

B2C Service



Using B2C Service

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Preface

This preface introduces information sources that can help you use the application and this guide.

Using Oracle Applications

To find guides for Oracle Applications, go to the [Oracle Help Center Documentation](#).

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B2C Service
Using B2C Service

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1 Auto Update Program

The Oracle B2C Service Version Update Policy is important to understand. See [Answer ID 6409](#) on our support site.

Before an update, be sure to review all B2C Service update documentation. See [Answer ID 5168](#) on our support site for system and infrastructure requirements and to select the newest release to view release notes and update guides. The following steps describe the update process:

1. An email is sent after general availability to remind your business about the scheduled update. The email will include the upgrade site creation date.
2. A second email is sent 7 days before the upgrade site creation date.
3. The upgrade site automatically begins to build on the scheduled date. A notification is sent when the upgrade site creation process starts.
4. A notification is sent when the upgrade site creation process is complete. We recommend that your business conducts acceptance testing on the upgrade site.
5. Cutover to the new production version begins. Notifications are sent to confirm the start and end of the update downtime. Downtime is generally 5 minutes.

2 Core Features

Getting Started for Administrators

Download the Oracle B2C Service Client and Log In

Oracle B2C Service, the customer experience suite, delivers comprehensive customer experience applications that drive revenue, increase efficiency, and build loyalty. Download the client and log in to begin working in B2C Service.

Before you start

Before you get started, you'll want to review the infrastructure requirements and the environmental configuration information in [Answer ID 31](#). Enable cookies on your workstation in order to work in the application.

Here's what to do

1. Open your web browser and go to **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 to install the application only if you know that it's from a trusted source.
3. Click **Install**.
After the client downloads to your workstation, the Login window opens.
4. To view all deployment files and processes, click **View Log File**.
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. See [Login Help Options](#).
5. Enter **administrator** in the Username field.
You must enter this user name the first time.
6. Enter the password assigned when your site was created. After logging in the first time, you must change your password. See [Change Your Password](#).
User names and passwords are case sensitive. Keep this in mind as you add staff accounts. See [Staff Accounts Editor](#).

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

7. Click **Login**.

Results:

The Service Console opens after the application updates and loads all necessary support files.

What to do next

All of the necessary components automatically install after you download B2C Service so you can begin configuring and customizing your application immediately.

Initial Setup

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

The administrator login you use to download B2C Service is a special account. It isn't 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.

Navigation Sets, Profiles, and Staff Accounts

Navigation sets control the navigation lists and buttons that staff members see on the console navigation pane. Staff members need a navigation set to work in your application.

You can create unique navigation sets for staff members who have any combination of responsibilities. This can be working with incidents, maintaining answers in your knowledge base, and creating mailings.

You must assign staff members 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. You must assign a default navigation set to each profile during setup.

Note: It's important to consider the security of your site when granting staff member permissions. See [Administration Interface Configuration](#) for information about protecting your site when assigning profile permissions. To learn how you can develop a security plan that fits the needs of your organization, see [How You Develop 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 [Create 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 should create your custom workspaces before creating profiles, since you assign the workspaces staff members use in their profiles. If you decide to create your profiles and staff accounts first, you can always update profiles later with the custom workspaces. See [Overview of Workspaces](#).

Related Topics

- [Overview of Navigation Sets](#)
- [Profiles](#)
- [Staff Accounts Editor](#)

How You Determine the Functionality Your Organization Needs

In order to configure your application with all the functionality your organization needs, identify those needs before creating your own navigation set.

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.

- Do you plan to use Outreach to communicate with your customers through mailings and campaigns and Feedback to survey your customers and prospects? If Yes, enable Outreach and Feedback. See [Overview of Mailings](#), [Overview of Campaigns](#), and [Overview of Surveys](#).
- Do you want your sales staff to manage and track all opportunity and related organization and contact information, and track quote interactions sent to customers and prospects? If Yes, enable Opportunity Tracking. See [Overview of Opportunities](#) and [How You Manage Quotes](#).

You must enable Outreach and Opportunity Tracking 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'll have to manually add those items to the list of configuration items for the Configuration button after the products are enabled.

Additionally, while there are no configuration items associated with Feedback, you must enable it in order to access the Surveys and Questions explorers and create questions and surveys.

Create 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 include the Configuration button. This contains the configuration items you'll need to configure and modify your application. We focus on adding items to the Configuration button in this procedure. The same steps apply when adding reports and other items to any navigation button you want in your navigation set. See [Overview of Navigation Sets](#).

1. Log in to your application using the administrator login.
2. Click **Configuration** on the navigation pane.
The default list of configuration items displays.
3. Expand **Application Appearance**, and then double-click **Navigation Sets**.

4. Click **New.**

The Navigation Sets editor opens.

Notice that File Menu displays first in the list. While this isn't a navigation button, it's part of every navigation set, and you can configure it with the items you want to create from the application menu. Click **File** next to the Home tab on the ribbon to access the File Menu.

You must also have the corresponding permission in your profile for every item or record type you add to this menu. See [Configure the File Menu](#).

5. On the content pane, scroll and select **Configuration in the list of buttons.**

The folders display containing default configuration items associated with the Configuration button for the administrator special account.

6. Expand each folder to view its items.

File Menu always appears 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.

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

8. Expand the Common and Service subfolders.

Items appear in alphabetical order.

Note that Outreach and Opportunity Tracking folders don't appear in the default list. In order for them to appear, you must enable them before you create your navigation set. Contact your Oracle account manager.

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. When you access any report in this folder, you can double-click a staff account or profile in the Profiles report to open it. You can also select one and click Open. You can 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 logged in staff members. You can use this report to manage your desktop usage administration. See Log Out a Staff Member Manually . |
| 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. See Profiles . |
| Password Configuration | Define requirements for password expiration, number of invalid logins allowed, and password length for staff accounts. See Configure Staff-Member Passwords . Tip: 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. |
| Application Appearance | This folder contains options to modify the information that displays to staff members, determine what navigation buttons and navigation lists staff members can access, create images for |

| Folder/Configuration Item | Description |
|---------------------------|--|
| | 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 Chat. You can also create custom workspaces for the Quote, Quote Product, and Service Opportunity windows. See Overview of Workspaces . |
| Client Workflow Images | Create images to use in workspaces and in questions for guided assistance. See Images Explorer . |
| Navigation Sets | Create navigation sets containing the navigation buttons and associated navigation lists staff members can access. See Create a Navigation Set . |
| Customizable Menus | Create menu items to keep your knowledge base organized and up-to-date. See Overview of Customizable Menus . 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 object feature before creating your navigation set, the tree won't contain any folders and only the default menu items will be listed in the tree. See Menu-Only Custom Objects . |
| System Menus | Customize any of the following default menu items in this folder. When you enable Opportunity Tracking and Chat, this list will also contain the following items. <ul style="list-style-type: none"> ○ Opportunity Tracking—Competitors, Contact Roles, Industry Types, Lead Rejection Types, Opportunity Statuses, and Win/Loss Reasons ○ Chat—Chat Agent Statuses and Chat Queues |
| ○ 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 Add or Edit an Answer Access Level . |
| ○ 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 Add or Edit an Answer Status . |
| ○ 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 Add or Edit an Asset Status . |
| ○ Billable Tasks | Add billable tasks so you can record the time agents spend working on incidents. The default billable task is Miscellaneous. See Add or Edit a Billable Task . |
| ○ 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. These give agents a more complete understanding of all incidents submitted by each contact. See Overview of Channels . |
| ○ 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 Add or Edit a Contact Type . |
| ○ 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 Add or Edit an Incident Queue . |
| ○ Incident Severities | Add incident severity levels to record the importance or urgency of individual incidents. See Add or Edit an Incident Severity Level . |

| 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 Add or Edit an Incident Status . |
| ○ 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 Add or Edit an Organization Address Type . |
| 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 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 Change the Interface Display Name) and identify the answers report that displays on your customer portal (see Overview of the Answer and Question Details Pages). 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 Overview of Chat Configuration . |
| Message Templates | Customize your B2C 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 How the Message Templates Editor Works . |
| 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. |
| Mailboxes | Add Service and Outreach mailboxes (when Outreach is enabled) and customize mailbox settings. You can configure both outgoing and incoming email options. See How Mailboxes Work . 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 Edit an Oracle-Managed Service Mailbox . |
| Distribution Lists | Add mailing lists consisting of non-staff members' email addresses. See Add or Edit a Distribution List . Distribution lists can also be used to schedule and send reports. See How You Schedule Reports . |
| Rules | Configure your application with business rules to automate workflow and handle routine tasks. See Create a Rule Base . |
| Configuration Settings | Customize configuration settings for each interface. See How You Customize Configuration Settings . 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 How You Customize Message Bases . |
| File Manager | Modify Chat images, custom scripts, wordlist files, dictionary files, and certificate directories. See Manage Files with the File Manager . |
| Add-In Manager | Upload add-ins and allow access to individual add-ins for each profile and interface. See Install a New Add-In . |
| 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 Log File Errors and Information . |
| Process Designer | Create custom processes (object event handlers) that run when events occur on an object in B2C Service. See Process Designer . |

| 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 Add or Edit a Country or Province . |
| 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. |
| 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 Overview of Finding Content on the Customer Portal . |
| Answer Stopwords | View or change the list of stopwords for answers that will be excluded from indexing and searching. See B2C Service and Your Customer Portal . |
| 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. See B2C Service and Your Customer Portal . |
| Topic Browse | Test the cluster groups for the Browse search method or schedule clustering for the next run of the Agedatabase utility. |
| Incident Stopwords | View or change the list of stopwords for incidents that will be excluded from indexing and searching. See Add or Edit an Incident Stopword . |
| 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 Overview of Service Level Agreements (SLAs) . |
| 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 Overview of Service Level Agreements (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 Overview of Service Level Agreements (SLAs) . |
| Products/Categories/Dispositions | <p>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 (subproducts) and categories (subcategories). 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.</p> <p>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.</p> <p>See Search Optimization Using Products, Categories, and Dispositions and Product Linking.</p> |
| 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 is available to staff: Incident Text and Rule Text. See Overview of Content Library . When Chat is enabled, Chat Text and Chat URL options are also available. |

| 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 Overview of Content Library . |
| 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 (Twitter, YouTube, RSS, and Facebook). You can also create custom channels for RSS, and Facebook. The remaining standard and social channels can be edited, including updating their name and disabling them. See Overview of Channels . |
| Channel Accounts | Configure your application so staff members can respond to contacts through Facebook or Twitter. Without a channel account, your staff can respond only through email. See Overview of Channels . |
| Database | This folder contains options to add and update items in your database to ensure that 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. See View Your Database Data Dictionary . |
| Custom Fields | Gather additional information about answers, contacts, incidents, opportunities, organizations, quotes, sales products, staff accounts, and tasks. See Custom Field Types . |
| Object Designer | Create custom objects in order to integrate your organization's data with B2C Service. 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 Custom Object Types . If you disable the custom objects feature before creating your navigation set, the Object Designer won't display in the default list. |
| Incident Thread Correction | Convert an incident response thread into a note thread. Customers never see note threads in their incident responses. If you've Edit/Delete Committed Thread Content permission set in your profile, you can edit incident thread content, including deleting images. See Edit or Convert a Response Thread . |
| 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 Add or Edit a Data Import Template . |
| Data Import Wizard | Upload multiple records using the Data Import Wizard. See How Data Import Works . |
| 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 . |

9. Select the configuration item and click **Add**. You can also drag the item 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**. This feature also finds items in folders that aren't expanded.
10. To set an item as the default for the configuration list, right-click it and select **Set As Default**.
The item you set as the default will automatically open on the content pane when the configuration list displays when you log in.
11. To remove an item from the configuration list, select it and click **Remove**.

12. To group your items into more categories than currently exist in the configuration list, click **New Folder**.
 - a. Enter the name of the folder.
 - b. Drag items to the folder.
13. To rename a folder, including one of the default folders, right-click it and select **Rename**. Then enter a new name.
14. 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.
15. 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 the previous steps.

The check box next to each button is selected by default. To remove a button from your navigation set, just clear its check box.
16. To add items to the file menu so you can use this shortcut to add records and items to the knowledge base, scroll to the top of your list and click **File Menu**. See *Configure the File Menu*.
17. Click **Save**.

The **Save As** window opens.
18. Enter a name for the navigation set in the Navigation Set Name field and click **OK**.

What to do next

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. See *Profiles* and *Staff Accounts Editor*.

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 click the **Gear** button in the Configuration list to add items to a list directly from the navigation pane. When you add items this way, you're changing only your lists, not the original navigation set. See *How You Customize Navigation and Configuration Lists*. To examine the implications of customizing your navigation set from the navigation pane, see *Overview of Navigation Sets*.

Related Topics

- [Change Your Navigation Pane Settings](#)

Optional Configuration Items

There are several optional configuration items you may want to enable.

Although B2C Service 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.

Note: Configuring your application so your staff can work in B2C Service 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 *Overview of Session Management and Login Controls* to learn about your options.

The following table describes the items that display under Components after 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.

Additional Configuration Items in the Components List

| Folder/Item | Description |
|---------------------------|--|
| Analytics | The Analytics folder contains all Analytics explorers and the Report Management item. 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. You can add any Analytics explorers to this button for your own navigation set or any of the other navigation sets you create. |
| Explorers | Analytics explorers include Chart Styles, Color Schemes, Images, Reports, Styles, and Text Fields. |
| 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. This item doesn't 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 in the Audiences folder 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. |
| External Suppression List | Add a list of email addresses that you want to exclude from mailings. The External Suppression List displays in 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. |
| Common | Common items apply to all products: Feedback, Opportunity Tracking, Outreach, and Service. |
| Access Control | Add Access Control to a navigation list in order to define community users' access to the community. |
| 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. This item appears in the Internationalization folder in the default configuration list if you enable Opportunity Tracking before creating your navigation set. |
| Customer Portal | Access the Customer Portal Administration site to perform administrative tasks, including staging and deploying your customer portal pages. You must enable the MOD_CP_DEVELOPMENT_ENABLED configuration setting in Common/Oracle Products/Modules in order to make changes to your development site. If you don't enable this setting, you can't make changes to your customer portal, and your customers will see the default reference implementation with no customization. |
| 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. After this component is enabled, you must manually add it to your list of items for the Configuration button. |

| Folder/Item | Description |
|-------------------------------|---|
| Language Skills | Add language skills to your application so you can route incoming chats to the agent with the most appropriate skill set. 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. 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. You must enable the KF_SA_OPTIMIZATION_ENABLE configuration setting and manually add this component to your list of items for the Configuration button. |
| 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. This item appears in the Application Appearance folder 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're updating 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. This component doesn't 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 B2C Service. Single sign-on integrations let you use B2C Service 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. This component doesn't 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. Your site must be integrated with virtual assistant in order to use a virtual assistant. |
| Workspaces/Workflows | When the desktop workflow feature is enabled, Workspaces changes to Workspaces/Workflows in the Application Appearance folder. 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. |
| 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). The Content Library navigation button also appears in a new navigation set when Outreach or Feedback is enabled. 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. |

| Folder/Item | Description |
|----------------------------|---|
| | 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). |
| 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. |
| Product Catalog | Add your organization's sales products for use with quotes in Opportunity Tracking in Service. |
| Quote Templates | Add quote templates and organize them into folders to automate and standardize quote generation. |
| Sales Periods | Add sales periods to track how sales representatives are meeting their sales quotas. |
| Strategies | Add strategies to track your sales processes. Also add the stages and tasks specific to each strategy. |
| Territories | Add territories and assign each sales representative to a territory for opportunity assignments. You can add additional levels of territories (subterritories) to cover all the geographical areas in which you do business. |
| Outreach | The following configuration items appear in the Outreach folder after Outreach is enabled. |
| Campaigns Explorer | The Campaigns explorer also displays in the Outreach folder. 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). |
| Mailings Explorer | The Mailings explorer also displays in the Outreach folder. 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). |
| 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. |
| Service | Optional items in this folder apply to Service. |
| Archived Incidents | Access outdated incidents that have been removed from your knowledge base. You don't have to enable this item, 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. This item appears in the Service folder 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 phone numbers. You can also define up to five custom patterns that are masked from view when new thread entries are created. You must enable incident thread masking for this item to be available. When enabled, you can add it to your list of items for the Configuration button. Contact your Oracle account manager to enable incident thread masking. |

Open a Configuration Item

Before you begin customizing your site, it's a good idea to look at the key elements on the console from the perspective of customer service agents, sales representatives, and marketing personnel.

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

The configuration list displays.

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

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 arrow in 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 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 Close (X) on any content pane tab. See *Close 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**. See *Record Workgroups*. On administration editors, you can undock any editor by clicking **Undock** on the active tab. This action opens the editor in a separate window and allows you to 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 expand the folder contents.
4. To change the name of a folder, click the folder.

To find an item in the tree, click the **Search** arrow. 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 **Next** 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**.

Note: 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 displays in the active folder.

Options from a Configuration Item 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. |

| Action | Description |
|------------------------------|---|
| 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 Delete. The item is removed from the knowledge base. 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 in the tree to expand all folders, and click it again to collapse them. To expand or collapse a single folder in the tree, click the arrow to expand or collapse the folder contents. |
| Edit an item | Click an item in the tree. The item 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. |
| 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 Search arrow to display a menu for searching folders and items. |

Related Topics

- [Folders and Items in the Tree](#)
- [Available Actions from a Navigation or Configuration List](#)
- [Overview of the Service Console](#)
- [Add Folders](#)

Add Folders

Folders and subfolders provide a way to organize items in B2C Service.

Certain configuration items can be organized in folders. For example, 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 after 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 tree of the item 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. Enter 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 click **Save** or you can 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**.

Folders and 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.

Getting Started for Users

Download Oracle B2C Service and Log In

No matter which channel you use to interact with customers, you need to quickly and accurately respond to them.

With B2C Service, you have a variety of powerful tools to help ensure that every customer interaction is a positive experience.

1. Open your web browser and go to **http://your_site.custhelp.com/cgi-bin/your_interface.cfg/php/admin/launch.php**.

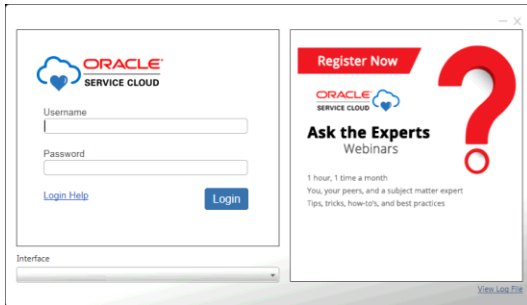
2. Click **Install Oracle Service Cloud**.

A security message warns you to install the application only if you know that it's from a trusted source.

Note: If B2C Service has been configured to use an external identity provider (IdP) for agent authentication, the Install Oracle Service Cloud–Internal Login button 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 don't have the SSO Login (SAML 2.0) profile permission log in without using the external IdP. See *Single Sign-on Support in B2C Service*.

3. Click **Install**.

After B2C Service downloads to your workstation, the **Login** window opens. This can take a few minutes.



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

- a. To view all deployment files and processes, click **View Log File**.

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

5. Enter your user name in the Username field.

Your user name and password are defined in your staff account and both are case sensitive.

- 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're 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 won't 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're 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've been assigned a password, enter it in the Password field. Passwords are optional in B2C Service.

The Interface field displays the name of the interface you entered in step 1. The drop-down list 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 displays when you initially log in depends on how your application is configured and what permissions have been assigned in your profile.

What to do next

After downloading B2C Service and logging in the first time, access your application from **Start/All Programs/RightNow/your site name**.

Related Topics

- [How You Add Your Branding on the Login Window](#)
- [Login Help Options](#)
- [Session Expiration](#)

Session Expiration

This topic describes how long the console remains active after logging in and how to prevent lost work after your session expires.

B2C Service is set up to automatically log you out after a specific period of inactivity on the console (by default, 15 minutes). After your session expires, you'll receive a Console Locked message, and you must re-enter your password to resume work without 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'll be locked out of the console and must relaunch the application. Any unsaved work will be lost.

Note: If you log in through an identity provider using the single sign-on process, you won't have the opportunity to re-enter your password to continue working in the application. Any unsaved work will be lost.

Related Topics

- [Automatically Logging Out Inactive Sessions](#)
- [Single Sign-on Support in B2C Service](#)

Overview of the Service Console

The Service Console (also called the agent desktop) is where you work with B2C Service.

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. And while the interface is easy to navigate, we recommend that you take the time to learn about the key areas on the Service Console and how to perform some basic tasks.

Related Topics

- [File Menu](#)
- [Console Ribbon](#)
- [Navigation Pane](#)

File Menu

Many of the options you'll need to access when working in your application are accessed from the File menu.

Click **File** 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 currently displays on the content pane. For example, a Print option appears when a report is open. Below this

section are global options, meaning they're constant and they'll always appear on the file menu no matter what displays on the content pane. These options are: 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.

File Menu Options

| Section and Option | Description |
|--------------------------------------|---|
| Content-dependent Options | The top section on the left panel contains options for performing actions on what displays on the content pane. These options will change to reflect the active tab on the content pane. You can add content-dependent options to the Quick Access toolbar. See Customize 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 displays on the content pane. 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. |
| 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 B2C Service products. |
| Tutorials | Select this option to take any of our tutorials, which walk you through product functionality and features. You can choose tutorials for any supported release of B2C Service. |
| 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 B2C Service beyond the enterprise. |
| Links | Select Links and choose from the following options. |
| Oracle Service Cloud Interface | 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. <ul style="list-style-type: none"> 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 B2C Service SmartTag so you'll be able to open incidents on the agent desktop from email messages in Microsoft Outlook. Outlook integration must be enabled for these options to be available. |
| Oracle Service Cloud Customer Portal | The Site Administration option lets you access the Customer Portal Administration site. The development area must be enabled in order for this option to appear (enable the MOD_CP_DEVELOPMENT_ENABLED configuration setting in Common/Oracle Products/Modules). |

| Section and Option | Description |
|---|---|
| <ul style="list-style-type: none"> Site Administration | <p>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). You can also create custom widgets and view documentation about all widgets from this option.</p> <p>Other functions include page set mapping, defining data fields, identifying framework and widget versions, viewing logs, and staging and deploying your customer portal.</p> <p>You must also have customer portal permissions in your profile for this option to appear.</p> |
| <ul style="list-style-type: none"> External Links | <p>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.</p> |
| Help | <p>Select Help to access the help contents, help index, help search, documentation and tutorials for all B2C Service products, and product version information.</p> <p>Context-sensitive help is available throughout the application when working with reports, records, editors, and explorers. (The context-sensitive Help button is found on the far right of the ribbon.)</p> |
| Add-in Logging | <p>Select Add-in Logging to view the current or previous log file. See View Add-In Log Messages.</p> |
| Options | <p>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 Application Options.</p> |
| Exit | <p>Select Exit to log out of the application.</p> |
| Create new items | <p>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.</p> <p>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.</p> |
| Dashboard (Ctrl+Shift+B) | <p>Select this option to create a dashboard. See Overview of Dashboards.</p> |
| Report (Ctrl+Shift+R) | <p>Select this option to create a custom report. See Overview of Custom Reports.</p> |
| Image | <p>Select this option to create a report image. See Images Explorer.</p> |
| Style | <p>Select this option to create a report style. See Styles Explorer.</p> |
| Chart Style | <p>Select this option to create a chart style. See Chart Styles Explorer.</p> |
| Color Scheme | <p>Select this option to create a color scheme. See Create a Color Scheme.</p> |
| Text Field | <p>Select this option to create a text field to add to a custom report or dashboard. See Create a Text Field.</p> |
| Contact (Ctrl+Shift+C) | <p>Select this option to add a contact. See Add a Contact.</p> |
| Organization (Ctrl+Shift+O) | <p>Select this option to add an organization. See Add an Organization.</p> |
| Task (Ctrl+Shift+T) | <p>Select this option to add a task. See Add a Task.</p> |
| Answer (Ctrl+Shift+A) | <p>Select this option to add an answer. See Overview of Answers.</p> |
| Incident (Ctrl+Shift+I) | <p>Select this option to add an incident. See Add an Incident.</p> |
| Asset (Ctrl+Shift+N) | <p>Select this option to add an asset. See Add or Edit a Sales Product to Use with Assets.</p> |

| Section and Option | Description |
|--|---|
| Opportunity (Ctrl+Shift+P) | Select this option to add an opportunity. See Overview of Opportunities . |
| Campaign (Ctrl+Shift+G) | Select this option to create a campaign. See Overview of Campaigns . |
| Surveys | Select this option to create a survey or survey question. See Overview of Surveys and Overview of Questions . |
| Mailing (Ctrl+Shift+M) | Select this option to create a mailing. See Overview of Mailings . |
| Audience | Select this option to create a contact list or segment. See Add a Contact List and Create a Segment . |
| Content Library | Select this option to create a document, template, snippet, tracked link, or file. See Overview of 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 Overview of Guided Assistance and Find Answers Using Guided Assistance . Guided assistance must be enabled for this option to appear in the list and you must have permission in your profile to create guides. |

Related Topics

- [How You Customize the Links Menu](#)
- [How You Configure Outlook Integration](#)

Console Ribbon

The console ribbon displays tabs and buttons associated with the report, editor, or explorer you're working with.

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. See [Common Functionality Ribbon](#).

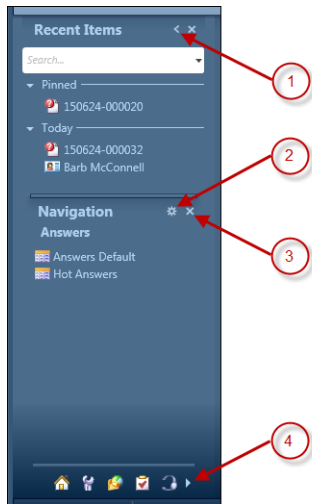
Tip: If nothing opens on the content pane when you log in, the ribbon will be empty. See [Change Your Navigation Pane Settings](#) to define what opens on the content pane when you log in.

Navigation Pane

On the left side of the Service 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. See [How You Move Tool Windows](#).

This image shows the default configuration for the left navigation pane. The Answers navigation list is the active list in this example, which displays when you click Answers on the navigation pane.



Legend for image: 1. Minimize 2. Customize List 3. Close 4. Navigation set buttons

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. (Configuration 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. See *Associate Products and Categories to an Answer*.
- Miscellaneous items—Notifications and the archived incidents component are just a few of the other items that can be placed in a navigation list.
- Folders—Folders are used to organize reports, dashboards, and other items in a navigation list.
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- 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. See [Associate Products and Categories to an Answer](#).
- Miscellaneous items—Notifications and the archived incidents component are just a few of the other items that can be placed in a navigation list.

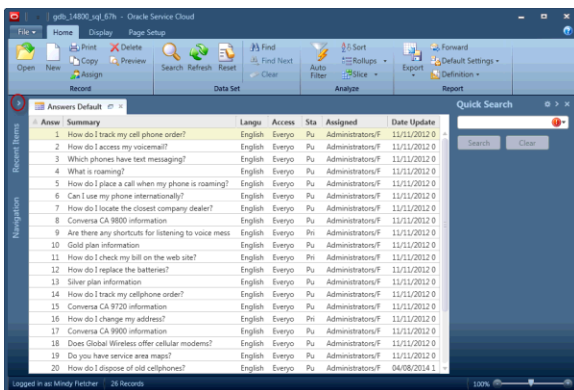
Related Topics

- [How You Customize Navigation and Configuration Lists](#)
- [Change Your Navigation Pane Settings](#)

Tool Window Buttons

Tool window buttons let you customize the display of windows.

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. This 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) icon. See [How You Customize Navigation and Configuration Lists](#).

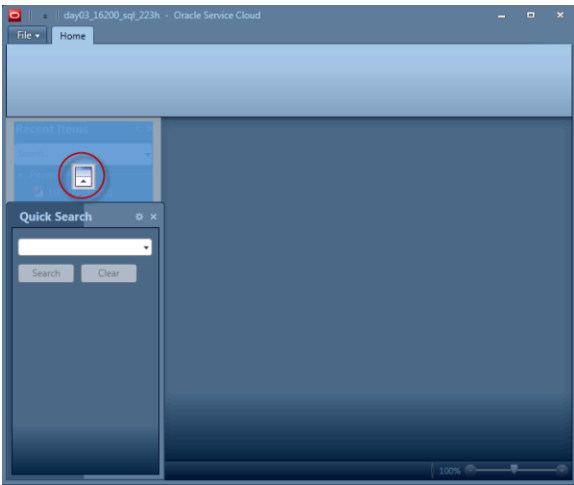
How You Move Tool Windows

Being able to move tool windows gives you the flexibility to arrange your console to suit your own work preferences.

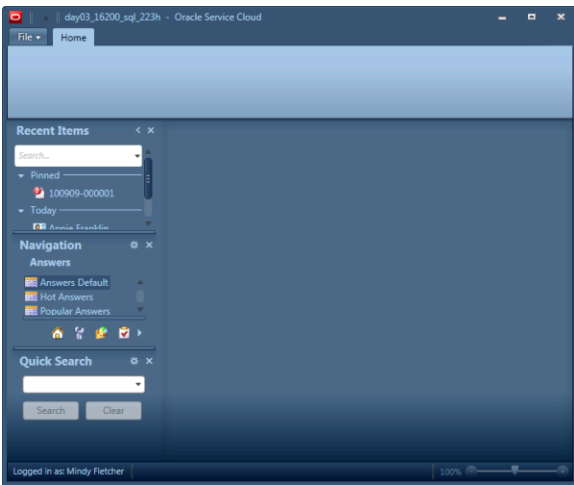
You might want all windows to remain on the navigation pane but want them in a different order. Or you might want to move all tool windows to the left or right navigation pane or to the status bar to create more space on the content pane. Plus, you can return the windows to their default locations at anytime. Click **File** and select **Options > Reset Tool Windows** or see [Change 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.

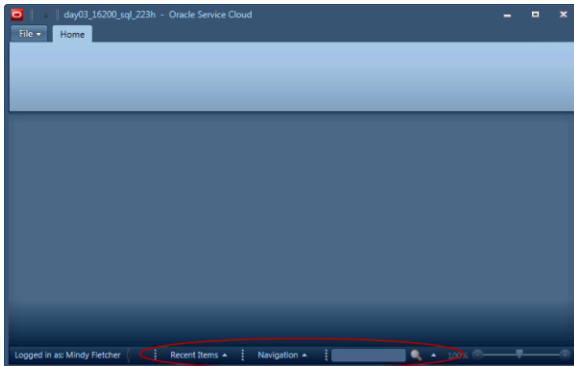
When you drag a window to another area on the console, the content pane momentarily changes to light gray, the area where you can dock the window is highlighted in blue, and a docking area indicator displays. In this example, we're moving the Quick Search tool window to the left navigation pane.



When 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 enter an entry and click **Search**. If you want to change to another Quick Search report, click the arrow next to Search 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.

Available Actions from a Navigation or Configuration List

The actions available from a navigation or configuration list vary depending on the item you've selected and your profile permissions.

When 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.

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. 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. 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. |
| Edit Report Definition | Select this action to edit the report. If you select this action for a standard report, the report doesn't 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 lets you assign permissions. Also, a message displays at the top of the content pane telling you that this is a read-only report. This action won't display if you don't have appropriate Analytics permissions in your profile. |

The remaining right-click actions appear only if you've the Customize Navigation Sets permission in your profile.

| Right-Click | Available Actions |
|------------------|--|
| 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. 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 Change Your Navigation Pane Settings . |
| Folder | Select from the following actions. Folder options don't 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. |

How You Customize Navigation and Configuration Lists

You can customize what displays in your navigation and configuration lists to help you work more efficiently.

If your profile lets you customize your navigation set, a Gear icon (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 don't apply to Quick Search reports.

Related Topics

- [Add Items to or Remove Items from a Navigation or Configuration List](#)
- [Search for an Item to Add to Your Navigation List](#)
- [Organize Items in a Navigation List](#)

Add Items to or Remove Items from a Navigation or Configuration List

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

1. Display the list you want to change.
2. Click the **Gear** icon.

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.

Related Topics

- [Search for an Item to Add to Your Navigation List](#)
- [Organize Items in a Navigation List](#)

Search for an Item to Add to Your Navigation List

You can search for items you want to add to your navigation list.

1. Click **Find in List** next to Available Items.

The **Find** window opens.

2. Enter 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 **Up** or **Down**.

As you enter letters, 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 entering 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.

Related Topics

- [Add Items to or Remove Items from a Navigation or Configuration List](#)
- [Organize Items in a Navigation List](#)

Organize Items in a Navigation List

You can organize items in your navigation list to more easily access the items you use most.

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 enter the new name.

4. Click **OK**.

Your changes are saved and the window closes.

Related Topics

- [Profiles](#)
- [How Custom Navigation Sets Work with Profiles](#)
- [Add Quick Search Reports to a Navigation Set](#)

How You Reorder 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 [How You Customize 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.

Related Topics

- [Create a Navigation Set for the Administrator](#)
- [Create a Navigation Set](#)
- [Analytics Permissions](#)

Available Actions from the Recent Items List

The records and items you've recently opened are listed in the Recent Items tool window.

Records and items are grouped into four categories, including Pinned, Today, Yesterday, and Older. Only the categories that have recent items display (for example, if only one record or item was opened today, the Today category will be the only one listed in the recent items list). By default, the last 10 items you opened are listed, but you can increase or decrease that number if you want. See [Change Your Navigation Pane Settings](#).

Tip: Configuration items aren't 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 actions from the recent items list.

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. |

Recent items also appear in other areas of the product to help you quickly select commonly used items when updating record fields. See [How You Search from Open Records](#) and [Assign a Record from a Report](#).

How You Search Recent Items

This topic describes how to use search to quickly find a record in your recent items.

You can search for recent records and items using a text search and filter by type (for example, incident record type). Click the Search field drop-down list to view all record types available to search in your recent items.

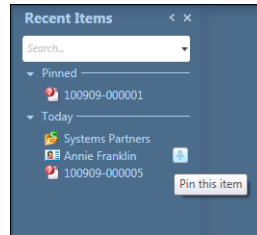
Note: Only record and item types recently opened will appear in the drop-down list. For example, if you recently opened a contact record and an incident but not an organization, only Contact and Incident will appear in the drop-down list.

How You Pin 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.

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.

Related Topics

- [How You Search from Open Records](#)
- [Change Your Navigation Pane Settings](#)
- [Assign a Record from a Report](#)

How Buttons in Your Navigation Set are Displayed

By default, one row of buttons displays at the end of the Navigation tool window no matter which navigation list is active.

Clicking Configure Buttons, indicated by 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.

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, see [Change Your Navigation Pane Settings](#).

Overview of the 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've 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 *Open an Incident for Editing*. You can also open an individual record from the Recent Items tool window. See *Available Actions from the Recent Items List*.
- Explorers—Access any of several components and configuration items that display information in hierarchical folders. See *Associate Products and Categories to an Answer*.
- Notifications—Access your messages when there's a change in the status of your incidents and answers in Service, mailings and campaigns in Outreach, or opportunities. You'll also receive a notification when you're assigned a new incident, answer, or opportunity. See *Notifications*.
- Search results—Access items and records from a standard search or a Quick Search. See *Record Search Options*. (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 *Application 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 Close (X) on any content pane tab. See *Close 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. See *Record Workgroups*.

Tip: On certain workspaces editors, including incidents, contacts, organizations, and tasks, you can undock an open record by clicking Undock on the active tab or Undock 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.

Related Topics

- *Overview of Managing Reports on the Reports Explorer*
- *Overview of Dashboards*

Application Options

After 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 are 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

| Option | Description |
|----------------------|--|
| Personal Settings | Select this option to change settings in your staff account and certain local settings. See Change 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 Change Your 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 items list, and choose what displays on the content pane when you log in. See Change Your Navigation Pane Settings . |
| Tool Windows | Select this option to choose which tool windows (Recent Items, Navigation, and Quick Search) are visible. See Change 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're logged in to. Inactive add-ins also display in the list. See View Add-Ins Enabled for Your Profile . |
| Communication Center | Select this option to customize your chat notification settings. See Chat for Agents, Supervisors, and Customers . Chat must be enabled for the Communication Center option to be available. |
| Reset Tool Windows | Select this option to return the tool windows to their default locations. You can also return tool windows to their default locations by selecting the Reset Local Settings check box in your personal settings. See Change Your Personal Settings . |

Change Your Personal Settings

This topic describes how to change your staff account settings using the Personal Settings option.

Some personal settings apply to options in your staff account and some settings apply to local settings, the interface defaults in B2C Service. Any staff account changes you make from the Personal Settings option will also be made to the corresponding settings in your staff account.

1. Click **File** and select **Options > Personal Settings**.
2. Select from the options listed.

Personal Settings

| Field/Button | Description |
|-------------------------|---|
| Notification Options | This section contains options for changing how you receive notifications. 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 aren't logged in to B2C Service. An email will be sent to your email client the first time a notification is delivered while you're logged out. Subsequent notifications won't generate an email until you log in and out of the system. |

| Field/Button | Description |
|--|---|
| | 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 aren't logged in to B2C Service. An email will be sent to your email client the first time a notification is delivered while you're 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're logged in to B2C Service. |
| Display Toast Notifications | Clear this check box if you don't want to receive notifications in a desktop alert, often referred to as "toast notifications." By default, when you log in to B2C Service, you receive a desktop alert listing new notifications. The message displays for several seconds in a window on the lower right of the screen. See Notifications . This is a local setting and an interface default setting. |
| Localizations | Options in this section let you change settings that apply when you add certain records such as opportunities. Changes you make here will also be made to the corresponding settings in your staff account. |
| Default Country | Click this drop-down list to change the default country in your staff account. United States is the default. |
| Default Currency | Click this drop-down list to change the default currency in your staff account. U.S. Dollar is the default. |
| Time Zone | Click this drop-down list to select the time zone in which you're working. This setting doesn't apply to all staff members and therefore may 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. 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 B2C Service is installed on 64-bit operating systems. Note: 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. |
| Disable Rich Client Visual Experience | Select this check box to use software rendering instead of hardware rendering on the console display. 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. |

| Field/Button | Description |
|--------------------------|--|
| 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 Change Your Password . |

3. Click **OK**.

Related Topics

- [Add or Edit a Staff Account](#)
- [Rebuild Your Local Cache](#)

Rebuild 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 list 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.

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

Change Your Password

Your organization may have security policies that require strong passwords for staff to use 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.

If your profile contains the SSO Login (SAML 2.0) permission for single sign-on, you cannot change your password in B2C Service. See [Agent Login Using an IdP-initiated SSO](#).

1. Click **File** and select **Options > Personal Settings**.
Your personal settings display.
2. Click **Change Password**.

3. Enter your current password and press Tab. Don't forget that your password is case sensitive.
4. Enter the new password and press Tab.
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. Re-enter 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.

Change Your 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. 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.

1. Click **File** and select **Options > View Options**.
2. Select from the view options listed.

View Options

| Field | Description |
|--|---|
| Appearance | The options in this section apply to the interface color. |
| Color Scheme | Click this drop-down list 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 option 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. |
| Display Content Editors in Popup Windows | Select this option 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. 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 Record 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. |

| Field | Description |
|------------------------------------|--|
| 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 option 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. 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. |
| Show Recent Items in Fields | By default, recent items display in workspace menus and search fields. For example, if a contact record is opened from an incident, the contact displays under Recent when you click in the Contact search field of the incident record. Clearing this check box prevents recent items from displaying in workspace menus and search fields. |

3. Click **OK**.

Change Your 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.

Note: 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 [Change Your Personal Settings](#).

1. Click **File** and select **Options > Navigation Pane**.
2. Select from the navigation pane options listed.

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. 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. |

| Field/Button | Description |
|---|---|
| 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 <i>How You Customize Navigation and Configuration Lists</i> . This check box won't appear unless you have the Customize Navigation Sets permission set in your profile. |
| 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. 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 | Enter 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: If you are working on the Agent Browser UI, the maximum number of items to show in the list is 20. 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. 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. By default, the navigation list or configuration list that appears when you log in is the same list that displayed when you logged out. |
| Nothing | Select this option 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 option if you don't want the default item for the navigation list to automatically open on the content pane. This option is selected by default. When the navigation list or configuration list does not have a default item, nothing will open. |
| Last Navigation Item Opened in Previous Session | Select this option 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**.

Change Tool Window Visibility

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

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**.

Tip: You also have the option to add a custom tool window to the Service Console. Using the `NAVPANE_CUSTOM_WEB_CONTROL_URL` configuration setting (**RightNow User Interface/Tool Bar/General**), you can embed a web page on the navigation pane. After 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.

Related Topics

- [Available Actions from a Navigation or Configuration List](#)
- [Available Actions from the Recent Items List](#)
- [How You Move Tool Windows](#)

Open the Reports Explorer

Certain components and configuration items display data in hierarchical folders similar to Windows Explorer.

The main elements and basic functionality of explorers in B2C Service are the same, but options may differ slightly from one explorer to another. 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.

1. Click **Analytics** 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 [Change Your Navigation Pane Settings](#) to select this option.

The following explorers are available in B2C Service. Certain components contain multiple explorers.

- Analytics
- Campaigns
- Mailings
- Surveys
- Content Library
- Audiences
- Navigation Sets
- Workspaces/Workflows
- Client Workflow Images
- Scripts
- 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.

Search for a Report from the Reports Explorer

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 list.

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 enter a number in the search box or select one using the arrows.

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 list and select a column to search.
4. Select an option for your search criteria.
5. Enter 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**.

Search Results Actions

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.

Advanced Search Options

| Option | Description |
|--|--|
| Search globally, replace results | Select this option 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 option to search only the current results and keep only those that match this search. |
| Search globally, append to results | Select this option to keep results from the previous search and add results from this search. |

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

Explorer 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.

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.

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. This option is not available when you right-click a root or standard folder. |
| Delete a folder | Right-click a folder and select Delete. When you select this action, you will be asked to confirm the deletion. CAUTION: Deleting a folder deletes all of its contents as well. This action cannot be reversed. 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. This option is not available when you right-click a root or standard folder. |
| Reorganize folders | Drag and drop a folder and its contents into another folder and move items from one folder to another. 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. |

Explorer 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.

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. 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. 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. |
| Delete a subfolder or item | Right-click a subfolder or item and select Delete. You will be asked to confirm the deletion. CAUTION: Deleting a folder deletes all of its contents as well. This action cannot be reversed. 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. 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. After 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.) 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. |

Explorer 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 on the far right of the ribbon. Click this button to access help for the current task.

Keyboard shortcuts are also available for all ribbon buttons so you can enter 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 the keyboard shortcuts for. (For instance, press Alt+H to display the keyboard shortcuts for buttons on the Home tab.) This is a one-time action. When you use a keyboard shortcut, the ribbon returns to its default display.

Explorer Ribbon

| 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. This button appears only on the Reports explorer ribbon. Other explorers contain a New button. |
| New Dashboard | Click this button to create a dashboard. 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. This button appears only on the Reports explorer ribbon. |
| 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. 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 | <p>CAUTION: Deleting a folder deletes all of its contents as well. This action cannot be reversed.</p> <p>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.</p> <p>You cannot delete a root or standard folder.</p> |
| 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. 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 |

| Group/Button | Description |
|----------------|---|
| | 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. |
| Find | Click this button to change the explorer state to Search On. See <i>Explorer Display States</i> . |
| Display | |
| Folders | Click this button to switch between showing the tree and hiding it. |
| 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 display have a check next to them. This button is available only when the Details view is active. (See the Views button description above.) 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. |

Related Topics

- [Overview of Creating Basic Custom Reports](#)
- [Overview of Dashboards](#)
- [Overview of Managing Reports on the Reports Explorer](#)

How You Change Folders from the Address Bar

You can change folders and focus in the tree by entering 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 enter 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.

Save an Item in an Explorer

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.

1. Click **Home**.

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

Session Management and Login Controls

Overview of Session Management and Login Controls

B2C Service 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.

How You Force Session Expiration

This topic describes how to force session expiration for staff members using the `SESSION_HARD_TIMEOUT` configuration setting.

Reducing session exploitation can help your organization protect its data. And B2C Service is set up to automatically expire sessions so you can control the length of time before staff sessions expire. 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.

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.

Note: Desktop Add-Ins (.NET API), Connect Desktop Integration (JavaScript API), and Co-browse will receive a notification when a new session has been created. See *Desktop Add-Ins Developer Guide* and *Connect JavaScript API Developer Guide*.

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.

Desktop Usage Control

Our desktop usage administration feature is controlled by the `SESSION_MANAGEMENT_ENABLED` configuration setting. This setting is enabled by default and lets you to control and manage both active and inactive sessions.

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

Log Out a Staff Member Manually

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.

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. See *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, 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.

1. Do one of the following:
 - o From the configuration list, double-click **Logged In Staff Accounts** in **Staff Management**.
 - o From the Reports explorer, double-click **Staff Management** in **Common/Site Administration**.
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**.
A message tells you that the staff member's session has been terminated.
4. Click **OK**.
5. Repeat the previous steps as necessary to log out additional staff accounts.

Results:

When a staff member tries to perform an action after being logged out, a **Console Locked** message displays. After 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 the **CLIENT_SESSION_EXP** configuration setting (**RightNow User Interface/General Security**) is 15 minutes and the maximum value is 1440 (24 hours).

Even if you disable desktop usage administration, you can still use the **CLIENT_SESSION_EXP** configuration setting to maintain security on your site.

- **Session Timeout** field—Use this field on the Profiles editor to specify a time (0–1440 minutes) other than the time defined in the **CLIENT_SESSION_EXP** configuration setting 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**.

Note: 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 the **SESSION_HARD_TIMEOUT** configuration setting expires.

Here's how automatic logout of inactive sessions works. When 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 without 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.

Note: 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.

Configure Automatic Logout by Profile

This topic describes how to configure automatic logout based on a specific 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 the CLIENT_SESSION_EXP configuration setting.

Note: When the SESSION_MANAGEMENT_ENABLED configuration setting is disabled, this profile setting is disregarded.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Profiles**.
The report opens on the content pane.
3. Select the profile you want to edit and click **Open**.
4. Click the **Other** tab to display the Session Timeout field.
The default value of the Session Timeout field is null, meaning that the value specified in the CLIENT_SESSION_EXP configuration setting will be used for automatic logout. Change the null default only if you want to override the value in CLIENT_SESSION_EXP.
5. To exempt staff members associated with this profile from being automatically logged out, enter **0** in the field.
6. To set another value, which will override the value specified in the CLIENT_SESSION_EXP configuration setting, enter the number of minutes in the field.

Note: 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.

7. Click **Save**.
8. Repeat this procedure for all the profiles you want to configure for automatic logout.

Related Topics

- [Overview of SAML 2.0 Open Login Single Sign-On](#)

Login Help 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.

B2C Service 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 the ACCT_RECOVER_ALT and ACCT_RECOVER_STATUS 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 the ACCT_RECOVER_STATUS configuration setting. When staff members click Login Help, the **Account Self Service** window opens.

Staff members who have forgotten their user name simply enter 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 I Forgot My Password. An additional field displays. Staff members must enter 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 the ACCT_RECOVER_STATUS configuration setting to **2** and enter your new message in the ACCT_RECOVER_ALT configuration setting.

Related Topics

- [Edit a Configuration Setting](#)

How You Add 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. (Expand Site Configuration, double-click Configuration Settings, and then find **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 that displays on the **Login** window. Default is blank.



Legend for image: 1. Message 2. Content

Related Topics

- [Overview of Multiple Interfaces](#)
- [Edit a Configuration Setting](#)

How You Provide Login Information to Staff Members

You can provide staff members with details about their login activity for the previous sixty days.

The My Account Login Statistics report, found in **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.

| My Account Login Statistics | |
|---|--------------------------------|
| Login Activity Since 11/29/2014 12:00 AM | |
| Account: | Mindy Fletcher |
| Login Date of Current Session: | 01/28/2015 01:03 PM |
| Last Successful Login Date: | 01/28/2015 10:15 AM |
| Last Successful Login IP Address: | 10.140.74.190 |
| Last Unsuccessful Login Attempt Date: | 01/28/2015 01:03 PM |
| Last Unsuccessful Login Attempt IP Address: | 10.140.74.190 |

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 B2C Service. 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.

| Unsuccessful Login Attempts | | |
|-----------------------------|---------------|--|
| Date | IP Address | |
| Account: Michele May | | |
| 01/28/2015 01:08 PM | 10.140.74.190 | |
| 01/28/2015 01:08 PM | 10.140.74.190 | |
| Account: Mindy Fletcher | | |
| 01/28/2015 01:03 PM | 10.140.74.190 | |

Record Count: 3

Administration Login Limits

You can 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. See [Desktop Usage Control](#) 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 using the Password Configuration editor accessed when you click Configuration on the navigation pane and expand Staff Management. See [Configure Staff-Member Passwords](#).

Related Topics

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 or the Agent Browser UI opens. To review or change your message, see the LOGIN_SECURITY_MSG configuration setting (**RightNow User Interface/Tool Bar/General**).

How You Save Login Credentials

For security purposes, staff members must enter their user name and password each time they log in.

If you want to provide staff members with the option to save their login credentials, enable the ACCT_ALLOW_REMEMBER_ME configuration setting (**RightNow User Interface/Tool Bar/General**). Thereafter, each staff member's browser control will handle the user's login credentials using auto complete.

Related Topics

- [Search for a Configuration Setting](#)
- [Edit a Configuration Setting](#)
- [Configure Staff-Member Passwords](#)

Navigation Sets

Overview of Navigation Sets

Navigation sets control the navigation lists and buttons that staff members see on the navigation pane of the agent desktop.

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 B2C Service. A navigation set is a combination of navigation buttons and their associated navigation lists. If you do not create navigation sets and assign them to profiles, staff members will not have access to navigation buttons and lists.

You can perform any of these tasks:

- 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.

- Create as many navigation sets as your organization needs.

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 navigation set unless you allow staff members with that profile to customize their navigation set. See [Add or Edit a Profile](#) and [How You Customize Navigation and Configuration Lists](#).

- Add reports and components to the navigation buttons.

You also can add Quick Search reports to navigation sets to allow searching for contacts, incidents, or other types of records directly from the navigation pane. The first time you open the Navigation Sets explorer, the right side is generally empty because no navigation sets have been created.

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. 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.

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, see [Add Folders](#). For detailed information about explorer functionality, see [Open the Reports Explorer](#).

Note: Changes you make to your navigation set on the Service Console will also display on the Agent Browser UI.

To understand how navigation sets, profiles, and staff accounts work together, see [Create Navigation Sets, Profiles, and Staff Accounts](#).

If your installation of Service contains multiple interfaces, also see [Staff Member Accessibility](#).

Create a Navigation Set

Follow this procedure to create a navigation set.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Navigation Sets**.
3. Click **New**.

The Navigation Sets editor opens on the content pane.

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, enter a description in the **Summary** field.
You name the navigation set when you save it.
5. To set the options available through the file menu, see [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. You cannot clear the check box next to the File Menu component, because the file menu is always available.

- 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. See [Create a Navigation Set for the Administrator](#).

- On the left side of the content pane, expand Public Reports and Components and then expand the subfolders to see the available items. If you know the name of a report or component (or part of the name) you want to add to a navigation list, click **Find in List** to search for the item.

Note: In addition, you can search for the report based on its ID.

- To add reports and dashboards to the navigation list do one of the following:
 - Select the reports you want to add from the left column and drag them to the lower portion of the right column.
 - Double-click or select the reports or components you want to add and click **Add**.

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

- To add explorers to the navigation list, select the navigation item you want to add the explorer to from the right column, expand Components in the left column, expand the folder for the explorer you want to add, and drag it to the lower portion of the right column.
- To add notifications to the navigation list, expand the Common folder 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. See [Notifications](#).
- To add a folder to the navigation list to help organize items in the list, click **New Folder**.
 - Enter the name you want for the folder.
 - Drag explorers, reports, or other items to the folder.
 - To rename a folder, click the folder, click **Rename**, enter the new name for the folder, and click outside the folder name to save the new name.
- To set a report, explorer, or other item as the default for this navigation list, right-click it and select **Set As Default**. See [Available Actions from a Navigation or Configuration List](#).

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 [Change Your Navigation Pane Settings](#) for how staff members can change this behavior.

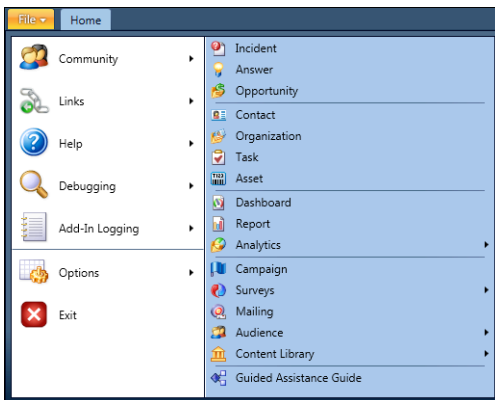
- To create a navigation list for each type of record that you want to be available in the navigation set, repeat steps 7 through 13.
- To choose the order in which the navigation buttons display on the navigation pane, click a record type or component on the upper portion of the right column and click **Move Up** or **Move Down** to position it in the list.
- To add Quick Search reports to the navigation set, see [Add Quick Search Reports to a Navigation Set](#).
- Click **Save**.
- Enter a name for the navigation set, and click **OK**.

Configure 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.

After you've configured it, staff members can click File and use the shortcuts you've added.

Tip: Use this same procedure to configure the Add a Record menu for staff members working on the Agent Browser UI.



If you do not set any options for the file menu in the navigation set, staff members with profiles that use that navigation set will not have the option to create items using this shortcut. Also, if you set menu options for items that the staff member's profile doesn't grant permission for, those options will not appear in the file menu.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Navigation Sets**.
The Navigation Sets explorer opens on the content pane.
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 **Add**.
You can also double-click items to add them. 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 **New Folder**.
 - a. Enter the name you want for the folder.
 - b. Drag menu items to the folder.
 - c. To rename a folder, select the folder, click **Rename**, enter 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 selected, click an item in the lower portion of the right column and then click **Move Up** or **Move Down** to position it in the list.

9. To group menu options, select **File Menu**, expand New Items on the left, and then select **Horizontal Separator** from the bottom of the list.
 - a. Click **Add**.
 - b. Click **Move Up** and **Move Down** to position the horizontal separators.
10. Click **Save**.

Add Quick Search Reports to a Navigation Set

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. These reports allow staff members to 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 list 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, see [Change Tool Window Visibility](#).

B2C Service 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

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Navigation Sets**.
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. Do one of the following:
 - If the Quick Search component check box on the upper portion of the right column is cleared, select it.

- If the Quick Search component check box is already selected, click it.

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

The Quick Search component is highlighted.

5. On the left side of the content pane, expand the list under Public Reports.
6. Drag a search report from the left column and drop it in the lower portion of the right column.
You can also add search reports by double-clicking them or by selecting them and clicking Add.
7. Click **Save**.

Copy a Navigation Set

After you create a navigation set, you can copy it to use as the starting point for another navigation set.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Navigation Sets**.
3. On the right side of the explorer, right-click the navigation set you want to copy and select **Copy**.
4. To add the copied navigation set to a folder, click the folder name.
5. Enter the name of the copied navigation set in the **Name** field.
6. Click the **OK**.

The copy you added appears on the explorer in the folder you selected.

Edit a Navigation Set

After you create a navigation set, you can 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.

Editing a navigation set used in a profile does not impact staff members who have permission to customize their navigation sets. See *How Custom Navigation Sets Work with Profiles*.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Navigation Sets**.
The Navigation Sets explorer opens.
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 these steps for each navigation list you want to modify.
8. Click **Save**.

Delete a Navigation Set

Occasionally, you might want to delete a navigation set that's no longer required.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Navigation Sets**.
The Navigation Sets explorer opens.
3. Right-click the navigation set you want to delete and select **Delete**.

Note: 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.

A message opens asking you to confirm deletion of the navigation set.

4. Click **Yes** to confirm deletion.

How Custom Navigation Sets Work with Profiles

Custom navigation sets give staff members permission to change the items in their navigation lists.

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 navigation set you define.

Tip: Staff members can reset their navigation set to their profile 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. See [Change Your 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 personalized navigation lists are removed.
- Changing the profile for a specific staff account removes the staff member's personalized 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 personalize 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.
- Editing navigation sets to add or remove items, such as reports or explorers, from navigation lists, has 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.

Assign a Navigation Set to a Profile

After you create navigation sets, you assign them to profiles used by your staff members.

You also can assign permission allowing staff members to customize the navigation set to their individual needs.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Profiles**.
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 **Search** in the **Navigation Set** field, select the navigation set you want staff members with this profile to use, and click **OK**.
5. To give staff members permission to change the items in their navigation lists, select **Customize Navigation Sets**.
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 [How Custom Navigation Sets Work with Profiles](#).
6. Click **Save**.

Staff Management

Overview of Staff Management

Every staff member who accesses or works in B2C Service requires a staff account.

Staff management includes these tasks.

- Creating and editing profiles
- Creating and editing staff accounts
- Assigning permissions
- Configuring staff-member passwords

Before creating a staff account, you must create a profile for that account. Profiles define the products and information staff members can work with when logged in to B2C Service. Staff accounts include staff-member-specific information, such as the account login, phone number, and assigned profile. 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 you create a staff account, you also can 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.

Profiles

Profiles let you control what areas of B2C Service your staff members can access and what specific actions they can perform in those areas.

Profiles contain general options for Service 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 B2C Chat, and perform other activities.

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. See [Overview of Navigation Sets](#) and [Overview of 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. After you create profiles, you can add staff accounts and assign a profile to each account.

Create the following items before adding profiles.

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

Add or Edit a Profile

Use this procedure to add or edit a profile.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Profiles**.
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 **New**.
4. To edit an existing profile, double-click the profile.
5. Enter the name of the profile in the **Name** field.
When you move to another field on the content pane, the name you type is automatically added to the Label field.
6. From the Interfaces section, select the check boxes next to the interfaces you want the profile to access under the Access column.
7. If your site has multiple interfaces, click the interface you want to configure the profile for. The permissions granted for the first interface you configure are also granted for all other interfaces the profile can access.
8. Click **Search** under the Navigation Set column to specify the navigation set you want to use for the profile.
 - a. Select the navigation set from the list.
 - b. Click **OK**.
9. To allow the staff accounts associated with the profile to customize their navigation set, select **Customize Navigation Sets** check box.

10. By default, standard workspaces are selected in new profiles. To assign custom workspaces or workflows to the profile, click the **Search** icon next to the workspace you want to change. The Workspaces / Workflows window opens.
 - a. Select the workspace you want to use.
 - b. Click **OK**.

Note: If you do not assign a workspace to a browser editor slot, the workspace or workflow from the non-browser editor will be used. If the non-browser editor row is blank, the standard desktop console workspace will be used.

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

Note: Options on this tab are active when add-ins are installed using the Add-in Manager.

- a. To let staff members with this profile install add-ins on their workstations without uploading the add-in to the server, select **Developer Access**.

This option lets developers test add-ins without the add-ins being downloaded to other staff members' workstations. 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 members with this profile use add-ins, select the check boxes next to the add-ins they can access.

12. To grant access to Agent Browser UI extensions that are installed on the site, click the **Agent Browser UI Extensions** tab.

Note: Options on this tab are active when extensions are installed using the Add-in Manager.

- a. To let staff members with this profile use extensions, select the check boxes next to the extensions they can access.

13. To grant access to installer options, click the **Deployment** tab.

14. To change the automatic logout setting for staff members with this profile, click the **Other** tab and enter a value (in minutes) in the Session Timeout field.

15. To set the .NET browser control to run in IE11 emulation mode rather than the default IE7 mode, click the **Other** tab and select the Set Browser Controls to use IE11 emulation mode check box. Contact your Oracle account manager to enable this option if you are a new customer.

A warning message appears indicating that this option will change the registry key of the user's computer so .NET browser controls in the B2C Service application will use IE11 emulation mode, and that the option should be thoroughly tested before used in production. Click **Yes** to continue with this option. Agents must log out and log in again for the registry key to be set.

Note: If the Set Browser Controls to use IE11 emulation mode check box has been previously selected, but is cleared, a warning will be shown indicating that once set, the registry will need to be manually cleared.

In addition, the Open Pop-ups in New Browser Control and Send URL as Post Data options in workspaces should be cleared, and No Application should be selected.

16. To grant permissions to the profile, click **Permissions**.

The Profiles Permissions editor opens displaying a number of tabs.

Note: See *Set Profile Permissions* to learn about the tabs, and how to use the available options to assign permissions to a profile.

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

18. To add notes to the profile, click **Notes**.

19. Click Save.

The profile is saved.

Note: You can delete a profile if you don't need it. However, you can't delete a profile, if the profile has any account associated with it.

Related Topics

- [Overview of Navigation Sets](#)
- [When to Use Multiple Interfaces](#)
- [How Custom Navigation Sets Work with Profiles](#)
- [Agent Browser UI Extensions](#)
- [Overview of Add-Ins](#)
- [Add a Browser to a Workspace or Script](#)

Set Profile Permissions

Using the tabs on the Profile Permissions editor, you can assign various administrative, read, edit, and delete permissions to staff members' profiles.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, double-click **Profiles**, and then double-click the profile you want to edit.
The Profiles editor opens.
3. Click **Permissions**.
The Profile Permissions editor opens.
4. Click the tabs to access options and assign permissions.

Profile Permissions Editor Tabs

| Click This Tab | To Perform This Function |
|----------------------------|--|
| <i>Administration</i> | Selected by default when you open the Permissions page. |
| <i>Organizations</i> | Assign permissions related to adding and editing organizations. |
| <i>Contacts</i> | Assign permissions related to adding and editing contacts. |
| <i>Service</i> | Assign permissions related to Service. If Chat is enabled on the site, chat permissions are also selected on this tab. |
| <i>Opportunities</i> | Assign permissions related to opportunity tracking. |
| <i>Outlook Integration</i> | Assign Outlook integration permissions. Outlook integration must be enabled for this tab to appear. |
| <i>Outreach</i> | Assign Outreach permissions. |
| <i>Feedback</i> | Assign Feedback permissions. |

| Click This Tab | To Perform This Function |
|-----------------------|--|
| | |
| <i>Tasks</i> | Assign task permissions. |
| <i>Custom Objects</i> | Assign custom object permissions. Custom objects must be enabled for this tab to appear. |
| <i>Analytics</i> | Assign Analytics permissions. |

5. Enter the appropriate field information.
6. Click **Save**.

Administration Permissions

The Administration tab is the default tab on the Profile Permissions editor. By enabling options on this tab, you can grant staff members permissions related to administrative functions of the system.

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

Note: You can redirect your staff members to use the Agent Browser User Interface (Agent Browser UI) by removing profile permissions that allow them access to administration functions that are not available on the Agent Browser UI. For more information, see [How You Redirect Staff Members to the Agent Browser UI](#).

Administration Tab

| 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: <ul style="list-style-type: none"> • Custom Fields • Messages • Mailboxes • Currencies and Exchange Rates • Service Level Agreements • Response Requirements • Chat Hours • Channels • Channel Accounts • Quote Templates • Territories • Promotions • Strategies |

| Field | Description |
|------------------------------------|---|
| | <ul style="list-style-type: none"> • Sales Periods • External Suppression List • Thread Type Correction |
| Groups/Accounts/Distribution Lists | <p>Select this check box to let staff members with this profile access the following options:</p> <ul style="list-style-type: none"> • Staff Accounts and Groups • Distribution Lists <p>Staff members who have Groups/Accounts/Distribution Lists permissions can assign only those profiles with the same or lesser permissions as their profile.</p> |
| System Error Log | Select this check box to let staff members with this profile access the log files under Site Configuration. |
| Workspace Designer | Select this check box to let staff members with this profile access the Workspaces and Workflows explorer and designer. |
| Scripting | Select this check box to let staff members with this profile create and edit agent scripts. 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. 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. |
| 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. For this check box to display, the MOD_CP_DEVELOPMENT_ENABLED configuration setting must be enabled on your site. 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. For this check box to display, the MOD_CP_DEVELOPMENT_ENABLED configuration setting must be enabled on your site. Staff members who have CP Stage permission automatically have CP Edit permission. |
| 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. For this check box to display, the MOD_CP_DEVELOPMENT_ENABLED configuration setting must be enabled on your site. 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. |
| Process Designer | Select this check box to let staff members with the profile create custom processes (object event handler) that run when events occur on objects in the system. |
| Bulk Delete | Select this check box to let staff members with this profile delete up to 1000 contact, custom object, incident, or opportunity records at a time. |
| Virtual Assistant Edit | Select this check box to let staff members with this profile configure the virtual assistant. |

| Field | Description |
|---------------------------|--|
| | For this check box to display, your site must be integrated with Oracle 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. |
| Configuration | <p>Select this check box to let staff members with this profile access the following options:</p> <ul style="list-style-type: none"> • Password Configuration • Configuration Settings • Configuration Wizard • Message Bases • File Manager • Interfaces • Add-In Manager • Email Address Sharing <p>If cleared, these options are not available.</p> <p>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.</p> |
| Business Process Settings | <p>Select this check box to let staff members with this profile access the following options:</p> <ul style="list-style-type: none"> • Navigation Sets • Customizable Menus • Countries • Products/Categories/Dispositions • Standard Text • Variables • Holidays • Product Catalog • Price Schedules • Tracked Link Categories <p>If cleared, these options are not available.</p> |
| Rules Edit | Select this check box to let staff members with this profile edit business rules. |
| Profiles | <p>Select this check box to let staff members with this profile add and edit profiles. 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.</p> |
| SSO Login (SAML 2.0) | <p>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.</p> <ul style="list-style-type: none"> • 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. |

| Field | Description |
|-----------------------------------|--|
| | <ul style="list-style-type: none"> Password options on the Account Details page are disabled. <p>B2C Service uses the SAML 2.0 open login 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.</p> |
| Skill Edit | Select this check box to let staff members with this profile configure advanced routing. For this check box to display, Chat and Smart Interaction Hub must be enabled. |
| Access Control | Select this check box to let staff members with this profile access the Access Control editor to configure permissions for Community Self Service. |
| Agent Browser User Interface | The permission in this section lets staff members with this profile access B2C Service using the Agent Browser UI through account authentication. |
| Account Authentication | Select this check box to let staff members with this profile access B2C Service using the Agent Browser UI. 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. |
| 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. |
| Allow Custom Attribute Decryption | <p>Select this check box to let staff members with this profile decrypt encrypted custom attribute fields visible in their workspaces.</p> <p>Encrypted fields are available only in the Agent Browser UI. Only agents with this permission can decrypt these fields. Overview of Custom Attribute Encryption.</p> |

Organization 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 and Outreach
- Service and Outreach
- Service and Opportunities
- Service and Opportunities and 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 and Opportunities, Service and Outreach, and Service and Opportunities and Outreach states.

Organizations Tab

| 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. 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. |

Related Topics

- [Add an Organization](#)

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.

Staff members can manually set the state of a contact 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 and Opportunities.

Contacts Tab

| 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. With this permission, a staff member can click Send Email 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 B2C Service). The To field in the new message is populated with the contact's email address. |
| Access Control | Select this check box to let staff members with this profile assign role sets to contacts for Community Self Service. |
| 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. Click the Read, Edit, Delete, or Move column headers 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. |
| 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. |

| 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 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. |

Related Topics

- [Add a Contact](#)

Service Permissions

Profile settings on the Service tab let you define permissions for handling incidents, answers, assignments, assets, 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 limit. If Chat is enabled, additional profile permissions display on the Service tab. See [Add Chat Permissions to a Profile](#).

Service Tab

| 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. |
| 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. |
| Edit/Delete Committed Thread Content | Select this check box to let staff members edit incident-thread content and delete images. |
| Incident Queues | Select a queue you want to be available for this profile from the drop-down list and click Add (+) . If needed, you can then select additional queues to associate with this profile, delete queues, or change their order to reflect queue priority ranking. |

| Field | Description |
|--|---|
| Pull Policy | <p>Click this drop-down list to select a pull policy that determines the queues that incidents are retrieved from and their order. The pull policies include:</p> <p>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.</p> <p>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.</p> <p>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.</p> |
| Pull Quantity | Enter 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 | Enter the number of incidents that can be in a staff member's inbox at one time. The maximum inbox limit is 999. |
| Pull From Single Round Robin Logged In Queue | <p>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.</p> <p>This setting has no effect when staff members manually pull incidents using the Fill Inbox feature.</p> |
| Advanced Routing - Incident Queues | <p>Click to select the advanced routing incident queue you want to be available for this profile, and click +. After selecting a queue, click the drop-down list to designate it as Primary or Overflow and its order of priority. The queue can be moved up or down in the queue list. If needed, you can then select additional advanced routing incident queues to associate with this profile. Pull policy must be set to strict priority or first due for advanced routing of incidents.</p> <p>Advanced routing must be enabled for this option to appear.</p> |
| 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 | <p>Select this check box to let staff members with this profile add and update answers.</p> <p>With this check box selected, you must also select HTML Design Mode and/or Source Mode.</p> |
| 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. |

| Field | Description |
|---|--|
| | 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 cannot edit in this mode. With this check box selected, you must also select Add/Edit . |
| Source Mode | Select this check box to let staff members with this profile create an answer in HTML source code. If cleared, the Source tab does not display and staff members cannot edit in this mode. With this check box selected, you must also select Add/Edit . |
| 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 list. |
| 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 list 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. |
| 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. |

| 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. |
| 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. Guided assistance must be enabled to use this feature. Contact your Oracle account manager. |

Related Topics

- [How You Add Answers for Multiple Interfaces](#)
- [Assign Asset Profile Permissions](#)

Opportunities 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.

Opportunities Tab

| 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. |
| 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. |

| Field | Description |
|---|---|
| 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. 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 permission enabled 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. |
| 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 list when adding or editing leads and opportunities, as well as the Salesperson drop-down menu when adding or editing contacts and organizations. |

Outreach Permissions

You can set options on the Outreach tab to grant permissions to add, update, and delete mailings, campaigns, and documents.

You also can allow staff members with this profile to create templates, snippets, file attachments, and tracked links.

Outreach Tab

| Field | Description |
|----------|---|
| Mailings | These options define the mailing permissions for staff members with this profile. |

| Field | Description |
|---|---|
| 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. |
| 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 Campaign, 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. |

| 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. |
| 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 list when adding or editing campaigns, mailings, or documents. |

Feedback Permissions

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

You also can specify permissions for enabling and disabling surveys and editing questions that have already been answered by customers.

Feedback Tab

| 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. |
| 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. |

| Field | Description |
|---|---|
| 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. |
| 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. |
| 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. |

| Field | Description |
|-----------------|--|
| 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 list when adding or editing surveys or documents. |

Task Permissions

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

Tasks Tab

| 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. |

Custom Objects 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.

Custom Objects Tab

| 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. 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. This check box displays only for custom objects that contain note fields. |

Related Topics

- [Custom Object Types](#)

Analytics Permissions

Options on the Analytics page determine the reports that staff members with this profile can access for each available interface.

You also can assign access to the analytics features, such as creating custom reports and dashboards.

If you are unable to perform certain actions on a report or dashboard, the cause may be that you lack the Analytics permissions needed to perform the actions.

Analytics Page

| 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. 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. This permission is required to access Analyze options on the Reports explorer ribbon. |
| 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. This permission also lets staff members edit data inline on the Agent Browser UI. |
| Print/Export/Forward Reports | Select this check box to let staff members with this profile print, export, and forward reports. |
| Create/Edit Schedules | Select this check box to let staff members with this profile create and edit schedules for reports and dashboards. |
| Create/Edit Custom Scripts | Select this check box to let staff members with this profile create and edit report custom scripts. Note: <i>Submit a Service Request</i> if this permission is enabled but the option to create a custom script is disabled on the Report Designer. |
| Administrator | Select this check box to give staff members with this profile administrator all analytics permissions. This permission is required to edit standard reports. 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. |

| Field | Description |
|--------|---|
| | Custom folders that do not contain reports do not display in the list of reports. |
| All | Select this check box to let staff members with this profile Open or Edit all folders. |
| 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. |
| 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. |

Staff Accounts Editor

Use the Staff Accounts editor to perform a variety of staff-management tasks.

The editor enables you to perform these tasks.

- Add staff members
- Assign staff members to profiles
- Group staff members according to level, department, area of expertise, manager, or other categories that apply to your organization

Note: 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.

- Configure and manage staff-member passwords

Configure Staff-Member Passwords

You can enhance your staff members' password security by specifying options that can prevent repeated invalid login attempts, set password length and character requirements, and expiration details.

Note: 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 [How You Recover Forgotten Passwords](#) and [How You Secure Customer Passwords](#).

1. **Click Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Password Configuration**.
The Password Configuration editor opens on the content pane.

3. Enter field information.

Password Configuration

| Field | Description |
|--------------------------|--|
| Login Requirements | This section contains the option to establish a limit on invalid login attempts. |
| Number of Invalid Logins | <p>Drag the slider to the number of failed login attempts you want to allow before the system locks out the account. Alternately, enter the number you want in the field to the right of the slider. A value of 0 disables this function. The default value is 5.</p> <p>Only administrators possessing the Groups/Accounts/Distribution Lists profile permission can unlock a staff account. After a successful login, the invalid login count is reset to 0.</p> |
| Password Expiration | <p>This section contains options to customize time periods that affect password expiration.</p> <p>If the Password Expires check box is cleared for a particular staff account, it overrides any password expirations defined in the password configuration settings.</p> |
| Expiration Interval | Drag the slider to the number of days that passwords stay in effect. Alternately, enter the number you want in the field 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, enter the number you want in the field to the right of the slider. After 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, enter the number you want in the field 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 | <p>Drag the slider to the minimum number of characters required for a staff account password. Alternately, enter the number you want in the field to the right of the slider. The default value is 8.</p> <p>Password length cannot exceed 20 characters.</p> |
| Character Repetitions | Drag the slider to the maximum number of consecutive repeated characters permitted in a password. Alternately, enter the number you want in the field 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. |
| Character Occurrences | Drag the slider to the maximum number of times a character can be used in a password. Alternately, enter the number you want in the field 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. |

| Field | Description |
|--------------------------------|---|
| Lowercase Characters | Drag the slider to the minimum number of lowercase characters required in a password. Alternately, enter the number you want in the field 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, enter the number you want in the field 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, enter the number you want in the field 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, enter the number you want in the field 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, enter the number you want in the field 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 Save.

Add or Edit a Staff Account

When you add a staff account, you define the login information for the staff member and associate a profile with the staff member.

Before you start

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

- Profiles. See [Profiles](#).
- Password security options. See [Configure 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 [Custom Field Types](#).

When adding or editing a staff account, 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 [How SMIME Security Works](#).

Note: You can only add 100,000 accounts and you cannot create a duplicate account with the same login credentials.

Here's what to do

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

2. Expand **Staff Management**, and the double-click **Staff Accounts by Group** (or another Accounts report).

The report opens on the content pane, listing the accounts that have already been created.

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 **Search** 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. Do one of the following:

- o To add a staff account, click **New**.
- o To edit a staff account, double-click the account on the report.

The Staff Accounts editor opens.

4. Enter field information.

Staff Accounts Editor

| 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. For this check box to display, your site must be integrated with Virtual Assistant. Although the Virtual Assistant Account check box displays, Virtual Assistant is deprecated and no longer available. For questions, contact your Oracle account manager. |
| Non-Contact Center Account | Select this check box to designate this user as a non-contact center account. For this check box to display, non-contact center user accounts must be enabled. Contact your Oracle account manager. |
| User Name | Enter 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 | Enter the staff member's first name in this field. The first name and last name appear on the Service Console when the staff member is logged in. |
| Last Name | Enter the staff member's last name in this field. The first name and last name appear on the Service Console when the staff member is logged in. |
| Change Password | Click Change Password to open the Change Password window. Enter the staff member's login password in the New Password field and enter 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 OK . 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. |
| Password Expires | Select this check box to automatically expire the password after the time period specified in the password configuration. |
| 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. This check box remains selected until the staff member changes the password. After the password has been changed, the check box is automatically cleared. |

| 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. Staff members without a valid password can reset their password from the Login Help link on the Login window. 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 | Enter a name for the staff member that will display in email communications and to customers during a chat session. |
| Phone Number | Enter the phone number of the staff member in this field. |
| Profile | Click the Search icon next to this field to open the Profiles window. Select the profile you want to associate with this staff member and click OK . |
| Group | Click the Search icon next to this field to open the Account Groups window where you assign the staff member to a group. |
| Disabled | Click this drop-down list to define whether the staff account is disabled. You can choose from the following options. <ul style="list-style-type: none"> ○ 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 cannot be used for a different staff account. <p>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.</p> |
| 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. |
| Default Currency | Click this drop-down list 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. |
| Time Zone | Click this drop-down list to select the account time zone. This drop-down list 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. If you wish to change the time zone associated with this staff member's location, contact your Oracle account manager to have the option enabled. (Note that the option should not be enabled if you are using SLAs.) |
| Default Country | Click this drop-down list to select the country associated with this staff member. |
| Territory | Click this drop-down list to select the sales territory associated with this staff member. |
| External Screen Pop Port | Enter the port number that the system will listen on for external screen pop requests. This field displays only if the EXT_CONSOLE_WS_ENABLED configuration setting is enabled on the Configuration Settings editor. |

| Field | Description |
|--|--|
| | 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. |
| Email Address | Enter the staff member's email address. This is required to receive scheduled reports and system notifications. |
| Email Notifications | <p>Click this drop-down list to select the email notifications the staff member receives when an event occurs, such as an incident being assigned. The following options are available.</p> <p>No Notifications—Select this option to prevent email notifications from being sent to the staff member.</p> <p>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.</p> <p>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.</p> <p>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.</p> |
| Email Signature | Enter 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 enter their own signature in the Email Signature field. |
| S/MIME Account Certificate | Click the Folder icon to find the file containing the public S/MIME account certificate. The certificate must contain the email address of the staff account. S/MIME security options are not available for Outreach mailboxes. |
| 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. 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 certificate. Changing this setting does not affect previously imported and stored certificates. |

5. To assign the staff account to a manager, click **Department**. See *Organize Staff Members by Manager*.
The Department editor 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. To define custom field information, click **Custom Fields**.
Any staff account custom fields created in your application will display in the editor.
7. To enter channel information, click **Channels**.
8. To view a log of changes that have been made to the staff account, click **Audit Log**.

9. Click **Save**.

Related Topics

- [Profiles](#)
- [Considerations When Using Single Sign-on](#)
- [How You Customize Configuration Settings](#)
- [Configure Staff-Member Passwords](#)
- [Change Your Personal Settings](#)

Assign a Staff Account to a Group

Every staff account you create must be assigned to a group.

Before you start

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.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Staff Accounts by Group** (or another Accounts report).
3. Double-click the staff account you want to assign to the group.
4. Do one of the following:
 - Click the **Search** icon next to the account Group field.
 - Click the **Department** tab on the ribbon and click the **Search** icon next to the Group field.
5. To assign the account to an existing group, select the appropriate group.
Staff members with the Profiles permission enabled 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 **New Group** and enter a name for the group.
7. To change the display order of the groups, select the group you want to move and click the up or down arrow.
8. To rename a group or add a description to a group, right-click the group and select **Edit**.
 - a. Enter the name you want for the group in the **Label** field.
 - b. Enter notes or other information you want regarding the group folder in the **Description** field.
 - c. Click **OK**.
9. To delete a group, right-click the group, select **Delete**, and click **OK** to confirm the deletion message.
You can delete only those groups that do not have associated staff accounts.
10. Click **OK** to close the Account Groups window.
11. Click the **Save** to save the changes to the staff account and group.

Sort the Staff Accounts in a Group

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

1. Open a staff account in the group you want to sort.
2. Click **Department** on the ribbon.

All staff members in the account's group display in the Staff in Group list. See [Organize Staff Members by Manager](#) for information about the Departments editor.

3. Click **Sort** above the Staff in Group list.
 - a. Select the option next to the sort option you want to use.
 - Sort by First Name, Last 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, Last 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, First 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, First Name (reversed)—Select this option to sort the accounts in the group by last name, starting with last names beginning with Z.
 - b. Click **OK**.
4. 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.
5. Click **Save**.

Organize Staff Members by Manager

You can organize staff members in a manager hierarchy, listed beneath their managers or team leads.

The manager hierarchy, which Opportunity Tracking uses, also helps you report on the performance of managers and their staff. You can create up to 12 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**).

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Staff Accounts by Group** (or another Accounts report).
3. Double-click the account you want to assign to a manager.
4. Click **Department** on the ribbon.

The Departments editor lets you specify the account group and manager hierarchy. You can also view lists displaying the other staff members in the same group and the manager hierarchy.

Note: You can manage staff groups on the Department page. See *Assign a Staff Account to a Group* for information about creating and editing groups, and adding and ordering staff accounts in groups. To change group assignments, staff members with the Profiles permission on the Administration tab can drag staff accounts from the open report to the Group folders on the left side of the report.

5. Click the **Search** icon next to the Manager field.
The Account Manager Hierarchy window opens.
6. Select the manager you want to assign the account to.
7. Click **OK**.
8. Click **Save**.

Delete a Staff Account

Like other types of records in B2C Service, you also can delete staff accounts. However, it is important that you understand what happens when you delete them.

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Staff Accounts by Group** (or another Accounts report).
3. Select the staff account you want to delete.
4. Click **Delete**.
A message asks you to confirm the deletion.
5. Click **Yes** to delete the staff account.

Customizable Menus

Overview of Customizable Menus

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.

When you customize drop-down lists, you increase the likelihood of an organized, accurate, and up-to-date knowledge base, which is essential for providing an exceptional customer experience. The available customizable menu items on your navigation pane depend on the B2C Service products that are enabled on your site, your navigation set, and your profile permissions.

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 answer using those options, and customers can select specific product and category for community posts and 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.

Note: 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. 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. See [Add a Custom Object Menu Item](#).

Select a customizable menu item to learn how to add and edit it.

Customizable Menu Items

| Menu Item(s) | Action |
|-----------------------------|--|
| <i>Answer access levels</i> | Add custom answer access levels for increased control over the information that is visible to staff members and customers. |
| <i>Answer statuses</i> | Add custom answer statuses for increased classification of answers in the knowledge base. |

| Menu Item(s) | Action |
|--|--|
| <i>Asset statuses</i> | Add custom asset statuses for tracking which assets are in use, which are no longer used or supported, and which assets have not been associated with customers. |
| <i>Billable tasks</i> | Define billable tasks for classifying and recording how agents spend their time working on incidents. |
| <i>Channel types</i> | Add channel types for contacts so they can associate their Twitter, YouTube, and Facebook user names through the customer portal. |
| <i>Chat agent statuses</i> | Add custom statuses to describe an agent's availability to chat with customers and assist other agents with their chat sessions. |
| <i>Chat session queues</i> | Identify queues that can be used for routing chat session requests. |
| <i>Competitors</i> | Add competitors to your knowledge base to help your organization track won and lost opportunities by competitor. |
| <i>Contact roles</i> | 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. |
| <i>Contact types</i> | Add contact types to help you organize contacts in ways that are most useful to your organization. |
| <i>Countries</i> | Maintain accurate, consistent address data for contacts and organizations by adding the countries and provinces your organization does business in. |
| <i>Custom object menus</i> and <i>Edit a Custom Object Menu Item</i> | Use custom object menus to add, copy, and delete custom object menu items. |
| <i>Incident queues</i> | Identify queues that can be used for routing incidents automatically or manually based on the criteria you establish. |
| <i>Incident severities</i> | Define incident severity levels for classifying incidents. |
| <i>Incident statuses</i> | Add custom incident statuses to track the state of an incident. |
| <i>Industry types</i> | Use industry types to identify those your customers are associated with. |
| <i>Lead rejection types</i> | Use lead rejection types to identify reasons for rejecting prequalified opportunities. |
| <i>Opportunity statuses</i> | Use opportunity statuses to identify the current state of opportunities in the knowledge base. |
| <i>Organization address types</i> | Add organization address types when you need more flexibility than that offered by the standard billing and shipping addresses. |
| <i>Price schedules</i> | Establish various pricing schedules that can be applied to sales products. |

| Menu Item(s) | Action |
|---|---|
| <i>Product catalog</i> and <i>Add a Price Schedule to a Sales Product</i> | Use the product catalog to add, edit, and categorize sales products and assign price schedules to them. |
| <i>Products/categories/dispositions</i> | 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. |
| <i>Product linking</i> | 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. |
| <i>Tracked link categories</i> | Assign tracked links to categories, and enhance reporting on customer clicks of links in your mailings and surveys. |
| <i>Win/loss reasons</i> | Identify win/loss reasons to determine what contributes to the outcome of opportunities. |

Add or Edit a Country or Province

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 list of the states or provinces associated with that country.

You can also delete countries and provinces on the Countries editor by clicking Delete. 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Internationalization**, and then double-click **Countries**.
The Countries tree displays on the content pane.
3. Do one of the following:
 - o To add a country, click **New** to display the editor.
 - o To edit a country, click it in the tree.

4. Enter field information.

Countries Editor

| Field | Description |
|---------------------|---|
| Name | Select a country from the Country/ISO Code list at the top of the editor or enter 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 2- or 3-digit abbreviation the country uses. 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. If you entered 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 | Enter a mask that restricts what staff members can enter when they specify phone numbers for contacts in this country. Any special characters for formatting will automatically populate in the field. If the staff member enters a character that doesn't match the mask, the staff member must correct it before entry can continue. For example, if the mask defines the phone number as numbers only, the staff member won't be able to enter letters. |
| Phone Code | Enter the international phone code for the country. |
| Postal Mask | Enter a mask that restricts what staff members can enter when they specify postal codes for contacts in this country. Any special characters for formatting, such as such as hyphens and parentheses, will automatically populate in the field. If the staff member enters a character that doesn't match the mask, the staff member must correct it before entry can continue. For example, if the mask defines the postal code as numbers only, the staff member won't be able to enter letters. |

- To add a province, click **Add** (in the Provinces section on the right side of the editor), and then enter the province name in the Name field.
- To edit the name of a province associated with the country you are editing, select the province name and enter the new name.
You can move provinces within the list using the up and down arrows next to the Provinces list.
- Click **Save**.

Related Topics

- [Input Masks](#)

Add or Edit an Organization Address Type

Organization address types let you 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.

- Click **Configuration** on the navigation pane.
- Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.

3. Click the arrow next to the System Menus folder to expand the list.
4. Select **Organization Address Types** to display the editor.
5. Do one of the following:
 - o To add an address type, click **New**.
 - o To add a new address type directly under an existing address type in the tree, select the existing address type and click **New**.
 - o To edit an address type, click it in the tree.
6. Enter a name for a new address type or edit an existing name in the Label column.
The corresponding field in the Label column in the Interface Visibility section is populated or revised as you type.
7. Click **Save**.
You can delete any address type except Billing by selecting it and clicking Delete.

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.

Add or Edit a Contact Type

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.
3. Expand the System Menus folder to view the list.
4. Click **Contact Types** to display the editor.
5. Do one of the following:
 - o To add a contact type, click **New**.
 - o To add a new contact type directly below an existing contact type in the tree, select the existing contact type and click **New**.
 - o To edit a contact type, click it in the tree.
6. Enter a name for a new contact type or edit an existing name under the Label column.
The corresponding field under the Label column in the Interface Visibility section is populated or revised as you type.
7. Click **Save**.

Add or Edit a Price Schedule

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.

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

Note: 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Sales** in the configuration list, and then double-click **Price Schedules**.
The Price Schedules tree displays on the content pane.
3. Do one of the following:
 - o To add a price schedule, click **New** to display the editor.
 - o To edit a price schedule, click it in the tree.
4. Enter field information.

Price Schedules Editor

| Field | Description |
|-----------------------------|---|
| *Price Schedule Name | Enter the name of the price schedule. The item name in the Price Schedules tree on the left side of the content pane and the corresponding field under the Label column in the Interface Visibility section are populated or revised as you type. |
| Disabled | Select this check box to prevent the price schedule from appearing in the Price Schedule drop-down list when selecting a price schedule for a sales product. |
| *Currency | Click this drop-down list and select a currency. Currency options are added to the Currencies/Exchange Rates editor. |
| Notes | Enter 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 **Save**.

Related Topics

- [Add or Edit a Currency](#)

Add or Edit a Sales Product

When you add sales products, you define the product catalog used to create quotes.

You also add sales products to use as customer assets.

You can enable or disable sales products, establish visibility, add identification fields, enter product descriptions, associate price schedule, associate a 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Sales** in the configuration list, and then double-click **Product Catalog**.
The Product Catalog tree displays on the content pane.
3. Do one of the following:
 - o To add a sales product, click **New** to open the Product Details editor.
 - o To edit a sales product, click it in the tree.
4. Enter field information.

Product Details Editor

| Field | Description |
|-----------------------------|--|
| *Product Name | Enter the sales product name. The item name in the Product Catalog tree on the left side of the content pane and the corresponding field in the Label column in the Interface Visibility section are populated or revised as you type. |
| ID | Enter 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. |
| Disabled | Select this check box to prevent the sales product from displaying when creating a quote or customer asset. |
| Sales Catalog | Select this check box to make the sales product available for use in Opportunity Tracking. If cleared, or if the Disabled check box is selected, the sales product will not be available in Opportunity Tracking. |
| Service Catalog | Select this check box to make the sales product available for use in B2C Service (Service). 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. |
| Service Product | Click this drop-down list to associate a product with the sales product. |
| Description | Enter a description of the sales product that can be viewed by sales reps when they add products to quotes. |
| Price Schedules | Select one or more price schedules. |
| 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. The sales product will remain on the Promotions editor. |

5. To add information for any sales products custom fields, click **Custom Fields** and enter the information.
Depending on the type of field, you can enter text in a field, select a date from a drop-down calendar, select a menu option, or select an option.
6. Click **Save**.

Related Topics

- [Search Optimization Using Products, Categories, and Dispositions](#)
- [How You Manage Quotes](#)
- [Custom Field Types](#)
- [Add or Edit a Sales Product to Use with Assets](#)

Add a Price Schedule to a Sales Product

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Sales** in the configuration list, and then double-click **Product Catalog**.
The Product Catalog tree displays on the content pane.
3. Click a product in the tree to open the Product Details editor.
4. Click **New** 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.
6. Enter field information.

Price Schedule Field

| Field | Description |
|--------------------|---|
| *Price | Double-click this field and enter a price. |
| Currency | This read-only field is determined by the price schedule you select. |
| *Start Date | Click each month, day, and year component of this date field and enter an effective start date for the price schedule. Or click the calendar and select a date. 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. |
| Notes | Enter any notes you want to add to the price schedule. |

7. Click **Save**.

Related Topics

- [How You Manage Quotes](#)

Add a Custom Object Menu Item

After menu-only custom objects are created and deployed, you can add them in Customizable Menus.

You add custom object menu items through the Custom Object Menu editor.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.
3. Expand the **Custom Menus** folder.
4. Select a custom menu item in the tree.
The Custom Object Menu editor opens on the content pane.
5. Click **New**.
The new menu item is added to the Custom Object Menu editor.
6. Enter a name for the menu item.
7. Click **Save**.

Edit a Custom Object Menu Item

After menu-only custom objects are created and deployed, you can copy, edit and delete them in Customizable Menus.

You edit, copy and delete custom object menu items through the Custom Object Menu editor.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.
3. Expand the **Custom Menus** folder to view 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 enter the new name.
7. To copy a menu item, select it on the editor and click **Copy**.
8. To delete a menu item, select it on the editor and click **Delete**.

How You Organize 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. Customers can select specific products and categories to refine community posts and searches. 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 customers. 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.

Perform these tasks 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.
- 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 and community pages.
- 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 and using the community. Add dispositions so agents can indicate how an incident was ultimately resolved.
- 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.
- Link products to dispositions—To restrict staff member selection of dispositions based on the incident's product, enable and configure product-disposition linking.

Related Topics

- [Product Linking](#)

Specify the Number of Required Product Levels for Incidents

You can use up to six levels of products, categories, and dispositions to classify incidents and answers in the knowledge base.

By creating subproducts, 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.

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 **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Workspaces**.
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**.
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 **Minimum Level** on the ribbon's Design tab and enter the number of required product levels.
Allowed values range from 0 to 6.
6. Click the **Save** icon on the Quick Access Toolbar.
7. Assign this workspace to the applicable profile. See *Profiles* if you need help with this process.

Search Optimization Using 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 on the customer portal through these classifications, the search finds answers and community entries 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.

Note: For Knowledge Advanced customers, the lists of products and categories available to content authors depend on how items are configured in Knowledge Advanced.

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 subproduct 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 subproducts and subcategories 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 subdispositions let you further refine the classification of incidents.

The following procedures describe working with products, but the procedures to add and edit categories and dispositions are identical. Simply replace product information with category or disposition information where appropriate.

- *Add or Edit a Product*
- *Add a Subproduct*
- *Edit Visibility Settings for Multiple Products Simultaneously*

Add or Edit a Product

Add or edit a product to narrow customer search results on the customer portal.

The following procedure describes working with products, but the procedures to add and edit categories and dispositions are identical. Simply replace product information with category or disposition information where appropriate.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.

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. Do one of the following:
 - To add a product, click in the Products column and click **New**.
 - 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 subproduct, right-click and select **Add Child**.

4. Enter the name of the product in the **Name** field.

The word you enter in the Name field is a keyword for all answers associated with this product. When customers search by the product name, all answers associated with this product are returned.

5. To make the product visible to staff members working with incidents, select **Administration**.

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 **End-user**. (The End-user check box is not available when adding or editing dispositions.)

Selecting the visibility settings for a parent level does not automatically set the same settings for the parent sublevels. Visibility must be set individually for each. You can also make subproducts visible even if the parent product is not visible.

Note: For Knowledge Advanced customers, visibility of products and categories depend on how items are configured in Knowledge Advanced.

7. To enter a description for the product, click **Description** and enter it in the **Description** field.

8. Click **Save**.

The product appears in the Products column.

Add a Subproduct

Add a subproduct to narrow customer search results on the customer portal.

The following procedure describes working with products, but the procedures to add and edit categories and dispositions are identical. Simply replace product information with category or disposition information where appropriate.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.

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 on 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. Do one of the following:
 - o Right-click the product you want to add the subproduct to and select **Add Child**.
 - o Select the product you want to add the subproduct to and click **New > Child** on the ribbon.

The New Product window opens.

4. Enter the name of the subproduct in the **Name** field.
5. To enter information about the subproduct, click **Description** and enter it in the **Description** field.
6. Select each visibility check box where you want the subproduct to appear.
7. Click **Save**.

The subproduct 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 *Change the Order of a Product, Category, or Disposition*.

Edit Visibility Settings for Multiple Products Simultaneously

Edit product visibility for staff members and customers for multiple products simultaneously.

The following procedure describes working with products, but the procedures to edit categories and dispositions are identical. Simply replace product information with category or disposition information where appropriate.

1. In the Products column, press Ctrl while selecting each product.
2. Click **Edit**.
A multi-edit window opens.
3. Select **Visibility**.
4. To make the products visible to staff members working with incidents, select the **Administration** check box.
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 **Save**.

Change the Order of a Product, Category, or Disposition

You can reorder products, categories, and dispositions as necessary, including creating subordinate relationships.

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.

The following procedure describes working with products, but the procedures to reorder categories and dispositions are identical. Simply replace product information with category or disposition information where appropriate.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.
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.
5. Release the mouse button.

What Happens When You Delete Products, Categories, and Dispositions

You can delete products, categories, and dispositions that do not have sublevels.

When deleting a product or other item that has sublevels, you must delete all of the sublevels first. You also cannot delete multiple products, categories, or dispositions simultaneously.

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. See [Add a Rule](#).

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.

Delete a Product That Has Subproducts

When deleting a product or other item that has sublevels, you must delete all of the sublevels first.

The following procedure describes working with products, but the procedures to delete categories and dispositions with sublevels are identical. Simply replace product information with category or disposition information where appropriate.

Note: 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. See [Add a Rule](#). 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.

1. Expand the highest product level to display all subproducts.
2. Do one of the following:
 - o Right-click each subproduct and select **Delete**.
 - o Click **Delete** on the ribbon.

A message asks you to confirm each deletion.

3. Repeat these steps until all subproducts have been deleted.

Product Linking

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.

Leaf products are those products that do not have any subproducts. Similarly, leaf levels of categories have no subcategories and leaf-level dispositions have no subdispositions. 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 subproduct 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 **Category Links**, 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 subcategories).

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. For example,

```
Account and Billing
General > Help
General > Information
```

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.

How You Link Products, 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.

Use these procedures to link products with categories and dispositions.

- *Create Links Automatically*
- *Create Links for One Product at a Time*
- *Create or Remove Links for Multiple Products Simultaneously*
- *Link Categories to Products*

Create Links Automatically

Create product-category and product-disposition 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 **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.
The top levels of products, categories, and dispositions are listed in columns on the editor.
3. To create product-category links automatically, click **Auto-Build** 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.
4. Click **Yes** 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.
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.
5. To create product-disposition links automatically, click **Auto-Build** 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.
6. Click **Yes** 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.
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.

What to do next

To edit the automatically generated list of product links, see *Create Links for One Product at a Time* and *Create or Remove Links for Multiple Products Simultaneously*.

Now that you have created links, you must enable product linking for them to take effect. See [Enable Product Linking](#).

Create Links for One Product at a Time

Create category and disposition links for one product at a time.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.
3. In the Products column, identify the product you want to link.
 - o To view subproducts under a product, click the **+** sign next to a product to expand it.
 - o To find a product, click **Find** and enter a search term in the Find window. The first product that matches your search term is highlighted in the tree. To continue searching, click **Find Next**.

Note: Remember that you can link categories and dispositions only to products that are leaf products. If the product you select has subproducts, the Category Links and Disposition Links buttons are disabled on the product editor.

4. Right-click the product you want to link and select **Edit**.
The product editor opens.
5. To create category links, click **Category Links**. The category tree displays on the content pane.
 - a. Select the check boxes for each category you want to link to the product. If you select a category that has subcategories, all subcategories are linked to the product. If you select a subcategory, all levels of its parent category are implicitly linked.
 - b. Click **Save**.
6. To create disposition links, click **Disposition Links**. The disposition tree displays on the content pane.
 - a. Select the check boxes for each disposition you want to link to the product. If you select a disposition that has subdispositions, all subdispositions are linked to the product. If you select a subdisposition, all levels of its parent disposition are implicitly linked.
 - b. Click **Save**.

What to do next

Now that you have created links, you must enable product linking for them to take effect. See [Enable Product Linking](#).

Create or Remove Links for Multiple Products Simultaneously

Create or remove category and disposition links for multiple products simultaneously.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.
3. On the Products/Categories/Dispositions editor, select the first product you want to link.
4. Press Ctrl 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 **Category Links**.

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, after 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 **Save**.

7. To create or remove disposition links, click **Disposition Links**.

- 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 **Save**.

What to do next

Now that you have created links, you must enable product linking for them to take effect. See [Enable Product Linking](#).

Link Categories to Products

Product linking is bidirectional. Besides linking products to categories, you also can link categories to products.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.
3. In the Categories column, right-click the category you want to link and select **Edit**.

You must select a leaf category (that is, one that has no subcategories). If you select a category that has subcategories, the Product Links button on the editor is disabled.

The category editor opens.

4. Click **Product Links**.
The products tree displays on the content pane.
5. Select the check boxes for the products you want to link to the category.
If you select a product that has subproducts, all subproducts are linked to the category. If you select a subproduct, all levels of its parent product are implicitly linked.
6. Click **Save**.

What to do next

Now that you have created links, you must enable product linking for them to take effect. See [Enable Product Linking](#).

Link Dispositions to Products

Product linking is bidirectional. Besides linking products, you also can link dispositions to products.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.

3. In the Dispositions column, right-click the disposition you want to link and select **Edit**.
You must select a leaf disposition (that is, one that has no subdispositions). If you select a disposition that has subdispositions, the Product Links button on the editor is disabled.
The disposition editor opens.
4. Click **Product Links**.
The products tree displays on the content pane.
5. Select the check boxes for the products you want to link to the disposition.
If you select a product that has subproducts, all subproducts are linked to the disposition. If you select a subproduct, all levels of its parent product are implicitly linked.
6. Click **Save**.

What to do next

Now that you have created links, you must enable product linking for them to take effect. See [Enable Product Linking](#).

Enable Product Linking

Enable product-category or product-disposition linking when you want to restrict the display of categories or dispositions to only those that are linked to the selected product.

Product-category linking 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.
3. To enable product-category linking, click **Enable > Product-Category Linking**.
4. To enable product-disposition linking, click **Enable > Product-Disposition Linking**.
5. Log out and then log back in for the changes to take effect.

Disable 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.
3. To disable product-category linking, click **Enable** and clear the **Product-Category Linking** check box.
4. To disable product-disposition linking, click **Enable** and clear the **Product-Disposition Linking** check box.
5. Log out and then log back in for the changes to take effect.

Copy Product Links

If you want a product to have the same category or disposition links as another product, 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.
3. Do one of the following:
 - o Right-click the product you want to copy links to and select **Edit** to open the product editor.
 - o To select multiple products press Ctrl, right-click, and select **Edit** to open the multi-edit window.
4. Do one of the following:
 - o To copy category links, click **Category Links** on the ribbon.
 - o To copy disposition links, click **Disposition Links** on the ribbon.
5. Click **Copy Links From** on the ribbon.
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 **OK**.
8. Click **Save**.

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.

Remove a Link

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.

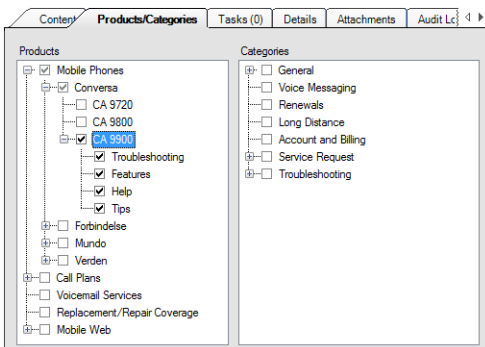
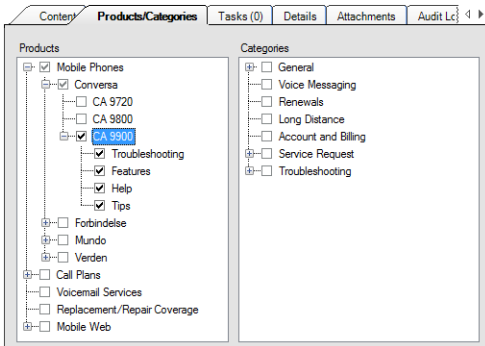
You can manually remove product links one at a time. You can also remove multiple product links in one operation using the multi-edit mode, described in *Create or Remove Links for Multiple Products Simultaneously*.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.
3. Right-click the product you want to remove links from and select **Edit**.
4. To remove category links from the product, click **Category Links**.
 - a. To remove all category links from the product, click **Remove All Links**.
 - 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 **Save**.
5. To remove disposition links from the product, click **Disposition Links**.
 - a. To remove all disposition links from the product, click **Remove All Links**.
 - 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 **Save and Close**.

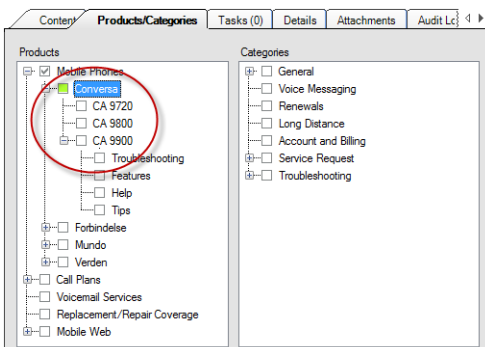
Product Linking When Working with Answers

Regardless of whether product linking is enabled or 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 subproducts (including one or more levels of subproducts), all subproducts below the product you selected are also selected, all the way down to the leaf level. Any parent product levels are also selected implicitly. As these images show, selecting CA 9900 automatically selects that product's subproducts. 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 subproducts with the answer. In that case, you can right-click the product to select it without selecting any of the subproducts. 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 subproducts 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.

View a Product Report

You can view product, category, and disposition reports on the **Products/Categories/Dispositions** editor.

This procedure describes how to display a product report, but the procedure is the same for viewing category and disposition reports.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Products/Categories/Dispositions**.
3. Select the product for which you want to view a report.
4. Click **Product Reports** 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 **Answers** column.
A list of all records or links displays.
6. To minimize the report, click the icon with two down arrows next to the **Undock** icon at the far right of the report header.
7. To display the same report for a different product, select the product and click **Refresh** in the report header (not **Refresh** 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**.

Results:

You can also view reports when you're 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 subproducts 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 subproducts, 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 subproducts, 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 subproducts 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 subproducts 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 subcategories 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 subcategories, 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 subcategories, 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 subdispositions 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 subdispositions, 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.

How Incident Statuses Work

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.

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, see *Overview of 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.

Note: 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.

Add or Edit an Incident Status

If necessary, you can add a new incident status or edit an existing one.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree displays on the content pane.
3. Expand the System Menus folder.
4. Click **Incident Statuses** to display the editor.
5. Do one of the following:
 - o To add an incident status, click **New**.
 - o To add a new incident status directly below an existing incident status in the tree, select the existing incident status and click **New**.
 - o To edit an incident status, click it in the tree.

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. Enter a name for a new incident status or edit an existing one in the Label column.
The corresponding field in the Label column in the Interface Visibility section is populated or revised as you type.
7. Click the **Status** drop-down list and select a status type. Options include Unresolved, Solved, and Waiting.
After you save an incident status, you cannot change its status type.
8. Click **Save**.

Add or Edit an Incident Severity Level

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.
3. Expand the System Menus folder.
4. Click **Incident Severities** to display the editor.

5. Do one of the following:
 - o To add an incident severity, click **New**.
 - o To add a new incident severity directly below an existing incident severity in the tree, select the existing incident severity and click **New**.
 - o To edit an incident severity, click it in the tree.
6. Enter a name for a new incident severity or edit an existing one in the Label column.
The corresponding field in the Label column 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 **Save**.

How You Route Incidents to Queues

Using incident rules, you can route unresolved incidents to different queues based on the criteria you define.

For example, you might add incident queue 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.

You can perform any of these tasks when managing queues.

Managing Incident Queues

| Task | Description |
|--|--|
| 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. See Add or Edit an Incident Queue . |
| Assign queues to profiles | You can define available queues, queue ranking, pull policy, pull quantity, and inbox limit for staff members with the profile. See 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. See Add a Rule . |
| 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. See Reassign or Requeue an Incident . |
| 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. See How You Monitor Incident Queues . |

Add or Edit an Incident Queue

When adding 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.

Before you start

You can also delete queues from the Incident Queues editor.

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](#).

Note: 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.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.
3. Expand the System Menus folder.
4. Click **Incident Queues** to display the editor.
5. Do one of the following:
 - o To add an incident queue, click **New**.
 - o To add a new incident queue directly below an existing incident queue in the tree, select the existing incident queue and click **New**.
 - o To edit an incident queue, click it in the tree.
6. Enter a name for a new incident queue or edit an existing one in the Label column.
The corresponding field in the Label column in the **Interface Visibility** section is populated or revised as you type.
7. Click the **Queue Type** drop-down list and select one of the following options: Standard, Round Robin (All), or Round Robin (Logged In).

Note: 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: Agent 1, Agent 2, Agent 3, Agent 4, Agent 1, Agent 2, 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. To designate the queue for use with advanced routing of incidents, select the Advanced Routing option and enter the following field information. Advanced Routing must be enabled for this option to appear. .

The Advanced Routing settings are described in the following table.

Advanced Routing Settings

| Field | Description |
|-------------------------------|---|
| Starting Minimum Score | Enter a value from 0 to 5 for each skill. Incoming chats will be first routed to those agents meeting this score. |

| Field | Description |
|--------------------------------------|---|
| Lowest Minimum Score | Enter a value from 0 to 5 for each skill. Only agents meeting this minimum skill level can be assigned chats from this queue. |
| Relax Score Requirement After | Enter a value in seconds for the queue. The score requirement will be relaxed after the time you specify. Skills are relaxed at the queue level. A value of 0 seconds disables skill relaxation. |
| Score Decrement Amount | Enter the score value from 1 to 5 for each skill to be decremented when it meets the relaxation time. |
| Overflow Timer | Enter a value in seconds after which the chat will be routed equally to agents assigned the queue as a primary or an overflow. Overflow will be disabled if this field is set to 0, and only agents assigned the queue as a primary will receive chats from this queue. |

9. If you want this incident queue to be the default queue, select the **Default** check box.

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.

10. Click **Save**.

How You Monitor Incident 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.

| Queue | Earliest Due | # Incidents |
|--------------------|---------------------|-------------|
| Tier III | 03/12/2014 04:22 PM | 2 |
| Tier II | 08/22/2013 02:13 PM | 5 |
| 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 **Refresh**.

How You Organize Answer Statuses

An answer's status controls whether or not it's public, and describes its state in the knowledge base.

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.

Service provides four default answer statuses, described in this 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. See *Solved Count Aging*. Answers with a Review status are associated with a Private status type by default.

Note: 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.

Related Topics

- [Add or Edit an Answer Status](#)

Add or Edit an Answer Status

You can add a new answer status or edit an existing one.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.
3. Expand the System Menus folder.
4. Click **Answer Statuses** to display the editor.
5. Do one of these:
 - To add an answer status, click **New**.
 - To add a new answer status directly below an existing answer status in the tree, select the existing answer status and click **New**.
 - To edit an answer status, click it in the tree.

Note: 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. Enter a name for a new answer status or edit an existing one in the Label column.
The corresponding field in the Label column in the Interface Visibility section is populated or revised as you type.
7. Click the **Status** drop-down list and select **Public** or **Private**.
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 access level. They are also not visible on the administration interface.
8. Click **Save**.

How You Control Answer Access

Answer access levels provide a way to control which answers in the knowledge base become public and visible to customers.

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.

Service has these 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.

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. See [Create an SLA](#) for information about assigning answer access levels to an SLA.

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. See [How to Control Answer Visibility](#).

Sibling answers with access levels that are at or below the contact's SLA are visible to the contact. See [Sibling Answers](#).

Related Topics

- [Add or Edit an Answer Access Level](#)

Add or Edit an Answer Access Level

You can add a new answer access level or edit an existing one.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.
3. Expand the System Menus folder.
4. Click **Answer Access Levels** to display the editor.
5. Do one of these:
 - To add an answer access level, click **New**.
 - To add a new answer access level directly below an existing answer access level in the tree, select the existing answer access level and click **New**.
 - To edit an answer access level, click it in the tree.
6. Enter a name for a new answer access level or edit an existing one in the Label column.
The corresponding field in the Label column 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 **Save**.

Billable-Task Tracking

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. See [Add Time Billed to an Incident](#) learn how agents record billable time when they work on incidents.

Note: 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. See [Create a Workspace](#).

Related Topics

- [Add or Edit a Billable Task](#)

Add or Edit a Billable Task

You can add a new billable task or edit an existing one.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.
3. Expand the System Menus folder.
4. Click **Billable Tasks** to display the editor.
5. Do one of the following:
 - To add a billable task, click **New**.
 - To add a new billable task directly below an existing billable task in the tree, select the existing billable task and click **New**.
 - To edit a billable task, click it in the tree.
6. Enter a name for a new billable task or edit an existing one in the Label column.
The corresponding field in the Label column in the Interface Visibility section is populated or revised as you type.
7. Click **Save**.

How Channel Types Work

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.

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.
- Staff members can add and edit Twitter, YouTube, and Facebook user names for contacts from a custom contact workspace.

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.

See [Edit a Channel Type](#) to rename or remove channel types.

Related Topics

- [Overview of Channels](#)
- [Input Widgets](#)
- [Create a Workspace](#)

Add the Channel Usernames Field to a Contact Workspace

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Workspaces**.
The Workspaces explorer opens.
3. Right-click the custom contact workspace you want to add the field to and select **Open**.
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 **Save**.
8. Assign this workspace to a profile used by your agents. See [Profiles](#) if you need help with this process.

Edit a Channel Type

You can permit staff members and contacts to add and edit social media user names based on the channel-type visibility settings.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
3. Click the **System Menus** drop-down arrow, then click **Channel Types**.

4. To rename a channel type:
 - a. Click it in the **Label** column.

The Interface Visibility section displays. It shows the names of all available interfaces, the languages in which they're implemented, and the language-specific label of the channel.
 - b. Enter the new name for the channel type. When you move to another field, the Label field in the Interface Visibility section populates with the name you typed.

Note: When using multiple-language interfaces, enter the label in the **Label** field in the language of the interface.
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, it removes the channel type 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 **Save**.

Tracked Link Categories for Outreach and Feedback

You can add tracked link categories to your Outreach and 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.

Note: 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.

Related Topics

Add or Edit a Tracked Link Category

You can add tracked link categories to your Outreach and Feedback applications to group and organize tracked links.

1. Click **Configuration** on the navigation pane.
2. Expand **Outreach**, and then double-click **Tracked Link Categories**.

The tree displays on the content pane.

3. Do one of the following:
 - o To add a tracked link category, click **New**.
 - o To edit a tracked link category, click it in the tree.

Note: 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 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 **New**.

4. Enter a new name or edit an existing one in the **Tracked Link Category Name** field.
The corresponding field in the Label column in the Interface Visibility section is populated or revised as you type.
5. To add a description to the tracked link category, enter 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 **Save**.

Add 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 New. You can create up to six levels of tracked link categories.

1. Click **Configuration** on the navigation pane.
2. Expand **Outreach**, and then double-click **Tracked Link Categories**.
The tree displays on the content pane.
3. Click the tracked link category you want to add a level to and click **New**.
4. Enter the name and description of the subcategory.
5. Click **Save**.
The new category level appears under the category in the tree.
6. Click **Save** to save the subcategory.

Add or Edit a Contact Role

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.

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.

3. Expand the System Menus folder.
4. Click **Contact Roles** to display the editor.
5. Do one of the following:
 - o To add a contact role, click **New**.
 - o To add a new contact role directly under an existing contact role in the tree, select the existing contact role and click **New**.
 - o To edit a contact role, click it in the tree.
6. Enter a name for a new contact role or edit an existing one in the Label column.
The corresponding field in the Label column in the Interface Visibility section is populated or revised as you type.
7. Enter any notes regarding the contact role in the **Notes** field.
8. Click **Save**.

Add or Edit an Opportunity Status

Opportunity statuses represent the current state of opportunities in your knowledge base.

When staff members assign a status to an opportunity, one of the seven default opportunity status types is also assigned. The seven default opportunity statuses include Lead, Reject, Active, Closed, Lost, Inactive, and Dead. You can define additional statuses if you need them. 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 list in the Status column on the editor.

Note: 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.
3. Expand the System Menus folder.
4. Click **Opportunity Statuses** to display the editor.
5. Do one of the following:
 - o To add an opportunity status, click **New**.
 - o To add a new opportunity status directly below an existing opportunity status in the tree, select the existing opportunity status and click **New**.
 - o To edit an opportunity status, click it in the tree.

Note: 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. Enter a name for a new opportunity status or edit an existing one in the Label column.
The corresponding field in the Label column in the Interface Visibility section is populated or revised as you type.

7. Click the **Status** drop-down list and select a status type.

Note: After you save an opportunity status, you cannot change its status type.

8. Click **Save**.

Add or Edit a Competitor

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.

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

2. Expand **Application Appearance**, and then double-click **Customizable Menus**.

The Customizable Menus tree opens on the content pane.

3. Expand the System Menus folder.

4. Click **Competitors** to display the editor.

5. Do one of the following:

- To add a competitor, click **New**.
- To add a new competitor directly below an existing competitor in the tree, select the existing competitor and click **New**.
- To edit a competitor, click it in the tree.

6. Enter a name for a new competitor or edit an existing one in the Label column.

The corresponding field in the Label column 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 **Save**.

Add or Edit a Win/Loss Reason

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.

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

2. Expand **Application Appearance**, and then double-click **Customizable Menus**.

The Customizable Menus tree opens on the content pane.

3. Expand the System Menus folder.

4. Click **Win/Loss Reasons** to display the editor.

5. Do one of the following:
 - o To add a win/loss reason, click **New**.
 - o To add a new win/loss reason directly below an existing win/loss reason in the tree, select the existing incident win/loss reason and click **New**.
 - o To edit a win/loss reason, click it in the tree.
6. Enter a name for a new win/loss reason or edit an existing one in the Label column.
The corresponding field in the Label column 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 **Save**.

How Industry Types Work

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.

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. See [Add the Industry Field to an Opportunity Workspace](#) to add this field to an opportunity workspace. Also see [Create a Workspace](#).

To add or edit an industry type, see [Add or Edit an Industry Type](#).

Add the Industry Field to an Opportunity Workspace

Industry types allow staff members to classify organizations according to the industry with which they are associated. 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 standard opportunity workspace does not contain a field for industry type.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Workspaces**.
The Workspaces explorer opens.
3. Right-click the custom opportunity workspace you want to add the field to and select **Open**.
You cannot edit the standard opportunity workspace, but you can copy it and edit the copy.
4. Click the **Insert Field** tab.
5. Click **Opportunity Fields** 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 **Design** tab.
8. Click **Save**.
9. Assign this workspace to the profile used by sales representatives. See [Profiles](#) if you need help with this process.

Add or Edit an Industry Type

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
The Customizable Menus tree opens on the content pane.
3. Expand the System Menus folder.
4. Click **Industry Types** to display the editor.
5. Do one of the following:
 - o To add an industry type, click **New**.
 - o To add a new industry type directly below an existing industry type in the tree, select the existing industry type and click **New**.
 - o To edit an industry type, click it in the tree.
6. Enter a name for a new industry type or edit an existing one in the Label column.
The corresponding field in the Label column 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 **Save**.

Add or Edit a Lead Rejection Type

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus** .
The Customizable Menus tree opens on the content pane.
3. Expand the **System Menus** folder.
4. Click **Lead Rejection Types** to display the editor.
5. Do one of the following:
 - o To add a lead rejection type, click **New**.
 - o To add a new lead rejection type directly below an existing lead rejection type in the tree, select the existing lead rejection type and click **New**.
 - o To edit a lead rejection type, click it in the tree.
6. Enter a name for a new lead rejection type or edit an existing one in the Label column.
The corresponding field in the Label column 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 **Save**.

Channels

Overview of Channels

Channels are all of the available sources of social content processed by your site.

In B2C Service, channels are helpful for routing new incidents to the agent desktop using the Incident.Channel field as a rule condition in business rules.

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 B2C Service and Outreach, such as mailboxes, chat sessions, and campaign flow actions.

You can edit the name of each channel to suit your business needs.

Note: Oracle Social Network and the Communities feature of Social Experience are deprecated and no longer available. For more information, see [Answer ID 5974](#).

Related Topics

- [Incident Threads](#)
- [Overview of Business Rules](#)

Grant Channel Account Access to a Staff Account

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.

While you can grant channel account access to groups and agents through the Channel Accounts editor, you can also provide access to specific agents by editing their staff accounts.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Staff Accounts by Profile**.
3. Double-click the staff account that you want to grant channel account access to.
4. Click **Channels**.
5. Click the channel that you want to provide access for.
6. Click **Add**.
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 Accounts Channel editor.

8. To change the default channel account, select the radio button in the Default column of the desired default channel account.

Note: 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.

9. Click **Save**.

Related Topics

- [Overview of Staff Management](#)

How You Store Social Media User Names

When monitoring certain channel types, B2C Service can store your customers' social media identifier in their contact records which lets you associate incoming social monitor incidents with contacts based on their social media accounts and helps agents identify where posts originate.

When an incident is created through Facebook, Twitter, or YouTube, B2C Service searches all contacts for an instance of the associated social media identifier. If a matching identifier is found, the incident is automatically associated with the contact. If no matching identifier is found, a new contact containing the identifier is created for the incident.

- When an incident is created through a Facebook channel, B2C Service populates the Channel Usernames field in the contact record with the post author's Facebook user ID.
- When an incident is created through Twitter or YouTube, the Channel Usernames field is populated with the user name from the channel.

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. Channel types are not interface specific and cannot be deleted.

- Contacts can add, edit, and view their Facebook, Twitter, and YouTube user names through the ChannelAllInput and ChannelAllDisplay widgets on the customer portal.
- 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 social media user names, the Channel Usernames field must be added to the contact workspace. See [Overview of Workspaces](#).

Related Topics

- [Add or Edit a Social Media User Name for a Contact](#)

Add or Edit a Social Media User Name for a Contact

Agents can add, edit, and remove social media user names for a contact.

Before you start

- The Channel Usernames field must have been added to the custom contact workspace being used. See [Edit a Workspace](#).

- The Contact Visible check box must be selected for the channel type.

Here's what to do

1. While editing a contact record, click **Add** or **Edit** in the Channel Usernames field.
2. To add a social media user name:
 - a. Click **Add Username**.
 - b. Click **Channel Type** and select **Facebook**, **Twitter**, or **YouTube**.
 - c. Enter the contact's user name in the **Username** column.
3. To edit a social media user name, enter the changes in the **Username** column.

CAUTION: Changing the social media user name may affect the ability of the system to accurately track open conversations with the user.

4. To remove a social media user name, click **Remove** in the Action column.
5. Click **OK**.
6. Click **Save**.

Related Topics

- [Overview of Workspaces](#)

How You Configure Self-Service for Facebook

Self Service is a component of your B2C Service 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 B2C Service.

Because Facebook often revises the development environment used to manage applications, the procedures for configuring Self Service are subject to frequent changes. For current procedures, see [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. To maintain the integrity and security of your Self Service application, see [Overview of Security-Related Configuration Settings](#).

Business Rules

Overview of Business Rules

Business rules are powerful tools for simplifying and automating common business tasks. They link data from all B2C Service products in the knowledge base, resulting in a responsive, consistent customer experience.

A business rule is 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 aren't met, then take a different action. Extending the billing question example, a rule can route the incident to accounting. If the question isn't about billing, for example, the incident does not match the rule condition, route it to technical support.

B2C Service has eight rule types:

- Answer
- Chat
- Contact
- Custom Object
- Incident
- Opportunity
- Organization
- Task

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 is known as the object type. This can be an answer, incident, contact, chat, opportunity, organization, task, or custom object.

Custom object business rules must use the business rules engine only available on the Agent Browser UI. Some of the benefits of the business rules engine are:

- Makes creating business rules easier.
- Introduces searching for fields and values in rules.
- Gives access to related objects and attributes when defining rules.
- Runs reports on business rules.

See *Business Rules on the Agent Browser UI* for more information.

Note: 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.

Business rules help you provide a consistent, accurate, and timely experience for customers. They also streamline the efficiency of staff members. When the rules engine updates information automatically and immediately, your entire organization has access to an accurate and current knowledge base. This knowledge base is used 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 that 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.

Business rules route incidents to the suitable support person. They notify an engineer when answers in the knowledge base need to be reviewed, and automatically answer customer questions. Business rules also send marketing emails and surveys. They escalate overlooked opportunities and set strategies based on conditions you define. Rules 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 *Examples of Business Rules*.

Related Topics

- [How are Rules Processed?](#)
- [Ways to Use Business Rules in Your Organization](#)
- [Best Practices for Planning Business Rules](#)
- [Elements of Rules and Rule Bases](#)
- [How to View Rule Bases](#)
- [Compilation and Activation of Rule Bases](#)
- [Create a Rule Base](#)
- [Add a Rule](#)
- [Modify a Rule Base](#)

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 rule conditions are met, the action associated with that rule occurs.

Let's say, for example, that 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 or set the state. The action might also 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 customer or a staff member updates the contact record, the rules engine processes the contact again.

Note: The rules engine is triggered when the contact, or another object, is updated, not when the rule base is updated. If you create or edit a rule, objects aren't evaluated to see if they meet the conditions of the new or updated rule. Rules processing happens only when objects are added or updated.

Ways to Use Business Rules in Your Organization

There are many ways you can use rules to automate workflow in your organization.

These are some common ways to use business rules:

- 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 haven't

received timely responses. Escalate answers to ensure adequate review, and follow up on opportunities to prevent ignoring potential sales.

- 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 *Overview of Service Level Agreements (SLAs)*.
- Route chat requests to queues—Route requests for chat sessions to a specific queue to manage chats optimally. See *Chat for Agents, Supervisors, and Customers* 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. You can also send a product-specific message for opportunities with a certain status. See *Overview of 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 *Overview of Surveys* for complete details about creating, managing, and sending surveys.

Related Topics

- [Examples of Business Rules](#)
- [Rules for Escalation of Answers, Incidents, Opportunities, and Tasks](#)

Best Practices for Planning Business Rules

Before you begin creating rules for your organization, it's important to examine your business processes. This includes how you update contacts and organizations, handle incidents and answers, route requests for chats, follow up opportunities, and define targets for marketing promotions.

When you understand your organization's processes, 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 aren't followed up promptly, rules can escalate those opportunities after a certain amount of time.

Review this 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.

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.

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 are processed in order until all the rules are processed, or until a rule transitions to a function or a different state, or stops processing completely.

Verify and fine-tune rules—An important part of configuring rules is verifying that they perform as expected.

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. Staff must also understand 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 re-evaluate 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’s 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.

Related Topics

- [Create a Rule Base](#)

Elements of Rules and Rule Bases

Before you create a rule base, you should be familiar with the elements of rules, rule bases, and how these elements relate to each other.

When you open the Rules editor, the left side of the content pane displays the rules in each of the rule base states and functions. It also lists rule base 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.

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, rule actions can modify the variable. 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. The next time rules processing starts, the variable value resets to the default value.

Conditions—A rule is basically an “if-then” statement. If something meets this condition, then take this action. The “if” statement is the rule 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 conditions with AND. If you want all conditions to apply, it isn’t necessary to edit the logical expressions.

Actions—Actions include 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 actions. The list of available actions depends on the rule object type. An action can be as simple as stopping the rules processing. Or it can be a more complex action. It can assign an incident to an agent, send that agent a notification, and define an escalation process if the incident isn’t resolved within a certain time frame.

States and Functions in Business Rules

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 Rules tree lists states and functions alphabetically. The list of rules within each state and function are in the order in which you want them to execute.

States are containers for rules. 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, rules that are applied to all new opportunities, or other object type, depending on the rule base. 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.

Functions are also containers for rules. Functions group sets of rules that you want to use in multiple places. You can set up many separate rules that call the same function, or set of rules. This reduces the number of individual rules you need. When a rule in one state calls a function, all the rules within that function are processed. After all the rules in the function are processed, 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 proceeds to the next rule in the state from which the function was called.

Functions are useful tools for grouping rules, avoiding duplication, and making maintenance easier, however you aren't required to use them in a rule base. You can still take advantage of the powerful features of business rules. You can add as many states as you need, based on the processes you want to automate, and then create rules within each state.

Variables in Business Rules

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 isn't stored in the database, so it returns to its default value the next time the rules engine begins processing.

Note: You can use a custom field to accomplish the same function as a variable. If you're deciding 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. A custom field, however, is fixed. At the end of rules processing, it stores the final value in the database. This is 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 evaluated object 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 [Create a Variable to Measure Service Quality](#).

See [Add or Edit a Variable](#) for the procedure to add or edit a variable.

Rule Actions for Variables

| Variable Data Type | Actions |
|--------------------|--|
| Integer | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> Set equal to an absolute string. Prefix character string. Append character string. Set equal to the value of another character variable or custom field. <p>See Actions to Set Custom Fields and Variables for information about how leading and trailing spaces are handled when rule actions are used to set variables.</p> |
| Date Field | <ul style="list-style-type: none"> Set equal to an absolute value. Increment by n days. |

| Variable Data Type | Actions |
|--------------------|--|
| | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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. |

Related Topics

- [Create a Rule Base](#)

Rules Processing Order

All the rules in a state process in the order you specify.

Rules processing for new objects begins in the state you've designated as the initial state. Existing objects begin in whatever rule state they were in when they were last updated. Rules only process if rules in that state have actions that transition to another state or call a function. This doesn't apply to rules in the initial state. Otherwise, rules processing for new objects ends when the rules engine reaches the last rule in the initial state.

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 one of the following actions:

- Stop Processing Rules
- Transition State and Stop
- Transition State and Continue
- Call Function

Related Topics

- [Variables in Business Rules](#)
- [Business Rule Actions](#)
- [Create a Rule Base](#)

Create a Rule Base

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 these main steps.

This process, especially states and functions, doesn't apply to custom object business rules. Custom object business rules use the new business rules engine.

1. Open the Rules editor and select the object type of the rule base on the ribbon. This can be an answer, contact, incident, chat, opportunity, organization, or task.
2. Create an initial state for the rule base.

3. Add additional states, functions, and variables as necessary.
4. Add rules to each state and function.
5. Reorder the rules within states and functions as necessary.
6. Activate the rule base.
7. Verify that the rules are performing as expected.

Related Topics

- [How to View Rule Bases](#)
- [Rules Processing Order](#)
- [Variables in Business Rules](#)
- [Compilation and Activation of Rule Bases](#)
- [Add a Rule](#)
- [Verify a Rule Using the Rule Log](#)

Add a State

This procedure explains how to add a state to the contact rule base. However, the steps are the same for adding states to any rule base.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Click **Contact** to view active contact rules.
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 **Edit** to enter the edit mode. Until you activate them, your site does not use the rules that you see in this mode.
5. Right-click **States**, then select **New State**.
6. Enter 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. You can then 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, enter comments in the **Notes** field.
8. To make this state the initial state, select the **Initial State** check box.
You must have only one state designated as the initial state before you can compile the rule base.
9. Click **Save**.
The state appears in the Rules tree.
10. To add more states, repeat steps 5-9.

Related Topics

- [Compilation and Activation of Rule Bases](#)

Add a Function

This procedure explains how to add a function to a rule base.

1. While editing a rule base, right-click **Functions** in the rules tree, then select **New Function**.
The Functions editor is activated.

2. Enter the name of the function in the **Function Name** field. Use a name that identifies the performance of the function, for example, **Escalation**.
3. To add a note about the function, enter comments in the **Notes** field.
After you save the function, you can hover over it in the tree to view the note.
4. Click **Save**.
The function appears in the tree.
5. To add more functions, repeat these steps.

Add or Edit a Variable

This procedure describes the steps to add a variable to a business rule or edit an existing one.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Click the button for the rule type to which you want to add the variable.
The incident rule base is selected by default.
4. Click **Edit**.
5. Do one of these:
 - o Right-click **Variables** in the Rules tree, then select **New Variable**.
 - o Right-click a variable, then select **Edit Variable**.
6. Enter field information.

Rule Variables Editor

| Field | Description |
|--------------------|--|
| Rule Variable Name | Enter the name of the rule variable in this field. |
| Data Type | Select the variable data type. The options include Integer, Text Field (to a maximum of 255 characters), Date Field, and Date/Time. After you've saved a variable, you can't edit its data type. |
| Default | Enter a value that will be the variable initial value every time the rules engine is called in the rule base. |
| Notes | Enter 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 **Save**.
8. To delete a variable, right-click it, select **Delete Variable**, and then confirm that you want to delete the variable.
If any rule uses the variable you're trying to delete, 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 [Dependency Conflicts](#).

Add a Rule

After you add states and functions for an object type, you can add rules.

Before you start

CAUTION: An extremely high number of complex rules can cause the application to run out of memory and cause errors. Let's say, for example, you've more than 675 highly complex rules. Each complex rule has 20 conditions, 20 Then actions, and 20 Else actions. In this scenario, memory errors are likely to occur. You can run more than 1,000 rules of moderate complexity, that is, three conditions, five Then actions, and three Else actions, without error. However, it might take more than a minute to save the rule base.

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 procedure shown here uses opportunity rules as an example.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Click **Opportunity** on the ribbon to view active opportunity rules.
4. Click **Edit** on the ribbon to enter the edit mode.
5. Right-click the **state** or **function** to which you want to add the rule, then select **New Rule**.

The **Edit Opportunity Rule** window opens.

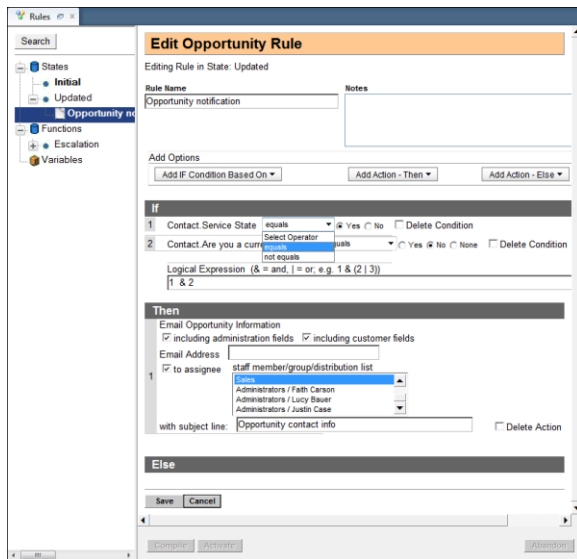
6. Enter the name of the rule in the **Rule Name** field.
7. To add a note about the rule, enter comments in the **Notes** field. Add any information or special instructions that may be helpful when staff members hover over the rule in the Rules tree.
8. To add a condition, click **Add IF Condition Based On**.

Opportunity rule conditions include Opportunity, Contact, and Organization. It can also include Rule Variables if you added variables. Each one has a drop-down list containing the fields for the condition. Rules for other object types have different menus for selecting conditions. See *Business Rule Conditions* for a description of the conditions for each object.

Note: You might decide you want the rule actions to apply to all opportunities. In that case, you can create a rule that has only actions, but no conditions. You must add the actions to the Then clause.

- a. Select **Opportunity, Contact, Organization, or Rule Variables** to display the drop-down list of fields. You then select the field for the condition.
For example, select the Contact field with the Service State to identify contacts who have entered the application through customer support.
 - b. Click **Select Operator** and select the operator that applies to the field you selected.
Let's use the example from the previous step. If the operator is "equals," different operators appear in the Select Operator drop-down menu when you select different fields.
 - c. Enter the value.
9. To add another condition to the rule, repeat the previous step.
You can require that only one of the conditions be met before the rule action is executed, that all conditions are met, or that some combination is required. To understand the relationships when a rule contains multiple conditions, see *Business Rule Logical Expressions*.
In our example, add a second condition using a contact custom field called "Are you a current customer?" and set the field to equal No. This identifies customers who have expressed enough interest to call customer support, but who aren't yet contacts.
 10. To delete a condition after you've added it to a rule, select the **Delete Condition** check box.
The editor is refreshed.
 11. Click **Add Action-Then** 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.

- Select the **To Assignee** check box. You'll also need to select a staff member or group from the drop-down list. For example, to send the opportunity email to Sales, scroll down and select **Sales**.



- To add an action to the Else clause, click **Add Action–Else** and select an action. For example, contacts that don't match the rule 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.
- To delete an action after adding it to a rule, select the **Delete Action** check box. The editor is refreshed.
- To add more actions to the rule, repeat step 10 or 11, depending on whether you want to add the action to the Then clause or the Else clause.
- Click **Save**.
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 nonexistent condition can't be unmatched. Rules with no action are also invalid.
If the rule is successfully saved, it appears in the Rules tree under the appropriate state or function. If the save isn't successful, a message prompts you to replace an invalid value or add a missing value.

Related Topics

- [Business Rule Operators](#)
- [Business Rule Actions](#)
- [Rules for Escalation of Answers, Incidents, Opportunities, and Tasks](#)
- [Search a Rule Base](#)

Business Rule Conditions

The conditions of a rule compose its “if” statement. If these conditions are met, then the rules engine performs the action specified in the rule.

Examples of conditions include:

- If the contact's state equals Montana

- If the incident customer thread contains 'warranty'
- 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 isn't necessary to add conditions to a rule. If for example, you want to apply the rule action to all objects, then simply don't 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 has a set of fields that are used to add conditions for its rules. This can be an answer, contact, incident, chat, opportunity, organization, or task rule.
- **Operator**—The operator is the relationship between the field and the value. In the preceding examples the equals, contains, and greater than operators are used. The selection of operators varies with the field. Some are simply “equals” and “not equals,” while others express more complex relationships.
- **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 has a set of fields that are used to add conditions for its rules. This can be an answer, contact, incident, chat, opportunity, organization, or a task rule.
- **Operator**—The operator is the relationship between the field and the value. The preceding example uses the equals, contains, and greater than operators. The selection of operators varies with the field. Some are simply “equals” and “not equals,” while others express more complex relationships.
- **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, enter a string of text, or select a check box or option 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 field, `forecast`, is an opportunity field.

When you click **Add IF Condition Based On**, a list of field types specific to the type of rule appears. Each field type has a drop-down list 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.

Available Field Types for Rule Bases

| Rule Base | Field Types |
|-----------|---|
| Answer | Answers |
| Chat | <ul style="list-style-type: none"> • Incident • Contact • Organization |
| Contact | <ul style="list-style-type: none"> • Contact • Organization |
| Incident | <ul style="list-style-type: none"> • Incident • Contact • Organization |

| Rule Base | Field Types |
|--------------|--|
| Opportunity | <ul style="list-style-type: none"> • Opportunity • Contact • Organization |
| Organization | Organization |
| Task | <ul style="list-style-type: none"> • Tasks • Opportunity • Incident • Answers • Contact • Organization |

Some conditions depend on how you've configured your site. For example, customizable menu items, such as products, categories, and dispositions, appear as conditions only if you add them. If the rules engine doesn't detect the presence of customizable menu items, custom fields, and items such as SLAs, mailboxes, Outreach emails and mailings, and Feedback surveys, they don't appear in the list of conditions. If you add them while you create rules, you must close and reopen the Rules editor 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 you defined no variables in the rule base, this disables the Rule Variables field type.

Related Topics

- [Business Rule Operators](#)
- [Custom Fields and Masks in Conditions](#)
- [Previous Fields in Conditions](#)
- [Conditions for Each Rule Base](#)
- [Add a Rule](#)

Relative Time Conditions

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.

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
- 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 is a useful tool. This can be specifying whether that date/time value is before, after, equal to, or within a certain range. However, sometimes you might want to set a relative date/time value. Let's say you want the condition "If the task due date is less than 8 hours from now." For this rule, you can select a relative time. 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.

See [Select the Relative Time Condition Using a Task Due Date](#) to set a relative time condition using a task due date, but the procedure is the same for setting other relative time conditions.

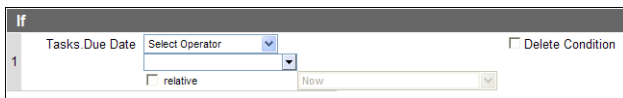
Related Topics

- [Business Rule Conditions](#)

Select the Relative Time Condition Using a Task Due Date

This procedure shows you how to set a relative time condition using a task due date, but the procedure is the same for setting other relative time conditions.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Click **Task** on the ribbon.
4. Click **Edit** on the ribbon.
5. Right-click the rule you want to add the relative time condition to, then select **Edit**.
6. Click **Add IF Condition Based On**, then 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 due date.
8. Click the drop-down list above the **Relative** check box.
The **Relative Time** window opens.
9. Complete the fields in the **Relative Time** window.
 - a. Click the **Direction** drop-down list, then select **+ (Future)**.
 - b. Enter **8** in the **Offset** field.
 - c. Click the **Unit** drop-down list, then select **Hours**.
 - d. Click **Save** to save your settings and close the **Relative Time** window.
10. Click the drop-down list next to the condition **Relative** check box, then select what you want the time you specified in [step 9](#) to be compared.
For example, if you wanted the rule to be triggered eight hours after a task is created, you could select **Tasks.Created** from the menu. In our example, you can leave the menu set to the default value of "Now," because 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 list, then select **Less Than**.
In this example, we want the rule to be triggered when a task due date is less (earlier) than the relative time we specified.

What to do next

With this type of condition, you must add an action before you can save the rule. See [Business Rule 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.

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.

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

Previous fields let you detect changes that occur to the fields.

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.

Conditions for Each Rule Base

Before you create a rule base, you should be familiar with the conditions associated with each type of rule base.

Each table lists the field, field description, and how to select a value based on its format. For example, formats might include texts that you type or a menu option you select.

Note: When the format of a value consists of menu selections, you can choose multiple options by pressing the Ctrl key while making each selection. Or if the value displays check boxes, you can make multiple selections.

Some conditions depend on how you've configured your site. Customizable menu items, such as products, categories, and dispositions, appear as conditions only if they've been added. If the rules engine doesn't detect the presence of customizable menu items, and custom fields, they don't appear in the list of conditions. This includes SLAs, mailboxes, Outreach emails and mailings, and Feedback surveys. If you add them while you create rules, you'll need to close and reopen the Rules editor to display them.

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 fields that are specific to each type of rule, all rules can use rule variables for rule conditions. If you don't define variables in the rule base, this disables the Rule Variables field type.

See these topics for condition field details:

- [Answer Conditions](#)
- [Contact Conditions](#)
- [Incident Conditions](#)

- *Opportunity Conditions*
- *Organization Conditions*
- *Task Conditions*

Related Topics

- *Business Rule Conditions*

Answer Conditions

When choosing answer conditions, select from these fields and enter the value in the specified format.

Conditions for Answers

| Field | Description | Selecting the Value |
|---------------------------|---|---|
| Answer Access | Answer's access level. | Select an access level from the menu. |
| Status | Answer's status. | Select a status from the menu. |
| Previous Status | Answer's previous status. | Select a status from the menu. |
| Assigned | Staff account in the answer's Assigned field. | Select a staff account from the menu. |
| Group | Group in the answer's Assigned field. | Select a group from the menu. |
| Previous Assigned | Answer's previous assigned staff account. | Select a staff account from the menu. |
| Previous Group | Answer's previous group. | Select a group from the menu. |
| Language | Selected language installed from a language pack. | Select a language from the menu. |
| Escalation Level | Answer's escalation level. 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 | Answer's previous escalation level. | Select an escalation level from the menu. |
| Updated From | Source of the most recent answer update. | Select the check box that indicates where the answer was most recently updated. |
| Banner Note | Information entered by a staff member in the banner. | Enter text in the field. |
| Banner Flag | Importance of the banner. | Select an importance level from the menu. |
| Banner Updated | Date and time the banner was last updated. | Click the drop-down list to open the current month's calendar, |

| Field | Description | Selecting the Value |
|-------------------|---|--|
| | | then select a date and time the banner was updated. Or select a relative time. |
| Banner Updated By | Staff member who last updated the banner. | Select a staff member from the menu. |
| Product | Products added on the Products/Categories/Disposition editor. | Select the appropriate product check boxes. |
| Category | Categories added on the Products/Categories/Disposition editor. | Select the appropriate category check boxes. |

Contact Conditions

When choosing contact conditions, select from these fields and enter the value in the specified format.

Conditions for Contacts

| Field | Description | Value Format |
|----------------------------|---|---|
| Last Name | Contact's last name. | Enter text in the field. |
| First Name | Contact's first name. | Enter text in the field. |
| Source | Source of the contact. | Select the check box for the source of the contact. |
| Updated From | Source of the most recent contact update. | Select the check box that indicates where the contact was most recently updated. |
| Email-Primary | Contact's email address. | Enter text in the field. The maximum number of characters allowed in this field is 80. |
| Email-Primary Invalid | Determines if the contact's primary email address is invalid as a result of bounced email processing. | Select Yes or No . |
| Email-Alternate #1 | Alternate email address. | Enter text in the field. The maximum number of characters allowed in this field is 80. |
| Email-Alternate #1 Invalid | Determines if the contact's first alternate email address is invalid as a result of bounced email processing. | Select Yes or No . |
| Email-Alternate #2 | Second alternate email address. | Enter text in the field. The maximum number of characters allowed in this field is 80. |

| Field | Description | Value Format |
|-------------------------------|--|--|
| Email–Alternate #2 Invalid | Determines if the contact’s second alternate email address is invalid as a result of bounced email processing. | Select Yes or No . |
| Login | Contact’s user ID. | Enter text in the field. |
| Contact Type | Any contact type you’ve added. | Select a contact type from the menu. |
| Marketing Organization Name | The name of the organization as it is used by Outreach. | Enter text in the field. |
| Street | Contact’s street address. | Enter text in the field. |
| City | Contact’s city. | Enter text in the field. |
| State/Province | Contact’s state or province. | Select a state or province from the menu. |
| Country | Contact’s country. | Select a country from the menu. |
| Postal Code | Contact’s postal code. | Enter text in the field. |
| Office Phone | Contact’s office phone number. | Enter text in the field using any formatting characters that appear in the record. |
| Office Phone (Unformatted) | Contact’s office phone number regardless of formatting characters. | Enter a numeric string in the field. |
| Mobile Phone | Contact’s mobile phone number. | Enter text in the field using any formatting characters that appear in the record. |
| Mobile Phone (Unformatted) | Contact’s mobile phone number regardless of formatting characters. | Enter a numeric string in the field. |
| Fax Phone | Contact’s fax number. | Enter text in the field using any formatting characters that appear in the record. |
| Assistant Phone | Phone number for the contact’s assistant. | Enter text in the field using any formatting characters that appear in the record. |
| Assistant Phone (Unformatted) | Contact’s assistant’s office phone number regardless of formatting characters. | Enter a numeric string in the field. |
| Home Phone | Contact’s home phone number. | Enter text in the field using any formatting characters that appear in the record. |
| Home Phone (Unformatted) | Contact’s home phone number regardless of formatting characters. | Enter a numeric string in the field. |
| Service State | Service check box selection for the State. | Select Yes or No . |
| Opportunities State | Opportunity Tracking check box selection for the State. | Select Yes or No . |
| Outreach State | Outreach check box selection for the State. | Select Yes or No . |

| Field | Description | Value Format |
|-------------------------|---|---|
| Disabled | Disabled Flag status on the contact record. | Select Yes or No . |
| Global Opt-in | Contact's decision to receive mailings. | Select the Yes or No option. |
| Survey Opt-in | Contact's decision to participate in surveys. | Select Yes or No . |
| Email Format Preference | Contact's preference for email format. This can be text, HTML, multipart, or unspecified. | Select a mail type from the menu. |
| Acquired | Date the contact was acquired as a customer. | Click the drop-down list to open the current month calendar, then select a date the contact was acquired. Use the arrows at the top to change the month if necessary. |
| Created | Creation date of the contact record. | Click the drop-down list to open the current month calendar, then select a date the contact was acquired. |
| Banner Note | Information entered by a staff member in the banner. | Enter text in the field. |
| Banner Flag | Importance of the banner. | Select an importance level from the menu. |
| Banner Updated | Date and time the banner was last updated. | Click the drop-down list to open the current month calendar, then select a date and time the banner was updated. Or select a relative time. |
| Banner Updated By | Staff member who last updated the banner. | Select a staff member from the menu. |

Incident Conditions

When choosing incident conditions, select from these fields and enter the value in the specified format.

Incident rules use all fields, except Chat Queue ID. Fields used by the chat and task rule types are indicated in the field descriptions.

Conditions for Incidents

| Field | Description | Value Format |
|-------------------|---|--------------------------|
| Customer Thread | All customer threads in the incident. | Enter text in the field. |
| Staff Thread | All staff response threads in the incident. | Enter text in the field. |
| Proposed Response | Incident Proposed Response field. This is an uncommitted response thread. | Enter text in the field. |
| Reference # | Incident Reference # field. This is also used in task rules. | Enter text in the field. |

| Field | Description | Value Format |
|-------------------|---|--|
| Subject | Subject of an incoming email or incident. This also refers to the Subject field on the Ask a Question page or API incident source. This is also used in task rules. | Enter text in the field. |
| Status | Incident status. This is also used in task rules. | Select a status from the menu. |
| Previous Status | Incident previous status. | Select a status from the menu. |
| Previous Assigned | Staff member previously assigned to the incident. | Select a staff account from the menu. |
| Previous Group | Group previously assigned to the incident. | Select a group from the menu. |
| Channel | Source of an incoming incident or outgoing response. Channels can be standard email channels: <ul style="list-style-type: none"> • CSS Email • MA Email • Phone • Fax • Post • CSS Web • MA Web • Chat • Email These can also be social channels: <ul style="list-style-type: none"> • Community • Twitter • YouTube • RSS feeds • Facebook | Select a channel from the menu. |
| Created By | Staff member who added the incident. This is also used in task rules. | Select a staff account from the menu. |
| Assigned | Staff member assigned to the incident. This is also used in task rules. | Select a staff account from the menu. |
| Product | Products added on the Products/ Categories/Dispositions editor. This is also used in chat and task rules. | Select the appropriate product check boxes. |
| Category | Categories added on the Products/ Categories/Dispositions editor. This is also used in chat and task rules. | Select the appropriate category check boxes. |
| Disposition | Dispositions added on the Products/ Categories/Dispositions editor. This is also used in task rules. | Select a disposition from the menu. |

| Field | Description | Value Format |
|---------------------|---|---|
| Language | Selected language installed from a language pack. (Also used in chat and task rules.) | Select a language from the menu. |
| Created | Time the incident was added. | Enter text in the field using the format hh:mm or use the up or down arrows to scroll to a time. This condition can use the unique "in/not in response interval" operators. |
| Group | Group assigned to the incident. This is also used in task rules. | Select a group from the menu. |
| Interface | Interface of the Ask a Question, incident, or API incident source. This is also used in chat and task rules. | Select an interface from the menu. Use this field to apply a rule to a specific interface. |
| Mailbox | Service and Outreach mailboxes that have outgoing email enabled. This is also used in task rules. | Select a mailbox from the menu. |
| Customer SmartSense | SmartSense rating calculated for all customer threads in the incident. | Select a SmartSense rating from the menu. |
| Staff SmartSense | SmartSense rating calculated for all staff response threads in the incident. | Select a SmartSense rating from the menu. |
| Email Header | Text in the header of an email that adds an incident. You must enable EGW_SAVE_EMAIL_HEADERS (RightNow Common/Service Modules/Oracle Email) for this condition to appear on the drop-down list. Only current header information is available for rules processing. If an agent or customer updates the incident header, the original header information is no longer available. This is also used in task rules. | Enter text in the field. |
| Source | Source of the incident. | Select the check box for the source of the incident. |
| Updated From | Source of the most recent incident update. | Select the check box that indicates where the incident was most recently updated. |
| Escalation Level | Incident escalation level. This is also used in task rules. This field is set through rules in the database and can't be edited in the record. To view an incident escalation level, click the Info button on the ribbon when the incident is open. | Select an escalation level from the menu. |

| Field | Description | Value Format |
|---------------------------|--|---|
| Previous Escalation Level | Incident previous escalation level. | Select an escalation level from the menu. |
| Queue ID | Incident assigned queue. This is also used in task rules. | Select a queue ID from the menu. |
| Mailing ID | Mailing that prompted a response, and then added the incident. This field appears only if you have created mailings in Outreach. This is also used in task rules. | Select a mailing from the menu. |
| Response Sent | Agent selection in the Send Response check box when solving the incident. | Select the Yes or No option. |
| Last Survey Score | Score from the most recent survey associated with this incident. This is also used in task rules. | Enter a numeric value in the field. |
| Severity | Incident severity. This is also used in task rules. | Select an incident severity option from the menu. |
| Banner Note | Information entered by a staff member in the banner. | Enter text in the field. |
| Banner Flag | Importance of the banner. | Select an importance level from the menu. |
| Banner Updated | Date and time the banner was last updated. | Click the drop-down list to open the current month calendar, then select a date and time the banner was updated. Or select a relative time. |
| Banner Updated By | Staff member who last updated the banner. | Select a staff member from the menu. |
| Incoming Mailbox | Service and Outreach mailboxes that have incoming email enabled. | Select a mailbox from the menu. |
| SLA Instance ID | SLA that has been applied to the incident. | Select an SLA from the menu. |
| Chat Queue ID | Incident queues for chat rules. | Select a Chat Queue ID from the menu. |

Related Topics

- [Overview of Multiple Interfaces](#)
- [SmartSense](#)
- [Overview of Mailings](#)
- [Add or Edit an Incident Queue](#)
- [Add or Edit an Incident Severity Level](#)

Opportunity Conditions

When choosing opportunity conditions, select from these fields and enter the value in the specified format.

Conditions for Opportunities

| Field | Description | Value Format |
|-----------------------------|---|--|
| Status | Opportunity status. This value can be lead, reject, active, closed, lost, inactive, dead, or unspecified. | Select a status from the menu. |
| Previous Status | Opportunity previous status. | Select a status from the menu. |
| Escalation Level | Opportunity escalation level. This field is set through rules in the database and can't be edited in the record. To view an opportunity's escalation level, click the Info button when the opportunity is open. | Select an escalation level from the menu. |
| Previous Escalation Level | Opportunity previous escalation level. | Select an escalation level from the menu. |
| Assign | Staff member assigned to the opportunity. | Select a staff account from the menu. |
| Previous Assigned | Staff member previously assigned to the opportunity. | Select a staff account from the menu. |
| Interface | Interface where the opportunity was added. | Select an interface from the menu. |
| Name | The name of the opportunity. | Enter text in the field. |
| Source | Source of the opportunity. | Select a check box for the source of the opportunity. |
| Updated From | Source of the most recent opportunity update. | Select the check box that indicates where the opportunity was most recently updated. |
| Strategy Hierarchy | Strategy hierarchy for the opportunity. | Select a check box for the opportunity strategy hierarchy. |
| Previous Strategy Hierarchy | Opportunity previous strategy hierarchy. | Select a check box for the opportunity previous strategy hierarchy. |
| Created | Date and time the opportunity was added. | Click the drop-down list to open the current month calendar, then select a Created date. Use the arrows at the top to change the month if necessary. |
| Created By | Staff member who added the opportunity. | Select a staff account from the menu. |
| Updated | Date and time the opportunity was updated. | Click the drop-down list to open the current month calendar, then select an Updated date. Or select a relative time. |
| Updated By | Staff member who updated the opportunity. | Select a staff account from the menu. |

| Field | Description | Value Format |
|----------------------------|---|--|
| Manager Forecast | Manager's forecast for the opportunity. | Click the drop-down list and enter a value in the Amount field. Click the Currency drop-down list, then select the currency. |
| Manager Forecast Committed | Yes or No selection in the Manager Commit field. | Select Yes or No . |
| Rep Forecast | Sales representative's forecast for the opportunity. | Click the drop-down list and enter a value in the Amount field. Click the Currency drop-down list, then select the currency. |
| Rep Forecast Committed | Yes or No selection in the Rep Commit field. | Select Yes or No . |
| Closed Value | Value the opportunity closed at. | Click the drop-down list and enter a value in the Amount field. Click the Currency drop-down list, then select the currency. |
| Summary | Information entered in the Summary text field of the opportunity. | Enter text in the field. |
| Territory | Territory for the opportunity. | Select a check box for the opportunity territory. |
| Initial Contact | Date of the opportunity initial contact. | Click the drop-down list to open the current month calendar, then select the date of initial contact. |
| Forecast Close | Date the opportunity is forecasted to close. | Click the drop-down list to open the current month calendar, then select a date when the opportunity is forecasted to close. |
| Date Closed | Date the opportunity closed. | Click the drop-down list to open the current month calendar, then select a date when the opportunity closed. |
| Cost of Sale | Total cost of a sale. | Click the drop-down list and enter a value in the Amount field. Click the Currency drop-down list, then select the currency. |
| Returned Value | Value of products returned by a customer. | Click the drop-down list and enter a value in the Amount field. Click the Currency drop-down list, then select the currency. |

| Field | Description | Value Format |
|----------------------------|---|---|
| Last Survey Score | Score from the most recent survey associated with this opportunity. | Enter a numeric value in the field. |
| Lost Date | Date the opportunity status was set to Lost. | Click the drop-down list to open the current month calendar, then select the date when the opportunity was lost. |
| Recall | Date the contact for the opportunity should be called again. | Click the drop-down list to open the current month calendar, then select the date for calling the contact for the opportunity. |
| Lead Rejection | Lead rejection reason selected by the staff member for the opportunity. | Select a lead rejection reason from the menu. |
| Lead Rejection Description | Text stored in the lead rejection reason field in the opportunity. | Enter text in the field. |
| Win/Loss Factor | Win/loss factor selected by the staff member for the opportunity. | Select a win/loss factor from the menu. |
| Win/Loss Description | Text entered as the win/loss description in the opportunity. | Enter text in the field. |
| Banner Note | Information entered by a staff member in the banner. | Enter text in the field. |
| Banner Flag | Importance of the banner. | Select an importance level from the menu. |
| Banner Updated | Date and time the banner was last updated. | Click the drop-down list to open the current month calendar, then select a date and time the banner was updated. Or select a relative time. |
| Banner Updated By | Staff member who last updated the banner. | Select a staff member from the menu. |

Related Topics

- [Add or Edit a Strategy](#)
- [Add or Edit a Territory or Subterritory](#)
- [Add or Edit a Lead Rejection Type](#)
- [Add or Edit a Win/Loss Reason](#)

Organization Conditions

When choosing organization conditions, select from these 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. You can also see any additional custom organization address types that have been added. See [Add or Edit an Organization Address Type](#).

Conditions for Organizations

| Field | Description | Value Format |
|---------------------|---|--|
| Organization Name | Name of the organization. | Enter text in the field. |
| Source | Source of the organization. | Select the check box for the source of the organization. |
| Updated From | Source of the most recent contact update. | Select the check box that indicates where the organization was most recently updated. |
| Street | Organization street address. | Enter text in the field. |
| City | Organization city. | Enter text in the field. |
| State/Province | Organization state or province. | Select a state or province from the menu. |
| Country | Organization country. | Select a country from the menu. |
| Postal Code | Organization's postal code. | Enter text in the field. |
| Service State | Service check box selection for the State. | Select Yes or No . |
| Opportunities State | Opportunity Tracking check box selection for the State. | Select Yes or No . |
| Outreach State | Outreach check box selection for the State. | Select Yes or No . |
| Industry Type | Organization industry. | Select an industry type from the menu. |
| Acquired | Date the organization was acquired as a customer. | Click the drop-down list to open the current month calendar, then select a date the organization was acquired. Use the arrows at the top to change the month if necessary. |
| Banner Note | Information entered by a staff member in the banner. | Enter text in the field. |
| Banner Flag | Importance of the banner. | Select an importance level from the menu. |
| Banner Updated | Date and time the banner was last updated. | Click the drop-down list to open the current month calendar and select a date and time the banner was updated. Or select a relative time. |
| Banner Updated By | Staff member who last updated the banner. | Select a staff member from the menu. |

Task Conditions

When choosing task conditions, select from these fields and enter the value in the specified format.

Conditions for Tasks

| Field | Description | Value |
|---------------------------|--|---|
| Status | Task status. | Select a status from the menu. |
| Previous Status | Task previous status. | Select a status from the menu. |
| Assign | Staff member to assign the task. | Select a staff account from the drop-down list. |
| Previous Assigned | Staff member previously assigned the task. | Select a staff account from the menu. |
| Completed Date | Date the task was completed. | Click the drop-down list to open the current month calendar, then select a task completion date. Use the arrows at the top to change the month if necessary. |
| Created | Date the task was added. | Click the drop-down list to open the current month calendar, then select the date the task was added. |
| Updated | Date the task was last updated. | Click the drop-down list to open the current month calendar, then select the date the task was updated. |
| Updated From | Source of the most recent task update. | Select the check box that indicates where the task was most recently updated. |
| Due Date | Date the task is due. | Click the drop-down list to open the current month calendar, then select the task's due date. |
| Escalation Level | Task escalation level. This field is set through rules in the database and cannot be edited in the record. To view a task escalation level, click Info on the ribbon when the task is open. | Select an escalation level from the menu. |
| Previous Escalation Level | Task previous escalation level. | Select an escalation level from the menu. |
| Name | Name of the task. | Enter the task name in the field. |
| Percent Complete | Percentage of the task that is complete. | Enter a value in the field. |
| Planned Completion Date | Date the task is scheduled to be completed. | Click the drop-down list to open the current month calendar, then select the planned completion date for the task. |
| Priority | Task priority. | Select a priority from the menu. |
| Start Date | Date the task is started. | Click the drop-down list to open the current month calendar, |

| Field | Description | Value |
|-------|---|--|
| | | then select a start date for the task. |
| Type | Type of task, which means the type of record the task is associated with. | Select a task type from the menu. |

Business Rule Operators

An operator expresses the relationship between a condition field and its value, determining how the field is applied to the value of the condition.

For example, in the condition “If an answer assignment equals customer support,” the operator is “equals.” Each field has its own set of operators, depending on what is logical for that field. For example, a rule with the condition “If an answer assignment is greater than or equal to customer support,” has no relevance and can't be applied to an answer.

Operators Used in Business Rules

| Operator | Description |
|--------------------------|---|
| equals | The field matches the value exactly, including case. When you use this field for specific text content, you must include single quotes around the text of interest. For example, you can set criteria to be Organization. Name equals 'ABC Company.' |
| not equals | The field doesn't match the value. |
| is null | The field doesn't 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. |
| contains | <p>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.</p> <p>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.” You then 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 don't have to occur sequentially.</p> |
| does not contain | <p>The field doesn't 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 aren't case sensitive. Word stemming isn't supported for custom fields, only text strings.</p> |

| Operator | Description |
|-----------------------------------|--|
| matches regular expression | The field matches the regular expression entered in a text string value. The regular expression compiler validates the expression. If an error code is returned, the rule isn't saved. |
| does not match regular expression | The field doesn't match the regular expression entered in a text string value. The regular expression compiler validates the expression. If an error code is returned, the rule isn't saved. |
| 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 isn't used when this operator is selected. |
| not in response interval | This operator is used only with the Incident Created condition for incident rules to indicate that the incident wasn't 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 hh:mm field isn't used when this operator is selected. |
| modified this edit | This operator indicates that the field 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. It can also happen automatically through a utility or rule action. All values use this operator. |
| not modified this edit | This operator indicates that the field value wasn't changed during the current edit of the object. All values use this operator. |

Related Topics

- [Regular Expressions](#)
- [Add a Rule](#)

Business Rule Logical Expressions

Logical expressions use AND (&) and OR (|) to define the relationship between rule conditions.

To edit the logical expression after you have defined conditions, 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 action occurs only when all three conditions are met. 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 action occurs if any one of the three conditions is 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. 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.

Related Topics

- [Add a Rule](#)

Business Rule Actions

The condition is the “if” part of a rule “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 happens when the object does not match the rule conditions. Every action that is available in an object Then clause is also available in the Else clause.

Note: An action that can only be used once in the Then clause (for example, setting an incident status) 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 these considerations:

- [Action Execution](#)
- [Action Order](#)
- [Dependency Conflicts](#)—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.
- [Actions to Set Custom Fields and Variables](#)
- [Actions for Rule Bases](#)
- [Rules for Escalation of Answers, Incidents, Opportunities, and Tasks](#)—You define the conditions that will schedule an object escalation and what actions you want to occur when that escalation level is reached.

Related Topics

- [Add a Rule](#)

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 list to trigger a custom process. 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 [Add an Object Event Handler](#) and [Overview of Custom Processes](#).

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.

These 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. After 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 this order:

- a. Call a function containing a rule with a stop-processing action.
- b. 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 continue. 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: 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.

Related Topics

- [Business Rule Actions](#)

Action Order

In general, the order of rule 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 actions occur in the rule.

The following Append Thread to Response actions are added to the response thread in the order that you specify in the rule 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

Note: 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 B2C Service 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 B2C Service.

Related Topics

- [Business Rule Actions](#)

Actions to Set 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 add an action that appends the word `there` to the same field, then 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: 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.

Related Topics

- [Business Rule Actions](#)

Actions for Rule Bases

This topic contains descriptions of the actions available for rules within each object type.

The available actions depend on the rule object type. These 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

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 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.

This list links to tables that describe actions for the specific rule types:

- [Actions for Answer Rules](#)
- [Actions for Contact Rules](#)
- [Actions for Incident Rules](#)
- [Actions for Chat Rules](#)
- [Actions for Opportunity Rules](#)
- [Actions for Organization Rules](#)
- [Actions for Task Rules](#)

Related Topics

- [Business Rule Actions](#)

Actions for Answer Rules

These are the actions that you can choose for answer rules.

Actions for Answer Rules

| Action | Description |
|------------------|---|
| Set Field | Select this option, then select a field to set or change. |
| 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 list and adds any text you type in the Banner Note field. |

| Action | Description |
|--|--|
| Set Custom Field | Select an answer custom field and set the value. You must add an answer custom field to your site for it to display. |
| 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. For variables to display, they must be added to the Rules tree. |
| Email | Select this action to send the following type of email notification. |
| Send Escalation Notification | Sends an escalation notification to the staff member or group you select. You can also select a check box to send the escalation notice to the staff person assigned to the answer. If multiple recipients are selected, press Ctrl and click a recipient to add it to (or clear it from) the list of selected recipients. |
| 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 list. For objects to display in the Execute Object Event Handler drop-down list, they must be added on the process designer and then the process model must be deployed. |
| 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. |
| Clear Escalation | Clear the escalation level. |

Related Topics

- [Custom Field Types](#)
- [Variables in Business Rules](#)
- [Object Event Handlers](#)
- [Rules for Escalation of Answers, Incidents, Opportunities, and Tasks](#)

Actions for Contact Rules

These are the actions that you can choose for contact rules.

Actions for Contact Rules

| Action | Description |
|---------------------|---|
| Set Field | Select this option, then select a field to set. 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, or Outreach) set to No and a rule 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. |

| Action | Description |
|--|--|
| 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. |
| 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. 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 list and select an option. |
| Banner Flag | Sets the importance of the flag to the level you select from the drop-down list and adds any text you type in the Banner Note field. |
| Set Date Acquired | Click the drop-down list on the left, select one of the following options, and then click the drop-down list on the right: <ul style="list-style-type: none"> • Equals—With the current month calendar open, select the date acquired. Use the arrows to change the month if necessary. • 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. • 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. |
| 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 list 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. You must add a contact custom field to your site for it to display. |
| 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 data type. For variables to display, they must be added to the Rules tree. |
| Email | Select one of these options to send an email to the contact. 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 list 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 list 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. |

| Action | Description |
|-------------------------------------|--|
| | At least one transactional survey (set for rule visibility) must have been added for this option to appear. |
| Execute Object Event Handler | Select this action to trigger a custom process and then select the type of object event handler from the drop-down list. For objects to display in the Execute Object Event Handler drop-down list, they must be added on the process designer and then the process model must be deployed. |
| Execute External Event | If you need to trigger a custom process, we recommend that you use the Execute Object Event Handler action described in the previous row. |

Related Topics

- [Custom Field Types](#)
- [Variables in Business Rules](#)
- [Object Event Handlers](#)

Actions for Incident Rules

These are the actions that you can choose for incident rules.

Actions for Incident Rules

| Action | Description |
|---------------------------|---|
| Set Field | Select this option, then select a field to set or change. 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 list 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. |

| Action | Description |
|---|--|
| Set Custom Field | Select an incident custom field and set the value. You must add an incident custom field to your site in order for it to display. |
| 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 data type. For variables to display, they must be added to the Rules tree. |
| Set Field by Concatenation | Select this field to create a rule that concatenates two fields. Note: This action is only available in the Agent Browser User Interface. |
| Arithmetic | Use the following arithmetic operators to create a rule with mathematical actions: <ul style="list-style-type: none"> Set Field by Addition (Added To) Set Field by Subtraction (Reduced By) Set Field by Multiplication (Multiplied By) Set Field by Division (Divided By) Set Field by Modulo (Modulo) Note: These actions are only available in the Agent Browser User Interface. |
| Append Thread | Select this action to append any of these responses to the incident Note or Response fields. 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 action 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 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. |
| Append Response Template to Response Field | Appends the standard text you select to the incident 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. |
| Append Existing Solution (by Answer ID) to Response Field | Appends the solution for the Answer ID you enter to the incident Response field. |
| Append SmartAssistant Response to Response Field | Appends the SmartAssistant suggested answer links to the incident response. 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. |
| 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 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 one of these email notifications. 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. |

| Action | Description |
|--|---|
| | To 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 for Append Thread in this table. |
| Email Incident Information | <p>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.</p> <p>To include administration and customer fields, select the appropriate check boxes.</p> <ul style="list-style-type: none"> • 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 fields include 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 or group you specify. You can also select a check box to send the escalation notice to the staff person assigned to the incident. If multiple recipients are selected, press Ctrl and click a recipient to add it to (or clear it from) the list of selected recipients. |
| Send Marketing Email | Sends the mailing you select from the drop-down list 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. This option does not appear if Outreach is not enabled and if no mailings have been created. |
| Send Transactional Survey | <p>Sends the survey you select from the drop-down list 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.</p> <p>At least one transactional survey (set for rule visibility) must have been added in order for this option to appear.</p> |
| 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. That is, 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 a custom process and then select the type of object event handler from the drop-down list. For objects to display in the Execute Object Event Handler drop-down list, they must be added on the process designer and then the process model must be deployed. |
| Execute External Event | If you need to trigger a custom process, we recommend that you 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. 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. |
| Do Not Send Response | Select this action to prevent an automatic response from being sent when an incident is updated. |

| Action | Description |
|--|---|
| | For example, if your responses are delivered through a message system outside of B2C Service, you can use this rule to suppress an automatic response. 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. 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. |
| Clear Escalation | Select this action to clear the escalation level. |

Related Topics

- [Custom Field Types](#)
- [Variables in Business Rules](#)
- [Overview of Answers](#)
- [Object Event Handlers](#)
- [Rules for Escalation of Answers, Incidents, Opportunities, and Tasks](#)

Actions for Chat Rules

These are the actions that you can choose for chat rules.

Note: Actions that send or open a survey display only if surveys are enabled for use in chat rules.

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 list. |
| 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. For variables to display, they must be added to the Rules tree. |
| 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 or tab 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 or tab 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. |

| Action | Description |
|-------------------------|--|
| Terminate Chat Request | Select this action to terminate the chat request. |
| ReQueue Chat Request in | Select this action to requeue the chat request in the number of seconds you specify. |

Related Topics

- [Variables in Business Rules](#)

Actions for Opportunity Rules

These are the actions that you can choose for opportunity rules.

Actions for Opportunity Rules

| Action | Description |
|---|--|
| Set Field | Select this option, then select a field to set or change. |
| Assign | Sets the Assigned field to the staff account you select from the drop-down list. |
| Status | Sets the Status field to the status you select from the drop-down list. |
| Reject Lead | Identifies the reason the lead was rejected. Select a status from the first drop-down list of available statuses with the Reject status type. Then select a lead reject type from the second drop-down list. Finally, enter a lead rejection description in the text field. |
| Interface | Sets the Interface field to the interface you select from the drop-down list. |
| Banner Flag | Sets the importance of the flag to the level you select from the drop-down list 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 list. |
| Territory | Sets the territory hierarchy to the territory you select from the drop-down list. |
| 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 list on the left, select one of the following options, and then click the drop-down menu on the right: <ul style="list-style-type: none"> • Equals—With the current month calendar open, select the date. Use the arrows to change the month if necessary. • Equal to the Value of—Select one of the available options from the drop-down list. • 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. |
| 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 list and enter a win/loss description in the text field. |
| Set Custom Field | Select an opportunity custom field and set the value. You must add an opportunity custom field to your site for it to display. |

| 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 data type. For variables to display, they must be added to the Rules tree. |
| Email | Select this action to send one of these email notifications. 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 include administration fields and customer fields, select the appropriate check boxes. |
| Send Escalation Notification | Sends an escalation notification to the staff member or group 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 list 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. At least one transactional survey (set for rule visibility) must have been added for this option to appear. |
| Execute Object Event Handler | Select this action to trigger a custom process and then select the type of object event handler from the drop-down list. For objects to display in the Execute Object Event Handler drop-down list, they must be added on the process designer and then the process model must be deployed. |
| Execute External Event | If you need to trigger a custom process, we recommend that you 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. |
| Clear Escalation | Select this action to clear the escalation level. |

Related Topics

- [Custom Field Types](#)
- [Variables in Business Rules](#)
- [Object Event Handlers](#)
- [Rules for Escalation of Answers, Incidents, Opportunities, and Tasks](#)

Actions for Organization Rules

These are the actions that you can choose for organization rules.

Actions for Organization Rules

| Action | Description |
|--|---|
| Set Field | Select this option, then select a field to set. At least one of an organization state fields must be set to Yes. If the organization has two of its three states (Service, Opportunities, or Outreach) set to No and a rule 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 Opportunity Tracking state. |
| Outreach State | Select Yes or No to set the organization Outreach state. |
| Banner Flag | Sets the importance of the flag to the level you select from the drop-down list and adds any text you type in the Banner Note field. |
| Set Date Acquired | Click the drop-down list, then select one of these options: <ul style="list-style-type: none"> • Equals—With the current month calendar open, select the date acquired. Use the arrows to change the month if necessary. • 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. • 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. |
| 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 list 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. You must add an organization custom field to your site in order for it to display. |
| 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 data type. For variables to display, they must be added to the Rules tree. |
| Execute Object Event Handler | Select this action to trigger a custom process and then select the type of object event handler from the drop-down list. For objects to display in the Execute Object Event Handler drop-down list, they must be added on the process designer and then the process model must be deployed. |
| Execute External Event | If you need to trigger a custom process, we recommend that you use the Execute Object Event Handler action described in the previous row. |

Related Topics

- [Custom Field Types](#)
- [Variables in Business Rules](#)
- [Object Event Handlers](#)

Actions for Task Rules

These are the actions that you can choose for task rules.

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, then 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 escalation does not happen.

Actions for Task Rules

| Action | Description |
|------------------------------|---|
| Set Field | Select this option, then select a field to set or change. |
| 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 priority to the priority you select. |
| Set Due Date To | Sets the task due date to the date you select. |
| Set Planned Complete To | Sets the task planned completion date to the date you select. |
| Task Start Date | Sets the task start date to the date you select. |
| Task Complete Date | Sets the task complete date to the date you select. |
| Set Custom Field | Select a task custom field and set the value. You must add a task custom field to your site for it to display. |
| 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 data type. For variables to display, they must be added to the Rules tree. |
| Email | Select this action to send one of these 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. Press Ctrl to make multiple selections. |
| Send Escalation Notification | Sends an escalation notification to the staff member or group 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. |

| Action | Description |
|------------------|---|
| Clear Escalation | Select this action to clear the escalation level. |

Related Topics

- [Custom Field Types](#)
- [Variables in Business Rules](#)
- [Rules for Escalation of Answers, Incidents, Opportunities, and Tasks](#)

Rules for Escalation of 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 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, these 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?

The scheduling of escalation involves these 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. The Response interval escalation option is available only in incident rules.
- **Revalidate**—Verifies that the object continues to match the rule 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 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 Revalidate to cancel the scheduled escalation when the Clear Escalation action is executed.

Note: 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 Revalidate to ensure that 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.

Related Topics

- [How Escalation Rules Work](#)
- [How the Dbstatus Utility Updates the Escalation Level](#)
- [Process for Escalating Incidents](#)

How Escalation Rules Work

While escalation rules are most commonly applied to incidents, they can also be useful for managing answers, opportunities, and tasks.

Escalation rules always come in pairs:

- The first rule creates the escalation level for any incident, answer, opportunity or task that matches the rule conditions. It tells the Dbstatus utility to set the escalation to the defined level when the time for escalation has passed.
- The second rule specifies what you want to happen after the incident, answer, opportunity or task reaches this escalation level.

For an example of escalation rules, see [Escalate an Incident](#).

Tip: We recommend creating a separate function where you can place escalation rules. See [Add a Function](#).

Related Topics

- [Rules for Escalation of Answers, Incidents, Opportunities, and Tasks](#)
- [Process for Escalating Incidents](#)
- [Create a Rule that Sets the Escalation Level](#)
- [Create a Rule that Triggers Actions on an Escalated Object](#)

Process for Escalating Incidents

Here are the main steps necessary to create and implement rules that escalate incidents. The process is the same for escalating answers, opportunities, and tasks.

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.
2. Add an escalation function to the incident rule base.
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.
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.
5. Repeat steps 3 and 4 for every escalation level.
6. 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, then 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 before escalation, and the last rule in a state is usually an action to transition to the next state.
7. Repeat step 6 for every state in the incident rule base.

Results:

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 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.

How the Dbstatus Utility Updates the Escalation Level

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.

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 use the configuration settings and message bases of the interface from which Dbstatus runs.

Create a Rule that Sets the Escalation Level

This procedure shows you how to create a rule that sets an escalation level when the escalation level is applied to an incident, but the procedure is the same when applied to answers, opportunities, and tasks.

Before you start

Tip: We recommend creating a separate function where you can place escalation rules. This procedure assumes that the rules you create are placed in an escalation function.

Escalation rules always come in pairs. This procedure creates a rule that sets the escalation level for an incident that matches the rule conditions. It tells the Dbstatus utility to set the 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.

Here's what to do

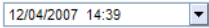


1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Click the button for the rule type you want to create. The incident rule base is selected by default.
4. Click **Edit**.
5. Right-click the escalation function where you want to place the new rule and select **New Rule**.
6. Enter the rule name in the **Rule Name** field.
7. Add the conditions that will trigger the escalation.

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 **Add Action-Then** and select **Escalate**.
9. Enter the values in the escalation action fields.

Escalation Action

| Field | Description |
|-------------------|--|
| Escalate to Level | Enter 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 list to the right of the check box. In the drop-down list 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. |

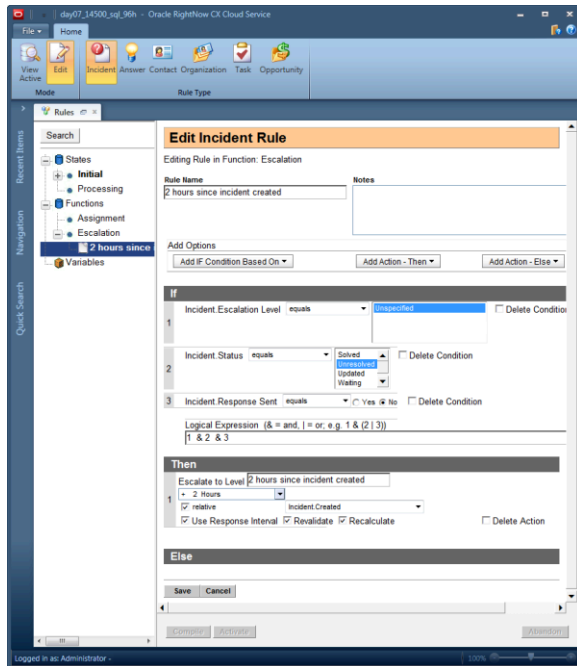
| Field | Description |
|---|---|
|  | <p>This field lets you schedule the escalation using absolute time. That is, you set the specific time you want rather than scheduling escalation relative to another time. Click the drop-down list to open the current month calendar and select the escalation date. To change the date or time, click the value you want to change, then enter a new value.</p> <p>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.</p> <p>This option appears only if the Relative check box is cleared.</p> |
|  | <p>Click the arrow to open a window for selecting the direction, offset, and units for the relative time value. +1 Hours is the default. Enter the direction, offset, and unit for this field, then click Save. This option appears only if the Relative check box is selected.</p> |
| Direction | <p>Select + (future) or – (past) to indicate the direction of the offset for the escalation time from the relative time you define.</p> <p>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.</p> |
| Offset | <p>Select this field and enter a new value to change the number of minutes or hours before or after the relative time.</p> |
| Unit | <p>Click the drop-down list, then select minutes or hours.</p> |
|  | <p>Click the arrow to display the drop-down list and select Now, Today, Tomorrow, any day of the week, or any of the answer, incident, opportunity, or task options listed below.</p> <p>This establishes the base time to which Dbstatus applies the relative escalation time. You must select the Relative check box to display the menu.</p> <p>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, then the escalation would be scheduled for the next Wednesday at 3 A.M.</p> <p>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.</p> <p>If, for example, work hours on Wednesdays begin at 6:00 A.M., then escalation for the incident would be scheduled for Wednesday at 9:00 A.M.</p> |
| Answers | <p>Select one of these escalation options based on the time the answer was added or updated or is scheduled to be reviewed or published.</p> |
| Answers.Created | <p>Select this option if you want the escalation time to be calculated from the time the answer was added.</p> |
| Answers.Updated | <p>Select this option if you want the escalation time to be calculated from the time the answer was updated.</p> |
| Answers.Review On | <p>Select this option if you want the escalation time to be calculated from the time the answer is scheduled to be reviewed.</p> |
| Answers.Publish On | <p>Select this option if you want the escalation time to be calculated from the time the answer is scheduled to be published.</p> |
| Incidents | <p>Select one of these escalation options based on the time the incident was added, updated, or responded to, or the time it is due.</p> |

| Field | Description |
|---|--|
| 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. |
| 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. 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. 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 these 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 | <p>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.</p> <p>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.</p> |
| Opportunity.Forecast Close | <p>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 at noon.</p> <p>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.</p> |
| Opportunity.Date Closed | <p>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.</p> <p>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.</p> |
| 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 these escalation options for tasks. |

| Field | Description |
|-------------------------------|--|
| 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 due date. |
| Tasks.Planned Completion Date | Select this option if you want escalation to be based on the planned completion date of the task. |
| Tasks.Start Date | Select this option if you want escalation to be based on the task 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 might escalate during non-working hours and holidays. 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. After 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. 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. |

| Field | Description |
|-------|-------------|
| | |

This image shows a rule that sets an escalation level.



10. Click **Save**.

What to do next

The next rule must specify what you want to happen after the incident reaches this escalation level. To do this, you create another rule in the escalation function, as described in [Create a Rule that Triggers Actions on an Escalated Object](#).

Related Topics

- [Overview of Service Level Agreements \(SLAs\)](#)
- [Add a Function](#)

Create a Rule that Triggers Actions on an Escalated Object

This procedure shows you how to create a rule that performs an action when the escalation level is applied to an incident, but the procedure is the same when applied to answers, opportunities, and tasks.

Before you start

Tip: We recommend creating a separate function where you can place escalation rules. This procedure assumes that the rules you create are placed in an escalation function.

Escalation rules always come in pairs. This procedure follows the creation of a rule that sets the escalation level for an incident that matches the rule conditions (see [Create a Rule that Sets the Escalation Level](#)). It tells the Dbstatus utility to

set the escalation to the defined level when the time for escalation has passed. This procedure creates the next rule to specify what you want to happen after the incident reaches this escalation level.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Click the button for the rule type you want to create. The incident rule base is selected by default.
4. Click **Edit**.
5. Right-click the escalation function where you want to place the new rule, then select **New Rule**.
6. Enter a name for the rule in the **Rule Name** field.
7. Click **Add IF Condition Based On** and select **Escalation Level equals <Escalation Level>**.
This is the name of the escalation level created in the rule that sets the escalation level.
8. Click **Add Action-Then** to add the appropriate actions based on your business process.
For example, the rule action could be to send an escalation email to the assigned staff member of the incident.
9. Click **Save**.

Results:

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. 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, repeat this process. After you have created your escalation rules, activate the rule base. See [Compilation and Activation of Rule Bases](#).

Related Topics

- [Business Rule Actions](#)
- [Add a Function](#)

Compilation and Activation of Rule Bases

Whenever you make changes to a rule base, you must compile it to make sure that no errors exist. You must then activate it so that 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 [How to View Rule Bases](#).

Note: Whenever you make any changes to a rule base, you must activate the rule base 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, that 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.

Compile a Rule Base

This procedure uses contact rules as an example, but you can compile any type of rule using the same procedure.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Click **Contact**, then click **Edit** to view the contact rules you will compile.
4. Click **Compile**.
A message asks you to confirm that you want to compile the rule base.
5. Click **OK**.
The compiler engine checks rules, states, and functions. If no errors occur, a message lets you know that the rule base compiled correctly.
6. Click **OK**.
You can now continue editing the rule base.

Activate a Rule Base

This procedure uses contact rules as an example, but you can activate any type of rule using the same procedure.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Click **Contact**, then click **Edit** 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 will be red to alert you that changes have not been activated.

4. Click **Activate**.
A message asks you to confirm that you want to activate the rule base.
5. Click **OK**.
The compiler engine checks rules, states, and functions. If no errors occur, a message lets you know the rule base compiled correctly.
6. Click **OK**.
If objects are in the Null state or a state that has been removed, see *Objects in the Null State*. If no objects must be reassigned to a different state, a message lets you know that the rule base has been activated.
7. Click **OK** to close the message and stop editing rules.

Abandon Changes to a Rule Base

Abandon changes to a rule base to revert back to the last activated version.

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 **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and double-click **Rules**.
3. Click the button for the rule base you want to abandon.
The incident rule base is selected by default.
4. Click **Edit** to view the rules currently in the edit state.
5. Click **Abandon** 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 **OK** 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 that the records 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 might 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 list 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 *Rules for Escalation of Answers, Incidents, Opportunities, and Tasks*.

Change State Values When Activating a Rule Base

Change the state value of records in a null state to an active state so they can be processed by a rule base.

1. When you see a message about moving records in a null state, click the drop-down list and select the state where you want to move the records.
2. Click **Save**.
A message lets you know that the rule base was activated.
3. Click **OK** to exit the rule base.

How to View Rule Bases

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.

When you open the Rules editor, the View Active button on the ribbon is selected. 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 for the restored version to become the new current version.

Note: 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 let them view rules by selecting the Rules View check box. See [Administration Permissions](#).

Related Topics

- [View a Rule Base](#)
- [Restore the Archived Version of the Rule Base](#)

View a Rule Base

Follow this procedure to view a rule base.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Click the button for the rule type you want to view.
Because **View Active** is selected 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 might 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**.

Restore the Archived Version of the Rule Base

Follow this procedure to restore the archived version of the rule base.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Select the rule type button for the rule base you want to restore.
The incident rule base is selected by default.
4. Click **Restore**.
You are asked to confirm that you want to restore the archived rule base.
5. Click **OK** to confirm the restoration of the archived rule base.
6. Click **Activate** to activate the restored version of the rules base.

Note: 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.

Search a Rule Base

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 large rule base.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Click the button for the rule base you want to view.
The incident rule base is selected by default.
4. Click **Search** above the tree.
The **Find** window opens.
5. Enter 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 that you enter. This lets you search for items using text strings that are in the item names but that are not at the beginning or end of the names. For example, entering **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 find 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 **Up**. To start from the top of the tree, select **Down**.
Down is the default.
9. Click **Find Next** to find the first state, function, rule, or variable in the rule base that matches the text you entered.
10. Click **Find Next** again to find subsequent items in the tree that match the text.
11. Click **Close** when you are finished with the search.

Modify a Rule Base

You can modify a rule base, including all states, functions, and the rules contained in each.

Modifying a rule base lets you:

- Change the names of states, functions, and rules, and the conditions and actions in rules.
- 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.

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 that you can revert to a functional rule base should you make any accidental changes while editing.

CAUTION: If you delete a state or function, you also delete all the rules within that state or function.

1. Right-click any rule in the rule base, then 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.
2. Make other changes to the rule base as necessary, such as reordering rules.

Results:

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.

What to do next

Regardless of how you modify a rule base, you must activate it for the changes to take effect. See [Compilation and Activation of Rule Bases](#).

Verify a Rule 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.

Before you start

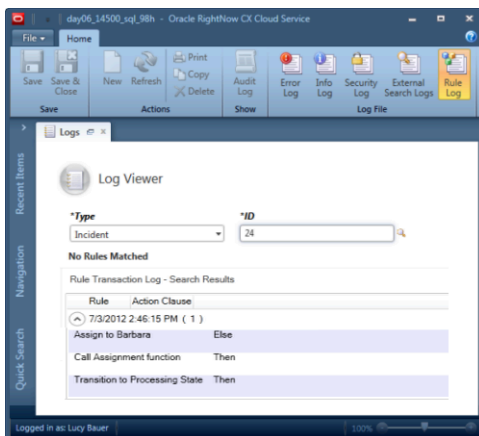
The rule log lets you verify that a rule base works as intended and that no unintended actions occur as a result. The rule log also identifies whether the Then or Else clause was used to process the rule.

Note: When testing escalation, you might have to run the Dbstatus utility 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. Be certain to configure email settings before you construct rules to check inquiries and responses that were sent by email. See *Overview of Email Management* for information about customizing email configuration settings.

Here's what to do

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.
 - o Open the record on a workspace, click **Info**, note the ID number, and close the record.
 - o 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 **Configuration** on the navigation pane.
4. Expand **Site Configuration**, then double-click **Logs**.
5. Click **Rule Log**.
The rule log opens on the content pane.
6. Click the **Type** drop-down list, then select the type of record you want to view.
7. Enter the ID in the field and click **Search**.

This image shows a rule log for an incident that triggered 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 was processed in that way.

Results:

The rule log might 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 might also indicate no matching rules.

Dependency Conflicts

If you attempt to delete an item (such as a rule variable, staff account, or queue) referenced in a rule, the system checks to see if the item is related to business rules. If it is related, then a dependency conflict might 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.

Note: 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. The system doesn't perform a dependency check if you use enhanced business rules.

Examples of Business Rules

These examples can help you to understand business rules better and create rule bases to streamline your organization's business practices.

- *Rules for Routing Customer Support Questions*
- *Example of Automatically Sending Emails and Surveys*
- *Example of Setting Incident Status in Response to an Event or Action*
- *Example of Using SmartAssistant to Suggest Answers Before Questions are Submitted*
- *Escalate an Incident*
- *Create a Variable to Measure Service Quality*
- *Examples of Applying Service Level Agreements (SLAs)*
- *Example of Using Relative Time Conditions*

As there can be more than one way to accomplish the same objective using business rules, you might 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 *Overview of Business Rules*.

Rules for 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 which 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 from which all logged-in agents can pull.

In the following examples, 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 might want to append SmartAssistant-suggested answers to the incident before you transition it to a different rule state.

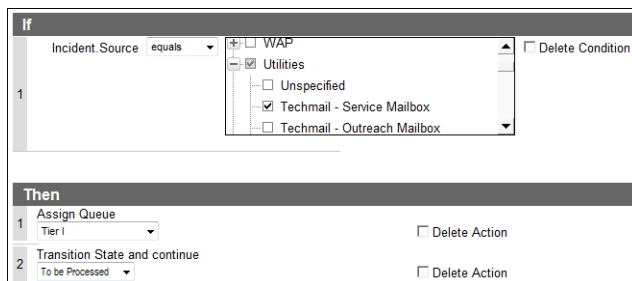
- *Example of Routing Incidents by Source*
- *Example of Routing Incidents by Products or Categories*
- *Example of Routing Incidents by Time Created*
- *Other Incident Routing Conditions*
- *Example of Building on Basic Incident Routing Rules*
- *How the Else Clause Can Simplify Business Rules*

Example of Routing Incidents by Source

You can use rules to route incidents to a specific queue or staff member.

You might 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.

This image shows a rule that routes incidents to a specific queue.



Note: 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.

Example of Routing Incidents by Products or Categories

You can use rules to route incidents by their associated product.

Routing incidents by products or categories lets you direct them to the staff members who are experts in those areas. This can be especially useful if members of your support team have highly specialized areas of knowledge. This image shows a rule that routes incidents by their associated product.

The screenshot shows a rule configuration window. Under the 'If' section, there is a dropdown menu set to 'equals' and a list of services: Mobile Phones (checked), Call Plans (unchecked), Voicemail Services (unchecked), Replacement/Repair Coverage (unchecked), and Mobile Web (unchecked). There is a 'Delete Condition' checkbox. Under the 'Then' section, there are two actions: 1. 'Assign Queue' with a dropdown set to 'Tier 1' and a 'Delete Action' checkbox. 2. 'Transition State and continue' with a dropdown set to 'To be Processed' and a 'Delete Action' checkbox.

Example of Routing Incidents by Time Created

You can use rules to route incidents by the time created.

For example, if a customer submits a question before or after your support staff's normal working hours, you might want to route the incident to a backup staff member or queue who can respond to the customer. This image shows a rule that routes an incident to a Tier 1 Queue when the incident is submitted outside the normal working hours of 8:00 A.M. to 4:00 P.M.

The screenshot shows a rule configuration window. Under the 'If' section, there is a dropdown menu set to 'not in range', two time pickers set to '08:00' and '16:00', and a 'Delete Condition' checkbox. Under the 'Then' section, there are two actions: 1. 'Assign Queue' with a dropdown set to 'Tier 1' and a 'Delete Action' checkbox. 2. 'Transition State and continue' with a dropdown set to 'To be Processed' and a 'Delete Action' checkbox.

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 might 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.

The screenshot shows a rule configuration window. Under the 'If' section, there are two conditions: 1. 'Incident.Created not in range' with time pickers '08:00' and '16:00' and a 'Delete Condition' checkbox. 2. 'Organization.Organization Name equals' with a dropdown set to 'VIP, Inc.' and a 'Delete Condition' checkbox. Below these is a 'Logical Expression' field containing '1 & 2'. Under the 'Then' section, there are two actions: 1. 'Assign Queue' with a dropdown set to 'Tier 1' and a 'Delete Action' checkbox. 2. 'Transition State and continue' with a dropdown set to 'To be Processed' and a 'Delete Action' checkbox.

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.

Example of Building on Basic Incident Routing Rules

Rules for routing incidents can be simple, but simple rules can serve as the building blocks for developing more complex rules.

In this example, you add to the rule that routes incidents created outside working hours by customers from a particular organization. (See *Example of Routing Incidents by Time Created* for 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 this image.

The screenshot shows a rule configuration interface with the following details:

- If Section:**
 - 1. Incident.Created: not in range (08:00 - 17:00). Delete Condition
 - 2. Organization.Organization Name: equals VIP, Inc. Delete Condition
 - Logical Expression (& = and, | = or, e.g. 1 & (2 | 3)): 1 & 2
- Then Section:**
 - 1. Assign Queue: Tier 1. Delete Action
 - Append SmartAssistant Response to Response Field
 - 2. Restrict Product To: [Dropdown]. Restrict Category To: [Dropdown]. Delete Action
 - 3. Append Response Template to Response Field: Workino hours standard text. Delete Action
 - Email Incident Information:
 - including administration fields
 - including customer fields
 - Email Address: [Text Field]
 - 4. to assignee: staff member/group/distribution list. List includes: Customer Support - Tier 1 / Mindy Fletcher, Customer Support - Tier 1 / Phil Wicklund, Customer Support - Tier 1 / George Hewitt, Customer Support - Tier 1 / Barb Dwyer.
 - with subject line: VIP, Inc. incident. Delete Action
 - 5. Transition State and continue: To be processed. Delete Action

Note: In the revised rule, the Transition State action must be last for the other actions to be processed. After 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.

Other Incident Routing Conditions

Besides source, products, categories, and time created, you can route incidents based on several other conditions.

This list describes some of the more common incident conditions. For a complete list, see [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 rule actions. You can set conditions to search for text in the incident subject as well as customer and staff threads.

Note: When you create a rule comparing a string to the Incident Customer Thread, Incident Staff Thread, Incident Proposed Response, or Incident Summary, you can use the Limit buffer by option that appears to specify the number of characters of the string the rule will search for in the most recent entries, up to a maximum of 4000 characters. This can be helpful if you want to disregard initial standard text. If no value is entered, the entire thread is compared.

- 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 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 might 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. See [SmartSense](#).

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.

How the Else Clause Can Simplify Business Rules

You can probably use rules to accomplish everything you want without ever using the Else clause. But using the Else clause can simplify your rules.

Rules are if-then statements: If this condition occurs, then take this action. 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, this could get unwieldy rather quickly. 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 the second rule set is more manageable than the first, the Else clause offers you a single-rule solution.

The screenshot shows a rule configuration window with three sections: 'If', 'Then', and 'Else'.
 - **If:** A single condition '1' where 'Incident.Severity' is set to 'equals' and 'High'. A 'Delete Condition' checkbox is present.
 - **Then:** A single action '1' 'Assign Queue' with 'Queue 1' selected. A 'Delete Action' checkbox is present.
 - **Else:** A single action '1' 'Assign Queue' with 'Queue 2' selected. A 'Delete Action' checkbox is present.
 At the bottom are 'Save' and 'Cancel' buttons.

Example of Automatically 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 this.

The screenshot shows a rule configuration window with three sections: 'If', 'Then', and 'Else'.
 - **If:** A single condition '1' where 'Contact.State/Province' is set to 'equals' and 'MS'. A 'Delete Condition' checkbox is present.
 - **Then:** A single action '1' 'Send Marketing Email' with 'New Bozeman Store HTML' selected. The 'After' field is set to '0 Hours'. A 'Delete Action' checkbox is present.
 - **Else:** This section is empty.
 At the bottom are 'Save' and 'Cancel' buttons.

Sending a survey is similar. The next image shows an incident rule that sends a customer support satisfaction survey when an incident is solved.

Note: The survey will only be sent to the contact once per incident, regardless of how many times the rule is matched.

The screenshot shows a rule configuration window with three sections: 'If', 'Then', and 'Else'.
 - **If:** A single condition '1' where 'Incident.Status' is set to 'equals' and 'Unresolved'. A 'Delete Condition' checkbox is present.
 - **Then:** A single action '1' 'Send Transactional Survey' with 'Closed Incident Survey' selected. The 'After' field is set to '1 Minutes'. A 'Delete Action' checkbox is present.
 - **Else:** This section is empty.
 At the bottom are 'Save' and 'Cancel' buttons.

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 might receive the survey before they receive the Incident Solved notification.

Example of 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 "Techmail-Incoming Auto-Reply Message" source in the Transactions (transactions) table.

Edit Incident Rule

Editing Rule in State: In Progress

Rule Name
Change Status on Email Bounce

Notes
Incident Updated from equals
Utilities > Techmail - Incoming Auto-Reply Message

Add Options
Add IF Condition Based On ▼ Add Action - Then ▼ Add Action - Else ▼

If
1 Incident Updated from equals
- SRM Engage
- Techmail - Incoming Auto-Reply Message
+ Public API
+ Outlook Synch Tools

Then
1 Set Status to Bounced
 Delete Action

Else

Save Cancel

Example of Using SmartAssistant to Suggest Answers Before Questions are Submitted

This example is an action that offers suggested solutions to your customers when they submit incidents. These suggestions might help them resolve their issues themselves, without requiring help from your support team.

The example rule described in *Example of Building on Basic Incident Routing Rules* contained the action Append SmartAssistant Response to Response Field.

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.

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 must have the check boxes for both SmartAssistant on Ask a Question and Ask a Question selected.

Escalate an Incident

Business rules let you escalate answers, incidents, opportunities, and tasks according to the conditions you define. This example shows how to create rules to escalate incidents.

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.

Each escalation action contains two rules:

- The first rule specifies when to escalate the incident and creates an escalation level.
 - The second rule specifies what happens when the escalation level defined in the first rule is reached.
1. Create a function to contain the escalation rules, so that you can access the rules from any state in the incident rule base.

2. Create the first rule. This rule tells the Dbstatus utility to set an incident escalation level when the incident matches the rule conditions.
 - a. Trigger the escalation if the incident status is unresolved, the incident has no current escalation level, and no response has been sent to the customer.
 - b. In the action, create an escalation level called Tier 1 Escalation, which will be triggered 24 hours from the time the incident was created.
 - c. Clear the **Use Response Interval** check box.
The 24 hours is calculated based on actual clock time. If the check box were selected, only your organization's normal working hours would be used to calculate the time.
 - d. Select the **Revalidate** check box.
Any updates to the incident will cause the rule conditions to be evaluated to see if they still match. For example, if an agent responds to the customer, then you do not want the escalation to occur.
 - e. Clear the **Recalculate** check box.
The escalation time is relative to the time the incident was created, which is a static value that does not change during rules processing

Your first escalation rule should look like this.

The screenshot shows a rule configuration window with the following sections:

- If**
 - Condition 1: Incident.Status equals Unresolved (with a dropdown menu showing Solved, Updated, and Waiting) and Delete Condition checkbox.
 - Condition 2: Incident.Escalation Level equals Unspecified and Delete Condition checkbox.
 - Condition 3: Incident.Response Sent equals Yes (with radio buttons for Yes and No) and Delete Condition checkbox.
 - Logical Expression (& = and, | = or, e.g. 1 & (2 | 3)): 1 & 2 & 3
- Then**
 - Action 1: Escalate to Level Tier 1 Escalation
 - Duration: 24 Hours
 - relative checkbox checked
 - Incident.Created dropdown
 - Use Response Interval checkbox unchecked
 - Revalidate checkbox checked
 - Recalculate checkbox unchecked
 - Delete Action checkbox
- Else**

Buttons: Save, Cancel

3. Create a rule that says what happens when the incident reaches the Tier 1 Escalation level.
 - a. One of your conditions must be that the incident escalation level equals the level you created in the first rule.
 - b. Add other conditions as necessary.

Your second escalation rule should look like this.

The screenshot shows a rule configuration window with three sections: 'If', 'Then', and 'Else'.
- The 'If' section contains a single condition: 'Incident Escalation Level' equals 'Tier 1 Escalation Unspecified'. There is a 'Delete Condition' checkbox.
- The 'Then' section is titled 'Email Incident Information'. It has two checked options: 'including administration fields' and 'including customer fields'. Below this is an 'Email Address' field with a dropdown menu set to 'staff member/group/distribution list'. The dropdown list shows 'Customer Service / Roy Kizer' (selected), 'Customer service / Kathleen Olmos', 'Customer service / Chris Seger', and 'Sales'. Below the dropdown is a 'with subject line:' field containing 'Unresolved incident escalation' and a 'Delete Action' checkbox.
- The 'Else' section is currently empty.
- At the bottom are 'Save' and 'Cancel' buttons.

Results:

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.

Create 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.

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 value.

In this example, let's assume that you want to be sure your management team is aware of high-priority service issues.

- 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.

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 what 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.

1. Create a variable called `service_quality`.
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 adding these rules to a state, 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 from which you want to run them.

- a. Create a function called Service Quality Scoring.
- b. 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 these to identify service issues:
 - If the staff member's SmartSense rating is Somewhat Angry, Angry, or Very Angry, then increment the value of service_quality by +6.

The screenshot shows a rule configuration window with three sections: 'If', 'Then', and 'Else'.
- The 'If' section contains one condition: 'Incident.Staff SmartSense equals' followed by a dropdown menu showing 'Very Angry', 'Angry', 'Somewhat Angry', and 'Neutral'. A 'Delete Condition' checkbox is to the right.
- The 'Then' section contains one action: 'Set Rule Variable "service_quality" to' followed by a dropdown menu showing 'increment by' and a text input field containing '6'. A 'Delete Action' checkbox is to the right.
- The 'Else' section is currently empty.
- At the bottom are 'Save' and 'Cancel' buttons.

- If the staff member's SmartSense rating is Neutral, then increment the value by +1.
- If the organization is the XYZ Corporation, then increment the value by +2.
- If the customer SmartSense is Somewhat Angry, Angry, or Very Angry, then increment the value by +6.
- If the contact type is Manager or Vice-President, then increment the value by +2.

3. Create rules that specify the actions for different values of the variable.

You might decide that high values of the service_quality variable warrant attention from a customer support supervisor or manager. Your rules might look like these two figures:

- o If service_quality is greater than 5 and less than or equal to 7, then email the incident information to the customer support supervisor at your organization.

The screenshot shows a rule configuration window. Under the 'If' section, there are two conditions: 'Incident.Rule Variable.service_quality' greater than 5 and 'less than or equal to 7'. The logical expression is '1 & 2'. Under the 'Then' section, 'Email Incident Information' is selected. The 'including administration fields' and 'including customer fields' checkboxes are checked. The 'Email Address' field is empty. The 'to assignee' dropdown is set to 'staff member/group/distribution list' with a list of staff members including 'Customer service / Fath Carson' selected. The 'with subject line' field contains 'Service Quality Notification'.

- o If service_quality is greater than 7, then email the incident information to the manager of customer support.

The screenshot shows a rule configuration window. Under the 'If' section, there is one condition: 'Incident.Rule Variable.service_quality' greater than 7. Under the 'Then' section, 'Email Incident Information' is selected. The 'including administration fields' and 'including customer fields' checkboxes are checked. The 'Email Address' field is empty. The 'to assignee' dropdown is set to 'staff member/group/distribution list' with a list of staff members including 'Customer service / Chad Hubbel' selected. The 'with subject line' field contains 'Important! Service quality issue'.

Results:

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). In this situation, the value 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 value is at least 6.
- An angry customer will trigger a notification to the supervisor, because the value is also 6.
- An unhappy (+6) manager (+2) from XYZ (+2) results in a service_quality value 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.

Note: Whenever the rules engine begins processing a new or updated incident, the value of the `service_quality` variable is initialized to 0 again.

Examples of Applying Service Level Agreements (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 to which the customer is entitled. 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.

SLAs can be applied only to contacts that are not associated with organizations. If a contact belongs to an organization, then the SLA must be applied to the organization. Any incidents submitted by contacts belonging to the organization will be credited to the organization's SLA.

Note: Before you add rules to apply an SLA, you must *Create an SLA*.

Related Topics

- [Apply an SLA Using a Contact Rule](#)
- [Apply an SLA Using an Incident Rule](#)

Apply an SLA Using a Contact Rule

In this example, we apply a service level agreement (SLA) to all customers whose contact records are created during a particular month.

Before you start

You must already have SLAs to apply them. See *Create an SLA*.

Here's what to do

1. Add a new contact rule.
2. Click **Add IF Condition Based On > Contact > Created**.
3. Click **Select Operator > in range**.
4. Use the calendar controls to set the date range.
5. Click **Add Action–Then > Modify Service Level Agreements > Create SLA Instance**.
6. Select the SLA from the drop-down list.
7. Add any other actions needed, such as state transitions, then click **Save**.

Results:

Your rule should resemble this image.

The screenshot shows a rule configuration window with three main sections: 'If', 'Then', and 'Else'.
- **If section:** A condition is defined for 'Contact.Created'. The operator is 'in range'. The start date is '07/01/2009 06:00' and the end date is '07/31/2009 18:00'. There are 'relative' checkboxes and 'Delete Condition' options for each date.
- **Then section:** Two actions are listed:
 1. 'Create SLA Instance' with a dropdown set to 'Silver - basic' and a 'Delete Action' checkbox.
 2. 'Transition State and continue' with a dropdown set to 'In process' and a 'Delete Action' checkbox.
- **Else section:** Currently empty.
- **Buttons:** 'Save' and 'Cancel' are located at the bottom left.

Related Topics

- [Apply an SLA Using an Incident Rule](#)

Apply an SLA Using an Incident Rule

You can apply an SLA based on the conditions of an incident.

Before you start

You must already have SLAs to apply them. See [Create an SLA](#).

In this example, 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 lets them submit a certain number of additional incidents regarding that product for a specified time period.

Note: Unlike contact and organization rules, incident rules do not have a Create SLA Instance action.

Here's what to do

1. Add a new incident rule.
2. Click **Add IF Condition Based On > Incident > Product**.
3. Click **Select Operator > equals**.
4. Select the product.
5. Click **Add Action–Then > Set Field > Apply SLA Instance**.
6. Select the SLA from the drop-down list.
7. Select the **Create instance if one does not exist** check box.

Note: If the SLA has already been applied to the contact, it is not necessary to select the check box.

8. Select the **Use the latest version of the SLA** check box.
9. Add any other actions needed, such as state transitions, then click **Save**.

Results:

Your rule should resemble this image.

The screenshot shows a rule configuration window with two main sections: 'If' and 'Then'.
If section: A dropdown menu is set to 'equals'. To the right, a list of categories is shown: 'Conversa' (checked), 'Unspecified', 'CA 9720', 'CA 9800' (checked), and 'CA 9900'.
Then section: A dropdown menu is set to 'Premium'. Below it, two checkboxes are checked: 'Create instance if one does not exist' and 'Use the latest version of the SLA'.

Related Topics

- [Apply an SLA Using a Contact Rule](#)

Example of Using Relative Time Conditions

This is an example of selecting a relative time for a rule condition.

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 might 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 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.

This image 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.

The screenshot shows a rule configuration window with three main sections: 'If', 'Then', and 'Else'.
If section: A dropdown menu is set to 'less than'. Below it, a dropdown menu is set to '+ 8 Hours'. A checkbox labeled 'relative' is checked. To the right, a dropdown menu is set to 'Now'.
Then section: A dropdown menu is set to 'High'. Below it, there is an 'Email Task Information' section with a text field for 'Email Address' and a dropdown menu for 'to assignee' set to 'staff member/group/distribution list'. Below that, a dropdown menu is set to 'Urgent!' for 'with subject line'.
Else section: This section is currently empty.
 At the bottom, there are 'Save' and 'Cancel' buttons.

Custom Fields

Overview of Custom Fields

When you first implement B2C Service, you might find that additional fields are needed to collect the information you require.

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. For example, a company that sells shoes might need to store the customer's shoe size.

After 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 Outreach or Feedback.

Custom Field Types

By adding custom fields to your knowledge base, you can be sure that you are collecting the information required to best meet your organization's needs.

Custom Field Types

| Custom Field Type | Description |
|-------------------|---|
| Common | You can add these 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. (Not supported on the Agent Browser UI.) |
| Contact | Add this type of custom field to gather additional information about your contacts (for example, their age). Contact custom fields can display 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 display 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. (Not supported on the Agent Browser UI.) |
| 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 these 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 display when adding or editing an incident and on the Ask a Question and Support History pages. |

| 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 display when adding or editing an answer and on the Answers and answer detail pages. |
| Opportunity Tracking | You can add these 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 display 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 display when adding or editing an opportunity. (Not supported on the Agent Browser UI.) |

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.

When you add or edit custom fields, those modifications can 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. After a custom field operation is scheduled, it cannot be modified or aborted.

Add or Edit a Custom Field

Adding custom fields is similar for each of the custom field types. Although this procedure is for adding a contact custom field, use the same procedure to add all other types of 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 let you create an input mask to require that information entered in the field matches a defined format.

Note: You can create a combined theoretical maximum of 500 custom fields and system attributes for each standard object. That is, if you have 100 incident custom fields, you could potentially create 400 system attributes for the incident object. Note, however, the actual number of custom fields and system attributes depends on database-row size limits. These will vary, based on the object you're modifying and the data types of the fields you're adding. For example, a Yes/No data type will contribute less bytes towards the row size than a text-field data type. As a result, an object configured with primarily Yes/No fields will allow for more total fields than an object configured with primarily text fields. In addition, you can index a maximum of 9 custom fields for each standard object, and allocate the remainder to system attributes.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Custom Fields**.
3. Do one of these:
 - o To add a contact custom field, in Custom Fields click **Contact**, then click **New**.
 - o To edit a contact custom field, click it in the tree.
4. Enter the name of the custom field in the **Name** field.

Tip: You can assign a keyboard shortcut to the custom field after you have added it on the workspace designer.

- Click **Data Type** and select the data type for this field.

Note: You cannot change the data type when editing an existing custom field.

Custom Field 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 list from which customers and staff members can select an item. |
| 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). Masks can be used only with Text Field data types. |
| Yes/No | Select this option to add a field with a Yes and No option. |
| Opt-in | Select this option to add a custom field that lets customers opt in or out of Outreach mailings and Feedback surveys. This option is available only when adding a contact custom field. |

- Enter field information. The available fields vary depending on the selected data type.

Custom Fields Editor

| Field | Descriptions |
|------------------|--|
| Field Attributes | Select from these field attributes. The data type you selected determines which field attributes are available. |
| Column Name | Enter 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 runtime filter in reports. Indexing, although not necessary, can make searching more efficient when the field is frequently searched on. 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. This option is available only for staff account and sales product custom fields. |

| Field | Descriptions |
|--|--|
| Required for Customer Portal | Select this check box to make the custom field required on the customer portal. This option is available only for contact and incident custom fields. |
| Hint | Enter 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 | Enter any notes about the custom field in this text box. |
| Data Details | Select from these data details. The data type you selected determines which fields are displayed in this section. |
| Mask | Enter 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. This option is available only with text field data types. |
| Default Value | Select or enter 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 enter a value. |
| Menu Items | To add a menu item, click Add at the top of the Data Details section. The added items appear at the bottom of the list. To delete a menu item, select the row containing the item and click Delete at the top of the Data Details section. Use the up and down arrows to change the order of menu items. 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 | Enter 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 list. |
| Label | Enter the label of the menu item for each interface. 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 | Enter the maximum number of characters for this field. This option is available for text fields. Text fields can contain up to 255 characters. 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. |
| Minimum | Enter the minimum value for this field. This option is available for integers. Integers can contain up to 10 characters. This field is required if you have selected the integer data type. The smallest value allowed for this field is -2147483645. |
| Maximum | Enter the maximum value for this field. This option is available for integers. Integers can contain up to 10 characters. This field is required if you have selected the integer data type. The largest value allowed for this field is 2147483647. |

| Field | Descriptions |
|-----------------------------|---|
| Usage | <p>Click this drop-down list to select how the custom field is displayed when editing a record containing the custom field:</p> <ul style="list-style-type: none"> ○ 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. <p>This option is available only with the text field data type.</p> |
| Interface Visibility | Select the interface visibility options and create labels and hints for this field on each interface. |
| Label | <p>Enter the text prompt for the custom field. This is the prompt that staff and customers will see on the interface.</p> <p>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.</p> |
| Hint | <p>Enter the hint that will appear when staff and customers hover over the field label.</p> <p>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.</p> |

7. Click **Save**.

8. Click **Yes**.

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.” After the operation is complete, the Custom Fields tree is refreshed and the flag and label no longer appear.

Related Topics

- [Input Masks](#)
- [How You Set Hidden, Required, and Read-Only Properties](#)
- [Custom Field Visibility Settings](#)

Custom Field Visibility Settings

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.

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.

Note: Answer, incident, contact, opportunity, organization, quotes, and tasks custom fields must also be added to the appropriate record's workspace. The Admin Edit visibility setting must be selected for a custom field to be available to add to workspaces and scripts. After 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.

Custom Field Visibility Settings

| Field | Description |
|--------------------------------|--|
| Staff Account | These 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 | These 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. You cannot select this check box if the Admin Display check box is cleared. |
| End-User Read | Select this option 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. You cannot select this option if the End-User Edit check box is cleared. |
| End-User Read/Write | Select this option to allow customers to set the value of the custom field when updating their profile through the Your Account page. You cannot select this option 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 | These 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. You cannot select this check box if the Admin Display check box is cleared. |

| 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. 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 | These 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. You cannot select this check box if the Admin Display check box is cleared. |
| 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 | These 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 | These 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. 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. |

| Field | Description |
|----------------------------|--|
| Quotes | These 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. |
| 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. 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 | These 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. 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. 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. 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. You cannot select this check box if the Admin Edit or Purchased Products Display check box is cleared. |
| 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 | These 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. 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. |

Related Topics

- [Custom Field Types](#)

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.

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.

This table describes the first and second characters that define mask patterns.

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) |
| L | Alpha (letter only) |
| C | Alphanumeric or formatting character |

This table describes input mask types, their associated patterns, and how they display to staff members and customers in text fields.

Note: 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.

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# | ###-##-#### |

| Mask Type | Mask Pattern | Masked Text Field |
|--------------------------------|------------------------------|-------------------|
| 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# | @## @## |

Custom Objects

Overview of Custom Objects

Custom objects allows 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 B2C Service, letting you 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, desktop 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 B2C Service sites, you can create, deploy, and test custom objects on a non-production site, export them, and then import them into your production site. See *Deploy 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 lets your staff members 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 find specific custom object records and view the relationships between objects. See *What to Do with Custom Objects After Deployment*.

Object Designer

You use the object designer to create custom objects, import objects that were created on other sites, and deploy custom objects to your database.

To access the object designer, you first must assign the Object Designer permission to your profile on the Administration tab of the Profile Permissions editor. See [Administration Permissions](#). You might also need to add the Object Designer component to your navigation set. See [Create a Navigation Set for the Administrator](#).

CAUTION: Because of the high degree of change that can be made to your application and database using custom objects, we recommend that few staff members be granted permission to use the object designer.

Related Topics

- [Custom Object Types](#)
- [Export and Import of Custom Objects](#)
- [What to Do with Custom Objects After Deployment](#)
- [Deploy Custom Objects](#)

Custom Object Types

Several types of items are available to use in your custom objects solutions, and all are created using the Objects Designer. While some solutions will 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.
- **Object**—Objects contain fields, indexes, 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.
- **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, indexes, 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.
- **System Attribute**—System attributes are fields that can be added to standard objects, such as incidents and contacts. You can select data types, indexes, and define relationships for these fields. System attributes can be used in workspaces and reports, just like custom fields can. 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).

Note: You can add a maximum of 200 objects, and each package can contain up to 23 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.

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.

Note: 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 displays if you attempt to edit or create an object when another staff member is already doing so.

Custom Object Packages

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.

Note: Each package can contain a maximum of 25 custom objects.

The object designer's tree also includes a list of standard objects under the OracleServiceCloud entry to help you manage system attributes. 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 objects, grouped by the package they are in.

Create a Custom Object

When you create an object, you are creating a new table in the database. You can specify fields, indexes, and database relationships for each object you create.

Before you start

To access the object designer, you first must assign the Object Designer permission to your profile on the Administration tab of the Profile Permissions editor.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Object Designer**.
3. Do one of the following:
 - o Select a package to which you want to add the custom object.
 - o To create a new package for the object, click **New > Package**.

When naming new packages, names must be between two and eleven characters in length. 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 default CO package, the resulting table name will be CO\$Warranty.

4. Click **New > Object**.

5. Enter a name for the object.

The name you define identifies the object in the database. Staff members generally see the custom object’s label, defined later in this procedure, when working with the object. 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 field information.

Summary Page

| Field | Description |
|--|--|
| Object Options | Select options in this section to specify where the object is available and other options. |
| 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. See <i>Custom Objects on the Service Console</i> . 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. 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.” Because 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. This option is available only when the Object Generates Menu check box is selected. |

7. To specify a label for the custom object that is different from the name entered in a previous step, enter the label you want in the **Label** field.

Labels are language specific, so you can use different labels for interfaces with different languages. 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, enter the description you want in the **Description** field.

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 **Notes** arrow.
 - a. Enter the note you want in the text field.
 - b. Click **Add**.
 - c. To add additional notes, repeat the two previous steps.
 - d. To delete notes, click **Delete** for the note you want to remove.
 - e. To save changes to the notes, click **Save**.

You can add or delete notes in custom objects even after they are deployed.

10. Click **Fields** to add predefined or customized fields to the object.

11. Click **Indices**.

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 indexes per custom object. However, indexing a large number of fields can result in decreased performance.

12. To add an index to a field, click **Add New Index**.

13. Click **Add Field to Index**.

14. Select the field you want to index.

Note: All field types, except Yes/No and Long Text fields, can be indexed.

The selected field displays in the List of Indices in Object area. Each object can have up to eighteen indexes for each object. However, this limit also includes indexes that are added automatically for each child field used in relationships you create for the object. See *Custom Object Relationships*.

15. To add a multiple-field index, select the index you want to edit.

16. Click **Add Field to Index**.

17. Select the field you want to add to the index.

Up to four fields can be used in multiple-field indexes.

18. To remove a field from an index, select the index you want to edit and click **Delete**.

19. Click **Relationships**, to define and view table relationships for the object.

20. Click **Extra Options**.

Note: Changes made on the Object Extra Options page take place when you save the object. Deployment is not necessary.

21. To associate icons with the object to display in the interface, click **Browse** and select the image you want to use.
 - o 16x16—Icons of this size are used in record tabs on workspaces, the New Workspace window, and the Workspaces and Scripts explorers.
 - o 24x24—Icons of this size are used on navigation buttons.
 - o 32x32—Icons of this size are used on the Insert Fields tab of the workspace designer and in flow elements on the workflow designer.

22. Select the check boxes for the permissions you want to grant to staff members associated with each profile. These permissions are available for each profile. They can also be defined on the Profiles editor.

Edit Objects Permissions

| Field | Description |
|---------------------------------|---|
| Select All | Select this check box to select all permission check boxes for all profiles. |
| Create / Delete / Read / Update | Select check boxes in these columns to allow staff members to create, delete, read, or update records for the custom object. |
| Personal Notes | Select check boxes in this column to allow staff members to create, edit, and delete notes in custom object records. This check box displays only for custom objects that have the Notes check box selected on the Summary page. |
| 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. This check box displays only for custom objects that have the Notes check box selected on the Summary page. |

23. Click **Save**.

What to do next

Deploy the custom objects. See [Deploy Custom Objects](#).

Add a Field to a Custom Object

You add fields to objects and system attributes from the object designer 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Object Designer**.
3. Select the object or system attribute to which you want to add a field.
4. Click **Fields**.

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.

- 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.

Predefined Fields

| Field | Description |
|--------------------|---|
| Created Time | Select this check box to add the CreatedTime field to the object table. This field tracks when custom object records are created and is updated automatically. |
| Created by Account | Select this check box to add the CreatedByAccount field to the object table. This field tracks which staff members create custom object records and is updated automatically. When you add this field to a custom object, a relationship to the accounts table is automatically created. In rare cases, if the record was not created by a staff member, this field may not resolve correctly. |
| Updated Time | Select this check box to add the UpdatedTime field to the object 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 table. This field tracks which staff members update custom object records and is updated automatically. When you add this field to a custom object, a relationship to the accounts table is automatically created. In rare cases, if the most recent update was not by a staff member, this field may not resolve correctly. |
| File Attachments | Select this check box to add the FileAttachments field to the object table. Add this field to allow file attachments to be added to custom object records. 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 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.) A separate Label field is created for each language used on your B2C Service site. This lets you enter a different label for each language. |
| Descriptions | Select this check box to add the Descriptions field to the object 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 table where notes about individual records can be stored. |

- To add a customized field to the custom object, click **Add New Field**.
- Select the type of data the field will store.

Data Types

| 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 lists 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. |

| Data Type | Description |
|-----------|--|
| 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 encrypted, and they can be configured to store text, email addresses, or URLs. Note: Encrypted fields are available only in the Agent Browser User Interface (Agent Browser UI). These fields can be only decrypted by agents with the Allow Custom Attribute Decryption permission. See <i>Overview of Custom Attribute Encryption</i> . |
| Menu | Select this option to add a field with a drop-down list from which staff members can select items. Only one value can be selected at a time in custom object menu fields. |
| Decimal | Select this option to add a field to store decimal-format data. |

8. Enter field information.

Note: Some options are disabled when using certain field types.

Field Information

| Field | Description |
|--------------------------|---|
| Name | Enter 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, enter a label name in the Interface Label area, which is also described in this table. The name cannot exceed 30 characters. |
| 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 value when the record is updated. 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. 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. |
| 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. 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 and perform the steps regarding indexes in the <i>Create a Custom Object</i> procedure. This option is available only for fields with Date, Date/Time, Integer, or Text data types. Encrypted fields aren't indexable. |

| Field | Description |
|--|--|
| | |
| Yes/No Field Settings | Click the Constant Default drop-down list 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. |
| Dynamic Default | Click this drop-down list 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. 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 | Enter 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 | Enter a value in this area or click the calendar icon to select the minimum date allowed in the field. You can enter dates between January 1, 1000 and December 30, 9999. This option is available only for Date fields. |
| Maximum Value | Enter a value in this area or click the calendar icon to select the maximum date allowed in the field. You can enter dates between January 2, 1000 and December 31, 9999. 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 list 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. 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 | Enter 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. |
| Minimum/Maximum | Enter 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 list to select the type of text field you want to create. These field types are available: <ul style="list-style-type: none"> ○ 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. |

| Field | Description |
|--|---|
| | <ul style="list-style-type: none"> Encrypted—Select this option to encrypt the text field up to 255 characters in length. Validation is performed on the text entered according to the pattern set for the field. <p>Encrypted fields are available only in the Agent Browser UI. These fields can be only decrypted by agents with the Allow Custom Attribute Decryption permission. See Overview of Custom Attribute Encryption.</p> <p>All text field types, except Long Text and Encrypted, can be indexed.</p> |
| Length of Field | <p>Enter the maximum number of characters that plain text fields can store in this area. Values from 1 to 255 can be entered.</p> <p>This option is available only for plain text fields.</p> |
| Pattern | <p>Enter a regular expression string pattern to define a format that will be used to verify the contents entered in the field. The caret (^) 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 field match the entire regular expression.</p> <p>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}.</p> <p>If your Field Usage setting is set to Encrypted, pattern validation is performed against the text entered in the field.</p> <p>Encrypted fields are available only in the Agent Browser UI. These fields can be only decrypted by agents with the Allow Custom Attribute Decryption permission. See Overview of Custom Attribute Encryption.</p> <p>Note: This option is available only for encrypted text, plain text and long text fields.</p> |
| Case Sensitive Sorting | <p>Select this check box to recognize case when sorting, with lowercase characters ordered before uppercase characters in ascending order. For example, if the field 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.</p> |
| Defacto Unique for Analytics | <p>Select this check box to group the field contents by the custom object unique key or ID number rather than the field 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.</p> |
| Menu Field Settings | <p>Select options for menu fields in this area.</p> |
| Menu | <p>Click this drop-down list 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 menu options. A read-only relationship to the custom object associated with the selected menu is automatically created.</p> |
| Dynamic Default | <p>Click this drop-down list 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.</p> |
| Constant Default | <p>Click this drop-down list to select a static default value for the menu field. The available options are populated by the options in the menu field.</p> |
| Use Current User/Interface/Language as Default | <p>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 records. This option displays only when one of these is selected in the menu field settings drop-down menu:</p> |

| Field | Description |
|-------------------------------|---|
| | <ul style="list-style-type: none"> ○ Accounts by Manager—When this field is used, selecting the check box uses the name of the logged-in staff member as the field 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 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. |
| Decimal Field Settings | Select options for decimal fields in this area. |
| Decimal part (0 to 5) | Enter the number of digits to display to the right of decimal point, from 0 to a maximum of 5. |
| Maximum Value | Enter the maximum value allowed for the decimal field. |
| Minimum Value | Enter the minimum value allowed for the decimal field. |
| Interface Label | Specify field names in this section. Different labels and descriptions can be used for interfaces with different languages. |
| Label | <p>Enter 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 label name when working with the field.</p> <p>When a field is initially named, the field label is automatically populated with the field name. If the field name is later edited, the label is not automatically updated.</p> |
| Description | Enter 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 designer. |

9. To make a text or integer field a lookup field for an object, click the option 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 lookup field.

Lookup fields help identify records when you're working with them. Values in lookup fields are displayed on the editor tab when you're editing records and in the Recent Items list on the navigation pane. For example, when editing an incident, the incident reference number displays on the editor 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 displays in the column.

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 displays in the column.

10. To delete a field, click **X**.

11. 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.

12. Click **Save**.

Custom Object 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.

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. The list that follows shows the standard objects to which relationships can be made.

Note: Relationships between the quotes and opportunities standard objects are not supported. Relationships with some internal tables, such as `common_users`, are not included in the list that follows.

- Accounts
- Answers
- Assets
- Community Comment
- Community Question
- Community User
- Contacts
- Incidents
- Opportunities
- Organizations
- Quotes (cannot be a parent in relationships)
- Sales products (cannot be a parent in relationships)
- Tasks

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.

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.

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 18 indexes can exist for each custom object. This limit includes indexes you create as well as indexes 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.

Define a Relationship

Define a relationship for a custom object.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Object Designer**.
3. Select the object or system attribute you want to edit relationships for or create a new object.
4. Click **Relationships**.
5. Click **Add**, to add a **Parents of Object** relationship or a **Children of Object** relationship.
 - a. Click **Type**.
 - b. 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.
 - c. Click **Parent Object** or **Child Object**.
 - d. Select the object you want to link to.
 - e. If creating a parent relationship, click **Child Field**.
 - f. Select the field in the object you are editing that you want to use as the link to the parent object.

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.

- g. If creating a child relationship, click **Child Field**.
- h. Select the field in the child object that you want to use as the link to the object you are editing.

Note: 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.

6. If you create more than one relationship to the same object, select the option in the Main column next to the relationship you want to use as the main relationship between the object and the custom object.
 7. To delete a relationship, click **Delete**.
 8. To edit an existing relationship, click **Edit Relationship > Edit**.
 9. Click **Save**.
- This also saves any system attributes that have been automatically created for standard objects in the steps above.

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 let you 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.

Related Topics

- [Custom Objects on the Service Console](#)

Create a System Attribute

System attributes are custom fields on standard objects, and 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.

A combined maximum of 500 system attributes and custom fields 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, you can index a maximum of 9 custom fields for each standard object, and allocate the remainder to system attributes.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Object Designer**.
3. Select the package where you want to place the system attribute.
4. Click **New > System Attribute**, and then select the standard object for which you want to create the field.
The Object Fields editor displays, with the list of fields (system attributes) for the object.
5. Click **Add New Field**, and then select the field type.
6. Enter the fields.

Field Details for System Attributes

| Field | Description |
|----------------|--|
| Name | Enter a column name for the field up to 30 characters long. The name cannot contain spaces. |
| Package | Select an existing package, or click Add Package . |
| Field Options | Select field options: <ul style="list-style-type: none"> <input type="radio"/> Is Auto Update <input type="radio"/> Is Nullable <input type="radio"/> Is Read Only <input type="radio"/> Is In Single Field Index Depending on the field type, not all of the check boxes are enabled. |
| Field Settings | These vary depending on the field type. For example, text fields have Field Usage and Length of Field settings. |
| Label | Enter a label if desired. The field name is the default. |
| Description | Enter a display name for the field. |

7. To define relationships for the system attribute, click **Relationships**.

8. Follow the procedure described in *Custom Object 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.

9. To define indexes for the system attribute, click **Indices**.

10. Perform the steps regarding indexes in the *Create a Custom Object* procedure.

Adding indexes to system attributes is optional.

11. Click **Save**.

12. Click **Deploy**.

Results:

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.

Related Topics

- [Custom Object Relationships](#)
- [What to Do with Custom Objects After Deployment](#)
- [Create a Custom Object](#)
- [Deploy Custom Objects](#)

Menu-Only Custom Objects

Menu-only custom objects store menu options for populating menu fields in other custom objects. This lets you to use the same menu lists to populate menu fields in multiple custom objects.

In addition, because 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.

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 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.

Note: 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.

Create a Menu-Only Custom Object

You can create a custom menu-only object.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Object Designer**.
3. To create a package for the object, click **New > Package**.
4. Enter 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.

5. Select the package you want to add the custom object to.
6. Click **New > Menu Only Object**.
7. Enter 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 below, when working with the object. 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.

8. Click **Add**.
9. Click the new row and then enter a name for the menu item.
10. Repeat steps 7 and 8 to add other menu items.

11. To add language-specific labels to the menu items, click **Convert to Menu with Labels**.

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 **Show Label Grid**, to display the label grid.
- b. Enter 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.

12. 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.**13.** To specify a label for the custom object that is different from the name entered in step 7, enter the label you want in the **Custom Object Labels Label** field.

Labels are language specific, so you can use different labels for interfaces with different languages. 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.

14. To add a description for the object, enter the description you want in the **Custom Object Labels Description** field.

Descriptions are language specific, so you can use different descriptions for interfaces with different languages.

15. To add notes about the custom object that you or other staff members can read, such as why the object was created, click the **Notes** arrow.

- a. Enter the note you want in the text field.
- b. Click **Add**.
- c. To add additional notes, repeat steps 15a and 15b. To delete notes that have previously been added, click **Delete**.
- d. To save changes to the notes, click **Save**.

You can add or delete notes in custom objects even after they are deployed.

Use a Menu-Only Object in a Custom Object

You can create 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 **Fields**.
3. Edit or add a menu field to the custom object.
4. Click **Menu Field Settings > Menu** and select the menu-only object you created.
5. Click **Save**.
6. Deploy the custom objects when you are ready.

Edit or Delete a Custom Object

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 decide 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.

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 indexes will also delete the indexes, whether they are single-field or multi-field indexes.
- When you delete menu-only custom objects that are used in menu fields in other custom objects, those menu fields are also deleted.

Note: Staff members with the Bulk Delete permission enabled can delete up to 1000 custom object records at a time. See *Administration Permissions* and the REST API for Oracle B2C Service guide on the Oracle Help Center. You can create custom data lifecycle management policies for archiving and purging custom objects. See *Data Lifecycle Management*.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Object Designer**.
3. To edit a custom object, select the object in the **Custom Objects** list and make your changes.

Note: To edit items in a menu-only custom object that has been deployed, use 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.

4. To delete a custom object, select the object in the **Custom Objects** list and click **Delete**.
5. Click **Yes**.
 - a. To restore the deleted custom object, click **Undelete**.
This button is disabled if the custom object was not previously deployed.
6. Click **Save**.
7. Deploy the custom objects.
8. Close the object designer.

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.

Roll Back Changes to Custom Objects

If you make numerous changes to custom objects that you later choose not to deploy, you can roll back the changes.

The custom objects will revert to the state they were in at the time of the previous deployment.

Note: If the custom objects have never been deployed, they are removed.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Object Designer**.
3. Click **Rollback**.
4. Click **OK**.

Deploy 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 indexes for the custom objects, so it is important that they are correct before you deploy them.

When a deployment occurs, the object designer is unavailable until the deployment completes so you should carefully consider when to deploy to ensure your site is not negatively impacted. Use the **Deploy Immediately** option with care on production sites. 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, indexes, 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Object Designer**.
3. Click **Deploy**.
4. Enter the email addresses you want to send notifications to in the **Email Address** field.
Separate multiple addresses with commas.
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 **Deploy Immediately**.
- b. To specify a time when you want the deployment process to start, enter the date and time you want the deployment to begin.

You can either enter 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 **Cutover Window** and select the amount of time after the cutover start time that the deployment process can start.

The process may not start immediately at the specified cutover start time due to issues that 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. 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 **Deploy**.

7. Click **Yes**.

Results:

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.

You also can view a report that shows the number of deployed custom objects on your site using the Agent Browser User Interface (Agent Browser UI). See [View Custom Object Use](#) for more information.

Export and Import of 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 interact 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, indexes, and other attributes originally configured for them. The relationship configuration of the objects is also included if all of the related custom objects are exported and imported.

Note: 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. Because a maximum of 23 custom objects can be imported at a time (not including menu-only objects), we recommend exporting no more than 23 custom objects at a time. Multiple export files can be created and then imported.

Export Custom Objects

You can export custom objects from a site.

Before you start

Verify that the custom objects are configured correctly on a test site.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Object Designer**.
3. Click **Export**.
Packages that do not contain deployed objects are disabled and cannot be selected for export.
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 **Next**.

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.
 - 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 **Next**.
8. Enter the path and file name to which you want to save the export file.
9. Click **Finish**.
10. To export additional objects, which you may need to do if exporting more than 23 objects, repeat steps 3 through 9.

Import Custom Objects

After exporting custom objects from a test site, you can then import them into your production site.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Object Designer**.
3. Click **Import**.
4. Enter the path and file name of the file to import.
5. Click **Next**.

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 decide 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 **merged into the existing custom object > imported as a new custom object**. A default name for the new object displays next to the drop-down list. Click the default name and enter 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. To clear the check boxes next to all custom objects, click **Unselect All**.

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 parent objects check boxes 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 **Finish**.
8. To import additional objects, which you may need to do if importing more than twenty-five objects, repeat these steps.
9. To deploy the imported objects on your site, click **Deploy**.

What to Do with Custom Objects After Deployment

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 must perform some additional steps.

- Create workspaces your staff members will use to work with custom object records. See *Custom Objects on the Service Console*.
- Add reports to your staff members' navigation sets so they can create and access custom object records. See *Custom Objects in Navigation Sets*.
- Edit profiles to specify permissions for staff members to use the custom object workspaces and work with the object records. See *Custom Object Permissions in 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. See *Custom Objects in Analytics*.
- If you create custom objects to import existing information stored in an external database into B2C Service, use the Data Import Wizard to copy the information into your site. See *Custom Objects in the Data Import Wizard*.

Custom Objects on the Service Console

Deployed custom objects can be added to your Service Console components, including workspaces, workspace rules, workflows, and agent scripts.

Using objects and system attributes in these areas is no different from 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.

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.

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, 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 `coWorkOrder.PaymentType` to the browser control's URL. See [Answer ID 5169](#) to access the B2C Service Connect Desktop Integration (Javascript API) documentation.

Related Topics

- [Custom Object Relationships](#)

Custom Objects in 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.

In addition, you can add standard search reports to navigation sets to help you quickly find specific custom object records. These reports are automatically created for all deployed custom objects and are found in **Public Reports > Common > Views—Common > Search Reports—Custom Objects**.

Custom Object Permissions in 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.

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.

Related Topics

- [Profiles](#)
- [Custom Objects Permissions](#)

Custom Objects in 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 **Public Reports > Common > Views—Common > Search Reports—Custom Objects** and **Editor Reports—Custom Objects**. 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.

When creating reports in the report designer, 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 on the navigation pane (**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 object label names. The table 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.

Custom Objects in the Data Import Wizard

You can use the Data Import Wizard to import a large number of records into your custom objects from an external file.

After deploying custom objects and configuring workspaces, navigation sets, and other components, you can enter data in the custom object 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. Because custom objects are used to integrate your organization’s unique data into B2C Service, you will likely want to consider using this option to copy data from an external database into your site.

Custom Processes

Overview of 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.

Object event handlers are added and managed on the process designer in a virtual container called the process model. After you add your object event handlers, you must deploy the process model to use the object event handlers in B2C Service. The process model is not written to the Oracle database until it is deployed.

We recommend testing the process model in 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 then deploy it. For more information, see *Best Practices for Testing Object Event Handler Scripts*.

Note: 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 these APIs:

- [Connect PHP API Developer Guide](#)
- [REST API for Oracle B2C Service](#)
- [Connect Web Services Developer Guide](#)

Process Designer

You use the process designer to add object event handlers and deploy process models to the Oracle database.

To access the process designer, your profile must have the Process Designer permission on the Administration tab enabled. See [Administration Permissions](#). In addition, you might need to add the Process Designer component to your navigation set to view it. See [Create a Navigation Set for the Administrator](#).

CAUTION: 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 be 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. See [Create a Custom Object](#) and [Custom Object Packages](#).

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. See [Triggers for Object Event Handlers](#).

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.

Note: When creating an object event handler, required test harness code must be implemented in the PHP script to ensure compatibility with B2C Service. See [Example of an Object Event Handler Script](#).

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. See [Triggers for Object Event Handlers](#).

Best Practices for Testing Object Event Handler Scripts

Before you add an object event handler, we recommend reviewing our best practices to ensure that you are aware of potential issues. These best practices can be helpful when creating and testing object event handler scripts.

- Have a complete test in mind. Consider all of 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.
- Perform both of these tasks:
 - Select the Can Suppress check box on the process designer.
 - Include `suppressExternalEvents` in a `->save` in your script.

Note: If neither of these tasks is 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 they are 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 found. 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 found 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. See [Variable scope](#) in the standard PHP documentation.
- 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.
- 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 will be changed to Errored. Otherwise, the script will become disabled on or after the fifth run if the error:success ratio becomes greater than or equal to 50%.
 - Error and success rates will stop recording when the error:success ratio falls below 10%.
 - All runtime errors are recorded to the Info log. See [Log File Errors and Information](#).

Add an Object Event Handler

Using the process designer, you can create a new object event handler.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Process Designer**.
The process designer opens on the content pane.
3. Click **New**.
The Server Process Object Event Handler editor opens.
4. Enter a name for the object event handler in the **Procedure Name** field.
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** icon 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.

Tip: 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 **Execute Asynchronously**. (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, the event handler execution will be retried automatically up to nine times.

- The initial three re-queuing are attempted with 3 minutes delay in between them. i.e., the first to third re-queuing occurs at 3 mins, 6 mins, and 9 mins.
- The next three re-queuing are attempted with 20 minutes delay in between them. i.e., the fourth to sixth re-queuing occurs at 29 mins, 49 mins, and 69 mins.
- The last three re-queuing are attempted with 3 hours, 12 hours, and 24 hours delay in between them. i.e., the seventh to ninth re-queuing occurs at 249 mins, 969 mins, and 2409 mins respectively.

The time of execution of the event handler depends on the existing entries in the queue.

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 B2C Service, you can use an `async` event handler since the data can be sent any time.

Note: You must select the **Execute Asynchronously** check box if you use `cURL` commands in your event handler. Do not select this option if you are adding an event handler for use in surveys or campaigns.

7. Click **Save**.

The status of the **State** field changes to Not Tested and the **Test** button is enabled.

8. Click **Test** 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 **Yes** 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 **Save** 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. See *Triggers for Object Event Handlers*.

What to do next

Before you can use the object event handler, the process model must be tested and deployed. See *Deploy the Process Model* and *Roll Back the Process Model*.

Example of an Object Event Handler Script

This 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 with which the script can function are indicated at the beginning of the script. The required test harness code can be found approximately 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 *Connect PHP API Developer Guide*.


```
<?
/*
 * 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 RNCPCM;
/**
 * 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 RNCPCM\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 RNCPCM\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;
}
}
```

Triggers for Object Event Handlers

Using the process designer, you can associate an event handler with a standard or custom object and a create, update, or destroy action.

After adding an event handler to the process designer, you must specify how the event handler will be triggered. 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, see [Actions for Rule Bases](#).

Note: Only object event handlers written for contacts can be used in surveys and campaigns.

You can also use the process designer to 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 example, this [Example of an Object Event Handler Script](#) is triggered when organizations are created.

Associate an Event Handler with an Object

Use the process designer to associate object actions with event handlers.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Process Designer**.
The process designer opens on the content pane.
3. Select the custom or standard object that you want to associate with the object event handler from the tree.

Note: By design, custom process error logging always executes with full permissions. It isn't associated with the profile permissions of the account whose operation triggered the process.

The Custom Event Handlers editor opens on the content pane and the drop-down list in the column that is associated with the PHP code file is activated.

4. Click the **drop-down list** in 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 Connect Web Services for SOAP and the Connect PHP API, select the **check box** in the Can Suppress column.
6. Click **Save**.

What to do next

Before you can use the object event handler, the process model must be tested and deployed. See [Deploy the Process Model](#) and [Roll Back the Process Model](#).

Related Topics

- [Connect Web Services Developer Guide](#)
- [Connect PHP API Developer Guide](#)

Export the Process Model

You can export process models, for example, from your test site.

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 B2C Service 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Process Designer**.
3. Click **Export** on the ribbon.
4. Select the check boxes next to the object event handlers that you want to export.
5. To export object event handler mappings, select **Export Event Handler Mappings**.
6. Click **Next**.
7. Click the **Browse** icon to open the Save As window. From here, you can select the location to save the export file.
8. Enter a name in the **File** field.
9. Click **Save**.
10. Click **Next** to complete the export.
If successful, a message informs you that the export was successful.
11. Click **OK** to close the message and the wizard.
12. Click **X** on the console to close the process designer.

Import the Process Model

You can import process models, for example, into your production site.

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 B2C Service 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.

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

2. Expand **Site Configuration**, then double-click **Process Designer**.

The process designer opens on the content pane.

3. Click **Import** on the ribbon.

The **Import Process Model Wizard** opens.

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 can be imported at one time is fifty.

4. Click the **Browse** icon to select the **.zip** file that contains the process model you want to import.

5. Click **Next**.

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.

The next page of the wizard shows you the object event handlers that can be imported.

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 **Import Event Handler Mappings**.

9. Click **Next** to complete the import.

A message informs you that the import was successful.

10. Click **OK** to close the message and the wizard.

11. To deploy the imported process model on your site, click **Deploy** on the ribbon. See *Deploy the Process Model*.

12. Click **X** on the console to close the process designer.

Deploy 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 B2C Service.

Before you start

Because of the changes at the database level, it is important that you test the process model before deploying it. See *Best Practices for Testing Object Event Handler Scripts* for information about potential issues and best practices when creating and testing object event handler scripts.

To assist you with testing, export and import functionality is available so you can test the process model on a test site before deploying it to a production site. See *Export the Process Model* and *Import the Process Model*.

Here's what to do

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

- Expand **Site Configuration**, then double-click **Process Designer**.

Note: Before you deploy the process model, we recommend that you first review the object event handlers to confirm that no additional changes are needed.

- Click **Deploy** on the ribbon.
- Enter the email addresses in the **Email Address** field to which you want to send notifications. 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.

Note: Multiple addresses must be separated by commas.

- Click **Deploy**.
A message informs you that you are about to deploy the server process model, which disables the process designer until the deployment is complete.
- Click **Yes** 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.
- Click **OK** to close the message and return to the process designer.
- Click **Save**.

Roll Back the Process Model

You can roll back an undeployed process model to revert it to the state it was in at the time of the most recent deployment.

If the process model has never been deployed, rolling it back removes all object event handlers.

- Click **Configuration** on the navigation pane.
- Expand **Site Configuration**, then double-click **Process Designer**.
- Click **Rollback** on the ribbon.
The Rollback window opens and a message informs you that all saved changes made on the process designer since the last deployment will be removed, and that after a rollback has been performed it cannot be undone.
- Click **OK** to close the Rollback window and start the rollback process.
- Click **Save**.

View Custom Process Error Logs

Custom process error monitoring provides a read-only report with information on errors that occur when running custom processes.

Before you start

You must add the Process Designer to the navigation sets of all profiles that will create and monitor custom processes.

You can diagnose custom process errors without having to contact our support staff. Errors are processed asynchronously at 15-minute intervals by the Delayed Query Aggregator (DQA) utility.

Here's what to do

Click **Error Log** on the Show group of the process designer ribbon. The CPM Errors report displays.

Results:

The error log report shows:

- Operation (such as Create or Update)
- Class (object such as Organization or Contact)
- Object ID
- Error summary
- Error content
- Time of occurrence
- Interface

Process Log for Asynchronous CPMs

Custom process provides a read-only report with execution details of the asynchronous CPMs.

Before you start

Your profile must have the appropriate Analytics permission to view the report.

The Process Log report is applicable only for asynchronous CPMs.

Enabling the report:

The report is available for viewing after raising an SR in <https://cx.rightnow.com/>.

Here's what to do

1. Click **Analytics** 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. Open the **Public Reports** folder.
4. Right-click the **CPM Process Log** report and click **Open**.
5. From the **Object Type** drop-down menu, select the type of object you want to view.
6. Apply other filters available in the report, such as **Created date time**, **Object ID**, **Status**, and **Script name**.

Results:

The Process Log report displays the list of async CPMs triggered against the selected object, and reports all details of the CPM, such as Script name, Hook that triggered it, Created date time, Queued date time, Process Start Time, Process End Time, Status, and so on.

Custom Process Logging for Debugging Scripts

The logging framework can be used for debugging runtime problems with custom process scripts during development and testing.

Two entities are used in custom process logging:

- Terminals—Provide the logging function. You define terminals in PHP scripts that you import to the process designer. The Terminal class is provided with Connect Common Object Model (CCOM) version 1.3 and later.
- Probes—Control which terminals are used for logging. You create probes on the Agent Browser UI using the probe designer.

Note: The probe designer currently works only on the Agent Browser UI. However, you create the custom process models for logging in the Service Console.

Probes control which terminals are activated based on these fields:

- Terminal Name
- Log Level

When a probe is enabled, it activates all terminals whose:

- Terminal name matches the name, wildcard, or regular expression provided in the probe. Terminal names are defined in the custom process model script.
- Log level is as severe as, or more severe than, the log level provided in the probe.

You use these rules for writing regular expressions in the Terminal Name field:

Regular Expressions for Terminal Names in Probes

| Expression | Indicates |
|------------|--|
| + | One or more of the previous character |
| * | Zero or more of the previous character |
| . | Any character |
| \w | Any word character (alphanumeric or underscore). Only matches standard ASCII characters (no accented or non-Latin characters). This expression is equivalent to [A-Z a-z 0-9 _]. |

For example:

- `ter+` will match `ter` and `terr`, but not `te` or `term`
- `ter*` will match `te`, `ter`, and `terr`, but not `term`
- `term.*` will match `term`, `term1`, and `termm`

Probes have these log levels, which are listed in order of decreasing severity:

Log Levels for Probes

| ID | Name |
|----|-------|
| 1 | FATAL |
| 2 | ALERT |

| ID | Name |
|----|----------|
| 3 | CRITICAL |
| 4 | ERROR |
| 5 | WARN |
| 6 | TRACE |
| 7 | INFO |
| 8 | DBG |

You must perform these tasks to implement custom process logging:

1. *Define the Terminals in the Custom Process Script.*
2. *Create the Object Event Handler.*
3. *Create Probes for Logging.*

After creating the probes, you perform operations to test your custom processes, then *examine the custom process logs*.

Define the Terminals in the Custom Process Script

You define terminals for custom process logging in PHP scripts that you import to the process designer.

Custom process logging uses this PHP syntax:

```
use \RightNow\Connect\v1_3 as versioned_namespace;  
versioned_namespace\Terminal::logger(terminal_name, log_level, log_message);
```

For example:

```
use \RightNow\Connect\v1_3 as RNCPHPV3;  
RNCPHPV3\Terminal::logger(terminal1, 'Fatal', 'This is a fatal error.');
```

Create a PHP file, like you would for any custom process script, that defines the terminals you wish to use for logging.

The following example shows a PHP script for logging events associated with custom processes for Organization objects.

```
<?  
  
/**  
 * CPMObjectEventHandler: OrgTest  
 * Package: RN  
 * Objects: Organization  
 * Actions: Create, Update, Destroy  
 * Version: 1.2  
 **/  
  
/**  
define("Fatal", "1");  
define("Alert", "2");  
define("Critical", "3");  
define("Error", "4");  
define("Warning", "5");  
define("Trace", "6");  
define("Info", "7");  
define("Debug", "8");  
**/
```



```
// This object procedure binds to v1_2 of Connect PHP.
use \RightNow\Connect\v1_2 as RNCPHP;

// This object procedure binds to the v1 interface of SPM.
use \RightNow\CPM\v1 as RNCMPM;
use \RightNow\Connect\v1_3 as RNCPHPV3;

class OrgTest implements RNCMPM\ObjectEventHandler
{
    public static function apply( $run_mode, $action, $obj, $n_cycles )
    {
        $terminalObj = new RNCPHPV3\Terminal();
        $terminalObj::logger("terminal1", 1, "This is a fatal error.");
        $terminalObj::logger("terminal1", 'Fatal', "This is a fatal error.");
        $terminalObj::logger("terminal1", 'Debug', "This is a debug message.");
        $terminalObj::logger("terminal1", 'Info', "This is an info message.");
        $terminalObj::logger("terminal2", 'Critical', "This is a critical error.");
        $terminalObj::logger("terminal2", 'Info', "This is an info message.");
        $terminalObj::logger("terminal3", 'Alert', "This is an alert.");
        $terminalObj::logger("terminal4", 4, "This is an error.");
        $terminalObj::logger("terminal6", 'Debug', "This is a debug message.");
        $terminalObj::logger("terminal6", 'Warning', "This is a warning.");

        // For testing

        if (is_null($obj->Notes))
        {
            $obj->Notes = new RNCPHP>NoteArray;
        }
        $note = new RNCPHP>Note;
        $note->Text = date( 'r' ) . "\n";

        switch ( $action )
        {
            case RNCMPM\ActionCreate:
                $note->Text .= "Created";
                break;

            case RNCMPM\ActionUpdate:
                $note->Text .= "Updated";
                break;

            case RNCMPM\ActionDestroy:
                $note->Text .= "Destroyed";
                break;

            default:
                assert( '!
                !!! Unknown action !!!
                ' ) || die( -1 );
        }

        $note->Text .= " by " . __CLASS__ . "\n";
        $obj->Notes[] = $note;

        if (RNCMPM\RunModeLive != $run_mode)
        {
            echo( "\nHello from OrgTest, run_mode= $run_mode, action= $action, id= {$obj->ID} n_cycles= $n_cycles
            \n" ); // */
            echo( "Note= " . $note->Text );
            return;
        }

        // End testing
    }
}
```

```
    return;
  }
}

class OrgTest_TestHarness implements RNCPM\ObjectEventHandler_TestHarness
{
    public static function setup()
    {
        // Nothing special to set up.
        return;
    }

    public static function fetchObject( $action, $object_type )
    {
        $org = new RNCPHP\Organization;
        switch ( $action )
        {
            case RNCMP\ActionCreate:
                $org->Name = 'A new Org';
                break;

            case RNCMP\ActionUpdate:
                $org->Name = 'An updated Org';
                break;

            case RNCMP\ActionDestroy:
                $org->Name = 'A destroyed Org';
                break;
        }

        $org->save();
        return( $org );
    }

    public static function validate( $action, $object )
    {
        assert("
1 == ".count( $object->Notes )."
" ) || die(-1);
return( true ); // It's false.
    }

    public static function cleanup()
    {
        // Nothing special to clean up.
        return;
    }
}
```

Create the Object Event Handler

You create the object event handler from the custom process logging PHP script. Then you associate the event handler with an object.

Before you start

You must perform these tasks before creating object event handlers:

- Add the process designer to the navigation sets of all profiles that will create custom processes.
- *Define the Terminals in the Custom Process Script* in the custom process PHP scripts.

See *Object Event Handlers* for more information on creating object event handlers. See *Associate an Event Handler with an Object* for more information on associating event handlers with objects.

Here's what to do

1. From the process designer, create an object event handler in your PHP script that defined the terminals.
2. Save and test the object event handler.
3. Associate the object event handler with the object for which the PHP script was written.
4. Save and deploy the custom process model.

Create Probes for Logging

You create probes for logging custom processes by using the probe designer on the Agent Browser User Interface.

Before you start

You must add the probe designer to the navigation sets for profiles that need to use it. The Probe Designer is found in **Components > Common** in the Navigation Sets editor on the Service Console.

Note: The Probe Designer currently can be used only in the Agent Browser UI.

Here's what to do

1. Click the Navigation Menu icon in the Agent Browser UI, then go to **Probes**.
The Probe Designer opens in the Probes report.
2. Click **New** on the toolbar.
The Probe workspace opens.
3. Enter a name for the probe in the **Name** field.
4. Enter a terminal that is defined in your PHP script for custom process logging in the **Terminal Name** field.
You can also use wildcards and regular expressions.
5. Select a logging level that is defined for the terminal from the **Log Level** drop-down list.
Every terminal with that log level and higher (greater severity) will be logged.
6. Select the **Enable** check box to enable the probe.

Note: The maximum number of enabled probes is 50.

7. Click **Save and Close** to save the probe and return to the Probe Designer.
8. Click **Refresh** on the toolbar to see the new probe.
If you have many probes, you can use the Filters option to limit the number of probes displayed per page. The maximum number is 10000.

Examine the Probe Logs

After creating the probes, you test them, and then examine the probe logs.

1. From the probe designer, click **Log** in the row for the probe whose log you wish to examine.
The CPM Logs report opens. The notifications for each logged event are grouped as a run. The run number is a unique number generated to group the logs generated in a single execution of the custom process model.
2. Use the **Filters** option to search by time, log level, and probe ID.
The maximum number of records that can display is 10000.

Asset Management

Overview of Asset and Product Registration

Knowing which products and services your customers are using helps you respond to their needs. For instance, an organization selling mobile phones can more quickly assist a customer if they know which model the customer owns. Organizations can also proactively contact customers with information pertaining to the products they own.

Using B2C Service, you can configure the assets you want to associate with your customers. These assets can require serial numbers or not, depending on your needs, and can be registered by customers on the customer portal or by agents on the agent desktop.

Note: An assets solution can be created using custom objects or an integration. However, using the asset and product registration tool makes it easy to quickly implement an assets solution and adopt future enhancements.

Asset Planning

There are a number of ways you can use assets. Some organizations will want to track assets without serial numbers, others will want to track serialized assets, and others will use external applications to validate serial numbers.

The steps you use to manage assets vary depending on your organization's needs. Consider these general use cases before you configure your asset management system.

- You want to track assets that do not use serial numbers—In this instance, you need to create asset products, but you do not need to create individual asset records since they can be created when customers or agents register an asset with a contact or organization. When creating products in the product catalog for non-serialized asset products, you will not select the Serialized check box. See [Add or Edit a Sales Product to Use with Assets](#).
- You want to track assets with unique serial numbers and want to validate the serial numbers using B2C Service—In this instance, you need to create asset products, and then add an asset record for every unique serial number. After the asset records are created, customers can register their product on the customer portal by entering their product's serial number. The system then associates the contact or organization with the asset record that has the serial number the customer entered.

When creating asset records in advance of product registration, the records should have a serial number, a status of Unregistered, and not be associated with a contact or organization.

- You want to track assets with unique serial numbers and you have an external serial number validation system—In this instance, you need to create asset products (see [Add an Asset Record](#)), but you do not need to create asset records. However, you need to use a customized customer portal widget that accesses your validation system. When a customer enters a serial number, the custom widget sends the information to the external system to validate. If the serial number is validated, the custom widget then creates an asset record, populates it with the correct information, and creates the association between the contact or organization record. Contact your Oracle account manager for information about custom widgets.
- You want to track assets with unique serial numbers but do not need to validate the serial numbers—In this instance, you need to create asset products, but not individual asset records. Using a custom widget, customers

enter serial numbers for their products on the customer portal, but the serial numbers aren't verified. The custom widget then creates asset records and populates them with the serial numbers your customers provide along with other pertinent information.

Regardless of how you manage assets, standard reports make it easy to view information related to them. These reports are available in the Reports explorer's **Public Reports/Service/Assets** folder. You can also create custom reports if the standard reports do not meet your needs.

How You Set Up Assets

Before your agents and customers can manage assets, you must configure the items you want to track.

- Configure asset statuses to help you track asset usage if the three default statuses (Active, Retired, and Unregistered) do not meet your needs. See [Add or Edit an Asset Status](#).
- Create the products or services you want to track in the product catalog and specify if they should have serial numbers. See [Add or Edit a Sales Product to Use with Assets](#).
- Configure your workspaces and assign them to the appropriate profiles. You can create custom asset workspaces or use the default workspaces. You can also create custom incident, contact, and organization workspaces to add asset fields and relationship items. See [Asset Workspaces](#).
- Configure navigation sets to let agents easily create assets and view asset reports. See [Assets and Navigation Sets](#).
- If you want to use serialized products and perform serial-number validation in B2C Service, create asset records and associate them with your customers. If you have an existing database where you store assets, you can import the data into B2C Service using the Data Import Wizard. See [Asset Planning](#) and [Add an Asset Record](#).
- If you want your customers to be able to view and register their products on the customer portal, add the appropriate widgets to the customer portal pages. See [Product Registration on the Customer Portal](#).
- Assets are similar to the other standard objects in B2C Service such as incidents, contacts, and answers. Just as with these objects, you can add system attributes to the asset object if you require additional fields to meet your needs. See [Create a System Attribute](#).

Add or Edit an Asset Status

Asset statuses help you manage assets by tracking which assets are in use, which are no longer used or supported, and which assets have not been associated with customers.

The three default statuses are Active, Retired, and Unregistered, and are associated with three status types, also named Active, Retired, and Unregistered. These status types have different purposes.

- Active—This is used for assets that are associated with contacts or organizations.
- Retired—This is used for assets that have previously been associated with contacts or organizations, but are no longer in use. Instead of deleting these records, you can use the Retired status type to continue to track assets that are no longer used.
- Unregistered—This is used for assets that have not been associated with contacts or organizations.

You can rename the three default statuses and add additional statuses to help you better organize assets. When you add a status, you must assign it to one of the three status types. You cannot modify the asset status types or add custom status types.

1. Double-click **Customizable Menus** in **Configuration > Application Appearance**.
2. Expand the System Menus folder.

3. Click **Asset Statuses** to display the editor.
4. To edit an existing status, click the status.
5. To add a new status, click **New**.
6. Click **Status** and select a status type.
After you save a status, you cannot change its status type.
7. Enter a name for a new status or edit an existing one in the **Label** field.
8. Click **Save**.

Add or Edit a Sales Product to Use with Assets

To configure assets, you must add sales products you want to associate with contacts and organizations.

These can be any unique item or resource you want to track. You add these items using the product catalog. However, if you have an existing asset management system, you can bulk import asset products using the Data Import Wizard. See [Import Asset Records](#).

If you currently use sales products with quotes, you can also use them for asset management and product registration. See [Add or Edit a Sales Product](#).

Note: If you delete an asset product, all asset records configured to use the product will also be deleted.

1. Double-click **Product Catalog** in **Configuration > Opportunity Tracking**.
2. Do one of the following:
 - o Click **New** to add a new product.
 - o Click an existing product to edit it.
3. Enter the name in the **Product Name** field.
4. To add an additional identifier for the product, enter it in the **ID** field.
5. To prevent the product from being used by agents or displaying in editors, select **Disabled**.
6. To make the asset available for use in opportunity tracking, select **Sales Catalog**.
This isn't necessary when configuring products for use in asset management.
7. To make the asset available for use in B2C Service, select **Service Catalog**.
This option must be selected to create asset records using the product, and to associate it with contacts and organizations.
8. To prompt customers and agents to enter a serial number for an asset related to the product, select **Serialized**.
It's important to consider your organization's requirements before selecting this option. See [Asset Planning](#).
9. To associate a service product with the asset product, select it from the **Service Product** drop-down menu.
Any incidents created from the Service Console or customer portal that apply to the asset will automatically be populated with the selected service product.
10. Click **Save**.

Asset Workspaces

Agents use asset workspaces to create, edit, and view assets. Incident, contact, and organization workspaces can also be modified to include asset information.

Standard asset and asset multi-edit workspaces are available for adding and editing assets. These standard workspaces are automatically added to profiles when assets are enabled. You can use these standard workspaces or create custom

workspaces. Creating custom workspaces for assets is no different than creating workspaces for other standard objects. See [Overview of Workspaces](#).

Note: If you want to use custom asset workspaces, you must select them on the Profiles editor's Interfaces page. See [Custom Workspaces](#).

You should also review your incident, contact, and organization workspaces to ensure they include the asset fields and relationship item that agents need to work with assets that are associated with these record types.

- **Asset fields**—You can add fields from the assets table to incident workspaces. This gives your agents the ability to view or modify asset information when they work with an incident that's associated with an asset record. These fields include information such as the asset's name, price, and serial number.
- **Assets relationship item**—You can add the Assets relationship item to contact and organization workspaces. This is needed for agents to view the assets associated with contact and organization records. Using the relationship item, agents can delete existing asset relationships, or open the Assets editor to add asset records to a contact or organization.

Assign Asset Profile Permissions

Profile permissions must be specified for those staff members who require access to assets. These permissions allow staff members to view, add, edit, and delete assets.

1. Double-click **Profiles** in **Configuration > Staff Management**.
2. Double-click the profile you want to assign permissions to.
3. Select **Permissions**.
4. Click the **Service** tab.
5. Select the appropriate check boxes under the Asset heading.
6. To assign all asset permissions to the profile, select **Select All**.
7. Click **Save**.

Assets and Navigation Sets

You can modify navigation sets to let agents work with assets on the Service Console and the Agent Browser UI.

You must add the Assets navigation button to the navigation sets used by your agents so they can access asset records. You can also add the New Asset item to the file menu so agents can quickly add assets. In addition, you can add asset reports, found in **Public Reports\Service\Assets**, to the Asset navigation button, or any other navigation button. See [Overview of Navigation Sets](#).

Add an Asset Record

After configuring assets, your agents can add and manage assets on the Service Console.

Assets can also be bulk imported from a file using the Data Import Wizard. See [Import Asset Records](#). Assets can be added on the Assets editor, and when viewing contact and organization records.

1. Do one of the following:
 - o If you're viewing a record in the Assets editor, click **New**.
 - o If your navigation set is configured to add assets from the file menu, click **File > Asset**. See *Configure the File Menu*.
 - o If your contact or organization workspace includes the assets relationship item, view the asset list in the contact or organization record, click **Add > Add New**.
2. Enter field information.

Asset Fields

| Field | Description |
|----------------------|--|
| Name | Enter a name for the asset record in this field. |
| Product | Click this drop-down list and select the asset product. See <i>Add or Edit a Sales Product to Use with Assets</i> . |
| Serial Number | If using serialized assets, enter the asset's serial number in this field. See <i>Asset Planning</i> . |
| Contact/Organization | Click the buttons next to these fields to select the contact or organization you want to associate with the asset. These fields are populated when creating an asset from the contact or organization record. When creating asset records for future registration, the fields may be left empty. See <i>Asset Planning</i> . |
| Price | Enter a price for the asset in this field. Click the currency shown to select a different currency, and click the button to view exchange rates. See <i>Add or Edit a Currency</i> . |
| Date Purchased | Enter the date the asset was purchased or obtained, or click the calendar next to the field to select a date. |
| Date Installed | Enter the date the asset was installed or activated, or click the calendar next to the field to select a date. |
| Date Retired | Enter the date the asset was retired or deactivated, or click the calendar next to the field to select a date. |
| Status | Click this drop-down list and select a status for the asset. See <i>Add or Edit an Asset Status</i> . |
| Description | Enter a description or notes for the asset in this field. |

3. To associate the asset with a new incident, click the **Incidents** tab.
 - a. Click **Add New** and complete the fields. See *Edit Key Incident Fields*.
4. To view the audit log for the asset record, click the **Audit Log** tab. See *Audit Logs*.
5. If you're adding the asset from the contact or organization record, click **OK**.
6. Click **Save**.

Import Asset Records

If you have an existing database where you store assets, you can import asset records instead of creating them manually.

You can also import information that associates assets with your customers.

You import this information into B2C Service using the Data Import Wizard. The file that contains the data you want to import can include the following information. See *How Data Import Works*.

- Name—This is the name of the asset product.
- Product ID—This maps to the `product_catalog.product_id` field.
- Serial number
- Asset status
- Organization ID—This maps to the `orgs.org_id` field. This lets you associate the asset with an existing organization.
- Contact ID—This maps to the `contacts.c_id` field. This lets you associate the asset with an existing contact.
- Purchase date
- Install date
- Retire date
- Description

Related Topics

- [Add or Edit a Sales Product to Use with Assets](#)

Product Registration on the Customer Portal

The objects that are called assets on the Service Console are called registered products on the Customer Portal.

When you have created assets on the Service Console and configured product registration for your customer portal, your customers can register their products themselves.

Add Product Registration Files to Your Customer Portal

The widgets necessary for product registration are included in the standard widgets on the reference implementation. The page files, however, aren't provided as part of the reference implementation.

The procedure for adding product registration files instructs you to overwrite several of the reference implementation pages. If you have customized these files, best practice suggests making a copy of these files and then customizing the new files with the same changes that you made to the original reference implementation pages. Having backup files also lets you revert from the new functionality to your previous implementation if necessary.

1. Download the [product_registration.zip](#).
2. Unzip the files to your workstation.
3. Copy the unzipped files to the appropriate customer portal file.

Adding Product Registration Files to the Customer Portal

| Downloaded Files | Customer Portal Location |
|------------------|--|
| Asset32.png | /cp/customer/assets/themes/standard/images/icons |
| standard.php | /cp/customer/development/views/templates |
| ask.php | /cp/customer/development/views/pages |
| detail.php | /cp/customer/development/views/pages/account/questions |
| overview.php | /cp/customer/development/views/pages/account |

4. Copy the **assets** folder from the unzipped files to **/cp/customer/development/views/pages/account**. The folder should contain the following files.
 - o **asset_registration_confirmation.php**
 - o **detail.php**
 - o **list.php**
 - o **register_asset.php**
 - o **serialnumber_validate.php**
 - o **update_registered_product.php**
5. Modify the **site.css** file in **/cp/customer/assets/themes/standard** by following these steps.
 - a. Open the downloaded **site.css** file in a text editor and copy all content.
 - b. Open the **/cp/customer/assets/themes/standard/site.css** file in a text editor.
 - c. Paste the copied content from the downloaded file to the end of the **/cp/customer/assets/themes/standard/site.css** file.
 - d. Save **site.css**.

Note: You're going to add content to the existing **site.css** file. Do not replace **/cp/customer/assets/themes/standard/site.css** with the downloaded **site.css** file.
6. To let your customers view products that are registered to other members of their organization, set a non-zero value for the MYQ_VIEW_ORG_ASSETS configuration setting.
 - a. Log in to B2C Service.
 - b. Double-click **Configuration Settings** in **Site Configuration > Configuration**.
 - c. Enter **MYQ_VIEW_ORG_ASSETS** in the Key field and click **Search**.
 - d. In the row for MYQ_VIEW_ORG_ASSETS, click the Value column.
 - e. Enter **1** if you want customers to be able to see products from others in their organization, or type **2** if you want them to see products from others in their organization and all its subsidiaries.
 - f. Click **Save**.

Overview of Product Registration Widgets

Various Customer Portal widgets support the product registration feature.

- AssetCheck—The AssetCheck widget, found in the **core/widget/standard/input** folder, directs customers to the Product Registration page. If the product requires a serial number, the widget also validates that number.

This widget contains the ProductCatalogInput widget and is used on the custom Register a Product > Product Validation page (**assets/serialnumber_validate/**).

- ProductCatalogInput—The ProductCatalogInput widget, found in the **input** folder, displays a drop-down list for collecting hierarchical tree data for products. It's used to submit product values for registered products. This widget contains the ProductCatalogDisplay widget and is contained in the AssetCheck widget.
- ProductCatalogDisplay—The ProductCatalogDisplay widget is found in the **output** folder. It displays the value of the specified product catalog field. The system fields that can display are listed on the Business Objects page of the Customer Portal Administration site, as shown in the following figure. This widget is contained in the ProductCatalogInput and DataDisplay widgets.

Note: The business objects for assets can be used only on pages where assets can be created, updated, or viewed. They aren't supported on the Ask a Question page.

- AssetOrgList—The AssetOrgList widget, found in the **search** folder, displays a drop-down menu that allows customers to search for registered products associated with their own record or for products associated with other contacts in their organization or its subsidiaries. The MYQ_VIEW_ORG_ASSETS configuration setting must be set to a value equal to or higher than the display_type attribute of the widget, which has a default value of 2.
- ProductCatalogSearchFilter—The ProductCatalogSearchFilter widget, found in the **search** folder, displays a drop-down list containing a hierarchical tree for the product catalog. This widget is contained in the AdvancedSearchDialog widget.

How to View Registered Products on the Customer Portal

When you added product registration files, a modified template file (standard.php) was included. The modified template contains an option on the Your Account drop-down list for Registered Products.

The product registration files also include an updated Account Overview page with a new Registered Products section.

Note: If you migrated your Customer Portal to the current version from an earlier framework version and implemented product registration before deciding you want to revert to the earlier version, the Registered Products section remains on the Account Overview page and will display all registered products available on the site. To prevent this from occurring, edit the reverted **overview.php** file to remove the RegisteredProducts div class section.

When logged-in customers select the Registered Products option on the Your Account tab or click the See All Registered Products link on the Account Overview page, a list of products registered to the customer opens. This page is generated by the **/account/assets/list.php** file.

Your customers can search their registered products on this page by any combination of product, status, and keyword.

Clicking a registered product opens the Registered Product details page. This page displays information about the product as well as any associated incidents. It also includes links that let customers edit the product or go to the Ask a Question page.

Clicking the Edit Registered Product link opens the Update Registered Product page, where your customers can edit the product name and status and add or edit the installed and retired dates.

Related Topics

- [Registered Product Update](#)
- [Add Product Registration Files to Your Customer Portal](#)

View Registered Products from Other Staff Members in an Organization

By default, customers can see only their own registered products on the Registered Products List page.

If you want to let customers view other products associated with members of their organization, you need to edit a configuration setting and place the AssetOrgList widget on the page.

1. Enable the MYQ_VIEW_ORG_ASSETS configuration setting as described in *Add Product Registration Files to Your Customer Portal*.
2. Open `/cp/customer/development/views/pages/account/assets/list.php`.
3. Find the following line of code.

```
<div id="rn_PageContent" class="rn_QuestionList">
```

4. Enter the following code just above the line you found in step 3.

```
<rn:widget path="search/AssetOrgList" search_on_select="true" />
```

Note: When the search_on_select attribute is true, customers do not have to click the Search button after making their menu selection for displaying registered products because the report refreshes automatically.

5. Save `list.php`.

Overview of Registering a Product

Your logged-in customers can open the page to register a product from the Account Overview page or the Registered Products list page.

On the Account Overview page, they can click the Register a New Product link in the Registered Products section.

Alternately, if they select the Registered Products option on the Your Account tab drop-down list, the page displays a list of registered products and a link to register a new product.

Clicking either of these Register a New Product links opens the first page in the product registration sequence to validate the product.

Customers select a product from the drop-down list, which displays all items created in the Product Catalog on the Service Console that have the Service Catalog check box selected.

If the product does not have the Serialized check box selected in the Product Catalog, the screen provides a message to the customer that a serial number isn't required. Having selected a valid product, the customer can then click Continue to register the product.

If, however, the product requires a serial number because the Serialized check box is selected in the Product Catalog on the Service Console, the message states that the serial number is required.

- The serial number for a serialized product does not match a serial number that was entered on the Service Console for the product.
- The serial number has already been registered to another customer.
- The product's status on the Service Console isn't Unregistered.

After clicking Continue, the Product Registration step displays. The product and serial number are now read-only, and the customer can complete some of the remaining fields, including name (which is populated with the name it was given on the administration interface), status, date purchased (also populated with the date from the administration interface), date installed, date retired, and description.

Note: If the product does not require a serial number, the act of registration creates and activates a new asset record. Therefore, the Status selection defaults to Active, and the Name and Date Purchased fields are blank. If the product requires a serial number, it must match an existing asset record that was created on the Service Console. When it was created, the asset was set to the Unregistered status and the Name and Purchase Date were entered. Therefore, when the customer registers the product, the Name and Purchase Date fields are populated. However, because the customer should not be registering a product with an Unregistered status, the Status isn't set and the Unregistered status isn't available.

Registered Product Update

When logged-in customers select the Registered Products option on the Your Account tab or click the See All Registered Products link on the Account Overview page, a list of products registered to the customer opens. Then clicking a registered product opens the Registered Product Details page.

If customers click the Edit Registered Product link on the page, the Update Registered Product page opens.

The product and serial number are read-only, but customers can change the following fields on the page:

- Date Purchased
- Name
- Status
- Date Installed
- Date Retired
- Description

Clicking the Continue button opens the Account Overview page, where the Registered Products section contains the edited product.

Site Configuration

Overview of Site Configuration

You can customize configuration settings, either individually or across multiple interfaces, to enable, disable, and configure B2C Service functions. You can also change certain text used in B2C Service 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 runtime 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 that 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 *B2C Service and Your Customer Portal*.

Related Topics

- [How the Configuration Settings Editor Works](#)
- [How You Customize Configuration Settings](#)
- [How the Message Bases Editor Works](#)
- [How You Customize Message Bases](#)
- [Service Update Notifications](#)
- [Search for a Configuration Setting](#)
- [Search for a Message Base](#)
- [Edit a Configuration Setting](#)
- [Edit Message Base Text](#)

Search for a Configuration Setting

Runtime 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Configuration Settings**.

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 Search to return every interface-specific configuration setting on the site you are logged in to.
- Click **Cancel** 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 list before clicking Search. 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 list.

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 display 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 found, select only that folder from the Folders field.

Search Window

| Field | Description |
|--------------------|---|
| Filters | This section displays the runtime 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. |
| Key | Enter the name of a specific configuration setting in this field. This field is not case sensitive. You can also enter just the first few letters and append either the percentage sign (%) or an asterisk (*) to serve as a wildcard. All settings that begin with the letters you type will be returned. |
| Default Value | Enter a default value to return settings that match the value you type. |
| Value | Enter 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 | Enter 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 displays 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 Change Sort Order Using the Ribbon and Change Sort Order Using Column Headers . |

| Field | Description |
|--------------------------|--|
| Settings | This drop-down list 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 <i>Overview of the Search Window</i> . |
| 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 Configuration Settings editor to display your previously filtered search results. 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. This button is disabled if the current search parameters were not populated from your local settings. See <i>Change Your Personal Settings</i> . |
| Reset Values | Select this option to reset the search parameter values to the default values that were populated when the editor opened. Clicking this button also resets the Configuration Settings window to the default size if it has been resized. |

4. Click Search.

Results:

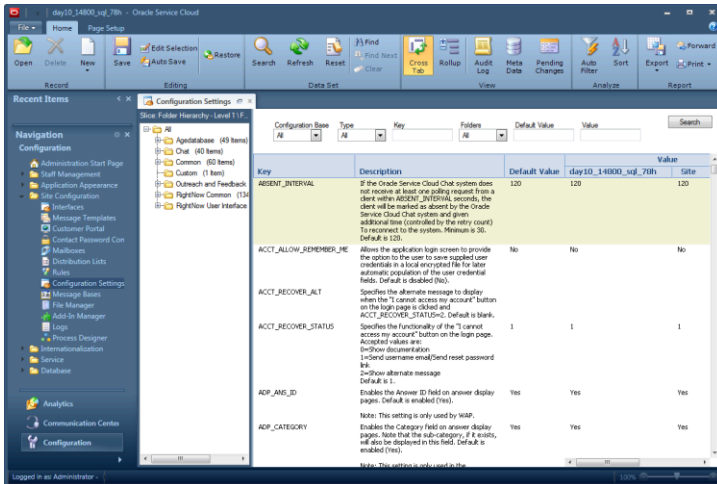
Your search criteria displays on the content pane.

How the Configuration Settings Editor Works

After performing a search, the Configuration Settings editor displays your search results on the content pane.

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.)

This image shows the Configuration Settings editor displaying search results in cross tab mode.



Most of the buttons on the Configuration Settings editor ribbon reflect common B2C Service functionality and work the same way as they do in reports. For information about working with reports in B2C Service, see [Overview of Managing Reports on the Reports Explorer](#).

Configuration Settings Editor Home Tab

From the Home tab on the ribbon, 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.

Home Tab

| Group/Button | Description |
|----------------|---|
| Record | The buttons in this group let you open existing configuration settings and create and delete custom settings. |
| Open | Click this button to open the selected configuration setting. |
| Delete | Click this button to delete a custom configuration setting. Standard configuration settings cannot be deleted. Therefore, this button is available only for custom settings. |
| New | Click this drop-down list to create a custom configuration setting. Data type options include Text, Integer, Menu, Yes/No, and Date/Time. 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. 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. |

| Group/Button | Description |
|-----------------|---|
| Auto Save | Click this button to automatically save your inline edits. Auto Save works only for inline edits. The Save button is disabled when Auto Save is selected. See Edit an Individual Value Inline and Edit Values in Multiple Rows Using the Ribbon . |
| 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 runtime selectable filters. See Search for a Configuration Setting . |
| Refresh | Click this button to reload the data shown using the current search criteria. Note: 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. |
| Find | Click this button to find text, numeric values, or special characters on the current page. Cells that contain the search value are highlighted. See Find Content in a Report . The Find button works only on the current 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 the same time for the same configuration setting. See Define Rollups and 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 runtime 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 Export Configuration Setting Metadata . |
| 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. Nothing displays unless there is a failed deployment. |
| Analyze | The buttons in this group let you sort the 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 Enable Auto Filters . |
| Sort | Click this button to open the Sort window and select which output columns to sort by and the sort method. See Change Sort Order Using the Ribbon and Change Sort Order Using Column Headers . |

| Group/Button | Description |
|--------------|--|
| Report | The buttons in this group let you export the data, forward the data in an email, and save and restore default values. 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 Export Report and Dashboard Data . |
| Forward | Click this button to send the data to individuals or distribution lists in an email. See Forward a Report . |
| Print | Click the arrow on this button to access printing options. |

Configuration Settings Editor 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 the group 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.

Page Setup Tab

| 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 . This button group displays only if your profile includes the Print/Export/Forward Reports permission. See . |
| 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 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 list to select a background color. |
| Gradient | Click this drop-down list to apply a gradient to the background. This option is available only after you have selected a fill color. |

| Group/Button | Description |
|--------------|---|
| Transparency | Click this drop-down list to apply a transparency to the background. 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 white space 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. |

Configuration Settings Editor Folder Structure

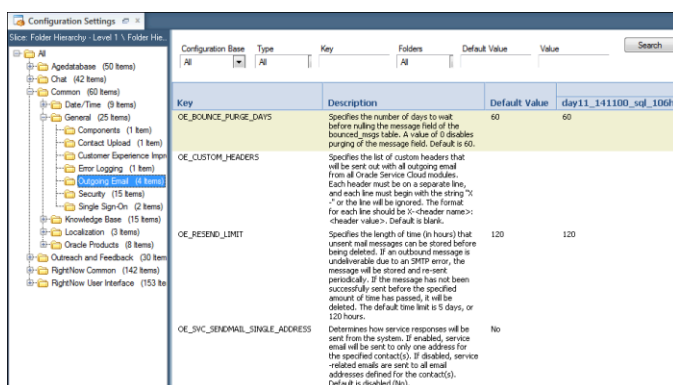
Configuration settings are organized in a hierarchical folder structure. The number of settings in each category folder display next to the folder name.

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, 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 found, 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 go to the General folder in **Common/General** to display all settings in the General folder, including its subfolders. You could then expand the settings by each subfolder.

This image shows the folders expanded by the Outgoing Email folder in **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.

Configuration Settings Editor Folder and Subfolder Categories

| 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 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 B2C Service 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 Outreach and Feedback. |
| RightNow Common | Expand this folder to view and edit configuration settings that are common to one or more areas of Oracle B2C Service or are used to enable functionality. The subfolders include 3rd-Party Applications, Answer Review, ATG Integration, External Integration, Fusion Integration, General Analytics Options, Message Templates, Mobility, Screen Pop, Service Modules, Siebel Integration, SIH, Single Sign-On, and Social. |
| 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 found under the Answer Display Page, Contact Services, and End-User Interface subfolders apply to the customer portal. |

Configuration Settings Editor 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.

Audit Log Search Options

| 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. |
| Relative | Select this check box and then click the calendar to enter relative start and end dates. |

| Field | Description |
|---------------------------|---|
| | |
| Who | Click this drop-down list to display changes made by a particular staff member. All is the default. |
| Key | <p>Enter the name of a specific configuration setting in this field.</p> <p>Tip: You can also enter just the first few letters and append either the percentage sign (%) or an asterisk (*) to serve as a wildcard. All settings that begin with the letters you type will be returned.</p> |
| Configuration Base | <p>Click this drop-down list and select the interface for which you want to display changes to configuration settings.</p> <p>All—Displays all site- and interface-specific settings.</p> <p>Logged In—Displays only interface-specific settings for the interface you are logged in to.</p> <p>Site—Displays only site-specific settings that are shared across all interfaces on this site.</p> <p><interface name>—Displays only interface-specific settings that apply to the selected interface.</p> |

Note: Clicking the Audit Log button with a specific configuration setting open displays changes to that setting only.

Export Configuration Setting Metadata

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, enter (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.

1. From the Configuration Settings editor, click **Meta Data** on the ribbon.
2. Specify options and enter field information.


Meta Data Window

| Field | Description |
|---------|--|
| Folders | Select the folders that contain the configuration settings you want to display. The Custom folder is selected by default. |
| Key | <p>Enter the name of a specific configuration setting in this field. This field is not case sensitive.</p> <p>Tip: You can also enter just the first few letters and append either the percentage sign (%) or an asterisk (*) to serve as a wildcard. All settings that begin with the letters you type will be returned.</p> |
| Type | Select the check boxes next to the type of configuration setting you want to display. |

| Field | Description |
|--------------------|--|
| | <p>Select All—Displays all site- and interface-specific settings. (Default)</p> <p>Site—Displays only site-specific settings that are shared across all interfaces on this site.</p> <p>Interface—Displays only those settings that are specific to the interface you are logged in to.</p> |
| Configuration Base | <p>Select the check boxes next to the interfaces for which you want to display configuration settings.</p> <p>Select All—Displays all site- and interface-specific settings.</p> <p>Logged In—Displays only interface-specific settings for the interface you are logged in to. (Default)</p> <p><interface name>—Displays only interface-specific settings that apply to the selected interface.</p> <p>Site—Displays only site-specific settings that are shared across all interfaces on this site. (Default)</p> |

3. Click **Search**.
4. Click the **Options** drop-down list and select **Export > Delimited > Comma**.
5. Specify export options.

Export Options Window

| 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 | <p>Select this check box to add the date and time to your file name.</p> <p>To change the format in which the date and time is added to your file, enter your preferred format in the field next to the check box and then click Reset.</p> |
| 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 | <p>Clear this check box to remove the report name from the CSV file.</p> <p>Note: 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.</p> |

6. Click **OK**.

What to do next

Now you can import your CSV file from the Data Import Wizard.

Related Topics

- [Import Data](#)

How You Customize 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 [Search for a Configuration Setting](#).

Edit a Configuration Setting

While standard settings cannot be deleted and their field parameters cannot be edited, the value of a standard configuration setting can be edited.

Configuration setting values can be edited either inline or by clicking the Edit Selection button. 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.

Tip: When you first open the Configuration Settings editor, the Search window opens where you can search for a specific configuration setting. After you are in the editor, you can click the Search on the ribbon. See [Search for a Configuration Setting](#).

1. Select the row that displays the configuration setting you want to edit.
2. Do one of the following:
 - Click **Edit Selection**. Either the Site window or an interface-specific window opens.
 - Click in the Value column to edit the setting value inline.
 - Double-click the setting to open the setting on the content pane and edit the Value field.
3. Enter or select the new value. Editing options are specific to the field data type. For example, if a setting can be enabled or disabled, a Yes/No drop-down list displays in the Value field.
4. To revert to the default value, click **Restore**.
5. Click **Save**.
The new value displays with an underscore.

What to do next

You may be required to log out of B2C Service and log back in for your changes to take effect.

Edit the Same Configuration Settings Across Multiple Interfaces

You can edit a single configuration setting across multiple interfaces at the same time using rollup mode.

You cannot edit different configuration settings on the same interface at the same time.

1. From the Configuration Settings editor, click **Rollup** on the ribbon.
The Configuration Settings editor displays in rollup mode.
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 **Edit Selection** on the ribbon.
4. Enter or select the new value.
5. Click **OK**.
The values of all the selected rows are updated.
6. Click **Save** on the ribbon.
The new values display with an underscore.

What to do next

You may be required to log out of B2C Service and log back in for your changes to take effect.

Create a Custom Configuration Setting

When you create a new configuration setting, it is considered a custom configuration setting. By default, every custom configuration 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. After you create a custom configuration setting, you can edit only its value and its folder location.

1. Click **New** on the ribbon and select the data type: **Text**, **Integer**, **Menu**, **Yes/No**, or **Date/Time**.

A new configuration setting opens on the content pane.

The screenshot shows the Configuration Settings editor interface. On the left, the 'Configuration Entry Information' section includes fields for Key (CUSTOM_CFG_), Data Type (Text), Type (Site), Required (No), Folder (Custom), Default, Maximum Length, and Pattern. On the right, the 'Descriptions' table lists three entries for the 'day04_14500_sql_100h' configuration setting across different interfaces and languages.

| Interface | Language | Description |
|------------------------|--------------|-------------|
| day04_14500_sql_100h | English (US) | |
| day04_14500_sql_100h_2 | English (US) | |
| day04_14500_sql_100h_3 | English (US) | |

Below the descriptions, the 'Values' section shows a table with 'Configuration Base' and 'Value' columns, where 'Site' is listed as the configuration base.

2. Enter field information.

Custom Configuration Setting

| 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 | Enter the name of your custom configuration setting after CUSTOM_CFG_, which populates in this field. All custom configuration 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 list to select the setting type, either Site or Interface. Site—Classifies the custom configuration setting as shared across all interfaces. (Default) Interface—Classifies the custom configuration setting as interface-specific only. |
| *Required | Click this drop-down list to define whether the custom configuration setting is required. |
| *Folder | Click the Search icon to define a folder location for your custom configuration setting. By default, all custom configuration 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) This field displays only for Text data types. |
| Pattern | Enter a regular expression format that the configuration setting value must conform to in this field. See <i>Regular Expressions</i> . 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 -99999999) 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.) |

| Field | Description |
|------------------|---|
| | 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. This field displays only for Menu data types. |
| Descriptions | This section displays the interface name, language, and description. |
| Description | Enter 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 configuration setting values. If you have more than one interface, you can set a value for each interface. |
| Value | Enter the value of the custom configuration setting in this field. |

3. Click Save.

Results:

After closing the editor, the custom configuration setting displays in the tree in the Custom folder you saved it in.

What to do next

You may be required to log out of B2C Service and log back in for your changes to take effect.

How You Configure 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.

Security settings—Use B2C Service 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.

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- Learn about the settings related to site protection, passwords, and file attachments in *Overview of Security-Related Configuration Settings*. For a complete list of security-related configuration settings, see *Security Level*.
- For an in-depth discussion about security practices in B2C Service and how to protect your data, see *Overview of Oracle B2C Service Security and Compliance*.

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 [Open Your Notifications](#).

Incidents—You can specify how long incidents remain open, active, and in the database. This table describes the configuration settings you can use to customize incident life.

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 [Send a Quote to a Customer](#).

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| To... | Use this setting... |
|--|------------------------|
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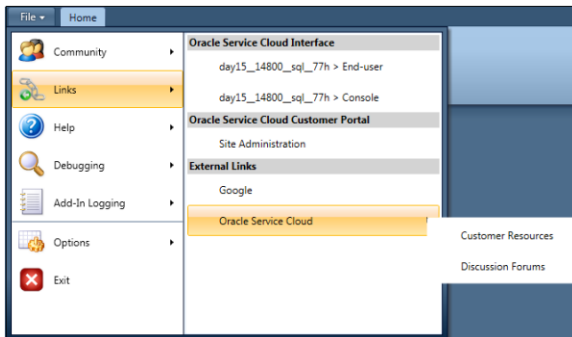
Related Topics

- [How You Customize Configuration Settings](#)

How You Customize the Links Menu

The Links menu, accessed by clicking File, provides quick access to commonly visited URLs. You can customize the links to meet the needs of your organization.

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 submenus that contain multiple links. This lets you organize your links by grouping related links in a single submenu title. This image shows a Links menu with a custom link, a separator, and a submenu with two links.



Note: In order for the Customer Portal option to appear on the Links menu, the development area must be enabled (see the MOD_CP_DEVELOPMENT_ENABLED configuration setting in **Common/Oracle Products/Modules**) and staff members must have customer portal permissions in their profile.

Using the procedures to add a custom link and to add a submenu with links, you can duplicate the custom links shown in the figure by defining the value of the TBAR_LINK_LIST configuration setting (**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", "https://cloudcustomerconnect.oracle.com/pages/home")
))
```

Add a Custom Link

You can add custom links to appear in the External Links option on the Links menu.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Configuration Settings**.
3. Enter TBAR_LINK_LIST in the **Key** field and click **Search**.
4. Double-click TBAR_LINK_LIST.

Tip: You can also edit the Value column inline. However, this type of change is easier to make from the setting tab.

- Enter the link in the **Value** field using the following syntax:

```
item (#, "<link name>", "<action>")
```

Custom Link Syntax

| Field | Description |
|---------------|---|
| # | Enter a link number in this field. The link number can be any positive integer. 0 is reserved for adding separators. |
| "<link name>" | Enter the link name as you want it to appear in the Links drop-down list. |
| "<action>" | Enter the URL of the website you want to open when the link is clicked. |

- To create another custom link, press Enter to begin a separate line, and enter the link definition as defined in the Custom Link Syntax table. Enter each link definition on a separate line.
- 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, "", "")
```

- Click **Save**.

Results:

After closing the editor, the new custom links appear in the External Links option on the Links menu after you log out and then log back in.

Add a Submenu with Links

You can add a custom submenu and links to appear in the External Links option on the Links menu.

- Click **Configuration** on the navigation pane.
- Expand **Site Configuration**, and then double-click **Configuration Settings**.
- Enter TBAR_LINK_LIST in the **Key** field and click **Search**.
- Double-click TBAR_LINK_LIST.

Tip: 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.

- Enter the submenu name and associated links in the **Value** field using the following syntax:

```
menu (#, "<menu name>", (
  item (#, "<link name>", "<action>")
  item (#, "<link name>", "<action>")
))
```

Custom Link Submenu Syntax

| Field | Description |
|-------|---|
| # | Enter a number for the option. This submenu or option number can be any positive integer. 0 is reserved for adding separators. |

| Field | Description |
|---------------|--|
| "<menu name>" | Enter the name of the submenu as you want it to appear on the Links option of the file menu. |
| "<link name>" | Enter the link name as you want it to appear in the Links submenu. |
| "<action>" | Enter the URL of the website you want to open when the link is clicked. |

- To enter additional links to the submenu, enter more "item" lines using the syntax described in the Custom Link Submenu Syntax table. Enter each link definition on a separate line.
- To place a separator line between links of the submenu, enter the following on a separate line between the links where you want the separator to appear:

```
item(0, "", "")
```

- Click **Save**.

Results:

After closing the editor, the new custom submenu and links appear in the External Links option on the Links menu after you log out and then log back in.

Message Bases Editor

Search for a Message Base

Message bases are text strings that appear on the administration interface, the customer portal, and in email messages and notifications. Runtime 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.

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.

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.

After 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.

- Click **Configuration** on the navigation pane.

2. Expand Site Configuration, and then, double-click Message Bases.

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 **Search** to return every message base on the site to which you are logged in.
- Click **Cancel** 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 list before clicking **Search**. 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 list.

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 display 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.

Search Window

| Field | Description |
|--------------|---|
| Filters | This section displays the runtime 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 | Enter the name of a specific message base in this field. This field is not case sensitive. 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 | Enter message base default text (or a portion of the default text) to return message bases with a value that matches the text you type. This field is not case sensitive and accepts blank spaces. |
| Custom Text | Enter message base customized text (or a portion of the text) to return message bases with a value that matches the text you type. |

| Field | Description |
|--------------------------|---|
| | This field is not case sensitive and accepts blank spaces. |
| Limit and Order | This section lets you 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. |
| Rows | Enter 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 displays 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 Change Sort Order Using the Ribbon and Change Sort Order Using Column Headers . |
| Settings | This drop-down list 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 Overview of 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. |
| 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. This button is disabled if the current search parameters were not populated from your local settings. See Change Your Personal Settings . |
| Reset Values | Select this option to reset the search parameter 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 **Search**.

Results:

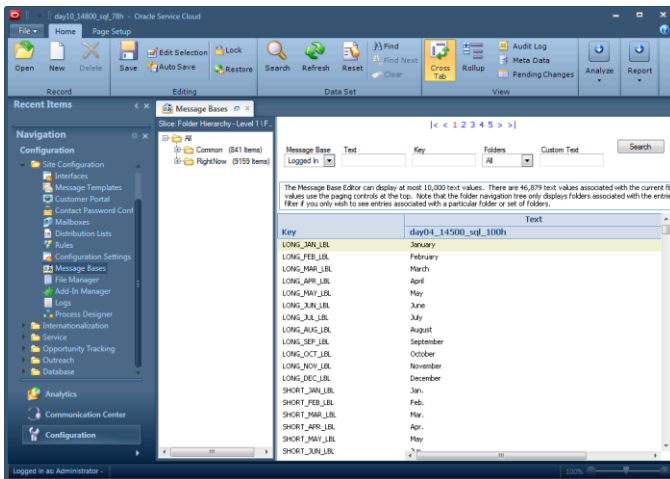
Your search results display on the content pane.

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 display. 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.

How the Message Bases Editor Works

After performing a search, the Message Bases editor displays your search results on the content pane. 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. This image shows the Message Bases editor displaying search results in cross tab mode.



Most of the buttons on the Message Bases editor ribbon reflect common B2C Service functionality and work the same way as they do in reports. For information about working with reports in B2C Service, see [Overview of Managing Reports on the Reports Explorer](#).

Message Bases Editor Home Tab

From the Home tab on the ribbon, 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.

Home Tab

| Group/Button | Description |
|----------------|---|
| 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. 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 update. See Lock a Text Value . |

| Group/Button | Description |
|--------------|---|
| | <p>Note: Because the custom text value is always used on update, 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 update. However, if the Custom Text field is not populated, then the default text value is copied into the Custom Text field. In other words, after 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.</p> |
| Auto Save | <p>Click this button to automatically save your inline edits.</p> <p>Note: Auto Save works only for inline edits. The Save button is disabled when Auto Save is selected. See Edit an Individual Value Inline and Edit Values in Multiple Rows Using the Ribbon.</p> |
| Restore | Click this button to return the selected message base to its default value. |
| 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 list to create a custom message base. |
| Delete | Click this button to delete a custom message base. Standard message bases cannot be deleted. Therefore, this button is available only for custom message bases. |
| 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 runtime selectable filters. See Search for a Message Base . |
| Refresh | <p>Click this button to reload the data shown using the current search criteria.</p> <p>Note: Refresh works differently when you edit a message base. If you change a value before saving, clicking Refresh reverts to the previously saved value.</p> |
| Reset | Click this button to reload the data shown using the default search criteria. |
| Find | <p>Click this button to find text, numeric values, or special characters on the current page. Cells that contain the search value are highlighted. See Find Content in a Report.</p> <p>Note: Find works only on the current page.</p> |
| 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 the same time for the same message base. See Define Rollups and Edit the Same Message Base on Multiple Interfaces . |

| 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 runtime 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 Export Message Base Metadata . |
| 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. Nothing displays unless there is a failed deployment. |
| Analyze | The buttons in this group let you sort the 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 Enable Auto Filters . |
| Sort | Click this button to open the Sort window and select which output columns to sort by and the sort method. See Change Sort Order Using the Ribbon and Change Sort Order Using Column Headers . |
| Report | The buttons in this group let you export the data, forward the data in an email, and save and restore default values. 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 Export Report and Dashboard Data . |
| Forward | Click this button to send the data to individuals or distribution lists in an email. See Forward a Report . |
| Print | Click the arrow on this button to access printing options. |

Message Bases Editor 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 the group 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.

Page Setup Tab

| 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 . This button group displays only if your profile includes the Print/Export/Forward Reports permission. See . |

| Group/Button | Description |
|-------------------------|---|
| 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 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 list to select a background color. |
| Gradient | Click this drop-down list to apply a gradient to the background. This option is available only after you have selected a fill color. |
| Transparency | Click this drop-down list to apply a transparency to the background. 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 white space 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. |

Message Bases Editor Folder Structure

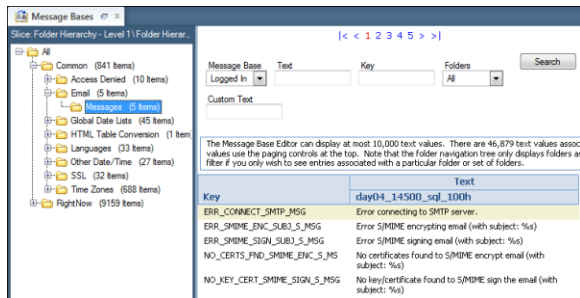
Message bases are organized in a hierarchical folder structure. The number of message bases in each category folder display next to the folder name. Keep in mind that this number varies depending on how you have defined the filters in your search.

By default, the system displays a maximum of 10,000 message bases per page. The folders that contain the text values display 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 found, 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 go to the Global Date Lists folder in **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.

This image shows the folders expanded by the Messages folder in **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.

Message Bases Editor 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 Audit Log 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.

Audit Log Search Options

| 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. |
| Relative | Select this check box and then click the calendar to enter relative start and end dates. |
| Who | Click this drop-down list to display changes made by a particular staff member. All is the default. |
| Key | Enter the name of a specific message base in this field. Tip: 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 interface for which you want to display changes to message bases: <ul style="list-style-type: none"> • All—Displays all message bases. (Default) • Logged In—Displays only message bases for the interface to which you are logged in. |

| Field | Description |
|-------|--|
| | <ul style="list-style-type: none"> <interface name>—Displays only message bases that apply to the selected interface. |

Note: Clicking Audit Log on the ribbon with a specific message base open displays changes to that message base only.

Export Message Base Metadata

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), enter (site or interface specific), description, maximum length, folder and folder ID, and text and custom text values.


1. From the Message Bases editor, click **Meta Data** on the ribbon.
2. Specify options and enter field information.

Meta Data Window

| Field | Description |
|--------------|---|
| Folders | Select the folders that contain the message bases you want to display. The Custom folder is selected by default. |
| Key | Enter the name of a specific message base in this field. This field is not case sensitive. 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: <ul style="list-style-type: none"> o Select All—Displays all site- and interface-specific message bases. o Logged In—Displays only interface-specific message bases for the interface to which you are logged in. (Default) o <interface name>—Displays only interface-specific message bases that apply to the selected interface. |

3. Click **Search**.
4. Click the **Options** drop-down list and select **Export > Delimited > Comma**.
5. Specify export options.

Export Options Window

| 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. |

| 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. To change the format in which the date and time is added to your file, enter your preferred format in the field next to the check box and then click Reset. |
| 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. Note: 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 **OK**.

What to do next

Now you can import your CSV file from the Data Import Wizard.

Related Topics

- [Import Data](#)

How You Customize Message Bases

Message bases are text strings that appear on the administration interface, the customer portal, and in email messages and notifications. You can customize these with the Message Bases editor.

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 described in the Search for a message base procedure.

When the Message Bases editor opens, 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 displaying the folders containing the text values on the left. The number of folders that displays depends on which page you view and which settings are shown.

Edit Message Base Text

While standard message bases cannot be deleted and field parameters cannot be edited, the text values of standard message bases can be edited inline or from the ribbon. You can also edit the same message base on multiple interfaces at once 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 update. Because the system always uses the custom text value on update, 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.

1. Select the row that displays the message base you want to edit.

Tip: When you first open the Message Bases editor, the Search window opens where you can search for a specific message base. After you are in the editor, you can click the Search on the ribbon. See [Search for a Message Base](#).

2. Do one of the following:
 - o Click **Edit Selection** on the ribbon.
 - o Click in the Text column to edit the text value inline.
 - o 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, enter your changes in the **Description** field.
4. Enter or select the new custom text value.

Note: 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 **Restore**.
6. Click **Save**.
The new custom text displays with an underscore.
7. Verify the change by checking the page where the edited message base appears.

What to do next

Changes to the message bases do not take effect immediately. You must log out of B2C Service and log back in or refresh the customer portal page.

Edit the Same Message Base on Multiple Interfaces

You can edit the same message base on multiple interfaces.

You cannot edit different message bases on the same interface at the same time.

1. From the Message Bases editor, click **Rollup** on the ribbon.
The Message Bases editor displays in rollup mode.
2. Press Ctrl while selecting the rows you want to edit.
3. Click **Edit Selection** on the ribbon.
4. Enter the new text value.
5. Click **OK**.
The values of all the selected rows are updated.
6. Click **Save**.
The new values display with an underscore.
7. Verify the changes by checking the pages where the edited message bases appear.

What to do next

Changes to the message bases do not take effect immediately. You must log out of B2C Service and log back in or refresh the customer portal page.

Lock a Text Value

If you have defined a value in the Custom Text field, you can lock that value and it will be used on update.

1. Select a message base from the Message Bases editor.
2. Click **Lock** on the ribbon.

Results:

If you have defined a value in the Custom Text field, then that value is locked and will be used on update. 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.

Create a Custom Message Base Entry

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.

After 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.

1. Click **New** on the ribbon.
A new message base entry opens on the content pane.

| Message Base | Default Text | Custom Text |
|-----------------------|--------------|-------------|
| day04_14500_sq_100h | No Value | |
| day04_14500_sq_100h_2 | No Value | |
| day04_14500_sq_100h_3 | No Value | |

2. Enter field information.

Custom Message Base Entry

| 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. |

| Field | Description |
|-----------------|---|
| *Key | Enter 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 | Enter a description of the message base in this field. |
| *Folder | Click the Search icon 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. Ten subfolders can be nested under the Custom folder. Each subfolder can contain three child folders. |
| *Entry Type | Select from the drop-down list to add a plain, HTML, or keyboard shortcut attribute to your message base. Both the Default Text and Custom Text fields accept plain, HTML, and keyboard shortcut attributes. The HTML option lets you apply HTML to your text. For example, if you want your text to display in bold, you could enter <code>Bold text</code> in the fields. The Hotkey option lets you add a keyboard shortcut to your text by prepending an ampersand (&) to the text you enter in the fields. |
| Default Text | <p>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.</p> <p>Enter the default text that you want to display on all interfaces. The text you enter in this field populates the Default Text fields for all interfaces under the Values section.</p> <p>Note: If you want your interfaces to display different default text, leave this field blank and enter your default text values in each interface row under the Values section.</p> |
| Values | This section displays the interface name and lets you set your default text for each interface. |
| Default Text | Enter the default text you want to display for each interface. |
| Custom Text | Enter 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. 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 Save.

Now that you have saved your message base, you can edit the Custom Text field.

4. To define a value for custom text, enter it in the Custom Text field.

Note: If you define a value for this optional field, it overwrites the value in the Default Text field.

5. Click Save and Close.

The custom message base displays in the tree under the Custom folder you saved it in.

6. To preserve your text value on update, you must lock the text value.

What to do next

Changes to the message bases do not take effect immediately. You must log out of B2C Service and log back in or refresh the customer portal page.

Manage Files with the File Manager

The File Manager provides direct access to files found 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 B2C Service.

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](#).

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 [Profiles](#).






1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **File Manager**.






The File Manager opens on the content pane.

Note: By default, the **mail/cc** 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 [Overview of Message Templates](#).

The Available Interfaces section contains links to the available interfaces for this installation of B2C Service. On the right, you can select a directory from the Switch To drop-down list to navigate to another directory. This section contains all the files found in the selected directory. Using the Upload function, you can upload a supported file to the current directory by browsing for the file.

File Manager

| Field/Button | Descriptions |
|---|--|
| Available Interfaces | Select the interface for viewing or editing files in the File Manager. |
| Switch to | Click this drop-down list 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. |
|  | Click this button to view or edit .gif, .jpg, and .png files. |
|  | Click this button to view or edit .html files. |

| Field/Button | Descriptions |
|--|--|
|  | 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 Download a File . |
|  Copy | Click this button to copy or move the file. See Copy or Move a File . 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 Restore a File from the Backup or Default Directory . |
|  Delete | Click this button to delete a file. Only copied, moved, and uploaded files can be deleted. See Delete a File . |
| Upload | Enter the path and name of the file you want to upload to the server in this text box. See Upload a File . |
| Browse | Click this button to browse for the file you want to upload. |
| Go | Click this button to upload the file to the current directory. A file must be specified in the Upload field. |
| Comment | Enter 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 [Restore a File from the Backup or Default Directory](#).

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 [Download a File](#). For information about making a temporary backup copy of a file using the copy feature, see [Copy or Move a File](#).

Related Topics

- [Manage Files with the File Manager](#)

Download a File

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **File Manager**.
3. Select the directory that contains the file from the **Switch To** drop-down list.
4. Click the **Download** icon 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.
5. Click **Save**.
6. Go to the directory where you want to save the file and enter the name of the file.
7. Click **Save** to download the file to the selected directory on your workstation.

Related Topics

- [Manage Files with the File Manager](#)

Upload a File

You can 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.

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.

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](#).

1. Select the directory that contains the file from the **Switch To** drop-down list.
2. Do one of the following:
 - Enter the full path of the file you want to upload in the **Upload** field.
 - Click **Browse** to open the **Choose File** window where you can search your local and network file systems for the file. Select the file and click **Open**.

The file path and name populates the Upload text box.

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 [Copy or Move a File](#).

3. Click **Go** to upload the file to the current directory.

Results:

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.

Related Topics

- [Manage Files with the File Manager](#)

View a File

You can view a file to help you identify the file purpose or to help you troubleshoot issues.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **File Manager**.
The File Manager opens on the content pane.
3. Select the directory that contains the file from the **Switch To** drop-down list.
4. Click the **View/Edit** icon to the left of the file you want to view.
The contents of the file display on the content pane.
5. Click **Cancel** 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.

Related Topics

- [Manage Files with the File Manager](#)

Edit a File

The File Manager lets you edit files on the hosting server.

1. From the File Manager, click the name of the file you want to edit or click the **View/Edit** icon to the left of the file.
2. Edit the file as necessary.
3. Enter a brief comment in the **Comment** field to help you track the editing history. For information about viewing comments, see [Log File Management](#).
4. Click **Save**.

Results:

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.

Related Topics

- [Manage Files with the File Manager](#)

Copy or Move a File

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.

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

2. Expand **Site Configuration**, and then double-click **File Manager**.
The File Manager opens on the content pane.
3. Select the directory that contains the file from the **Switch To** drop-down list.
4. Click the **Copy** icon in the Action column of the file you want to copy or move.
5. To move the copy of the file to the backup directory, select it using the directory drop-down list in the current directory.
6. To change the resulting file name from the default copy_<filename>, enter the new name in the text box to the right of the directory drop-down list.
7. Click **Save** to copy or move the file to the specified directory and file name.
8. Enter a brief comment in the **Comment** field to help you track the editing history. For information about viewing the editing history, see [Log File Management](#).
9. To create additional copies of the same file, repeat steps 3 through 8.
10. Click **Cancel** to return to the directory with the copied file.

Related Topics

- [Manage Files with the File Manager](#)

Restore a File from the Backup or Default Directory

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **File Manager**.
The File Manager opens on the content pane.
3. Select the directory that contains the file you want to restore from the **Switch To** drop-down list.
4. Click the **Restore** icon 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.
5. Click **OK**.
If both backup and default files exist, you are prompted to choose either the backup or default file.
6. To restore from the default file, select **Default** and click **Commit** to return to the directory list of files.
7. To restore from the backup file, select **Backup** and click **Commit** to return to the list of files.

Related Topics

- [Manage Files with the File Manager](#)

Delete a File

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 update. 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **File Manager**.
The File Manager opens on the content pane.
3. Select the directory that contains the file you want to delete from the **Switch To** drop-down list.
4. Click the **Delete** icon in the Action column of the file you want to delete.
A warning message asks you to continue or cancel the action.
5. Click **OK** to delete the file.

Related Topics

- [Manage Files with the File Manager](#)

File Manager Directories

The File Manager gives you access to the directories described here along with access to the backup and default directories.

- Mail files—The PHP files in the **ma/cc**i 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 [Overview of 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 B2C Service functionality. You can upload and download CSS files to the customer portal assets folder through WebDAV. See [Overview of WebDAV](#).
- Custom scripts—This directory is used to store legacy files for any customization work done on your site. When naming files, use only legal Linux file names. File names cannot have URL encoded characters.
- Outreach and Feedback files—Using the default files in the **ma/cc**i 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.

Files in the ma/cc

i Directory

| File | Description |
|------------|---|
| bottom.php | Used to add page elements to the bottom and right of HTML pages that have been generated by PHP scripts. |
| head.php | Used to link to a cascading style sheet to add head elements to the HTML pages that have been generated by the PHP scripts. |

| File | Description |
|---------|--|
| top.php | Used to add page elements to the top and left of HTML pages that have been generated by PHP scripts. |

- Image files—This directory has been deprecated and is not used by standard B2C Service functionality. You can upload and download image files to the customer portal assets folder through WebDAV. See the cross-references listed under CSS files above.
- 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* and *Wordlist Files* for more details.
- 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. See *Asian Language Dictionaries* for more information.
- 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. Enter 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 Features*.
- 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. See *Log File Management* for more information.

Wordlist Files

The files in this directory let you customize the words used during keyword indexing, text searching, and SmartSense 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 be run by Oracle Cloud Operations before your changes become active. To schedule this, *Submit a Service Request*.

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. |

| File | Description |
|-----------------------|---|
| | <p>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:</p> <p>GPS, GLOBAL POSITIONING SYSTEM, NAVIGATIONAL SYSTEM</p> <p>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.”</p> |
| do_not_suggest.txt | <p>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.</p> |
| exclude_answers.txt | <p>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 entered on separate lines.</p> <p>Note: Words in this file are also excluded when using SmartAssistant to search for an answer.</p> |
| exclude_incidents.txt | <p>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 entered on separate lines.</p> <p>Note: SmartAssistant does not exclude words from exclude_incidents.txt when searching incidents on the administration interface or the customer portal.</p> |
| exclude_responses.txt | <p>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 entered on separate lines.</p> |
| smartsense.txt | <p>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 SmartSense ratings of +3 to -3. The word and its value must be separated by a tab and entries must be entered 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.</p> |
| thesaurus.txt | <p>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:</p> <p>ABIDE, BIDE, STAY, ENDURE, STOMACH, BEAR, STAND, TOLERATE, BROOK, SUFFER</p> <p>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.</p> |

| File | Description |
|------|--|
| | Note: The synonyms can be multi-word phrases, but the first term in the line must be a single word. |

Related Topics

- [SmartSense](#)

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 AABBBCC ORGANIZATION 2,2,2 indicates that AABBBCC 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

Note: Oracle Cloud Operations must run the Keywordindexer utility before your changes to the word list files are active. To schedule this, *Submit a Service Request*.

Log File Management

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.

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.

Log File

| 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 | Enter your email address to be used as the From address when the log file is sent. |
| Send the Log File To | Enter 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 option to download the log file in CSV format. |
| HTML | Select this option to download the log file in HTML format. |
| Download Log File | Click this button to download the log file to your workstation. |

Email the Log File

You can send the log file through email.

1. Enter your email address in the **Your Email Address** field.
This will be the From address.
2. Enter the recipient's email address in the **Send the Log File To** field.
3. Click **Email Log File**.

Download the Log File

You can download the log file to your workstation in either CSV (comma-separated value), comma-delimited, or HTML format.

1. Select the format for downloading the file (Comma Delimited, CSV, or HTML).
2. Click **Download Log File**.
3. Select the location where you want the file saved and click **Save**.

Log File Errors and Information

Log files let you view errors and other information generated by the CGI and PHP scripts, the Techmail and Agedatabase utilities, and B2C Service products.

The log files can be helpful in troubleshooting issues with your B2C Service application. These 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 pages performed by spiders or robots. See [Overview of Finding Content on the Customer Portal](#).
- Rule log—This log describes the business rules that have fired against a specified record. See [Verify a Rule Using the Rule Log](#).

Open Log Files

Open log files to view information in the error, info, and security logs.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Logs**.
The content pane displays the log viewer.
3. Click **Error Log**, **Info Log**, or **Security Log** on the ribbon to open the corresponding log file.
4. Select options from the Log File drop-down lists.

Log File Drop-Down Lists

| Field | Description |
|-------------|---|
| Interface | Click this drop-down list and select the interface of the logs you want to view. |
| Application | Click this drop-down list 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. |

| Field | Description |
|------------|---|
| | <ul style="list-style-type: none"> o All o Agedatabase o Bulkdel o Certool o Dataminer o DBAudit o DBStatus o DBUpdate o DQA o Kexport o Keyword Indexer o Kimport o Lang CVT o Mailer o Messagebase Compiler o Oracle Service Cloud o Oracle Service Cloud PHP o Oracle Service Cloud Upgrade o RD o Reportgen o Sawmill o Techmail o Unknown o WLTool <p>When you open the error, info, or security logs, all messages in the log display and are grouped together by application. You can click the header for each group to expand or collapse the messages listed in the group.</p> |
| Error type | <p>Click this drop-down list and select the type of messages that you want to view. The following options are available.</p> <ul style="list-style-type: none"> o All—Select this option to see all types of messages. This is selected by default when you open the log file. o Campaign—Select this option to see messages generated by campaigns. o Configuration—Select this option to see messages generated when using the Configuration Settings editor. o Internal—Select this option to see internal server errors. o POP3 Protocol—Select this option to see messages returned by Techmail when it is trying to retrieve email from the Service or Outreach mailboxes. o Rules—Select this option to see messages generated when rules are being processed. |

| Field | Description |
|-------|---|
| | <ul style="list-style-type: none"> ○ 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 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.

Note: 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 updating from an earlier version. Two standard reports, Compatibility Exceptions and Deprecations, drive the data that display 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.
- 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.

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.

View Service Update Notifications

You can choose to view all service updates data or slice the data to view only the application areas you want to see.

Before you start

Before you can view service updates data, you must add the Service Update Notifications component to the configuration list for the Configuration button. See *Create a Navigation Set for the Administrator*.

Here's what to do

1. Click **Configuration** 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 **Deprecated Items** on the ribbon.

- 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 B2C Service 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.

Service Update Notification Ribbon

| 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 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. |
| 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. Compatibility Exceptions 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. |
| 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 defaults. |
| Search | Click this button to open the report Search window to select criteria for variables and runtime selectable filters. See How You Search in Reports . |
| Refresh | Click this button to reload the data shown using the current search criteria of the report. |
| Reset | Click this button to reload the data shown using the report default search criteria. |
| Find | Click this button to open the Find window to enter text, numeric values, or special characters you want to find in the report output. Report cells that contain the search value are highlighted on the report. See Find Content in a Report . |
| 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. See Enable Auto Filters . |

| Group/Button | Description |
|------------------|---|
| Sort | Click this button to open the Sort window and select which output columns to sort by and the sort method. See Change Sort Order Using the Ribbon and Change Sort Order Using Column Headers . |
| Rollups | Click this button to select rollup options and open the Rollups window. See Define Rollups . |
| 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 How You Slice 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 Export Report and Dashboard Data . 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 Forward a Report . 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 Reset Display and Data Settings . |
| 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 Overview of the Analytics Explorers . |

Compatibility Exceptions

When changes to this version of B2C Service 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 displays by clicking the Compatibility Exceptions button on the ribbon. This 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 B2C Service affected by the service update.
- Status—Contains a drop-down list that can be edited inline to designate how a service update has been addressed. Status options include New, Not Applicable, and User Remediated.
- 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

The Deprecated Items 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.

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 B2C Service functionality or to third-party components used within the B2C Service 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 Deprecated Items report displays by clicking the Deprecated Items button on the ribbon. The following report columns display on the top of the content pane.

- **Application Area**—Area of B2C Service affected by the service update.
- **Status**—Contains a drop-down list that can be edited inline to designate how a service update has been addressed. Status options include New, Not Applicable, and User Remediated.
- **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.

Edit Status Inline

You can designate how a service update has been addressed by editing the status inline.

1. Do one of the following:
 - Select the row in the report you want to edit.
 - 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. Do one of the following:
 - Hover over the status until the field is highlighted in blue, and then click to activate the drop-down list.
 - Click **Edit** on the ribbon to apply edits to multiple rows.

3. Select one of the following options from the drop-down menu.
 - o New—Designates that you still need to address the service update. New is the default option.
 - o 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.
 - o User Remediated—Designates that you have completed the steps to address the issue. For example, you have read the compatibility exception, understand the suggested workaround, and have remediated the issue.
4. Do one of the following:
 - o To apply the edit inline, press Enter or click outside the column you are editing.
 - o Click **OK** to apply edits to multiple rows.

Change 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Interfaces**.
3. Click the interface name you want to edit.
4. Enter the new interface name in the **Display Name** text box.
5. Click **Save**.

Add or Edit a Currency

By adding currencies, you can define the currency associated with each country or province in your knowledge base.

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. After 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.

Note: You can add and edit currencies, but you cannot delete them.

1. Click **Configuration** on the navigation pane.
2. Expand **Internationalization**, and then double-click **Currencies/Exchange Rates**.
The content pane displays the Currencies and Exchange Rates trees.
3. To edit a currency, select the currency in the tree and go to step 7.

4. To add a currency, click **New** and select **Currency**.

The Installed Cultures list opens.

When you select a culture, the Currency editor automatically populates with the associated culture information contained in the related region on your workstation. After 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 or contact your organization's information technology team and have the associated language pack installed on your workstation.

5. To select a standard culture, double-click the culture that matches the currency.

The Currency editor opens.

6. 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.

7. Enter field information.

Currency Editor

| Field | Description |
|--------------------------|--|
| Names and Symbols | |
| Label | Enter the name of the currency as it appears in the Currencies tree. |
| English Name | Enter the English name of the currency. |
| Native Name | Enter the name of the currency as it appears in the associated country. |
| Symbol | Enter the symbol that represents the currency you are adding. For example, the symbol for the United States dollar is \$. You may need to use your operating system character-mapping feature to determine the keystrokes for entering symbols that do not appear on your keyboard. |
| Code | Enter 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 list 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). |

| Field | Description |
|--------------------------|---|
| Decimal (Dec.) Separator | Enter 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 list to select a digit-grouping format. |
| Group Separator | Enter 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 currency. |
| Negative Format | Select a format to represent negative currency. |
| Examples | |
| Positive Example | Enter the number you want used in the positive currency example. |
| Negative Example | Enter the number you want used in the negative currency example. |
| Interface Visibility | |
| Label | Enter 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. |

8. Click **Save**.

Add or Edit Exchange Rates

After you add currencies, you can add and edit exchange rates.

Before you start

Currencies must be created before adding exchange rates. See [Add or Edit a Currency](#).

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. Keeping currencies and the associated exchange rates up-to-date helps your sales representatives provide the most accurate quotes for customers.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Internationalization**, and then double-click **Currencies/Exchange Rates**.
The content pane displays the Currencies and Exchange Rates trees.

3. Do one of the following:
 - o To add exchange rates, click **New** and select **Exchange Rate**.
 - o To edit exchange rates, click the date in the tree.

The Exchange Rate editor opens.

4. Enter field information.

Exchange Rates Editor

| Field | Description |
|------------|--|
| Start Date | The Start Date becomes the name of the exchange rate in the tree. Enter the date that the exchange rates take effect or click the drop-down calendar and select a start date. The start date can be a past date but not a future date. |
| Rates | Enter 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. |

5. Click **Save**.

As shown in this image, 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.

| 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 B2C Service 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 runtime 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.

How You Configure 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 B2C Service returns 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 B2C Service 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 found in **RightNow Common/Screen Pop/General**.

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.

Enter screen pop function parameters and associated values.

Screen Pop Function Parameters

| 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 displays when the console is popped. 1—Incident 2—Answer 4—Opportunity 5—Contact 6—Organization 7—Task 17—Campaign (requires flowID=<int>) |
| id | Specifies the ID of the record (when used with t=editor) or the report ac_id (when used with t=report) to open. <p>Note: When opening an editor, a new record also opens if no ID is supplied.</p> |

| Parameter | Description |
|-----------------------|---|
| <runtime filter name> | This parameter is used with the t=report parameter to specify the value of a runtime-selectable filter in the specified report. This parameter should be the filter name of a runtime filter you want to use to select data. The value should be the string you want to search on. For example, <code>contacts.last_name=Jones</code> or <code>opportunities.assign_acct_id=12</code> . |

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 runtime filter accounts.display_name with the value Abby Parker.

```
http://localhost:101/screenpop?t=report&id=55&accounts.display_name=Abby%20Parker
```

Related Topics

- [Add or Edit a Staff Account](#)

Email Management

Overview of 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 B2C Service, 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.

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 and general Service mailboxes are used only with the Service application, while Outreach mailboxes are used with either Outreach or Feedback.

If you use a general Service mailbox supplied by Microsoft, such as Outlook or Office 365, you need to configure your mailbox settings in B2C Service to use OAuth authentication. This is in keeping with Microsoft's end of service support for Exchange mailboxes. When you implement this email authentication correctly, you can continue to send emails to contact centers using Microsoft mailboxes without any mail delivery problems. See [Configure OAuth Authentication Settings](#).

How Email Works in Service

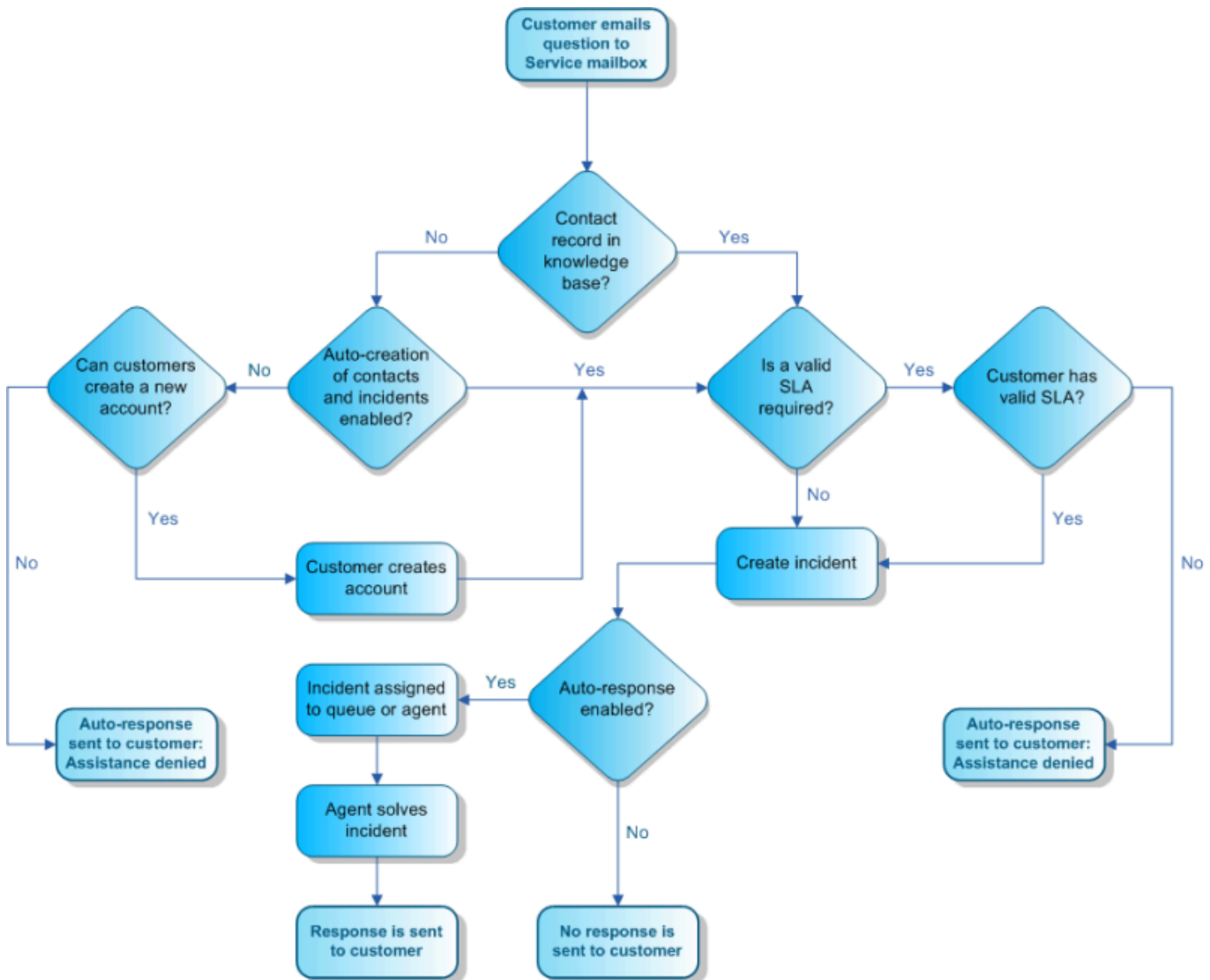
Service provides a powerful email management system for handling email communication between your customers and your customer service team.

Note: B2C Service includes a component known as “Service” where you can customize email management functions for Service mailboxes.

The system evaluates each incoming email to ensure it meets your criteria for customer service, and then manages all back-and-forth email replies between the agent and contact until the incident is resolved. Along the way, B2C Service can automate key service functions to help your team deliver timely, world-class service.

Tip: 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 about working with the Message Templates editor, see [Overview of Message Templates](#).

This flowchart shows 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 mail header in the message. If no match is found, Techmail looks for the address in the mail header From field. If no match is found in the From field, Techmail looks in the Sender 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.

By default, the incoming email processing order comes from the mail header fields in this order: Reply To, From, Sender. However, if the business policies of your organization restrict use of the Reply To mail header, you can

change the processing order to use the From mail header by setting the EGW_CONT_ASSOC configuration setting to 1 in the Configuration Settings editor. See [Edit a Configuration Setting](#).

Also 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. See [Email Address Sharing](#).

2. Contact validity is verified—After 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. See [Overview of Service Level Agreements \(SLAs\)](#).
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 B2C Service 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 [Overview of Business Rules](#).
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. Techmail then applies the update to the incident, extending the conversation until resolved. See [Email Reply Processing](#) and [Cross-Site Email Management](#).

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, see [Advanced Configuration for Email Handling](#).

Related Topics

- [Best Practices for Sending Email](#)

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. There are several ways that the Techmail utility can manage this scenario.

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 display, for example, each line begins with a vertical bar or an indent. The Techmail utility 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. See [Advanced Configuration for Email Handling](#).

If you enable the EGW_REPLY_BETWEEN_ENABLED configuration setting 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 Incoming Email settings of the mailbox, 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 [How You Customize 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.

Related Topics

- [How Email Works in Service](#)

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_SENDEMIL_SINGLE_ADDRESS (**Common/General/Outgoing Email**).

After enabling the configuration setting, 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. See [Advanced Configuration for Email Handling](#). 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 [How You Send Incident 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. These are examples that use 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.

Related Topics

- [How Email Works in Service](#)

Cross-Site Email Management

Service automatically handles email between separate B2C Service 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.

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. See [Overview of Incidents](#).

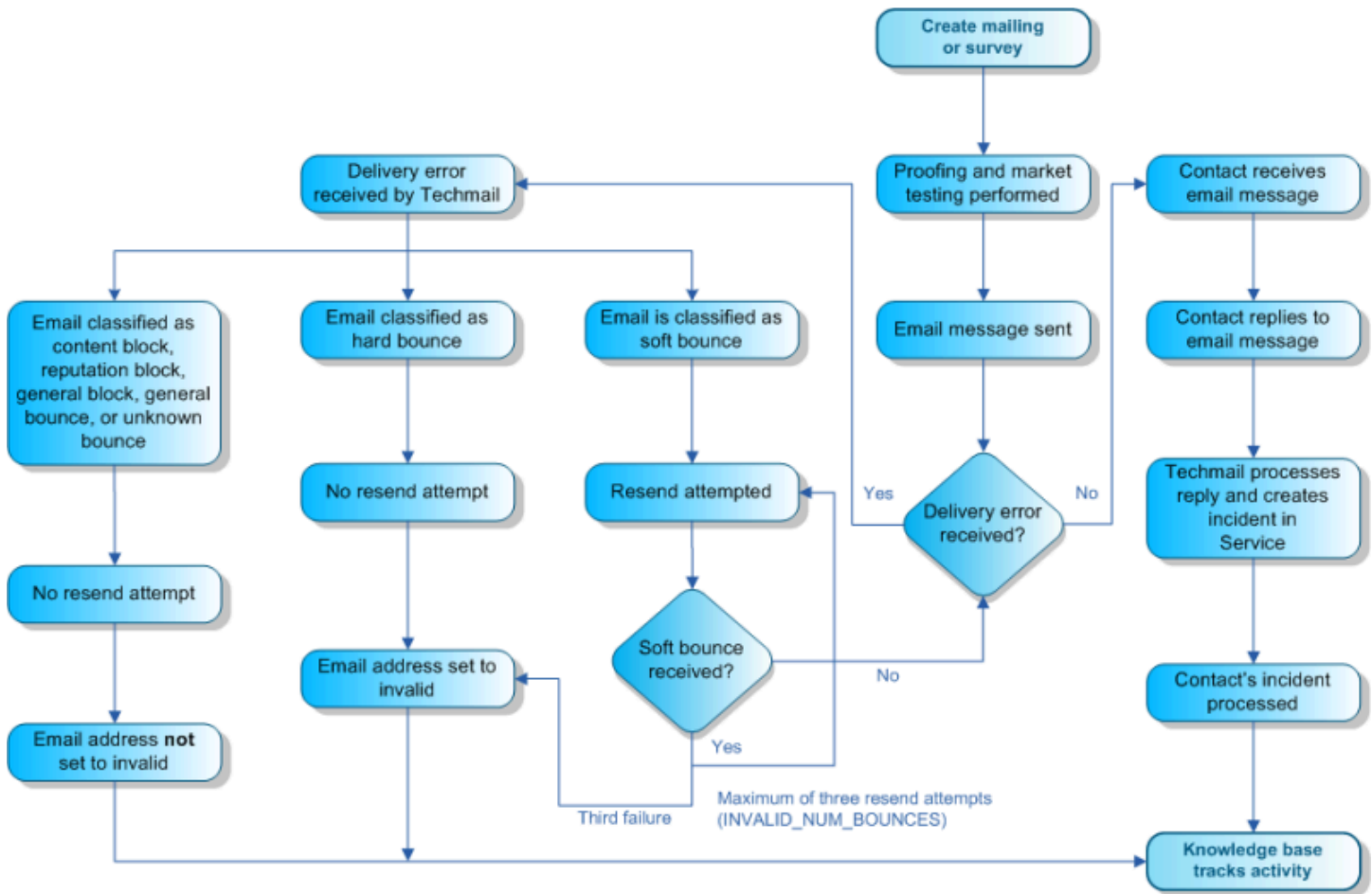
Related Topics

- [How Email Works in Service](#)

How Email Works in Outreach and Feedback

Outreach and Feedback provides an efficient system for handling all email communication related to mailings and surveys, including proofs, market tests, and delivery error notifications.

This flowchart shows the general sequence of email communication supported by this process.



As the flowchart illustrates, the process of sending mailings and surveys includes a number of points where outgoing and incoming email communication can occur.

- Message proofing—After 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—After 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 *Edit an Oracle-Managed Service Mailbox*. 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 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. Mailbox settings are accessed by clicking **Configuration > Site Configuration > Mailboxes** on the navigation pane. See [Edit an Oracle-Managed Service Mailbox](#).

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. See [Advanced Configuration for Email Handling](#) for descriptions of these additional options.

How Mailboxes Work

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 B2C Service until at least one mailbox is configured and enabled for the interface you are using.

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 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 authentication methods, using basic password or OAuth authentication. Other methods filter mail messages, by applying discard filters and restricting file attachments by size and file type, and forward rejected messages to another email address.

Note: 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. See [Email Security Features](#).

Note: To enable processing of bounce errors in Outreach or Feedback, the Envelope From/Bounce Address in your Outreach mailbox 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. See [Email Bounce Handling](#).

Related Topics

- [Best Practices for Using Branded Email Domains](#)

Edit an Oracle-Managed Service Mailbox

We recommend using Oracle-managed Service mailboxes because of several inherent advantages, including easy setup, faster and more reliable email processing, and reliability.

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. For more information on the order in which Oracle handles your incoming email, see [Answer ID 12282](#).

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 from the B2C Service Configuration Assistant. For information on accessing the Configuration Assistant, see [Answer ID 6354](#).

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Mailboxes**. The Mailboxes tree displays on the content pane with the primary interface expanded to display your existing mailboxes.
 - a. To edit Oracle-managed Service mailboxes on additional interfaces, expand the additional interface for which you want to edit a mailbox.

3. Select an Oracle-managed Service mailbox in the tree.

The outgoing email settings display on the editor. Oracle-managed Service mailboxes display only if one, or more, has been added to your site. Oracle-managed Service mailboxes can be added from the B2C Service Configuration Assistant.

4. Enter the following field information to enable mailbox functionality.

Note: For Oracle-managed Service mailboxes, the Incoming Email Enable field is read-only. However, this field can be edited from the B2C Service Configuration Assistant.

Mailboxes Editor

| Field/Button | Description |
|-----------------------|---|
| Name | Enter the mailbox name in this field. 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. |

| Field/Button | Description |
|--------------|---|
| | For Oracle-managed Service mailboxes, this check box has been selected for you and is read-only. |
| Default | <p>Select this check box to set this mailbox as the default mailbox for the interface. 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 Add Incident Information on the Details Tab.</p> <p>Note: 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.</p> |

5. Enter the following field information to configure outgoing email for this mailbox.

Outgoing Email Settings

| Field | Description |
|--------------------------------|--|
| Envelope From/Bounce Address | <p>Enter 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.</p> <p>Tip: 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.nmk.com."</p> |
| Friendly From/ Branded Address | <p>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, enter the address the way you want it to appear in this field. If you define an email address in this field, it displays as the From address in the outgoing email.</p> |
| Reply-To Address | <p>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.</p> <p>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.</p> |
| Display Name | <p>Enter the name you want to appear on outgoing messages as the sender. For example, Global Wireless Customer Service.</p> |

6. To enter incoming email information, click **Incoming Email** on the ribbon.

7. Enter the following field information to configure incoming email for this mailbox.

Note: For Oracle-managed Service mailboxes, the POP Server, POP Account, and Password fields are read-only. However, this field can be edited from the B2C Service Configuration Assistant. For information on accessing the Configuration Assistant, see [Answer ID 6354](#).

Incoming Email Settings

| Field | Description |
|-----------------------------|---|
| POP Server | <p>Enter the address or IP address of the POP server. For example, the POP server for jsmith@mail.custhelp.com would be "mail.custhelp.com."</p> <p>For Oracle-managed Service mailboxes, this field has been set up for you and is read-only.</p> <p>Note: To ensure that your bounced emails and replies process correctly, you must use the POP server configuration provided when your account was set up.</p> |
| POP Account | <p>Enter the account name of the mailbox. For example, the account name for jsmith@mail.custhelp.com would be "jsmith."</p> <p>For Oracle-managed Service mailboxes, this field has been set up for you and is read-only.</p> <p>Note: To ensure that your bounced emails and replies process correctly, you must use the POP account configuration provided when your account was set up.</p> |
| Password | <p>Enter the password of the mailbox.</p> <p>For Oracle-managed Service mailboxes, this field has been set up for you and is read-only.</p> |
| Send Rejected Messages To | <p>Enter 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.</p> |
| Discard Automatic Responses | <p>Select an option from this drop-down list to determine the level of automatic response filtering. You can define the levels of automatic response filtering by setting values for the following configuration settings:</p> <ul style="list-style-type: none"> ○ EGW_AR_CONS_BODY_FLTR ○ EGW_AR_MODR_BODY_FLTR ○ EGW_AR_AGGR_BODY_FLTR <p>Default values are blank. See How You Customize Configuration Settings.</p> |
| Off | <p>Select this option to turn off automatic response filtering. All automatic responses received by the mailbox are turned into incidents.</p> |
| Conservative | <p>Select this option to activate conservative response filtering. The value of "conservative" is defined by the value of the configuration setting EGW_AR_CONS_BODY_FLTR. Default is blank.</p> |
| Moderate | <p>Select this option to activate moderate response filtering. The value of "moderate" is defined by the value of the configuration setting EGW_AR_MODR_BODY_FLTR. Default is blank.</p> |
| Aggressive | <p>Select this option to activate aggressive response filtering.</p> |

| Field | Description |
|---------------------------|--|
| | The value of “aggressive” is defined by the value of the configuration setting EGW_AR_AGGR_BODY_FLTR. Default is blank. |
| Message Pull Limit | Enter 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. 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. |
| Max Attachment Size | Enter the maximum size, in number of bytes, allowed for file attachments. The default maximum size is 5,000,000 bytes (5MB). Tip: 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 | Enter 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 default value is 250,000. |
| Force Reply Between Lines | Select this check box to require that customers enter 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. <ul style="list-style-type: none"> ○ 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. See 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. This option is not available for Outreach mailboxes. Note: The EGW_SECURE_UPDATE_MODE configuration setting affects the handling of returned messages. |
| Discard Filters | Select from any of the following filters to discard all incoming email with the specified characteristics. CAUTION: To prevent unintended behavior, do not add hard returns to create blank lines within any of the discard filters. |
| Addresses | Enter the email addresses you do not want to receive email from. Separate entries in the list with commas. Do not add hard returns within this filter. 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, enter: |

| Field | Description |
|------------|---|
| | jsmith@example.com,*@example.org |
| Headers | <p>Click this tab and enter any strings found in any header that identifies email you want to discard. Enter each entry on a separate line using up to 4,000 characters. Do not add hard returns within this filter. 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, enter: [124.456.789.321]</p> <p>X-BulkPrecedence:</p> |
| Subject | <p>Click this tab and enter any text found in an email subject line that identifies email you want to discard. Enter each entry on a separate line. Do not add hard returns within this filter. The text comparison is not case sensitive. For example, to discard all email with the following text in the subject line, enter: Mortgage rates</p> <p>Marketing solution</p> <p>Bargain alert</p> |
| Body | <p>Click this tab and enter any text found in an email body that identifies email you want to discard. Enter each entry on a separate line using up to 4,000 characters. Do not add hard returns within this filter. The text comparison is not case sensitive. For example, to discard all email with the following text in the body, enter: Be your own boss</p> <p>If you do not wish to receive further mailings</p> <p>To unsubscribe</p> |
| MIME Type | <p>Click this tab and enter 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. Do not add hard returns within this filter. 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, enter: video/mpeg, image/gif, audio/*</p> <p>This filter blocks only matching file attachments. The remaining contents of the email continue to process.</p> |
| File Types | <p>Click this tab and enter 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. Do not add hard returns within this filter. 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, enter: *.exe, *.scr, worm.vbs</p> <p>This filter blocks only matching file attachments. The remaining contents of the email continue to process.</p> |

8. To enter security settings, click **Security** on the ribbon and see *Email Security Features*.
9. To view the mailbox configuration audit log, click **Audit Log** on the ribbon.
10. Click **Save**.

Add or Edit a General Service Mailbox

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Mailboxes**. The Mailboxes tree displays on the content pane with the primary interface expanded to display any existing mailboxes.
 - a. To add or edit Service mailboxes on additional interfaces, expand the additional interface for which you want to add or edit a mailbox.
3. Do one of the following:
 - o Click **New** on the ribbon and select **New Service Mailbox**.
 - o To edit a mailbox, select it in the tree.

The outgoing email settings display on the editor.

Note: General Service mailboxes are not managed by Oracle.

4. Enter field information described in the *Mailboxes Editor* table to enable mailbox functionality.
5. To configure outgoing email for this mailbox, enter field information described in the *Outgoing Email Settings* table.
6. To configure incoming email for this mailbox, click **Incoming Email** on the ribbon and enter field information described in the *Incoming Email Settings* table.
7. To enter security settings, click **Security** on the ribbon and see *Email Security Features*.
8. To view the mailbox configuration audit log, click **Audit Log** on the ribbon.
9. Click **Save**.

Add or Edit an Outreach Mailbox

If you use Outreach or Feedback on your site, you also need to add an Outreach mailbox.

Note: 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Mailboxes**. The Mailboxes tree displays on the content pane with the primary interface expanded to display any existing mailboxes.
 - a. To add or edit Outreach mailboxes on additional interfaces, expand the additional interface for which you want to add or edit a mailbox.
3. Do one of the following:
 - o Click **New** on the ribbon and select **New Outreach Mailbox**.
 - o To edit a mailbox, select it in the tree.

The outgoing email settings display on the editor.

4. Enter field information described in the *Mailboxes Editor* table to enable mailbox functionality.
5. To configure outgoing email for this mailbox, enter field information described in the *Outgoing Email Settings* table.

6. To configure incoming email for this mailbox, click **Incoming Email** on the ribbon and enter field information described in the *Incoming Email Settings* table.
7. To enter security settings, click **Security** on the ribbon and see *Email Security Features*.
8. To view the mailbox configuration audit log, click **Audit Log** on the ribbon.
9. Click **Save**.

How You Designate a Default Mailbox

The default mailbox is the mailbox that is used to send Service incident responses. You must designate one default mailbox for Service—either an Oracle-managed Service mailbox or a general Service mailbox.

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 *Add Incident Information on the Details Tab*.

Note: 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 Outgoing Email page of the editor. After 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.

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.

Configure an Agent Browser UI Mailbox Editor

You can configure your Service Console to display an Agent Browser UI mailbox editor, allowing you to use OAuth authentication.

You can create a custom configuration setting to configure an Agent Browser UI mailbox editor in the Service Console.

If you use a general Service mailbox supplied by Microsoft, such as Outlook or Office 365, you need to configure your mailbox settings in B2C Service to use OAuth authentication. This is in keeping with Microsoft's end of service support for Exchange mailboxes. When you implement this email authentication correctly, you can continue to send emails to contact centers using Microsoft mailboxes without any mail delivery problems. See *Configure OAuth Authentication Settings*.

1. From the Service Console, click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Configuration Settings**.
3. Click **Search**.
4. Click **New** and select **Yes/No** on the ribbon.

A new configuration setting opens on the content pane of the Configuration Settings editor. By default, the custom configuration setting name starts with CUSTOM_CFG_ and is automatically assigned to a Custom folder in the folder hierarchy.

5. To configure an Agent Browser UI mailbox editor in the Service Console, enter `CUSTOM_CFG_BUI_MB_ENABLED` in the **Key** field.
 - a. Click the **Type** drop-down list and select **Site**. Site is the default and classifies the custom configuration setting is shared across all interfaces. Interface classifies the custom configuration setting as interface-specific only.
 - b. The Required drop-down list is read-only.
 - c. Custom is the default folder. Leave this setting as it is.
 - d. Click the **Default** drop-down list and select the default setting.
 - e. Click **Save**.

Results:

You must log out of the Service Console and log back in to see your changes.

Email Security Features

B2C Service 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.

Note: If you use a general Service mailbox supplied by Microsoft, such as Outlook or Office 365, you need to configure your mailbox settings in B2C Service to use OAuth authentication. This is in keeping with Microsoft's end of service support for Exchange mailboxes. When you implement this email authentication correctly, you can continue to send emails to contact centers using Microsoft mailboxes without any mail delivery problems. See [Configure OAuth Authentication Settings](#).

- 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, B2C Service 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 B2C Service application and we realize that your organization may have unique security needs. For an in-depth discussion about security practices in B2C Service and how to protect your data, see [Overview of Oracle B2C Service Security and Compliance](#).

Configure SSL Security Settings

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.

SSL settings let you specify the method used to establish the secure connection and set conditions on how strictly Techmail validates the server SSL certificate before connecting.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Mailboxes**.
3. Click the mailbox you want to edit in the tree.
4. Click **Security** on the ribbon.
5. Enter field information to select the SSL method and set certificate verification requirements.

SSL Security Settings

| Field | Description |
|--|--|
| SSL Method | Click this drop-down list 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. |
| Accept Untrusted SSL Certificates | Select this check box to bypass verification that the mail server 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 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 host name is the same host specified in the SSL certificate. |

6. Click **Save**.

How SMIME Security Works

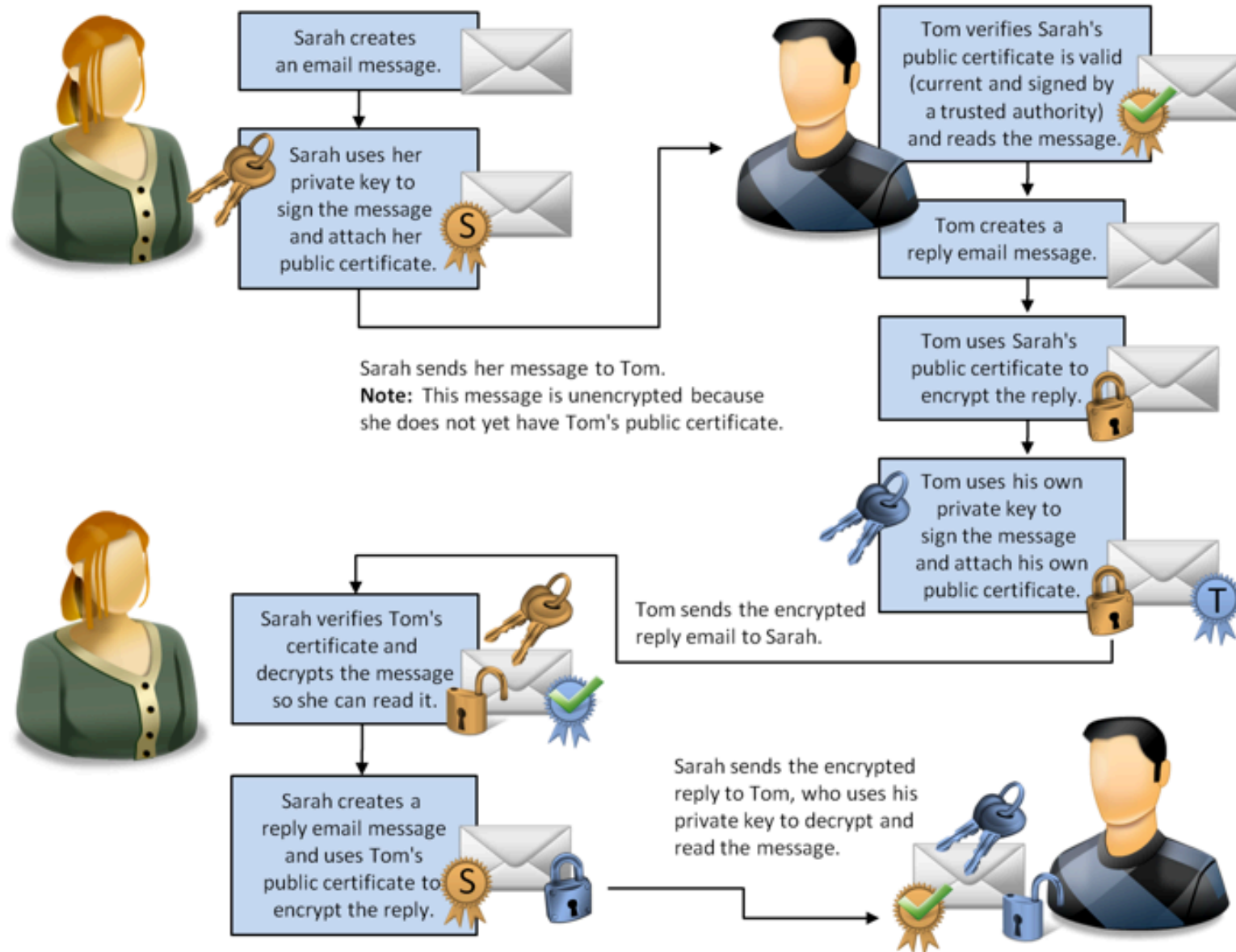
In addition to SSL encryption, Oracle-managed Service mailboxes and general Service mailboxes support S/MIME, an industry standard for ensuring the security of message content through the use of electronic signatures, encryption, or both.

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.

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 in the Report Behavior drop-down list for the Contacts relationship item control on the Workspace editor Design tab. See [Overview of Workspace and Script Elements](#).

This image shows 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 private key for the certificate.

Note: Agents responding to a signed message can send a non-encrypted response by selecting Do Not Encrypt from the incident response options. See [Sign and Encrypt an Incident Response](#).

Service 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 the EGW_SAVE_EMAIL_HEADERS configuration setting 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 key to decrypt those replies and process the message contents normally.

Configure SMIME Security Settings

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Mailboxes**.
3. Click the mailbox you want to edit in the tree.
4. Click **Security** on the ribbon.
5. Enter field information to identify the mailbox’s public certificate/private key file and set certificate import requirements.

S/MIME Security Settings

| Field | Description |
|--|---|
| Mailbox Personal Certificate and Key | <p>Click the Browse icon to find 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 Edit an Oracle-Managed Service Mailbox. When prompted, enter the original password, this is the password used to encrypt the file. You must also enter the new password, the password the private key is to be encrypted with in the database.</p> <p>Note: The file is not imported until you save all mailbox settings.</p> |
| Import Untrusted Certificates | <p>Select this check box to bypass verification that the mailbox certificate file will to be imported (set in the mailbox personal certificate and key field) or a contact certificate extracted from a signed S/MIME email is signed by a trusted certification authority.</p> <p>Changing this setting does not affect previously imported and stored certificates.</p> |
| Import Expired or Not Yet Valid Certificates | <p>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) 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.</p> <p>Changing this setting does not affect previously imported and stored certificates.</p> |

| Field | Description |
|--|--|
| 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. |
| Ignore certificate integrity sign errors | Select this check box to allow incidents to be created and updated even if an email fails the signature check. |

6. Click **Save**.

Certificate Validation Options

To supplement the SSL and S/MIME email security settings, B2C Service provides you with the resources for managing the validation and revocation of certificates. These resources are accessed using the File Manager.

- **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, that is, 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.

Related Topics

- [Manage Files with the File Manager](#)

Add or Remove Certification Authorities

Service uses a predefined list of trusted certification authorities for verifying certificates from POP3 servers and S/MIME email senders.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and double-click **File Manager**.
3. Click the **Switch To** drop-down list and select **Additional Root Certificates**.
4. Click **Browse** 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 **Go** to upload the file.
6. To delete a root certificate file, click the **Delete File** icon on the line that contains the file you want to delete.
7. Click **OK** to confirm the deletion.

Add or Remove Certification Revocation Lists

Certification authorities regularly publish certificate revocation lists, which you can use to check the validity of certificates.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration** and double-click **File Manager**.
3. Click the **Switch To** drop-down list and select **Certificate Revocation Lists**.
4. Click **Browse** and select the intermediate certificate file you want to upload.
The file should be in a DER Encoded Binary (.crl) format.
5. Click **Go** to upload the file.
6. To delete a certificate revocation list file, click the **Delete File** icon on the line that contains the file you want to delete.
7. Click **OK** to confirm the deletion.

Add or Remove 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, that is, 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration** and double-click **File Manager**.
3. Click the **Switch To** drop-down list and select **Intermediate Certificates**.
4. Click **Browse** 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 **Go** to upload the file.
6. To delete an intermediate certificate file, click the **Delete File** icon on the line that contains the file you want to delete.
7. Click **OK** to confirm the deletion.

How You Troubleshoot 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, or a contact record in the knowledge base.

The logic that determines which email messages are processed is based on mailbox settings, configuration settings, and the business rules your site uses. 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, click **Configuration > Database > Data Dictionary** on the navigation pane to view the data dictionary.

This table lists the filter types associated with the Techmail Filter Details table as well as the settings and rules that cause a message to be filtered out by Techmail.

Techmail Filter Details Table Filter Types

| 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. |
| 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: <ul style="list-style-type: none"> • 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. 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. No configurable setting is associated with this filter type. |

| Filter Type | Description |
|--------------------------------------|--|
| techmail_filter_reject_disabled | This message was filtered out because the contact record is disabled. No configurable setting is associated with this filter type. |
| techmail_filter_reject_reply | This message was filtered out for the following reasons: <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> EGW_AUTO_CONT_CREATE_MA = Yes (Default = No) EGW_AUTO_CONT_CREATE = Yes (default) Incoming message 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 business rules of the site 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

A bounced e-mail message (or simply bounce) is a message that cannot be delivered to its destination. Usually, Internet Service Providers (ISPs) will return the e-mail to the sender along with some information indicating why the message could not be delivered.

These different kinds of bounces can be grouped depending on whether the fault lies with the sender, the receiver, or somewhere in between. When it handles bounces due to problems with the recipient, it may invalidate the recipient’s e-mail address. This cleans mailing lists and segments by preventing any future mailings from being sent to that recipient, this is an important step in maintaining a good sender reputation. When techmail handles bounces due to problems with the sender or problems in transit, it takes no automatic action. For all bounces, regardless of type, it records as much information as possible for reporting.

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 configuration setting).

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 as invalid. Once a contact's email has been invalidated, the system does not send mailings or surveys to that address.

- **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. When techmail encounters a hard bounce, it immediately invalidates the contact's e-mail address to prevent further mailings from being sent.
- **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.
- **Forced unknown bounce** - An email was returned and the error code is not a recognized bounce code. Typically emails will bounce with a SMTP 500 type error, but on occasion bounces do not have a typical 500 type error.

It is possible to re-validate contacts whose e-mail addresses have been invalidated due to bounce activity. In the contact workspace editor, there are fields named Primary Email Invalid, Alternate Email 1 Invalid, and Alternate Email 2 Invalid. With these fields added to a contact workspace, the contacts' e-mail addresses can be re-validated simply by editing the contact record. These fields are also available for contact multi-edit workspaces. This allows you to re-validate multiple contact e-mail addresses at once. Please note, however, that we strongly recommend submitting an incident to Technical Support and allowing us to assist you in analyzing the need to re-validate large numbers of contacts. Large-scale re-validations can lead to e-mailing large numbers of invalid addresses, which can severely damage your reputation as a sender. Reputation damage, in turn, can lead to ISP blocks and blocklists, which reduces the efficacy of e-mail as a marketing tool, and reduces your ability to reach your customers.

To view mailing bounce statistics, visit the Mailing Delivery Analysis report located at \Public Reports\Outreach\Email Performance. This report shows the number of messages sent, number delivered, a count of each type of bounce that occurred, and percentages for each count. There is one row for each format associated with the mailing, and a bar chart that displays a visual representation of bounce information aggregated over all formats in the mailing.

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 bounce** - 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 bounce** - An email was blocked due to the sender's reputation. This means that the sender has not developed a trusted relationship with the recipient provider.
- **Block bounce** - An email was blocked for a reason not fully specified. The block class generally relates to policies outlined by the recipient mail system.

When techmail encounters this, 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 *Overview of Custom Reports*.

B2C Service 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 *Edit a Configuration Setting*.

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. See *View a Bounced Message*.

Note: Because email technology is constantly evolving, B2C Service 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, for example 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 *Overview of Creating Basic Custom Reports* and *Overview of Business Rules*.

If an agent attempts to send an incident response to a contact with at least one valid primary or alternate email address, B2C Service 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, B2C Service 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 you (**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 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 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.
- B2C Service 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.

Note: 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.

This table describes the configuration settings you can use to configure the Techmail email loop prevention function. See [Edit a Configuration Setting](#).

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. |

| 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. See [Add a Rule](#).
- 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 [How Mailboxes Work](#) and [Edit an Oracle-Managed Service Mailbox](#).

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 default behavior of the system.

The settings described in the procedures found in this section 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 [How the Configuration Settings Editor Works](#).

Edit Common Outgoing Email Configuration Settings

You can configure the resend limit, custom headers, single-send email response logic, and the number of days before purging the message field from the Configuration Settings editor.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Configuration Settings**.
The **Search** window opens, where you can filter your search results.
3. To display all outgoing email settings, select the **Site** check box as well as the Logged In check box (this is selected by default) below the Configuration Base field.
4. Clear the **Select All** check box below the Folders field and then select the **Common** check box.
5. To search for a specific configuration setting in the Common folder, enter the setting name in the Key field.

Tip: You can search part of a configuration setting name by appending a wildcard, such as an asterisk or a percentage sign, to the end of your search term.

6. Click **Search**.
The Configuration Settings editor displays the settings in the Common folder that match your search criteria. 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 in 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 [Edit a Configuration Setting](#).

Related Topics

- [Overview of Site Configuration](#)

Edit Service Email Configuration Settings

You can configure mail processing functions such as the email gateway, contact record creation, contact association priority for incoming email, and email loop prevention from the Configuration Settings editor.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Configuration Settings**.
The **Search** window opens, where you can filter your search results.
3. Clear the **Select All** check box below the Folders field and then select the **RightNow Common** check box.
4. To search for a specific configuration setting in the RightNow Common folder, enter 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, such as an asterisk or a percentage sign, to the end of your search term.

5. Click **Search**.
The Configuration Settings editor displays the settings in the RightNow Common folder that match your search criteria.
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 in the Oracle 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 [Edit a Configuration Setting](#).

Related Topics

- [Overview of Site Configuration](#)

Edit Outreach and Feedback Email Configuration Settings

You can configure mail processing functions such as bounced email processing, delivery of campaigns and mailings, invalid contacts, and mailer daemon utility (also called RNMD) parameters from the Configuration Settings editor.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Configuration Settings**.
The **Search** window opens, where you can filter your search results.
3. Clear the **Select All** check box below 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, enter 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, such as an asterisk or a percentage sign, to the end of your search term.

5. Click Search.

The Configuration Settings editor displays the settings in the Outreach and Feedback folder that match your search criteria.

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 in 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 *Edit a Configuration Setting*.

Related Topics

- [Overview of Site Configuration](#)

Add or Edit a Distribution List

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 B2C Service. By adding their addresses to a distribution list, you can then include that list when defining subscribers to that report.






You can see all of the distribution lists your organization uses in the Distribution Lists report, found in **Public Reports/Common/Site Administration/Communication Configuration**.

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 the address in the list.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Distribution Lists**.
3. Do one of the following:
 - o To add a distribution list, click **New** on the ribbon.
 - o To edit a distribution list, click it in the tree.
4. Enter the distribution list name in the **List Name** field.
5. To add an internal note about the distribution list, enter it in the **Notes** field.
6. Enter field information.

Distribution Lists Editor

| Field | Description |
|---------------------------|--|
| Distribution List Members | This section contains the list of addresses available for the distribution list. |

| Field | Description |
|--|--|
|  Filter | Enter filter text and click the drop-down menu to select a column to filter the address list. Filtering is available only when editing a list that has been saved. |
|  | Click this button to add a new address to the address list. |
|  | 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. 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. |
| 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 | Enter the email address. |
| First Name | Enter the first name associated with the email address. |
| Last Name | Enter the last name associated with the email address. |
| Notes | Enter 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 enter 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 audit log, click the Audit Log button on the ribbon.
9. Click **Save**.

Related Topics

- [Add Email Addresses to Distribution Lists](#)

Add Email Addresses to Distribution Lists

You can add email addresses to your distribution lists from the Distribution Lists editor. You can also copy and paste multiple addresses that are saved in another program, such as Microsoft Word, Excel, or Notepad. After the email addresses are added, new addresses can be included in distribution lists.

1. On the Distribution Lists editor, click **Import**.
2. Do one of the following:
 - o Enter the email addresses you want to add.
 - o 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 **OK** 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**.

Related Topics

- [Add or Edit a Distribution List](#)

Best Practices for Sending Email

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.

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 communication. 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 blocked by ISPs or email reputation management services.

Note: The following practices apply only to mail sent from Service.

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 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, 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. If we supplied your email address using custhelp.com or rnmk.com domains, your emails are already signed by B2C Service and no further action is needed. Otherwise, see [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, see [How the Message Templates Editor Works](#) and [How You Customize 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 creating and using reports, see [Overview of Creating Basic Custom 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 or non-alphanumeric characters, as they can cause filters to falsely identify the email as spam.

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 one of several subscription-based notifications 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.

Message Templates

Overview of 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 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](#).

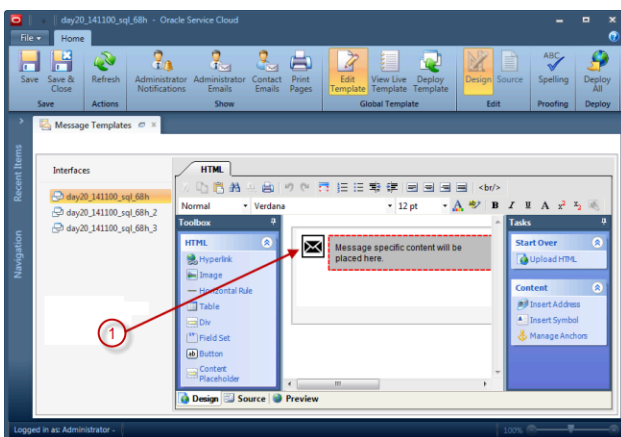
How the Message Templates Editor Works

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 [How the HTML Editor Works](#).

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.

This image shows the global template open on the Message Templates editor.

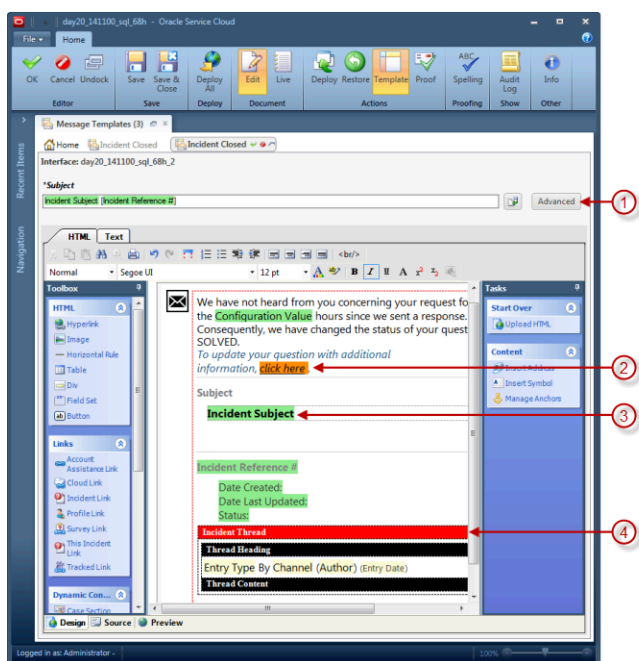


Legend for image: 1. Image placeholder that you can replace with your own logo.

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 subtab, making it easy to move between different message templates.

This image shows the Incident Closed message template open on a subtab. The different types of context-sensitive tools and links included on this specific message template are highlighted.



Legend for image: 1. Advanced editing button 2. Context-sensitive link 3. Merge field 4. Incident thread

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.

Note: The buttons on the message templates ribbon are inactive until you select the interface you want to customize.

Some buttons apply only to the global template while others apply to the system-generated messages. Those differences as well as the buttons available on the message templates ribbon are described in this table.

Message Templates Ribbon

| 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. |
| 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 switch between the different message types that are available. |
| 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. |
| 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. 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. |
| 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. Note: You must click Save 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. |

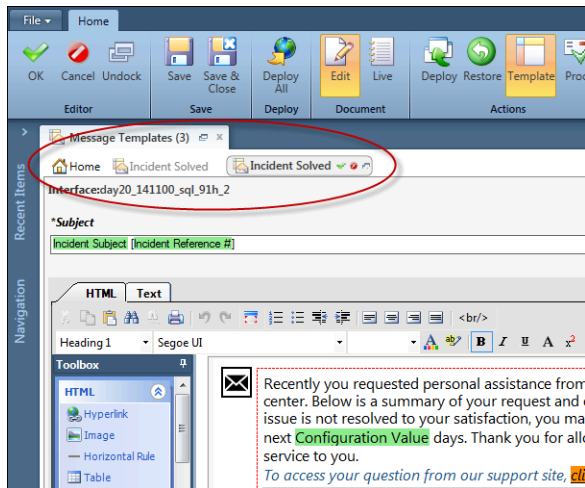
| Group/Button | Description |
|--------------|--|
| | |
| Design | Click this button to set the global template and the messages to open in design mode on the HTML editor. This is the default mode. |
| Source | Click this button to set the global template and the messages to show the source code on the HTML editor. |
| Proofing | |
| Spelling | Click this button to spell check the global template. |
| Deploy | |
| Deploy All | <p>Click this button to deploy the global templates as well as the entire set of messages across all interfaces at the same time.</p> <p>Note: You must save after clicking the Deploy All button to commit your edits to the database.</p> |

Message Templates Subtabs

Managing multiple message templates across multiple interfaces is easy through the use of content pane subtabs.

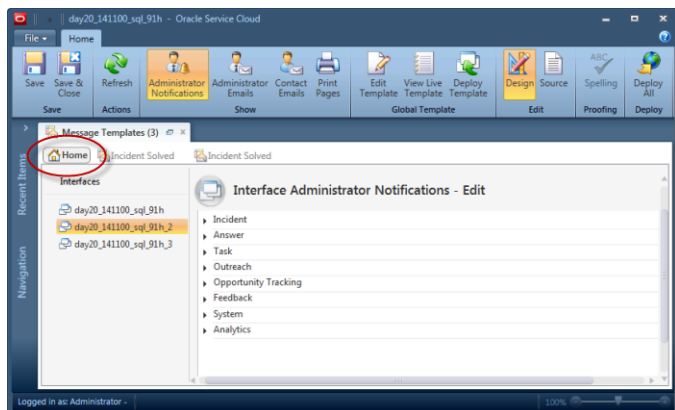
Using the Message Templates editor, you can work with multiple templates at the same time, which is especially useful if you want to compare similar messages or if you work with more than one interface. In addition, you can also move to other areas of B2C Service without needing to close your message 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. 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 subtabs. This image shows the Incident Solved message template for two separate interfaces, each one open on its own subtab.

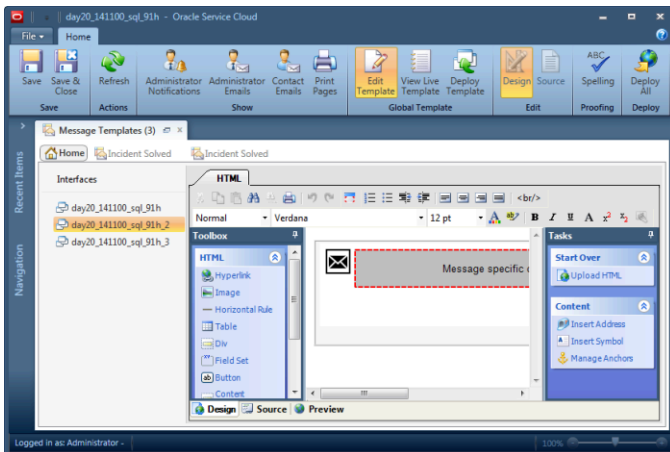


Notice the number in parentheses on the Message Templates editor tab. This identifies the number of subtabs you currently have open (in this case, the number 3 represents the Home subtab and two Incident Solved subtabs).

You'll use the Home subtab when you want to return to the Message Templates main editor to open other templates or the global template. As shown in this image, clicking the Home subtab 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.

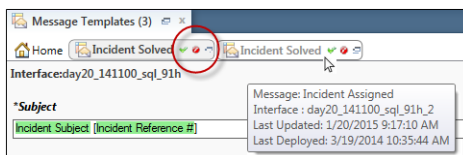


If you want to edit the global template, click the Home subtab, click the applicable interface on the left, and click the Edit Template button on the ribbon as shown in this image.



Note: Because each interface has its own global template, you cannot edit more than one global template at the same time.

As shown in the image, each message template subtab contains buttons that correspond to the buttons on the Editor group of the Message ribbon: OK, Cancel, and Undock. All subtabs, except for the Home subtab, contain these buttons for taking actions on the individual message templates. From the active subtab (or when you hover over an inactive subtab), these buttons let you save and cancel your changes as well as undock your message template without needing to use the ribbon buttons. Hovering over a subtab 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 subtab. 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 subtab 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 ribbon.

How You Customize the Global Template

The global template contains the content that frames the message-specific content in 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 HTML editor for the global template 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 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.

Edit the Global Template

You can edit the global template to customize the content that frames the message-specific content in each of your individual messages.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Message Templates**.
3. Select the interface you want to customize. By default, the categories for administrator notifications display on the right.
4. Click **Edit Template** 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 *Insert an Image*.
6. To edit the global template using the hyperlinks, buttons, and other features available on the HTML editor, use the HTML editor. See *How You Add HTML in Design Mode*.
7. To customize your header and footer content, enter above or below the placeholders.
8. To discard your pending changes and revert to the most recently saved global template, click **Refresh** on the ribbon.

Note: Refresh 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, after you save, then that is the version that is available to refresh.

9. To see the currently deployed template, click **View Live Template** 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 View Live Template lets you see a read-only version of the active content that you can copy and paste into the version you are editing.

10. To spell check the global template, click **Spelling** 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 **Save** on the ribbon to save your edits to the global template.

At this point, your changes are not active because they have not been deployed or committed to the database. See *How You Deploy the Global Template*.

How You Deploy 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.

After 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. After 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.

Deploy the Global Template

If you've made changes to your global template but have *not* changed any of your individual messages, the global template is all you need to deploy.

1. After saving changes to the global template, click **Deploy Template**.
A message asks you to confirm your decision to deploy.
2. Click **OK**.
Your deployed version is copied to the version that is sent throughout the system.

Note: At this point, if you click View Live Template, 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 **Save** to commit your deployed version to the database.

Results:

Now, your deployed version is your active global template and is applied to your entire set of active messages.

Deploy the Global Template and the Messages at the Same Time

If you've made changes to both your global template and any of your individual messages, you can deploy everything at the same time.

1. After saving changes to the global template, click **Deploy All**.
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 **OK**.
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 **Save** to commit your deployed version and all of your messages to the database.

Results:

Now, your deployed version is your active global template and is applied to your entire set of messages. Your deployed messages are also active.

How You Customize Messages

B2C Service 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.

Tip: Remember to use the global template to apply your organization's branding across all your 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.

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 [How You Add HTML in Design Mode](#).

Message Types

The buttons on the Show group of the message templates ribbon can be used to switch between the different types of messages that are available, including administrator notifications, administrator email messages, and contact email messages.

Administrator Notifications—B2C Service 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 B2C Service, a notification email is sent instructing them to log in to view the notification. See [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 [Add or Edit a Staff Account](#). Staff members can also set notification preferences in their personal settings, see [Change Your Personal Settings](#).

Administrator Emails—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 Emails—Customers can receive a broad range of email messages supporting their activities on your site, such as incident receipts and responses, answer and community update subscriptions, and account assistance requests.

Links and Dynamic Content Elements

B2C Service 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 and dynamic content 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 found in the toolbox.

Note: 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 in the following table, see the Toolbox Section table in *How You Add HTML in Design Mode*.

Links and Dynamic Content Elements

| Button | Description |
|--------------------------------|---|
| Links | Buttons in this section are used to insert the available context-sensitive links in your message content. |
| Account Assistance Link | 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 <i>Insert an Account Assistance Link</i> . |
| Agent Browser UI Incident Link | Inserts a link to the incident that triggered the sent message so that agents can access the incident from the Agent Browser User Interface. See <i>Insert an Agent Browser UI Incident Link</i> . |
| Answer Link | Inserts a link to any answer you specify. See <i>Insert an Answer Link</i> . |
| Customer Portal Incident Link | Inserts a link to the incident that triggered the sent message. 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 Customer Portal Incident Link to your Question Receipt message template, you can provide your customers with easy access to the incident created from their question. See <i>Insert a Customer Portal Incident Link</i> . |
| Incident Link | Inserts a link to any incident you specify in the message. See <i>Insert an Incident Link</i> . |
| Profile Link | 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 <i>Insert a Profile Link</i> . |
| Proof Comments Link | Inserts a link to a web page where the recipient can give feedback about the survey they have been asked to proofread. See <i>Insert a Proof Comments Link</i> . |
| Proof Survey Link | Inserts a link to the survey you want your proofreaders to review. See <i>Insert a Proof Survey Link</i> . This link is included, by default, on the Survey Proof message template. |
| Setup Password | Inserts a link to the Finish Account Creation page on your customer portal. See <i>Insert a Setup Password Link</i> . |

| Button | Description |
|------------------------------|--|
| | |
| Survey Link | Inserts a link to a survey. See <i>Insert a Survey Link</i> . |
| Survey Results Link | Inserts a link to a web page that shows the survey responses. <i>Insert a Survey Results Link</i> . This link is included, by default, on the Survey Notification message template. |
| This Answer Link | Inserts a link to the incident that triggered the sent message. See <i>Insert a This Answer Link</i> . |
| This Discussion Link | Inserts a link to the email discussion that triggered the sent message. See <i>Insert a This Discussion Link</i> . |
| Unsubscribe All Answers Link | This button inserts a link that lets contacts who receive answer notifications unsubscribe from future communications. See <i>Insert an Unsubscribe All Answers Link</i> . |
| Unsubscribe This Answer Link | Inserts an unsubscribe link to a specific answer that's been returned as the result of a repeatable answer section. See <i>Insert a This Answer Link</i> . |
| View Subscriptions Link | Inserts a link customers can use to update the list of notifications they are subscribed to. See <i>Insert a View Subscriptions Link</i> . |
| Dynamic Content | Buttons in this section are used to insert dynamic content in your message content. |
| Attached File List | Inserts a list of file attachment links that display as long as attachments have been added to the record the template is referencing. See <i>Print Templates</i> . 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 <i>Insert an Answer Section</i> . |
| Case Section | Click this button to add a case section to your conditional text. See <i>Insert a Case Section</i> . |
| Conditional Section | 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 <i>Insert a Conditional Section</i> . |
| Incident Thread | Inserts an incident thread that displays all communication between the parties associated with the incident. See <i>Insert an Incident Thread</i> . |
| Merge Field | Inserts a merge field. See <i>Insert a Text Merge Field</i> . |
| Merge Report | Inserts a merge report. See <i>Merge a Report into Content</i> . |

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 displays. This is especially useful for agents who frequently reference answers. See [Links and Dynamic Content Elements](#).

Display Sibling Answer File Attachments on the Answer Print Message Template

You can specify file attachment properties on the Answer Print message template so that sibling answers display any attachments included in the sibling answer. When sibling attachments are set to display, the attachment file names are listed when you print a hard copy.

Before you start

Sibling answers must be enabled on the answer workspace for the list of sibling file attachments to display. See [Sibling Answers](#) and [Options Properties](#). In addition, the Attached File List element is included by default on the Answer Print message template. If the Attached File List element has been removed, you must add it to the template before starting this procedure.

Here's what to do

1. From the Answer Print message template, do one of the following:
 - o Double-click the **File Attachments List** element.
 - o Right-click the **File Attachments List** element and then select **Attached File List Properties**.
2. Select **Show Sibling Attachments**.
3. Click **OK**.
4. Click **Save**.

Note: You must deploy and commit your changes to the database before they will take effect. You must also log out and then log back in to see the changes on your site. See [Deploy One Message](#).

Results:

Any sibling attachments associated to an answer display in the file attachments list on your Answer Print message template.

Message Ribbon

When you edit a message, it opens below the Message Templates editor content pane tab on its own subtab with its own ribbon.

Message Ribbon

| Group/Button | Description |
|--------------|---|
| Editor | 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 subtab. The subtab closes. |

| Group/Button | Description |
|-----------------|---|
| Cancel | Click this button to abandon changes you have made to your message. The subtab closes and the Home tab becomes the active subtab. |
| Undock | Click this button to undock the message from its subtab and open it in its own window. |
| Console | 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 subtab. |
| 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. 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. 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. This button is not available from an undocked message. Note: 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. Note: 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 database. |
| Actions | |
| Deploy | Click this button to deploy the working version of your message. Note: 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. |

| Group/Button | Description |
|--------------|--|
| 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 | <p>Click this button to send a proof email to your content reviewers.</p> <p>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.</p> |
| 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. |

Format Messages

By default, all B2C Service 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 customize the format settings from the Message Templates editor.

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Message Templates**.
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 Show group.
The categories for the message type, such as 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.

Messages that do not have an HTML check box are console-only notifications and are not sent by email.

8. Click **Save**.

How Message Editing Works

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, the active content on your site 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.

Tip: Remember to use the global template to apply your organization's branding across all your messages. See [How You Customize the Global Template](#).

Edit a Message

Your individual messages can be edited using the Message Templates editor.

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

2. Expand **Site Configuration**, and then double-click **Message Templates**.

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 Show group.

The categories for the message type, such as administrator notifications, administrator emails, contact emails, or 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 subtab and becomes the active subtab.

7. To edit the subject of the message, enter in the **Subject** field.

For the best practice on creating effective subject lines, see [Ensuring that contacts read your message](#).

8. To edit a merge field in the subject, double-click the merge field. See [Insert a Text Merge Field](#).

9. To add a merge field in the subject, click the **Merge Field** icon, which is to the right of the Subject field, and select the field.

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 **Advanced** to the right of the Merge Field icon next to the Subject field and see [Add a Conditional Subject Line](#).
11. Enter 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 [How You Add HTML in Design Mode](#).
12. To view your most recently deployed content, click **Live**.
13. To revert to the system default message, click **Restore**.
14. To remove the global template from your message, click **Template**. If you click Template again, the global template is reapplied to your message.
15. To spell check your content, click **Spelling**.
16. To preview your message, click the **Preview** tab at the bottom of the HTML editor.
17. To see how your dynamic content displays, either by incident or contact, click the **Search** icon 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.
18. To send your edited message to another staff member for review, click **Proof** on the ribbon.
19. Click **OK** on the ribbon to save your edits and close the message.

At this point, your changes are not active because they have not been deployed or committed to the database. See [How You Deploy the Global Template](#).

Add a Conditional Subject Line

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 subject line of the message. 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.

1. From an open message template, click **Advanced** to the right of the Merge Field icon next to the Subject field.
The **Advanced Subject** window opens.

Tip: In addition to the default subject line, you can add up to ten conditional subject lines (a total of eleven) to each message template.

2. Click **Add Subject**.

The **Subject Condition** window opens.

3. Select the appropriate option for the type of condition you are adding.

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.

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 the previous step, enter the title as you want it to appear in the **Title** field.

6. Click **OK** 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 enter 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** icon next to the Subject field. See *Insert a Text Merge Field*.

You can add up to five 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 **Edit** in the Actions column and make any necessary changes to your condition.

12. To remove a condition, click **Remove** 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.

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 **OK**.

Results:

The Subject field is now labeled Conditional Subject and is uneditable. After you add conditional subject lines to your message, you must use the advanced editing feature to make changes.

Proof Messages

When you are finished editing your message, you can send a proof to key staff for feedback on your design. For instance, you may need your legal department to review language or your marketing department to review 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.

Note: 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 subtab or an undocked message. Therefore, the procedures differ slightly.

Send a Proof Message from a Subtab

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.

Save works differently depending on whether you are working from a subtab or an undocked message. Therefore, the procedures differ slightly. If you are sending a proof message from an undocked message, see *Send a Proof Message from an Undocked Message*.

Note: 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.

1. Click the subtab for the message you want to send and then click **Save** on the ribbon.
2. Click **Proof**.
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. Enter 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, enter them in the **Comment** text box.
6. To customize your proof message so that your reviewers can see your dynamic content, click the **Search** icon 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, enter the incident reference number in the **Reference #** field and click **Search**. The Incident Search window closes and the reference number populates the Customize Proof field on the Send Message Proof window.

Tip: You can also enter 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, enter your search criteria in one or more of the available fields and click **Search**. 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 **Select**.
The Contact Search window closes and the contact name you selected populates the Customize Proof field on the Send Message Proof window.
7. Click **Send**.

Send a Proof Message from an Undocked Message

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.

Save works differently depending on whether you are working from a subtab or an undocked message. Therefore, the procedures differ slightly. If you are sending a proof message from a subtab, see *Send a Proof Message from a Subtab*.

Note: 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.

1. Click **OK** on the message ribbon.

Your message closes.

Note: 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 **Save** 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 subtab.
4. Click **Proof**.
The **Send Message Proof** window opens.
5. Enter 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, enter them in the **Comment** text box.
7. To customize your proof message so that your reviewers can see your dynamic content, click the **Search** icon 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, enter the incident reference number in the **Reference #** field and click **Search**. The Incident Search window closes and the reference number populates the Customize Proof field on the Send Message Proof window.

Tip: You can also enter 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, enter your search criteria in one or more of the available fields and click **Search**. 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 **Select**.
The Contact Search window closes and the contact name you selected populates the Customize Proof field on the Send Message Proof window.
8. Click **Send**.

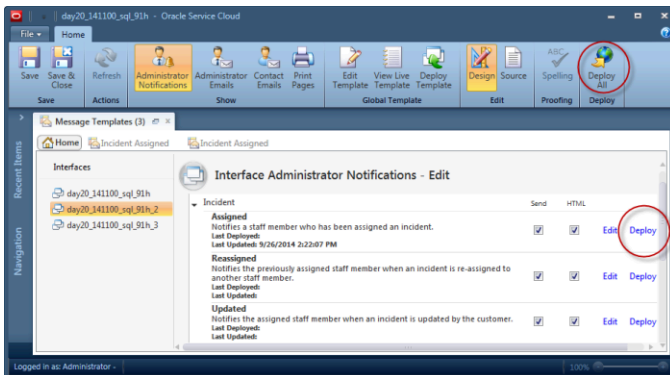
How You Deploy Messages

To make your changes live, you must deploy and then commit your changes to the database.

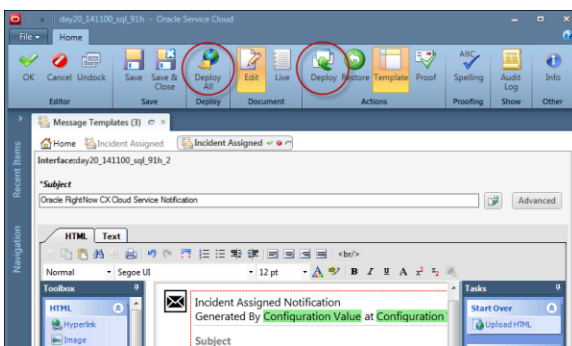
There are three ways to deploy your messages.

- Click **Deploy** next to the message on the Home subtab.
- Click the **Deploy** button on the message ribbon.
- Click the **Deploy All** button on the message templates ribbon or the message ribbon.

This image shows the Deploy All button on the message templates ribbon as well as the Deploy link next to the messages on the Home subtab.



This image shows the Deploy All button and the Deploy button on 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 Restore on the ribbon.

Deploy One Message

You must deploy your message to make your changes active.

1. Click **Deploy** on the ribbon.

A message asks you to confirm your decision to deploy.

2. Click **OK** to continue.
3. Click **OK** on the ribbon.

The subtab or editor closes depending on whether you are working from a docked or undocked message.

4. Click **Save** on the ribbon to commit your deployment.

Results:

Your deployed version is now active.

Deploy Multiple Messages at the Same Time

You must deploy your messages to make your changes active.

Before you start

This procedure assumes you have edited more than one message and have saved your changes.

Here's what to do

1. Click **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 **OK** to confirm.
3. Click **Save** on the ribbon to commit all your deployments to the database.

Results:

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 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 [Add a Tracked Link](#) and [Insert a Tracked Link](#).

Incident response tracking data is accessed through standard reports found in public reports which are accessed either from the Reports Explorer or from the Customize List window. This is accessed by clicking the Gear icon on your navigation list. 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, click **Configuration > Database > Data Dictionary** on the navigation pane to view the data dictionary.

Note: 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 using the Configuration Settings editor, click **Configuration > Site Configuration > Configuration Settings** on the navigation pane. From the Configuration Settings editor the setting is found in **RightNow Common/Message Templates/General**. See [How You Customize Configuration Settings](#).

- **Incident Message Statistics**—This report provides statistics comparing the number of incident responses sent and the number that contacts viewed over time. (**Public Reports/Service/Incident Reports/Incident Activity**)
- **Incident Message Transactions**—This report was designed to be added to an incident workspace. It provides statistics on runtime 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. (**Public Reports/Service/Views/Service/Editor Reports - Service**)
- **Incident Message Web Visit Details**—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 runtime filter it requires is a web visit ID. (**Public Reports/Service/Views/Service/Editor Reports - Service**)

Related Topics

- [How You View Reports](#)
- [How You Search in Reports](#)

Examples of Message Templates

This set of examples includes scenarios where message templates can be used to accomplish more advanced and specific needs.

- *Define Conditional Content Based on Message Thread Count*
- *When to Use Case Sections vs. Conditional Sections*
- *Apply Product-Specific Logos*

Define Conditional Content Based on Message Thread Count

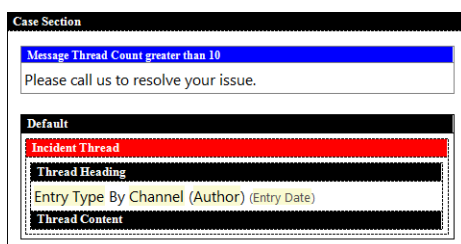
In addition to limiting the thread count on your incident thread properties, this example shows you how to display content based on the number of threads that are included within the sent message.

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 *Insert an Incident Thread*.

1. Add a conditional section or a case section to your message template.
2. Select **Associated Record**.
3. Expand the Special Fields folder and select **Message Thread Count**.
4. Select an operator from the **Operator** drop-down list.
5. Enter a value for the operator in the **Value** field.
6. Click **OK** 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 you want to display.
7. Place your cursor inside the condition you just added and enter the content you want to display when the condition value is matched.

The following image shows the Case Section with the conditional content "Please call us to resolve your issue." set to display when the message thread count is greater than ten.



When to Use Case Sections vs. Conditional Sections

Understanding when to use a case section instead of an independent conditional section is important in making your content as effective as it can possibly be. These examples describe scenarios that put the best option to use.

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 straightforward 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 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.

Apply Product-Specific Logos

This example shows you how to use case sections 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 in the Contact Emails message type should be considered. In some cases, taking a more generic approach in which the global template could be used might make more sense.

1. From an open message template, click **Template** 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 **Case Section** in the toolbox.
3. Select the conditional section inside the case section, right-click, and select **Conditional Section Properties**. The **Conditional Section** window opens.
 - a. Select **Associated Record**.
 - b. In the Record section, expand the Incident Fields folder and select **Product**.
 - c. Select **Equals** from the **Operator** drop-down list.
 - d. Select the product you want associated with this conditional section from the **Value** drop-down list.
 - e. Click **OK**.
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 **Image** in the toolbox. The **Image Editor** window opens.
 - a. Enter the URL where the logo you want to display for this product is found.
 - b. Click **OK**.
7. Repeat step 6 for the second conditional section.

Note: Leave the Default section blank, don't delete it. This way, if the product is unknown, then no image displays.
8. Click **Save**.
9. Repeat steps 1-8 for each message template you want to apply different logos to.

Tip: After you define the first case section, you can easily select the case section, copy it, and then paste it into your other message templates.

What to do next

At this point, your changes are not active because they have not been deployed or committed to the database. See [How You Deploy the Global Template](#).

Related Topics

- [Insert an Image](#)
- [Insert a Conditional Section](#)

Data Import

Overview of 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 *Overview of 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.

B2C Service 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.
- **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.
- **Data imports reporting**—View the Data Imports report to track information about past imports.

Note: 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*.

How Data Import Works

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.

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 Service is disabled, answer, asset, and incident record types are not available for import.
- The maximum number of fields that can be mapped is 50.
- 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 the associated tables of a record. For example, you cannot map a value for the threads.entered field. This value is set to the date and time the import occurred.
- If the input mask for a field contains fixed or formatted characters, exclude those characters in the CSV data. For example, if the mask for a custom field is defined as F\$M#M#F.M#M# in order to store dollar amounts in the \$12.34 format, edit the CSV data to contain the value '1234'.

- 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 B2C Service.

Related Topics

- [Input Masks](#)

Import Data


You can add new contacts, answers, assets, incidents, organizations, and custom objects to your Oracle database by using the Data Import Wizard.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Data Import Wizard**.
The Data Import Wizard opens.
3. Enter field information.

Data Import Wizard

| Field/Item | Description |
|-------------------|---|
| Data Record Type | Click this drop-down list 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 assets data as the type of record you want to import. Currency fields are not supported. For example, the Price field cannot be imported. |
| Config Base Entry | <p>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 in 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:</p> <ul style="list-style-type: none"> ○ 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) <p>Prerequisite: You must create a configuration base entry before you can create a configuration base value.</p> |
| Config Base Value | <p>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 in 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:</p> <ul style="list-style-type: none"> ○ ID—Configuration Entry ID (configbase_entry_id) ○ Key—Configuration Base ID (configbase_id) ○ Value—Configuration Value (value) |

| Field/Item | Description |
|-------------------------|--|
| | Prerequisite: 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. This is the default record type. |
| Incident | Select this option to designate incident data as the type of record you want to import. |
| Message Base Entry | <p>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.</p> <p>The following fields are required in the Column in File and Field columns for mapping to work:</p> <ul style="list-style-type: none"> ○ 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) <p>Prerequisite: You must create a message base entry before you can create message base text to go with it.</p> |
| Message Base Text | <p>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.</p> <p>The following fields are required in the Column in File and Field columns for mapping to work:</p> <ul style="list-style-type: none"> ○ ID—Message Base Entry ID (msgbase_entry_id) ○ Message Base—Message Base ID (msgbase_id) ○ Custom Text—Message Base Custom Text (custom_text) <p>Prerequisite: 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.</p> |
| 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. Custom objects must be enabled for this option to display. To enable custom objects, contact your Oracle account manager. |
| *Data File | <p>Click Browse to the right of the field to access the file containing the data you want to import. Windows/MS-DOS format is the only supported CSV file type.</p> <p>The maximum number of fields that can be mapped is 50.</p> |
| Header Location | Click this drop-down list 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. The header file cannot contain fewer columns than the data file. |

| Field/Item | Description |
|---|--|
| *Import Header File | Click Browse 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 list. |
| Staging Directory | Click Browse 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. By default, the location is C:/Documents and Settings/<username>/My Documents/My Imports/YYYY-MM-DD-#. The staging directory can be set to a local directory on your workstation or a shared network drive. |
| Duplicate Records | Click this drop-down list 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. Note: 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 list (as described 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. |
| 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. |
| 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 list to select a campaign entry point for imported contact records. See Overview of Campaigns . This option is available only when importing contacts. |
| Insert Into Contact List | Click this drop-down list 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 New Contact List. See Add a Contact List . This option is available only when importing contacts. Note: For optimal performance, be sure to select the Keep Original Data option in the Duplicate Records drop-down list when using this option. See the Keep Original Data description in this table. |
|  | Click this icon (signified by a plus sign and located to the right of the Insert Into Contact List drop-down list) to create a new contact list. |
| *Delimiter | Enter the character used to separate columns in the data file. The default delimiter is a comma. 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/CPMs | Select this check box if you want external events to run against the data you are importing. The check box is cleared by default. |

| Field/Item | Description |
|--------------------|--|
| | Note: Object event handlers from enhanced business rules will not execute on objects imported using the Data Import wizard, if Run ExternalEvents/CPMs is not selected. |
| 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 **Next**.

The content pane displays fields for defining column mapping and duplicate criteria as well as a preview of the records in the data file.

5. Enter field information.

Column Mapping

| Field/Icon | Description |
|------------------|--|
| File Encoding | Click this drop-down list to select the encoding type of the data file. The default encoding type is UTF8. |
| Select Template | Click this drop-down list to select a previously saved template to use for mapping the data file columns to the database. See <i>Add or Edit a Data Import Template</i> . This menu lists only templates for the record type you are importing. |
| *Name | Enter a template name and click Save As Template on the ribbon to save the current column mapping as a template. Click Clear to clear the field contents. The default delimiter is a comma. The template name must be unique for the record type, and the tab character is not a supported delimiter. |
| Column Mappings | This section defines how columns in the data file are mapped to fields in the database. |
| Add | Click this icon to create a new row in the column mapping grid. |
| Remove | Click this icon to remove a selected row from the mapping grid. |
| Column in File | Click the drop-down list to select the column name specified in the data file or header file, or the column number if no header was specified. |
| Field | For each data column that you want to import, click the drop-down list 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, see the data dictionary located on the navigation pane (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 be inserted into the database for new records, but do not want the column updated for existing records. |

| Field/Icon | Description |
|---------------|--|
| | Note: This option has no effect unless you select Keep Original Data from the Duplicate Records drop-down list. |
| 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, see the data dictionary located on the navigation pane **Configuration > Database > Data Dictionary**.

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 the associated tables of a record. 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 field information to map a column to a table associated with a new import record type.

Associated Table Mapping

| Field/Icon | Description |
|----------------|--|
| Add | Click this icon to create a new entry in the mapping grid. |
| Remove | Click this icon to remove an entry from the mapping grid. |
| Column in File | Click the drop-down list 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.

9. Click Next.

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 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, enter 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.

Note: If errors are reported for records that you want to include in the import, you must resolve the errors before proceeding.

15. Click Next.

The data imports to the database.

When 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.

Back and Next are unavailable during the import process.

16. To pause the import process after it starts, click Stop on the toolbar. Click Start to resume the import.

Any records listed as returning errors are not imported to the database. 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.

When the import process is complete, the Import Status field displays Import Complete.

Results:

All imported records are immediately available for use. Any additional processing that you specified on the initial screen of the wizard (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 list on the initial page of the wizard.

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, `entry_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}`.

Note: 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 entering them in the Criteria Field.

Data Import Error Handling

If the Data Import Wizard prescan process returns errors, you can select the Ignore Errors check box to ignore them and continue importing only those records without errors. However, if the prescan reveals 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 find 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 initial screen of the wizard. 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"). The subdirectory of each import 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.

After 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 initial screen of the wizard, 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.

Add or Edit a Data Import Template

You can create data import templates for use in the Data Import Wizard. Templates let you 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.

After a template is created, you can select it when mapping data field columns through the Data Import Wizard. 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.

Note: 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Data Import Templates**.
The Data Import Templates tree displays on the content pane.
3. Do one of the following:
 - o To add a template, select a record type in the tree and click **New** on the ribbon to display the editor.
 - o To edit an existing template, click it in the tree.

The Data Import Templates editor opens. It 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 field information.

Data Import Templates Editor

| Field/Icon | Description |
|------------------|---|
| *Name | Enter 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 icon to create a new row in the column mapping grid. |
| Remove | Click this icon to remove a selected row from the column mapping grid. |
| Column in File | The column number that the data file will be mapped to. The maximum allowed value is 9999. |
| Field | <p>For each data column that you want to import, click the drop-down list 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 found on the navigation pane (Configuration > Database > Data Dictionary).</p> <p>Tip: If you map a column to <code>ma_org_name</code>, 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 <code>org_id</code> 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.</p> |
| Ignore on Update | <p>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.</p> <p>Note: This option has no effect if you selected Keep Original Data from the Duplicate Records drop-down menu.</p> |
| 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, see the data dictionary found on the navigation pane (**Configuration > Database > Data Dictionary**).

6. Enter field information.

Associated Table Mapping

| Field/Icon | Description |
|----------------|--|
| Add | Click this icon to create a new entry in the mapping grid. |
| Remove | Click this icon to remove an entry from the mapping grid. |
| Column in File | Enter 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 see *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 enter 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 **Save**.

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, found in **Public Reports/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. For a description of the information logged in the Data Imports table, see the data dictionary found on the navigation pane (**Configuration > Database > Data Dictionary**).

Related Topics

- [Overview of Creating Basic Custom Reports](#)

Element Manager on the Agent Browser UI

Element Manager lets you automatically group, package, migrate, and deploy configurable components across B2C Service instances. You can easily migrate configurations from development, to test, and then to production environments.

Note: Element Manager works only on the Agent Browser UI. If you try to access it from the Service Console, a message tells you it is available only on the Agent Element Manager lets you export and import reports, workspaces, workflows, and dashboards. Browser UI. For more information, see [Element Manager](#).

SAML 2.0 Open Login

Overview of SAML 2.0 Open Login

B2C Service supports SAML 2.0 single sign-on (SSO) integrations, which let your agents and customers log in using credentials supplied by external identity providers (IdPs).

Agents can also use B2C Service as an IdP to provide login credentials and authentication services to third-party applications. This lets your agents seamlessly access these applications from the Service Console or Agent Browser UI without being required to re-enter their credentials.

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 B2C Service using credentials from an external IdP, see [Single Sign-on Support in B2C Service](#). Single logout is supported when using this configuration.
- If you want your agents to be able to access external applications from the Service Console or Agent Browser UI without being asked for login credentials, see [Log in to External Applications Using B2C Service as the Identity Provider](#).

Note: This functionality isn't available for customers.

Single Sign-on Support in B2C Service

B2C Service includes single sign-on (SSO) support for agents working on the Service Console or Agent Browser UI and customers using the Customer Portal.

Typically, agents and customers log in using the logins and passwords specified in their B2C Service staff account and contact records. With single sign-on, however, agents and customers are authenticated by a different application, and B2C Service accepts authentication and logs them in.

Note: To enable single sign-on for agents, customers, or both, contact your Oracle account manager.

B2C Service supports two types of SSO:

- IdP-initiated SSO
- Service Provider (SP)-initiated SSO (supported only for agents)

IdP-initiated SSO

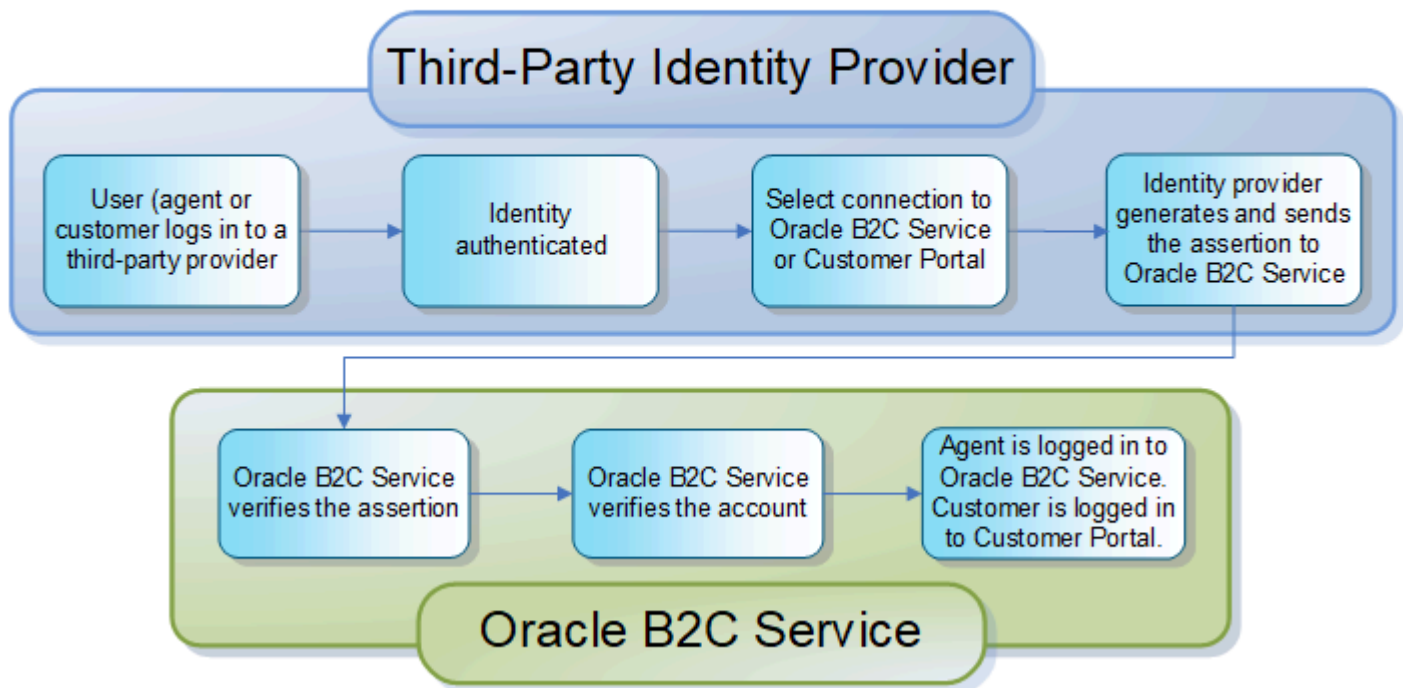
When agents and customers log in to an external identity provider, the IdP must authenticate their identity. Then they select a connection to the Service Console (for agents) or your customer portal (for customers).

After verifying the login credentials, the IdP encapsulates the result of the verification in an assertion that's signed using an X509 certificate and sends the assertion to B2C Service. The application verifies the signature and (if successful) accepts the account information for logging in to the B2C Service 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 B2C Service accept identity provider assertions. The use of encrypted SAML tokens are supported. These are decrypted by B2C Service using an internal API.

Note: The identity provider's login page can be embedded in the B2C Service Login window, providing a seamless method for agents to access the application and any service provider applications configured in B2C Service. See [Authentication Using an External Identity Provider on the B2C Service Login Window](#).

An overview of the IdP-initiated single sign-on process is shown here.

Identity Provider-Initiated Single Sign-On Process



SP-initiated SSO

B2C Service also supports SSO initiated from a service provider (SP) instead of an IdP. For example, an agent may attempt to access B2C Service by launching the login window. If SSO is enabled for this specific agent, B2C Service automatically redirects the agent to the appropriate login page the external IdP. The IdP captures the agent credentials and, if the authentication is successful, redirects the agent back to B2C Service with a SAML assertion.

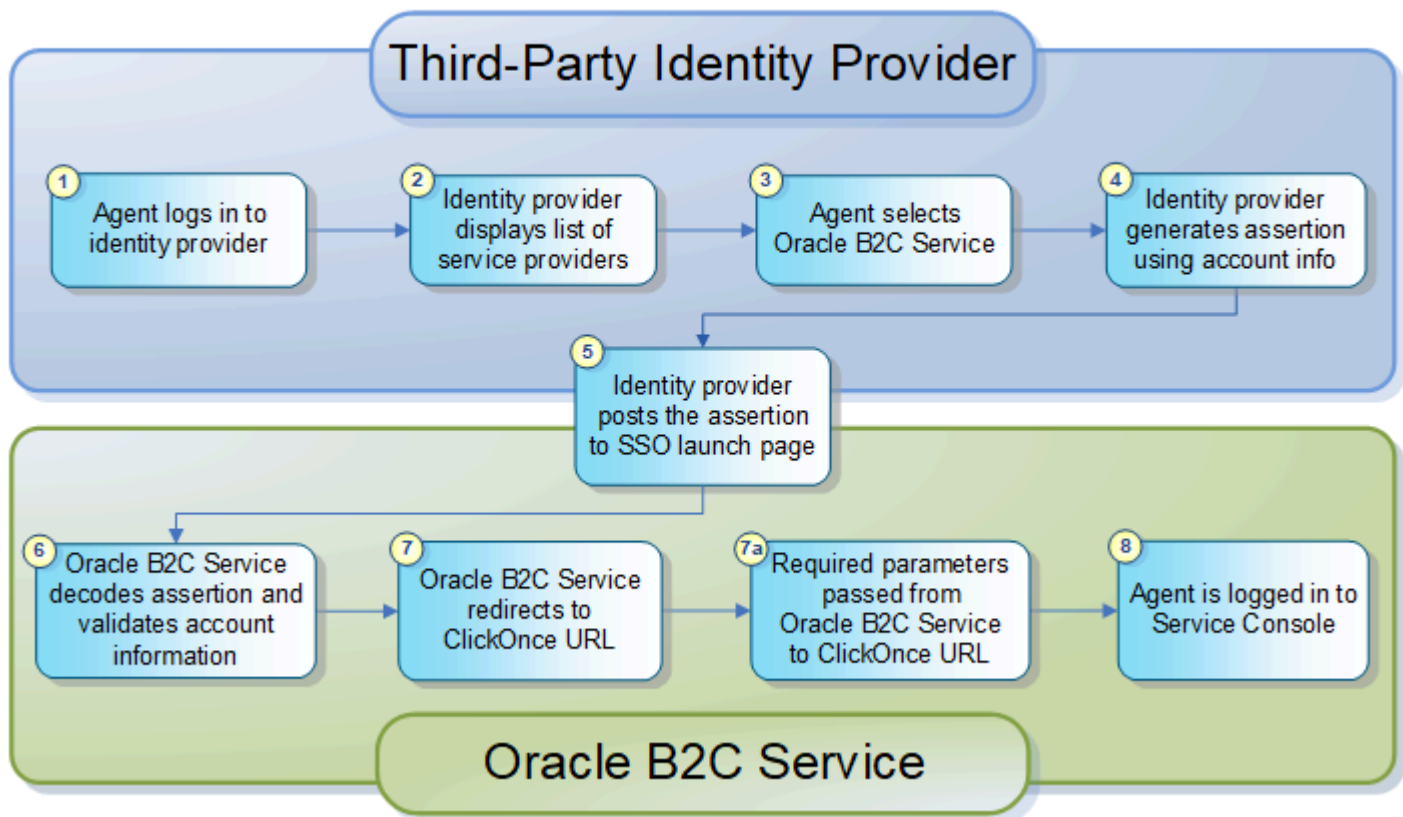
Note: Customer login isn't supported using SP-initiated SSO.

Agent Login Using an IdP-initiated SSO

IdP-initiated SSO for agents occurs when single sign-on is enabled for agents who log in to the agent desktop by first logging into an external identity provider.

This flow diagram shows the process flow of an agent accessing the Service Console with an IdP-initiated SSO.

Agent Login Process Overview



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 B2C Service, that the agent can connect to.
3. The agent selects B2C Service.
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. See *How You Identify the SAML Subject for Agent Login*.

Note: The assertion must be signed using *XML Signature Syntax and Processing* 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. See *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. See *Define Single Sign-on Configuration Settings*. Additionally, the assertion cannot be encrypted.

5. The identity provider then submits the assertion to the B2C Service SSO launch page using HTTP POST binding (since that's 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. B2C Service decodes and verifies the assertion and validates the account by confirming that the assertion matches an account in the Oracle database.
 - o Staff members logging in through an identity provider must have the SSO Login (SAML 2.0) permission enabled in their profile. See *Considerations When Using Single Sign-on*.
 - o 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. B2C Service 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. B2C Service verifies the account using the parameters of the ClickOnce URL for authentication. If necessary, the B2C Service client is downloaded and installed. The application is then launched, and the agent is logged in.

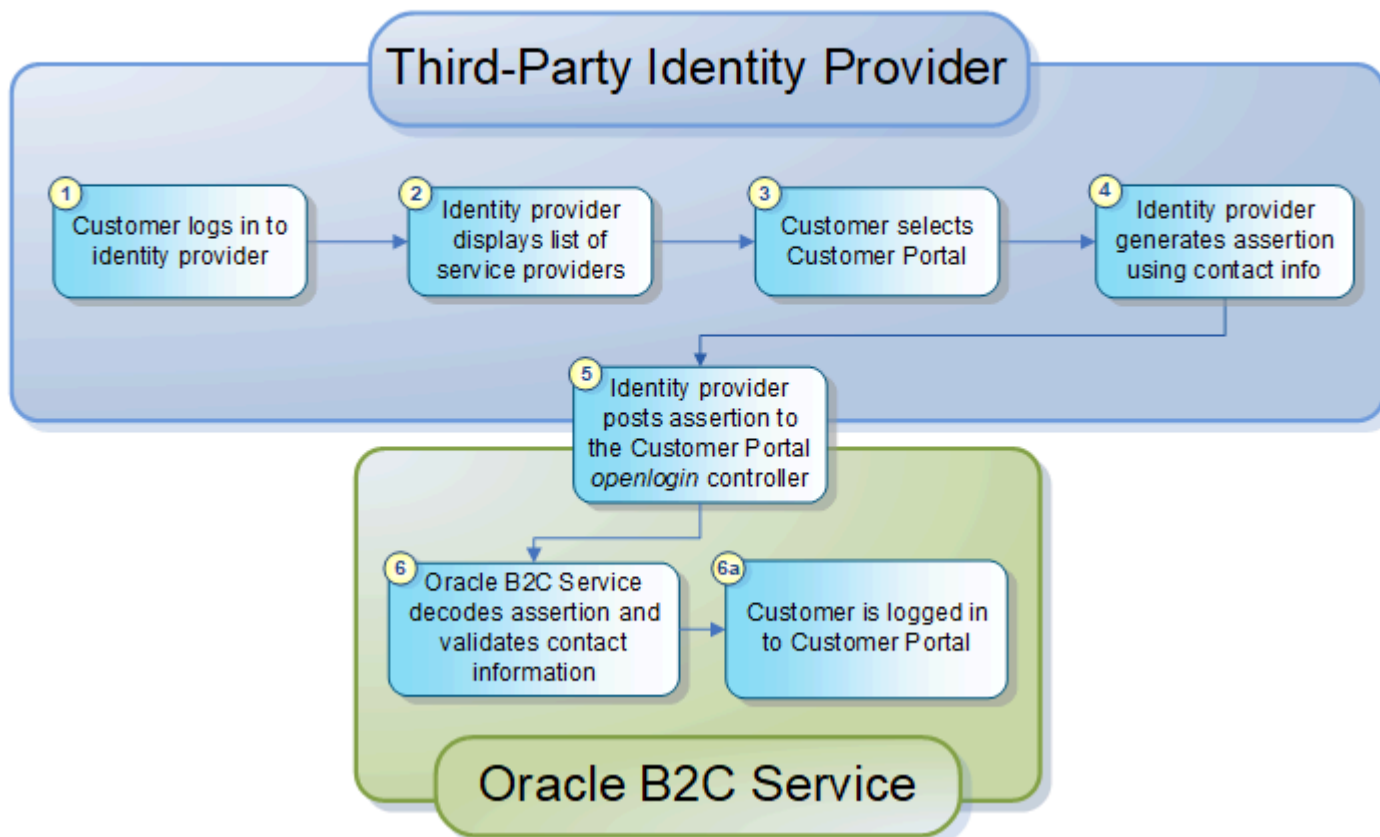
See *Server and client configuration issues in ClickOnce deployments* for information about browser scripting and compatibility with ClickOnce applications.

Customer Login Using an IdP-initiated SSO

IdP-initiated SSO for customers occurs when single sign-on is enabled for customers logging in to your customer portal.

This flow diagram shows the process of a customer accessing the customer portal with an IdP-initiated SSO.

Customer Single Sign-On Overview



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. See *Considerations When Using Single Sign-on*.

Note: The assertion must be signed using *XML Signature Syntax and Processing*. 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. See *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. See *Define Single Sign-on Configuration Settings*.

5. The identity provider then submits the assertion, using HTTP POST binding (because that's 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. B2C Service 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. See *How You Redirect Contacts After Login*.)
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.)

Set Up Single Sign-on (SSO) Using an External Identity Provider

Complete these steps to configure single sign-on for your site.

1. Contact your Oracle account manager to enable single sign-on for agents, customers, or both.
2. Add the single sign-on permission to the profiles that will use it. See *Add the SSO Profile Permission*.
3. *Define Single Sign-on Configuration Settings*.
4. Set up external identity providers (IdPs). See *Methods for Setting Up Identity Providers*.
 - a. Identify the SAML subject for agent login. See *How You Identify the SAML Subject for Agent Login*.
 - b. Identify the SAML subject for contact login. See *How You Identify the SAML Subject for Contact Login*.

Add the SSO Profile Permission

You can add the single sign-on (SSO) permission on the Administration tab of the Profiles editor.

Before you start

For the SSO profile permission to be available, it must be enabled. Contact your Oracle account manager.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, then double-click **Profiles**.
The list of profiles displays.
3. Double-click the profile to which you want to assign single sign-on permission.
The Profiles editor opens.
4. Click **Permissions**.
The Permissions page opens with the Administration tab selected.

5. Select **SSO Login (SAML 2.0)**.

A warning message notifies you that all staff members having this profile will be prevented from logging in directly to B2C Service 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.

6. Click **OK**.

7. Click **Save**.

Related Topics

- [Administration Permissions](#)

Considerations When Using Single Sign-on

When single sign-on (SSO) is 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.

Configuration Settings—For security purposes, we recommend that if the SSO Login (SAML 2.0) permission is enabled, then SEC_END_USER_HTTPS also be 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 B2C Service, see [Overview of Oracle B2C Service Security and Compliance](#).

Restrictions—Several restrictions apply to staff members whose profile includes the SSO Login (SAML 2.0) permission. Because of the restrictions described here, we recommend creating a 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 B2C Service and change other staff member profiles (and assign them passwords, if necessary) so agents can continue to work until the problem is resolved.

- The staff members cannot log in to B2C Service using their B2C Service credentials, and will see an access denied message if they try to do so. 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.
- The profile's **CP Promote**, **CP Stage**, and **CP Edit** permissions are disabled and cannot be selected when the SSO Login (SAML 2.0) permission is selected. In addition, staff members using the profile cannot deploy the customer portal. For more information about Customer Portal permission options, see [Assign Permissions for Customer Portal](#).
- The staff members cannot edit development pages in WebDAV because WebDAV authentication requires a user name and password.
- Agents associated with a profile that has the SSO Login (SAML 2.0) permission selected cannot use their username and password for SOAP API authentication.
- The password options on the Staff Accounts editor are disabled; therefore, passwords cannot be modified for staff members with profiles that have the SSO Login (SAML 2.0) permission enabled. See [Add or Edit a Staff Account](#).

Related Topics

- [Administration Permissions](#)

Define Single Sign-on Configuration Settings

The configuration settings described in this procedure support the implementation of open login.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Configuration Settings**.
The Search window opens.
3. Perform these actions on the Search criteria at the top of the content pane.
 - a. Click the Configuration Base menu and select the **All** check box.
 - b. Click the Folders menu, clear the **Select All** check box in the Folders menu and then select the **Common** check box.
 - c. Click **Search**.

The Configuration Settings editor opens with the Common folder displayed on the content pane.

4. Expand the folders in the **Common/General/Single Sign-On** path to display the SAML_20_SIGN_CERTS and USE_KNOWN_ROOT_CAS configuration settings.
5. Click in the Value column to edit the configuration setting values. See *Edit a Configuration Setting*.

Common Single Sign-On Configuration Settings

| Configuration Setting | Description |
|-----------------------|---|
| SAML_20_SIGN_CERTS | <p>Identifies the only certificate(s) (a comma-separated list of SHA-1 hex thumbprints) accepted for SAML 2.0 signatures for agent or contact IdP-initiated SSO. You can use the value ANY-TRUSTED to accept any certificate that's trusted by the root CAs for the site. Default is blank.</p> <p>Tip: If ANY-TRUSTED is used, we recommend that the USE_KNOWN_ROOT_CAS configuration setting be disabled for security reasons.</p> <p>During IdP-initiated SSO, for either agents or contacts, only certificates listed in the SAML_20_SIGN_CERTS configuration setting are accepted for SAML 2.0 assertion signing for IdP-initiated SSO. This means that if no certificates are listed in the setting—which is its default—then no certificate will be accepted for SAML signing of IdP-initiated single sign-on requests. 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.</p> <p>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. See <i>Certificate Validation Options</i>.</p> <p>You can also prefix the list of certificate thumbprints with CERT_VALIDATION:IGNORE_TRUST. This indicates that the certificate used to sign the token (matching one of the certificate thumbprints in the list) doesn't need to be signed by a trusted root CA from the certificate store (i.e. the certificate signature chain's root CA doesn't need to be in the list of well-known CAs, assuming USE_KNOWN_ROOT_CAS is set or added to the Additional Root Certificates store). See <i>Add or Remove Certification Authorities</i>. For example, when a value of CERT_VALIDATION:IGNORE_TRUST,06767A1E3D41A358A8BCA912F36C0E3C5425CD4F,B7C5D22D2AEE2E151ED6D16DA3D6F4EEC7D08676 is entered, two certificates will be accepted for SAML token signatures (with the SHA-1 thumbprints given), but neither will be validated to have been signed by a trusted root CA.</p> |
| USE_KNOWN_ROOT_CAS | <p>Controls whether the known root certificate authorities list that's 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).</p> |

6. Click **Save**.

7. From the search criteria fields on the top of the editor, click the **Folders** drop-down list, clear the **Common** check box, and then select the **RightNow Common** check box.
8. Click **Search**.
The RightNow Common folder displays on the content pane.
9. Expand the folders in the **RightNow Common/Single Sign-On/General** path to display the SAML_ERROR_URL, SSO_ENTITY_ID, and SSO_SAME_SITE_ATTR configuration settings.
10. Click in the Value column to edit the configuration setting values.

RightNow Common Single Sign-On Configuration Settings

| Configuration Setting | Description |
|-----------------------|---|
| SAML_ERROR_URL | <p>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 <code>%error_code%</code> and <code>%session%</code> 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.</p> <p>These errors can be returned when using the <code>%error_code%</code> variable.</p> <ul style="list-style-type: none"> ○ SAML_TOKEN_REQUIRED—No SAMLResponse POST value was sent to the CP controller. A SAML response is required in order to start the authentication process. The error ID is 14. ○ SAML_TOKEN_FORMAT_INVALID—The SAML response was found, but it could not be successfully Base 64 decoded. The error ID is 15. ○ FEDERATED_LOGIN_FAILED—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. The error ID is 16. ○ SSO_CONTACT_TOKEN_VALIDATE_FAILED—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. The error ID is 17. ○ CONTACT_DISABLED_ERROR—The SAML assertion/login succeeded, but the contact is disabled in the database. The error ID is 6. ○ COOKIES_REQUIRED_ERROR—The user does not have cookies enabled. Cookies are required in order to log in to CP. The error ID is 3. |
| SSO_ENTITY_ID | You can use this setting to override the default entity identifier of your B2C Service site. Use this only when the external application doesn't support characters in the default identifier. |
| SSO_SAME_SITE_ATTR | An optional site-level parameter that controls whether SSO will be supported to access embedded frames within the Agent Browser UI. Set the value to None to allow SSO access. Leave the value blank if your site doesn't use SSO, or if you don't want it extended to use embedded frames. The default value for the setting is blank. |

11. Click **Save**.

Methods for Setting Up Identity Providers

You can configure identity providers using two different methods.

- Edit the **SAML_20_SIGN_CERTS** configuration setting and enter the certificate thumbprint of the IdP that posts the SAML assertion. This option is generally used with IdP-initiated SSO. See [Define Single Sign-on Configuration Settings](#) for a description of the configuration setting.
- Configure the IdP using the Single Sign-On Configurations editor. Identity providers configured using this method are used only for SP-initiated SSO. These are ignored when validating SAML assertions for IdP-initiated SSO. See [Authentication Using an External Identity Provider on the B2C Service Login Window](#).

For B2C Service to accept SAML 2.0 open login assertions from external identity providers, each identity provider must be configured to send the assertion URL to the B2C Service 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.*

B2C Service 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, this list includes some requirements and constraints you must consider as you configure an identity provider:

- B2C Service 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 these 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 means two minutes; however, you can change the value as needed.

How You Identify the SAML Subject for Agent Login

The parameter used to identify the SAML subject contents must be passed to the SSO launch page as a GET parameter.

The subject value must be unique for the single sign-on to be successful. For example, if multiple staff members can have the same value for an account custom field, then do 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`.

Acceptable values for `p_subject` depend on whether the flow is IdP-initiated SSO or SP-initiated SSO. If SSO is initiated by B2C Service (in other words, SP-initiated SSO), the only allowed value for `p_subject` is `Account.Login`. If SSO is initiated by an external provider (in other words, IdP-initiated SSO), the `p_subject` value can be any one of 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 the `sso_account_login()` API. This is the default mapping value if `p_subject` isn't set. The `Account.Login` value is case sensitive.

Note: This is the only value permitted for `p_subject` when the SSO is initiated by B2C Service in an SP-initiated process.

- `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.

The custom field value is case insensitive. These staff account custom field data types aren't supported for use in an assertion:

- Menu
- Yes/No
- Date/Time
- Date Field

This 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://my_site/cgi-bin/my_interface.cfg/php/admin/sso_launch.php?  
p_subject=Account.CustomFields.ExternalPhone
```

CAUTION: The latest version of the single sign-on URL for agents no longer accepts custom fields. Previously, custom fields in the query helped identify the SAML subject type. However, the SAML subject type passed by the external entity provider is now specified in the single sign-on configuration. An example of a URL using the new configuration follows.

```
https://my_site/cgi-bin/my_interface.cfg/php/sso/saml2/sp/post/acs.php
```

How You Identify the SAML Subject for Contact Login

For contacts, only IdP-initiated SSO is supported. The parameter used to identify the SAML subject contents must be passed to the openlogin controller as a GET parameter.

The format of the URL is:

```
your_site/ci/openlogin/saml/subject/SAML_subject
```

For example:

```
mysite.example.com/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` isn't 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 is added if necessary.

Note: The custom field value is case insensitive. These contact custom field data types aren't supported for use in an assertion:

- Menu
- Yes/No
- Date/Time
- Date Field
- Opt-in

How You Redirect 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 contacts 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 this example URL:

```
https://your_site/ci/openlogin/saml/subject/contact.id/redirect/app/ask
```

Authentication Using an External Identity Provider on the B2C Service Login Window

Your staff members can log in on the B2C Service Login window using authentication from external IdPs. This lets agents log in once to be authenticated across several service-provider (SP) applications.

Single logout is also supported, so that when agents log out of any SP application, they're also automatically logged out of the IdP and any other SPs where they were logged in.

See [Define an External IdP for Agent Authentication on the Login Window](#) for information about configuring external IdPs.

Note: Deployments involving B2C Service and Oracle Sales CX use Oracle Identity Management because Oracle Identity Management is bundled with Oracle Sales CX.

When the staff member logs in to the IdP, an encrypted SAML token is generated and passed to B2C Service. This method increases security because user IDs and passwords aren't sent between the applications.

After being authenticated, B2C Service provides authentication services to other SPs, alleviating the need to integrate them and the external IdP.

Define an External IdP for Agent Authentication on the Login Window

Follow this procedure to configure an external identity provider for agent authentication on the Login window.

Before you start

This procedure assumes that:

- You have added the Single Sign-On Configurations component to the configuration list for the Configuration button. See *Create a Navigation Set for the Administrator*.
- You have access to the Identity Provider editor defined by the hidden configuration setting SSO_ENABLE_EXTERNAL_IDP. This setting is not enabled by default. You can enable this setting using B2C Service Configuration Assistant. For more information, refer *Single Sign-On Configuration*.

Here's what to do

- Click **Configuration** on the navigation pane.
- Double-click **Single Sign-On Configurations** in your navigation list. The Single Sign-On Configurations editor opens with the **SAML** tab active.
 - Click **New** on the ribbon and select **SSO Identity Provider**.
The Identity Provider editor opens on the content pane.
 - Enter field information.

Identity Provider Editor

| Field | Description |
|------------------------------|--|
| Provider Entity ID | Enter a unique name for the IdP in this field. |
| Active | Select this check box to enable the IdP. You can configure multiple IdPs. |
| Web SSO | Select this check box to redirect agents to the IdP when they log in on the B2C Service Login window. See <i>Log in with an External Identity Provider on the B2C Service Login Window</i> . Only one active IdP can be enabled for Web SSO. |
| Enforce Audience Restriction | Select this check box to force the aud attribute (audience) of the SAML token to include the custom audience URL. Enforcing an audience restriction ensures that only tokens meant for the specific site are consumed. |
| Custom Audience URL | Enter the custom audience URL that the SAML token must match, for example: <code>https://customaudience.com/services/saml</code> If the Enforce Audience Restriction check box is selected, and the custom audience URL isn't specified, then the token must include the interface URL in its audience list. Entries in this field are ignored when Enforce Audience Restriction isn't selected. |
| NameID Format | Select either Unspecified or Email Address from the drop-down list. The NameID attribute is used in two places for enhanced validation: <ul style="list-style-type: none"> Incoming SAML assertion from the IdP Outgoing logout request to the IdP |

| Field | Description |
|--|--|
| Subject Type | Click the drop-down list and select the subject type used in the SAML token. The options are Email, Login Name, and Account ID. The default value is Login Name. |
| Label | Click the arrow next to Labels to expand this section. Enter the name as you want it to display for the IdP in the Label column. You can specify different names to use for different interfaces and languages. |
| SAML Token Parameters | Click the arrow next to SAML Token parameters to expand this section and configure the SAML token parameters. |
| Token Validity Offset | Enter 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. |
| Token Validity | Enter the number of seconds that the timestamp on SAML tokens will be accepted. |
| Certificates | Click the arrow next to Certificates to expand this section. The fields in this section are used to import the certificates you want to use to validate requests and SAML tokens received from the IdP. To delete a certificate, click the X icon next to the certificate. Certificates can be deleted if there is more than one certificate configured for the IdP or if the IdP is inactive. |
| Do Not Verify Trust Chain for Certificates | Select this check box to prevent verification of the trust chain for the certificates you import. This lets you use self-signed certificates or certificates that don't adhere to OpenSSL trust chain verification. |
| Import Certificate | Click the folder next to the field name to select the location of the certificate you want to use. The certificate displays in the Certificate field. |
| Import Alternate Certificate | Click the folder next to the field name to select the location of an alternate certificate to use when validation fails using the primary certificate. The certificate displays in the Alternate Certificate field. |
| Signing Parameters | Click the arrow next to Signing Parameters to expand this section where you can enter information to configure the signing method. |
| 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 list to select the XML signature method used to sign the SAML token. You can select: <ul style="list-style-type: none"> - RSA + SHA-1 - RSA + SHA-256 - RSA + SHA-512 |
| Sign Digest Method | Click this drop-down list to select the digest method used to sign the SAML token signature. You can select: |

| Field | Description |
|--------------------------|--|
| | <ul style="list-style-type: none"> - SHA-1 - SHA-256 - SHA-512 |
| Auto Provisioning | Click the arrow next to Auto Provisioning to expand this section where you can enable and configure the ability to automatically create staff accounts and enable or disable auto-provisioning for each IdP. |
| Enable Auto-Provisioning | Select this check box to enable this IdP for auto-provisioning of staff accounts. |
| Default Profile | Click the Search icon to select the profile you want to associate to this IdP. |
| Default Group | Click the Search icon to select the group you want to associate to this IdP. |
| First Name | Enter the value for the staff member as it corresponds to the FName attribute mapping. |
| Last Name | Enter the value for the staff member as it corresponds to the LName attribute mapping. |
| Title | Enter the value for the staff member as it corresponds to the JobTitle attribute mapping. |
| Phone | Enter the value for the staff member as it corresponds to the Phone attribute mapping. |
| Email Address | Enter the value for the staff member as it corresponds to the EMail attribute mapping. |
| User Name | Enter the value for the staff member as it corresponds to the Login attribute mapping. |

- c. Click **Save**.
 - d. To export the B2C Service metadata to an XML file, click **Export SP Metadata** on the ribbon and then browse to the XML file that's created into the external IdP's web server. This establishes a trust relationship between the IdP and B2C Service. If the external IdP encounters a problem with the entity ID in the exported metadata, the entity ID can be changed. Contact your Oracle account manager.
 - e. To import the metadata from the external IdP into B2C Service, click **Import IdP Metadata** on the ribbon and browse to the file you want to import.
 - f. Click **Save and Close** to save your changes and close the editor.
3. To create or edit a profile, click **Permissions** on the ribbon, and select the **SSO Login (SAML 2.0)** check box in the Administration section.
For more information on profile permissions, see *Profiles*.
 4. To create or edit a staff account in B2C Service and associate the profile with it. See *Add or Edit a Staff Account*.

Note: The staff account must also be a registered user in the external IdP and the user ID must match the B2C Service user name.

Log in with an External Identity Provider on the B2C Service Login Window

After the external IdP is configured, staff members open the B2C Service Login window as they normally would. However, the IdP's login page is now embedded in the window.

Before you start

You must have the SSO Login (SAML 2.0) profile permission selected in your profile.

Here's what to do

1. Launch B2C Service.

The external IdP's login page is embedded in the Login window.

2. Enter your login information.

The IdP verifies your credentials, generates a SAML token, and sends it to B2C Service. The SAML token is authenticated with the certificate used to sign the token.

You are then logged in to B2C Service.

Bypass the External Identity Provider

If staff members do not have the SSO Login (SAML 2.0) profile permission, the IdP can be bypassed, letting them log in using their Oracle Cloud Service credentials.

After configuring and enabling an IdP in B2C Service, your site's launch page includes an option for Install B2C Service—Internal Login.

Note: This option is intended for troubleshooting single sign-on issues, and isn't meant to be used as a conventional sign-on process.

1. Launch B2C Service.

2. Select **Install B2C Service—Internal Login**.

The login window without the embedded IdP page is loaded. This is an example of a URL for a launch page:

```
https://your_site/cgi-bin/interface_name.cfg/php/admin/launch.php
```

Use OpenID-based External Identity Providers

B2C Service supports the use of OpenID Connect (OIDC) external identity providers for single sign-on authorization for agents.

OpenID Connect (OIDC) is a widely used authorization protocol based on JSON, and OAUTH 2.0 standards. OIDC support lets administrators define and manage OIDC providers on the Agent Browser UI.

Using OIDC has these benefits:

- Agents have seamless access to B2C Service.
- OIDC eliminates the need for multiple credentials. Agents can log into B2C Service using their credentials with popular OIDC providers.
- OIDC can be used for web single-sign on.
- A single logout terminates the session, regardless of where the logout originates.
- Unlike SAML, OIDC is light weight and can be used on mobile platforms.

You perform these tasks to set up OIDC:

1. *Register B2C Service with the OpenID Connect Provider.*
2. *Define the OpenID Connect Provider in B2C Service.*

OIDC authorization uses this process:

1. An agent tries to log in to B2C Service.

2. B2C Service sends an authorization code request to the OIDC provider.
3. The OIDC provider challenges the user for their credentials. This is usually performed on a login page.
4. If the agent logs in successfully, or is already logged in to the OIDC identity provider, the OIDC provider returns an authorization code to B2C Service.
5. B2C Service sends an identity (ID) token request to the OIDC provider using the obtained authorization code.
6. The OIDC provider issues the ID token.
7. B2C Service creates a user session using the ID token.

Register B2C Service with the OpenID Connect Provider

You register B2C Service as a client with the OpenID Connect (OIDC) provider.

Enter information about B2C Service in the OIDC provider:

| Parameter | Value |
|--------------------------|--|
| Allowed Grant Types | Authorization Code |
| Client Type | Confidential |
| Redirect URL | The B2C Service URL to redirect to after the authorization code is generated: https://your_site/cgi-bin/your_interface.cfg/php/sso/oidc/idp/oidcs.php |
| Logout URL | The B2C Service URL where to post the logout request: https://your_site/cgi-bin/your_interface.cfg/php/sso/saml2/idp/post/logout.php |
| Post Logout Redirect URL | This is the same as the redirect URL: https://your_site/cgi-bin/your_interface.cfg/php/sso/saml2/idp/post/oidcs.php |

Define the OpenID Connect Provider in B2C Service

You use the OIDC Providers editor in B2C Service to enter information about OpenID Connect external identity providers.

Before you start

This procedure assumes that:

- You have added the Single Sign-On Configurations component to the configuration list for the Configuration button. See *Create a Navigation Set for the Administrator*.
- You have enabled the hidden configuration setting `SSO_ENABLE_EXTERNAL_IDP`. This setting is not enabled by default. You can enable this setting using B2C Service Configuration Assistant. For more information, refer *Single Sign-On Configuration*.

Here's what to do

1. In the Agent Browser UI, click the Navigation Menu icon, then select **Single Sign-On Configurations**.
2. Click **New** on the toolbar.
The **New OpenID Connect Provider** editor displays.

3. Enter field information.

New OpenID Connect Provider Editor

| Field | Description |
|------------------------|---|
| Provider Entity ID | Enter a unique name for the OpenID Connect (OIDC) provider in this field. |
| Active | Select this check box to enable the OIDC provider. |
| Authorization Endpoint | The URL on the OIDC provider for requesting authorization code |
| Token Endpoint | The URL on the OIDC provider for requesting ID token |
| Client ID | Unique ID assigned to B2C Service by the OIDC provider |
| Client Secret | Confidential key assigned to Oracle Service Cloud by the OIDC provider |
| Scope | openid |
| ID Token Provider | Click the vertical three-dot menu, and click Add New to add a new Identity Provider. |
| Web SSO | Select this check box to make the OIDC provider the default external identity provider. Note: Only one active identity provider can be enabled for Web SSO (across both the SAML and OIDC protocols). |
| Subject Type | Click the drop-down list and select the subject type used in the ID token. The options are Email, Login Name, and Account ID. The default value is Login Name. |
| Logout URL | The URL on the OIDC provider for sending logout requests/responses |
| Token Validity | Enter the number of seconds that the timestamp on ID tokens will be accepted. This takes precedence over the timestamp on ID tokens. |
| Certificates | Click the arrow next to Certificates to expand this section. Click the Choose file next to the Import Certificate field to select the location of the certificate you want to use to validate ID tokens received from the OIDC provider. The certificate populates in the Certificate field. You can also specify an alternate certificate to use when validation fails using the primary certificate. You can click the X Delete icon to delete the certificate. Certificates can be deleted if there is more than one certificate configured for the IdP or if the IdP is inactive. |

Note: If the certificate used to sign the ID token is self-signed, it must be uploaded to the Additional Root Certificates (certs/root) directory in the File Manager. See *Manage Files with the File Manager*.

Log in to External Applications Using B2C Service as the Identity Provider

You can configure B2C Service 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 Service Console or Agent Browser UI.

Before you start

To enable the option to use B2C Service as an identity provider, you must:

- Enable the SSO_IDP_ENABLE_EXT_APPS configuration setting.
- Add the Single Sign-On Configurations component to your navigation set.

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. 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.

Here's what to do

1. Go to **Single Sign-On Configurations**.
2. In the Single Sign-On Configurations editor, create a service provider.
3. Create a service application.
4. Add the service application to a workspace where agents can then access the external application without being asked for sign-in credentials.
See *Add Applications to the Service Console or Agent Browser UI*.

Results:

When an external application is configured to use B2C Service 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.

These procedures describe how to create an SSO service provider and an SSO service application, and how to view the audit log to see all related activity.

Related Topics

- [Redirection to the B2C Service Login Page](#)
- [Search for a Configuration Setting](#)
- [Edit a Configuration Setting](#)
- [Create an SSO Service Provider](#)
- [Create a Service Application](#)
- [View the Single Sign-On Configurations Audit Log](#)

Create an SSO Service Provider

Follow the steps outlined in this procedure used to create an SSO provider.

Before you start

Before you can create an SSO service provider, you must add the Single Sign-On Configurations component to the configuration list for the Configuration button. See *Create a Navigation Set for the Administrator*.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Double-click **Single Sign-On Configurations** in your navigation list.
The Single Sign-On Configurations tree opens with the SAML tab active.

3. Click **New** on the ribbon, then select **SSO Service Provider**.

The Service Provider editor opens.

4. Enter field information.

Service Provider Editor

| Field | Description |
|---|--|
| Provider Entity ID | Enter 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. After you're ready to use the service provider and its associated service applications, select the check box to enable it. |
| Use as Template | Select this check box to use the values for this service provider as your template values. If designated as the template, this service provider values are used for generating the SAML token when an Add-In requests a SAML token without specifying a specific service provider ID. Only one service provider can be designated as the template. |
| Audience Type | Click the drop-down list to select the type of audience for the service provider. Options include: <ul style="list-style-type: none"> ○ None—Generated SAML token is valid for all domains and URLs. ○ Restricted—Generated SAML token is valid only for the specific domains and URLs defined by the token. ○ Custom—Generated SAML token is valid for the domains and URLs defined in the Custom Audience URL field. The default value is Restricted. |
| Custom Audience URL | Enter the domains and URLs you want to specify as valid in this field. This field displays only when the Audience Type is set to Custom. |
| Labels | Click the arrow next to Labels to expand this section. Enter the name as you want it to display for the service provider in the Label column. You can specify different names to use for different interfaces and languages. |
| SAML Token Parameters | Click the arrow next to SAML Token Parameters to expand this section and enter information to configure the SAML assertion. |
| Assertion Consumer Service URL | Enter 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 | Enter the domain for which the SAML assertion is intended or for which it's valid. |
| Assertion Validity Duration | Enter 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 | Enter 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. |
| Include InResponseTo element in Assertion | Select this check box to include the InResponseTo element in the SAML assertion. The default value is No (unchecked). |
| Logout Parameters | Click the arrow next to Logout Parameters to expand this section. |

| Field | Description |
|--|---|
| | The fields in this section are used to configure single logout for external service applications when using B2C Service as the identity provider. See <i>Single Logout for SSO Applications</i> . |
| Logout URL | Enter the URL where the identity provider sends the logout request to the service provider. |
| Logout Validity Duration (in seconds) | Enter the number of seconds the identity provider's logout request will be valid. |
| Certificates | Click the arrow next to Certificates to expand this section. The fields in this section are used to configure certificates for single logout for external service applications when using B2C Service as the identity provider. |
| Do Not Verify Trust Chain for Certificates | Select this check box to prevent verification of the trust chain for the certificates you import. This lets you use self-signed certificates or certificates that don't adhere to OpenSSL trust chain verification. |
| Import Certificate | Click the folder next to the field name to select the location of the certificate you want to use. The certificate displays in the Certificate field. |
| Import Alternate Certificate | Click the folder next to the field name to select the location of an alternate certificate to use when validation fails using the primary certificate. The certificate displays in the Alternate Certificate field. |
| 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 list to select the XML signature method used to sign the SAML token. You can select: <ul style="list-style-type: none"> ○ RSA + SHA-1 ○ RSA + SHA-256 ○ RSA + SHA-512 |
| Sign Digest Method | Click this drop-down list to select the digest method used to sign the SAML token signature. You can select: <ul style="list-style-type: none"> ○ SHA-1 ○ SHA-256 ○ SHA-512 |

5. Click **Save**.

Create a Service Application

Use the following procedure to create a service application.

Before you start

Before you can create a service application, you must add the Single Sign-On Configurations component to the configuration list for the Configuration button. See *Create a Navigation Set for the Administrator*.

Here's what to do

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

2. Double-click **Single Sign-On Configurations** in your navigation list.
The Single Sign-On Configurations tree opens with the SAML tab active.
3. Select the SSO service provider you want the service application associated with.
The Service Provider editor opens.
4. Click **New** on the ribbon and select **SSO Service Application**.
5. Enter the URL that a browser using the application should go to in the **Base URL** field.
6. Click the **Type** drop-down list and select the type of application.
Options include the following:
 - o Oracle ATG Web Commerce Service Center
 - o Oracle ATG Engagement Engine
 - o Oracle InQuira Knowledge
 - o Unspecified
7. To prevent the service application from being available on the Service Console or Agent Browser UI, clear the **Enabled in Console** check box.
8. To prevent the service application from being available in a browser control, clear the **Available in Browser Control** check box.
9. To define how you want the service provider to display on the Service Console or Agent Browser UI, click the arrow next to Labels and enter the name you want to use for the service provider in the Label column.
You can specify different names to use for different interfaces and languages.
10. Click **Save**.

View the Single Sign-On Configurations Audit Log

Use the following procedure to view the Single Sign-On Configurations editor audit log.

1. Click **Configuration** on the navigation pane.
2. Double-click **Single Sign-On Configurations** in your configuration list.
The Single Sign-On Configurations editor opens.
3. Click the name of the service provider, service application, or identity provider you want to examine.
4. Click **Audit Log**.
The **Audit Log** window opens displaying the time the action occurred, the staff member who made the change, the type of action, and where on the administration interface the action was performed.

Add Applications to the Service Console or Agent Browser UI

After you configure SSO service providers and service applications, you must add the service applications you want your agents to access to the Service Console or Agent Browser UI.

1. Create or edit the workspace your staff members will use to access the external applications.
2. Add a browser control to the workspace.
SSO service applications you have created are available as options in workspace browser controls.
3. Select the service application from the **Application** drop-down list on the ribbon's Design tab, and drag it to the workspace.

Results:

When your staff members use the workspace, they will be able to access the application and will not be asked for credentials.

Redirection to the B2C Service Login Page

After configuring external applications to use Oracle B2C Service 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 B2C Service credentials.

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 (**RightNow User Interface/Tool Bar/General**), you can select what action is taken when staff members forget their user name or password. See [Login Help Options](#).

Note: Setting ACCT_RECOVER_STATUS to **0** disables login help functionality on the PHP login page, because this value opens the login help procedure in the B2C Service online documentation.

Related Topics

- [Search for a Configuration Setting](#)
- [Edit a Configuration Setting](#)

Single Logout for SSO Applications

Single logout for internal service providers is enabled automatically. Logout for external service providers requires editing the service provider configuration.

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're logged into when they log out of any one of them. The applications can be external or internal to the Oracle cloud. This enhances the security for all the applications, because users would be forced to reenter their credentials after they log out of any one of them.

- Internal service providers—Single logout for internal service providers is enabled automatically and requires no configuration other than that described in [Create an SSO Service Provider](#). Logout requests by service providers internal to the Oracle cloud do not require certificates because they're assumed to be secure.
- External service providers—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.

CAUTION: You must also configure the NameID Format parameter. If the NameID Format parameter for B2C Service and the external IdP do not match, then your agents might not be logged out automatically from other service providers. See [Define an External IdP for Agent Authentication on the Login Window](#).

Logout requests by external service providers must be signed using valid certificates to ensure that the logout request can be trusted. External service providers can also use alternate certificates to help transition from expiring certificates.

Related Topics

- [Create an SSO Service Provider](#)
- [Enable Single Logout for an External Service Provider](#)

Enable Single Logout for an External Service Provider

If your agents use single sign-on (SSO) to log in to other applications using B2C Service as the identity provider, they can be automatically logged out of all the service providers they're logged into when they log out of any one of them.

Before you start

This procedure assumes that:

- Single sign-on is enabled on your site and that you have already added the external service provider to B2C Service.
- You have added the Single Sign-On Configurations component to the configuration list for the Configuration button. See *Create a Navigation Set for the Administrator*.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Double-click **Single Sign-on Configurations** in your navigation list.
The Single Sign-On Configurations tree opens.
3. Select the service provider for which you want to enable single logout in the tree.
The Service Provider editor opens.
4. Click the arrow next to SAML Token Parameters.
5. Click the arrow next to Logout Parameters and enter the URL where the identity provider sends the logout request to the service provider in the **Logout URL** field.
6. Enter the number of seconds the identity provider's logout request will be valid in the **Logout Validity Duration** field.
The default value is **600** seconds.
7. Click the **arrow** next to Certificates to expand the section.
8. Click the **folder** next to the Import Certificate field to select the location of the certificate you want to use to validate logout requests.
After you select the certificate file, it populates the Certificate field.
9. 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're transitioning from an expiring certificate.
10. Click **Save**.

Use OAuth Authorization to Access the Connect REST API

You can use an external identity provider (IdP) to store your credentials, and use these credentials for making requests to the Connect REST API. You can also use these credentials to make requests to the Knowledge Advanced REST API.

You must perform these tasks to use an external IdP for making REST API requests.

1. *Configure the External Identity Provider.*
2. Download a security certificate from the external IdP to your local computer.
3. *Configure B2C Service for OAuth Authorization.*

Configure the External Identity Provider

This is a general procedure. The exact steps depend on the particular identity provider (IdP) used.

1. Configure B2C Service as a trusted client.
2. Specify the primary audience to be the Connect REST API endpoint, for example:
`https://mysite.example.com/services/rest/`
3. Specify the secondary audience, if needed, to be the Knowledge Advanced REST API endpoint, for example:
`https://mysite.example.com/services/km/api/latest/`
4. Set the scope to `/a11`, so that when an OAuth access token is requested from the IdP, the primary and secondary audiences are set in the token.

What to do next

Download a security certificate from the external IdP to your local computer. Then [Configure B2C Service for OAuth Authorization](#).

Configure B2C Service for OAuth Authorization

You must perform these tasks to use OAuth authorization with the Connect REST API. These tasks aren't required if you plan to use OAuth authorization only with the Knowledge Advanced REST API.

Before you start

This procedure assumes that you have access to the Identity Provider editor defined by the hidden configuration setting `SSO_ENABLE_EXTERNAL_IDP`. This setting is not enabled by default. To enable this hidden setting, contact your Oracle account manager or [Submit a Service Request](#).

Here's what to do

1. Create a profile for the OAuth user that has the SSO Login (SAML 2.0) permission enabled under Administration permissions.
See [Add or Edit a Profile](#) for more information.
 2. Create a staff account for the OAuth user and assign the OAuth user profile to it.
See [Add or Edit a Staff Account](#) for more information.
- Note:** The OAuth user staff account must not be disabled or locked.
3. Define the external IdP in B2C Service.
See [Define the External Identity Provider for OAuth Authorization](#).
 4. Retrieve a token from the external IdP.

Note: The OAuth user must be defined in the external IdP.

What to do next

You can now use the token in [REST API for Oracle B2C Service](#) and [REST API for Knowledge Advanced in B2C Service](#) calls. To [Revoke OAuth Access Tokens](#), use the Manage Access Tokens editor.

Define the External Identity Provider for OAuth Authorization

You define the external identity provider (IdP) on the OAUTH tab of the Single Sign-On Configurations editor.

Before you start

You must perform these tasks before defining the external IdP:

- Configure the external IdP.
- Download the security certificate from the external IdP to your computer.
- Add the Single Sign-On Configurations component to the configuration list for the Configuration button, for example to the **Site Configuration** tree. See *Create a Navigation Set for the Administrator*.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Double-click **Single Sign-On Configurations** in your navigation list.
The Single Sign-On Configurations editor opens with the **SAML** tab active.
3. Click the **OAuth** tab.
4. Click **New** on the ribbon and select **SSO Identity Provider**.
The Identity Provider editor opens on the content pane.
5. Enter this information:

External Identity Provider Fields

| Field | Description |
|------------------------------|--|
| Provider Entity ID | Enter a unique entity ID for the external IdP. |
| Active | Select this check box to make the external IdP active. |
| Enforce Audience Restriction | Select this check box to force the aud attribute (audience) of the OAuth token to include the custom audience URL. Enforcing an audience restriction ensures that only tokens meant for the specific site are consumed. |
| Custom Audience URL | Enter the custom audience URL that the OAuth token must match, for example: <code>https://customaudience.com/services/rest</code> Note: If the Enforce Audience Restriction check box is selected, and the custom audience URL isn't specified, then the token must include the interface URL in its audience list. |
| Token Validity | Enter the length of time in seconds from 1 to 86400 (1 day) for the OAuth token to remain valid from the time issued. If no expiration time is set by the external IdP, the default validity is 120 seconds. The length of time that the token is valid is the lesser of the following: <ul style="list-style-type: none"> ○ Time issued plus token validity ○ Expiration time set by the issuing IdP |
| Label | To change the display name of the external IdP, click the arrow next to Labels and enter a label as you want it to display. The default is New IDP Provider. |

6. Click the arrow next to **Certificates** drop-down arrow, then perform these steps.
 - a. To prevent verification of the trust chain for the certificates you import, select the Do Not Verify Trust Chain for Certificates check box.
Use this option only when using self-signed certificates or certificates that don't adhere to OpenSSL trust chain verification.

- b. Click the folder next to the Import Certificate field, browse for the security certificate you downloaded from the external IdP, then click **Open**.

The certificate is imported.

7. Click **Save**.

Results:

The external IdP definition is shown in the **Identity Providers** list.

What to do next

Use the Manage Access Tokens editor to *Revoke OAuth Access Tokens* as needed.

Revoke OAuth Access Tokens

You use the Manage Access Tokens editor to revoke OAuth access tokens.

Before you start

You must add the Manage Access Tokens component to the configuration list for the Configuration button, for example to the Common tree. See *Create a Navigation Set for the Administrator*.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Common**, then double-click **Manage Access Tokens**.
The Search window opens.
3. Enter or choose search terms, then click **Search**.
Access tokens are displayed in the list.
4. Click the **Revoke** link in the Action column to revoke a token.
That token can no longer be used to makes REST API calls.
5. Click the **Unrevoke** link to make the token valid again.
You can unrevoke tokens as long as they have not expired.

Add-Ins

Overview of Add-Ins

The desktop add-in framework lets application developers add custom components, or add-ins, to Oracle B2C Service to integrate with other applications on staff members' workstations.

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, see *Profiles*. For information about creating add-in files, see *Desktop Add-Ins Developer Guide*.

Note: 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 B2C Service 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.

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 direct linked library (DLL) files that reference the add-in views or zipped (**.zip**) 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.

Install a New Add-In

Using the Add-In Manager, you can 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. Additionally, 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 available to only those staff members with the Configuration permission selected on their profile's Administration tab.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Add-In Manager**.
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.

4. To install a new add-in, click **New**, then select **Agent Desktop Add-In**.

Note: When the Open window initially displays, only **.dll** files appear. To view **.zip** files, click the Files of Type drop-down list and select Compressed Add-In Files.

- a. Select the add-in's file and click **Open**.

The **Add-In Details** editor displays. The Name and API DLL Version fields are populated.

Add-In Details

| 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 **Folder** in the Name field, select the file, and then click **Open**.

6. To add a note to the add-in, enter it in the **Notes** field.

7. To specify the profiles that can access the add-in, click **Profile Access**.

- Select the profile in the Profiles Allowed to Access section.
- Select the appropriate interface check boxes in this section. Only interfaces that the profile has permission to access are displayed in the Interfaces section.
- To give the selected profile access to the add-in on all interfaces, select the **Select All** check box.
- To grant add-in access to all profiles on all interfaces, click **Apply All**.
- To remove add-in access from all profiles and interfaces, click **Clear**.

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, then double-click the property's **Value** field.

- To change the value for a property with a string or numeric type, enter the numbers or text you want for the property's value.
- To change the value for a property with a Boolean (yes/no) type, select or clear the check box that displays.

9. To specify different property values for another interface, select the interface and repeat step 7.

10. To specify different property values for another profile, select the profile and repeat step 7.

11. To automatically apply the property values you specified to other profiles and interfaces, click **Apply**, then select the appropriate option.

- To apply the property values to all interfaces for the profile, select **Apply this Configuration to All Interfaces for the Selected Profile**.
- 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 **Restore** 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 **Save**.

Install an Updated Add-In

If you edit or replace files used for an add-in you have previously installed, you need to update the add-in in the Add-In Manager.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Add-In Manager**.
The Add-In Manager opens on the content pane.
3. Click the name of the add-in you want to update.
4. Click **Update**.

Note: When the Open window initially displays, only **.dll** files appear. To view **.zip** files, click the Files of Type drop-down list and select Compressed Add-In Files.

5. Select the add-in's updated file, then click **Open**. The display is updated to reflect any changes from the updated add-in file.
6. Make any edits to the add-in that you need.
7. Click **Save**.

Remove an Add-In

You will sometimes need to remove add-ins that you no longer use from your site. This is done using the Add-In Manager. You cannot remove add-ins when an upgrade test site exists.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Add-In Manager**.
The Add-In Manager opens on the content pane.
3. Click the name of the add-in you want to remove.
4. Click **Delete**.
5. Click **Save**.

View the Audit Log for an Add-In

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.

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

2. Expand **Site Configuration**, and then double-click **Add-In Manager**.
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.
5. Click **X** on the top right to close the window.

Use Add-Ins in Scripts and Workspaces

After you upload an add-in, you can place it in scripts and workspaces. This functionality can be added in several ways, depending on how the add-in is written.

If the add-in includes functionality to accept information from rule and branch conditions, 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.

The add-in can display 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. We provide a script example here.

1. Add a custom field to your script where customers enter their product's serial number.
2. 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.
3. Create two script branches that branch to different pages on the script.
4. Configure the branches to fire when the customer clicks the **Next Page** button on the script's navigation panel (or when another action is taken).
5. Create one **if** condition for each branch that is checked when an add-in's control condition returns a certain value.
6. When you edit the conditions, you can enter the information you want to send to the add-in in the **Add-In Parameter** field.
In this example, you 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.
7. Set different operators and values for the conditions in each branch.
 - a. If you want the add-in to return true when it finds the serial number in the external database, set the operator to **equals** and the value to **true**.
 - b. Set the other branch's operator and value to **equals** and **false**.

Results:

Using this configuration, one branch is triggered when the add-in finds that a serial number is under warranty, and the other branch is triggered when the add-in finds it is not under warranty.

What to do next

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.

View Add-In Log Messages

After add-ins are installed, you can view log files of the activity related to add-ins you use or that you have added or deleted from the Add-In Manager.

Add-in logging is particularly useful for add-in developers or administrators who need to test or troubleshoot add-ins. You can also view which add-ins are enabled for your profile that might impact the behavior of the Service Console. All messages on the Log Messages window are removed when you log out of B2C Service. 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: 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 member sessions. However, you can save the messages to text files for later viewing.

1. Click **File** and then select **Add-In Logging**.
 - a. To view the current log file, select **View Current Log File**.
 - b. To view the previous log file, select **View Previous Log File**.

The **Log Messages** window opens. Two tabs are available on the 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 these message types.

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. These 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. These messages are not displayed on the In Memory Log Messages tab. |

2. 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 lists.

Add-In Logging Drop-down Lists

| Drop-down List | Description |
|-------------------|--|
| Activation Logger | Message types in this drop-down list 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. |

| Drop-down List | Description |
|---------------------|---|
| Distribution Logger | Message types in this drop-down list are written to the log file when add-in files are uploaded, updated, or removed. |
| Component Logger | Message types in this drop-down list are written to the log file by active add-ins that use the IGlobalContext.LogMessage API. |
| Usage Logger | Message types in this drop-down list are written to the log file when add-ins are used. The specific entries written to the log vary depending on the add-in functions. |

3. To remove log messages you do not want to see, select the tab showing the messages and then click **Clear Messages**.
4. To save the log file to a text file you can open for later viewing using a third-party text editor, select the tab with the messages you want to save and then click **Save Messages**.
A window opens where you select the location and name of the text file containing the log messages.

View Add-Ins Enabled 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 to which you are logged in, and add-ins that are not applicable to the current interface.

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 **OK** to close the list.

Agent Browser UI Extensions

You can import Agent Browser UI Extensibility Framework files into Oracle B2C Service to create extensions by using the Add-In Manager.

You use this process:

1. Create custom content to display on the Agent Browser UI by using the extensibility framework. See the [Agent Browser UI Extensibility Framework Developer Guide](#).
2. Create an extension by using the Add-In Manager. See [Overview of Agent Browser UI Extensions](#).

Download Add-Ins and Extensions

You can download add-in and extension files from the Add-In Manager by using the Download button on the ribbon.

Before you start

Files must first be saved in the Add-In Manager before they can be downloaded.

Downloading add-in and extension files let you troubleshoot any errors that might occur in using these files. You can also use the download capability to import add-ins and extensions to other sites.

Here's what to do

1. In the Add-In Manager, select the add-in or extension that you wish to download.
2. Click **Download** on the ribbon.
3. In the **Save As** window, select where you want to save the add-in or extension, and click **Save**.

Results:

Add-ins are saved as **.zip** archives.

Extensions that consist of a single file, such as **.js** or **.json**, are saved as the file itself. Extensions that contain multiple files are saved as **.zip** archives.

Multiple Interfaces

Overview of Multiple Interfaces

When you use multiple interfaces, each interface can be a unique configuration of the data in your installation's single knowledge base.

Each installation of B2C Service initially contains one knowledge base and one interface. The knowledge base contains all the data needed to run B2C Service 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.

Multiple interfaces let you apply a unique configuration of your data to each interface 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 displays on the agent desktop. Using visibility settings for specific fields in each interface, you choose what can be viewed by your staff members.

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.

Note: You must set up customer portal pages separately for each interface.

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.
- **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. You must set the `ANS_PRV_ENABLED` configuration setting to Yes in order to enable privileged access to answers. This setting is found in the Configuration Settings editor in **RightNow User Interface/End-User Interface/Answers**. See *Edit a Configuration Setting*.

Note: Contact your Oracle account manager for information about multiple knowledge bases.

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.

Note: The configuration and analytics items in the following lists display 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
 - Password Configuration
 - Profiles
- 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
 - Mailboxes
 - Process Designer
 - Rules
 - Site-specific configuration settings
 - Site-specific message bases
- Internationalization
 - Countries
- Service
 - Answer Stopwords
 - Channels
 - Guided Assistance
 - Service Level Agreements (SLAs appear on all interfaces. However, you must set the response requirements separately for each interface.)
- Opportunity Tracking
 - Product Catalog
 - Sales Periods
 - Strategies
- Outreach
 - External Suppression List
- Database
 - Data Dictionary
 - Object Designer (custom objects)
 - Incident Thread 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 create a survey, you must log in to the interface from which the survey will be used. 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
 - Navigation Sets—Can be configured only for the logged-in interface
 - Scripts—Can be configured only for the logged-in interface
 - Workspaces/Workflows—Can be configured only for the logged-in interface
- Site Configuration
 - Customer Portal
 - File Manager
 - Interfaces
 - Interface-level configuration settings
 - Interface-level message bases
 - Message Templates
- Service
 - External Search Configuration—Can be configured only for the logged-in interface
 - Incident Stopwords—Can be configured only for the logged-in interface
 - Response Requirements

- Search Priority Words—Can be configured only for the logged-in interface
- Topic Browse
- 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 *Export a Report Definition to an XML File* to learn about copying reports from one interface to another.
- Audiences
 - Contact Lists
 - Segments
- Campaigns
- Content Library
 - Documents
 - File Attachments
 - Snippets
 - Templates
- 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.

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

When to Use Multiple Interfaces

The decision to use multiple interfaces depends on what you want to accomplish with each interface.

The following list summarizes the procedures involved in creating and configuring an additional interface. After you have completed the first two procedures, you need to decide which of the remaining procedures listed in this section you need to implement. Your decision depends on what you want to accomplish, but it is likely that you will want to implement many, if not all of them.

1. *How You Determine 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. *Change the Interface Display Name*—Change the interface name that appears on the agent desktop.
3. *Staff Member Accessibility*—Use navigation sets, workspaces, and profiles to establish the interfaces staff members have permission to access and work on.
4. *How You Manage Visibility in Configuration Items*—Customize configuration items with specific visibility settings such as custom fields and products.
5. *How You Configure and Customize the Interface*—Customize the interface-specific configuration settings for each new interface through the Configuration Settings editor.
6. *How You Manage Multiple Interfaces by Creating Business Rules*—Define rules to automatically assign incidents and opportunities to the proper interface and queue or staff member.
7. *How You Configure Mailboxes for Multiple Interfaces*—Customize your Service and Outreach mailboxes for each interface.
8. *How You Customize Message Templates for Multiple Interfaces*—Customize the notifications and emails that can be sent to your staff members and your customers from each interface.
9. *How You Add Answers for Multiple Interfaces*—Determine the content you want to provide to your customers through the customer portal and create your answers.

How You Determine 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.

Note: 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 criterion, you can easily see which settings are applied across all interfaces and decide what is best for your situation. See [Search for a Configuration Setting](#) and [Search for a Message Base](#).

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.

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.

Change 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Interfaces**.
3. Click the interface name you want to edit.
4. Enter the new interface name in the **Display Name** text box.
5. Click **Save**.

Staff Member Accessibility

There are three components that affect how your staff members access your interfaces: navigation sets, workspaces, and profiles. 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.

Related Topics

- [Navigation Sets in Relation to Multiple Interfaces](#)
- [Workspaces in Relation to Multiple Interfaces](#)
- [Profiles in Relation to Multiple Interfaces](#)

Navigation Sets in Relation to Multiple Interfaces

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 *Create a Navigation Set*.

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.

After your navigation sets are configured, you can assign them to profiles. See *Profiles*.

Workspaces in Relation to Multiple Interfaces

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 in Relation to Multiple Interfaces

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.

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. See *Add or Edit a Profile*.

How You Manage 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.

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 entering the foreign language word in the Label field.

How You Configure and Customize 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. See [How You Customize Configuration Settings](#).

Note: For configuration settings specific to the customer portal, see [Customer Portal Configuration Settings](#).

How You Manage Multiple Interfaces by Creating Business Rules

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 display on the interface. See [Options with Interface Visibility Settings](#) for a complete list of options.

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 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 conditions are met.

And although you cannot set the language or mailbox in a rule 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 language to German in a rule, you can change its interface. And, because 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 [Overview of Business Rules](#). For examples of commonly used business rules, see [Examples of Business Rules](#).

How You Configure Mailboxes for Multiple Interfaces

If you have Service enabled, you must create at least one Service mailbox for the new interface in order to send and receive email. If Outreach or Feedback is enabled, you must create at least one Outreach mailbox to 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. However, you can configure mailboxes for all interfaces, from any interface, using the Mailboxes editor. See [How Mailboxes Work](#).

Note: 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.

Distribution lists are not interface specific so any distribution list you add on one interface is available on all other interfaces. See [Add or Edit a Distribution List](#).

How You Customize Message Templates for Multiple Interfaces

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 let 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 [How the Message Templates Editor Works](#).

How You Add Answers for Multiple Interfaces

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 each interface 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 display and who can view them. Here are the other methods you can use to control the display of answers.

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. |

| Item | Method |
|----------------------|---|
| Conditional Sections | <p>Insert a section with certain visibility restrictions within an answer.</p> <p>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 Insert a Conditional Section.</p> |

Common Functionality

Overview of Common Functionality

B2C Service is designed for efficiency by making procedures as similar as possible.

When 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 B2C Service.

Common functionality applies to searching, opening, forwarding, copying, printing, assigning, flagging, and attaching files to different types of records. Also common to B2C Service 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.

Common Functionality Ribbon

All items that appear on the content pane—reports, explorers, and records—display a ribbon at the top of page, just below the Oracle logo 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 the buttons for that tab. 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.

Some buttons on the Home tab 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 Open, the incident that you have selected on the content pane opens. If you click the arrow on Open, 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 displays 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. See [Change Your 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 click buttons on a tab without maximizing the ribbon, just click that tab.

Customize the Quick Access Toolbar

The Quick Access toolbar, which appears next to the Oracle logo 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 displays 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. See [Change 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.

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 list 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 list on the Quick Access Toolbar and select **Reset Quick Access Toolbar to default**.

Display Shortcut Keys on the Ribbon

Keyboard shortcuts are available for all ribbon buttons so you can enter a key combination to perform an action rather than clicking a button 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 keyboard shortcuts for. For example, press Alt+H to display the keyboard shortcuts on the Home tab of the ribbon.
2. Enter the keys associated with a particular button to perform the button's action.
After using this method to perform an action, the keyboard shortcuts no longer display. See [Keyboard Shortcuts](#).

Record Search Options

One way to find a specific record when a report is open is by scanning the list of records to see if you can spot it.

B2C Service 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.

- *Search for a Record 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 Search depend on the report and which filters have been defined for it.
- *Overview of 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 displays, and you can select the one you want. If only one search result is returned, the workspace for that record will open on the content pane.
- *How You Search 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.

Search for a Record from a Report

Reports can be used to display lists of records. When you open a report, you can easily search for a record from that 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 the report 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.

1. With a report displayed, click **Search** 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.)

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. See *Change 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, enter 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. See *Answer Text Field Search Options*.
5. To limit the number of records returned in the search, select the **Limit To** check box and enter 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 list.
 - b. To sort by the selected field in ascending order, select **Ascending**. To sort in descending order, select **Descending**.
 - c. To sort on additional fields, select the fields to sort on from the **Then By** drop-down lists. 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 **Clear All**.
 - e. Click **OK**.
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. See [Change 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. See [Overview of Custom Reports](#).

11. Click **Search** to display the records that match your search criteria.

Related Topics

- [Special Characters Allowed When Searching](#)

Answer Text Field Search Options

When you are searching for answers, you can use the search text type fields Phrases, Similar Phrases, Exact Search, Complex Expression, or Answer ID.

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, see [Special Characters Allowed When Searching](#).

The answer Summary, Question, Answer, and Keywords fields are searched for matching terms.

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 enter. 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 enter 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 enter. 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. |

| Field | Description |
|--------------------|--|
| Complex Expression | Select this search technique to search for answers containing the complex expression you enter. 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. |
| Answer ID | Enter 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. |

Related Topics

- [Search for a Record from a Report](#)

Special Characters Allowed When Searching

B2C Service supports wildcard search and also allows other characters to produce more accurate results.

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.

This 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.

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. |
| / | May appear in the middle of a capitalized word or a number, but is otherwise considered punctuation. 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. |

| Character | Description |
|---------------------------------|---|
| < > | 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. |

Overview of Quick Search

Quick Search 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 displays 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 list on the Quick Search tool window, just enter the answer ID and click Search. 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. See [Overview of Managing Reports on the Reports Explorer](#).

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 displays, and you can select the one you want. If only one search result is returned, the workspace for that record will open on the content pane.

Note: B2C Service contains a number of predefined Quick Search reports. The reports that appear in the Quick Search drop-down list 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 [How You Customize Navigation and Configuration Lists](#).

Search for an Answer with Quick Search

You can use Quick Search to search for a variety of records, including answers.

1. Click the **Quick Search** drop-down menu on the Quick Search tool window and select **Answer Quick Search**. 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. Enter the answer ID and click **Search**. The answer opens on the content pane.

Note: Since the answer ID must match exactly, only one answer can match the answer ID you enter. However, other quick search types let you 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 **Clear** 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.

Keep in mind that your list of Quick Search reports may be different from the reports described here.

Search Fields for Predefined Quick Search Reports

| Predefined Quick Search Reports | Description |
|----------------------------------|--|
| Answer Quick Search | Enter the answer ID. |
| Asset Search | Enter the asset name, serial number, organization name, or contact name or select a service product from the Product drop-down list. |
| Campaign Search | Enter the campaign name. |
| Contact Quick Search | Enter the contact's last name, first name, or email address. |
| Incident Search | Enter the incident reference number. |
| Mailing Search | Enter the mailing name. |
| Opportunity Search | Enter the opportunity name. |
| Opportunity Tracking Task Search | Enter the task name. |
| Organization Quick Search | Enter the organization name. |
| Outreach Task Search | Enter the task name. |
| Quick Search Dashboard | Enter the incident reference number, contact name, organization name, or opportunity name. |
| Service Task Search | Enter the task name. |

How You Search 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.

This lists describes 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.

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.

This functionality applies only to incident, contact, organization, task, chat, asset, and custom object workspace types. If the Show Recent Items in Fields check box is cleared on the View Options window, recent items will not display in the search list.

Search for a Contact from an Open Record

Search for a contact from an open incident, opportunity, organization, task, asset, or contact list.

1. Open the **Contact Search** window using one of the following methods:
 - o If you are working on an incident, opportunity, organization, or contact list, click the **Contacts** tab. Then click **Add Existing** (or, for contacts lists, click **Add Contact** and select **Add Existing**).
 - o If you are working on an incident, opportunity, task, or asset, click **Search** to the right of the Contact field.
2. Enter 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 list and select from the following options (by default, all states are selected).
 - o Select All
 - o Service State
 - o Outreach State
 - o Opportunities State
4. Click **Search**. The contacts that match the search criteria are returned on the **Contact Search** window. If only one contact matches the search criteria, that contact is automatically selected and the **Contact Search** window closes.
5. Do one of the following:
 - o Select the contact you want to associate with the open record and click **Select**. 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).
 - o If the contact does not appear in the list, click **New Contact** at the bottom left of the window to open a new contact subtab. Complete the fields and click **OK**.

When the new contact subtab 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.

Search for an Organization from an Open Record

Search for an organization from an open contact, incident, opportunity, task, or asset.

1. On an open contact, opportunity, task, or asset, click **Search** to the right of the Organization field. The **Organization Search** window opens.
2. Enter 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 enter 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 list and select from the following options (by default, all states are selected).
 - o Select All
 - o Service State
 - o Outreach State
 - o Opportunities State
4. Click **Search**. The organizations that match the search criteria are returned on the **Organization Search** window. 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 **Select**. The **Organization Search** window closes and the organization appears in the Organization field.
 - o Or, if the organization does not appear in the list, click **New Organization** to open a new organization subtab. Complete the fields and click **OK**.

This procedure also applies when you want to search for and associate an organization on a new contact subtab opened from the Contacts tab of an incident, opportunity, organization, or contact list.

Search for a Task from an Open Record

Search for a task from an open answer, contact, incident, opportunity, or organization.

1. On an open answer, contact, incident, opportunity, or organization, click the **Tasks** tab.
2. Click **Add** and select **Add Existing**.
The **Task Search** window opens.
3. Enter 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 enter 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 **Search**.
The tasks that match your entry are returned on the **Task Search** window. If only one task matches the search criteria, that task is automatically selected and the **Task Search** window closes.
5. Do one of the following:
 - o Select the task you want to associate with the open record and click **Select**. The **Task Search** window closes and the task appears in the list of tasks on the Tasks tab.
 - o If the task does not appear in the list, click **New Task** to open a new task subtab. Complete the fields and click **OK**.

Overview of Standard Workspaces

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.

B2C Service 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. B2C Service also contains standard chat workspaces for staff members working in Chat. 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.

B2C Service 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. See *Change Your Personal Settings*.

For information about working with specific records and a description of their standard workspaces, see any of the following references.

- Organizations—See *Overview of Organizations*.
- Contacts—See *Overview of Contacts*.
- Tasks—See *Overview of Tasks*.
- Incidents—See *Overview of Incidents*.
- Answers—See *Overview of Answers*.
- Opportunities—See *Overview of Opportunities*.
- Assets—See *Overview of Asset and Product Registration*.

Open an Incident for Editing

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).

1. Click **Incidents** 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. See *Change Your 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 **Open** on the ribbon
- Clicking **Open** in the Action column
- Double-clicking the record

Forward a Record

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 displays. See *How You Customize Messages*. If you are adding a record instead of editing an existing one, you must first save the record before you can forward it.

1. Do one of the following:
 - Right-click a record in a report and select **Forward**. The **Forward** window opens.
 - With a record selected in a report, click **Forward**.
 - With a record open, click **Forward**.
2. Enter field information.

Forward Window

| Field/Button | Description |
|--------------------------|--|
| To ...* | Click this button to open the Select Names window. Select the name of the recipient and click To to insert the name in the field. (To select additional recipients, press Ctrl while making your selections.) After selecting the recipient, click OK on the Select Names window. See <i>Select a Recipient</i> . You can also enter 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 Cc . 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 Bcc . 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. 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. 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. |

| Field/Button | Description |
|-------------------|---|
| | This field is not visible when forwarding opportunities, tasks, or assets or if no files are attached to the incident. |
| 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. 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. This field is not visible when forwarding incidents, opportunities, or assets or if no files are attached to the task. |
| Files | Click Add Files and select Browse or Search to attach files to the email containing the forwarded record. See Browse for a File to Attach to a Record or Search for a File to Attach to a Record . Files added in this field are not added to the record. |
| Comment | Enter any comments you want to forward with the record in this field. 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 signature. 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. See How SMIME Security Works . |
| Do not encrypt | Click this drop-down list and select one of the encryption options. <ul style="list-style-type: none"> ○ Do Not Encrypt ○ Encrypt When Possible ○ Always Encrypt. Encryption is supported if a destination email address has a public key associated with it. |

Tip: If you want to retain a copy of the record you forward, enter your email address in the Cc or Bcc field. This will let you reference comments and any attachments to the record you forwarded to the recipient.

3. Click **Send**.

Related Topics

- [Overview of Message Templates](#)
- [Select a Recipient](#)
- [Browse for a File to Attach to a Record](#)
- [Search for a File to Attach to a Record](#)

Select a Recipient

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.

If your administrator has not added distribution lists, the Distribution Lists and Addresses folders will not display. See [Add or Edit a Distribution List](#).

1. Click **To**, **Cc**, or **Bcc** 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 B2C Service.
3. Select the name of the recipient and click **To**, **Cc**, or **Bcc** to insert the name in the field. To select multiple recipients, press Ctrl while making these selections.

Tip: You can enter 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 entered is highlighted. Notice that this name may be an individual's name, an email address, or a group or distribution list.

4. Click **OK**.
5. Click **Send** to forward the record to the recipients you selected.

Check Names Window

When forwarding records, if you enter 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 Send, 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. 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.

Copy a Record

B2C Service lets you copy a record to use as a starting point for creating another record.

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.

1. Do one of the following:
 - With a report open on the content pane, right-click the record you want to copy and select **Copy**. The **Copy** window opens.
 - With the record open, click **Copy** on the ribbon.

2. Select the option for each of the data items you want copied with the record.

Copy Options for Each Type of Record

| Record Type | Copy Options |
|--------------|--|
| Answer | <ul style="list-style-type: none"> <input type="radio"/> Access Level—Select from drop-down list. <input type="radio"/> Language <input type="radio"/> Status—Select from drop-down list. <input type="radio"/> Copy File Attachments <input type="radio"/> Copy Notes <input type="radio"/> Create Sibling Relationship—Select this check box to create a sibling relationship between the answer and the copy. <input type="radio"/> Save and Close Copies—Select this check box to automatically save and close copies of answers. |
| Asset | No copy options display when copying an asset record. |
| Contact | <ul style="list-style-type: none"> <input type="radio"/> Notes <input type="radio"/> File Attachments <input type="radio"/> Contact Lists |
| Incident | <ul style="list-style-type: none"> <input type="radio"/> Threads <input type="radio"/> Incident Contacts <input type="radio"/> File Attachments <p>When copying an incident, the original reference number is prepended to the incident subject of the copied incident for identification purposes.</p> <p>When copying an incident that is associated with a social channel, the thread type is automatically set to Email.</p> |
| Opportunity | <ul style="list-style-type: none"> <input type="radio"/> Notes <input type="radio"/> Opportunity Contacts <input type="radio"/> Opportunity Competitors <input type="radio"/> File Attachments <input type="radio"/> Quotes <input type="radio"/> Quote Products |
| Organization | <ul style="list-style-type: none"> <input type="radio"/> Notes <input type="radio"/> Organization Addresses <input type="radio"/> File Attachments |
| Task | <ul style="list-style-type: none"> <input type="radio"/> File Attachments <input type="radio"/> Notes |

3. Edit the copied record as necessary.

4. Click **Save**.

Print a Record

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.

1. Do one of the following:
 - o Right-click the record on a report and select **Print**. The **Print Dialog** window opens.
 - o With the record open, click **Print** on the ribbon.
2. Click **File** and select **Print**.
The **Print** window opens.
3. Click **Print**.

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*.

Close Multiple Records Simultaneously

You can close multiple open records at the same time using the right-click menu.

1. Select the records you want to close.
2. Right-click an individual tab and select one of the following options.
 - o Open in New Window—Opens the active tab in a separate window.
 - o Close—Closes the active tab. You can also press Ctrl+W or Ctrl+F4 to close the active tab.
 - o Close All But This—Closes all open tabs except the active one.
 - o 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. See *Record Workgroups*.

Audit Logs

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, who made the change, 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.

When all incidents of a parent object are re-associated to another object, they are subject to Foreign Key Management in the audit log. See https://cx.rightnow.com/app/answers/detail/a_id/12274.

In addition to records (answers, assets, contacts, incidents, opportunities, organizations, and tasks), B2C Service provides an audit log for campaigns, contact lists, documents, mailings, segments, surveys, and quotes.

Audit Log

| 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 B2C Service. |
| What | Displays the type of action performed. |
| Description | Displays a brief description of the action performed or provides additional information about the action. |

The Audit Log tab for quotes contains additional information. See [How You Manage Quotes](#).

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.

Assign a Record from a Report

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.

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. The staff member you assign the record to will receive a notification. See [Notifications](#).

1. Do one of the following:

- With a report open on the content pane and a record selected in the report, click **Assign** 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.)
- Right-click the record in the report and select **Assign** or **Assign > [Type of record]**.

2. Do one of the following:

- Select a staff member from the Recent list, if any appear. Up to ten of the most recent selections are shown.
- Use the auto-complete function to quickly find a name in the list of staff members. Begin entering 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 entered, and the focus is on the first name on the filtered list. Enter 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 **OK**. 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).

Assign an Open Record

You can assign an open record to another staff member. The staff member you assign the record to will receive a notification.

1. Click the **Assigned** field drop-down menu. (For a contact or organization, click the **Salesperson** field drop-down list.)
2. Do one of the following:
 - o Select a staff member from the Recent list, if any appear. Up to ten of the most recent selections are shown.
 - o 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 entering 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 entered, and the focus is on the first name on the filtered list. Enter 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 entering 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 entered. Enter additional letters of the name to narrow the list further.
 - o To find a previous matching name, click the up arrow.
 - o To find the next name that matches in the list, click the down arrow next to the Find field.

Note: List hierarchy is used in determining match precedence.

4. Do one of the following:
 - o With the staff member you want to assign the record to highlighted, press the Enter key to select it.
 - o Click a staff member or group name from the list to select it.

Results:

The menu closes and your selection appears in the field.

Add a Flag to a Record

The standard workspace for answer, incident, opportunity, contact, and organization records includes a flag that lets you define the priority and enter a message regarding the record. When other staff members open the record, the flag and text you added appear on the 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 **High** (indicated by a red flag), **Medium** (indicated by a blue flag), or **Low** (indicated by a green flag).
3. To add text to the flag, select **Edit Flag Text** and enter text in the field.

Spell Checking

B2C Service uses three methods of spell checking.

The first method of spell checking 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 Spell Check on the ribbon.

Note: 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 Spell Check is disabled.

Related Topics

- [Create a Workspace](#)

Correct an Inline Misspelling

If your administrator has configured inline spell checking for fields in the workspaces you use, any text you enter in those fields is checked in real time.

B2C Service 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 enter 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.

Right-click the misspelled word and select one of the spell check options.

Spell Check Options

| 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 B2C Service 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. |

Check Spelling Manually

Rather than correcting each misspelled word individually as you work, you may prefer to wait until you are done entering all information for the record before you check the spelling.

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 Spell Check. Ribbons are defined when your administrator creates workspaces, which are then assigned to your profile.

1. Click **Spell Check**.

The **Spell Checker** window opens, and the first misspelled word is highlighted in the Not in Dictionary field.

2. Select one of the spell checker options.

Spell Checker Window Options

| 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. |

| Option | Description |
|--------------|--|
| 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. 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. |
| Cancel | Click this button to cancel the spell check. |

3. Click **OK**.

Set Spell Check Options

You can set specific options to streamline your spell check.

1. Click **Spell Check**.
The **Spell Checker** window opens.
2. Click **Options**.
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) 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 **OK**.

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 *Check Spelling Manually*. If you click Cancel to stop checking the record's spelling, a message notifies you and asks if you still want to save the record. Click Yes to cancel the spell checking and save the record.

Note: Your administrator may have disabled your ability to cancel an automatic spell check.

Overview of the Attachments Tab

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. When one or more files are attached to a record, the Attachments tab displays a paper clip icon.

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. See [View Attachment Properties](#).

Tip: You can drag file attachments found on your workstation and drop them onto any incident, answer, opportunity, contact, organization, or task if the Attachments tab is active.

Attachments Tab Toolbar

| Button | Description |
|------------|--|
| Add Files | Click this button and select Browse or Search to find and attach a file. |
| 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 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 display so you can select the ones you want to upload and attach to the record. See 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 View Attachment Properties . |
| Delete | Click this button to remove the selected file attachment from the record. |

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.

Sibling answer attachments with access levels that are at or below the contact's SLA are visible to the contact. See [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, 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. See *Incident Attachments Tab*.

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.

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. All files attached to an incident or incident response are recorded in the knowledge base and audit log. See *Attach Files to an Incident Response*.

Browse for a File to Attach to a Record

When you want to attach a file to a record, you can find the file by browsing or searching. The following procedures describe each method.

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.

1. Click the **Attachments** tab.
2. Click **Add Files** 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 **Open**.

Search for a File to Attach to a Record

You can search for files you want to attach to a record.

1. Click the **Attachments** tab.
2. Click **Add Files** and select **Search**.
The **File Search** window opens.
3. Enter field information.

File Search Window

| Field | Description |
|--------------------------------|--|
| Search directory | Enter the name of the directory where you want to search for the file, or click Browse . |
| Browse | Click Browse to display the file structure and make a selection from the list of available directories. |
| Part of file name or extension | Enter all or part of the file name in this field. This field uses an implicit wildcard at the end of the entry. |

| Field | Description |
|--|--|
| Filters | To select a filtering option for narrowing the search, clear the All Files (*.*) check box, 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. |
| All Files (*.*) | Select this check box if you do not want to restrict the search by file type. |

- Click **Search** to display a list of files that meet the search criteria.
- Click a file to select it for uploading.
- To attach additional files to the record, press Ctrl while selecting the files.
- Click **Add Files**.

View 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.

- Select a file attachment from the list and click **Properties** on the Attachments tab toolbar.
- Enter field information.

Attachment Properties Window

| Field | Description |
|--------------|---|
| *File Name | This field displays the file name. You can change the name of the file. |
| Display Name | Enter the name you want the file to display as on the customer portal. |
| Description | Enter a description of the file to provide more information about it. |
| Private | Select this check box to make the attachment private. 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. The Indexed check box appears only for files that are attached to answers. |

- Click **OK**.

How You Update Multiple Records

Multi-editing lets you 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 let 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 *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. This 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.

Available Fields on the Standard Workspaces

| Standard Multi-Edit Workspace | Fields Available for Multi-Editing |
|-------------------------------|--|
| Answer | <ul style="list-style-type: none"> • Status • Assigned • Review On • Publish On • Notes • Products/Categories |
| Asset | <ul style="list-style-type: none"> • Organization • Contact • Product • Status • Date Purchased • Date Installed • Date Retired • Price • Description |
| Contact | <ul style="list-style-type: none"> • Salesperson • State • Disabled Flag |
| Incident | <ul style="list-style-type: none"> • Assigned • Product • Status • Category • Queue • Disposition |

| Standard Multi-Edit Workspace | Fields Available for Multi-Editing |
|-------------------------------|--|
| | <ul style="list-style-type: none"> • Messages tab • S/MIME signing and encryption of responses are disabled when you edit multiple incidents simultaneously. <p>Note: Answers cannot be added to incidents when using multi-editing. You must add an answer to each individual incident record.</p> |
| Opportunity | <ul style="list-style-type: none"> • Organization • Status • Strategy • Stage • Manager Forecast • Rep Forecast • Forecast Close • Assigned • Date of Initial Contact • Recall • Date Closed • Closed Value • Summary |
| Organization | <ul style="list-style-type: none"> • Salesperson • State |
| Task | <ul style="list-style-type: none"> • Assigned • Due Date • Planned Completion • Date Completed • Status • Priority • Percent Complete • Task Type (Opportunity, Incident, Answer, Campaign, Mailing, Survey, Document) |

Edit Multiple Records

You can edit multiple records at the same time from the B2C Service application.

1. Double-click a report to display a list of records.
You can specify unique criteria to search for all records you want to update. See [Search for a Record from a Report](#).
2. Press Ctrl while selecting each record you want to edit.
3. Click **Open** 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.

The drop-down lists 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.

- o To change a field associated with a drop-down list, click the drop-down list 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 **Assign** on the ribbon, and select a staff member or group from the **Assign** window. See *Assign a Record from a Report*.

- o To change a date field, click the drop-down list associated with the field to open the current calendar month and select a date. If necessary, use the arrows at the top to change the month before clicking a day.
- o To change a search field, click **Search** (the magnifying glass to the right of the field), enter the search criteria in the window that opens, click **Search**, and select an option from the list of results.
- o To change a text field (such as the Response field on the Messages tab of the incident workspace), enter the new entry for the field.

Note: 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 **Save**.

Delete Multiple Records

You can delete multiple records at the same time from the B2C Service application.

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. See *What Happens When You Delete a Contact*.

1. Double-click a report to display a list of records.
2. Press Ctrl while selecting each record on the content pane you want to delete.
3. Click **Delete** on the report ribbon.
4. Click **Yes** on the Delete message to delete the selected records.

Forward Multiple Records

You can forward multiple records at the same time from the B2C Service application.

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 **Forward** on the report ribbon.
4. Follow the procedure for forwarding single records as described in *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.

Record Workgroups

B2C Service 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 lets you 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 subtab 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 subtab and becomes part of the workgroup. You can move easily between the records in the workgroup by clicking on the subtabs.

A record tab contains buttons that correspond to the buttons on the Editor group of the ribbon: OK, Cancel, and Undock. All subtabs, 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 subtab. However, it does not save changes to the database until you click Save or Save and Close on the ribbon.
- **Cancel**—Clicking this button closes the subtab 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 Dock on the window.)

Continuing the example of the incident workgroup, clicking the incident subtab 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 subtab. 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. To create workgroups, see [Create an Incident Workgroup](#).

Create an Incident Workgroup

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.

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 subtab.
4. To open additional records associated with the incident, repeat the previous two steps, replacing the references to contact information with information about the type of record you are opening.

When you click **Save** on any record in the workgroup, all records in the workgroup are saved. Likewise, when you click **Save and Close** 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.

Record Information Available in Outlook Appointments

This topic describes the record information that is transferred to Outlook appointments for each record type.

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, B2C Service automatically adds record information to the Outlook appointment, including the subject of the appointment.

Record Information Available in Appointments

| Record | Available Information |
|----------|---|
| Contact | <ul style="list-style-type: none"> • Name (subject of the appointment) • Title • Email • Office phone number • Address (street address, city, and postal code) • Banner text associated with the record flag • Notes |
| Incident | <ul style="list-style-type: none"> • Subject (subject of the appointment) • Customer entry |

| Record | Available Information |
|--------------|---|
| | <ul style="list-style-type: none"> • Response • Banner text associated with the record flag |
| Opportunity | <ul style="list-style-type: none"> • Opportunity name (subject of the appointment) • Manager estimate (Manager Value) • Sales rep estimate (Rep Forecast) • Closed value • Summary • Notes |
| Organization | <ul style="list-style-type: none"> • Organization name (subject of the appointment) • Addresses (street, city, and postal code for each available address type) • Banner text associated with the record flag • Notes |
| Task | <ul style="list-style-type: none"> • Task name (subject of the appointment) • Due date • Planned completion date • Completed date • Percentage complete • Notes |

Add an Outlook Appointment

You can add an Outlook appointment for contact, incident, opportunity, organization, and task records.

1. Right-click the record that you want to create an appointment for and select **Open** followed by [Record Type].
The record opens on the content pane.
2. Click **Appointment** to open the **Appointment** window.
The available record information displays in the appointment.
3. To add or edit any of the appointment information, enter the information in the appropriate field.
4. To add a color category to the appointment, click **Categorize** and select the category.
The first time you assign a default color category to an appointment, you are prompted to rename the category.

B2C Service automatically adds the category EM (Experience Management) to all new appointments. The appointment category displays above the Subject field.

5. To add multiple color categories to the appointment, click **Categorize** 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 keyboard shortcuts.
6. Make your changes to the appointment's categories and click **OK**.
7. Click **Save**.
It now appears in your Outlook calendar.

Notifications

Your notifications appear on 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 B2C Service 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.

Open Your Notifications

The Notifications component lets you view and manage the notifications you receive.

The following procedure assumes you open your notifications from the Communication Center navigation list, which displays 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.

1. Click **Communication Center** 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.

Notifications Ribbon

| Button | Description |
|------------|---|
| New | Click this button to open the Send Notification window, where you can enter a message and select a recipient. This button is enabled only when your profile has permission to send notifications. |
| Delete | Click this button to delete the selected notification. |
| Delete All | Click this button to delete all notifications. |
| 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.

Related Topics

- [Send a Broadcast Notification](#)

Desktop Alerts

Notifications display as desktop alerts, also known as toast notifications, when you're logged in to B2C Service.

The desktop alert message displays 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. See [Change Your Personal Settings](#).

Send a Broadcast Notification

If your profile gives you permission, you can also send broadcast notifications from this component.

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.

1. Double-click **Notifications** on the navigation pane.
2. Click **New** 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. When you select this check box, you cannot select individuals because **To** is grayed out.
4. To send to selected staff members, click **To** to open the **Select Names** window.
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 B2C Service.
 - a. Select one or more names from the list.
 - b. Click **To** to add the names to the field.
 - c. Click **OK** to close the **Select Names** window. The names you selected appear in the To field of the **Send Notification** window.
5. Enter your message in the **Message** field of the **Send Notification** window.

6. Click **Send**.

Tip: You can also enter 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.

HTML and Text Editors

How the HTML Editor Works

When creating content for use in mailings, surveys, message templates, or answers, you can add HTML using an HTML editor built into the system.

The HTML editor for answers is different from the HTML editor used for mailings, surveys, and message templates. The information in this section pertains to the HTML editor for mailings, surveys, and message templates. For details about the HTML editor for answers see .

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. See .

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 and .

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.

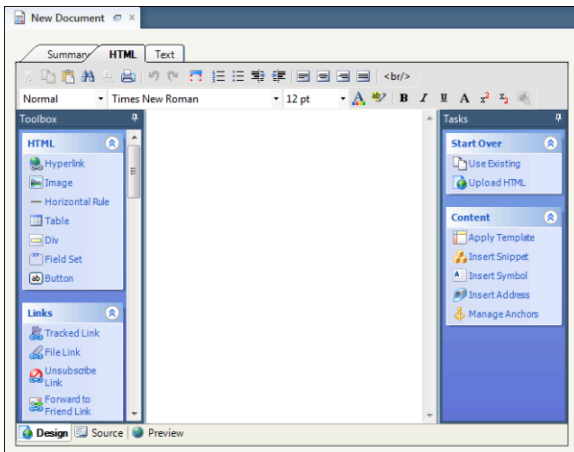
The links and dynamic content elements that display on the HTML editor are context-sensitive and depend on what type of content you are creating.

Related Topics

How You Add HTML in Design Mode

B2C Service contains an HTML editor for creating dynamic content.

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 as this image shows. The links and dynamic content elements that display on the HTML editor are context-sensitive and depend on what type of content you are creating.



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. Otherwise, only source mode is available. See , , and .

Links appear as clickable text when the document is used in a message, 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 found 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 message, mailing, or survey template. See .

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 are accessed through the Toolbox and Tasks sections. In the Toolbox section, there are HTML, Links, and Dynamic Content sections. When creating documents in Outreach and Feedback, there is also a Forms section. In the Tasks section, there are Start Over and Content sections. For detailed information about these functions, see the Toolbox Section and Tasks Section tables here: .

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.

Links and Dynamic Content Elements

You can add several types of links and dynamic content elements to your content. When an element is added, you have the option of defining certain attributes depending on the type of element.

Links appear as clickable text when the content is used in a message, mailing, or survey. The tools displayed on the HTML editor are context sensitive and are the logical tools you would use for the specific content you are creating.

Links and dynamic content elements are found in the Toolbox and Tasks sections of the HTML editor. 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 options.

Tip: You can insert HTML by clicking any button in the Toolbox or Tasks section, or by dragging and dropping the button to a specific location on the canvas.

Toolbox Section

| 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 . |
| Image | Click this button to insert an image. See . |
| Horizontal Rule | Click this button to insert a horizontal line. |
| Table | Click this button to insert a table. See . |
| 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. |

| Button | Description |
|--------------------------------|---|
| Account Assistance Link | Click this button to insert a link to the Account Assistance page on your customer portal. See . |
| Agent Browser UI Incident Link | Click this button to insert a link to the incident that triggered the sent message so that agents can access the incident on the Agent Browser User Interface. See . |
| Answer Link | Click this button to insert a link to any answer you specify. See . This button is available only in message templates. See . |
| Browser Link | Click this button to insert a browser link. See . |
| Chat Link | Click this button to insert a link to the Live Help page on the customer portal. See . This button is available only if Chat is enabled. |
| Cloud Link | Click this button to insert a link to a social media service. See . |
| Customer Portal Incident Link | Click this button to insert a link to the incident that triggered the sent message. 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 Customer Portal Incident Link to your Question Receipt message template, you can provide your customers with easy access to the incident created from their question. See . |
| File Link | Click this button to insert a file link. See . |
| Forward to Friend Link | Click this button to insert a link, which allows your customer to forward a copy of the mailing or survey to friend. See . |
| Incident Link | Click this button to insert a link to any incident you specify. See . |
| Profile Link | Click this button to insert a link to the Account Settings page on your customer portal. See . |
| 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 . This button is available only in message templates. See . |
| 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 . |

| Button | Description |
|------------------------------|---|
| | This button is available only in message templates. See . |
| Reset Password | Click this button to insert a reset password link. See . |
| Setup Password | Click this button to insert a link to the Finish Account Creation page on your customer portal. See . |
| Survey Link | Click this button to insert a link to a survey. See . |
| Survey Results Link | <p>This button is included, by default, on the Survey Notification message template and links to a web page that shows the survey responses. See .</p> <p>This button is available only in message templates. See .</p> |
| This Answer Link | <p>Click this button to insert a link to the incident that triggered the sent message. See .</p> <p>This button is available only in message templates. See .</p> |
| This Discussion Link | <p>Click this button to insert a link to the email discussion that triggered the sent message. See .</p> <p>This button is available only in message templates. See .</p> |
| Tracked Link | Click this button to insert a tracked link. See . |
| Unsubscribe All Answers Link | <p>Click this button to insert a link that lets contacts who receive answer notifications unsubscribe from future communications. See .</p> <p>This button is available only in message templates. See .</p> |
| Unsubscribe Link | Click this button to insert an unsubscribe link. See . |
| Unsubscribe This Answer Link | <p>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 .</p> <p>This button is available only on the Answer Update Notification message template. See .</p> |
| View Subscriptions Link | <p>Click this button to insert a link customers can use to edit their social notification subscriptions. See .</p> <p>This button is available only in message templates. See .</p> |
| Web Page Link | Click this button to insert a web page link. See . |

| Button | Description |
|---------------------|--|
| Forms | Buttons in this section are used to insert web forms and survey questions in your HTML. These buttons are available only for documents, templates, and snippets created in Outreach and Feedback. See . |
| Web Form | Click this button to insert a web form to collect customer data. Documents can contain only one web form. |
| Form Field | Click this button to insert a database field in the web form. Your web form must contain at least one form field. |
| Survey Question | Click this button to insert a survey question in the web form. |
| Submit Button | Click this button to insert a button for submitting the web form. |
| 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 . This button is available only in message templates. See . |
| Case Section | Click this button to add a case section to your conditional text. See . |
| Conditional Section | Click this button to insert a section of conditional text. See . |
| 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 . This button is available only for templates. For message templates, this button displays in 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 . |
| Merge Field | Click this button to insert a merge field. See . |
| Merge Report | Click this button to insert a merge report. See . |

Tasks Section

| Button | Description |
|----------------|---|
| Start Over | Buttons in this section are used to clear all HTML content and allow users to 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 | <p>Click this button to select a template to apply to a document. You cannot apply a template to templates or snippets. See .</p> <p>After 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.</p> |
| Insert Snippet | Click this button to insert a snippet. See . |
| Insert Symbol | Click this button to insert a special symbol. A symbol map opens. Double-click the symbol you want to insert. |
| Insert Address | <p>Click this button to insert a physical address. See .</p> <p>Note: The CAN-SPAM Act of 2003 requires that commercial email messages contain the sender's valid physical postal address.</p> |
| Manage Anchors | Click this button to add or remove an anchor or go to an anchored site. See . |
| Test CAN-SPAM | <p>Click this button to test the document for CAN-SPAM compliance. See .</p> <p>This button is available only when editing a document in a mailing message or survey invitation message.</p> |


Modify Page Properties

You can modify the HTML properties of your content to change colors of the text and links, insert a background image or color, and change the title.

1. Right-click in the document and select **Page Properties**.
The **Modify Page Properties** window opens.

2. Enter field information.

Modify Page Properties Window

| Field | Description |
|--|--|
| General Information | Define the general information of the web page in this section. |
| Title | Enter the title of the web page. |
| Author | Enter the name of the web page author. |
| Description | Enter 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 option to use the web browser default color settings. |
| Use Custom Colors | Select this option 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. |
| Background Image | Enter a URL to an image to use as the background in this text box. |
|  Open URL | Click this icon to open the URL in a web browser. |
| Background Color | Click this color box to choose a color to use as the background or enter the HTML hexadecimal value of the color in the field to the right of the color box. |

3. Click **OK**.

Edit Style and Class

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 with the `<head>` tag of a template.

1. Right-click an element after you add it to the canvas.
2. Select **Edit Style** for `<element type>` element.

3. Enter field information.

Edit Style Window

| Field | Description |
|-------|--|
| Class | <p>Enter any class name you want to assign to the element in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag.</p> <p>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.</p> |
| Style | <p>Enter 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).</p> |

4. Click **OK** to apply the attributes.

Insert an Account Assistance Link

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.

1. Click **Account Assistance** in the Links section of the Toolbox.

The **Account Assistance** window opens.

2. Enter field information.

Account Assistance Link Window

| Field | Description |
|--------|---|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | <p>Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag.</p> <p>Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS.</p> |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Insert an Agent Browser UI Incident Link

Inserting an Agent Browser UI Incident Link lets you link to the incident that triggered the sent message so that agents can access the incident from the Agent Browser User Interface.

The Agent Browser UI Incident Link is included, by default, on any incident-related administrator notification and administrator email message template. See *How You Customize Messages*.

1. Click **Agent Browser UI Incident Link** in the Links section of the Toolbox.
The **Agent Browser UI Incident Link** window opens.
2. Enter field information.

Agent Browser UI Incident Link Window

| Field | Description |
|--------|--|
| *Text | Enter the text you want to appear as the link. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Related Topics

- [Overview of Message Templates](#)

Insert an Anchor

From the HTML editor, you can add and remove anchors. Anchors are placed at designated locations within your content as destinations for hyperlinks.

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.

1. Click **Manage Anchors** from the Tasks section.
The **Manage Anchors** window opens.
2. Enter the anchor name in the **Anchor Name** field.
3. Click **Add Anchor** to add the anchor at the insertion point.
4. To delete an anchor, select it and click **Delete**.

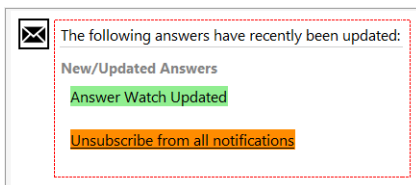
5. To rename an anchor, select it, click **Rename**, and enter a new name for the anchor.
6. Click **OK**.
7. Click **Close**.

Insert an Answer Section

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.

This image shows an answer section which 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 [How You Customize Messages](#).



1. Click **Answer Section** in the Dynamic Content section of the Toolbox.
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.

Note: 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.

Related Topics

- [Overview of Message Templates](#)

Insert an Answer Link

There are two ways you can link to answers from B2C Service. Inserting an Answer Link lets you link to any answer you need to reference in the message sent to your customer. Inserting a This Answer Link lets you link to the answer that triggered the sent message.

Both the Answer Link and This Answer Link are included, by default, on any answer-related message template. See [How You Customize Messages](#).

1. Click **Answer Link** in the Links section of the Toolbox.
The **Answer Link** window opens.

2. Enter field information.

Answer Link Window

| Field | Description |
|-----------|--|
| Answer ID | Enter the answer ID for the answer you want to link to in this field. |
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Related Topics

- [Overview of Message Templates](#)
- [Insert a This Answer Link](#)

Insert a Browser Link

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.

1. Click **Browser Link** in the Links section of the Toolbox.

The **Browser Link** window opens.

2. Enter field information.

Browser Link Window

| Field | Description |
|-------|---|
| *Text | Enter the text you want to appear as the hyperlink text. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. |

| Field | Description |
|--------|---|
| | Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Insert a Case Section

Case sections help you make your content more relevant to your target audience than it would be 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, then 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, then 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. See *When to Use Case Sections vs. Conditional Sections*.

Tip: Case sections and conditional sections can also be helpful when designing surveys for use on mobile devices. See *How You Customize Surveys for Use on Mobile Devices*.

1. Click **Case Section** in the Dynamic Content section of the Toolbox.
A case section opens on the content pane.
2. Do one of the following:
 - o Double-click **Conditional Section** inside the Case Section.
 - o Right-click and select **Add Conditional Section**. See *Insert a Conditional Section*.

You can apply style and class attributes by right-clicking an element after you add it to the canvas. See *Edit Style and Class*.

3. To add another conditional section to your case section, repeat step 2.
4. To add content to the Default section, enter 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.

Insert a Chat Link

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.

1. Click **Chat Link** in the Links section of the Toolbox.
The **Chat Link** window opens.
2. Enter field information.

Chat Link Window

| Field | Description |
|--------|--|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

How Cloud Links Work

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.

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 , then the key is 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 , then the key is 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 , then the key is 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 , then the key is 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 , then the key is 012345. |
| 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 enter a title for your posted link in the Key field. |
| Community | Clicking this link takes contacts to your Community Self Service page. No key is required. |

Insert a Cloud Link

Use cloud links to let your contacts track or post communications on social media. You can include cloud links in documents, templates, snippets, mailings, campaigns, surveys, and survey invitation messages.

1. From the HTML or Text tab on the HTML editor, click **Cloud Link** in the Links section of the Toolbox. The **Cloud Link** window opens.

2. Enter field information.

Cloud Link Window

| Field | Description |
|-----------------|---|
| Link Type | Click this drop-down list 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 |
| *Key | Enter the unique key value associated with the selected link type. This field is inactive when the link type is Facebook (Share on Profile), Twitter (Tweet), or Community. |
| Information (i) | Hover over this icon for information about the key required for the selected link type. |
| Target | Click this drop-down list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. This field displays only when inserting cloud links in the HTML editor. |
| *Link Text | Enter the text you want to appear as the link in this field. This field displays only when inserting cloud links in the Text editor. |

3. Click **OK**.

Note: The social media services described in this procedure, with the exception of Community Self Service, 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.

Insert a Conditional Section

You can add conditional content that displays only when specific criteria is met. For example, you could add a conditional section to a document used in a mailing for a segment of customers who live in a specific postal code.

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 in mailings and surveys when you insert a conditional section within an incident thread. For example, in certain message templates or if you've added a conditional section within an incident thread in a mailing or survey, you can define the conditional section to display a coupon based on the product specified in the incident. See *Edit a Message* and *How Incident Threads Work*.

Note: The available options are context-sensitive and depend on what type of content you are customizing.

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 *Insert a Case Section*.

For more information on how to use surveys on mobile devices, see *How You Customize Surveys for Use on Mobile Devices*.

1. Click **Conditional Section** in the Dynamic Content section of the Toolbox.
The **Conditional Section** window opens.
2. Enter a title for the conditional section in the **Title** field.
3. Select an option from the drop-down list to include content based on whether the contact is included or not included in the selected segment.
4. For mailings and surveys, select a segment from the Segments menu.
Segments are created when you define audiences.
 - a. To create a segment, click **New Segment**. See *Create a Segment*.
5. 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 option. These options are context-sensitive based on the type of content you are customizing.
 - a. To display text based on contact, see step 3.
 - b. To display text based on recipient profile, select an option from the drop-down list 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 *Edit a Message*.
 - d. To display text based on a record type, select an option from the drop-down list to include content based on whether the condition is true or false, and then select a record.
 - e. Next, select an operator to use in comparing the record to the data value, and then type a value that the record is compared to. See *Filter Operators for Segments*.
6. Click **OK** 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 *Edit Style and Class*. 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 *Insert an Incident Thread*.

7. Enter the content you want to display to your audience in the text box below the conditional section header.

Note: 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.

Related Topics

- [Overview of Message Templates](#)

Insert a Customer Portal Incident Link

There are two ways to link to incidents from B2C Service. Inserting a Customer Portal Incident Link lets you link to the incident that triggered the sent message. Inserting an Incident Link lets you link to any incident you need to reference in the message sent to your customer.

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 Customer Portal Incident Link to your Question Receipt message template, you can provide your customers with easy access to the incident created from their question. See [How You Customize Messages](#).

1. Click **Customer Portal Incident Link** in the Links section of the Toolbox.
The **Customer Portal Incident Link** window opens.
2. Enter field information.

Customer Portal Incident Link Window

| Field | Description |
|--------|--|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Related Topics

- [Overview of Message Templates](#)
- [Insert an Incident Link](#)

Insert a File Link

After files have been added, you can place them in your HTML content as links.

1. Click **File Link** in the Links section of the Toolbox.
The **File Attachment** window opens.
2. Enter field information.

File Attachment Window

| Field/Option | Description |
|--------------|--|
| *Files | Select a file from this list. See <i>Add a File</i> . |
| New File | Click this text to add a file. When you add the file, it's automatically selected in the menu. |
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Tip: You can also apply style and class attributes by right-clicking an element after you add it to the canvas. See *Edit Style and Class*.

Insert a Forward to Friend Link

Forward to Friend links let your customers forward your mailing or survey to additional email addresses. Recipients of the forwarded message 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.

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. Recipients of these emails see the message, "This message was sent to you by <email_address>," regardless of whether the sender includes comments when forwarding the message.

1. Click **Forward to Friend Link** in the Links section of the Toolbox.
The **Forward to Friend Link** window opens.

2. Enter field information.

Forward to Friend Link Window

| Field | Description |
|--------|---|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML document by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Insert a Hyperlink


You can insert hyperlinks in your HTML content and then define the hyperlink properties. You can also choose whether to link to an external site or an anchor in this or another document.

1. Click **Hyperlink** in the HTML section of the Toolbox.

The **Hyperlink** window opens.

2. Enter field information.

Hyperlink Window

| Field | Description |
|--|---|
| External Link | Select this option to insert a link to a website outside of B2C Service. |
| Link | Enter the full URL of the hyperlink in this field. |
|  Open Hyperlink | Click this icon to open the hyperlink in a web browser. |
| Link Text | Enter the text you want to appear as the link in this field. |
| Target | Select a target from this drop-down list: <ul style="list-style-type: none"> ○ 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. |

| Field | Description |
|---------------|---|
| | <ul style="list-style-type: none"> Browser Window—The URL opens in the same window. |
| Internal Link | Select this option to insert a link to an internal anchor. This option is available only if an anchor has been added to the document. See <i>Insert an Anchor</i> . |
| Anchor | Click this drop-down list to select an anchor to link to. |
| Link Text | Enter the text you want to appear as the link in this field. |
| Email | Select this option to insert a link to an email address. |
| Address | Enter the email address in this field. For example, enter 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 <code>mailto:</code> tag. The system adds the <code>mailto:</code> tag when you enter the email address in the field. |
| Link Text | Enter the text you want to appear in this field. |

3. Click **OK**.


Tip: You can also apply style and class attributes by right-clicking an element after you add it to the canvas. See *Edit Style and Class*.

Insert an Image

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.

- Click **Image** in the HTML section of the Toolbox. The **Image Editor** window opens.
- Enter field information.

Image Editor Window

| Field | Description |
|--|--|
| *Image URL | Enter the URL where the image is located. |
|  Open URL | Click this icon to open the URL in a web browser. |
| Alt Text | Enter the alternative text for the image. |
| Width | Enter the width, in pixels, you want the image to appear as. |
| Height | Enter the height, in pixels, you want the image to appear as. |
| Border | Enter the width, in pixels, of the image border. |
| Alignment | Click this drop-down list to select the image alignment: Inline, Left, Middle, Right, Top, or Bottom. The default alignment is Inline. |

3. Click **OK**.

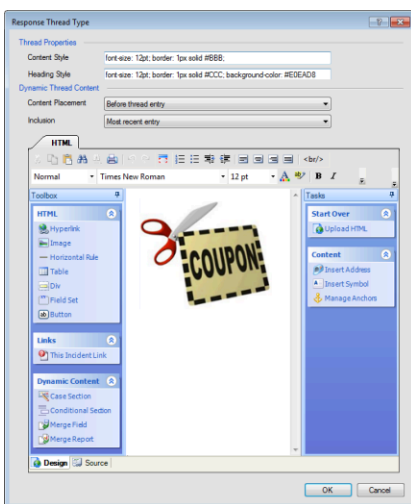
How Incident Threads Work

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.

You can define thread properties, which apply to the entire thread entry, as well as dynamic thread content, which lets you dynamically add content for a specific thread type. From the thread properties, you can customize the look of your incident thread by defining style and class attributes, display order, and limits on the number of threads (up to 99) that display in your messages. You can also set character limits on your incident threads to truncate the text that displays in the email message.

In addition to defining style and display attributes for the entire thread, you can define where to include your dynamic content—either before or after the thread entry for each specific thread type. 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 response thread.

This image shows the Response Thread Type incident thread. This particular thread type is designed to display a coupon at the start of the thread entry content and to be included only in the most recent entry.



Note: While dynamic 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.

Insert an Incident Thread

Use incident threads to display all communication related to an incident in your HTML content.

1. Click **Incident Thread** in the Dynamic Content section of the Toolbox.
An incident thread opens on the content pane.
2. To edit the thread properties, double-click the incident thread.
The **Thread Properties** window opens.
Thread properties display by incident thread type. 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.

- To define the types of threads that display in your content, clear or select the check boxes in the Thread Type section.

Note: Because thread types are specific to the type of thread, you may need to edit several (or all) thread types depending on which B2C Service products your organization uses.

Thread Type Definitions

| Thread Type | Description |
|-----------------|--|
| Customer Entry | Select this check box to display threads submitted by the customer. This option maps to both the Customer and Voice Integration incident thread type IDs in the threads.entry_type field. |
| Response | Select this check box to display threads for incident responses submitted from the Response option on the incident workspace. This option maps to the Response incident thread type ID in the threads.entry_type field. |
| Customer Proxy | Select this check box to display threads for incidents submitted by an agent on behalf of the customer from the incident workspace. This option maps to the customer proxy incident thread type ID in the threads.entry_type field. |
| Chat Transcript | Select this check box to display incident threads created from a chat session. This option maps to the Chat Transcript incident thread type ID in the threads.entry_type field. |
| Auto Response | Select this check box to display responses that are automatically added to the thread from a business rule. This option maps to the Auto Response incident thread type ID in the threads.entry_type field. |
| Private Note | Select this check box to display threads added as private notes on the incident workspace or threads added through business rules to the Notes thread. This option maps to both the Note and Rule Response Template incident thread type IDs in the threads.entry_type field. |

- 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.

5. Enter field information.

Thread Type Window

| 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. Thread properties are not available when using the text editor. See <i>Create Text Content in Documents</i> . |
| Content Style | Enter any HTML style and class attributes you want the content of your entire incident thread to display. By default, font-size: 12pt; border: 1px solid #BBB. |
| Heading Style | Enter any HTML style and class attributes you want the heading of your entire incident thread to display. By default, font-size: 12pt; border: 1px solid #CCC; background-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. It applies only to the content displayed in the email message. The options in this section apply only to the specific thread type. |
| Content Placement | The options in this drop-down list 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 list define where in the incident thread your content displays. Options include the following. <ul style="list-style-type: none"> ○ Most Recent Entry—Displays your content in only the most recent thread of this type. (Default) ○ All Entries—Displays your content in every thread of this type. ○ All Entries Except Most Recent—Displays your content in every thread of this type except the most recent one. |

6. Define the content to include in addition to your incident thread using the HTML editor on the Thread Type window. See *How the HTML Editor Works*.

7. Click **OK** to save your content and close the window.

The Thread Properties window remains open.

8. Repeat steps 4 to 7 for each thread type your system uses.

9. To change the thread order to display the oldest threads first, select **Oldest to Newest** in the **Thread Order** drop-down list in the Display section of the Thread Properties window. By default, the most recent threads display.

10. To limit the number of threads that display, select **Limit Thread Count** in the Display section of the Thread Properties window.

The Limit Thread Count check box is available only if the thread order is set to Newest to Oldest.

- a. Enter the number of threads you want to display (up to 99) in the field next to the Limit Thread Count check box.

- To truncate the text that displays within each thread (for all thread types), select **Limit Text To** in the Display section of the Thread Properties window.

The Use Ellipsis check box is available only if the Limit Text To check box is selected.

- Enter the number of characters you want to display in the field next to the Limit Text To check box.
- Select the **Use Ellipsis** check box to display an ellipsis (...) at the end of the truncated characters if the text exceeds the set character limit.

- Click **OK** to close the Thread Properties window.

Tip: You may want to consider showing conditional content based on the number of threads that are included within the sent message. See *Define Conditional Content Based on Message Thread Count*.

- Add any other links or dynamic content you need to customize your message using the hyperlinks, buttons, dynamic content, and other features available on the HTML editor of the message template.

Results:

If an incident is triggered, all communication regarding the incident displays in your message.

Insert an Incident Link

There are two ways you can link to incidents from B2C Service. Inserting an Incident Link lets you link to any incident you need to reference in the message sent to your customer. Inserting a Customer Portal Incident Link lets you link to the incident that triggered the message.

- Click **Incident Link** in the Links section of the Toolbox.
The **Incident Link** window opens.
- Enter field information.

Incident Link Window

| Field | Description |
|-------------|--|
| Incident ID | Enter the incident ID for the incident you want to link to in this field. |
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

- Click **OK**.

Related Topics

- [Overview of Message Templates](#)
- [Insert a Customer Portal Incident Link](#)

How Merge Fields Work

Merge fields let you look up account, asset, contact, incident, opportunity, organization, community, 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 [Insert a Merge Field to a URL Parameter](#).

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 invitation message by displaying the survey expiration date or the number of days until the survey expires. Other special fields include interface name, generation time, SLA name, and merge fields related to community content. 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 ways merge field content can be added: 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. See [Insert a Text Merge Field](#). When you insert an image merge field, you insert the content from any text or text area custom field into an `` tag within the HTML where it displays, such as a message template, mailing, survey, or answer. The custom field should contain the absolute or relative path to the image you want to display in the content. See [Insert an Image Merge Field](#).

Insert a Text Merge Field

Merge fields let you look up account, asset, contact, incident, opportunity, organization, community, or tracked link information and insert it in the text. When you insert a text merge field, you insert the text from part of the record, such as a contact email address.

1. Click **Merge Field** in the Dynamic Content section of the Toolbox.
The **Merge Field** window opens.
2. Click the **Type** drop-down list and select **Text**.
 - a. Enter field information and values.

Text Merge Field Window

| Field/Option | Description |
|---------------|---|
| *Merge Fields | Select a database column from this list. |
| Default | Enter 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. This field is unavailable when adding merge fields to a URL parameter. |

| Field/Option | Description |
|---------------|--|
| Format | <p>Click this drop-down list to select the format. The options that display are dynamic based on the type of merge field you select.</p> <p>This field is not available when adding merge fields to a URL parameter.</p> |
| Label | <p>Enter a label that displays next to the merge field in this field.</p> <p>This field is unavailable when adding merge fields to a URL parameter.</p> |
| Limit Text To | <p>Select this check box to truncate the text that displays as a result of a text-based merge field.</p> <p>For fields that are not text-based, such as date fields, this check box does not display. This field is set to 2500 characters, by default, on the Body merge field that displays in the template. Social and discussion message templates are located under the Discussion category of the Contact Emails message type.</p> |
| Characters | <p>Enter the number of characters you want to allow in text-based merge fields. This truncates the text that is sent in email messages.</p> <p>This field is available only if the Limit Text To check box is selected. For fields that are not text-based, such as date fields, this field does not display. This field is set to 2500 characters, by default, on the Body merge field that displays in the template. Social and discussion message templates are located under the Discussion category of the Contact Emails message type.</p> |
| Use Ellipsis | <p>Clear this check box to remove the ellipsis (...) from the end of the truncated characters if the text exceeds the set character limit. This check box is selected by default.</p> <p>This check box is available only if the Limit Text To check box is selected. For fields that are not text-based, such as date fields, this field does not display.</p> |

b. Click **OK**.

3. Click **Save**.

Tip: You can apply style and class attributes by right-clicking an element after you add it to the canvas. See [Edit Style and Class](#).

Insert an Image Merge Field

Image merge fields let you insert the content from any text or text area custom field into an `` tag within the HTML where it displays, such as a message template, mailing, survey, or answer.

Before you start

Before you can insert an image merge field to your content, you must add a custom field to your knowledge base. See [Add or Edit a Custom Field](#).

The custom field must contain the absolute or relative path to the image you want to display in the content.

Here's what to do

1. Click **Merge Field** in the Dynamic Content section of the Toolbox.
The **Merge Field** window opens.
2. Click the **Type** drop-down list and select **Image**.
 - a. Enter field information and values.

Image Merge Field Window

| Field/Option | Description |
|---------------|---|
| *Merge Fields | Select a text or text area 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 | Enter the default value of the merge field. The default value is used if a value does not exist for the custom field in a record. The value should be an absolute URL to an image (for example, http://www.example.com/images/logo.gif). |
| Base URL | Enter the base URL for the merge field if you use relative URLs in the custom field. The value of the custom field is appended to this URL. For example, if the base URL is http://www.example.com/images/ and the value of the custom field is logo.gif , the result will be http://www.example.com/images/logo.gif . Leave this field blank if the custom field uses an absolute URL. |

- b. Click **OK**.
3. Click **Save**.

Tip: You can apply style and class attributes by right-clicking an element after you add it to the canvas. See [Edit Style and Class](#).

Insert a Merge Field to a URL Parameter

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, 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](http://www.global.example/regform.php?user=$contacts.login) would return a URL such as <http://www.global.example/regform.php?user=jsmith>.

1. Enter any parameters you want to append to the links in your message (for example, `p1=v1&p2=v2`) in the **URL Parameters** field located below the HTML editor.

2. Click the **Merge Field** icon to the right of the URL Parameters field. The **Merge Field** window opens.
 - 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 **OK** to insert the merge field with the appended URL parameter.

How Merge Reports Work

In addition to merging data into your content one field at a time, you can select and merge full reports. Then you can filter the report output and edit its appearance. Merged reports extend data access to your marketing and survey communications so you can develop more dynamic and contextually relevant content.

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 Preview tab of the content editor. This filter limits the data shown in the preview and provides a more accurate representation of the finished content. You can also edit the merge report 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 a specific postal code to see if your conditional section works as intended. This improves the accuracy of your messages and, ultimately, saves you time.

Merge a Report into Content

Merge a report in the HTML editor in both HTML and text mode.

1. On the Design tab of the HTML editor, place the cursor where you want to position the report.
2. Click **Merge Report** in the Dynamic Content section of the Toolbox.
The **Merge Report** window opens listing all reports available in your profile.
3. Click the **Search** icon 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 **Select**.
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 list.
For a description of each merge report property, see *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 after the report is merged by editing the contents of the merge report placeholder.

8. Click **OK**.
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 that postal code to see if your conditional section works as intended. To preview by contact, repeat step 3.

Merge Report Properties

Merge report properties are defined on the Properties tab of the Merge Report window when merging a report into HTML content. In addition to merge report properties, other properties are available when merging into text content. The available properties depend on the option you select in the Output Type field.

Merge Report Properties

| Field | Description |
|-------------|---|
| Output Type | <p>Click this drop-down list to select the output type option. Output types define how your report data displays when it is merged into your HTML content. Options include the following:</p> <p>Table—Displays report data as a table.</p> <p>Record—Displays report data as a record, without table rows.</p> <p>List—Displays report data as a list.</p> |

| Field | Description |
|---------------------|---|
| | Single Value—Displays only the value of the field in the first row and first column of your report content. |
| Max Rows | Enter the maximum number of rows for the report data. Click the up or down arrow to increase or decrease the value. This field is available only for Table, Record, and List output types. |
| Table Properties | The settings in this section define the appearance of the table when it is merged into your HTML content. Table properties are available only when the Output Type field is set to Table. |
| Caption | Enter the caption you want to appear at the top of the table. This setting is also available when merging a report into text content. |
| Table Style | Enter any style attributes you want to apply to the table. |
| Table Class | Enter any class attributes you want to apply to the table. |
| Caption Style | Enter any style attributes you want to apply to the table caption. Style attributes define how the text appears. For example, color: red; font-weight: bold; font-style: italic. |
| Column Headers | Select this check box to display column headers for the table. This setting is also available when merging a report into text content. |
| Column Header Style | Enter any style attributes you want to apply to the column headers of the table. Style attributes define how the text appears. For example, color: red; font-weight: bold; font-style: italic. |
| Column Header Class | Enter the class name you want to apply to the column headers of the table. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. |
| Cell Style | Enter any style attributes you want to apply to the table cells. Style attributes define how the text appears. For example, color: red; font-weight: bold; font-style: italic. |
| Cell Class | Enter the class name you want to apply to the table cells. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. |
| Cell Format | Click this drop-down list to select a case format for the table cells. Options include Lowercase, Uppercase, and Proper Case (which capitalizes the first letters of every word). 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 list. |

| Field | Description |
|------------------------------|---|
| Border | Enter the width, in pixels, of the table border. |
| Frame | <p>Click this drop-down list to apply an HTML style to your frame. Options include the following:</p> <p>Void—Outside borders are not shown.</p> <p>Above—Top outside border is shown.</p> <p>Below—Bottom outside border is shown.</p> <p>Hsides—Top and bottom outside borders are shown.</p> <p>Vsides—Left and right outside borders are shown.</p> <p>Lhs—Left outside border is shown.</p> <p>Rhs—Right outside border is shown.</p> <p>Box—Outside borders are shown on all four sides.</p> <p>Border—Outside borders are shown on all four sides.</p> |
| Rules | <p>Click this drop-down list to apply an HTML style to the lines in your table. Options include the following:</p> <p>None—No lines are shown.</p> <p>Groups—Lines are shown between row groups and column groups.</p> <p>Rows—Lines are shown between rows.</p> <p>Cols—Lines are shown between columns.</p> <p>All—Lines are shown between rows and columns.</p> |
| Cell Padding | Enter the padding, in pixels, of the table cells. |
| Cell Spacing | Enter the spacing, in pixels, of the table cells. |
| Primary Background Color | Click this color box to select a primary color for the table cell background or enter the HTML hexadecimal value of the color in the field to the right of the color box. |
| Alternating Background Color | <p>Click this color box to select a color for the alternating table cell background or enter the HTML hexadecimal value of the color in the field to the right of the color box.</p> <p>The alternating background color helps with readability by adding color variation from one table row to the next.</p> |
| Border Color | Click this color box to select a primary color for the table border or enter the HTML hexadecimal value of the color in the field to the right of the color box. |
| Record Properties | <p>The settings in this section define the appearance of the record when it is merged into your HTML content.</p> <p>Record properties are available only when the Output Type field is set to Record.</p> |

| Field | Description |
|------------------------------|--|
| Record Style | Enter any style attributes you want to apply to the entire record. |
| Record Class | Enter any class attributes you want to apply to the entire record. |
| Row Style | Enter any style attributes you want to apply to the record rows. |
| Row Class | Enter any class attributes you want to apply to the record rows. |
| Header Style | Enter any style attributes you want to apply to the row headers of the record. Style attributes define how the text appears. For example, color: red; font-weight: bold; font-style: italic. |
| Header Class | Enter the class name you want to apply to the row headers of the record. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. |
| Value Style | Enter any style attributes you want to apply to the entered values of the record. Style attributes define how the text appears. For example, color: red; font-weight: bold; font-style: italic. |
| Value Class | Enter the class name you want to apply to the entered values of the record. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. |
| Format | Click this drop-down list to select a case format for the record values. Options include Lowercase, Uppercase, and Proper Case (which capitalizes the first letters of every word). This setting is also available when merging a report into text content. |
| Horizontal Rule | Clear this check box to remove the horizontal lines that display between your record rows. This check box is selected by default. |
| Primary Background Color | Click this color box to select a primary color for the background of the record or enter 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 alternating background of the record or enter the HTML hexadecimal value of the color in the field to the right of the color box. The alternating background color helps with readability by adding color variation from one record to the next. |
| List Properties | The settings in this section define the appearance of the list when it is merged into your HTML content. List properties are available only when the Output Type field is set to List. |
| Ordered List | Select this option to display a numbered list. |
| Unordered List | Select this option to display a bulleted list. |

| Field | Description |
|-------------------------|---|
| List Style | Enter any style attributes you want to apply to the list text. Style attributes define how the text appears. For example, color: red; font-weight: bold; font-style: italic. |
| List Class | Enter the class name you want to apply to the list text. You must define the class in your HTML content 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. |
| Format | Click this drop-down list to select a case format for the list text. Options include Lowercase, Uppercase, and Proper Case (which capitalizes the first letters of every word). This setting is also available when merging a report into text content. |
| Single Value Properties | The settings in this section define the appearance of the values of the field in the first row and first column of your report content. Single value properties are available only when the Output Type field is set to Single Value. |
| Format | Click this drop-down list to select a case format for the single value text. Options include Lowercase, Uppercase, and Proper Case (which capitalizes the first letters of every word). This setting is also available when merging a report into text content. |
| Style | Enter any style attributes you want to apply to the single value output. Style attributes define how the text appears. For example, color: red; font-weight: bold; font-style: italic. |
| Class | Enter the class name you want to apply to the single value output. You must define the class in your HTML content 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: Regarding class attributes, because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS.

Related Topics

- [Merge a Report into Content](#)

Insert a Physical Address

You can include a physical address in your HTML so it passes CAN-SPAM requirements by entering it in a separate area.

1. Click **Insert Address** in the Content section of Tasks.
The **Insert Address** window opens.
2. Enter the physical address of your organization in the **Sender's Postal Address** field.

3. Click **OK**.

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 *Edit Style and Class*.

Related Topics

- [CAN-SPAM Compliance](#)

Insert a Profile Link

Profile links let you link to the Account Settings page on your customer portal where customers can change their user name and update their profile information.

1. Click **Profile Link** in the Links section of the Toolbox.

The **Profile Link** window opens.

2. Enter field information.

Profile Link Window

| Field | Description |
|--------|--|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Related Topics

- [Configure the Account Settings Page](#)

Insert a Proof Comments Link

A Proof Comments Link lets you add a link to a web page where the recipient can give feedback about the survey they have been asked to proofread.

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.

1. Click **Proof Comments Link** in the Links section of the Toolbox.
The **Proof Comments Link** window opens.
2. Enter field information.

Proof Comments Link Window

| Field | Description |
|--------|---|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML document by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Related Topics

- [Overview of Message Templates](#)

Insert a Proof Survey Link

Inserting a Proof Survey Link lets you add a link to the 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.

1. Click **Proof Survey Link** in the Links section of the Toolbox.
The **Proof Survey Link** window opens.
2. Enter field information.

Proof Survey Link Window

| Field | Description |
|-------|--|
| *Text | Enter the text you want to appear as the link in this field. |

| Field | Description |
|--------|--|
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Related Topics

- [Overview of Message Templates](#)

Insert a Reset Password Link

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.

1. Click **Reset Password** in the Links section of the Toolbox.
The **End User Reset Password Link** window opens.
2. Enter field information.

End User Reset Password Link Window

| Field | Description |
|--------|--|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

| Field | Description |
|-------|-------------|
| | |

3. Click **OK**.

Insert a Setup Password Link

Setup password links let you link to the Finish Account Creation page on the customer portal, which also displays a link to the Account Assistance page.

1. Click **Setup Password Link** in the Links section of the Toolbox.
The **Setup Password Link** window opens.
2. Enter field information.

Setup Password Link Window

| Field | Description |
|--------|--|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Insert a Survey Link

There are two ways you can link to surveys from B2C Service—a Survey Link or a Link to This Survey.

From mailings, documents, and certain message templates, you can insert a Survey Link to add a link to any existing survey listed in your Surveys explorer. From a survey, you can insert a Link to This Survey to add a link to the survey you have open. The Link to This Survey is included, by default, on the survey invitation message when you create a new survey.

1. From a document, mailing or message template, click **Survey Link** in the Links section of the Toolbox.
The **Survey Link** window opens.

2. Enter field information.

Survey Link Window

| Field/Option | Description |
|--------------|---|
| *Surveys | Select a survey from this list. See Create a Survey . |
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> 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 | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Related Topics

- [Overview of Message Templates](#)
- [Insert a Link to This Survey](#)

Insert a Link to This Survey

There are two ways you can link to surveys from B2C Service—a Link to This Survey or a Survey Link.

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 invitation message when you create a new survey. 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.

1. From a survey Invitation Message tab, click **Link to This Survey** in the Links section of the Toolbox. The **Link to This Survey** window opens.
2. Enter field information.

Link to This Survey Window

| Field/Option | Description |
|--------------|--|
| *Text | Enter the text you want to appear as the link in this field. |

| Field/Option | Description |
|--------------|--|
| Class | <p>Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag.</p> <p>Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS for content included in mailings.</p> |
| Style | <p>Enter 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).</p> |
| Target | <p>Click this drop-down list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.</p> |

3. Click **OK**.

Related Topics

- [Overview of Message Templates](#)
- [Insert a Survey Link](#)

Insert a Survey Results Link

Inserting a Survey Results Link lets you link to a web page showing the survey responses. The Survey Results Link is included, by default, on the Survey Notification message template.

1. Click **Survey Results Link** in the Links section of the Toolbox.
The **Survey Results Link** window opens.
2. Enter field information.

Survey Results Link Window

| Field | Description |
|--------|---|
| *Text | <p>Enter the text you want to appear as the link in this field.</p> |
| Class | <p>Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag.</p> <p>Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS.</p> |
| Style | <p>Enter 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).</p> |
| Target | <p>Click this drop-down list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.</p> |

| Field | Description |
|-------|-------------|
| | |

3. Click **OK**.

Related Topics

- [Overview of Message Templates](#)

Insert a Table

You can insert a table in your HTML and define the number of rows and columns, its border properties, cell padding, and cell spacing.

1. Click **Table** in the HTML section of the Toolbox.
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 field information.

Advanced Tab

| Field | Description |
|--------------|--|
| Size | Define the size of the table in this section. |
| Rows | Enter the number of rows in the table. |
| 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 list. |
| Display | Define the table attributes in this section. |
| Border | Enter the width, in pixels, of the table border. |
| Cell Padding | Enter the padding, in pixels, of the table cells. |
| Cell Spacing | Enter the spacing, in pixels, of the table cells. |

- b. Click **OK** to insert the table.

4. To edit the table properties, right-click the table and select **Table Editor > Table Properties**. The **Table Editor** window opens.
 - a. Enter field information.

Table Editor Window

| Field | Description |
|--------------------|---|
| Caption Properties | Define the table caption in this section. |
| Caption | Enter the caption of the table. |
| Alignment | Click this drop-down list 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 list and select the location of the caption in relation to the table. Your choices are Top and Bottom. |
| Table Properties | Define the table attributes in this section. |
| Border | Enter the width, in pixels, of the table border. |
| Alignment | Click this drop-down list and select the alignment of the table on the page. Your choices are Inline, Left, Centered, and Right. The default alignment is Inline. |
| Width | Enter the width of the table and select the unit from the options (Pixels or Percentage). |
| Background Color | Click the color box to select a color for the table background or enter 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 borders or enter the HTML hexadecimal value of the color in the field to the right of the color box. |
| Cell Properties | Define the table attributes in this section. |
| Cell Spacing | Enter the spacing, in pixels, of the table cells. |
| Cell Padding | Enter the padding, in pixels, of the table cells. |

- b. Click **OK**.

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 cell properties, right-click the table cell and select **Table Editor > Cell Properties**. The **Cell Properties** window opens.
 - a. Enter field information.

Cell Properties Window

| Field | Description |
|----------------------|--|
| Border Properties | Define the cell border properties in this section. |
| Border | Enter the width of the cell border in pixels. |
| Border Color | Click the color box to select a color for the cell borders or enter the HTML hexadecimal value of the color in the field to the right of the color box. |
| Layout | Define the cell 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 list. |
| Horizontal Alignment | Click this drop-down list 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 list 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 background or enter 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 **OK**.

Tip: Additional options for inserting, merging, splitting, and deleting cells are available by right-clicking the table and selecting Table Editor.

Insert a This Answer Link

There are two ways you can link to answers from B2C Service. Inserting an Answer Link lets you link to any answer you need to reference in the message sent to your customer. Inserting a This Answer Link lets you link to the answer that triggered the sent message.

Both the Answer Link and This Answer Link are included, by default, on any answer-related message template.

1. Click **This Answer Link** in the Links section of the Toolbox.
The **This Answer Link** window opens.
2. Enter field information.

This Answer Link Window

| Field | Description |
|--------------------------|--|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list 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 summary as the text you want to appear as the link. |

3. Click **OK**.

Related Topics

- [Overview of Message Templates](#)
- [Insert an Answer Link](#)

Insert a This Discussion Link

Inserting a This Discussion Link lets you add a link to your message that customers can use to access the message that triggered the sent email.

The This Discussion Link is included, by default, on any contact email message template that is related to community content.

1. Click **This Discussion Link** in the Links section of the Toolbox.
The **This Discussion Link** window opens.

2. Enter field information.

This Discussion Link Window

| Field | Description |
|--------|--|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Related Topics

- [Overview of Message Templates](#)

Insert a Tracked Link

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.

Before you start

You must define your tracked links before you can insert them in your HTML.

Here's what to do

1. Click **Tracked Link** in the Links section of the Toolbox.
The **Tracked Link** window opens.
2. Enter field information.

Tracked Link Window

| Field/Option | Description |
|------------------|--|
| *Tracked Links | Select a tracked link from this list. |
| New Tracked Link | Click this text to create a tracked link. The tracked link is selected in the menu after being added. See Add a Tracked Link . |

| Field/Option | Description |
|--------------|--|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Tip: You can also apply style and class attributes by right-clicking an element after you add it to the canvas. See [Edit Style and Class](#).

Related Topics

- [Incident Response Tracking](#)

Convert Links to Tracked Links

When a document, template, snippet, or notification with HTML content is saved, you can choose to convert the links in the HTML to tracked links.

B2C Service 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>]."

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 **Yes** to convert the links to tracked links.

The **Convert Tracked Links** window opens. Each link in the document is validated and the results display in the window.

3. Enter field information.

Convert Tracked Links Window

| 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 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. |

4. Select the links you want to convert by clicking the check boxes next to the link names.

5. To edit the name and URL of a link, click **Edit**.

The Edit Tracked Link window opens.

- a. Enter the name of the tracked link in the **Link Name** field.
- b. Enter 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** icon.
- d. Click **OK** to save changes to the tracked link.

6. Click **OK** to convert the selected tracked links.

Note: The tracked links can be viewed or edited from the Tracked Links explorer. The links are stored in a folder named Automatically Generated and a subfolder named by the date the conversion was done (YYYY MM DD).

Related Topics

- [Automatically Generated Folders](#)
- [Add a Tracked Link](#)

Insert an Unsubscribe All Answers Link

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.

1. Click **Unsubscribe All Answers Link** in the Links section of the Toolbox.

The **Unsubscribe From All Notifications Link** window opens.

2. Enter field information.

Unsubscribe From All Notifications Link Window

| Field | Description |
|--------|--|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK** to insert the unsubscribe all answers link.

Related Topics

- [Overview of Message Templates](#)

Insert an Unsubscribe Link

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. 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 this procedure.

1. Click **Unsubscribe Link** in the Links section of the Toolbox.
The **Unsubscribe Link** window opens.

2. Enter field information.

Unsubscribe Link Window

| Field | Description |
|--------------|--|
| Opt-in Field | Click this drop-down list 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 Contact Opt-In Management . |
| Mode | Click this drop-down list to select how the link functions. You can select from three options: <ul style="list-style-type: none"> 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 - Opens a web page to confirm, but the field is set first. The default option is One Click. |
| Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK**.

Tip: You can also apply style and class attributes by right-clicking an element after you add it to the canvas. See [Edit Style and Class](#).

Insert an Unsubscribe This Answer Link

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.

The Unsubscribe This Answer Link is available only on the Answer Update Notification message template.

1. Click **Unsubscribe This Answer Link** in the Links section of the Toolbox.
The **Unsubscribe From Notification Link** window opens.

2. Enter field information.

Unsubscribe From Notification Link Window

| Field | Description |
|--------|--|
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 list 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 [Edit Style and Class](#).

Related Topics

- [Overview of Message Templates](#)
- [Insert an Answer Section](#)

Insert a View Subscriptions Link

Inserting a View Subscriptions Link lets you add a link to your messages that customers can use to see the list of subscriptions they have to your content and to update that list if needed.

The View Subscriptions Link is included, by default, on any contact email message template related to subscription notifications, such as answer and community update (discussion) subscriptions.

1. Click **View Subscriptions Link** in the Links section of the Toolbox.

The **View Subscriptions Link** window opens.

2. Enter field information.

View Subscriptions Link Window

| Field | Description |
|-------|--|
| *Text | Enter the text you want to appear as the link in this field. |

| Field | Description |
|--------|---|
| Class | <p>Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag.</p> <p>Note: Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS.</p> |
| Style | <p>Enter 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).</p> |
| Target | <p>Click this drop-down list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window.</p> |

3. Click **OK**.

Related Topics

- [Overview of Message Templates](#)

Insert a Web Form

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.
- 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, B2C Service searches existing organization records for a match. If a match is found, the contact is associated to the matching organization.

Note: 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 [Edit 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.

1. From a document, click **Web Form** in the Forms section of the Toolbox.

The web form section is added to the HTML content bordered by an orange dotted line.

2. Insert the cursor in the web form section and click **Form Field** to insert a field.
The **Form Field** window opens.
3. Enter field information.

Form Field Window

| 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 | Enter the class name you want to assign to the field. You must define the class in the HTML of your document by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. Because few third-party mail clients consistently support CSS, you should use style attributes instead of CSS. |
| Style | Enter 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 | Enter 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 **OK** to insert the field.
5. To add a survey question, click **Survey Question**. 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 *How Questions Work*.
 - 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 **OK** to insert the question.

6. Click **Submit 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.

Results:

After 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.

Related Topics

- [Web Form and Survey Security](#)
- [Prefill Web Form Fields](#)

Insert a Web Page Link

Web page links let you link to another document in B2C Service. When you create a campaign that serves a web page as an action, you make the page available to link to.

1. From a document, mailing, or survey, click **Web Page Link** in the Links section of the Toolbox.

The **Web Page Link** window opens.

Note: Your campaign must be launched for it to appear in the Web Page Links list. See [Launch or Suspend a Campaign](#).

2. Enter field information.

Web Page Link Window

| Field/Option | Description |
|-----------------|---|
| *Web Page Links | Select a web page from this list. See Edit Serve Web Page Attributes for information about web pages served in campaigns. |
| *Text | Enter the text you want to appear as the link in this field. |
| Class | Enter any class name you want to assign to the link in this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> 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 | Enter 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 list and select the target for the link: New Window, Same Window, Parent Window, or Browser Window. |

3. Click **OK** to insert the web page link.

Related Topics

- [Create a Campaign](#)

Add HTML in Source Mode

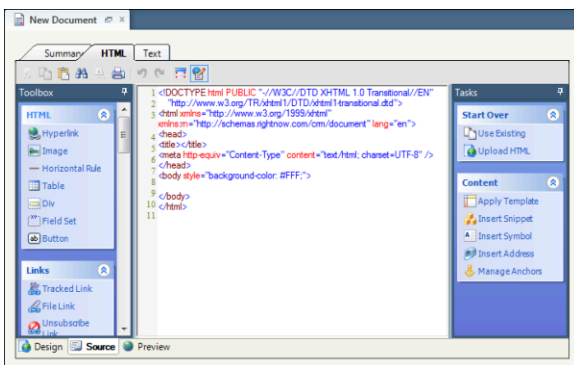
The HTML editor contains an option to create your documents using HTML code. You can enter HTML code directly in the editor to create your content.

The editor displays your code using colored text to indicate structure and syntax. There are additional functions available that you can access through the Toolbox and Tasks sections. The links and dynamic content elements that display on the HTML editor are context-sensitive and depend on what type of content you are creating. When you save, 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**).

Click the **Source** tab at the bottom of the HTML editor.

Source mode automatically places the cursor after the opening `<body>` tag. This image shows the HTML editor in source mode with the HTML tab selected.



The Source tab has a toolbar and a section for entering 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 .

Additional functions are accessed through the Toolbox and Tasks sections. 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. For detailed information about these functions, see the Toolbox Section and Tasks Section tables in .

Preview Content

You can preview the HTML and text versions of your content. The content displays as customers will see it in their email client or on a web page.

1. Click the **Preview** tab at the bottom of the HTML editor.
2. To see how your dynamic content displays, either by incident or contact, click the **Search** icon 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.

How You Create and Edit Text-Only Messages

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 , 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

Additional functions are accessed through the Toolbox and Tasks sections.

Toolbox and Tasks Sections

| 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 . |

| Button | Description |
|--------------------------------|---|
| Agent Browser UI Incident Link | Inserts a link to the incident that triggered the sent message so that agents can access the incident from the Agent Browser User Interface. See . |
| Answer Link | Click this button to insert a link to any answer you specify. See . This button is available only in message templates. See . |
| Browser Link | Click this button to insert a browser link. See . |
| Chat Link | Click this button to insert a link to the Live Help page on the customer portal. See . This button is available only if Chat is enabled. |
| Cloud Link | Click this button to insert a link to a social media service. See . |
| Customer Portal Incident Link | Click this button to insert a link to the incident that triggered the sent message. 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 Customer Portal Incident Link to your Question Receipt message template, you can provide your customers with easy access to the incident created from their question. See . |
| File Link | Click this button to insert a file link. See . |
| Forward to Friend Link | Click this button to insert a forward to friend link. See . |
| Incident Link | Click this button to insert a link to any incident you specify. See . |
| Profile Link | Click this button to insert a link to the Account Settings page on your customer portal. See . |
| Reset Password | Click this button to insert a reset password link. See . |
| Setup Password | Click this button to insert a link to the Finish Account Creation page on your customer portal. See . |
| Survey Link | Click this button to insert a link to an existing survey. See . |
| This Answer Link | Click this button to insert a link to the incident that triggered the sent message. See . |
| This Discussion Link | Click this button to insert a link to the email discussion that triggered the sent message. See . This button is available only in message templates. See . |
| Tracked Link | Click this button to insert a tracked link. See . |
| Unsubscribe All Answers Link | Click this button to insert a link that lets contacts who receive answer notifications unsubscribe from future communications. See . |

| Button | Description |
|------------------------------|--|
| | This button is available only in message templates. See . |
| Unsubscribe Link | Click this button to insert an unsubscribe link. See . |
| 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 . This button is available only on the Answer Update Notification message template. See . |
| View Subscriptions Link | Click this button to insert a link customers can use to update the list of social notifications they are subscribed to. See . This button is available only in message templates. See . |
| Web Page Link | Click this button to insert a web page link. See . |
| 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 . This button is available only in message templates. See . |
| Case Section | Click this button to add a case section to your conditional text. See . |
| Conditional Section | Click this button to insert a section of conditional text. See . |
| Incident Thread | Click this button to insert an incident thread that displays all communication between the parties associated with the message. See . |
| Merge Field | Click this button to insert a merge field. See . |
| Merge Report | Click this button to insert a merge report. See . |
| 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 . |
| Content | Buttons in this section are used to insert snippets and symbols. |
| Insert Snippet | Click this button to insert a snippet. See . |
| 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 . |

| Button | Description |
|--------|---|
| | Note: The CAN-SPAM Act of 2003 requires that commercial email messages contain the sender's valid physical postal address. |

Organizations

Overview of Organizations

Organization records provide a complete view of all activity 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. 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 B2C 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.

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.

How SLAs Work with Organizations and Contacts

A service level agreement (SLA) is a contract that can be applied to customers, both organizations and contacts, in Service.

SLAs let you 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. See [SLA Instance Field](#) for specific instructions about applying SLA instances.

Standard Organization Workspace

B2C Service 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. 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. See [Standard Workspaces](#) or [Custom Workspaces](#).

Organization Workspace Ribbon

The buttons on the standard organization workspace ribbon are used to perform actions on the workspace.

For information about the ribbon in general, see [Common Functionality Ribbon](#).

Standard Organization Workspace Ribbon

| Group/Button | Description |
|---------------|--|
| Editor | |
| Undock | Click to undock the organization editor from the console and display it in a separate window. |
| Save | |
| Save | Click to save the changes you have made to the organization and continue working. The organization record remains open. 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. See Overview of Business Rules . |

| Group/Button | Description |
|---|---|
| Save and Close | Click to save the organization and close the record. |
| Actions 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 to add an organization. |
| Refresh | Click to refresh the current organizations report. |
| Appointment | Click to add an appointment that is associated with the organization. See <i>Record Information Available in Outlook Appointments</i> . |
| Print | Click to print the organization record. See <i>Print a Record</i> . |
| Copy | Click to copy the organization record. See <i>Copy a Record</i> . |
| Delete | <p>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. See <i>What Happens When You Delete a Contact</i>.</p> <p>Click to delete the organization record.</p> |
| Proofing | |
| Spell Check | Click to check the spelling of any fields that have spell checking enabled. See <i>Check Spelling Manually</i> . |
| Links and Info | |
| Links | Click to select a URL from the list of links added by your administrator. |
| Info | Click 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. |

Related Topics

- [Display Keyboard Shortcuts on the Ribbon](#)

Organization Workspace 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.

- **Contacts**—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. See *Add New Contacts to an Organization*.

Note: Contact roles are used only in opportunity tracking.

- **Opportunities**—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. See *Overview of Opportunities*.

- **Notes**—Contains all notes associated with the organization. Notes can be sorted by date. Remember that customers never see the notes added by staff members. See *Add an Organization*.
- **Tasks**—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. See *Add a Task*.
- **Incidents**—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. See *Incident Creation*.

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**—Contains the hierarchical structure of the organization. See *Organization Hierarchies*.
- **Attachments**—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. See *Overview of the Attachments Tab*.
- **Audit Log**—Lists all actions taken on the organization record by all staff members. Also displayed are automatic changes initiated by B2C Service 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. See *Audit Logs*.

Add an Organization

You can add organizations independently of other records, or you can add them when you work on contacts.

Before you start

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. See *Record Search Options*.

Here's what to do

1. Do one of the following:
 - Click **New**.
 - If your navigation set is configured to add organizations from the file menu, click **File** and select **Organization**. See *Configure the File Menu*.
 - Click **Search** next to the Organization field from a contact record, and then click **New Organization** on the Organization Search window.

A new organization opens on a subtab.

2. Enter field information.

Organization Workspace Fields

| Field | Description |
|--------------------------|--|
| Organization Name | Enter 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. Enter 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. 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, you will only be able to view an SLA instance that has already been applied.) See <i>SLA Instance Field</i> . This field applies only to Service. |
| State | Click this drop-down list and select one or more of the following check boxes. <ul style="list-style-type: none"> ○ Service ○ Outreach ○ Opportunities The State field classifies how the organization was added (whether through Service when working on an incident, Oracle B2C Service Outreach when adding contacts, or 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 list to select a salesperson assigned to the organization. This field defaults to your name on the standard organization workspace. See <i>Assign a Record from a Report</i> . |
| Login | Enter 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. This field applies only to Service. |
| Password | Enter a password in this field to assign a login password to the organization. This field applies only to Service. |

3. To add contacts to the organization, click the **Contacts** tab. See *Add New Contacts to an Organization*.
4. To associate the organization with a new opportunity, click the **Opportunities** tab, click **Add New**, and complete the opportunity fields. See *Overview of Opportunities*.
5. To add notes to the organization record, click the **Notes** tab, click **Add**, and enter 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 **Note Channel** (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. See *Tasks Tab*.
7. To associate the organization with a new incident, click the **Incidents** tab, click **Add New**, and complete the incident fields. See *Add an Incident*.
8. To define the organization in terms of its parent or subsidiary divisions, click the **Hierarchy** tab. See *Organization Hierarchies*.
9. To attach files to the organization record, click the **Attachments** tab. See *Overview of the Attachments Tab*.
10. To view the audit log for the organization, click the **Audit Log** tab. See *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. See *Add a Flag to a Record*.
12. If the organization you are adding is on a subtab (because you are adding the organization to a contact), click **OK**.
Note: Closing the new organization subtab 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 **Save**.

Add New Contacts to an Organization

You can add new or existing contacts to an organization. This procedure is for adding new contacts.

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 **Add New** on the Contacts tab.
A new contact opens on a subtab.
3. Enter the contact's first and last names in the appropriate fields.
4. Select one or more check boxes in the **State** drop-down list.
5. To enter additional contact information, complete any of the remaining fields on any of the record tabs. See *Add a Contact*.
6. Click **OK**.
Clicking OK on the new contact subtab closes the subtab 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, repeat the previous steps.
8. Click **Save**.

Add Existing Contacts to an Organization

You can add new or existing contacts to an organization. This procedure is for adding existing contacts.

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, see *Overview of Contacts*.

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 **Add Existing**.

The Contact Search window opens.

3. Enter an entry in any of the available fields: **Contact Last Name, Contact First Name, Phone, Email, Postal Code, or Organization**.

You can use an asterisk (*) as a wildcard in your search term.

4. Select one or more check boxes in the **State** drop-down list.

5. Click **Search**.

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 Contacts tab.

6. Select the contact you want to associate with the organization and click **Select**.

The window closes and the contact appears on the organization's Contacts tab.

7. Click **Save**.

Edit an Organization

You might need 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.

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 **Save**.

Delete an Organization

This procedure describes how 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. See *What Happens When You Delete a Contact*.

1. Right-click the organization and select **Delete**.

A message asks you to confirm that you want to delete the organization.

2. Click **Yes**.

Remove Contacts from an Organization

This procedure describes how 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 **Yes** on the message that confirms the removal of the contact.
4. To remove additional contacts, repeat these steps.
5. Click **Save**.

Results:

The contacts are removed from the organization but not from the knowledge base.

Organization Hierarchies

The Organization Hierarchy feature in B2C Service lets you create a hierarchy for any organization that has subordinate organizations.

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 to create an organization hierarchy. After 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.

How You Work with the Hierarchy Tab

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.

Hierarchy Tab Toolbar

| Button | Description |
|---------------------|---|
| Add | Click and select one of the following options. |
| Add New | Select to open a new organization on a subtab and add an organization to the hierarchy. |
| Add Existing | Select to open the Organization Search window and add an existing organization to the hierarchy. |
| Open | Click to open the selected organization and edit it. |
| Print | Click to print the selected organization. |
| Remove | Click to remove the organization from the hierarchy. CAUTION: Removing an organization also removes its subordinate organizations from the hierarchy. |

| Button | Description |
|---------|--|
| Find | Click to open the Find window and search the hierarchy for an organization. |
| Refresh | Click 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 [Delete an Organization](#).

Add a New Organization to the Hierarchy

This procedure describes how 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 **Add > Add New**.
A new organization opens on a subtab.
4. Enter the organization name.
5. Select one or more check boxes in the **State** drop-down list.
6. To enter additional organization information, complete any of the remaining fields on any of the record tabs.
7. Click **OK** to close the new organization subtab 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 **Save**.

Related Topics

- [Add an Organization](#)

Add an Existing Organization to the Hierarchy

This procedure describes how 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 **Add** and select **Add Existing**.
The Organization Search window opens.
4. Enter search criteria in the fields to filter your organization search and click **Search**.
The organizations that match your search criteria display.

5. Select an organization from the list and click **Select**.
 - 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 **OK** 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**.

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.

6. Click **Save**.

Contacts

Overview of Contacts

Customer data is the foundation of B2C Service. 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.

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.

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.

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.

Standard Contact Workspace

Oracle B2C Service provides a standard workspace for working with contacts.

The standard contact 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. See [Standard Workspaces](#) or [Custom Workspaces](#).

Contact Workspace Ribbon

The buttons on the standard contact workspace ribbon are used to perform actions on the workspace.

For more information about the ribbon in general and the Quick Access toolbar, see [Common Functionality Ribbon](#).

Standard Contact Workspace Ribbon

| Group/Button | Description |
|-----------------------|---|
| Editor | |
| Undock | Click to undock the contact editor from the console and display it in a separate window. |
| Save | |
| Save | Click to save the changes you have made to the contact and continue working. The contact record remains open. 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 to save the contact and close the record. |
| Actions | 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 to add a contact. |
| Refresh | Click to refresh the current contact record. |
| Appointment | Click to add an appointment that is associated with the contact. See Record Information Available in Outlook Appointments . |
| Print | Click to print the contact record. |

| Group/Button | Description |
|-----------------------|--|
| Copy | Click to copy the contact record. |
| Delete | <p>CAUTION: To understand the consequences of this action before you delete a contact, see What Happens When You Delete a Contact.</p> <p>Click to delete the contact record.</p> |
| Reset Password | Click to invalidate the contact's current password. 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 to check the spelling of any fields that have spell checking enabled. See Spell Checking . |
| Links and Info | |
| Links | Click to select a URL from the list of links added by your administrator. |
| Info | Click 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. |

Related Topics

- [Common Functionality Ribbon](#)
- [Display Keyboard Shortcuts on the Ribbon](#)

Contact Workspace 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.

- **Opportunities**—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. See [Overview of Opportunities](#).
- **Notes**—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. See [Add a Contact](#).
- **Tasks**—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.
- **Incidents**—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. See *Incident Creation*.

- **Surveys**—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 allows you to view the contact's response. See *Overview of Surveys*.
- **Outreach Activity**—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. See *Overview of Mailings*.
- **Attachments**—Lists all attachments associated with the contact. The tab displays the file name, size, date created, date updated, and a description for each attachment. See *Overview of the Attachments Tab*.
- **Audit Log**—Lists all actions taken on the contact record by you, other staff members, and the customer. It also displays any automatic changes initiated by B2C Service that resulted from the application of business rules or through configuration settings. See *Audit Logs*.

Note: Your administrator may add additional tabs to a custom contact workspace assigned to your profile. The Role Sets View control can be added to a custom contact workspace to define Community Self Service roll sets for the contact.

Add a Contact

Contacts can be added to the knowledge base by customers and staff members.

Before you start

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. See *Record Search Options*.

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.

Here's what to do

1. Do one of the following:
 - Click **New** on the ribbon.
 - If your navigation set is configured to add contacts from the application menu, click **File** and select **Contact**. See *Configure the File Menu*.

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 subtab, 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. See *How You Add Contacts from Other Records*.

2. Enter field information.

Contact Workspace Fields

| Field | Description |
|--------------------------|--|
| First Name | Enter the contact's first name in this field. |
| Last Name | Enter the contact's last name in this field. |
| Email | Enter 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 enter the alternate email address in the field. 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 enter 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. See Email Address Sharing . |
| Office Phone | Enter the contact's phone number in this field. To add other phone numbers, click the arrow, select one of the options, and enter 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. Enter 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 list and select a contact type. These options are unique to your organization and were added by your administrator. See Add or Edit a Contact Type . |
| 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. See Overview of Channels . This field does not display unless your administrator has configured a custom contact workspace for the Channel Usernames field. See Overview of Workspaces . In addition, contacts can provide their own Facebook, Twitter, and YouTube user names through the ChannelAllInput and ChannelAllDisplay widgets on the customer portal. |
| State | Click this drop-down list 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 Service when working on an incident, Outreach when adding contacts, or Opportunity Tracking when working on an opportunity, and what areas of B2C Service the contact has since had activity in. The State field may be updated automatically, and you can also update it manually. |
| Organization | Click Search to the right of the Organization field to open the Organization Search window and search for an organization to associate with the contact. See Associate a Contact with an Organization . |
| Salesperson | Click this drop-down list and select the salesperson assigned to the contact. This field defaults to No Value. See Assign a Record from a Report . |
| Title | Enter the contact's title in this field. |
| Login | Enter 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 even if email address sharing is enabled. See Email Address Sharing . |

| Field | Description |
|----------------------|---|
| | 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, you will only be able to view an SLA instance that has already been applied.) See <i>SLA Instance Field</i> . 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 list 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 **Add New** to open a new opportunity on a subtab, and then complete the fields. See *Overview of Opportunities*.
4. To add a note to the contact record, click the **Notes** tab, click **Add**, and enter your comments in the field. 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 list 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 a task 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. See *Tasks Tab*.
6. To associate the contact with a new incident, click the **Incidents** tab. Click **Add New** to open a new incident on a subtab, and then complete the fields. See *Add an Incident*.
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. See *Overview of the Attachments Tab*.
10. To view the audit log for the contact record, click the **Audit Log** tab. See *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. See *Add a Flag to a Record*.
12. If the contact you are adding is on a subtab (because you are adding the contact to a contact list, incident, opportunity, or task), click **OK**.

Note: Closing the New Contact subtab 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 **Save**.

How You Add Contacts from Other Records

You can add or edit a contact from the Contacts tab when you work with incidents, opportunities, and organizations. These options are also available by right-clicking any contact.

Contacts Tab Toolbar

| Button | Description |
|-------------------------|---|
| Add New | Click to add a new contact to the record. See Add a Contact . |
| Add Existing | Click to search for and add an existing contact to the record. See Record Search Options . |
| Open | Click to open the contact record. See Edit a Contact . |
| Print | Click to print the contact record. See Print a Record . |
| Copy | Click to copy the contact record. See Copy a Record . |
| Delete | Click to delete the contact record. See What Happens When You Delete a Contact . |
| Remove | Click to remove the contact association from the incident, opportunity, or organization. |
| Email | Click to open your email client with an untitled message to the contact. This button is enabled only if your profile includes permission to email contacts. |
| Set Contact Role | Click to assign a contact role to the contact. See Set a Contact Role . This button is available only when editing opportunities. |
| Options | Click to display a drop-down list of options that include actions you can take, such as printing, forwarding, publishing, or exporting the contact data. |

These 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.)

Related Topics

- [Add a Contact](#)
- [Search for a Record from a Report](#)

Contact Associations

Changing a contact 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.

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 B2C Service 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 Feedback, can open and update contact records, ensuring that every staff member has the most current information about all contacts.

Associate a Contact with an Organization

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.

Note: 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.

1. Do one of the following:
 - o 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.
 - o If your navigation set is configured to add contacts from the file menu, click **File** and select **Contact**. See *Configure the File Menu*.
2. Click **Search** to the right of the Organization field.
You can also click the link in the **Organization** field, then select an organization from the list of recently viewed organizations. See *How You Search from Open Records*.
3. To search by organization name, enter the first few characters in the **Organization Name** field.
An implied wildcard is used so all organizations that begin with the letters you enter 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 list.
5. Click **Search**.
The list of organizations that match the search criteria appears.

6. Do one of the following:
 - o Select the organization you want to associate the contact with and click **Select** or press Enter. The Organization Search window closes and the organization appears in the contact record.
 - o If the organization does not appear in the list, click **New Organization** to open a new organization on a subtab and complete the fields. (The search term you entered in the Organization Name field on the search window appears in the Organization Name field on the new organization subtab.) See [Add an Organization](#).
7. Click **Save**.

How You Associate Contacts with Incidents

When you work on an incident in B2C 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. See [Add an Incident](#).

How You Associate 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. See [Overview of Opportunities](#).

Remove a Contact from a Record

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.

To remove a contact from an open task, right-click the name in the **Contact** field and select **Clear**.

1. Do one of the following:
 - o On the Contacts tab of the record, select the contact you want to remove and click **Remove**.
 - o Right-click the contact and select **Remove**.

A message asks you to confirm that you want to remove the contact.

2. Click **Yes**.

The contact remains in the knowledge base but is no longer associated with the record.

3. Click **Save**.

Edit a Contact

It is highly likely you will encounter situations where you need to update contact information for contacts that are already in the knowledge base.

Before you start

This procedure assumes a contacts report displays on the content pane. See [Search for a Report from the Reports Explorer](#).

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.

Here's what to do

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 **Save**.

What Happens When You Delete a Contact

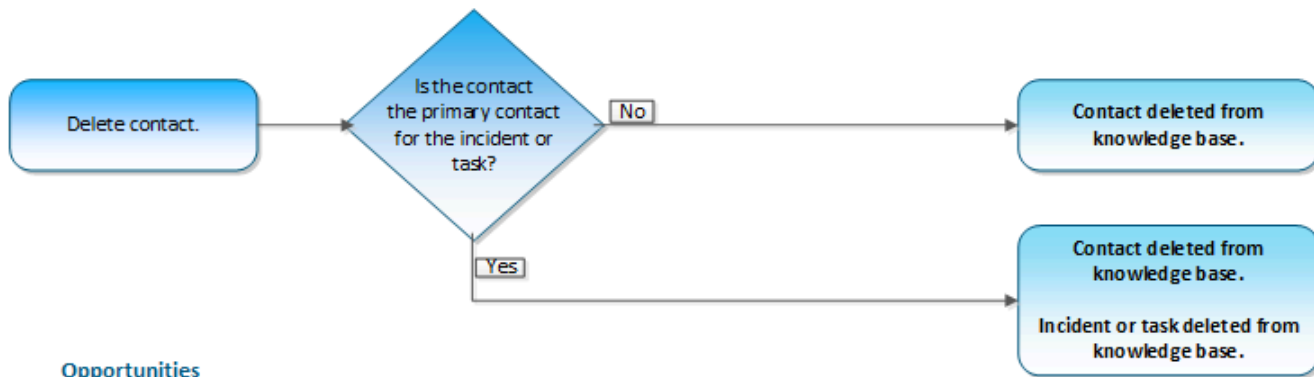
There are usually consequences when a contact is deleted. If the contact is associated with multiple incidents, tasks, opportunities or both, different results may occur with each record, depending on the type of associations and the association of other contacts with the record.

In cases where the contact has multiple incidents, tasks, or 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.

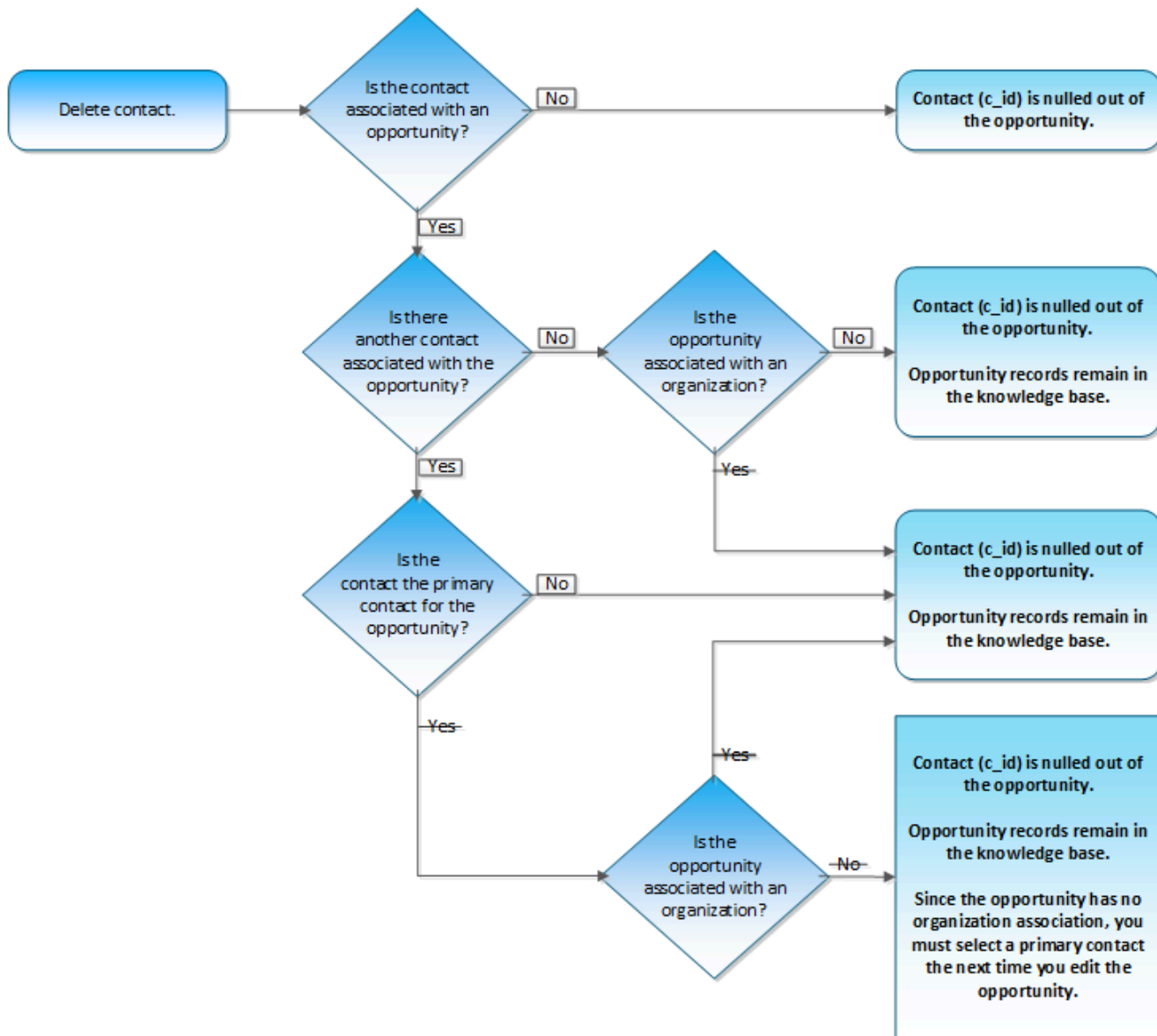
For example, assume a contact is associated with two opportunities. Also assume that the first opportunity does not have an organization association while the second one does, and that neither opportunity has a secondary contact. Deleting the contact removes the contact from the knowledge base and nulls the contact (c_id) out of the first opportunity. The second opportunity remains in the knowledge base, and the contact is nulled.

Note: When you delete secondary contacts for incidents and opportunities, the incidents and opportunities are not deleted.

Incidents or Tasks



Opportunities



Delete a Contact

This procedure describes how 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 can also be deleted, so you must understand the consequences of deleting contacts before doing so. See *What Happens When You Delete a Contact* for specific results of deleting contacts.

Staff members with the Bulk Delete permission enabled can delete up to 1000 contact records at a time. See *Administration Permissions* and the REST API for Oracle B2C Service guide on the Oracle Help Center. Transactions associated with those contacts are deleted asynchronously. Purging transactions is controlled by data lifecycle management policies. See *Data Lifecycle Management*.

1. Right-click a contact and select **Delete**.
A message asks you to confirm that you want to delete the contact.
2. Click **Yes**.

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. See *Reassociate the Contact with an Incident* or *Reassociate the Contact with an Opportunity*.

Set a Contact Role

You can set a contact role from an opportunity.

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**.
5. Click the **Contact Role** drop-down menu and select a contact role for the opportunity contact.
6. Click **OK**.
7. Click **Save**.

Note: The contact role may be different for different opportunities, which is why you set it 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.

Reassociate the Contact with an Incident

Deleting a contact also deletes the incidents for which the contact is the primary contact. However, deleting a contact who is associated with an incident but is not the primary contact, does not delete the incident.

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.

1. Right-click the contact you want to delete and select **Open > Contact**.
2. Click the **Incidents** tab.

3. Right-click the first incident and select **Open**.
4. Click the **Contacts** tab on the incident.
5. Click **Add Existing**.
6. Search for a contact on the Contact Search window using the procedure described in *Search for a Contact from an Open Record*.

The contact you select appears on the Contacts tab of the incident.

Note: Adding a contact to an incident using the Search button next to the Contact field of the incident, automatically removes the existing primary contact from the incident and replaces it 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. Adding a contact to an incident using the Add New or Add Existing functionality from the Contacts tab on the incident retains the primary contact, and adds the new contact as a secondary contact.

7. Select the option under the Primary column for the contact you added.
This makes the new contact the primary contact for the incident.
8. Click **OK** to close the incident.
9. Repeat these steps for every incident you want to associate with a different contact.
10. Click **Save**.

Results:

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. See *What Happens When You Delete a Contact*.

Reassociate the Contact with an Opportunity

Clicking the Opportunities tab on an open contact displays the opportunities associated with the contact.

If there are no associated opportunities, 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.

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 subtab.
4. On the Contacts tab, click **Add** and select **Add Existing**.
5. Search for a contact on the Contact Search window using the procedure described in *Search for a Contact from an Open Record*.

The contact you select appears on the Contacts tab of the opportunity.

Note: Adding a contact to an opportunity using the Search button next to the Contact field of the opportunity automatically removes the existing primary contact from the opportunity and replaces it with the new primary contact. This logic also applies when clicking the contact name in the Contact field and selecting Change or Add New. Adding a contact to an opportunity using the Add New or Add Existing functionality from the Contacts tab on the opportunity retains the primary contact, and adds the new contact as a secondary contact.

6. Select the option under the Primary column for the contact you added.
This makes the new contact the primary contact for the opportunity.
7. Click **OK**.

8. Repeat these steps for every opportunity you want to reassociate.
9. Click **Save**.

Results:

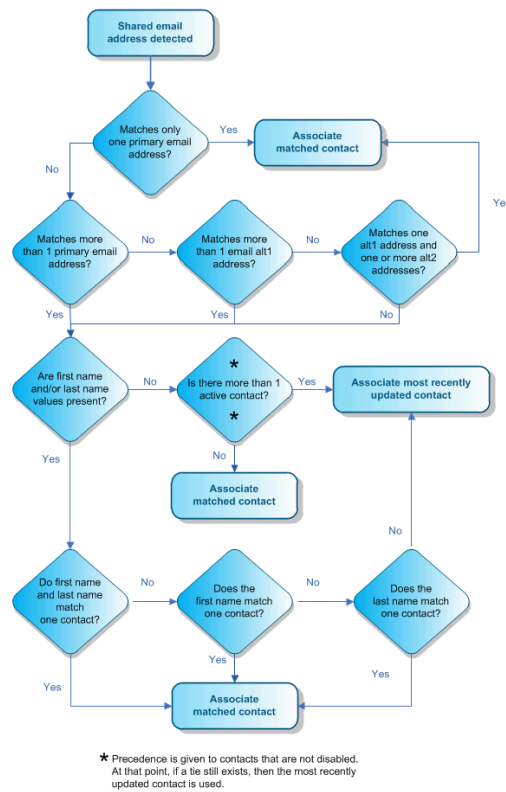
The opportunities you reassociated no longer appear on the Opportunities tab of the contact. Now you can delete the contact that was originally the primary contact. If the contact you deleted belonged to an organization, the opportunity remains with the organization, although the reassociated contact appears on the opportunity as well. See *What Happens When You Delete a Contact*.

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.

After 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 this flowchart.



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

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. These areas in B2C Service are affected when email address sharing is enabled.

Areas in B2C Service Affected by Email Address Sharing

| Area in B2C Service | Where to Find Information |
|---------------------|---|
| Common | |
| Email management | See How Email Works in Service or Email Bounce Handling . |
| Data import | See How Data Import Works . |

| Area in B2C Service | Where to Find Information |
|---------------------|---|
| Contact workspaces | See Add a Contact . |
| Outlook integration | See Email Address Sharing or Email Integration . |
| Service | |
| Customer Portal | See B2C Service and Your Customer Portal . |
| Chat | See Chat for Agents, Supervisors, and Customers . |
| Outreach | |
| Mailings | <p>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. See the following links:</p> <p>Broadcast mailings—Create a Broadcast Mailing to view the option for the delivery of messages to multiple contacts that are sharing the same email address.</p> <p>Transactional mailings—Create a Transactional Mailing to view the option for delivery of messages to multiple contacts that are sharing the same email address.</p> <p>Audience count—View Audience Count Details in Mailings to view the description of the Duplicate Email column on the Audience Count Details window.</p> <p>Web form identification—Insert a Web Form.</p> |
| Feedback | |
| Surveys | <p>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. See the following links:</p> <p>Broadcast surveys—Create a Broadcast Survey to view the option for the delivery of messages to multiple contacts that are sharing the same email address.</p> <p>Transactional surveys—Create a Transactional Survey to view the option for the delivery of messages to multiple contacts that are sharing the same email address.</p> <p>Audience count—View Audience Count Details in Surveys to view the description of the Duplicate Email column on the Audience Count Details window.</p> <p>Web form identification—Insert a Web Form.</p> |

Enable Email Address Sharing

To make email address sharing available, it must first be enabled.

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.

1. Click **Configuration** on the navigation pane.
2. Click **Database**, then double-click **Email Address Sharing**.

The Email Address Sharing editor displays on the content pane.

3. Select **Enabled**.
4. Click **Save**.
A message warns you that duplicate email address safeguards will be removed.
5. Click **OK**.

What to do next

After email address sharing is enabled, staff members who are currently logged in to B2C Service must log out and log back in for the change to take effect.

Contact Synchronization with Oracle Commerce Service Center Integration

Contacts are synchronized between Oracle Commerce Service Center (CSC) and B2C Service, 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. CSC must be enabled. Contact your Oracle account manager. See *Oracle Commerce Service Center* for more information on working with CSC on the Service Console.

Tasks

Overview of 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 B2C Service, you can monitor everything you must do from a single location, all but eliminating the possibility of forgetting a critical task. 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

B2C Service provides a standard workspace for working with tasks.

The standard task 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. See *Standard Workspaces* or *Custom Workspaces*.

Task Workspace Ribbon

The buttons on the standard task workspace ribbon are used to perform actions on the workspace.

Task Ribbon Buttons

| Button | Description |
|-----------------------|--|
| Undock | Click to undock the task workspace editor from the console and display it in a separate window. |
| Save | Click to save the task and keep it open for editing. 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 to save the task and close it. |
| New | Click to add a task. |
| Refresh | Click to refresh the current tasks report. |
| Forward | Click to forward the task. See Forward a Record . |
| Print | Click to print the task. See Print a Record . |
| Copy | Click to create a copy of the task that you can modify to create another task. |
| Delete | Click to delete the task. CAUTION: This action cannot be undone. |
| Spell Check | Click to check the spelling of any task fields that have spell checking enabled. See Check Spelling Manually . |
| Links | Click to select a URL from the list of links added by your administrator. See Overview of Workspace and Script Elements . |
| Info | Click 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. |

Related Topics

- [Common Functionality Ribbon](#)
- [Display Keyboard Shortcuts on the Ribbon](#)

Task Workspace Record Tabs

The standard workspace for tasks includes these tabs.

- **Summary**—Contains all key fields for the task. You can also select a record with which you want to associate the task. Depending on the height of the Service Console on your screen, the key fields might display on the content pane, rather than on a separate Summary tab.
- **Attachments**—Contains the attachments associated with the task. The tab displays the file name, size, date created, date updated, and a description for each attachment.

- **Audit Log**—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.
- **Notes**—Contains task notes that can be sorted by date. Remember that customers never see the task notes added by staff members.

Related Topics

- [Overview of the Attachments Tab](#)
- [Audit Logs](#)
- [Add a Task](#)

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.

These options are also available by right-clicking a task.

Tasks Tab Toolbar Buttons

| Button | Description |
|---------------------|---|
| Add New | Click to open a new task on a subtab. |
| Add Existing | Click to display the Task Search window. After finding and selecting a task, the task is added to the task list for the record. |
| Open | Click to open the selected task for editing. |
| Print | Click to print the task. |
| Copy | Click to copy the task. |
| Delete | Click to delete the task. |
| Remove | Click to remove the task association. The task is disassociated, but the task record remains in the knowledge base. |
| Complete | Click to mark the task complete. |
| Forward | Click to forward the task to the selected recipients. |
| Options | Click to display a drop-down list of options that include actions you can take, such as printing, previewing, forwarding, publishing, or exporting the task data. |

Related Topics

- [Add a Task](#)
- [Edit a Task](#)
- [Complete a Task](#)
- [Search for a Task from an Open Record](#)
- [Forward a Record](#)

Delete a Task

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. Open a task report.
2. Do one of the following:
 - o Right-click on a task and select **Delete > Task**.
 - o Open a task and click **Delete**.
3. Click **Yes** in the confirmation window.

Related Topics

- [Overview of Tasks](#)

Complete a Task

You can change the status of a task to Complete.

1. Open a task report.
2. Select one or more tasks to complete.
To select multiple tasks, press Ctrl while selecting tasks.
3. Right-click the selected tasks and select **Complete Task**.
You can also select a single task and click **Complete** in the Action column to complete it. You cannot complete multiple tasks this way.

Add a Task

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 define its name, the staff member it is assigned to, relevant dates, and other task information. You can also associate it with existing records. When you add a task in a workgroup, clicking the OK button accepts changes made to the record and closes the subtab. However, it does not save changes to the database until you click Save or Save and Close.

1. Do one of the following:
 - o Click **New**.
 - o If your navigation set is configured to add tasks from the file menu, click **File** and select **Task**.
 - o If you want to add a new task from an open record (such as an incident) or from items like mailings and campaigns, click **Add New**.

The new task opens in a separate window.

2. Enter field information.

Task Fields

| Field | Description |
|---------------------------|--|
| *Name | Enter the name of the task. |
| Assigned | This field defaults to your name in the standard tasks workspace, but you can click the drop-down list to assign the task to a different staff member if you have permission. |
| *Status | Click this drop-down list and select a status. The status options include Not Started, In Progress, Completed, Waiting, and Deferred. |
| Percent Complete | Enter a value for the percentage of the task that is complete. |
| Priority | Click this drop-down list and select Low , Normal , or High as the task's priority. |
| Due Date | Click this drop-down list 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 list to open the current month's calendar and select the task's planned completion date. |
| Date Completed | Click this drop-down list to open the current month's calendar and select a completion date for the task. |
| Task Type | Click this drop-down list 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. You do not have to select a task type if you do not want to associate the task with a specific record. If you are adding the task from an open record, the task type selection defaults to the type of record being edited. |
| Notes | Enter any notes about the task in this field. |

3. To associate the task with a record:
 - a. Click **Search** to the right of the Record field.
 - b. Enter information in the search fields.
 - c. Select the record you want to associate with the task.

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 attach files to the task, click the **Attachments** tab.
5. To view the audit log for the task, click the **Audit Log** tab.
6. To add notes to the task, click the **Notes** tab:
 - a. Click **Add**.
 - b. Enter your comments in the field.
 - c. Click the **Task Note** drop-down list to select the channel through which you gained the information you are adding to the note.

Add notes to the task when you want to provide information for other staff members. Notes are not visible to customers.

7. Click **Save**.

If you added the task on a subtab of a workgroup, all records in the workgroup will be saved.

Related Topics

- [Overview of Tasks](#)
- [Record Search Options](#)
- [How You Inherit Task Fields](#)
- [Overview of the Attachments Tab](#)
- [Audit Logs](#)
- [Configure the File Menu](#)

Edit a Task

Depending on the permissions set in your profile, you can edit, copy, and delete individual and multiple tasks, forward tasks, and mark them complete.

Before you start

A task report displays on the content pane.

Here's what to do

1. Right-click the task you want to edit.
2. Click **Open > Task**
The task opens.
3. Make the necessary changes.
4. Click **Save**.

Related Topics

- [Overview of Tasks](#)
- [How You Update Multiple Records](#)

How You Inherit 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. After 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.

The concept of inheritance hinges on the task type. If you do not select an option from the Task Type drop-down list, 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.

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.

Related Topics

- [Inherit Contact and Organization Fields](#)
- [Inherit the Assigned Field](#)

Inherit Contact and Organization Fields

With certain task types, you can set the organization field, the contact field, or both to inherit those field values from the associated record.

When you add or edit an opportunity or incident 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 contact task type, you can set the organization field to inherit the organization associated with the contact.

When the task 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.

This procedure sets contact and organization fields to Inherit for an incidents task type. The procedure is the same for opportunity and contact task types.

1. Open a task.
2. Click the **Task Type** drop-down list and select **Incidents**.
The Incident field label turns red and includes an asterisk, indicating that it is now a required field. An Inherit button appears to the right of the Organization and Contact fields.
3. Select the incident you want to associate with the task.
4. Click **Search** for the Incident field.
5. Enter your search criteria in the search fields.
6. Click **Search**.
7. Select the incident you want from the list of search results.
8. Click **Select**.
The Incident Search window closes and the incident appears in the Incident field of the task. If only one incident matches the search criteria, the Incident field is automatically populated.
9. Click **Inherit** to the right of the Contact field.
The Inherit button changes to Contact Locked (with a lock symbol) indicating the Inherit property is active, the value in the Contact field changes to the contact for the incident, and the field is disabled and appears grayed out.

10. Click **Inherit** to the right of the Organization field.

The Inherit button changes to Organization Locked (with a lock symbol) indicating the Inherit property is active, the value in the Organization field changes to the organization for the incident, and the field is disabled and appears grayed out.

If the incident does not have an organization, the field is locked anyway. If you later add an organization to the incident, the task Organization field contains the same organization value as the incident.

11. To unlock the inheritance, click **Locked** 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.

Related Topics

- [How You Inherit Task Fields](#)
- [Inherit the Assigned Field](#)

Inherit the Assigned Field

This procedure uses the Answer task type as an example, but the procedure is the same for all task types.

1. Open a task.

2. Click the **Task Type** drop-down list and select **Answers**.

The Answer field label turns red and includes an asterisk, indicating that it is now a required field. An Inherit button appears to the right of the Assigned field.

3. Select the answer you want to associate with the task.

- a. Click **Search** to the right of the Answer field.
- b. Enter information in the **Search** field.
- c. Choose the answer you want from the results list and click **Select**.

The Answer Search window closes and the answer appears in the Answer field of the task. If only one answer matches the search criteria, the Answer field automatically populates.

4. Click **Inherit** to the right of the Assigned field.

The Inherit button changes to Assigned Locked (with a lock symbol) indicating the Inherit property is active, the value in the Assigned field changes to the staff member assigned to the answer, and the field is disabled and appears grayed out.

5. To unlock the inheritance, click **Locked** to the right of the Assigned field.

The staff member name in the field remains the same, but the field is enabled. You can change the value now that the Inherit property is no longer active.

Related Topics

- [How You Inherit Task Fields](#)
- [Inherit Contact and Organization Fields](#)

Outlook Integration

Overview of Outlook Integration

Microsoft Outlook can be integrated with B2C Service, 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 B2C Service.

Outlook integration comprises the following components:

- Contact synchronization—Enter contact information one time, in either B2C Service 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 B2C Service.

Besides synchronizing contacts, tasks, and email between Outlook and B2C Service, you can also implement a Microsoft smart tag in Outlook to open incidents directly from an email.

How You Configure Outlook Integration

You must complete a few actions to use Outlook integration.

- Enable Outlook integration. Contact your Oracle account manager.
- Add or update profiles to include Outlook integration permission. See [Add Outlook Integration Permissions to a Profile](#).
- Install Outlook integration software on agent workstations. See [Install Outlook Integration](#).

Add Outlook Integration Permissions to a Profile

You can be assigned full Outlook integration permissions (contact synchronization, task synchronization, and email integration) or any combination of the three permissions.

Before you start

Updating your profile is a necessary first step as B2C Service will check your permissions before installing the appropriate Outlook integration components. All staff members who will be using Outlook integration must have the profile containing Outlook integration permissions assigned to their staff account.

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**.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management** and then double-click **Profiles**.
The report opens on the content pane.
3. Double-click the profile you want to edit.
4. Click **Permissions** on the ribbon of the Profiles editor.
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 let staff members append Outlook email to contacts, organizations, opportunities, and incidents in B2C Service, select the **Email Integration** check box.
8. To let staff members share contacts between Outlook and B2C Service, select one or more of the **Contact Synchronization** check boxes.
 - o To share contacts that are in the Opportunities state, select the **Opportunities Contacts** check box.
 - o To share contacts that are in the Service state, select the **Service Contacts** check box.
 - o To share Outlook contacts with B2C Service, select the **Outlook to Server** check box.
 - o To share B2C Service contacts with Outlook, select the **Server to Outlook** check box.
9. To let staff members share tasks between Outlook and B2C Service, select one or both of the **Task Synchronization** check boxes.
 - o To share B2C Service tasks with Outlook, select the **Server to Outlook** check box.
 - o To share Outlook tasks with B2C Service, select the **Outlook to Server** 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.
 - a. After selecting a new report, click **OK** to close the Select Report window.
All of the Outlook integration reports are read-only standard reports that can be copied and modified.
11. Click **Save**.

Related Topics

- [Profiles](#)
- [Add or Edit a Staff Account](#)

Install 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, B2C Service 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.

1. Close Outlook.
2. From B2C Service, click **File** and select **Links > Install Outlook Integration**.
The Oracle Service Cloud Outlook Sync Setup wizard opens.
3. Click **Next** to open the Select Installation Folder window.

Tip: We recommend that you install Outlook integration in the default location.

4. To install Outlook integration in a different location, click **Browse**, select the folder where you want to install Outlook integration, and click **OK**.
5. To see a list of the drives where Outlook integration can be installed, click **Disk Cost**. Click **OK** when you are finished.
6. Do one of the following:
 - o If you are the only staff member who uses your workstation, select the **Just Me** option.
 - o If other staff members have accounts on your workstation and must also use Outlook integration, select the **Everyone** option.
7. Click **Next** to open the Confirm Installation window.
8. Click **Next** to begin the installation.
After the installation is complete, the Installation Complete window opens.
9. Click **Close** to complete the installation.

What to do next

With the proper components installed, you'll want to review and possibly customize your sync options before using Outlook integration.

Related Topics

- [Contact, Task, and Email Sync Options](#)
- [Add Outlook Integration Permissions to a Profile](#)

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 B2C Service user name and password. You can then customize contact and task sync options, including preferences for sync direction (such as from B2C Service 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 B2C Service.)

Note: You must have administrative permissions on your workstation to change sync options. If you do not have administrative permissions, contact your administrator.

Sync Settings Options

Enter server details and your B2C Service user name and password to let you change default sync options.

1. Open Outlook.
2. Click the arrow next to the Sync Email button and select **Sync Settings**.

3. Enter field information.

Sync Settings Window General Tab

| 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 | Enter the server name of the B2C Service application. |
| Interface Name | Enter the interface name. |
| Use Secure Connection | Select this check box to use a secure connection between Outlook and B2C Service. |
| User Information | This section contains fields for entering your B2C Service user information. |
| User Name | Enter your B2C Service user name. |
| Password | Enter your B2C Service password. |

4. Click **OK** to save your settings and close the Sync Settings window.

Contact Sync Options

Select contact sync options for Outlook integration.

1. Open Outlook.
2. Click the arrow next to the Sync Email button and select **Sync Settings**.
3. Click the **Sync Contact** tab.
4. Select options.

Sync Contact Tab

| Field | Description |
|--------------------------------------|---|
| Sync Direction | This section contains check boxes for selecting the direction for contact synchronization. Selecting only one of the contact synchronization settings results in a one-way synchronization. |
| From Oracle Service Cloud to Outlook | Select to sync contact data from B2C Service to Outlook. Contacts in B2C Service are added to the Contacts folder in Outlook only if one or more of the following conditions are met: <ul style="list-style-type: none"> ○ 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 to sync contact data from Outlook to B2C Service. |

| Field | Description |
|-------------------------|---|
| Auto Sync Events | This section contains options for selecting when you want to sync contact data. |
| Attempt Sync When Saved | Select to sync contact data between B2C Service and Outlook when a contact is saved in Outlook. |
| Attempt Sync When Open | Select to sync contact data between B2C Service and Outlook when a contact is opened in Outlook. |
| Sync On Demand Only | Select to sync contact data between B2C Service and Outlook when you click Share or Sync All Contacts 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 B2C Service, the data from B2C Service will be used during the two-way synchronization.

Note: When a contact record is first created in B2C Service 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 B2C Service.

5. Click **OK** to save the sync contact settings and close the Sync Settings window.

Task Sync Options

Select task sync options for Outlook integration.

1. Open Outlook.
2. Click the arrow next to the Sync Email button and select **Sync Settings**.
3. Click the **Sync Task** tab.
4. Select options.

Sync Task Tab

| 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 to sync task data from B2C Service to Outlook. |
| From Outlook to Oracle Service Cloud | Select to sync task data from Outlook to B2C Service. |
| Auto Sync Events | This section contains options for selecting when you want to sync tasks. |
| Attempt Sync When Saved | Select to sync task data between B2C Service and Outlook when a task is saved in Outlook. |
| Attempt Sync When Open | Select to sync task data between B2C Service and Outlook when a task is opened in Outlook. |

| Field | Description |
|---------------------|--|
| Sync On Demand Only | Select to sync task data between B2C Service and Outlook only when you click Share or Sync All Tasks on the Outlook toolbar. This option is selected by default. |

Note: 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 B2C Service, the data from B2C Service will be used during the two-way synchronization.

5. Click **OK** to save the task sync settings and close the Sync Settings window.

Email Sync Options

Select email sync options for Outlook integration.

1. Open Outlook.
2. Click the arrow next to the Sync Email button and select **Sync Settings**.
3. Click the **Sync Email** tab.
4. Select options.

Sync Email Tab

| 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 B2C Service. |
| Organization | Select to append email data from Outlook to the B2C Service organization record associated with the contact that has the same email address as the selected email. |
| Contact | Select to append email data from Outlook to the B2C Service contact record with the same address as the selected email. |
| Opportunity | Select to append email data from Outlook to one or more opportunities in B2C Service for the contact associated with the email address. |
| Incident | Select to append email data from Outlook to one or more incidents in B2C Service 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 B2C Service: Customer Entry , Response , or Private Note . The Customer Entry option is selected by default. |
| Auto Sync Events | This section contains options for selecting when you want to sync email. |
| Attempt Sync When Saved | Select to append email data from Outlook to B2C Service when an email is saved in Outlook. |
| Attempt Sync When Open | Select to append email data from Outlook to B2C Service when an email is opened in Outlook. |

| Field | Description |
|---------------------|---|
| Sync On Demand Only | Select to append email data from Outlook to B2C Service only when Sync Email on the Outlook toolbar is clicked. This option is selected by default. |

5. Click **OK** to save the email sync settings and close the Sync Settings window.

How You Synchronize Contacts

While viewing or editing a contact in Outlook, you can click a button to share the contact between Outlook and B2C Service.

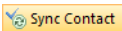
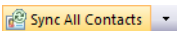
If two-way synchronization is set up and you click Sync All Contacts, all your Outlook contacts are added to B2C Service. Before you can add B2C Service contacts to the Outlook Contacts folder, your staff account must be associated with the contacts. At least one of the following conditions must be true 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.

Note: When email address sharing is enabled in B2C Service, 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 B2C Service and Microsoft Outlook. See [Email Address Sharing](#).

After contact integration is set up on your workstation and the Contacts folder is selected, your Outlook toolbar contains these buttons.

Outlook Buttons for Contact Integration

| Button | Description |
|---|---|
|  | Click to sync the selected contact between Outlook and B2C Service. |
|  | Click this drop-down list to display contact sync options. |
| Sync All Contacts | Select to sync all contacts between Outlook and B2C Service. |
| Sync Settings | Select for sync options. |

Related Topics

- [Contact Sync Options](#)

Sync a Contact Between Outlook and B2C Service

Sync a contact between Outlook and B2C Service.

1. From Outlook, click on the contact you want to sync.
2. Click **Sync Contact**.

If you have not previously shared Outlook data, you must enter your B2C Service user name and password to verify your permission before continuing.

A message lets you know that the contact was synchronized successfully.

3. Click **OK**.

Results:

B2C Service now contains a contact record associated with the contact you shared.

Sync All Contacts Between Outlook and B2C Service

Sync all contacts between Outlook and B2C Service.

1. From Outlook, click **Sync All Contacts**.

A Synchronization Succeeded message lets you know that the contacts were synchronized successfully.

2. Click **OK**.

The Sync All Contacts window opens, confirming the number of contact records that were synchronized between Outlook and B2C Service.

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 **OK**.


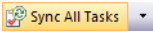
How You Synchronize Tasks

While viewing or editing a task in Outlook, you can click a button and share the selected task or all your tasks with B2C Service.

If two-way synchronization is set up and you click Sync All Tasks, all your Outlook tasks are added to B2C Service, and all your B2C Service 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 these buttons.

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 B2C Service. |
|  | Click this drop-down list to display task sync options. |
| Sync All Tasks | Select to share all tasks between Outlook and B2C Service. |
| Sync Settings | Select for sync options. |

Related Topics

- [Task Sync Options](#)

Sync a Task Between Outlook and B2C Service

Sync a task between Outlook and B2C Service.

1. From Outlook, click on the task you want to sync.
2. Click **Sync Task**.
The Sync Task window opens, confirming that the task from Outlook has been synchronized with B2C Service.
3. Click **OK**.

Results:

B2C Service now contains the task you shared from Outlook.

Sync All Tasks Between Outlook and B2C Service

Sync all tasks between Outlook and B2C Service.

1. From Outlook, click **Sync All Tasks**.
2. Click **OK**.
The Sync All Tasks window opens, confirming the number of tasks that were synchronized between Outlook and B2C Service.

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 **OK**.

Email Integration

You can append Outlook email to contacts, organizations, opportunities, and incidents in B2C Service.

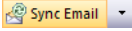
Email integration can also be used to create contacts and incidents from Outlook email if no associated email address exists in the knowledge base at the time of synchronization.

Email integration is a one-way data transfer from Outlook to B2C Service. Email data is copied from Outlook and appended to the selected records in B2C Service.

Note: 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 B2C Service 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. See [Email Address Sharing](#).

After email integration is set up on your workstation and an email folder is selected, your Outlook toolbar contains these buttons.

Sync Email Button

| Button | Description |
|---|--|
|  | Click this drop-down list to select email sync options. |
| Sync Email | Select to append the selected email to an existing contact, organization, opportunity, or incident in B2C Service. If the associated email address is not in the knowledge base, you will have the option of adding a contact or incident. |
| Sync Settings | Select for sync options. |

Related Topics

- [Append Outlook Email to a Record in B2C Service](#)
- [Email Sync Options](#)

Append Outlook Email to a Record in B2C Service

Append Outlook email to a record in B2C Service.

1. From Outlook, select or open the email you want to append to a record in B2C Service.
Only one email can be synchronized at a time. Selecting multiple emails will disable **Sync Email**.

2. Do one of the following:
 - o If you selected the email in a list of messages, click **Sync Email** on the Outlook toolbar.
 - o If you have a new or existing email message open, click the **Add-Ins** tab and then click **Sync Email**.
3. To filter the list of returned records, enter the contact's name, email address, organization name, or associated record name in the **Filter Tree** field and click **Go**. To return to the original list of records, click **Clear**.

Tip: Although wildcards are not supported, you can enter just a few characters in the **Filter Tree** field. After clicking **Go**, the system will present you with any matching records.

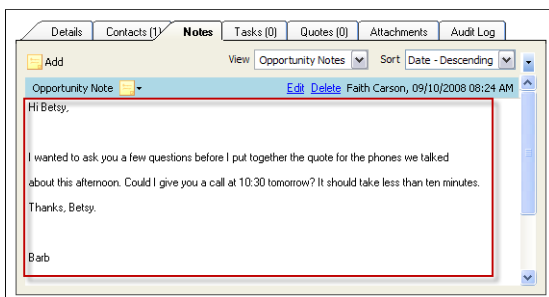
4. Select the appropriate check boxes associated with the addresses in the email. For example, if you select all check boxes, the same email will be added to the individual Notes tabs of the contact and organization records as well as all selected opportunities. The email text appears as a private note in the message thread of all selected incidents.

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 B2C Service. You can also drag Outlook attachments to the Attachments tab of existing records in B2C Service.

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 **OK** to append email to the appropriate records in B2C Service.

After a successful synchronization, **Sync Email** is disabled for that message.

This image shows an email after it has been appended to the Notes tab of the opportunity.



Install B2C Service SmartTag

B2C Service lets you install a smart tag that recognizes incident reference numbers in email messages.

Before you start

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**.

Outlook recognizes certain types of data in your email, and lets you perform actions on that data. B2C Service SmartTag recognizes incident reference numbers in email messages. When you right-click the reference number in an email, the incident automatically opens in B2C Service.

Here's what to do

1. Close Outlook.
2. In B2C Service, click **File** and select **Links > Install Incident Reference Number Smart Tag**.
The SmartTag Setup Wizard opens.
3. Click **Next** to open the Select Installation Folder window.

Tip: We recommend that you install SmartTag in the default location of **C:/Program Files/Oracle Service Cloud SmartTag**.

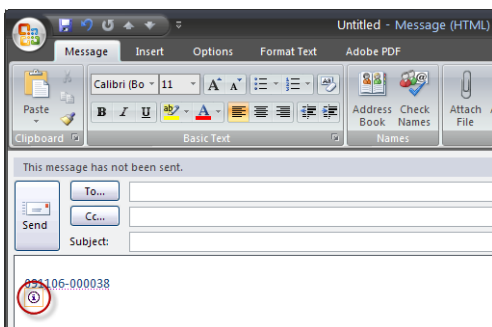
4. To install SmartTag in a different location, click **Browse**, select the folder where you want to install SmartTag, and click **OK**.
5. To see a list of the drives where SmartTag can be installed, click **Disk Cost**. Click **OK** when you are finished.
6. Click **Next** to open the Confirm Installation window.
7. Click **Next** to begin the installation.
After the installation is complete, the Installation Complete window opens.
8. Click **Close** to complete the installation.

Open an Incident Using B2C Service SmartTag in Outlook

Open an incident using B2C Service SmartTag in Outlook.

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 B2C Service for the incident to open.

Oracle Applications Integration

Oracle Applications Integrations with B2C Service

B2C Service supports integrations with a host of other Oracle applications to add industry-leading, cutting-edge capabilities to your implementation.

Current offerings include:

- *Oracle Commerce Service Center*
- *Oracle Engagement Engine*
- *Oracle Enterprise Knowledge*
- *Oracle Intelligent Advisor*
- *Oracle CX Sales*
- *Oracle CX Marketing*
- *Oracle Digital Assistant*
- *Oracle Unity*

Note: For more information about any of the Oracle products listed here, contact your Oracle account manager.

Oracle Commerce Service Center

With the integration of Oracle Commerce Service Center, you can quickly take needed actions and respond to commerce support questions directly from B2C Service.

After integration, contacts created in Commerce Service Center (CSC)—formerly ATG Commerce Service Center—are synchronized with B2C Service, letting you use the Service Console to:

- Respond quickly to commerce support questions.
- View existing CSC contact information and order details.
- Take action on an existing CSC order or place a new order in CSC on behalf of the customer.

For more information about Oracle Commerce Service Center, see the [Oracle Commerce Service Center Documentation](#).

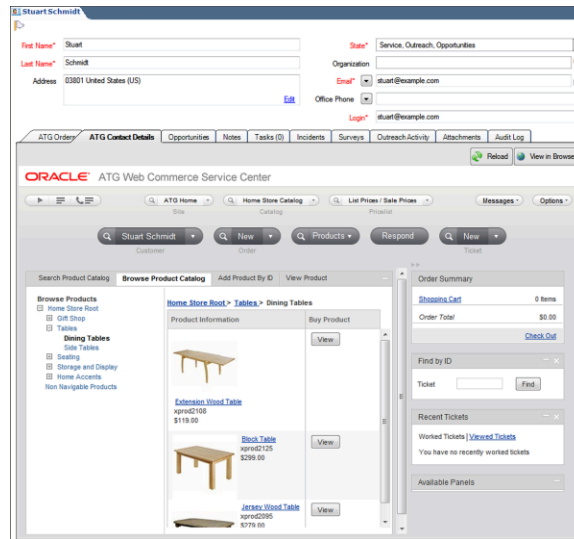
Note: Oracle Commerce Service Center must be enabled and configured by Oracle. Contact your Oracle account manager.

How You Work with Oracle Commerce Service Center on the Service Console

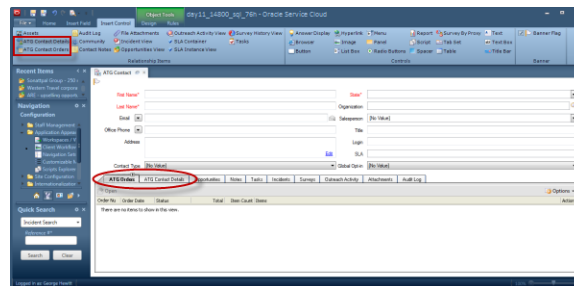
With the integration of Oracle Commerce Service Center (CSC), you can respond quickly to commerce support questions from the agent desktop.

Contacts are synchronized between Oracle Commerce Service Center (CSC) and B2C Service, 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.

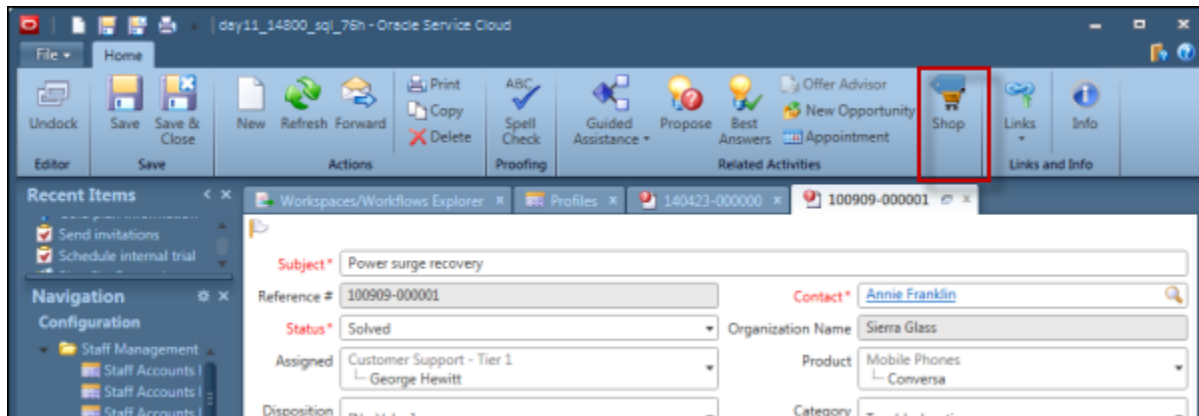
Note: CSC must be enabled. Contact your Oracle account manager.



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. See [Add a Control to the Design Space](#).



Additionally, 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. See [Customize the Ribbon](#).



Oracle Engagement Engine Cloud Service

B2C Service supports integration with Oracle Engagement Engine.

The integration of Oracle Engagement Engine—formerly ATG Engagement Engine—gives you greater control over when, where, and how proactive and reactive chats are provided to your customers. In addition, it gives you information about what pages on your customer facing website your customers were viewing when they decided to initiate a chat, and lets your customers request a phone call from an agent.

For more information about Oracle Engagement Engine, see [Administering Oracle Engagement Engine](#).

Note: Oracle Engagement Engine must be enabled and configured by Oracle. Contact your Oracle account manager.

Oracle Knowledge Management

You can integrate B2C Service with on-premise Oracle Enterprise Knowledge to provide a full-featured knowledge authoring and management solution, enabling contact center agents and customers to quickly and easily find accurate answers to customer inquiries from within the agent desktop and customer portal.

The Oracle Enterprise Knowledge integration leverages best-in-class content authoring and content management capabilities that enable agents and authors to create content that can be segmented for specific audiences, products, and categories, and managed and published using content versioning and history and flexible workflows, including translation support.

For agents and customers, Enterprise Knowledge includes Intelligent Search technology, which finds exact answers to questions based on their meaning, and searches unstructured content, structured data sources, and transactional business applications in parallel. Intelligent Search incorporates customer context, call context, and system contextual information to provide highly relevant answers to customer questions.

- **Customer Portal**—Enterprise Knowledge can be embedded in the customer portal to provide customer-facing natural language search and intent-based solutions. Unlike typical self-service solutions that match search terms, Enterprise Knowledge uses natural language processing to understand the true intent of the customer's inquiry. Then, using other search enhancement features, such as industry-specific libraries, it identifies and presents the best possible answer. Enterprise Knowledge in Customer Portal increases resolution rates while reducing calls and support costs, transforming the self-service experience.
- **Agent Desktop**—The Enterprise Knowledge integration with Agent Desktop embeds the same intent-based search functionality directly within the dynamic agent desktop to maximize agent productivity and improve

call resolution rates. In addition, Enterprise Knowledge streamlines the call wrap-up process by automatically providing embedded links to associate the right knowledge with each service request resolution task. You can also configure incident workspaces with the Enterprise Knowledge options available to the workspace profiles.

For more information about integrating with Enterprise Knowledge, see the [Oracle Knowledge for B2C Service Integration Guide](#).

Oracle Intelligent Advisor

Oracle Intelligent Advisor (Intelligent Advisor) interviews can be embedded as questionnaires in the Service Console and Agent Browser UI by using a workspace control, and in your customer portal by adding the provided sample widget. Interviews can also be delivered on mobile devices.

Intelligent Advisor is especially useful when customer service must comply with regulations or internal company policies. When policy changes occur, rules and interview flows can quickly be updated and re-deployed, ensuring your organization's advice is always accurate and up-to-date. Intelligent Advisor features include:

- Easy mapping of B2C Service data into and out of Intelligent Advisor interviews.
- A management console for tracking and deploying policy versions.
- Web services for integrating decision-making with other applications and processes.
- The ability to generate prepopulated PDF forms, using the built-in Business Intelligence Publisher integration.

A broad range of industries use Intelligent Advisor including:

- Public sector, for applications like benefit entitlements, licensing, and border control operations.
- Higher education, for scholarship eligibility, transfer credit assessments, and course prerequisites.
- Financial services, for insurance claims, premium calculations, and loan eligibility.

This image shows an example Intelligent Advisor interview delivered on the customer portal.

Support Home | Answers | Ask a Question | Your Account ▾

Business License Wizard (Recommended)

Published 10/01/2014 02:53 PM | Updated 03/02/2014 05:46 PM

Use this interactive advice tool to work out which business licenses you require.

Start | Food | Alcohol | Devices | Vending | Lottery | Prescriptions | General | Summary

Business Type | **Grocery Store**

Grocery Store

You have selected **Grocery Store**. Please provide the following information:

Number of employees:
1-10 ▾

Legal structure:
Sole Proprietor ▾

New or expanding business:
 New
 Expanding

Back | Next

Microsoft Word (or Excel) is used to author rules.

Education Criteria

the student satisfies the education criteria if

either

- the student is enrolled as a regular student in an eligible degree or certification program
- or
- the student is accepted for enrollment as a regular student in an eligible degree or certification program

and

the student has maintained satisfactory academic progress in college or career school and any

- the student has a high school diploma or
- the student has a General Educational Development (GED) certificate or
- the student has completed a high school education in a state-approved home school setting

Citizenship/Immigration Status

the student satisfies the citizenship/immigration status criteria if

- the student is a US citizen or
- the student is an eligible non-citizen

Note: Oracle Intelligent Advisor must be enabled and configured by Oracle. Contact your Oracle account manager. See [Answer ID 5597](#) to access Intelligent Advisor documentation. Oracle Intelligent Advisor is available for integration with the following releases:

- Service Console: February 2013 and later
- Agent Browser UI: August 2015 and later

Oracle CX Sales

B2C Service supports integration with Oracle CX Sales.

Using the Sales Accelerator for B2C Service, service agents can:

- View all Oracle CX Sales opportunities for organizations (B2B) and contacts (B2C).
- Create opportunities and sales leads in Oracle CX Sales directly from incidents in B2C Service for contacts associated with organizations (B2B), or not associated with organizations (B2C). Assign these opportunities and leads automatically to the primary account managers in Oracle CX Sales.
- View all sales leads and opportunities created in B2C Service. Filter the leads and opportunities by incident, service representative, contact, or organization.

For more information about the Sales Accelerator for B2C Service, see [Answer ID 4755](#) on our support site.

Oracle CX Marketing

B2C Service supports integrations of Oracle Eloqua and Oracle Responsys with Oracle CX Marketing.

The following integrations with Oracle CX Marketing are supported:

- Oracle Eloqua—Bidirectional synchronization of organizations and contacts
- Oracle Responsys—Synchronization of contacts from B2C Service to Oracle Responsys

The integrations are created using preconfigured adapters in Oracle Integration Cloud Service. For more information, see the following articles:

- [Integrating Oracle CX Marketing \(Eloqua\) with Oracle B2C Service](#)
- [Integrating Oracle CX Marketing \(Responsys\) with Oracle B2C Service](#)

Oracle Digital Assistant

B2C Service supports integration with Oracle Digital Assistant.

With Oracle Digital Assistant, you create and deploy skills and digital assistants for natural language communication to help your customers accomplish a variety of tasks. For more information, see [Oracle Digital Assistant](#).

Oracle Unity

B2C Service supports integration with Oracle Unity.

Oracle Unity is a Customer Data Platform (CDP) that provides customer intelligence. With built-in AI and machine learning, Unity brings data together from all sources, applies intelligence, and activates insights to improve the B2B and B2C customer experience across marketing, sales, service, and commerce. For more information, see [Oracle B2C Service integration](#).

Reference Information

Reference Information

B2C Service uses format tokens for date and time, regular expressions, keyboard shortcuts and SmartSense.

B2C Service uses date and time format tokens to determine how dates and times are expressed throughout the application and how results are grouped in analytics. See [Date and Time Format Tokens for Analytics](#) and [Date and Time Format Tokens for Configuration Settings](#).

Regular expressions use operators and character strings to specify a set of character strings. See [Regular Expressions](#).

To help you be more efficient and quickly navigate B2C Service, default keyboard shortcuts are included for creating records and other items, navigating the console and content pane, and performing functions. See [Keyboard Shortcuts](#).

SmartSense can help you determine the attitude of customers and staff members in incident correspondence, customer responses to Feedback surveys, and in posts returned from cloud searches. See [SmartSense](#) and [How You Evaluate SmartSense Ratings](#).

Date and Time Format Tokens for Analytics

Use these format tokens to specify date and time formats in reports.

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. |
| 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 start of the week. For example, Thursday July 16, 2009 = 07/12/2009. This token can be used only with the <code>date_add</code> and <code>date_trunc</code> functions. |

| Token | Description |
|--------|---|
| IWEEKS | <p>Rounds the entered date value to the beginning of the week, using Monday as the start of the week. For example, Thursday July 16, 2009 = 07/13/2009.</p> <p>This token can be used only with the <code>date_add</code> and <code>date_trunc</code> functions.</p> |
| 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. |
| YYYYX | 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. YYYYX 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), YYYYX 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 YYYYX. |
| 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. |
| J | Displays the Julian date. For example, 2008-08-08 11:18:30 = 733627. |
| 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. |

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

Use these format tokens to specify date and time formats in configuration settings.

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. |

| Token | Description |
|-------|---|
| %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 %l:%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. |
| %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 lists are fixed, using regular expressions to match items in a drop-down list (for example, Product or Category) is not supported. If you want to include an If condition for items in a drop-down list, use EQUALS or CONTAINS instead of a regular expression.

The first table below lists some of the regular expression operators that work with business rules and mailboxes. The second table lists examples of how regular expressions can be used.

Note: B2C Service accepts any regular expression using POSIX Extended syntax. POSIX Extended syntax does not support `\n`, `\t`, or `\r` as escaped special characters. Please check the POSIX extended syntax before authoring a regular expression.

Regular expressions begin and end with slash (/) delimiters, but they are not required when using regular expressions in business rules or report filters. However, slashes are used to separate multiple regular expressions in some configuration settings, such as `EGW_AR_MODR_HEAD_FLTR`.

Regular Expression Operators

| Action | Description |
|-------------|--|
| [] | Matches any character in the brackets. |
| [0-9] | Matches any number between 0 and 9. |
| [A-Z] | Matches any character A-Z or a-z. |
| [^] | Matches any characters NOT in the brackets. The first character in the brackets must be ^. |
| text1 text2 | The pipe character acts as a Boolean OR, so text1 OR text2 results in a match. Do not include a pipe at the beginning or end of a regular expression. |
| . | Matches any single character except a new line. |
| ? | The preceding item is optional and matched at most once. |
| * | The preceding item is repeated as many times as necessary to match. Also matches if preceding item is not present. |
| + | The preceding item is matched one or more times. |
| {n} | The preceding item is matched exactly n times. |
| {n,} | The preceding item is matched n or more times. |
| {n,m} | The preceding item is matched at least n times, but not more than m times, and as few times as possible. |
| () | Used to group elements of the regular expression, as in arithmetic. |
| \w | Any alphanumeric character. |
| ^ | Match if at start of line. |

| Action | Description |
|----------|---|
| \$ | Match if at end of line. |
| \ | Quote or escape a character that would otherwise be interpreted as a syntactic character. Characters that must be quoted are: + ? () { } |
| \<text\> | Match the string (case insensitive) only if it is surrounded on both sides by any non-word character (such as a space, dash, or a special character (!\$%^.<.* ()?\ / \ : ;)). Note that alpha-numeric characters and underscores are considered word characters. |

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) |

| This regular expression... | matches... |
|----------------------------|--|
| \<jump\> | Jump, jump, JuMp, etc. The regular expression does not match jumping, jumped, etc. |

Shortcut Keys

To help you be more efficient and quickly navigate B2C Service, default keyboard shortcuts 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 keyboard shortcuts. In addition, you can press the Alt key plus the first letter of the ribbon tab to display keyboard shortcuts for the tab.

B2C Service Keyboard Shortcuts

| Keyboard Shortcut | 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 |

| Keyboard Shortcut | Action |
|-----------------------|--|
| 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 B2C Service |
| 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 |

| Keyboard Shortcut | Action |
|--|---|
| Ctrl+D | Forward |
| Ctrl+I | Information |
| Ctrl+P | Print |
| F8 | Appends standard text to an incident when used with standard-text keyboard shortcuts. |
| 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) |
| 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 |

| Keyboard Shortcut | Action |
|-------------------|----------------------------------|
| | |
| Ctrl+D | Forward |
| Ctrl+N | New (uses default new selection) |
| Ctrl+P | Print |
| Del | Delete |

Related Topics

- [Display Keyboard Shortcuts on the Ribbon](#)

SmartSense

SmartSense can help you determine the attitude of customers and staff members in incident correspondence, customer responses to 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.

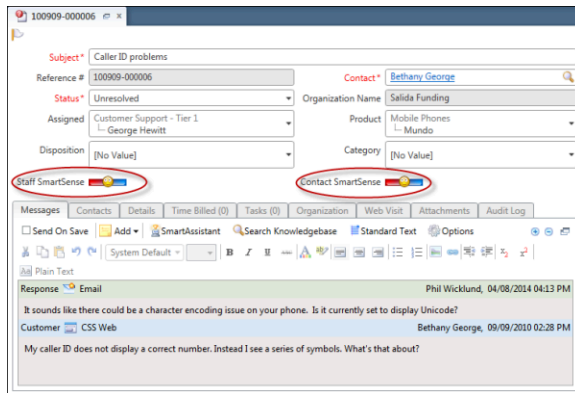
In incidents, two SmartSense ratings can be placed on the incident workspace: one for the customer and one for the staff member editing the incident. SmartSense scans the text and rates the words and phrases in all customer entries for the customer rating and all responses for the staff member rating.

Although the following descriptions discuss SmartSense as it applies to incidents, it also applies to surveys. In surveys, responses to text questions, including SmartSense evaluations of each response, appear on the Results tab of the survey. See [Topic Monitoring](#).

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. This image 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.

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. 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.

How You 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.

As a single rating, the SmartSense rating may be an oversimplification. If a word has several meanings, the SmartSense rating may not be exactly precise for one or more of the meanings. 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. 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.

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.

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.

Related Topics

- [Wordlist Files](#)

3 Dynamic Agent Desktop

Dynamic Agent Desktop

Overview of the Dynamic Agent Desktop





The dynamic agent desktop is your staff members' portal to your knowledge base.




The dynamic agent desktop 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 after you are familiar with one desktop feature, learning the others becomes easier. For example, after you learn to create workspaces, you'll have most of the knowledge you need to create agent scripts.

As you evolve beyond the default configuration to an optimized interface, you'll increase agent productivity and extend the impact of their actions, producing a more dynamic, responsive operating environment. Keep in mind that all of the agent desktop features apply to the Service Console. However, many features are also supported on the Agent Browser UI. For a complete list of supported features, see [Answer ID 8173](#) on our support site.

Dynamic Agent Desktop Features

| Feature/Icon | Description |
|---|--|
|  | 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 B2C Chat; 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. See Overview of 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. See Workspace Rules . |
|  | Guide—An interactive tool that helps agents quickly find 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 rightnow customer portal. See Overview of 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. See Overview of Agent Scripts . |

| Feature/Icon | Description |
|---|---|
|  | <p>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. See Script Rules.</p> |
|  | <p>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. See Overview of Desktop Workflows.</p> |
|  | <p>Add-ins—The desktop add-in framework allows application developers to add custom components, or “add-ins,” to B2C Service in order to integrate with other applications on staff members’ workstations. When 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 display 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. See Overview of Add-Ins.</p> |

Considerations for Mapping Your Business Processes to the Agent Desktop

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’ll 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.

- 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’re integrating with an external system, is there any functional overlap that’s easier to manage within B2C Service?
- 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’s 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 these 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’ve 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'll be responsible for completing any necessary tasks. For example, who'll be responsible for viewing and responding to customer inquiries? To whom will they escalate outstanding or complex issues? Who'll be charged with developing and monitoring team performance? And who'll be charged with maintaining these processes as needs change in the future? Do these people have staff accounts in B2C Service 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? After your process definition is complete, how'll 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.

After you've answered these questions, you're 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.

Guidelines for Testing Your Agent 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'll 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'll 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's during the testing phase.

Workspaces

Overview of Workspaces

Workspaces define the appearance of the agent desktop when staff members add, view, and edit records in B2C Service.

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.

B2C Service 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. See [Overview of Staff Management](#).

Tip: 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, see [Overview of the Dynamic Agent Desktop](#).

Open the 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.

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. See [Create a Workspace](#).

Listed next to each workspace 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 lets you 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and double-click **Workspaces**. 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. See [Create a Desktop Workflow](#). 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

B2C Service 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.

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.

This table lists the standard workspaces and when they are used. Your explorer may list fewer workspaces depending on which B2C Service products are enabled on your site. Contact your Oracle account manager for information about enabling products. For information about workspaces on the Agent Browser UI, see [Administering the Agent Browser User Interface](#).

Standard Workspaces

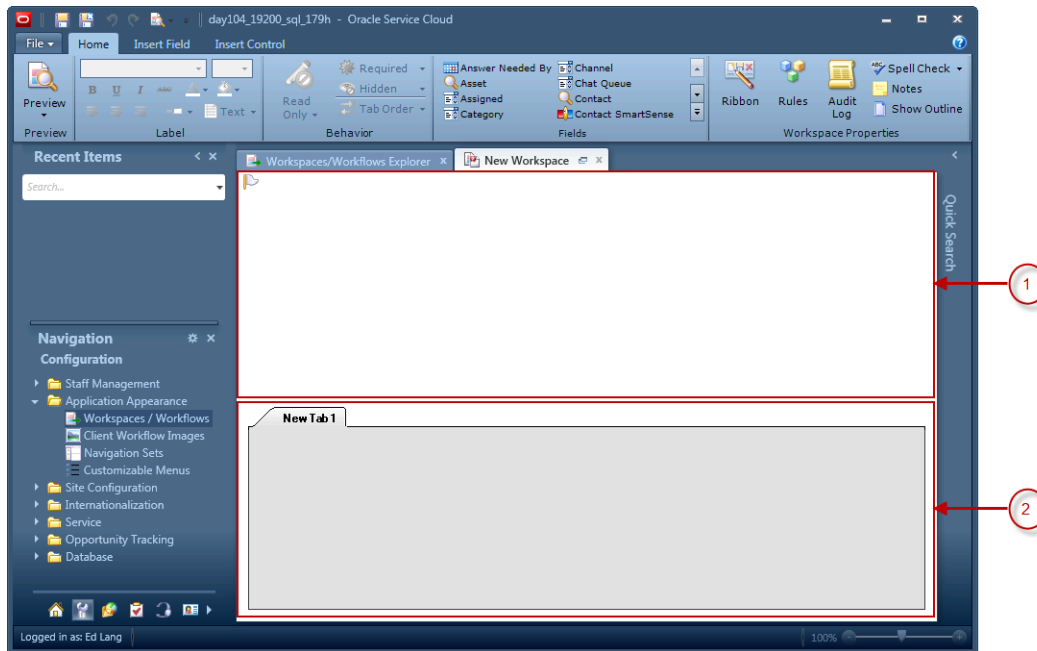
| Workspace | Description | Supported in Agent Browser UI |
|-------------------|--|-------------------------------|
| Answer | The standard answer workspace displayed when a staff member adds or edits an answer. | Yes |
| Answer Multi Edit | The standard answer workspace displayed when a staff member edits multiple answers. | Yes |
| Asset | The standard assets workspace displayed when a staff member adds or edits an asset. | Yes |
| Asset Multi Edit | The standard assets workspace displayed when a staff member edits multiple assets. | Yes |
| Chat Sessions | The standard chat sessions workspace displays when an agent accepts a chat from a customer or when a supervisor monitors a chat. The chat sessions workspace uses the chat workspace type. | No |
| Chat Sidebar | The standard chat sidebar workspace has no function and is no longer used. | No |

| Workspace | Description | Supported in Agent Browser UI |
|-------------------------|--|-------------------------------|
| Contact | The standard contact workspace displayed when a staff member adds or edits a contact. | Yes |
| Contact Multi Edit | The standard contact workspace displayed when a staff member edits multiple contacts. | Yes |
| Incident | The standard incident workspace displayed when a staff member adds or edits an incident. | Yes |
| Incident Multi Edit | The standard incident workspace displayed when a staff member edits multiple incidents. | Yes |
| Interaction | The standard interaction workspace displayed when a staff member chats with a customer on the Agent Browser UI. When a chat is initiated, the engagement panel opens with an interaction workspace where contact information for the chat is created. An incident for the chat is also created if the staff member has add/edit permissions for incidents. | Yes |
| Opportunity | The standard opportunity workspace displayed when a staff member adds or edits an opportunity. | Yes |
| Opportunity Multi Edit | The standard opportunity workspace displayed when a staff member edits multiple opportunities. | No |
| Organization | The standard organization workspace that is displayed when a staff member adds or edits an organization. | Yes |
| Organization Multi Edit | The standard organization workspace that is displayed when a staff member edits multiple organizations. | Yes |
| Quote | The standard quote workspace displayed when a staff member adds or edits a quote. | No |
| Quote Product | The standard quote product workspace that is displayed when a staff member adds a sales product to a quote. | No |
| Service Opportunity | The standard service opportunity workspace that displays when a staff member adds or edits a service opportunity. The service opportunity workspace uses the opportunity workspace type. | No |
| Task | The standard task workspace displayed when a staff member adds or edits a task. | Yes |
| Task Multi Edit | The standard task workspace displayed when a staff member edits multiple tasks. | Yes |

Custom Workspaces

In addition to standard workspaces, B2C Service gives you complete flexibility to create your own custom workspaces to help your staff work more efficiently.

Custom workspaces are 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.



Legend for image: 1. Summary Panel 2. Tab Set

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. See [Design Space Layout Options](#).

After you add a field or control to the design space, you can select it to adjust its properties on the designer ribbon.

Workspace Designer Ribbon

| Tab | Description |
|----------------|--|
| Home | Contains buttons for managing the entire workspace. You can preview the workspace, customize the ribbon that displays 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. |
| 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. See Workspace and Script Fields . |
| Insert Control | Lists controls and relationship items you can add to the workspace. Controls include spacers, tab sets, 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. See Workspace and Script 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 |

| Tab | Description |
|-------|---|
| | 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. 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. |
| 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. See Workspace Rules . |

Create a Workspace

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.

After you create a custom workspace, you can tailor the design by adding and removing fields and controls, adjusting properties, and arranging the layout to suit your business needs.

This procedure describes how to create workspaces. To import a workspace from an exported workspace file, see [How You Export and Import Workspaces](#).

1. From the Workspaces explorer, click **New**. (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.

Note: If your site has an Agent Browser User Interface associated with it, a message displays with a link to more information. Click **OK** to continue.

The workspace designer opens.

3. To design the workspace, see [Edit a workspace](#).
4. Click **Save**.

Related Topics

- [Edit a Workspace](#)

Copy a Workspace

The following procedure describes how 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. Enter a name for the copied workspace in the **Name** field.
4. Click **OK**.

Results:

The workspace you added appears on the explorer in the folder you selected.

Delete a Workspace

The following procedure describes how 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 **Yes** to delete the workspace.

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.

Edit a Workspace

You can edit a workspace to modify which fields, controls, and properties your staff members have access to.

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 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 Tab Alignment button on the Design tab. You can also adjust the space allotted to the two main areas of the workspace by selecting options from the Threshold Height and Summary Panel Height buttons on the Design tab.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Workspaces**. (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.
5. Drag the controls and relationship items you want from the Insert Control tab onto the design space.
6. To modify the properties for fields and controls, select the item, click the Design tab, and make the appropriate changes.
7. To customize options specific to chat workspaces, click **Options** on the Home tab.
8. To customize the workspace ribbon, click **Ribbon** on the Home tab.
9. To hide the workspace ribbon, click **Ribbon** on the Home tab, then click **Configure Quick Access Buttons**, and deselect all buttons.

10. To add workspace rules that alter the display or behavior of items on the workspace or the values in its fields, click **Rules** on the Home tab. You can also select an item on the workspace and then click **Add Rule** on the Rules tab.

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.

11. To view a history of all actions taken on the workspace, such as when the workspace was created and edited, and by whom, click **Audit Log** on the Home tab.
12. To invoke spell checking on fields that have the spell checking property enabled whenever a record that uses this workspace is saved, click **Spell Check** on the Home tab and select **Auto-Check Spelling on Save**.
13. To permit staff members to cancel automatic spell checking, click **Spell Check** 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.
14. To add notes about the workspace, click **Notes** on the Home tab to open the **Workspace Notes** window.
 - a. Enter any notes you want in the text field.
 - b. Click **OK**.

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.

15. 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.

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.

16. To see what your workspace will look like when it is used by staff members, click the **Home** tab and click **Preview**. You can choose to see the workspace as it will display when creating a record or when editing an existing record on the agent desktop or on the Agent Browser UI.

17. Click **Save** or **Save As**.

What to do next

Staff members may need to log out and then log back in to see any 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 keyboard shortcuts and tab indexes—Agents can be more efficient when they can keep their fingers on the keyboard. After you have optimized your workspace layout, select a Tab Order 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 (see the Tab Order button

description at *Behavior Properties*). Add keyboard shortcuts to the most commonly accessed fields to provide even faster navigation, and train your team to use them (see 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. See *How You Set 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 keyboard shortcuts so your agents can navigate quickly using their keyboard. See *Add Tabs to the Design Space*.
- 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 found on tabs that are not visible when the workspace is initially opened. See *Report Properties* and *Workspace and Script 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. See *Overview of Agent Scripts* and *Overview of Desktop Workflows*.

Workspace Rules

The efficiency provided by custom workspaces can be extended even further using workspace rules.

Note: Workspace rules are not available for multi-edit workspaces.

Workspace rules are an automation layer used to set properties for different workspace items based on actions and conditions occurring in the workspace. 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.

Related Topics

- [Workspace and Script Fields](#)
- [Workspace and Script Controls](#)
- [Field and Control Properties](#)
- [Overview of the Dynamic Agent Desktop](#)

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.)

Workspace rules are created and managed on the Service Console for staff actions taken on the agent desktop and the Agent Browser UI. However, not all workspace rule elements are supported on the Agent Browser UI.

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, after 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 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 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.

Workspace rules can be created and managed from two locations on the workspace designer ribbon. Clicking Rules on the Home tab gives you an overview of all the rules for the workspace. 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.

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.

Workspace Rules Tab

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.

Rules Tab

| Field | Description |
|----------------------------------|---|
| Current Selection | Click this drop-down list to view a hierarchical listing of all the items on the workspace design space. Selecting an item from the hierarchy will select it on the design space. |
| Show Details | Click this button to view the properties of the selected item. |
| 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. |
| 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 rule triggers. |
| Rules that Reference this Object | Click this button to list only rules that use the selected item in the rule 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. You can scroll the rule list using the up and down arrows on the scroll bar. You can expand the list by clicking the Expand Fields button at the bottom of the scroll bar. |
| Edit Rule | Select a rule in the rule list and click this button to edit the rule. |

| Field | Description |
|-------------|---|
| 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. 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. Rules with the same trigger run in the order listed. |

Add a Workspace Rule

You create rules using the Rule Wizard, which you can open from the Rules tab or from the Rules button on the Home tab.

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.

1. On the open workspace, click the **Home** tab and click **Rules** to open the **Rules** window.
2. Click **Add Rule**. The **Rule Wizard** opens.
The top of the wizard displays five buttons—Triggers, Conditions, Then Actions, Else Actions, and Properties. You can create the rule by clicking each button and adding items to the rule description.
3. Select one or more triggers to fire the rule.
4. Click **Conditions** to add conditions that determine whether the triggering event will result in an action.
5. Click **Then Actions** to define the actions that should occur if the conditions are met.
6. Click **Else Actions** to define the actions that should occur if the conditions are not met.
7. Click **Properties** and type the name of the rule in the Rule Name field.
8. Enter 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 **Finish**.

Related Topics

- [Workspace Rule Triggers](#)
- [Workspace Rule Conditions](#)
- [Workspace Rule Actions](#)

Workspace 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.

Workspace Rule Triggers Description

Available triggers vary based on the fields and controls that have been added to the workspace.

All rule triggers listed in this table are supported in the Service Console and on the Agent Browser UI.

Rule Triggers

| Event | Description |
|-------------------------------------|--|
| The editor loads | <p>Add this event to trigger the rule immediately after a record is opened using the workspace.</p> <p>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.</p> |
| The record is saved without closing | <p>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.</p> <p>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.</p> |
| The record is forwarded | <p>Add this event to trigger the rule immediately after a record is forwarded using the workspace.</p> |
| A field changes | <p>Add this event to trigger the rule immediately after the value of a field is changed. When added, click the 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.</p> <p>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.</p> <p>If the selected field is a currency, the rule will be evaluated when the field loses focus.</p> <p>Not all fields are supported on the Agent Browser UI.</p> |
| An input control value changes | <p>Add this event to trigger the rule immediately after the value of an input control is changed to another value or to no value. When added, click the underlined text to select an input control that will trigger the rule. Available input controls include any menus, options, list boxes, and text boxes that are not used to trigger other rules.</p> <p>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.</p> |
| A button is clicked | <p>Add this event to trigger the rule immediately after a button on the workspace is clicked. When added, click the underlined text to select a button from the workspace that will trigger the rule.</p> <p>This trigger is available only when a button has been added to the workspace.</p> |
| An image is clicked | <p>Add this event to trigger the rule immediately after an image is clicked. When added, click the underlined text to select an image from the workspace that will trigger the rule.</p> |

| Event | Description |
|------------------------------------|--|
| | This trigger is available only when an image has been added to the workspace. |
| A hyperlink control is clicked | Add this event to trigger the rule immediately after a hyperlink is clicked. When added, click the underlined text to select a link from the workspace that will trigger the rule. 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. |
| 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. |
| 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. 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. When added, click the underlined text to select an input control that will trigger the rule. Available input controls include any menus, options, and list boxes that are not used to trigger other rules. 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. |
| 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. When added, click the underlined text to enter the name of the event that will trigger the rule. Rule conditions are evaluated at the time that the event is fired. |

Add a Workspace Rule Trigger

The following procedure describes how to add a rule trigger to a workspace.

1. On the Rule Wizard, click **Triggers** 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). See [Workspace Rule Triggers Description](#) for a description of trigger actions.
4. Do one of the following:
 - o Click **Next** to add conditions to the rule.
 - o Click **Then Actions** to add actions to the rule.
 - o Click **Finish** to save your trigger in the rule.

Workspace 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 Then actions will be taken immediately after the triggering event. If any condition in the rule is not met, the rule Else actions will be taken. If no Else actions are defined and any condition is not met, no action will be taken.

Workspace Rule Conditions Description

Available conditions vary based on the fields and controls you have added to the workspace.

All rule conditions listed in this table are supported in the Service Console and on the Agent Browser UI.

Rule Conditions

| 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. |
| 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. |

| Condition | Description |
|---|--|
| 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. |

Add a Workspace Rule Condition

The following procedure describes how to add a rule condition to a workspace.

1. From the Rule Wizard, click **Conditions** 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. See *Workspace Rule Conditions Description* for a description of rule conditions.
4. To evaluate two or more conditions using a logical expression, click **Combine the Conditions Using a Logical Expression**. See *Edit a Workspace Rule Logical Expression*.
5. Do one of the following:
 - o Click **Next** to add actions to the rule.
 - o Click **Finish** to save your condition in the rule.

Workspace Rule Operators

Operators specify IF conditions in workspace rules.

A workspace rule operator expresses the relationship between a selected field for a condition and its value, determining how the field is applied to the value of the condition. For example, in the condition “If the logged-in account equals Alex Thompson,” the operator is “equals.” Each field has its own set of operators, depending on what is logical for that field. A workspace rule with the condition “If an answer assignment is greater than or equal to customer support,” for example, has no relevance and cannot be applied to an answer.

Operators Description

| Operator | Description |
|-------------------------------|---|
| equals | The field matches the value exactly, including case. |
| not equals (exclude No Value) | The field does not match the value exactly (excluding case), and does not contain a null value. |
| not equals (include No Value) | The field does not match the value exactly (including case), or contains a null value. |
| is null | The field does not contain a value. |

| Operator | Description |
|--------------------------|--|
| is not null | The field contains a value. |
| in list | The field values you want to search for are specified by selecting check boxes in a menu. The selected options display 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. |
| not in list | The field values you do not want to search for are specified by selecting check boxes in a menu. The selected options display 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. |
| 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. |
| like | The field 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 that contain "all," you should type %a11% in the field. |

Edit a Workspace Rule Logical Expression

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.

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 display in an AND tree node.
3. To add a condition joined with OR logic, click **Add OR Node** and drag the condition to the OR node.

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.

When you add nodes to the expression, the nodes display in a tree structure, with conditions 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.

4. To delete a node from the logical expression, select the node and click **Delete Node**.
5. To view a text definition for the logical expression, click **View Text Definition**.
 - a. Click **OK**.

Workspace Rule 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 conditions are not met. For a list of available workspace rule actions, see [Workspace Rule Actions Description](#).

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. See [Add a Connector Event](#).

Workspace Rule Actions Description

The available rule actions depend on the type of workspace and the fields and controls you have added and are described in the following table.

All rule actions listed in this table are supported in the Service Console and on the Agent Browser UI.

Rule Actions

| 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. 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 previous value. |
| 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. 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. |

| Action | Description |
|---|---|
| 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. Note: A control with a value that can be changed at runtime must be added to the workspace for this action to be available on workspaces used on the Agent Browser UI. |
| 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. Note: A browser control must be added to the workspace for this action to be available on workspaces used on the Agent Browser UI. |
| 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. Note: A text box control must be added to the workspace for this action to be available on workspaces used on the Agent Browser UI. |
| 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 or subtab 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. When you choose to hide a ribbon button, all instances of the button on the workspace 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. 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. |

| Action | Description |
|---|---|
| | This option is available only if guided assistance is enabled on your site. |
| 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. 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. 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 enter the name of an event that you can use to trigger a script branch, desktop workflow connector, or another rule. 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. |
| 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 customer entry, response, or private note type threads. 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. |
| Add answer to thread | Add this action and click the underlined text to select and display an answer from your knowledge base into the incident thread. You can determine whether the answer is included in the thread as a customer entry, a response, or a private note. You can select whether to include the answer as text or as a link. Specify which answer you want included by the answer ID or using the search. |
| Display a message box | Add this action and click the underlined text to define a customized message that will display in a new 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 (none, error, information, question, or warning). |
| Show an Intelligent Advisor Interview | Add this action to show an Intelligent Advisor Interview. Specify the Policy Model and the Locale. |
| 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. |
| Request Insights | Add this action to show the Insight sidebar. |

| Action | Description |
|--------------------------|--|
| Show an Insight | Add this action to add an item to the Agent Insights panel, and show the panel if necessary. Specify the item Title, Message, and the Named Event to be executed when the Insight is accepted. |
| Show Best Answers Dialog | Add this action to display the Best Answers dialog. Best Answers displays a list of answers marked as best answers. You can also select the answer that best resolves the incident. |

Add or Edit a Workspace Rule Action

The following procedure describes how to add or edit a rule action to a workspace.

1. From the Rule Wizard, do one of the following:
 - o Click **Then Actions** to list available Then actions.
 - o Click **Else Actions** 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. See *Workspace Rule Actions Description* for a description of rule actions.
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 **OK**.
5. Click **Finish**.

Modify Workspace Rules

After you add rules, you can easily edit them, reorder them, or delete them when they are no longer needed. These functions can be accessed from both the Rules tab and the Rules button on the Home tab.

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.

1. Do one of the following:
 - o From an open workspace, click the **Home** tab and then click **Rules**. The **Rules** window opens and lists all workspace rules.
 - o 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 **Filter List** and select the option you want.)
2. In the rule list, select the rule you want to modify.
3. To edit the rule, click **Edit Rule**.
The **Rule Wizard** opens. See *Adding workspace rules*.
4. To copy the rule, click **Copy Rule**.
The **Rule Wizard** opens the rule copy where you can make any needed changes to rule. 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 **Delete Rule**.

Considerations for Avoiding Workspace Rule Conflicts

You should understand the sequence in which rules are performed in order to avoid rule conflicts.

Note: Some agent scripting and workspace rule elements are not currently supported on the Agent Browser UI. Test your workspace rules on the agent desktop (Service Console or Agent Browser UI) used by your staff members.

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 branching logic

If additional scripts appear on the same workspace, processing continues as follows:

1. Script 2 current page rules
2. Script 2 current page branching logic
3. Script 3 current page rules
4. Script 3 current page 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.

Preview a Workspace

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.

1. Do one of the following:
 - o While editing a workspace, click the **Home** tab.
 - o 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 on the agent desktop, click **Preview** and select **Agent Desktop New**.
A preview of the new record opens.
 3. To view the workspace as it will appear on the agent desktop with data from a specific record, click **Preview** and select **Agent Desktop Existing**.
 - a. Enter the record ID number.
 - b. Click **OK**.The record preview opens.
 4. To view the workspace as it will appear to staff members when they add records using this workspace on the Agent Browser UI, click **Preview** and select **Agent Browser UI**.
The **Preview in Agent Browser UI** window opens.
 - a. To view a new record, click **Preview**.
You can also click **Copy URL to Clipboard**, and then paste the URL in a web browser.
A preview of the new record opens on the Agent Browser UI.
 - b. To view the workspace as it will appear with data from a specific record, enter the incident ID or reference number and click **Preview**.
You can also click **Copy URL to Clipboard**, and then paste the URL in a web browser.
 - c. Click **X**.
- Note:** If you are not already logged in to the Agent Browser UI, you will be prompted to log in before the preview opens on the Agent Browser UI.
5. To view a chat workspace as it will appear with data from a specific chat session, click **Preview**.
 - a. Enter 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 **OK**.The chat preview opens.

6. Click **X** on the top right or press Esc.

When you click **Preview** 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.

How You Export and Import 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, B2C Service 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 B2C Service interface and want to create a copy or similar workspace on a different interface.

Consider the following when exporting or importing workspaces.

- 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.

Export a Workspace

This procedure describes the steps 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 enter the file name.
4. Click **Save**.

Import a Workspace

This procedure describes how to import a workspace.

1. From the Workspaces explorer, click **New**. (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 **Next**.
4. Do one of the following:
 - Enter the full path of the workspace definition file you want to import.
 - Click **Browse** to find the file on your workstation and click **Open**.

5. Click **Next**.
6. To map the file to a workspace type, click the **Map To Type** drop-down list 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.

Note: 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 **Next**.
8. If the workspace includes records from a custom object, click the **Map To Record Type** drop-down list and select the record type you want to map the records to. If B2C Service detects a record type of the same name already in the site, it is selected by default.

9. Click **Next**.

10. Click **Finish**.

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.

11. Edit the workspace to remove or replace fields that are not available. See [Edit a Workspace](#).

12. Click **Save**.

When you save a workspace, reports that are used by the workspace 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.

Guided Assistance

Overview of Guided Assistance

Guided assistance gives agents and customers the ability to find 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.

Note: 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. See [Overview of Answers](#).

Not all guided assistance features are currently supported on the Agent Browser UI. For a complete list of supported features, see [Answer ID 9022](#) on our support site.

To understand how guides can best be implemented in your agent desktop on the Service Console and the Agent Browser UI, you should also become familiar with workspaces, scripts, script rules, and workflows. For a summary of these features, see [Overview of the Dynamic Agent Desktop](#).

Provide Guided Assistance to Agents and Customers

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.

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.

1. Add the Guided Assistance explorer to your configuration list for the Configuration button. See [Create a Navigation Set for the Administrator](#).
2. Assign guided assistance permission to profiles. See [Assign Guided Assistance Permission to Profiles](#).
3. Create guides for your agents or customers. See [Create or Edit a Guide](#).
4. To display a guide to agents, add the Guided Assistance control to a workspace selected in the agent profiles. See [Guided Assistance Relationship Item](#).
5. To display a guide to customers, add the GuidedAssistant widget to the Customer Portal.

Assign 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.

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Profiles**.
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 **Permissions**.
5. Click the **Service** tab and select the **Guided Assistance – Add/Edit** check box under More Options.
6. Click **Save**.
Staff associated with the profile you have edited must log out of B2C Service and log back in to apply the changes you have made.

Related Topics

- [Add or Edit a Profile](#)

Create or Edit a Guide

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. See *Open the Reports Explorer*.

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 more easily see relationships between guided assistance questions and responses, view the data in a tree format. See *Overview of Managing Reports on the Reports Explorer*.

1. Click **Configuration** 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, do one of the following:
 - o Click **New** on the Guided Assistance explorer ribbon. The guided assistance designer opens.
 - o If your navigation set is configured to add guides from the application menu, click **File** and select **Guided Assistance Guide**.

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 ribbon give you access to all the tools you need to preview, validate, and edit a guide.

Guided Assistance Designer Ribbon

| 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 list and select Agent Preview or Web Preview. 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. |

| Group/Button | Description |
|-----------------|--|
| | 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 Guided Assistance field on the answer.) When staff members search for guides, a search that matches the associated answer content will return the guide. See Guide Search Options and How You Add Answers for Multiple Interfaces . |
| 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. |
| Notes | Click this button to open a text window where you can enter 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. |
| Language | Click this button to select the language to use for the guide. Only languages deployed to your site are available. 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. 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 list. |
| 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 options. |
| Link Question | Click this button to add a question with responses shown as links. 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 Post and click OK. |
| Text Question | Click this button to add a question with a response shown as a text box and an OK button. All text fields are automatically marked as required on the customer portal. |
| 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. When you open the explorer, you can manage images the same way you do in the Images explorer. See Images Explorer . |

| Group/Button | Description |
|-----------------------------|---|
| | |
| 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. See <i>How Events are Used in Workspace and Script Rules</i> . |
| 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. |
| Call URL | <p>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. See <i>How You Pass Parameters Through Call URL Nodes</i>.</p> <p>Tip: 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. 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.</p> <p>Call URL nodes support both absolute and relative URLs. For example, you can post the relative URL <code>/app/ask</code> to load your Ask a Question page.</p> |
| Node Properties and Actions | <p>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 branches for each question.</p> <p>Some of the options available in this group are also available when you right-click a question or response in the guide.</p> |
| 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 displays 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). |

| Group/Button | Description |
|--------------|--|
| Delete | <p>CAUTION: When deleting a question or response, all the images, web pages, questions, and responses beneath the item will also be deleted.</p> <p>Click this button to delete the selected question or response.</p> |
| Edit | <p>Click this button to open the Edit Question Properties window to change the properties of the selected question. You can also change the question properties from the ribbon.</p> <p>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.</p> <p>See <i>Add Questions and Responses to a Guide</i>.</p> |
| Extract | <p>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.</p> |

Add Questions and Responses to a Guide

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. See *Add an Image Control to a Workspace or Script*.

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.

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, see the Guided Assistance Designer Ribbon table in *Create or Edit a Guide*.
After 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 field information.

Edit Question Properties Window

| Field | Description |
|---------------|--|
| Question Name | Enter 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. |

| Field | Description |
|--------------------|--|
| Question | <p>Enter 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. See Adding HTML answers.</p> <p>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 window. See Add an Image Control to a Workspace or Script.</p> <p>When inserting an inline web page from the toolbox, you must specify the URL address, width, and height.</p> |
| Agent Text | Enter 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. See How You Pass Parameters Through Call URL Nodes . |

4. Click **OK**.
5. To add responses to the question, click **Response**.
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. Enter the text and value for the response.
 - b. Click **OK**.
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.
8. Click **Save** on the Quick Access toolbar. The **Save As** window opens if you have not yet named the guide.

Note: 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 **Continue** to save the guide or click **Cancel** to cancel. If problems exist with your guide, we recommend that you fix them before making the guide available to agents.

- a. Enter a name for the guide in the **Name** field.
- b. Click **OK**.

Associate Answers and Text Explanations with Question 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. After a guide has been saved, you can click **Create Answer** on the ribbon to create an answer to associate with your guide.

1. To associate an answer with a question response, select the response and click **Associated Answer** on the ribbon. The **Add or Edit an Answer Node** window opens.
 - a. If you know the ID number of the answer you want, enter it in the Answer ID field and click **Select**.
 - b. To search for an answer, enter search criteria in the fields, click **Search**, select the answer you want, and click **Select**. 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 **Select**.

Tip: When you edit a guide, you can view the answers associated with responses by right-clicking an answer and selecting **View Answer**.

The answer in the guide is replaced with the new answer.

3. To associate a text explanation with a question response, select the response and click **Text Explanation** on the ribbon.
 - a. Enter 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, do one of the following:
 - o Select the explanation, click **Text** on the ribbon, and enter the text you want.
 - o Double-click the explanation and enter the text you want.
 - a. Enter the text you want and click **OK**.

If the text explanation exceeds 200 characters, the **Edit Node Text** window opens when you double-click the text explanation.

5. Click **Validate** 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 **OK**.

Note: Validation also occurs automatically when saving a guide. If validation errors occur when saving, you can click **Continue** 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 **Save** on the Quick Access toolbar.

How You Pass Parameters Through Call URL Nodes

Call URL functions and parameters can route customers to an absolute or relative URL, helping them find a solution more quickly.

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 Ask a Question page. This can be done by entering the relative URL `/app/ask` in the Call URL properties.

Note: 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 the remaining branches on a guide and are passed through any Call URL function that exists in the question subhierarchy. To test Call URL functions and parameters, click the Preview button and select an option for previewing your guide.

Pass a Parameter Using Response Properties

The following procedure describes how to pass a parameter using response properties. This procedure assumes you have created a guide containing a question and a response with a Call URL node.

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. Enter the name of the parameter you want to pass in the **Question Name** field.
If passing a parameter to a B2C Service 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, enter `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 **Edit Response**. The **Edit Response Properties** window opens.
4. Enter the parameter value you want to pass in the **Response Value** field.
If passing a parameter to a B2C Service field, be sure to use a value consistent with the purpose and type for the field. 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 enter a number or number sequence corresponding to the product ID.
5. Click **OK**.
6. Click **OK**.
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. 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 **OK**.
10. Click **Save**.

Related Topics

- [Create or Edit a Guide](#)

Pass a Static Parameter Using Question Properties

The following procedure describes how to pass a static parameter using question properties. This procedure assumes you have created a guide containing a question and a response with a Call URL node.

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 **Add**.
3. Enter the name of the parameter in the **Name** field.
If passing a parameter to a B2C Service 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, enter `incidents.prod`. Custom fields are indicated in the format `table.c$fieldname`, such as `incidents.c$priority`.
4. Enter the parameter value you want to pass in the **Value** field.
If passing a parameter to a B2C Service field, be sure to use a value consistent with the purpose and type for the field. 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 enter a number or number sequence corresponding to the product ID.
5. Click **OK**.
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. 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 **OK**.
9. Click **Save**.

Related Topics

- [Create or Edit a Guide](#)

Guide Preview

You can preview a guide to confirm that it appears and functions as you want it to.

The Preview button 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.

- **Web Preview**—This option opens the guide in a separate window and shows you the guide as your customers will see it.

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, edit the Answer Details page of your Customer Portal.

Use Agent Preview

The following procedure describes the steps to preview guides using the Agent Preview option.

1. When viewing a guide, click **Preview** and select **Agent Preview**.
A window opens, showing only the first question in the guide.
2. To view the guide 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 branches.
3. To view the guide 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 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 **Navigate** at the top of the window.
The content of the question or response displays on the right.
5. Click **OK**.

Use Web Preview

The following procedure describes the steps to preview guides using the Web Preview option.

1. When viewing a guide, click **Preview** on the ribbon and select **Web Preview**.
A window opens, showing only the first question in the guide.
2. To view the guide 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 branches.
3. Click **OK**.

Guided Assistance Relationship Item

Before your agents can use guides, you must add the Guided Assistance relationship item to a custom incident or chat workspace.

When added, the Guided Assistance relationship item functions as a container for displaying guides to your staff on the agent desktop. You can display guides manually, based on a guide search or selection performed by an agent. See [Guide Search Options](#). 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 category, or you can load a different guide when an agent selects a certain incident disposition. See [Guided Assistance Functions in Workspace and Script Rules](#).

Note: A separate Guided Assistance field can be added to answer workspaces and scripts. This field lets you associate answers directly to guides for search-matching purposes. See [How You Associate Answers to Guides](#). Guides can also be embedded in answers so customers can use them on the customer portal.

Related Topics

- [Relationship Items](#)
- [Overview of Workspace Rules](#)
- [Create a Workspace](#)

Guide Search Options

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.

Note: When providing guide search to your agents, you must ensure that each guide is appropriately associated to one or more answers. See [How You Associate Answers to Guides](#).

Several design options are available for guide searching. 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, Guided Assistance automatically displays on the ribbon. By default, this button provides both select and search options for locating guides. However, you can edit Guided Assistance to show or hide either option. Or, if you do not want Guided Assistance to display at all, you can remove it. See [Ribbon and Quick Access Toolbar Buttons](#).

Related Topics

- [Find Answers Using Guided Assistance](#)

Edit Guide Search Options

This procedure describes the steps to edit guide search 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.
3. Click the **Design** tab.
4. Edit the Options button group properties. See [Edit a Field or Control](#).

Design Options for the Guided Assistance Relationship Item

| Option | Description |
|---------------|---|
| Search Report | <p>Click this button to select the report you want to use when searching for guides from a workspace. The report displays when you click the Search for a Guide button on the guided assistance panel or you click the Guided Assistance button on the incident ribbon and select Search. The report is also shown on the guided assistance panel on the incident workspace when the Show Search Inline option is enabled on the incident workspace.</p> <p>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.</p> |

| Option | Description |
|--------------------|--|
| Show Search Inline | <p>Selecting this option displays search fields on the guided assistance panel you can use to search for a guide. The fields displayed come from the search report you select for finding guides.</p> <p>Selecting this option prevents the Search for a Guide and Select a Guide buttons from displaying on the guided assistance panel, though these can still be accessed from the Guided Assistance button on the incident workspace ribbon.</p> |
| Show Search Button | <p>This option adds the Search for a Guide button on the 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.</p> <p>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 ribbon.</p> |
| Show Select Button | <p>This option adds the Select a Guide button to the 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. See <i>Guide Search Options</i>.</p> <p>If this option is disabled, the Select a Guide window can still be opened from the Guided Assistance button on the incident workspace ribbon.</p> |
| Show Navigation | <p>This option adds the Expand Navigator check box and slider bar to the guided assistance panel. Clicking this button on a workspace lets you view all the branches in the guide simultaneously. See <i>Guide Preview</i>.</p> |

Edit the Guided Assistance Button

The following procedure describes the steps to edit the Guided Assistance button.

1. From the open incident workspace, click the **Home** tab and click **Ribbon**.
2. Select **Guided Assistance**.
3. Click **Edit 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 **Select Search Report** to open the **Select Report** 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.

- a. Select the report you want agents to use to search for guides.
 - b. Click **OK**.
7. Click **OK** to save the changes to **Guided Assistance**.

Related Topics

- [Ribbon and Quick Access Toolbar Buttons](#)
- [Edit a Field or Control](#)

How You Associate 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 content must be relevant to the topic addressed by the guide.

There are two ways to associate an answer to a guide.

- [How You Find Guides Associated to Answers](#)
- [How You Select a Guide from the Guided Assistance Field on an Answer](#)

Note: 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, see [Overview of Workspaces](#).

Related Topics

- [Associate an Answer with a Guide](#)

How You Find Guides Associated to Answers

You can associate answers to guides and later find guides associated to those answers using the Guide Dependency report.

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. See [Associate Answers and Text Explanations with Question Responses](#).

Tip: To help you identify guides associated to a particular answer, the Guide Dependency report lists answers and other guides that have been linked to by each guide. The Guide Dependency report is found in **Public Reports/Service/Guided Assistance** on the Reports explorer.

How You Select a Guide from the Answer's Guided Assistance Field

You can select a guide from the guided assistance field by associating a guide using the Guided Assistance field on an answer or custom workspace.

Sometimes, a guide may not contain any responses that link to answers from the knowledge base. For example, 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 found on the Details tab. (For custom workspaces, you can add the answers.guided assistance field from the Insert Field ribbon tab on the workspace editor.) For example, if the answer is associated with a guide named Service Plan Assistance, that guide will be returned in guide searches when the search criteria matches the answer contents.

Use one of the following reports on the Reports explorer to help you identify guides that will be impacted by changes to guides or the removal of associated content.

- **Public Reports/Service/Guided Assistance/Guide Dependency**—Lists answers and other guides that have been linked to by each guide.
- **Public Reports/Service/Guided Assistance/Guided Assistance Search**—Lists Guided Assistance guides that contains the answers matching the specified search criteria.

Related Topics

- [Reports Explorer](#)

Associate an Answer with a Guide

You must associate an answer with a guide in order for the guide to be searchable.

1. With the answer open, go to the tab or other location where the Guided Assistance field displays. In the default answer workspace, this field is located on the Details tab.
2. Click **Select Guide** 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 **OK** to close the **Select a Guide** window.
5. Click **Save**.

Related Topics

- [Add Answer Details](#)

Guided Assistance Functions 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 product or category.

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. See [Script Rules](#).

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. |

| Trigger/Action | Description |
|---|---|
| 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 Value field on the Add Action window. |
| 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. |
| 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. By default, the standard Guided Assistance Search report is used. If you want to select a different report, click Select Search Report on the Value field when this operation is selected. |

Note: Guided assistance options are also available when configuring workflow connector events leading from incident elements. See *Add a Connector Event*.

Related Topics

- [Script Rules](#)
- [Add a Workspace Rule](#)
- [Add a Connector Event](#)
- [Add a Connector Condition](#)

How You Export and Import Guides

After you create a guide, you can export it to a guide definition file and import it into other B2C Service interfaces to create a new guide. This lets you create a single guide for use in several interfaces.

You can also extract a subset of the guide 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.

Export an Entire Guide

The following procedure describes the steps 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 enter the file name.
4. Click **Save**.

Export Part of a Guide

The following procedure describes the steps to export a subset of questions and responses for 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. Enter 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 **Export to File**.
 - a. Click **Browse** and select the location where you want to save the file.
 - b. Enter a name for the new guide.
 - c. Click **Save**.
4. Click **Extract**.
All responses, answers, and text explanations that are part of the extracted question branch will be included in the extracted guide.

Import a Guide Definition File

You can import a guide from other B2C Service interfaces.

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 **Yes** 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 **Open**.
The imported guide displays on the content pane.
4. If the guide was exported from a different B2C Service site, verify that the answers associated with question responses are correct and choose different answers if necessary.
5. Click **Save** on the Quick Access toolbar. The **Save As** window opens if you have not yet named the guide.
 - a. Enter a name for the guide.
 - b. Click **OK**.

Agent Scripts

Overview of Agent Scripts

Agent scripts 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.

After you create a script, it can be inserted into one or more workspaces using the Script workspace control (see [Add a Script Control to the Design Space](#)) or presented as a standalone component of a desktop workflow using the Script workflow element (see [Edit 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, see [Overview of the Dynamic Agent Desktop](#).

Assign 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.

Before you start

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.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Profiles**.
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 **Permissions**.
5. Select the **Scripting** check box on the **Administration** tab.
6. Click **Save**.

Note: Staff associated with the profile you have edited must log out of B2C Service and log back in to apply the changes you have made.

Open the 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.

Note: B2C Service does not include a set of standard scripts because all scripts are designed with unique content to meet specific business needs.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Scripts Explorer**.

The Scripts explorer opens. The explorer displays the tree structure on the left and lists scripts and custom folders on the right. Listed next to each script 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. See *Script Types*.

What to do next

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.

Note: You can also add the Scripts explorer to any of your navigation lists if your profile allows. See *Download the Oracle B2C Service Client and Log In*.

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.

B2C Service 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. See *Overview of 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 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, B2C Service Opportunity Tracking must be enabled in order for the opportunity script type to be available, and B2C Chat 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. See [Standard Workspaces](#).

Script Designer

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. See [Design Space Layout Options](#).

After a field or control has been added to a page, you can select it to adjust its properties on the designer ribbon.

Script Designer Ribbon

| 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 Insert group on the Home tab 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. See How Fields Are Added to Workspaces and Scripts . |
| 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. See Workspace and Script Controls . Questions controls are used to configure script branching. See How Branches Work in Scripts . The values staff members enter in questions and their corresponding controls are available for use with the script 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. See How Branches Work in Scripts and Place the Header on Script Pages . |
| 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. See 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 |

| Tab | Description |
|-----|---|
| | 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, see 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.

When a page is complete, you can use the page selector to add more branches and pages to your script (see [How Branches Work in 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 **Page Selector**, and select **Show Selector** to switch it on or off. You can also select Use Large Icons on Show Selector to switch between using large and small icons on the page selector.

Create a Script

The following procedure describes how to create 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.

1. From the Scripts explorer, click **New**.
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. See [Script Types](#).
The script designer opens.
3. Click **Save**.
To import a script from an exported script file, see [Export a Script](#).

Copy a Script

The following procedure describes how 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. Enter a name for the copied script in the **Name** field.
4. Click **OK**.
The script you added appears in the folder you selected.

Delete a Script

The following procedure describes how 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 displays.

2. Click **Yes** to delete the script.

Note: 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. See *Add a Script Control to the Design Space*.

Edit a Script

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 that contains a header, footer, and text control. You use the options available on the ribbon 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 ribbon.

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Scripts Explorer**.
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. See *Workspace and Script Fields*.
5. Drag the controls and questions you want from the Insert Control tab onto the design space. See *Workspace and Script Controls*.
You can also drag controls onto the design space using the icons on the Home tab Insert group.
6. To modify the properties of a field or control, select the item, click the Design tab, and make the appropriate changes. See *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 **Add Rule**. See *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 **Add Page**.
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. See *How Branches Work in Scripts*.
10. To reposition a page in the script, drag it to the position you want on the page selector.

Tip: After 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 pages can all be reached.

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.

11. To rename a page, select the page, click the **Page** tab, enter the name you want in the ribbon Name field, and press Enter.

12. To add or remove the header and footer from script pages, click the **Page** tab, click **Header** or **Footer**, and select the option you want. See *Place the Header on Script Pages*.
13. To customize the ribbon for a script that is used in a workflow, click **Ribbon** on the **Home** tab. See *Ribbon and Quick Access Toolbar Buttons*.

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 **Audit Log** on the **Home** tab.
15. To add notes about the script, click the **Home** tab and then click **Notes** to open the **Script Notes** window.
 - a. Enter any notes you want in the text field.
 - b. Click **OK**.

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 **Preview**. You can choose to see the script as it will display when creating a record or when editing an existing record. See *Preview a Script*.
17. To confirm that the pages are all accessible from a branch or a navigation button, click the **Home** tab and click **Validate**. The **Script Validation Results** window will list any inaccessible pages.
 - a. Click **OK**.

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 **Save** on the Quick Access toolbar.

What to do next

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.

Considerations for 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.

Note: 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.

Remove an Item from a Script

When you are certain you no longer need an item and know how your changes will impact the rest of your script, you can remove fields, controls, branches, rules, and entire pages from your script.

1. From your open script, do one of the following:
 - o Select the item you want to remove on the design space.
 - o Click the **Design** tab and select the item you want to remove from the drop-down list on the Selected Object group.

Tip: Selecting the item you want to remove from the drop-down list 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. See *Access Design Space Items Using the Ribbon*.

- a. Click **Delete** 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 **Yes** 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 **Delete**.
The **Delete Confirmation** window opens, asking if you want to delete the item.
 - b. Click **Yes** to delete the item.

Place the Header on Script Pages

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 displays only on that page, the content you add to the header and footer is shown on every page where the header and footer displays. 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. See *Navigation Panel Control Buttons*.

The following procedure describes how to place the header on script pages. You use a similar procedure when placing the footer on script pages.

1. From your open script, click the **Page** tab.
2. To show the header only on the selected page, click **Header** 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 **Header** and select **Show Header On All Pages**.
4. To remove the header, click **Header** 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 **Insert Field** or **Insert Control** tab and drag the items you want to the design space.

Navigation Panel Control Buttons

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, Exit is renamed Finish. This button is not enabled unless a rule or branch is configured to use one of these conditions.

How Branches Work in Scripts

This topic explains 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. After you create branches, you can easily edit, reorder, and delete them using the tools available on the ribbon.

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.

Add a Branch by Right-Clicking a Field or Control

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.

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.
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 **Go to Next Page**. This option does not display when creating a branch on the last page of a script.
 - b. To branch to the previous page in the script, select **Go to Previous Page**. The previous page is the page staff members would visit before the current page when using the script. This option does not display when creating a branch on the first page of a script.
 - c. To branch to an existing page, select **Go to Page** (or **Branch to Existing Page**). A window opens where you can select the page you want to branch to.
 - d. To branch to a new page, select **Go to New Branch Page** (or **Branch to New Page**). A new page is created and displays on the design space where you can add the fields and controls you want.

Add a Branch 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 Add Branch 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, see [Script Rules](#). For detailed procedures to create workspace rules, see [Add a Workspace Rule](#).

1. From your open script, select the page you want to add the branch to on the page selector.
2. Do one of the following:
 - o Click the **Page** tab and then click **Add Branch**.
 - o 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 display on 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.
 - o **Page Loaded**—Select this item to trigger the branch immediately after the page the branch is on is opened.
 - o **A Button is Clicked**—Select this item to trigger the branch when **Next** on the navigation panel is clicked to proceed to the next page.
 - o **The Exit Script Event Fires**—Select this item to trigger the branch when **Exit** on the 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 go to another page. For this reason, exit script events usually occur before the script has reached the final page.

- **The Finish Script Event Fires**—Select this item to trigger the branch when **Finish** on the navigation panel is clicked to leave the script. **Finish** displays only if there is no branch or subsequent page to go to from the script page. For this reason, finish script events usually occur after the script has reached the final page for the branch. For descriptions of the other triggers and how to add them to your branch, see *Workspace Rule Triggers Description*.

When multiple triggers are specified, the branch conditions will be checked if any of the actions for the trigger 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 **Conditions** 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. See *Workspace Rule Conditions*.
6. Click **Go to Page** to select the page you want the script to display immediately after the branch is triggered and all conditions are met.

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 option 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 **OK**.
7. Click **Finish**.
 8. Repeat these steps to add other branches from the page.

Tip: Branches are fired in the order in which they are listed. This can impact how the branches affect the script.

Modify Branches

This section describes how to edit, delete, and reorder script rules using the tools available on the Page tab.

After you add branches, you can easily edit, reorder, and delete them from the 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.

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 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 **Edit Branch**. The **Edit Branch** window opens. See *How Branches Work in Scripts*.
4. To change the order of the branch, click the up or down arrow to move the branch where you want it.

Note: 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 **Delete Branch**.

Script Rules

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 the page is opened.

Note: Whereas workspace rules apply to the entire workspace, script rules impact only the script pages the rules are created on.

After 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. See [Modify 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 Status field to Solved can be triggered when a staff member clicks a button on a script page. See [How Events are Used in Workspace and Script Rules](#).

Related Topics

- [Workspace and Script Fields](#)
- [Workspace and Script Controls](#)
- [Field and Control Properties](#)
- [Overview of the Dynamic Agent Desktop](#)

Create a Script Rule

You create script rules from the Add Rule window, which is opened from the Rules tab on the script editor. You specify the 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.

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, see [Add a Workspace Rule](#).

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.

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 **Add Rule**.

The **Add Rule** window opens. Five buttons display 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 Next on the navigation panel is clicked to proceed to the next page.
 - The Exit Script Event Fires—Select this item to trigger the rule when Exit on the navigation panel is clicked to exit the page. Exit displays on the script page only if there is a branch or subsequent page allowing staff members to go to another page. For this reason, exit script events usually occur before the script has reached the final page for the branch.
 - The Finish Script Event Fires—Select this item to trigger the rule when the Finish button on the navigation panel is clicked to leave the script. Finish displays only if there is no branch or subsequent page to go to from the script page. For this reason, finish script events usually occur after the script has reached the final page for the branch.

For descriptions of the other triggers and how to add them to your rule, see [Workspace Rule Triggers](#).

4. Click **Conditions** 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. See [Workspace Rule Conditions](#).
5. Click **Then Actions** 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 Exit 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 Finish on the navigation panel control. See [How Events are Used in Workspace and Script Rules](#). For descriptions of the other rule actions and how to add them to your rule, see [Workspace Rule Actions](#).
6. Click **Else Actions** 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. See [Workspace Rule Actions](#).
 7. Click **Properties** and enter the name of the rule in the Rule Name field.
 8. Enter 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 **Finish**.

Related Topics

- [Workspace and Script Fields](#)
- [Workspace and Script Controls](#)
- [Field and Control Properties](#)
- [Add a Workspace Rule](#)

Modify Script Rules

After you add script rules, you can easily edit them, reorder them, or delete them when they are no longer needed. This section describes how to edit, delete, and reorder script rules using the tools available on the Rules tab.

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.

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.
 - a. 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 **Filter List** on the Rules tab, and select **Rules Triggered by Selected Object** or **Rules that Reference Selected Object**.

The rule list updates 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 **Edit Rule**.
The **Edit Rule** window opens. See *Script Rules*.
4. To change the order of the rule, click the up or down arrow to move the rule where you want it.

Note: 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 **Properties** on the **Edit Rule** window, clear the **Active** check box, and click **Finish** to save the change.

5. To delete the rule, click **Delete Rule**.

How Events are Used in Workspace and Script Rules

Events are defined by adding event fire actions. This topic describes how to use events in workspace and script rules using the various event types.

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 Exit 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 Finish 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 final page for the branch, while finish script events usually occur after the script has reached a 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.

After an event is defined as a rule action, the 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.)

Fire a Named Event in a Rule

Whether you are firing a named event in a script rule or a workspace rule, the process for using it is the same.

The following procedure explains how 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. See *Add a Workspace Rule*.
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 Rule Description area.
4. Enter 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 **OK**.
6. Click **Finish**.

Trigger a Rule When a Named Event is Fired

The following procedure explains how to use an event as a trigger for another rule. The process for using an exit script event or finish script event is similar.

1. From your open script, create the rule that you want the named event to trigger and specify conditions and actions for the rule. See *Add a Workspace Rule*.
2. Click **Add** next to A Named Event Fires.
3. Click the underlined named event text in the 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 **OK**.
5. Specify any remaining triggers, conditions, and actions you want to use in the rule. See *Script Rules*.
6. Click **Finish**.

Preview a Script

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 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.

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 **Preview** 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 **Preview** and select **Opening a Record**.
 - a. Enter the record ID number.
 - b. Click **OK**. A preview of the record opens with the script fields populated with values from the record you specified.
4. Click **X** on the window or press Esc.

Export a Script

This topic describes how to export a script as an XML file.

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. The exported script XML file includes all of the script elements, including fields, controls, branches, rules, and the script layout.

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 enter the file name.
4. Click **Save**.

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.

Import a Script

This topic describes how to import a script using the script import wizard.

An imported script becomes its own unique copy and can be modified without impacting the original. When you are ready to import the script, the script import wizard guides you through the import process.

1. From the Scripts explorer, click **New**.
The **New Script** window opens.
2. Click **Import Script from an Exported Script File** to open the **Import Script** wizard.
3. Click **Next**.
The next window asks you for the name of the script definition file you want to import.
4. Do one of the following :
 - o Enter the full path of the script definition file.
 - o Click **Browse** to find the script definition file on your workstation and click **Open**.
5. Click **Next** 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.

Note: 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 **Next**.

8. Click **Finish**.

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. See *Edit a Script*.

What to do next

When you save a script, reports that are used in the script 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.

Workspace and Script Elements

Overview of Workspace and Script Elements

To provide you with a consistent, intuitive design environment, 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 the properties of each item 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.

Tip: 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, see *Overview of the Dynamic Agent Desktop*.

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 generally displays 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 structure.

Related Topics

- [Display or Hide Design Space Table Outlines](#)
- [Change the Number of Table Rows and Columns Used by a Field or Control](#)

Display or Hide Design Space Table Outlines

Use this procedure to display or the hide design space table outlines on your workspace or script.

1. From an open workspace or script, click the **Home** tab.
2. Click **Show Outline** to display the outline.
3. Click **Show Outline** again to hide the outline.

When Show Outline is highlighted, the table outline displays.

Change the Number of Table Rows and Columns Used by a Field or Control

You can change the display of information when you increase or decrease table rows and columns used by a field or control.

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.

Note: 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.

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 **Table Cell**.

The number of rows and columns the selected table cell 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 **Save** on the Quick Access toolbar.

Workspace and Script 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 keyboard shortcut 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 display 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. You can access the data dictionary by clicking **Configuration > Database > Data Dictionary**.

Related Topics








- [Overview of the Dynamic Agent Desktop](#)
- [Edit a Workspace](#)
- [Edit a Script](#)







Workspace and Script 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.

You can hover over a field 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 message base label.

Field Type Icons

| Icon | Field Type |
|---|---|
|  | Field with drop-down list 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 |

| Icon | Field Type |
|---|--------------------------------|
|  | Address field |
|  | Email address field |
|  | Phone number field |
|  | Currency field |
|  | Quote document selection field |
|  | Contact lists field |

Required Fields for Workspace Types

Each workspace and script type has certain required fields when working on records.

B2C Service 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 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 Required property to be not required after you place it on the script. See [How You Set Hidden, Required, and Read-Only Properties](#) and [Workspace Rules](#).

This 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.

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 |

| Workspace Type | Required Fields |
|--|---|
| 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 |
| Task | Name and Status |
| Task Multi Edit | Status |

Workspace and Script Custom Fields

The availability and behavior of custom fields in the knowledge base is affected by the following visibility settings.

- **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. After 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. After 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. See *How You Set Hidden, Required, and Read-Only Properties*.

Related Topics

- [Custom Field Visibility Settings](#)

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.

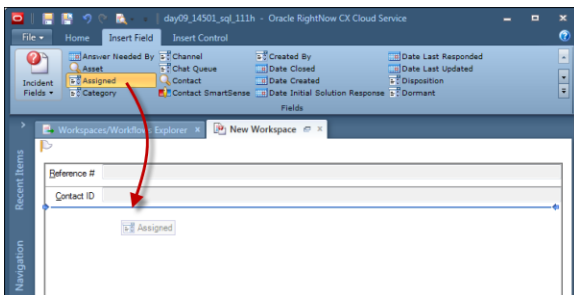
- Email field—This field includes a click-to-email link that opens the staff member’s email client with a blank message to the selected address. This behavior can be disabled by selecting the Disable Email Icon option on the Design tab.
- URL field—A custom text field set to URL usage includes a link to open a URL in a web browser.

How Fields Are Added to Workspaces and Scripts

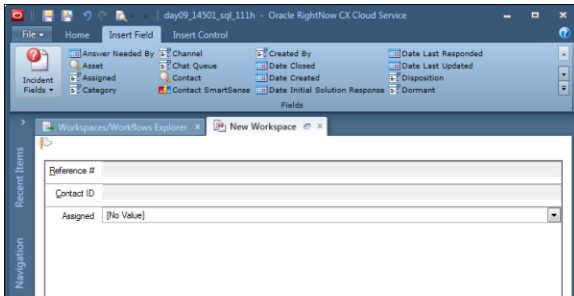
The design space is structured by a table, even if you have not enabled the display of its rows and columns by clicking the Show Outline button.

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 image shows 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.

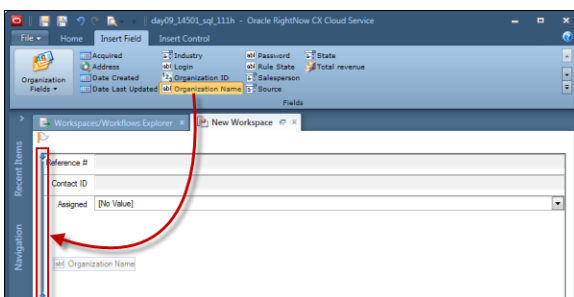
These examples show the table outline for clarity. To display the outline for a workspace or script, click **Show Outline** on the Home tab.



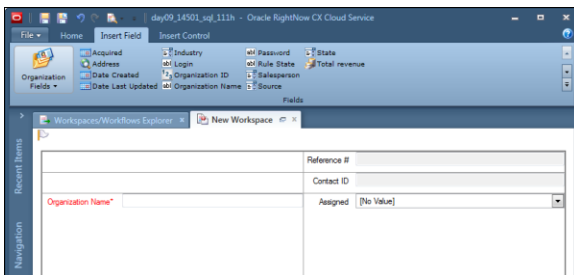
Simply click to add the field in that position.



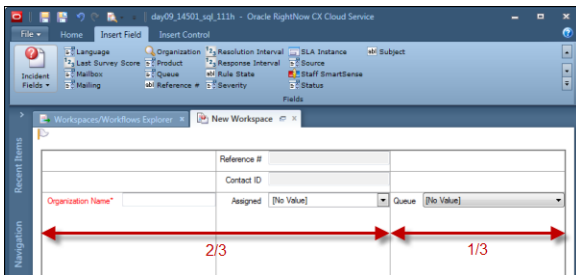
To add a field to the right or left of another field or control, click the field on the ribbon and hover over either side of a field on the design space. When the vertical indicator appears, click to add the field to the table.



This action adds the field to a new column in the table.



As 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 image, 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 click **Show Outline**.

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.

Add a Field to a Workspace or Script

The following procedure describes how to add a field to a workspace or script.

1. From an open workspace or script, click the **Insert Field** tab.
2. Click **Object Type Selector**.

Note: The fields available depend on the type of workspace or script you are adding them to. See *Standard Workspaces* or *Script Types*. Custom fields can be added to the design space only if their Admin Edit visibility setting is selected. See *Overview of Custom Fields*.

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 **Expand Fields** 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 keyboard shortcut for the field, click **Text** on the Design tab, enter a label for the field, and enter an ampersand (&) in front of the character you want to be the keyboard shortcut. For example, to allow staff members to move the focus to a field with the label “Details” by pressing Alt+T, enter **De&tails**.

Tip: You can also click the label on the design space to edit the label value without clicking Text.

10. To edit other field properties, see *Edit a Field or Control*.

Move a Field on the Design Space

You can easily rearrange the fields on the design space by moving them from one location to another.

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.

Remove a Field from the Design Space

You can also quickly remove any fields that you no longer need.

Just as rows and columns can be added to a table when you add fields to the design space, the table rows and columns will be deleted when you move or delete the only remaining field in the row or column.

1. From the open workspace or script, do one of the following:
 - o Right-click the field and select **Delete**. The **Delete Confirmation** window opens.
 - o Select the field, click the **Design** tab, and then click **Delete**.

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 after 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 after the field is removed. See [Overview of Workspace Rules](#).

2. Click **Yes** to confirm the deletion.

Workspace and Script 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 the 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.

Controls are added to workspaces from the workspace designer Insert Control tab. If your site is configured to use custom add-in components, they will also display 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. See [Relationship Items](#).

Tip: You can easily identify a control that has been placed on a workspace by double-clicking the control. The control name will appear in the drop-down list on the Selected Object button group on the Design tab.

Workspace and Script Controls

| Control | Description |
|---------------------|---|
| Answer Display | Displays an answer on a workspace or script. To select the answer you want, click Answer ID on the Design tab and enter the answer ID number. |
| Browser | Adds a browser window to a workspace or script. Click URL on the Design tab to enter a URL for the browser. You can also set a URL for the browser from a workspace rule or script rule. See <i>Workspace and Script Browser Controls</i> . |
| 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. See <i>Workspace and Script Button and Image Controls</i> . |
| Flip Tile | Places two tabs on a workspace for use on the Agent Browser UI. You can add fields and other controls to each side of the flip tile. The flip tile lets staff members view and edit workspace fields that are added to either side of the dynamic tile that flips to show front and back elements. |
| Hyperlink | Places a hyperlink on the workspace or script. Click URL on the Design tab to enter 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 display. You can create workspace rules and script rules that trigger actions when images are clicked. See <i>Workspace and Script Button and Image Controls</i> . |
| Intelligent Advisor | <p>The Intelligent Advisor control can be added to workspaces when Intelligent Advisor is enabled on your site, providing access to policy administration tools for determining eligibility and tracking compliance for programs and services. For information about Intelligent Advisor, see <i>Oracle Applications Integrations with B2C Service</i>.</p> <p>To enable Intelligent Advisor with B2C Service, contact your Oracle account manager.</p> |
| 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. See <i>Workspace and Script List Box, Menu, Option, and Text Box Controls</i> . |
| Menu | Adds a drop-down list 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. See <i>Workspace and Script List Box, Menu, Option, and Text Box Controls</i> . |
| Navigation Panel | <p>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 Exit is clicked. See <i>Workspace Rule Triggers</i>.</p> <p>This control is available to scripts only.</p> |

| Control | Description |
|-------------------------------------|---|
| 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). |
| 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. See <i>Workspace Panel Controls</i> . |
| Progress Label | <p>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.</p> <p>This control is available to scripts only.</p> |
| Radio Buttons | Adds options (radio buttons) to a workspace or script. You can create workspace rules and script rules that are triggered when an option is selected. See <i>Workspace and Script List Box, Menu, Option, and Text Box Controls</i> . |
| 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. See <i>Default Reports Used on Standard Workspaces</i> . |
| Script | <p>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. See <i>Add a Script Control to the Design Space</i>.</p> <p>This control is available to workspaces only.</p> |
| 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. |
| Splitter Panel | Inserts a panel on a workspace for use on the Agent Browser UI. The splitter panel is divided into two sections by a splitter bar. The splitter lets staff members resize workspace elements to enhance their view of the Agent Browser UI. You can add fields and other controls to each panel, and nest a splitter panel within other splitter controls to create additional panels. |
| Survey by Proxy | <p>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 Survey 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. See <i>Overview of Surveys</i>.</p> <p>This control is available only when Feedback is enabled. Polling surveys are not supported by this control.</p> |
| 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. See <i>Add Tabs to the Design Space</i> . |
| 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. See <i>Add a Table to the Design Space</i> . |

| Control | Description |
|-----------|--|
| Text | <p>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. See Add Text with the Text Control.</p> <p>A text control default background color and font match the workspace it is used on.</p> |
| Text Box | <p>Adds a text box to a workspace or script. You can create workspace rules that are triggered when agents enter specific text in the text box. See Workspace and Script List Box, Menu, Option, and Text Box Controls.</p> |
| Title Bar | <p>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.</p> |

Related Topics

- [Overview of the Dynamic Agent Desktop](#)
- [Edit a Workspace](#)
- [Edit a Script](#)

Relationship Items

This topic describes workspace relationship items.

B2C Service 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 name will appear in the drop-down list on the Selected Object button group on the Design tab.

Workspace Relationship Items

| Relationship Item | Description |
|-----------------------|--|
| Answer Type Container | <p>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.</p> |
| Assets | <p>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 name, serial number,</p> |

| Relationship Item | Description |
|-------------------------|--|
| | 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 | <p>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.</p> <ul style="list-style-type: none"> • Answer • Asset • Contact • Custom Object • Incident • Opportunity • Organization • Quote • Task <p>In answer workspaces, the audit log shows all actions taken on both the answer and its siblings.</p> |
| 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. |
| 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. See <i>Chat for Agents, Supervisors, and Customers</i> . |
| 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 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 primary record for the workspace. 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. See <i>Overview of Custom Objects</i> . |
| File Attachments | <p>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.</p> <ul style="list-style-type: none"> • Answer • Contact • Custom Object • Incident • Opportunity • Organization • Task <p>In answer workspaces, files can be attached to the answer as well as all sibling answers.</p> |

| Relationship Item | Description |
|--------------------------|--|
| Guided Assistance | <p>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. See Guided Assistance Relationship Item.</p> <p>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.</p> |
| Incident View | <p>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 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, interaction, contact, organization, and asset workspaces.</p> |
| Label | <p>Allows placement of a label on the chat workspace.</p> |
| Learned Links | <p>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.</p> |
| Manually Related Answers | <p>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.</p> |
| Notes | <p>Notes relationship items can be specific to individual workspaces.</p> <p>Answer Notes—Allows staff members to add notes, select the note channel, and sort notes by date on answer workspaces.</p> <p>Contact Notes—Allows staff members to add notes, select the note channel, switch the view between contact and organization notes, and sort notes by date on contact workspaces.</p> <p>Custom Object Notes—Allows staff members to add notes, select the note channel, and sort notes by date on custom object workspaces.</p> <p>Meta Answer Notes—Allows staff members to add notes that pertain to the sibling answers.</p> <p>Opportunity Notes—Allows staff members to add notes, select the note channel, switch the views between opportunity, contact, and organization notes, and sort notes by date on opportunity workspaces.</p> <p>Organization Notes—Allows staff members to add notes, select the channel, and sort notes by date on organization workspaces.</p> <p>Task Notes—Allows staff members to add notes, select the note channel, and sort notes by date on task workspaces.</p> <p>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. See Overview of Staff Management.</p> |
| Outreach Activity View | <p>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.</p> |

| 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 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 to chat and interaction 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 selected price schedule for a quote 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 name and status, whether it was sent, the forecast, and action options. The Quotes relationship item is available when creating opportunity workspaces. |
| 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. |
| 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 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. <ul style="list-style-type: none"> • Answer • Contact |

| Relationship Item | Description |
|-------------------------|---|
| | <ul style="list-style-type: none"> • 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. |
| Visitor Browser History | Allows staff members to view a list of URLs a contact visited before starting a chat. The Visitor Browser History relationship item is available when creating chat and interaction workspaces. |

Related Topics

- [Overview of the Dynamic Agent Desktop](#)
- [Edit a Workspace](#)

Question Controls

B2C Service provides a set of question controls that are used to configure branching in scripts.

Questions are available as buttons, options, 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, see [How Branches Work in Scripts](#).

Note: The values that agents enter in questions and their corresponding standard controls are available for use with the script rules and branches. However, they are not saved in the database.

Related Topics

- [Overview of the Dynamic Agent Desktop](#)
- [Edit a Script](#)

Add a Control to the Design Space

Placing controls on a workspace or script is similar to adding fields. Like fields, controls occupy cells on the underlying table for the design space.

After 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 rows and columns is adjusted to accommodate the new object.

1. From an open workspace or script, click the **Insert Control** tab on the designer 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, see *Edit a Field or Control*.

Related Topics

- [Overview of the Dynamic Agent Desktop](#)
- [Edit a Workspace](#)
- [Edit a Script](#)

Move a Control on the Design Space

You can easily move controls to other locations on your design space. As with fields, moving 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.

1. From the open workspace or script, click 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.

Delete a Control from the Design Space

You can easily delete controls if they are no longer needed. As with fields, 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.

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. See *Workspace Rules*.

2. Click **Yes** to confirm the deletion.

Workspace and Script Button and Image Controls

You can add buttons to workspaces and scripts that you can use with rules to trigger actions when clicked.

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. For example, you could add a button to a workspace to display an additional tab set when a staff member clicks it.

Tip: 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 display promptly without requiring you to log out and back in to B2C Service.

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, see [Workspace Rule Triggers](#).

Add Content to Button Controls

You can modify button controls added to the design space to customize the appearance on a workspace or script.

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 properties from the Design tab. You can also size the button and specify where it should be positioned.

1. From the open workspace or script, click the button control you added to the design space.
2. Click the **Design** tab.
3. To change the default text on the button, click **Text**.
 - a. Enter 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 clicking the button and choosing from the Label group options on the **Design** tab.

4. To add an image to the button, click **Image**. 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 **OK** to add the image to the button.
 - e. To position the image on the button in relation to text on the button, click **Image Align** 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, see [Add an Image Control to a Workspace or Script](#).

5. To manually define the width of the button margins, click **Margin**. 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 margins in the Top, Bottom, Left, and Right fields.

6. To manually define the button size, click **Size** on the Design tab and select **Enable Auto Sizing** to disable it.
 - a. Click **Size** again and enter the number of pixels you want for the button size in the Width and Height fields.
 - b. To re-enable auto sizing, click **Size** and select **Enable Auto Sizing**.
7. To position the button on the table cell that contains it, click **Position** 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 the Stretch option.
8. Click **Save**.

Add an Image Control to a Workspace or Script

When you add an image to a workspace or script, you can specify options such as the size, position, and layout of the image.

1. Drag the control to the design space. See [Add a Control to the Design Space](#).
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 **OK**. The image is added to the design space.
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 size, click **Size** on the Design tab and select **Enable Auto Sizing** to disable it.
 - a. Click **Size** again and enter the number of pixels you want for the image size in the Width and Height fields.
 - b. To re-enable auto sizing, click **Size** and select **Enable Auto Sizing**.
5. To specify a layout for the image on the table cell, click **Image Layout** and select from None, Tile, Center, Stretch, and Zoom.
The Image Layout button is inactive when auto sizing is enabled.
6. To position the image on the table cell that contains it, click **Position**.
 - 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 the **Stretch** option.

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 **Save**.

Client Workflow Images Explorer

Using the Client Workflow Images explorer, you can add images to use in workspaces and scripts.

After you have opened the explorer, you can add and manage images the same way you do in the Images explorer. See [Images Explorer](#).

Click **Configuration** on the navigation pane, expand **Application Appearance**, and then double-click **Client Workflow Images**.

Note: You can add the Client Workflow Images explorer to navigation lists in the same way you can add other explorers. See [Overview of Navigation Sets](#).

Add 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.

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 enter 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 Label group on the Design tab. See *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.
 5. Do one of the following:
 - o Click **Insert Merge Field** on the Design tab.
 - o Right-click the control and select **Insert Merge Field**.
 6. Do one of the following:
 - o Select the name of the database table with the field you want in the Table Name field.
 - o 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.
7. Select the field you want to include on the text control on the Field Name field.
 8. Click **OK** to add the variable to the text control.

Workspace and Script List Box, Menu, Option, and Text Box Controls

List box, menu, option, and text box controls give you the ability to trigger workspace rules, script rules, script branches, or workflows from agent selections or text entries.

List box, menu, option, and text box 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.

Note: 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.

After you add menu and list entries or options to the controls, you can create rules that are triggered when agents select the entries or buttons, or when they enter certain text in a text box. You can also add rule conditions based on the value of these controls. See *Workspace Rules*.

You can specify options on the Design tab for the list box, option, and text box controls to change their behavior or appearance. For definitions of the options for these and other controls, see *Workspace and Script Controls*.

Add and Edit Items for List Box, Menu, and Option Controls

The following procedure explains how to add and edit items for list box, menu, and option 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. Click the control on the design space and click the **Design** tab.
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 **Edit Item**. The **Edit Item** window opens.
 - a. Enter the text you want the item to display.
 - b. Click **OK**.
- Note:** For option 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 **Add Item** on the Design tab to open the **New Item** window.
 - a. Enter the text of the item you want to add to the control.
 - b. Click **OK** 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 **Move Up** or **Move Down** 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 **Delete Item**.
 7. To change the layout of an option control, select the control on the design space, click **Layout** 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.

Edit Items from the Edit Items Window

If you want to add or edit several items on list, menu, or option controls, it can be faster to do so from the Edit Items window than from the Design tab. You can reorder items from the window as well as add and edit items on the control.

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 **Add Item** and enter the item text.
3. To edit item text, select the item in the list and click **Edit Item**.
4. To remove an item from the list, select the item you want to remove and click **Delete Item**.
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 **OK**.

Default Reports Used on Standard Workspaces

This topic describes the default reports used on standard workspaces.

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.

Many standard workspaces contain reports, most of which have row limits of 100 rows. 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.

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 |
| Incident | |
| Contacts/Contacts | Incident Contacts |
| Contacts/Incident History | Incidents by Contact |
| Tasks | Tasks by Incident |
| Organization/Incident History | Incidents by Organization |

| Standard Workspace/Tab or Control | Default Report |
|-----------------------------------|-------------------------------|
| 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. See [How You Select Search Reports](#).

How You Add 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 runtime 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.

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 Report Behavior button on the Design tab.

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 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. See *Overview of Custom Objects*.

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`).

Add a Report to a Report Control or Change a Report on a Relationship Item

You can add a report to a report control on a workspace. You can also 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. Click the control or relationship item on the workspace and click the **Design** tab. Configuration options for the report control display 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 **Report** to open the **Select Report** window.
5. Select the report you want to add to the workspace and click **OK**.
6. Click **Save**.

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.

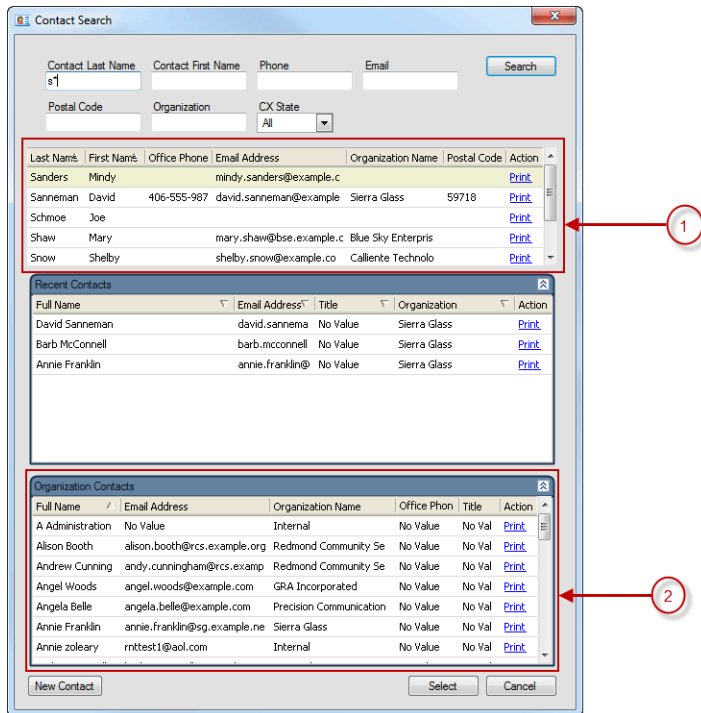
How You Select Search Reports

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 function by clicking Search next to the field or on the relationship item. For example, the button to open the **Contact Search** window from an incident workspace is to the right of the contact field.

When you open a search window, the window displays a report and the 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.

Drill-down levels and report links can be used in search reports for database fields but are disabled on the search report relationship items.



Legend for image: 1. Search Report with docked filters 2. Secondary Search Report

The standard reports that are used by default with this functionality are designed to allow staff members to quickly find 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 workspace search reports using docked filters. For this reason, the search reports you specify must include docked filters in order to search for records. See *Overview of Custom Reports*.

Select Primary and Secondary Search Reports for the Contacts Search Window

You can add primary and secondary search reports to a field or a relationship item. The following procedure explains how to add search reports to the Contacts Search window.

1. From an open workspace or script, do one of the following:
 - o Click the Contact field on the design space.
 - o Click the Contact relationship item on the design space.
2. Click the **Design** tab.

3. To change the primary search report, do one of the following:

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.

- o Click **Search Report**. The **Select Report** window opens.
- o To add a secondary search report, click **Secondary Search Report**.

4. Select the report you want to use.

5. Click **OK**.

6. Click **Save**.

Report Properties

In addition to selecting the report you want to appear on a workspace or script, you can modify the report 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. See [Set a Time Limit for a Report Control](#).
- **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.

The properties described here can also be accessed by clicking Report Behavior on the Design tab.

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. 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 any of the workspace fields selected on the Report Filter Mapping Wizard. See Filter Workspace Fields on a Workspace Report . |
| Open Existing Records in Separate Workgroup | Select this option if you want records opened from this report to display 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 subtab and edits are saved when any record in the subtab 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 subtab and edits are saved when any record in the subtab workgroup is saved. |

| Property | Description |
|----------------------------------|---|
| | This property is available for the Incident View, Opportunity View, Task View, and Custom Object View relationship items. |
| 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.) 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. This property is not available for the Manually Related Answers, Learned Link, Incident View, and Custom Object View relationship items. |

Filter Workspace Fields on a Workspace Report

With workspace filter mapping, you can leverage data on a workspace with internal and external object tables.

Use the Report Filter Mapping Wizard to select any field on a workspace to filter on the report and set its runtime value as the filter value.

1. Select the report on the **Design** tab of the workspace.
2. Click **Report Behavior** and clear the **Filter On Primary Key Only** option.
3. Click **Filter Mappings**.
The **Report Filter Mapping Wizard** opens.
4. Click the **Use** drop-down list and select **Parent**.
A list of all available fields for the workspace display in the **Value** drop-down list.
5. Select the field you want the report to filter at runtime.
6. Click **Finish**.

Set a Time Limit for a Report Control

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.

1. From the open workspace or script, click the report control you want to modify.
2. Click the **Design** tab and click **Time Limit**.
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 **OK**.

Note: 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.

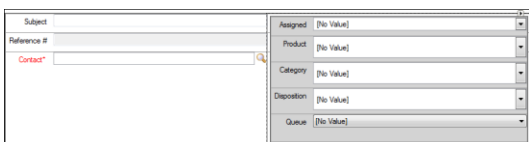
Workspace Panel Controls

A panel is a special workspace control that provides grouping for fields and controls and lets you create scrolling subsections of the workspace.

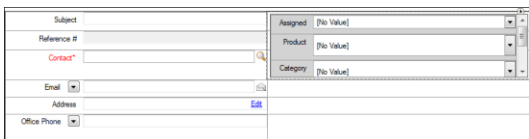
When you add more fields than the panel control can accommodate, a scroll bar appears automatically. This lets you add multiple fields to a panel even though the panel size is controlled.

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.

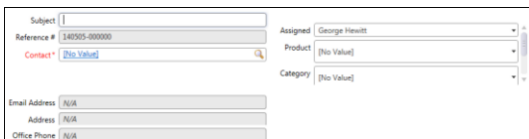
This image shows a panel control on the right. The panel has been defined to span three rows. The single panel contains the Assigned, Product, Category, Disposition, and Queue fields.



The next image 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 image shows how the panel displays to staff members using the workspace. They can scroll down on the panel to complete all fields.



Add a Script Control to the Design Space

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.

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. See *Script Designer*.

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.

1. From an open workspace, click the **Insert Control** tab and click **Script**.
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 **OK**.
4. To change the script used on the script control, click the script control and click **Script** on the **Design** tab to open the **Select a Script** window.
5. To change the size of the script control, click the control on the workspace, click the **Design** tab, select the **Set Fixed Height** check box, and click **Size** to enter a size for the control. See *Design Property Descriptions*.

Add a Table to the Design Space

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.

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.

1. From the open workspace or script, click the **Insert Control** tab and click **Table**.

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, click the table on the design space, click the **Design** tab, and click **Add Column** or **Add Row**. 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 list. See [Access Design Space Items Using the Ribbon](#).

4. To edit table properties, such as borders and background color, see [Layout Properties](#).

Add Tabs to the Design Space

You can add individual tabs and tab sets, or groups of tabs.

1. From the open workspace or script, click the **Insert Control** tab on the ribbon, click **Tab Set**, 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, do one of the following:
 - o Right-click next to an existing tab and select **Add Tab**.
 - o Right-click an existing tab and select **Add Tab Before** or **Add Tab After**.
3. Rename the tab.
 - a. Click the new tab.
 - b. Click the **Design** tab.
 - c. Click **Text** on the Label group and enter the name you want for the tab.

How You Move a Tab

You can move individual tabs and tab sets, or groups of tabs. Tabs are moved with the same methods used to move fields and controls on the upper section of the workspace.

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, see [Download the Oracle B2C Service Client and Log In](#).

Right-click the tab and select **Move Left** or **Move Right**.

Or

Click the action arrow on the tab and select **Move Left** or **Move Right**. See [How You Access Design Properties from the Actions List](#) for a description of action arrows.

Delete a Tab or Tab Set

You can delete individual tabs and tab sets, or groups of tabs. Tabs are deleted with the same methods used to move fields and controls on the upper section of the workspace.

1. Right-click the tab or tab set and select **Delete**.
2. Click **Yes** on the **Delete Confirmation** message.

Workspace and Script 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 B2C Service data—such as record IDs, custom field values, or custom object field values—with the web page you open or through Connect PHP API. See [Answer ID 2429](#).

Also, the page loaded in the browser can contain Connect JavaScript code to view and edit information about the record being edited. See [Answer ID 5169](#).

Add a Browser to a Workspace or Script

Use this procedure to add a browser to a workspace or script.

1. Click the **Insert Control** tab and click **Browser**.
2. Click the location on the design space where you want the browser.
The browser is added to the workspace.
3. Click the browser control and click the **Design** tab.
4. Click **URL** and enter the URL you want the browser control to open when the workspace is opened.
You can also set the URL of a browser control using a workspace rule. See [Workspace Rule 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 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. The Delay Page Load check box is applicable only for the Service Console. In Agent Browser UI, the browser control on a tab will be loaded when the tab is in focus, irrespective of whether the Delay Page Load check box is enabled or not.

6. To change the size of the browser control, click the **Design** tab and select the **Set Fixed Height** check box.
 - a. Click **Size** to enter a size for the control.
7. To open windows from the browser content in child browser controls, select the **Open Pop-ups in New Browser Control** check box.

If this check box is not selected, windows 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 send the URL as POST data so that it is sent securely, select the **Send URL as Post Data** check box. If you do not select this check box, the URL is sent as GET data. If you select this check box, you must enter a URL that starts with https in the URL field.

Note: The Service Console sends an HTTP GET request, if your Browser Control URL does not have any query parameters (..?var1=\$param1) and the "Send URL as Post Data" option is enabled. However, the Agent Browser UI sends a POST request.

9. 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.

Note: 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. Click any of the following links to learn more about the associated property.

- [Considerations for Using the Default Value Property](#)
- [Custom Field Properties](#)
- [How You Set Hidden, Required, and Read-Only Properties](#)
- [Considerations for Setting Hidden and Read-Only Properties for Required Fields](#)

For a full list of all properties and their descriptions, see [Design Property Descriptions](#).

Related Topics

- [Overview of the Dynamic Agent Desktop](#)
- [Edit a Workspace](#)
- [Edit a Script](#)

View Item Properties

You can quickly view all the properties for a field or control from the Design and Rules tabs. This helps you see what properties are already applied to an item before you edit the item.

1. From an open workspace or script, click an item on the design space.
2. Click **Show Details** on the Design tab.

The **Selected Object Details** window opens. 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 positioning on the workspace and any visibility, hidden, or read-only attributes. See [Field and Control Properties](#) for descriptions of the properties that can be applied to items on workspaces.

3. Click **Close**.

Edit a Field or Control

You can edit a field or a control on the design space of a workspace or script.

When you select a field or control on the design space, the Design and Rules tabs display 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.

1. From an open workspace or script, click a field or control on the design space and click the **Design** tab. The options 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. See *Design Property Descriptions*. The object is updated on the design space to reflect the change.
3. Click **Save**.

Related Topics

- [Access Design Space Items Using the Ribbon](#)

How You Select Multiple Fields and Controls

If you want to edit properties shared by a number of fields and controls, you can select them and then edit them simultaneously.

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, Delete on the 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 Read Only on the Design tab, since both fields and controls have this attribute.

Press Ctrl while selecting the fields and controls on the design space that you want to edit or delete.

Access Design Space Items Using the Ribbon

You can select fields and controls using the ribbon to access design space items.

The Current Selection drop-down list 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.

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 lets you 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.

1. From an open workspace or script, click an item on the design space to activate the **Design** and **Rules** tabs.
2. Click the **Design** or **Rules** tab.
3. From the Selected Object group, click the **Current Selection** drop-down list.
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 go to the field or control you want to view.
5. Click the item in the tree to select it on the design space.

How You Access 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 displays. 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.

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 original default field value and set a different default value from the design space, you must enable the Default Value, From Workspace, or From Script property. See *Considerations for 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 RNT Mask on the Design tab on the ribbon. You cannot specify masks for custom fields when you place them on the design space. See *Overview of Custom Fields*.
- If you add a custom field that was configured to be required when it was created, the required property for the field will be enabled on the design space by default. However, you can disable the required property if you do not want to require the field. See *How You Set 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.

Considerations for 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.

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 B2C Service, carefully consider the following order in which these defaults are applied.

1. Values defined by B2C Service 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 the default value of a field. 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.

Enable the Default Value Property and Set a Default Value for a Field

When you add a field to the design space that can have a default value, the Default Value From Workspace property for the field is initially disabled and must be enabled before you can define a default value.

1. From the open workspace or script, click a field on the design space.
2. Click the **Design** tab and click **Default Value**.

Note: Default Value displays 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 enter text directly into a text field on the design space or select from a drop-down list on a menu field.
5. Click **Save**.

How You Set Hidden, Required, and Read-Only Properties

You can apply Read-Only, Required, and Hidden properties to many of the items you add to a workspace or script.

- Read-Only—Read-Only items display 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 display 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 do not display 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 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.

Set the Read-Only Property

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, click the item you want to make Read-Only.
2. Click the **Design** tab and click **Read-Only**.
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 **OK**.
7. Click **Save**.

Considerations for 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 property to Read-Only for new records, you cannot also enable the Required property for new records.
- If you set a field to be hidden when creating a record, you cannot also enable the 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. See *Considerations for 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 an item to the design space, you can select it and then edit its properties using the options available on the 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.

- *Selected Object Properties*
- *Behavior Properties*
- *Label Properties*
- *Layout Properties*
- *Options Properties*

Note: For the sake of simplicity, descriptions that refer to fields may also apply to controls and relationship items.

Selected Object Properties

The options in the Selected Object group let you select the element to edit and delete. Options for tab controls are also available here.

Selected Object Properties

| Property | Description |
|--|---|
| Current Selection | This field shows the name of the item currently selected on the design space. Click this drop-down list 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 properties and corresponding values for the selected item. |
| Delete | Click this button to delete the item currently selected on the design space. |
| 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 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 options in the Behavior 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.

Behavior Properties

| Property | Description |
|---|---|
| Read Only | <p>Click this button to specify when this property should be applied to the selected element.</p> <ul style="list-style-type: none"> 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. <p>The Read Only property cannot be set to On New if the object Required property is also set to On New for any or all profiles, and a default value is not set for the object.</p> |
| Required | <p>Click this button to specify when this property should be applied to the selected element.</p> <ul style="list-style-type: none"> 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. <p>B2C Service 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.</p> |
| Hidden | <p>Click this button to specify when this property should be applied to the selected element.</p> <ul style="list-style-type: none"> 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. <p>Required fields cannot be hidden when creating records.</p> |
| Tab Order | <p>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 Tab key. You can manually specify the tab order value for each item or you can assign the tab order automatically.</p> |
| Set Parent Table's Tab Indexes from Top to Bottom | <p>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.</p> <p>This selection will reset any numerical ordering that has been defined using the Value property.</p> |
| Set Parent Table's Tab Indexes from Left to Right | <p>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.</p> <p>This selection will reset any numerical ordering that has been defined using the Value property.</p> |

| Property | Description |
|----------|---|
| Value | <p>Enter 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.</p> <p>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.</p> |

Related Topics

- [How You Set Hidden, Required, and Read-Only Properties](#)

Label Properties

The options in the Label group let you adjust the fonts and placement of labels for fields you add to your workspace or script.

Label Properties

| Property | Description |
|-------------------------------------|--|
| Font | Select the font you want to use for the label from this drop-down list. |
| Font Size | Select the font size you want to use for the label from this drop-down list. |
| Bold/Underline/Italic/Strikethrough | Click these buttons to change font style attributes for the label. |
| Font Color | Select the font color you want to use from this drop-down list. |
| Background Color | <p>Select the background color you want to use from this drop-down list.</p> <p>This option is enabled when editing an element that has a background, such as the panel control.</p> |
| 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 list to select the label position in respect to the field. You can position the label at the right, left, top, or bottom of the field, or inside the field. The default label position is to the left of the field. |
| Text | <p>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 displays. Enter the text you want for the label in the text box and press Enter.</p> <p>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.</p> |

| Property | Description |
|----------|---|
| | <p>To allow the use of keyboard shortcuts (Alt + <selected character>), enter an ampersand (&) in front of the character you want to be the keyboard shortcut. For example, to allow staff members to move the focus to a control with the label “Details” by pressing Alt+T, enter Details.</p> <p>Note: Text fields used in scripts are limited to 1,000 characters.</p> |

Layout Properties

The options in the Layout 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.

Layout Properties

| 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. |
| 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 | <p>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.</p> <p>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.</p> |
| Margin | <p>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.</p> <p>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.</p> |
| Size | <p>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 height and width to its natural size. If you disable auto sizing, you can enter the height and width (in pixels) of the field or control on the workspace.</p> <p>On some fields and controls, the MultiLine or Set Fixed Height properties on the Design tab Options group must be enabled before you can edit the Height property.</p> |

Options Properties

The properties you can edit for the Options group depend on the element you select.

Options Properties

| Property | Description |
|---------------------------------------|--|
| Accepts Return | Select this check box if you want staff members to be able to press Enter in a multi-line field. |
| 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 anonymous responses. |
| Answer ID | Click this button and enter 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 control. The available options are None, Fixed Single, and Fixed 3D. |
| Background Image URL | Click this button and enter a URL for an image you want to display in the table background on the Agent Browser UI. |
| 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 list and select an option that controls how names in the Assigned field for tasks are grouped. The options are: <ul style="list-style-type: none"> • Default—Names display in a flat alphabetical list. • Sales—Names display by Manager hierarchy. • Incident—Names display by Group hierarchy. • Answer—Names display by Group hierarchy. • Organization—Names display by Manager hierarchy. |

| Property | Description |
|--|--|
| | <ul style="list-style-type: none"> • Campaign—Names display by Group hierarchy. • Document—Names display by Group hierarchy. • Mailing—Names display by Group hierarchy. • Survey—Names display by Group hierarchy. |
| Default Channel | Click this button to define the default channels for customer entries and notes. |
| <ul style="list-style-type: none"> • 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. |
| <ul style="list-style-type: none"> • 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 list 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 display on the workspace. For example, you can choose Office Phone or Mobile Phone. |
| Default Thread | Click this button to define the default thread type for new incidents or incidents being edited. |
| <ul style="list-style-type: none"> • Default Thread on Edit | Click this drop-down list 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. |
| <ul style="list-style-type: none"> • Default Thread on New | Click this drop-down list 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 | <p>Click this button and select From Workspace or From Script if you want to specify a default value for a field. 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. See <i>Considerations for Using the Default Value Property</i>.</p> <p>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.</p> |
| Delay Page Load | <p>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 loads as soon as the workspace or script opens, even if the browser control is hidden.</p> <p>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.</p> |
| 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 default mail client, outside of B2C Service. |
| Display Options | Click this button to select toolbar options for the Chat Control relationship item. |
| <ul style="list-style-type: none"> • Show Toolbar | Select this option to display the Chat Control toolbar. |
| <ul style="list-style-type: none"> • SmartAssistant | Select this option to display the SmartAssistant button on the Chat Control toolbar. |
| <ul style="list-style-type: none"> • Search Knowledgebase | Select this option to display the Search Knowledgebase button on the Chat Control toolbar. |

| Property | Description |
|--|---|
| <ul style="list-style-type: none"> Standard Text | Select this option to display the Standard Text button on the Chat Control toolbar. |
| Display Style | Click this drop-down list to select the display style for a Yes/No field on the Agent Browser UI. Options include drop-down list, Checkbox, Radio Buttons, and Switch. |
| Display Value Without Border | Select this check box to display the field value without a border in the selected workspace on the Agent Browser UI. |
| Enable Collapse/Expand | Select this check box to let users expand and collapse the table display in the selected workspace on the Agent Browser UI. |
| 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 Options Button | Select this check box to prevent the Options button from displaying on a report control or relationship item that contains the Options button (such as Contacts, Time Billed, and Audit Log) in a workspace or script. The Options button displays by default. If this check box is selected when there are no commands on the toolbar or the Hide Report Command option is also selected, the entire toolbar will be hidden. |
| <ul style="list-style-type: none"> 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. See <i>Workspace and Script Button and Image Controls</i> . |
| <ul style="list-style-type: none"> URL | Click this drop-down to enter an image URL to display an image. Note: The image URL will display only on workspaces on the Agent Browser UI. |
| Image Align | Click this button to position an image added to a button in relation to the button text. See <i>Workspace and Script Button and Image Controls</i> . |
| Image Layout | Click this button to select how you want the button or image control sized. See <i>Workspace and Script Button and Image Controls</i> . |
| Increment | Enter 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 an option control display vertically or horizontally. |
| Legacy Status Mode | Click this button to enable the legacy status indicator on the Chat Transcript Control relationship item. |
| Limit By Profile Interface(s) | Click this button to limit products and categories that display 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 Intelligent Advisor control. For information about Intelligent Advisor, see <i>Oracle Applications Integrations with B2C Service</i> . To enable Intelligent Advisor with B2C Service, contact your Oracle account manager. |
| Max Length | Click this button and enter the maximum number of characters the field can contain. You can enter values from 1 to 4,000. |
| Minimum Level | Click this button and enter 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. |

| Property | Description |
|---|--|
| 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. 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 windows from the browser content in child browser controls. When this option is not selected, the control will fill the maximum allowed space. 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 | Enter the character you want to use to hide the password when it is entered on the workspace. The default is an asterisk (*). This option is available for use with the organization password field. You cannot add the contact password field to workspaces. |
| Permissions | Click this button to manage individual options available on the Rich Text Incident Thread control. 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. |
| <ul style="list-style-type: none"> Follow Links | Select this option to allow agents to go 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 displays when the agent clicks a link in a committed thread. |
| <ul style="list-style-type: none"> 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. |
| <ul style="list-style-type: none"> 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. |
| <ul style="list-style-type: none"> 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. |
| <ul style="list-style-type: none"> 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. |
| <ul style="list-style-type: none"> 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. |
| <ul style="list-style-type: none"> Allow Toggling Thread Content to Plain Text | Select this option to allow an agent to switch between using Plain Text and Rich Text format modes in incident thread entries. When this option is selected, the Always Use Plain Text option is cleared. |
| <ul style="list-style-type: none"> Always Default to Plain Text | Select this option to use Plain Text format mode for a new incident thread entry. 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. |
| <ul style="list-style-type: none"> 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. 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. |

| Property | Description |
|---|---|
| <ul style="list-style-type: none"> Allow Adding Responses | Select this option to enable the Response item in the Add button drop-down list on the Messages tab toolbar. When this option is not selected, the Response item is hidden. 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. |
| <ul style="list-style-type: none"> Allow Adding Customer Entries | Select this option to enable the Customer Entry item in the Add button drop-down list on the Messages tab toolbar. When this option is not selected, the Customer Entry item is hidden. 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. |
| <ul style="list-style-type: none"> Allow Adding Notes | Select this option to enable the Private Note item in the Add button drop-down list on the Messages tab toolbar. When this option is not selected, the Private Note item is hidden. 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. |
| <ul style="list-style-type: none"> 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. |
| <ul style="list-style-type: none"> 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 Intelligent Advisor control. For information about Intelligent Advisor, see Oracle Applications Integrations with B2C Service . To enable Intelligent Advisor with B2C Service, contact your Oracle account manager. |
| Refresh When New Record is Saved | Select this check box to refresh the Intelligent Advisor control when a new record is saved. For information about Intelligent Advisor, see Oracle Intelligent Advisor . |
| Report | Click this button to open the Select Report window to select a report for the control. See How You Add 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. See 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 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. |
| <ul style="list-style-type: none"> Allow Encoding Choice | Select this option to allow agents to choose between rendering chat comments as HTML or plain text. |
| <ul style="list-style-type: none"> Always Leave as Plain Text | Select this option to always render chat comments as plain text. |
| <ul style="list-style-type: none"> Always Send as HTML | Select this option to always render chat comments as HTML. |
| <ul style="list-style-type: none"> 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. |

| Property | Description |
|--|--|
| <ul style="list-style-type: none"> Commit Response When Incident is Saved | <p>Select this option if you want the staff response to be committed to the incident thread when the response is saved.</p> |
| <ul style="list-style-type: none"> Add a Response When Selecting Send On Save if No Response Already Exists | <p>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 check box, and closing the response options clears the check box.</p> <p>If this option is disabled, then expanding the response options panel enables the Send on Save check box, but clicking the check box does not automatically expand the panel. Clearing the check box automatically collapses the panel, but collapsing the panel does not automatically clear the check box.</p> |
| <ul style="list-style-type: none"> Always show email message header for responses | <p>Select this option if you want the email message header to always display when the response is sent.</p> |
| <ul style="list-style-type: none"> Reassign the Incident When Send On Save is Selected | <p>Click this drop-down list and select one of the following options for reassigning an incident when a response is sent.</p> <ul style="list-style-type: none"> No Change—The incident 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. |
| <ul style="list-style-type: none"> Automatically Select Send On Save When Opening an Incident | <p>Click this drop-down list and select an option that indicates when an incident response should be sent automatically. The options are:</p> <ul style="list-style-type: none"> 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. <p>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.</p> <p>This option is not supported on the Agent Browser UI.</p> |
| <ul style="list-style-type: none"> Change the Incident's Status when Send On Save is Selected | <p>Click this drop-down list and select an option for changing the incident status when a response is sent. The options are:</p> <ul style="list-style-type: none"> No Change—The incident status does not change when a response is sent. To Waiting—The incident status changes to Waiting when a response is sent. To Solved—The incident status changes to Solved when a response is sent. |
| <p>RNT Mask</p> | <p>Click this button to view the mask for the selected custom field. Standard fields do not have mask properties. See Input Masks for information about specifying masks for custom fields.</p> |
| <p>Script</p> | <p>Click this button to open the Select a Script window to change the script used in a script control. See Add a Script Control to the Design Space.</p> |
| <p>Search Report</p> | <p>Click this button to open the Select Report window to select a search report. See How You Add Reports and Relationship Items to Custom Workspaces and Scripts. This property is used for items that include a search report, such as the Contacts, Tasks, Guided Assistance, and Custom Object View relationship items.</p> |

| Property | Description |
|---|--|
| Secondary Search Report | Click this button to open the Select Report window to select a secondary search report. See <i>How You Add Reports and Relationship Items to Custom Workspaces and Scripts</i> . 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. |
| 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 subproduct). |
| 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 displays 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. See <i>Guided Assistance Relationship Item</i> . 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. See <i>Guided Assistance Relationship Item</i> . 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. See <i>Guided Assistance Relationship Item</i> . If this check box is not selected on the workspace designer, the Search window can still be opened from a ribbon button. |
| Siblings Visible | Click this drop-down list and select True if you want the File Attachments controls to display information for the answer and all the answer 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. See <i>Add or Edit a Country or Province</i> . |
| 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 list and select a spell check option from the following list. <ul style="list-style-type: none"> • True—The field spelling is checked when a staff member clicks the Spell Check button. • False—The field spelling is never checked. |

| Property | Description |
|--|--|
| | <ul style="list-style-type: none"> As You Type—The field spelling is checked automatically as the staff member enters information. |
| Splitter Anchor | Click this drop-down list to select the splitter anchor. Options are Left, Right, Top, and Bottom. The options available in the menu depend on the splitter orientation. If the splitter orientation is set to Vertical, you can anchor the splitter to the Left or Right. If the splitter orientation is set to Horizontal, you can anchor the splitter to the Top or Bottom. |
| Splitter Orientation | Click this drop-down list to select the splitter orientation. <ul style="list-style-type: none"> Vertical—The splitter is divided into two vertical sections, one on the left and one on the right. Horizontal—The splitter is divided into two horizontal sections, one on the top and one on the bottom. |
| Splitter Position | Click this button to enter the number of pixels the splitter is offset from the anchor side. If the Splitter Orientation property is set to Horizontal, the default splitter position is 300. If the Splitter Orientation property is set to Vertical, the default splitter position is 100. |
| Summary Panel Alignment | Click this button to select if the Summary Panel will appear as the first tab in the tab set or as a persistent panel above the tab set. Options are First Tab or Top. The default value for a new workspace is Top. This button is only available when the workspace primary tab set is selected. This property is applicable only when a workspace is used on the Agent Browser User Interface. <p>Note: When enabled on an incident workspace on the Agent Browser UI, the summary panel displays above the tab set containing summary information about the incident.</p> |
| Summary Panel Height | Click this button to enter the height of the summary panel in pixels. This button is available only when the workspace primary 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. |
| Tab Display Style | Click this drop-down list and select a tab display style option from the following list. <ul style="list-style-type: none"> Regular—Displays the selected tab set as the default, horizontal style. Accordion Single Open—Displays the selected tab set as an accordion with only the selected tab open. When a different tab in the tab set is open, the previous open tab will close. Accordion Multiple Open—Displays the selected tab set as an accordion, allowing for multiple tabs to remain open. <p>Note: The accordion tab set display applies only to workspaces on the Agent Browser UI.</p> |
| Thousands Separator | Select this check box to add a thousands separator to an integer when the value is entered on a workspace (for example, "10000" becomes "10,000"). |
| Thread Display | Click this drop-down list and select Show Thumbnails and then specify the number of threads that will display on the incident workspace. The incident threads will display as thumbnails once the specified threshold is met. The maximum incident threshold value is 99. |

| Property | Description |
|--|---|
| Thread Orientation | Click this drop-down list 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. Agent Browser users can override this setting for their workspace using the Draft Thread setting. |
| Threshold Height | Click this button to enter 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. 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 won't display on the workspace. See <i>Set a Time Limit for a Report Control</i> . |
| Time Required | Click this button to select time requirements. This property is used with the Time Billed control. |
| <ul style="list-style-type: none"> 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. An entry will not be required if the Time Billed relationship item is hidden on the workspace. |
| <ul style="list-style-type: none"> 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. 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. |
| Up Down Align | Click this drop-down list 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 | Enter the URL that should be accessed when the browser control is used on the workspace. You can also open files on your workstation or network by specifying a format of file://<file path> . For information about passing variables through this URL, see <i>Workspace and Script Browser Controls</i> . |
| 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 label text if needed to fit the label in the space provided. |

Ribbon and Quick Access Toolbar Buttons

When designing a workspace, or a script that will be used in a workflow, you can select which buttons to place on the ribbon, the Quick Access toolbar, and the Actions drop-down list (for the Agent Browser UI).

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. In addition, if you are configuring workspaces for the Agent Browser UI, you will configure the Actions drop-down using the ribbon configuration.

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 ribbon buttons available vary by workspace type. 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.

Quick Access Toolbar Buttons

| Workspace Type | Available Buttons |
|----------------|--|
| Answer | <ul style="list-style-type: none"> • Bookmark • Check Links • Copy • Delete • Draft • Expand/Collapse • Forward • Info • Links • New • Preview • Print • Publish • Refresh • Save • Save and Close • Spell Check • Validate Category Links |
| Assets | <ul style="list-style-type: none"> • Bookmark • Copy • Delete • Expand/Collapse • Forward • Info • Links • New • Print |

| Workspace Type | Available Buttons |
|----------------|--|
| | <ul style="list-style-type: none"> • Refresh • Save • Save and Close • Spell Check |
| Chat | <ul style="list-style-type: none"> • Add to Incident • Add to New Incident • Change Lead Role • Conference • Expand/Collapse • Join • Leave • New Opportunity • Screen Sharing • Spell Check • Terminate • Transfer • Wrap-up |
| Contact | <ul style="list-style-type: none"> • Appointment • Bookmark • Copy • Delete • Expand/Collapse • Forward • Info • Links • New • Print • Refresh • Reset Password • Save • Save and Close • Spell Check |
| Custom Object | <ul style="list-style-type: none"> • Copy • Delete • Expand/Collapse • Info • Links |

| Workspace Type | Available Buttons |
|----------------|--|
| | <ul style="list-style-type: none"> • New • Refresh • Save • Save and Close • Spell Check |
| Incident | <ul style="list-style-type: none"> • Appointment • Best Answers • Bookmark • Chat • Collaborate • Copy • Delete • Expand/Collapse • Forward • Guided Assistance • Info • Links • New • New Opportunity • Print • Propose • Refresh • Reset Password • Save • Save and Close • Send • Send and Close • Spell Check |
| Interaction | <ul style="list-style-type: none"> • Add to Incident • Add to New Incident • Save • Save and Close |
| Opportunity | <ul style="list-style-type: none"> • Appointment • Bookmark • Copy • Delete • Expand/Collapse |

| Workspace Type | Available Buttons |
|----------------|--|
| | <ul style="list-style-type: none"> • Forward • Info • Links • New • Print • Refresh • Reject • Reset Password • Save • Save and Close • Spell Check |
| Organization | <ul style="list-style-type: none"> • Appointment • Bookmark • Copy • Delete • Expand/Collapse • Forward • Info • Links • New • Print • Refresh • Save • Save and Close • Spell Check |
| Quote | <ul style="list-style-type: none"> • Expand/Collapse • Info • Links • Print • Save • Save and Close • Send • Spell Check |
| Quote Product | <ul style="list-style-type: none"> • Expand/Collapse • Info • Links • Save |

| Workspace Type | Available Buttons |
|----------------------|--|
| | <ul style="list-style-type: none"> • Save and Close • Spell Check |
| Task | <ul style="list-style-type: none"> • Appointment • Bookmark • Complete • Copy • Delete • Expand/Collapse • Forward • Info • Links • New • Print • Refresh • Reset Password • Save • Save and Close • Spell Check |
| Multi Edit Workspace | <ul style="list-style-type: none"> • Complete — Only on Task Multi-Edit workspaces • Expand/Collapse • Links • Reject — Only on Opportunity Multi-Edit workspaces • Save and Close • Spell Check • Validate Category Links — Only on Answer Multi-Edit workspaces |

Related Topics

- [Overview of the Dynamic Agent Desktop](#)
- [Edit a Workspace](#)
- [Edit a Script](#)

How You Work 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 organize your ribbon, and you can arrange tabs, groups, and buttons in any order you want. You can also change button display options to help optimize the ribbon display. Certain ribbon buttons include special features you can use to access record information and links to web pages.

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.

Open the Ribbon Designer

You can customize the ribbon and the Quick Access toolbar by using the ribbon designer.

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.

From the open workspace or script, click the **Home** tab and click **Ribbon**.

Customize the Ribbon

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. To select an item you want to edit, click it on the preview ribbon.

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 procedure.

1. To add a tab to the ribbon, click **Add Tab** on the bottom of the ribbon designer.
 - a. Enter a name for the new tab in the **Ribbon Tab Name** field.
 - b. Click **OK**.
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 **Edit Tab**.
 - b. Click **Add Group**.
 - c. Enter a name for the new group in the **Group Name** field.
 - d. Click **OK**.
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 **Edit Group**.
 - b. Click **Add Buttons** 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 **OK**.

Note: 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 **Add Separator** to add a vertical line to the group to break up buttons in the group.

4. Click **OK** on the ribbon designer.

Rename a Tab, Group, or Button

Use this procedure to rename a tab, group, or button (either on the ribbon preview or in the item list).

1. To rename a tab, click the tab you want to rename.

Note: The Home tab cannot be renamed.

- a. Click **Rename Tab**.
The **Rename Tab** window opens.
- b. Enter a new name for the tab in the **Tab Name** field.
- c. Click **OK**.

2. To rename a button group, click the button group you want to rename.

- a. Click **Rename Group**.
The **Rename Group** window opens.
- b. Enter a new name for the group in the **Group Name** field.
- c. Click **OK**.

3. To rename a button, click the button you want to rename.

- a. Click **Rename Button**.
The **Rename Button** window opens.
- b. Enter a new name for the button in the **Button Name** field.
- c. Click **OK**.

4. Click **OK**.

Move Tabs, Groups, Buttons, and Separators

Use this procedure to move items on the ribbon designer.

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 **OK**.

Delete Tabs, Groups, Buttons, and Separators

Use this procedure to delete items on the ribbon designer.

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 **Delete Tab**, **Delete Group**, or **Delete Button**.
3. Click **Yes** to confirm the deletion.

Edit Ribbon Buttons

You can edit buttons on the ribbon to change their size and to specify if text should be included with the icons.

1. On the ribbon preview, click the button you want to edit.

Tip: You can also right-click tabs, groups, and buttons on the ribbon preview to access Edit, Delete, and Rename options.

2. Click **Edit 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 list.
4. To select a different style for the button, select **Icon** and **Text or Icon Only** from the **Button Style** drop-down list.
5. Click **OK**.

Set a Link to a URL on the Links Button

You can define a link to a URL on the Links button, allowing staff members access to the URLs you specify.

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 list, they will see the list of links you defined. Selecting one of the links takes them to the specified URL.

1. Click **Links** (either on the ribbon preview or in the item list). See *Customize the Ribbon* for the procedure to add buttons to the ribbon.
2. Click **Edit Button**.
The **Edit Links** window opens.
3. Select the size of the Links button from the **Button Size** drop-down list.
4. Select whether to display the button with an icon and text or only an icon from the **Button Style** drop-down list.
5. Right-click the link browse tree and select **Add Link**.
6. Enter the name of the link (what staff members will see on the menu) in the **Label** field.
7. Enter 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. Enter 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 **OK**.

Set Information Options on the Info Button

You can define the information that displays when staff members hover over or click 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.

Tip: To reduce clutter on your workspace, consider configuring the Info ribbon button to show fields that are always read only, such as the Date Created and Date Updated fields on an incident.

1. Click **Info**, either on the ribbon preview or on the bottom of the designer. See *Customize the Ribbon* for the procedure to add buttons to the ribbon.
2. Click **Edit Button**.
The **Info Item Editor** opens.
3. Click the **Button Size** drop-down menu to select the size of the Info button.

4. Click the **Button Style** drop-down menu to select whether to display the button with an icon and text or only an icon.
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, located between the Available Info Fields and Selected Info Fields columns, to place the fields in the Selected Info Fields column.
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, located between the Available Info Fields and Selected Info Fields columns, to remove the fields.
8. Click **OK**.

Set Dialog Options for the Forward Button

You can define the dialog used with the Forward button.

Before you start

See *Customize the Ribbon* for the procedure to add buttons to the ribbon.

Here's what to do

1. Click **Forward**, either on the ribbon preview or on the bottom of the designer.

Note: You can also set the options for the Forward button on the Quick Access ribbon by selecting it in the Configure Quick Access Buttons.

2. Click **Edit Button**.
3. Click the **Button Size** drop-down menu to select the size of the Forward button.
4. Click the **Button Style** drop-down menu to select whether to display the button with an icon and text or only an icon.
5. Select **Add Comments to Thread** to add the forward comments to the thread as a private note by default.
6. Select **Allow Agents to Control Comments** to allow the user to override the default setting.
7. Click **OK**.

Add or Remove Quick Access Toolbar Buttons

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 be saved without having to select a tab on the ribbon to access the Save button.

1. Click **Configure Quick Access Buttons** on the Quick Access toolbar on the Ribbon Preview.
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 **OK**.

Results:

The buttons on the Quick Access toolbar shown on the ribbon designer are updated to reflect the changes you made.

Restore Default Content on the Ribbon and Quick Access Toolbar

After you edit a ribbon, you may decide you want to restore the default content.

The ribbon defaults can be restored at any time. When you restore the defaults, the content on the Quick Access toolbar is also reset. In addition, buttons on the ribbon will be reset to use their default size and style.

1. On the lower left corner of the ribbon designer, click **Reset to Default**.
2. Click **Yes**.

Desktop Workflows

Overview of Desktop Workflows

To promote efficiency and reduce the chances for human error, you can create highly customized desktop workflows that guide agents through complex customer interactions and data updates.

When following elaborate business processes, staff members often evaluate critical information and perform a variety of actions across multiple records. 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.

After 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. See [Overview of the Dynamic Agent Desktop](#).

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.

Desktop Workflows 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.

Home Tab

| Group/Button | Description |
|--------------|--|
| Designer | The buttons in this group provide access to basic design functions. |
| Preview | Click this button to preview the desktop workflow. See Preview a Workflow . |
| 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. 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 let you add elements to your flow diagram. For a description of available elements, see How You Design a Flow Diagram . Elements can also be accessed from the Insert tab. |
| Validate | Click this button to check the flow diagram for errors. See Workflow Validation . |

Desktop Workflows Insert Tab

The Insert tab lets you add components to your flow diagram, either one at a time or in predefined workflow templates.

Insert Tab

| Group/Button | Description |
|---------------|---|
| Template | The buttons in this group let you select a predefined flow template to apply to your desktop workflow. See Apply a Workflow Template . 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. See New vs. Edit Workflow Template . |
| 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. See Add Task Workflow Template . |
| 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. See Copy Incident Workflow Template . |

| Group/Button | Description |
|----------------|--|
| 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. See Create Contact Workflow Template . |
| Elements | The buttons in this group let you select elements to add to your flow diagram. For a description of available elements, see How You Design a Flow Diagram . Elements can also be accessed from the Home tab. |

Desktop Workflows View Tab

The View tab provides options for changing your view of the design canvas.

View Tab

| Group/Button | Description |
|--------------------|--|
| Canvas | The settings in this group let you select canvas options. B2C Service 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 display by default. |
| 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. Validation results are hidden by default. See Workflow Validation . |
| Working Record | Select this check box to display working record labels for elements in the diagram. Labels display by default. |
| Grid | Select this check box to display the design grid. The grid displays by default. |
| Grid Size | Click this drop-down list 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. See Set 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.

Set Zoom Options

You can set zoom options that are available from the View tab.

1. Click **Zoom** on the View tab.
The **Zoom Options** window opens.
2. To specify a desired zoom level, select an option in the Zoom To section.
 - a. To adjust the zoom level to show all components, select **Fit to Screen**.
 - b. To show the entire canvas, select **Extents**.
3. Enter a zoom percentage in the **Percent** field. Click the up or down arrow to increase or decrease the value.

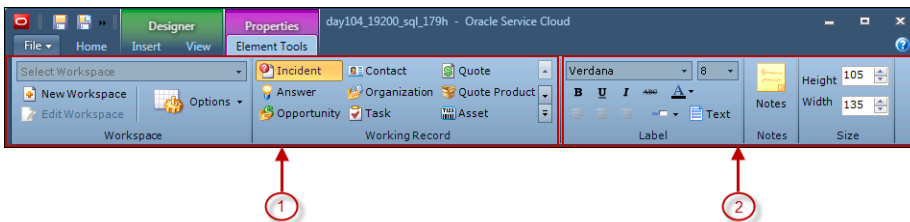
Tip: You can also change the magnification of the canvas using the zoom slider found in the bottom right corner of the Service Console.
4. Click **OK**.

Desktop Workflows Contextual Tabs

The contextual and standard groups and buttons that display on the ribbon of the workflow editor depend on the selected tab.

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.

This image 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.



Legend for image: 1. Contextual group of buttons 2. Standard group of buttons



Related Topics

- [Desktop Workflows Element Tools Tab](#)
- [Desktop Workflows Path Tools Tab](#)

Desktop Workflows Element Tools Tab

The Element Tools tab is a contextual tab that displays on the ribbon when you select an element.

Element Tools Tab

| 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 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 enter the text of the element label. |
| Notes | Click this button to enter notes about the element. |
| Size | The buttons in this group let you to change the height and width of the element. |

Related Topics



- [Element Attributes](#)

Desktop Workflows Path Tools Tab

The Path Tools tab is a contextual tab that displays on the ribbon when you select a connector.

The buttons on the Path Tools tab let you format the connector and change the connector type. See [How You Connect an Element](#).

Path Tools Tab

| Group/Button | Description |
|--|---|
| Style | The buttons in this group let you 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 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 enter 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 let you add and delete events that cause the path to be followed. See Add a Connector Event . 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. |

| Group/Button | Description |
|------------------|--|
| Delete Event | Click this button to delete an event selected in the list. |
| Conditions | The buttons in this group let you add and delete conditions associated with the connector. |
| Add Conditions | Click this button to add conditions to the connector. See <i>Add a Connector Condition</i> . |
| Conditions List | This list displays conditions that have been added to the connector. |
| Delete Condition | Click this button to delete a condition selected in the list. |

Create a Desktop Workflow

B2C Service 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Workspaces/Workflows**. 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 in the Application Appearance folder. To enable desktop workflows, contact your Oracle account manager.

3. Click **New Workflow** on the ribbon to open a new desktop workflow with a blank design canvas.
4. To design the flow diagram, see *How You Design a Flow Diagram*.
5. Click **Save** on the Quick Access toolbar to save the desktop workflow. The **Save As** window opens.

Note: Before saving, B2C Service automatically validates your flow diagram and reports any errors. Click **Cancel** to correct errors before saving or click **Continue** 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 enter the name of the desktop workflow in the Name field.
7. Click **Save**.

How You Design a Flow Diagram

A desktop workflow is defined by dragging elements to the canvas, ordering them, and connecting them to form a flow diagram.

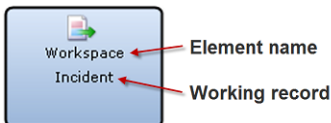
The flow diagram is a graphical representation of the actions and decisions your workflow will perform and the order in which it will perform them. Your flow diagram can be as simple as a single path connecting a few workspaces or it can be complex, routing your staff members through dozens of workspaces, 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 name. The bottom label identifies the element working record. The icon varies by element type as well as the 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.

Note: If a workflow is unable to find an open record that matches the designated working record, B2C Service will display a workflow execution error and end the workflow session.

Create a Flow Diagram

The function of the working record varies by element type.

1. From the open workflow, drag and drop an element from the ribbon onto the canvas.

Desktop Workflow Elements

| Element/Menu | Description |
|--------------|---|
| Workspace | Drag and drop this element to open the working record in a workspace. See Edit Workspace Attributes . |
| Script | Drag and drop this element to initiate a script. See Edit Script Attributes . 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. See to 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. See Edit Workflow Attributes . |

| Element/Menu | Description |
|--------------|--|
| Set Fields | Drag and drop this element to set values for one or more fields in the working record. See <i>Best Practices for Editing Set Fields Attributes</i> . |
| Comment | Drag and drop this element to add comments or notes to the workflow. See <i>Add a Comment to a Workflow</i> . |
| Connector | Drag and drop this element to add a connector to the workflow. See <i>How You Connect an Element</i> . |
| Create | Click this drop-down list 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. See <i>Edit Create Attributes</i> . |
| Load | Click this drop-down list 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. See <i>Load Attributes</i> . |
| Clear | Click this drop-down list and drag and drop a record type to clear the association between the working record and an organization, contact, answer, incident, or opportunity. See <i>Edit Clear Attributes</i> . |
| Change | Click this drop-down list and drag and drop a record type to associate the working record to a different organization, contact, answer, incident, or opportunity. See <i>Edit Change Attributes</i> . |
| Copy | Drag and drop this element to copy the working record and give it a name that can be referenced later in the workflow. See <i>Edit Copy Attributes</i> . |
| Save | Drag and drop this element to save all records open in the workflow. To close the records after saving, click Close After Save on the ribbon. See <i>Save Attributes</i> . Business rules will be run on all open records at the time the Save element is triggered. |
| 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. See <i>Return Attributes</i> . |



Note: 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 Save instead.

- 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. See *How You Connect an Element*.

- To change the formatting of an element, select the element and see the associated actions.

Element Tools Tab

| 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 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 enter the text of the element label. |
| Notes | Click this button to enter notes about the element. |
| Size | The buttons in this group let you change the height and width of the element. |

- To cut, copy, or paste one or more elements, click the appropriate button on the Clipboard group of the Home tab.
- To undo an action on the canvas, click **Undo** on the Quick Access toolbar.
- To redo an action on the canvas, click **Redo** on the Quick Access toolbar.

Element Attributes

After 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.

Note: You must define attributes for each element added or a validation error will occur when attempting to save the workflow. See [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.

Edit Workspace Attributes

This topic describes how to edit workspace element attributes.

The Workspace element is used to display the working record in a workspace. After 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.

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.
The name label is updated with the name of the selected workspace.

Workspace Attributes

| Button | Description |
|------------------|--|
| Select Workspace | Click this drop-down list 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, see Edit a Workspace . For information about importing a workspace, see Import a Workflow . |
| Edit Workspace | Click this button to edit the selected workspace. See Edit a Workspace . |
| Options | Click this drop-down list 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. |
| Open in Subtab | Select this option to open the element in a subtab instead of replacing the current editor. Outgoing connectors are not supported. Note: This option only applies to the Agent Browser UI. |
| Focus Subtab | Select this option to set the focus to the subtab. Note: This option only applies to the Agent Browser UI. |

3. Click a button in the Working Record button group to select the record you want to display using the workspace. The 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 **Expand Working Records** below the scroll bar in the Working Record button group.

Edit Script Attributes

The Script element is used to open the working record in a script. After 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.

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. See *How Events are Used in Workspace and Script Rules*.

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.
The name label is updated with the name of the selected script.
3. Select a script attribute.

Script Attributes

| Button | Description |
|---------------|---|
| Select Script | Click this drop-down list 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, see <i>Create a Script</i> . For information about importing a script, see <i>Export a Script</i> . |
| Edit Script | Click this button to edit the selected script. See <i>Edit a Script</i> . |
| Options | Click this drop-down list 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. |

4. Click a button in the Working Record button group to select the record you want to pass to the script. The working record label is updated with the name of the selected working record.
Because quotes and quote products have no corresponding script type, they are not available as working records for Script elements.
5. 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 **Expand Working Records** below the scroll bar in the Working Record button group.

Decision Attributes

The Decision element is used to branch your workflow based on conditions that you define. After 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 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.

Define Decision Attributes

The following procedure describes the process for defining Decision attributes on a workflow.

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 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 **Expand Working Records** below the scroll bar in the Working Record button group.

4. Do one of the following:
 - o Click **Edit**. The **Decision** window opens.
 - o Double-click the Decision element.
5. To define conditions for a yes/no decision, see *Define Conditions for a Yes/No Decision*.
6. To define conditions based on a field with multiple possible values, see *Define Conditions Based on a Field with Multiple Possible Values*.
7. Click **OK**.

Define Conditions for a Yes/No Decision

The following procedure describes the process and options available for defining 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.

Decision Conditions

| 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. |

| Condition | Description |
|--|---|
| 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 displays in a child editor. |
| The current editor is a primary editor | Add this condition to verify that the working record displays 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. The **Edit Condition** window opens.
3. If specifying a condition value for a field, click the **Field** drop-down list and select a field.
4. Click the **Operator** drop-down list and select an operator.
5. Enter a value in the Value field.
6. Click **OK**.
7. To edit the logical expression used to evaluate two or more conditions, click **Combine the Conditions Using a Logical Expression** and see *Edit a Workspace Rule Logical Expression*.
8. Click **OK**.

Define Conditions Based on a Field with Multiple Possible Values

The following procedure describes the process for defining conditions based on a field with multiple possible values.

1. On the **Decision** window, select the **Decision on a Field with Multiple Possible Values** option.
2. Click the **Property or Field** drop-down list and select a property or field to evaluate.
3. To verify a client type, select the check box next to the client types you want to use in the decision.
4. To verify a value in a menu field, select the check box next to the value you want to use in the decision.
5. To remove a menu field value from the decision, clear its check box.
6. To verify a value in a date field, click **Add Choice** and then click the calendar button in the Choice column to select a date.
7. To verify a value in a text field, click **Add Choice** and enter the value in the Choice column.
8. To remove a date or text value you have added, click **Remove** in the Action column.
9. To include an option for all other values, select the **Include a Value for Other** check box.
10. Click **OK**.
An outgoing anchor is added to the element for each value selected.

Edit Workflow Attributes

The Workflow element is used to open the working record in an embedded workflow.

After you add the Workflow 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.

Note: If you want an embedded workflow to return to the primary flow, it must contain at least one Return element. See *Return 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.
The name label is updated with the name of the selected workflow.

Workflow Attributes

| Button | Description |
|-----------------|--|
| Select Workflow | Click this drop-down list 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 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 **Expand Working Records** below the scroll bar in the Working Record button group.

Best Practices for Editing Set Fields Attributes

This topic describes best practices for avoiding field conflicts when editing set field attributes.

The Set Fields element is used to set values for one or more fields in the working record. After you add the Set Fields 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.

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 Opportunity Tracking. 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.

Edit Set Fields Attributes

The following procedure describes how to edit Set Field attributes from a workflow.

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 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 **Expand Working Records** below the scroll bar in the Working Record button group.

4. Do one of the following:
 - o Click **Edit**. The **Set Fields** window opens.
 - o Double-click the **Set Fields** element.
5. Click **Add Field** to add a field to the element.
6. In the Fields column, click the **Select a Field** drop-down list, 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 previous field value. See [Relative Field Values](#).

8. To remove a field you have added, click **Remove** in the Action column.
9. Click **OK**.
The field and value you selected display in the text box next to the Edit button.
10. To display a confirmation message when the field is set, click **Confirmation Message** and enter the message.
11. Click **OK**.

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 list presents additional options for adding or subtracting (or appending or prepending) a value to the previous value of the field. 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.

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 maximum value minus the minimum value of the field. 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. |

Edit Create Attributes

The Create element is used to create a new record in the workflow. After 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.

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 audit log will show the staff member as the creator of the incident.

1. From your open workflow, click a Create element on the canvas.
The Element Tools tab displays on the ribbon.
2. Do one of the following:
 - o Click **Set Fields**. The **Set Fields** window opens.
 - o Double-click the **Set Fields** element.
3. Click **Add Field** to add a field to the element.
4. In the Fields column, click the **Select a Field** drop-down list and select the field you want to set.
5. In the Value column, enter the value that you want to set the field to.
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 previous field value. See *Relative Field Values*.
6. To remove a field you have added, click **Remove** in the Action column.
7. Click **OK**. The field and value you selected display in the text box next to the Set Fields button.
8. To display a confirmation message when the field is set, click **Confirmation Message** and enter the message.
 - a. Click **OK**.

- To name the record, click **New Record Name** and enter the name in the working record label. The new record name appears in the Working Record button group for elements of the same record type.

Note: 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. See *Save Attributes*.

Load Attributes

The Load element is used to find and load an existing record into the record pool. After 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.

Records opened with the Load element are simply loaded into memory and do not automatically display 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.

Prompt Agents to Search for a Record to Load

Use this procedure to add search reports for the Load element.

- From your open workflow, click a Load element on the canvas. The Element Tools tab displays on the ribbon.
- Click **Search Report**. The **Select Report** window opens.
By default, the 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.
- Select a primary report to display in the **Search** window.
- Click **OK**.
- To select a secondary search report to display in the **Search** window, click **Secondary Search Report**. The **Select Report** window opens.
 - Select a secondary report.
 - Click **OK**.
 - Select a secondary search record from the Secondary Search Record button group.
- 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.
- To name the record, click **New Record Name** and enter the name in the working record label.
The new record name appears in the Working Record button group for elements of the same record type.

Load a Specific Record

Use this procedure to add a specific record to the Load element.

1. From your open workflow, click a Load element on the canvas.
The Element Tools tab displays on the ribbon.
2. Click **Load Type** 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 **Record**.
4. Search for and select the record you want the element to load.
5. Click **Select**.
6. Click **OK**.
7. To rename the record, click **New Record Name** and enter the new name in the working record label.
The new record name appears in the Working Record button group for elements of the same record type.

Edit Clear Attributes

The Clear element is used to clear the association of the working record with any organization, contact, answer, incident, or opportunity. After you add a Clear element to your flow diagram, you must edit its attributes to select the working record you want to disassociate.

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.

1. From your open workflow, click 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 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.
For a menu of available records, click **Expand Working Records** below the scroll bar in the Working Record button group.
4. To display a confirmation message when the record association is cleared, click **Confirmation Message** and enter the message.
5. Click **OK**.

Note: 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. See [Save Attributes](#).

Edit Change Attributes

The Change element is used to find and load an existing record to associate with the working record.

After you add the Change 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).

When using a Change element to change the contact associated with an incident, the behavior is the same as when you click Search 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.

1. From your open workflow, click a Change element on the canvas.
The Element Tools tab displays on the ribbon.
2. Click **Search Report**. The **Select Report** window opens.
By default, the 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 **OK**.
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.
 - b. Click **OK**.

Note: 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. See [Save Attributes](#).

What to do next

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.

Edit Copy Attributes

The Copy element is used to create a new record in the workflow. After 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.

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. See [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.

1. From your open workflow, click 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 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 **Expand Working Records** 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.

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. |

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 **Confirmation Message** and enter the message.
 - a. Click **OK**.
6. To name the copied record, click **New Record Name** and enter the name in the new record label.
The new record name appears in the Working Record button group for elements of the same record type.

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.

After you add a Save element to your flow diagram, you can edit its attributes to change its appearance.

Note: 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.

Return Attributes

The Return element is used to return an embedded workflow to the primary workflow to resume the flow of action.

After 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.

Related Topics

- [Edit Workflow Attributes](#)

Connect an Element

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 conditions are met.

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.

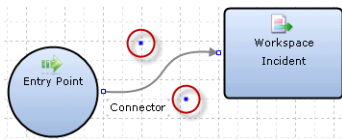
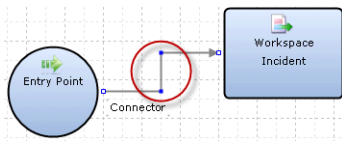
Tip: You can easily connect to a different element or delete a connector. From your open workflow, do one of the following:

- 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.
- Click a midpoint on the connector to select it and press Delete.

How You 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.

These images show the calibration points on square and curved connectors.



Add a Connector Event

You must add connectors to connect one element to another in a workflow.

When a record or script displays 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.

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.

1. From your open workflow, click the connector on the canvas.
The Path Tools tab displays.
2. Click **Add Events**.
The **Select Connector Events** window opens.

3. Click **Add** next to the event you want to add to the connector.

Available events vary based on the type of element you are connecting from.

Connector Events

| Event | Description |
|-------------------------------------|--|
| The editor loads | <p>Add this event to follow the path when a record is loaded using the workspace.</p> <p>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.</p> |
| The record is saved without closing | <p>Add this event to follow the path when an open record is saved without closing.</p> <p>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.</p> |
| A field changes | <p>Add this event to follow the path when the value of a field is changed. When added, click the 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.</p> <p>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.</p> |
| An input control value changes | <p>Add this event to follow the path when the value of an input control is changed to another value or to no value. When added, click the underlined text to select an input control that will trigger the path. Available input controls include any menus, options, list boxes, and text boxes that are not used to trigger other paths.</p> <p>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.</p> |
| An input control value is selected | <p>Add this event to follow the path when an input control value is selected. When added, click the underlined text to select an input control that will trigger the path. Available input controls include any menus, options, and list boxes that are not used to trigger other paths.</p> <p>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.</p> |
| A button is clicked | <p>Add this event to follow the path when a specified button is clicked. When added, click the underlined text to select a button from the workspace that will trigger the event.</p> |
| An image is clicked | <p>Add this event to follow the path when an image is clicked. When added, click the underlined text to select an image from the workspace that will trigger the event.</p> <p>This trigger is available only when an image has been added to the workspace.</p> |
| A hyperlink control is clicked | <p>Add this event to follow the path when a hyperlink is clicked. When added, click the underlined text to select a link from the workspace that will trigger the event.</p> |

| Event | Description |
|-------------------------------|--|
| | 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. See How Events are Used 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. See How Events are Used 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 enter 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. See How Events are Used in Workspace and Script Rules . 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. |

- 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).
- To remove an event from the connector description, hover over the event and click **Remove**.
- Click **OK** to add the event to the connector.

Add a Connector Condition

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.

- From your open workflow, click the connector on the canvas.
The Path Tools tab displays.
- Click **Add Conditions**.
The **Select Connector Conditions** window opens.
- Click **Add** next to the conditions you want to add to the connector.
Available conditions vary based on the type of element you are connecting from.

Connector Conditions

| 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. |

| Condition | Description |
|---|--|
| 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. |
| 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. |
| 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. See Overview of Add-Ins . |

4. If a condition you have added to the description contains underlined text, click the underlined text to open the **Edit Condition** window.
 - a. If defining a condition based on a value for a field, click the **Field** drop-down list and select a field.
 - b. Click the **Operator** drop-down list and select an operator.
 - c. Enter a value in the Value field.
 - d. Click **OK** 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 **OK** to add the condition to the connector.

Add a Comment to a Workflow

The Elements button group provides a Comment element that lets you 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.

1. From your open workflow, drag and drop a Comment element from the ribbon onto the canvas.
2. Click the element to enter 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.

Apply a Workflow Template

The Template button group on the Insert tab of the workflow designer provides several predefined templates as a starting point for creating your 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 element attributes to meet your business needs.

1. From the Template group of the Insert tab, hover over a template button to see it previewed on the canvas.
 - o 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. See [New vs. Edit Workflow Template](#).
 - o Add Task—This template displays an incident in a workspace and then automatically creates a new task for the incident. See [Add Task Workflow Template](#).
 - o 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. See [Copy Incident Workflow Template](#).
 - o 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. See [Create Contact Workflow Template](#).
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 **OK**.
The template is inserted in the diagram.
4. Select each element and edit its attributes. See *How You Design a Flow Diagram*.
5. Click **Save**.

New vs. Edit Workflow Template

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.

New vs. Edit

| 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. |
| 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 Workflow Template

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.

Add Task

| 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 Workflow Template

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 displays in another workspace.

Copy Incident

| 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 displays the incident copy. |

Create Contact Workflow Template

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.

Create Contact

| 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 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. |

Workflow Validation

B2C Service provides features to help you validate and preview workflows as you create them.

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. As you create a flow diagram for your workflow, B2C Service 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.

Note: You can save a workflow without first correcting validation errors by clicking Continue on the **Validation Results** window. However, the workflow will not function properly until all validation errors have been corrected.

Preview a Workflow

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.

After 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.

1. From the open workflow, click **Preview** on the Home tab.
2. Select the type of record you want to preview in the workflow.
3. Choose whether to preview your record in the Agent Desktop or the Agent Browser UI.
 - a. To simulate the workflow using a new record, select **New Record**.
 - b. To simulate the workflow using an existing record, select **Open a Record** and enter the record ID in **Enter ID**.

4. Click **OK**.

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.

Export a Workflow

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.

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 followed by Export Image.

3. If the workflow contains embedded workspaces, scripts, or nested workflows, select the **Export Workflow Definition Only** option to export the workflow definition only. By default, the workflow definition is exported along with any contained workspaces, scripts, and workflows.

4. Click **OK**.

The **Save As** window opens.

5. Select the location where you want to save the workflow definition file and enter the file name.

6. Click **Save**.

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.

Import a Workflow

You can import a workflow, including any contained workspaces, scripts, and workflows.

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 **Yes** to allow the import to overwrite the current open workflow.

The **Import Workflow** wizard opens.

4. Click **Next**.

5. Do one of the following:

- o Enter the path and name of the workflow definition file you want to import.
- o Click **Browse** to find the file on your workstation and click **Open**.

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 **Next**.

- a. Select the folder you want to save the workspaces and workflows in and click **Next**.
- 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 B2C Service detects a record type of the same name already in the site, it is selected by default.
- d. Click **Next**.

7. To import only the workflow definition, select **Import Workflow Definition Only** and click **Next**.

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 **Next**.

9. Click **Finish**.

The desktop workflow canvas opens with the imported workflow.

Best Practices for Creating 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.

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, see [Overview of the Dynamic Agent Desktop](#).

4 Analytics

Overview of Analytics

Analytics provides the tools you need to view and create reports that show information about the activities and content on your B2C Service site.

These links give you access to information about the tools used to create, manage, and share reports and dashboards.

How to Monitor Report Usage—Describes management reports you can view to monitor how and where the reports on your site are being used. This information is intended for managers and site administrators.

Overview of the Analytics Explorers—Describes the explorers you use to create and manage reports, including the images explorer

Overview of Creating Basic Custom Reports—Describes the procedures you need to follow to create a simple report. This is intended as an introduction to creating and editing reports.

Overview of Managing Reports on the Reports Explorer—Describes the tools and procedures to view existing reports, and how to modify the display of data in reports.

Overview of Dashboards—Describes how to create, edit, and view dashboards.

Overview of Custom Reports—Describes how to create custom reports, and how to edit existing reports.

View Your Database Data Dictionary—Describes the information displayed in the data dictionary. The data dictionary gives you a view into the database where the content of your site is stored.

Overview of the Transactions Database Table—Describes the information in the Transactions table. This table stores information about actions that users take on contacts, incidents, and other types of records on your site. This table is frequently used in standard reports, and you can use the table in custom reports as well.

Analytics Configuration Settings—Describes the configuration settings that impact information displayed in reports.

Monitoring Report Usage

How to Monitor Report Usage

Several reports are available to help you determine how and where your reports and dashboards are used.

As a manager or site administrator, it's important to understand who uses the reports and dashboards on your site, how often they're used, and where they're used. You can view this information using the Expanded Report Audit Log, and the reports available in the Report Management module.

The Expanded Report Audit Log lists every instance of every report on your site being generated, printed, exported, and previewed over the previous 30 days. See *View the Expanded Report Audit Log*.

The reports in the Report Management module give you information about scheduled reports and dashboards, reports and dashboards that require excessive processing time, and reports and dashboards used in workspaces, report links,

and navigation sets. You can also find reports and dashboards that meet criteria you specify and generate a list of descriptions for any of your public reports and dashboards.

If you need a list of the reports available on your site, you can use the View Report Descriptions report, available in the Report Management component. With this report, you can produce a catalog of reports that displays the descriptions of standard and custom reports. This can help you find an existing report you can use to find information you want, or that you can copy to create a custom report that more precisely meets your reporting needs. See [Create a List of Reports](#).

Note: The reports in the Report Management component use data that's not available in the report designer, and perform non-standard post-processing of the data. These reports cannot be copied or edited like the standard reports. In addition, these reports aren't accessible with the Public API.

To access the Report Management component, you need to add it to your navigation set. See [Overview of Navigation Sets](#). You also must configure your profile permissions to access the management reports you want. See [Configure Management Reports Permissions](#).

Configure Management Reports Permissions

Your staff members can access different management reports depending on their roles.

Staff members with the Analytics Administrator permission can run all management reports. For those staff members without this permission, their access to management reports is determined by their other profile permissions. These permissions and the reports that can be accessed are described here.

- Staff members with permission to run one or more reports, but who lack permissions to edit workspaces or navigation sets, can access the management reports in these folders.
 - Performance
 - Find
 - Definition
 - Reference
- Staff members who can run one or more reports and who have permission to edit workspaces can access the management reports in these folders.
 - Performance
 - Find
 - Definition
 - Reference
 - Workspaces
- Staff members who can run one or more reports and who have permission to edit navigation sets can access the management reports in these folders.
 - Performance
 - Find
 - Definition
 - Reference
 - Navigation Sets

Related Topics

- [Administration Permissions](#)
- [Analytics Permissions](#)

Open a Report in the Report Management Component

You can open the Report Management component from your navigation pane.

1. Click **Analytics** on the navigation pane and then double-click **Report Management**.
2. Open the folder containing the report you want to run.

Report Management Reports

| Folder | Description |
|------------------------|--|
| Schedules | The reports in this folder display the scheduled reports that are being sent, helping administrators better manage receipt of scheduled reports. Depending on the report you select, you can search by individual email addresses, email subject lines, or report names. See Schedule a Report . |
| Workspaces | The report in this folder displays the workspaces that use a particular report, helping administrators understand the impact of changing or deleting a report. See Overview of Workspaces . |
| Navigation Sets | The reports in this folder display the reports included in specified navigation sets or the navigation sets that include the specified reports. This helps administrators determine if a report can be deleted or modified. See Overview of Navigation Sets . |
| Performance | The reports in this folder help administrators find reports that may require excessive processing to run, including reports that have no filters and reports that are automatically deferred due to processing time. These reports can then be modified to reduce the processing time or restricted to those staff members who understand the impact of running them. |
| Find | <p>The reports in this folder are used to find reports that contain certain descriptions, custom scripts, column headings or column descriptions, and references to particular tables or columns in the database.</p> <p>We recommend using the Reports by Database Reference report to find reports that query a particular database field, such as when you want to delete a system attribute and need to know which reports use the field.</p> |
| Definition | The report in this folder returns the report descriptions for the reports you specify, allowing you to easily create a catalog of reports that can be used to understand the available public reports. See Create a List of Reports . |
| Reference | The reports in this folder show you reports that are used in dashboards or in report links. See Overview of Dashboards and Overview of Linked Reports . |

3. Double-click the report you want to run.

Search options vary depending on the report you run. Some reports have required filters (the filter names display in red with an asterisk), while other filters do not require you to select values for them. You can also specify limit, paging, and sorting options, and change the layout of the search window.

The **Search** window opens where you can select options to filter and sort the report's output. Any required filters are indicated by red text. You can also use paging options to specify how many records you want to display per page.

4. Select the filter options you want and click **Search**. The report output displays.

As with other reports you run, you can sort the output, print and export the report, and apply slicing and other options. You can also run the report again, selecting different search criteria in the docked filters shown above the report output.

Related Topics

- [How You Distribute Reports and Dashboards](#)
- [Search for Records in a Report](#)
- [Define Rollups](#)
- [Slice Report Data](#)

Create a List of Reports

With the large number of standard reports available in B2C Service, it can be challenging to understand what each report provides. Using the View Report Descriptions report in the Report Management component, you can generate listings of column and report output definitions for any standard or custom reports.

While the Analytics Administrator profile permission is required to run any of the reports in Report Management, you can export, print, or publish the output so other staff members can view the report descriptions. See [How You Distribute Reports and Dashboards](#).

Note: Report output definitions are preconfigured for standard reports. For information about adding descriptions to custom reports, see [Display Output Descriptions](#).

1. Click **Analytics** on the navigation pane and then double-click **Report Management**.

Because you can add this component to any navigation button in your navigation set, you may need to click another navigation button to access it.

2. Expand the **Definition** folder and then double-click **View Report Descriptions**.

The **Search** window opens.

3. Select the reports you want to include in the output.

By default, all reports are selected, but since this is a required filter, you need to specify the reports you're interested in. You can select all the reports in a top-level folder by selecting the check box next to the folder.

4. Click **Search** to run the report.

The report descriptions are displayed on the content pane.

5. To see a report's column descriptions and expressions, click the **Details** link in the View column.

View the Expanded Report Audit Log

The Expanded Report Audit Log provides administrators with information about reports that have been viewed or accessed. This information is recorded for all reports in your B2C Service site, regardless of where they were accessed.

This report is accessed from the Reports Explorer, but uses information from a table that's not accessible for use in custom reports. For this reason, you can't copy this report.

Note: The data displayed in the Expanded Report Audit Log accumulates quickly since it's stored every time a report is run, previewed, forwarded, printed, or exported. To prevent the accumulation of this data from impeding site performance, it's purged 30 days after the tracked event occurs. If you need data stored longer than 30 days, you will need to run the audit log on a regular basis and export the data that's returned to another location.

This procedure describes opening the Expanded Report Audit Log from the Reports Explorer. However, it can also be added to navigation sets.

1. Click **Analytics** on the navigation pane.
2. Double-click **Reports Explorer**.
3. Expand **Public Reports > Common > Site Administration > Reports**.
4. Double-click the **Expanded Report Audit Log** report.
The report's Search window opens.
5. Select the filters you want to use to limit the amount of data returned by the report.
6. Click **Search**.
The results display on the content pane.

Results:

These are the fields you will see in the Expanded Report Audit Log.

- Report—This is the ID number of the report.
- Report Name—This is the name of the report.
- Account First Name—This is the first name of the staff member who performed the report action.
- Account Last Name—This is the last name of the staff member who performed the report action.
- Type—This is the type of action that occurred. The available options are Generated, Forwarded, Exported, and Printed.
- Start Date—This is the time the report action was initiated.
- End Date—This is the time the report action completed.
- Source Level—This is where the report action occurred. For instance, reports generated on the Reports explorer have a source of CX Console > Console Standard Report, and reports generated through the Connect Public API have a source of Public API > Connect PHP.
- Result Code—This is the result of the attempt to perform the action. The available options are Success, Too Much Data, Timed Out, and Unexpected Error.
- Description—This lists the accounts and email addresses that a forwarded report was sent to.

Analytics Explorers

Overview of the Analytics Explorers

The reporting features in B2C Service are accessed through the Analytics explorers.

Analytics explorers are accessed by clicking Analytics on the navigation pane. Your access to Analytics explorers is determined by your navigation set and profile permissions. See [Overview of Navigation Sets](#) and [Analytics Permissions](#).

From Analytics 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. See [Download Oracle B2C Service and Log In](#).

Search for Analytics Items

You can search for reports, styles, images, or other types of items specific to the explorer you're using.

For instance, you can search for reports and dashboards from the Reports Explorer and text fields from the Text Fields Explorer.

Note: You can use the Quick Search feature to search for a specific file or record no matter where you're in the product. See [Overview of Quick Search](#).

This 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.

1. Click **Analytics** on the navigation pane and then double-click **Reports Explorer**.
2. Click **Find**. The left side of the content pane displays a menu, hiding the folders tree.

Note: All of the Analytics explorers include a ribbon for working with items shown in the explorers.

3. Enter field information.

Reports Explorer Find Menu

| Field | Description |
|-----------------|--|
| Find Using | <p>Click this drop-down list 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:</p> <ul style="list-style-type: none"> ○ 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. |

| 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 option to remove the results from the previous search and replace them with results from this search. This is the default option. |
| Search globally, append to results | Select this option to keep results from the previous search and add results to them from this search. |
| Search within results, replace results | Select this option 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 **Find**.

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 **Clear** on the **Find** menu.

6. To replace the search results with the original reports list, click **Refresh**.

7. To remove the **Find** menu and display the folders list, click **Folders**.

Copy Analytics Content

You can copy reports, styles, chart styles, and color schemes shown in the Analytics explorers, and then edit the copies to create your own customized versions.

1. Open the appropriate explorer.

2. Right-click the item you want to copy.

3. Select **Copy** to open the **Copy As** window.

4. To store the new item in a custom folder, go to the folder.

Note: Custom files cannot be stored in the Reports explorer's or Images explorer's standard folders.

5. Enter a name for the new item in the **Name** field.

6. Click **OK**.

Save an Item

The procedure to save custom reports, report styles, chart styles, color schemes, and text fields is similar, no matter what type of item you're saving.

1. After editing the item, select the appropriate save option on the Home tab:
 - o To save changes to the item without closing it, select **Save**.
 - o To save a new item, or to save a copy of the item you're editing with a different name, select **Save As**.
 - o 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 designer'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, go to the folder.
You can store custom files only in custom folders.
3. Enter a name for the new item in the **Name** field.
4. Click **OK**.

How You Create Custom Folders

You can create custom folders in any explorer.

Custom folders let you organize new or copied reports, styles, chart styles, color schemes, images, and text fields. You can also rename custom folders and files.

Related Topics

- [Create a Custom Folder](#)
- [Rename a Custom Folder](#)

Create a Custom Folder

You can add folders to any parent folder that accepts custom folders.

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. Enter a name for the folder.
5. Click outside the folder name, or press Enter, to save the folder.

Rename a Custom Folder

You can use the rename folder feature when saving or copying a custom folder.

1. Open the appropriate explorer.
2. Right-click the custom folder.
3. Select **Rename**.
4. Enter a new name for the folder.
5. Click outside the folder name, or press Enter.

Tip: You can also use right-click functionality to rename custom folders when you're saving or copying items.

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 aren't 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.

Related Topics

- [Overview of Managing Reports on the Reports Explorer](#)
- [Overview of Custom Reports](#)
- [Overview of Dashboards](#)

Styles Explorer

Report styles let you 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, see [Apply a Style to a Report](#).

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.

Tip: When configuring reports to display on the Browser User Interface, you can use any style you want, but we suggest trying the Web Theme style, which is configured for optimal display on web browsers.

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're 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. See [Overview of Report Sections](#) for descriptions of the various components that can be added to reports.

Create a Style

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.

1. Click **Analytics** on the navigation pane.
2. Double-click **Styles Explorer**.
The Styles explorer opens, displaying the current styles.
3. Do one of the following:
 - o To create a style, click **New**.
 - o To edit an existing custom style, right-click the style and select **Edit**.

The Style editor opens.

4. Do one of the following:
 - o Select the component whose style you want to modify from the drop-down list at the top of the editor and click **Edit**.
 - o 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. See [Specify Style Options](#).
6. To associate a custom chart style with the report style, click the name of the chart style that's currently associated with the report style, shown next to Attached Chart Style. The **Select Chart Style** window opens.
7. Select the chart style you want to associate with the report style.
8. Click **OK**.

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. See [Chart Styles Explorer](#) for information about chart style options. For information about adding charts to reports, see [How to Add and Edit Charts](#).

9. Click **Save**.

Specify Style Options

After selecting the component you want to modify from the style editor, you can define options for the component's font, margins, background colors, and borders.

You can access all the style options for the selected component from the window that displays when you select a component and click Edit.

Tip: You can also select common style options for the selected component using the buttons on the explorer's ribbon.

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. See [Change Font Attributes from the Font Tab](#) 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're 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 field information.

Fill Tab

| 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. |
| 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. <ul style="list-style-type: none"> ○ 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 | 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. |
| 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 field information.

Borders Tab

| Field | Description |
|-------|---|
| Color | Click this box to select a color for the border. |
| 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. |

| Field | Description |
|----------------|--|
| Weight | Click this drop-down menu to select the pixel size of the border. You can select 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. |
| Border buttons | 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 **Preview** to preview the style with the changes you have made to fonts, margins, fill, and borders.
10. Click **OK**.

Related Topics

- [Change Colors](#)

Chart Styles Explorer



You can apply chart styles to charts shown on reports to change their appearance. You can also create custom chart styles if you have specific display requirements for your charts.

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.

Tip: When configuring charts to display on the Agent Browser UI, you can use any chart style you want, but we suggest trying the Web Theme style which is configured for optimal display on web browsers.

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.

Chart Types

| 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. |

| Chart Type | Description |
|--|---|
|  Pie | <p>Pie charts display data as a percentage of a whole. Subtype options can display two- or three-dimensional pie charts or doughnut charts.</p> |
|  Line | <p>Line charts display data as a series of points connected by a line. Subtype options can display the chart as two- or three-dimensional.</p> |
|  Line/Bar Combo | <p>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.</p> |
|  Area | <p>Area charts display data as areas on an x- and y-axis. Subtype options can display the chart as two- or three-dimensional.</p> |
|  X-Y | <p>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.</p> |
|  Radar | <p>Radar charts display data in a radar format. Numeric values are plotted at markers on the perimeter.</p> |
|  Stock | <p>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.</p> |
|  Pareto | <p>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.</p> |
|  Gauge | <p>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.</p> <p>Gauge charts cannot be used in reports that contain non-aggregate columns.</p> |
|  Funnel | <p>Funnel charts display data as areas shown in ascending or descending order. Subtype options can display two- or three-dimensional funnel or pyramid charts.</p> |
|  Gantt | <p>Gantt charts display time lines for completion of scheduled tasks. Subtype options can display the chart as two- or three-dimensional.</p> |

Related Topics

- [How to Add and Edit Charts](#)

Create or Edit a Chart Style

Chart styles are customized using the Chart Styles editor.

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 when editing a style for a vertical bar chart, whereas it's 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 which options are enabled.

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: After 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.

1. Click **Analytics** on the navigation pane and then double-click **Chart Styles Explorer**.
2. To create a new chart style, click **New** on the ribbon.
3. To edit a chart style, right-click the chart style and select **Edit**.
The chart styles editor displays a default chart type.
4. Click **Type** on the Home tab to display the chart type menu.
5. Select the chart and chart subtype you want to configure for the chart style.
After 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.
6. To configure three-dimensional settings for a chart style with a 3D subtype, click **3D Depth** and **3D Angle** 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.

Three-Dimensional Chart Subtype Settings

| 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. |

| Button | Description |
|----------|--|
| 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. |

7. To configure colors, styles, borders, and other settings for the bar, line, or gauge elements in charts, click the Home tab and click **Bar Settings**, **Line Settings**, or **Gauge Settings**.

Bar, Line, and Gauge Settings Descriptions

| Button | Description |
|-------------------|---|
| Bar Settings | Click this button to customize the display of the bar elements for chart types that include bars. |
| Bar Outline | <p>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:</p> <ul style="list-style-type: none"> ○ 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. <p>Selecting Color enables the Outline Color option. Use this to open the color menu where you can select a color for the outline.</p> |
| Bar Style | Select this option and then select the style you want for the bars in the chart. You can select 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 isn't 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 select None, Square, Circle, or Triangle. |
| 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. You can also select No Value from the menu to use the default color. |

| Button | Description |
|-------------------------|---|
| Border Color | Select this option to open the color menu to select a color for the gauge's outline. 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. |

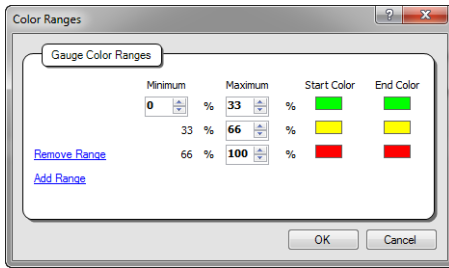
8. To define color ranges for a gauge chart, click **Gauge Settings** on the Home tab and select **Color Ranges**.
- a. Click **Add Range** to add a color range.
 - b. Enter field information.

Color Ranges Window

| 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. |
| End Color | Click this box to open the Color window and select a color for the end of the range. |
| Remove Range | Click this text to remove the range shown next to the text. |

- c. Click **OK** to save the 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.

- 9. To select a color scheme for the chart style, click **Color Scheme** 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. See [Create a Color Scheme](#).

- 10. To define the placement of labels, such as titles and legends, click the Layout tab and click the button in the Labels group that corresponds to the label you want to configure.

Labels Descriptions

| 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. |
| 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 display 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. |

- To configure scale options for the chart style, click **Value Scale** on the Layout tab and select from the options presented.

Value Scale Descriptions

| 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 displays. |
| 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). |
| 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 doesn't display. |
| 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 define where to place the primary scale on the chart. |
| Primary Scale Right | Select one of these options to place the primary scale on the right or left side of the chart. By default, the primary scale displays to the left of the chart. |
| Primary Scale Left | These options are enabled only for chart types that display data vertically. |
| Primary Scale Top | Select one of these options to place the primary scale at the top or bottom of the chart. By default, the primary scale displays at the bottom of the chart. |
| Primary Scale Bottom | These options are enabled only for chart types that display data horizontally. |

| Option | Description |
|-----------------------|---|
| Use Logarithmic Scale | Select this check box to use a logarithmic scale based on your report data. |

12. To configure category and value grid lines shown on the chart, click **Category Grid Lines** or **Value Grid Lines** on the Layout tab.

Category Grid Lines and Value Grid Lines Descriptions

| 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. |
| 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. |
| Show Left | Select this option to show grid lines along the left side of the chart. This option isn't 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. This option isn't available on the Value Grid Lines button. |
| Bottom Color | Select this option to open the color menu where you can pick the color you want for the grid line along the bottom of the chart. This option isn't available on the Category Grid Lines button. |

13. To configure options for tick marks shown on the chart's scale, click **Tick Marks** on the Layout tab, and select the options you want.

Tick Marks Descriptions

| 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. |

14. To customize the fonts, borders, and backgrounds of different sections of the chart, click the Format tab.
- 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.

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

- Select from the options on the Format tab's Format group.

Format Tab Descriptions

| Button | Description |
|--------|---|
| Border | Click this button to select a border style for the selected section. The available options are: |

| Button | Description |
|--------------|---|
| | <ul style="list-style-type: none"> - None - Thin - Medium - Thick - Dashed <p>To select a color for the border, select Border Color from the menu to open the color menu.</p> |
| Shadow | <p>Click this button to select a shadow style for the selected section's border. The available options are:</p> <ul style="list-style-type: none"> - None - Thin - Medium - Thick <p>To select a color for the shadow, select Shadow Color from the menu to open the color menu.</p> |
| Background | <p>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.</p> |
| Transparency | <p>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.</p> |
| Gradient | <p>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:</p> <ul style="list-style-type: none"> - None - Left to Right - Top to Bottom <p>To select a gradient color to blend into the background color, select Gradient Color to open the color menu.</p> |
| Font buttons | <p>Select the font, font size, and other attributes from these buttons.</p> |

15. To configure settings for a different chart type or subtype, repeat steps 3 through 14.

16. Click **Save**.

Related Topics

- [Change Colors](#)

Create a Color Scheme

The Color Schemes explorer lets you view standard color schemes used in conjunction with chart styles.

You can copy standard color schemes and edit the copies, or you can create your own custom color schemes.

Tip: When configuring charts to display on the Agent Browser UI, you can use any color scheme you want, but we suggest trying the Web Theme scheme which is configured for optimal display on web browsers.

1. Click **Analytics** on the navigation pane and then double-click **Color Schemes Explorer**.
The explorer opens, displaying the current color schemes.
2. Click **New**.
The **New Color Scheme** window opens, populated with default colors.
3. To change a particular color, click the box with the color to open the **Color** window. See [Change 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 **Save**.

Images Explorer

You can add or replace images in reports and dashboards using the 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. See [Add an Image to a Report Section](#) for information about adding images to reports area backgrounds or [Add an Image](#) 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. After 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.

Add an Image

You can add images using the Images Explorer.

1. Click **Analytics** on the navigation pane, and then double-click **Images Explorer**.
2. Click **New**.
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 **Open**.
6. Click **Save**.
When saving a single image, you can specify a new name for the image. When saving multiple images, the original image names are retained.

Replace an Image

You can replace an image with an updated image using the Images Explorer.

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 **Open**.
5. Click **Save**.

Create a Text Field

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. See [Add a Text Field to a Header or Footer](#) or [How You Add 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 after they're 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.

1. Click **Analytics** on the navigation pane and then double-click **Text Fields Explorer**.
2. Click **New**.
A new text field opens on the content pane.
3. Enter field information.

Text Tab

| Field | Description |
|----------------|---|
| Text | Enter the text you want to display in this field. This text also serves as the text field name. |
| Text Alignment | Click this drop-down list to select the horizontal alignment for the text in the text field. Options are Left, Center, and Right. |
| Line Alignment | Click this drop-down list to select the vertical alignment for the text in the text field. Options are Top, Center, and Bottom. |

| Field | Description |
|--------------|---|
| Anchor Style | Click this drop-down list to select the anchor style for the field. See <i>Specify an Anchor Style for a Text Field</i> . |

4. Click the **Size** tab.
5. Enter field information.

Size Tab

| Field | Description |
|------------------------|---|
| Best Fit | Select this option to have the size of the text field automatically adjusted to best fit the available space in the report. |
| Specific Size (Pixels) | Select this option 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. See *Change Font Attributes from the Font Tab*.
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 field information.

Fill Tab

| 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. |
| 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 list. 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. |

| Field | Description |
|---|--|
| 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. |
| 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 field information.

Borders Tab

| Field | Description |
|---------|--|
| Color | Click the color box to select a color for the border. |
| Style | Click this drop-down list 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 list to select the pixel size of the border. The border weight can be from 1 to 10 pixels. |
| Preview | This area defines the placement of the borders you define. Select any of the border buttons to place the borders or click the area in the Preview white space where you want the border. |
| Borders | Click a border 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 **Preview**.
14. Click **Close**.
15. Click **Save**.

Related Topics

- [Change Colors](#)

How You Change 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're editing or the explorer you're using.

Change Font Attributes from the Font Tab

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 ribbons 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. 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.

1. Click the **Font** tab.
2. Enter field information.

Font Options

| Field | Description |
|---------|---|
| Font | Click this drop-down list 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 list to select the point size of the font. |
| Color | Click the color box to select a color for the font. See Change Colors . |
| Preview | Click this button to preview the font using the options you select. This button isn't available on all Font tabs. |

3. Click **OK**.

Change 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 displays. 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.

1. To select a color using the menu, click the color you want to use.
The color is applied to the object you're editing.

2. To select a color using the window:

- a. Click the color you want.
- b. Click **OK**.

The color is applied to the object you're editing.

3. To define a custom color from the window:

- a. Click **Define Custom Colors**.

The window expands to show custom color options.

- b. Click anywhere in the color palette or enter 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.

- c. Click **Add to Custom Colors**. The color is added to your custom colors.
- d. Click **OK** to apply the color you selected or created to the component you're defining.

4. To view additional standard colors or to create a custom color from the color menu, click **More Colors**.

- a. To select a standard color from the window, click the color you want and click **OK** to apply the color to the object you're editing.
- b. To define a custom color, click the **Custom** tab.
Custom colors are defined on the Custom tab in the same way they're defined on the Color window.
- c. Click **OK** to apply the custom color to the object you're editing.

Creating Basic Custom Reports

Overview of Creating Basic Custom Reports

You can create new reports using the Analytics explorer. While this can be a complex process, learning how to create a basic report will help you understand the tools you need to create more complex reports.

When creating reports, you can use advanced features such as multiple output levels, linked reports, calculations, data exceptions, variables, and computed fields. 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.

Related Topics

- [Overview of Custom Reports](#)

How to Plan a Basic Custom Report

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. See [Apply a Layout to a Dashboard](#) and [Apply a Layout to an Output Level](#).
- What information do you want the report to return? This determines the fields to include in the report's output. See [Overview of Report 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 runtime selectable filters. See [Overview of Report 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. See [Overview of Report Output Levels](#) and [Overview of Linked Reports](#).
- How do you want the information that's returned to be ordered? This determines the sorting options that you apply to the report. See [How You Change Report Sort Order](#).
- 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. See [Set Report Permissions](#).

Tip: If an existing report is similar to a report you want to create, you can copy the existing report and then edit the copy to create your new report. To view descriptions of existing reports, you can generate a catalog of reports. See [Create a List of Reports](#). For information about finding reports, see [Search for Analytics Items](#). For information about viewing the contents of a report, see [View a Report Definition](#).

Overview of Creating Custom Reports

After you understand what your report should contain, you create it on the report designer.

The procedures listed here demonstrate the basic steps required to create most reports. While the sample report might not be useful to your organization, knowing how to create a report like 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.

1. Open the report designer. See [Open the Report Designer](#).
2. Add columns to the report. See [Add Output Columns to a Report](#).
3. Add another output level to the report. See [Add a Second Output Level to a Report](#).
4. Add filters to the report. See [Add a Search Filter to a Report](#).
5. Save the report. See [Save a Custom Report](#).

Open the Report Designer

The report designer gives you access to all the tools you need to create basic or more complex reports.

1. Do one of the following:
 - Click **Analytics** on the navigation pane, double-click **Reports Explorer**, and then click **New Report**.
 - If your navigation set is configured to add new reports from the file menu, click **File** and then select **Report**. See *Asset Workspaces*.
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**.

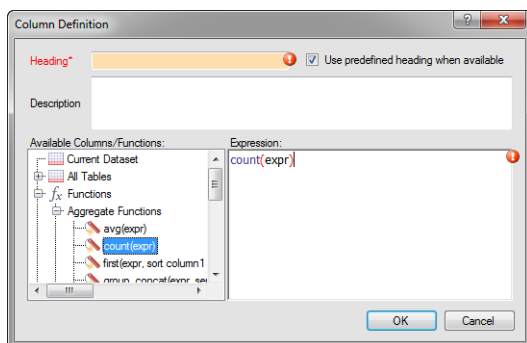
Note: Grid reports are most commonly used on the Service Console to list records that staff members can open for editing. The other report types are generally used to present summaries of data inside or outside of your organization. If you decide you want a different report type after you start creating a report, you can change it from the **Report Layouts** button on the Home tab.

After selecting the report type, the report design center opens where you create your report. The report designer consists of the ribbon, the design surface, and the data dictionary, where you can select from the database's tables and fields.

Add Output Columns to a Report

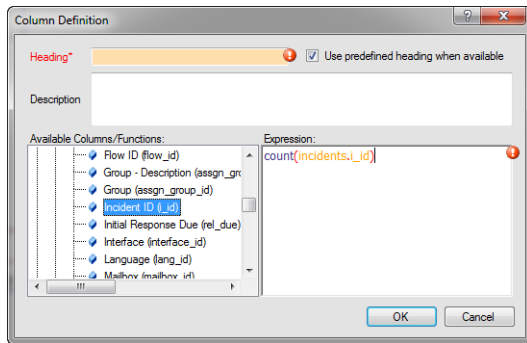
In this procedure, we will add two columns to the report's first output level, displaying incident queues and the number of incidents in each queue.

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 > 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's a unique identifier for incidents as no two incidents share the same ID number.

7. To change the name of the column you're adding, enter the name you want in the **Heading** field. For our example, you can enter **Number of Incidents**.
8. Click **OK**.

The new column automatically displays a count of all incidents in each incident queue.

Results:

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, see [Overview of Report Output Columns](#).

Add a Second Output Level to a Report

Now we will add a second output level to the report that you can drill down into to view details about the incidents in the queues.

For an overview of output levels, see [Overview of Report Output Levels](#). Alternatively, 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. See [Overview of Linked Reports](#).

1. Click the **Level** tab and then click **Add Drilldown**.

You can enter 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 [Overview of Report 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's 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.

The **Level Settings** window opens, displaying information about the new output level.

2. Click the **Link** drop-down list and select **count(incidents.i_id)**.
3. Click **OK**.

Tip: If your report has multiple output levels, you can click the **Level** drop-down list at the top of the design surface and select the level you want.

Results:

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. See [Add Output Columns to a Report](#).

Add a Search Filter to a Report

You can add a fixed filter to return only unresolved or updated incidents in the report.

Fixed filters prevent reports from querying more information than you need in the report. You could also add runtime selectable filters 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, runtime selectable filters let you select the values you want when you run the report.

1. Click the **Home** tab and then click **Add Filter**.

The Add Filter window opens.

2. If you want to specify a name for the filter, enter a name in the **Name** field.

This name is used only on the report designer. 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 runtime selectable filter, we would leave this check box selected and enter 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 runtime 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 > Status status_id**.

This is the database field we are using to filter the report's output by.

5. Click the **Operator** drop-down list and select **In List**.

6. Select the items you want to include in the search.

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 runtime, you can change the search options when you run the report.

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.

7. Click **OK**.

Related Topics

- [Overview of Report Filters](#)
- [Change Menu Filter Options](#)

Save a Custom Report

The final step in creating the report is to save it to a location where the report's audience can access it. After you save the report, your staff members can open it, assuming they have permission to do so.

1. Click the arrow next to Save 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 the Public Reports folder or a custom subfolder beneath it. 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 enter the name you want for the folder.
3. Enter the name for the report in the **Name** field. The name can be up to eighty characters long.
4. Click **OK**.

Results:

Your staff members can now access the report from the Reports explorer or you can add the report to their 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.

If you have problems when you try to run a custom report, you can examine it using the report analyzer. This helps 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.

Related Topics

- [Overview of Navigation Sets](#)
- [Overview of Custom Reports](#)
- [How to Review Report Performance](#)
- [Set Report Permissions](#)

Custom Reports

Overview of 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 runtime 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.

Overview of the Report Designer

You create and edit custom reports from the report designer.

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 Analytics explorers, from the report designer to enhance your reports.

You can customize reports based on your organization's needs using the report designer's ribbon, data dictionary, and design surface components.

Related Topics

- [Overview of the Analytics Explorers](#)
- [Open the Report Designer](#)
- [Import a Report from an XML File](#)

Open the Report Designer

Use the report designer to create and edit custom reports.

In most cases, you will open the report designer from the **Reports** explorer. If your navigation set is configured to add reports from the file menu, you can click **File** and select **Report**.

Note: If your site has an Agent Browser UI associated with it, a message displays stating that not all Analytics features are supported by the interface. Click **OK** to continue.

After you open the report designer, 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's hidden, you can display it again.

1. Click **Analytics** on the navigation pane.
2. Double-click **Reports Explorer**.
3. To edit an existing custom report, right-click the report and select **Edit**.
The report designer opens.
4. To create a report, click the **New Report** button.
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.
Options include Grid Report, Standard Report, and Standard Report with Chart.
When you select a layout, the report designer opens with the selected layout.
6. To create a copy of a report from another interface by importing a report definition, click **Import Existing Report Definition**. See [Import a Report from an XML File](#).

Related Topics

- [Overview of Navigation Sets](#)
- [Reports Explorer](#)
- [Overview of Report Designer Components](#)
- [Import a Report from an XML File](#)

Import a Report from an XML File

Using existing report definitions allows you to create duplicates of complex custom reports from other interfaces without manually re-creating the reports.

If you have multiple interfaces, you can use report definitions saved in XML files to create reports on other interfaces. If you have previously exported segments, you can also import these to create custom reports. Since reports aren't 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.

Note: When you import a report definition to create a report on a different B2C Service 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.

When you import a report, the permissions from the imported report aren't changed. However, the owner of the report is changed to the staff member who imports the report.

1. Click **New Report** on the Report explorer's ribbon to select the report layout.
2. Click **Import Existing Report Definition**.
3. Select the XML file containing the report definition.
4. Click **Open**.

The imported report opens on the report designer where you can modify it.

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.

If the XML file you import contains a custom script, a dialog displays where you can choose to import the script or not. See [Create a Custom Script in a Report](#).

5. Save the new report.

Related Topics

- [Overview of Custom Objects](#)
- [Export a Report Definition to an XML File](#)

Overview of Report Designer Views

There are four different ways to view a report as you edit it in the report designer.

Each view presents your report in a different way and gives you access to different ribbon tabs.

- **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're 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. While you can save the report, we recommend that you add fixed filters or reduce the number of tables in the report to ensure that the report runs efficiently. In addition, any custom scripts added to the report are checked for PHP errors when you select these views. If any problems are found, a message displays providing information about the error. The report can be saved, but the custom script will be disabled when users run the report. See [Create a Custom Script in a Report](#).

- **Design View**—This is the default view when you open the report designer. 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. In addition, you can define the filter label that displays in the Quick Search by selecting the filter you want to display and moving it to the top of the list.

Related Topics

- [Specify Report Views](#)

Specify Report Views

When you open the report designer, you can select from four view options to display your report.

1. Edit a report.

By default, the report opens in the design view.

2. Click the arrow on the **Views** button on the Home tab and select the view you want.

The report display is updated to use the view you select.

Related Topics

- [Overview of Report Designer Views](#)

Overview of Report Designer 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 designer.

These components provide access to the data, report sections, parameters, and other items you use to create and edit custom reports.

The ribbon is shown at the top of the content pane and gives you access to the tools you need to create and edit reports. The design surface is shown in the middle of the content pane and shows the data area and other fields. The data dictionary is shown at the bottom of the content pane and gives you access to the fields in the database that you can use in your custom reports.

Report Designer Ribbon

The report designer ribbon includes eight tabs from which you can access options to create or edit a report.

The ribbon tabs vary depending on which view you use and the object selected on the design surface. For example, 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 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 isn't available. Fewer tabs are available when using the report and layout views.

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 icons to the right of their names that you can click to open a window. For example, the Page Setup tab has Print, Background, and Display groups. You can click the small icon shown on the Background group to open the Display Options window.

Windows give you access to the same features you can access from the ribbon. However, the windows group the options differently, and sometimes contain additional options not available from the ribbon.

When explaining features that can be accessed from a window or the ribbon, we describe the feature using the window, but remember that the buttons on the ribbon provide shortcuts to most of the same features available on windows.

Related Topics

- [Overview of the Report Ribbon](#)

Report Designer Home Tab

The report designer's Home tab gives you access to options that impact the entire report.

From the Home tab, 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.

Home Tab

| Group/Button | Description |
|----------------|---|
| Views | This button lets you choose whether to view the report using the report, layout, design, or data set view. See Overview of Report Designer Views . |
| Layouts | The buttons in this group let you select a style and layout for the report. |
| 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. See Apply a Layout to a Dashboard or Apply a Layout to an Output Level . |
| Tabular | Click this button to edit the report in a tabular layout. This is the default layout used when creating a report. See Display Data Using Record or Tabular Layouts . |
| Record | Click this button to edit the report in a record layout. See Display Data Using Record or Tabular Layouts . |
| Properties | The buttons in this group let you modify properties that apply to the entire report. |

| Group/Button | Description |
|-----------------|--|
| 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. See Change Report Properties . |
| Definition | <p>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. See View a Report Definition.</p> <p>Click this button and select Export to export the definition to a file which you can import into another interface to copy the report. See Export a Report Definition to an XML File.</p> |
| Records | Click this button to select the record commands buttons you want to display on the report's Home tab. See Change Record Command Actions . |
| Scheduling | <p>Click this button to schedule the report to be sent to other individuals. See How You Schedule Reports.</p> <p>This button appears only when scheduled reports are enabled. For information about enabling scheduled reports, contact your Oracle account manager.</p> |
| Permissions | Click this button to define which profiles should have access to run and edit the report. See Set Report Permissions . |
| Audit Log | <p>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. See View a Report Audit Log.</p> <p>The Expanded Report Audit Log is also available. This shows you when reports and dashboards have been generated, printed, exported, and previewed over the previous 30 days. See View the Expanded Report Audit Log.</p> |
| References | <p>Click this button to access pre-defined reports that show you the workspaces, navigation sets, dashboards, and report links that use the report you're editing. Viewing these items before editing a report ensures that you're 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.</p> <p>If you have the Analytics Administrator profile permission, you can access versions of these reports that include search options in the Report Management component. See How to Monitor Report Usage.</p> |
| Inline Editing | <p>Click this button to select options for inline editing, which allows staff members to edit data directly from a report. See Enable Inline Editing.</p> <p>This button does not display if the staff member's profile lacks inline editing permission.</p> |
| 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. See How You Change Report Sort Order . |
| Rollups | Click this button to select rollup options and open the Rollups window. See Define Rollups . |
| 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. See How You Slice Report Data . |
| Data Dictionary | Click this button to hide or display the data dictionary at the bottom of the report designer. You can select fields from the database to use in the report from the data dictionary. See Overview of the Data Dictionary . |

| 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. See <i>Overview of Table Relationships in Reports</i> . |
| Filters | Click this button to view, add, edit, or delete report filters. See <i>Create a Fixed or Runtime Selectable Filter</i> . |
| Variables | Click this button to view, add, edit, or delete variables. See <i>Variables</i> . |
| Analyze | Click this button to preview the report's database query. See <i>How to Review Report Performance</i> . |
| Add Filter | Click this button to add a report filter. See <i>Create a Fixed or Runtime Selectable Filter</i> . |
| Add Variable | Click this button to add a variable to the report. See <i>Variables</i> . |
| Comparison | Click this button to add comparison date offsets for comparison columns. See <i>Add a Comparison Value Column to a Report</i> . |
| Add Column | Click this button to add a column to the report. See <i>Add a Column to a Report</i> . You can also add columns by dragging them from the data dictionary onto the design surface. |

Report Designer Display Tab

The Display tab on the report designer ribbon provides several ways to view a report.

This Display tab 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 designer's Display tab also includes a Show/Hide 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 groups, see *Report Display Tab*.

Display Tab Show/Hide Group

| 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. |

Report Designer 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. See [Create a Text Field](#) and [Images Explorer](#).

Insert Tab

| Group/Button | Description |
|--------------|---|
| Column | Click this button to open the Column Definition window to add a column to the report. See Add a Column to a Report . 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. See Add a Text Field to a Header or Footer . |
| Image | Click this button to add an image to your report. See Add an Image to a Report Section . |
| 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. See How to Add and Edit Charts . |
| Exception | Click this button to add data exceptions to the report. See Create a Data Exception . |

Report Designer Level Tab

The report designer'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 list on the design surface.

You can apply level filters and group filters from this tab and add custom scripts to the report level you're viewing. You can also click Edit to add output descriptions to the report level.

Level Tab

| Group/Button | Description |
|--------------------|--|
| Current Level | The buttons in this group let you edit the report level that's currently selected on the Level drop-down list 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. See Overview of Report Output Levels . |
| Delete | Click this button to delete the selected level. This option isn't available for the top level of a report. 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. See Overview of Report Output Levels . |
| Custom Scripts | Click this button to add a custom script to the selected level. See Create a Custom Script in a Report . |
| Drilldown Settings | The options in this group let you select the drill-down filter and link for the level. See Configure Recursive Drill-Down Levels . |
| Drilldown Filter | Click this drop-down list 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. |

| Group/Button | Description |
|--------------------|--|
| Drilldown Link | Click this drop-down list 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. 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 list. See Change Record Command Actions . |
| Open in Window | Click this drop-down list 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. See Group Data in an Output Level . |
| Change Group Order | Click this button to change the order of the grouped output columns. See Change Data Grouping Order . |
| 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. See Create a Level Filter . |
| Group Filters | Click this button to view, add, edit, or delete group filters. See Create a Group Filter . |
| Add Level Filter | Click this button to add a level filter. See Create a Level Filter . |
| Add Group Filter | Click this button to add a group filter. See Create a Group Filter . |
| Record Limit | Click this button to limit the number of records that can be returned on the selected level. See Set Record Row Limits and Page Breaks . |

Report Designer Page Setup Tab

The buttons on the Page Setup tab let you change printing options for the report. You can also change the report's background, margins, and width.

Page Setup Tab

| 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. See Print a Report . 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 report. Options include Normal, Narrow, Medium, and Wide. |
| Size | Click this button to select the size of the paper used when printing the report. Options include Letter, Legal, Executive, A3, A4, and A5. |
| Portrait/Landscape | Click these buttons to print the report in portrait or landscape mode. |

| Group/Button | Description |
|-------------------------|---|
| 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. Options include 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. Options include Best Fit and Fit to Window. When using Best Fit, all content in the report is examined to calculate column width before the report displays. To reduce the report load time, you can enable Improve Display Performance. See Change Data Display Options . |

Report Designer Design Tab

Use the Design tab to configure and add columns and data types to your custom report.

The report designer's Design tab is available when you click a column, text field, exception, or chart. This 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 options you can select for columns, text fields, data exceptions, charts, tables, and filters or variables are described in the following tables.

Note: The groups and buttons available on this 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.

Design Tab Column Options

| Group/Button | Description |
|----------------|---|
| Edit | Click this button to open the Column Definition window, from which you can edit the column's definition. See Change Trend Options . |
| Arrange | The buttons in this group let you hide, remove, and order the position of the selected column. |
| Hide | Click this button to hide the selected column. 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 display in the column's default location. |

| Group/Button | Description |
|----------------------------|--|
| | |
| 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. See How You Change Report Sort Order . 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. See Add Calculations to a Report Column . |
| 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. See Overview of Linked Reports . |
| 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. See Define Rollups . |
| 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. Available options include: <ul style="list-style-type: none"> • Display Group Counts • Display Rollup Headings • Display Column Headings • 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. See Computed Fields for information about computed columns. |
| Trend Options | The buttons in this group let you edit trend options for the selected trend column. See Change Trend Options . |
| 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. |
| % 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. See Add a Comparison Percentage Column to a Report and Add a Trend Percentage Column to a Report . |

| Group/Button | Description |
|----------------------|--|
| 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 if there's a positive change, negative change, or no change. |
| Icon Colors | Click this button to change the colors used for the icons that indicate a positive change, negative change, or no change. |

Text Field Tab Options

| Group/Button | Description |
|-----------------------------|--|
| Edit | Click this button to open the Edit Text Field window, from which you can edit the selected text field. See 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. See Specify an Anchor Style for a Text Field . |
| Bring to Front/Send to Back | Click these buttons to place the selected item on top of or beneath overlapping items. |
| Size to Fit | Click this button to automatically shrink or expand the element containing the text field to fit the selected item. 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. Available options include: <ul style="list-style-type: none"> • None • Narrow • Medium • Wide • 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. |

Design Tab Data Exception Options

| Group/Button | Description |
|--------------|--|
| Edit | Click this button to open the Exception Editor, from which you can edit the selected data exception. See Create a Data Exception . |

| Group/Button | Description |
|-----------------------------|---|
| Display Reference | The drop-down list 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. See <i>Create a Data Exception</i> . |
| Delete | Click this button to remove the selected exception from the report. |
| Move Up/Move Down | Click these buttons to move the selected exception up or down in the list of exceptions. See <i>Order Data Exceptions</i> . |
| Insert Before/ Insert After | Click these buttons to add a new data exception before or after the selected exception. See <i>Order Data Exceptions</i> . |
| Tabular Display | The options in this group let you configure the tabular display for the selected data exception. See <i>Create a Data Exception</i> . |
| 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. See <i>Order Data Exceptions</i> . |
| 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 | 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. |
| % Not Meeting 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. |

Design Tab Chart Options

| Group/Button | Description |
|-----------------------------|---|
| Define Data Source | Click this button to open the Chart Wizard where you can select data options for your chart. See <i>Add or Edit a Chart with the Chart Wizard</i> . |
| 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. |

| Group/Button | Description |
|--------------------|--|
| 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. See <i>Add or Edit a Chart with the Chart Wizard</i> for descriptions of the available chart types. |
| Chart Style | Click this button to select a chart style for the selected chart. See <i>Chart Styles Explorer</i> . |
| 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. See <i>Chart Styles Explorer</i> . 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. See <i>Chart Styles Explorer</i> . 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. See <i>Chart Styles Explorer</i> . |

Design Tab Table Options

| Group/Button | Description |
|---------------------|--|
| Tables | Click this button to open the Data Set window, where you can edit the tables used in the report. See <i>Overview of Table Relationships in Reports</i> . |
| Outer Join | Click these buttons to join the selected table with the parent table using an outer or an inner join. See <i>Overview of Table Joins</i> . |
| Inner Join | |
| Join Condition Menu | Select the fields used to link the selected table with the parent table from this drop-down list. |

Design Tab Filters and Variables Options

| 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. See <i>Overview of Report Filters</i> . |
| 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. See <i>Edit a Logical Expression</i> . |
| 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. See <i>Overview of Report Filters</i> and <i>Add Report Variables</i> . The type of filter you select determines whether you add a report, level, or group filter. |
| Delete | Click this button to remove the selected item from the report. |

| Group/Button | Description |
|--------------------------------|--|
| Move Up/Move Down | Click these buttons to move the selected runtime selectable filter or variable up or down in the list of filters or variables on the data set view. 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 runtime selectable filter on the docked filters section of the report. See Add Variables or Runtime Filters to Docked Filters . |
| Display in Search Criteria | Select this check box to include descriptions of the selected variable or filter in the search criteria description. See Overview of Search Criteria Descriptions . |
| Runtime Selectable | Select this check box to make the selected filter available on the Search window when the report is run. See Create a Fixed or Runtime Selectable Filter . |
| Required | Select this check box to make the selected runtime selectable filter required. Staff members must specify values for required filters when they run the report. |

Report Designer Layout Tab

The report designer'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. See [Chart Styles Explorer](#) for information about options available on this tab.

Report Designer Format Tab

The report designer Format tab provides access to general display options, such as fonts, margins, borders, and width.

The report designer's Format tab is available when you click a column, data exception, or chart. 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.

Format Tab

| 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. This group does not display when editing a chart. |
| Margin | Click this button to select the width of the margins around the selected column. Options include None, Narrow, Medium, Wide, and Custom. Selecting Custom lets you specify the number of pixels for the top, bottom, left, and right margins. This button displays when editing a column. |

| Group/Button | Description |
|------------------------|---|
| Border | <p>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.</p> <p>This group does not display when editing a chart.</p> |
| Display | <p>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.</p> <p>This group displays when editing a column.</p> |
| Conditional Formatting | <p>Click this button to apply conditional formatting to the column's data.</p> |
| Width | <p>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.</p> |
| Freeze Column | <p>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.</p> <p>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.</p> |
| Hide Repeating | <p>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.</p> <p>You can also hide repeating values on the Column Format window. 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're still included in column calculations and auto-filtering.</p> |
| Options | <p>Click this button to select display options for the column.</p> |
| Number | <p>The options in this group let you display numeric values as a gauge and select numeric formats.</p> <p>This group displays when selecting a column containing numeric values.</p> |
| Date | <p>The options in this group let you select a date format for the column and view the format.</p> <p>This group displays when selecting a column containing date/time data.</p> |
| Image | <p>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. See Create a Data Exception.</p> <p>This group displays when editing a data exception.</p> |
| Current Selection | <p>The options in this group let you select the area of the chart you want to edit and reset the style options.</p> <p>This group displays when editing a chart.</p> |

| Group/Button | Description |
|----------------------|---|
| Area Menu | Select the area of the chart you want to edit from this drop-down list. 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's 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. See Create or Edit a Chart Style . This group displays when editing a chart. |

Related Topics

- [How You Edit Column Formatting](#)

Report Designer Options Tab

Use the Options tab on the report designer to change how your custom report looks.

The 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 displays above the Options tab. For example, after selecting a report section you could edit the section's margins, borders, fill colors, and layout options from the tab.

Options Tab

| Group/Button | Description |
|--------------|---|
| Margin | Click this button to select the width of the margins around the item. Options include None, Narrow, Medium, 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. See Change the Display of a Report Section . This group isn't 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. |
| 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. |

| Group/Button | Description |
|----------------|--|
| Layouts | <p>Click the down arrow on this button to select a layout for the chart section. See Add a Chart Using Chart Layouts.</p> <p>This button is shown when a chart is selected on the report.</p> |
| Auto Height | <p>If Automatic layout is selected, you can click this button to prevent the height of the section from being automatically set.</p> |
| Table Layout | <p>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. See Change the Layout of a Report Section.</p> |
| Add Text Field | <p>Click this button to add a new text field to the report.</p> <p>This button is shown when a text field, image, or report section is selected on the report.</p> |
| Add Chart | <p>Click this button to add a new chart to the report.</p> <p>This button is shown when a chart is selected on the report.</p> |
| Add Column | <p>Click this button to add a new output column to the report.</p> <p>This button is shown when a column is selected on the report.</p> |

Report Design Surface

The design surface displays all of the sections you add to your custom report from the report designer ribbon.

Only report sections displayed on the design surface are included in a report when it runs. After 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 designer, 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 Display tab.

Overview of the Data Dictionary

You can use the data dictionary to access all the tables in the database and view details about each tables' columns.

The data dictionary is shown on the report designer 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.

View Database Information on the Report Designer

Before you add database fields to a report from the data dictionary, you may need to view information about the field's contents.

When you create or edit a report, the data dictionary shown on the report designer gives you access to information about the tables and fields in the database.

Tip: If you want access to the data dictionary without opening the report designer, you can also open it from **Configuration > Database > Data Dictionary**.

1. Open a report on the report designer.
2. To view a brief description of a table or field, hover over the name of the object in the data dictionary.
3. To view a detailed description of a table or field, right-click the name of the object in the data dictionary and select **View Data Definition**.
4. To view the entire data dictionary that describes all the standard tables and fields in the database, right-click any table name and select **View Full Data Dictionary**.
The data dictionary opens in a separate window.

Customize the Data Dictionary

You can hide available tables and fields in the data dictionary 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 designer's data dictionary. This prevents customizing the data dictionary to display only custom object tables. See [Overview of Custom Objects](#).

1. Click **Customize** at the top of the data dictionary.
The Customize Data Dictionary window opens.
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're 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 **OK**.

Move the Data Dictionary

By default, the data dictionary is found at the bottom of the report or dashboard designer, but you can reposition it on the content pane.

The following procedure is the same as that used to move the report explorer on the dashboard designer.

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 designer.
2. Drop the data dictionary when the section where you want it is highlighted.

Results:

The designer displays the data dictionary in the new location.

Since the location of the data dictionary is stored in your personal settings, it stays where you placed it until you move it again.

Related Topics

- [Overview of Dashboards](#)

Overview of Report Sections

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 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. The output level you're currently viewing on the design surface is shown in the Level drop-down list 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 list. See [Drilling Down in Reports](#) and [Overview of Report Output Levels](#).
- **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. See [Overview of Report 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. See [How to Add and Edit 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. See [Add an Image to a Report Section](#).
- **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. See [Create a Data Exception](#).

Tip: If you want to highlight data in a single column, you can apply conditional formatting to the column instead of using data exceptions. See [How You Edit Column Formatting](#).

- **Report output level content**—Each output level on a report can have different headers, footers, descriptions, charts, data exceptions, and tabular data. See [Overview of Content on Report Output Levels](#).
- **Search parameters**—You can add search parameters to your report to define the data shown in the report's columns, charts, and exceptions. See [Overview of Search Parameters](#).

Overview of Content on Report Output Levels

Each output level of a report can have different content. This includes docked filters, headers, footers, descriptions, charts, tabular data, and data exceptions.

Some areas of report output levels contain text fields, such as the report title, and others are designed to display non-tabular data, such as charts. The content you should include in each output level is primarily determined by the audience and the purpose of the output level. For example, a custom report that only you will use may not need a report header, report footer, or similar report sections. However, these are useful if the report will be sent to other staff members. If you add an area to an output level that does not have content in it, that part of the output level does not display when the report is run.

Note: When creating a report, you can select a layout to have the appropriate output level areas automatically included in the report. See [Display Data Using Record or Tabular Layouts](#).

Report Output Level Areas

| Report Section | Description |
|------------------------------|--|
| Docked Filters | <p>This is used to display runtime selectable filters at the top of the report for easy changes to the report search parameters.</p> <p>This is added to or removed from the design surface by selecting or clearing the Docked Filters check box on the Display tab.</p> |
| Page Header | <p>This displays only on printed reports. By default, the page header contains the Current Date text field, which is a variable that outputs the date when the report is run.</p> <p>This is added to or removed from the design surface by selecting or clearing the Page Header check box on the Page Setup tab.</p> |
| Report Header | <p>This contains text fields that display at the top of each page of the report. By default, the report header contains the Title and Sub Title text fields.</p> <p>This is added to or removed from the design surface by selecting or clearing the Report Header check box on the Display tab.</p> |
| Output Descriptions | <p>This 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. See Display Output Descriptions.</p> <p>This is shown on the design surface by selecting Display Descriptions Inline from the Output Descriptions button on the Display tab.</p> |
| Search Criteria Descriptions | <p>This 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. See Overview of Search Criteria Descriptions.</p> <p>This is shown on the design surface by selecting Display Search Criteria Inline from the Search Criteria button on the Display tab.</p> |
| Charts | <p>This 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.</p> |

| Report Section | Description |
|-----------------|--|
| | This is added to or removed from the design surface by selecting or clearing the Charts check box on the Display tab. |
| Data Area | <p>This contains database fields you add to the report, which outputs tabular data. This is used in almost all reports, as it provides text with specific details about specific records or specific numbers summarizing groups of records.</p> <p>This is removed from the design surface by selecting Do Not Display Data from the Data button on the Display tab.</p> |
| Report Footer | <p>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.</p> <p>This is added to or removed from the design surface by selecting or clearing the Report Footer check box on the Display tab.</p> |
| Data Exceptions | <p>This 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.</p> <p>This is added to or removed from the design surface by selecting or clearing the Exceptions check box on the Display tab.</p> |
| Page Footer | <p>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 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.</p> <p>This is added to or removed from the design surface by selecting or clearing the Page Footer check box on the Page Setup tab.</p> |

Overview of 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's returned, or you can hide filters so their values cannot be changed by staff members.

Search Parameters

| 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 runtime selectable. Fixed filters cannot be changed when the report is run, but runtime selectable filters can be changed by staff members. runtime selectable filters can also be required if you want to force staff members to select filter values. See Create a Fixed or Runtime Selectable Filter . |
| Level Filters | Level filters are similar to report filters and can be fixed or runtime selectable. However, unlike report filters, level filters limit the data accessible at individual output levels rather than the entire report. See Create a Level Filter . |

| Parameter | Description |
|------------------------|---|
| Group Filters | Group filters can be fixed or runtime selectable and are applied to data that's 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. See Create a Group Filter . |
| 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. See Variables . |
| 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. See Add a Comparison Percentage Column to a Report and Add a Comparison Value Column to a Report . |

Apply a Layout to an Output Level

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 aren't 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 designer'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. See [Open the Report Designer](#) for more information about adding layouts from the **Getting Started** window.

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 list at the top of the design surface.
2. Click the **Home** tab.
3. Click **Report Layouts** to open the report layouts menu.
4. Click one of the layouts to apply it to the current output level.

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. |
| 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 isn't available on the Getting Started window. |

| Layout | Description |
|--------|--|
| | When a report output level includes a chart but not tabular data, you can add data for the chart directly from the Chart Wizard . See Add or Edit a Chart with the Chart Wizard . |

Display and Hide a Report Section

You can select which sections are displayed on a report.

While layouts automatically add certain report sections to the design surface, you may want to customize the sections displayed after 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.

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.
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.
The design surface changes to remove the report section.

Resize a Report Section

You can resize a report 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.

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.

Change the Display of a Report Section

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. See [Apply a Style to a Report](#) 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 Options tab.

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.

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're 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 field information.

Fill Tab

| 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. |
| 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 for the Color option. Selecting a color automatically clears the No Fill check box and enables the other options. |
| Gradient Mode | Select the positioning of the primary and secondary colors for the background from the Gradient Mode drop-down list. 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. |
| 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.
 - a. Enter field information.

Borders Tab

| Field | Description |
|----------------|--|
| Color | Click this box to select a color for the border. |
| Style | Click this drop-down list to select a border styles. Options include 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 list to select the pixel size of the border. You can select a number between 1 and 10 pixels. |
| Preview | This area defines the placement of the borders you define. Select any of the options to place the borders, or click the area in the Preview white space where you want the border. |
| Border buttons | Click a button showing a border 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. |

8. Click **OK**.

Related Topics

- [Change Colors](#)

Enable Automatic Layout of a Report Section

Applying an automatic layout to a report section lets you quickly arrange the section’s contents for better viewing.

When applying an automatic layout, the report section’s charts, images, and text fields are placed 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.

1. Add the report section you want to the report output level.
 - o To add the report header or footer sections, click the **Display** tab and select the **Report Header** or **Report Footer** check box.
 - o 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 report section on the design surface to select it.
3. Click the **Options** tab and click **Automatic**.

- To prevent the section's height from being automatically adjusted to fit the items you add to the section, click **Auto Height**.

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.

Change the Layout of a Report Section

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.

- Add images and text fields to the report section.
- Click the report section on the design surface and then click the **Options** tab.
- If the section has a manual layout, click **Automatic** to change to an automatic layout.
- Click **Table Layout**.
- To give each column in the section's table the same amount of width, select **Size All Columns Equally**.
- To give each row in the section's table the same amount of height, select **Size All Rows Equally**.
- To size each column to best show the column's contents, select **Auto Size All Columns**.
- To size each row to best show the row's contents, select **Auto Size All Rows**.
- To manually configure the table's layout, select **More Options**.
- Enter field information.

Edit Table Layout Properties Window

| Field | Description |
|------------|---|
| Show | Click this drop-down list 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 option to specify a certain size for the selected row or column in pixels. |
| Percentage | Select this option to specify a certain percentage of the total available space in the section to assign to the selected row or column. |
| Best Fit | Select this option to have the size of the selected row or column automatically adjusted to best fit the row's or column's contents. |

- Click **OK**.

How to Add Images, Text Fields, and Descriptions

Add an Image to a Report Section

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. See *Images Explorer*.

1. Click **Analytics** 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 designer's ribbon.
5. Click **Image** 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. See *Enable Automatic Layout of a Report Section*.
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. See *Specify an Anchor Style for an Image*.

Use a Filter or Variable in the URL Field

You can associate a filter or variable you create in a report to open a different web page depending on the value selected for the filter or variable.

When you view a report and click an image that's configured as a link, the web page the URL points to opens on the workstation's default browser.

1. Click **Analytics** 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.
See *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`. See *Overview of Report Filters* or *Variables*.

6. Right-click the image on the report designer and select **Edit Image Field**. The **Edit Image Field** window opens.
7. Enter the name of the filter or variable you created in the **URL** field. Surround the name in curly brackets.
For example, if the variable's name is \$webpages, enter **{\$webpages}** in the URL field. (Filter names do not begin with the dollar sign.)
8. Click **OK**.
9. Click **Save**.

What to do next

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.

Associate a URL with an Image

You can associate URLs with images to use the images as links.

When you view a report and click an image that's configured as a link, the web page the URL points to opens on the workstation's default browser.

1. Click **Analytics** 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. See *Add an Image to a Report Section*.
5. Right-click the image and select **Edit Image Field**.
The **Edit Image Field** window opens.
6. Enter the URL you want the image to link to in the **URL** field.
7. Click **OK** to close the window.
8. Click **Save**.

Results:

When you run the report and click the image, the web page the image links to opens in a web browser.

Add a Text Field to a Header or Footer

You can add text to a report's header and footer sections. This can be custom text you have created, or standard text that you can modify when editing the report.

Custom text fields, created in the **Text Fields** explorer, and standard text fields, such as Title, can be added 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. See *Create a Text Field* for information about creating and editing custom text fields in the **Text Fields** explorer.

1. Click **Analytics** 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 designer's ribbon.
5. Click **Text Field** 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.
To move a text field from one report section to another, both sections must have Automatic layout enabled. See *Enable Automatic Layout of a Report Section*.
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 **Save**.

Edit a Text Field in a Report

After adding a text field to a report section, you can edit it to change the fonts, colors, text, and other attributes.

You can have one generic text field that can be added to several reports, which can then be modified in each 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. You can edit these fields, but you cannot edit their dynamic value placeholders.

1. Right-click the text field in the report section on the design surface and select **Edit Text Field**.

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.

The **Edit Text Field** window opens.

2. Edit the text field on the Edit Text Field window.
3. Click **OK**.

Related Topics

- [Create a Text Field](#)

Display a Filter Value in a Text Field

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.

1. Click **Analytics** 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. See *Overview of Report Filters*.

5. Add a text field to your report.
See *Add a Text Field to a Header or Footer*.
6. Right-click the text field and select **Edit Text Field**.
The **Edit Text Field** window opens.
7. Enter the text you want to display in the **Text** field on the window's Text tab. Enter the name of the filter with braces around it where you want the filter value to display in the field. **{filter_name}**
For example, if the report has a filter named Assigned that filters on the staff member assigned to incidents, you can enter **Assigned to {Assigned}** in the window's Text field.
8. Click **OK**.
9. Click **Save**.

Results:

When the report runs, the text field will display the static text entered in the field along with the filter or variable value that's currently selected. For example, if the filter value is currently Tina Smith, the text field will read Assigned to Tina Smith.

Specify an Anchor Style for an Image

You can change the default anchor style of an image in a report so that it moves with the bottom or right side of the report section when the section's borders are changed.

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.

1. Right-click an image on the design surface and select **Edit Image Field**.
See *Add an Image to a Report Section*.
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 **OK**.

Related Topics

- [Specify an Anchor Style for a Text Field](#)

Specify an Anchor Style for a Text Field

You can change the default anchor style of a text field in a report so that it moves with the bottom or right side of the report section when the section's borders are changed.

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.

1. Click a text field on the design surface to select it.
See *Add a Text Field to a Header or Footer*.

2. Click **Anchor** on the Text Field tab to view anchor style options.

The text field's current anchor style displays. The gray bars that are displayed show you 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.

Related Topics

- [Specify an Anchor Style for an Image](#)

Display 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 display 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.

1. Click the **Display** tab.
2. Click **Output Descriptions** and select the display option you want from the list.

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 select this option. |

Related Topics

- [Add Output Columns to a Report](#)
- [Add Text to Output Descriptions](#)

Add Text to Output Descriptions

You can add text to the output descriptions section of a report to help describe what the report output means.

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 list at the top of the design surface.
 - a. Click the **Level** tab, then click **Edit** to open the **Level Settings** window.
 - b. Enter the text you want to describe the output level in the **Description** field.
 - c. Click **OK**.
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 **Edit** to open the **Column Definition** window.
 - c. Enter the text you want to describe the column in the **Description** field.
 - d. Click **OK**.

Related Topics

- [Display Output Descriptions](#)

Overview of Search Criteria Descriptions

Search criteria descriptions provide additional information about the data displayed in a report.

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 display inline or on a tab in the report. You select where to place the descriptions from the Search Criteria button on the Display tab.

Related Topics

- [Add Search Criteria Descriptions](#)
- [Remove Search Criteria Descriptions](#)

Add Search Criteria Descriptions

You can select whether or not you want to show search criteria descriptions on a report, and how you want the descriptions to be displayed.

1. Click the **Display** tab.
2. Click **Search Criteria** and select what you want from the list.

Search Criteria Descriptions 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. |

Related Topics

- [Overview of Search Criteria Descriptions](#)
- [Remove Search Criteria Descriptions](#)

Remove Search Criteria Descriptions

You can remove search criteria descriptions that you do not want to display in a report.

1. Click the **Search Criteria Descriptions** tab or its area on the design surface.
2. Click the **Options** tab.
3. Click **Search Criteria**.
4. Clear the check boxes next to the descriptions you do not want to display.
5. Click **OK**.

Related Topics

- [Overview of Search Criteria Descriptions](#)
- [Add Search Criteria Descriptions](#)

Overview of Report 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. After 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 any of these.

- Fields from the database
- Functions
- Variables
- 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 that contain the data you see throughout B2C Service.

Fields from tables that are created for custom objects are also available (see [Overview of Custom Objects](#)). The database fields that can be used in reports are listed in the report designer'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.

Related Topics

- [Database Field Suffixes](#)

Database Field Suffixes

By adding a suffix to a database field, you can change the value that's returned in a report.

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.

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. |
| <code>.id</code> | This suffix prevents Analytics from performing a name lookup and returns the ID number stored in the field. For example, <code>answers.assgn_acct_id.id</code> would return the account ID number of the staff member an answer is assigned to. |
| <code>.desc</code> | 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, <code>incidents.prod_lvl1_id.desc</code> would return the text description of the parent product an incident is associated with. |
| <code>.name</code> | This suffix returns the name that's associated with the database field. For example, <code>answers.map_cat_lvl1_id.name</code> would return the name of the parent category an answer is associated with. 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. |
| <code>.curr_id</code> | This suffix returns the type of currency the value was stored in, rather than the currency value. For example, <code>opportunities.mgr_value.curr_id</code> could return <code>USD</code> , <code>GBP</code> , or another currency type. |
| <code>.rate_id</code> | This suffix returns the exchange rate that's used to calculate the field's currency value when returning the value in a different currency format. For example, <code>opportunities.rep_value.rate_id</code> could return <code>1.45000</code> or another exchange rate. |

| Suffix | Description |
|----------------------|---|
| <code>.native</code> | This suffix returns the field's value in its original currency instead of the currency determined by staff account or interface settings. For example, <code>opportunities.mgr_value.native</code> 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. |

Related Topics

- [Database Fields](#)

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.

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. See [Create a Data Exception](#).

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. See [Add an Image to a Report Section](#). Using a variable in a text field lets you display the variable's current value in the text field. See [Display a Filter Value in a Text Field](#).

Add Report Variables

Before you can use variables in report 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.

1. Click the **Home** tab.
2. Click **Add Variable**.

The **Add Variable** window opens.

3. Enter a name for the variable in the **Name** field.

Variable names are always preceded by the dollar sign.

The options on the Add Variable window change depending on the variable type that's selected.

4. Enter an optional prompt in the **Prompt** field.

The Prompt field isn't available when using a Replacement Value variable type, as this type doesn't display when running a report

This text displays on the Search window when running the report. If this field is left empty, the variable's name displays instead.

5. Select the variable type from the **Type** drop-down list.

Variable Types

| Field | Description |
|---------------------------|--|
| Predefined List variables | <p>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.</p> <ul style="list-style-type: none"> ○ 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 | <p>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 <code>incidents.status</code> and another for <code>incidents.assgn_acct_id</code>.</p> <p>When you select this type, you must select a data type for the variable. See step 7 in this procedure for a description of the available data types.</p> |
| Ad Hoc Value | <p>Select this type to allow staff members to enter their own value for the parameter at runtime, 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.</p> <p>When you select this type, you must select a data type for the variable. See step 7 in this procedure for a description of the available data types.</p> |
| Replacement Value | <p>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 enter the expression. This lets you use a short variable name rather than a lengthy expression.</p> |

6. If using a predefined list variable type, select the list to use from the **List Name** drop-down list.

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 list.

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. |

| Data Type | Description |
|---------------|---|
| 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, <code>incidents.status</code>). This data type isn't available for ad hoc values. |

8. If using a user-defined list variable type, create the list items you want to include.
 - a. Click **Add Item**. The **Edit Variable List Item** window opens.
 - b. Enter 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 **OK**.
 - 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, enter a default value for the variable in the **Default** field.
11. Do one of the following:
 - o If using a replacement variable type, enter the expression you want the variable to replace.
 - o Click **Use Data Dictionary** to open the data dictionary to create the expression from database fields and functions.
12. Click **OK**.

Related Topics

- [Variables](#)
- [How to Use Variables in Columns](#)

How to Use Variables in Columns

You can use variables you have created in the output columns you add to a report.

After you create a variable in a report, it's added to the variables list in the report designer 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.

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.

Related Topics

- [Add a Column to a Report](#)

Computed Fields

You can create computed fields and use them in your reports.

Computed fields aren't actual fields in the database, but are calculated from the columns in your output level. Before the output level has columns added, computed fields aren't available. After 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 [Add a Comparison Value Column to a Report](#). The Trend Value and Trend Percentage Value computed fields are described in [Add a Trend Percentage Column to a Report](#) and [Add a Trend Value Column to a Report](#).

Related Topics

- [Moving Total](#)
- [Percentage of Average](#)
- [Percentage of Total](#)
- [Running Average](#)
- [Running Total](#)
- [Moving Average](#)
- [Change the Number of Data Points](#)

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, d_i , and number of data points, N , is:

$$(d_{i-(N-1)/2} + d_{i-(N-1)/2 + 1} + \dots + d_i + \dots + d_{i+(N-1)/2 - 1} + d_{i+(N-1)/2})/N.$$

For an even number of data points, the centered average at i for a given data point, a_i , and number of data points, N , is:

$$(d_{i-N/2} + 2*d_{i-N/2+1} + \dots + 2*d_i + \dots + 2*d_{i+N/2-1} + d_{i+N/2}) / 2N.$$

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. See [Change the Number of Data Points](#).

Related Topics

- [Computed Fields](#)

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.

Related Topics

- [Computed Fields](#)

Change the Number of Data Points

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.

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. Enter the number of data points you want to use in the calculation.
4. Click **OK**.

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.

Related Topics

- [Computed Fields](#)

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.

Related Topics

- [Computed Fields](#)

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.

Related Topics

- [Computed Fields](#)

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.

Related Topics

- [Computed Fields](#)

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.

Related Topics

- [Computed Fields](#)

Functions for Reports

Functions let you 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)`. You can also combine different functions and database fields in the same column's expression.

Note: There's a limit of 3,500 characters in the column expression field. You can use replacement variables to create expressions that require more characters. See [Add Report Variables](#).

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 enter 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.

Functions

| Function | Description |
|---|--|
| Aggregate Functions | Select from the following to use an aggregate function in the expression. Aggregate functions can be used only when defining output. |
| <code>avg(expr)</code> | This function computes an average value for the data set <code>expr</code> . |
| <code>count(expr)</code> | This function returns the number of rows included in the data set <code>expr</code> . |
| <code>first(expr, sort column1[, sort column2][, ...])</code> | This function returns the first value of data set <code>expr</code> based on the order of the specified sort columns. For example, the expression <code>first(threads.note, threads.entered, threads.seq)</code> returns the first thread note in the data set based on time entered and thread sequence. |
| <code>group_concat(expr, separator[, sort column 1, ASC DESC][, sort column 2, ASC DESC][, ...])</code> | This function allows you to combine multiple values from data set <code>expr</code> into a delimited list in a single row. The list is delimited by <code>separator</code> and ordered by the specified sort columns. For example, the expression <code>group_concat(threads.note, ',', threads.entered, ASC)</code> returns a comma-delimited list of thread notes ordered by time entered ascending. |
| <code>last(expr, sort column1[, sort column2][, ...])</code> | This function returns the last value of data set <code>expr</code> based on the order of the specified sort columns. For example, the expression <code>last(threads.note, threads.entered, threads.seq)</code> returns the last thread note in the data set based on time entered and thread sequence. |
| <code>max(expr)</code> | This function returns the largest numerical value, the last string in alphabetical order, or the latest date in the data set <code>expr</code> . |
| <code>min(expr)</code> | This function returns the smallest numerical value, the first string in alphabetical order, or the earliest date in the data set <code>expr</code> . |
| <code>sum(expr)</code> | This function returns the sum of the values in the data set <code>expr</code> . |
| <code>sum_distinct(expr, reference)</code> | 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 <code>sum_distinct(sa_period2accts.quota, sa_period2accts.acct_id)</code> . |
| <code>stddev(expr)</code> | This function returns the standard deviation of <code>expr</code> . For example, the expression <code>stddev(answers.solved_count)</code> returns the standard deviation of all the values in the <code>solved_count</code> column of the <code>answers</code> table. |
| String Functions | Select from the following to use a string function in the expression: |
| <code>concat(str1, str2)</code> | 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 <code>concat('www.', 'global', '.com')</code> returns the value <code>www.global.com</code> . |
| <code>instr(str, substr)</code> | This function returns the numeric position (in characters) of the initial occurrence of string <code>substr</code> in string <code>str</code> . For example, the expression <code>instr('globalcellphones.com', 'cell')</code> returns the value 7. |

| Function | Description |
|---|---|
| <code>length(str)</code> | This function returns the length (in characters) of the string. For example, the expression <code>length('cell phones')</code> returns the value 10. |
| <code>lower(str)</code> | This function returns string <code>str</code> in all lowercase characters. For example, the expression <code>lower('Global.COM')</code> returns the value <code>global.com</code> . |
| <code>ltrim(str)</code> | This function returns the string <code>str</code> without leading spaces. For example, the expression <code>ltrim(' Cell phone')</code> returns the value <code>Cell phone</code> . |
| <code>lpad(str1, x, str2)</code> | This function returns <code>str1</code> padded on the left with <code>str2</code> until <code>str1</code> is <code>x</code> characters long. For example, the expression <code>lpad('phone', 10, '@')</code> returns the value <code>@@@@@phone</code> . |
| <code>rpadd(str1, x, str2)</code> | This function returns <code>str1</code> padded on the right with <code>str2</code> until <code>str1</code> is <code>x</code> characters long. For example, the expression <code>rpadd('phone', 10, '@')</code> returns the value <code>phone@@@@@</code> . |
| <code>rtrim(str)</code> | This function returns the string <code>str</code> without trailing spaces. For example, the expression <code>rtrim('agarfield@global.com ')</code> returns the value <code>agarfield@global.com</code> . |
| <code>substr(str, start_pos, [length])</code> | This function returns a portion of the string <code>str</code> starting at the character defined by <code>start_pos</code> (an integer) and ending at the character defined by <code>length</code> (an integer). If <code>length</code> isn't indicated, it returns the remainder of the string. |
| <code>to_char(expr)</code> | This function converts the numeric <code>expr</code> to a character string. |
| <code>to_number(str)</code> | This function converts the character string <code>str</code> to a numeric. If the <code>str</code> isn't numeric, this function returns zero. If <code>str</code> is a combination of numbers and other characters and begins with a number, this function returns only the initial numeric portion. For example, <code>to_number('123ABC')</code> returns 123. |
| <code>upper(str)</code> | This function returns string <code>str</code> in all uppercase characters. For example, the expression <code>upper('global.COM')</code> returns the value <code>GLOBAL.COM</code> . |
| Date Functions | Select from the following to use a date function in the expression. See Reference Information 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 functions do not support dates earlier than January 1, 1970. |
| <code>date_add(date, units, interval, round)</code> | This function returns the value of <code>date</code> plus a specified amount of time where <code>date</code> 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 <code>units</code> and <code>interval</code> . <code>Units</code> is an integer or expression referring to an integer database field specifying the number of intervals to add or subtract. <code>Interval</code> 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 <code>round</code> argument to 1. If you set <code>round</code> to 0, the result will not be rounded. For example, the expression <code>date_add('2013-11-25 22:35:00', 48, HOURS, 1)</code> returns the value 2013-11-27 22:00:00. |

| Function | Description |
|-----------------------------------|---|
| <code>to_date(str, format)</code> | <p>This function converts the value entered in <code>str</code> that's in the format specified in <code>format</code> to a date or date/time value. For example, the expression <code>to_date('20140215', 'YYYYMMDD')</code> returns a value of <code>02/15/2014</code>.</p> <p>Unlike other date functions, <code>to_date</code> supports only the following date formats.</p> <p>DD MM YYYY HH24:MI:SS</p> <p>DD MM YYYY HH:MI:SS AM</p> <p>DD MON YY</p> <p>DD MON YYYY</p> <p>DD-MM-YY</p> <p>DD-MM-YYYY</p> <p>DD.MM.YY</p> <p>DD.MM.YYYY</p> <p>DD/MM/YY</p> <p>DD/MM/YYYY</p> <p>DD/MM/YYYY HH:MI:SS AM</p> <p>MM-DD-YY</p> <p>MM-DD-YYYY</p> <p>MM/DD/YY</p> <p>MM/DD/YYYY</p> <p>MON DD YY</p> <p>MON DD YYYY</p> <p>MON DD YYYY HH:MI AM</p> <p>MON DD YYYY HH:MI:SS AM</p> <p>YY.MM.DD</p> <p>YY/MM/DD</p> <p>YYMMDD</p> <p>YYYY-MM-DD</p> <p>YYYY-MM-DD HH24:MI:SS</p> <p>YYYY-MM-DDTHH24:MI:SS</p> <p>YYYY.MM.DD</p> <p>YYYY/MM/DD</p> <p>YYYYMMDD</p> |

| Function | Description |
|---|---|
| <code>date_format(date, format)</code> | 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 <code>date_format('2013-11-25 22:25:00', 'DAY, MONTH DD, YYYY, HH12:MI PM')</code> returns the value Tuesday, November 25, 2013 10:25 PM. |
| <code>date_diff(date, date)</code> | This function returns the number of seconds occurring between two dates. For example, the expression <code>date_diff('2014-07-26 22:25:00', '2014-07-25 10:30:00')</code> returns the value 129300. Another example is <code>date_diff(sysdate(), incidents.updated)</code> . This expression returns the number of seconds between the current time and the time that incidents were last updated. To change the format of the output, use the <code>time_format</code> function. For example, <code>time_format(date_diff('2014-07-26 22:25:00', '2014-07-25 10:30:00'), 'HH24h MIm SSs')</code> returns the value 35h 55m 00s. |
| <code>rel_date_diff(date2, date1, rr_id)</code> | This function returns the number of seconds between two dates, taking holidays and the work hours specified in response requirements into account. The value for rr_id is the response requirement ID that you want to use. We recommend using the value from the <code>incidents.rr_id</code> field. For example, if a site's response requirements are configured with work hours from 9 A.M. to 5 P.M., the expression <code>rel_date_diff('2014-07-26 22:25:00', '2014-07-25 10:30:00', 1)</code> returns the value 52200. Another example is <code>rel_date_diff(sysdate(), incidents.rel_due, incidents.rr_id)</code> . 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. This function isn't available for use in variables, filters, or exceptions. In addition, it cannot be nested in other expressions. |
| <code>date_trunc(date, units)</code> | 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 <code>date_trunc('2013-11-25 22:25:10', HOURS)</code> returns the value 2013-11-25 22:00:00. |
| <code>sysdate()</code> | This function returns the current system date in the format YYYY-MM-DD HH:MI:SS. |
| <code>time_format(seconds, format)</code> | This function converts seconds to the specified time format. For example, the expression <code>time_format(86610, 'HH24 MI SS')</code> returns the value 24 03 30. |
| <code>date_group(expr, format)</code> | 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 <code>date_format</code> 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 <code>date_group(incidents.created, 'YYYY-MM')</code> , and the expression for Column B set to <code>count(*)</code> , the report would output: 2014-01 10 2014-02 0 2014-03 15 If you changed Column A's expression to <code>date_format(incidents.created, 'YYYY-MM')</code> to use the <code>date_format</code> function instead of <code>date_group</code> , the output would be similar, but would not include a row for February. |

| Function | Description |
|--|---|
| | When this function is used in a column, the report designer 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. |
| <code>if(expression, then result, else result)</code> | 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 <code>if(incident.c\$field=1, 'Yes', 'No')</code> returns Yes for incidents where the value of <code>c\$field</code> is 1. If the value isn't 1, No is returned. You can use IS NULL and IS NOT NULL as part of the expression. For example, you could use the expression <code>if(incident.c\$field IS NOT NULL, 'Yes', 'No')</code> . |
| <code>decode(test expression, test value 1, result 1, [, next test value, next result]* [,default])</code> | This function compares <code>test expression</code> to each <code>test value</code> in order and returns <code>result</code> for the first <code>test value</code> that <code>expression</code> matches. If <code>expression</code> does not match any <code>test value</code> , <code>default</code> is returned. If <code>default</code> 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 <code>faqs.status</code> even though the table contains code value in the <code>status</code> column). |
| <code>nvl(expr1, expr2)</code> | If the value <code>expr1</code> is null, this function returns the value <code>expr2</code> . However, if the value <code>expr1</code> isn't null, then the value <code>expr1</code> is returned. The value of <code>expr2</code> must match the data type of <code>expr1</code> . |
| Math Functions | Select from the following to use a math function in the expression. |
| <code>bitand(X, Y)</code> | This function returns the bitwise AND of two integers, <code>x</code> and <code>y</code> . |
| <code>ceiling(X)</code> | This function returns the smallest integer value greater than or equal to <code>x</code> . |
| <code>floor(X)</code> | This function returns the largest integer less than or equal to <code>x</code> . |
| <code>power(X, Y)</code> | This function returns the value of <code>x</code> to the power of <code>y</code> . For example, <code>power(2, 3)</code> would return 8. |
| <code>rand()</code> | 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 <code>rand()</code> to an incidents report and sort on the column. The report will show information for incidents meeting your search criteria, sorted randomly. |
| <code>round(X, D)</code> | This function returns the value <code>x</code> rounded to the nearest number with <code>D</code> decimals. For example, <code>round(5.55555, 2)</code> returns the value 5.56. |
| <code>truncate(X, D)</code> | This function returns the value <code>x</code> truncated to the <code>D</code> decimal places. For example, the expression <code>truncate(5.55555, 2)</code> returns the value 5.55. |
| Currency Functions | Select from the following to use a currency function in the expression. |
| <code>cvt_currency(expr, str)</code> | This function converts the currency value <code>expr</code> to the specified currency <code>str</code> . For example, the expression <code>cvt_currency(opportunities.rep_value, 'USD')</code> returns the <code>rep_value</code> in U.S. dollars when "USD" is stored as the abbreviation for U.S. dollars in the <code>currencies</code> table. |

| Function | Description |
|---------------------------------------|--|
| <code>make_currency(expr, str)</code> | This function converts an integer or decimal number to the specified currency <code>str</code> . For example, the expression <code>make_currency(100.00, 'USD')</code> returns the <code>expr</code> in U.S. dollars. You can also replace <code>str</code> with the value <code>df1t</code> to convert the expression to the user's currency. |
| <code>to_currency(expr, str)</code> | This function converts an integer <code>expr</code> to a value in <code>str</code> 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 <code>exchange_rates</code> table. For example, for a user with a default currency of <code>USD</code> , <code>to_currency(sa_products.c\$price, 'EUR')</code> returns an amount in <code>USD</code> that's equal to the number in the <code>sa_products.c\$price</code> custom field converted to Euros. |

How You Use Report Columns

View the Column Right-Click Menu

Numerous options that let you change a column's display, positioning, and other options are available on the column's right-click menu.

The right-click menu is available for columns when you're viewing a report, or when you're editing a report on the report designer. The options in this menu give you a large amount of control over how your columns display and function, so it's important you understand the options available on the menu.

1. Open the report.
2. Right-click the header of the column you want to modify.
The right-click menu opens.

Column Options

| Button | Description |
|--------------------------|---|
| Edit Definition | Select this option to open the Column Definition window where you can edit the column heading, descriptions, and expression. See <i>Add a Column to a Report</i> . This option displays only when editing a report on the report designer. |
| Edit Format | Select this option to open the Column Format window where you can change the column format, alignment, width, and styles. See <i>How You Edit Column Formatting</i> . |
| 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 <i>Add Calculations to a Report Column</i> . |
| Sort Ascending | Select these options to sort the values in the column in ascending or descending order. See <i>How You Change Report Sort Order</i> . |
| Sort Descending | |
| 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. These options display only when editing a report on the report designer. |
| 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. These options display only when editing a report on the report designer. |
| Insert New Column After | |

| Button | Description |
|----------------------|--|
| 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. This option displays only when editing a report on the report designer. |
| 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. 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 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, see <i>Hide or Show a Column Using Right-Click Options</i> . |
| 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. This option displays only when the report has hidden columns. |

Add a Column to a Report

You can add a report column from either the data dictionary or the **Column Definition** window.

The procedures to add report columns are the same whether you're 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 complex it can be easier to add the column from the **Column Definition** window.

Note: 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.

1. To add a column from the data dictionary:

- a. Select the field, function, variable, or computed field you want from the data dictionary.

Note: If the data dictionary isn't shown on the design surface, click the **Home** tab and click **Data Dictionary** to display it.

- b. 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. Arrows display between column headers indicating where the field will be placed. When the field is in the location you want, drop it onto the data area.

2. To add a column from the **Column Definition** window:

- a. Click the **Home** tab and click **Add Column**.
The Column Definition window opens.
- b. Enter field information.

Column Definition Window

| Field | Description |
|---------------------------------------|--|
| Heading | Enter 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. |
| Description | Enter 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. See <i>Display Output Descriptions</i> . |
| 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. 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 enter 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. 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. See <i>Add Report Variables</i> . |

- c. Click **OK** to add the output column.

The column is added as the last column on the report level. See *How You Edit Column Formatting* for information about how to reposition the column.

Columns are displayed on the design surface after you add them to the data area. Four rows of sample text display beneath each column to give you an idea of what the report output will look like.

Remove a Column from a Report

If you decide you no longer need a column in the report, you can remove it when working on the report designer.

1. Select the column you want to remove from the report.

2. Do one of the following:
 - o Click **Delete** on the Design tab.
 - o Press Delete on your keyboard.

What to do next

If the column you delete uses a table that's no longer needed in the report, you should remove the table from the report to help the report run efficiently.

Related Topics

- [Change Table Joins and Linked Fields](#)

Move a Column in a Report

You can move columns when viewing or editing a report.

1. To move a column when viewing a report, click the header of the column you want to move and drag it to the new position in the report.
2. To move a column when editing a report on the report designer, do one of the following.
 - o Drag the column to the new position in the report.
 - o Click **Move Left** or **Move Right** on the Home tab.

Results:

After moving the column, it displays in the new position on the report.

Add Calculations to a Report Column

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.

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.

You can also add calculations from a selected column's Design tab.

1. Right-click the column and select **Edit Calculations**.
The **Calculations** window opens.
2. If you select a rollup column, select the options you want for the column.
 - a. Select the **Total** check box to display the total value of the output column for all records.
 - b. Select the **Minimum** or **Maximum** check boxes to display the minimum or maximum values of the output column for all records.
 - c. Select the **Weighted Average** check box to display the weighted average of the column for all records.
 - d. Select the **Average** check box to display the average value of the output column for all records.
 - e. Select the **Median** check box to display the median (middle) value of the output column for all records.
 - f. Select the **Standard Deviation** 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.

3. Select calculations for columns.

- a. Select the **Total** check box to display the total value of the output column for all records.
- b. Select the **Minimum** or **Maximum** check boxes to display the minimum or maximum values of the output column for all records.
- c. Select the **Weighted Average** check box to display the weighted average of the column for all records.
- d. Select the **Average** check box to display the average value of the output column for all records.
- e. Select the **Median** check box to display the median (middle) value of the output column for all records.
- f. Select the **Standard Deviation** 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.

- g. Click the **Weighted Column** drop-down list and select the column to use in conjunction with the current column to derive the weighted average.

This drop-down list 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, $((30*30) + (10*110)) / (30 + 10) = 50$.

4. Click **OK**.

Related Topics

- [Define Rollups](#)

Add a Comparison Value Column to a Report

You can view the same data for two different time periods side-by-side in a report by adding a comparison value computed field.

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.

After you add a comparison value column to a report, the Comparison button on the 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.

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 to return a count of incidents.

- 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 then selecting the column you want to add.

- Click the column you want to compare.
- From the right side of the data dictionary, drag **Comparison Value** (column name) and drop it on the design surface.
- Click the **Home** tab.
- Click **Comparison** and select **Edit Comparison Date Offset**.
- Do one of the following:
 - Enter 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's exactly one week earlier than the data returned in the column that's being compared.
 - Click the **Calendar** to specify relative date and time values. See [Filter Date Ranges](#).

When you run the report, the default comparison date offset can be changed on the Search window. This lets you to run the report several times to compare different time periods.

- Click **OK**.
- Add a fixed or runtime 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.

Related Topics

- [Add a Comparison Percentage Column to a Report](#)
- [Change Column Comparison Options](#)

Add a Comparison Percentage Column to a Report

After adding a comparison value column to a report for a numeric field, you can then add a Comparison Percentage computed field column to the report.

Before you start

Before adding a comparison percentage column, you must first add a comparison value column to the report. See [Add a Comparison Value Column to a 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%.

Here's what to do

- 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 then selecting Comparison % Change.

- Click the comparison value column you added.
- From the right side of the data dictionary, drag the Comparison Percentage column name and drop it on the design surface.

- 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.

- Enter field information.

Comparison Percentage Options Window

| 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 option 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 option 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 show you if there's a positive change, negative change, or no change. To change the colors used for the icons, click the icon to open the Color window. See Change Colors . |

- Click **OK**.

Change Column Comparison Options

You can modify the comparison value columns that you have added to a report.

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 isn't 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.

- Add a comparison value column to a report.
- Click the **Home** tab.
- Click **Comparison** and select **Edit Comparison Match Columns**.
- Select the column(s) that define the corresponding values.
- Move the selected column to the Comparison Match Columns panel by dragging the field or clicking the right arrow.
- Click **OK**.

Related Topics

- [Add a Comparison Value Column to a Report](#)

Add a Trend Value Column to a Report

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.

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.

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 then selecting Trend Value.

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 the Trend Value column name and drop it on the design surface.

Related Topics

- [Add a Trend Percentage Column to a Report](#)
- [Change Trend Options](#)

Add a Trend Percentage Column to a Report

After adding a trend value column to a report, you can then add a Trend Percentage computed field column to the report.

Before you start

Before adding a trend percentage column, you must first add a trend value column to the report. See [Add a Trend Value Column to a Report](#).

You can add a Trend Percentage column, 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%.

Here's what to do

1. Expand the **Computed Fields** tree in the data dictionary.
2. Click the trend value column you previously added to the report.
3. From the right side of the data dictionary, drag the Trend Percentage column name and drop it on the design surface.

- 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.

- Enter field information.

Trend Percentage Options Window

| 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 option 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 option 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. |
| Display Change Icon | Select this check box to display icons next to the percentage values returned in the column. The icons indicate show you if there's a positive change, negative change, or no change. To change the colors used for the icons, click the icon to open the Color window. See Change Colors . |

- Click **OK**.

Change Trend Options

Change trend options to specify the number of time units that are forecast forward for a trend value or trend percentage column.

When using forecasting, you can select the time period that you want to use. For example, if the trended column groups data by week, trending forward three units shows data trended three weeks in the future.

Tip: You can also edit trend options from the Trend Options group on the Design tab after selecting the column on the design surface.

- Right-click the trend value column on the design surface and select **Edit Trend Options**.
- Select the **Perform Forecast** check box to enable forecasting.
- Enter the number of units.
- Click **OK**.

Related Topics

- [Add a Trend Percentage Column to a Report](#)
- [Add a Trend Value Column to a Report](#)

How You Edit Column Formatting

You can edit formatting options for your report columns to change how they look, or to change how their data is presented.

When you edit a report or view an existing report, you can change the formatting for the report's columns. Most of these options are the same for all columns and let you adjust column fonts, width, alignment, and similar properties. Other formatting options that impact how data displays vary depending on the type of information the column returns. For instance, a column that displays numbers will have different data options than a column that displays text.

When viewing reports you select format options from the Column Format window. When using the report designer, you can select from options in the Column Format window, or use buttons on the Format tab. The tab includes the most commonly used options available in the window.

If you change column format options when viewing a report, those changes are lost when you close the report. To save formatting changes on a custom report, you must edit it on the report designer.

Edit Column Alignment Options

You can change the way text displays in report columns.

1. Right-click the header of the column you want to modify and select **Edit Format**.
The **Column Format** window opens.
2. Click the **Alignment** tab.
3. Enter field information.

Alignment Tab

| Field | Description |
|--|---|
| Header | The fields in this section determine the alignment for the column's header. |
| Text Alignment | Click this drop-down list to select the column header's horizontal alignment. Options include Left, Center, and Right. |
| Line Alignment | Click this drop-down list to select the column header's vertical alignment. Options include 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 list to select the horizontal alignment for the column's data. Options include Left, Center, and Right. |
| Line Alignment | Click this drop-down list to select the vertical alignment for the column's data. Options include 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, enter the maximum number of wrapped rows that should be shown in the report output. You can enter 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. |

Edit Column Width Options

Change the width of a column in a report.

1. Right-click the header of the column you want to modify and select **Edit Format**.
The **Column Format** window opens.
2. Click the **Width** tab.
3. Select the width setting you want.
 - Best Fit—Select this option to automatically size the column width to best fit in the report.
 - Specific Width—Select this option to define a width for the column. Enter the width of the column and select the unit to use from the drop-down list. You can select Percentage (of the total width of the report), Pixel, Inch, Cm (centimeter), Mm (millimeter), Pica, Point, Em, and Ex.

Edit Column Style Options

Change the format of text that appears in a report column.

1. Right-click the header of the column you want to modify and select **Edit Format**.
The **Column Format** window opens.
2. Click the **Styles** tab.
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.
3. Enter field information.

Styles Tab

| Field | Description |
|-----------------------------|--|
| Data Headings | Click Edit to define the style for the column's heading when the report is shown with a tabular layout. |
| 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. <ul style="list-style-type: none"> ○ Click Edit to edit the style that's currently used for the data text in the column. ○ Click Add to add other styles for alternating data rows in the column. The new style you create is initially identical to the original data style. After 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. ○ Click Remove 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. |

Edit Conditional Format Options

You can change how values display in a column based on conditions you specify.

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.

Conditional formatting isn't available for columns that return hierarchical values.

1. Right-click the header of the column you want to modify and select **Edit Format**.

The **Column Format** window opens.

2. Click the **Conditional** tab.

3. Click **Add**. The **Conditional Format** window opens.

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.

4. Select the operator and value(s) you want flagged.
5. Click the **Format** tab to define how the flagged data displays.
6. Enter field information.

Conditional Format Window

| Field | Description |
|----------------|---|
| Display | Click this drop-down list 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 list to select the image to display. Options include Circle, Square, Flag, Check, Up Arrow, Down Arrow, and Custom. Select Custom to select the image from the Images explorer. This drop-down list is disabled if Text Only is the selected display option. |
| Change Color | Click this text to change the color of the selected image. 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. |

7. Click **OK**.

8. 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** arrows to move the conditional format up or down in the list.

Edit Data Type Column Format Options

The options for editing a report column vary depending on the column data type.

1. Right-click the header of the column you want to modify and select **Edit Format**.

The **Column Format** window opens, and the tab on the top-left of the window is active. The tab's contents vary depending on whether you are editing a column that contains text, dates, numbers, or currency. The fields available on the Text, Date, Number, and Currency tabs are described in the following tables.

2. To define options for a text column, enter the field information described here.

Text Tab

| Field | Description |
|--|--|
| Text Length | Define limits to the length of text strings appearing in the column. |
| Do not limit text length | Select this option to allow an unlimited length of text strings in the column. The column is automatically resized to fit the length of the output text. This option is not available for menu type fields. |
| Limit text to x characters | Select this option to limit the text string length to a certain number of characters and then enter 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 displays, 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. This option is available only from the Options button on the Format tab. |
| Strip HTML tags | Select this check box to remove HTML tags from text that's displayed in a column. |
| NULL Values | Define how NULL values in the database should display. |
| Display Blank | Select this option to display a blank for NULL values. |
| Display as No Value | Select this option to display No Value for NULL values. |

3. To define options for a date column, enter the field information described here.

Date Tab

| Field | Description |
|---------------------|---|
| Date Format | Click this drop-down list to select the date format you want to use for date fields. Options include Date Time, Long, Short, Month Year, Clock, Month Day, Year, Date Time (time zone), and Custom. When you select any option other than Custom, the selected format displays in the Format String field so you can see the string that's used for the selected format. |
| Format String | Enter 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 option to display a blank for NULL values. |
| Display as No Value | Select this option to display No Value for NULL values. |

4. To define options for a numeric column, enter the field information described here.

Number Tab

| Field | Description |
|-------------------------------|---|
| Show Value As | Click this drop-down list to select the format to use when displaying content in numeric columns. Options include Number, Seconds, Minutes, Percent, and File Size. 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. This option appears only when the selected value format is Number, Decimal, or Percent. |
| Do not show group separator | Select this option to prevent the values in the column from including a separator character. |
| Use default group separator | Select this option to use the default group separator character. The default separator is a comma. |
| Use custom group separator | Select this option to define your own group separator character. Enter the character you want to use in the field. |
| Decimal | Define how decimal and percentage formats should display. 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 option to use the default group separator character. The default separator is a period. |
| Use custom decimal separator | Select this option to define your own decimal separator character. Enter the character you want to use in the field. |
| Multiply by 100 | Select this check box to multiply the decimal values by 100. |

| Field | Description |
|--------------------|--|
| | This option appears only when the selected value format is Percent. |
| 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 option to display a blank for NULL values. |
| Display as 0 | Select this option to display 0 for NULL values. |

5. To define options for a currency column, enter the field information described here.

Currency Tab

| Field | Description |
|---|---|
| Use Default Currency Format | Select this option to use default currency settings, as specified by your administrator. When this option is selected, most of the other fields on the Currency tab are disabled. |
| Use the Following Format Options | Select this option 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 options 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 option to prevent the values in the column from including a separator character. |
| Use Default Group Separator | Select this option to use the default group separator character. The default separator is a comma. |
| Use Custom Group Separator | Select this option to define your own group separator character. Enter the character you want to use in the field. |
| Decimal | Define how decimal and percentage formats should display. |
| Decimal Places | Enter the number of decimal places to display in the output. |
| Use Default Decimal Separator | Select this option to use the default group separator character. The default separator is a period. |
| Use Custom Decimal Separator | Select this option to define your own decimal separator character. Enter the character you want to use in the field. |
| NULL Values | Define how NULL values in the database should display. |
| Display Blank | Select this option to display a blank for NULL values. |
| Display as 0 | Select this option to display No Value for NULL values. |

Add URL Links to a Column

You can define report column cells as URL links.

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.

1. Right-click the header of the column you want to modify and select **Edit Format**.
The **Column Format** window opens.
2. Click the **URL** tab.
3. Enter field information.

URL Tab

| Field | Description |
|--------------------------------|---|
| None | Select this option to clear URL options. |
| Display Cell Value as Link | Select this option to enable URL options for the column. This lets you link to a website using either the value displayed in the field or a custom URL. |
| Display Cell Value as Image | Select this option 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. Instead, you specify the URL where the image you want to display is stored. See <i>Display External Images in a Report Column</i> . |
| Use Cell Value as URL | Select this option to use the value in the field as the URL link. Use this only if the value in the field is a valid URL. |
| Use Custom URL | Select this option 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. 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. Enter 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 list. |
| Target | Enter 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's 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 B2C Service 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. |
| Begin with Server Admin URL | Select this check box to automatically prepend the path to the B2C Service server's PHP directory to the custom URL. |

| Field | Description |
|-----------------|--|
| Open URL in | You can use the options in this section to specify where you want the web page that's linked to from the column to open. |
| Default Browser | Select this option to open the web page in the computer's default browser. A new browser window opens if one isn't already open. |
| Popup Window | Select this option to open the web page in a new window. |
| Print Dialog | Select this option to open the web page in the Print window. You can then print the content displayed in this window. |

Add Gauge Charts to a Column

You can display numeric or currency values in a column as gauge charts. Several types of gauges are available.

1. Right-click the header of the column you want to modify and select **Edit Format**.
The **Column Format** window opens.
2. Click the **Gauge** tab.
3. Enter field information.

Gauge Tab

| Field | Description |
|-----------------------|--|
| Inline Gauge Type | Click this drop-down list to select the type of gauge you want to use. Options include None, Linear Gauge, Circular Gauge, Progress Bar, LED, and Status Gauge. |
| Display Numeric Value | Select this check box to display numeric values on the gauge. |
| Orientation | This option displays only when Status Gauge is selected. You can select Circular to display the information using a circular line, similar to a donut chart. You can select Horizontal to display the information using a horizontal line. |
| Show Reference Marks | This option displays only when Status Gauge is selected. Select this check box to display lines on the status gauge where your gauge color ranges are configured. For instance, if you configure ranges of 0%-50% and 51%-100%, a line will display at the midpoint of the gauge between the two ranges. |
| Size | Define the size of the gauge in this section. |
| Best Fit | Select this option to allow the width of the gauge to be automatically sized to the best fit for the report. |
| Specific Width | Select this option to define a width for the gauge. Enter the width of the gauge and select the unit to use from the drop-down list. You can select Percentage (of the total width of the column), Pixel, Inch, Cm (centimeter), Mm (millimeter), Pica, Point, Em, and Ex. |
| Bar Size | Define the bar size of the gauge in this section. This section is available only for the Status Gauge type. |
| Best Fit | Select this option to allow the width of the gauge's bar to be automatically sized to the best fit for the report. |
| Specific Width | Select this option to define a width for the gauge's bar. Enter the width you want for the bar size and select the unit to use from the drop-down list. You can select 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. |

| Field | Description |
|---------------------------|---|
| Scale Start/Scale End | Enter the starting value (lowest value) and ending (highest value) for the gauge's scale in these fields. 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. This section isn't available for LED gauges. |
| Indicator Color | Click this color box to select the color to use as the gauge indicator color. This option isn't available for the LED or Status Gauge types. |
| Border Color | Click this color box to select the color to use as the gauge border color. |
| Gauge Color Ranges | Add color ranges and define range colors in this section. Color ranges are optional, but can be used to display numeric values in different colors. The graphic that indicates the value of the field in the report displays in the color configured for the range the value falls in. Range values cannot contain gaps or overlap. Color ranges aren't available with Progress Bar gauges. |
| Add Range | Click this text to add a color range. A maximum of five ranges can be shown on the gauge. |
| 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. |

4. Click **OK**.

Display External Images in a Report Column

If you store images on a separate server, you can display those images in report columns.

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.

There are some considerations when configuring column image options.

- Column format image options can only be configured using the report designer. 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 display each time the report is generated. 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.

1. Open the report you want to add the image to on the report designer.

2. Right-click the column on the report where you want the image displayed and select **Edit Format**.
The **Column Format** window opens.
3. Click the **URL** tab, and then select **Display Cell Value as Image**.
4. 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.
5. In the text box, enter the URL of the image file.
6. Click **OK**.
7. Click **Save**.

Related Topics

- [Images Explorer](#)

Create a Data Exception

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 display.

Tip: Each report level can have a maximum of thirty-two data exceptions.

After you define your exceptions, you can schedule the report to send alerts whenever the criteria of a data exception is met. See [How You Schedule Reports](#).

1. Click **Exception** on the Insert tab.
The **Exception Editor** opens.
2. Enter field information.

Definition Tab

| Field | Description |
|---------------------|--|
| Name | Enter the name of the data exception. |
| Display Reference | Click this drop-down list 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 list to select the operator to use in the exception criteria. This drop-down list is activated when a database column is selected. See Overview of Filter Operators for a description of operators. |

| Field | Description |
|-------|--|
| 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's used. You can type in a value, select items from a drop-down list, or select dates from calendars. |

3. To define how the data exception displays in the report's tabular output, click the **Tabular Display** tab.
4. Enter field information.

Tabular Display Tab

| 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 option to display the exception using the color, font, and marking method defined in the style that is being used for the report. See <i>Styles Explorer</i> for information about creating styles and <i>Apply a Style to a Report</i> for information about applying styles to reports. |
| Use Custom Display Options | Select this option to define a custom color, font, and data marking method for the exception. |
| Data Marking | <p>Click this drop-down list to select a data marking to mark the data that meets your exception criteria. You can select None, Circle, Square, Flag, Check, Up Arrow, Down Arrow, or Custom.</p> <p>Select Custom to open the Select Image window and select images you have added in the Images explorer. See <i>Images Explorer</i>.</p> <p>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.</p> <p>The data marking symbol displays in the window's Preview field so you can view the symbol as you define it.</p> |
| Hide Cell Values | <p>Select this check box to hide the value in the column that's used as the display reference.</p> <p>This check box is available if the exception's display reference is set to a column rather than an entire row.</p> |
| Change Color | <p>Click this text to open the Color window to change the color of the graphic. See <i>Change Colors</i>.</p> <p>This option appears if Circle, Square, Flag, Check, Up Arrow, or Down Arrow is selected in the Data Marking drop-down list.</p> |
| Change Image | <p>Click this text to open the Select Image window to change the image data marking image.</p> <p>Change Image appears only if Custom is selected in the Data Marking drop-down list.</p> |
| 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. |

| Field | Description |
|--------------------------------------|---|
| | To remove a style that has already been defined, click Clear next to the Style box. |
| 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 displays as 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 on 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 on the Data Exceptions report section. |

5. To define how the data exception displays in the report's graphical output, click the **Graphical Display** tab.
6. Enter field information.

Graphical Display Tab

| 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. |
| Use Custom Display Options | Select this option to pick your own line color for the data exception. If this box isn't selected, the exception uses the line color defined in the chart style that's being used for the report. See Chart Styles Explorer for information about creating chart styles and How to Add and Edit 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. See Change 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. |

Related Topics

- [Order Data Exceptions](#)

Order Data Exceptions

When you have more than one data exception based on the same database field in a report output level, the ordering of the exceptions can impact which exception the data matches.

When you have multiple data exceptions, you may 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.

1. Select the data exception you want to move on the design surface.
2. Click the **Design** tab.
3. Click **Move Up** or **Move Down** 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.

Related Topics

- [Create a Data Exception](#)

Set Record Row Limits and Page Breaks

You can limit the number of rows returned on each page or on the entire output of a report.

Reports can return large amounts of data, especially if they lack fixed filters or required runtime 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. For these reasons, you might want to limit the number of rows a report can return on a page or in total.

You can set limits for each output level in the report.

1. Select the level you want to add the record limit to from the **Level** drop-down list at the top of the design surface.
2. Click the **Level** tab.
3. Click the **Record Limit** button.
4. Enter field information.

Edit Row Limit Window

| Field | Description |
|----------|--|
| Limit To | Select this check box to limit the records returned on the output level. |
| Rows | Enter the maximum number of rows you want returned. 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. See 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 isn't selected, the row limit you enter restricts the total number of rows returned in the selected output level. |

5. Click **OK**.

Overview of Table Relationships in Reports

You can link tables in different reports so that they function like a single report.

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 display together.

Note: When viewing a report, you can see the report's tables in the report definition. See [View a Report Definition](#). 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 designer's ribbon. See [How to Change 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 aren't 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.

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. See [Add Tables to a Report Manually](#).

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're interested in. You can then link the tables together so they function like a single report. See [Overview of Linked Reports](#).

How to Change Table Relationships

If you create a report that returns data from multiple tables and find that the data you want isn't 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.

Related Topics

- [Change Table Ordering](#)
- [Change Table Joins and Linked Fields](#)

Change Table Joins and Linked Fields

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.

1. Click the **Home** tab.

2. Click **Tables** to open the **Data Set** window.

When you open the **Data Set** window, you see the tables in your report and their relationships. When two tables are inner joined, two overlapping circles with their intersection highlighted display next to the secondary table. When two tables are outer joined, two overlapping circles with one circle highlighted display next to the secondary table.

3. Click the table that's joined to the primary table.

4. Enter field information.

Data Set Window

| 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. Columns aren't 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. |
| Join Type | Select the Inner option to use an inner join or the Outer option to use an outer join. 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. Join filters apply only to outer joins and aren't available if the Inner join type option is selected. |

Related Topics

- [Overview of Table Joins](#)
- [How to Create Join Filters](#)

Change Table Ordering

When using outer joins to combine tables, the ordering of tables can affect what data the report can return.

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.

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**.
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 displays on the Data Set window.

Related Topics

- [Overview of Table Joins](#)

Add Tables to a Report Manually

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.

Before you start

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.

Here's what to do

1. Delete all columns and filters from an existing report, or start with a report with no columns.
2. Click **Tables** on the Home tab.
The **Data Set** window opens.
3. Click **Select Table**.
A list of all tables displays.
4. Select the table you want from the list.
5. Click **OK** to add the table to the report.
6. To join additional tables to the table you added, right-click the table you added, select **Join To**, and select the table to join.
7. Repeat step 6 for each table you want to add.

Overview of Table Joins

Analytics uses inner and outer table joins. The join type that's used to link the tables in your report impacts what records the report can return.

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. You may also need to change the join type to allow the report to access the appropriate records in the tables.

Note: The relationships between custom object tables and other tables are defined when the custom object is created. See [Overview of Custom Objects](#).

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's 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 aren't 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. See [Change Table Ordering](#).

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 aren't 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.

Related Topics

- [How to Change Table Relationships](#)

How to Specify Joins for Tables with Multiple Relationships

You can specify the fields you want to use to join tables when the tables share more than one relationship.

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 isn't 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. If you select the incidents table, you will be asked which field in the table should be used as the link.

Specify Fields to Link Tables

In a report, you can link tables together in the database using more than one field.

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's displayed, click **OK**.
3. To define which tables should be linked, select the option 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 list that displays next to the table's option.

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're 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. See *Change Table Joins and Linked Fields*.
5. If you do not want to define a table relationship, click **Cancel**.
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. See *How to Change Table Relationships*.
6. Click **OK**.

Define Intermediate Table Joins

Tables that aren't directly linked together in the database can still be joined by going through intermediate tables that are common to both.

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. However, if you encounter this scenario, we recommend reconsidering the report's design since a single report isn't intended to report on unrelated information.

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 option next to the table you want to join the new table to.
3. In the Intermediate Table column, select the option 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 list 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 list and select the fields you want to join from the intermediate table and the new table you're adding.
The join tree you define displays on the window.
6. To prevent the Select Intermediate Table and Join windows 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.
7. Click **OK**.

Related Topics

- [How to Change Table Relationships](#)
- [Change Table Joins and Linked Fields](#)

How to Add and Edit 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 show incident activity over a period of time.

You can manually add charts to reports, or you can use a chart table layout to automatically add generic charts with preconfigured positions. You edit charts with the Chart Wizard, to select the chart type, the data used in the chart, labels for the chart, and other settings. In addition, you can change the appearance of charts, including fonts, colors, and other attributes.

Note: Each report level can have a maximum of twenty charts.

Add a Chart 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 placed in the report.

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 Add Chart to open the Chart Wizard. See [Add or Edit a Chart with the Chart Wizard](#).

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 list 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.
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.

Note: If you have applied a report style to the report, the chart style that's 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. See [Apply a Style to a Report](#).

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, see [Create or Edit a Chart Style](#).
8. To enable automatic positioning and sizing for your chart, edit style options for the chart's report section.
See [Chart Placement and Sizing](#).
9. Repeat all steps to add additional charts to your report.

Add a Chart Using Chart 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.

1. If the Charts report section doesn't display 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 **Automatic** on the Options tab to apply automatic formatting to the report section. See *Change the Display of a Report Section*.
4. Click **Layouts** 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 arranged.
6. Do one of the following:
 - o Right-click a blank chart on the design surface and select **Edit Chart** to configure the chart with the Chart Wizard. See *Add or Edit a Chart with the Chart Wizard*.
 - o Select a chart on the design surface, click the Design tab, click **Type**, 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.

7. To change data options for a chart type that does not require different source data, click **Define Data Source** to manually open the Chart Wizard.

Related Topics

- [Chart Placement and Sizing](#)

Add or Edit a Chart with the Chart Wizard

You can use the Chart Wizard to create and customize charts for a report.

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.

1. Add or edit a chart to open the Chart Wizard.
2. Click the **Chart Type** drop-down list to select the chart type you want to use.

Chart Types

| 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. |

| 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. 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. |

3. Select one of the chart subtypes from the Chart Subtype section.
4. Click **Next** to open the Source Data window.

The source data options let you specify the data to display in the chart. For example, if 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 field information.

Select Source Data

| Field | Description |
|-------------------------------------|--|
| Available Columns | This field displays the columns you have added to the report level that can be used in the chart. If you have not yet added columns to the report, you can click this area to open the Column Definition window. See Add a Column to a Report . |
| 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. See Add a Column to a Report . |
| 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. |

| Field | Description |
|--|--|
| | <p>To move the column, click the up or down icons to move the column one position.</p> <p>This option isn't available for Pie, Gauge, and Funnel charts.</p> |
| Add One or More Series | <p>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.</p> <p>To move the column, click the up or down icons to move the column one position.</p> <p>This option isn't available for Gauge and Line/Bar Combo charts. In addition, Pie and Funnel charts accept only one series.</p> |
| Define Series | <p>This section is where you pick the output columns or column values to use for the series.</p> <p>This section isn't available for Pie, Line/Bar Combo, X-Y, Stock, Pareto, Gauge, and Funnel chart types.</p> |
| By Manually Selecting from Available Columns | <p>Select this option 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.</p> |
| Using Values From | <p>Select this option to specify the output column that's 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 list associated with this option, 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.</p> |
| Get Labels From | <p>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.</p> <p>This option is available only for Pie and Funnel charts.</p> |
| Add Line Series | <p>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.</p> <p>This option is available only for Line/Bar Combo charts.</p> |
| Add Bar Series | <p>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.</p> <p>This option is available only for Line/Bar Combo charts.</p> |

| Field | Description |
|--------------------------|---|
| Select Gauge Series | <p>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.</p> <p>This option is available only for Gauge charts.</p> |
| Select Line Series | <p>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.</p> <p>This option is available only for X-Y charts with a combo subtype.</p> |
| Add Bubble Series | <p>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.</p> <p>This option is available only for X-Y charts with bubble or combo subtypes.</p> |
| Add Bubble Values | <p>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.</p> <p>This option is available only for X-Y charts with bubble or combo subtypes.</p> |
| Category Axis Series | <p>Select a column to use as the category for the chart from this drop-down list.</p> <p>This option is available only for Gantt charts.</p> |
| Select Progress Series | <p>Select a column to use as the progress series for the chart from this drop-down list. Only integer columns can be selected for the progress series.</p> <p>This option is available only for Gantt charts.</p> |
| Select Start Date Series | <p>Select a column to define the start date series from this drop-down list. Only date columns can be selected for the start date series.</p> <p>This option is available only for Gantt charts.</p> |
| Select End Date Series | <p>Select a column to define the end date series from this drop-down list. Only date columns can be selected for the start date series.</p> <p>This option is available only for Gantt charts.</p> |

6. Click **Next** to define general chart settings.

7. Enter field information.

General Chart Settings

| Field | Description |
|-----------------------|--|
| Chart Title | Enter the title of the chart in this text box. |
| Category Axis Label | Enter the label of the category axis in this text box. This option isn't available for Pie, Radar, Gauge, or Funnel charts. |
| Value Axis Label | Enter the label of the value axis in this text box. This option isn't available for Pie, Line/Bar Combo, Radar, Gauge, or Funnel charts. |
| Bar Value Axis Label | Enter the label for the chart's bar value. This option is available only for Line/Bar Combo charts. |
| Line Value Axis Label | Enter the label for the chart's line value. 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. 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. After you apply a chart style, you can customize the chart styling using buttons on the Design, Layout, and Format tabs. See Chart Styles Explorer . |
| Scale | Specify the scale used by the chart in this section. This option isn't available for Pie, Radar, or Funnel charts. |
| Default | Select this option to use the scale values specified in the selected chart style. |
| Custom | Select this option 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. 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. This option is available only for Gauge charts. |

| Field | Description |
|-----------------------|---|
| | |
| Add Range | Click this text to add a color range. 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 Finish.

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. See *Create or Edit a Chart Style* for information about the options on these tabs.

Related Topics

- [Add a Chart Manually](#)
- [Add a Chart Using Chart Layouts](#)

Chart Placement and Sizing

The Charts report section can be configured to use automatic or manual section layouts.

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.

Related Topics

- [Change the Display of a Report Section](#)

Overview of Report Filters

You add filters to a report to limit the data the report returns.

If filters were not used, a report that included information from a table would return all the records in that table every time you run the report. Some filters set hard limits on what the report can return, and other filters can be selected 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. See [Create a Fixed or Runtime Selectable Filter](#).
- Report runtime selectable filters—Runtime 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. See [Create a Fixed or Runtime Selectable Filter](#).
- Level filters—Level filters are fixed or runtime 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. See [Create a Level Filter](#).
- 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. See [Create a Group Filter](#).
- Join filters—Join filters restrict data returned in the secondary table of outer table joins. See [How to Create 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.

Create a Fixed or Runtime Selectable Filter

Report filters limit the data that can be returned in any level of a report.

Report filters can be fixed or runtime selectable. These filters are similar in that both restrict the data that's returned in the report according to what the filter allows and are created in the same way. However, runtime filters can be changed when the report is run, whereas fixed filters cannot.

Runtime 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.

Most reports used on workspaces automatically attempt to filter on the record shown in the workspace to display only information that's 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`).

1. Open the report you want to edit.
2. Click the **Home** tab.
3. Click **Add Filter**.

4. Enter field information.

Add Filter Window

| Field | Description |
|--|---|
| Name | Enter a name for the filter in this field. The name identifies the filter on the report designer but does not display when the report is run. Entering a value for this field is optional. If a name isn't entered, the name defaults to the name of the filter's database field. |
| Make This Filter Selectable at runtime | Select this check box to make the field a runtime selectable filter. If this check box is cleared, the filter becomes a fixed filter. |
| Label This Filter | Enter 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. |
| Expression | <p>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 enter the expression. A menu displays when you start entering text that lists the database tables that begin with the letters you enter. 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, see Add a Column to a Report.</p> <p>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. See Add Report Variables.</p> <p>Only indexed database fields are available for use in filters.</p> |
| 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. See Overview of Filter Operators for descriptions of operators. |
| Value | <p>Enter the value for the filter. If you're creating a runtime filter, this value is the filter's default value that can be changed when the report is run. If you're creating a fixed filter, this is the filter value the report uses when it's run.</p> <p>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 list, whereas a date field's values display date and time options. Text area fields aren't available for use in report filters.</p> |
| 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. See Change Menu Filter Options . |

5. Click **OK**.

6. Click **Save**.

Change Menu Filter Options

You can hide selected report runtime filter menu options.

In some instances, you may have runtime 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.

Tip: 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. See [Copy Analytics Content](#) and [Set Report Permissions](#).

1. Open the report on the report designer.
2. Click **Filters** on the **Home** tab.
The Edit Logical Expression window opens.
3. Select the filter you want to customize, and select **Edit Filter**.
The **Edit Filter** window opens, displaying the filter details.
4. Click **Customize**.
The **Customize Filter Values** window opens.
5. Clear the check boxes next to the menu options you do not want to display.
6. Click **OK**.
7. Click **OK** to close the Edit Filter window.
8. Click **OK** to close the Edit Logical Expression window.
9. Click **Save**.

Create a Level Filter

Level filters are similar to the filters that are applied to the main report.

While report filters are applied to the report as a whole, restricting the data that's 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're created. If the report has multiple output levels, the other levels aren't subject to the level filters applied to other levels in the report.

1. Open the report you want to edit.
2. Select the level you want to add the filter to from the **Level** drop-down list at the top of the design surface.
3. Click the **Level** tab.
4. Click **Add Level Filter**.
The Add Filter window opens.
5. Enter field information described in [Create a Fixed or Runtime Selectable Filter](#).
6. Click **OK**.
7. Click **Save**.

Create a Group Filter

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 runtime selectable.

1. Open the report you want to edit.
2. Select the level you want to add the filter to from the **Level** drop-down list at the top of the design surface.
3. Click the **Level** tab.
4. Click **Add Group Filter**.
The **Add Filter** window opens.
5. Enter field information described in *Create a Fixed or Runtime Selectable Filter*.

Note: 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 **OK**.
7. Click **Save**.

Overview of Filter Operators

The operator you select when creating filters greatly impacts the data that's returned, so you should understand the functionality of each operator.

The types of operators available for a filter depend on the data type of the filter's expression.

Filter Operators

| Operator | Description |
|-------------------------------|--|
| equals | The expression matches the value exactly, including case. When using this operator with menu fields, you can quickly find the menu item you want by entering 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. When using this operator with menu fields, you can quickly find the menu item you want by entering 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. When using this operator with menu fields, you can quickly find the menu item you want by entering 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. |

| Operator | Description |
|------------------------|--|
| | |
| 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 | <p>The expression is between two specified values. The between operator is available to use with date, currency, and numeric (integer and float) expressions.</p> <p>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 aren't. This prevents records from being displayed twice on a report that's 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.</p> |
| like | <p>The expression matches the value. This operator allows wildcard searching using an asterisk (*). For example, typing "*all*" will return values where the expression resides in any part of the value. Wildcards may also be used when searching on multiple words.</p> |
| not like | The expression does not match any part of the value. Wildcard characters are supported. |
| not like or null | <p>The expression does not match any part of the value, or is a null value.</p> <p>This operator isn't available in runtime selectable filters.</p> |
| in list | <p>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.</p> <p>When using this operator with menu fields, you can quickly find the menu item you want by entering 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.</p> <p>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.</p> |
| not in list | <p>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.</p> <p>When using this operator with menu fields, you can quickly find the menu item you want by entering 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.</p> <p>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.</p> |
| is null | The expression has a null value. |

| Operator | Description |
|------------------------|--|
| | This operator isn't available in runtime selectable filters. |
| is not null | The expression does not have a null value. This operator isn't available in runtime selectable filters. |
| Complex Expression | The expression matches the beginning of the value. For example, if the expression is "all" this filter will locate values "all", "all hands", "allen", etc. This operator allows wildcard searching using an asterisk (*). You may instead search for the expression at the end of the value by typing "*all". This expression will locate values like "recall" or "one for all". Wildcards may also be used at both the beginning and end to find the expression in any part of the value or when searching multiple words. |
| 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. |

Edit a Logical Expression

You can modify the logical expressions that join filters in a report.

When you add multiple fixed or runtime 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 `incidents.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.

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.
 - o To open the **Edit Logical Expression** window for report filters, click **Filters** on the ribbon's Home tab.
 - o To open the **Edit Logical Expression** window for level filters or group filters, select the report level you want from the **Level** drop-down list 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're automatically joined with AND logic and display in an AND tree. runtime 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 in an AND node or an OR node. Filters in the same AND node are joined to each other using AND logic. Filters in 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**. See *Create a Fixed or Runtime Selectable Filter*.
6. To edit a filter, select the filter you want to edit and click **Edit Filter**. See *Create a Fixed or Runtime Selectable Filter* 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. See *Change Table Joins and Linked Fields*.

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 **OK**.
11. Click **OK**.
12. Click **Save**.

Combine Runtime Selectable Filters

When your report includes multiple runtime 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. See *Edit a Logical Expression*.

Runtime 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.

1. Create a runtime selectable filter. See *Create a Fixed or Runtime Selectable Filter*.
2. Create a second runtime selectable filter.

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.

Add Variables or Runtime Filters to Docked Filters

Variables and runtime filters can be added to docked filters to make them easier to access when viewing reports.

Report users can change variable and filter values using the **Search** window. However, they can also be added 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**.
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.
You can double-click docked filters and variables shown on the design surface to open them for editing.
7. Click **Save**.

Results:

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.

Overview of the Search Window

The Search window you use to search for information in a report or dashboard displays the filters and variables you specify. You can place these where you want, and size the window to suit your needs.

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 specific to individual reports. See [How You Search Dashboard Reports](#).

If the default layout of your report's **Search** window does not meet your needs, you can size 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.

When you customize a **Search** window layout from the report or dashboard designer, 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.

Related Topics

- [Modify the Search Window](#)

Modify the Search Window

You can customize the Search window you use to search for information in a report or dashboard.

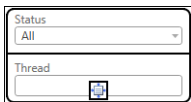
1. Open the search designer.
 - o To open the search designer when viewing a report or dashboard, open the Search window and click the gear icon next to Settings in the lower left of the window. See *How You Search in Reports* and *How You Search Dashboard Reports*.

Or

 - o Click **Settings** and select **Enter Search Design Mode**.
 - o 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

 - o Click the arrow on the Home tab's Filters button to open the Edit Logical Expression window and click **Search Designer**.
 - o To open the search designer when editing a dashboard, click **Parameters Values** and click the gear icon 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.
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 in the following figure.



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 **Set as Default Layout for All Users**. The search designer closes. After 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're viewing, click **Set as Default Layout**. The search designer closes and the layout you configured is saved to your workstation.

Related Topics

- [Overview of the Search Window](#)

How to Create Join Filters

Join filters 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 instead of the data 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 instance, 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. See *Functions for Reports* for function descriptions.

Related Topics

- [Create a Join Filter](#)

Create a Join Filter

You can create join filters to filter data in tables that are joined to the primary table with an outer join. Tables joined with an inner join do not have the Join Filters option.

1. Click the **Home** tab while editing a report that has multiple tables.
2. Click **Tables**.
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.

5. Click **Add Filter**.

The **Add Filter** window opens.

6. Do one of the following:
 - o Enter the expression for the join filter.
 - o 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** option.

The Add Filter window then displays a Value field.

8. Do one of the following:
 - o Enter the expression in the **Value** field.
 - o 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 aren't available for use in join filters.

9. Click **OK**.

Results:

After 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 let you 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 switch between the filters' descriptions and names. See *Edit a Logical Expression*.

Related Topics

- [How to Create Join Filters](#)

Overview of Report Output Levels

After you configure the primary output level in your report, you can add output levels, also referred to as drill-down levels, that contain details about records in the first level.

Report users access these secondary levels by clicking on records in the first level that act as links. This is configured in the report designer by grouping data in the primary output level, then creating a drill-down level with more information about the group's data. You can have up to fifty 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. See [Drilling Down in Reports](#).

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.

Each output level you add to a report can have its own headers, footers, charts, data exceptions, custom scripts, and other standard elements. These are configured in the same way as those on the primary output level.

You can also create drill-down functionality in reports by linking reports together. This method is used when the separate levels contain disparate information pulled from different database tables. See [Overview of Linked Reports](#).

Group Data in an Output Level

Grouping data in an output level allows you to combine records with similar data into one row.

Output levels with grouped data often have other output levels added to them. This lets you 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.

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're using a function to group records together in the column.

1. Open the report you want to edit.
2. Select the output level you want to edit from the **Level** drop-down list at the top of the design surface.
3. Click the **Level** tab.
4. Click **Edit**.
The **Level Settings** window opens.
5. Select the **Group Results** check box.
6. Click **OK**.
7. Click **Save**.

Change Data Grouping Order

When data is grouped in a level, it's automatically grouped in the order in which the columns are listed in the output level. This impacts the ordering of filters on drill-down levels that you add to a report. You can manually change group ordering if you need to.

The ordering of grouped data doesn't affect the rows displayed in the grouped output level. It instead affects the ordering of the drill-down filters of the output level that you drill down into. This ordering is important since it impacts what records you can see when drilling down into the level.

You want the list of fields to start with a field that stores values that multiple records can share so the records can be grouped together by the field's value. For instance, grouping records by incident status works well since multiple incidents have the same status. You would not want a unique field that stores unique values listed first in the drill-down filters. For instance, grouping by incident reference number does not work since the reference number is different for every incident.

For example, if you have a report with columns for **Reference #**, **Subject**, and **Status Type**, in that order, the output level's data are also grouped in that order. If you then add a drill-down level, the fields in the drill-down menu's Filter menu would be listed in this order.

- incidents.ref_no
- incidents.ref_no, incidents.subject
- incidents.ref_no, incidents.subject, incidents.status_id

Since `incidents.ref_no` is the first ordering field for a drill-down level, the drill-down level would return only information related to the 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.

1. Select the **Group Results** check box on the Level Settings window.
See *Group Data in an Output Level*.
2. Click **Change Group Order**.
The **Define Group Order** window opens and 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 **OK**.

Create an Additional Output Level

You can add a drill-down output level in a report to display only the content you want.

After 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 the 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.

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 list at the top of the design surface.
3. Click the **Level** tab.

4. Click **Add Drilldown** to open the **Level Settings** window with drill-down options.
5. Enter field information.

Level Settings Window

| Field | Description |
|--------------------------------------|---|
| Name | Enter the name of the new level in this text box. |
| Description | To add an optional description for the output level, enter the description you want in this text box. The description displays in the level's Output Descriptions section. See Remove Search Criteria Descriptions . |
| Group Results | This check box isn't used when initially creating new output levels. See Group Data in an Output Level . |
| 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 list 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. |
| Link | <p>Click this drop-down list 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.</p> <p>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 list. See Change Record Command Actions.</p> |
| 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 list to select Top , Bottom , Left , or Right . |
| Custom Script | <p>This section allows you to create, edit, and remove custom scripts to modify the output level's output. See Create a Custom Script in a Report.</p> <p>Note: <i>Submit a Service Request</i> if this option is disabled and the Create/Edit Custom Scripts permission is enabled for your profile.</p> |
| Add | Click this text to add a custom script to the output level. |
| Edit | <p>Click this text to edit an existing custom script.</p> <p>This option is available only when a custom script has been added to the output level.</p> |
| Remove | Click this text to delete an existing custom script. |

| Field | Description |
|-------|--|
| | This option is available only when a custom script has been added to the output level. |

6. Click **OK**.
7. Click **Save**.

Configure Recursive Drill-Down Levels

You can drill down recursively on hierarchical items (for example, accounts, products, and categories) in a report.

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 display. A level can have both regular and recursive drill-down enabled, but the drill-down links cannot be the same.

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 **Edit**.
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 list 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 subproducts down from the parent product.
4. Click the **Link** drop-down list and select the output column you want as the drill-down link in the report.
By default, this is the hierarchical item.
5. Click **OK**.

Create a Custom Script in a Report

You can add custom PHP scripts to your output levels to further manipulate the data in your report. For example, custom scripts can remove unwanted data, create links to web pages, and convert rows of data into tables.

Before you start

The Create/Edit Custom Scripts Analytics profile permission must be enabled to access custom scripts. [Submit a Service Request](#) if you aren't able to create a custom script and the profile permission is enabled.

When a report with a custom script runs, the report first runs on the server, then the script is applied to the report's output. It is important to consider this ordering when creating custom scripts since this may cause the script to not function as you expect. For instance, when you view a report with a script that hides certain rows, the total number of records and pages on the report may be greater than what you see on the report, since these totals are generated when the report first runs.

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 creating custom scripts only if you're familiar with the PHP language and programming concepts. For documentation and information, see *PHP: Hypertext Preprocessor*.

Note: Custom scripts cannot include direct SQL statements.

Here's what to do

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 list at the top of the report designer.
3. Click the **Level** tab.
4. Click **Custom Scripts**. The Custom Script editor opens.
If the output level already has a custom script, the editor displays the custom script for editing.
5. From the Initialization tab, enter the script executed before the report is processed.
This script is executed when the report starts to process.

Note: If the report is to be scheduled (see *How You Schedule Reports*), add `putenv('TEMPORARY_RNW_CONF_DIRECTORY');` to the Initialization pane to ensure the custom script runs correctly when recipients open the report.

6. Click the **Headers** tab.
7. Enter 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
)
```

8. Click the **Process** tab.
9. Enter 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. Enter 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 **OK** to apply your custom script to your output level.
13. To remove a custom script, click the **Level** tab, click **Edit**, and click **Remove**. Click **Yes** to the removal confirmation.

14. To check the custom script for PHP errors, click the **Home** tab, click **Views**, and select either **Report View** or **Layout View**.

If errors are found in the PHP code, a message displays. You can save the report if the message shows an error, but the custom script will be disabled when you run the report. When the problem is corrected and the report is saved again, the custom script will be enabled.

15. Click **Save**.

What to do next

After adding a custom script to an output level, we recommend previewing the report using the Report View and Layout View options on the Home tab's Views button. When you do so, the custom script is checked for errors and a message displays if any are found. When troubleshooting reports, we also recommend that you check if any of the report's output levels have custom scripts since these can modify the reports' appearance and functionality.

Related Topics

- [Analytics Permissions](#)

Overview of Linked Reports

You can use conditional and unconditional links to link reports together.

Before you create report links, you should be familiar with the variables and runtime selectable filters in the reports or dashboards you're 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**—You can 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**—You can 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.

Just as you can drill down into different levels within a report (see [Overview of Report Output Levels](#)), you can also drill down into separate reports or dashboards using report linking. This helps avoid database query limitations since linked reports run independently of one another. Using linked reports is also beneficial when you need to create multiple reports with identical drill-down levels, since you can create a single report and link to it from multiple reports instead of re-creating identical levels in multiple reports. See [How to Use Linked Reports](#).

Additionally, if you have very complex reports that attempt to display columns with summaries of data from several tables, you may want to use inline aggregate reporting for more efficient database queries. See [Inline Aggregate Reporting](#).

How to Use Linked Reports

While report links are easy to use, there are some items you'll want to consider before adding them to reports.

When a report link is created, it's 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 added to workspaces, but the links are unavailable if the reports are used in workspace relationship items. See *Overview of Workspace and Script Elements* 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. See *How You Distribute Reports and Dashboards*.
- Report links are unavailable when the columns in are rolled up. See *Define Rollups*.
- 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 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 public or private. Because of this, you should be familiar with the content of the report or dashboard you're linking to so staff members won't be able to access sensitive information.
- You can't 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.

Create an Unconditional Report Link

Create an unconditional link to open a specific report or dashboard when you drill down on any value in a parent report's linked column.

1. Open the report you want to create the link from on the report designer.
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.

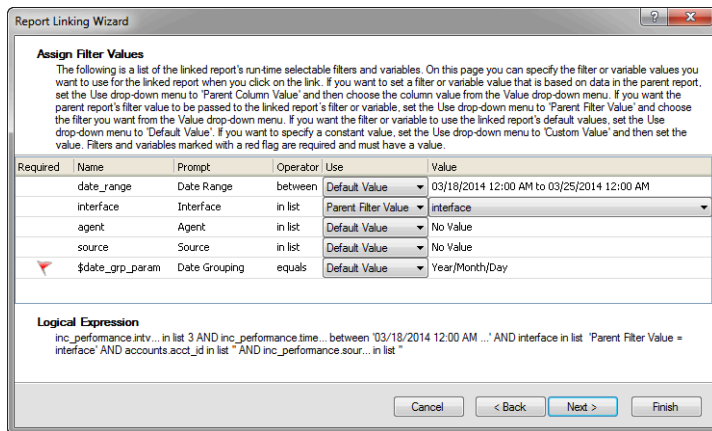
It does not need to be the column with the data used to filter shown on the linked report.

4. Click **Report Linking** on the 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 **Next**.

After 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 runtime selectable filters, as shown here.



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 define values for items that aren't required.

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 list.

Variable and Filter Value Types

| Type | Description |
|-----------------------|---|
| Parent Column Value | <p>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.</p> <p>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.</p> |
| Parent Filter Value | <p>Select this option to populate the linked report's variable or filter with the current value from one of the parent report's filters.</p> <p>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.</p> |
| Parent Variable Value | <p>Select this option to populate the linked report's filter with the current value from one of the parent report's variables.</p> <p>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.</p> |
| Default Value | <p>Select this option to use the default variable or filter value specified in the linked report for the variable or filter value.</p> |

| 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 enter 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. |

- From the **Value** drop-down list, 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 select a custom value, 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 shown for reference and cannot be edited.

- Click **Next**.
The wizard presents options for specifying where you want the linked report to open.
- Select the option you want to use to display the linked report or dashboard.

Linked Report Display Options

| Option | Description |
|-----------------------------------|---|
| Replace Report in the Same Window | Select this option to close the parent report and display the linked report instead. |
| Display Report in a Separate Tab | Select this option to open the linked report on a separate tab on the content pane. |
| Use Existing Tab | Select this option 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 option to open the linked report on a new tab each time you click the link. |
| Display Report in a Split Window | Select this option 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 options to display the linked report above or below the parent report. |
| Left/Right | Select these options to display the linked report to the left or right of the parent report. |

- Click **Finish**.
- Click **Save**.

Related Topics

- [Overview of Linked Reports](#)
- [How to Use Linked Reports](#)
- [Create a Conditional Report Link](#)

Create a Conditional Report Link

Use conditional links to open different reports or dashboards depending on the value you drill down on in the parent report's linked column.

1. Open the report that you want to create the link from on the report designer.
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 **Report Linking** on the Design tab ribbon 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 list 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 where the link displays. 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 list 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 **Next**.
The remaining pages of the Conditional Report Linking wizard are identical to those on the **Report Linking** wizard.
9. To add other conditional links, repeat steps 2 through 8.
10. Click **Save**.

Related Topics

- [How to Use Linked Reports](#)
- [Overview of Linked Reports](#)
- [Create an Unconditional Report Link](#)

Reorder a Conditional Link

If you create several conditional links on the same column, you can reorder them to ensure that links with conditions that might overlap are triggered in the order you want.

Before you start

You must create a conditional report link before you can reorder a conditional link. See [Create a Conditional Report Link](#).

While ordering is irrelevant for conditional links with exclusive conditions, it can affect which linked report or dashboard opens if you have multiple links that could match a particular column value.

Here's what to do

1. Select the report column that's associated with the link and click **Report Linking** on the Design tab.
2. Select **Manage Conditional Report Links**.
The **Manage Conditional Report Links** window opens displaying 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 **OK**.

Edit a Report Link

After you create conditional or unconditional report links, you can edit them.

Before you start

You must create a conditional report link or an unconditional report link to edit a report link. See [Create a Conditional Report Link](#) and [Create an Unconditional Report Link](#).

You can use the standard Linked Reports and Reports with Disabled Links reports to list reports that contain links to reports and dashboards.

Here's what to do

1. Open the report that includes the link on the report design center.
2. Select the report column that's associated with the link and click **Report Linking** on the Design tab.
3. To edit an unconditional report link, select **Edit Report Link** to open the Report Linking wizard.
4. To edit a conditional report link, select **Manage Conditional Report Links**. The **Manage Conditional Report Links** window opens.
 - a. Click **Edit** next to the link you want to edit.
The Conditional Report Linking wizard opens where you can edit the link.
 - b. Click **OK**.
5. Click **Save**.

Remove a Report Link

After you create conditional or unconditional report links, you can remove them.

Before you start

You must create a conditional report link or an unconditional report link to edit a report link. See [Create a Conditional Report Link](#) and [Create an Unconditional Report Link](#).

You can use the standard Linked Reports and Reports with Disabled Links reports to list reports that contain links to reports and dashboards.

Here's what to do

1. Open the report that includes the link on the report design center.
2. Select the report column that's associated with the link and click **Report Linking** on the Design tab.
3. To remove an unconditional link from the column, select **Remove Report Link**.
The unconditional link is deleted.
4. To remove all conditional links from the column, select **Clear All Conditional Report Links**.
All conditional links 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 **Yes** to confirm the deletion.
 - b. Click **OK**.
6. Click **Save**.

Inline Aggregate Reporting

Inline aggregate reporting lets you insert columns in custom reports to show aggregate information that could not normally display due to restraints on database query size.

The aggregate data you want displayed in a column is compiled in a separate report and then pulled into a column in the primary report. This breaks the database query that would normally be required to return the data in a single report into multiple queries from multiple reports.

Note: You can pull data from several reports into columns in a single parent report. However, the parent report cannot have more than 500 cells displaying inline aggregate data.

Using this feature helps avoid query limitations when running reports that include summaries of data from tables containing large amounts of data, such as `transactions` or `incident performance`, particularly when joins do not exist between all the tables you need to include in a report.

CAUTION: Using inline aggregate reporting is not recommended for most reports where normal inner or outer joins are used, since it will result in less efficient reports that may not run successfully. Use inline aggregate reporting only when the query required to return aggregate data in a column results in a Cartesian join between tables. This is when data is pulled from all rows in the tables required by the query, resulting in a large number of rows being accessed. If you're unfamiliar with Cartesian joins, or have questions about whether using this feature will help a report run more efficiently, please [submit a service request](#).

Related Topics

- [Configure Inline Aggregate Reporting](#)

Configure Inline Aggregate Reporting

Inline aggregate reporting lets you insert columns in custom reports to show aggregate information that could not normally display due to restraints on database query size.

1. Create a column in a report to collect the aggregate data.
 - a. Click **Analytics** on the navigation pane.
 - b. Double-click **Reports Explorer**.
 - c. Do one of the following:
 - Click **New Report** and select a report format to create a new report.
 - Right-click an existing report and select **Edit**.
 - d. Click **Add Column** on the Home tab.
The **Column Definition** window opens. See *Add a Column to a Report*.
 - e. Configure the column to display the aggregate data you want.
See *Functions for Reports* for a list of aggregate functions you can use in reports.
 - f. Add a runtime selectable filter or a variable to the report.
Inline aggregate reporting requires that the report you link to includes at least one variable or runtime selectable filter. See *Add Report Variables* or *Create a Fixed or Runtime Selectable Filter*.
 - g. Click **Save**.
2. Create a new report or edit a report that will link to the column created in the previous step.
 - o Click **New Report** and select a report format to create a new report, or
 - o Right-click an existing report and select **Edit**.
3. Click **Inline Aggregate** on the Insert tab. The Inline Aggregate Wizard opens.
 - a. Enter a column header for the new column.
 - b. Enter an optional column description.
 - c. Click **Next**.
 - d. Select the report containing the aggregate column you want to link to and click **Next**.
 - e. Select the values you want to use for the linked aggregate report's variables and runtime selectable filters.
The values you specify determine what data is shown in the aggregate column. Required variables and filters are indicated with a red flag and you must set a value for these. You must also map at least one indexed filter in the report containing the aggregate column to a column in the parent report
 - f. Select the values you want to use for the linked aggregate report's variables and filters from the **Use** drop-down list.

Variable and Filter Value Types

| Type | Description |
|---------------------|--|
| Parent Column Value | <p>Select this option to use the values in a column in the parent report to populate the linked aggregate report's variable or filter.</p> <p>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 aggregate report's variable or filter.</p> |
| Parent Filter Value | <p>Select this option to populate the aggregate report's variable or filter with the current value from one of the parent report's filters.</p> <p>This option is available only when the parent report has filters with the same data type and operator as the linked aggregate report's variable or filter.</p> |

| Type | Description |
|-----------------------|---|
| Parent Variable Value | Select this option to populate the linked aggregate report's filter with the current value from one of the parent report's variables. This option is available only when the parent report has variables with the same data type and operator as the linked aggregate report's variable or filter. |
| Default Value | Select this option to use the default variable or filter value specified in the linked aggregate report for the variable or filter value. |
| 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 enter 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. |

4. Click **Finish**.

5. Click **Save**.

How to Enable Editing Records on Reports

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 directly from the report.

There are two methods to edit records directly from a report.

- **Inline editing**—Using inline editing, you can double-click or right-click an individual field on a record shown on a report to make changes to the field. For instance, you can double-click the name of a staff member an incident is assigned to and then select a different staff member from a menu that displays to assign it to someone else. When you enable inline editing on a report, you can select which fields can be edited inline.
- **Record commands**—By adding command links or buttons to a report, you can edit, delete, copy, or perform other actions on individual records shown on the report. Record commands are shown on reports as buttons on the ribbon, as links in the report rows, or as record commands when you right-click a record. When you enable record commands on a report, you can select the default action that should be performed when you double-click a record on the report. You can also select which commands should be available as buttons, links, and right-click menu commands.

Note: To edit records shown on reports, staff members' profiles must include permissions to modify the appropriate record types.

Related Topics

- [Analytics Permissions](#)

Overview of Using Record Commands on Reports

The record commands displayed on a report let you perform actions such as opening, printing, and deleting records the report displays.

Record commands can display as links in a column, as buttons on the report's Home tab, or 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.

Note: Record command options aren't applied when viewing reports in workspaces.

You can select from standard record commands, such as the edit or delete command. In addition, if your site has add-ins that perform actions on records, you can add these as commands to a report as well.

Related Topics

- [Overview of Add-Ins](#)

Add Record Command Links to a Report

You can select the record command links that you want to display in a report.

Before you start

The links' record commands must be enabled for the report on the Customize Record Commands window.

When you add record command links, they're displayed in a column that's automatically added to your report. You can select the links you want to display. Not all the record commands you specify for the report are available as links.

When using the report, you can hide or display links that are enabled for the report from the Links button on the Display tab of the report.

Here's what to do

1. Open the report you want to edit.
2. If your report has more than one output level, click the **Level** drop-down list on the design surface and select the level you want to add links to.
3. Click the **Display** tab.
4. Click **Links** and select the link you want to add to the report.

If the link you want to add to the report doesn't display 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. See [Change Record Command Actions](#).

When you add the first record command link to your report, the Action column is added to the report.

5. Click **Save**.

Specify the Record Commands to Display on a Report

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.

Before you start

The Records button is disabled on reports that do not have rows that display or are associated with unique records.

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, but these need to be added to the report manually. See [Adding record command links](#).

Here's what to do

1. Open the report you want to edit.
2. Click the **Home** tab and click **Records**.
The **Customize Record Commands** window opens.
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 **OK** to save your changes.
6. Click **Save**.

Change 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 select the actions you want to perform when you double-click the report's rows. For example, you can open a record, assign a record, or perform other actions when you double-click the row.

1. Open the report you want to edit.
2. Click **Records** on the Home tab.
The **Customize Record Commands** window opens.
3. To select the report level you want to configure, click the **Level** drop-down list and select the report level you want.
The options available on the Default Record and Default Action drop-down lists depend on the information displayed in the report level you select.
4. Click the **Default Record** drop-down list and select the record type you want the record command actions to apply to.
The record type you select determines which links are available on the Links button on the Display tab of the report designer, since different actions can be performed on different record types. See [Add Record Command Links to a Report](#).
5. 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 list.
The additional report level must be configured with a drill-down link of Entire Row. See [Create an Additional Output Level](#).
6. Click the **Default Action** drop-down list and select the action you want performed when you double-click a row in the report.
7. To restore the default record command settings for all the levels in the report, click **Reset All** near the top of the window.
8. Click **OK**.
9. Click **Save**.

Enable 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.

Before you start

You can configure inline editing in reports only if your profile includes the Modify Inline Report Editing permission on the Analytics tab.

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.

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. Custom objects, other than menu-only objects, included in your report can also be edited inline.

Here's what to do

1. Open the report you want to edit.
2. Click **Inline Editing** on the Home tab and select **Allow Inline Editing**.
3. To specify the columns you want inline editing enabled for, click **Inline Editing** again and select **Choose Editable Columns**.
The **Editing Options** window opens.
4. Enter field information.

Editing Options Window

| 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. |
| 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. 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, but a column that returns incident creation dates or a count of incidents isn't. |

5. Click **OK**.
6. Click **Save**.

Related Topics

- [How You Edit Data on a Report](#)
- [Overview of Staff Management](#)
- [Overview of Custom Objects](#)
- [Save Edits Performed Inline](#)

Set Report Permissions

Report permissions let you specify which profiles can open or edit a report.

You can select Open and Edit permissions for each profile defined in your system. If staff members can't perform certain actions on a report, they may lack permission to edit the report.

Note: Permissions applied to private reports are irrelevant until you make the report public.

1. Open the report you want to edit.
2. Click the **Home** tab.
3. Click **Permissions**.
The **Permissions** window opens.
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 **OK** to save the permissions.
6. Click **Save**.

Change Report Properties

Report options let you 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's 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.

1. Open the report you want to edit.
2. Click the **Home** tab.
3. Click **Options** and select **More Options**.
The **Edit Settings** window opens.

4. Enter field information.

Edit Settings Window

| Field | Description |
|---|---|
| Time Zone | <p>Click this drop-down list 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:</p> <ul style="list-style-type: none"> ○ 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's running the report. See <i>Add or Edit a Staff Account</i>. <p>A specific time zone you can select from a list of standard time zones.</p> <p>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's used since they're grouped according to the interface's time zone.</p> |
| Owner | <p>Click this drop-down list 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. See <i>Set Report Permissions</i>.</p> <p>Changing the owner of a private report makes the report unavailable to the previous owner.</p> |
| Open report without prompting for search parameters | <p>Select this check box to have the report automatically run and return data when you open it from a navigation list. The report uses the default values specified in the report's filters.</p> <p>This option is referred to as Initial Run on the Reports explorer Find menu. See <i>Search for Analytics Items</i> for information about finding reports.</p> |
| Refresh report when data shown is changed due to an action initiated from this report | <p>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.</p> |
| Open editor when report contains only one row (quick search and editor search reports only) | <p>Select this check box to automatically open the record for editing when the report returns only one record.</p> <p>This option applies only to Quick Search reports and reports used in workspaces.</p> |
| Cache the drilldown levels | <p>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're viewing is cached on your workstation. The cache is cleared when you close the report.</p> <p>When this option isn't 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.</p> |
| Return to previous level when current level no longer has data | <p>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.</p> |

| Field | Description |
|---|--|
| Allow server to change the data source as necessary | <p>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's selected.</p> <p>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.</p> |
| Set report to deferred execution | <p>Select this check box to automatically queue the report when it runs. See How to Prevent Automatic Queuing.</p> <p>If this option isn't selected but the report is automatically queued the next time it runs 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's next run, edit the report and clear this check box.</p> |
| Data Source | <p>Select which database you want the report to run on. You can select the operational or the report database (also referred to as the replication database). See Overview of Report Databases for more information about data sources.</p> <p>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.</p> |
| Report Database | <p>Select this option 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.</p> <p>If you select this option in a report that includes the Fill Inbox record command and a staff member clicks Fill Inbox 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. See Overview of Incidents and Overview of Report Databases.</p> |
| Operational Database | <p>Select this option 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.</p> <p>The operational database is selected by default when you create a new report.</p> |
| Refresh all split levels simultaneously | <p>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.</p> |
| Automatically refresh report at a regular interval | <p>Options in this section let you configure automatic refresh of the report's data to ensure the most recent data displays.</p> |
| Auto-refresh options visible at runtime | <p>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 isn't selected, the report's data is refreshed only when the button is clicked.</p> |
| Auto-refresh enabled by default | <p>Select this check box to enable automatic refresh of the data shown on the report.</p> |
| Interval | <p>Enter the number of seconds after which the data shown on the report is automatically refreshed.</p> |

| Field | Description |
|-------|--|
| Image | Click Change to select a different image to display next to the report in lists such as navigation lists. The image that's displayed by default is determined by the layout selected when creating a new report. When selecting an image, you can select from a list of standard images or from custom images that have been added in the Images explorer. See <i>Images Explorer</i> . |
| Notes | Enter 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 **OK**.
6. Click **Save**.

View a Report 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.

The audit log shows you when the report was edited and generated, but not all actions performed, such as previewing the report, are listed in the audit log. If you need to see every instance of a report or dashboard being generated, printed, exported, and previewed, you can use the Expanded Report Audit Log. See *View the Expanded Report Audit Log*.

1. Open the report on the report designer.
2. Click **Audit Log** on the Home tab.
The **Audit Log** window opens.
3. To access a list of actions that can be taken on the audit log, click **Options**.
See *Overview of the Report Ribbon* for descriptions of the actions.
4. Click **OK**.
5. Click **X** on the top right.

How to Review Report Performance

Using certain standard reports and the report analyzer helps you identify reports that run slowly, or not at all, and determine the cause.

Reports that are configured to examine large amounts of data may be problematic. These reports might use too few filters, include a large number of tables, or might be running on an excessively large database.

Running Large Reports

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. See [Overview of Report Databases](#).
- Queue the report to run at a later time. See [Overview of 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. See [Overview of Linked 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 in **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.

Related Topics

- [Troubleshoot Reports Using the Report Analyzer](#)

Troubleshoot Reports Using 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're configured to use. See [Overview of Report Databases](#).

1. Open the report you want to analyze on the report design center.

2. Click **Analyze** on the 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's analyzed.

If your report lacks required runtime 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. See *How You Search in Reports*.

3. If you're presented with the report's Search window, enter the search criteria you want to use and click **OK**.

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 (see *View a Report Definition* 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.

Report Analyzer Window

| Report Component | Potential Issue |
|------------------|---|
| Filters | <p>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.</p> <p>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.</p> <p>The filter contains a reference to a pseudo field, so no index information is available.</p> |
| Tables | <p>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.</p> <p>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.</p> <p>This table isn't 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.</p> <p>This table isn't 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.</p> <p>The data set contains the Incident Performance (inc_performance) and the Transactions (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.</p> |
| Levels | <p>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.</p> <p>This level contains one or more columns with a <code>sum_distinct</code> expression. <code>Sum_distinct</code> expressions have a negative impact on performance. If possible, consider a different approach that does not involve using a <code>sum_distinct</code> expression. You may be able to remove the <code>sum_distinct</code> expression by converting any drill-down levels to linked reports.</p> |

| Report Component | Potential Issue |
|------------------|--|
| Rows | <p>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.</p> <p>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's likely this will occur automatically.</p> <p>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's unlikely the report will execute. Consider using the report database for this report.</p> <p>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's unlikely the report will execute.</p> <p>The report will likely return a large number of rows. Consider using filters instead of paging to navigate the result set.</p> <p>A row estimate isn't available because the report contains sum_distinct expressions.</p> <p>Due to the complex nature of the report, a row estimate isn't available.</p> <p>The estimated number of rows is x. However, the underlying query contains a one-to-many relationship so the estimate may not be accurate.</p> |

4. Click **X** on the top right to close the Report Analyzer window.
5. Click **X** on the top right to close the report.

Related Topics

- [How to Review Report Performance](#)

Using Reports

Overview of Managing Reports on the Reports Explorer

The Reports explorer lets you manage standard and custom reports. From here, you can organize, find, 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.

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.

How You View Reports

B2C Service includes numerous standard reports you can use to track activity in any Service application.

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 report's 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.

Open a Report from the Reports Explorer

You can open reports using the Reports explorer.

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.

1. Click **Analytics** on the navigation pane.
2. Double-click **Reports Explorer**.

The explorer opens on the content pane. The folders tree displays 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 display where you can specify the search parameters you want to use for the report. The window displays if the report has required runtime selectable filters or is configured to display the Search window. For information about using the Search window, see [How You Search in Reports](#).

In addition, when you attempt to open reports that examine a large amount of data or that may take a long time to run, an options to queue the report may display. See [Overview of Queuing Reports](#).

This table describes the standard sections you will see when you view reports. Reports may not include all sections.

Report Sections

| Field | Description |
|---------------------|--|
| Docked Filters | Docked runtime filters defined in the report display above the report output, allowing you to quickly select different filter values. For information about adding docked runtime filters, see Add Variables or Runtime Filters to Docked Filters . You can dock output variables in reports in the same manner as runtime filters. |
| Report Header | Text added to this area displays near the top of each page in the report. See Add a Text Field to a Header or Footer . |
| 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 display inline, on a separate tab, or on column rollover. |

| Field | Description |
|------------------------------|--|
| Search Criteria Descriptions | Descriptions of the filters in the report can display to describe the report's filters and values. See Overview of Search Criteria Descriptions . |
| Charts | Any charts defined in the report display above the tabular report output. See How to Add and Edit Charts . 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. See Add a Text Field to a Header or Footer . |
| Data Exceptions | Records matching data exceptions defined in the report are flagged, and a summary of the data exception can display in the report output. See Create a Data Exception . |

- 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 display as inline text in the report header, or by rolling over the column names in the report.

View Data Using the Report or Layout View

When you open a report, you can 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 change column formatting using this 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.

- Open a report.
By default, the report opens in the report view.
- Click the **Display** tab.
- Click the arrow on the **Views** button and select **Layout View** to change the view.
- To return to the report view, click the arrow on the **Views** button and select **Report View**.

View a Report Definition

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.

1. From the Reports explorer, do one of the following:
 - o Select a report and click **View Definition**.
 - o Open a report, click the Home tab, click **Definition**, and select **View**.

The **Report Definition** window opens.

2. To save the output from the report definition to a file for later viewing, click **Export** and select the file type.

You can select HTML, PDF, Excel, Image, and Delimited file types. See *Export Report and Dashboard Data* for a description of these file types. You can also export the definition to an XML file which you can use to create duplicate reports on other interfaces. See *Export a Report Definition to an XML File*.

3. To print the page, perform these steps.
 - a. To preview the page layout page before printing it, click **Print Preview**. See *Preview a Report*.
 - b. To configure the page layout, click **Page Setup**. See *Report Designer Page Setup Tab*.
 - c. Click **Print**.

Your computer's Print window opens where you can select the destination printer.

4. Click **X** on the top right to close the **Report Definition** window.

Export a Report Definition to an XML File

You can save a report definition as an XML file for later viewing.

If you have multiple interfaces, you can import the XML file to copy a custom report from one interface to another. This lets you create duplicates of complex custom reports on other interfaces without manually re-creating the reports.

The following procedure explains how to export report definitions to XML files, which you can later import. See *Import a Report from an XML File*.

1. To export a report definition from the Report Definition window:
 - a. Click the window's **Export** button.
 - b. Select **Report Definition**.

The **Save As** window opens.

2. To export a report definition while you're viewing or editing it:
 - a. Click the **Home** tab.
 - b. Click **Definition**.
 - c. Select **Export**.

The **Save As** window opens.

3. Select a location for the file and enter a file name.
4. Click **Save**.

Results:

The report definition is saved as an XML file.

Related Topics

- [View a Report Definition](#)

Overview of the Report Ribbon

When viewing a report, you can move between the Home, Display, and Page Setup tabs on the ribbon to access buttons that modify the report's display, search for data, and edit records.

The buttons on the report ribbon vary depending on the report view you use. 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's 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. 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.

Report 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.

Home Tab

| Group/Button | Description |
|--------------|---|
| Record | <p>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.</p> <p>When editing custom reports, you can choose the buttons you want to display on this group. See Change Record Command Actions.</p> <p>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.</p> |
| Open | <p>Click this button to open the selected record. To open a record that's 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.</p> |
| New | <p>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.</p> |
| Print | <p>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.</p> |

| Group/Button | Description |
|----------------|--|
| 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. |
| Preview Answer | Click this button to view the selected answer as it will display on your site's customer portal. This button displays 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 displays only when viewing a report that lists incidents. |
| Fill Inbox | <p>Click this button to assign incidents to yourself from incident queues. This button displays only when viewing a report that lists incident information and when the permissions in your profile let you pull incidents from queues. This button must be manually enabled on custom reports. See Change Record Command Actions.</p> <p>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. See Fill Your Inbox and Overview of Report Databases.</p> |
| 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 displays only when Chat is enabled and when the permissions in your profile let you 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. See Change Record Command Actions . |
| Editing | This group displays when inline editing is enabled on the report. The buttons in this group let you save and edit records using inline editing. See How You Edit Data on a Report . |
| Data Set | <p>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. See How You Search in Reports.</p> <p>The buttons in this group aren't available when viewing a report that was queued. See Overview of Queuing Reports.</p> |
| Search | Click this button to open the report's Search window to select criteria for variables and runtime selectable filters. |

| Group/Button | Description |
|------------------|---|
| 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. See Change 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 find in the report's output. Report cells that contain the search value are highlighted on the report. See Find Content in a Report . |
| 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. See Enable Auto Filters . |
| Sort | Click this button to open the Sort window and select which output columns to sort by and the sort method. See How You Change Report Sort Order . |
| Rollups | Click this button to select rollup options and open the Rollups window. See Define Rollups . |
| 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're interested in. See How You Slice 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 | <p>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. See Export Report and Dashboard Data.</p> <p>Permission to export, print, and forward reports must be enabled in your profile for this button to display. See Analytics Permissions.</p> |
| Forward | <p>Click this button to send the report to individuals or distribution lists in an email. See Forward a Report.</p> <p>Permission to export, print, and forward reports must be enabled in your profile for this button to display. See Overview of Staff Management.</p> |
| Default Settings | <p>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 Reset Display and Data Settings.</p> <p>This button isn't available on a report's Home tab when viewing the report in a dashboard.</p> |

| Group/Button | Description |
|--------------|--|
| Definition | <p>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 designer.</p> <p>See View a Report Definition. For information about editing reports, see Open the Report Designer.</p> <p>This button isn't available when viewing a report that was queued. See Overview of Queuing Reports.</p> |

Report Display Tab

The display tools let you adjust the fonts, colors, margins, and other display settings in the viewed report.

Display Tab

| Field | Description |
|---------------------|---|
| Views | Click the arrow on this button to choose whether to view the report using the report view or layout view. See View Data Using the Report or Layout View . |
| Auto Format | Click this button to apply a style to a report. See Apply a Style to a Report . |
| 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. |
| 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. See Display Data Using 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. See Add Search Criteria Descriptions 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. See Display Output Descriptions 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. See Hide or Show Columns Using the Field Chooser . |
| 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. See Define a Cross Tab Report . Open the Cross Tab window and select the output columns to use as 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. See Add 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. |

| Field | Description |
|------------------------|--|
| | This button is active only if the current report level displays unique records and the report is configured to display links by default. See Add Record Command Links to a Report . |
| Exceptions | Click this button to show or hide data exceptions. See Show or Hide Data Exceptions . 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. See Display Guided Assistance Information in Tree Format . 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. |

Report 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 the group 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.

Page Setup Tab

| 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 . This button group displays only if your profile includes the Print/Export/Forward Reports permission. See . |
| 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 default page width and send it to the printer. |

| Group/Button | Description |
|--------------|---|
| 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 list to select a background color. |
| Gradient | Click this drop-down list to apply a gradient to the background. This option is available only after you have selected a fill color. |
| Transparency | Click this drop-down list to apply a transparency to the background. 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 white space 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. |

Report 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. See [View Data Using the Report or Layout View](#).

Design Tab

| Group/Button | Description |
|--------------|--|
| Arrange | The buttons in this group let you move and hide the selected column. 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. See How You Change Report Sort Order . |
| 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. See Add Calculations to a Report Column . |
| 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. See Define Rollups . |

| 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. See How You Slice Report Data . |

Report Format Tab

Buttons on the Format tab let you change the formatting of your report.

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 displays. 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. See [View Data Using the Report or Layout View](#).

Format Tab

| 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 background 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. |
| 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. |
| 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. When using Best Fit, all content in the report is examined to calculate column width before the report displays. To reduce the report load time, enable Improve Display Performance. See Change Data Display Options . |
| 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. |

| Group/Button | Description |
|----------------|--|
| | 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 | <p>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.</p> <p>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.</p> |
| Options | Click this button to select display options for the column. |
| Number | The options in this group let you display numeric values as a gauge and select numeric formats. 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. This group displays when selecting a column containing date/time data. |

Related Topics

- [How You Edit Column Formatting](#)

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 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 output level in the report showing the number of incidents in each subcategory. You can then drill down on each subcategory to open an additional level showing details about the incidents in the subcategory.

By default, output levels opened from drill-down links replace the parent output level on the content pane. You go 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. See [Overview of Report Output Levels](#).

Tip: Usually, when drilling down into another output level in a report, the database is queried to ensure the most current data displays 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. See [Change Report Properties](#).

Most reports with drill-downs open another output level in the same report. However, you can also link reports together to open another report when you click a drill-down link. See [Overview of Linked Reports](#).

View Your Database Data Dictionary

You can use the data dictionary to view information about the tables and fields in your site's database.

The information returned in reports and dashboards is stored in your site’s database, allowing you to see vital information about your customers, staff members, and interfaces. Using the data dictionary, you can view details about all the tables and fields in the database, such as field names, descriptions, and database types. You can add the Data Dictionary component to any navigation list. See [Change Your Navigation Pane Settings](#).

Note: Not all the information in the database is accessible to Analytics.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Data Dictionary**.
The content pane displays a list of all the tables in the database.
3. Click a table to view the table information.
The details that display depend on the table you have selected.

Table Information

| Field | Description |
|-------------------|---|
| Table Label | Lists the descriptive table name used in the data dictionary. |
| 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 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.

Column Information

| Field | Description |
|--------------------|--|
| Column Label | Displays the descriptive column label used by the data dictionary. |
| 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. |
| Analytics Usage | Indicates how the column can be used in analytics. |

| Field | Description |
|-------|---|
| | <ul style="list-style-type: none"> ○ 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. |
| Joins | Lists the columns that the selected column is joined to. |

How You Search in Reports

You can search for specific records in reports from the Search window.

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 runtime filters or when the Open Report Without Prompting for Search Parameters report option isn't selected. See [Change Report Properties](#).

The options available when searching for information consist of the runtime 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 (see [Overview of 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's updated nightly. See [How You Use Cached Data in Reports](#).

Note: 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 runtime selectable filters to limit the data they can return. See [Overview of Report Filters](#).

After generating the report using the search criteria you want, you can quickly find specific content displayed in the report using the Find feature. See [Find Content in a Report](#).

Search for Records in a Report

Search parameters let you search for records in a report.

1. Open the report you want to search in.
2. Click the **Home** tab.

3. Click **Search**. The **Search** window opens.
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** icon next to Settings, or click **Settings** and select **Enter Search Design Mode**.
 - b. Edit the layout as described in *Overview of the Search Window*.
 - c. Click **Set as Default Layout** 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. See *Filter Date Ranges* and *Date Grouping Output Variables*.

Search Window

| Field | Description |
|-----------------|--|
| Filters | <p>This section displays the report's runtime 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 entered in a text field. Text area fields aren't available for use in report filters. See <i>Create a Fixed or Runtime Selectable Filter</i>.</p> <p>This section also lists output variables that have been added to the report. Output variables can have the same types of selection methods as runtime selectable filters. See <i>Variables</i>.</p> <p>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 find specific values in menu lists, enter 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.</p> |
| 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 | <p>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.</p> <p>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. See <i>Analytics Configuration Settings</i> for information about VRL_HARD and other configuration settings that can impact reports.</p> |
| Rows | Enter 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. |

| 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 displays 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 How You Change Report Sort Order . |

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're 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 option is disabled if the report's current search parameters were not populated from your personal settings. See [Change 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 quit without saving your changes, click **Cancel**.
11. Click **Search** to search the report with the search parameters you selected.

Overview of Unique Search Parameters

Unique search parameters are used in filters for returning specific data to the report.

While most of the filters and variables you see on the Search window are self-explanatory, these search parameters may require more information to use correctly.

- [Filter Date Ranges](#)
- [Date Grouping Output Variables](#)
- [First Contact Resolution Rate](#)
- [Incident Performance Intervals](#)
- [Add the Incident Summary Thread Filter to a Report](#)

Related Topics

- [Variables](#)
- [Create a Fixed or Runtime Selectable Filter](#)

Filter Date Ranges

You can use runtime filters to select a date range.

Most standard reports include runtime filters created from date/time fields that let you 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 runtime 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. See [Change Report Properties](#).

Define a Relative Date Range in a Filter

You can specify a relative date range in date or date/time filters. For example, a relative range could be from six months ago to three months ago, or a week ago to the current time.

1. Select the **Relative** check box on the Search window to switch from a specific date to a relative date.
2. Click the **Calendar** icon to display the relative options.
3. Enter field information.

Relative Date Range

| 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 option 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 option 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 **OK**.

Date Grouping Output Variables

While most options on the Search window are runtime 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.

Date grouping output variables can be added to custom reports and are 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 (2019/23). However, the display format of grouped date columns can be changed by editing the Group Date Format configuration settings found on the Configuration Settings editor in the Group Date Format folder (**RightNow Common/General AnalyticsOptions/Group Date Format**). See *Overview of Site Configuration* and *Analytics Configuration Settings* for descriptions of the configuration settings that impact reports.

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's important to 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 aren't included in the calculation. Incidents solved without a response being sent aren't included, and responses automatically appended by rules aren't 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.

Incident Performance Intervals

Incident performance intervals are used as runtime selectable filters in several standard Analytics reports.

Incident performance intervals can be added as filters or output columns to custom reports, using the Incident Performance (inc_performance) table. See *Create a Fixed or Runtime Selectable Filter* and *Add a Column to a Report*. 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.

Note: The content in the Incident Performance (inc_performance) table is updated nightly by the Agedatabase utility. See *How You Use Cached Data in Reports*.

Some intervals can occur more than one time 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's 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.

Add the Incident Summary Thread Filter to a Report

By adding the Incidents.Summary/Thread filter to a report, you can use one filter to search incidents by reference numbers, subject lines, and thread entries.

Before you start

If this incidents field is not available when you create the filter, [Submit a Service Request](#) to have the option enabled on your site.

If an incidents report includes the Incidents.Summary/Thread (search_thread) search filter, you can search for incidents by their reference numbers, by text in subject lines, or by text anywhere in the incident threads. The search includes an implied wildcard (*), so you can enter partial values in the search field, and any records matching the partial value will be returned.

By default, the words you enter in the search have an implied OR between them, so search results will return records that have any of the words. To require all words to be in the returned records, enter a plus sign before each word in the search thread.

This procedure assumes that you're familiar with creating and editing reports, and adding report filters.

Here's what to do

1. Open the report you want to edit.
2. If the Home tab is not active, click it to make it the active tab.
3. Click **Add Filter**.
The Add Filter window opens.
4. Do one of the following:
 - o Type incidents.search_thread in the Expression field.
 - o Click **Use Data Dictionary**, expand the Incidents tree, double-click the Summary/Thread(search_thread) field, and then click **OK**.
5. Verify that Equals is selected in the Operator drop-down list.
We recommend using only the Equals operator with the incidents.search_thread filter. This ensures that the values you enter in the filter include the implied wildcard.
6. If you want a default search value for the filter, type it in the Value field.
7. Enter values for the other fields on the Add Filter window, as described in *Create a Fixed or Runtime Selectable Filter*.
8. Click **OK**.

Results:

When you use the report, the filter will be available on the Search window. You can also add the filter to the docked filters area at the top of the report.

Related Topics

- [Create a Fixed or Runtime Selectable Filter](#)
- [Add Variables or Runtime Filters to Docked Filters](#)

Find Content in a Report

You can search for specific text, numeric values, or special characters in the content displayed in a report using the Find feature.

When using the Find feature, cells on the report page currently being viewed that contain what you searched for are highlighted. Content on other pages or drill-down levels in the report must be searched separately.

1. Open the report you want to find content in.
2. Click the **Home** tab.
3. Click **Find**.
The **Find** window opens.
4. Enter 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 **Match Case**.
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 **Match Entire Cell Contents**.
7. Do one of the following:
 - o Click **Find Next** to close the Find window and highlight the first cell in the report that matches the search value you entered.
 - o Click **Find All** to close the Find 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 **Find** on the Home tab.

9. To clear the search value you entered without opening the Find window, click **Clear** on the Home tab.

How You Use Cached Data in Reports

Before you analyze data returned in reports, you should understand how using cached data can affect your reports.

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.

Agedatabase Utility Data 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. Understanding which reports use cached data will help you accurately interpret your reports' results.

Cached data remains constant throughout the day and isn't 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.

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.

Related Topics

- [View a Report Definition](#)
- [Answer ID 1917](#)

Dataminer Utility Data 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 (**RightNow User Interface/General/Security**).

CAUTION: 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. See [Overview of Site Configuration](#).

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.

Overview of Queuing Reports

Reports can be manually or automatically queued to run at a later time.

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're 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.

Note: 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. See [How Queuing Works on the Report Database](#).

Queue a Report or Dashboard Manually

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.

For information about viewing reports in the queue and opening queued reports that have processed, see [How You View Reports in the Queue](#).

You can also require dashboards and reports to be queued when they are run by enabling the Set Report to Deferred Execution option. See [Change Report Properties](#).

1. Do one of the following:
 - o Select the report or dashboard on the Reports explorer and click the ribbon's **Queue** button.
 - o Right-click the report or 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 report.

The window contains three sections: Filters, which includes Products, Interface, and Date Range selection options; Delivery Options, which includes options to view or download queued-report results; and Limit and Order, which includes queued-report display options.

2. Enter the search parameters you want to use.

For information about specifying search parameters, see [How You Search 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** option.

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 isn't available when queueing dashboards.

In addition, this option isn't 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.
- Rows in the report 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 **Queue**.

A message displays an approximation of when the report or dashboard will be generated.

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 **OK**.

Automatically Queuing Reports

You can queue the report using the search parameters you selected.

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 **Cancel**. The window will close 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 **OK**. 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 the workspace or previewed on the report designer are never queued. If it's determined such a report will take too long to generate, the report won't display.

How to Prevent Automatic Queuing

You can prevent the automatic queuing of reports.

After a report is automatically queued, it's queued every time it runs thereafter, since it's assumed the report's filters and data set result in long run times.

Tip: To view reports that will be automatically queued when they're next run, you can run the Deferred Reports standard report. This report is in the Reports explorer's Common > Site Administration > Reports folder.

If you have a report that's set to be queued, you can prevent it from being automatically queued when it's next run. However, you will still be asked to queue the report when you next run it if the report meets queuing criteria. See [Change Report Queuing and Data Source Options](#) for information about preventing automatic queuing for a standard report or [Change 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.

Why Reports Fail to Queue

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 isn't 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. See [Troubleshoot Reports Using the Report Analyzer](#).

How You View Reports in the Queue

Reports placed in the queue are associated with one of the following states: Waiting, Processing, and Complete.

When you queue a report, it's 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. From the Reports Explorer, open **Public Reports > Common > Site Administration > Reports**.

- Reports Waiting in Queue—Displays 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—Displays 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.

How You Open Queued Reports

You can open queued reports from My Queued Reports or from the notifications list.

When the database server has run a queued report and it's ready to view, you will receive a message in a toast notification and in your list of notifications. See [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. See [Queue a Dashboard Manually](#).

Note: After 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 (**Agedatabase/Batch Processing/Miscellaneous Purging**) are deleted from the list of processed reports by the Agedatabase utility. For information about this and other configuration settings that impact reports, see [Analytics Configuration Settings](#).

How You Use Queued Reports

When you open a report that you queued, it displays and functions just like a report that has not been queued. However, there are some differences to be aware of.

- Docked filters aren't displayed in queued reports.
- Action links, such as those used to open and delete records, aren't displayed.
- The ribbon's Search, Refresh, Reset, Definition, and Links buttons aren't available.
- If your report includes drill-down levels, these levels are not queued, so are instead run when you open the drill-down levels.

You can view the output from a queued report as many times as you want. However, it's 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.

Overview of Report Databases

B2C Service 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.

How You Specify Which Database Reports Run On

You can specify whether you want a report to always run on the operational database or the report database. The system can also automatically force a report that fails to run on the operational database to instead run on the report database.

By default, reports are configured to run on the operational database. However, 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 system reviews the database query generated by the report. If the query will take longer than 10 seconds to run or will query more than 2,000,000 database rows, the report automatically runs on the report database. Reports run on this database can query up to 5,000,000 rows. The report owner receives a notification if their report is changed to run on the report database.

Note: 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. See *Change Record Command Actions*.

After 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. In addition, you can require that the report is queued or not queued when it's next run.

Change Report Queuing and Data Source Options

You can change the queuing and data source options for reports and dashboards.

Before you start

The Administrator Analytics profile permission is required to modify these settings on a standard report or dashboard. See *Analytics Permissions*.

Here's what to do

1. Click **Analytics** on the navigation pane.
2. Double-click **Reports Explorer**.
3. Go to the report or dashboard you want to modify, right-click the report, and select **Edit**.
4. Open the Edit Settings window using one of the following options:
 - o To open the window for a standard report or dashboard, click **More Options**.
 - o To open the window for a custom report or dashboard, click **Options**, and then select **More Options**.

The **Edit Settings** window opens.

5. To require the report or dashboard to be queued when it's next run, select **Set Report to Deferred Execution**. See *Automatically Queuing Reports*.

If this option isn't selected but the report or dashboard is automatically queued the next time it's 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 or dashboard from being automatically queued when it's next run. However, even when this check box is cleared, you will still be asked to queue the report or dashboard when you next run it if it meets queuing criteria.

6. Select the database you want the report to run on.
 - a. To run the report or dashboard on the operational database, select **Operational Database**. This option is helpful if you need the most current data available.
 - b. To run the report or dashboard on the report database, select **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.
7. Click **OK**.
8. Click **Save**.

How Queuing Works on the Report Database

Report queuing works slightly differently when using the reporting database.

Since sites with report databases (also referred to as replication databases) have additional options available for running reports, queuing works slightly different on those sites. If your site has a report database, you'll want to consider keep the following 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. See [Change Report Properties](#).
- If a report is set to run on the report database and it's determined it will take longer than sixty seconds to run the report's query, you're 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. See [How You Search in Reports](#).

How You Distribute Reports and Dashboards

You can share reports with others in a number of ways.

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.

In addition, frequently-used reports and dashboards that query large amounts of information can be cached at scheduled times to reduce database load that can adversely impact site performance.

Note: Before you can print, export, or forward reports or dashboards, the Print/Export/Forward Reports permission must be enabled in your profile. See [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 B2C Service 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. See [Overview of Report Output Levels](#) for information about drilling down into report levels and [Overview of Linked Reports](#) for information about drilling down into other reports or dashboards.

Note: 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 isn't 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. See *Change Page Options* for descriptions of these settings.
- Reports shown in the record layout are by default converted to tabular layout when they're exported or scheduled in an Excel format. This ensures that the report's data can be easily read in a column and row format. See *Display Data Using 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 isn't fixed, the column's width setting is changed to Best Fit. See *How You Edit Column Formatting* 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. See *Add Page Breaks*.
- The dates and times displayed in scheduled reports are adjusted for the time zone of the interface they're sent from, but aren't adjusted for staff members' time zone settings in their staff accounts. See *Add or Edit a Staff Account* and *How You Schedule Reports*.
- Externally hosted images displayed in columns aren't available in scheduled reports. See *Display External Images in a Report Column*.

Print a Report

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.

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 **Print to Fit**.
3. Do one of the following:
 - 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.
 - Select printing options from the Page Setup tab's Print group. See *Report Page Setup Tab* 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.

4. Enter field information.

Page Setup Window

| 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 list. The available paper sizes depend on your selected printer. |
| Source | Click the paper source from this drop-down list. The available paper sources are dependent on the printer that is currently selected. |
| 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. 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. |

5. Click **OK**.

6. Click **File**, select **Print**, and then do one of the following to 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.

Preview a Report

You can preview the information on a report before you print it.

1. Open the report you want to preview.
2. Click **File** and select **Print > Print Preview**.
The **Print Preview** window opens.
3. Select the preview options you want.

Print Preview Window

| 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 | 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. |

| Field | Description |
|-------|--|
| Page | Enter the page number you want to view on the Print Preview window, either by entering the page number or by scrolling through the available page numbers with the arrows. |

Forward a Report

You can forward reports and dashboards in emails.

After 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.

Note: You can forward reports as long as the resulting HTML email does not exceed 8 MB.

1. From an open report, click the **Home** tab.
2. Click **Forward**.
The **Forward Report** window opens.
3. Do one of the following:
 - o 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.
 - o Click **To**, **Cc**, or **Bcc** 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. See [Select a Recipient](#).
4. Select a format for the forwarded email. Options include HTML Email or HTML Attachment (Images/Charts stored on the server).
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. See [Analytics Configuration Settings](#) for information about this and other configuration settings that impact reports.
5. Enter a subject for the email.
6. Enter any text you want to appear in the email in the **Comment** text box.
7. Click **Send**.

Related Topics

- [Modifications Made to Distributed Reports](#)

How You Publish Reports

Publishing a report lets you modify the data and display options of an existing report and then save a copy of the report in the reports explorer that other individuals can access.

After 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.

Note: To open a published report, staff members must have permission to access the report in the reports explorer folder where it's placed. You can change report permissions by editing the published report, or by editing Analytics permissions in the profile. See [Set Report Permissions](#).

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 runtime selectable filters aren't available.
- Actions that can be taken on individual records in the report are disabled. Therefore, buttons on the Home tab's Record group aren't available, inline editing is disabled, and action links aren't displayed.
- Paging is disabled for published reports. See [Add Page Breaks](#).
- The Publish option isn't available.
- If the report style the report used when it was published is deleted, a default report style is used when rendering the published report.

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.

Tip: You can view the published reports you own using the My Published Reports standard report.

Publish a Report Manually

You can manually publish a report and save it.

1. Run the report you want to publish using the same search parameters that you want the published report to use.
2. Click **File > Publish**.
The **Publish As** window opens.
3. Select a directory to store the published report and enter 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 **OK**.

Export Report and Dashboard Data

The data shown in reports and dashboards can be exported to several different file formats. You can then view the data in third-party applications. The information that's exported and opened in third-party applications is subject to the functionality of those applications.

Data can be exported to HTML, PDF (Portable Document Format), Excel, XML (Extensible Markup Language), Image, or Delimited formats. You can also export the report output to the clipboard.

When viewing a report, a maximum of 50,000 characters can display 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.

Tip: If you want to copy the contents from a few cells in your report or dashboard to another application, you do not need to export the data. Instead, you can right-click the cell you want to copy and select **Copy Cell to Clipboard**. After the data is on your clipboard, you can copy the data to other applications.

1. Run the report or dashboard to display the data you want to export.
2. Click **Export** on the Home tab.
A menu of export options displays.
3. Select the type of export file that you want.

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 and dashboards can be exported using absolute or relative HTML layouts. See <i>Export Report and Dashboard Data</i> for descriptions of export options. |
| PDF | This option exports the data to a PDF file, which is compatible with exporting images and charts. When you select this option, you can have the file's page width set automatically or use the options on the Page Setup window. |
| Excel | This option exports the data to a Microsoft Excel file. When exporting in this format, the version of Microsoft Excel installed on your workstation is automatically checked and the data is exported to an .xls or .xlsx file depending on the version. |
| XML | This option exports the data to an XML file. |
| Image | This option exports the data to a .jpg image file, which is compatible with exporting images and charts. |
| Clipboard | This option exports the data to the workstation's clipboard. The data can be exported to the clipboard in HTML, Tab Delimited, or Comma Delimited formats. After 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 select 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 save location, whether to include the report or dashboard name, and whether all the data should be returned or only data shown on the current page. The HTML, PDF, and custom delimiter export options include additional export options.

4. Select the options you want applied to the export file.

Export Options Window

| Field | Description |
|--|--|
| Location | This field displays the file name and where it is saved to. When the Export Options window is initially opened, a default directory location and file name displays. |
| Save to Folder (folder icon) | Click this button to open the Save As window if you want to specify an alternate location or file name. |
| Launch Application | Select this check box to automatically launch the application associated with the file type the data is saved to when you close the Export Options window. If you're 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 data. |
| 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 | Enter 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 or dashboard. See Reference Information . |
| 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. |
| Add Report Name to Output | Select this check box to include the report's name in the export file. This option isn't available when exporting dashboards. Report names display in exported dashboard files if their title bars are enabled in the dashboard's display options. See Edit Dashboard Options for information about including report title bars on a dashboard. |
| Data Set | The options in this group let you specify whether 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. 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. This option isn't available when exporting dashboards, published reports, or queued reports. |
| Export Current Page | Select this option to export only the data currently shown on the report. |
| Export All Data | Select this option 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. This option isn't functional for reports that were queued. |

| Field | Description |
|---|--|
| HTML Options | Select how you want the HTML file to be generated in this section. This section displays only when you select HTML format. |
| Use Absolute Layout | Select this option to format the export file using absolute layout. The exported report or dashboard will match the display of the original very closely, though discrepancies may be noticed in some reports and dashboards. Some browsers do not support printing HTML files that use this layout. |
| Use Relative Layout | Select this option to format the export file using relative layout. The exported report or dashboard will be similar to the original, though there may be some discrepancies. Most browsers support printing HTML files that use this layout. |
| PDF Options | Select how you want to specify the width of the PDF document in this section. This section displays only when you select PDF format. |
| Set Page Width to Best Fit the Report | Select this option to automatically set the width of the PDF file to best fit the width of the report or dashboard. This method displays the report or dashboard in its original width, though the size of fonts may be reduced and the file may use landscape orientation to fit wide reports and dashboards. |
| Use Printer Page Setup to Set Page Dimensions | Select this option to open the Page Setup window to manually select margins, paper size, and orientation for the PDF file. <i>Print a Report</i> for information about this window. |
| Excel Options | Select how you want to format date/time columns for the Excel file in this section. 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 the exported data is consistent with Excel's functionality. |
| Include Cell Images | Select this check box to include images that are displayed in the report's or dashboard's cells in the exported file. This option is selected by default. |
| Custom Delimiter | Enter the custom delimiter you want to use in this field. This option displays only when you select the Delimited > Custom format. |

5. Click **OK**.

If you selected the Launch Application check box, the application associated with the exported file's file type opens.

How You Schedule Reports

Scheduled reports are a list of reports that are set up to run on a specified schedule.

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.

Certain modifications may be apparent when viewing reports or dashboards sent in emails. See *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. See *Create a Custom Script in a Report*.

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. See *Add an Alert to a Schedule*.

Note: The Create/Edit Schedules Analytics profile permission must be enabled to schedule reports. See *Analytics Permissions*.

Schedule a Report

You can set up reports to run on a specified schedule.

Before you start

The Create/Edit Schedules Analytics profile permission must be enabled to create or edit schedules.

Here's what to do

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, and displays information about any schedules for the report that have been created.
 - b. To schedule a custom report, right-click the report and select **Edit**. Click the **Home** tab, and then click **Scheduling**. The **Schedules** window opens, showing schedules that have been created for the report.
 2. Click **Add Schedule**.

The **New Schedule** window opens.
 3. Enter a name for the new schedule in the **Name** field.

The name should clearly identify the purpose of the schedule. When creating a schedule to publish a report, the report that's created in the destination folder is given the name you specify in the Name field.
 4. Specify the email recipient (unless using the Published format), using one of the following methods:
 - o Enter the email addresses the scheduled report email should be sent to in the **To** field. Separate addresses with semicolons.
 - o Click **To**. The **Select Recipients** opens where you can add staff members, groups, and distribution lists to the schedule. See *Select a Recipient*.
- Note:** Emails sent for scheduled reports automatically hide the other recipients' email addresses in the email header.
5. Enter a subject for the scheduled report email in the **Subject** field.
 6. Enter any text you want to include in the body of the scheduled report email in the **Comment** field.

7. Select the format of the report from the **Format** drop-down list.

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. Non-English characters may not display correctly when sent as a PDF attachment. We recommend instead using an HTML format for such reports. |
| Published | Select this option to publish the report at the scheduled time. See How You Publish Reports . Note: The Published format does not require email information. |
| 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 aren't 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. <ul style="list-style-type: none"> ○ The report cannot contain custom scripts. ○ The report cannot contain comparison columns. ○ The report cannot contain date grouping columns. |

| Format | Description |
|---|---|
| | <ul style="list-style-type: none"> o The report's rows must return unique records, such as information about specific incidents, answers, or contacts. o 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 isn't available for reports that do not meet these requirements. <p>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 have this issue, you can queue the report to save it in a CSV file instead. See Overview of Queuing Reports.</p> <p>This option isn't available when scheduling dashboards.</p> |
| 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. See How You View Reports in the Queue . |

8. To select the folder in the Reports explorer where you want published reports sent, click the **Destination Folder** drop-down list and select the folder you want as your destination. This drop-down list is available only when you select the Published format. See [How You Publish Reports](#).
9. From the Run Report As drop-down list, select the staff account you would use if the report was 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. See [Add or Edit a Staff Account](#).
10. Click the schedule time next to the Recurrence field. The **Schedule Recurrence** window opens. The underlined text displays the report's current schedule. This is set to Every Day Every Hour by default.
11. Enter field information.

Schedule Recurrence Window

| 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. |

| Field | Description |
|--------------------------|--|
| Monthly | Select this option 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. |
| Weekly | Select this option 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 option, a Recur drop-down list 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. |

12. Click **OK**.

13. 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. The Search window opens where you can select the values for the report's runtime filters to use when the scheduled report is automatically generated.

If you do not specify filter values, the report's default values are used. See [Overview of Report Filters](#).

Note: The Ordering feature isn't available when selecting filter options for scheduled reports.

14. Click **OK**.

15. To edit an existing schedule, click **Edit** next to the name of the schedule on the Scheduling or Schedules windows. The **Edit Schedule** window opens. The options in the window are identical to those in the New Schedule window.

16. To delete an existing schedule, click **Delete** next to the name of the schedule on the Scheduling or Schedules windows.

a. Click **Yes** to confirm the deletion.

Related Topics

- [Analytics Permissions](#)

Add an Alert to a Schedule

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 exceptions 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. After 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. See [Create a Data Exception](#).

1. Open the New Schedule window, as described in [Schedule a Report](#).
2. Do one of the following:
 - o Enter the email addresses to send the alert to, separated by semicolons.
 - o Click **To**. The **Select Names** window opens where you can add staff members, groups, and distribution lists to the alert. See [Select a Recipient](#).

Note: 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 information for the alert.

Add Alert Window

| Field | Description |
|-----------|--|
| Name | Enter a name for the alert. |
| Exception | Click this drop-down list to select the data exception that's 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 **OK**.

Cache Reports and Dashboards at Scheduled Times

Caching reports and dashboards that require large database queries can significantly improve report performance.

Running reports and dashboards that pull large amounts of information from multiple database tables can strain database resources. If several users need to run such reports and dashboards regularly, the resulting load can adversely impact site performance. Caching these reports and dashboards on a schedule can greatly reduce the load on the database while providing recent data for your reporting needs.

You can specify when you want your reports or dashboards cached. By default, they're cached hourly, though you can set caching intervals as short as fifteen minutes. Cached reports or dashboards are run on the server at the specified caching time. When a user needs to access the report or dashboard, they open it as they normally would. However, the report or dashboard they see is the version that was cached earlier. At the next scheduled caching time, the report or dashboard is run on the server again, replacing the previous version.

1. Click **Analytics** on the navigation pane.
2. Double-click **Reports Explorer**.
3. Go to the report or dashboard you want to cache, right-click the report or dashboard, and select **Edit**.
4. Click **Caching** on the Home tab.
The **Caching Options** window opens.
5. Enter field information.

Caching Options Window

| Field | Description |
|--------------------------|--|
| Enable Results Caching | Select this check box to cache the report or dashboard at scheduled times. The other fields on the Caching Options window are disabled when this check box is cleared. |
| Schedule Times | Select the times of day that you want the report or dashboard data to be cached. You can click the plus signs next to the hour menu items to view and select fifteen-minute intervals. |
| Select All | Click this text to automatically select all hourly intervals. Fifteen-minute intervals aren't selected when you click this. |
| Clear All | Click this text to clear all times that have been selected. |
| Recurrence Pattern | Select the weekly or monthly caching intervals in this section. |
| Clear All | Click this text to clear all selected recurrence pattern check boxes. |
| Monthly | Select this option to display check boxes for each date in a month. You can then select the dates of the month you want caching to occur. |
| Weekly | Select this option to display check boxes for each day of the week. You can then select the check boxes next to the days you want caching to occur. When you select the Weekly option, a Recur drop-down list displays where you can specify which weeks you want caching to occur. For example, if you want a report cached every week on the selected days, enter 1 in the field. If you want the report cached only every third week on the selected days, enter 3 in the field. This field accepts values from 1 to 99. |
| Schedule Specific Months | Click this text to select the months you want caching to occur. By default, every month is selected, but if you do not want caching to occur 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. |

6. Click **OK**.

How You Change Report Formatting

When viewing a standard or custom report, you can change the report's appearance and how data displays.

You can change the report's colors, fonts, and other display options. You can also change formatting options to sort content, hide columns, add page breaks, and filter data to display only a subset of the records the report returns.

You can also change how data displays on the report using slicing, cross tabs, and rollups. You can also display guided assistance response data in a tree format to help you better review the flow of guided assistance responses.

Note: Your profile must include the Customize Reports Analytics permission to use these options.

Related Topics

- [Analytics Permissions](#)

Apply a Style to a Report

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, see [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. There are a number of default styles to select from. When creating a report for use on the Browser User Interface, we recommend using the Web Theme style which is formatted for use with web browsers.

1. From an open report, click the **Display** tab.
2. Click **Auto Format**.
The **Auto Format** window opens.
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.

Results:

The report is updated to use the style you select.

Display Data Using Record or Tabular Layouts

Reports can display 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 with the record layout is shown here.

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.

| Incident Activity | |
|-------------------|---|
| Reference #: | 100909-000012 |
| Status: | Solved |
| Subject: | Warranty extension |
| Date Created: | 08/21/2013 02:48 PM |
| Assigned Account: | Ed Lang |
| Reference #: | 100909-000002 |
| Status: | Solved |
| Subject: | The wrong phones were shipped to my office |
| Date Created: | 08/21/2013 02:22 PM |
| Assigned Account: | Faith Carson |
| Reference #: | 100929-000002 |
| Status: | Solved |
| Subject: | How do I access voicemail outside my home calling area? |
| Date Created: | 09/10/2013 02:18 PM |
| Assigned Account: | Lucy Bauer |
| Reference #: | 100910-000008 |
| Status: | Solved |
| Subject: | How do I activate GPS on my phone? |
| Date Created: | 08/22/2013 12:03 PM |
| Assigned Account: | Lucy Bauer |

1. From an open report, click the **Display** tab.
2. Click **Data**.
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**.

How You Change Report Display Options

Report styles let you change the display options for specific areas of a report, such as the title or data areas.

If you want to change the margins, width, background, and borders of the entire report, or change how the report output displays, you can change the report's display options. These are modified using buttons on the ribbon or by using the tabs on the Display Options window.

Related Topics

- [Overview of the Report Ribbon](#)

Change Page Options

The Page Options tab on the Display Options window contains settings which control report width and the margins surrounding the report content.

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 field information.

Page Options Tab

| Field | Description |
|--------------|--|
| Report Width | Define the width of the entire report using the available options. |

| Field | Description |
|----------------|--|
| Best Fit | Select this option 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. When using this option, all content in the report is examined to calculate column width before the report displays. To reduce the report load time, select the Improve Display Performance data display option. See Change Data Display Options . |
| Fit in Window | Select this option 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 option 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 **OK**.

Change Data Display Options

You can select data display options to control a number of features that modify 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.

1. From an open report, click the **Page Setup** tab, and then click the button to the right of the Display group name. The **Display Options** window opens.
2. Click the **Data Display Options** tab.
3. To format the report in record layout, select **Display Columns in a Record Layout**. See [Display Data Using Record or Tabular Layouts](#).
4. To fix the report's column headers at the top of the report so they're always visible when scrolling the report, select **Fix Column Headers**.
5. To add row numbers to each row of the report, select **Display Row Numbers**.
6. To display multiple calculations in the report on separate lines, select **Display Calculations on Separate Rows**. If this check box isn't selected and the report displays more than one calculation, the calculations display on the same line.
7. To reduce processing time when using the Best Fit option to automatically size report columns, select **Improve Display Performance**.
By default, the Best Fit option examines content in every row and column in the report to calculate column widths. Selecting Improve Display Performance changes the processing to examine only the content initially displayed on the screen and in every 100th row in the report. Since not all content is examined, report load times are reduced, though some items in the report might be truncated.
The Improve Display Performance option is ignored when using a report with cross tabs, rollups, conditional formatting, and exceptions, since these require examining all content before the report is displayed.
8. To add a column to your report which displays actions you can take on records in the report, select **Display Links Column** and select the commands you want to include in the column.
If the rows do not see unique records, such as a specific incident or contact, the Display Links Column check box is disabled.
9. Click **OK**.

Customize a Report Background

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.

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 field information.

Background Tab

| 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. See Change 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. |
| Gradient Mode | Select the positioning of the primary and secondary colors for the background from the Gradient Mode drop-down list. Using gradient coloring lets you merge two colors. The following options are available. <ul style="list-style-type: none"> ○ 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. See Change 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. See Images Explorer . |

| Field | Description |
|-------------|---|
| Clear Image | Click Clear Image to remove a previously selected image from the report. |
| Layout | Click this drop-down list to define the placement of the image on the background. Available options are None, Title, Center, and Stretch. |

5. Click **OK**.

Add a Border 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.

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 field information.

Borders Tab

| Field | Description |
|----------------|---|
| Color | Click this box to select a color for the border. See Change Colors . |
| Style | Click this drop-down list to select one of the following border styles: Solid, Dashed, Dotted, Inset, Outset, Double, Groove, Ridge, or Rounded. |
| Weight | Click this drop-down list to select the width of the border in pixels. You can select values between 1 and 10 pixels. |
| 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. |
| Border buttons | Click one of the border buttons 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 **OK**.

Show or Hide Report Sections

Different sections in a report can display large amounts of information you may not need to see. You can select which sections you view in a report, making it easier to see only the information you want to view.

Report sections include docked filters, headers, footers, charts, data exceptions, and the data area, that shows the tabular data returned by the report. You can hide or display each of these.

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 **Data** and select **Do Not Display Data**.

Show or Hide 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.

1. From an open report, click the **Display** tab.
2. Click **Exceptions**.
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 **OK** to apply the exception visibility to the report.

Change Report Magnification

When viewing a report, you can change the magnification level to better view the content.

The magnification slider always displays on the bottom right of the content pane, but is enabled only when viewing a report. The current magnification level is shown to the left of the slider. You can select levels ranging from 10 to 200 percent.

To use the slider, drag it to the left or right to decrease or increase magnification. You can also click the plus or minus sign on either end of the slider.

Hide or Show Columns Using the Field Chooser

If you don't want to view all the fields included in a report when you view it, you can hide the fields temporarily. You can also display fields in the report that are hidden.

1. From an open report, click the **Display** tab.
2. Click **Field Chooser** 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's 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 **OK**.

Hide or Show a Column Using Right-Click Options

You can use the right-click menu options to hide or show a column in your report.

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.

How You Change Report Sort Order

You can change the sort options for a report to sort by any column.

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.

Change Sort Order Using the Ribbon

You can change the order of sorting information in a report.

1. From an open report, click the **Home** tab.
2. Click **Sort**. The **Sort** window opens.
The Sort button is also available from the Design tab when using the layout view.
3. Select the primary field you want to sort by from the **Sort Items By** drop-down list.
4. To sort by the selected field in ascending order, select **Ascending**. To sort in descending order, select **Descending**.
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 **Sort by Menu Sequence**.
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 lists.
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 **Clear All**.
8. Click **OK**.

Results:

The report refreshes using the sort order you defined.

Change Sort Order Using Column Headers

You can quickly change the sort order using column headers.

1. Click **Views** 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.

Enable Auto Filters

You can add auto-filtering to report columns, giving you a quick way to filter data 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.

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.

1. From an open report, click the **Home** tab.
2. Click **Auto Filter** to display arrows next to each column in the report. Click the Auto Filter button again to turn off auto filtering.
3. To filter on a column, click the down arrow in the column's header to open the drop-down list 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 list to define whether the records with the highest or lowest field values are displayed.

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 **OK**.

7. To create a custom filter on the field, perform the following steps:

- a. Select **Custom**.

The **Custom Auto Filter** window opens. Only records that match your custom filter display in the report.

- b. Define the custom filter you want to use.

The filter options vary somewhat depending on the type of field that's being filtered on. For example, date fields include calendar options, whereas text fields do not. However, every window has a drop-down list from which you can select the operator, and an area to enter the filter value. See *Overview of Report Filters*.

Note: To specify values from menu fields, the value must be entered manually. 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), enter them as 'Bob Jones','Sarah Smith','Tom Payne'.

- c. Click **OK**.

Add 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 go 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. See *How You Search in Reports* for information about using the Search window.

1. From an open report, click the **Display** tab.
2. Click **Page Report** and select the number of rows per page you want for your report.
3. To specify a different number of rows per page, click **Page Report** and select **More Options**.
 - a. Select **Page Report**. If the report is already paged, this check box is automatically selected when you open the window.
 - b. Enter the number of rows you want on each page in the **Rows per Page** field.
 - c. Click **OK**.
4. To remove paging from the report, click **Page Report** and select **Remove Paging**.

After 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.

How You Slice Report Data

Slicing a report allows you to group tabular data sharing common values in fields included in the report.

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.

| Reference # | Subject | Created | Assigned Account |
|---------------|---|---------------------|------------------|
| 100909-000000 | How do I access my voicemail outside of my home calling area? | 08/21/2013 02:13 PM | Faith Carson |
| 100909-000001 | Power surge recovery | 08/21/2013 02:15 PM | Lucy Bauer |
| 100909-000002 | The wrong phones were shipped to my office | 08/21/2013 02:22 PM | Faith Carson |
| 100909-000005 | Health hazards of cell phone | 08/21/2013 02:25 PM | Phil Wicklund |
| 100909-000006 | Caller ID problems | 08/21/2013 02:28 PM | George Hewitt |
| 100909-000007 | Billing issues | 08/21/2013 02:32 PM | No Value |
| 100909-000008 | I need information about the Mundo recall | 08/21/2013 02:36 PM | No Value |
| 100909-000010 | I'm looking for a plan with unlimited minutes | 08/21/2013 02:41 PM | Mindy Fletcher |
| 100909-000011 | Switching to the pre-pay plan | 08/21/2013 02:43 PM | Lucy Bauer |
| 100909-000012 | Warranty extension | 08/21/2013 02:48 PM | Ed Lang |
| 100909-000013 | Available ring tones? | 08/21/2013 02:46 PM | No Value |

The next figure shows a report sliced on assigned account with the slice options displayed as links.

| Reference # | Subject | Created | Assigned Account |
|---------------|---|---------------------|------------------|
| 100909-000000 | How do I access my voicemail outside of my home calling area? | 08/21/2013 02:13 PM | Faith Carson |
| 100909-000001 | Power surge recovery | 08/21/2013 02:15 PM | Lucy Bauer |
| 100909-000002 | The wrong phones were shipped to my office | 08/21/2013 02:22 PM | Faith Carson |
| 100909-000005 | Health hazards of cell phone | 08/21/2013 02:25 PM | Phil Wicklund |
| 100909-000006 | Caller ID problems | 08/21/2013 02:28 PM | George Hewitt |
| 100909-000007 | Billing issues | 08/21/2013 02:32 PM | No Value |
| 100909-000008 | I need information about the Mundo recall | 08/21/2013 02:36 PM | No Value |
| 100909-000010 | I'm looking for a plan with unlimited minutes | 08/21/2013 02:41 PM | Mindy Fletcher |
| 100909-000011 | Switching to the pre-pay plan | 08/21/2013 02:43 PM | Lucy Bauer |
| 100909-000012 | Warranty extension | 08/21/2013 02:48 PM | Ed Lang |
| 100909-000013 | Available ring tones? | 08/21/2013 02:46 PM | No Value |

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.

Slice Report Data

You can configure a report you're viewing to display the report's data in slice groups.

1. From an open report, click the **Home** tab.
2. Click **Slice**. The **Slice** window opens.

Tip: When viewing a report using the layout view, you can select a column, click the **Design** tab, and click **Slice** to slice the report by the selected column.

3. Enter field information.

Slice Window

| Field | Description |
|----------|--|
| Slice By | Select from the following options to define the slice by column values or buckets. |

| Field | Description |
|-----------------------|--|
| Column Values | Select this option 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 option 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. See <i>Define a Slice Bucket</i> . |
| Display Slices | Select from the following options to define how the slice groups selection appears in the report. |
| As a Tree | Select this option to display slice groups in a tree that's docked to the report. |
| 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 option 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 subgroups 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 options 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 isn't selected, the slice groups will be ordered alphabetically. This option can be configured only when editing the report on the report designer. See <i>Open the Report Designer</i> . |
| Drag and Drop Options | Click this text to configure custom drag-and-drop options for inline editing. See <i>Use Slicing to Edit Records</i> . This option can be configured only when editing the report on the report designer. See <i>Open the Report Designer</i> . |
| Clear All | Click this button to reset all slice fields to None. |

4. Click **OK**.
The report displays with the slice groups you defined.
5. To remove slicing from your report, click **Slice > Reset**.
6. To display the number of records in each slice group displayed as a tree, click **Slice > Display Group Counts**.
The number of records in each slice group displays next to the group names in the slice tree.

- To switch between displaying slice groups as a tree and as links, click **Slice > Display Slice Items > As a Tree or As Links**.

Note: If you're slicing by more than one column and change the display from a tree to links, only the first slice column displays.

Define a Slice Bucket

Slicing records by buckets lets you 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.

- From an open report, click the **Home** tab.
- Click **Slice**.
The **Slice** window opens.
- Select **Buckets** in the Slice By section.
The options on the Slice window change to let you create, edit, or delete buckets.
- Select the field on which to slice from the **Slice Column** drop-down list.
- Click **Add Bucket**.
The **Slice Bucket** window opens.
- Enter field information.

Slice Bucket Window

| Field | Description |
|----------|---|
| Name | Enter a name for the new bucket. |
| Operator | Click this drop-down list to select the operator to use. Operator options are the same as those available when defining filter values, described in Overview of Report 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 lists with various values to select, while other fields display a calendar to select specific dates or date ranges. To specify values from menu fields, you must manually enter the value. 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), enter them as 'Bob Jones','Sarah Smith','Tom Payne'. |

- Click **OK** to return to the main Slice window.

Define a Cross Tab Report

Cross tabs let 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 | | | |
| Assigned Account | Incidents | | |
| | Solved | Unresolved | Waiting |
| Ed Lang | 1 | 1 | 0 |
| Mindy Fletcher | 1 | 0 | 0 |
| Lucy Bauer | 2 | 1 | 1 |
| Falh 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

After 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.

1. From an open report, click the **Display** tab.
2. Click **Cross Tab**.
3. Select **Choose Columns**.
The **Cross Tab** window opens.
4. Enter field information.

Cross Tab Window

| 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. |

| Field | Description |
|--------------------------------|--|
| 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. |
| Clear All | Click this button to clear all fields and reset the cross tab definition. |

- Click **OK**.
- To remove cross tabs from your report, click **Cross Tab > Reset**.
- To perform cross tab calculations on the report, click **Cross Tab > Perform Cross Tab Calculations**.
- To switch between displaying output fields above or below column fields, click **Cross Tab > Display Output Fields > On Top or On Bottom**.

Define Rollups

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 subheadings.

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 can use rollups in an incident report to group incidents by their status. You can then add a second rollup level to group incidents with the same status by their assigned staff account.

- From an open report, click the **Home** tab.
- Click **Rollups**.

Tip: When editing a report on the report designer, you can select a column and click **Rollup** on the Design tab to roll up the report by the selected column.

- Select **Choose Columns**.
The **Rollups** window opens.
- Enter field information.

Rollups Window

| Field | Description |
|--------------------|---|
| Rollup Items By | Select output columns from the drop-down lists in this section to use as the primary rollup level. After 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 lists. When multiple columns are used in a rollup level, the data displayed in 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 isn't selected, the column name displays in the rollup heading, but isn't included as a column in the report output. |

| Field | Description |
|--|--|
| Then By | <p>Select output columns from the drop-down lists in this section to use as the secondary rollup level. After you select a column, you can select the sort order for the rollup column. Options include Do Not Sort, Sort Ascending, and Sort Descending.</p> <p>Secondary rollup levels break down the data in the primary rollup level depending on the columns selected for the secondary level.</p> <p>After you define a secondary rollup level, an additional Then By field displays. You can use this to define a third rollup level to further break down the data grouped in the secondary rollup level.</p> <p>Note: The header for the secondary rollup doesn't display if records grouped in 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.</p> |
| Display Rollup Headings | Select this check box to display the rollup headings and subheadings. Headings don't display if this check box is cleared. However, the report data is still sorted as if the headings were displayed. |
| Display Rollup Headings Multi-Line | <p>Select this check box to display each rollup column as a separate heading. If this check box isn't selected when using multiple columns in the same rollup level, the columns for the rollup level display in the same heading.</p> <p>This check box is disabled if the Display Rollup Headers option isn't selected.</p> <p>Note: This option isn't currently supported on the Agent Browser User Interface.</p> |
| 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 displays for each rollup group. |
| Repeat Column Headings for Each Rollup | <p>Select this check box to show the output column headers before each rollup heading and subheading. If this option isn't selected, the column headers display only at the top of the report.</p> <p>Note: This option isn't currently supported on the Agent Browser User Interface.</p> |
| Display Group Counts | Select this check box to display the number of items in each rollup heading and subheading. |
| 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 **Clear All**.
6. Click **OK** to generate the report using the rollups settings.
The report refreshes, displaying the rollup levels you defined.
7. To quickly remove rollups from your report, click the arrow on the **Rollups** button and select **Reset**.
8. To display the number of records in each rollup group, click the arrow on the **Rollups** button and select **Display Group Counts**. Repeat this to hide the headings.
9. To display headings for each rollup group, click the arrow on the **Rollups** button and select **Display Rollup Headings**. Repeat this to hide the headings.

10. To show the name of the rolled-up column in the heading for each rollup group, click the arrow on the **Rollups** button and select **Display Column Headings**. Repeat this to hide the column name.
11. To display repeating column headers, click the arrow on the **Rollups** button and select **Repeat Column Headings**. Repeat this to hide repeating column headers.
12. To collapse all the rollup headings in a report, click the arrow on 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 beneath the headings.

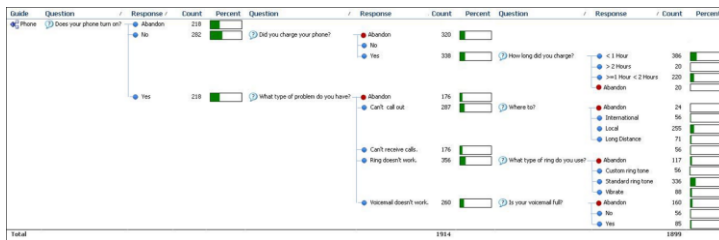
Display Guided Assistance Information in Tree Format

Guided assistance allows you to offer help to your customers using questions that then branch to other questions or answers.

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. See [Overview of Guided Assistance](#).

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. See [Define a Cross Tab Report](#).

The following report is configured to display guided assistance data in a tree format.



1. Open the report that contains the guided assistance information.
2. Click the **Display** tab and then click **Guide**.
The **Edit Guide Display Options** window opens.
3. Enter field information.

Edit Guide Display Options Window

| 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. |

| Field | Description |
|-----------------------|---|
| 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 list 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 list 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 **OK**.

How You Save Report Display Settings

You can choose to save or clear any changes to the report display settings.

After 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 made.

Save Display and Data Settings for a Report

Using the Save as Default feature, you can save changes to a report's display and data settings to your workstation so the report uses the same settings you have previously defined.

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. However, you can save your preferences for these settings as your default so they're used automatically when you next open the report.

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. See [Change Your Personal Settings](#).

1. Open a report and change display and data settings.
2. Click the **Home** tab.
3. Click **Default Settings > Save as Default**.

Reset Display and Data Settings

You can remove a report's display and data settings that are stored on your workstation. This restores these settings to the defaults defined in the report.

1. Open a report that has display and data settings stored on your workstation.
2. Click the **Home** tab.

3. Click **Default Settings > Restore**.

A warning message asks if you're certain you want to restore the default settings.

4. Click **Yes** to delete your personalized report settings from your workstation.

How You Edit Data on a Report

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.

Note: 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. See *Analytics Permissions*. In addition, inline editing must be enabled for the report and the report must display data that can be edited. See *Enable Inline Editing*.

When you edit data inline on a report, the changes you make need to be saved to the server. If this 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's made.

Edit an Individual Value Inline

When editing options are enabled in a report, the data shown for a record on the report can be edited directly without opening the record.

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 list.

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're 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 aren't saved to the server automatically, click **Save** to save the change to the server. See *Save Edits Performed Inline*.

Use Slicing to Edit Records

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. By default, you cannot edit any fields using drag-and-drop that aren't used in the slice tree.

As an 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.

Note: You can't customize slice drag-and-drop options when running a report. The options must be configured when editing the report on the report designer.

By customizing slice drag-and-drop options, you change the drag-and-drop behavior to edit fields in a record that aren't 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.

1. Open the report you want to edit on the report designer.
2. Click **Inline Editing** on the Home tab to ensure inline editing is enabled.
3. Click **Slice**.
The **Slice** window opens.
4. Click the **Slice Items By** drop-down list and select the column you want to use to slice the report output.
The column you 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 will be selected below.
5. Click **Drag and Drop Options**.
The **Drag and Drop Options** window opens.
6. Select **Enable Drag and Drop**.
This check box is selected by default; however, it's disabled if the slice column is enabled for inline editing.
Note: 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.
7. Click the **Source Column** drop-down list and select the column with the values you want to use in the destination column.
8. Click the **Destination Column** drop-down list and select the column you want to populate using the values from the source column.
The options displayed in the drop-down list depend on the selected source column since the columns must have the same data type (such as text, currency, or integer).
9. Click **OK**.
10. Click **OK** to close the Slice window.
11. Click **Save**.

Results:

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.

Related Topics

- [How You Edit Data on a Report](#)
- [Enable Inline Editing](#)

How You Edit 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.

Edit Values in Multiple Rows Using the Ribbon

Multiple records can be selected and edited 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 **Edit Selection**.
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 **OK** to apply the change to the selected records.
7. If inline edits aren't saved to the server automatically, click **Save** on the Home tab to save the changes to the server. See [Save Edits Performed Inline](#).

Edit Multiple Values Using Slicing

You can select and edit multiple records 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. See [How You Slice 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. After 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 aren't saved to the server automatically, click **Save** on the Home tab to save the changes to the server. See [Save Edits Performed Inline](#).

Save Edits Performed Inline

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. See [Enable 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. After the data is saved to the server, the visual indicator is removed.

1. To save changes automatically, click the **Home** tab and then click **Auto Save**. The button is highlighted when Auto Save is enabled.

Any other inline edits made to the report's fields will be saved to the server automatically until the report is closed again.

2. To save changes manually, click the **Home** tab and then click **Save**.

Dashboards

Overview of Dashboards

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.

When viewing standard or custom reports, you generally open reports one at a time, and search for data in only the report that's 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.

How You Create Dashboards

Dashboards are created and edited on the dashboard designer. You can modify your dashboards by adding images, text, and controls, and changing their appearance.

If you don't 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 designer.

Note: Customizations made to report displays in existing dashboards aren't carried over when copying dashboards. This can result in a copied dashboard displaying somewhat differently than the original.

Open the Dashboard Designer

The dashboard designer 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 designer 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 designer from the Reports explorer.

1. If your navigation set is configured to add dashboards from the file menu, do one of the following:
 - Click **File > Dashboard**. See *Overview of Navigation Sets*.
 - Click **Analytics** on the navigation pane and then double-click **Reports Explorer**.
2. To create a dashboard, click **New Dashboard**.

3. To edit an existing dashboard, right-click the dashboard and select **Edit**.

The dashboard designer opens. The designer consists of the ribbon, the design surface, where the dashboard content is placed, and the reports explorer, which shows reports and other items you can place on the dashboard. For descriptions of the ribbon and main components, see *Overview of the Dashboard Designer Ribbon* and *Overview of Dashboard Designer Components*.

Overview of the Dashboard Designer Ribbon

When you open the dashboard designer, 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.

Dashboard Designer Home Tab

The options available on the Home tab let you preview the dashboard you're 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.

Home Tab

| Group/Button | Description |
|--------------|---|
| Views | This button lets you choose whether to view the dashboard using the report view or design view. See <i>How You Preview Dashboards</i> . |
| 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. See <i>Edit Dashboard Options</i> . |
| 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. See <i>How You Schedule Dashboards to be Sent</i> . 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. See <i>Set Dashboard Permissions</i> . |
| 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. See <i>View the Dashboard Audit Log</i> . The Expanded Report Audit Log is also available. This shows you when reports and dashboards have been generated, printed, exported, and previewed over the previous 30 days. See <i>View the Expanded Report Audit Log</i> . |

| Group/Button | Description |
|------------------|---|
| References | <p>Click this button to access predefined reports that show you the workspaces, navigation sets, and report links that use the dashboard you're editing. Viewing these items before editing a dashboard ensures that you're 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.</p> <p>If you have the Analytics Administrator profile permission, you can access versions of these reports that include search options using the Report Management component. See How to Monitor Report Usage.</p> |
| 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 | <p>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.</p> <p>If the entire size of the dashboard exceeds 32767 x 32767 pixels, the dashboard contents are clipped when using scrolling.</p> |
| Display Options | Click this button to change the dashboard's width, add report title bars, and select which report sections you want to display. See Change 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. See Apply 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. See Overview of Dashboard Section Layouts . |
| Parameter Values | Click this button to open the Set Filter Values window where you can specify defaults for searching reports in the dashboard. See How You Specify Dashboard 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. |

Dashboard Designer Display Tab

The options available on the dashboard Display tab let you add images and text fields, show the dashboard header and footer, and hide portions of the designer so you can see only the components you need.

Display Tab

| Group | Description |
|---------------|---|
| Insert | The buttons in this group let you add images and text fields to your dashboard. See How You Add 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. See How You Add Dashboard Descriptions . |
| Show/Hide | The buttons in this group let you show or hide different parts of the dashboard designer. 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. See Overview of Dashboard Designer 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. 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. See How You Add Tabs to Dashboards . |

Dashboard Designer 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.

Page Setup Tab

| 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 default page width and send the dashboard to the printer. |

Dashboard Designer Text Field Tab

The ribbon's Text Field tab is shown when you select a text field on the dashboard designer.

You can use the buttons on the tab to edit the text field fonts, margins, and borders.

Text Field Tab

| 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. See Specify an Anchor Style for a Text Field and Specify an Anchor Style for an Image . |
| 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. Manually resizing the selected element disables Size to Fit. |
| 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 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 border display options. You can identify which borders you want and choose the border color, size, and style. |

Dashboard Designer Options Tab

The Options tab is shown 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.

Options Tab

| 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. See Overview of Dashboard Section Layouts . |
| Add Text Field | Click this button to add a new text field to the dashboard. |

Overview of Dashboard Designer Components

The tasks you perform when creating or editing a dashboard are performed using the dashboard designer's ribbon, design surface, and reports explorer.

These components provide access to the reports, dashboard sections, and other items you use to create and edit dashboards.

Dashboard Sections

| Dashboard Section | Description |
|-----------------------|--|
| Page Header | This section accepts images and text fields and displays 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 subtitle. |
| 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. See How You Add Dashboard Descriptions . |
| Dashboard Items | Contains the reports and components you add to the dashboard. 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. See How You Add Tabs to Dashboards . |
| Dashboard Footer | This section contains text fields and images that display at the bottom of the dashboard. |

| Dashboard Section | Description |
|-------------------|--|
| 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. |

Dashboard Design Surface

The design surface displays the dashboard sections you want to include in the dashboard.

After a dashboard section displays 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 Display tab.

Design Surface Display Options

| 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. |

Dashboard Reports Explorer

The dashboard designer's reports explorer lists the items that can be added to a dashboard. You add these by dragging them from the reports explorer to the dashboard's design surface.

The reports explorer on the dashboard designer includes reports, notifications, infolets, and a web browser component that you can place on the dashboard. If your site is configured to use custom add-ins, they're also available in the Components tree.

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 designer or open it in a new window just as you can move the data dictionary on the report designer. See *Move the Data Dictionary*.

Apply a Layout to a Dashboard

The use of layouts is optional, but they offer a helpful starting point when creating dashboards.

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.

1. Click the **Home** tab.
2. Click **Layouts** 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.

Consolidated Dashboard Layout

Unlike the other dashboard layouts that determine where individual reports display on the dashboard, the Consolidated Dashboard layout groups information from all reports on the dashboard into a single report.

Using this layout lets you display data from multiple, unrelated tables in a single report. While you can create reports that pull information from unrelated tables, they may fail to run due to database query limits.

Since consolidated dashboards combine data by matching the columns in the reports you add, all the reports must have the same number of columns and the corresponding columns in each report must have the same data type. For example, if one report has five columns, the other reports you add to the dashboard must also have five columns, all matching the data types of first report's columns.

How You Place Content on Dashboards

You can drag and drop the items from the dashboard designer's reports explorer to the dashboard design surface.

You can customize the content added to the dashboard:

- Choose where to place each item.
- Determine how much content you want to display.
- Use tabs to add additional content that might not fit on the dashboard's main page.

Note: Each dashboard can have a maximum of fifty items placed on it.

There are five types of items you can add to dashboards:

- Reports—Place reports on dashboards using drag and drop from the reports explorer. You can remove, replace or edit them at any time. See [How You Place Reports on Dashboards](#).
- Add-ins—Access any installed add-ins from the dashboard from the Components > Add-ins folder. You can drag and drop them to the dashboard. See [Overview of Add-Ins](#).
- Notifications—Staff members can receive notifications on their dashboards to alert them of events, such as an incident has been assigned to them. You can drag and drop notifications to the dashboard from the Components > Common folder. See [Notifications](#).
- Infolets—An infolet provides a brief overview of data pertaining to service performance, such as incident assignments and incident backlog. Infolets can also be used by managers who need to get a quick view of

information about data. You can drag and drop infolets to the dashboard from the Public Reports > Service folder.

Note: Use the Agent Overview and Service Overview dashboards to monitor agent performance and contact-center status. These dashboards will help you understand infolets, and how you can use them in your custom dashboards. When creating custom infolet dashboards, it is recommended to use the Infolet auto format style.

- Web browser—Add a web browser to a dashboard to allow staff members to access any web page displayed in the dashboard parameters. You can drag and drop the Web Browser-Component to the dashboard from the Public Reports > Common folder. You can then specify a default URL in the dashboard's parameters. See [How You Specify Dashboard Search Defaults](#).

How You Place Reports on Dashboards

Reports are the most likely items you add to dashboards. You can place reports on dashboards using drag and drop from the reports explorer.

There are some points to keep in mind before you add reports to the dashboard:

- Adding Private reports to a dashboard – The staff members who do not have permission to view individual reports can view them on the dashboard, if they have permission to open the dashboard. This may result in staff members viewing information they should not have access.
- Deleting a report used on a dashboard – The deleted report is automatically removed from the dashboard and a placeholder is displayed when you view or edit a dashboard.
- Using a report multiple times with different default filter values to show different data – You must create a copy of the report and add it to the dashboard along with the original, since only one set of filter values can be stored for each unique report on a dashboard.

Add a Report to a Dashboard


You can quickly add reports to a dashboard.


This 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.

1. In the dashboard designer's reports explorer, go to the report you want to add to the dashboard. You can quickly find reports by right-clicking a report folder in the reports explorer and selecting **Search**.
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, shown here, appear. Hovering over the various images highlights portions of the design surface. After the section where you want the report is highlighted, drop the report. The design surface refreshes to show the updated dashboard layout.

Dashboard Reports Positioning Icons

| Icon | Description |
|--|--|
|  <p>Entire Area</p> | <p>This icon group appears over the predefined dashboard section you're 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.</p> |

| Icon | Description |
|---|---|
| | <p>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.</p> <p>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.</p> |
|  <p>Area Buttons</p> | <p>Drop a report over one of these icons to place the report in the top, right, bottom, or left areas of the dashboard.</p> |

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 these steps to add additional reports to the dashboard.
6. Click **Save**.

Remove a Report from a Dashboard

You may want to remove reports from a dashboard; however, if a dashboard has only one report, you cannot remove it. You must replace it with another report.

Right-click the report on the design surface and select **Remove**.

Or

Click the item on the dashboard, click the **Display** tab, and click **Remove**.

Replace a Report on the Dashboard

You can replace a report with another report from the reports explorer.

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.

Open a Report for Editing from the Dashboard

If you have to make any changes to a report on the dashboard, you can open the report for editing directly from the dashboard.

Right-click the report on the design surface and select **Edit Report Definition**. The report opens on the report designer where you can edit it.

See [Open the Report Designer](#) for information about editing reports.

How You Add Tabs to Dashboards

Multiple pages containing reports can be added as tabs to the same 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 50 tabs.

Add a Tab to a Dashboard

You can add additional tabs to the dashboard.

1. Click the **Home** tab.
2. Click **Add Tab**.

Results:

After you add a tab, the dashboard designer 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.

Change the Name of a Tab

Tab names can be modified if needed.

1. Do one of the following:
 - o Right-click the tab on the design surface and select **Rename**.
 - o Click the tab, click the Display tab, and click the **Rename** button.
2. Enter the new name for the tab.
3. Click **OK**.

How You Add Dashboard Descriptions

Dashboard descriptions display information about the dashboard.

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.

Add a Dashboard Description

You can use the Edit Dashboard Description option to change the dashboard description.

1. Click the **Home** tab on the dashboard designer's ribbon.
2. Click **Options** and select **Edit Dashboard Description**.
The Edit Dashboard Description window opens.
3. Enter the text for the description.
4. Click **OK**.

Define the Description Location

You can directly display the dashboard description inline or display it on a separate tab.

1. Click the Display tab and then click **Dashboard Description**.
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**.

How You Add 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. After 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.

Overview of Dashboard Section Layouts

You can set the layout for dashboard sections to be manual or automatic.

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.

Enable Automatic Layout of a Dashboard Section

You can use an 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 **Automatic**.
4. To prevent the section's height from being automatically adjusted to fit the items you add to the section, click **Auto Height** 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.

Results:

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.

Change Table Layout Options

You can specify the table layout options for a dashboard section.

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 **Automatic** on the Options tab to change to an automatic layout.
4. Click **Table Layout** 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 field information.

Edit Table Layout Properties Window

| Field | Description |
|------------|---|
| Show | Select the row column you want to configure and then click this drop-down list to select whether you're configuring rows or columns. |
| Size Type | Specify how the size of the report section is determined in this section. |
| Absolute | Select this option to specify a certain size for the selected row or column in pixels. |
| Percentage | Select this option to specify a certain percentage of the total available space in the section to assign to the selected row or column. |
| Best Fit | Select this option to have the size of the selected row or column automatically adjusted to best fit the row's or column's contents. |

11. Click **OK**.

Add a Text Field to a Dashboard

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. See *Create a Text Field* for information about creating custom text fields. After 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.

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 **Automatic**. See *Overview of Dashboard Section Layouts*.
3. To add a preconfigured text field to the dashboard, click the Display tab and then click **Text**. 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're 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's not in the Text Fields explorer, click the Options tab and click **Add Text Field**. The text field is added to the dashboard section with default text and text attributes which you can then edit. See *Edit a Text Field in a Report*.
7. Click **Save**.

Edit a Text Field on a Dashboard

After 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 isn't 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.

Right-click the text field and select **Edit Text Field**.

Or

Click the text field and then click **Edit** on the Text Field tab.

The **Edit Text Field** window opens. For the procedure to use the options available on this window, see *Edit a Text Field in a Report*.

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.

Add an Image to a Dashboard

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.

See *Images Explorer* for information about adding images you can use on reports and dashboards.

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 **Automatic**. See *Overview of Dashboard Section Layouts*.
3. Click the **Display** tab.
4. Click **Image** 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's over a section that can accept an image.
7. Click to place the image in the dashboard section you select.
8. Click **Save**.

How You Move Images and Text Fields in Dashboards

After 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.

How You Change Dashboard Properties

You can change the dashboard properties if needed.

Many of the buttons on the 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's 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.

Edit Dashboard Options

Dashboard options let you modify numerous aspects of the dashboard that change how the dashboard appears and functions.

You can 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's 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. These and other options are described in the following procedure and are also addressed in [How You Search Dashboard Reports](#).

1. Click **Options** on the Home tab, and then select **More Options** to open the Edit Settings window.

Note: Most dashboard options can be selected from the Options button without opening the Edit Settings window.

2. Enter field information.

Edit Settings Window

| Field | Description |
|-----------|--|
| Time Zone | <p>Click this drop-down list 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's specified. The available options are:</p> <p>Same as Interface—The time zone is the same as that set for the interface. This is the default setting.</p> <p>Same as Account—The time zone is the same as that of the staff member who's using the dashboard. See Add or Edit a Staff Account.</p> <p>A specific time zone you can select from a list of standard time zones.</p> |
| Owner | <p>Click this drop-down list 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. See Set Dashboard Permissions.</p> <p>Changing the owner of a private dashboard makes the dashboard unavailable to the previous owner.</p> |

| Field | Description |
|---|--|
| Open dashboard without prompting for search parameters | Select this check box to open the dashboard using the default runtime filters for the reports. If this check box isn't selected, the Search window opens for the dashboard's reports before the dashboard displays. Selecting this check box does not prevent the Search window from opening if a report has a required runtime filter. See <i>How You Search Dashboard Reports</i> . |
| 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. |
| Cache the drilldown levels for all reports | <p>Select this check box to automatically cache the data in report levels when they're 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're viewing is cached on your workstation. The cache is cleared when you close the dashboard.</p> <p>If this option isn't selected, the database is queried every time you view an output level to ensure the most recent data displays 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.</p> <p>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.</p> |
| 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 isn't 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 | <p>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's selected.</p> <p>This check box is cleared automatically any time the data source is changed on the Edit Settings window.</p> |
| Set report to deferred execution | Select this check box to automatically queue the dashboard when it runs. |

| Field | Description |
|---|---|
| | If the dashboard is automatically queued the next time it runs due to meeting queuing criteria, this option is selected automatically. To prevent the dashboard from being queued when it's next run, edit the dashboard and clear this check box. |
| Data Source | Select which database you want the dashboard to run on. You can select the operational or the report database. See <i>Overview of Report Databases</i> for information about these data sources. 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 option 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 option 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 isn't 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 displays. |
| Delay non-focused tab report execution | Select this option to prevent reports on dashboard tabs that you're not viewing from loading in the background. Selecting this option can improve dashboard performance by reducing the amount of time it takes for the dashboard to initially load. |
| Auto-refresh options visible at runtime | 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. When this check box isn't 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. |
| 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 pick from a list of standard images or from custom images that have been added in the Images explorer. See <i>Images Explorer</i> . |
| Notes | Enter 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. |

3. Click **OK**.

How You Schedule Dashboards to be Sent

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, click the **Scheduling** button on the Properties tab. See [How You Schedule Reports](#).

Set Dashboard 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. Permissions applied to a private dashboard take effect only when the dashboard is made public.

1. Edit a dashboard and click the **Home** tab.
2. Click **Permissions**.
The Permissions window opens.
3. To let staff members open the dashboard, select the check box next to their profile name. You can select multiple profiles.
4. To let staff members edit the dashboard, select the check box next to their profile name. You can select multiple profiles.
5. Click **OK**.

View the Dashboard 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.

The audit log shows you when the dashboard was edited and generated, but not all actions taken on the dashboard, such as previewing it, are listed in the audit log. If you need to see every instance of a dashboard or report being generated, printed, exported, and previewed, you can use the Expanded Report Audit Log. See [View the Expanded Report Audit Log](#).

1. Edit a dashboard and click the Home tab.
2. Click **Audit Log**.
3. To access a list of actions that can be taken on the audit log report, click **Options**. Many of the actions available when viewing other reports are available on the Options button. See [Overview of the Report Ribbon](#) for descriptions of these actions.
4. Click **OK**.

How You Specify Dashboard Search Defaults

You can specify search defaults for the reports in a dashboard.

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 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, see [How You Search Dashboard Reports](#).

Set Dashboard Search Defaults

You can change the default values set for the report parameters, for example you can specify the total number of rows returned in the reports.

1. Edit a dashboard.
2. Click the Home tab.
3. Click **Parameter Values** to open the Set Filter Values window.

The window displays the runtime 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. Enter 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 isn't 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**. See [Overview of the Search Window](#).
8. Click **OK**.

How You Customize Your Dashboard Display

You can customize the appearance of your dashboards to make it more usable or presentable to your audience.

Numerous options are available to customize dashboard display. These include applying styles, selecting font attributes, modifying sizing options, and adding titles to the dashboard's reports.

Apply 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.

You can create your own styles, or select from a number of default styles. Two of the default styles are intended for specific purposes, though you can use whichever style you want.

- Infolet—We recommend using this style with dashboards that primarily contain infolets. This style is formatted to provide the most efficient use of space for viewing infolets. For information about infolets, see [How You Place Content on Dashboards](#).

- **Web Theme**—This style is intended for use on the Browser User Interface. This is formatted to provide a consistent look and feel when viewed in a web browser.

1. Click the **Home** tab.
2. Click **Auto Format** 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.

Results:

The report style is automatically applied to all the reports in your dashboard. If you later add a new report to the dashboard, you will need to apply the style to the dashboard again for the style to be applied to the new report. See [Apply a Style to a Report](#) for information about applying a style to a report. For procedures on editing and creating styles, see [Styles Explorer](#).

Change 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.

1. Click the **Home** tab.
2. Click **Display Options** 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 an option to specify how you want the dashboard's reports to scroll.
 - a. **Screen**—Select this option to add scroll bars to the individual reports in the dashboard.
 - b. **Scrollable**—Select this option 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 aren't shared by all reports have a gray check, and sections that aren't 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 **OK**.

How You Preview Dashboards

The Report view provides a preview of the dashboard.

When creating and editing dashboards on the dashboard designer, 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.

After you modify your dashboard, you can switch to the report view to preview what the dashboard will look like when it's 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.

Display a Dashboard Using the Report or Design Views

You can view the dashboard in either report or design view.

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**.

How You Use Dashboards

You can 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.

Every report in a dashboard is fully functional, so you can access the standard options available when viewing a report. For instance, you can change the report's sort order, modify column formatting options, and search for information in only one of the dashboard's reports. If the report and your permissions allow it, you can access records shown on a report by double-clicking them, or by right-clicking them and selecting from menu options that display. Reports viewed on dashboards also support inline editing, so you can quickly edit records shown on dashboard reports.

Overview of the 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. These tabs are displayed next to the dashboard's Home and Page Setup tabs, and are grouped under a Report heading.

Note: Some ribbon buttons aren't available when you view a published dashboard or a dashboard that's run after being queued.

Dashboard Tabs

The buttons 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.

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. These permissions are described in [Analytics Permissions](#). See [Dashboard Designer Page Setup Tab](#) for descriptions of the buttons on the Page Setup tab.

Dashboard Home Tab

| 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. See How You Search Dashboard Reports . |
| Refresh | Click this button to refresh the dashboard's data using the current search criteria. 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. See Edit 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 displays. 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. If the entire size of the dashboard exceeds 32767 x 32767 pixels, dashboard contents are clipped when using scrolling. |
| Display Options | Click this button to change the dashboard's width, add report title bars, and select which report sections you want to display. See Change 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. See Apply 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. Permission to export, print, and forward reports must be selected in your profile for the Export and Forward buttons to display. See Analytics Permissions . |
| 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 displays sequentially. |

| Group/Button | Description |
|-----------------------|---|
| | <p>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.</p> <p>Dashboards and reports are exported using the same method and can be exported in the same formats. See <i>Export Report and Dashboard Data</i> for more information about these formats.</p> |
| 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. See <i>Forward a Report</i> . |
| 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. See <i>Reset Display and Data Settings</i> . |
| Sections | The options in this group let you select whether to show the dashboard's header, footer, and 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 display. 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, see *Overview of the Report Ribbon*.

Display and Hide Dashboard Reports

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.

1. Open the dashboard you want to view.
2. Click one of these buttons on the titlebar of the report you want to hide or display.

Dashboard Reports Display Buttons

| Button | Description |
|----------|--|
| Minimize | <p>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.</p> <p>This button isn't available when the dashboard displays with a scrollable view mode.</p> |

| Button | Description |
|----------|---|
| Maximize | Click this button to maximize the report. When a report is maximized, the other reports in the dashboard are hidden. This button isn't available when the dashboard displays with a scrollable view mode. |
| 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. This button isn't available when the dashboard displays with a scrollable view mode. |

Related Topics

- [Change Dashboard Display Options](#)

How You Search Dashboard Reports

You can search for information shown in dashboard reports.

While searching for information in reports in a dashboard is similar to searching the reports when generated on their own, there are some differences:

- **Docked filters**—When a report that includes docked runtime 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. See [Edit 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 dashboard's Search window. See [How You Search in Reports](#).

Search All Reports on a Dashboard

You can perform a search in all reports on a dashboard.

1. Open the dashboard and click the **Home** tab.
2. Click **Search** to open the dashboard's Search window.
3. Select the filters, variables, and limits you want.

4. Click **OK** 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. See *Edit Dashboard Options* for information about these options.

5. 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, and then click **Search**.

Search in a Single Report on a Dashboard

You can search for information in a specific report on a dashboard.

1. Open the dashboard.
2. Select the report on the dashboard you want to search.
Additional ribbon tabs display when you select a single report on the dashboard.
3. Click the **Home** tab beneath the ribbon's Report heading.
4. Click **Search**.
The report's **Search** window opens. The search you perform from the report's Search window applies only to the selected report.
5. Enter the search criteria you want in the Search window and click **Search**.

Results:

The search returns information in the selected report. The other reports on the dashboard are unchanged.

How You Queue Dashboards

Dashboards can be queued to run at a later time just as reports can.

Dashboards can be manually queued or automatically queued. After a queued dashboard generates, you can view the dashboard using a standard report or a notification just as you can with queued reports. See *Overview of Queuing Reports*.

Note: Unlike queued reports, you cannot send queued dashboards to comma-separated values (CSV) files.

Queue a Dashboard Manually

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.

1. Do one of the following:
 - o Select the dashboard on the Reports explorer and click **Queue**.
 - o 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. See *How You Search Dashboard Reports*.
3. Click **Queue**.
A window displays an approximation of when the dashboard will be available to view.
4. Click **OK**.

Automatically Queue a Dashboard

Dashboards can be forced to be queued automatically if needed.

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 queue the dashboard, it runs 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 decide 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. See *Edit Dashboard Options*.

How You View Queued Dashboards

You can access queued dashboards from the Reports Explorer.

After you queue a dashboard, you can use standard reports in the Reports Explorer (**Public Reports/Common/Site Administration/Reports**) to see the dashboard's status in the queue. After the dashboard runs and is ready to view, you're 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 *Why Reports Fail to Queue*. If a report in a dashboard can't be queued, the queued dashboard can't be processed.

The methods to view and open dashboards that have been queued are identical to those used with queued reports. See *How You View Reports in the Queue*.

Configuration Settings that Impact Reports

Analytics Configuration Settings

A number of configuration settings can impact report performance and output.

The settings you should be aware of are described in the following topics, and are organized by the folders and subfolders they're found in. For information about modifying configuration settings, see *Overview of Site Configuration*.

CAUTION: 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 Configuration Setting for Reports

Only one setting in the Common category impacts reports.

KF_ACTIONABLE_DATA_PURGE_DAYS is 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 Configuration Settings for Reports

The configuration settings described here are 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.

RightNow Common Analytics Settings

| Configuration Setting | Description |
|--|---|
| RightNow Common/Service Modules/Clustering Field | |
| CLUST_ENABLED | <p>Enable clustering and the use of clustering information by other modules.</p> <p>The default value for this setting is enabled (Yes).</p> |
| RightNow Common/General Analytics Options/Server Options | |
| KEEP EMAILED_IMAGES | <p>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.</p> <p>The default value for this setting is 14.</p> |
| MAX_ANALYTICS_FILE_SZ | <p>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).</p> <p>The default value for this setting is 15728640 (15 MB).</p> |
| PURGE_REPORT_RUN_AUDITS | <p>Specify the number of days after which the information used in audit logs is deleted. This value does not apply to the data used by the Expanded Report Audit Log.</p> <p>The default value for this setting is 10.</p> |
| RightNow Common/General Analytics Options/Report Options | |
| RPT_FROM_ADDR | <p>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 or sends the scheduled report.</p> <p>The default value for this setting is 2.</p> |
| RightNow Common/General Analytics Options/Custom Scripts | |
| CUSTOM_SCRIPT_DATA_SIZE | <p>Specify the size of the data buffer (in bytes) used when processing custom scripts in Analytics.</p> <p>The default value for this setting is 50000.</p> |
| RightNow Common/General Analytics Options/Group Date Format | |
| GRP_DT_DATE_DAY_FMT | <p>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.</p> <p>The default value for this setting is YYYY/MM/DD.</p> |

| Configuration Setting | Description |
|----------------------------|--|
| 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/Day/Hour at runtime. The default value for this setting is YYYY/MM/DD/HH24. |
| 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/Month at runtime. The default value for this setting is YYYY/MM. |
| 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/Quarter at runtime. The default value for this setting is YYYY/Q. |
| 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 at runtime. The default value for this setting is YYYY/WW. |
| GRP_DT_DATE_WEEK_START_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. The default value for this setting is YYYY/WWW. |
| 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 Month at runtime. The default value for this setting is DD. |
| 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 Day of Week at runtime. The default value for this setting is DAY. |
| GRP_DT_HOUR_FMT | Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Hour at runtime. The default value for this setting is HH24. |
| 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/Day at runtime. The default value for this setting is MM/DD. |
| GRP_DT_MONTH_FMT | Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Month at runtime. The default value for this setting is MM. |
| GRP_DT_QUARTER_FMT | Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Quarter at runtime. |

| Configuration Setting | Description |
|-----------------------|---|
| | The default value for this setting is Q. |
| 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 at runtime. The default value for this setting is WW. |
| GRP_DT_WEEK_START_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. The default value for this setting is WWW. |
| GRP_DT_YEAR_FMT | Specify the format string used in the predefined group date list for output variables, if the user selects grouping by Year at runtime. The default value for this setting is YYYY. |

RightNow User Interface Configuration Settings for Reports

Several configuration settings that impact Analytics are in the RightNow User Interface folder.

RightNow User Interface Analytics Settings

| Configuration Setting | Description |
|--|--|
| RightNow User Interface/Misc. Customization/Query | |
| VRL_HARD | Specifies the maximum number of rows that can display on 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 aren't displayed. The default value for this setting is 10000. This setting is ignored when sending queued or scheduled reports to comma-separated values (CSV) files. See Overview of Queuing Reports and How You Schedule Reports . |
| RightNow User Interface/Support/General | |
| PURGE_DELETE_INCIDENT_PHRASES | 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. Sites with less than 1 million rows in the incidents table aren't affected. Default is 366. |

Agedatabase Configuration Settings for Reports

The configuration settings described here are 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.

The Agedatabase utility automatically runs on the server hosting your 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's no longer needed for reports to help maintain the efficiency of your database.

CAUTION: 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.

This table describes the Agedatabase configuration settings that impact reporting.

Agedatabase Utility Analytics Settings

| Configuration Setting | Description |
|---|--|
| Agedatabase/Batch Processing/Miscellaneous Purging | |
| PURGE_CS_SESSION_SUMMARY | Specifies the number of days after which clickstream session summary statistics are removed from the database. Set this value to 0 to prevent this information being removed from the database. The default value for this setting is 60. The minimum, non-zero value you can enter is 8. |
| PURGE_DELETE_INC_PERFORMANCE | Specifies 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. The default value for this setting is 0. |
| PURGE_DELETE_KEYWORD_SEARCHES | Specifies 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. The default value for this setting is 120. |
| PURGE_DELETE_QUEUE_STATS | Specifies 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. The default value for this setting is 120. |
| PURGE_DELETE_SESSION_SUMMARY | Specifies 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. The default value for this setting is 0. |
| PURGE_DELETE_TM_STATS | 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. The default value for this setting is 30. |
| PURGE_DELETE_USER_TRANS | Specifies 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. The default value for this setting is 0. |

| Configuration Setting | Description |
|---|--|
| PURGE_DELETE_VOICE_STATS | <p>Specifies 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.</p> <p>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.</p> |
| PURGE_GUIDE_SESSIONS | <p>Specifies 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.</p> <p>The default value for this setting is 30.</p> |
| PURGE_GUIDE_STATS | <p>Specifies 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.</p> <p>The default value for this setting is 0.</p> |
| PURGE_QUEUED_REPORT_DAYS | <p>Specifies the number of days after which files that store the output from queued reports and dashboards are deleted.</p> <p>The default value for this setting is 7 days.</p> |
| PURGE_RULE_LOG_FREQ | <p>Specifies 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.</p> <p>The default value for this setting is 30.</p> |
| Agedatabase/Batch Processing/Opportunities | |
| OPP_SNAPSHOTS_SCHEDULE | <p>Specifies 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.</p> <p>The default value for this setting is 6 (Friday).</p> |
| Agedatabase/Batch Processing/Gap Analysis | |
| GAP_FREQUENCY | <p>Specifies how frequently (in days) the Information Gap report is generated.</p> <p>The default value for this setting is 7.</p> |
| GAP_TIME_PERIOD | <p>Specifies the time period reported on in the Information Gap report. The report will analyze incidents created during the specified number of days.</p> <p>The default value for this setting is 7.</p> |
| Agedatabase/Batch Processing/Sales Performance | |
| SALES_TOP_PERFORMER_THRESHOLD | <p>Specifies the quota attainment threshold as a percentage that a given salesperson should meet to be classified as a "Top Performer."</p> <p>The default value for this setting is 95.</p> |

| Configuration Setting | Description |
|---------------------------------|---|
| SALES_TP_METRIC_BALANCE | Specifies 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're 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. The default value for this setting is 5. |
| SALES_TP_REL_VALUE_CLOSED | Specifies 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. The default value for this setting is 5. |
| SALES_TP_REL_VALUE_LOST | Specifies 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. The default value for this setting is 5. |
| SALES_TP_REL_VALUE_NEW_BUSINESS | Specifies 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. The default value for this setting is 5. |
| SALES_TP_REL_VALUE_PIPELINE | Specifies 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. The default value for this setting is 5. |

Transactions Database Table

Overview of the Transactions Database Table

Many of the standard reports use data from the database's Transactions table, and the table can be useful when creating custom reports.

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, when 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.

- *Transactions Database Table Field Descriptions*—Summarizes of all the fields in the Transactions table.

- *Transactions Database Table Transaction Types*—Describes the types of transactions and the records and items they can apply to.
- *Transactions Database Table Attribute and Description Fields*—Describes the Transactions table’s attribute 1, attribute 2, attribute 3, and description fields.

Note: You can view additional information about the Transactions (transactions) table and information about other database tables in the data dictionary. You can access the data dictionary by clicking **Configuration > Database > Data Dictionary** on the navigation pane.

Transactions Database Table Field Descriptions

This table describes all the fields in the Transactions table.

Transactions

| 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. See <i>Transactions Database Table Attribute and Description Fields</i> . |
| Date Created (created) | The date and time the transaction occurred. |
| Date/Time (dtm) | 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. See <i>Transactions Database Table Attribute and Description Fields</i> . |
| 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 B2C Service, and level-2 sources are the specific component. See 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. See <i>Transactions Database Table Transaction Types</i> . |

| Field | Description |
|-------------------|---|
| Type (trans_type) | The type of transaction that occurred, such as a record being created or edited. See <i>Transactions Database Table Transaction Types</i> . |

Transactions Database Table Transaction Types

The types of transactions stored in the Transactions table, and the types of records and items that the transaction types can apply to, are listed in this table.

The numeric code for each type is shown in parentheses after the type name. The numeric code for each table is shown after the table name.

Note: Some transaction types listed in the table are intended for use only by Oracle Consulting Services.

Table and Transaction Type Associations

| Table Name | Transaction Type |
|---------------|--|
| Incidents (1) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Assigned (4) • Status Changed (6) • Time Billed Added (7) • Response Sent (8) • Escalated (11) • SmartAssist (12) • Forwarded (14) • Message Send Failure (15) • Incident Proposed (16) • Queue Changed (17) • Forwarded by a Rule (21) • Sent (24) • Completed (25) • Cloud Response Queued (37) • Read (48) • Cloud Response Received (51) • Cloud Result Appended (53) |
| Contacts (2) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Escalated (11) |

| Table Name | Transaction Type |
|-------------------|--|
| | <ul style="list-style-type: none"> • Moved (20) • Opt-In (23) • Invalid Email Flag Changed (35) • Contact Password Reset (36) • Email Changed (38) • Email Alt1 Changed (39) • Email Alt2 Changed (40) • City Changed (41) • Country Changed (42) • Postal Code Changed (43) • Province Changed (44) • Street Changed (45) • Sub-Object Move (47) |
| Organizations (3) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Escalated (11) |
| Answers (9) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Assigned (4) • Access Level Changed (5) • Status Changed (6) • Escalated (11) • Forwarded by a Rule (21) |
| Meta-Answers (10) | <ul style="list-style-type: none"> • Created (2) • Edited (3) |
| Quotes (12) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Status Changed (6) • Quote Sent (22) • Quote Forecasted (32) • Quote Price Schedule Changed (33) • Quote Template Changed (34) |
| Documents (51) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Proof Message Sent (49) • Document Deployed (50) |

| Table Name | Transaction Type |
|----------------------|---|
| Contact Lists (52) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Audience Counted (30) • Purge (46) |
| Mailings (53) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Assigned (4) • Audience Counted (30) |
| Mailing Messages(54) | <ul style="list-style-type: none"> • Edited (3) • Status Changed (6) • Sent (24) • Mailing Error (28) • Mailing Scheduled (29) • CAN-SPAM Compliance (31) |
| Segments (79) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Stage Changed (18) • Audience Counted (30) |
| Opportunities (87) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Assigned (4) • Status Changed (6) • Escalated (11) • Completed (25) |
| Tasks (106) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Assigned (4) • Status Changed (6) • Escalated (11) |
| Flows (126) | <ul style="list-style-type: none"> • Status Changed (6) |
| Surveys (127) | <ul style="list-style-type: none"> • Created (2) • Edited (3) • Assigned (4) • Survey Disabled (26) • Advanced Mode (27) |

| Table Name | Transaction Type |
|-----------------|---|
| | <ul style="list-style-type: none"> Audience Counted (30) Survey Reminder Sent (52) |
| Campaigns (163) | <ul style="list-style-type: none"> Created (2) Edited (3) Assigned (4) |
| Assets (542) | <ul style="list-style-type: none"> Created (2) Edited (3) Status Changed (6) Forwarded (14) |

Transactions Database Table Attribute and Description Fields

The attribute and description fields in the Transactions table contain information about events that occur on a number of different record types.

The data in the 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 aren't 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.

This table describes the contents of the attribute 1 field for each transaction type. Transaction type ID numbers are shown in parentheses.

Attribute 1 (id1) Field Values

| Transaction Type | Attribute 1 Description |
|---------------------------|--|
| Created (2) Edited (3) | 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. |
| Assigned (4) | This is the assigned group. |
| Status Change (6) | This is the new status. 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. |

| Transaction Type | Attribute 1 Description |
|---------------------------|---|
| Forwarded (14) | This is the staff member who forwarded the record. |
| Message Send Failure (15) | This indicates the type of transaction that failed: <ul style="list-style-type: none"> • 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. |
| 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: <ul style="list-style-type: none"> • 0–Active • 1–Disabled |
| Advanced Mode (27) | This indicates if the survey is in Advanced mode: <ul style="list-style-type: none"> • 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 at 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: <ul style="list-style-type: none"> • 0–Not forecasted |

| Transaction Type | Attribute 1 Description |
|-----------------------------------|--|
| | <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 1-Add 2-Update 3-Delete |
| Invalid Email Flag Changed (35) | This indicates if the primary email address was set to Invalid: <ul style="list-style-type: none"> 0-Not set to Invalid 1-Set to Invalid |
| Password (36) | This indicates if the password was manually changed or reset: <ul style="list-style-type: none"> 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. |

This table describes the contents of the attribute 2 field for each transaction type. Transaction type ID numbers are shown in parentheses.

Attribute 2 (id2) Field Values

| Transaction Type | Attribute 2 Description |
|---------------------------|---|
| Created (2) Edited (3) | This is the queue the record is assigned to at the time of the transaction for both the Created and Edited transaction types. |
| 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. |

| Transaction Type | Attribute 2 Description |
|---------------------------------|--|
| Forward (14) | This is the group the staff member who forwarded the record belongs to. |
| Message Send Failure (15) | This indicates the reason for the mailing error: <ul style="list-style-type: none"> • 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 • 9-SMTP message undeliverable • 10-Cloud response failed |
| 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: <ul style="list-style-type: none"> • 1-Custom field • 2-Global opt-in flag |
| Sent (24) | This is the account that's 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: <ul style="list-style-type: none"> • 0-Not set to Invalid • 1-Set to Invalid |
| Cloud Result Appended (53) | This is the ID number of the cloud result. |

This table describes the contents of the attribute 3 field for each transaction type. Transaction type ID numbers are shown in parentheses.

Attribute 3 (id3) Field Values

| Transaction Type | Attribute 3 Description |
|---|---|
| Created (2) Edited (3) | 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. |
| Assigned (4) Status Changed (6) Time Billed Added (7) Response Sent (8) Escalated (11) Forwarded (14) Message Send Failure (15) Incident Proposed (16) Forwarded by a Rule (21) | This is the queue the record was assigned to at the time of the transaction for all of these transaction types. |
| Opt-In (23) | This indicates if the flag was enabled or disabled: <ul style="list-style-type: none"> • 0–Disabled • 1–Enabled |
| Quote Template Changed (34) | This is the template that was changed. |
| Invalid Email Flag Changed (35) | This indicates if the second alternate email address was set to Invalid: <ul style="list-style-type: none"> • 0–Not set to Invalid • 1–Set to Invalid |

This table describes the contents of the description field for 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.

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. |

| Transaction Type | Description |
|------------------------------|--|
| 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. |
| 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. |

How to View the Database Data Dictionary

View Your Database Data Dictionary

You can use the data dictionary to view information about the tables and fields in your site's database.

The information returned in reports and dashboards is stored in your site’s database, allowing you to see vital information about your customers, staff members, and interfaces. Using the data dictionary, you can view details about all the tables and fields in the database, such as field names, descriptions, and database types. You can add the Data Dictionary component to any navigation list. See [Change Your Navigation Pane Settings](#).

Note: Not all the information in the database is accessible to Analytics.

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Data Dictionary**.
The content pane displays a list of all the tables in the database.
3. Click a table to view the table information.
The details that display depend on the table you have selected.

Table Information

| Field | Description |
|-------------------|---|
| Table Label | Lists the descriptive table name used in the data dictionary. |
| 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 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.

Column Information

| Field | Description |
|--------------------|--|
| Column Label | Displays the descriptive column label used by the data dictionary. |
| 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. |
| Analytics Usage | Indicates how the column can be used in analytics. |

| Field | Description |
|-------|---|
| | <ul style="list-style-type: none"> ○ 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. |
| Joins | Lists the columns that the selected column is joined to. |

5 Service

Incidents

Overview of Incidents

When customers request help through email or the Ask a Question page, Service automatically creates incidents.

Note: B2C Service includes a component known as “Service” where you work with 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 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. Service 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, Service gives you the tools to craft consistent, accurate answers to customer questions. It also lets you propose incidents as answers, and create opportunities from incidents.

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
- Present promotional offers to the customer

You might also want to propose the incident as a permanent answer in the knowledge base. This lets customers to view the answer without being required to submit a service request.

Note: Service automatically handles email between separate B2C Service sites. The site-specific incidents are accurately updated on each site even if unique reference numbers are used for the same incident. See [Cross-Site Email Management](#).

Incident Reports

This topic describes incident reports and what options are available.

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.

Incident 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.

Double-clicking any incident report displays the report on the content pane. The incident information displayed on the content pane depends on the incident report you opened and which fields were defined when the report was created. The Incidents report, for example, displays the 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 lets you open, add, print, copy, assign, delete, forward, and propose incidents. In addition, you can send email to the contact associated with an incident, 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.

Tip: You can right-click any incident and select the same functions that are available on the incident report ribbon.

Related Topics

- [Record Search Options](#)

Standard Incident Workspace

This topic describes the standard incident workspace used when working on incidents.

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.

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.

Related Topics

- [Custom Workspaces](#)

Incident Workspace Ribbon

This table describes the buttons on the ribbon of the standard incident workspace.

Incident Ribbon

| Group/Button | Description |
|--------------|---|
| Editor | |
| Undock | Click this button to undock the incident editor from the console and display it in a separate window. |

| Group/Button | Description |
|--|---|
| Save | |
| Save | Click this button to save the incident you are working on. The incident remains open. 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. |
| 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 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. |
| 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. |
| Print | Click this button to print the incident. |
| Copy | Click this button to copy the incident. |
| Delete | Click this button to delete the incident. |
| Proofing | |
| Spell Check | Click this button to check the spelling of any incident fields that have spell checking enabled. |
| 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. 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. This button is not enabled until after you have saved an incident you are adding. |
| New Opportunity | Click this button to create an opportunity that provides information about the incident to your sales department. |
| 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. |

Related Topics

- [Overview of Business Rules](#)
- [Add an Incident](#)
- [Find Answers Using Guided Assistance](#)
- [Propose an Answer from an Incident](#)
- [Create an Opportunity from an Incident](#)

Incident 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.

The standard workspace for incidents includes these tabs.

- **Messages**—Contains fields that let you 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. See [Add an Incident](#).
- **Contacts**—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. See [Add or Edit Contact Information](#).
- **Details**—Contains fields for collecting additional information about the incident, which is beneficial for reporting purposes. See [Add Incident Information on the Details Tab](#).
- **Time Billed**—Lists all time billed entries for the incident. From this tab, you can add, open, and delete time billed entries. See [Add Time Billed to an Incident](#).
- **Tasks**—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. See [Add or Edit a Task for an Incident](#).
- **Organization**—Lists the organization associated with the incident. See [Edit an Organization Associated with an Incident](#).
- **Web Visit**—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. See [View Web Visit Information for an Incident](#).
- **Attachments**—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. See [Overview of the Attachments Tab](#).
- **Audit Log**—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. See [Audit Logs](#).

Note: If you make changes to fields on any of the incident record tabs or any of the subtabs or windows opened through the record tabs (for example, the contact editing subtab), 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.

Incident Creation

This topic describes the process for working on incidents after a customer submits a question.

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.

Fill 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.

1. Click **Fill Inbox**.

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. If only one queue is configured to pull incidents from, the **Manual Queue Pull** window does not display.

2. If the displayed incidents report does not display incidents by assigned staff member, open the My Inbox report to view incidents that were added when you clicked Fill Inbox.

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.

How You Edit 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 an asterisk before you can save the incident. Incidents do not have to be completed in any particular order, but you must complete all required fields before you can save an incident.

This list provides the required and optional steps involved when editing an incident.

- Complete the incident fields. See [Edit Key Incident Fields](#).
- Compose your response to the customer. See [Incident Threads](#).
- To add content to your response, see [Response Options](#).
- To add or edit contact information, see [Add or Edit Contact Information](#).
- To track the time you spend editing the incident, see [Add Time Billed to an Incident](#).
- To add or edit tasks associated with the incident or its contact, see [Add or Edit a Task for an Incident](#).
- To add or edit organization information, see [Edit an Organization Associated with an Incident](#).
- To create an opportunity for the sales department to follow up, see [Create an Opportunity from an Incident](#).
- Send a response to the customer. See [How You Send Incident 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.

How Incidents are Evaluated by the Rules Engine

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. See [Overview of Business Rules](#).

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.
 - o The incident's status changes to Solved.

Note: 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.

- o 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.

SLA Instance Field

Another incident field you may work with is the SLA Instance field.

An SLA is a service level agreement. SLAs let 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.

Related Topics

- [Examples of Applying Service Level Agreements \(SLAs\)](#)

Apply an SLA Instance to a Contact or Organization

This procedure describes how to apply an SLA instance when you are working on an incident.

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.

The **SLA Viewer** window opens. 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**

The **Add New SLA Instance** window opens.

4. Click the **Name** drop-down list and select an SLA.
5. Select an active date by clicking a day on the current month calendar (or, to change the month, click the right or left arrow in the month heading). The date today is selected by default.
6. Click **OK**.
The **Add New SLA Instance** window closes and the SLA instance is added.
7. Click **OK**.

Results:

After 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. See [Credit an Incident to an SLA Instance](#).

Credit an Incident to an SLA Instance

After 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.

1. From an incidents report, right-click the incident and select **Open > Incident**.
2. Click the **Details** tab.
3. Click the drop-down list 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 **Save**.

Results:

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. See [Resolution Due Calculations](#).

Edit Key Incident Fields

After understanding the role of incident statuses and SLAs, you can edit the key incident fields.

This procedure describes the standard incident workspace. Keep in mind that your workspace may contain different fields.

1. From an incidents report, right-click the incident and select **Open > Incident**.
2. Enter field information.

Tip: Use Find at the bottom of drop-down lists when available to search quickly. Wildcards are supported. You can search strings that include a space by entering `%[spacebar][character]`, which is helpful when searching last names. For example, when using the Find feature in the Assigned field, entering `%[space bar]b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so entering b in the Find field returns all items containing the letter b.

Incident Fields

| Field | Description |
|-------------------|---|
| *Subject | Enter 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 list and select an incident status. The options include Solved, Unresolved, Updated, and Waiting, as well as any custom incident statuses added by your administrator. |
| Assigned | Click this drop-down list and select a staff member to assign the incident to. On the standard incident workspace, this field contains your name by default. |
| Disposition | Click this drop-down list and select a disposition that indicates the resolution of the incident. There may be multiple levels of dispositions for you to select. |
| *Contact | Click Search to the right of the Contact field to search for a contact to add to the incident. To add a contact, click New Contact on the open Contact Search window. 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 list and select one or more product levels to indicate the product for the incident. |
| Category | Click this drop-down list and select one or more category levels to indicate the category for the incident. |

3. To add a flag to the incident, click the area next to the white flag at the top of the content pane.

- To add other key incident fields, click the **Details** tab.

Related Topics

- [Reassign or Requeue an Incident](#)
- [Add or Edit Contact Information](#)
- [Add a Flag to a Record](#)
- [Add Incident Information on the Details Tab](#)

Add Incident Information on the Details Tab

The standard incident workspace contains a Details tab where you can enter additional information about the incident.

- From an incidents report, right-click the incident and select **Open > Incident**.
- Click the **Details** tab.
- Enter field information.

Incident Fields on the Details Tab

| Field | Description |
|---------------|---|
| Mailbox | Click this drop-down list 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 list 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. |
| *Interface | Click this drop-down list and select an interface. 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 list and select a language. 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 list to credit the incident to an SLA instance that has been applied to the contact or the organization to which the contact belongs. |
| Queue | Click this drop-down list and select a queue into which to move the incident from your inbox. |
| Custom Fields | If your administrator has added incident custom fields, you can enter that information on the Details tab. |

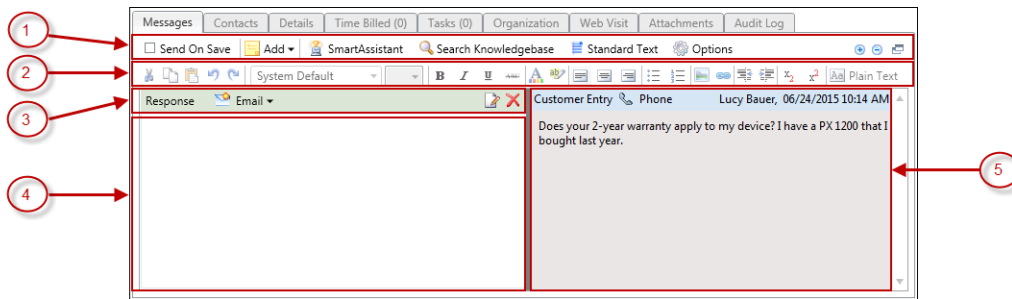
Related Topics

- [SLA Instance Field](#)
- [Add or Edit an Incident Severity Level](#)
- [Reassign or Requeue an Incident](#)

Incident Thread

The incident thread, which displays communication between the customer and agent, is found 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.

This image shows the thread control on the standard incident workspace, displayed by clicking File and selecting Incident.



Legend for image: 1. Messages tab toolbar 2. Incident thread toolbar 3. Title bar 4. Uncommitted threads panel 5. Committed threads panel

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.

Note: Whenever a valid incident reference number appears in any incident thread (Customer Entry, Response, or Private Note), it displays 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 #####-#####.

Related Topics

- [Incident Thread Toolbar](#)
- [How You Send Incident Responses](#)
- [SmartAssistant Suggested Answers](#)
- [How You Search the Knowledge Base](#)
- [Insert Standard Text from the Standard Text Window](#)
- [Insert Standard Text Using a Keyboard Shortcut](#)

Messages Tab Toolbar

Using the Messages tab toolbar, you can choose the type of thread entry—customer entry, response, or private note—when responding to the customer.

The thread title bars are color coded, making 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).

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.

Messages Tab Toolbar

| Button | Description |
|-----------------------------|--|
| Send on Save | Select this check box to send your response to the customer when you save the incident. |
| 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. |
| Response | Select this option to enter your response to the customer's question. This is the default option when you edit an incident. |
| Private Note | Select this option to enter 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. |
| Search Knowledgebase | Click this button to search for answers to help you respond to the customer. |
| 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. |
| 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. See [Overview of Workspace and Script Elements](#) to view the list of individual functions.

WYSIWYG Toolbar

Using the incident thread 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. If the EGW_VISUAL_EMAIL configuration setting is disabled, all incoming email will display as plain text even if it was sent as HTML. Depending on your organization's security requirements, there may be other reasons to disable this configuration setting. See [Email Security](#) for more information.

Use the incident thread 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 Paste as Text or press Ctrl+Shift+V.

- Change font style, size, and attributes (bold, italic, underline, strikethrough, text color, highlight).

Tip: To make the font size in the incident and the response the same, see [Answer ID 4857](#).

- 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.
- 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.

Note: 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 Paste as Text or press Ctrl+Shift+V.

Related Topics

- [Incident Threads](#)
- [Add a Response to an Incident](#)
- [Add a Customer Entry or Private Note to an Incident](#)

Add a Response to an Incident

Follow this procedure to add a response to an incident.

1. From an incidents report, right-click the incident and select **Open > Incident**.
2. If the Messages tab is not on top, click **Messages**.

Note: On the standard incident workspace, this tab displays when an incident is opened.

3. If the Response option is not selected automatically, click **Add** and select **Response** to display the title bar on the uncommitted threads panel.

Note: You can add multiple threads to the uncommitted threads panel before saving the incident. To edit or delete a thread, click **Edit** or **Delete** found on the right side of the title bar.

4. To identify a channel for a response, click the **Email** drop-down list in the Response title bar and select one of the following options: Phone, Fax, Post, CSS Web, or Email.

Note: Email is the default channel on the Response title bar.

5. Enter your response to the customer's question. See [Incident Thread Toolbar](#).

When you save the incident, the uncommitted threads panel closes and all uncommitted threads move to the committed threads panel. The committed threads panel expands so the incident threads are easier to read.

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.

Results:

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.

Add a Customer Entry or Private Note to an Incident

Follow this procedure 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 **Add** and select **Customer Entry**. The Customer Entry title bar displays on the uncommitted threads panel.

You can add multiple threads to the uncommitted threads panel before saving the incident. To edit or delete a thread, click **Edit** or **Delete** found on the right side of the title bar.

- a. To identify a channel for a customer entry, click the **Phone** drop-down list 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.)
3. To add a private note, click **Add** and select **Private Note**.
 - a. To identify a channel for the private note, click the **No Channel** drop-down list and select one of the following options: No Channel, Phone, Fax, Post, CSS Web, or Email. (No Channel is the default channel.)
 4. Enter the customer entry or note in the uncommitted threads panel. See *Incident Thread Toolbar*.

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.

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.

Results:

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.

Response Options

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.

- *SmartAssistant Suggested Answers*
- *How You Search the Knowledge Base*
- *Insert Standard Text from the Standard Text Window*
- *Insert Standard Text Using a Keyboard Shortcut*
- *Find Answers Using Guided Assistance*

SmartAssistant Suggested Answers

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: You must enable the `KF_SA_OPTIMIZATION_ENABLE` configuration setting and add the autotuner component to your list of items for the Configuration button. See *Edit a Configuration Setting* and *Create a Navigation Set for the Administrator*.

Add SmartAssistant Suggested Answers

Follow this procedure to add SmartAssistant suggested answers to a response.

1. Click **SmartAssistant** 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 ID by pressing F9 from the incident response on the Messages tab, entering 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 URL link to the response, click **Add As Link** in the Action column.

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 **Close**.

Mark an Answer as the Best Answer

Mark an answer as the best answer to have SmartAssistant give it greater deference.

1. From the open incident, click **Best Answers**.

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 **Save**.

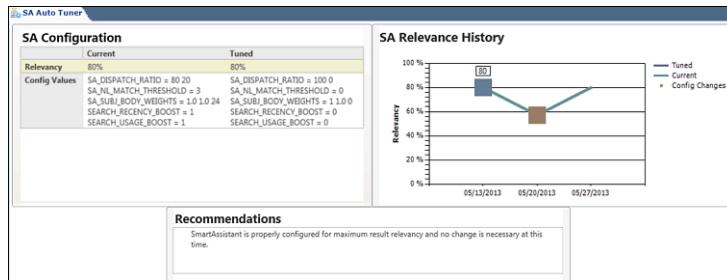
Review and Accept Autotuner Recommendations

Review and accept SmartAssistant Auto Tuner settings.

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

2. Double-click **SA Auto Tuner** component in your configuration list.

The **SA Auto Tuner** dashboard displays 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 the SmartAssistant effectiveness of your site.
- **Recommendations**—This panel displays the current recommendation of the auto tuner (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 **Accept New Configuration**.

How You Search 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. See .

Insert Standard Text from the Standard Text Window

When you are busy responding to customer 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 entering 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.

You can insert standard text from the Standard Text window or, if you know the keyboard shortcut for the text item, you can enter it without opening the Standard Text window.

1. In your response, position the cursor where you want to insert the standard text.

2. Click **Standard Text** on the Messages tab toolbar.

The **Standard Text** window opens.

3. Do one of the following:

- Double-click the standard text item to automatically insert the text into your response.
- Select the standard text item you want to insert in your response and click **OK**.
- Drag the standard text item from the list into the response.
- Copy the text in the Preview section and paste it into the 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**.

4. Click **OK**.

5. To add new standard text to the response, repeat these steps.

6. To edit the standard text, make changes as necessary in the response.

Note: If the standard text includes one or more variables, the variable displays 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 displays where the variable had been inserted.

Related Topics

- [Add or Edit Standard Text](#)
- [Insert Standard Text Using a Keyboard Shortcut](#)
- [Add or Edit a Variable](#)

Insert Standard Text Using a Keyboard Shortcut

If you know the keyboard shortcut for standard text you want to insert, you can enter it without opening the Standard Text window.

1. To display the keyboard shortcut for a standard text item, select the standard text in the column that contains the Standard Text options in the **Standard Text** window.

The keyboard shortcuts are displayed in the Hotkey field in the right column.

2. At the location in the incident response where you want to insert the standard text:

- a.** Press F8 to open a Standard Text field.
- b.** Enter the keyboard shortcuts in the field.
- c.** Press F8 or Enter to insert the text into your response.

Related Topics

- [Add or Edit Standard Text](#)

Find 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.

Guided Assistance Window Buttons

| 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. |
| Select a Guide | Click this button to select a guide. |
| Add Text to Thread | Click this button to add the text of the current question and response to the incident thread. |

1. Open the incident for which you want to use guided assistance.
2. To select a guide from a list, click **Guided Assistance** and click **Select**.
The **Select a Guide** window opens.
3. Select the guide you want from the list.
4. Click **OK**.
The **Guided Assistance** window opens.
5. To search for a guide, click **Search for a Guide**. 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 list options or entering phrases in a text field.
 - b. Click **Search**.
A list of guides that match your search criteria displays.
 - c. Select the guide you want to use and click **Select**.
The window closes and the questions in the guide are displayed.
6. 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.
7. 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**.
8. Click **Close**.

Related Topics

- [Overview of Guided Assistance](#)

Add or Edit 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.

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 **Remove**, 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 contact, do one of the following:

- o To add a new contact to the incident, click **Add New**. A new contact opens on a subtab.
- o To add an existing contact to the incident, click **Add Existing**, search for the contact you want to add, and select it. To edit this contact, right-click it and select **Open**.

Note: Adding a new contact from the Contacts tab does not change the primary contact for the incident. To designate a primary contact, manually select **Primary** next to the contact's name. However, adding a new contact using Search 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.

4. To edit an existing contact for the incident, right-click the contact and select **Open**.

The contact opens on a subtab.

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.

7. Click **OK**.

The Contact subtab closes and keeps the contact data in memory. 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** subtab.

- a. To add or edit the contact's login, enter 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 list and select an option.

9. To view incident information for the primary contact, click the **Incident History** subtab.

10. Click **Save**.

Related Topics

- [Overview of Contacts](#)
- [Edit Key Incident Fields](#)

Add Time Billed to an Incident

This topic describes how you can use the fields available on the Time Billed tab to track your time working on an incident.

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.

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 **Add New** to open the **Time Billed** window.
4. Enter field information.

Time Billed Window

| Field | Description |
|----------------|--|
| *Date | The default is today's date. Click the drop-down list to open the current month's calendar and select a date. |
| *Billed By | Click this drop-down list 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 list and select a task. |
| *Duration | Select the value in the Hours or Minutes field, or both, and enter a new value. Or use the up and down arrows to adjust the duration. |
| Notes | Enter a note about the time billed for the incident. |

5. Click **OK**.
6. Click **Save**.

Modify Time Billed Entries

You can edit and delete time billed entries as necessary.

1. To edit a time billed entry, right-click it and select **Open**.
 - a. Make your changes.
 - b. Click **Save**.
2. To delete a time billed entry, right-click the entry and select **Delete**.

Note: Deleting a time billed entry can result in inaccurate statistics in reports.

Add or Edit a Task for an Incident

You can add and edit all tasks associated with an incident by clicking the 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.

1. From an incidents report, right-click the incident and select **Open > Incident**.
2. Click the **Tasks** tab.
3. Do one of the following:
 - o Click **Add New** to open the new task on a subtab. The reference number for the incident appears in the Incident field on the new task editor.
 - o 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 list 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.
7. Click **OK**.
8. Click **Save**.

Related Topics

- [Overview of Tasks](#)

Edit an Organization Associated with an Incident

Incidents are associated with contacts. If an incident also has an organization association, it's because the primary contact is associated with an organization.

The Organization tab lets you view the name and ID of the organization associated with the 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.

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 Billing field to display a window for entering the address. Enter information in the Street, City, and Postal Code fields, and make selections on the Country and State/Prov fields drop-down lists. 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, enter the information in the appropriate field.
5. To change the state, click the drop-down list and select an option.
6. To view the incident history for the organization, click the **Incident History** tab.
7. To view the 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.
 - **CAUTION:** There are usually consequences when a contact is deleted. See [Delete a Contact](#).
8. Click **Save**.

View Web Visit Information for an Incident

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.

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.

Incident Attachments Tab

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 or incident response, 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. HTML email updates that are larger than the maximum description size are attached to the incident as an HTML file.

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 at the same time an incident thread is added on the Messages tab, 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 list to display attachments added at the time the thread entry was saved, then click a file name to view the file.

Note: The Attachments indicator drop-down list in a thread title bar indicates which files were sent in your response to the customer and 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.

Related Topics

- [Overview of the Attachments Tab](#)
- [How Mailboxes Work](#)
- [Attach Files to an Incident Response](#)

Create an Opportunity from an Incident

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.

1. From an open incident, click **New Opportunity**.
2. To edit any information for the opportunity, enter the field information described in *Edit Key Opportunity Fields*.
3. Click **Save**.

How You Send Incident Responses

When you complete a response to an incident, you 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 Options 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 **Options** on the thread control and select the **Always Show for Responses** check box below the Email Message Header heading. 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 *Attach Files to an Incident Response* and *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 found in **RightNow Common/Service Modules/RightNow Email**.
- 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_SENDEMAIL_SINGLE_ADDRESS (found in **Common/General/Outgoing Email**). When 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.

Related Topics

- [Edit a Configuration Setting](#)

Send a Response to the Primary Contact

Follow this procedure to send a response to the primary incident contact.

Do one of the following:

- Click **Send**.
- Select the **Send on Save** check box, and then click **Save**.

If a customer does not receive your response, a Viewed Bounced Messages button appears on the Response title bar in the committed threads panel. See [View a Bounced Message](#).

Send a Single Response to a Contact Associated with Multiple Addresses

Follow this procedure to send a single response to a contact associated with multiple addresses.

Before you start

This procedure assumes you have enabled the site-wide configuration setting OE_SVC_SENDBMAIL_SINGLE_ADDRESS (**Common/General/Outgoing Email**). See [Edit a Configuration Setting](#).

Here's what to do

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.
2. Click the drop-down list 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. New email addresses can be added to the contacts table by enabling the EGW_AUTO_CONT_CREATE configuration setting. For example, if a customer uses an email address to submit an incident through the Techmail utility, and that email address isn't in the contacts table, a new contact record is created for this email address. See [Answer ID 12289](#).

3. Click **Save**.

Related Topics

- [Attach Files to an Incident Response](#)
- [Select Additional Recipients for an Incident Response](#)

Attach Files to an Incident Response

Follow this procedure to attach files to an incident response.

1. Click **Options** and select the **Always Show for Response** check box below Email Message Header.
The Response title bar expands and the Attach button displays.
2. Click **Attach**.
3. To send the response with one or more attached files, select the associated check boxes in the Incident Files section of the Attachments window.
4. To attach additional files to the incident response, click **Add Files** 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 **Open** 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 **Search**. Then select one or more of the matching files and click **Add Files**.
5. Click **OK**.

6. Click **Send**.

This sends the response with attachments to the customer, as well as to any other recipients you added to the CC or BCC fields. Attached files sent with the response will appear in the Attachments drop-down list in the title bar of the response.

Note: All files attached to an incident or incident response are recorded in the knowledge base and audit log. Files attached to an incident using the Attachments tab, rather than with the Attachments button in the response title bar, are stored with the incident, but are not sent with the response unless selected. These files appear in the Attachments drop-down list in the title bar of the message with the heading “Added to incident, but not sent.” See *Incident Attachments Tab*.

Select Additional Recipients for an Incident Response

Follow this procedure to select additional recipients for an incident response.

1. Click **Options** 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. To display the BCC field, you must also select the **Show BCC** check box on the Options window.
2. Click **CC**.
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 present in B2C Service.
4. Select a name from the list.

Tip: Typing the first few letters of the name in the field at the top of the Select Names window highlights the first name in the list that matches the letters. Notice that this name may be the contact’s first or last name, an email address, or a group or distribution list.

5. Click **CC** to list the name in the CC field or click **BCC** 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 **OK**.
7. Click **Send**.

The response is sent to the customer, as well as any other recipients you added to the CC or BCC fields.

Results:

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.

Sign and Encrypt an Incident Response

Follow this procedure to sign and encrypt an incident response.

1. Click **Options** and select the **Always Show for Response** and **Show Sign/Encrypt** check boxes below Email Message Header.

Note: Because different staff members can be working on the same incident, email signatures are appended to the thread you are responding to instead of to the bottom of the email. If your email signature does not populate the thread response, your administrator has not set up email signature information. Contact your administrator for more information.

2. Select the **Sign** check box.

You cannot select the Sign check box if the Service mailbox does not have a certificate that allows sending encrypted email.

- To encrypt your response to the contact, click the **Do Not Encrypt** drop-down list and select **Encrypt When Possible** or **Encrypt Always**.

You cannot 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.

Related Topics

- [How SMIME Security Works](#)

View a Bounced Message

If a customer does not receive your response due to a bounced message, a **View Bounced Message** button displays on the Response title bar.

The audit log will also contain an entry for the bounced incident response that reads, “From Techmail–Incoming Auto-Reply Message.”

- Click **View Bounced Messages** on the Response title bar.
The **Bounced Messages** window opens, displaying full text copies of each bounced email.
- Click **OK**.

Cobrowse with a Customer from an Incident Workspace

This topic describes how to use Co-browse to assist a customer while working on an incident.

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. In addition, you can engage in only one co-browse session at a time.

- 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.
- With the customer’s incident open, click the **Co-browse** tab.
The co-browse login page displays and your B2C Service login name appears in the Agent Name field.
- Ask the customer for the secure session ID number and enter it in the Access Code field.
- Click **Connect**. The co-browse toolbar displays and the co-browse session begins.

Your viewing and co-browsing options are limited depending on how your company has set up the Co-browse deployment. Privacy settings can differ when you co-browse in Instant Co-browse mode or Advanced Co-browse mode. Your company’s Co-browse administrator configures the privacy settings.

Co-browse Toolbar

| Button/Field | Description |
|--------------|---|
| Mode | Click this drop-down list to select an advanced co-browse state, which specifies how much control you have over the customer’s desktop. |

| Button/Field | Description |
|---------------------|---|
| View Only | Select to view the customer's active window. This option is selected by default in Advanced Co-browse mode. |
| View + Pointer | Select to view the customer's active window and use a labeled mouse as a pointing device on the customer's screen. With this option selected, mouse-click functionality does not work on the customer's active window. This option is selected by default in Instant Co-browse mode. |
| View + True Pointer | Select to view the customer's active window and control the movement of the customer's mouse or other pointing device. This option is only available when co-browsing in Advanced Co-browse mode. With this option selected, mouse-click functionality does not work on the customer's desktop. |
| Full Control | Select to view the customer's active window, control all mouse or other pointing device functions (pointer and mouse clicks), go to other company web pages, and use your keyboard to enter information on the customer's active window (for instance, to help the customer fill out a form). The customer receives a consent message to permit or deny full control. In Advanced Co-browse mode, you can access the customer's desktop and co-browse third party sites. |
| Advanced Mode | Select to escalate to the Advanced Co-browse mode. An invitation is sent to the customer to activate Advanced Co-browse mode. |
| Client Info | Displays the customer's environment information for operating system, browser version, client version, and escalation mode. |
| Disconnect | Click this button to end the co-browse session. |
| True View | True View is enabled by default and lets you view the customer's desktop exactly as it is seen by the customer when in Instant Co-browse mode. Click to turn True View off in situations where the customer's settings prevent you from navigating efficiently. |
| Zoom In | Click to zoom in on the customer's desktop. This button is available only in Advanced Co-browse mode. |
| Zoom Out | Click to zoom out on the customer's desktop. This button is available only in Advanced Co-browse mode. |
| Annotations | <p>Click to make comments on the customer's window.</p> <ul style="list-style-type: none"> ○ Select one of the displayed suggested colors, or click the last color option to open a color picker where you can select any color. ○ Select the line width for your annotations. <p>Any comments you make are cleared from the window when you click Annotations again, or when the customer scrolls the page, resizes the browser window, or leaves the page.</p> <p>Note: Comments are only visible to you and the customer. If another agent is joined in the co-browsing session, comments you make are not visible to that agent.</p> |

- Click **Disconnect** 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.

Related Topics

- [Overview of Co-browse](#)

Add an Incident

This procedure describes how to add an incident for a customer using B2C Service.

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. You can add incidents to your knowledge base no matter what navigation list is active or what kind of record you are working on.

1. Do one of the following:
 - Click **New** on the ribbon.
 - If your navigation set is configured to add incidents from the application menu, click **File > Incident**.

Note: Notice that the Reference # and Organization Name are read-only fields. The reference number is automatically assigned by B2C Service, and the organization name (if the field contains an entry) is the one associated with the primary contact for the incident.

2. Enter the question or issue in the Subject field. Maximum character limit is 240 characters.
3. Complete the incident fields as described in [Edit Key Incident Fields](#).
4. Click the **Customer Entry** field and enter the customer's question.
5. Click **Add > Response**.
6. Enter your response. See [Incident Threads](#) and [Response Options](#).
7. To add or edit contact information for the incident, click the **Contacts** tab and complete the information as described in [Add or Edit 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 [Add Time Billed to an Incident](#).
9. To add or edit task information for the incident, click the **Tasks** tab and complete the information as described in [Add or Edit a Task for an Incident](#).
10. To add or edit organization information for the incident, click the **Organization** tab and complete the information as described in [Edit an Organization Associated with an Incident](#).
11. To attach one or more files to the incident, click the **Attachments** tab. See [Overview of the Attachments Tab](#).
12. To create an opportunity from the incident, click **New Service Opportunity**. See [Create an Opportunity from an Incident](#).
13. To send a response, see [How You Send Incident Responses](#).
14. Click **Save**.

Related Topics

- [Incident Management](#)

Incident Management

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 requeue or reassign incidents.

For other incident management tasks, including forwarding incidents and updating multiple incidents simultaneously, see [Overview of Common Functionality](#).

Propose an Answer from an Incident

You can propose an incident to become a potential answer for your knowledge base.

Sometimes a customer's question is common enough that you believe other customers should also have access to the answer. If you believe that this information belongs in the knowledge base, you can propose the incident as a potential answer that customers can view without needing to submit a service request. This helps the knowledge base stay current with the information customers need.

When you propose an incident as an answer, a knowledge engineer receives a copy of the incident and determines if 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 **Propose** on the report ribbon, the incident custom fields are not added to the **Notes** tab on the **Propose Incident for Answer** window. If, however, you click **Propose** from an open incident, the custom fields do appear on the **Propose Incident for Answer** window.

1. Do one of the following:
 - o From an incidents report, right-click the incident and select **Propose Incident**.
 - o With the incident open, click **Propose**.
2. Review the proposed answer and make any necessary edits.
3. To add a note to the proposed answer, click the **Notes** field and enter 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.

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.

All files permanently attached to the incident are selected to be proposed with the incident by default.
6. Click **OK**.

A confirmation message lets you know that an answer was proposed from the incident.

Related Topics

- [How You Add Answers for Multiple Interfaces](#)

Delete an Incident

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.

1. Do one of the following:
 - To delete an incident when the incident is open, press **Delete**. A message asks you to confirm deletion of the incident.
 - To delete an incident from an incidents report, right-click the incident and select **Delete > Incident**.
2. Click **Yes**.

Note: Staff members with the Bulk Delete permission enabled can delete up to 1000 incident records at a time. See [Administration Permissions](#) and the REST API for Oracle B2C Service guide on the Oracle Help Center. Transactions associated with those incidents are deleted asynchronously. Purging transactions is controlled by data lifecycle management policies. See [Data Lifecycle Management](#).

Reassign or Re-Queue an Incident

You might need to assign incidents from your inbox to another staff member or move them back into an incident queue.

These 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.

1. From an incidents report, right-click the incident and select **Open > Incident**.
2. Do one of the following:
 - To reassign the incident, click the **Assigned** drop-down list and select the appropriate group or staff member.
 - To requeue the incident, click the **Details** tab, click the **Queue** drop-down list, and select the appropriate queue.

3. Click **Save**.

The incident is moved from your inbox to the agent inbox or selected queue.

Archived Incidents

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, B2C Service archives incidents automatically past a certain period of time after they are solved. Archived incidents can also automatically be purged (deleted permanently).

You can access data lifecycle management on the Agent Browser UI, which provides built-in policies to archive and purge unused or unrequired data automatically and periodically. See [Data Lifecycle Management](#).

When working with custom attributes in archived incidents, it's important to remember that only non-encrypted custom attributes can be retrieved in archived incidents. See [Overview of Custom Attribute Encryption](#).

Note: Encrypted fields are available only in the Agent Browser User Interface (Agent Browser UI), and can be only decrypted by agents with the Allow Custom Attribute Decryption permission. See [Administration Permissions](#).

Open the Archived Incidents Component

There might be times when you need to reference outdated incidents to better serve your customers. In B2C Service, you can search for and view incidents that have been removed from your knowledge base and archived.

Before you can access the Archived Incidents component, the appropriate permissions must be defined in your profile. Customize navigation sets must be enabled, in addition to Incident Read permission. You must then add the Archived Incidents component to a navigation list. Contact your administrator if you are unsure of your permissions or this component's location.

Note: Archived incident information is read-only and cannot be updated. In addition, you must perform a search to display and view archived incidents.

1. Click the navigation button that contains the Archived Incidents component.
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. See [Perform a Basic Search for an Archived Incident](#) or [Perform an Advanced Search for an Archived Incident](#).

Perform a Basic Search for an Archived Incident

You can search for archived incidents. No incidents display until you perform a search.

1. Click **Search** on the Archived Incidents component.
The **Search** window opens.
2. Enter search terms.

Search Window

| Field/Button | Description |
|------------------|--|
| Reference Number | Enter the reference number of the incident in this text box. |
| Text Search | Enter 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 subproducts), Category (including subcategories), contact-related fields, organization-related fields, incident custom fields, and incident custom attributes. 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. |
| Order By | Click this drop-down list to select a sort order. |

3. Click **Search**.

Related Topics

- [Perform an Advanced Search for an Archived Incident](#)

Perform an Advanced Search for an Archived Incident

The Archived Incidents component features advanced searching capabilities for retrieving archived incidents.

You can perform a search based on a range of search fields, including the subject, threads, product, category, disposition, contact data, and organization data associated with the incident. You can also 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 **View Incident**.

1. Click **Search** on the **Archived Incidents** component.
The **Search** window opens.
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 see [Perform a Basic Search for an Archived Incident](#).

3. Enter field information.

Archived Incidents Advanced Search Options

| Field/Button | Description |
|---------------------------------|--|
| Search Attributes (contains) | Search results contain all or part of the search terms. |
| Ref Number | Enter all or part of the reference number of the incident in this text box. You can use wildcards in searching. |
| Text Search | Enter 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 subproducts), Category (including subcategories), contact-related fields, organization-related fields, incident custom fields, and incident custom attributes. 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 | Enter a word or phrase in this text box to search the Subject field of archived incidents. |
| Threads | Enter 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. |

| Field/Button | Description |
|--------------------------|---|
| 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 | Search for specific customer information including the contact name and contact email. |
| 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 | Search for specific organization information including the name, state/province, and country. |
| 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 | Define the date range search criteria using the closed date and created date. |
| Closed Date | Click the From and To drop-down lists and select start and end dates to search archived incidents by a closed date range. |
| Created Date | Click the From and To drop-down lists and select start and end dates to search archived incidents by a created date range. |
| Custom Fields/Attributes | Search for specific information in custom fields and system attributes. |
| Custom Fields | <p>Enter a search string to search custom fields of a string, text, or date type in archived incidents. The search string format is:</p> <pre><custom_field_name>_custom_<search_data_type>:</pre> <pre><search_term> [<connector></pre> <pre><custom_field_name>_custom_<search_data_type>:</pre> <pre><search_term>]</pre> <p>Where:</p> <ul style="list-style-type: none"> ○ 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 <p>Examples:</p> <pre>c\$url_custom_str:c\$RMAId_custom_str:123</pre> <pre>c\$RMA_custom_text:"RMA12345" AND c\$RMAId_custom_str:123</pre> <pre>c\$date_custom_date:[2021-09-25T00:00:00Z TO 2021-09-28T00:00:00Z]</pre> <p>Note: Use quotation marks when searching for a URL value in a text field. Use YYYYMMDDTHH:MM:SSZ format for date/time values. You can join multiple search strings together using the AND and OR operators.</p> |

4. To clear all field search values, click **Reset**.

5. Click **Search**.

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.”

View an Archived Incident

When you find the archived incident you're looking for, you can open it to view the incident details. You can also print, export, or delete the incident.

1. From the list of search results, open the archived incident you want to view.

Note: B2C Service 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 Agent Browser UI. If an incident includes HTML formatting when it's archived, the HTML formatting is retained and displays on the content pane.

2. View the archived incident details.

Archived Incident Details

| 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. |
| Secondary Incident Contact | Displays the secondary contact's information. |
| SLA Instance | Displays the SLA instance applied to the contact or the organization associated to the archived incident. |

Delete an Archived Incident

You can delete a selective archived incident, permanently removing the incident from your organization's database.

Before you start

Your profile must have Administration permission before you can delete archived incidents. See [Administration Permissions](#).

There may be times when you want to delete an archived incident prior to the specified purge date defined by your organization. This procedure lets you delete an archived incident, regardless of the period specified for archived incidents to be automatically deleted.

Here's what to do

1. Click **Search** on the Archived Incidents component.
The **Search** window opens.
2. Click the **Advanced Search** link to access advanced searching options.
3. Enter search terms as described in the *Archived Incidents Advanced Search Options* table.

Tip: You can also use Basic Search to search for an archived incident.

4. Click **Search**.
The search results display on the Archived Incidents component.
5. Select the check box next to the incident(s) you want to permanently delete.
6. Click **Delete**.
7. Click **OK** in response to the confirm delete message.
8. Click **OK** in response to the selected incidents are being deleted message.

Note: It may take up to 30 minutes for the deleted incidents to be fully removed from the database. Deleted incidents may continue to display in search results until the delete operation is complete.

Export Archived Incidents

After performing a search, you can export archived incidents.

1. Select the archived incidents you wish to export. You can export up to 100 incidents at a time.
2. Click **Export**.
3. Select the location where you want to save the export file and enter a name for the file.
4. Click **Save**.

Results:

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.

Incident Thread Management

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.

- *Incident Thread Masking*
- *Edit or Convert a Response Thread*

Incident Thread Masking

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.

Incident thread masking can protect this personal data by automatically masking content in incident threads. By default, B2C Service 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. To mask customer information in incident threads, incident thread masking must be enabled. Contact your Oracle account manager to enable this feature.

CAUTION: Be aware that after 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.

After 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. See [Create 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. See [Administration Permissions](#).

Configure Incident Thread Masking

By default, B2C Service 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.

1. Click **Configuration** on the navigation pane.
2. Double-click **Incident Thread Masking** in the configuration list.
3. Enter field information.

Incident Thread Masking Editor

| 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. When 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 | <p>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. The dividers can be at fixed/random intervals.</p> <p>Note: Credit cards with 12–19 digits are supported by Incident Thread Masking to include additional credit card types, not just those in the following list.</p> <ul style="list-style-type: none"> ○ Visa: <ul style="list-style-type: none"> 4215101992633023 4215 1019 9263 3023 453 939339 6455 453-939339 6455 ○ MasterCard: |

| Field/Button | Description |
|--------------|--|
| | <p>5406209167573761</p> <p>5406-2091-6757-3761</p> <p>5406.2091.6757.3761</p> <p>540.620916.757.3761</p> <ul style="list-style-type: none"> ○ American Express: <ul style="list-style-type: none"> 373518140296377 3735 181402 96377 ○ Discover: <ul style="list-style-type: none"> 6011891400863425 6011.8914.0086.3425 601.189.140.086.3425 ○ Diners Club: <ul style="list-style-type: none"> 30139201272845 |
| SSN | <p>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, AAAGSSSS, AAA-GGSSSS, AAAGG-SSSS, AAAGG SSSS or AAA GGSSSS. Hyphens, periods, and spaces are valid dividers between number groups, as in the following examples:</p> <p>534-14-3154</p> <p>534-14-3154</p> <p>534.14.3154</p> <p>534 14 3154</p> |
| Phone number | <p>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:</p> <p>1(111)222-3333</p> <p>1(111)2223333</p> <p>1(111) 222-3333</p> <p>1.111-222-3333</p> <p>1.111.222.3333</p> <p>1 111 222 3333</p> <p>+1.111.222.3333</p> <p>+1.111.2223333</p> <p>+1.1112223333</p> |

| Field/Button | Description |
|--------------|--|
| Custom Masks | <p>Double-click in the Value field next to the first custom mask and enter the regular expression for the pattern you want to mask. This examples can help you configure custom masks for new incident threads.</p> <p>Example 1</p> <p>Suppose you want to mask all account numbers that match the pattern 123-123456. Enter [0-9]{3}-[0-9]{6}. As a result, all account numbers that match this pattern will display as XXXXXXXXXXXX in new incident threads. (Notice that all characters are masked, including the hyphen.)</p> <p>Example 2</p> <p>In this example, we'll define a mask for Canadian postal codes that match the pattern K8N 5W6.</p> <p>Enter [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 XXXXXXXX. The space is also masked.</p> |
| State | <p>This read-only field shows the status of changes you make in any custom mask Value field. Statuses include Valid, Requires Test, and Error.</p> <p>The status of this field may change when you enter sample text in the Preview Text field, and click the Test/Preview button.</p> |
| Preview Text | <p>Click in this field to test your mask patterns. Include samples that both match and closely match the custom pattern you configured.</p> <p>For example, to verify that your Canadian postal codes mask is masking only the alphanumeric pattern you configured, enter the following postal code samples.</p> <p>K8N 5W6</p> <p>4J3 P2P</p> <p>V5T 1Y9</p> |
| Test/Preview | <p>Click this button to apply the configured system and custom masks to the sample content in the Preview Text field.</p> |
| Result Text | <p>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.</p> <p>XXXXXXXX</p> <p>4J3 P2P</p> <p>XXXXXXXX</p> <p>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.</p> <p>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.</p> |

4. Click **Save** save your changes to system and custom masks.

Note: You must deploy mask configurations before they will be committed to the database and applied to new incident threads.

5. Click **Deploy**.

The **Deploy** window opens.

6. Enter 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 **Deploy** to deploy your changes.

A **Deploy** message displays.

8. Click **Yes** to confirm the deployment.

The Incident Thread Masking editor will be unavailable until the deployment completes.

9. Click **OK** in response to the message that reads, "Deploying has finished."

What to do next

Testing the accuracy of masking configurations in a test incident thread is an important security procedure. See [Verify Changes to Incident Thread Masking in a Test Incident](#).

Verify Changes to Incident Thread Masking in a Test Incident

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 recommend 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. This procedure is for testing purposes only.

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, enter text that both matches and closely matches the mask patterns you have deployed. For example, enter **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 **Save**.

5. Verify that only the appropriate patterns were masked in the incident thread and in the email response.

What to do next

If you need to make further changes to your masks, you can return to the Incident Thread Masking editor.

Edit or Convert a Response Thread

With incident thread correction you can convert a response thread entry into a note thread entry as well as edit or remove text and images. This lets you remove content so it cannot be seen by customers in future responses.

There may be times when a response contains incorrect information or was inadvertently sent to a customer. Thread entries can be edited after they are sent to a customer, letting you to convert a response thread entry into a note thread entry and edit or delete text and images. With incident thread correction, you can view all responses for a particular incident and select only those you want to change. After a response is modified, it cannot be converted back to the original thread.

Note: To access the Incident Thread Correction element, you must have Administration permissions set in your profile. In addition, you must have the Edit/Delete Committed Thread Content permission set in your profile to edit incident thread content and delete images. See [Profiles](#).

1. Click **Configuration** on the navigation pane.
2. Expand **Database**, and then double-click **Incident Thread Correction**.
The Incident Thread Correction tree displays on the content pane.
3. Enter the reference number of the incident containing the thread entry you want to edit and click **Search**.
Threads from the incident display on the content pane.
4. Select the **Make Note** check box next to the response you want to convert into a note.
After saving your changes, the next time you open the incident, this information displays as a Note thread.
5. To remove inline images from the incident thread, do the following:
 - a. Select the **Remove Thread Images** check box.
 - b. Remove the `` tag in the Thread column.
When you remove an image from a thread and the incident is refreshed, the image is removed from the incident thread. If you do not remove the `` tag in the Thread column, the image is replaced by a black X icon when the incident is refreshed.
6. To edit the incident thread, do one of the following:
 - o Right-click in the Thread column and select **Edit Thread**.
 - o Double-click in the Thread column.

The Edit Thread window opens.

- a. To search for a word or phrase in the incident thread, enter it in the text field and click **Find**.
The search results are highlighted on the Edit Thread window.
- b. Edit the incident thread.
- c. Click **X** to close the Edit Thread window.

Your changes display in the Thread column on the Threads table.

7. Click **Save**.

Results:

The changes you made are saved to the incident.

Related Topics

- [Incident Threads](#)

Add or Edit an Incident Stopword

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. See [Manage Files with the File Manager](#).

1. Click **Configuration** on the navigation pane.
2. Expand **Service > Knowledge Base**, and then double-click **Incident Stopwords** 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, enter the word in the text box on the Active list and click **Add New**.
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 **Save**.

Note: Oracle Cloud Operations must run the Keywordindexer utility before your changes to the stopwords list are active. To schedule this, [Submit a Service Request](#).

How You Configure Advanced Routing for Incidents

You can route incoming incidents to agents with specific language or product skills. Routing incidents 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 incident was initiated determine which agent skills are required. If your customer is viewing the English version of the customer portal when they initiate the incident, connecting them to an 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 an agent who is an expert with that product is going to provide the quickest resolution. When an incident is initiated, if there is no agent logged in with the specific skill required by your customer, advanced routing relaxes the skill requirement immediately to prevent the incident from becoming stuck in the queue.

You can also use advanced routing primarily for the queue overflow capabilities without defining skills.

Additionally, you can track the performance of advanced routing of incident sessions using standard reports available in **Public Reports/Service/Advanced Routing**.

Note: Advanced routing reports and configuration options will not be visible until Smart Interaction Hub is 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 incidents.

- Define products and categories you will use for advanced routing. See [Search Optimization Using Products, Categories, and Dispositions](#).
- Add product and category fields to the Live Help page of the customer portal.
- Create an advanced routing incident queue. See [Add or Edit an Incident Queue](#).
- Create and activate a rule to route incidents to the advanced routing incident queue. See [Overview of Business Rules](#).
- Assign advanced routing permissions to a profile. See [Service Permissions](#).

Additionally, if you are using advanced routing with products or categories, you will need to configure skills and staff account skill scores to finish the configuration and begin using advanced routing for incoming incidents. See [Assign the Skill Edit Permission in Profiles](#), [Add Skills](#), and [Assign Skill Scores to a Staff Account](#).

Assign the Skill Edit Permission in Profiles

Assign the Skill Edit permission in profiles for advanced routing.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Profiles**.
The report opens on the content pane.
3. Double-click the profile you want to edit.
4. Click **Permissions**.
5. Select the **Skill Edit** check box in the Administration section on the Administration tab.
6. Click **Save**.

What to do next

You must add Product Skills and Language Skills to the navigation set. See .

Add Skills

Add skills for advanced routing.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Language Skills** or **Product Skills**.
3. Do one of the following:
 - o To add a skill, click **New** to display the editor.
 - o To edit a skill, click it in the tree.

You can delete a skill at any time by selecting the skill entry in the tree and clicking **Delete**. However, when you delete a skill, you also will delete instances of the skill.

4. Enter field information.

Skills Editor

| Field | Description |
|-------------------|---|
| Skill Information | This section defines the name and type of the skill. |
| *Skill Name | Enter the name of the skill. |
| Template ID | This read-only field identifies the type of skill. |
| Label | Select the interface. |
| Characteristics | This section specifies the language, product, or category for the skill. |
| Language | Select a language from the drop-down list. This field is available only on the Language Skills editor. |
| Product | Select a product from the drop-down list. This field is available only on the Product Skills editor. |
| Category | Select a category from the drop-down list. This field is available only on the Product Skills editor. |

5. Click **Save**.

Assign Skill Scores to a Staff Account

Assign skill scores to a staff account for advanced routing.

You can assign skills to a staff account at the profile level or at the individual staff account level. Skills assigned at the profile level are inherited by staff accounts assigned to that profile, but skills can be modified and added to individual staff accounts.

1. Click **Configuration** on the navigation pane.
2. Do one of the following:
 - o To assign skills to a profile, expand **Staff Management**, double-click **Profiles**, and then double-click the profile you want to edit. The **Profiles** editor opens.
 - o To assign skills to a staff account, expand **Staff Management**, double-click one of the staff account reports, and then double-click the individual account you want to edit. The **Account Details** editor opens.

3. Click **Skills**.

The **Account Skill Scores** window opens.

4. Click the **Product** or **Language** tab.

5. To add a product or language:

- a. Select the product or language from the drop-down list.
- b. Click the **Add**, indicated by green plus sign.
- c. Assign the skill an account score from the drop-down list.

6. To modify a skill at the account level that was inherited by a profile, click the blue arrow next to the skill score.

Note: Changing an agent's inherited skill score to 0 is not the same as assigning an agent to a profile without that skill. When the advanced routing queue has relaxed to a score of 0, the incident will be routed to an agent with a skill score of 0. The incident will only be routed to an agent assigned a profile without the skill if no other agents with that skill are logged in.

7. To delete a skill, click **Delete**, indicated by the red X next to the skill score.

Skills assigned at the profile level can only be deleted at the profile level.

8. Click **Save**.

Answers

Overview of Answers

Customers use your site to find answers to their questions about the services and products your organization provides.

To help 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.

B2C Service includes a component known as "Service" where you work with answers.

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.

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 toolbar lets you 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. If you use the Agent Browser User Interface, you can integrate with Oracle Content Management (OCM) to include digital assets from OCM in your answers. See *Integrating the Agent Browser UI with Oracle Applications*.

To learn how to start your knowledge base and keep it organized and up-to-date, see *How to Seed Your Knowledge Base*. To learn more how to work with answers on the Service Console, see *How You Work with Answers*.

Related Topics

- [How to Maintain Your Knowledge Base Data](#)
- [Add an Answer](#)
- [Edit an Answer](#)

How to Seed Your Knowledge Base

Because Service can start with only 15-20 answers, the need for a comprehensive initial knowledge set is eliminated, which significantly speeds and simplifies implementation.

Most organizations can build their initial knowledge base 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. Propose Answer lets agents suggest that certain incidents become public answers, letting you seamlessly create public answers from the real issues 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. See *Service Permissions*.

Related Topics

- [Propose an Answer from an Incident](#)

Define a Process for Publishing and Reviewing Answers

Before you develop your knowledge base, you must have a process for publishing answers.

This process outlines the steps for efficiently capturing incident information and creating answers.

1. Define a process for proposing new answers—Typically, 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 agent expertise, we have found this approach to be successful.
 - a. 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.
 - b. 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.
 - c. You review, edit, and format the proposed answer, and then 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.
2. Define an approval review process for new answers >—After 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.
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. See *How to Control Answer Visibility*.
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.
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 found under **Public Reports/Service/Site Reports/Answer Notifications**. See *How You Distribute Reports and Dashboards*.

What to do next

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.

Best Practices for Creating Effective Answers

Creating useful answers is a straightforward process with a few simple guidelines. Follow these guidelines to enhance the search process for customers by letting them find pertinent information quickly and eliminating the need for 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 these 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.

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.

How to Control Answer Visibility

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 service level agreements (SLAs).

When you publish answers, you make them available to the public on your customer portal. Whether answers are visible on your customer portal is determined by what you specify in certain fields. The key fields and functions 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. See [Add or Edit an Answer Status](#).
- 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. See [Add or Edit an Answer Access Level](#).
- 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. See *Search Optimization Using 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, see *Insert a Conditional Section*.

What to Do When Answers Are Not Visible

If an answer (or a section within an answer) you want to be accessed by your customers does not appear on the customer portal, answer these questions to troubleshoot the problem.

Tip: You can preview an answer to view it as customers will see it on the customer portal.

- 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 or 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 use the preview to see if the answer displays. If you are unsure of the answer to any of the above questions, contact your administrator.

Related Topics

- [Preview an Answer](#)

Answer Ranking

Through answer click-track analysis and feedback, 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 “Is this answer helpful?” option. Their responses automatically raise or lower the solved count of answers.
- **Explicit ranking of 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 relationships—An affinity map is built that 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.
 - 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.

Related Topics

- [Answer Relationships](#)

Answer Ranking Through Solved Count

Solved count 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 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. By default, the Solved Count feature is enabled.

An answer score value is a calculated value equal to the answer solved count combined with any “fix at” positions specified for the answer in the Display Position drop-down list when adding or editing an answer. For more information about the options available, see [Add 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, “Is this answer helpful?” This question displays on the Answers page on the customer portal.

Solved Count Aging

Over time, the solved count of an unused answer will gradually decline or age.

If an answer has not been viewed for thirty days (the default setting), the solved count is automatically 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 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. 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 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. 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.

Answer Management

Many of the maintenance tasks related to organizing the answers in your knowledge base are automated in Service. This allows you to focus on improving and maintaining the content of answers.

This 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. See [Solved Count Aging](#).
- 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 a publish date for a date in the future. In this way, you can schedule an answer to become public automatically without having to publish. See [Answer Review](#).
- 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, “Is 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 customer 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 customer questions. This information can also indicate areas of the knowledge base that need to be tuned. See [View Web Visit Information for an Incident](#).
- 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. See [Answer Evaluation Using Analytics](#).

Customer Feedback

Your customers can provide feedback on answers that do not completely solve their issues by answering the question, “Is 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. In some instances, customer feedback can be incorporated directly into an existing answer. In other cases, new answers might need to be created.

Answer Review

Over time, the content of your answers can become outdated.

Reviewing answers should be a central part of maintaining your knowledge base to ensure that the content is current, relevant, and useful. You might 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 might 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 might 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 solved count will reduce to zero, and the status of the answer will change to Review.

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.

Related Topics

- [Solved Count Aging](#)

Content Hole Identification

You should actively investigate material for new answers by reviewing recently submitted incidents.

Agents can become overwhelmed with assistance requests, and despite their best intentions, they might 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 find answers that are incomplete or need updating.

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.

Related Topics

- [View Web Visit Information for an Incident](#)

Answer Evaluation Using 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 found in **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 found in **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 found 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 these 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 that 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 these reports.

- **Top Searches Per Answer**—This report provides the top ten searches that returned an answer that 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.

Answer Link Checking Using Analytics

Maintaining your knowledge base includes making sure that links in answers to other answers and external sites are not broken. Analytics provides reports for checking answer links.

These reports are found in **Public Reports\Common\Site Administration\Link Checker**.

Link Checker Reports

| Report | Description |
|-------------|--|
| Broken URIs | Use this report to search for broken links to other answers and external references. After searching, click the link in the Usage column to list where the broken links occur. |
| Top URIs | Use this report to search for the most commonly used links to other answers and external references. After searching, click the link in the Usage column to list where the links are used. |
| URI Sources | Use this report to search for answers that have links. After searching, double-click an answer to open it to examine the links. You can embed the URI Sources report in the answer workspace. In the answer workspace, the URI Sources report automatically filters by answer ID and show all answers that link to the answer that is currently open. |

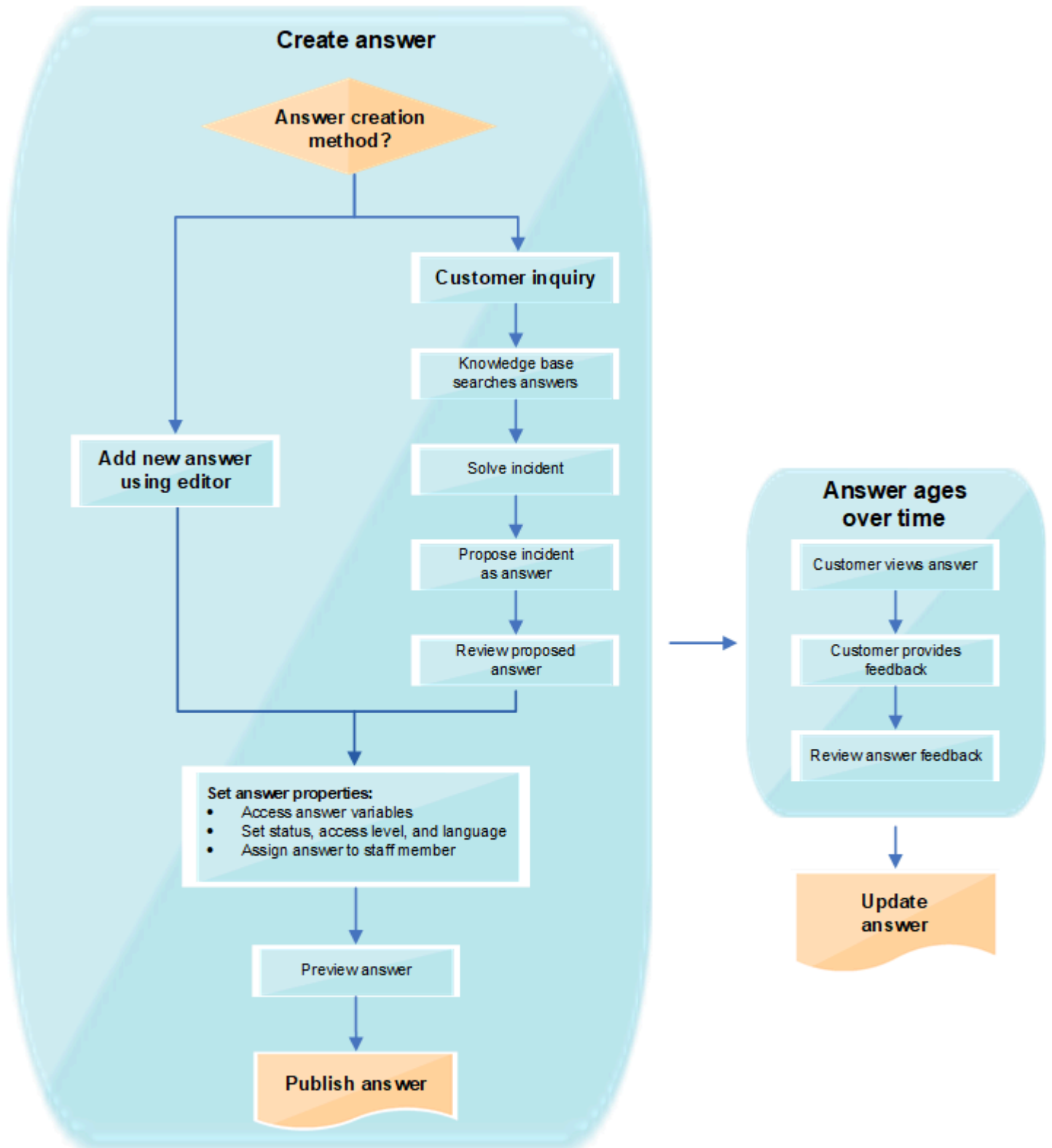
Process of Creating and Updating Answers

You can improve customer experience by having 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.

After 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.

This flowchart shows the process of creating and updating an answer.



Related Topics

- [Add an Answer](#)
- [Edit an Answer](#)

Answer 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. Answer reports can be placed in other navigation lists, not just the Answers navigation list.

Note: 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.

The answer information displayed on the content pane depends on the answer report you opened and which fields were defined when the report was created. The Answers Default report, for example, displays the answer ID, summary, language, access level, status, assigned, and date the answer was last updated. The ribbon lets you 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.

Tip: Besides selecting an answer from a report, you can search for answers from a report or use Quick Search. See [Record Search Options](#).

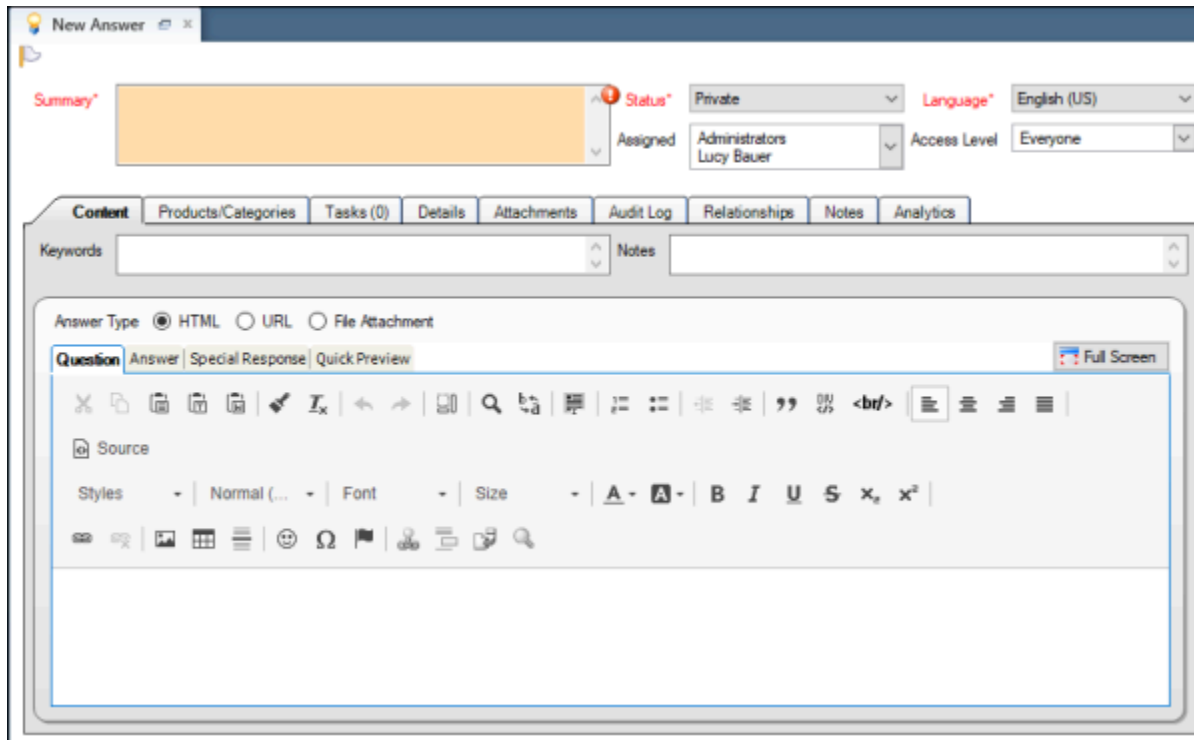
Related Topics

- [Answer Ribbon](#)

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. This is an example of the standard answer workspace.



Your organization can 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 might display a different combination of fields or display them in a different location on the content pane.

Answer Ribbon

A standard ribbon exists for working with answers.

Answer Ribbon

| Group/Button | Description |
|----------------|---|
| Editor | |
| Undock | Click this button to undock the answer editor from the console and display it in a separate window. |
| Save | |
| Save | Click this button to save the answer without closing it. The answer remains open. 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 status or answer access level. See Overview of Business Rules . |
| Save and Close | Click this button to save and close the answer. |

| Group/Button | Description |
|---|--|
| Actions | |
| 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. See Add an Answer . |
| Refresh | Click this button to refresh the current answer. |
| Preview | Click this button to view the answer as it will appear to your customers. See Preview an Answer . |
| Check Links | Click this button to check the validity of hyperlinks and answer links in the answer. See Validate Links in an Answer . |
| 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. See Product Linking . |
| Print | Click this button to print the answer. See Print a Record . |
| Copy | Click this button to copy the answer. See Copy a Record . |
| Delete | <p>CAUTION: Deleting an answer affects all relationships associated with the answer.</p> <p>Click this button to delete the answer. See Delete an Answer.</p> |
| Proofing | |
| Spell Check | Click this button to check the spelling of any answer fields that have spell check enabled. Text on the answer Content tab is automatically checked for correct spelling. See 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. |

Answer Record Tabs

Record tabs contain fields and options for adding additional information to answers.

The organization of these tabs lets you 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.

Note: 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.

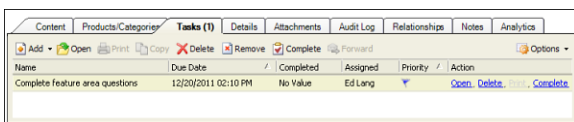
- Content tab—Contains the fields for adding and editing answers, including answer types. The Content tab also contains the HTML editor for answers where you can create HTML answers using basic word processing functions as well as dynamic content, such as adding hyperlinks, images, tables, answer links, and conditional sections. You can also use source mode to enter HTML code directly in the editor. The HTML editor lets you add a special response, which is a short version of the answer that can be used in search results. You can use

the special response to format your answer content based on how and where the answer displays. See [Add an Answer](#).

- **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. See [Associate Products and Categories to an Answer](#).
- **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 toolbar or by right-clicking the task and making your selection. See [Add or Edit a Task for an Answer](#).
- **Details tab**—Contains the fields for answer details, including Display Position, Review On, Notify Subscribers, and Publish On. See [Add 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. See to [Overview of the Attachments Tab](#).
- **Audit Log tab**—Lists all answer actions performed by staff members as well as automatic changes initiated by any business rules that are used. 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. See [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. See [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. See [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. See [Answer Evaluation Using Analytics](#).

Answer Tasks Tab Toolbar

The Tasks tab contains a toolbar for working with the tasks associated with an open answer.



Answer Tasks Tab Toolbar Buttons

| Button | Description |
|--------|--|
| Add | Click this button to add a new or existing task: <ul style="list-style-type: none"> • Add New—Select this option to add a task. • Add Existing—Select this option to search for a task to add to the answer. |
| Open | Click this button to open or edit the selected task. If you have read-only access to tasks, you can open the selected task but all options to edit the task are disabled. |

| Button | Description |
|----------|--|
| 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. 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 list of Analytics options. |

Add an Answer

Key answer fields are used to specify the answer summary, status, language, access level, and the staff member assigned to the answer.

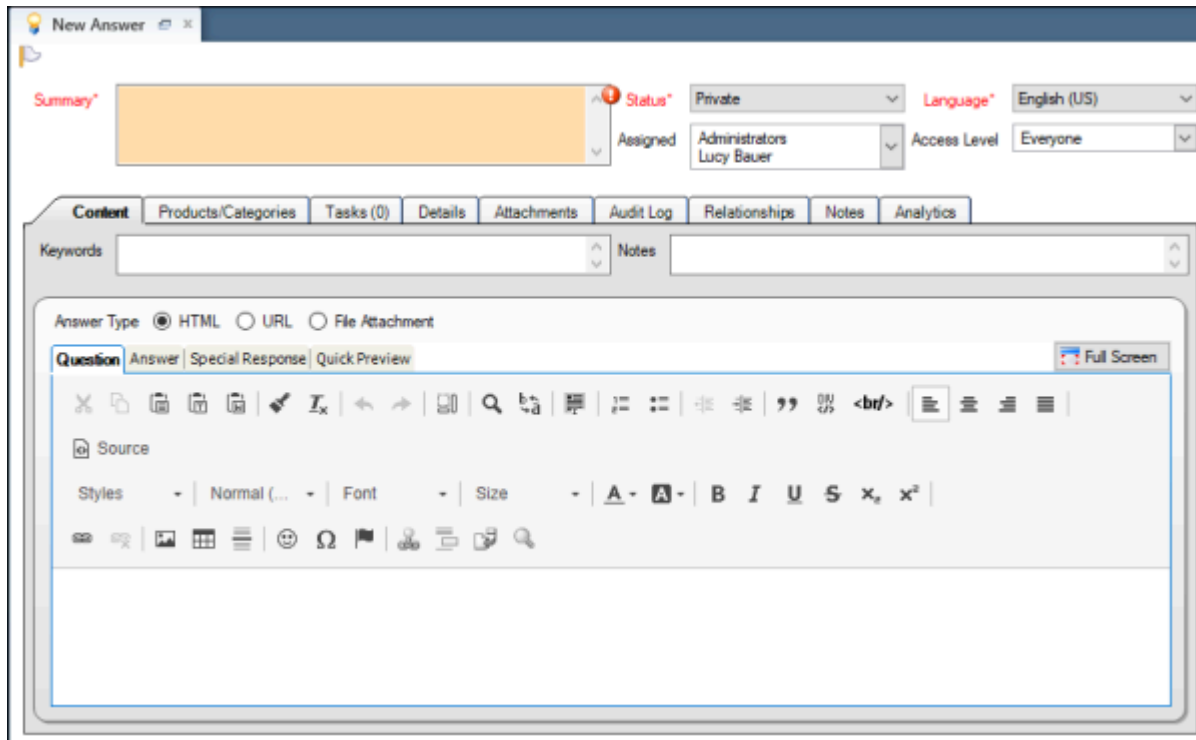
Key answer fields are found at the top of the content pane. Field marked with a red label and an asterisk are required and must be completed before you can save the answer. The key answer fields that display on the content pane vary depending on the permissions set in your profile.

You can create different answer types when adding answers to the knowledge base. Answer types give you 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. See [HTML Editor for Answers](#).
- **URL**—Answers that consist of a link to an external URL. The URL address and the content of the web page display. See [Add a URL Answer](#).
- **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. See [Add a File Attachment Answer](#).

1. Do one of the following:
 - o From an open answer report, click **New**.
 - o If your navigation set is configured to add answers from the file menu, click **File** and select **Answer**. See *Configure the File Menu*.

The New Answer editor displays with the Content tab active.



2. Enter field information.

Answer Fields

| Field | Description |
|-----------|--|
| *Summary | Enter the subject of the answer in this field. |
| *Status | Click this drop-down list to select an answer status. |
| *Language | Click this drop-down list to select a language. |
| Assigned | Click this drop-down list 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. |

| Field | Description |
|--------------|---|
| | <p>Tip: Use the Find feature at the bottom of the Assigned drop-down list to find staff members quickly. Wildcards are supported when searching staff members and groups. You can search strings that include a space by entering <code>%+Space+character</code>, which is helpful when searching last names.</p> <p>For example, entering <code>%+Space+b</code> returns all last names starting with the letter b. There is also an implied wildcard when searching, so entering <code>b</code> in the Find field returns all items containing the letter b.</p> |
| Access Level | Click this drop-down list to control answer visibility by selecting one or more access levels. See Associate an Answer with Multiple Access Levels . |

- To add a flag to the answer, click the area next to the white flag above the answer fields.
- Select the answer type on the Content tab.

Options include HTML, URL, and File Attachment. See [HTML Editor for Answers](#), [Add a URL Answer](#), or [Add a File Attachment Answer](#).

CAUTION: When you change the answer type in an existing answer, all answer relationships and certain answer fields are removed. For example, when you change an HTML answer type to a URL answer type, the Question, Answer, Special Response, and Attachments tabs are removed and you lose any content that was created on those tabs.

- To add keywords to associate with the answer, enter the words in the **Keywords** field on the Content tab. Separate keywords by commas and separate any compound words by spaces. For example, `phone,call plan,nationwide`.

Keywords are used by the search feature. In addition, associated products and categories and their descriptions are automatically used as keywords for answers.

Tip: Use keywords sparingly. Too many keywords can negatively impact the accuracy of search results. Instead, consider using the `aliases.txt` wordlist file to customize the words used during keyword indexing and text searching. See [Wordlist Files](#).

- To add notes specific to your answer content, enter your notes in the **Notes** field on the Content tab.

Keep in mind that this field can be viewed by customers. Use the Notes tab for private notes.

- To associate products and categories with the answer, click the **Products/Categories** tab.
- To add tasks to the answer, click the **Tasks** tab.
- To add information you want to associate with the answer, including setting Publish On and Review On fields, click the **Details** tab.

10. To attach files to the answer, click the **Attachments** tab. Attachments are available only for HTML answer types.

You can attach as many files as needed to associate with an answer. 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.

- a. Click **Add Files** on the Attachments tab toolbar.
- b. To attach files that will be shared with sibling answers, click **Add Files** under the Attachments for This Answer and All Sibling Answers section.

The Attachments for This Answer and All Sibling Answers section displays only if the Siblings Visible property for the File Attachments relationship item on the answer workspace is set to True. See *Sibling Answers* and *Options Properties*.

11. To view the answer audit log, click the **Audit Log** tab.

12. To manage answer relationships, including sibling answers, manually related answers, and learned links, click the **Relationships** tab.

13. To enter private notes about the answer, click the **Notes** tab.

These notes are not be visible to customers on the customer portal.

- a. Click the **Notes** tab.
- b. Click **Add**.
- c. Enter the notes in the **Answer Note** field.

14. Click **Save**.

Your answer is added to the knowledge base.

Results:

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 product and category visibilities. A check mark signifies that a product or category is visible on a particular interface, whereas a X signifies that it is not.

- To perform a visibility check when the answer 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**.

Related Topics

- [Answer Relationships](#)
- [Audit Logs](#)
- [Add a Flag to a Record](#)
- [Associate Products and Categories to an Answer](#)
- [Add or Edit a Task for an Answer](#)
- [Add Answer Details](#)

HTML Editor for Answers

You can use the HTML editor for answers to design creative and eye-catching answers. The default answer type is HTML.

The HTML editor's Content tab contains four subtabs (Question, Answer, Special Response, and Quick Preview) that you can use to create and preview content for answers. You can design your answer content using design mode or source mode.

In design mode, you can create dynamic, well-formatted answers without previous HTML experience. The HTML editor contains many of the same options available in basic word processing applications so you format your text and add graphics, links, and other common HTML features. You can also add links that reference other answers. In source mode, you can create answers using HTML source code. By default, the source mode editor displays your code in colored text to indicate structure and syntax. If you use the Agent Browser User Interface, you can integrate with Oracle Content Management (OCM) to include digital assets from OCM in your answers. See *Integrating the Agent Browser UI with Oracle Applications*.

For design mode to be available with the HTML editor, the HTML Design Mode permission must be selected in your profile. For source mode to be available with the HTML editor, the Source Mode permission must be selected in your profile.

Regardless of which mode you use to create answers, you can preview how the content displays to customers on the customer portal from the Quick Preview tab.

Note: 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.

Related Topics

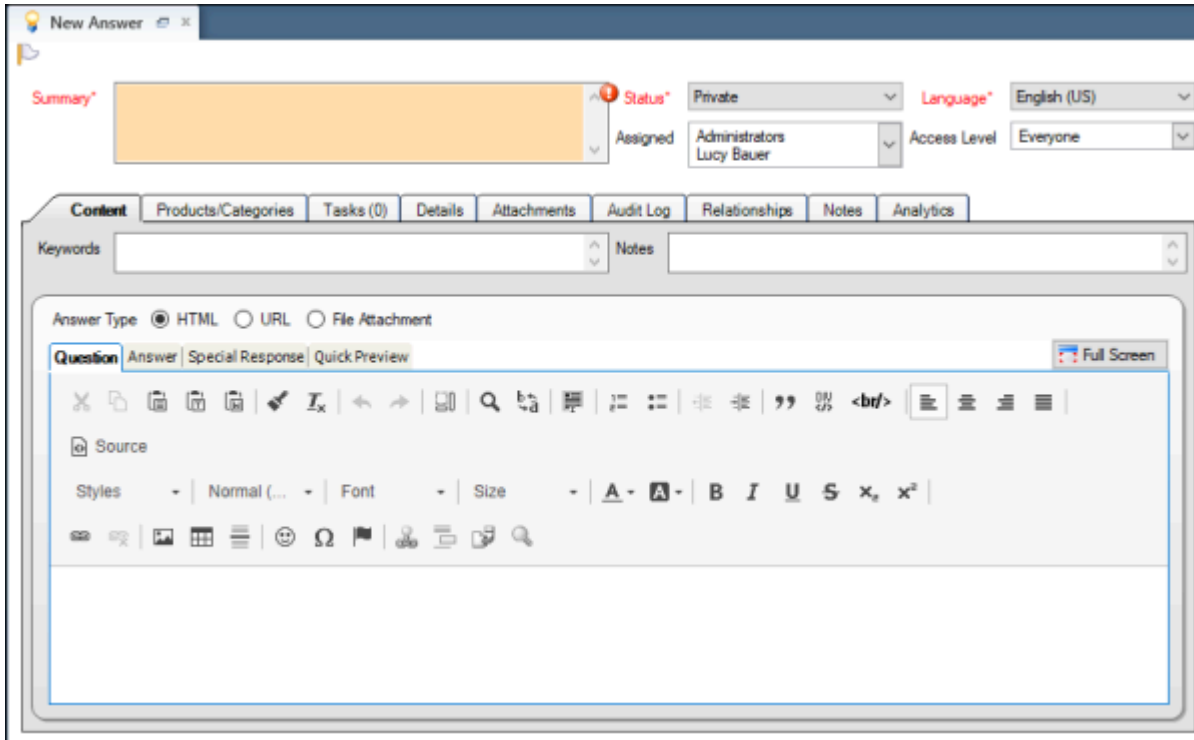
- [Add an HTML Answer in Design Mode](#)
- [Add an HTML Answer in Source Mode](#)
- [Service Permissions](#)

Add an HTML Answer in Design Mode

Design mode lets you create dynamic, well-formatted answers without previous HTML experience.

1. Do one of the following:
 - o From an open answer report, click **New**.
 - o If your navigation set is configured to add answers from the file menu, click **File** and select **Answer**. See *Configure the File Menu*.

The New Answer editor displays.



By default, the Content tab is active and the HTML answer types is selected.

2. Enter the subject of the answer in the **Summary** field.
This field displays as the subject of the answer on the customer portal.

3. Use the HTML editor to add the question portion of the answer. By default, the Question tab is active.

Options available on the toolbar let you do the following:

- Cut, copy, and paste.
- Search for text.
- Undo and redo changes.
- Format text with bullets or numbered lists.
- Adjust indentation.
- Center, left-justify, or right-justify text and images on the page.
- Change the font using the system fonts, including the default font.
- Change the font style, size, and attributes (highlighting, bold, italic, underline).
- Apply specialized formatting, including super and subscripts.
- Insert hyperlinks, images, tables, lines, special characters, and anchors. You can use the mouse to resize an image after inserting it.

Note: If you use the Agent Browser User Interface, you can integrate with Oracle Content Management (OCM) to include digital assets from OCM in your answers. See *Integrating the Agent Browser UI with Oracle Applications*.

Other options are also accessed through the toolbar.

HTML Editor Toolbar Icons

| Icon | Description |
|-------------------|---|
| Block Quote | Click this icon to set off text as a block quote (lockquote> tag). |
| Div Container | Click this icon to create a DIV block (<div> tag). You can insert new lines and line breaks between DIV containers. |
| Line break | Click this icon to insert a line break (tag). |
| Source | Click this icon to switch between source and design mode. In source mode, most of the toolbar icons are unavailable. |
| Link | Click this icon to insert a hyperlink. See <i>Insert a Hyperlink</i> . |
| Unlink | Click this icon to remove a hyperlink. |
| Image | Click this icon to insert an image. You can use the mouse to resize an image after inserting it. See <i>Insert an Image</i> . |
| Table | Click this icon to insert a table. See <i>Insert a Table</i> . |
| Horizontal Line | Click this icon to insert a horizontal line. |
| Smiley | Click this icon to open the Insert a Smiley window, and then click an emoticon to insert at your cursor position. |
| Special Character | Click this icon to use special characters in your content. |
| Anchor | Click this icon to insert an anchor in the answer. See <i>Insert an Anchor</i> . |
| Answer Link | Click this icon to insert a cross-reference to an existing answer. See <i>Insert an Answer Link</i> . |

| Icon | Description |
|----------------------|--|
| Conditional Section | Click this icon to insert a section with certain visibility restrictions within the answer. See <i>Insert a Conditional Section</i> . |
| Smart Merge | Click this icon to merge similar answers using Smart Merge. See <i>Merge Similar Answers</i> . |
| Search Knowledgebase | Click this icon to search for an answer in the knowledge base and append the content with the current answer. See <i>Append Answer Content</i> . |

4. Click the **Answer** tab to create your answer content.
5. To add a short version of your answer, click the **Special Response** tab.
If you do not enter a special response, the content you created on the Answer tab is used.
6. Click the **Quick Preview** tab to preview your answer content.
Customer portal themes do not display on the Quick Preview tab. You can also preview the answer and select assigned access levels to view answer visibility by clicking Preview on the ribbon.
7. To use the HTML editor in undocked, full-screen mode, click **Full Screen**.
8. To exit full-screen mode, click **Exit Full Screen**.
9. Click **Save**.

Related Topics

- [Preview an Answer](#)

Add an HTML Answer in Source Mode

You can use source mode to create your answers using HTML source code.

Syntax is highlighted in source mode. You can also search and replace code.

1. Do one of the following:
 - o Click **New**.
 - o If your navigation set is configured to add answers from the file menu, click **File** and select **Answer**.
2. From the Content tab of an answer, select **HTML** as the answer type.
HTML is the default answer type for a new answer.
3. On the Question tab, click the **Source** icon on the HTML editor toolbar.
When adding an HTML answer in source mode, most of the HTML editor toolbar icons are disabled.
4. Enter the HTML code to create your question content.
5. Click the **Answer** tab and enter the HTML code to create your answer content.
6. To add a short version of your answer, click the **Special Response** tab and enter the HTML code.
If you do not enter a special response, the content you created on the Answer tab is used.
7. Click the **Quick Preview** tab to preview your answer content.

Customer portal themes do not display on the Quick Preview tab. You can also preview the answer and select assigned access levels to view answer visibility by clicking Preview on the ribbon after you save your answer.

8. Click **Save**.

Related Topics

- [Preview an Answer](#)

Add a URL Answer

When you create a URL answer, an external URL address displays 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 fields as you would when creating HTML answers. However, certain fields are unavailable when adding a URL answer. The available fields depend on the permissions set in your profile.

1. Do one of the following:
 - Click **New**.
 - If your navigation set is configured to add answers from the file menu, click **File** and select **Answer**.
2. Enter a one-line summary in the **Summary** text box.
This field displays as the subject of the answer on the customer portal.
3. Select **URL**.
The **Confirm Answer Type Change** window opens.

CAUTION: When you change the answer type in an existing answer, all answer relationships and certain answer fields are removed. For example, when you change an HTML answer type to a URL answer type, the Question, Answer, Special Response, and Attachments tabs are removed and you lose any content that was created on those tabs.

4. Click **Yes** in response to the Confirm Answer Type Change message.
5. Enter or paste a URL address in the **URL** field.
6. Click **Preview** 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 **Save**.

Add a File Attachment Answer

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 are unavailable when adding file attachment answers. You can attach only one file for each file attachment answer type. File attachment answers are also indexed as searchable text on the customer portal. After you save your file attachment answer, you can download, view and edit properties, and delete the file.

File attachment answers appear to customers on the customer portal as file attachments. These are different to HTML answers that contain file attachments within the answer to provide additional information.

When you open an answer file attachment from the Search Knowledge Base tools panel, do one of the following:

- Click **Save** to save the attachment to your local drive.

- Click **Cancel** to open and view the file.

1. Do one of the following:
 - Click **New**.
 - If your navigation set is configured to add answers from the file menu, click **File** and select **Answer**.

2. Enter a one-line summary in the **Summary** text box.
This field displays as the subject of the answer on the customer portal.

3. Select **File Attachment**.
The **Confirm Answer Type Change** window opens.

4. Click **Yes**.

CAUTION: When you change the answer type in an existing answer, all answer relationships and certain answer fields are removed. For example, when you change an HTML answer type to a file attachment answer type, the Question, Answer, Special Response, and Attachments tabs are removed and you lose any content that was created on those tabs.

5. Click **Add File**.

After you attach a file, information about the selected file appears on the Content tab. The Content tab contains a paper clip icon when there is a file attached to the file attachment answer.

File Attachment Answer Content Tab

| Field | Description |
|-------------|---|
| Name | This field displays the name of the file. |
| 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. You can add or edit the description by selecting the file, clicking Properties and entering 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, the Open, Download, and Delete options are available. |

6. To open the attachment, click **Open**.
7. To download the selected file, click **Download**.
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 **Properties**.
9. To remove this file from the answer, click **Delete**.
10. Click **Save**.

Related Topics

- [Overview of the Attachments Tab](#)

Edit an Answer

You can edit answers, including sibling answers, manually related links, 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 answer versions and you can edit multiple answers at one time. See [Answer Versioning](#).

1. From an answer report, right-click the answer and select **Open**.
2. To change the answer type, select the option next to the answer type.

Options include HTML, URL, and File Attachment.

CAUTION: When you change the answer type in an existing answer, all answer relationships and certain answer fields are removed. For example, when you change an HTML answer type to a URL answer type, the Question, Answer, Special Response, and Attachments tabs are removed and you lose any content that was created on those tabs.

3. Edit the answer fields.
4. To search the answer for a word or phrase to replace, click **Find Text** 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.
6. To notify answer subscribers of the change, click the **Details** tab.
 - a. Click **Notify Subscribers**.
 - b. Select one of the following options:
 - o No Change
 - o Do Not Notify
 - o This Hour
 - o End of Today
 - o End of this Week
 - o End of this Month
7. Click **Save**.

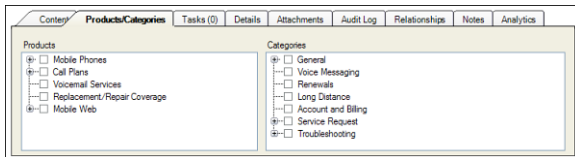
Related Topics

- [How You Add Answers for Multiple Interfaces](#)
- [HTML Editor for Answers](#)
- [Answer Versioning](#)
- [Add a URL Answer](#)
- [Add a File Attachment Answer](#)

Associate Products and Categories to an Answer

You can associate products and categories with answers. By associating products and categories with your answers, you can create rules and facilitate searching.

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 which categories are linked to products, all products and all categories are available on the Products/Categories tab when you add or edit an answer. 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.

4. To associate the answer exclusively with a product or category (without any dependence on subproducts or subcategories), 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.

Related Topics

- [Sibling Answers](#)

Add or Edit a Task for an Answer

You can add and edit all tasks associated with an answer by clicking the Answer 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 answers. For more information on working with answer tasks, see [Answer Tasks Tab Toolbar](#).

1. Right-click the answer and select **Open**.
2. Click the **Tasks** tab.

3. Do one of the following:
 - o Click **Add** and select **Add New** to open a new task on a subtab.
 - o Click **Add** and select **Add Existing** to open an existing task on a subtab.
 - o Right-click a task on the Tasks tab and select **Open**.

The screenshot shows the 'New Task' form in Oracle B2C Service. The form is titled '1 - How do I track my cell phone order? (2)'. It has tabs for 'Summary', 'Attachments', 'Audit Log', and 'Notes'. The 'Summary' tab is active. The form contains the following fields:

- Name ***: Text input field (empty)
- Assigned**: Dropdown menu (Lucy Bauer)
- Status ***: Dropdown menu (Not Started)
- Percent Complete**: Text input field (0)
- Priority**: Dropdown menu ([No Value])
- Due Date**: Text input field with calendar icon
- Planned Completion**: Text input field with calendar icon
- Date Completed**: Text input field with calendar icon
- Task Type**: Dropdown menu (Answers)
- Opportunity**: Text input field ([No Value])
- Organization**: Text input field ([No Value])
- Contact**: Text input field ([No Value])
- Incident**: Text input field ([No Value])
- Answer ***: Text input field (How do I track my cell phone order?)
- Campaign**: Text input field ([No Value])
- Mailing**: Text input field ([No Value])
- Survey**: Text input field ([No Value])
- Document**: Text input field ([No Value])
- Notes**: Text area (empty)

4. Enter the task name in the **Name** field.
5. To enter additional task information, complete the fields or select a menu option.
6. Click **OK**.

Related Topics

- [How You Search from Open Records](#)
- [Add a Task](#)

Add Answer Details

The Details tab contains information associated with the selected answer. You can use the Details tab to 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.

Enter field information.

Answer Details Tab

| Field | Description |
|-----------------------|---|
| *Display Position | Click this drop-down list to determine the answer display position on the customer portal. |
| Historical Usefulness | Select this option to use customer feedback to adjust the ranking of the answer. |
| 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 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 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 score will not increase or decrease over time. |
| Review On | Click this drop-down list 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 lets you select a guided assistance guide to associate with the answer. Note: The Guided Assistance button does not display unless your administrator has enabled guided assistance. |
| Notify Subscribers | Click this drop-down list 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, and End of This Month. |
| Publish On | Click this drop-down list 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. When an answer status is set to Private, the Publish On date is cleared. |

Insert a Hyperlink

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 link and be directed to either an internal or external URL.

1. From an answer report, right-click the answer and select **Open**.
2. Click the **Link** icon on the toolbar.
The **Link** window opens.

3. Enter field information.

Link Window

| Field | Description |
|--------------|--|
| Link Info | Select this tab to define your URL display and protocol options. |
| Display Text | Enter the text you want to display as the link in this field. If this field is left blank, the URL in the Link field displays to customers. |
| Link Type | Click this drop-down list to select the type of link. <ul style="list-style-type: none"> ○ URL—Adds a link to an external web page. This option is selected by default. ○ Link to anchor in the text—Adds a link to an answer. To enable this option, you must first add an anchor to the answer. See <i>Insert an Anchor</i>. ○ Email—Adds an email link to the answer content. Selecting this option lets you create a message that is addressed to the specified email account. ○ Phone—Lets you add a phone number to the answer content. |
| Protocol | Select a protocol. Options include the following: <ul style="list-style-type: none"> ○ http:// ○ https:// ○ ftp:// ○ news:// ○ <other> |
| *URL | Enter a valid URL for the page you want to link 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. <p>CAUTION: If the link is to a non-HTML page (for example, 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.</p> |
| Target | Click the Target tab to define target options. |
| Target | Click the Target tab and then click the Target drop-down list to select one of these options. <ul style="list-style-type: none"> ○ <Frame>—Enter the target frame name. ○ <Popup Window>—Enter the window name, select window features, and enter window size and position attributes. ○ New Window (_blank)—The URL opens in a new window. ○ Topmost Window (_top)—The URL opens in the top (focus) window. ○ Same Window (_self)—The URL opens in the same window. ○ Parent Window (_parent)—The URL opens in the same frameset. |
| Advanced | Click the Advanced tab to define options such as ID, language direction and code, and stylesheet usage. |

4. Click **OK** to insert the hyperlink at the cursor position.

Add or Remove Hyperlink Underlines

If you want your hyperlink to display an underline, you must add the underline text decoration manually, before you add your hyperlink. If you want to remove the underline from your hyperlink, you must delete the underline text decoration in source mode.

Even though the HTML editor for answers displays an underlined link when you create a hyperlink, the underline does not display on your customer portal page. This is because the standard customer portal theme does not include a hyperlink that displays with the underline text decoration. Instead, the hyperlink displays in plain text. However, when you hover over the link, then an underline displays.

Tip: Keep in mind that answer links also display on the customer portal without the underline text decoration. Therefore, if you want your answer links and your hyperlinks to look the same, make sure to apply consistent formatting to both link types.

You can add the text decoration in design mode or source mode. Removal of the text decoration is available only in source mode.

1. From the HTML editor for answers, click the **Answer** tab.
2. To add the underline text decoration to your hyperlink in design mode, enter the text you want to display as the link.
 - a. Select your text and click the **Underline** icon on the toolbar.
 - b. Select your text again and then click the **Link** icon to define your hyperlink options.
3. To add the underline text decoration to your hyperlink in source mode, click the **Source** icon on the toolbar. The editor changes from design mode to source mode.
4. Add `"style="TEXT-DECORATION: underline"` to your hyperlink in the HTML.
5. To remove the underline text decoration from your hyperlink, click the **Source** icon on the toolbar. The editor changes from design mode to source mode.
6. Delete `"style="TEXT-DECORATION: underline"` from your hyperlink in the HTML.

Related Topics

- [Add an HTML Answer in Design Mode](#)
- [Add an HTML Answer in Source Mode](#)
- [Insert a Hyperlink](#)

Insert an Image

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, see [Answer ID 4161](#) on our customer support site.

1. From an answers report, right-click the answer and select **Open**.
2. Click the **Image** icon on the toolbar.
The **Image Properties** window opens.

3. Enter field information.

Image Properties

| Field | Description |
|------------------|--|
| *URL | Enter the URL where the image is found. |
| Alternative Text | Enter the alternate text for the image. |
| Width | Enter the width, in pixels, you want the image to appear. |
| Height | Enter the height, in pixels, you want the image to appear. |
| Border | Enter the width, in pixels, of the image border. |

4. Click **OK**.

Insert a Table

You can insert a table in your HTML answer and define the number of rows or columns and its border properties, cell padding, and cell spacing.

1. From an answers report, right-click the answer and select **Open**.
2. Click the **Table** icon on the toolbar.
The **Table Properties** window opens.
3. Enter field information.

Table Properties Window

| Field | Description |
|--------------|--|
| Rows | Enter the number of rows in the table. |
| Columns | Enter the number of columns in the table. |
| Width | Enter the width of the table in pixels, or append a valid unit. |
| Height | Enter the height of each row in pixels, or append a valid unit. |
| Headers | Select None , First Row , First Column , or Both . |
| Border size | Enter the width, in pixels, of the table border. |
| Cell spacing | Enter the spacing, in pixels, of the table cells. |
| Cell padding | Enter the padding, in pixels, of the table cells. |
| Alignment | Select Left , Center , or Right . |
| Caption | Enter the title of the table. |
| Summary | Enter information about the table (this does not display). |

4. Click the **Advanced** tab to define the language direction and the style and class attributes.
5. Click **OK**.

Insert an Answer Link

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 entering a long URL for the answer.

1. Right-click the answer on the content pane and select **Open**.
2. Click the **Answer Link** icon on the toolbar.
The **Answer Link** window opens.
3. Enter field information.

Answer Link Window

| Field | Description |
|------------|---|
| *Answer ID | Enter the answer ID of the answer you want to link to. |
| Link Text | Enter the text you want to display to customers. Note: If this field is left blank, "Answer Link" displays to customers. |
| Title | Enter the text you want to display to customers when they hover over the link title. |
| Target | Select the target location where you want the contents of the link to display. Available options include New Window, Same Window, Parent Window, and Browser Window. |
| Class | Enter any class name you want to assign to the link text this field. You must define the class in your HTML content by either using the <code><style></code> tag to define the class inline, or posting the class in a CSS file on your web server and referencing it with the <code><link></code> tag. |
| Style | Enter any style attributes you want to assign to the link text. Style attributes define how the text appears, such as color and font. For example, color: red; font-weight: bold; font-style: italic. |
| Anchor | Enter the anchor to link to a specific location in a long string of text in an answer. This lets the customer to link to the exact location. |

4. Click **OK** to insert the answer link at the cursor position in the current answer.

Related Topics

- [Insert an Anchor](#)

Insert an Anchor

When you insert an answer link, you can also insert an anchor in the answer you are linking to. The answer link will open to a specific location within the answer.

For example, you might 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.

1. Right-click the answer on the content pane, then select **Open**.
2. Insert the cursor in the exact location of the answer to which you want to link.

3. Click the **Anchor** icon on the toolbar.
The **Anchor Properties** window opens.
4. Enter a name for the anchor in the **Anchor Name** field.
5. Click **OK** to add the anchor at the cursor position in the answer.
6. To rename an anchor, double-click the anchor to open the **Anchor Properties** window.
7. To delete an anchor, right-click the anchor and click **Delete**.

Insert a Variable into an Answer

Answer variables are predefined shortcuts for entering information into an answer instead of a long string of text.

When an answer displays 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. Contact your administrator for a list of variables defined for your application.

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.

1. From an open answer, click the **Question, Answer, or Special Response** tab on the Content tab and place your cursor where you want to insert the variable.
2. Enter a dollar sign **\$** followed by the variable name.

Note: Because variables are case sensitive, you must enter the variable name exactly as it is defined. See [Add or Edit a Variable](#).

Results:

The assigned value displays when customers view the answer.

Associate an Answer with Multiple Access Levels

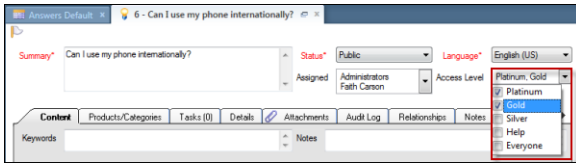
You can associate multiple access levels with an answer.

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, see [How to Control Answer Visibility](#).

1. Right-click the answer on the content pane and select **Open**.

2. Click **Access Level** 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 **Save**.

Insert a Conditional Section

You can add conditional content, within your answers, that displays only when specific criteria is met. Conditional sections control the visibility of specific sections within your answers. For example, you could show certain content only to customers with the appropriate access levels according to a service level agreement (SLA).

Say you're 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 use a conditional section to limit visibility to certain access levels.

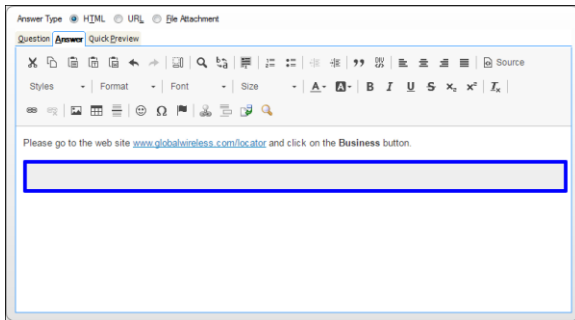
Conditional sections can also be used with privileged access levels assigned to specific SLAs. In this way, you could show all your content to customers assigned an SLA with a privileged access level. For instance, a customer assigned an SLA with Gold access is able to view conditional sections with access levels of Gold, Everyone, or Gold and Everyone. This gives you flexibility to customize and personalize answers for different types of customers.

Note: Conditional sections can also be nested. Although answers let you nest an unlimited number of conditional sections, we recommend limiting nested conditional sections to three.

1. From an answer report, right-click the answer and select **Open**.
By default, the Question tab is active.
2. To add your conditional section to the answer, click the **Answer** tab.
3. Click the **Conditional Section** icon on the toolbar.
The **Access Level** window opens.
4. Select the access levels you want to assign to the conditional section.

5. Click OK.

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. Enter the content you want to display in the conditional section text box.**7. Click Save.**

Modify Conditional Sections

You can modify your conditional section content to make text changes, add nested conditional sections, change access levels, and apply style and class attributes.

1. Right-click the answer on the content pane and select Open.

By default, the Question tab is active.

2. Click the Answer tab.**3. To edit the text of a conditional section, click the conditional section and enter your text in the text box.****4. To nest a conditional section in the current conditional section, click inside the answer section and then click the Conditional Section icon on the toolbar. See *Insert a Conditional Section*.****5. To change the access level of a conditional section, double-click the conditional section to open the Access Levels window.**

- a. Select the access level or multiple access levels.
- b. Click **OK** to assign the selected access levels and close the Access Levels window.

6. To apply style and class attributes, right-click inside the conditional section text box and select Edit Div. The Create Div Container window opens with the General tab active.

- a. Define style and stylesheet classes.
- b. Click the **Advanced** tab.
- c. Enter style attributes in the **Style** field.
- d. Click **OK**.

7. Click Save.**Results:**

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. You can see how the answer will appear to customers with different access levels on the customer portal using the Preview functionality.

Related Topics

- [Preview an Answer](#)

Append Answer Content

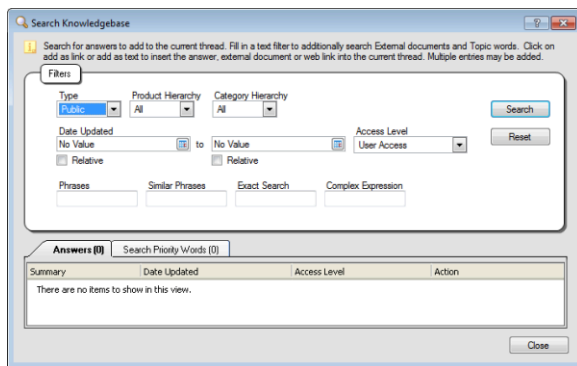
While editing an answer, you can search for other answers in the knowledge base. If answers are returned that match your search criteria, you can append them to the answer you are editing.

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.

1. Right-click the answer on the content pane and select **Open**.
2. Click the **Search** icon on the toolbox.

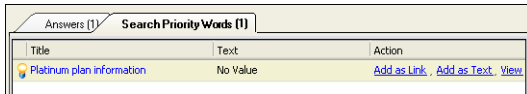
The **Search Knowledge Base** window opens.



3. Enter your search criteria and click **Search**.
4. Click the **Answers** tab.

| Answers (1) | Search Priority Words (1) | | |
|-----------------|---------------------------|--------------|--|
| Summary | Date Updated | Access Level | Action |
| Smart phone A90 | 02/10/2010 01:35 PM | Everyone | Add as Link , Add as Text , View |

- 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.
- 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.
- To view the answer, click **View**.

5. Click the Search Priority Words tab.

The screenshot shows a table with two tabs: 'Answers (1)' and 'Search Priority Words (1)'. The 'Search Priority Words (1)' tab is active. The table has three columns: 'Title', 'Text', and 'Action'. There is one row with the following data:

| Title | Text | Action |
|---------------------------|----------|--|
| Platinum plan information | No Value | Add as Link , Add as Text , View |

- 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.
 - 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.
 - To view the answer, click **View**.
- 6. To view the answer as it will appear on the customer portal, close the Search Knowledge Base window and click the Quick Preview tab.**
- 7. Click Save.**

Related Topics

- [Preview an Answer](#)

Preview an Answer

Before making an answer available to customers, you can preview it on the customer portal to ensure everything is accurate.

Before you start

Before you preview answers, your administrator needs to first expose the `answer_full_preview.php` and `answer_quick_preview.php` files located in `/views/admin`. See [Answer ID 10939](#).

You can verify that the answer and answer sections display as you expect them to by viewing the answer with different access levels selected. See [How to Control Answer Visibility](#).

Note: Customer portal themes are not applied when previewing answers on the content pane. This means the way your answer displays in the preview may be different from how it displays on the customer portal. We recommend using the cascading style sheet (CSS) from your customer portal when previewing answers.

Here's what to do

1. From an answers report, right-click the answer and select **Preview Answer**.
2. Select the access levels from the **Access Level** drop-down list.
Only the sections of the answer with the selected access level display on the **Answer Preview** window.
3. Click **Preview**.

Related Topics

- [What to Do When Answers Are Not Visible](#)
- [Use the End-User Cascading Style Sheet in Answer Previews](#)

Use the End-User Cascading Style Sheet in Answer Previews

You can use the cascading style sheet (CSS) from your customer portal when previewing answers, to get a better idea of how they will look to the end user. To do this, you must modify the standard answer workspace.

The end-user CSS from the customer portal is also applied to the content when editing the Question and Answer content in the HTML editor.

Note: The Service Console uses custom code and settings to render previews. Therefore, the appearance of an answer in a preview will not look exactly as it will on your customer portal.

1. Copy the standard answer workspace, then open the copy for editing.
2. Click the **Design** tab.
3. On the **Content** tab in the workspace, click the **Answer Type Container** control.
4. On the **Design** tab, select the **Apply End User CSS** check box.
5. Save the modified workspace.

What to do next

Edit the profiles of staff members to use the modified workspace. See [Add or Edit a Profile](#).

Validate Links in an Answer

You can check for broken links in HTML and URL answers.

Keep in mind that this procedure applies to hyperlinks and links to other answers. The broken links checker functions on a per-answer basis. 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.

1. While editing an answer, click **Check Links**.
The **Check Links** window opens and link validation begins.

Check Links Window

| Column/Button | Description |
|---------------|---|
| Name | This column displays the name of the links that have been checked for validity. 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. Hyperlinks open in a new browser, whereas answer links open on the Answer Preview window. |
| Status | <p>This column displays the status of the links. The following statuses display depending on the type of link being validated.</p> <p>Valid—This status is used only for hyperlinks and signifies that the links checker successfully visited the link destination.</p> <p>Broken—This status is used only for hyperlinks and signifies that the links checker attempted to visit the link destination, but was unsuccessful.</p> <p>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.</p> <p>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.</p> |

| Column/Button | Description |
|---------------|---|
| | 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. |

- To edit a link, click **Edit** in the Action column of the link.

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.

- Enter your changes in the appropriate fields.

- Click **OK**.

The **Edit Hyperlink** or **Edit Answer Link** window closes and all links are automatically revalidated and display on the **Check Links** window.

- Click **OK**.

Edit a Related Answer

You can edit related answers, including sibling, manually related, and learned links.

Editing a related answer affects all answers associated with it.

- From an answers report, right-click the answer and select **Open**.

- Click the **Relationships** tab.

- Click **Open** next to the answer you want to edit.

The related answer opens in a new window.

- Enter your changes.

- Click **OK**.

- Click **Save**.

Merge Similar Answers

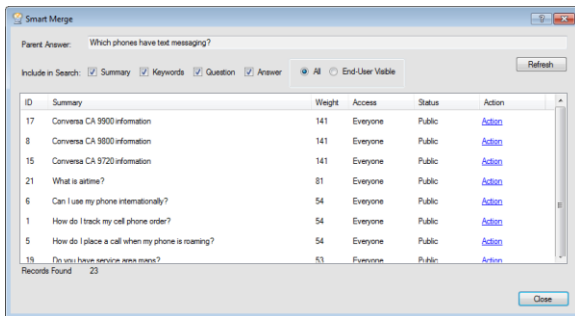
You can effectively manage the answers in your knowledge base by merging similar answers or merging the content of one answer with another answer.

In addition, merging answers also merges any conditional sections. Conditional sections display as text in the appropriate fields of the answer.

Answers can be merged with similar answers found in the knowledge base by using Smart Merge. 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.

1. Right-click the answer on the content pane and select **Open**.
2. Click the **Smart Merge** icon (next to the Search icon) on the toolbar.



3. Enter field information.

Smart Merge Window

| Field | Description |
|-------------------|---|
| Parent Answer | The parent answer is the current answer to which you are merging an answer. This field displays the summary of the open answer. |
| Include in Search | Define your search criteria with any of these areas of the answer. 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 option to return all answers, regardless of status. |
| End-User Visible | Select this option to return only public answers. |

4. Click **Refresh**.
The results display on the **Smart Merge** window. The matched answers are sorted by relevance.
5. Click **Action** next to each answer you want to merge, and select from the merge options.

Merge Answer Options

| Option | Description |
|--------|---|
| Merge | Select this option to merge the answer with the answer you are editing. |

| Option | Description |
|------------------------|---|
| 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 prompts 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 after it has been merged. CAUTION: Selecting this option permanently deletes 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: After you select an option, the underlined text next to the answer changes. For example, if you select **Merge**, the text changes from Action to Merged.

6. Click **Close** to close the window and return to the answer.
7. To view the merged answer as it displays on the customer portal, click the **Quick Preview** tab.
8. Click **Save**.

Related Topics

- [Preview an Answer](#)
- [Insert a Conditional Section](#)
- [Modify SmartAssistant Relevancy](#)

Delete an Answer

You can delete answers from Service when they become outdated.

Deleting an answer also deletes all associated relationships.

CAUTION: Deleting is permanent and cannot be undone.

1. Right-click the answer on the content pane and select **Delete**.
2. Click **Yes** to confirm the deletion.

Answer Versioning

You can create new versions of answers while keeping previous versions for historical purposes.

Note: Before you can use answer versioning, you must modify the answer workspace.

Answer versioning lets you do the following:

- Draft new versions of existing answers, including from historical versions.
- Publish new answer versions immediately or at a designated time in the future.
- Compare answer versions.
- Delete answer versions.
- Audit answer versions.

Answer IDs and version IDs are independent from each other. The IDs may or may not have the same numbers when the versions are created.

Tip: If you plan to audit answer versions, we recommend creating business rules to prevent answer versions from being deleted.

Related Topics

- [Create an Answer Workspace for Answer Versioning](#)
- [Versioned Answer Fields](#)

Versioned Answer Fields

If you edit a versioned field, it changes only for the version that you edited.

Versioned Answer Fields

| Field | Table Column | Description |
|-------------------|----------------------|--|
| Access Level | access_id | Access level for the answer. |
| Access Mask | access_mask | Indicates the access levels for the answer through a bitmap. |
| Answer | solution | Solution field of the answer. |
| Assigned | assgn_acct_id | Staff member to whom the answer is assigned. |
| Assigned Group | assgn_group_id | Staff group to which the answer is assigned. |
| Date Updated | updated | Date and time when the answer was last edited. |
| Draft Date | v\$drafted | Date and time when the draft was created. |
| Draft Note | v\$draft_note | Note for the answer version when the draft is created. |
| Expiration Date | expires | Date when the answer status will automatically be set to Review. |
| Keywords | keywords | Keywords field in the answer. |
| Last Edited By | last_edited_by | ID of the last staff member to edit the answer. |
| Notes | notes | Notes associated with the answer. |
| Parent Version ID | v\$parent_version_id | ID of the version from which the version was drafted. |
| Publish Date | v\$published | Date and time when the answer version was published. |
| Publish Note | v\$publish_note | Note for the answer version when it is published. |

| Field | Table Column | Description |
|----------------|----------------|--|
| Publish On | publish_on | Date when the answer status will automatically be set to Public. |
| Question | description | Question field of the answer. |
| Status | status_id | Current status of the answer, such as Private or Public. |
| Status Type | status_type | Type of the answer status. |
| Summary | summary | Summary of the answer content. |
| URL | url | URL associated with a URL answer. |
| Unpublish Date | v\$unpublished | Date and time when the answer version was changed to the Historical state. |
| Version ID | v\$id | Unique ID number of the version. |
| Version State | v\$state | State of the answer version: Draft, Live, or Historical. |

Nonversioned Associated Objects and Answer Fields

If you edit a nonversioned field or object from an answer or answer version, it changes for that answer and all versions of that answer. These lists include fields and associated objects that are not versioned in answers.

Nonversioned Objects Associated with Answers

The following objects are not versioned.

- Custom fields
- System attributes
- Related objects
 - Attachments
 - Notes
 - Products and categories
 - Tasks

Nonversioned Answer Fields

The following fields are not versioned.

Nonversioned Answer Fields

| Field | Table Column | Description |
|------------------------|-------------------|--|
| Admin Long-term Score | aolt_solved_count | Long-term solved count for administrative users. |
| Admin Short-term Score | aust_solved_count | Short-term solved count for administrative users. |
| Answer ID | a_id | Unique ID number of the answer. |
| Answer Type | type | Type of the answer: HTML, URL, or File Attachment. |

| Field | Table Column | Description |
|-------------------------------|-------------------|--|
| Banner Account | banner_acct_id | Staff account that last updated the flag. |
| Banner Flag | banner_flag | Importance of the flag. |
| Banner Text | banner_text | Text added to the flag. |
| Computed Score | solved | Answer score. |
| Date Admin Last Access | admin_last_access | Date and time a staff member last opened the answer while editing an incident. |
| Date Banner Flag Last Updated | banner_upd | Date and time the flag was last edited. |
| Date Created | created | Date and time the answer was created. |
| Date Last Access | last_access | Date and time the answer was last viewed from the customer portal pages. |
| Date Last Notify | last_notify | Date and time a notification was last sent for the answer. |
| End-User Short-term Score | eust_solved_count | Customer short-term solved count for the answer. |
| Escalation Date | escldate | Date and time that the answer is scheduled to be escalated, or the last time the answer was escalated by answer rules. |
| Escalation Level | escllevel | Escalation level of the answer. |
| Guided Assistance Guide | dt_id | Guided Assistance ID for the answer. |
| Language | lang_id | Language to which the answer is assigned. |
| Meta-Answer ID | m_id | ID number of the meta-answer to which the answer is assigned. |
| Next Notification | next_notify | Date and time the next answer notification will be sent for the answer, if the answer is modified before the specified date and time. |
| Position in List | position | Display position of the answer in the answer list. |
| Rule State | rule_state | Rule state of the answer. |
| Score | solved_count | Solved count for the answer. This is a measure of how helpful the answer is to users. |
| Static Score | static_solved | Static score assigned to the answer. The static score overrides the solved count and is used to determine the answer display position. |

Create an Answer Workspace for Answer Versioning

You must modify the standard answer workspace to enable answer versioning.

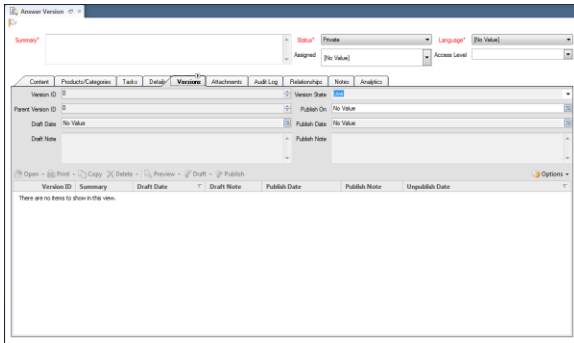
Answer versioning uses the Answer Versions report found in **Public Reports/Service/Views - Service/Editor Reports - Service**.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Workspaces**. If workflows are enabled, the item is labeled Workspaces/Workflows.
The Workspaces explorer opens on the content pane.

3. Copy the standard answer workspace and name the copy.
4. Open the new workspace for editing.
5. Add the Draft and Publish buttons to the ribbon.
 - a. Click the **Home** tab, and then click **Ribbon**.
 - b. On the **Ribbon Designer**, click any of the buttons in the Actions section of the Ribbon Preview.
The editing window displays the buttons in the Actions group.
 - c. Click **Add Buttons**.
 - d. In the **Add or Remove Buttons** window, select the **Draft** and **Publish** check boxes, and then click **OK**.
 - e. Use the arrows to move the **Draft** and **Publish** buttons where you want them to be found.
 - f. Click **OK** to close the Ribbon Designer.
6. Add a new tab to the workspace and name the tab **Versions**.
7. Add the Answer Versions report to the new tab.
 - a. Click the **Insert Control** tab, and then drag and drop a **Report** control onto the **Versions** tab.
 - b. Click the **Design** tab, and then click **Report** on the ribbon.
The **Select Report** window opens.
 - c. Select the Answer Versions report found in **Public Reports/Service/Views - Service/Editor Reports - Service**, and then click **OK**.
The Answer Versions report is added to the Versions tab.
8. Click the **Insert Field** tab, and then add the following fields above the report.
 - o Version ID
 - o Parent Version ID
 - o Version State
 - o Draft Date
 - o Draft Note
 - o Publish Date
 - o Publish Note
 - o Publish On (optional: this field is already on the Details tab)
 - o Review On (optional: this field is already on the Details tab)
9. Click **Save**.
10. Edit the profiles of any staff members who need to create answers so they can use the new workspace.

Results:

The new answer workspace should resemble this image.



Related Topics

- [Add Tabs to the Design Space](#)
- [Copy a Workspace](#)
- [Edit a Workspace](#)

Create a New Answer Version

You use the modified answer workspace to create a new draft from an answer and then publish it.

Before you start

This procedure assumes that the answer workspace has been modified to enable answer versioning.

Here's what to do

1. Open the answer for which you want to create a new version.
2. Click **Draft**.
The **Create Draft** window opens.
3. Enter a note for the draft and click **OK**.
The default note reads, Draft created from version id: current_version_number .
The new version opens in the HTML editor with - Draft appended to the title.
4. Close the previous version of the answer.
5. Edit the new version and click **Save**.
Clicking the Versions tab shows the original answer version in the Live state, while the new version is in the Draft state.
6. To publish the draft immediately, click **Publish**. The **Publish Draft** window opens.
 - a. Enter a note about the draft.
 - b. Click **OK**.
The default note reads, Publish draft with version Id: new_version_number .
The draft is published. The Versions tab shows the original version is now in the Historical state, while the new version is in the Live state.
7. To publish the draft on a future date, click the **Calendar** icon next to the Publish On field.
 - a. Select a publishing date.
If a draft is already set to publish, the Publish On window opens with the draft version ID and the scheduled publish date.
 - b. Click **OK**.

- c. Click **Save**. The draft is published on the specified date.

Note: If you change your mind about publishing your draft, you can clear the Publish On field.

Create a New Answer Version from a Historical Version

You can create a new draft from a historical version of an answer. For example, you might want to revert some of the changes that have been made to the answer. You can also use this procedure to create a draft from another draft.

1. Open the answer for which you want to create a new version.
2. Click the **Versions** tab.
3. Double-click the historical version.
The historical version opens in the HTML editor, with - Historical appended to the title.
4. Close the editor for the live version.
5. Click **Draft**.
The **Create Draft** window opens.
6. Enter a note for the draft and click **OK**.
The default note reads, Draft created from version id: historical_version_number .
The new version opens in the HTML editor with - Draft appended to the title.
7. Close the previous version of the answer.
8. Edit the new version and click **Save**.
Clicking the Versions tab shows that the original answer version is in the Historical state while the new version is in the Draft state.
9. To publish the draft immediately, click **Publish**. The **Publish Draft** window opens.
 - a. Enter a note about publishing the draft.
 - b. Click **OK**.
The default note reads, Publish draft with version Id: new_version_number .
The draft is published. Clicking the Versions tab shows the original and previously live versions are now in the Historical state, while the new version is in the Live state.
10. To publish the draft on a future date, click the **Calendar** icon next to the Publish On field.
 - a. Select a publishing date from the calendar.
If a draft is already set to publish, the Publish On window lists the draft version ID and the publish date.
 - b. Click **OK**.
 - c. Click **Save**.
The draft is published on the specified date. Clicking the Versions tab shows the original answer version is still in the Historical state, while the new version is in the Draft state.

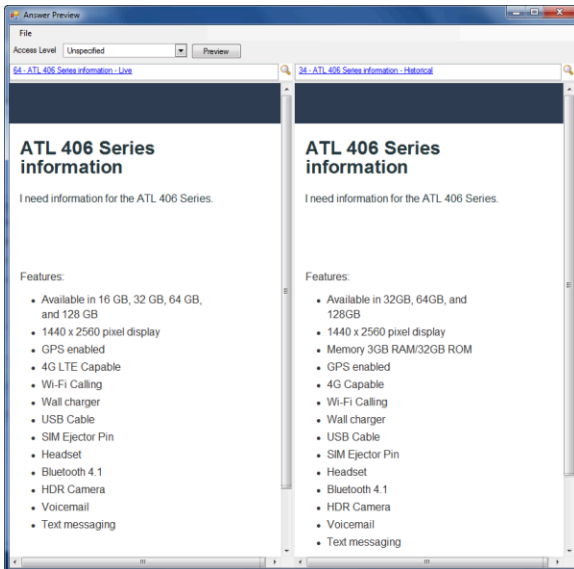
Compare Answer Versions

You use the answer preview functionality to compare versions. For example, you might want to compare the live version to a historical version.

1. Click the **Versions** tab and select the first version you want to compare.
2. Click **Preview**.
The answer version displays in the **Answer Preview** window.
3. Click **File > Compare**.
4. Select the answer version to compare to the first version, and then click **Select**.

Results:

The two versions are compared side by side in the **Answer Preview** window.



Delete an Answer Version

You can delete answer versions without deleting the entire answer.

Deleting the live version of an answer causes the answer to be lost temporarily from any report or functionality that relies on it. Publishing a draft version restores that functionality.

However, you cannot delete the live version of an answer from the Service Console without deleting the answer (and all of its other versions).

To identify answers that are missing live versions, run the Answers Missing Live Versions report, found in **Public Reports/Service/Views - Service/Editor Reports - Service**.

1. On your modified answer workspace, click the **Versions** tab.
2. Select the row of the answer version you want to delete by clicking in the row.
3. Click **Delete** on the Versions tab, and then select **Answer Version**.
The **Answer Version Delete** window opens.
4. Click **Yes** to confirm the deletion.
5. Click **Refresh**.

Results:

All answer versions are deleted.

Audit an Answer Version

Use the Audit Log tab to view events that have occurred for answer versions. The audit log for answer versions is especially useful in regulated industries.

The Answer Version Audit Log report, found in **Public Reports/Service/Views - Service/Editor Reports - Service**, displays on the Audit Log tab.

Tip: We recommend creating business rules to prevent answer versions from being deleted if you plan to audit answer versions.

1. From an open an answer, click the **Versions** tab, and then open an answer version.
2. Click the **Audit Log** tab.

Results:

The following transactions are listed:

- Transactions for the answer.
- Transactions that affect the answer and all sibling answers.
- Transactions for the answer version.

Related Topics

- [Audit Logs](#)

Find the Live Answer Version For a Specific Date

You can use the Answer Version Audit Search report to find which version of an answer was live on a specific date. This report can be especially useful in regulated industries.

Before you start

This procedure assumes that the Reports Explorer component has been added to the Analytics button of your navigation set. The Answer Version Audit Search report is found in **Public Reports/Service/Search Reports - Service**. If you plan to audit answer versions, we recommend creating business rules to prevent answers from being deleted.

Here's what to do

1. Click **Analytics** on the navigation pane, and then double-click **Reports Explorer**.
2. Expand **Public Reports > Service > Search Reports — Service**, and then double-click **Answer Version Audit Search**.

You can also add this report to the Answers button of your navigation set.

3. In the Search window, enter the answer ID.
4. Click the **Calendar** icon to enter a search date or timeframe.
The Relative check box is selected by default with zero (0) months rounded for the date.
5. To designate a specific date, clear the **Relative** check box.
6. Click **Search**.

The search result displays as shown in this example.

| Version ID | State | Summary | Draft Date | Draft Note | Publish Date | Publish Note | Unpublish Date |
|------------|------------|----------------------------|---------------------|------------|---------------------|--------------|---------------------|
| 34 | Historical | ATL-406 Series information | 06/23/2015 10:45 AM | No Value | 06/23/2015 10:45 AM | No Value | 01/04/2018 10:25 AM |

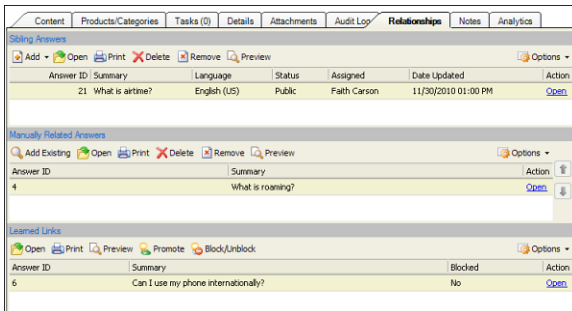
What to do next

You can open the version in the search results of the report.

Answer Relationships

Answer relationships give you a way to group similar answers, improving the way you keep track of and update answers in your knowledge base. There are three types of answer relationships, including sibling answers, manually related answers, and automatically learned links.

You can manage the way one answer relates to other answers from the Relationships tab on the answer workspace. The answer relationship types available to you depend on how the answer workspace assigned in your profile is customized.



Sibling answers, manually related answers, and automatically learned links display 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 are automatically related 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.

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 a set of answers that share the same products, categories, or file attachments.

Sibling answers and attachments with access levels that are at or below the contact's Service Level Agreement (SLA) are visible to the contact.

Note: To display file attachments for answer siblings on the Attachments tab, the Siblings Visible property for the File Attachments relationship item on the custom answer workspace must be set to True. See *Options Properties*.

The Sibling Answers section of the Relationships tab consists of a toolbar and a list of sibling answers. The toolbar is found above the sibling answer list.

Sibling Answers Toolbar

| Button | Description |
|--------------|---|
| Add | Click this drop-down list to select an option to add a new or existing answer to the sibling set. |
| 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. |
| 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 permanently delete the sibling answer. |
| Preview | Click this button to preview the selected sibling answer. |
| Draft | Click this button to create a draft from the selected answer and open it for editing. |
| Remove | Click this button to remove the selected sibling answer, which disables the answer relationship. |
| Options | Click this button to display a drop-down list of report options. |

The list in the Sibling Answers section contains answers that share the same product or category as the current answer.

Sibling Answer List

| Column | Description |
|--------------|---|
| Answer ID | This column displays the unique ID assigned to the answer. |
| Summary | This column displays a summary of the answer content. The summary is the answer 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. |
| Date Updated | This column displays the date the answer was last updated. |
| Action | This column displays a link for opening the sibling answer. Right-click the Open link to select Print, Remove, or Preview. |

Related Topics

- [Report Home Tab](#)

Move an Answer to a Sibling Set

You can create answer relationships by making an answer part of a sibling set.

1. From the Relationships tab, click **Add > Add Existing** on the Sibling Answers toolbar.
The **Answer Search** window opens.

2. Search for the answer you want to move to your sibling set and click **Select**.
The **Move Siblings** window opens.
3. Select the sibling set option you want to use.
4. Click **OK**.

Remove an Answer from a Sibling Set

You can change answer relationships by removing an answer from a sibling set.

1. In the Sibling Answers section of the Relationships tab, select the answer that you want to remove from the sibling set.
2. Click **Remove**.
The **Move Answer** window opens.
3. Select the appropriate option.
4. Click **OK**.

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 found above the manually related answer list.

Manually Related Answers Section Toolbar Buttons

| 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. |
| 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 list of Analytics options. |

The list in the Manually Related Answers section contains answers that may contain related answer information.

Manually Related List

| Column | Description |
|-----------|---|
| Answer ID | This column displays the unique ID assigned to the answer. |
| Summary | This column displays a summary of the answer content. The summary is the answer subject, which is defined on the Summary tab. |

| Column | Description |
|--------|--|
| Action | This column displays a link for opening the manually related answer. Right-click the Open link to select Print, Remove, or Preview. |

Related Topics

- [Report Home Tab](#)

Learned Links

Service automatically links answers, known as learned links, based on customer activity. Relationships between answers are established when customers view answers during the same visit.

The Learned Links section on the Relationships tab consists of a toolbar and a list of learned link answers. The toolbar is found above the learned links answer list.

Note: To display learned links on a customer portal page or any page that is external to the customer portal, add the RelatedKnowledgebaseAnswers widget to the page. The number of related answers (learned links) that display depends on how the widget is configured.

Learned Links Toolbar

| 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. |
| Blocked | Click this button to block the answer from displaying in the Related Answers section on the customer portal. To block more than one answer, press Ctrl while selecting each answer. Click this button again to allow a blocked answer to display in the Related Answers section on the customer portal. Note: Blocking or unblocking a learned link is effective only for the answer in which the block was placed. Other answers where a particular answer displays as a learned link are not affected. |
| Options | Click this button to display a drop-down list 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.

Learned Links List

| Column | Description |
|-----------|---|
| Answer ID | This column displays the unique ID assigned to the answer. |
| Summary | This column displays a summary of the answer content. The summary is the answer subject, which is defined on the Summary tab. |
| Blocked | This column displays the blocked status of the answer link on the customer portal. If the blocked status is set to No, then the answer link is not blocked and it will display on the customer portal. If the blocked status is set to Yes, then the answer link is blocked and it will not display on the customer portal. |
| Action | This column displays a link for opening the learned link answer. Right-click the Open link to display Print, Remove, and Preview functionality. |

Related Topics

- [Report Home Tab](#)

Other Answer Actions

Besides editing and adding answers, you might have other answer management duties, for example, printing an answer, copying an answer, or making 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. See [Print a Record](#).
- **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. See [Copy a Record](#).
- **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. See [How You Update Multiple Records](#).

Content Library

Overview of Content Library

You can create standard text and variables to represent words, phrases, and replies that agents use frequently. Your agents can use this content to save time and eliminate errors when responding to customers and creating answers.

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. 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 also assign a keyboard shortcut to any standard text. Agents can use keyboard shortcuts to insert standard text when working on incidents or engaged in a chat session.

Variables are shortcuts that can be inserted into incident responses, chat sessions, or in the Question and Answer fields of an answer. For example, instead of agents entering your organization’s support phone number every time, you can add the phone number as a variable. Agents can copy a variable and paste it or enter the variable inline when responding to a customer in a chat session or an incident response. Variables can be indexed to make the answer contents more searchable.

You can embed variables as shortcuts in standard text, including variables defined on the Variables editor or system-defined variables. 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.

You can add folders to organize standard text and variables and organize folders in the tree.

Related Topics

- [Add or Edit Standard Text](#)
- [Add or Edit a Variable](#)
- [Insert Standard Text from the Standard Text Window](#)

Add or Edit Standard Text

Provide standard text that your agents can use to save time, eliminate errors, and respond with consistent information in incident responses, chat sessions, and answers. You can also organize standard text using folders.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Standard Text**.
The Standard Text tree displays on the left side of the content pane.
3. Choose one of the following options:
 - o To add standard text, click **New**.
 - o To edit standard text, select it in the tree.

Tip: You can search for standard text by expanding the arrow next to Search at the bottom of the tree.

The Standard Text editor displays on the right side of the content pane.

4. Enter field information.

Standard Text Editor

| Field | Description |
|---------------|--|
| *Name | Enter the name of the standard text. The item name in the Standard Text tree on the left side of the content pane populates or updates as you type. |
| Hotkey | Enter the keyboard shortcut letters, numbers, or both in this field. This lets agents quickly insert standard text by pressing F8 and the keyboard shortcut when working on an incident or during a chat session. To find a keyboard shortcut, hover over a standard text response in the tree. |
| *Type | Select at least one of the following check boxes for the standard text type. |

| Field | Description |
|--------------------------|--|
| Rule Text | Select this check box to include the standard text as a rule action. |
| Chat Text | Select this check box to make this text available to agents during a chat session. This check box displays only when 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 make this URL available to agents during a chat session. Agents can send the URL to customers, which opens a browser that displays the URL. This check box displays only when Chat is enabled. |
| *Value | Select the appropriate option for adding standard text in plain text or HTML format. 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. |
| Text | Select this option to add the standard text in plain text. |
| HTML | Select this option to add standard text in HTML. For information on how HTML fields in standard text display in responses, see Answer ID 1434 All standard text images must be referenced by URL. |
| Variables | Click this button to select a variable defined on the Variables editor. See Add or Edit a Variable . |
| \$ | Click this button to select from the list of system-defined variables. When the standard text is appended, the variable is replaced with the related data. If you enter the period mark (.) 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. <code>\$solutions</code> populates in the Value text box. |
| Response Link | Select this option to append the Response Link variable. <code>\$response_link</code> populates in the Value text box. |
| Incidents | Click the Incidents drop-down list and then select one of the variables on the list. For the list of available standard content variables, see Answer ID 6529 . Custom fields and attributes defined in your system are also on the list. For a description of the standard content variables on the list, see the Incidents table information in the Data Dictionary (Configuration > Database > Data Dictionary). |
| Contacts | Click the Contacts drop-down list and then select one of the variables on the list. For the list of available standard content variables, see Answer ID 6529 . Custom fields and attributes defined in your system are also on the list. |

| Field | Description |
|----------------------|--|
| | For a description of the standard content variables on the list, see the Contacts table information in the Data Dictionary (Configuration > Database > Data Dictionary). |
| Orgs | Click the Orgs drop-down list and then select one of the variables on the list. For the list of available standard content variables, see <i>Answer ID 6529</i> . Custom fields and attributes defined in your system are also on the list. For a description of the standard content variables on the list, see the Organizations table information in the Data Dictionary (Configuration > Database > Data Dictionary). |
| Comment | Enter a description or instructions to help your agents who are working on the Agent Browser User Interface understand how to use the standard text. Note: This field does not display on the Service Console. It displays only on the Agent Browser UI. |
| Interface Visibility | Select the individual interfaces where you want to display the standard text. All interfaces are selected by default. You can prevent standard text from appearing on all interfaces by clearing the Select All check box. |

- To add folders or organize items and folders in the Standard Text tree, see *Add Folders* and *Folders and Items in the Tree*.
- Click **Save**.

CAUTION: You can delete standard text at any time by selecting the standard text entry in the tree and clicking **Delete** on the ribbon. However, when you delete standard text, all instances of the standard text will also be deleted.

Related Topics

- [Insert Standard Text from the Standard Text Window](#)

Add or Edit a Variable

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. You can add or edit variables from the Variables editor.

- Click **Configuration** on the navigation pane.
- Expand **Service**, and then double-click **Variables**.
The Variables tree displays on the left side of the content pane.
- Choose one of the following options:
 - To add a variable, click **New**.
 - To edit a variable, select the variable in the tree.

Tip: You can search for variables by expanding the arrow next to Search at the bottom of the tree.

The Variables editor displays on the right side of the content pane.

4. Enter field information.

Variables Editor

| Field | Description |
|----------------------------|--|
| *Name | Enter 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. Variable names cannot include spaces. We recommend using an underscore character (_). |
| 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 | Enter the text of the variable. Variables are case sensitive. |

5. To add folders or organize items and folders in the Variables tree, see [Add Folders](#) and [Folders and Items in the Tree](#).
6. To view answers that are dependent on the variable, click **Dependencies**.
The Dependencies button is available only when you edit a variable.
7. To delete a variable, select the variable in the tree and click **Delete**.
The system performs a dependency check and any answers that contain the variable display on the **Dependency Conflict** window.
 - a. To delete all instances of the variable, click **Yes**. Otherwise, update the applicable answers before deleting the variable.
8. Click **Save**.

Related Topics

- [Insert a Variable into an Answer](#)
- [Add Folders](#)

Service Level Agreements

Overview of Service Level Agreements

Service level agreements (SLAs) 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.

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 [Add Custom Response Requirements to an SLA](#).

Add or Edit a Holiday

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Service > Service Level Agreements**, and then double-click **Holidays**.
The Holidays tree displays on the content pane.
3. Choose from the following options:
 - o To add a holiday, click **New** to display the editor.
 - o To edit a holiday, click it in the tree.
4. Enter field information.

Holidays Editor

| Field | Description |
|-----------------------------|--|
| *Name | Enter the name of the holiday. |
| *Date | Click in this field and enter 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. |
| Interface Visibility | Select the check box next to each interface for which this holiday applies. 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 **Save**.

Note: You must add an entry for all holidays that occur yearly. For example, you must add separate entries for July 4, 2020, and July 4, 2021.

Define Default Response Requirements

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Service > Service Level Agreements**, and then double-click **Response Requirements**.
The Response Requirements tree displays on the content pane.
3. Click the appropriate interface in the tree to display the editor.
4. Enter field information for the first service interval. Press Tab to move between interval fields.

Response Requirements Editor

| 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 list to select a day of the week. Press Tab to move between fields. |
| *Start Hour | Enter the start hour using a 24-hour clock (for example, if your business day starts at 8:00 A.M., enter 8 in this column). |
| *Minute | Enter the start minute from 0 to 59 . |
| *End Hour | Enter the end hour using a 24-hour clock (for example, if your business day ends at 5:00 P.M., enter 17 in this column). The end hour must be a number greater than the start hour. |
| *Minute | Enter the end minute from 0 to 59 . |
| Response Time (Minutes) | Enter 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, enter 240 in this field. |
| Resolution Time (Minutes) | Enter 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, enter 480 in this field. |
| Holidays Observed | Select the holidays that will suspend the response requirements. Select the Select All check box to select all holidays in the Holidays Observed section. |

5. Click the **Day** drop-down list 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 **Save**.

Related Topics

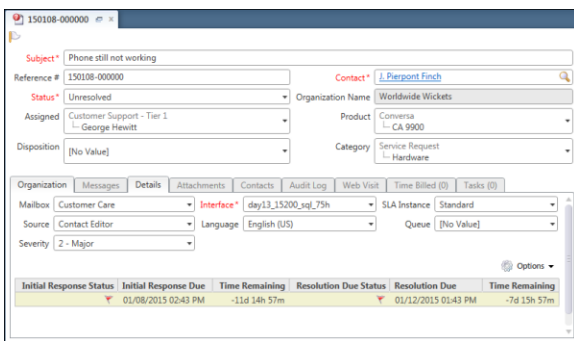
- [Add Custom Response Requirements to an SLA](#)

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. This image shows an incident workspace that has been configured to display resolution due calculations.



Related Topics

- [Create the Incident Milestones Report](#)
- [Add the Incident Milestones Report to a Custom Incident Workspace](#)

Create the Incident Milestones Report

To display resolution due calculations, you must create a custom incident milestones report and then add it to a custom incident workspace.

1. Create a new report with column definitions.

Custom Incident Milestones Report Columns

| Heading | Definition |
|-------------------------|--|
| Initial Response Status | <code>if(incidents.status_type=2,100,round((((date_diff(sysdate(), incidents.rel_due))*-1)/60,0))</code> |
| Initial Response Due | <code>incidents.rel_due</code> |
| Time Remaining | <code>if(incidents.status_type=2,0,round((((date_diff(incidents.rel_due, sysdate())))/60,0))</code> |
| Resolution Due Status | <code>round((((date_diff(sysdate(), milestone_instances.due_date))*-1)/60,0)</code> |
| Resolution Due | <code>milestone_instances.due_date</code> |

| Heading | Definition |
|----------------|---|
| Time Remaining | if(incidents.status_type=2,0,round((((date_diff (milestone_instances.due_date,sysdate())))/60,0)) |

- Use the conditional formatting described in this table for the Initial Response Status and Resolution Due Status columns.

Conditional Formatting for Status Flags

| Condition | Display | Image | Color |
|------------------------|------------|-------|--------|
| Greater than 15 | Image Only | Flag | Green |
| Less than or equals 0 | Image Only | Flag | Red |
| Less than or equals 15 | Image Only | Flag | Yellow |

- Use the Minutes (Days, Hours, Minutes) format for both Time Remaining columns.
- Set the following report options to refresh the data regularly:
 - Refresh the report when data shown is changed in the editor.
 - Automatically the refresh report by selecting **Regular interval > Auto-Refresh enabled by default > Interval 55 Seconds**.
- Clear all of the check boxes in the **Customize Record Commands** window so that no commands will be available at runtime.
- Click **Save**.

Related Topics

- [Overview of Custom Reports](#)
- [Add the Incident Milestones Report to a Custom Incident Workspace](#)

Add the Incident Milestones Report to a Custom Incident Workspace

To display resolution due calculations, you must create a custom incident milestones report and then add it to a custom incident workspace.

- Copy the standard incident workspace and name it.
- Open the custom incident workspace.
- Click the **Details** tab.
- Add the custom incident milestones report to the Details tab.
- Click **Save** to save the custom workspace.
- Edit your staff members' profiles to use the new Incident Milestones workspace.

Results:

After an SLA instance is applied to an incident, you can view the resolution due date and time. See [Credit an Incident to an SLA Instance](#).

Related Topics

- [Custom Workspaces](#)
- [Add or Edit a Profile](#)

How You Set 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. See [Create an SLA](#).
- Set up business rules to automatically assign SLAs to customers. See [How You Issue SLAs Automatically](#). Also, review how staff members can manually assign SLAs when working on incidents and editing organizations and contacts. See [How You Issue SLAs Manually](#).

Create an SLA

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Service > Service Level Agreements**, and then double-click **Service Level Agreements**.
The Service Level Agreements tree displays on the content pane.
3. Choose from the following options:
 - To add a service level agreement, click **New** to display the editor.
 - To edit a service level agreement, click it in the tree.
4. Enter field information.

Service Level Agreements Editor

| Field | Description |
|----------------------------|--|
| *Service Level Name | Enter 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 entered 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. 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. |

| Field | Description |
|-------------------------------|--|
| | 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 | Enter 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. |
| CSR Incidents | Enter 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 | Enter 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. 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. |
| Self-Service Incidents | Enter 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 | Enter the total number of incidents allowed from all incident sources. 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) | Enter a number in this field and select days, weeks, months, or years from the drop-down list. 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 | These 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. |
| 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. |
| Access | Select the answer access levels assigned to the SLA. Answer access levels will display only if they have been added to the application. Note: Knowledge Advanced customers must select all options under Access in order to configure Web Roles and User Groups within Knowledge Advanced Agent Desktop. |
| 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. When using multiple-language interfaces, you must enter the label in the Label field in the language of the interface. |

| Field | Description |
|-------|-------------|
| | |

5. Click **Save**.

Related Topics

- [How You Customize Configuration Settings](#)
- [Add or Edit an Answer Access Level](#)
- [View Disabled SLA Instances](#)

Add Custom Response Requirements to an SLA

You can define custom response requirements for each SLA or use the default response requirements already defined.

1. When adding or editing an SLA, click **Edit** next to the interface in the Interface Label section. The **Response Requirements** window displays.
2. Complete the **Service Intervals**, **Response Time**, **Resolution Time**, and **Holidays Observed** fields. See [Define Default Response Requirements](#).
3. Click **Save**.

How You Issue SLAs Automatically

After you create SLAs, they can be automatically issued to organizations and contacts with no organization association using business rules.

After an SLA has been automatically applied to an organization or contact, a unique SLA instance is associated with the organization or contact. See [Examples of Applying Service Level Agreements \(SLAs\)](#).

Note: Contacts associated with an organization cannot be assigned an SLA instance, as the SLA instance is applied to the organization.

How You Issue SLAs Manually

Staff members can manually apply SLAs to organizations and contacts when editing incidents associated with an organization or contact.

After 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. See [SLA Instance Field](#).

How You Maintain 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.

- [SLA Reporting](#)

- [Edit an SLA](#)
- [View Disabled SLA Instances](#)

SLA Reporting

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 found in **Public Reports/Service/SLA Reports**.

For statistical information about individual SLAs, see [Create an SLA](#).

Edit an SLA

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.

After 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. See [View Disabled SLA Instances](#).

1. Click **Configuration** on the navigation pane.
2. Expand **Service > Service Level Agreements**, and then double-click **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. See [Create an SLA](#).
5. Click **Save**.

Results:

The next time you assign this SLA to contacts and organizations, the changes will apply to all instances of the SLA.

View 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, letting you view the settings for the previous, or "disabled," instance of the SLA.

1. Click **Configuration** on the navigation pane.
2. Expand **Service > Service Level Agreements**, and then double-click **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. Click the disabled SLA you want to view.
The Service Level Agreement editor displays on the content pane and the disabled SLA opens in read-only mode.

Examples of SLAs

These SLA examples show you how to meter service and offer different levels of support to your customers. SLA examples are provided for a 30-day SLA, a grace period SLA, and a premium SLA.

- [Add a 30-Day SLA](#)
- [Add a Grace Period SLA](#)
- [Add a Premium SLA](#)

Add a 30-Day SLA

This example shows you how to add a 30-day SLA that restricts support to 30 days, but lets contacts and organizations 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 example, the default response requirements are used.

1. Click **Configuration** on the navigation pane.
2. Expand **Service > Service Level Agreements**, and then double-click **Service Level Agreements**.
The Service Level Agreements tree displays on the content pane.
3. Click **New**.
4. Enter **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. Enter **30** in the **Term (Duration) field** and select **Days** from the drop-down list.

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 let contacts and organizations assigned this SLA submit an unlimited number of each type of incident until the 30-day term has expired.

8. Click **Save**.

Add a Grace Period SLA

This example shows you how to add 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Service > Service Level Agreements**, and then double-click **Service Level Agreements**.
The Service Level Agreements tree displays on the content pane.
3. Click **New**.
4. Enter **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. Enter **2** in the **Total Incidents** field.

Leaving the Chat Incidents, CSR Incidents, Email Incidents, and Self-Service Incidents fields blank, or null, will let contacts and organizations assigned this SLA submit an unlimited number of incidents. By entering the number

2 in the Total Incidents field, you are letting customers 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 **Save**.

Add a Premium SLA

This example shows you how to add a type of SLA that 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. See [Add Custom Response Requirements to an SLA](#).

1. Click **Configuration** on the navigation pane.
2. Expand **Service > Service Level Agreements**, and then double-click **Service Level Agreements**.
The Service Level Agreements tree displays on the content pane.
3. Click **New**.
4. Enter **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. Enter **10** in the **Chat Incidents** field.
8. Enter **30** in the **CSR Incidents** fields.
9. Enter **40** in the **Total Incidents** field.

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 permitted 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.

10. Enter **1** in the **Term (Duration)** field and select **Years** from the drop-down list.
11. Click **Save**.

6 Customer Portal

Your customers can use your customer portal to access a variety of self-help tools, including:

- Searching for product and support information
- Reviewing the contents of your knowledge base
- Asking questions of your support staff and your user community
- Chatting with staff
- Managing their account information

For more information about Customer Portal, see [Using B2C Service Customer Portal](#).

7 Chat Configuration

Overview of Chat

Configure Chat for supervisors, agents, and customers.

With B2C Chat, you can provide access to agents for customer questions and issues that merit human interaction between your supervisors and agents, and agents and customers through real-time chat sessions. You must configure Chat for supervisors, agents, and customers to take advantage of these functions. To get started with chat configuration, become familiar with the following interactions.

- The administrator configures chat for staff and customers.
- The Chat component manages connections, pushes chats to agents, and creates incidents from chats.
- The supervisor manages agents and monitors agents and chats.
- The agent chats with customers, suggests answers, conferences another agent, transfers customers, and cobrowses with customers.
- The customer submits a chat request, searches the knowledge base, reviews suggested answers, and cobrowses with agents.

After you implement Chat for your application, you can measure its effectiveness using powerful analytics. See [Real-Time Reports and Dashboards](#) and [Chat Audit Report](#).

Additional Chat Configuration Options

Powerful configuration options are available for Chat.

You can set service level requirements to ensure agents respond to customers in a timely manner, for example, or 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 rightnow feedback so that contacts are presented with a survey at the conclusion of a chat session.

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 in **Public Reports/Service/Chat Reports/Audit Reports**.

Tip: To view column definitions in the Chat Audit report, hover over the column headings.

Chat Customer Reconnect

In the case of a crashed browser or otherwise improperly terminated chat session, the chat reconnect feature lets customers 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.

Chat Data Purging

Because chat data can potentially build up quickly, it can be purged according to configuration settings.

Configuration settings for purging chat data are found in **Agedatabase Utility/Chat Purging**.

CAUTION: When chat data is purged, it is permanently deleted from the database. If you need assistance with chat data purging, submit a service request on our [support site](#).

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 begin chatting with a customer, Chat creates an incident from the chat session, which results in all correspondence being recorded to the knowledge base for resolution and reporting purposes.

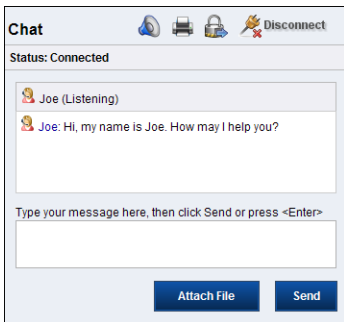
Chat for Customers

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.

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.

This image 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.



Chat Page

| Button | Description |
|--------------------------------|--|
| Mute | Customers click to mute incoming sound notifications. |
| Print | Customers click to print the chat correspondence at any time. |
| Send an Off the Record Message | Customers click to send unrecorded messages during the chat session. 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 to disconnect from the chat session. This button appears only during a chat session. |
| Close | Customers click to close the Chat page. This button appears only after a chat session is disconnected. |
| Attach File | Customers click to send file attachments during the chat session. This button appears only during a chat session. |
| Send | Customers click to send messages to an agent. This button appears only during a chat session. Customers can also press Enter to send messages. |

Related Topics

- [Chat Customer Reconnect](#)
- [Chat for Agents](#)
- [Chat for Supervisors](#)
- [Chat with an Agent](#)

Chat for Supervisors

Through real-time reporting, Chat makes it easy to manage a group of agents. It is important to familiarize yourself with the Chat Supervisor Home–Real Time dashboard before monitoring agents.

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.

The following reports display on the Chat Supervisor Home–Real Time dashboard. The Chat Supervisor Home–Real Time dashboard refreshes every fifteen seconds or less, depending on server load.

- **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. 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. See *Monitor a Chat Session*.

Related Topics

- [Chat Sessions Workspace](#)
- [Chat for Agents](#)
- [Chat for Customers](#)

Chat: Overview

Chat is a component of B2C Service that can be used to provide one-on-one interaction between your supervisors 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 following interactions.

- The administrator configures chat for staff and customers.
- The Chat component manages connections, pushes chats to agents and creates incidents from chats.
- The supervisor manages agents and monitors agents and chats.
- The agent chats with customers, suggests answers, conferences another agent, transfers customers, and cobrowses with customers.
- The customer submits a chat request, searches the knowledge base, reviews suggested answers and cobrowses with agents.

How You Configure Chat for Supervisors and Agents

When configuring Chat, it is important that you set certain configuration options before others.

Chat session queues must be added before they will display in profiles, and profiles must be added or updated before they can be assigned to agents. We recommend that you configure Chat options in the following order.

Note: Configuration options will not be visible until Chat is enabled. To enable Chat, contact your Oracle account manager.

1. Add chat session queues. See [Add or Edit a Chat Session Queue](#).
2. Add chat agent statuses. See [Add or Edit a Chat Agent Status](#).
3. Add chat reports to navigation sets. See [Chat Reporting](#).
4. Add or update profiles to include Chat permissions. See [Add Chat Permissions to a Profile](#).
5. Add or update staff accounts to use profiles that include Chat permissions. See [Add or Edit a Staff Account](#).

Add or Edit a Chat Session Queue

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.

A wireless communications organization, for example, 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 let agents 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
- MIN_WAIT_INFO_UPDATE_SECONDS

Setting each configuration setting in additional interfaces to the same value as the primary interface avoids confusion. See [Overview of 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. See [Overview of Business Rules](#).

Note: 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
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.
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. Do one of the following:
 - o To add a chat session queue, click **New** to display the editor.
 - o To edit a chat session queue, click it in the list.
6. Enter the name of the chat session queue in the **Label** field.
When using multiple-language interfaces, you must enter the name in the Label field in the language of the interface.
The same name is added to the Label field in the Interface Visibility section.
7. To designate the queue for use with advanced routing of chat requests, select the **Advanced Routing** check box and enter field information. See [How You Configure Advanced Routing for Chat](#).

Advanced Routing Settings

| Field | Description |
|--------------------------------------|---|
| Starting Minimum Score | Enter a value from 0 to 5 for each skill. Incoming chats will be first routed to those agents meeting this score. |
| Lowest Minimum Score | Enter a value from 0 to 5 for each skill. Only agents meeting this minimum skill level can be assigned chats from this queue. |
| Relax Score Requirement After | Enter a value in seconds for the queue. The score requirement will be relaxed after the time you specify. Skills are relaxed at the queue level. A value of 0 seconds disables skill relaxation. |
| Score Decrement Amount | Enter the score value from 1 to 5 for each skill to be decremented when it meets the relaxation time. |
| Overflow Timer | Enter a value in seconds after which the chat will be routed equally to agents assigned the queue as a primary or an overflow. Overflow will be disabled if this field is set to 0, and the queue will be treated as a primary queue. |

8. To designate the queue for use with third-party-initiated chat requests, select the **External** check box.
The read-only VA Enabled check box is used to designate the queue for use with virtual assistant initiated chat requests.
9. To change the order in which chat session queues display on the editor, select the queue, and click **Move Up** or **Move Down**.
10. Click **Save**.

Related Topics

- [How You Configure Virtual Assistant](#)

Add or Edit a Chat Agent Status

An agent's status describes his or her availability to chat with customers and assists 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.
 - 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.
 - 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 list.

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, then you can add them.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Customizable Menus**.
3. Click the arrow next to the System Menus folder to expand the list.
4. Click **Chat Agent Statuses** to display the editor.
5. Do one of the following:
 - To add a chat agent status, click **New** to display the editor.
 - To edit a chat agent status, click it in the list.

The In Meeting and On Break default chat agent statuses and custom chat agent statuses can be deleted.

6. Enter 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 list and select a status type. The options include **Available**, **Unavailable**, and **Logged Out**.
After 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 **Move Up** or **Move Down**.
9. Click **Save**.

What to do next

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. See [Add Chat Permissions to a Profile](#).

Related Topics

- [Live Media Bar](#)

Chat Reporting

Agents and supervisors use chat reports to view and monitor chat activity.

Chat reports are available in **Public Reports/Service/Chat Reports** and include real-time reports that are refreshed at a default rate of fifteen seconds or less, and a chat audit report. You can view the reports and, with appropriate permissions, edit them inline or delete selected chats. Reports that can be edited or have chats deleted must include first name, last name, email, IP address, or subject fields.

For editing a chat report inline, the report must have inline editing enabled, automatic saving of inline edits enabled, and your profile must include Edit permission for chats.

For deleting a selected chat, the report must have the delete command enabled and your profile must include Delete permission for chats. You can only delete one chat at a time. When chats are deleted, they will no longer display on the Chat Conversion by Agent report.

Related Topics

- [Real-Time Reports and Dashboards](#)
- [Chat Audit Report](#)
- [Add a Real-Time Chat Report to a Navigation Set](#)
- [Add Chat Permissions to a Profile](#)
- [Monitor a Chat Session](#)
- [Enable Inline Editing](#)

Real-Time Reports

Real-time reports and dashboards are available for Chat.

Real-time reports and dashboards are available in **Public Reports/Service/Chat Reports/Real-Time Reports**. All of the reports include a default refresh rate of fifteen seconds or less.

Real-Time Chat Reports

| 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 found in 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. |

| Report | Description |
|--------------------------------|---|
| Chat Supervisor Home–Real Time | This dashboard is a real-time alternative to the Chat Supervisor Home dashboard found in 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. The Chats in Last Hour column is non-functional, and displays 0, for the virtual assistant. See How You Configure 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 in **Public Reports/Service/Chat Reports/Audit Reports**.

Tip: To view column definitions in the Chat Audit report, hover over the column headings.

Add a Real-Time Chat Report to a Navigation Set

Add real-time chat reports so staff members can view a dashboard of their chat activity.

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. See [Real-Time Reports and Dashboards](#).

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Navigation Sets**.
3. Double-click the navigation set used by your agents.
4. On the right side of the content pane, select **Communication Center**.
All Communication Center items display in the lower portion.
5. On the left side of the content pane, expand **Public Reports/Service/Chat Reports/Real-Time Reports** to open the folder with real-time chat 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 **Save**.

What to do next

The navigation set containing Chat Agent Home or Chat Supervisor Home must be selected in the Interfaces section on the Profile editor. See [Add Chat Permissions to a Profile](#).

Related Topics

- [Overview of Navigation Sets](#)

Add Chat Permissions to a Profile

Designate staff members to access Chat.

After 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Profiles**.
3. Double-click the profile you want to edit.
4. Click **Permissions**.
5. Click the **Service** tab and scroll down to Chat permissions.
6. Enter field information.

Chat Profile Settings

| Field | Description |
|--|---|
| Chat Agent Permissions | Select the Select All check box to select all options in the Chat section. 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 access. |
| Chat | Select to let staff members with this profile chat with customers. |
| Supervisor | Select to let staff members with this profile have supervisory permissions in Chat. |
| Monitor | Select to let supervisors with this profile monitor other agents. This check box cannot be selected unless the Supervisor check box is selected, as monitoring can be performed only by supervisors. |
| Conference/Transfer to Other Groups | Select to let staff members conference with agents in other groups and transfer customers to agents in other groups. Agents can always conference with agents in their own group and transfer customers to agents within their own group. |
| Pull Chat | Select to let agents pull chats from the wait queue. 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 Request Chat on the Live Media bar. |

| Field | Description |
|----------------------------------|---|
| Allow Decline | Select to let agents with this profile manually decline chat requests. 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 to let the system automatically decline chat requests when the toast notification expires. The chat toast expiration timeout can be configured through the <code>CHAT_ALERTFORM_AUTOCLOSE_TIMEOUT</code> configuration setting. |
| Set Max Active Chats | Select to allow agents to set the Maximum Active Chats field to a value up to and including the number entered in the associated Max Active Chats field. See <i>Change Your Chat Options</i> . |
| Set Delay Between Chats | Select, and in the associated Delay Between Chats field enter the number of seconds that elapse before a new chat is presented to an agent. The value set in this field determines the value that displays in the Stagger Incoming Chats field on the Options window. |
| Edit | Select to let staff members edit existing chats. |
| Delete | Select to staff members delete chats. |
| *Max Active Chats | Enter the maximum number of active chat sessions that a staff member can be engaged in. The minimum value for this field is 1, the maximum value is 11, and the default value is 3. |
| *Max Total Chats | Enter the maximum number of total chat sessions, both active sessions and those that are in wrap-up mode, that a staff member can be engaged in. The minimum value for this field is 1, the maximum value is 20, and the default value is 3. |
| *Delay Between Chats | Enter 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. |
| Video Chat | Select to designate the profile for use with video chat. Video chat must be enabled and is only available on the Agent Browser UI. Agents using video chat must also have Agent Browser UI permission. |
| Enable Advanced Routing | Select to designate the profile for use with advanced routing. |
| Chat Queues | Click to select the chat queue you want to be available for this profile, and click + . 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. An agent must be assigned to a chat queue to log in to Chat and accept chat requests from customers. |
| Pull Policy | Click 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. |

| Field | Description |
|---------------------------------------|---|
| Advanced Routing - Chat Queues | Click to select the advanced routing chat queue you want to be available for this profile, and click + . After selecting a queue, click the drop-down list to designate it as Primary or Overflow and its order of priority. The queue can be moved up or down in the queue list. If needed, you can then select additional advanced routing chat queues to associate with this profile. |
| 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. |
| Available | The Available list displays chat agent statuses that are not available to agents on the Agent Status drop-down list found on the Live Media bar. Select a status and click Add 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 list found on the Live Media bar. Select a status and click Remove to move the status to the Available list. By default, Logged Out–Unspecified is selected so agents are not automatically logged in to Chat when they log in to B2C Service. Select Available–Unrestricted to automatically log agents in to Chat (and make them available) when they log in to B2C Service. |

7. Click **Save**.

What to do next

Before agents can use Chat, you must assign a profile containing chat permissions to their staff accounts. See [Add or Edit a Staff Account](#).

Related Topics

- [How You Configure Virtual Assistant](#)
- [How You Configure Advanced Routing for Chat](#)
- [Change Your Chat Options](#)
- [Add or Edit a Chat Session Queue](#)
- [Add or Edit a Chat Agent Status](#)

Standard Chat Workspace

Chat contains a standard chat session workspace that is used by supervisors and agents. The workspace determines what staff members see when they chat with customers or among themselves.

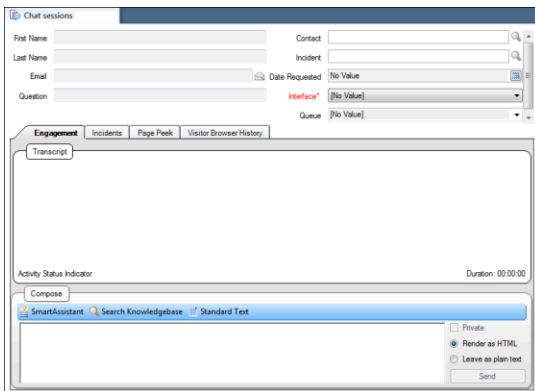
You can use the standard workspace or create custom workspaces by copying one to use as a starting point. You assign a workspace in the profile used by agents. If you do not assign a workspace, the system uses the default. The workspace used for chatting on the Agent Browser UI uses a different default standard workspace, the interaction workspace, that may also be customized.

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 Engagement, Incidents, Page Peek, and View Browser History tabs.

- The Engagement tab consists of a Transcript section (where the chat session is recorded to) and a Compose section (where you enter 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.

- The Page Peek tab is where you view a snapshot of the web page that the customer was viewing when the chat was initiated.
- 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. To enable 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.



Additional Chat Configuration Options

Powerful configuration options are available for Chat.

You can set service level requirements to ensure agents respond to customers in a timely manner, for example, or 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 rightnow feedback so that contacts are presented with a survey at the conclusion of a chat session.

Service Level Requirements for Chat

Chat has configurable service level requirements that let you set realistic service goals for your agents and reasonable expectations for your customers.

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. You can find the Chat service level configuration settings in **Chat/General/Service Level**. See *How You Customize Configuration Settings* and *Chat with a Customer*.

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 found in **Chat/General/Service Level**.

See [How You Customize Configuration Settings](#) and [Chat with a Customer](#).

Standard Responses and URLs for Chat Sessions

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 lets agents 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. Entering 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, see [Add or Edit Standard Text](#).

Tip: If your organization uses variables in standard text, such as `contacts.first_name`, agents can enter (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, see [Add or Edit a Variable](#).

Related Topics

- [Overview of Content Library](#)

How You Configure 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.

Note: If the Pull Chat check box is selected, you must also select a pull policy. See [Add Chat Permissions to a Profile](#).

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.

How You Create Incidents from Chat Sessions

Chat sessions can be captured as incidents, letting you track all chat correspondence.

By default, an incident is created when a chat sessions begins. However, this functionality is configurable so that an incident can be created when a chat session ends or when prompted. 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.

Note: To create an incident when a chat session ends or with a prompt, 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. 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 enter wrap-up mode or to terminate the session. Wrap-up mode lets agents 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.

Related Topics

- [Configure Incident Creation and Editing for Chat](#)

Configure Incident Creation and Editing for Chat

By default, an incident is created when a chat session begins. However, you can customize the chat workspace so that an incident is created when a chat session ends or when prompted.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Workspaces**.
3. Click the **Standard** folder in the Workspaces tree.
4. Right-click the **Chat Sessions** workspace and select **Copy**.
5. Select the folder you want to add the copied workspace to.
6. Enter a name for the copied workspace in the **Name** field.
7. Click **OK**.
The workspace displays on the explorer in the folder that you selected.
8. Double-click the new workspace.
The workspace opens on the content pane.
9. Click **Options**.
The Chat Options window opens and the Related Incident Options tab displays by default.
10. Select related incident options.

Related Incident Options Tab

| Option | Description |
|---|---|
| Create/associate related incident at the beginning of a chat (if one does not exist)? | Select from the following options. <ul style="list-style-type: none"> ○ Yes ○ No ○ Prompt agent This option is set to Yes by default. |

| Option | Description |
|---|--|
| Open related incident for editing at the beginning of a chat (if one exists)? | <p>Select from the following options.</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Prompt agent <p>This option is set to No by default. This feature is not available for the enhanced Service Console.</p> |
| Create/associate related incident at the end of a chat (if one does not exist)? | <p>Select from the following options.</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Prompt agent <p>This option is set to No by default.</p> |
| Open related incident for editing at the end of a chat (if one exists)? | <p>Select from the following options.</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Prompt agent <p>This option is set to No by default. The incident opens only when Wrap-up is selected to end a chat.</p> |
| Discard previous related incident if it is uncommitted when another incident is associated to chat? | <p>Select from the following options.</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Prompt agent <p>This option is set to No by default.</p> |
| Set status to solved for incidents created automatically. | <p>Select this check box to set the incident's status to Solved if it is not automatically opened.</p> <p>This check box is selected by default.</p> |

11. Click the **Other Options** tab.

12. Select other options.

Other Options Tab

| Option | Description |
|----------------------|---|
| Data Synchronization | <p>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.</p> |

| Option | Description |
|--|---|
| Synchronize common fields across related records automatically | <p>Select this check box to enable data synchronization between the following fields:</p> <ul style="list-style-type: none"> ○ 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 <p>This feature is disabled by default.</p> |
| Wrap-up Behavior | This section contains options for configuring wrap-up mode, which lets agents complete any post-chat tasks before automatically receiving the next chat request. |
| Automatically release chat after wrap-up | <p>Select this check box to automatically release a chat after wrap-up mode has ended.</p> <p>This feature is enabled by default. This feature is not available for the enhanced Service Console.</p> |
| Automatically close editor after chat is terminated | <p>Select this check box to close the incident workspace after the chat has ended.</p> <p>This feature is enabled by default. This feature is not available for the enhanced Service Console.</p> |
| Prompt the agent to enter wrap-up mode | <p>Select this check box to prompt agents to enter wrap-up mode.</p> <p>This feature is enabled by default.</p> |
| Wrap-up time (seconds) | <p>Enter the number of seconds to specify the maximum time allowed for chat sessions to wrap up.</p> <p>This option is set to 45 seconds by default. If it is set to zero, agents will be prompted when the chat disconnects to terminate or enter wrap-up mode if the Prompt the agent to enter wrap-up mode option is selected.</p> |

13. Click **Save**.

What to do next

After configuring the custom workspace, it must be assigned to one or more profiles. See [Profiles](#).

How You Configure the 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 lets agents view additional information about chat requests.



The information that displays on the preliminary screen pop table can be specified for the Service Console using the `CHAT_ALERTFORM_DISPLAY` configuration setting. Note that any changes made will not affect the display on the Agent Browser UI. You can also disable the preliminary screen pop using the `CHAT_ALERTFORM_ENABLED` configuration setting. Both settings are found in **Chat/General/Agent**. See [How You Customize Configuration Settings](#).

Related Topics

- [Chat with a Customer](#)

Enable Sneak Preview

Sneak Preview lets agents view chat dialog as it is being entered by the customer before the customer sends the message.

Sneak Preview is not enabled by default. Through configuration settings for individual interfaces, you can enable Sneak Preview and specify the time interval sneak preview data is sent to the agent. See [How You Customize Configuration Settings](#). You must be using CP framework version CPv3.5 or later for Sneak Preview.

Note: Sneak Preview should only be enabled in accordance with your company's privacy and security requirements.

1. To enable Sneak Preview, set the `SNEAK_PREVIEW_ENABLED` configuration setting to **Yes**.
2. Set the `SNEAK_PREVIEW_INTERVAL_MS` configuration setting to specify the interval in milliseconds that the chat session sends sneak preview data to the agent.
The default value is 3000 milliseconds (3 seconds).

Feedback for Chat

You can gather feedback during or after a chat session.

You have 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 have a browser window containing a survey open at the end of the chat session (transactional survey). Customer responses to the surveys are linked back to the chat session to facilitate reporting. See [Overview of 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. See [Overview of Business 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, see *How Fields Are Added to Workspaces and Scripts*. For information about how agents use guides while chatting with customers, see *Access Guided Assistance During a Chat Session*.

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 found in **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 displays 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. See *Offering Customers a Chat Session*.

Chat Data Purging

Because chat data can potentially build up quickly, it can be purged according to configuration settings.

Configuration settings for purging chat data are found in **Agedatabase Utility/Chat Purging**.

CAUTION: When chat data is purged, it is permanently deleted from the database. If you need assistance with chat data purging, submit a service request on our *support site*.

How You Configure Advanced Routing for Chat

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. When a chat is initiated, if there is no agent logged in with the specific skill required by your customer, advanced routing relaxes the skill requirement immediately to prevent the chat from becoming stuck in the queue.

You can also use advanced routing primarily for the queue overflow capabilities without defining skills.

You can track the performance of advanced routing of chat sessions using standard reports available in **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 must complete the following tasks before you can configure and use advanced routing for incoming chats.

1. Define products and categories. See *Search Optimization Using Products, Categories, and Dispositions*.
2. Add product and category fields to the Live Help page of the customer portal.
3. Create an advanced routing chat queue. See *Add or Edit a Chat Session Queue*.
4. Create and activate a rule to route chats to the advanced routing chat queue. See *Overview of Business Rules*.
5. Assign advanced routing permissions to a profile. See *Add Chat Permissions to a Profile*.

Additionally, if you are using advanced routing with products or categories, you must configure skills and staff account skill scores to finish the configuration and begin using advanced routing for incoming chats. See *Assign the Skill Edit Permission in Profiles*, *Add Skills*, and *Assign Skill Scores to a Staff Account*.

Assign the Skill Edit Permission in Profiles

Assign the Skill Edit permission in profiles for advanced routing.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Profiles**.
The report opens on the content pane.
3. Double-click the profile you want to edit.
4. Click **Permissions**.
5. Select the **Skill Edit** check box in the Administration section on the Administration tab.
6. Click **Save**.

What to do next

You must add Product Skills and Language Skills to the navigation set. See .

Add Skills

Add skills for advanced routing.

1. Click **Configuration** on the navigation pane.
2. Expand **Service**, and then double-click **Language Skills** or **Product Skills**.
3. Do one of the following:
 - o To add a skill, click **New** to display the editor.
 - o To edit a skill, click it in the list.

You can delete a skill at any time by selecting the skill entry in the tree and clicking **Delete**. However, when you delete a skill, all instances of the skill will also be deleted.

4. Enter field information.

Skills Editor

| Field | Description |
|--------------------------|--|
| Skill Information | This section defines the name and type of the skill. |
| *Skill Name | Enter the name of the skill. |
| Template ID | This read-only field identifies the type of skill. |
| Label | Select the interface. |
| Characteristics | This section specifies the language, product, or category for the skill. |

| Field | Description |
|----------|---|
| Language | Select a language from the drop-down list. This field is available only on the Language Skills editor. |
| Product | Select a product from the drop-down list. This field is available only on the Product Skills editor. |
| Category | Select a category from the drop-down list. This field is available only on the Product Skills editor. |

5. Click **Save**.

Assign Skill Scores to a Staff Account

Assign skill scores to a staff account for advanced routing.

You can assign skills to a staff account at the profile level or at the individual staff account level. Skills assigned at the profile level are inherited by staff accounts assigned to that profile, but skills can be modified and added to individual staff accounts.

1. Click **Configuration** on the navigation pane.
2. Do one of the following:
 - o To assign skills to a profile, expand **Staff Management**, double-click **Profiles**, and then double-click the profile you want to edit.
 - o To assign skills to a staff account, expand **Staff Management**, double-click one of the staff account reports, and then double-click the individual account you want to edit.
3. Click **Skills**.
The Account Skill Scores window opens.
4. Select the **Product** or **Language** tab.
5. To add a product or language:
 - a. Select the product or language from the drop-down list.
 - b. Click the **+** (plus) sign.
 - c. Assign the skill an account score from the drop-down list.
6. To modify a skill at the account level that was inherited by a profile, click the blue arrow next to the skill score.

Note: Changing an agent's inherited skill score to 0 is not the same as assigning an agent to a profile without that skill. After the advanced routing queue has relaxed to a score of 0, the chat will be routed to an agent with a skill score of 0. The chat will only be routed to an agent assigned a profile without the skill if no other agents with that skill are logged in.

7. To delete a skill, click the **X** next to the skill score.
Skills assigned at the profile level can only be deleted at the profile level.
8. Click **Save**.

Assign Engagement Engine Rules Permissions in Profiles

Engagement engine rules give you greater control over when, where, and how proactive and reactive chats are provided to your customers.

Engagement engine rules must be enabled. Contact your Oracle account manager.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Profiles**.
3. Double-click the profile you want to edit.
4. Click **Permissions**.
5. Select **Engagement Engine Rules** on the Administration tab.
6. Click **Save**.
7. Add the Engagement Engine Rules item to your configuration list for the Configuration button.
See *Create a Navigation Set for the Administrator*.

Access the Engagement Engine Rules Editor

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.

Engagement engine rules must be enabled. Contact your Oracle account manager.

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 **Log In**.

What to do next

For more information about Engagement Engine, see *Administering Oracle Engagement Engine*.

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. An agent's profile must include access to the primary interface for visitor browser history to display.

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. See *Oracle Engagement Engine* for more information.

How You Configure 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.

See the following configuration topics:

- [The Live Help Page](#)
- [Chat Page Configuration](#)
- [How You Configure Virtual Assistant](#)

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. See [Overview of Chat on the Customer Portal](#).

See [Set Chat Hours](#) to control when customers can submit chat requests.

Set Chat Hours

You can set chat hours for Chat availability to control when customers can submit chat requests.

The available chat hours you set display on the Live Help page. Outside of those chat hours, customers cannot request assistance. 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, you may want 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Interfaces**.
3. Click the interface for which you want to add chat hours.
4. Click **Chat Hours**.

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.

Chat Hours Editor

| 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 list. 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 | Enter the hour of the day that you want the service interval to begin. This field uses the 24-hour clock. For example, enter 8 for 8:00 A.M and enter 17 for 5:00 P.M. |
| *Minute | Enter the minute of the hour that you want the service interval to begin. |
| *End Hour | Enter the hour of the day that you want the service interval to end. This field uses the 24-hour clock. For example, enter 8 for 8:00 A.M and enter 17 for 5:00 P.M. |
| *Minute | Enter the minute of the hour that you want the service interval to end. |

| Field | Description |
|-----------------|--|
| Holidays | Select the holidays that will affect your chat hours. Chat hours will not be available during selected holidays. If you have not defined any holidays, this field is blank. |

6. Click Save.

The chat hours will now appear on the Live Help page of the customer portal.

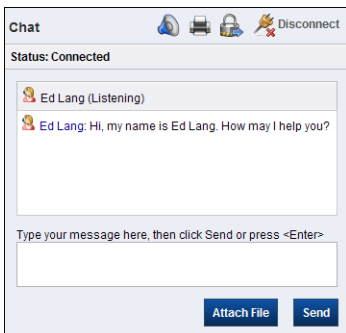
Related Topics

- [Overview of Chat on the Customer Portal](#)
- [Overview of Service Level Agreements \(SLAs\)](#)

Chat Page Configuration

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.

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. You can customize the look and feel of the Chat page.



To learn more about Chat and how agents interact with customers while chatting, see [Chat for Agents](#).

Related Topics

- [Overview of Chat on the Customer Portal](#)

How You Configure Virtual Assistant

If your site is integrated with Oracle Virtual Assistant (Virtual Assistant), you can route incoming chats to a virtual assistant.

For complete information about Virtual Assistant, see [Using Virtual Assistant](#).

Note: Virtual Assistant is deprecated as of May 2021. See [Answer ID 11887](#).

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 B2C Service and Virtual Assistant. Contact your Oracle account manager.

After Virtual Assistant is enabled, you need to perform the following steps so incoming chats can be routed to the virtual assistant.

1. Assign the Virtual Assistant Edit permission to your profile—You will need this permission in order to configure the virtual assistant for your application. See [Add Virtual Assistant Edit Permissions to a Profile](#).
2. Add the Virtual Assistant editor to a navigation set—All configuration takes place on this editor. See [Add the Virtual Assistant Editor to a Navigation Set](#).
3. 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. After you fill in this information and save it to the database, the virtual assistant profile is created automatically. See [Create a Virtual Assistant Profile, Account, and Queue](#) and [Add or Edit a Chat Session Queue](#).
4. 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. See [Route Chats to Virtual Assistant](#) for steps to create rules.

Add Virtual Assistant Edit Permissions to a Profile

Add Virtual Assistant edit permissions to a profile to configure the Virtual Assistant.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Profiles**.
3. Double-click the profile you want to edit.
4. Click **Permissions**.
5. Select the **Virtual Assistant Edit** check box in the Administration section on the Administration tab.
6. Click **Save**.

Add the Virtual Assistant Editor to a Navigation Set

Add the Virtual Assistant editor to a navigation set for Virtual Assistant configuration.

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Navigation Sets**.
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 then click **Add**.
7. Click **Save**.

Create a Virtual Assistant Profile, Account, and Queue

Define the virtual assistant name that will display to customers during a chat and the chat queue that will handle incoming chats and escalation. After you fill in this information and save it to the database, the virtual assistant profile is created automatically.

You can have only one virtual assistant account and one virtual assistant queue. After they are 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 **Configuration** on the navigation pane.
2. Double click **Virtual Assistant Editor** in the list.
3. Enter the name for the virtual assistant in the **Display Name** field.
This is the account name that displays to customers during a chat.
4. Enter 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 **Save**.
The virtual assistant profile (automatically labeled VA_Accounts_Profile), virtual assistant account, and virtual assistant queue are created.

What to do next

In order to complete the configuration and begin routing incoming chats to the virtual assistant, you must create chat rules. See [Route Chats to Virtual Assistant](#).

Route Chats to Virtual Assistant

Create business rules to route chats to the virtual assistant queue and to escalate chats to an agent when certain conditions are met.

Before you start

You must configure a Virtual Assistant account, profile, and queue before routing chats to Virtual Assistant. See [Create a Virtual Assistant Profile, Account, and Queue](#).

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, then double-click **Rules**.
3. Click **Chat**.
4. Click **Edit** to enter the edit mode.
5. Create an Initial State, if one doesn't exist, and a state named **VA_State**.
 - a. Right-click **States**.
 - b. Select **New State**.
 - c. Enter the name of the state (either **Initial State** or **VA_State**) in the **State Name** field.
 - d. Select the **Initial State** check box if this is the Initial State.
 - e. Click **Save**.The state appears in the Rules tree.
6. Right-click **Initial State**, then select **New Rule**.
The Edit Chat Rule window opens.
7. Enter the name of the rule in the **Rule Name** field.
For example, name the rule **VA_Rule**.

8. Click **Add IF Condition Based On**, then select the field, operator and value for the condition.
For example, you may want to route all incidents of a specific type to the virtual assistant queue.
9. Click **Add Action–Then** to select the action that will be executed if the conditions are met.
For example, create an Assign Chat Queue action to assign chats to the Virtual Assistant chat queue, and a Transition State and Stop with VA_State selected.
10. Click **Save**.
The rule to route chats to the Virtual Assistant chat queue is saved.
11. Right-click **VA_State**, then select **New Rule**.
The Edit Chat Rule window opens.
12. Enter the name of the rule in the **Rule Name** field.
For example, name the rule **Escalation**.
13. Click **Add IF Condition Based On**, then select the same condition values you specified for the VA_Rule.
14. Click **Add Action–Then** to select the action that will be executed if the conditions are met.
For example, create an Assign Chat Queue action to assign chats to the chat queue used to escalate to a live agent, and a Stop Processing Rules action.
15. Click **Save**.
The rule to escalate chats to a chat queue used by a live agent is saved.

8 Chat

Chat for Agents, Supervisors, and Customers

While self-service and email response management can solve the majority of customer issues, B2C Chat offers the best venue for certain queries, such as helping customers finalize purchases.

- [Chat for Agents](#)
- [Chat for Supervisors](#)
- [Chat for Customers](#)

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.

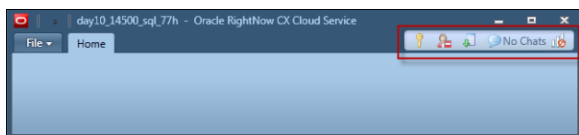
By default, when you begin chatting with a customer, Chat creates an incident from the chat session, which results in all correspondence being recorded to the knowledge base for resolution and reporting purposes.

Live Media Bar

With the Live Media bar, you can log in, log out, and set your status in Chat.

Chat must be enabled and your profile must include chat permissions to log in as an agent from the Live Media bar. You can request chats and cancel chat requests, manage active chat sessions, and view the status of your connection with the chat server.

The Live Media bar appears on the content pane regardless of which navigation list is selected or what displays on the content pane.



Live Media Bar

| Button | Description |
|------------|--|
| Login Chat | Click to log in to Chat. The Agent Status drop-down list (found next to Login) is enabled. This button appears only when you are logged out. |

| Button | Description |
|-----------------------|--|
| Logout Chat | Click to log out of Chat. The Agent Status drop-down list (found next to Logout) is disabled. This button appears only when you are logged in. |
| Agent Status | Click this drop-down list to select an agent status type and status. 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. |
| Available | This status type signifies that you are available to chat. |
| Unavailable | This status type signifies that you are not available to chat. |
| In Meeting | This status indicates that you are in a meeting and unavailable to chat. By default, this status does not display on the Agent Status drop-down list. |
| On Break | This status indicates that you are on a break and unavailable to chat. By default, this status does not display on the Agent Status drop-down list. |
| Request Chat | Click to request (pull) a chat from the queue. 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 to cancel a chat request after it has been pulled from the queue. 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 list and select a chat session to participate in. When you are not chatting with customers, the drop-down list 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. The color of the selections in the Active Chats drop-down list correspond to the customer tab colors. |
| 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. |

Related Topics

- [Chat with a Customer](#)

Log in to Chat

Log in to B2C Chat and view Chat–Real Time reports.

1. Click **Communication Center** 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.

The Chat Agent Home–Real Time dashboard refreshes every fifteen seconds or less, depending on server load. 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.

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 it if you have the correct profile permission. See [How You Customize Navigation and Configuration Lists](#).

3. Click **Login Chat** on the Live Media bar.

4. Click **Agent Status** and select **Available**.

Your administrator can configure your profile so that you are automatically logged in and available to chat after logging in to B2C Service.

Related Topics

- [Real-Time Reports and Dashboards](#)

Change Your 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.

1. Click **File** and select **Options** > **Communication Center** to view chat options for the Service Console.
2. Select chat notification options.

Chat Notification Settings

| Field | Description |
|--|---|
| Incoming Chat Assignment Notification | Incoming Chat Notification options apply only to new chat requests. |
| Flash Window | Select to flash the minimized window on the Windows task bar whenever a new chat arrives. This option is selected by default. |
| Play Sound | Select to enable an incoming sound alert whenever a new chat arrives. |
| Show Toast | Select to display a toast notification whenever a new chat request arrives. This option is selected by default. |
| Incoming Chat Post Notification | Incoming Chat Post Notification options apply only to existing chats that are updated by the customer. |

| Field | Description |
|---|---|
| Flash Window | Select to flash the minimized window on the Windows task bar whenever a chat is updated by the customer. This option is selected by default. |
| Play Sound | Select to enable sound alerts whenever the chat is updated by the customer. |
| Color Window | Select to change colors on the customer tab as time passes to alert you that you need to respond to the customer. 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 Active Chats | Select a maximum number of active chat sessions for the Service Console, up to and including the number of maximum active chats set by your administrator for your profile. To change this setting, your profile must include permission to set maximum active chats. Click the up or down arrow to increase or decrease your maximum number of active chats. |
| 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. |

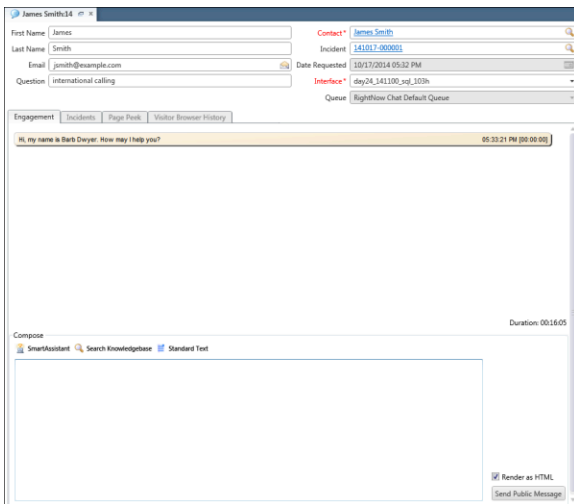
3. Click **OK** to save your chat notification settings.

Chat Sessions Workspace

It is important to familiarize yourself with the chat sessions workspace before chatting with customers.

Your main role is to chat with customers and access tools to answer their questions. This is accomplished through the chat sessions workspace.

This image 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 the customer’s name on the content pane tab in the image. Additional tabs will display when you are engaged in multiple chat sessions.

After you accept a chat request, read-only customer fields display at the top of the content pane. See [View Incidents Submitted by a Customer](#). Much of the information listed on the content pane is also provided in the toast invitation you see before accepting the chat request.

Chat Ribbon

While chatting with customers, multiple chat agent tools are available on the chat ribbon.

Chat Ribbon

| Button | Description |
|------------------|---|
| Undock | Click to undock the chat workspace editor from the console and display it in a separate window. |
| Terminate | Click to terminate the chat session. |
| Wrap-up | Click to conclude the chat and enter wrap-up mode. Wrap-up mode lets you 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 to join a chat session while monitoring a chat. This button is disabled until you begin monitoring a chat session. |
| Leave | Click to leave a chat session during a conference. For this button to be enabled, you must be the agent who was conferenced into the chat. |

| Button | Description |
|----------------------------|--|
| Transfer | Click to transfer the customer to another agent. |
| Conference | Click to conference another agent into your chat. |
| Change Lead Role | Click to select the lead chat agent. You must be involved in a conference session for this button to be enabled. |
| Add to New Incident | Click to create an incident from the chat session while the chat is in progress or after you have entered wrap-up mode. Chat correspondence that is added to an incident is read-only and cannot be edited. |
| Add to Incident | Click to add the chat correspondence to an existing incident. Chat correspondence that is added to an incident is read-only and cannot be edited. |
| New Opportunity | Click to create an opportunity from the chat session while the chat is in progress or after you have entered wrap-up mode. |

Related Topics

- [Overview of Opportunities](#)
- [Monitor a Chat Session](#)
- [Conference Another Agent into Your Chat](#)
- [Transfer a Chat to Another Agent](#)
- [Wrap Up and Terminate a Chat Session](#)
- [Add an Incident](#)

Chat Session Workspace Tabs

A tab set below the customer's contact fields contains information about the chat session and the customer's existing incidents.

- **Engagement**—The Engagement tab is where you chat with customers.
 - 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.
 - 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.
- **Incidents**—The Incidents tab is where you view incidents 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.

Related Topics

- [Agent Chat Tools](#)
- [Chat with a Customer](#)

Chat with a Customer

If you are the agent selected for a chat request, you will receive a toast notification.

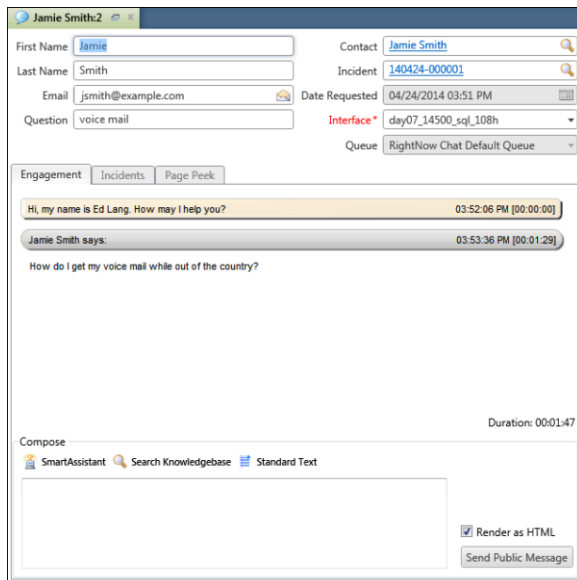
Through chat notification settings, you can also enable sound notification.

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.

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. 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.

Note: If Sneak Preview is enabled, you see the customer's entry in italics as it is being typed, letting you begin composing a response. After the customer sends the message, the customer's message changes from italicized to regular font. It is a best practice to wait to respond until the customer has sent the message. If you have multiple active chats, you will only see Sneak Preview for the chat in focus.

2. Additional customer tabs 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 list on the Live Media bar. The colors of the selections in the drop-down list correspond to the colors of the customer tabs.

3. Enter your reply in the message text box in the Compose section.
 - a. By default, Render As 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, select **Leave As Plain** and all of the markup tags will display in the response to the customer.
 - b. To copy and paste text, press Ctrl+C and Ctrl+V.
 - c. To start a new paragraph, press Shift+Enter.
 - d. As you type, an inline spell checker recognizes misspelled words and marks them with a red zigzag underline. Right-click the misspelled word to see a list of substitute words from which you can select. You can also choose to add words to your spell check dictionary. See [Spell Checking](#).

4. Click **Send** 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.

Related Topics

- [How You Configure the Preliminary Screen Pop](#)
- [Service Level Requirements for Chat](#)
- [Live Media Bar](#)
- [Change Your Chat Options](#)
- [Wrap Up and Terminate a Chat Session](#)

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. See [Email Address Sharing](#).

Agent Chat Tools

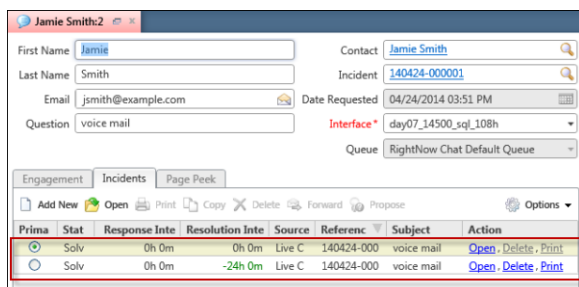
Agent chat tools give you access to customer information, SmartAssistant suggested answers, answers in the knowledge base, and standard text.

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. Agent chat tools are available only when chatting with customers.

View Incidents Submitted by a Customer

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 Service, you can view the contents of the incident while chatting with the customer.

1. While chatting with a customer, click the **Incidents** tab.



2. Double-click an incident to open it.
See *Incident Creation*.
3. After reviewing the customer's current incidents, click the **Engagement** tab to return to the chat.

Search for a Contact Record

You can access additional information about the customer using the Contact Search feature.

If the customer has a contact record in the knowledge base, for example, you can see any organization association and the customer's location.

1. Do one of the following:
 - o 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. See *Overview of Contacts*.
 - o If a contact record does not exist for the customer, the Contact field is blank. Click **Search** to the right of the Contact field to open the Contact Search window. See *Record Search Options*.
2. After viewing or editing the contact record, click **OK** to return to the chat session.

Access 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.

1. Click **SmartAssistant** on the Compose section.
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 **Close**.

How You Search 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. See .

Insert Standard Text

Frequently used responses and URLs can be prepared in advance so that you can quickly send them to customers.

This tool not only helps you assist customers more quickly, but also eliminates typographical errors. Your administrator can also define shortcut IDs for standard responses and URLs. Then, you can enter 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.

1. Click **Standard Text** on the Compose section.

2. Do one of the following:

- Double-click a standard text item to automatically insert it into the Compose section of the response.
- Click a standard text item to add it to the Preview section of the Standard Text window and click **OK**.
- Drag the standard text item from the left column into the Compose section of the response.
- Copy the text in the Preview section and paste it into the response.

To search for standard text, click **Find in List** above the left column. 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.

Tip: If you know the shortcut ID, from the Compose section of the response, you can press F8, enter the keyboard shortcut, and click Enter. The standard text is inserted into the response.

The standard text is now ready to send to the customer.

Note: 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 enter the value before sending your response to the customer.

3. Click **OK**.

Transfer a Chat to Another Agent

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.

1. At any point during your chat session, click **Transfer**.

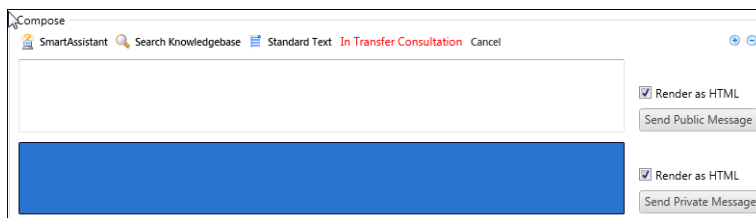
The Select Names window opens.

Note: Select **Transfer to Queue** 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 **Request**.

The agent receives a toast notification to accept, view, or decline the transfer request.

- If the agent clicks View, the toast invitation closes, the chat transcript appears on both of your workspaces, the Compose section indicates In Transfer Consultation, and a message area is highlighted in blue for private messaging. You and the agent can chat before the other agent accepts or declines the transfer request. The customer cannot view messages sent in the private message area.



- If the agent clicks Accept, the associated contact and incident are automatically saved, and the chat is transferred to the agent. After the transfer is made, the customer is notified that you left the chat and the new agent's name appears in the chat transcript instead of your name.
- If the agent declines the conference, the chat stays with you.

Related Topics

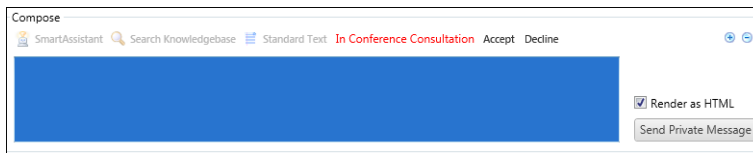
- [Conference Another Agent into Your Chat](#)

Conference 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.

1. At any point during your chat session, click **Conference**.
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 **Request**.
The agent receives a toast notification to accept, view or decline the conference request.
 - o If the agent clicks View, the chat transcript appears on both of your workspaces, the Compose section indicates In Conference Consultation, and a message area is highlighted in blue for private messaging. You and the agent can chat before the other agent accepts or declines the conference request. The customer cannot view messages sent in the blue private message area.



- o If the agent clicks Accept, the new agent is conferenced into the chat session. The chat transcript appears on both of your workspaces. After 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. The Leave button is disabled on your ribbon because you initiated the conference. The agent you conferenced in must click Leave to exit the conference.
- o If the agent clicks Decline, the chat stays with you.

Related Topics

- [Transfer a Chat to Another Agent](#)

Access Guided Assistance During a Chat Session

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.

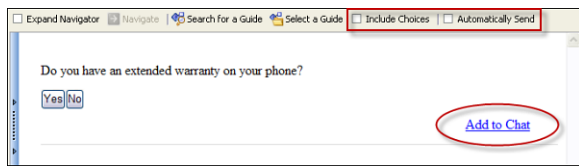
Note: Guided assistance must be enabled before you can access guides on the chat sessions workspace. Contact your Oracle account manager.

1. While chatting with a customer, click **Search for a Guide** or **Select a Guide** on the Guided Assistance control.

2. To insert a question from the guide, click **Add to Chat**.

Add to Chat is available for all questions and text explanations in guides.

- 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.
- 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 Send.



Related Topics

- [Find Answers Using Guided Assistance](#)

Cobrowse with a Customer

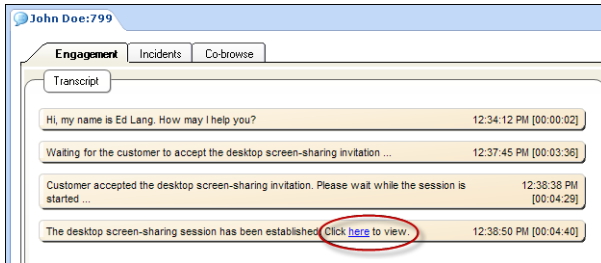
With Co-browse, you can guide a customer through a web page using your mouse or other pointing device to demonstrate actions.

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.

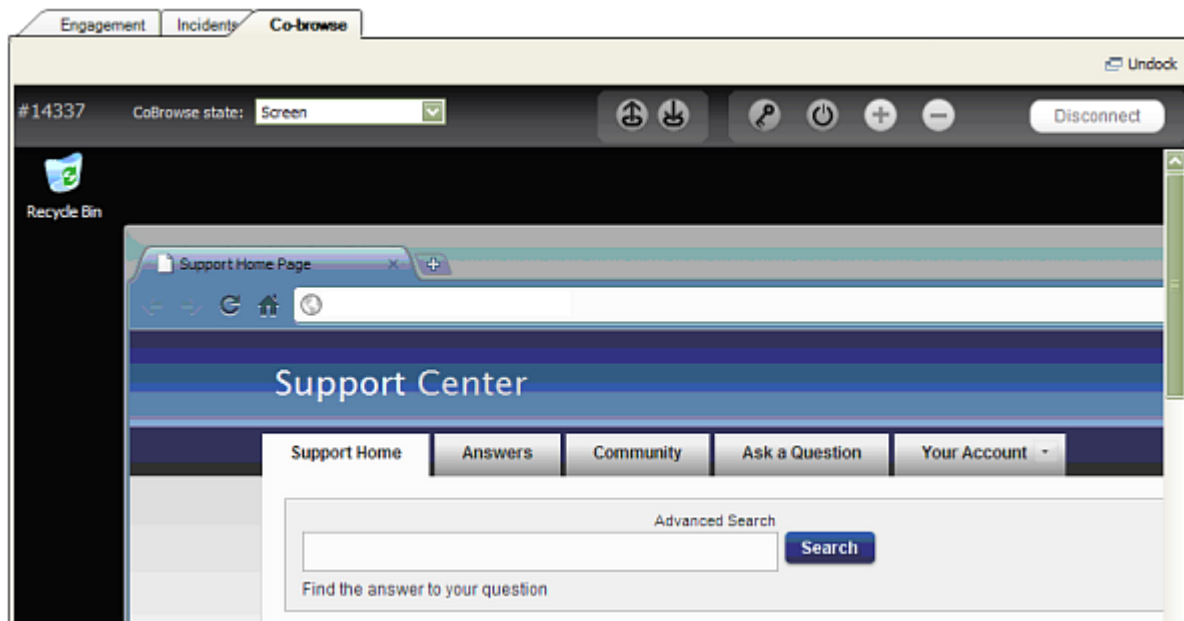
1. While chatting with a customer, click **Screen Sharing.**

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 lets you control the co-browse session. Your viewing and options are limited depending on how your organization has set up the Co-browse deployment. Privacy settings can differ when you co-browse in Instant Co-browse mode or Advanced Co-browse mode. Your organization's administrator configures the privacy settings.

Co-browse Toolbar

| Button/Field | Description |
|--------------|---|
| Mode | Click this drop-down list to select a co-browse state, which specifies how much control you have over the customer’s desktop. |

| Button/Field | Description |
|----------------------------|---|
| View Only | Select to view the customer's active window. This option is selected by default in Advanced Co-browse mode. |
| View + Pointer | Select to view the customer's active window and use a labeled mouse as a pointing device on the customer's screen. With this option selected, mouse-click functionality does not work on the customer's active window. This option is selected by default in Instant Co-browse mode. |
| View + True Pointer | Select to view the customer's active window and control the movement of the customer's mouse or other pointing device. With this option selected, mouse-click functionality does not work on the customer's desktop. This option is only available when co-browsing in Advanced Co-browse mode. |
| Full Control | Select to view the customer's active window, control all mouse or other pointing device functions (pointer and mouse clicks), go to other company web pages, and use your keyboard to enter information on the customer's active window (for instance, to help the customer fill out a form). The customer receives a consent message to allow or deny full control, and you'll see a message when the customer has consented to full control. In Advanced Co-browse mode, you can access the customer's desktop and co-browse third party sites. |
| Advanced Mode | Select to escalate to the Advanced Co-browse mode. An invitation is sent to the customer to activate Advanced Co-browse mode. |
| Client Info | Displays the customer's environment information for operating system, browser version, client version, and escalation mode. |
| Disconnect | Click to end the co-browse session. |
| True View | True View is enabled by default and lets you view the customer's desktop exactly as it is seen by the customer when in Instant Co-browse mode. Click to turn True View off in situations where the customer's settings prevent you from navigating efficiently. |
| Zoom In | Click to zoom in on the customer's desktop. This button is available only in Advanced Co-browse mode. |
| Zoom Out | Click to zoom out on the customer's desktop. This button is available only in Advanced Co-browse mode. |
| Annotations | <p>Click to make comments on the customer's window.</p> <ul style="list-style-type: none"> ○ Select one of the displayed suggested colors, or click the last color option to open a color picker where you can select any color. ○ Select the line width for your annotations. <p>Any comments you make are cleared from the window when you click Annotations again, or when the customer scrolls the page, resizes the browser window, or leaves the page.</p> <p>Note: Comments are only visible to you and the customer. If another agent is joined in the co-browsing session, comments you make are not visible to that agent.</p> |

3. Click **Disconnect** to disconnect from the co-browse session.

Both you and the customer are notified when the co-browse session has ended. The customer can also disconnect from the co-browse session at any time.

Note: 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. See *Co-browse Session Reporting*.

Related Topics

- [Configure Co-browse on a Chat Workspace](#)

Wrap Up and Terminate a Chat Session

Either you or the customer can end the chat session. If the customer ends the session, a message asks if you want to terminate or wrap up the session. Alternatively, you can click the Wrap-up or Terminate buttons to end the session.

By default, an incident is created when a chat session begins and an Incident field displays as a key field containing the incident's reference number. You can edit the incident while chatting with a customer by right-clicking the reference number and selecting **Open**.

Your administrator can configure chat to create an incident when you terminate or wrap up a chat automatically, or by prompting you 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.

1. To enter wrap-up mode, click **Wrap-up**.

- a. Complete any post-chat tasks such as creating an incident, adding the chat to an existing incident, or creating an opportunity from the chat. You can edit this incident in the same manner as any other incident, including changing the incident subject.

When you create an incident, 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. 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.

- b. Click **Terminate**.

2. To end the session without entering wrap-up mode, click **Terminate**.

Results:

The chat session closes and the chat transcript is inserted as a response thread on the Messages tab of the incident.

Related Topics

- [How You Edit Incidents](#)
- [Add an Incident](#)

Chat for Supervisors

Through real-time reporting, Chat makes it easy to manage a group of agents. It is important to familiarize yourself with the Chat Supervisor Home–Real Time dashboard before monitoring agents.

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.

The following reports display on the Chat Supervisor Home–Real Time dashboard. The Chat Supervisor Home–Real Time dashboard refreshes every fifteen seconds or less, depending on server load.

- **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. 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. See [Monitor a Chat Session](#).

Related Topics

- [Chat Sessions Workspace](#)
- [Chat for Agents](#)
- [Chat for Customers](#)

Monitor a Chat Session

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 increase 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.

Tip: 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, see [Selected Object Properties](#).

1. Click **Login Chat** to log in to Chat.
2. From the Chat Supervisor Queue Snapshot report, select the chat you want to monitor and click **Monitor**, or you can right-click and select **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. The private response Compose field displays.
3. To send a private message to the agent, enter your message in the private response Compose field and click **Send Private Message**.
Your message appears on the chat transcript and is indicated to be a private message. The agent cannot respond to your private message unless you join the chat.

4. To join the chat you are monitoring, click **Join**.
Two Compose fields display, one with a white background for public messages to the agent and customer, and the other with a blue background for private messages to the agent. The agent is notified that you joined the chat.
5. To send a message, enter your message in either the public or private Compose field, and click **Send Public Message** or **Send Private Message**, as appropriate.
Customers don't see private messages to the agent. Send a public message if you want the customer to see your message to the agent.
6. To leave the chat you are monitoring, click **Leave**.
You are disconnected from the chat and the monitoring session ends. If you were only monitoring and had not joined the chat, the agent is not notified that you left. If you joined the chat, the agent is notified that you left the chat.

Related Topics

- [Chat Sessions Workspace](#)

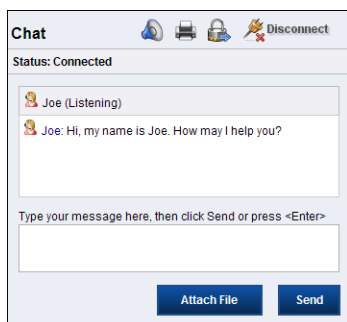
Chat for Customers

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.


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.

This image 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.



Chat Page

| Button | Description |
|--------|---|
| Mute | Customers click to mute incoming sound notifications. |
| Print | Customers click to print the chat correspondence at any time. |

| Button | Description |
|--|--|
|  Send an Off the Record Message | Customers click to send unrecorded messages during the chat session. 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 to disconnect from the chat session. This button appears only during a chat session. |
| Close | Customers click to close the Chat page. This button appears only after a chat session is disconnected. |
| Attach File | Customers click to send file attachments during the chat session. This button appears only during a chat session. |
| Send | Customers click to send messages to an agent. This button appears only during a chat session. Customers can also press Enter to send messages. |

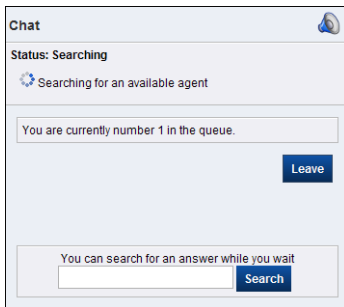
Related Topics

- [Chat Customer Reconnect](#)
- [Chat for Agents](#)
- [Chat for Supervisors](#)
- [Chat with an Agent](#)

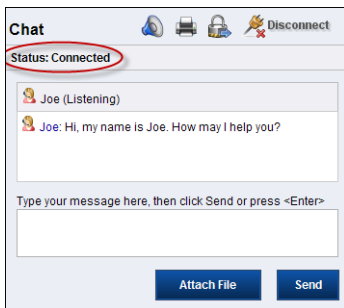
Chat with an Agent

Customers chat with an agent from the Live Help page.

1. From the Live Help page, the customer fills in the required information and clicks **Submit Request**.
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 enters a question and presses Enter or clicks **Send**.
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 **Disconnect** to terminate the chat session.
The agent is notified that the customer has disconnected.
5. The customer clicks **Close** 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 lets customers 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.

9 Co-browse

Overview of Co-browse

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.

Administrators use the administrative console to manage the product and customize the Co-browse user interface. See [Admin Console](#). See [Answer ID 5673](#) on our support site for system requirements.

Admin Console

The Co-browse administrative console is a standalone user interface used to manage B2C Co-browse, to customize the user interface and configure its deployment, to add and edit users, and to access additional Co-browse reports.

With B2C Service, you configure Co-browse on chat and incident workspaces, add a Co-browse widget to the customer portal, and give Co-browse permission to agents working on the agent desktop through their profile.

In addition, the following functionality is available for Configuration Administrators through the Co-browse Admin Console:

- Company set up and remote control options
- User management and permissions
- SiteID management
- Co-browse product UI customization, security masking, and deployment
- Reporting

See [Implementing Standalone Cobrowse](#) for more details on working with the Admin Console.

Configure Co-browse on an Incident Workspace

Co-browse configuration for incident workspaces consists of creating a custom incident workspace with a tab where agents can co-browse with customers.

Before you start

You must add the `CobrowsePremium` widget to the customer portal before agents can co-browse with customers. See [Add the CoBrowsePremium Widget](#).

Note: Before you can configure Co-browse, it must be enabled. To enable Co-browse, contact your Oracle account manager.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Workspaces**.
3. Expand the **Standard** folder, right-click the incident workspace, and select **Copy**.
The Copy Incident As window opens.
4. Enter a name for the copied workspace in the **Name** field and click **OK**.
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.
8. In the Label section of the ribbon, click the **Text** drop-down list and rename the tab **Co-browse**.
9. Click the **Insert Control** tab.
10. In the Relationship Items section, drag the **Co-browse** control onto the Co-browse tab on the workspace.
11. Click **Save**.

What to do next

Now you need to assign this custom incident workspace to profiles. See [Profiles](#). For information about using Co-browse on incident workspaces, see [Co-browse with a Customer from an Incident Workspace](#).

Add the CoBrowsePremium Widget

Follow this procedure to add the CoBrowsePremium widget to your customer portal pages.

1. Open the **standard.php** file in the **views/templates** folder.
2. Find 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 found in step 2.

```
<div>
  <rn:widget path="utils/CobrowsePremium" />
</div>
```
4. Save **standard.php**.
5. Promote the customer portal pages to Production.

What to do next

To enable mobile compatibility, follow these same steps to modify the **mobile.php** template.

After the widgets have been added to the appropriate pages, the standard and mobile page sets need to be enabled. See [Stage Customer Portal Pages](#) and [Promote Customer Portal Pages](#).

Configure Co-browse on a Chat Workspace

Co-browse configuration for B2C Chat consists of creating a custom chat sessions workspace with a tab where agents can co-browse with customers.

Before you start

You must add the `ChatCobrowsePremium` widget to the customer portal before agents can co-browse with customers. See [Add the ChatCobrowsePremium Widget](#). 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.

Here's what to do

1. Click **Configuration** on the navigation pane.
2. Expand **Application Appearance**, and then double-click **Workspaces**.
3. Expand the **Standard** folder, right-click the chat sessions workspace, and select **Copy**.
The Copy Chat Sessions As window opens.
4. Enter a name for the copied workspace in the **Name** field and click **OK**.
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.
8. In the Label section of the ribbon, click the **Text** drop-down list and rename the tab **Co-browse**.
9. Click the **Insert Control** tab.
10. In the Relationship Items section of the ribbon, drag the **Co-browse** control onto the Co-browse tab on the workspace.
11. Click the **Home** tab on the ribbon and click **Ribbon**.
The ribbon designer opens.
12. Click a button in the **Session** group to activate the buttons.
13. Click **Add Buttons** on the ribbon designer toolbar.
14. Select **Screen Sharing** and click **OK**.
15. Click **OK**.
16. Click **Save**.

What to do next

Now you need to assign this custom chat sessions workspace to profiles. See [Profiles](#). For information about using Co-browse on chat workspaces, see [Co-browse with a Customer](#).

Add Co-browse Permissions to a Profile

Co-browse is not fully functional until staff members have been assigned co-browse permissions in their profile.

After 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Staff Management**, and then double-click **Profiles**.
3. Double-click the profile you want to edit.
4. Click **Permissions**.
5. Click the **Service** tab.
6. Select **Co-browse**.
7. Click **Save**.

What to do next

Before agents can use Co-browse, you must assign a profile containing co-browse permissions to their staff account. See [Add or Edit a Staff Account](#).

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 in **Public Reports/Service/Co-Browse**. Before staff members can use the report, it must be added to their navigation sets. See [Edit a Navigation Set](#).

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. See [Overview of Creating Basic Custom Reports](#).

10 Outreach and Feedback

Explorers

Overview of Explorers

Explorers are used to access and manage mailings, campaigns, questions, surveys, audiences, and content library items created in Outreach and Feedback.

With these explorers, you can browse, search, and organize items in hierarchical folders on the content pane using functions similar to Windows Explorer. Like Windows Explorer, each B2C Service 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 find 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.

Outreach and Feedback Explorers

| Explorer | Description |
|--------------------|--|
| Outreach Explorers | These explorers are used to manage mailings and campaigns. |
| Mailings | Click Mailings on the navigation pane and double-click Mailings Explorer. See Overview of Mailings . |
| Campaigns | Click Campaigns on the navigation pane and double-click Campaigns Explorer. See Overview of Campaigns . |
| Feedback Explorers | These explorers are used to manage questions and surveys in Feedback. |
| Questions | Click Questions on the navigation pane and double-click Questions Explorer. See Overview of Questions . |
| Surveys | Click Surveys on the navigation pane and double-click Surveys Explorer. See Overview of Surveys . |
| Audience Explorers | These explorers are used to manage audiences in both Outreach and Feedback. |
| Contact Lists | Click Audiences on the navigation pane and double-click Contact Lists Explorer. See Add a Contact List . |

| Explorer | Description |
|---------------------------|--|
| Segments | Click Audiences on the navigation pane and double-click Segments Explorer. See Create a Segment . |
| Content Library Explorers | These explorers are used to manage content library items in both Outreach and Feedback. |
| Documents | Click Content Library on the navigation pane and double-click Documents Explorer. See Create a Document . |
| Tracked Links | Click Content Library on the navigation pane and double-click Tracked Links Explorer. See Add a Tracked Link . |
| File Attachments | Click Content Library on the navigation pane and double-click File Attachments Explorer. See Add a File . |
| Templates | Click Content Library on the navigation pane and double-click Templates Explorer. See How Templates Work . |
| Snippets | Click Content Library on the navigation pane and double-click Snippets Explorer. See How Snippets Work . |

Find a Document

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.

Tip: You can also search for mailings, campaigns, surveys, and documents from anywhere in the product using Quick Search. See [Overview of Quick Search](#).

1. Click **Find** on the ribbon.
The left side of the content pane displays a Find menu, hiding the folders tree.
2. Enter field information.

Documents Explorer Search Menu

| Field | Description |
|------------|---|
| Find Using | <p>This drop-down list 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.</p> <ul style="list-style-type: none"> ○ 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 calendar and select another day, or click the arrows at the top of the calendar to change months. |

| Field | Description |
|--|--|
| | <ul style="list-style-type: none"> 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. <p>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.</p> |
| 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 option 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 option to search only the current results and keep only those that match this search. |
| Search globally, append to results | Select this option 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 Find.

The search results replace the document list in the explorer.

4. To clear the value from the search text box, click Clear.

5. To replace the search results with the original documents list, click Refresh on the ribbon.

For additional information about explorer search functionality, see the Search On state in *Explorer Display States*.

Edit an Item

You can edit items used in documents, mailings, and surveys.

1. Select the item you want to edit and click Open.

The item opens on the content pane.

2. Edit the necessary fields and click Save.

Copy an Item

You can copy items used in documents, mailings, and surveys.

1. Select the item you want to copy and click Copy.

The **Copy As** window opens.

2. Select the folder you want to save the item in and enter the name of the item in the **Name** field.
3. Click **OK**.

Delete an Item

You can delete items used in documents, mailings, and surveys. However, make sure the item has no dependencies before you delete it.

CAUTION: If you attempt to delete an item that is being used in a document, mailing, survey, or campaign, a dependency warning lists each location where the item is used and provides 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.

Select the item you want to delete and click **Delete**.

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. See [Convert Links to Tracked Links](#).

Note: 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.

Automatically Generated Folders

| 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 after 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, |

| Folder | Description |
|----------------------------|--|
| | <p>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.</p> <p>The document name is limited to 80 characters.</p> |
| Message Templates | <p>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.</p> <p>These documents are read-only.</p> |
| Survey Invitation Messages | <p>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.</p> <p>The document name is limited to 80 characters.</p> |
| Survey Pages | <p>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.</p> <p>Documents are read-only if they are created in basic mode but can be edited if they are converted to advanced mode.</p> |
| Survey Reminders | <p>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.</p> <p>The name is limited to 80 characters. You can edit the reminders in this folder as long as they have not been sent.</p> |
| Tracked Links explorer | <p>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. See Convert Links to Tracked Links.</p> <p>You can edit or move the tracked links in this folder.</p> |

Audiences

Overview of Audiences

B2C Service 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.

For information about uploading contacts to your knowledge base, see [Add a Contact](#). For information about adding segments and lists to mailings and surveys, see [Define the Broadcast Mailing Audience](#) and [Define the Broadcast Survey Audience](#).

Related Topics

- [Define the Transactional Mailing Audience](#)
- [Define the Transactional Survey Audience](#)

Add a Contact List

Contact lists are static sets of contacts you can use to define audiences for broadcast mailings and surveys.

Contact lists 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. After 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.

1. Click **Audiences** on the navigation pane.
2. Double-click **Contact Lists Explorer**.
The Contact Lists explorer opens on the content pane.
3. Click **New**.

Tip: You can also create a contact list from an open contact list by clicking New. Additionally, if your navigation set is configured to add contact lists from the file menu, click **File > Audience > Contact List**. See [Overview of Navigation Sets](#).

A new contact list opens on the content pane.

4. Enter field information.

Contact List

| Field | Description |
|---------------------|--|
| Notes | Enter 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 Send a Proof . |

| Field | Description |
|-------------------------------|--|
| Remove Contacts from Old List | <p>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 a Service Request. Also see Answer ID 4802.</p> <p>Tip: We recommend leaving this check box selected to ensure your database tables stay at a manageable size.</p> |
| 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. |
| Details | <p>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.</p> <p>A count must be performed before Details are available.</p> |
| Refresh | <p>To calculate the number of contacts currently in the list, click Refresh.</p> <p>The list must be saved before the count is refreshed.</p> |

5. To add new and existing contacts to the list on the Contacts tab, see [How Contact Lists Work](#).
6. To view a list of actions taken on the contact list, click the **Audit Log** tab.
7. To check the spelling of any fields that have spell checking enabled, click **Spelling**.
8. Click **Save**.
The Save As window opens.
9. Select the folder you want to save the contact list in and enter the name of the contact list in the **Name** field.
10. Click **Save**.

How Contact Lists Work

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 search your list of contacts, remove contacts from the list, or edit contact records. See [Overview of Contacts](#). Contacts can also be added to lists in large batches using the Data Import Wizard. See [How Data Import Works](#).

Note: 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 [Overview of Queuing Reports](#), [How You View Reports in the Queue](#), and [Search for Records in a Report](#).

Add a Contact to the Contact List

You can add existing contacts to your contact list from the Contacts tab of the contact list editor.

1. On the Contacts tab of a contact list, click **Add > Add Existing**.
The **Contact Search** window opens.

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. Click **Search**.

A list of contacts that match the search criteria you entered appears in the grid below the search criteria fields.

4. Select a contact and click **Select** to add the contact to the list.

Tip: You can select multiple contacts by pressing Ctrl while clicking additional contacts. Selected contacts that are already in the list are not added again.

The contact appears on the Contacts tab with the other contacts in the contact list.

5. To add a new contact, click **Add > Add New**. See [Create a Contact and Add It to the Contact List](#).
6. Click **Save**.

Create a Contact and Add It to the Contact List

You can create new contacts and add them to your contact list.

1. On the Contacts tab of a contact list, click **Add > 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 **OK**.

The contact appears on the Contacts tab with the other contacts in the contact list.

Note: Clicking OK 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 [Overview of Contacts](#).

4. Click **Save**.

Search 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.

1. From an open contact list, click **Search List** on the Contacts tab toolbar.

The Search window opens.

2. In the Filters section, enter 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, enter 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 list. See *Modify the Search Window*.
6. Click **Search**.

Search results are returned on the Contacts tab.
7. To edit a contact record, click **Open** next to the contact.
8. To remove a contact from the contact list, click **Remove** next to the contact.

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 **Clear List**.
 - a. Click **Yes** to confirm.
10. To clear the search results and view the entire contact list, click **View Entire List**.
11. To refresh the contact list, click **Refresh**.
12. To access report options, such as sorting and exporting, click **Options** next to the contact. See *How You Distribute Reports and Dashboards* and *How You Change Report Formatting*.

Create a Segment

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.

After 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 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.

1. Click **Audiences** on the navigation pane.
2. Double-click **Segments Explorer**.

The Segments explorer opens on the content pane.

3. Click **New** on the ribbon.

Tip: You can also create a segment from an open segment by clicking **New**. Additionally, if your navigation set is configured to add segments from the file menu, click **File > Audience > Segment**. See [Configure the File Menu](#).

a. To create a segment from scratch, click **New Segment**.

The Segment editor opens on the content pane.

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 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**.

4. Enter field information to define the segment filters on the Criteria tab.

5. To preview the contacts belonging to the segment, click the **Preview** tab.

6. To refresh the audience count, click **Refresh** in the Count section.

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.

9. Click **Save**.

The Save As window opens.

10. Select the folder you want to save the segment in and enter the name of the segment in the **Name** field.

11. Click **Save**.

How Segment Filters Work

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 of the Segment editor, 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.

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 [Overview of the Data Dictionary](#).

In addition to drag-and-drop functionality, you can click Add Filter in the Actions section to add a filter. After 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.

Related Topics

- [Functions for Segments](#)
- [Filter Operators for Segments](#)

Add Filters to a Segment

Filters determine which contacts are returned when the segment is applied to contact data.

1. Select a table in the Data Dictionary section.
The table columns appear in the Fields section.
2. Drag and drop a column name from the Fields section to the center of the Criteria tab.

Tip: You can also add a filter by clicking Add Filter in the Actions section or double-clicking a column name in the Fields section.

The **Edit Filter** window opens.

3. Enter the name of the filter in the **Name** field.
The name appears in the Filters section of the Criteria tab.
4. Enter field information.

Edit Filter Window

| Field | Description |
|-------------|--|
| *Expression | Enter 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 list displays a list of database tables that begin with the letters you type. You can enter the complete expression or select a table and field from the drop-down list. You can also select a table and column or function by right-clicking in the field. Tip: 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. |
| Value Type | Select the type of value to match with the expression from these options. |
| Constant | Select this option to type the value to complete the filter or select the value from a drop-down list or calendar (depending on the expression). |
| Expression | Select this option to enter an expression to complete the filter, using the syntax <table_name>.<column_name>. |
| Value | Enter 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 list, but when the field type is date, you select it from a calendar. |

5. To customize the list of values that display in the Value field, click **Customize**.
The Customize link is available only when you select equal or list values from the Operator drop-down list and when the Value field displays as a drop-down list.

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.

Edit Expression Window

| 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. |

- b. Click **OK** to save the expression and return to the Edit Filter window.
7. Click **OK** 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 Cancel to exit the window.

8. To edit a filter, do one of the following:
 - o Select the filter and click **Edit Filter** in the Actions section.
 - o Right-click the filter in the Filters section and select **Edit Filter**.
9. To display the filter expression in the Filters section instead of the name you defined, click **Display Filter Descriptions**. To switch back to the filter name, click **Display Filter Names**.
10. To delete a filter, do one of the following:
 - o Select the filter and click **Delete Filter** in the Actions section.
 - o 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 *Edit a Logical Expression*.
12. To define the tables and joins used in the segment, click **Edit Data Set** in the Advanced Options section. See *Edit the Data Set*.
13. To apply group filters to the segment, click **Edit Group Filters** in the Advanced Options section. See *Create a Group Filter*.

Functions for Segments

Functions let you apply standard mathematical operators to your segment. You can also combine different functions and database fields in an expression.

Note: Before you can add a function, you must add a filter. See *Add Filters to a Segment*.

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 of the expression.

Functions

| Expression | Description |
|---|---|
| Aggregate Functions | Select from the following to use an aggregate function in the expression. Aggregate functions are available only when defining group filters. See Create a Group Filter . |
| 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 in the data set expr based on the order of the specified sort columns. For example, the expression <code>first(threads.note, threads.entered, threads.seq)</code> 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 <code>group_concat(threads.note, ',', threads.entered, ASC)</code> 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 in the data set expr based on the order of the specified sort columns. For example, the expression <code>last(threads.note, threads.entered, threads.seq)</code> 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 <code>sum_distinct(sa_period2accts.quota, sa_period2accts.acct_id)</code> . |
| stddev(expr) | This function returns the standard deviation of expr . For example, the expression <code>stddev(answers.solved_count)</code> returns the standard deviation of all the values in the <code>solved_count</code> column of the Answers (<code>answers</code>) 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 <code>concat('www.', 'global', '.com')</code> returns the value <code>www.global.com</code> . |

| Expression | Description |
|---|--|
| <code>instr(str, substr)</code> | This function returns the numeric position (in characters) of the initial occurrence of string <code>substr</code> within string <code>str</code> . For example, the expression <code>instr('globalcellphones.com', 'cell')</code> returns the value 7. |
| <code>length(str)</code> | This function returns the length (in characters) of the string. For example, the expression <code>length('cell phones')</code> returns the value 10. |
| <code>lower(str)</code> | This function returns string <code>str</code> in all lowercase characters. For example, the expression <code>lower('Global.COM')</code> returns the value <code>global.com</code> . |
| <code>ltrim(str)</code> | This function returns the string <code>str</code> without leading spaces. For example, the expression <code>ltrim('Cell phone')</code> returns the value <code>Cell phone</code> . |
| <code>lpad(str1, X, str2)</code> | This function returns <code>str1</code> padded on the left with <code>str2</code> until <code>str1</code> is <code>X</code> characters long. For example, the expression <code>lpad('phone', 10, '@')</code> returns the value <code>@@@@@phone</code> . |
| <code>rpadd(str1, X, str2)</code> | This function returns <code>str1</code> padded on the right with <code>str2</code> until <code>str1</code> is <code>X</code> characters long. For example, the expression <code>rpadd('phone', 10, '@')</code> returns the value <code>phone@@@@@</code> . |
| <code>rtrim(str)</code> | This function returns the string <code>str</code> without trailing spaces. For example, the expression <code>rtrim('agarfield@global.com')</code> returns the value <code>agarfield@global.com</code> . |
| <code>substr(str, start_pos, [length])</code> | This function returns a portion of the string <code>str</code> starting at the character defined by <code>start_pos</code> (an integer) and ending at the character defined by <code>length</code> (an integer). If <code>length</code> is not indicated, it returns the remainder of the string. |
| <code>to_char(expr)</code> | This function converts the numeric <code>expr</code> to a character string. |
| <code>to_number(str)</code> | This function converts the character string <code>str</code> to a numeric. If the <code>str</code> is not numeric, this function returns zero. If <code>str</code> is a combination of numbers and other characters and begins with a number, this function returns only the initial numeric portion. For example, <code>to_number('123ABC')</code> returns 123. |
| <code>upper(str)</code> | This function returns string <code>str</code> in all uppercase characters. For example, the expression <code>upper('global.COM')</code> returns the value <code>GLOBAL.COM</code> . |
| Date Functions | Select from the following to use a date function in the expression. |
| <code>date_add(date, units, interval, round)</code> | This function returns the value of <code>date</code> plus a specified amount of time where <code>date</code> 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 <code>units</code> and <code>interval</code> , where <code>units</code> must be an integer specifying the number of intervals to add, and <code>interval</code> can be SECONDS, MINUTES, HOURS, DAYS, WEEKS, MONTHS, or YEARS. To round the result to the beginning of the specified interval, set the <code>round</code> argument to 1. Otherwise, set <code>round</code> to 0 and the result is not rounded. For example, the expression <code>date_add('2003-11-25 22:35:00', 48, HOURS, 1)</code> returns the value <code>2003-11-27 22:00:00</code> . |
| <code>to_date(str, format)</code> | This function converts the string <code>str</code> in the format specified by <code>format</code> to a date value. For example, the function <code>to_date('19981231', 'YYYYMMDD')</code> returns a date of 12/31/1998. |

| Expression | Description |
|---|---|
| | <p>Unlike <code>date_format</code>, the <code>to_date</code> function supports only the following date formats.</p> <p>DD MM YYYY HH24:MI:SS</p> <p>DD MM YYYY HH:MI:SS AM</p> <p>DD MON YY</p> <p>DD MON YYYY</p> <p>DD-MM-YY</p> <p>DD-MM-YYYY</p> <p>DD.MM.YY</p> <p>DD.MM.YYYY</p> <p>DD/MM/YY</p> <p>DD/MM/YYYY</p> <p>DD/MM/YYYY HH:MI:SS AM</p> <p>MM-DD-YY</p> <p>MM-DD-YYYY</p> <p>MM/DD/YY</p> <p>MM/DD/YYYY</p> <p>MON DD YY</p> <p>MON DD YYYY</p> <p>MON DD YYYY HH:MI AM</p> <p>MON DD YYYY HH:MI:SS AM</p> <p>YY.MM.DD</p> <p>YY/MM/DD</p> <p>YYMMDD</p> <p>YYYY-MM-DD</p> <p>YYYY-MM-DD HH24:MI:SS</p> <p>YYYY-MM-DDTHH24:MI:SS</p> <p>YYYY.MM.DD</p> <p>YYYY/MM/DD</p> <p>YYYYMMDD</p> |
| <p><code>date_format(date, format)</code></p> | <p>This function converts <code>date</code> from a datetime data type to a string and reformats <code>date</code> to match the format specified by <code>format</code>, where <code>date</code> is a datetime type column or a literal string in the format <code>YYYY-MM-DD</code> or <code>YYYY-MM-DD HH:MI:SS</code>. For example, the expression <code>date_format('2003-11-25</code></p> |

| Expression | Description |
|--|--|
| | <code>22:25:00</code> , <code>'DAY, MONTH DD, YYYY, HH12:MI PM'</code>) returns the value <code>Tuesday, November 25, 2003 10:25 PM</code> . |
| <code>date_diff(date, date)</code> | <p>This function returns the number of seconds occurring between two dates. For example, the expression <code>date_diff('2009-11-26 22:25:00', '2009-11-25 10:30:00')</code> returns the value <code>129300</code>.</p> <p>Another example is <code>date_diff(sysdate(), incidents.updated)</code>. This expression returns the number of seconds between the current time and the time that incidents were last updated.</p> <p>Note: To change the format of the output, use the <code>time_format</code> function. For example, <code>time_format(date_diff('2009-11-26 22:25:00', '2009-11-25 10:30:00'), 'HH24h MI SS')</code> returns the value <code>35h 55m 00s</code>.</p> |
| <code>date_trunc(date, units)</code> | This function truncates <code>date</code> to the unit specified by <code>units</code> . For example, the expression <code>date_trunc('2003-11-25 22:25:10', HOURS)</code> returns the value <code>2003-11-25 22:00:00</code> . |
| <code>sysdate()</code> | This function returns the current system date in the format <code>YYYY-MM-DD HH:MI:SS</code> . |
| <code>time_format(seconds, format)</code> | This function converts <code>seconds</code> to the specified time format. For example, the expression <code>time_format(86610, 'HH24 MI SS')</code> returns the value <code>24 03 30</code> . |
| <code>date_group(expr, format)</code> | <p>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 <code>date_format</code> instead.</p> <p>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 <code>date_group(incidents.created, 'YYYY-MM')</code>, and the expression for Column B set to <code>count(*)</code>, the report would output:</p> <pre>2006-01 10 2006-02 0 2006-03 15</pre> <p>If you changed the expression in Column A to <code>date_format(incidents.created, 'YYYY-MM')</code> to use the <code>date_format</code> function instead of <code>date_group</code>, the report would output similar data, but would not return a row for February.</p> <p>This function can be used only when defining group filters. See Create a Group Filter.</p> |
| Logical Functions | Select from the following to use a logical function in the expression. |
| <code>if(expression, then result, else result)</code> | <p>This function returns the then result if expression is true, or returns the else result if expression is false. For example, the expression <code>if(incident.c\$field=1, 'Yes', 'No')</code> returns Yes for incidents where the value of <code>c\$field</code> is 1. Otherwise, No is returned.</p> <p>You can use <code>IS NULL</code> and <code>IS NOT NULL</code> as part of the expression. For example, you could use the expression <code>if(incident.c\$field IS NOT NULL, 'Yes', 'No')</code>.</p> |
| <code>decode(expression, test_value_1, result_1[, test_value_2, result_2][, default])</code> | This function compares <code>expression</code> to each <code>test value</code> in order and returns <code>result</code> for the first <code>test value</code> that <code>expression</code> matches. If <code>expression</code> does not match any <code>test value</code> , <code>default</code> is returned. If <code>default</code> is undefined, a null value is returned. |

| Expression | Description |
|-------------------------------------|--|
| | 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 <code>faqs.status</code> even though the table contains code value in the <code>status</code> column. |
| <code>nvl(expr1, expr2)</code> | If the value <code>expr1</code> is null, this function returns the value <code>expr2</code> . However, if the value <code>expr1</code> is not null, then the value <code>expr1</code> is returned. The value of <code>expr2</code> must match the data type of <code>expr1</code> . |
| Math Functions | Select from the following to use a math function in the expression. |
| <code>bitand(X, Y)</code> | This function returns the bitwise AND of two integers, <code>x</code> and <code>y</code> . |
| <code>ceiling(X)</code> | This function returns the smallest integer value greater than or equal to <code>x</code> . |
| <code>floor(X)</code> | This function returns the largest integer less than or equal to <code>x</code> . |
| <code>power(X, Y)</code> | This function returns the value of <code>x</code> to the power of <code>y</code> . For example, <code>power(2, 3)</code> would return 8. |
| <code>rand()</code> | This function returns a random number between 0 and 1, containing up to nine decimal places. |
| <code>round(X, D)</code> | This function returns the value <code>x</code> rounded to the nearest number with <code>D</code> decimals. For example, <code>round(5.55555, 2)</code> returns the value 5.56. |
| <code>truncate(X, D)</code> | This function returns the value <code>x</code> truncated to the <code>D</code> decimal places. For example, the expression <code>truncate(5.55555, 2)</code> returns the value 5.55. |
| Currency Functions | Select the following to use a currency function in the expression. |
| <code>to_currency(expr, str)</code> | This function converts <code>expr</code> to a value in <code>str</code> 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 (<code>exchange_rates</code>) table. For example, for a staff member with a default currency of USD, <code>to_currency(opportunities.mgr_value, 'EUR')</code> returns an amount in USD that is equal to the number in the <code>mgr_value</code> converted to Euros. |

Filter Operators for Segments

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.

Filter Operators

| 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. |

| Operator | Description |
|-------------------------------|---|
| 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 | <p>The expression is between two specified values. The between operator is available to use with date, currency, and numeric (integer and float) expressions.</p> <p>When using this operator with a date expression, records matching the date and time of the beginning value are returned, but those matching the date and time of the ending value are not. This prevents records from displaying 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.</p> |
| 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 '%a11%' 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 '%a11%' in the Value field. |
| in list | <p>The expression values you want to search for are specified by selecting check boxes in a menu. The selected options display in a separate Selected Items list to assist you when selecting from menus with a large number of options.</p> <p>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.</p> |
| not in list | <p>The expression values you do not want to search for are specified by selecting check boxes in a menu. The selected options display 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.</p> <p>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.</p> |
| 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. |

| Operator | Description |
|------------------------|--|
| 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. See <i>Special Characters Allowed When Searching</i> . |
| 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. |

Related Topics

- [Functions for Segments](#)
- [Add Filters to a Segment](#)

Edit a Logical Expression

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.

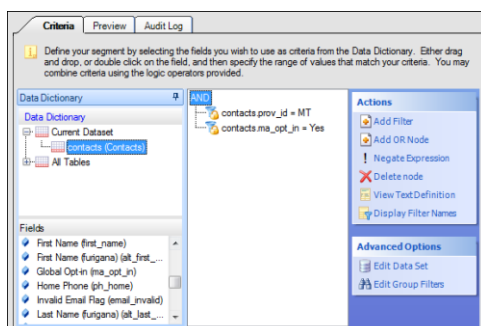
- The AND operator retrieves data matching all of the filters.
- The OR operator retrieves data matching any of the filters.
- The NOT operator (represented by an exclamation point) excludes matching data.

When you add nodes to the expression, the nodes display 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`).

1. From an open segment, add more than one filter to the Filters section.

This image shows an open segment with two filters.



The filters you add are automatically joined with AND logic and display 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 logical expression for the current filters, click **View Text Definition**.
The Text Definition window opens.
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`.

Edit 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:

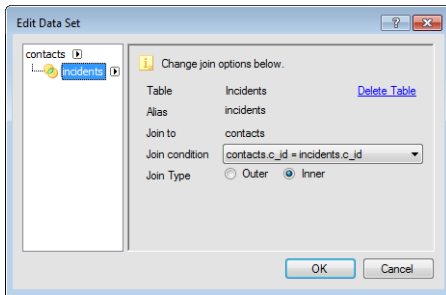
- Inner join—Inner joins select records from the joined tables on the condition that the value in the specified column of the primary table is equal to the value in the specified column of the secondary table. For example, if the Incidents table is joined to the Contacts table with an inner join, contacts 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.

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.

This image shows the table that is joined to the parent table and the available join options which are defined in the Edit Data Set window table.



- a. Enter field information.

Edit Data Set Window

| 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 list to select the fields on which to join. If only one field relationship is available, the menu displays only that option. |
| Join Type | Select the Inner option to use an inner join and the Outer option to use an outer join. Tip: 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. |

| Field | Description |
|-------|-------------|
| | |

4. Click **OK**.

Create 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.

1. Select a joined table in the data set tree.
2. Select **Outer** as the join type.
The Join Filters heading displays.
3. Expand the Join Filters heading on the Edit Data Set window.
The Edit Data Set window displays the Join Filters section.
4. Click **Add Filter**.
The **Add Filter** window opens.
5. Enter field information.

Add Filter Window

| Field | Description |
|-------------|--|
| Name | Enter the name of the filter. If you leave this field blank, the database name displays. |
| *Expression | Enter 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 list displays a list of database tables that begin with the letters you type. You can enter the complete expression or select a table and field from the drop-down list. You can also select a table and column or function by right-clicking in the field. Tip: 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. |
| Value Type | Select the type of value to match with the expression from these options. |
| Constant | Select this option to enter the value to complete the filter or select the value from a drop-down list or calendar (depending on the expression). |
| Expression | Select this option to enter an expression to complete the filter, using the syntax <table_name>.<column_name>. |
| Value | Enter 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 list, but when the field type is date, you select it from a calendar. |

6. Click OK.

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 filter logical expression. For procedures on using these actions, see *Edit a Logical Expression*.

Create a Group Filter

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.

1. From the Criteria tab, click **Edit Group Filters.**

The **Edit Groups** window opens.

2. Click **Add Filter**

The Add Filter window opens.

3. Enter field information on the Add Filter window. See *How Segment Filters Work*.**4. Click **OK** 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 filter logical expression. See *Edit a Logical Expression*.

5. Click **OK.**

Preview a Segment

After defining your filters, you may want to see which contacts meet the segment criteria. You can preview the segment to see a list of up to 1,000 contacts.

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 **Options > Paging.**

The **Report Paging Options** window opens.

3. Enter the number of rows you want to display per page and click **OK.****4. To edit a contact record, select the contact and click **Open**. See *Edit a Contact*.****5. To print a contact record, select the contact and click **Print**.****6. To access report options, such as sorting and exporting, click **Options**. See *How You Distribute Reports and Dashboards*.**

Analyze a Segment

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 query may need to access so you know if the segment can run without encountering row limits.

Tip: After you create or edit a segment, we recommend that you run the segment analyzer to check the segment database queries. This lets you fine-tune your segments to ensure they run as quickly and efficiently as possible.

1. Open the segment you want to analyze.
2. Click **Analyze** on the ribbon Home tab.

The **Segment Analyzer** window opens.

The segment analyzer lists the segment filters, tables, output levels, and the estimated number of rows the segment query examines when it runs. If the analyzer finds potential issues with the segment 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.

Segment Analyzer Window

| Segment Component | Potential Issue |
|-------------------|--|
| Filters | <p>This section lists the expressions used for each segment and level filter and identifies whether the filter 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.</p> <ul style="list-style-type: none"> ○ 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 | <p>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.</p> <ul style="list-style-type: none"> ○ 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 | <p>This section does not apply to segments even though it displays in the report.</p> |
| Rows | <p>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. 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.</p> <ul style="list-style-type: none"> ○ 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.

Export a Segment

Exporting and importing segments saves you time by letting you reuse your segments.

There may be situations when you want to use the same segment in multiple interfaces, websites, or custom reports. You can export your segments as XML files and then import the files to use again. See [Import a Report from an XML File](#).

1. Open the segment you want to export.
2. Click **Export** on the ribbon Home tab.
3. Save the new XML file.

Import a Segment

Exporting and importing segments saves you time by letting you reuse your segments.

There may be situations when you want to use the same segment in multiple interfaces, websites, or custom reports. You can export your segments as XML files and then import the files to use again. See [Import a Report from an XML File](#).

1. On the Segments explorer, click **New**.
2. Click **Import Segment**.

Note: You must have exported an XML segment and saved it to a location where you can access it before it can be imported.

3. Select the XML segment file you want to import and click **Open**.

Results:

The segment displays on the Data Dictionary window.

Example of Creating a Segment

This procedure uses a real-world scenario to walk you through the creation of a segment.

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 [Add or Edit a Product](#), [Add a Subproduct](#), and [Edit Visibility Settings for Multiple Products Simultaneously](#).

1. From the Segments explorer, click **New**.
A new segment opens on the content pane.
2. Click **New Segment**.
The Segment editor opens on the content pane.
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 with the contacts.prov_id field populating the Expression field.
5. Click the **Value** drop-down list and select **MT**.
6. Click **OK**.
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 with the incidents.prod_hierarchy field populating the Expression field.
9. Click the **Value** drop-down list and select **Call Plans**.
10. Click **OK**.
The segments display on the content pane with the criteria you defined.
11. Click **Save**, enter the segment name in the **Name** field of the Save As window, and click **Save**.

Results:

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.

How You Improve Conversion Rates

A successful broadcast mailing is largely dependant on the quality of your contacts. This topic includes steps you can take to improve your organization's 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 lists that 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: After 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 B2C Service, 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.

Note: Data older than 400 days is automatically truncated from the following tables: Marketing Activities (`ma_trans`), Bounced Messages (`bounced_msgs`), and Mailing Exclusions.

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.

Contact Opt-In Management

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.

An effective opt-in process can also provide numerous benefits, including the following:

- 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 reputation among ISPs.

To help track your customers' messaging preferences, B2C Service 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 [Insert an Unsubscribe Link](#).

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 [Define 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.

Related Topics

- [CAN-SPAM Compliance](#)
- [Contact Opt-Out Tracking](#)
- [Exclude Contacts Based on a Custom Opt-In Field](#)

Exclude Contacts Based on a Custom Opt-In Field

Exclusions based on custom opt-in fields are manually enabled by adding a filter to your segments.

You could add a filter such as `contacts.<opt-in_field_name> not equals No`, or you could add a special segment to your audience as described in the following procedure.

1. Click **Audiences** on the navigation pane.
2. Double-click **Segments Explorer**.
The Segments explorer opens on the content pane.
3. Click **New** 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 **New**. Additionally, if your navigation set is configured to add segments from the file menu, click **File > Audience > Segment**. See *Configure 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 *Import a Segment*.
4. Click **Add Filter**. The **Add Filter** window opens.
 - a. Enter the opt-in field name in the **Expression** field.
 - b. Select **No** from the **Value** field.
 - c. Click **OK**.
 - d. Click **Save and Close** to save the segment.
5. From the Audience tab of an open mailing, click **Add Segment** in the Excluded section.
6. Select the segment you created and click **OK**.
7. Click **Save**.

Contact Opt-Out Tracking

B2C Service 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.

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. |
| 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 B2C Service, and the contact was opted-out by the system. |

| Method | Description |
|--------|-------------|
| | |

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*. If your site is experiencing higher-than-usual opt-out rates, the recommended best practice is to increase the deliverability of your communications.

Content Library

Overview of Content Library

The Content Library is a resource for creating, storing, and organizing custom content such as documents, templates, tracked links, and snippets. When 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 after 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 lets you create dynamic documents to send to your customers in mailings, surveys, and notifications. 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.

Related Topics

- [How the HTML Editor Works](#)
- [Insert a Web Form](#)

Create a Document

You can create unique documents to use in mailings, campaigns, and surveys. Documents can be designed in either HTML or 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.

After 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.

1. Click **Content Library** on the navigation pane.
2. Double-click **Documents Explorer**.
The Documents explorer opens on the content pane.
3. Click **New**.
A new document opens on the content pane.

Tip: You can also create a document from an open document by clicking New. Additionally, if your navigation set is configured to add documents from the file menu, click **File > Content Library > Document**. See *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 document notes, tasks, and attachments. See *How Documents Work*. 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 list and select the staff member.

Tip: Wildcards are supported when searching staff members. You can search strings that include a space by entering `%+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.

- a. To search for a staff member, enter the staff member's name in the **Find** field.
5. To let staff members to serve this document as a web page, select the **Approved for Web** check box.
 6. To let 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 see *Create an HTML Document*.
 8. To create a plain-text version of the document, click the **Text** tab and see *Create Text Content in Documents*.
 9. To spell check the document, click **Spelling** on the ribbon and see *Spell Checking*.
 10. Click **Save**.
The **Save As** window opens.
 11. Select the folder you want to save the document in and type the name of the document in the **Name** field.
 12. Click **Save**.

Create an HTML Document

When you create HTML documents, you have the option of starting with a blank document, copying an existing document, using a template, 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.

1. Click the **HTML** tab.
2. To create an HTML document from scratch, click **Begin with Blank Content**.
The HTML editor opens. See *How the HTML Editor Works*.
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 **OK** 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 see *How Templates Work*.
 - c. Click **OK** 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 **Open** to insert the HTML into your document.
6. Click **Save**.

Create 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.

1. Click the **Text** tab.
2. To create text content from scratch, click **Begin with Blank Content**.
The text editor opens. See *How You Create and Edit Text-Only Messages*.
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 **OK** to add the content to your document.

4. To create a text document by converting an HTML page to text, click **Convert HTML Content**. The HTML to Text window opens.
 - a. To convert the HTML content to text, select **HTML Part**. 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 **File On Disk** and browse for the file.
 - c. Click **OK** to insert the converted HTML in the text part of your document.
5. Click **Save**.

How Documents Work

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.

- [View Click-Through Results](#)
- [Add a Note to a Document, Mailing, or Survey](#)
- [Add a Task to a Document](#)

To add file attachments and view the audit log, see [Overview of the Attachments Tab](#) and [Audit Logs](#).

View 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.

From the Documents explorer, do one of the following:

- Right-click the document and select **View Click-Through Results**.
- Click **View Click-Through Results** on the Documents explorer ribbon.

Add a Note to a Document, Mailing, or Survey

You can use notes to provide additional information about the content that can be viewed by staff members as they are working with the document, mailing or survey.

1. On the Summary tab of an open document, mailing, or survey, click the **Notes** tab.
2. Click **Add**.
3. Enter the note text in the text field.
4. To sort the notes by ascending or descending date, click the **Sort** drop-down list 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.

Add a Task to a Document

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.

1. From your open document, click the **Tasks** tab.
2. Enter field information.

Tasks Tab Toolbar

| Button | Description |
|--------------|---|
| Add | Click this button to display a drop-down list containing the following options. |
| Add New | Select this option to add a new task. See 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 document. See 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. |
| 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 Forward a Report , and Export Report and Dashboard Data . For information about other options, see How You Change Report Formatting . |

How Templates Work

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. See [Create a Template](#).

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.

In certain cases, you may be better off using a snippet. Consider the following when deciding whether to use templates.

- 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 B2C Service to reflect the edits. This occurs even if the mailing has already been sent and the RNM_MOD_SENT_DOCS configuration 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 effectiveness of the mailing.

- 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 [Create a Snippet](#).
- Another alternative to using templates is to store your design in an HTML file outside of B2C Service and then upload it when you create your mailing or survey. See [Upload HTML Content](#).

If you need to update a template that has been applied to a document, you can click Info on the Home tab ribbon to display the template ID. You can then search for the template in the Templates explorer by clicking Find on the ribbon and selecting ID from the Find Using drop-down list. See [Find a Document](#).

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 [Overview of Creating Custom 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 [How You Customize Surveys for Use on Mobile Devices](#).

Create a Template

Templates are used to standardize the design of the headers and footers of your documents. 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.

1. Click **Content Library** on the navigation pane.
2. Double-click **Templates Explorer**.
The Templates explorer opens on the content pane.
3. Click **New**.
A new template opens on the content pane.

Tip: You can also create a template from an open template by clicking New. Additionally, if your navigation set is configured to add templates from the file menu, click **File > Content Library > Template**.

4. To create the template from scratch, click **Begin with Blank Content**.

The HTML editor opens. 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 *How the HTML Editor Works*.

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 **OK** to add the content to your template.

After uploading your HTML, you must insert the placeholder by clicking **Content Placeholder** in the toolbox.

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 **Open**.

The HTML is inserted in your template.

After uploading your HTML, you must insert the placeholder by clicking **Content Placeholder** in the toolbox.

7. To spell check the template, click **Spelling** on the ribbon.

8. Click **Save**.

The **Save As** window opens.

9. Select the folder you want to save the template in and type the name of the template in the **Name** field.

10. Click **Save**.

Related Topics

- [How Templates Work](#)
- [Configure the File Menu](#)

How Snippets Work

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 B2C Service and then upload it when you create your mailing or survey. See *Upload HTML Content*.

Create a Snippet

Snippets are small pieces of commonly used content that can be inserted into your content.

1. Click **Content Library** on the navigation pane.
2. Double-click **Snippets Explorer**.
The Snippets explorer opens on the content pane.
3. Click **New**.

Tip: You can also create a snippet from an open snippet by clicking New. Additionally, if your navigation set is configured to add snippets from the file menu, click **File > Content Library > Snippet**. See [Configure the File Menu](#).

A new snippet opens on the content pane.

By default, the snippet type is HTML. You can also create plain text snippets. See [Create a Text Snippet](#).

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 [How the HTML Editor Works](#).
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 **OK** 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 **OK** to insert the HTML into your snippet.
7. To spell check the snippet, click **Spelling** on the ribbon.
8. Click **Save**.
The **Save As** window opens.
9. Select the folder you want to save the snippet in and enter the name of the snippet in the **Name** field.
10. Click **Save**.

Related Topics

- [How Snippets Work](#)

Create a Text Snippet

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.

1. From the Snippets explorer, click **New**.
A new snippet opens on the content pane.

Tip: You can also create a snippet from an open snippet by clicking New. Additionally, if your navigation set is configured to add snippets from the file menu, click **File > Content Library > Snippet**. See [Configure the File Menu](#).

2. Click **Change** in the Current Snippet Type section.

The **Snippet Type** window opens on the content pane.

Note: You can also change to a text snippet while creating an HTML snippet by clicking **Switch to Text Mode** in the **Tasks** section of the HTML editor.

3. Select **Text Snippet**.

4. Click **OK**.

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 *How You Create and Edit Text-Only Messages*.

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 **OK** 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 **Open** to insert the converted HTML in the snippet.

8. Click **Save**.

Related Topics

- [How Snippets Work](#)

Add a Tracked Link

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 and through analytics. See *View Mailing Results*.

After you have added tracked links to your system, they can be inserted in documents, templates, or snippets. See *Insert a Tracked Link*. Tracked links can also be inserted in several of the standard system-generated contact email messages. See *How You Customize Messages*. Adding tracked links to your contact emails are especially useful in tracking your customer-facing incident responses. See *Incident Response Tracking*.

Note: Due to the volume of tracked links that accumulate 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 removed from the database. The default value is 30 days. To turn off tracked link purging, set the value to 0.

1. Click **Content Library** on the navigation pane.

2. Double-click **Tracked Links Explorer**.

The Tracked Links explorer opens on the content pane.



3. Click **New**.

Tip: You can also create a tracked link from an open tracked link by clicking **New**. Additionally, if your navigation set is configured to add tracked links from the file menu, click **File > Content Library > Tracked Link**. See [Overview of Navigation Sets](#).

A new tracked link opens on the content pane.

4. Enter field information.

Tracked Links Explorer

| Field | Description |
|---|---|
| URL | Enter the full URL of the tracked link in this field. |
|  Open URL | Click this icon to open the URL. |
|  Merge Field | Click this icon 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 B2C Service. |
| Category | Click this drop-down list and select a category to associate with the link. See Add or Edit a Tracked Link Category . |
| Description | Enter 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** icon.

- 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 **OK** to append the field to the URL.

6. To spell check the tracked link description, click **Spelling** on the ribbon.

7. Click **Save**.

The **Save As** window opens.

8. Select the folder you want to save the tracked link in and enter the name of the tracked link in the **Name** field.

9. Click **Save**.

Add a File

You can add files to your system that can be viewed by contacts who receive your mailings and surveys. After your files are added, you can use them as many times as you want.

Links to the files can be inserted in documents, templates, and snippets as a link. As a best practice, always include an unsubscribe link to give your contacts the option of opting out of future mailings and surveys. See [Insert an Unsubscribe Link](#).

Note: Certain practical limitations exist that restrict the size of files that can be uploaded to B2C Service. See [Answer ID 280](#) on our support site.

1. Click **Content Library** on the navigation pane.
2. Double-click **File Attachments Explorer**.
The File Attachments explorer opens on the content pane.
3. Click **New**.

Tip: You can also add files from an open file by clicking New. Additionally, if your navigation set is configured to add files from the file menu, click **File > Content Library > File**. See [Overview of Navigation Sets](#).

A new file opens on the content pane.

4. Enter field information.

File Attachments Explorer

| Field | Description |
|--------------------------|--|
| *File | Enter the full path name to the file you want to upload in this field or click Browse 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 | Enter 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 **Spelling** on the ribbon.
6. Click **Save**.
The **Save As** window opens.
7. Select the folder you want to save the file in and enter the name of the file in the **Name** field.

8. Click **Save**.

How the HTML Editor Works

When creating content for use in mailings, surveys, message templates, or answers, you can add HTML using an HTML editor built into the system.

The HTML editor for answers is different from the HTML editor used for mailings, surveys, and message templates. The information in this section pertains to the HTML editor for mailings, surveys, and message templates. For details about the HTML editor for answers see .

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. See .

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 and .

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.

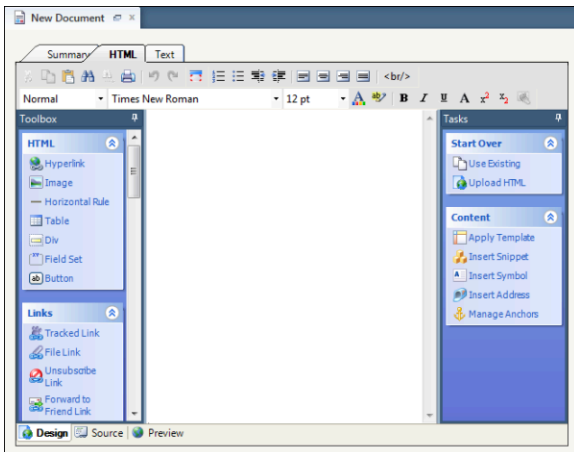
The links and dynamic content elements that display on the HTML editor are context-sensitive and depend on what type of content you are creating.

Related Topics

How You Add HTML in Design Mode

B2C Service contains an HTML editor for creating dynamic content.

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 as this image shows. The links and dynamic content elements that display on the HTML editor are context-sensitive and depend on what type of content you are creating.



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. Otherwise, only source mode is available. See , , and .

Links appear as clickable text when the document is used in a message, 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 found 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 message, mailing, or survey template. See .

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 applicier

Additional functions are accessed through the Toolbox and Tasks sections. In the Toolbox section, there are HTML, Links, and Dynamic Content sections. When creating documents in Outreach and Feedback, there is also a Forms section. In the Tasks section, there are Start Over and Content sections. For detailed information about these functions, see the Toolbox Section and Tasks Section tables here: .

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.

Links and Dynamic Content Elements

You can add several types of links and dynamic content elements to your content. When an element is added, you have the option of defining certain attributes depending on the type of element.

Links appear as clickable text when the content is used in a message, mailing, or survey. The tools displayed on the HTML editor are context sensitive and are the logical tools you would use for the specific content you are creating.

Links and dynamic content elements are found in the Toolbox and Tasks sections of the HTML editor. 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 options.

Tip: You can insert HTML by clicking any button in the Toolbox or Tasks section, or by dragging and dropping the button to a specific location on the canvas.

Toolbox Section

| 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 . |
| Image | Click this button to insert an image. See . |
| Horizontal Rule | Click this button to insert a horizontal line. |
| Table | Click this button to insert a table. See . |
| 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 . |

| Button | Description |
|--------------------------------|---|
| Agent Browser UI Incident Link | Click this button to insert a link to the incident that triggered the sent message so that agents can access the incident on the Agent Browser User Interface. See . |
| Answer Link | Click this button to insert a link to any answer you specify. See . This button is available only in message templates. See . |
| Browser Link | Click this button to insert a browser link. See . |
| Chat Link | Click this button to insert a link to the Live Help page on the customer portal. See . This button is available only if Chat is enabled. |
| Cloud Link | Click this button to insert a link to a social media service. See . |
| Customer Portal Incident Link | Click this button to insert a link to the incident that triggered the sent message. 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 Customer Portal Incident Link to your Question Receipt message template, you can provide your customers with easy access to the incident created from their question. See . |
| File Link | Click this button to insert a file link. See . |
| Forward to Friend Link | Click this button to insert a link, which allows your customer to forward a copy of the mailing or survey to friend. See . |
| Incident Link | Click this button to insert a link to any incident you specify. See . |
| Profile Link | Click this button to insert a link to the Account Settings page on your customer portal. See . |
| 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 . This button is available only in message templates. See . |
| 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 . This button is available only in message templates. See . |

| Button | Description |
|------------------------------|---|
| Reset Password | Click this button to insert a reset password link. See . |
| Setup Password | Click this button to insert a link to the Finish Account Creation page on your customer portal. See . |
| Survey Link | Click this button to insert a link to a survey. See . |
| Survey Results Link | <p>This button is included, by default, on the Survey Notification message template and links to a web page that shows the survey responses. See .</p> <p>This button is available only in message templates. See .</p> |
| This Answer Link | <p>Click this button to insert a link to the incident that triggered the sent message. See .</p> <p>This button is available only in message templates. See .</p> |
| This Discussion Link | <p>Click this button to insert a link to the email discussion that triggered the sent message. See .</p> <p>This button is available only in message templates. See .</p> |
| Tracked Link | Click this button to insert a tracked link. See . |
| Unsubscribe All Answers Link | <p>Click this button to insert a link that lets contacts who receive answer notifications unsubscribe from future communications. See .</p> <p>This button is available only in message templates. See .</p> |
| Unsubscribe Link | Click this button to insert an unsubscribe link. See . |
| Unsubscribe This Answer Link | <p>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 .</p> <p>This button is available only on the Answer Update Notification message template. See .</p> |
| View Subscriptions Link | <p>Click this button to insert a link customers can use to edit their social notification subscriptions. See .</p> <p>This button is available only in message templates. See .</p> |
| Web Page Link | Click this button to insert a web page link. See . |

| Button | Description |
|---------------------|--|
| Forms | Buttons in this section are used to insert web forms and survey questions in your HTML. These buttons are available only for documents, templates, and snippets created in Outreach and Feedback. See . |
| Web Form | Click this button to insert a web form to collect customer data. Documents can contain only one web form. |
| Form Field | Click this button to insert a database field in the web form. Your web form must contain at least one form field. |
| Survey Question | Click this button to insert a survey question in the web form. |
| Submit Button | Click this button to insert a button for submitting the web form. |
| 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 . This button is available only in message templates. See . |
| Case Section | Click this button to add a case section to your conditional text. See . |
| Conditional Section | Click this button to insert a section of conditional text. See . |
| 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 . This button is available only for templates. For message templates, this button displays in 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 . |
| Merge Field | Click this button to insert a merge field. See . |
| Merge Report | Click this button to insert a merge report. See . |

Tasks Section

| Button | Description |
|----------------|---|
| Start Over | Buttons in this section are used to clear all HTML content and allow users to 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 | <p>Click this button to select a template to apply to a document. You cannot apply a template to templates or snippets. See .</p> <p>After 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.</p> |
| Insert Snippet | Click this button to insert a snippet. See . |
| Insert Symbol | Click this button to insert a special symbol. A symbol map opens. Double-click the symbol you want to insert. |
| Insert Address | <p>Click this button to insert a physical address. See .</p> <p>Note: The CAN-SPAM Act of 2003 requires that commercial email messages contain the sender's valid physical postal address.</p> |
| Manage Anchors | Click this button to add or remove an anchor or go to an anchored site. See . |
| Test CAN-SPAM | <p>Click this button to test the document for CAN-SPAM compliance. See .</p> <p>This button is available only when editing a document in a mailing message or survey invitation message.</p> |

Add HTML in Source Mode

The HTML editor contains an option to create your documents using HTML code. You can enter HTML code directly in the editor to create your content.

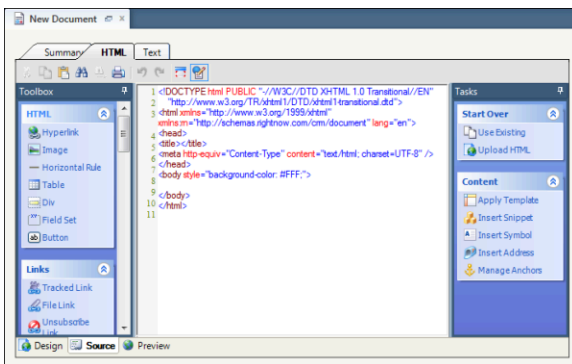
The editor displays your code using colored text to indicate structure and syntax. There are additional functions available that you can access through the Toolbox and Tasks sections. The links and dynamic content elements that

display on the HTML editor are context-sensitive and depend on what type of content you are creating. When you save, 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**).

Click the **Source** tab at the bottom of the HTML editor.

Source mode automatically places the cursor after the opening `<body>` tag. This image shows the HTML editor in source mode with the HTML tab selected.



The Source tab has a toolbar and a section for entering 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 .

Additional functions are accessed through the Toolbox and Tasks sections. 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. For detailed information about these functions, see the Toolbox Section and Tasks Section tables in .

How You Can Use Dynamic Content

In addition to HTML, B2C Service 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.

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 | <ul style="list-style-type: none"> Text fields such as email, first_name, last_name, or any custom field of type text field, text area, or integer. drop-down lists such as country, province, or any custom field of type menu, date, or date time. |
| onblur | <ul style="list-style-type: none"> Text fields such as email, first_name, last_name, or any custom field of type text field, text area, or integer. drop-down lists such as country, province, or any custom field of type menu, date, or date time. Options and check boxes such as opt-in fields, or any custom field of type opt-in or yes/no. |
| onfocus | <ul style="list-style-type: none"> Text fields such as email, first_name, last_name, or any custom field of type text field, text area, or integer. drop-down lists such as country, province, or any custom field of type menu, date, or date time. Options and check boxes such as opt-in fields, or any custom field of type opt-in or yes/no. |
| onclick | <ul style="list-style-type: none"> Text fields such as email, first_name, last_name, or any custom field of type text field, text area, or integer. drop-down lists such as country, province, or any custom field of type menu, date, or date time. Options 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. |

How You Create and Edit Text-Only Messages

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 , 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

Additional functions are accessed through the Toolbox and Tasks sections.

Toolbox and Tasks Sections

| 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 . |
| Agent Browser UI Incident Link | Inserts a link to the incident that triggered the sent message so that agents can access the incident from the Agent Browser User Interface. See . |
| Answer Link | Click this button to insert a link to any answer you specify. See . This button is available only in message templates. See . |
| Browser Link | Click this button to insert a browser link. See . |
| Chat Link | Click this button to insert a link to the Live Help page on the customer portal. See . This button is available only if Chat is enabled. |
| Cloud Link | Click this button to insert a link to a social media service. See . |
| Customer Portal Incident Link | Click this button to insert a link to the incident that triggered the sent message. 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 Customer Portal Incident Link to your Question Receipt message template, you can provide your customers with easy access to the incident created from their question. See . |
| File Link | Click this button to insert a file link. See . |
| Forward to Friend Link | Click this button to insert a forward to friend link. See . |
| Incident Link | Click this button to insert a link to any incident you specify. See . |
| Profile Link | Click this button to insert a link to the Account Settings page on your customer portal. See . |
| Reset Password | Click this button to insert a reset password link. See . |
| Setup Password | Click this button to insert a link to the Finish Account Creation page on your customer portal. See . |
| Survey Link | Click this button to insert a link to an existing survey. See . |
| This Answer Link | Click this button to insert a link to the incident that triggered the sent message. See . |
| This Discussion Link | Click this button to insert a link to the email discussion that triggered the sent message. See . This button is available only in message templates. See . |

| Button | Description |
|------------------------------|--|
| Tracked Link | Click this button to insert a tracked link. See . |
| Unsubscribe All Answers Link | Click this button to insert a link that lets contacts who receive answer notifications unsubscribe from future communications. See . This button is available only in message templates. See . |
| Unsubscribe Link | Click this button to insert an unsubscribe link. See . |
| 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 . This button is available only on the Answer Update Notification message template. See . |
| View Subscriptions Link | Click this button to insert a link customers can use to update the list of social notifications they are subscribed to. See . This button is available only in message templates. See . |
| Web Page Link | Click this button to insert a web page link. See . |
| 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 . This button is available only in message templates. See . |
| Case Section | Click this button to add a case section to your conditional text. See . |
| Conditional Section | Click this button to insert a section of conditional text. See . |
| Incident Thread | Click this button to insert an incident thread that displays all communication between the parties associated with the message. See . |
| Merge Field | Click this button to insert a merge field. See . |
| Merge Report | Click this button to insert a merge report. See . |
| 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 . |
| Content | Buttons in this section are used to insert snippets and symbols. |
| Insert Snippet | Click this button to insert a snippet. See . |

| Button | Description |
|----------------|---|
| 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 . <div style="border-left: 2px solid orange; padding-left: 10px;"> <p>Note: The CAN-SPAM Act of 2003 requires that commercial email messages contain the sender's valid physical postal address.</p> </div> |

Preview Content

You can preview the HTML and text versions of your content. The content displays as customers will see it in their email client or on a web page.

1. Click the **Preview** tab at the bottom of the HTML editor.
2. To see how your dynamic content displays, either by incident or contact, click the **Search** icon 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.

Prefill 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 [Edit Serve Web Page Attributes](#).

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 B2C Service browser cookie, click the **User Identification** tab.
 - a. Select **Other Credentials**.
 - 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 **Copy URL**.
 - 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 Launch 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 address field.
8. Append parameters to the URL to define which fields you want to prefill. See [How You Append 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 address field and publish the link to your designated external sources.

Related Topics

- [Insert a Web Form](#)

How You Append 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 the same time 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 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>
```

Default Contact Fields and Corresponding 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 |

| 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 **Configuration** on the navigation pane, expand **Database**, and then double-click **Data Dictionary**.

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 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 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 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 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 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 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 the same time by appending multiple parameters to a single URL, separated by slashes. This image 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 the information originates from a human rather than a bot (an automated software program) being run for malicious purposes.

B2C Service 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. After 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.

External Suppression List

Overview of the External Suppression List

In addition to the global suppression list applied across all B2C Service sites, you can use the external suppression list to define a site-specific 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 both the global and external suppression lists and email is not sent to contacts with an email address on either 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: The global suppression list supplements your site-specific external suppression list to exclude a list of known SPAM addresses and invalid (or mistyped) domains. Although the external suppression list is honored by default, you can configure individual surveys and mailings to ignore the external suppression list and send to all audience members instead. Keep in mind that the global suppression list is always honored. See [Define the Broadcast Mailing Audience](#) and [Define the Broadcast Survey Audience](#).

Create or Edit an 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Outreach**, and then double-click **External Suppression List**.
The External Suppression List editor displays on the content pane.

- To append a list of addresses to the external suppression list, click **Append to List** on the ribbon. A window opens to let you browse to the folder that contains the file you want to append.

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, see [Answer ID 280](#) on our support site.

- Select the .txt file you want to append or type its path and name in the **File Name** field.
 - Click **Open**.
A message lets you know that the upload was successful.
 - Click **OK**.
 - Click the **Search** icon to the right of the Search the External Suppression List field.
The email addresses in the file display in the Records Found section.
- To add an individual email address to the external suppression list, enter the email address in the **Add to the External Suppression List**.
 - Click the **Add Email** icon to the right of the field.
 - Click the **Search** icon to the right of the Search the External Suppression List field.
The new email address displays in the Records Found section.
 - To replace the existing suppression list with a different list, click **Replace List** on the ribbon. A window opens to let you browse to the folder that contains the file you want to replace the list with.
 - Select the .txt file you want to replace the existing list or type its path and name in the **File Name** field.
 - Click **Open**. A message asks you to confirm that you want to replace the list.
 - Click **Yes** to confirm.
 - Click the **Search** icon 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.
 - To delete individual email addresses in the external suppression list, search for the addresses you want to delete. See [Search the External Suppression List](#).
 - Select the check box next to each email address you want to delete.
 - Click **Delete** on the ribbon. A message asks you to confirm that you want to delete the selected addresses.
 - Click **Yes** to confirm.
The Records Found section is refreshed to remove the addresses you deleted.
 - To delete all email addresses in the external suppression list, click **Delete All** on the ribbon. A message asks you to confirm.
 - Click **Yes** to confirm.
A message lets you know all email addresses were successfully deleted.
 - Click **OK**.

Search 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.

- Click **Configuration** on the navigation pane.
- Expand **Outreach**, and then double-click **External Suppression List**.
The editor displays on the content pane.

3. Select the type of search you want from the **Like** drop-down list.

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. Enter your search term in the text field. Leave this field blank to return all email addresses in the list.
5. Click **Search**.
The number of matching records and the returned email addresses display in the Records Found section.
6. To select one or more email addresses to remove from the external suppression list, do one of the following:
 - o Select the check box next to each email address.
 - o Select the **Select All** check box if you want to remove all of the addresses in the Records Found field.

Download the External Suppression List

You can download your external suppression list and save it to a text file on your local workstation.

1. Click **Configuration** on the navigation pane.
2. Expand **Outreach**, and then double-click **External Suppression List**.
The editor displays on the content pane.
3. Click **Download List** on the ribbon.
A window opens where you can browse to the folder where you want to save the file.
4. Enter the file name in the **File Name** field or select an existing file to overwrite it.
5. Click **Save**.
A confirmation message lets you know the download was successful and asks if you want to open the file.
6. Click **Yes** or **No** to close the download confirmation.
If you click Yes, the file opens.

Outreach Mailings

Overview of Mailings

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 the same time or at different 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.

Related Topics

- [Overview of Audiences](#)
- [Overview of Content Library](#)
- [Define the Broadcast Mailing Audience](#)
- [Define the Transactional Mailing Audience](#)

How Mailings Work

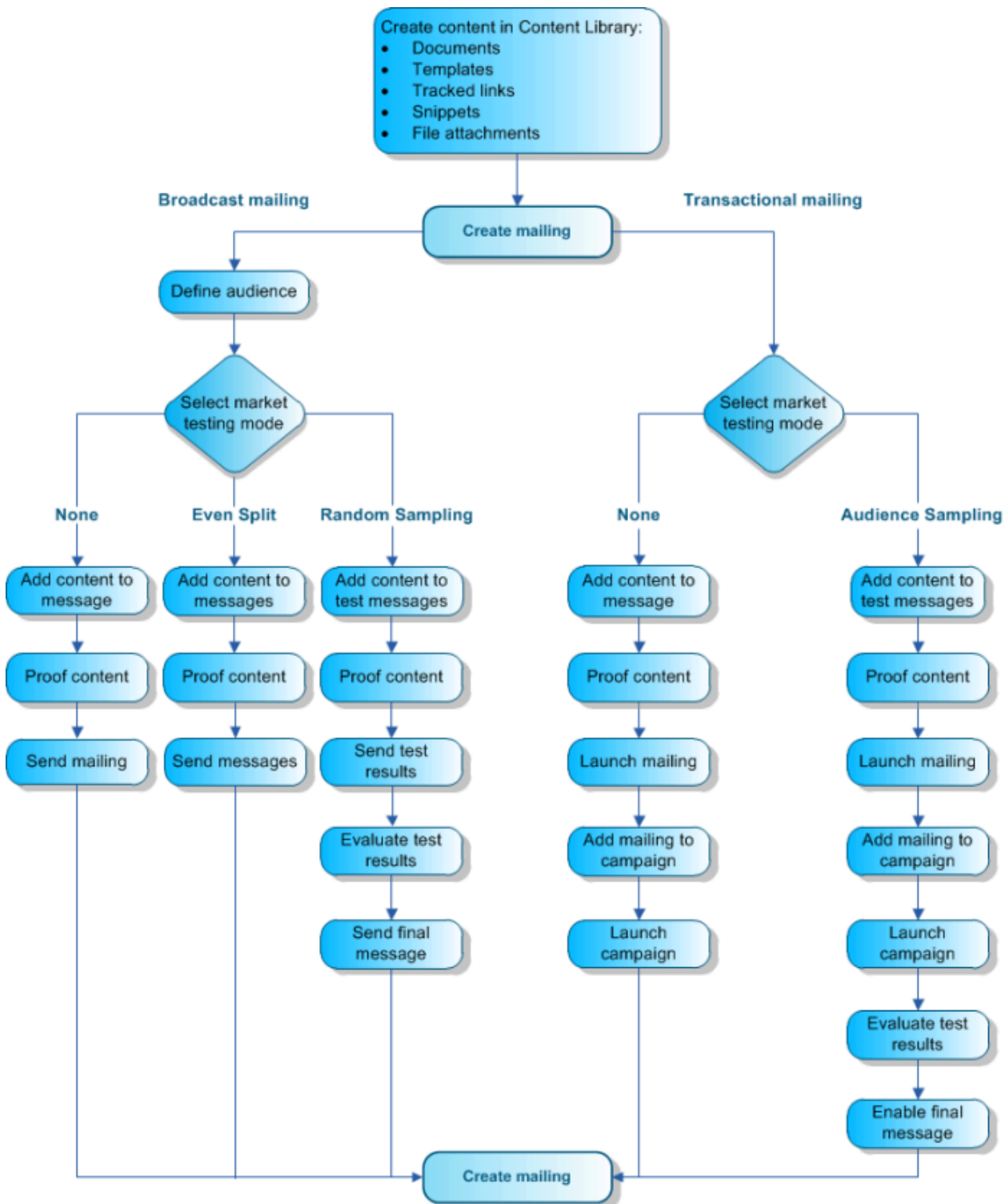
You can target and email different groups of your customers. When you create a mailing, you define the content of the message and the group of customers who will receive it.

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.

This flowchart shows how the processes for creating and sending a broadcast mailing are different from a transactional 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.

1. Click **Mailings** on the navigation pane and double-click **Mailings Explorer**.
The Mailings explorer opens on the content pane.
2. Click **New**.
A new mailing opens on the content pane.
Tip: You can also create a mailing from an open mailing by clicking New. Additionally, if your navigation set is configured to add mailings from the file menu, click **File > Mailing**. See *Overview of Navigation Sets*.
3. To create a broadcast mailing (the mailing method selected by default), see *Create a Broadcast Mailing*.
4. To change to a transactional mailing, see *Change the Mailing Method*. Then, to create the transactional mailing, see *Create a Transactional Mailing*.

Related Topics

- [Overview of Audiences](#)
- [Overview of Content Library](#)
- [Define the Broadcast Mailing Audience](#)

Mailing Delivery Statuses

Delivery status indicates the current state of the mailing as it progresses through the distribution process.

Your broadcast and transactional mailings must follow certain steps that are defined by the mailing delivery status.

This 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.

Broadcast and Transactional Mailing Delivery Statuses

| 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 un schedules 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 on the Delivery tab. A launched mailing cannot be edited. However, you can suspend the mailing message, make edits, and then re-launch it. See <i>Suspend a Transactional Mailing</i> . |
| 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 Send Now. |

| Status | Survey Type | Description |
|--------------------|----------------------------|--|
| Sending | Broadcast | This status indicates a mailing is currently being sent to customers. The system automatically sets the mailing status to Sending after the mailing is done preparing to send or at the date and time the mailing is scheduled to send. |
| 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 Suspend 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 Cancel Mailing on the Delivery tab. 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 status to Completed from the Sending status. |

Related Topics

- [Access Broadcast Mailing Delivery Options](#)
- [Access Transactional Delivery Options for Mailings](#)

Mailing Management

When creating or editing a mailing, the Summary tab provides a variety of mailing management functions, including changing the mailing method, adding notes, and adding tasks.

- 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.

Related Topics

- [Overview of Standard Workspaces](#)

Change the Mailing Method

After you create a mailing, you can change its mailing method type.

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*.

1. On the Summary tab of an open mailing, click **Change** next to Mailing Method.
The **Select Mailing Method** window opens.
2. Select **Broadcast** or **Transactional**.
3. Click **OK**.

Results:

The mailing changes to the method you selected.

Add a Note to a Document, Mailing, or Survey

You can use notes to provide additional information about the content that can be viewed by staff members as they are working with the document, mailing or survey.

1. On the Summary tab of an open document, mailing, or survey, click the **Notes** tab.
2. Click **Add**.
3. Enter the note text in the text field.
4. To sort the notes by ascending or descending date, click the **Sort** drop-down list 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.

Add a Task to a Mailing

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.

1. On the Summary tab of an open mailing, click the **Tasks** tab.
2. Enter field information.

Tasks Tab Toolbar

| Button | Description |
|--------------|---|
| Add | Click this button to display a drop-down list containing the following options. |
| Add New | Select this option to add a task. |
| 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. |
| 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 permanently delete the task. |
| Remove | Click this button to remove the selected task from the mailing (without deleting the task). |

| Button | Description |
|----------|--|
| 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 <i>How You Change Report Formatting</i> for information about other options, such as Auto Filter, Slice, Cross Tab, and Rollups. |

Related Topics

- [Overview of Common Functionality](#)
- [Add a Task](#)
- [Search for a Task from an Open Record](#)

Create a Broadcast Mailing

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 *Create a Document*. You can also choose to market test your mailing by sending different message content to subsections of your audience.

Note: The delivery of broadcast mailings can be impaired by factors beyond the scope of Outreach. Contact your account manager for steps you can take to optimize your message delivery and to improve delivery and participation rates.

1. From the Mailings explorer, click **New**.

A new broadcast mailing opens on the content pane.

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 mailing notes, tasks, and attachments. As you create the mailing, you move through each tab to complete the mailing 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 *Add a Custom Tab to Mailings*.

- 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 list and select the staff member.

Tip: Wildcards are supported when searching staff members. You can search strings that include a space by entering `%+space+character`, which is helpful when searching last names. For example, entering `%+space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so entering `b` in the Find field returns all items containing the letter b.

- To search for a staff member, enter the staff member's name in the **Find** field.
- 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.
 - Click the links in the At a Glance section to perform common mailing functions.

At a Glance Section

| Field | Description |
|-----------------|--|
| Mailing Method | This field displays the mailing method currently selected for the mailing. Click Change to change the method. See Mailing Management . |
| Market Testing | This field displays the market testing mode of the mailing. Click Change to change market testing modes. See Activate 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. See View Audience Count Details in Mailings . |
| 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 Send a Proof . |
| Delivery Status | This field displays the delivery status of the mailing and the number of emails sent and delivered. See Access Broadcast Mailing Delivery Options . |

- Click the **Audience** tab to define an audience for the mailing.
- Click the **Message** tab to create the email sent to the mailing audience. See [Create a Message in Broadcast Mailings](#).
- Click the **Proofing** tab to send a proof of the mailing for internal review before sending it to the entire audience.
- Click the **Delivery** tab to select delivery options.
- Click the **Results** tab to view the report associated with the mailing. See [View Mailing Results](#).

Note: If your application is configured with custom tabs for mailings, they display after the Results tab.

- To spell check the mailing, click **Spelling**.
- Click **Save**.
The **Save As** window opens.
- Select the folder you want to save the mailing in and enter the name of the mailing in the **Name** field.
- Click **Save**.

Define the Broadcast Mailing Audience

You specify the audience your broadcast 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 [Overview of Audiences](#).

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 see [Add a Contact List](#).
 - b. Select the list you want to include in the mailing audience and click **OK**.
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 see [Create a Segment](#).
 - b. Select the segment you want to include in the mailing audience and click **OK**.
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 audience and click **OK**.
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 audience and click **OK**.
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 [How Contact Lists Work](#).
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 to set communication options.

Options Section

| 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 . The minimum you can enter is 2 in the last 1 day. The maximum number of days you can enter is 90. |

| Field | Description |
|--|---|
| | <p>Tip: To ensure contacts receive only 1 email every “x” number of days, use the Limit recency of communication setting described in the next entry.</p> |
| Limit recency of communication | <p>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.</p> <p>The maximum number of days you can enter is 90. The default value is 1 day.</p> <p>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.</p> |
| Honor external suppression list | <p>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 Overview of the External Suppression List.</p> |
| Limit delivery to a randomly selected subset of the audience | <p>Select this check box to send the mailing to a subset of the audience. Enter a percentage or use the up and down arrows to select a percentage of the audience to send the mailing to.</p> |
| Allow delivery of messages to multiple contacts sharing the same email address | <p>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.</p> <p>This option is available only when email address sharing is enabled. See Email Address Sharing.</p> <p>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.</p> |
| Exclude from audience if previously sent | <p>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 Add or Edit a Recurring Schedule for a Broadcast Mailing.</p> |

9. To count the number of contacts who will receive the mailing, click **Refresh** in the Current Count section. After the audience has been counted, the last count also displays in this section.

10. To view the details of an audience count, click **Details** in the Current Count section after the count has been performed.

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 the *Options Section* table in the procedure about defining your audience.

- 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.)

View 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.

Before you start

You must count your audience before you can view audience count details.

Here's what to do

Do one of the following:

- From the Summary tab, click **Details** next to Audience Count.
- From the Audience tab, click **Details** next to Current Count.

| 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 |

The Audience Count Details window opens.

Audience Count Details Window

| 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. |

| Column | Description |
|----------------------|--|
| 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 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. This option is available only when email address sharing is enabled. See Email Address Sharing . |
| Suppression | Lists the number of email addresses that are excluded from the mailing because they are part of the external or global suppression list. |
| 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. |
| 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. |

Note: 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 global suppression list
- Contacts in the external suppression list
- Contacts filtered by recency settings
- Contacts filtered by frequency settings

Create a 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.

1. From an open mailing, click the **Message** tab.
 2. To activate market testing, click the information bar (above the From address field) and select **Change Market Testing Mode**. See *Activate 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 *Customize the Mailing Message Header*.
 4. Enter the subject of the message in the **Subject** field.
For the best practice on creating effective subject lines, see *Ensuring that contacts read your message*.
 5. To add a merge field to the subject, click the **Merge Field** icon (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 see *How the HTML Editor Works*.
 7. To create an HTML message by using an existing document, click **Choose Existing Content** and see *Insert Existing Content*.
 8. To create an HTML message by uploading your own HTML page, click **Upload HTML Content** and see *Upload HTML Content*.
 9. To create a text version of the message, click the **Text** tab.
 10. To create a text message from scratch, click **Begin with Blank Content** and see *How the HTML Editor Works*.
 11. To create a text message by copying an existing document, click **Choose Existing Content**.
 12. To create a text message by converting an HTML page to text, click **Convert HTML Content** and see *Convert 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*.
13. To add URL parameters, enter any parameters you want to append to the links in your message (for example, p1=v1&p2=v2) in the **URL Parameters** field.
 14. To add a merge field to the URL parameters, click the **Merge Field** icon to the right of the URL Parameters field and select the field. See *Insert a Merge Field to a URL Parameter*.

Customize the Mailing Message Header

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.


By default, Outreach uses the name and email addresses specified in the outgoing email settings of your default Outreach mailbox. 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.

Note: 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 B2C Service, your mail administrator must configure SMTP forwarding from that mail account to an account configured in B2C Service. See [How Mailboxes Work](#).

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 the outgoing email settings of your Outreach mailbox even if the message header is customized using the following procedure. See [Email Bounce Handling](#).

1. On the Message tab of an open mailing, click **Edit** next to the From field.
The **Customize From and Reply-To Headers** window opens.
2. Enter field information.

Customize From and Reply-To Headers Window

| Field | Description |
|---|--|
| Mailbox | Click this drop-down list and select a mailbox to change the mailbox from the default. See How Email Works in Outreach and Feedback . |
| From | Enter the name and email address that you want the message to appear from in the From text boxes. |
| Name | Enter the name you want the message to appear from. |
| *Email Address | Enter the email address you want the message to appear from. |
| Reply-To | Enter the name and email address that you want the message to reply to in the Reply-To text boxes. |
| Name | Enter the name you want to appear as the reply-to address. |
| *Email Address | Enter the email address you want to appear as the reply-to address. 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 outgoing emails settings of your mailbox. See the descriptions for outgoing email settings in Edit an Oracle-Managed Service Mailbox as well as Answer ID 1272 on our support site. |
|  Merge Field | Click this icon 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 **OK**.

Related Topics

- [Overview of Email Management](#)
- [Best Practices for Using Branded Email Domains](#)

Best Practices for Using Branded Email Domains

Using email addresses branded with your company 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 these 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. B2C Service supports two forms of authentication.
 - o 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.
 - o 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.

Insert Existing Content

As an alternative to creating a message from scratch, you can base your message on existing content. You can choose to copy content into your message and customize it, or share the content with other surveys and messages that use the document.

1. From the Message tab of a mailing or the Invitation Message tab of a survey, click **Choose Existing Content**. The **Choose Document** window opens.
2. Select the document you want to use and click **OK**. 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 **Share Content**.
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 **Copy Content**.
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 or 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 of the mailing or survey. See .

Upload HTML Content

You can upload an HTML file into your document, template, snippet, mailing or survey 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.

1. From the HTML tab of a document, the Message tab of a mailing, the Invitation Message tab of a survey, or from a new template or snippet, click **Upload HTML Content**.
2. Select the HTML file you want to upload.
3. Click **Open**.

Results:

The HTML is inserted in your message.

Convert 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.

You should finalize your HTML content before converting it to text.

1. From the Message tab of an open mailing or the Invitation Message tab of an open survey, click the **Text** tab and then click **Convert HTML Content**.

The **HTML to Text** window opens.

2. To convert the HTML message to text, select **HTML Part**.
3. To convert an HTML file to text, select the **File On Disk** and browse for the file.
4. Click **OK**.

Results:

The converted HTML is added to the text part of your message.

Activate 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.

For broadcast mailings, market testing is available in two modes: even split and random sampling.

- 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.

By default, the Message tab is set up without market testing. This means you create and send only one message with the mailing.

1. On the Message tab of an open mailing, click the information bar (above the From address field) and select **Change Market Testing Mode**.

You can also access this window on the Summary tab by clicking **Change** next to Market Testing.

The **Select Market Testing Mode** window opens.

2. To send test messages to equal portions of your audience, select **Even Split**. See *Create Messages in Even Split Mode*.
3. To send test messages to a percentage of your audience, select **Random Sampling**. See *Create Messages in Random Sampling Mode*.
4. To disable market testing, select **None**.

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 **OK**.

Create 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.

1. From the Select Market Testing Mode window, select **Even Split** and click **OK**.

The Message tab (mailings) or the Invitation Message tab (surveys) displays in even split mode.

By default, one test message is sent to 100 percent of the audience. From here, you can add more messages, edit messages, send proofs, or view results. From here, you can also see information about each message.

Message Tab / Invitation Message Tab

| Column | Description |
|--------------|--|
| Name | This column displays the name of the message. |
| Subject | This column displays the email 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. |
| 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. Unsubscribe sets global opt-in in both Outreach and Feedback. See . |
| Replied | This column displays the number of times the mailing was replied to. |

2. Click **New** on the toolbar to add a second test message.
The **Edit Message** window opens.

3. Enter the name of the message in the **Name** field.
4. Enter the subject of the message in the **Subject** field on the Content tab. See and .
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 and .
6. To send a proof message, click the **Proofing** tab on the Edit Message window. See .
7. Click **OK** to save the message.
The new message is added to the Message tab (mailings) or the Invitation Message tab (surveys).
8. To open a message for editing, select the message and click **Open**.
9. To delete a message, select the message and click **Delete**.
10. To copy a message to create another test message, select the message and click **Copy**.

Note: 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 .

11. To send a proof of a message, select the message and click **Send Proof**.
12. To preview the content of a message, select the message and click **Preview**.
13. To refresh the message statistics, click **Refresh**.
14. To add URL parameters, enter 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** icon to the right of the URL Parameters field and select the field. See .

Create 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. After you evaluate the effectiveness of your test messages, you create a final message and send it.

For the best practice on how to handle scheduling, see *Scheduling Mailings and Surveys for Market Testing*.

1. From the Select Market Testing Mode window, select **Random Sampling** and click **OK**.
The Message tab (mailings) or Invitation Message tab (surveys) displays in random sampling mode.

By default, one test message is 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.

Message Tab / Invitation Message Tab

| Column | Description |
|---------|--|
| Name | This column displays the name of the message. |
| Subject | This column displays the email subject line for the message. |
| Status | This column displays the status of the message. See and . |

| Column | Description |
|--------------|--|
| 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. |
| 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. Unsubscribe sets global opt-in in both Outreach and Feedback. See . |
| Replied | This column displays the number of times the mailing was replied to. |

2. Click **New** on the toolbar to add a second message.
The **Edit Message** window opens.
3. Enter the name of the message in the **Name** field.
4. Enter 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 list.
The percentage of recipients is based on the number of contacts in the audience at the time the mailing is sent.
5. Enter the subject of the message in the **Subject** field on the Content tab. See .
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 and .
7. To send a proof message, click the **Proofing** tab on the Edit Message window. See .
8. Click the **Delivery** tab on the Edit Message window to define the delivery options for the message. See or .

Tip: 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 **OK** to save the test message.
The new message is added to the Message (mailings) or the Invitation Message (surveys) tab.
10. To open a message for editing, select the message and click **Open**.
11. To delete a message, select the message and click **Delete**.

Note: You cannot delete the final message.
12. To copy a message to create a new message, select the message and click **Copy**.
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 .
13. To send a proof of a message, select the message and click **Send Proof**.

14. To preview the content of a message, select the message and click **Preview**.
15. To refresh the message statistics, click **Refresh**.
16. To add URL parameters, enter 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** icon to the right of the URL Parameters field and select the field. See .
18. When 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 **Copy To Final**.
The message you selected is copied to the Final Message section of the Message tab (mailings) or the Invitation Message (surveys) tab.
 - b. Click **OK**.
 - c. Select the final message and click **Open**.
The **Edit Message** window opens.
 - d. Click the **Delivery** tab on the Edit Message window to define delivery options.

Send a Proof

An important step in creating a mailing or a survey is ensuring the content 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 .

After a reviewer has approved or rejected the proof, the assigned staff member will receive a Mailing Proof Response Notification or a Survey Proof Response Notification. Both notifications can be customized using message templates found in the Administrator Notifications message type under the Outreach or Feedback category respectively. See .

Proof surveys and mailings 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 after the mailing or survey has been sent, Outreach and Feedback does not retain data submitted from proof surveys. If you want to submit test responses without impacting specific statistics, you can copy the mailing or survey and test using the copy instead.

For the best practice about sending proofs, see [Send Proofs to Key Staff](#).

1. From an open mailing or survey, click the **Proofing** tab.
2. Click **Send Proof Message** to select proof recipients.
The Send Proof Message window opens.

Tip: 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 see .

4. Enter 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** icon (to the right of the Recipients field). The **Select Names** window opens.
 - a. Select a staff member, address, group, or proof list and click **To**.
 - b. To find a specific staff member, address, group, or proof list, enter the name in the **Type Name or Select From List** field.

The first item matching the letters you type is selected in the grid.
 - c. To import your contacts from the default Contacts folder in Outlook, select **Load Outlook Contacts**. This is useful for displaying contacts that are not included in . See .
 - d. Click **OK**.
6. Enter any comments you want to appear in the message in the **Comment** text box.
7. To spell check your comments, click the **Spell Check** icon (to the right of the Comment field).
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** icon next to the Preview Contact field on the bottom of the window. The **Contact Search** window opens.
 - a. Enter your search criteria in one or more of the available fields and click **Search**.

A list of contacts that match your search criteria displays in the grid below the search criteria fields.
 - b. Select a contact and click **Select**.

The Contact Search window closes and the contact name you selected populates the Preview Contact field on the Send Message Proof window.
9. Click **Send Proof Message**.

Accept or Reject a Proof Email

After you send a proof, the recipients can accept or reject the mailing or survey content.

The proof email automatically displays a link to a web page where the tester can accept or reject the content. The word "Proof:" is prepended to the message subject. The assigned staff member receives either a Mailing Proof Response Notification or a Survey Proof Response Notification every time a reviewer submits feedback.

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. Enter any comments related to the proof mailing or survey in the **Comments for Mailing Organizer** text box.
3. Do one of the following:
 - o To approve the mailing, click **Approve**.
 - o To reject the mailing, click **Reject**.

Results:

A message displays confirming your submission.

Proof Results

After 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 or 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.

Proofing Results

| Column | Description |
|-----------|--|
| Recipient | This column displays all recipients of the proof mailing or survey. |
| 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. |

Access Broadcast Mailing 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.

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 options for controlling the sending of the mailing. You can perform the following tasks from this section.

- Send a mailing—See *Send a Broadcast Mailing*.
- Schedule a mailing, Reschedule a mailing, and Cancel a mailing schedule—See *Schedule a Broadcast Mailing*.
- Mailing recurrence—See *Add or Edit a Recurring Schedule for a Broadcast Mailing*.
- Suspend a mailing—See *Suspend a Broadcast Mailing*.
- Cancel a mailing—See *Cancel a Broadcast Mailing*.

The Delivery Options section lets you set options related to sending the mailing. See *Send a Broadcast Mailing*.

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.

Delivery Checklist and Message Send History Sections

| 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 <i>Define the Broadcast Mailing Audience</i> . |
| Message Preview | This section contains a link to preview the message that is sent with the mailing. Click Preview to preview the message. |

| Section | Description |
|----------------------|---|
| 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 <i>Proof Results</i> . |
| 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 <i>Check Compliance from the Delivery Tab</i> . |
| 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. |

Send a Broadcast Mailing

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. After the mailing finishes sending, the status is Completed.

1. On the Delivery tab of an open mailing, enter field information in the Delivery Options section.

Delivery Options Section

| 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 list 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 **Send Now**.
3. Click **Yes** to confirm that you want to send the mailing.

The delivery status changes to Preparing to Send and you can see the delivery progress of the message along with the audience count.

Results:

When the mailing finishes sending, the status changes to Completed and the Delivery Status section displays the number of emails sent and delivered.

Schedule a Broadcast Mailing

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). When scheduled, the mailing sends automatically.

1. On the Delivery tab of an open mailing, enter field information in the Delivery Options section.

Delivery Options Section

| 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 list 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 **Schedule**.
The Confirm Schedule Mailing window opens.
3. Enter the date and time you want to send the mailing in the **Time to Send Mailing** field or click the calendar to open a calendar and select the date.
4. Click **OK**.
The Delivery Status section displays the time and date the mailing is scheduled to be sent.
5. To reschedule the mailing, click **Reschedule**.
6. To cancel a scheduled mailing, click **Unschedule**.

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.

Add or Edit a Recurring Schedule for a Broadcast Mailing

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.

Before setting a recurring schedule, you must first define the audience and the message subject and content. When recurrence has been set, you can click Suspend 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 runtime, 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 audit log along with a description of how many emails were sent.

1. From an open mailing, click the **Delivery** tab.
2. Click **Recurrence**.
The **Confirm Schedule Recurrence** window opens.
3. Enter field information.

Confirm Schedule Recurrence Window

| 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 option 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 option 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 option, a Recur drop-down list 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 | 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. |
| End | |
| Time to Send Mailing | Enter the time of day to begin sending the mailing. |

4. Click **OK** to save the recurrence settings and return to the Delivery tab.
5. To suspend the recurrence, click **Suspend**.
 - a. Click **OK** to confirm you want to suspend the recurrence.
After recurrence is suspended, you can click Recurrence 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 instance, sending a one-time offer to all contacts who have a birthday in the next month.

Related Topics

- [Audit Logs](#)

Suspend a Broadcast Mailing

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.

1. From the Delivery tab of an open mailing, click **Suspend**.
This button appears only when a mailing is in the process of being sent.
2. Click **Yes** to confirm suspending the mailing.

Results:

The status changes to Suspended and the Delivery Status section displays the number of audience members the mailing was already sent and delivered to.

Cancel a Broadcast Mailing

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.

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. Instead of canceling your mailing, you may want to consider temporarily suspending it. See [Suspend a Broadcast Mailing](#).

1. From the Delivery tab of an open mailing, click **Cancel Mailing**.
2. Click **Yes** to confirm that you want to cancel the mailing.

Results:

The delivery status changes to Canceled.

View 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.

Note: The email gateway must be activated in order for the Techmail utility to capture bounce data for analytics. See [Email Bounce Handling](#).

1. From an open mailing, click the **Results** tab.
The list of standard reports displays.
2. Select a report from the 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 **Go**.
The report opens on a new tab.
4. To view a definition of the report, including its tables, filters, and column descriptions, click **Definition** on the ribbon and select **View**. See [View a Report Definition](#).
5. To view the same report for a different mailing, select the mailing from the **Mailing** drop-down list at the top of the open report and then click **Search**.

Customize 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.

1. From the Results tab of an open mailing, click **Customize 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 **Add**.
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 (or part of 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 **Remove**.
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 **OK** to close the window and update the list.

Results:

Added reports display at the bottom of the list.

Create a Transactional Mailing

Transactional mailings let you send a mailing when an event occurs.

You can send the email as part of a campaign. 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.

1. From the Mailings explorer, click **New**.
A new broadcast mailing opens on the content pane.
2. Click **Change** in the Mailing Method section of the Summary tab.
The Select Mailing Method window opens.
3. Select **Transactional**.
4. Click **OK**.

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 mailing notes, tasks, and attachments. As you create the mailing, you move through each tab to complete the mailing 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 [Add a Custom Tab to Mailings](#).

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 list and select the staff member.
 - a. To search for a staff member, enter 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 entering `%+space+character`, which is helpful when searching last names. For example, entering `%+space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so entering `b` in the Find field returns all items containing the letter b.

6. Click the links in the At a Glance section to perform common mailing functions.

At a Glance Section

| Field | Description |
|-----------------|---|
| Mailing Method | This field displays the mailing method currently selected for the mailing. Click Change to change the method. |
| Market Testing | This field displays the market testing mode of the mailing. Click Change to change market testing modes. |
| 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. |
| Delivery Status | This field displays the delivery status of the mailing and the number of emails sent and delivered. |

7. Click the **Audience** tab to define an audience for the mailing. See *Define the Transactional Mailing Audience*.
8. Click the **Message** tab to create the email sent to the mailing audience. See *How Messages Work 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 *Send a Proof*.
10. Click the **Delivery** tab to select delivery options. See *Access Transactional Delivery Options for Mailings*.
11. Click the **Results** tab to view the report associated with the mailing. See *View Mailing Results*.
If your application is configured with custom tabs for mailings, they display after the Results tab.
12. To spell check the mailing, click **Spell Check** on the ribbon.
13. Click **Save**.
The Save As window opens where you can select the folder you want to save the mailing in and enter the name of the mailing in the **Name** field.
14. Click **Save**.

Related Topics

- [Business Rule Actions](#)
- [Mailing Management](#)
- [Edit Transactional Mailing Attributes](#)
- [Configure the File Menu](#)

Define the Transactional Mailing Audience

Even though your rules and campaigns determine which customers receive transaction mailings, 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 [Overview of Audiences](#).

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 see [Add a Contact List](#).
 - b. Select the list you want to exclude from the mailing audience and click **OK**.
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 new excluded segment, click **New Segment** and see [Create a Segment](#).
 - b. Select the segment you want to exclude from the mailing audience and click **OK**.
The segment is added to the Excluded grid. Contacts belonging to the segment will 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.
5. To remove a list or segment from the Excluded section, click **Remove** next to the list or segment name.
6. Enter field information to set communication options.

Options Section

| 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 . The minimum you can enter is 2 in the last 1 day. The maximum number of days you can enter is 90. |

| Field | Description |
|--|---|
| | <p>Tip: To ensure contacts receive only 1 email every “x” number of days, use the Limit recency of communication setting described in the next entry.</p> |
| Limit recency of communication | <p>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.</p> <p>The maximum number of days you can enter is 90. The default value is 1 day.</p> <p>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.</p> |
| Honor external suppression list | <p>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 Overview of the External Suppression List.</p> |
| Limit delivery to a randomly selected subset of the audience | <p>Select this check box to send the mailing to a random subset of the audience. Enter a percentage or use the up and down arrows to select a percentage of the audience to send the mailing to.</p> |
| Allow delivery of messages to multiple contacts sharing the same email address | <p>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.</p> <p>This option is available only when email address sharing is enabled. See Email Address Sharing.</p> <p>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.</p> |

How Messages Work 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 in transactional mailings follows the same procedure as creating a message in broadcast mailings. See [Create a Message in Broadcast Mailings](#).

Activate Market Testing in Transactional Mailings

When creating a transactional mailing, you can send a sample of test messages to portions of your audience before determining the best one to use as a final message. You can define different message content, designs, delivery, and proofing options for each version of your message.

For transactional mailings, market testing is available in audience sampling mode. If more than one message is created when market testing is used, then contacts who are sent the email through a campaign or rule will receive one of the

test messages. When the mailing is launched through a campaign, market testing rotates between the test messages. After you evaluate the effectiveness of your test messages, you create a final message.

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 **Audience Sampling**.

3. Click **OK**.

The Messages tab displays in audience sampling mode.

From here, you can add more messages, edit the messages, send proofs, or view results. You can also see information about each message.

Messages Tab

| Column | Description |
|--------------|--|
| Name | This column displays the name of the message. |
| Subject | This column displays the email subject line for the message. |
| Status | This column displays the delivery status of the message. |
| 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 Insert an Unsubscribe Link . |
| Replied | This column displays the number of times the mailing was replied to. |

4. Click **New** on the toolbar to add a second test message.

The **Edit Message** window opens.

5. Enter the name of the message in the **Name** field.

6. Enter the subject of the message in the **Subject** field on the Content tab. See [How Messages Work 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 [How the HTML Editor Works](#) and [How You Create and Edit Text-Only Messages](#).

8. To send a proof message, click the **Proofing** tab on the Edit Message window. See [Send a Proof](#).

9. Click the **Delivery** tab on the Edit Message window to access delivery options. See [Access Transactional Delivery Options for Mailings](#).

10. Click **OK**.

The new test message displays on the Messages tab.

11. To open a message for editing, select the message and click **Open**.

12. To delete a message, select the message and click **Delete**.

13. To copy a message to create another test message, select the message and click **Copy**.

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 **Send Proof**.

15. To preview the content of a message, select the message and click **Preview**.

16. To refresh the message statistics, click **Refresh**.

17. To add URL parameters, enter 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** icon to the right of the URL Parameters field and select the field. See [Insert a Merge Field to a URL Parameter](#).

Access Transactional Delivery Options for Mailings

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.

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 [Launch a Transactional Mailing](#).
- Suspend a mailing—See [Suspend a Transactional Mailing](#).
- Cancel a mailing—See [Cancel a Transactional Mailing](#).

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.

Delivery Checklist and Message Send History Sections

| Section | Description |
|----------------------|---|
| Message Preview | Contains a link to preview the message that is sent with the mailing. Click Preview to preview the message. |
| Proofing | Displays a summary report of message proofs associated with the mailing. Click Send Proof Message to send the message as a proof. See Send a Proof . |
| CAN-SPAM Compliance | 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 Check Compliance from the Delivery Tab . |
| Message Send History | Displays a log of events relating to the delivery status of the mailing. If the mailing has not been sent, it is noted here. |

Launch a Transactional Mailing

After you launch a mailing, the status changes to Launched. From the Launched status, you can suspend the mailing or cancel it.

Transactional mailings must be launched before they can be used in rules or campaigns.

Note: A launched transactional mailing cannot be edited. However, you can suspend the transactional mailing message, make edits, and then re-launch it. See [Suspend a Transactional Mailing](#).

1. From the Delivery tab of an open mailing, click **Launch**.
2. Click **Yes** to confirmation launch of the mailing.

Results:

Delivery status changes to Launched and you can see how many mailings were sent and delivered.

Suspend a Transactional Mailing

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.

1. From the Delivery tab of an open mailing, click **Suspend**.
This button appears only when a mailing is in the process of being sent.
2. Click **Yes** to confirm suspending the mailing.

Results:

The status changes to Suspended and the Delivery Status section displays the number of audience members the mailing was already sent and delivered to.

Cancel a Transactional Mailing

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.

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. Instead of canceling your mailing, you may want to consider temporarily suspending it. See [Suspend a Transactional Mailing](#).

1. From the Delivery tab of an open mailing, click **Cancel Mailing**.
2. Click **Yes** to confirm that you want to cancel the mailing.

Results:

The delivery status changes to Canceled.

Add a Custom Tab to Mailings

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 *Insert a Text Merge Field* and *Edit Redirect to URL Attributes*. Custom tabs display after the Results tab on the mailings editor.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **Configuration Settings**.
The Search window opens.
3. Clear the **Select All** check box under Folders, select the **RightNow User Interface** check box, and click **Search**.
The Configuration Settings editor opens.
4. Double-click the MAILING_EDITOR_TABS setting in **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, enter 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, enter 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 and 6.
8. Click **Save**.

Results:

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

B2C Service 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, an unsubscribe link, and honors global opt-in preferences. Remaining requirements must be manually verified by the mailing or survey designer.

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.

Note: 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, and the Delivery tab of a mailing or survey.

For information about the CAN-SPAM Act, see the .

Related Topics

Check Compliance from the Message Tab

Testing for CAN-SPAM compliance issues can be accessed from both the Message and the Delivery tabs in a mailing.

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 creating the mailing. For best practices related to mailings, see *Improving your email marketing*.

1. From the Message tab of an open mailing, do one of the following:
 - o Click **Test CAN-SPAM** in the Content section of Tasks on the HTML editor.
 - o 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.

CAN-SPAM Compliance Report

| 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 by clicking Insert Address in the tasks on the HTML editor. See <i>Insert a Physical Address</i> . If a text address has not been inserted using Insert Address, 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 clicking Unsubscribe Link in the toolbox of the HTML editor. When Unsubscribe Link 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 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. |

| Field | Description |
|---|---|
| | 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 lets 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 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 wireless service providers . |
| 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. |

| Field | Description |
|-------------|--|
| 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 **OK**.

Check Compliance from the Delivery Tab

You can check for CAN-SPAM compliance issues from the Delivery tab of a mailing or survey. You can also test CAN-SPAM compliance from the Message tab of a mailing or the Invitation Message tab of a survey.

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 creating the mailing or survey.

1. Open a mailing or survey and click the **Delivery** tab.
2. 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.

CAN-SPAM Compliance Report

| 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 clicking Insert Address on the HTML editor. See . If a text address has not been inserted using Insert Address, 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 clicking Unsubscribe Link in the toolbox of the HTML editor. When Unsubscribe Link 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 |

| Field | Description |
|---|---|
| | 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. |
| 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 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 . |
| 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. |
| 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. |

| Field | Description |
|----------|---|
| Reply-To | Displays the Reply-To address of the message. |

- 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 on the Delivery tab.

Outreach Campaigns

Overview of Campaigns

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. In addition, you can define a budget and predict your return on investment. After your campaign is launched, you can review its results and compare them against your estimates to evaluate the effectiveness of your design.

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.

Campaign Design Ribbon Home Tab

The campaign design ribbon includes three standard tabs (Home, Insert, and View) and 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 for modifying the campaign or elements on the canvas.

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.

Home Tab

| 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. |

| Group/Button | Description |
|--------------|---|
| 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. |
| Details | Click this button to display the campaign details on the content pane. See Set Campaign Details . |
| 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. See Set Campaign Details . |
| 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 | <p>The buttons in this group let you add campaign components to your flow diagram. For a description of available components, see Create a Campaign Flow Diagram.</p> <p>Note: Components can also be accessed from the Campaign Components toolbox.</p> |
| 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. See Campaign Validation . |
| 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. |

Campaign Design Ribbon Insert Tab

The Insert tab lets you add components to your campaign flow diagram, either one at a time or in predefined campaign templates.

Insert Tab

| Group/Button | Description |
|---------------|---|
| Template | <p>The buttons in this group let you select a predefined flow template to apply to your campaign. See Apply a Campaign Template.</p> <p>CAUTION: When you add a template, any content you previously added is deleted from the canvas.</p> |
| 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. See Ad Conversion . |

| Group/Button | Description |
|-------------------------|--|
| 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. See 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. See 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. See 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. See Subscription Management . |
| Elements | The buttons in this group let you select components to add to your flow diagram. See Create a Campaign Flow Diagram . Components can also be accessed from the toolbox. |

Campaign Design Ribbon View Tab

The View tab provides access to the component toolbox and options for changing your view of the design canvas.

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.

View Tab

| Group/Button | Description |
|---------------------|---|
| Campaign Components | Click this button to display the toolbox. |
| Canvas | The check boxes and drop-down list 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 list 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. See Set Zoom Options . |

| Group/Button | Description |
|---------------|--|
| 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. |

Set Canvas Options

You can set canvas options that are available from the View tab on the campaign design ribbon.

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. See *Campaign Validation*.
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 list.

Set Zoom Options

You can set zoom options that are available from the View tab.

1. Click **Zoom** on the View tab.
The **Zoom Options** window opens.
2. To specify a desired zoom level, select an option in the Zoom To section.
 - a. To adjust the zoom level to show all components, select **Fit to Screen**.
 - b. To show the entire canvas, select **Extents**.
3. Enter 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 found in the bottom right corner of the Service Console.



4. Click **OK**.

Campaign and Survey Element Tools Tab

When you select an element on the canvas of a campaign or an advanced survey, the design ribbon displays a contextual tab called the Element Tools tab.

The contextual tabs that display on the ribbon depend on your selection. When you select an element or a connector, the ribbon displays a fourth contextual tab. When an element is selected, the Element Tools tab displays. The Element Tools tab is divided into two sections. On the left are contextual groups and options, meaning they change depending on the element selected. On the right are standard groups and options, meaning they display no matter what element is selected.

Element Tools Tab

| Group/Button | Description |
|--|---|
| Label | The options 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 alignment. |
|  (Label Position) | Click this icon to select the position of the label relative to the element. The default label position of a new element is Inside. |
|  | Click this icon to enter the text of the element label. You can also edit the label text inline by clicking the element label. |
| Notes | Click this option to enter notes about the element. |
| Size | The options in this group let you change the height and width of the element. |

Campaign and Survey Path Tools Tab

When you select a connector on the canvas of a campaign or an advanced survey, the design ribbon displays a contextual tab called the Path Tools tab.

The options on this tab let you format the connector and change the connector type. See [and](#) .

Path Tools Tab

| Group/Button | Description |
|----------------|--|
| Type | Click this drop-down to change the type of the selected connector. A connector type can be changed only when it is not connected to a standard or event-triggering element. |
| Style | The options in this group let you change the line style of the selected connector. |
| Straight | Click this option to set the connector line style to straight. |
| Square | Click this option to set the connector line style to square. |
| Rounded Square | Click this option to set the connector line style to rounded square. |
| Curved | Click this option to set the connector line style to curved. |

Create a Campaign

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.

You can also define the objectives for the campaign by including a text summary and estimating expenses and return on investment. After 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.

1. Click **Campaigns** on the navigation pane and double-click **Campaigns Explorer**.
The Campaigns explorer opens on the content pane.
2. Click **New** 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**. See [Choose an Existing Design](#).
 - c. To create a new campaign by copying a campaign template, click **Choose a Campaign Template**. See [Apply a Campaign Template](#).

Tip: You can also create campaigns from an open campaign by clicking **New**. Additionally, if your navigation set is configured to add campaigns from the file menu, click **File > Campaign**. By default, the design canvas is active when creating a campaign. From here, you can design the campaign flow diagram. See [Create a Campaign Flow Diagram](#).

3. To manage campaign details, including assignment, start and end dates, and objectives, click **Details** from the Display group on the ribbon. See [Set Campaign Details](#).
4. To view the campaign results, click **Results** from the Display group on the ribbon. See [View Campaign Results](#).
Note that this report will display no data until the campaign has been launched.
5. To add tasks to the campaign, click **Tasks** from the Display group on the ribbon. See [Add a Task to a Campaign](#).
6. Click **Save**.
The **Save As** window opens where you can select the folder you want to save the campaign in and enter the name of the campaign in the **Name** field.
7. Click **Save**.

Related Topics

- [Configure the File Menu](#)

Create a Campaign Flow Diagram

The first step in creating a campaign is to design a flow diagram. The flow diagram is a graphical representation of the campaign “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 component elements 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 the key objectives of your campaigns. When 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. After 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.

1. From an open campaign, drag and drop a campaign component element from the toolbox onto the canvas.

Campaign Component Elements



| 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. See Edit Serve Web Page Attributes . |
| Broadcast Mailing | Drag and drop this element to send a broadcast mailing. After 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. See Edit Broadcast Mailing Attributes . |
| 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. See Edit Entry Point 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. See Edit Scheduled 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. See Edit Add to List Attributes . |

| Element | Description |
|------------------------------|---|
| 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 <i>Edit Transactional Mailing Attributes</i> . |
| 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. See <i>Edit Set Field Attributes</i> . |
| 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 <i>Edit Redirect to URL Attributes</i> . |
| 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 <i>Edit Opportunity Attributes</i> . |
| 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 <i>Edit Notification Attributes</i> . |
| 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 <i>Edit Lead Attributes</i> . |
| External Event | Drag and drop this element to run an external event. External events are scripts that run outside of B2C Service. After adding this element, double-click it to define its attributes. See <i>Edit External Event Attributes</i> . |
| 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 <i>Edit Transactional Survey Attributes</i> . |
| 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 <i>Edit Incident Attributes</i> . |
| 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 <i>Edit Execute Object Event Handler Attributes</i> . |
| 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. See <i>Connectors in Campaigns</i> . After adding the case statement, double-click it to define its attributes. See <i>Edit Case Statement Attributes</i> . |
| 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 <i>Connectors in Campaigns</i> . After adding the decision, double-click it to define its attributes. See <i>Edit Decision Attributes</i> . |
| Artifacts | Artifact elements let you make comments about your campaign. They do not affect the outcome of your flow diagram. |

| Element | Description |
|---------|---|
| 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 <i>Connectors in Campaigns</i> . |

- 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. See *Connectors in Campaigns*.
- To change the formatting of an element, double-click the element, and then use the options on the Element Tools tab.

Element Tools Tab

| 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 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. 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 the same time, press Ctrl and select each component.

- To cut, copy, or paste one or more components, click the appropriate button on the Clipboard group of the Home tab.
- To undo an action on the canvas, click **Undo** on the Quick Access toolbar.
- To redo an action on the canvas, click **Redo** on the Quick Access toolbar.
- To export an image of the canvas to your workstation, click **File** and select **Export Image**.

Connectors in Campaigns

Connectors are components used to link campaign 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.

Types of Campaign 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 the element 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. 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 Insert a Survey Results Link . |
| 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. The following table details the type and number of connectors allowed in each element.

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 |

| Element | Connectors Allowed |
|------------------------------|---|
| | 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 |
| 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 |

| Element | Connectors Allowed |
|---------|--|
| | 1 outgoing standard connector 1 outgoing submit connector |

Connect an Element

Connectors are used to link elements and show flow direction. Elements can be connected to other elements depending on their type. The type of connector is indicated by its color.

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.

Click an anchor on the first element and drag the connector to an anchor on the second element.

Note: If you use the wrong connector type, the element anchor will not be highlighted.

Other ways to connect elements include the following:

- 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.

Related Topics

Connect to a Different Element

You can change the flow of your existing elements by moving a connector to a different element.

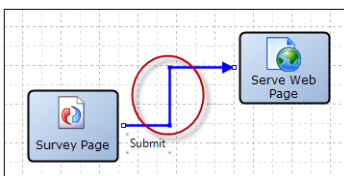
Click a midpoint on the connector to select it and drag one of its ends to an anchor on a different element.

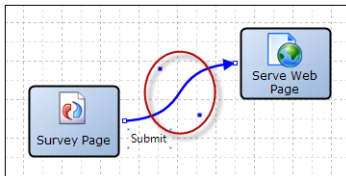
The element will highlight when you can connect to it. Remember, if you try to use the wrong connector type, your element will not be highlighted.

Edit a Square or Curved Connector

You can adjust the shape of the connection on square and curved connectors.

These images show the calibration points on square and curved connectors.





Click a midpoint on a square or curved connector to select it and drag the calibration points to change the connection shape.

Delete a Connector

You can delete connector components.

Click a midpoint on the connector to select it and press Delete.

Edit Serve Web Page Attributes

After 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 B2C Service.


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.

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 also add a back button to a web page that contains a web form. See .

1. Double-click the **Serve Web Page** element.
The **Serve Web Page** window opens.
2. Enter the name of the element in the **Label** field.
3. Enter field information.

Serve Web Page Window

| 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 enter the document name in the Find field. |
| New Document | Click this text to create a document. See . |
| *Shortcut ID | Enter 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. |

| Field | Description |
|--|--|
|  (View Web Page) | Click this icon to open the web page in a browser. The icon is inactive until the campaign is launched. If the shortcut ID is edited after launching, the icon is inactive until the campaign is saved. |
| Copy URL | Click this icon to copy the web page URL to the clipboard. The URL will not be valid until the campaign is launched. |
| *Friendly Name | Enter the name of your web page. This name is used when linking to the web form from another document. |
| Title | Enter the name of the page as you want it to display in the title bar of the web browser when the survey is taken. 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.

You can specify default values for the settings on the User Identification tab by editing optional configuration settings. See .

5. Enter field information.

Note: Keep in mind that all the settings you define on the User Identification tab determine what data is passed to the survey results. This affects how you can associate your survey results to an incident or to a contact.

User Identification Tab

| 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 option 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 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 option to identify the contact by a cookie or through URL parameters. |
| Cookie | Select this option 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. |
| Email Click-Through Parameters | Select this option if you want to use parameters passed in the URL to prefill the web form. |

| Field | Description |
|------------------------------|--|
| | <p>Tip: 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.</p> |
| Do Not Identify | <p>Select this option if you do not want the web form to prefill. This applies only to single page surveys or campaigns with only one Serve Web Page element. For surveys and campaigns with more than one page, after the contact info is added to the first page, the subsequent pages will prefill. Therefore, this option applies only to the first instance of a page in a survey or campaign flow that uses a Submit connector.</p> <p>For example, most surveys use a Submit connector on the first page that flows to the next page with another Submit connector, and so on. In this case, the first page will not prefill since the contact has not been identified. However, after the first page has been submitted, the next page that loads will be associated to that contact. Therefore, any web form fields on that page (as well as on subsequent pages) will prefill even though Do Not Identify is selected.</p> <p>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.</p> <p>When serving a website link survey, this option is available only if the Allow Anonymous check box is selected on the Summary tab of the survey.</p> |
| Set Browser Cookie on Submit | <p>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 option is selected for that form.</p> |

Tip: You can set default values for the user identification fields by editing the configuration settings found in **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 enter the notes.
7. Click **OK**.

Edit Broadcast Mailing Attributes

After 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. See *Create a Broadcast Mailing*.

Tip: Use a submit connector to connect this element to the next element when the mailing contains a web form.

1. Double-click the **Broadcast Mailing** element to open the **Broadcast Mailing** window.
2. Enter 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 enter the mailing name in the **Find** field.

- To create a broadcast mailing, click **New Broadcast Mailing**.

Note: When adding a new broadcast mailing to a campaign, you cannot send or schedule the mailing until you save the campaign.

- To add any notes associated with the element, click the **Notes** tab and enter the notes.
- Click **OK**.

Edit Scheduled Entry Point Attributes

After 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.

When 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 runtime, 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 audit log along with a description of how many contacts were processed. See [Audit Logs](#).

- Double-click the **Scheduled Entry Point** element to open the **Scheduled Entry Point** window.

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.

- Enter the name of the entry point in the **Label** field.
- Enter field information.

Scheduled Entry Point Window

| 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. |
| Monthly | Select this option 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 option 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 option, a Recur drop-down list 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. |

| Field | Description |
|--------------------------|--|
| 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 **Exclude Previous Match**.
 - b. To create a new segment, click **New Segment**.
5. Click the **Properties** tab and enter 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. Enter 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 enter the notes.
8. Click **OK**.

Edit Entry Point Attributes

After 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. See *Import Data*.

1. Double-click the **Entry Point** element to open the **Entry Point** window.
2. Enter the name of the entry point in the **Label** field.
3. Enter 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. Enter the name of the entry point in the **Friendly Name** field.
5. Select **Create Outreach Activity Record** 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 enter the notes.
7. Click **OK**.

Edit Add to List Attributes

After 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.

1. Double-click the **Add to List** element to open the Add to List window.
The **Add to List** window opens.

2. Enter 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**.
 - b. Enter the list name in the **Find** field.
4. To create a contact list, click **New Contact List** and see .
5. To add any notes associated with the element, click the **Notes** tab and enter the notes.
6. Click **OK**.

Edit Transactional Mailing Attributes

After 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.

1. Double-click the **Transactional Mailing** element.
The **Transactional Mailing** window opens.
 2. Enter 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 enter 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**. See .
 5. Click the **Schedule** tab.
 6. Enter field information.

Schedule Tab

| Field | Description |
|---------------|--|
| Immediately | Select this option to send the email immediately after the action occurs. |
| At Exact Time | Select this option and click the calendar (to the right of the date field) to select a specific date and time to send the email. 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. |

| Field | Description |
|-------|---|
| Wait | <p>Select this option 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 list to select the interval (minutes, hours, days, or weeks).</p> <p>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.</p> |

7. Click the **Filter** tab to select whether or not contacts should be 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. Select the **Filter this Mailing** check box.
9. Click the drop-down list 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 see .
12. To add any notes associated with the element, click the **Notes** tab and enter the notes.
13. Click **OK**.

Edit Set Field Attributes

After 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.

1. Double-click the **Set Field** element.
The **Set Field** window opens.
2. Enter the name of the element in the **Label** field.
3. Click the **Field** drop-down list 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 see .
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 previous value of the field. See .

6. To add any notes associated with the element, click the **Notes** tab and enter the notes.
7. Click **OK**.

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 list presents additional options for adding or subtracting (or appending or prepending) a value to the previous value of the field. 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.

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 maximum value minus the minimum value of the field. 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. |

Edit Opportunity Attributes

After 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.

1. Double-click the **Opportunity** element.
The **Opportunity** window opens.
2. Enter the name of the element in the **Label** field.
3. Enter field information.

Opportunity Window

| Field | Description |
|----------|---|
| *Name | Enter the name of the opportunity in this field. The contact's email address is appended to the lead name. |
| *Status | Click this drop-down list to assign a status to the opportunity. |
| Strategy | Click this drop-down list to assign the opportunity to a strategy. |
| Stage | Click this drop-down list to assign the opportunity to a stage. The options in this menu depend on the strategy selected. |
| Assigned | Click this drop-down list to assign the opportunity to a sales representative. Use the Find field at the bottom of the Assigned drop-down list to quickly find staff members. |

| Field | Description |
|-----------|---|
| | <p>Tip: Wildcards are supported when searching staff members. You can search strings that include a space by entering %+Space+character, which is helpful when searching last names. For example, entering %+Space+b returns all last names starting with the letter b. There is also an implied wildcard when searching, so entering in the Find field returns all items containing the letter b.</p> |
| Territory | Click this drop-down list to assign the opportunity to a territory. |
| Summary | Enter a summary of the opportunity in this field. |

- 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 .

- Click the **Field** drop-down list to select the custom field you want to set.
- Enter the value of the custom field in the **Value** field.
- Click **OK**.

The custom field and its value appear in the Custom Fields grid.

- To edit the value of a custom field, click **Edit** next to the custom field.
- To remove the set value of a custom field, click **Delete** next to the custom field.
- To add any notes associated with the element, click the **Notes** tab and enter the notes.
- Click **OK**.

Related Topics

Edit Notification Attributes

After you add a Notification element to your flow diagram, you can edit its attributes to define which staff members to notify.

- Double-click the **Notification** element.
The **Notification** window opens.
- Enter the name of the element in the **Label** field.
- Enter the message you want to appear in the subject line of the notification in the **Message** field.
- Select the check boxes of the staff members you want to notify.
- To add any notes associated with the element, click the **Notes** tab and enter the notes.
- Click **OK**.

Edit Redirect to URL Attributes

Redirect to URL elements let you define a web page your customers are redirected to when they complete the previous action in the workflow. After adding a Redirect to URL element to your flow diagram, you can edit its attributes to specify the URL you want to send the contact.

1. Double-click the **Redirect to URL** element.
The **Redirect to URL** window opens.
2. Enter the name of the element in the **Label** field.
3. Enter the URL of the website you want to redirect the contact to in the **URL** field.
The protocol must be specified. The following protocols are supported:
 - o file:///
 - o ftp://
 - o gopher://
 - o http://
 - o https://
 - o mailto:
 - o nntp:
 - o news:
4. To open the URL in a browser, click the **Open URL** icon (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** icon (to the right of the Open URL icon). See *Insert a Text Merge Field*.
6. To add any notes associated with the element, click the **Notes** tab and enter the notes.
7. Click **OK**.

Edit Transactional Survey Attributes

After 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.

1. Double-click the **Transactional Survey** element.
The **Transactional Survey** window opens.
2. Enter 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 enter the survey name in the **Find** field.
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**. See .
5. Click the **Schedule** tab.

6. Enter field information.

Schedule Tab

| Field | Description |
|---------------|---|
| Immediately | Select this option to send the survey invitation message immediately after this action occurs. |
| At Exact Time | Select this option 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. 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. |
| Wait | Select this option to send the survey 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 list to select the interval (minutes, hours, days, or weeks). 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 **Filter This Survey** 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 list 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 enter the notes.

12. Click **OK**.

Edit 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.

Before you start

You must add object event handlers from the process designer and then deploy the process model before you can add Execute Object Event Handler elements to your campaign.

After 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 .

Note: Only synchronous object event handlers are applicable to campaigns and surveys.

Here's what to do

1. Double-click the **Execute Object Event Handler** element.
The **Execute Object Event Handler** window opens.
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. Enter 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 enter your notes.
5. Click **OK**.

Edit Lead Attributes

After 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 status, strategy, stage, assigned sales representative, and territory of the lead.

1. Double-click the **Lead** element.
The **Lead** window opens.
2. Enter the name of the element in the **Label** field.
3. Enter field information.

Lead Window

| Field | Description |
|-----------|---|
| *Name | Enter the name of the lead in this field. The contact's email address is appended to the lead name. |
| *Status | Click this drop-down list 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 list to assign the lead to a strategy. Only strategies with a stage assigned the Lead status type display. |
| Stage | Click this drop-down list to assign the lead to a stage. The options in this menu depend on the strategy selected. |
| Assigned | Click this drop-down list to assign the lead to a sales representative. Use the Find field at the bottom of the Assigned drop-down list to quickly find staff members. Tip: Wildcards are supported when searching staff members. You can search strings that include a space by entering %+Space+character , which is helpful when searching last names. For example, entering %+Space+b returns all last names starting with the letter b. There is also an implied wildcard when searching, so entering in the Find field returns all items containing the letter b. |
| Territory | Click this drop-down list to assign the lead to a territory. |
| Summary | Enter a summary of the lead in this field. |

| Field | Description |
|-------|-------------|
| | |

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 .

- a. Click the **Field** drop-down list to select the custom field you want to set.
- b. Enter the value of the custom field in the **Value** field.
- c. Click **OK**.

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 enter the notes.
8. Click **OK**.

Related Topics

Edit Incident Attributes

After 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.

1. Double-click the **Incident** element.
The **Incident** window opens.
2. Enter the name of the element in the **Label** field.
3. Enter field information.

Incident Window

| Field | Description |
|----------|--|
| *Subject | Enter the subject of the incident in this text box. |
| *Status | Click this drop-down list to select a status to assign to the incident. The default status is Unresolved. |
| Assigned | Click this drop-down list to select a group or staff member to assign to the incident. Use the Find field at the bottom of the Assigned drop-down list to quickly find staff members. Tip: Wildcards are supported when searching staff members. You can search strings that include a space by entering %+Space+character , which is helpful when searching last names. For example, entering %+Space+b returns all last names starting with the letter b. There is also an implied wildcard when searching, so entering in the Find field returns all items containing the letter b. |
| Product | Click this drop-down list to select a product for the incident. |
| Category | Click this drop-down list to select a category for the incident. |

| Field | Description |
|-----------------|---|
| Disposition | Click this drop-down list to select a disposition for the incident. |
| Queue | Click this drop-down list to select a queue for the incident. |
| Service Mailbox | Click this drop-down list to select a mailbox to associate with the incident. |
| Customer Entry | Enter a default value for the customer thread in this text box. |
| Private Note | Click this tab to enter 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 .

- a. Click the **Field** drop-down list to select the custom field you want to set.
- b. Enter the value of the custom field in the **Value** field.
- c. Click **OK**.

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 enter the notes.
8. Click **OK**.

Related Topics

Add a Comment

The toolbox also provides a Comment artifact that allows you to enter comments in your diagram without impeding the campaign or 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.

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.

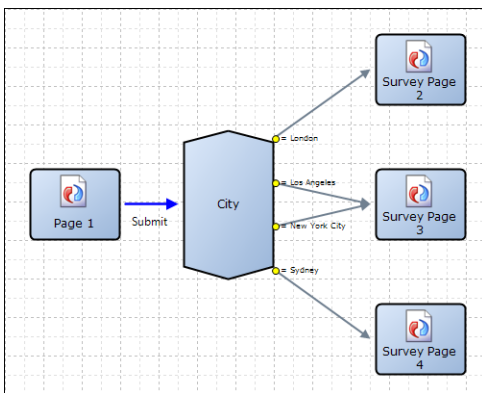
Edit Case Statement Attributes

Case statements help you branch your workflow based on multiple conditions you define. They are unique because you define an outgoing path for each condition. When the first choice (condition) is matched, the path for that choice is followed, and no other conditions within the case statement are evaluated.

After 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. This image shows a case statement with four choices that lead to three different paths.



1. Double-click the **Case Statement** element.
The **Case Statement** window opens.
2. Select a contact field, survey question, or score from the Cases tab.
Tip: 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 **Include Option for Other**.
4. To add a choice that is not defined by default, click **Add Choice**.
The bottom section of the Case Statement window displays options to define logical expressions for your choices. 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 list to select the logical symbol that completes your expression.
6. Enter the field 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.
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 enter the notes.
11. Click **OK**.

Edit Decision Attributes

Decision elements let you branch your workflow based on two outgoing paths you define.

After 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 campaigns or 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 flow based on a specific contact response to an individual question in the matrix.

1. Double-click the **Decision** element to open the **Decision Conditions** window.
2. Enter the name of the decision in the **Label** field.
3. Click **Add Condition** to create a condition for the Yes path. The **Add Condition** window opens.
 - a. Enter the name of the condition in the **Name** field.
 - b. Click the **Source** drop-down list and select a database field or survey question.

Note: When adding a text field to a decision, the Source drop-down list displays an additional item as “<text field name> SmartSense.” Selecting the Smart Sense 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 list and select the logical symbol that completes the condition.
- d. Enter the value of the field or click the drop-down list and select the value in the **Value** field.
- e. Click **OK** 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 **Add OR Node**.
Conditions attached to the OR node are joined by OR.
5. To edit a condition, select the condition and click **Edit Condition**.
6. To delete a condition, select the condition and click **Remove Condition**.
The Add OR Node, Edit Condition, and Delete Condition options display only after you have added a condition.
7. Click **View Text Definition** to see your conditions as a logical expression.
8. To add any notes associated with the element, click the **Notes** tab and enter the notes.
9. Click **OK**.

Edit External Event Attributes

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.

For information about external events or contact-related object event handlers, contact your Oracle account manager. See *Edit Execute Object Event Handler Attributes*.

Choose 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.

1. Click **New** 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 **Show Advanced Options**.
 - a. To copy the element attributes of the campaign diagram, including labels and other fields, select **Full Copy**.
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 **Empty Copy**.
After copying, you will need to edit each element to enter its attributes.
5. Click **OK**.

Tip: Outreach also provides a number of predefined campaign templates that support common business processes. See [Apply a Campaign Template](#).

Campaign Validation

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 by clicking **Validate** on the Home tab.

You can choose to display validation flags by selecting the Validation Results check box on the 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.

Related Topics

- [Campaign Design Ribbon View Tab](#)
- [Campaign Design Ribbon Home Tab](#)

Launch or Suspend a Campaign

After you have designed and validated your campaign, you must launch it to make it active. After a campaign has been launched, you can suspend it and relaunch it at a later time.

1. To launch or relaunch the campaign, click **Launch** on the Home tab.
 - a. Click **OK** to save the campaign in a launched state.
2. To suspend the campaign, click **Suspend**.
 - a. Click **OK** to save the campaign in a suspended state.

3. Click **Save**.

Note: When you suspend a campaign, you do not suspend all of the mailings or surveys 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 or surveys.

View Campaign Results

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.

In addition to the campaign results, Outreach features a variety of reports for viewing detailed campaign performance statistics.

Click **Results** on the Home tab.

Results:

A report opens.

Related Topics

- [How You View Reports](#)

Campaign Management

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, see [Overview of Common Functionality](#).

Set Campaign Details

The campaign details settings let you assign a campaign to a staff member, set start and end dates, and define campaign objectives. After a campaign is launched, this section also displays a report listing opportunities generated by the campaign.

1. Click **Details** 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 list and select the staff member.

- To search for a staff member, enter 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 entering `%+space+character`, which is helpful when searching last names. For example, entering `%+space+b` returns all last names starting with the letter b. There is also an implied wildcard when searching, so entering `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.

- 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 [Launch or Suspend a Campaign](#).

- Enter 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. When 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).

- Enter field information.

Objectives Fields

| Field | Description |
|-------------------------------|--|
| Budget | Enter the amount budgeted for the campaign, select the currency used, and click the Exchange Rates icon to select the exchange period. |
| Expected Cost | Enter the expected cost of the campaign, select the currency used, and click the Exchange Rates icon to select the exchange period. When the campaign ends, enter the actual cost of the campaign. |
| Actual Cost | |
| Expected Sales | Enter the expected amount of sales resulting from the campaign, select the currency used, and click the Exchange Rates icon to select the exchange period. When the campaign ends, enter the actual amount of sales resulting from the campaign. |
| Actual Sales | |
| 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 | These fields display the expected cost per lead, and when the campaign ends, the actual cost per lead. The values are calculated by dividing the expected cost by the expected leads. |
| Actual Cost Per Lead | |
| Expected Cost Per Opportunity | These fields display the expected cost per opportunity, and when the campaign ends, the actual cost per opportunity. The values are calculated by dividing the expected cost by the expected opportunities. |
| Actual Cost Per Opportunity | |
| Expected Net Profit | These fields display the expected net profit, and when the campaign ends, the actual net profit. The values are calculated by subtracting the expected cost from the expected sales. |

| Field | Description |
|-------------------|---|
| Actual Net Profit | |
| Expected ROI | These fields display the expected return on investment, and when the campaign ends, the actual return on investment. The values are the percentage difference between the expected cost and expected sales. |
| Actual ROI | |

- To view data associated with campaign objectives, you can view the Opportunities by Stage report found below the objectives section. For information about this report, click the **Options** drop-down list and select **View Definition**.
- Click **Save**.

Add a Task to a Campaign

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.

- Click **Tasks** on the Home tab.
The Tasks section opens on the content pane.
- Enter field information.

Tasks Toolbar

| 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. See <i>Add a Task</i> 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. See <i>Search for a Task from an Open Record</i> . |
| 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 campaign (without deleting the task). |
| Complete | Click this button to mark the selected task completed. |

| Button | Description |
|---------|--|
| 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. See <i>How You Change Report Formatting</i> for information about other options, such as Auto Filter, Slice, Cross Tab, and Rollups. |

Related Topics

- [Overview of Common Functionality](#)
- [Add a Task](#)
- [Search for a Task from an Open Record](#)

Apply a Campaign Template

Outreach provides several predefined templates as a starting point for creating your campaign 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.

1. From the Template group of the Insert tab, hover over each template button to see a preview 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. See *Ad Conversion*.
 - Email Promotion—This template sends a broadcast email and actions are taken based on a contact's level of interest. See *Email Promotion*.
 - Event Registration—This template sends an invitation to an event and uses a web form for registration. See *Event Registration*.
 - Information Request—This template is used to gather information about contacts through a questionnaire. See *Information Request*.
 - Subscription Management—This template allows contacts to update their subscription preferences. See *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 **OK**.

The template is inserted in the diagram.
4. Double-click each element to edit its attributes.
5. Click **Save**.

Related Topics

- [Create a Campaign Flow Diagram](#)

Ad Conversion

The Ad Conversion 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.

Ad Conversion Template

| 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. |
| 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

The Email Promotion 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 Opportunity Tracking, or added to a contact list and sent a follow-up email.

Email Promotion Template

| 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. |

| Component | Description |
|-----------|---|
| 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

The Event Registration 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.

Event Registration Template

| 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. |
| 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

The Information Request 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.

Information Request Template

| 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. |
| 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

The Subscription Management template lets contacts 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.

Subscription Management Template

| 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. See *Choose an Existing Design*.

Customize Outreach and Feedback Configuration 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.

1. Expand **Site Configuration**, and then double-click **Configuration Settings**.

The **Search** window opens, where you can filter your search results.

2. Clear the **Select All** check box under Folders and then select **Outreach and Feedback**.

3. To search for a specific configuration setting in the Outreach and Feedback folder, enter the setting name in the **Key** field. (The Key field is not case sensitive.)

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 **Search**.

The Configuration Settings editor displays the settings that match your search criteria. 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 in 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 [Edit a Configuration Setting](#).

Related Topics

- [Overview of Site Configuration](#)

Feedback Questions

Overview of Questions

Before you create surveys in 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. Alternatively, 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 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.

Related Topics

- [Best Practices for Writing Effective Questions](#)

Best Practices for 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 the goal of each question—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 option available on the ribbon.

How Questions Work

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 surveys. You can also assign a score to each question choice. There are three question types.

- [Create a Text Question](#)
- [Create a Choice Question](#)
- [Create a Matrix Question](#)

Note: Questions can be edited after they have been created, even if they have been used in a survey. However, if you edit the question 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.

Create a Text Question

Text questions let respondents enter 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.

1. From the Questions explorer, click **New**.

A new question opens on the content pane.

Tip: You can also create questions from an open question by clicking New. Additionally, if your navigation set is configured to add questions from the file menu, click **File > Surveys > Question**. See *Configure the File Menu*.

2. Enter 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 field information.

Text Question

| 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. |
| Number of Characters the Respondent May Use to Answer | Enter 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 | Enter 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 | Enter 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 **Display Options** on the ribbon to define HTML properties for the question and answer. The **Display Options** window opens.
6. Enter field information.

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. Style and class must be defined in a CSS file that is available on your web server and linked to in the <code><head></code> tag of a survey template. |

| Field | Description |
|-----------------------------|--|
| HTML Style | Enter 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 | |
| Answer Text Display Options | Enter information in this section to define how the answer text appears in the survey. 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 | Enter 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 enter 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 enter 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 **OK**.
8. To preview the question before saving it, click **Preview Question** on the ribbon. The **Question Preview** window opens.
 - a. Click **OK**.
9. To spell check your question, click **Spelling**.
10. Click **Save**.
The Save As window opens where you can select the folder you want to save the question in and enter the name of the question in the **Name** field.
11. Click **Save**.

Create a Choice Question

Creating choice questions let 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.

1. From the Questions explorer, click **New**.

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 > Surveys > Question**. See *Configure the File Menu*.



2. Enter 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 list.
Choice is the default question type.
4. Click the **Display As** menu and select one of the following question display types:
 - Radio—The choices appear as options 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 list. Respondents click the drop-down list 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 field information.

Choices Section

| 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. |
| 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. 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 | Enter the text of the choice in this field. |
| Score | Enter 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. See Add an Action with the Survey Final Action Wizard . |
| Is "Other" Choice | Double-click this field and then click the drop-down list and select Yes to set the choice to "other." This lets respondents enter an additional choice in the list. 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. |

| 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 | Enter the number of choices to display per line in this field or use the up and down arrows to select a number. This field displays only for Radio and Checkbox choice types. |

6. Click **Display Options** on the ribbon to define HTML properties for the question and answer. The **Display Options** window opens.
7. Enter field information.

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. 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 | Enter 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 | |
| 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 listed choices for the question. 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 | Enter 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 **OK**.
9. To preview the question before saving it, click **Preview Question** on the ribbon. The **Question Preview** window opens.
 - a. Click **OK**.
10. To spell check your question, click **Spelling**.
11. Click **Save**.
The Save As window opens where you can select the folder you want to save the question in and enter the name of the question in the **Name** field.
12. Click **Save**.

Create a Matrix Question

In cases where a series of questions can be responded to with the same set of answer choices, matrix questions can help streamline survey appearance by grouping the questions together in a table.

Answer choices display 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.

1. From the Questions explorer, click **New**.

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 > Surveys > Question**. See *Configure the File Menu*.





2. Select **Matrix** from the **Question Type** drop-down list.
3. Enter 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.

Matrix Section

| Field | Description |
|--------------------------------------|---|
| Display As | Click this drop-down list to select how answer choices display. Options include Radio or Checkbox. Radio is the default. 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 | Enter 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. 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. 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. |

| Field | Description |
|--|--|
| 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. |
| 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 | Enter 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 the Last Survey Score field description under <i>Incident Conditions</i> . See also <i>Add a Rule</i> . |
| 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). |

- Click the **Display Options** button on the ribbon to define HTML properties for the question and answer. The **Display Options** window opens.

6. Enter field information:

Matrix Question Display Options

| Field | Description |
|------------------------------|---|
| Introduction Display Options | Enter information in this section to define how the introduction text appears in the survey. 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 | Enter 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 | |
| Question Display Options | Enter information in this section to define how the question text appears in the matrix. 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 | Enter 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 listed choices for the question. 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 | Enter 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 attributes in this section. |
| Border | Enter the width, in pixels, of the table border or use the up and down arrows to select a number. |
| Alignment | Click this drop-down list and select the alignment of the table on the page. Your choices are Left, Centered, and Right. |
| Width | Enter 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 | Enter 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 dark background or enter the HTML hexadecimal value of the color in the field to the right of the color box. |

| Field | Description |
|------------------------|---|
| Light Background Color | Click the color box to select a color for the light background or enter 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 borders or enter the HTML hexadecimal value of the color in the field to the right of the color box. |
| Cell Properties | Define the table attributes in this section. |
| Cell Spacing | Enter the spacing and padding, in pixels, of the table cells or use the up and down arrows to select a number. |
| Cell Padding | |

7. Click **OK**.
8. To preview the question before saving it, click **Preview Question** on the ribbon. The **Question Preview** window opens.
 - a. Click **OK**.
9. To spell check your question, click **Spelling**.
10. Click **Save**.

The Save As window opens where you can select the folder you want to save the question in and enter the name of the question in the **Name** field.

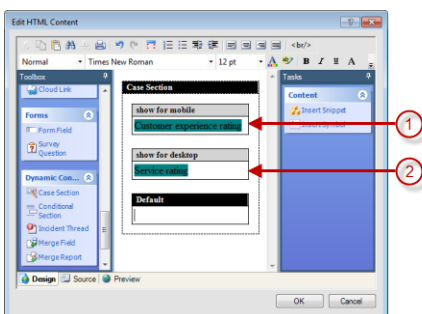
11. Click **Save**.

Best Practices for Using Matrix Questions in Mobile Surveys

When matrix questions display on small mobile devices (400 pixels wide or less), questions and choices automatically reflow to display vertically. Larger mobile devices, such as tablets (or when small devices are viewed in landscape mode), are wide enough to display matrix questions horizontally, as they display on a desktop.

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 [How You Customize Surveys for Use on Mobile Devices](#).

Here 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.



Legend for image: 1. Choice style question displays for mobile 2. Matrix style question displays for desktop

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.

Tip: 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.

Related Topics

- [Mobile Surveys](#)

Feedback Surveys

Overview of Surveys

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.

After you have defined the questions you want to ask, you can easily present them to your audience in surveys. 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.

Related Topics

- [How Questions Work](#)
- [Overview of Audiences](#)
- [Overview of Content Library](#)

Create a Survey

You can create four types of surveys, distinguished by invitation method. Although available features vary by invitation method, every survey is presented through a web page and can be linked to from outside of B2C Service.

- 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.

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.

Tip: 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 *Add a Survey Reminder*.

The following procedure assumes that you access the Surveys explorer from the Surveys navigation list. However, this explorer might reside in another navigation list.

1. Click **Surveys** on the navigation pane and double-click **Surveys Explorer**.
2. Click **New**.

A new survey opens on the content pane.

Tip: You can also create surveys from an open survey by clicking New. Additionally, if your navigation set is configured to add surveys from the file menu, click **File > Surveys > Survey**.

3. To create a broadcast survey, click **Broadcast Survey** and see *Create a Broadcast Survey*.
4. To create a transactional survey, click **Transactional Survey** and see *Create a Transactional Survey*.
5. To create a website link survey, click **Website Link** and see *Create a Website Link Survey*.
6. To create a polling survey, click **Polling Survey** and see *Create a Polling Survey*.
7. Click **Save**.
The **Save As** window opens where you can select the folder you want to save the survey in and enter the name of the survey in the **Name** field.
8. Click **Save**.

Related Topics

- [Configure the File Menu](#)

Survey Delivery Statuses

Your broadcast and transactional surveys must follow certain steps that are defined by the survey delivery status. Delivery status indicates the current state of the survey as it progresses through the distribution process.

This 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.

Broadcast and Transactional Survey Delivery Statuses

| 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. |

| Status | Survey Type | Description |
|----------------------|----------------------------|---|
| Launched | Transactional | <p>This status indicates a survey has been launched and can be included in a rule or campaign. Staff members launch a survey by clicking Launch on the Delivery tab.</p> <p>Note: 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 invitation message, make edits, and then re-launch it. See Launch a Transactional Survey.</p> |
| Recurrence Scheduled | Broadcast | <p>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.</p> |
| Preparing to Send | Broadcast | <p>This status indicates a survey is about to be sent. The status changes to Preparing to Send when a staff member clicks Send Now.</p> |
| Sending | Broadcast | <p>This status indicates a survey is currently being sent to customers. The system automatically sets the survey status to Sending after the survey is done preparing to send or at the date and time the survey is scheduled to send.</p> |
| Suspended | Broadcast Transactional | <p>This status indicates a survey is temporarily suspended from the Sending or Scheduled status. Staff members can change the status to Suspended by clicking Suspend on the Delivery tab.</p> |
| Expired | Broadcast Transactional | <p>This status indicates a survey has expired. Surveys can be set to expire based on date or maximum number of responses. After the first expiration criterion is met, the status is set to Expired and cannot be changed. See Survey Expiration Settings.</p> |
| Suspended by Error | Broadcast Transactional | <p>This status indicates a survey encountered an error and was suspended by the system.</p> |
| Canceled | Broadcast Transactional | <p>This status indicates a survey was manually canceled. Staff members can cancel a survey by clicking Cancel Invitation Message on the Delivery tab.</p> <p>Note: 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 Cancel a Broadcast Survey Invitation Message and Cancel a Transactional Survey Invitation Message.</p> |
| Completed | Broadcast | <p>This status indicates a survey was sent. The system automatically sets a survey status to Completed from the Sending status.</p> |

Related Topics

- [Access Broadcast Survey Delivery Options](#)
- [Access Transactional Delivery Options for Surveys](#)

Survey Management

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**—After 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.
- **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.

Change the Invitation Method of a Survey

Survey invitation methods include broadcast, transactional, website link, and polling. After you create a survey, you can change its invitation method type.

1. On the Summary tab of an open survey, click **Change** next to Invitation Method. The **Select Invitation Method** window opens.

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](#).

2. Select **Broadcast Survey**, **Transactional Survey**, **Website Link**, or **Polling Survey**.
3. Click **OK**.

Results:

The survey invitation method changes to the type you select.

Deactivate a 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.

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.
4. Click **Yes** to confirm you want to activate the survey.

Results:

The survey status changes to Active.

Add a Note to a Document, Mailing, or Survey

You can use notes to provide additional information about the content that can be viewed by staff members as they are working with the document, mailing or survey.

1. On the Summary tab of an open document, mailing, or survey, click the **Notes** tab.
2. Click **Add**.
3. Enter the note text in the text field.
4. To sort the notes by ascending or descending date, click the **Sort** drop-down list 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.

Add a Task to a Survey

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.

1. On the Summary tab of an open survey, click the **Tasks** tab.
2. Enter field information.

Tasks Tab Toolbar

| 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 <i>Add a Task</i> 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 <i>Search for a Task from an Open Record</i> . |
| 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. |

| Button | Description |
|----------|--|
| 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 How You Change Report Formatting for information about other options, such as Auto Filter, Slice, Cross Tab, and Rollups. |

Related Topics

- [Overview of Common Functionality](#)
- [Add a Task](#)
- [Search for a Task from an Open Record](#)

Survey Expiration Settings

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 [Add or Edit a Recurring Broadcast Survey Schedule](#).

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.

Note: After 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.

Set an Absolute Expiration Date

Automatic survey expiration is useful when a survey is needed for a limited period of time.

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 or click the expiration date. The **Survey Expiration** window opens.
2. Select **Time to Expire Survey** 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 the calendar and then click **Today – [Date]**.
4. To cancel an existing survey expiration date, click the calendar and then click **No Value**.
5. Click **OK**.

Results:

The Expiration Date field displays the time and date the survey is scheduled to expire.

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.

Set a Relative Expiration Date

Broadcast and transactional surveys can be set to expire relative to the date you send the invitation message.

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 [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 **Relative Expiration** 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 **OK**.
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.

Results:

- 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 [Add or Edit a Recurring Broadcast Survey Schedule](#).

Set Expiration Based on Maximum Number of Responses

You can set survey expiration based on the maximum number of survey responses you have received. This option is available for all survey types, including survey by proxy.

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 [Set an Absolute Expiration Date](#).

1. On the Summary tab of an open survey, click **Edit** next to Expiration Max Responses. The **Maximum Responses** window opens.

2. Select **Limit Responses** and enter the maximum number of responses you want to allow.
The maximum number of survey responses you can define is one million.
3. Click **OK**.
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 **Refresh** on the ribbon.

Results:

A response is counted as soon as the answer to the first question is submitted.

Customize the Expiration Message

To help ensure your recipients know the right course of action to take when an expiration message displays, you can customize the expiration message, per survey, that recipients receive if they try to take an expired survey.

1. On the Summary tab of an open survey, click **Edit** next to Expiration Message.
The **Survey Expiration Message** window opens.
2. Enter 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 default message is used.
3. Click **OK**.

Survey Reminders

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.

We recommend implementing survey reminders into your strategy from the start. For detailed information about how to make survey reminders effective, see [Best Practices for Creating Effective Survey Reminders](#).

For broadcast and transactional surveys, you can add up to four automatic reminder messages to create a sense of urgency for customers to complete surveys within a time frame you specify.

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 [Create a Segment](#).

- 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 Summary tab.

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.

Add a Survey Reminder

Survey reminders increase your participation rates and, ultimately, give you more data about your customer experiences. You can add up to four automatic reminder messages to broadcast and transactional surveys, creating a sense of urgency for customers to complete surveys within a time frame you specify.

Keep in mind that 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](#).

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.

Reminders Tab

| Column | Description |
|---------------|---|
| Name | This column displays the name of the survey reminder. |
| Subject | This column displays the email subject line for the message that is sent to your audience about the survey reminder. |
| Audience | <p>This column displays the recipients who are included in the reminder message audience. Options available include the following:</p> <p>Not Started—Sends the invitation message to recipients who have not submitted any pages of the survey.</p> <p>In Progress— Sends the invitation message to recipients who have started but have not completed the survey.</p> <p>By default, both options are selected.</p> |
| Reminder Days | <p>This column displays the number of days after the initial invitation message was sent that the reminder message will be sent.</p> <p>The minimum value of this field is 1 day and the maximum value is 365 days.</p> |
| Status | <p>This column displays the delivery status of the reminder. See Survey Delivery Statuses.</p> <p>This column is available only for broadcast survey reminders.</p> |

| Column | Description |
|--------|-------------|
| | |

2. Click **New** on the toolbar to add your first reminder message.
The **Survey Reminder** window opens.
3. Enter 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. Enter the number of days after the initial invitation message is sent that the reminder message will be sent in the **Reminder Days** field.
This value must be unique for each reminder that you add in order to prevent duplicates by allowing only one reminder to be sent to the same audience on the same day.
5. Enter the subject your audience will see in the **Subject** field.
6. To insert a merge field into the subject line of your reminder message, click the **Merge Field** icon (to the right of the Subject field) and select the merge field. For example, you could use the special field, Survey Expiration Date, to let your audience know when the survey expires. See *Insert a Text Merge Field*.
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 *How the HTML Editor Works* and *How You Create and Edit Text-Only Messages*.
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 *Add Filters to a Segment*.
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: The Count section is available only for broadcast surveys and data is available only after the survey reminder is sent.
13. Click **OK**.
The new reminder is added to the Reminders tab.
14. To add another reminder, click **New** on the toolbar and repeat steps 3 to 13.
15. To open a reminder for editing, select the reminder and click **Open**.
16. To delete a reminder, select the reminder and click **Delete**.
17. To copy a message to create another reminder, select the message and click **Copy**. You can then open the copy and make your edits.

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*.

18. To send a proof of a reminder message, select the message and click **Send Proof**. See *Send a Proof*.

Best Practices for Creating Effective 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.
- Track reminder success—View the effectiveness of survey reminders using our standard reports. See *View 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. Landing pages, including Thank You, Forward to Friend, and Unsubscribe, have also been optimized for mobile.

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.

Mobile optimization is enabled, by default, on the Survey Options window. See *Set 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.

Preview Your Survey for Mobile

See the way your survey looks on a mobile device as well as a desktop or laptop.

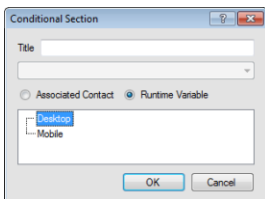
1. From an open survey, click **Mobile** on the ribbon.
The **Mobile Preview** window opens as it would display if viewed from a mobile device.
2. To see how the survey would look on a mobile device without mobile optimization applied, click **Switch to Desktop Mode** at the bottom of the Mobile Preview window.
3. Click **OK**.

How You Customize Surveys for Use on Mobile Devices

Case sections and conditional sections using runtime variables can be added to the HTML content of your survey 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.

This image shows the Conditional Section window with the Runtime Variable option selected.



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.

Related Topics

- [Mobile Surveys](#)
- [Best Practices for Using Matrix Questions in Mobile Surveys](#)
- [Insert a Case Section](#)
- [Insert a Conditional Section](#)

Best Practices for Mobile Surveys

Many factors need to be considered, when designing surveys for use on mobile devices. Several of these factors are addressed in this topic.

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 [How You Customize 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 display 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 [Overview of WebDAV](#) and [Customer Portal Folder Structure](#).

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.

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 [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 [View Survey Results](#).

The three mobile survey reports (Mobile Survey Trend, Mobile Survey Browser Trend, and Mobile Survey Operating System Trend) and the dashboard are found in **Public Reports/Feedback/Survey Responses/Mobile Surveys**. A fourth report (Standard Versus Mobile Survey Trend), which is not included on the dashboard, is also found 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.

Together with the advanced mode features Feedback provides, 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.

Related Topics

- [Add a Control to the Design Space](#)

Create a Broadcast Survey

You can create a broadcast survey if you want to survey a group of contacts in your knowledge base.

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 [Create a Document](#). Customers can then click the link to complete the survey.

Note: The delivery and participation rates of survey invitation emails can be impaired by factors beyond the scope of Feedback.

1. From the Surveys explorer, click **New**.

A new survey opens on the content pane.

Tip: You can also create surveys from an open survey by clicking New. Additionally, if your navigation set is configured to add surveys from the file menu, click **File > Surveys > Survey**.

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 survey notes, tasks, and attachments (see [Survey Management](#)). As you create the survey, you move through each tab to complete the survey 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 list and select the staff member.

- a. To search for a staff member, enter 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 entering `%+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.

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 B2C Service 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 [Set Survey Options](#).

5. To let customers submit the survey more than once, select the **Allow Multiple Submissions** check box.

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 [Add or Edit a Recurring Broadcast Survey Schedule](#).

6. Click the text in the At a Glance section to perform common survey functions.

At a Glance Section

| Field | Description |
|-------------------|---|
| Invitation Method | This field displays the invitation method currently selected for the survey. Click Change to change the method. See 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 Deactivate a Survey . |
| Expiration Date | This field displays the survey expiration date and time. By default, no expiration date is set. See Set an Absolute Expiration Date and Set a Relative Expiration Date . |

| 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 Set Expiration Based on Maximum Number of Responses . |
| Expiration Message | Click Edit to customize the survey expiration message. See Customize the Expiration Message . If you do not define your own survey expiration message, the system 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. |
| 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. See View Audience Count Details in Surveys . |
| Market Testing | This field displays the market testing mode of the survey. Click Change to change market testing modes. See Activate 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 Send a Proof . |
| 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 [Create a Questionnaire in Basic Mode](#) and [Create a Questionnaire in Advanced Mode](#).
8. Click the **Audience** tab to define an audience for the survey. See [Define the Broadcast Survey Audience](#).
9. Click the **Invitation Message** tab to create the message sent to the survey audience. See [Create an 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 [Survey Reminders](#).
11. Click the **Proofing** tab to send a proof of the email for internal review before sending it to the entire audience.
12. Click the **Delivery** tab to select delivery options. See [Access Broadcast Survey Delivery Options](#).
13. To view the reports associated with the survey, click the **Results** tab. See [View 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 **Standard** 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 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 **Mobile** on the ribbon. See *Mobile Surveys*. 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 **Survey URL** on the ribbon. The **Survey URL** message opens.
 - a. Click **OK** when you are finished viewing the URL.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 clipboard.
17. Click **Save**.

Related Topics

- [Configure the File Menu](#)

Define the Broadcast Survey Audience

Your survey audience 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 *Overview of Audiences* for complete details and procedures about using contact lists and segments in surveys and mailings.

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 see *Add a Contact List*.
 - b. Select the list you want to include in the survey audience and click **OK**.
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 see *Create a Segment*.
 - b. Select the segment you want to include in the survey audience and click **OK**.
The list is added to the Included grid. Contacts belonging to the list 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 audience and click **OK**.
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 audience and click **OK**.
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 *How Contact Lists Work* and *How Segment Filters Work*.
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 about communication options.

Options Section

| 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. |
| 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 <i>Frequency and Recency Limits</i> . 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 <i>Frequency and Recency Limits</i> . 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 <i>Overview of the External Suppression List</i> 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. Enter a percentage or use the up and down arrows to select a percentage of the audience to send the survey to. |

| Field | Description |
|--|--|
| Allow delivery of messages to multiple contacts sharing the same email address | <p>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.</p> <p>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.</p> |
| Exclude from audience if previously sent | <p>Select this check box to exclude contacts from the audience that were previously sent an invitation from the same survey.</p> <p>This option applies only to recurring surveys. Contacts excluded in this manner are also excluded from the audience count. See Add or Edit a Recurring Broadcast Survey Schedule.</p> |

9. To count the number of contacts who will receive the survey, click **Refresh** in the Current Count section. After the audience has been counted, the last count also displays in this section.
10. To view the details of an audience count, click **Details** in the Current Count section after the count has been performed.

View 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, opt-out and duplicate emails as well as emails that are part of the external or global suppression list.

Before you start

You must count your audience before you can view audience count details.

Here's what to do

Do one of the following:

- o From the Summary tab, click **Details** next to Audience Count.
- o From the Audience tab, click **Details** next to Current Count.

The Audience Count Details window opens.

Audience Count Details Window

| 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. |

| Column | Description |
|----------------------|---|
| 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. This option is available only when email address sharing is enabled. See <i>Email Address Sharing</i> . |
| Suppression | Lists the number of email addresses that are excluded from the survey because they are part of the external or global suppression list. |
| 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. |
| Recency | Lists the number of contacts belonging to the list or segment who are filtered by the survey recency settings. |
| 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. |

Note: 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 global suppression list
- Contacts in the external suppression list
- Contacts filtered by recency settings
- Contacts filtered by frequency settings

Create an Invitation Message in Broadcast Surveys

The invitation message is what your customers receive in the email inviting 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.

Note: 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 [Cancel a Broadcast Survey Invitation Message](#). Alternatively, 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.

1. From an open survey, click the **Invitation Message** tab.
2. To activate market testing, click the information bar (above the From address field) and select **Change Market Testing Mode**. See [Activate 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 [Customize the Survey Invitation Message Header](#).
4. Enter the subject of the message in the **Subject** field.
For the best practice on creating effective subject lines, see [Ensuring that contacts read your message](#).
5. To add a merge field to the subject, click the **Merge Field** icon (to the right of the Subject field) and select the field. See [Insert a Text Merge Field](#).
6. To create an HTML invitation message from scratch, click **Begin with Blank Content** and see [How the HTML Editor Works](#).
7. To create an HTML invitation message by copying an existing document, click **Choose Existing Content** and see [Insert Existing Content](#).
8. To create an HTML invitation message by uploading your own HTML page, click **Upload HTML Content** and see [Upload HTML Content](#).
9. To create a text version of the invitation message, click the **Text** tab.
10. To create a text invitation message from scratch, click **Begin with Blank Content** and see [How You Create and Edit Text-Only Messages](#).
11. To create a text invitation message by copying an existing document, click **Choose Existing Content**.
12. To create a text invitation message by converting an HTML page to text, click **Convert HTML Content** and see [Convert HTML Content](#).
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](#).
13. To add URL parameters, enter any parameters you want to append to the links in your message (for example, p1=v1&p2=v2) in the URL Parameters field.
14. To add a merge field to the URL parameters, click the **Merge Field** icon to the right of the **URL Parameters** field and select the field. See [Insert a Merge Field to a URL Parameter](#).

Customize the Survey Invitation Message Header

If you want to use a different name and email address for your survey invitation message, such as a branded email address, you can do so by customizing the message header.

By default, Feedback uses the name and email addresses specified in the outgoing email settings of your default Outreach mailbox. 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.


Note: 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 B2C Service. See [How Mailboxes Work](#).

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 the outgoing email settings of your Outreach mailbox even if the message header is customized using the following procedure. See [Email Bounce Handling](#).

See also [Best Practices for Using Branded Email Domains](#).

1. From the Invitation Message tab of an open survey, click **Edit** next to the From field. The Customize From and Reply-To Headers window opens.
2. Enter field information.

Customize From and Reply-To Headers Window

| Field | Description |
|---|---|
| Mailbox | Click this drop-down list and select a mailbox to change the mailbox from the default. See Overview of Email Management for complete details and procedures about email handling. |
| From | Enter the name and email address that you want the message to appear from in the From text boxes. |
| Name | Enter the name you want the message to appear from. |
| *Email Address | Enter the email address you want the message to appear from. |
| Reply-To | Enter the name and email address that you want the message to reply to in the Reply-To text boxes. |
| Name | Enter the name you want to appear as the reply-to address. |
| *Email Address | Enter the email address you want to appear as the reply-to address. Note: 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 outgoing emails settings of your mailbox. See Edit Common Outgoing Email Configuration Settings and Answer ID 1272 on our support site. |
|  Merge Field | Click this icon 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 **OK**.

Insert Existing Content

As an alternative to creating a message from scratch, you can base your message on existing content. You can choose to copy content into your message and customize it, or share the content with other surveys and messages that use the document.

1. From the Message tab of a mailing or the Invitation Message tab of a survey, click **Choose Existing Content**.
The **Choose Document** window opens.
2. Select the document you want to use and click **OK**. 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 **Share Content**.
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 **Copy Content**.
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 or 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 of the mailing or survey. See .

Upload HTML Content

You can upload an HTML file into your document, template, snippet, mailing or survey 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.

1. From the HTML tab of a document, the Message tab of a mailing, the Invitation Message tab of a survey, or from a new template or snippet, click **Upload HTML Content**.
2. Select the HTML file you want to upload.
3. Click **Open**.

Results:

The HTML is inserted in your message.

Convert 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.

You should finalize your HTML content before converting it to text.

1. From the Message tab of an open mailing or the Invitation Message tab of an open survey, click the **Text** tab and then click **Convert HTML Content**.
The **HTML to Text** window opens.
2. To convert the HTML message to text, select **HTML Part**.
3. To convert an HTML file to text, select the **File On Disk** and browse for the file.
4. Click **OK**.

Results:

The converted HTML is added to the text part of your message.

Activate 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.

For broadcast surveys, market testing is available in two modes: even split and random sampling.

- **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.

By default, the Invitation Message tab is set up without market testing. This means you create and send only one invitation message.

1. On the Invitation Message tab of an open survey, click the information bar (above the From address field) and select **Change Market Testing Mode**.
You can also access this window on the Summary tab by clicking Change next to Market Testing. The **Select Market Testing Mode** window opens.
2. To send test messages to equal portions of your audience, select **Even Split**. See *Create Messages in Even Split Mode*.
3. To send test messages to a percentage of your audience, select **Random Sampling**. See *Create Messages in Random Sampling Mode*.
4. To disable market testing, select **None**.

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 **OK**.

Create 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.

1. From the Select Market Testing Mode window, select **Even Split** and click **OK**.

The Message tab (mailings) or the Invitation Message tab (surveys) displays in even split mode.

By default, one test message is sent to 100 percent of the audience. From here, you can add more messages, edit messages, send proofs, or view results. From here, you can also see information about each message.

Message Tab / Invitation Message Tab

| Column | Description |
|--------|---|
| Name | This column displays the name of the message. |

| Column | Description |
|--------------|--|
| Subject | This column displays the email 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. |
| 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. Unsubscribe sets global opt-in in both Outreach and Feedback. See . |
| Replied | This column displays the number of times the mailing was replied to. |

2. Click **New** on the toolbar to add a second test message.
The **Edit Message** window opens.
3. Enter the name of the message in the **Name** field.
4. Enter the subject of the message in the **Subject** field on the Content tab. See and .
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 and .
6. To send a proof message, click the **Proofing** tab on the Edit Message window. See .
7. Click **OK** to save the message.
The new message is added to the Message tab (mailings) or the Invitation Message tab (surveys).
8. To open a message for editing, select the message and click **Open**.
9. To delete a message, select the message and click **Delete**.
10. To copy a message to create another test message, select the message and click **Copy**.
Note: 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 .
11. To send a proof of a message, select the message and click **Send Proof**.
12. To preview the content of a message, select the message and click **Preview**.
13. To refresh the message statistics, click **Refresh**.
14. To add URL parameters, enter 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** icon to the right of the URL Parameters field and select the field. See .

Create 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. After you evaluate the effectiveness of your test messages, you create a final message and send it.

For the best practice on how to handle scheduling, see *Scheduling Mailings and Surveys for Market Testing*.

1. From the Select Market Testing Mode window, select **Random Sampling** and click **OK**.

The Message tab (mailings) or Invitation Message tab (surveys) displays in random sampling mode.

By default, one test message is 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.

Message Tab / Invitation Message Tab

| Column | Description |
|--------------|--|
| Name | This column displays the name of the message. |
| Subject | This column displays the email subject line for the message. |
| Status | This column displays the status of the message. See and . |
| 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. |
| 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. Unsubscribe sets global opt-in in both Outreach and Feedback. See . |
| Replied | This column displays the number of times the mailing was replied to. |

2. Click **New** on the toolbar to add a second message.
The **Edit Message** window opens.
3. Enter the name of the message in the **Name** field.

4. Enter 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 list.
The percentage of recipients is based on the number of contacts in the audience at the time the mailing is sent.
5. Enter the subject of the message in the **Subject** field on the Content tab. See .
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 and .
7. To send a proof message, click the **Proofing** tab on the Edit Message window. See .
8. Click the **Delivery** tab on the Edit Message window to define the delivery options for the message. See or .

Tip: 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 **OK** to save the test message.
The new message is added to the Message (mailings) or the Invitation Message (surveys) tab.
10. To open a message for editing, select the message and click **Open**.
11. To delete a message, select the message and click **Delete**.
Note: You cannot delete the final message.
12. To copy a message to create a new message, select the message and click **Copy**.
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 .
13. To send a proof of a message, select the message and click **Send Proof**.
14. To preview the content of a message, select the message and click **Preview**.
15. To refresh the message statistics, click **Refresh**.
16. To add URL parameters, enter 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** icon to the right of the URL Parameters field and select the field. See .
18. When 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 **Copy To Final**.
The message you selected is copied to the Final Message section of the Message tab (mailings) or the Invitation Message (surveys) tab.
 - b. Click **OK**.
 - c. Select the final message and click **Open**.
The **Edit Message** window opens.
 - d. Click the **Delivery** tab on the Edit Message window to define delivery options.

Send a Proof

An important step in creating a mailing or a survey is ensuring the content 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 .

After a reviewer has approved or rejected the proof, the assigned staff member will receive a Mailing Proof Response Notification or a Survey Proof Response Notification. Both notifications can be customized using message templates found in the Administrator Notifications message type under the Outreach or Feedback category respectively. See .

Proof surveys and mailings 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 after the mailing or survey has been sent, Outreach and Feedback does not retain data submitted from proof surveys. If you want to submit test responses without impacting specific statistics, you can copy the mailing or survey and test using the copy instead.

For the best practice about sending proofs, see *Send Proofs to Key Staff*.

1. From an open mailing or survey, click the **Proofing** tab.
2. Click **Send Proof Message** to select proof recipients.

The Send Proof Message window opens.

Tip: 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 see .
4. Enter 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** icon (to the right of the Recipients field). The **Select Names** window opens.
 - a. Select a staff member, address, group, or proof list and click **To**.
 - b. To find a specific staff member, address, group, or proof list, enter the name in the **Type Name or Select From List** field.

The first item matching the letters you type is selected in the grid.
 - c. To import your contacts from the default Contacts folder in Outlook, select **Load Outlook Contacts**. This is useful for displaying contacts that are not included in . See .
 - d. Click **OK**.
6. Enter any comments you want to appear in the message in the **Comment** text box.
7. To spell check your comments, click the **Spell Check** icon (to the right of the Comment field).
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** icon next to the Preview Contact field on the bottom of the window. The **Contact Search** window opens.
 - a. Enter your search criteria in one or more of the available fields and click **Search**.

A list of contacts that match your search criteria displays in the grid below the search criteria fields.
 - b. Select a contact and click **Select**.

The Contact Search window closes and the contact name you selected populates the Preview Contact field on the Send Message Proof window.
9. Click **Send Proof Message**.

Accept or Reject a Proof Email

After you send a proof, the recipients can accept or reject the mailing or survey content.

The proof email automatically displays a link to a web page where the tester can accept or reject the content. The word “Proof:” is prepended to the message subject. The assigned staff member receives either a Mailing Proof Response Notification or a Survey Proof Response Notification every time a reviewer submits feedback.

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. Enter any comments related to the proof mailing or survey in the **Comments for Mailing Organizer** text box.
3. Do one of the following:
 - o To approve the mailing, click **Approve**.
 - o To reject the mailing, click **Reject**.

Results:

A message displays confirming your submission.

Proof Results

After 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 or 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.

Proofing Results

| Column | Description |
|-----------|--|
| Recipient | This column displays all recipients of the proof mailing or survey. |
| 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. |

Access Broadcast Survey Delivery Options

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.

Before you start

You must create a questionnaire before delivering the survey. See [Create a Questionnaire in Basic Mode](#).

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.

Here's what to do

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 [Send a Broadcast Survey](#).
- Schedule a survey, Unschedule a survey, and Reschedule a survey—See [Schedule a Broadcast Survey](#).
- Set a recurring survey—See [Add or Edit a Recurring Broadcast Survey Schedule](#).
- Suspend a survey—See [Suspend a Broadcast Survey](#).
- Cancel a survey—See [Cancel a Broadcast Survey Invitation Message](#).

The Delivery Options section lets you set options related to sending the survey.

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.

Delivery Checklist and Message Send History

| Section | Description |
|----------------------|---|
| Delivery Checklist | This section displays the audience count and proof history and provides a link to preview the survey. |
| Audience Count | After 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 Define the Broadcast Survey Audience . |
| 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. |
| CAN-SPAM Compliance | This section contains a link to test survey 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 . |
| 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. |

Send a Broadcast Survey

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. After the survey finishes sending, it is marked Completed.

1. From the Delivery tab of an open survey, enter field information in the Delivery Options section.

Delivery Options Section

| 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 list to select the number of emails to send per hour. |

| Field | Description |
|---------------------------|--|
| 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. Proof members may receive two messages if they are also part of the audience. |

2. Click **Send Now.**

A window opens asking you to confirm that you want to send the survey.

3. Click **Yes 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.

Results:

When the survey is finished sending, the status changes to Completed and the Delivery Status section displays the number of emails sent and delivered.

Schedule a Broadcast Survey

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. When scheduled, the survey automatically sends.

1. From the Delivery tab of an open survey, enter field information in the Delivery Options section. See *Send a Broadcast Survey* for field descriptions.

2. Click **Schedule.**

The **Confirm Schedule Invitation Message** window opens.

3. Enter 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 **OK.**

The Delivery Status section displays the time and date the survey is scheduled to send.

5. To unschedule a survey without canceling it, click **Unschedule.**

This way, the survey can be scheduled later.

6. To reschedule the survey, click **Reschedule.**

7. To cancel a survey schedule, click **Cancel Invitation Message.**

- a. Click **OK** 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 *Cancel a Broadcast Survey Invitation Message*.

Add or Edit a Recurring Broadcast Survey Schedule

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.

Information about past recurrences—such as the time last run, next scheduled runtime, 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 audit log along with a description of how many invitations were sent. See [Audit Logs](#).

Before you set a recurring schedule, you must first define the audience and the invitation message subject and content. After recurrence has been set, you can click Suspend to suspend recurrences. This saves the recurrence information so it can be edited or reactivated.

1. From an open survey, click the **Delivery** tab.
2. Click **Recurrence**.
The **Confirm Schedule Recurrence** window opens.
3. Enter field information.

Confirm Schedule Recurrence Window

| 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 option 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 option 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 option, a Recur drop-down list 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. |
| 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 **OK** to save the recurrence settings and return to the Delivery tab.

- To suspend the recurrence, click **Suspend**. The **Confirm Suspend** window opens.
 - Click **OK** to confirm you want to suspend the recurrence.

Note: After recurrence is suspended, you can click **Recurrence** again to edit or reactivate it.

- To exclude contacts from the audience that were included in a previous instance of the recurrence, click the **Audience** tab and select **Exclude From Audience if Previously Sent**.

Tip: 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 instance, sending a one-time offer to all contacts who have a birthday in the next month.

Suspend a Broadcast Survey

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.

- From the Delivery tab of an open survey, click **Suspend**.

Note: 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.

- Click **Yes** to confirm suspending the survey.

Results:

The status changes to Suspended and the Delivery Status section displays the number of audience members the survey was already sent and delivered to.

Cancel a Broadcast Survey Invitation Message

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.

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.

Tip: Alternatively, 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.

- From the Delivery tab of an open survey, click **Cancel Invitation Message**.

The **Confirm Cancel Invitation Message** window opens asking you to confirm that you want to cancel the invitation message.

- Click **Yes** to cancel the survey.

Results:

The delivery status changes to Canceled.

View 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.

Note: 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](#).

1. From an open survey, click the **Results** tab.
The list of standard reports display.
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 **Go**.
The report displays on a new tab.
4. To view a definition of the report, including its tables, filters, and column descriptions, click **Definition** 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 list and click **Search**.

Customize 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.

1. From the Results tab of an open survey, click **Customize List**.
The **Customize Survey Report List** window opens.
2. To add a report to the survey report list, do one of the following:
 - o Select a report from the Available Items list and click **Add**.
 - o 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 (or part of 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 **Remove**.
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 **OK** to close the window and update the list.

Results:

Added reports display at the bottom of the list.

How You Track 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 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.

Related Topics

- [Create a Transactional Survey](#)

Exclude or Include a Survey Response

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.

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.

1. From an open survey results report, select the record from which you want to exclude a response and click **Response Exclusion** on the ribbon.
The Response Exclusion button is enabled only on reports with response data that list results.
The **Response Exclusion** window opens.
2. To exclude the response from survey results, select **Exclude Response**.
3. Click **OK**.
4. To see your change reflected on your report, click **Refresh**.

Note: 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 **Search** on the ribbon.
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.
 - 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 **Response Exclusion** on the ribbon.
The **Response Exclusion** window opens with the Include Response option selected.
 - c. Click **OK**.
 - d. To see the responses added back into your report, click **Search** 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.

Topic Monitoring

Text responses often provide the most valuable information you receive. 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.

Cluster Text Responses

Grouping responses and identifying themes can help you analyze text responses received from customers.

1. In the Topic Monitoring section on the Results tab, click **Go**.
The **Topic Monitoring Wizard** opens.
2. Select a question from the **Select a Survey Question** drop-down list.
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 **Cluster Responses**.
4. To view recent cluster results without re-clustering, select **View Previous Results** and see the descriptions in the Topic Monitoring Report table.
5. Click **Finish**.
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.

Topic Monitoring Report

| Field | Description |
|---------------|---|
| Report Fields | Topic monitoring results include the following information. |

| Field | Description |
|-----------------------|---|
| 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 options in this section to cluster responses, reset clustering, edit themes, and open the Topic Monitoring Wizard. |
| Cluster Responses | Click this option to recluster the responses using your customized themes. |
| Reset Clustering | Click this option to recluster the responses without using your customized themes. Your custom themes are retained. However, they cannot be used during this clustering session. |
| Edit Themes | Click this option to edit the themes used in clustering. See <i>Edit Themes</i> . |
| Clustering Wizard | Click this option 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. |

Edit 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 or creating new ones. During the clustering process, the themes you create are emphasized more than automatically generated themes.

- In the Topic Monitoring section on the Results tab, do one of the following:
 - Click **Go**.
 - Click **Edit Themes** in the Survey Tasks section on the Results tab that displays response themes for a question.

The **Topic Monitoring Wizard** opens.

Note: Response themes only display after clustering has finished and there are at least ten question responses for the survey.

- Select a question from the **Select a Survey Question** drop-down list.
The question text appears below the menu.

3. Select **Edit Themes/Keywords and click the **Next**.**

The Edit Themes page opens in the wizard.

- 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.
- 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 *Include a Suggested Theme*.

4. When you are done editing themes, click **Next.**

The Final Action page opens.

5. To close the Topic Monitoring Wizard and return to the survey without clustering responses, select **Resume Survey Editing.**

If you select the Resume Survey Editing option, changes made to themes are saved, but responses are not clustered. The next time you cluster responses, your themes are applied.

6. To cluster responses and return to the survey, select **Cluster Responses.**

7. Click **Finish.**

Add Custom Themes

When editing themes, you can customize them to fit your unique needs.

1. From the Edit Themes page of the Topic Monitoring Wizard, click **Add in the Themes to Include section.**

The **Theme Editor** window opens.

2. Enter a name for the theme in the **Name field.**

3. Enter a keyword that you want associated with this theme in the **Keyword field and click **Add**.**

The keyword is added to 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.

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 **OK.**

Import Themes

When editing themes, you can import themes from existing survey questions.

1. From the Edit Themes page of the Topic Monitoring Wizard, click **Import 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 **OK.**

Results:

The imported themes are added to the Themes to Include section.

All themes included with the question are imported. You can edit or delete them after the import. Suggested themes are not imported.

Edit a Theme

The following procedure describes the steps pertaining to the Theme Editor window.

1. From the Edit Themes page of the Topic Monitoring Wizard, click **Edit** next to the theme in the Themes to Include section.

The **Theme Editor** window 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 **OK**.

Include a Suggested Theme

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.

1. To include a suggested theme, do one of the following:
 - Click **Copy** next to the suggested theme in the Previously Suggested Themes section. The suggested theme appears in the Themes to Include section.
 - Select a theme and click the left arrow between the Themes to Include and Previously Suggested Themes sections.
2. To view a suggested theme, click **View** next to the theme in the Previously Suggested Themes section.

The **View Theme** window opens.

Add 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.

You can access the stopword list file (**exclude_responses.txt**) from the File Manager.

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Site Configuration**, and then double-click **File Manager**.

The File Manager opens on the content pane.

3. Select **Wordlist Files** from the Switch To drop-down list.
The available wordlist files display.
 - a. Select the **exclude_responses.txt** file.
The file opens on the content pane where you can make edits.
4. Enter the words you want to add to your stopword list.
Each word must be typed in upper case and separated by a carriage return.
5. Click **Save**.
You may need to scroll to the bottom of the content pane to access the Save button.

Best Practices for Topic Monitoring

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.
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.

Note: 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.

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 Reset Clustering in the Tasks section of the Results tab. Any custom themes you created are retained, but they are not used in the clustering session.

Create a Transactional Survey

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 primary contact of the incident to find out how satisfied the contact was with your customer service.

Note: The survey will only be sent to the contact once per incident regardless of how many times the rule is matched.

- For information about using transactional survey attributes in campaigns, see [Edit Transactional Survey Attributes](#).

- For information about tracking transactional survey results by agent, see *How You Track Transactional Survey Results by Agent*.

1. From the Surveys explorer, click **New**.

A new survey opens on the content pane.

Tip: You can also create surveys from an open survey by clicking New. Additionally, if your navigation set is configured to add surveys from the file menu, click **File > Surveys > Survey**.

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 survey notes, tasks, and attachments. As you create the survey, you move through each tab to complete the survey 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 list and select the staff member.

- To search for a staff member, enter the staff member's name in the **Find** field.

Wildcards are supported when searching staff members. You can search strings that include a space by entering `%+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 **Allow Anonymous**.

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 B2C Service 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 to perform common survey functions.

At a Glance Section

| Field | Description |
|--------------------------|---|
| Invitation Method | This field displays the invitation method currently selected for the survey. Click Change to change the method. See <i>Change the Invitation Method of a Survey</i> . |
| 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 <i>Deactivate a Survey</i> . |
| Expiration Date | This field displays the survey expiration date and time. By default, no expiration date is set. See <i>Set an Absolute Expiration Date</i> and <i>Set a Relative Expiration Date</i> . |
| 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 <i>Set Expiration Based on Maximum Number of Responses</i> . |
| Expiration Message | Click Edit to customize the survey expiration message. See <i>Customize the Expiration Message</i> . |

| Field | Description |
|-----------------|--|
| | If you do not define your own survey expiration message, the system 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 <i>Activate Market Testing in Transactional Surveys</i> . |
| Proofing | This field displays the number of proofs that have been sent, approved, and rejected. Click Send Proof Message to send a proof. See <i>Send a Proof</i> . |
| Delivery Status | This field displays the delivery status of the survey and the number of emails sent and delivered. See <i>Survey Delivery Statuses</i> . |
| 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 *Create a Questionnaire in Basic Mode* and *Create a Questionnaire in Advanced Mode*.
7. Click the **Audience** tab to define an audience for the survey. See *Define the Transactional Survey Audience*.
8. Click the **Invitation Message** tab to create the message sent to the survey audience. See *Create an 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.
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 *Survey Reminders*.
11. Click the **Delivery** tab to select delivery options. See *Access Transactional Delivery Options for Surveys*.
12. To view the reports associated with the survey, click the **Results** tab.
13. To preview the survey as it would be viewed on a standard web device, such as a desktop or a laptop, click **Standard** 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 **Mobile** on the ribbon.
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 **Survey URL** 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 clipboard.

- a. Click **OK** when you are finished viewing the URL.

16. Click **Save**.

Related Topics

- [Business Rule Actions](#)
- [Mobile Surveys](#)
- [Configure the File Menu](#)
- [View Survey Results](#)

Define 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 [Overview of Audiences](#) for complete details and procedures about using contact lists and segments in surveys and mailings.

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 see [Add a Contact List](#).
- b. Select the list you want to exclude from the survey audience and click **OK**.

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 see [Create a Segment](#).
- b. Select the segment you want to exclude from the survey audience and click **OK**.

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 [Add a Contact List](#) and [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 field information about communication options.

Options Section

| 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. |

| Field | Description |
|--|--|
| Limit frequency of communication | <p>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.</p> <p>The minimum you can enter is 2 in the last 1 day. The maximum number of days you can enter is 90.</p> <p>Tip: To ensure contacts receive only 1 email every “x” number of days, use the Limit recency of communication setting described next.</p> |
| Limit recency of communication | <p>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.</p> <p>The maximum number of days you can enter is 90. The default value is 1 day.</p> <p>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.</p> |
| Honor external suppression list | <p>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 Overview of the External Suppression List for complete details and procedures about the external suppression list.</p> |
| Limit delivery to a randomly selected subset of the audience | <p>Select this check box to send the survey to a random subset of the audience. Enter a percentage or use the up and down arrows to select a percentage of the audience to send the survey to.</p> |
| Allow delivery of messages to multiple contacts sharing the same email address | <p>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.</p> <p>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.</p> |

How Invitation Messages Work 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 [Create an Invitation Message in Broadcast Surveys](#).

Note: 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 invitation message, make edits, and then relaunch it. See *Suspend a Transactional Survey*. For a canceled survey, you can copy it, and then modify and send the copy. See *Cancel a Transactional Survey Invitation Message*. Alternatively, 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.

Activate Market Testing in Transactional Surveys

When creating a transactional survey, you can send a sample of test messages to portions of your audience before determining the best one to use as a final message. You can define different message content, designs, delivery, and proofing options for each version of your message.

For transactional surveys, market testing is available in audience sampling mode. If more than one message is created when market testing is used, then contacts who sent the email through a campaign or rule will receive one of the test messages. When the survey is launched through a campaign, market testing rotates between the test messages. After you evaluate the effectiveness of your test messages, you create a final message.

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 **Audience Sampling**.

3. Click **OK**.

The Invitation Message tab displays in audience sampling mode.

You can add additional messages, edit the messages, send proofs, or view results. From here, you can also see information about each message.

Invitation Message

| Column | Description |
|--------------|--|
| Name | This column displays the name of the message. |
| Subject | This column displays the email subject line for the message. |
| Status | This column displays the delivery status of the message. |
| 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. |

| Column | Description |
|---------|---|
| | <p>Note: Unsubscribe sets global opt-in in both Outreach and Feedback. See Insert an Unsubscribe Link.</p> |
| Replied | This column displays the number of times the survey message was replied to. |

4. Click **New** on the toolbar to add a second test message.
The **Edit Message** window opens.
5. Enter the name of the message in the **Name** field.
6. Enter the subject of the message in the **Subject** field on the Content tab. See [How Invitation Messages Work 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 [How the HTML Editor Works](#) and [How You Create and Edit Text-Only Messages](#).
8. To send a proof, click the **Proofing** tab on the Edit Message window. See [Proof Results](#).
9. Click the **Delivery** tab on the Edit Message window to access delivery options for the test message. See [Access Transactional Delivery Options for Surveys](#).
10. Click **OK**.
The new message displays on the Invitation Message tab.
11. To open a message for editing, select the message and click **Open**.
12. To delete a message, select the message and click **Delete**.
13. To copy a message to create a new message, select the message and click **Copy**.
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 **Send Proof**.
15. To preview the content of a message, select the message and click **Preview**.
16. To refresh the message statistics, click **Refresh**.
17. To add URL parameters, enter 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** icon to the right of the URL Parameters field and select the field. See [Insert a Merge Field to a URL Parameter](#).

Access Transactional Delivery Options for Surveys

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 it in rules and campaigns.

Before you start

You must create a questionnaire before delivering the survey. See [Create a Questionnaire in Basic Mode](#).

From the Delivery tab, you can launch, suspend, or cancel surveys as well as access common administration tasks and see the send history.

Here's what to do

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 [Launch a Transactional Survey](#).
- Suspend a survey—See [Suspend a Transactional Survey](#).
- Cancel a survey—See [Cancel a Transactional Survey Invitation Message](#).

On the bottom of the tab, delivery information about the survey is available for you to quickly scan and assess.

Delivery Checklist and Message Send History Sections

| 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 Send a Proof . |
| CAN-SPAM Compliance | This section contains a link to test survey 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 Check Compliance from the Delivery Tab . |
| 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. |

Launch a Transactional Survey

After you launch a survey, the status changes to Launched. From the Launched status, you can suspend the survey invitation message or cancel it.

Transactional surveys must be launched before they can be used in rules or campaigns.

Note: 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 invitation message, make edits, and then re-launch it. See [Suspend a Transactional Survey](#). Alternatively, 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.

1. From the Delivery tab of an open survey, click **Launch**.
2. Click **Yes** to confirm the survey launch.

Results:

The delivery status on the Delivery tab changes to Launched and you can see how many surveys were sent and delivered.

Suspend a Transactional Survey

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.

1. From the Delivery tab of an open survey, click **Suspend**.

Note: 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 **Yes** to confirm suspending the survey.

Results:

The status changes to Suspended and the Delivery Status section displays the number of audience members the survey was already sent and delivered to.

Cancel a Transactional Survey Invitation Message

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.

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.

Tip: Alternatively, 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.

1. From the Delivery tab of an open survey, click **Cancel Invitation Message**.

The **Confirm Cancel Invitation Message** window opens asking you to confirm that you want to cancel the invitation message.

2. Click **Yes** to cancel the survey.

Results:

The delivery status changes to Canceled.

Create a Website Link Survey

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. After you save the survey, it is available on the web and can be linked to from your outside source.

1. From the Surveys explorer, click **New**.

A new survey opens on the content pane.

Tip: You can also create surveys from an open survey by clicking New. Additionally, if your navigation set is configured to add surveys from the file menu, click **File > Surveys > Survey**. See *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 survey notes, tasks, and attachments (see *Survey Management*). As you create the survey, you move through each tab to complete the survey 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 list and select the staff member.
 - a. To search for a staff member, enter the staff member's name in the **Find** field.
Wildcards are supported when searching staff members. You can search strings that include a space by entering `%+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 B2C Service 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 to perform common survey functions.

At a Glance Section

| Field | Description |
|--------------------------|--|
| Invitation Method | This field displays the invitation method currently selected for the survey. Click Change to change the method. See 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 Deactivate a Survey . |
| Expiration Date | This field displays the survey expiration date and time. By default, no expiration date is set. See 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 Set Expiration Based on Maximum Number of Responses . |
| Expiration Message | Click Edit to customize the survey expiration message. See Customize the Expiration Message . If you do not define your own survey expiration message, the system 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 Send a Proof . |
| Rule Visibility | Clear the Chats check box to make this survey unavailable as an action in a chat rule. Rule Visibility only displays if Chat is enabled. |

| Field | Description |
|-------|-------------|
| | |

6. Click the **Questionnaire** tab to add questions and HTML content to the survey. See *Create a Questionnaire 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.

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 *Overview of Message Templates*.
8. To view the reports associated with the survey, click the **Results** tab. See *View 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 **Standard** 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 **Mobile** on the ribbon. See *Mobile Surveys*.
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 **Survey URL** 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 B2C Service. From this window, you can view the URL and it is automatically copied to your workstation clipboard.
12. Click **Save**.

Polling Surveys

Polling surveys display as a question on a customer portal page or any page that is external to the customer portal. 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 *Polling Widgets*.

Create a Polling Survey

Polling surveys display as a question on a customer portal page or any page that is external to the customer portal.

1. From the Surveys explorer, click **New**.

A new survey opens on the content pane.

Tip: You can also create surveys from an open survey by clicking **New**. Additionally, if your navigation set is configured to add surveys from the file menu, click **File > Surveys > Survey**.

2. Click **Polling Survey**.

The Summary tab for a polling survey displays on the content pane.

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 polling survey notes, tasks, attachments, and audit log. As you create the polling survey, you move through each tab to complete the polling survey 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 list and select the staff member. To search for a staff member, enter the staff member's name in the **Find** field.

Wildcards are supported when searching staff members. You can search strings that include a space by entering **%+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 to perform common polling survey functions.

At a Glance Section

| Field | Description |
|--------------------------|--|
| Invitation Method | This field displays the invitation method currently selected for the survey. Click Change to change the method. After 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. |
| Expiration Date | This field displays the polling survey expiration date and time. By default, no expiration date is set. |
| 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. This field works only on sites using Customer Portal Framework Version 3.0 or later. |
| Expiration Message | Click Edit to customize the survey expiration message. If you do not define your own survey expiration message, the system default message is used. 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. |

| Field | Description |
|-----------|--|
| | 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 **Add Question**.

The **Select Question** window opens.

7. To add an existing question, double-click the question you want to add.

The question is added to the Active Questions list.

8. To add a new question, click **Add Question**, and then click **New Survey Question**.

- a. To create a text question, see *Create a Text Question*.
- b. To create a choice question, see *Create a Choice Question*.
- c. To create a matrix question, see *Create a Matrix Question*.

Note: Display options which lets you define HTML properties for all question types, may be affected by widget styling attributes defined in the customer portal. (Display options are available on the ribbon of a new question.)

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.

Tip: 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 **Polling Options** on the ribbon. The **Polling Survey Options** window opens.

- a. To define the polling survey title that displays on the web page, enter it in the **Poll Title** field.
- b. To let respondents see the polling survey results chart on the web page, select **Show Chart**.
- c. To display the total number of votes on the web page, select **Show Total Votes**.
- d. To display polling survey results to all web page visitors, even if they have not responded to the poll, select **Show View Results Link**.
- e. To define what happens after customers submit a polling survey, click **Add Action** 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.

Note: 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 *Set End of Survey Options*.

10. To spell check the polling survey, click **Spelling**.

11. To preview the polling survey, click **Preview Survey**.

The polling survey preview lets you see specific questions and switch between views.

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 **Go**.

The question 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 **Save**.**What to do next**

When you save the polling survey, a survey ID is assigned that must be associated to the polling widget in the customer portal. See *Add the Polling Widget to a Page*.

HTML Properties in Polling Surveys

You can define 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 **Display Options** on the ribbon of the **New Question** window. For customer portal widget styling attributes, see *Polling Widget Attributes*.

- To define HTML properties for a text question, see steps 5–7 in *Create a Text Question*.
- To define HTML properties for a choice question, see steps 6–8 in *Create a Choice Question*.
- To define HTML properties for a matrix question, see steps 5–7 in *Create a Matrix Question*.

Create a Questionnaire in Basic Mode

The questionnaire is the main part of broadcast, transactional, and website link surveys. 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 *Create a Questionnaire 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 *Polling Surveys*.

1. In an open survey, click the **Questionnaire** tab.

The Questionnaire tab opens on the content pane.

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 options for the tasks you can perform on the questionnaire, such as adding a question. The Page Tasks section contains options for the tasks you can perform on the specific page of the questionnaire you are working on. The Survey Tasks section contains options for the tasks you can perform on the entire survey. You can also right-click in the main section to select from the most common tasks.

2. Enter field information.

Page Tasks

| Button | Description |
|------------------|--|
| Add a Question | Click this button to add a question to the questionnaire. See <i>Add a Question to a Survey</i> . |
| Add HTML Content | Click this button to add HTML content to the questionnaire. See <i>How the HTML Editor Works</i> . |
| Set Page Title | Click this button to change the title of the page from the default "Page <page number>." See <i>Set the Page Title</i> . |
| Delete Page | <p>CAUTION: Deleting a page cannot be undone.</p> <p>Click this button to delete the page you are on and all of its content.</p> <p>This button is available only when the questionnaire contains more than one page.</p> |

3. Enter field information.

Survey Tasks

| 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. |
| Organize Pages | Click this button to organize pages in the questionnaire. See <i>Organize Questionnaire Pages</i> . 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 <i>Apply a Survey Template</i> . |

| Button | Description |
|-------------------------|--|
| | Templates are created through the Content Library. See <i>How Templates Work</i> . |
| 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 <i>Set Survey Options</i> . |
| End of Survey Options | Click this button to set options that determine what happens when the survey is submitted. See <i>Set End of Survey Options</i> . |
| Switch to Advanced Mode | Click this button to create your questionnaire in advanced mode. See <i>Create a Questionnaire in Advanced Mode</i> . 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. 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 *Apply a Survey 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 Survey Ribbon

Options found on the ribbon when creating a survey in basic mode are described here.

Basic Survey Ribbon

| 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. |

| Group/Button | Description |
|--------------|---|
| Survey URL | Click this button to view the survey 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. |
| 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. |

Add a Question to a Survey

Adding questions is the most important part of creating your survey. You can add any questions already in Feedback or create questions as needed.

1. Click **Add a Question** 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 icon 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.
To add multiple questions at the same time, 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. After you save the new question, it appears in the questions list. See [How Questions Work](#).
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 **OK** to move the question to the specified location.

Related Topics

- [Best Practices for Writing Effective Questions](#)

Set 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.

1. In your open questionnaire, click **Set Page Title** in the Page Tasks section.
The **Set Page Title** window opens.
2. Enter the name of the page in the **Title** field.
This field must contain a value.
3. Click **OK**.

Organize Questionnaire 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.

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](#).

1. In your open questionnaire, click **Organize Pages** 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 **Add Page**.
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 **Edit Title**. See [Set the Page Title](#).
4. To delete a page from the questionnaire, select the page you want to delete and click **Remove**.
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 **Move Up**.
6. To move a page down one position, select the page and click **Move Down**.

Tip: You can also drag and drop pages to adjust their position.

7. Click **OK**.

Apply a Survey 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.

1. In your open questionnaire, do one of the following:
 - o Click **Apply Template** in the Survey Tasks section.
 - o 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 **OK**.

The template is applied to your questionnaire and the name of the template appears in the Survey Template section.

3. To clear a template from your survey, do one of the following:
 - o Click **Clear Template** on the Choose Template window.
 - o Click **Clear** next to Survey Template on the bottom of the content pane.

Related Topics

- [How Templates Work](#)

Set 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](#).

1. In your open questionnaire, click **Survey Options** in the Survey Tasks section.
The **Survey Options** window opens.
2. Enter field information.

Survey Options Window

| 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 list to select the font family. |
| Font Size | Click this drop-down list 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. |

| Field | Description |
|--------------------------|--|
| 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 list to select the number format you want to appear before each question. This drop-down list 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). 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. 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 list 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, enter the name of the label as you want it to display. |
| Final Page Submit | To change the label of the submit button, which is set to Submit by default, enter the name of the label as you want it to display. |

| Field | Description |
|---------------------------|---|
| 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, enter the name of the label as you want it to display. |
| Class | Enter any class name you want to assign to the default buttons. You must define the class in your HTML document 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 | Enter 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 B2C Service 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 | <p>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.</p> <p>Clear this check box to disable optimization for mobile devices.</p> |

3. Click **OK**.

Set End of Survey Options

You can 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.



1. In your open questionnaire, click **End of Survey Options** in the Survey Tasks section.

When you are creating a polling survey, the first step looks slightly different. In your open question list, click **Polling Options** on the ribbon to open the Polling Survey Options window, where the End of Survey Actions section displays. Continue with step 2.

The **End of Survey Options** window opens.

2. Click **Add Action** to add an action that is performed when the survey is submitted.
The **Survey Final Action Wizard** opens. See *Add an Action with the Survey Final Action Wizard*.
3. To edit an action, select the action and click **Edit Action**.
4. To delete an action, select the action and click **Remove**.
5. To move an action up one position, select the action and click **Move Up**.
The actions execute in the order they are listed.
6. To move an action down one position, select the action and click **Move Down**.
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 options listed in the Final Page section.

Final Page Section

| Option | Description |
|--|---|
| Redirect to Default Thank You Page | Select this option to use the default final page. Customers are redirected to a B2C Service page that thanks them for their feedback. You can edit this page through the File Manager using the cci/top.php, head.php, and bottom.php files. See <i>Manage Files with the File Manager</i> . |
| Redirect to URL | Select this option and enter a URL to redirect customers to a specific website. See <i>Edit Redirect to URL Attributes</i> . |
|  Open URL | Click this icon to open the URL. |
|  Add | Click this icon to add a contact, incident, opportunity, or tracked link merge field to the URL. See <i>Insert a Text Merge Field</i> . |
| Display Final Page Without Buttons | Select this option to display the final page of the survey without a Submit button. 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 **OK**.

Add an Action with the Survey Final Action Wizard

When setting 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. See *Set End of Survey Options*.

1. From the End of Survey Options window, click **Add Action**.
The **Survey Final Action Wizard** opens.
2. Click **Next**.

3. Select the action you want to perform from the final action type options.

Final Action Types

| Action Type | Description |
|----------------------------------|---|
| Add the Survey Contact to a List | Select this option to add the customer to a contact list after submitting the survey. |
| Create an Opportunity | Select this option to create an opportunity in Opportunity Tracking using the customer information. |
| Create a Notification | Select this option to send an email to staff members notifying them that the survey has been submitted. |
| Create an Incident | Select this option to create an incident in Service using the customer information. |
| Create a Lead | Select this option to create a lead in Opportunity Tracking using the customer information. |
| Execute Object Event Handler | Select this option to create a contact-related object event handler using customer information. |
| Send an Email to a Contact | Select this option to send a transactional mailing to the customer. |
| Set a Field Value | Select this option to set a field in the contact record for the customer. |
| Execute an External Event | Select this option to execute an external event after the survey is submitted. |

4. Click **Next**. 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.
 - o Add the Survey Contact to a List—See [Edit Add to List Attributes](#).
 - o Create an Opportunity—See [Edit Opportunity Attributes](#).
 - o Create a Notification—See [Edit Notification Attributes](#).
 - o Create an Incident—See [Edit Incident Attributes](#).
 - o Create a Lead—See [Edit Lead Attributes](#).
 - o Execute Object Event Handler—See [Edit Execute Object Event Handler Attributes](#).
 - o Send an Email to a Contact—See [Edit Transactional Mailing Attributes](#).
 - o Set a Field Value—See [Edit Set Field Attributes](#).
 - o Execute an External Event—See [Edit External Event Attributes](#).

5. Click **Next**.

6. Select when the action should be performed.

Final Action Start Options

| Option | Description |
|------------------------------------|--|
| Every time the survey is completed | Select this option to perform the action every time the survey is submitted. |
| When the completed survey score is | Select this option 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 Create a Choice Question . |

7. Click **Finish** to add the action.

8. Click **OK**.

Tip: The actions available in the Survey Final Action Wizard are also available as standards elements when editing in advanced mode.

Create a Questionnaire 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 [Edit Decision Attributes](#) and [Edit 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.

Click **Switch to Advanced Mode** in the Survey Tasks section.

Results:

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. See [Edit Redirect to URL Attributes](#).

Related Topics

- [How You Edit Element Attributes](#)
- [Design an Advanced Survey Flow Diagram](#)

Advanced Mode Survey 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 options you can use to modify the survey or elements on the canvas.

Advanced Survey Designer Home Tab

The Home tab in advanced surveys gives you access to basic editing functions, survey components, and attributes that impact the entire survey.

From the Advanced Survey 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. See [Set Survey Options in Advanced Mode](#).

Advanced Survey Designer Home Tab

| Group/Button | Description |
|--------------|--|
| Elements | <p>The buttons in this group let you add survey components to your flow diagram. For a description of available components, see Design an Advanced Survey Flow Diagram.</p> <p>Tip: Components can also be accessed from the toolbox.</p> |

| Group/Button | Description |
|----------------------|--|
| 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 Apply a Survey Template . |
| Switch to Basic Mode | <p>CAUTION: Switching to Basic mode cannot be undone and any changes made in advanced mode are lost.</p> <p>Click this button to switch the survey to Basic mode.</p> |
| Validate | Click this button to check the survey workflow for errors. See Survey Validation . |
| 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. |

Set Survey Options in Advanced Mode

You can specify certain survey options to customize your questionnaire from the Designer Home tab.

1. Click **Survey Options** on the Designer Home tab.
Depending on your screen size, you may need to click **Survey Tasks > Survey Options**.
The **Survey Options** window opens.
2. Enter the field information.

Survey Options in Advanced Mode

| Field | Description |
|-------------------|---|
| Font | Enter field information in this section to define the font attributes for the survey. |
| Apply Survey Font | <p>Select this check box to set the font attributes in the survey.</p> <p>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.</p> |

| Field | Description |
|---------------------------|--|
| Font Family | Click this drop-down list to select the font family. |
| Font Size | Click this drop-down list 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 list to select the number format you want to appear before each question. This drop-down list 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 B2C Service 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 | <p>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.</p> <p>Clear this check box to disable optimization for mobile devices. See <i>Mobile Surveys</i>.</p> |

3. Click **OK**.

Advanced Survey Designer View Tab

The View tab in advanced surveys mode provides access to the toolbox and options for changing your view of the design canvas, including displaying design grid elements and adjusting the zoom level. These options make it easier to review and edit your flow diagram.

Advanced Survey Designer View Tab

| 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. |
| Grid | Select this check box to display the canvas grid. The canvas grid displays by default. |
| Grid Size | Click this drop-down list 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 Set 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. |

Set Canvas Options

The following procedure describes the steps for customizing your canvas options on the View tab in advanced surveys.

1. To display labels for connectors on the canvas, select **Connector Labels** on the View tab.
2. To display validation results on the canvas, select **Validation Results**. See [Survey Validation](#).
3. To display the canvas grid, select **Grid**.
4. To change the size of the canvas grid, click the **Grid Size** drop-down list and select from Small, Medium, or Large.

Set Zoom Options

You can set zoom options that are available from the View tab.

1. Click **Zoom** on the View tab.
The **Zoom Options** window opens.

2. To specify a desired zoom level, select an option in the Zoom To section.
 - a. To adjust the zoom level to show all components, select **Fit to Screen**.
 - b. To show the entire canvas, select **Extents**.
3. Enter 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 found in the bottom right corner of the Service Console.



4. Click **OK**.

Campaign and Survey Element Tools Tab

When you select an element on the canvas of a campaign or an advanced survey, the design ribbon displays a contextual tab called the Element Tools tab.

The contextual tabs that display on the ribbon depend on your selection. When you select an element or a connector, the ribbon displays a fourth contextual tab. When an element is selected, the Element Tools tab displays. The Element Tools tab is divided into two sections. On the left are contextual groups and options, meaning they change depending on the element selected. On the right are standard groups and options, meaning they display no matter what element is selected.

Element Tools Tab

| Group/Button | Description |
|--|---|
| Label | The options 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 alignment. |
|  (Label Position) | Click this icon to select the position of the label relative to the element. The default label position of a new element is Inside. |
|  | Click this icon to enter the text of the element label. You can also edit the label text inline by clicking the element label. |
| Notes | Click this option to enter notes about the element. |
| Size | The options in this group let you change the height and width of the element. |

Campaign and Survey Path Tools Tab

When you select a connector on the canvas of a campaign or an advanced survey, the design ribbon displays a contextual tab called the Path Tools tab.

The options on this tab let you format the connector and change the connector type. See [and](#) [and](#) .

Path Tools Tab

| Group/Button | Description |
|----------------|--|
| Type | Click this drop-down to change the type of the selected connector. A connector type can be changed only when it is not connected to a standard or event-triggering element. |
| Style | The options in this group let you change the line style of the selected connector. |
| Straight | Click this option to set the connector line style to straight. |
| Square | Click this option to set the connector line style to square. |
| Rounded Square | Click this option to set the connector line style to rounded square. |
| Curved | Click this option to set the connector line style to curved. |

Design an Advanced Survey Flow Diagram

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 “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 the key objectives of your survey. When 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. After 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 elements 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 the Feedback 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.

1. Drag and drop a survey element from the toolbox onto the canvas.

Survey Elements

| 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 Edit a Survey Page . |
| 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 Edit Serve Web Page Attributes . |
| Conditional Elements | Conditional elements produce multiple path outcomes based on decisions. |
| Decision | <p>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 Connectors in Surveys.</p> <p>After adding the decision, double-click it to define its attributes. See Edit Decision Attributes.</p> |
| Case Statement | <p>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 Connectors in Surveys. After adding the case statement, double-click it to define its attributes. See Edit Case Statement Attributes.</p> |
| 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 Edit 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 Edit 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 Edit 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 Edit Opportunity Attributes . |

| 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 Edit 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 Edit 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 Edit 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 Edit 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 Edit 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 Edit Transactional Survey Attributes . |
| External Event | Drag and drop this element to run an external event. External events are scripts that run outside of B2C Service. After adding this element, double-click it to define its attributes. See Edit 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 Connectors in Surveys . |

2. To edit the attributes of an element on the canvas, double-click the element. See [How You Edit 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 [Connectors in Surveys](#).
4. To cut, copy, or paste one or more components, click the appropriate option on the Clipboard group of the Designer Home tab.
5. To export an image of the canvas to your workstation, click **File > Export Image**.
6. To change the formatting of an element, select the element and see the following table. See [Campaign and Survey Element Tools Tab](#).

Tip: To select multiple elements at the same time, press Ctrl and select each element.

Connectors in Surveys

Connectors are components used to link survey 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.

Each element can have a specific number of incoming and outgoing connectors. This table lists the number of connectors allowed for each element.

Types of Survey Connectors

| Path | Color | Description |
|----------|----------------|--|
| Submit | Blue | <p>This type of connector submits the element 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.</p> <p>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 Insert a Survey Results Link.</p> |
| 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. |
| 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.

Connectors Allowed for Element Types

| Element | Connectors Allowed |
|------------------------------|---|
| Add to List | <p>Unlimited incoming connectors</p> <p>1 outgoing standard connector</p> |
| Case Statement | <p>Unlimited incoming connectors</p> <p>1 outgoing connector for each choice.</p> |
| Decision | <p>Unlimited incoming connectors</p> <p>1 outgoing Yes connector</p> <p>1 outgoing No connector</p> |
| Execute Object Event Handler | <p>Unlimited incoming connectors</p> <p>1 outgoing standard connector</p> |

| Element | Connectors Allowed |
|-----------------------|---|
| 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 |
| 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 |

| Element | Connectors Allowed |
|---------|--------------------|
| | |

Connect an Element

Connectors are used to link elements and show flow direction. Elements can be connected to other elements depending on their type. The type of connector is indicated by its color.

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.

Click an anchor on the first element and drag the connector to an anchor on the second element.

Note: If you use the wrong connector type, the element anchor will not be highlighted.

Other ways to connect elements include the following:

- 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.

Related Topics

Connect to a Different Element

You can change the flow of your existing elements by moving a connector to a different element.

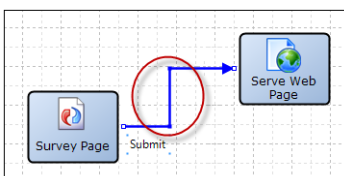
Click a midpoint on the connector to select it and drag one of its ends to an anchor on a different element.

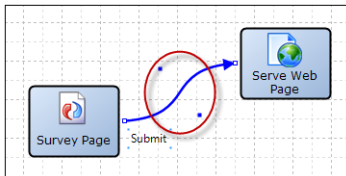
The element will highlight when you can connect to it. Remember, if you try to use the wrong connector type, your element will not be highlighted.

Edit a Square or Curved Connector

You can adjust the shape of the connection on square and curved connectors.

These images show the calibration points on square and curved connectors.





Click a midpoint on a square or curved connector to select it and drag the calibration points to change the connection shape.

Delete a Connector

You can delete connector components.

Click a midpoint on the connector to select it and press Delete.

How You Edit Element Attributes

After 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.

The following elements can be added to an advanced survey:

- *Edit a Survey Page*
- *Edit Serve Web Page Attributes*
- *Edit Decision Attributes*
- *Edit Case Statement Attributes*
- *Edit Notification Attributes*
- *Edit Redirect to URL Attributes*
- *Edit Incident Attributes*
- *Edit Opportunity Attributes*
- *Edit Lead Attributes*
- *Edit Add to List Attributes*
- *Edit Set Field Attributes*
- *Edit Execute Object Event Handler Attributes*
- *Edit Transactional Mailing Attributes*
- *Edit Transactional Survey Attributes*

Note: You must define attributes for each component added or a validation error occurs when attempting to save the survey. See *Survey Validation*.

Edit a Survey Page

After 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, after 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.

For best practices about using back and next buttons, see *Standard element placement when using next and back buttons*.

1. Double-click the **Survey Page** element.
The New Survey Page window opens.
2. Click an option in the Page Tasks section.

Page Tasks

| Button | Description |
|------------------|--|
| Add a Question | Click this button to add a question to the questionnaire. See <i>Add a Question to a Survey</i> . |
| Add HTML Content | Click this button to add HTML content to the questionnaire. See <i>How the HTML Editor Works</i> . |
| Set Page Title | Click this button to change the title of the page from the default "Page <page number>." See <i>Set the Page Title</i> . |
| Modify Buttons | Click this button to modify the text of the buttons or remove buttons from a page. See <i>Modify Buttons</i> . |

Modify Buttons

After you add a Survey Page element to your flow diagram, you can define the buttons you want to use on your page.

1. Click **Modify Buttons** in the Page Tasks section.
The **Set Button Properties** window opens.
2. Enter field information.

Set Button Properties Window

| Field | Description |
|--------------------------|---|
| Button Alignment | Click this drop-down list to select left, center, or right alignment. Left is selected by default. |
| Show Next Button on Page | <p>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.</p> <p>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.</p> |
| Text | To change the label of the next button, which is set to Submit by default, enter the name of the label as you want it to display. |

| Field | Description |
|------------------------------|--|
| Class | Enter any class name you want to assign to the button. You must define the class in your HTML document 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 | Enter 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, enter the name of the label as you want it to display. |
| Class | Enter any class name you want to assign to the button. You must define the class in your HTML document 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 | Enter 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 **OK**.

Edit Serve Web Page Attributes

After 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 B2C Service.


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.

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 also add a back button to a web page that contains a web form. See .

1. Double-click the **Serve Web Page** element.
The **Serve Web Page** window opens.
2. Enter the name of the element in the **Label** field.
3. Enter field information.

Serve Web Page Window

| 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 enter the document name in the Find field. |

| Field | Description |
|---|--|
| New Document | Click this text to create a document. See . |
| *Shortcut ID | Enter the shortcut ID that is used to format the URL in this field. The URL for the document will be: <code>http://<your_domain>/ci/documents/detail/2/<shortcut_ID></code> Note: This shortcut ID must be unique for all Serve Web Page elements in all surveys and campaigns. |
|  (View Web Page) | Click this icon to open the web page in a browser. The icon is inactive until the campaign is launched. If the shortcut ID is edited after launching, the icon is inactive until the campaign is saved. |
| Copy URL | Click this icon to copy the web page URL to the clipboard. The URL will not be valid until the campaign is launched. |
| *Friendly Name | Enter the name of your web page. This name is used when linking to the web form from another document. |
| Title | Enter the name of the page as you want it to display in the title bar of the web browser when the survey is taken. 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.

You can specify default values for the settings on the User Identification tab by editing optional configuration settings. See .

5. Enter field information.

Note: Keep in mind that all the settings you define on the User Identification tab determine what data is passed to the survey results. This affects how you can associate your survey results to an incident or to a contact.

User Identification Tab

| 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 option 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 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 |

| Field | Description |
|--------------------------------|---|
| | cleared, the contact is always required to log in through the customer portal before viewing the web form. |
| Other Credentials | Select this option to identify the contact by a cookie or through URL parameters. |
| Cookie | Select this option 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. |
| Email Click-Through Parameters | Select this option if you want to use parameters passed in the URL to prefill the web form. Tip: 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 option if you do not want the web form to prefill. This applies only to single page surveys or campaigns with only one Serve Web Page element. For surveys and campaigns with more than one page, after the contact info is added to the first page, the subsequent pages will prefill. Therefore, this option applies only to the first instance of a page in a survey or campaign flow that uses a Submit connector. For example, most surveys use a Submit connector on the first page that flows to the next page with another Submit connector, and so on. In this case, the first page will not prefill since the contact has not been identified. However, after the first page has been submitted, the next page that loads will be associated to that contact. Therefore, any web form fields on that page (as well as on subsequent pages) will prefill even though Do Not Identify is selected. 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. When serving a website link survey, this option is available only if the Allow Anonymous check box is selected on the Summary tab of the survey. |
| 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 option is selected for that form. |

Tip: You can set default values for the user identification fields by editing the configuration settings found in **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 enter the notes.
7. Click **OK**.

Add a Back Button to a Serve Web Page

You can add a back button to a web page that contains a web form.

1. From an advanced survey, double-click the **Serve Web Page** element.
The **Serve Web Page** window opens.
2. Click **New Document**.

3. From the HTML tab of your document, click **Begin With Blank Content**.
The HTML editor opens.
4. Click **Web Form** in the Forms section of the Toolbox. See *Insert a Survey Results Link*.
Note: Form fields cannot be added outside of a web form.
5. Click **Submit Button** to add a submit button to your web form.
Web forms must contain a submit button.
6. To add a back button to your content, click **Back Button**.
7. To edit the label of the back button, double-click the button and enter the label as you want it to display.

Edit Decision Attributes

Decision elements let you branch your workflow based on two outgoing paths you define.

After 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 campaigns or 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 flow based on a specific contact response to an individual question in the matrix.

1. Double-click the **Decision** element to open the **Decision Conditions** window.
2. Enter the name of the decision in the **Label** field.
3. Click **Add Condition** to create a condition for the Yes path. The **Add Condition** window opens.
 - a. Enter the name of the condition in the **Name** field.
 - b. Click the **Source** drop-down list and select a database field or survey question.

Note: When adding a text field to a decision, the Source drop-down list displays an additional item as "<text field name> SmartSense." Selecting the Smart Sense 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 list and select the logical symbol that completes the condition.
- d. Enter the value of the field or click the drop-down list and select the value in the **Value** field.
- e. Click **OK** 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 **Add OR Node**.
Conditions attached to the OR node are joined by OR.
5. To edit a condition, select the condition and click **Edit Condition**.

- To delete a condition, select the condition and click **Remove Condition**.
The Add OR Node, Edit Condition, and Delete Condition options display only after you have added a condition.
- Click **View Text Definition** to see your conditions as a logical expression.
- To add any notes associated with the element, click the **Notes** tab and enter the notes.
- Click **OK**.

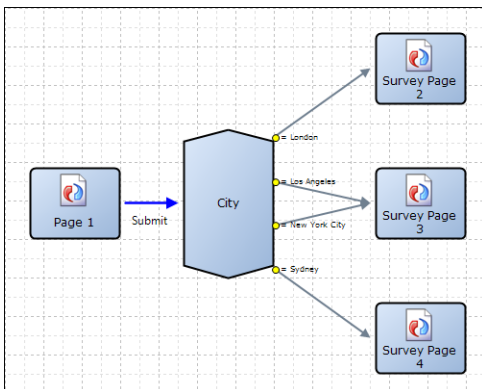
Edit Case Statement Attributes

Case statements help you branch your workflow based on multiple conditions you define. They are unique because you define an outgoing path for each condition. When the first choice (condition) is matched, the path for that choice is followed, and no other conditions within the case statement are evaluated.

After 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. This image shows a case statement with four choices that lead to three different paths.



- Double-click the **Case Statement** element.
The **Case Statement** window opens.
- Select a contact field, survey question, or score from the Cases tab.
Tip: Depending on the item you select, choices are either already defined by default or you must define them.
- If you want to add an “other” path to your case statement, select **Include Option for Other**.
- To add a choice that is not defined by default, click **Add Choice**.
The bottom section of the Case Statement window displays options to define logical expressions for your choices. 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.
- Click the **Operator** drop-down list to select the logical symbol that completes your expression.
- Enter the field 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.
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 enter the notes.
11. Click **OK**.

Edit Notification Attributes

After you add a Notification element to your flow diagram, you can edit its attributes to define which staff members to notify.

1. Double-click the **Notification** element.
The **Notification** window opens.
2. Enter the name of the element in the **Label** field.
3. Enter 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 enter the notes.
6. Click **OK**.

Edit Redirect to URL Attributes

Redirect to URL elements let you define a web page your customers are redirected to when they complete the previous action in the workflow. After adding a Redirect to URL element to your flow diagram, you can edit its attributes to specify the URL 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).

1. Double-click the **Redirect to URL** element.
The **Redirect to URL** window opens.
2. Enter the name of the element in the **Label** field.
3. Enter the URL of the website you want to redirect the contact to in the **URL** field.
The protocol must be specified. The following protocols are supported:
 - o file:///
 - o ftp://
 - o gopher://
 - o http://
 - o https://
 - o mailto:
 - o nntp:
 - o news:
4. To open the URL in a browser, click the **Open URL** icon 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** icon (to the right of the Open URL icon). See *Insert a Text Merge Field*.

6. To add any notes associated with the element, click the **Notes** tab and enter the notes.
7. Click **OK**.

Edit Incident Attributes

After 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.

1. Double-click the **Incident** element.
The **Incident** window opens.
2. Enter the name of the element in the **Label** field.
3. Enter field information.

Incident Window

| Field | Description |
|-----------------|--|
| *Subject | Enter the subject of the incident in this text box. |
| *Status | Click this drop-down list to select a status to assign to the incident. The default status is Unresolved. |
| Assigned | Click this drop-down list to select a group or staff member to assign to the incident. Use the Find field at the bottom of the Assigned drop-down list to quickly find staff members. Tip: Wildcards are supported when searching staff members. You can search strings that include a space by entering %+Space+character , which is helpful when searching last names. For example, entering %+Space+b returns all last names starting with the letter b. There is also an implied wildcard when searching, so entering in the Find field returns all items containing the letter b. |
| Product | Click this drop-down list to select a product for the incident. |
| Category | Click this drop-down list to select a category for the incident. |
| Disposition | Click this drop-down list to select a disposition for the incident. |
| Queue | Click this drop-down list to select a queue for the incident. |
| Service Mailbox | Click this drop-down list to select a mailbox to associate with the incident. |
| Customer Entry | Enter a default value for the customer thread in this text box. |
| Private Note | Click this tab to enter 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 .

- a. Click the **Field** drop-down list to select the custom field you want to set.
- b. Enter the value of the custom field in the **Value** field.
- c. Click **OK**.

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 enter the notes.
8. Click **OK**.

Related Topics

Edit Opportunity Attributes

After 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.

1. Double-click the **Opportunity** element.
The **Opportunity** window opens.
2. Enter the name of the element in the **Label** field.
3. Enter field information.

Opportunity Window

| Field | Description |
|----------|---|
| *Name | Enter the name of the opportunity in this field. The contact's email address is appended to the lead name. |
| *Status | Click this drop-down list to assign a status to the opportunity. |
| Strategy | Click this drop-down list to assign the opportunity to a strategy. |
| Stage | Click this drop-down list to assign the opportunity to a stage. The options in this menu depend on the strategy selected. |
| Assigned | Click this drop-down list to assign the opportunity to a sales representative. Use the Find field at the bottom of the Assigned drop-down list to quickly find staff members. |

| Field | Description |
|-----------|---|
| | Tip: Wildcards are supported when searching staff members. You can search strings that include a space by entering %+Space+character , which is helpful when searching last names. For example, entering %+Space+b returns all last names starting with the letter b. There is also an implied wildcard when searching, so entering in the Find field returns all items containing the letter b. |
| Territory | Click this drop-down list to assign the opportunity to a territory. |
| Summary | Enter 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 .

- a. Click the **Field** drop-down list to select the custom field you want to set.
- b. Enter the value of the custom field in the **Value** field.
- c. Click **OK**.

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 enter the notes.
8. Click **OK**.

Related Topics

Edit Lead Attributes

After 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 status, strategy, stage, assigned sales representative, and territory of the lead.

1. Double-click the **Lead** element.
The **Lead** window opens.
2. Enter the name of the element in the **Label** field.
3. Enter field information.

Lead Window

| Field | Description |
|---------|--|
| *Name | Enter the name of the lead in this field. The contact's email address is appended to the lead name. |
| *Status | Click this drop-down list to assign a status to the lead. Only statuses with a Lead status type display. This field is set to Lead by default. |

| Field | Description |
|-----------|---|
| Strategy | Click this drop-down list to assign the lead to a strategy. Only strategies with a stage assigned the Lead status type display. |
| Stage | Click this drop-down list to assign the lead to a stage. The options in this menu depend on the strategy selected. |
| Assigned | Click this drop-down list to assign the lead to a sales representative. Use the Find field at the bottom of the Assigned drop-down list to quickly find staff members. Tip: Wildcards are supported when searching staff members. You can search strings that include a space by entering <code>%+Space+character</code> , which is helpful when searching last names. For example, entering <code>%+Space+b</code> returns all last names starting with the letter b. There is also an implied wildcard when searching, so entering in the Find field returns all items containing the letter b. |
| Territory | Click this drop-down list to assign the lead to a territory. |
| Summary | Enter 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 .

- a. Click the **Field** drop-down list to select the custom field you want to set.
- b. Enter the value of the custom field in the **Value** field.
- c. Click **OK**.

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 enter the notes.
8. Click **OK**.

Related Topics

Edit Add to List Attributes

After 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.

1. Double-click the **Add to List** element to open the Add to List window.
The **Add to List** window opens.
2. Enter 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**.
 - b. Enter the list name in the **Find** field.

4. To create a contact list, click **New Contact List** and see .
5. To add any notes associated with the element, click the **Notes** tab and enter the notes.
6. Click **OK**.

Edit Set Field Attributes

After 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.

1. Double-click the **Set Field** element.
The **Set Field** window opens.
2. Enter the name of the element in the **Label** field.
3. Click the **Field** drop-down list 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 see .
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 previous value of the field. See .

6. To add any notes associated with the element, click the **Notes** tab and enter the notes.
7. Click **OK**.

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 list presents additional options for adding or subtracting (or appending or prepending) a value to the previous value of the field. 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.

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 maximum value minus the minimum value of the field. 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. |

| Field Type | Value Options |
|------------|---|
| 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. |

Edit 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.

Before you start

You must add object event handlers from the process designer and then deploy the process model before you can add Execute Object Event Handler elements to your campaign.

After 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 .

Note: Only synchronous object event handlers are applicable to campaigns and surveys.

Here's what to do

1. Double-click the **Execute Object Event Handler** element.
The **Execute Object Event Handler** window opens.
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. Enter 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 enter your notes.
5. Click **OK**.

Edit Transactional Mailing Attributes

After 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.

1. Double-click the **Transactional Mailing** element.
The **Transactional Mailing** window opens.
2. Enter 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 enter 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**. See .
5. Click the **Schedule** tab.
6. Enter field information.

Schedule Tab

| Field | Description |
|---------------|--|
| Immediately | Select this option to send the email immediately after the action occurs. |
| At Exact Time | Select this option and click the calendar (to the right of the date field) to select a specific date and time to send the email. 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 option 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 list to select the interval (minutes, hours, days, or weeks). 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.
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. Select the **Filter this Mailing** check box.
9. Click the drop-down list 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 see .
12. To add any notes associated with the element, click the **Notes** tab and enter the notes.
13. Click **OK**.

Edit Transactional Survey Attributes

After 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.

1. Double-click the **Transactional Survey** element.
The **Transactional Survey** window opens.
2. Enter 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 enter the survey name in the **Find** field.
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**. See .
5. Click the **Schedule** tab.
6. Enter field information.

Schedule Tab

| Field | Description |
|---------------|---|
| Immediately | Select this option to send the survey invitation message immediately after this action occurs. |
| At Exact Time | Select this option 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. 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. |
| Wait | Select this option to send the survey 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 list to select the interval (minutes, hours, days, or weeks). 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 **Filter This Survey** 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 list 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 enter the notes.
12. Click **OK**.

Edit External Event Attributes

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.

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 contact-related object event handlers, contact your Oracle account manager.

See [Edit Execute Object Event Handler Attributes](#).

Add a Comment

The toolbox also provides a Comment artifact that allows you to enter comments in your diagram without impeding the campaign or 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.

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.

Survey Validation

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 by clicking Validate on the Designer Home tab.

You can choose to display validation flags by selecting the Validation Results check box on the 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.

Related Topics

- [Advanced Survey Designer View Tab](#)
- [Advanced Survey Designer Home Tab](#)

CAN-SPAM Compliance

B2C Service 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, an unsubscribe link, and honors global opt-in preferences. Remaining requirements must be manually verified by the mailing or survey designer.

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.

Note: 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, and the Delivery tab of a mailing or survey.

For information about the CAN-SPAM Act, see the .

Related Topics

Check Compliance from the Invitation Message Tab

Testing for CAN-SPAM compliance issues can be accessed from both the Invitation Message and the Delivery tabs in a survey.

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 creating the survey. For best practices related to surveys, see *Improving your email marketing*.

1. Open a survey and click the **Invitation Message** tab.
2. Click **Test CAN-SPAM** under the Content section of Tasks on 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.

CAN-SPAM Compliance Report

| 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 clicking Insert Address on the HTML editor. See <i>Insert a Physical Address</i> . If a text address has not been inserted using Insert Address, 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 clicking Unsubscribe Link in the toolbox of the HTML editor. When Unsubscribe Link 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. |

| Field | Description |
|---|--|
| 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. |
| 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 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 wireless service providers . |
| 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. |
| 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. |

| Field | Description |
|-------------|--|
| 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 **OK**.

Check Compliance from the Delivery Tab

You can check for CAN-SPAM compliance issues from the Delivery tab of a mailing or survey. You can also test CAN-SPAM compliance from the Message tab of a mailing or the Invitation Message tab of a survey.

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 creating the mailing or survey.

1. Open a mailing or survey and click the **Delivery** tab.
2. 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.

CAN-SPAM Compliance Report

| 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 clicking Insert Address on the HTML editor. See . If a text address has not been inserted using Insert Address, 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 clicking Unsubscribe Link in the toolbox of the HTML editor. When Unsubscribe Link 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. |

| Field | Description |
|---|---|
| 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 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 . |
| 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. |
| 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. |

- 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 on the Delivery tab.

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 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 configuration 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.

Customize 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 display.

1. Expand **Site Configuration**, and then double-click **Configuration Settings**.

The **Search** window opens, where you can filter your search results.

2. Clear the Select All check box and then select the **Outreach and Feedback** check box.

3. To search for a specific configuration setting in the Outreach and Feedback folder, enter the setting name in the **Key** field.

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 **Search**.

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 [Edit a Configuration Setting](#).

Related Topics

- [Overview of Site Configuration](#)

Best Practices for Mailings, Surveys, and Campaigns

There are a number of methods or techniques that are generally found to be superior to those achieved by other means or that have become a standard mode of operation. Best practices as they apply to Outreach and Feedback as well as email management are listed here.

- [Best Practices for Sending Email](#)
- [Best Practices for Using Branded Email Domains](#)
- [Best Practices for Creating Effective Survey Reminders](#)
- [Best Practices for Writing Effective Questions](#)
- [Best Practices for Mobile Surveys](#)
- [Best Practices for Using Matrix Questions in Mobile Surveys](#)
- [Best Practices for Topic Monitoring](#)

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.

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 an Outreach and 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.

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 when 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.

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 or survey can help 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.

Scheduling mailings and surveys for market testing

Market testing your mailings and surveys 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.

11 Opportunity Tracking

Opportunities

Overview of Opportunities

An opportunity is a record in B2C Service Opportunity Tracking (Opportunity Tracking) that contains 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 B2C Service Analytics (Analytics) to help managers identify trends and forecast sales periods and to help you meet or exceed your quota.

Before you start working on your assigned opportunities, you'll want to know how to access opportunities and how opportunity information is organized. The topics in this section explain the layout you'll be working with and show you where to find the details of each opportunity.

Opportunity Reports

Opportunity reports can be placed in the Opportunities navigation list or any other navigation list you have access to.

When you click Opportunities 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.

Opportunity 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 opportunity report displays the list of opportunities in the report on the content pane.

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. 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.

Standard Workspace for Opportunities

Your B2C Service application contains a standard workspace for working with opportunities, and defines which fields you see 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 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.

Opportunity Ribbon

This table describes the buttons on the ribbon of the standard opportunity workspace.

Opportunity Ribbon

| Group/Button | Description |
|--|--|
| Editor | |
| Undock | Click this button to undock the opportunity editor from the console and display it in a separate window. |
| Save | |
| Save | Click this button to save the opportunity you are currently editing or adding. The opportunity remains open. 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 Add an Opportunity . |
| 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 Delete an Opportunity . |
| Proofing | |
| Spell Check | Click this button to spell check the opportunity. |
| Related Activities | |
| Reject | Click this button to reject the lead. See Reject a Lead . |
| Appointment | Click this button to create an appointment in Microsoft Outlook. |
| 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 marked with an asterisk before you can save the opportunity. See [Edit Key Opportunity Fields](#).

Opportunity Record Tabs

Much of the 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 these 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. See [Edit 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. See [Add or Edit 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. See [Add or Edit a Note for an Opportunity](#).
- **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. See [Add or Edit a Task for an Opportunity](#).
- **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. See [Add a Quote to an Opportunity](#).
- **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.

- **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.

How You Work with Opportunities

Opportunities are the building blocks of your sales operation for collecting general sales information.

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, we have identified procedures for working with existing opportunities rather than adding new opportunities.

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. See [Add an Opportunity](#).

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.

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. |

Related Topics

- [How You Work with Opportunities](#)

How You Work with 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.

Accept a Lead

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.

1. From an open opportunity, click **Status**.
2. Select **Active** to convert the lead into an active opportunity.
3. Click **Save**.

Results:

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.

Reject a Lead

You can reject a lead from an open opportunity.

1. From an open opportunity, click **Reject**.
If your profile does not let you 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, enter a comment in the **Comments** field.
4. Click **OK** to close the Reject Lead window.
5. Click **Save** to reject the lead and save and the opportunity.

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.

How You Use Sales 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.

Forecast an Opportunity

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.

1. Perform one of these tasks:
 - If you are a manager, click the **Manager Forecast** field.
 - 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 in the field.
3. Click **Save**.

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. See [Add a Quote to an Opportunity](#).


Edit Key Opportunity Fields

After you understand the role of statuses, strategies, and forecasts, you can complete the opportunity fields to update your opportunities.

Required fields are labeled with an asterisk next to them. Remember that you can't save an opportunity without completing all of the required fields.

1. From an open opportunity, enter field information.

Opportunity Fields

| Field | Description |
|---|---|
|  | Click this button to add or change the priority notifications for the opportunity. |
| *Opportunity Name | Enter the name of the opportunity in this field. |
| *Status | Click this drop-down list and make a selection to change the opportunity's status. See Opportunity Statuses . |
| Strategy | Click this drop-down list and make a selection to change the opportunity's strategy. See How You Use Sales Strategies . |
| *Stage | Click this drop-down list and make a selection to change the opportunity's stage. See How You Use Sales Strategies . The options in this field depend on the strategy assigned to the opportunity. |
| Rep Forecast | Enter a new value to change your monetary forecast for the opportunity. See Forecast an Opportunity . |

| Field | Description |
|------------------------|---|
| | 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 in File > Options > Personal Settings . See <i>Change Your Personal Settings</i> . |
| *Rep Commit | Click this drop-down list and select Yes to commit to closing the opportunity in the defined sales period. This drop-down list is not active until a value is entered in the Rep Forecast field. |
| Summary | Enter 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. 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. Only one organization can be associated with an opportunity. |
| Assigned | Click this drop-down list to re-assign the opportunity to another sales representative. The list of staff members that displays in the drop-down list is the same list that displays in the Salesperson field of the contact record. See <i>Add or Edit Contact Information</i> . 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 list 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 Staff Management. Tip: Use the Find field at the bottom of the Assigned drop-down list to quickly find staff members. Wildcards are supported when searching staff members. You can search strings that include a space by entering %+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 list to re-assign the opportunity to another territory. |
| Manager Forecast | Enter a new value to change the manager forecast for the opportunity. See <i>Forecast an Opportunity</i> . 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 in File > Options > Personal Settings . |
| *Manager Commit | Click this drop-down list and select Yes to commit to closing the opportunity in the defined sales period. This drop-down list won't be active until a value is entered in the Manager Forecast field. |

2. Click **Save**.

Edit Details Tab Information

Fields on the Details tab are used to collect additional completion and win/loss information for your opportunities and are useful for reporting purposes.

1. From an open opportunity, enter field information.

Details Tab

| 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, enter a date or click the calendar and select a new date from the calendar. |
| Date Closed | To change the date an opportunity closes, enter a date or click the calendar and select a new date from the calendar. |
| Closed Value | To change the closed value for the opportunity, type a new value in this field. 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 in File > Options > 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 list 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), enter 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 list and select the competitors that were also pursuing the opportunity. Note: A check box and an option appear next to each competitor in the drop-down list. You can select multiple check boxes to show that multiple competitors are involved, but you can select only one option 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, enter 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 B2C Service. This is a read-only field. |
| Recall | To change the reminder date that you should contact the customer, enter a date or click the calendar and select a new date from the calendar. |

2. Click **Save**.

Contacts Tab Toolbar

This table describes the Contacts tab toolbar buttons.

Contacts Tab Toolbar

| 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. 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. |
| 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). 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, do the following: Click the Contact Role drop-down list and select the role the contact has in this opportunity. Click OK to close the Set Contact Role window. The contact role displays in the Contact Role column on the contact list. 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 list to choose report options. |

Add or Edit Contact Information


The Contacts tab on the opportunities workspace contains a toolbar for working with the contacts associated with the opportunity.

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.

1. From an open opportunity, click the **Contacts** tab.

2. Perform one of these tasks:
 - o Click **Add > Add New** on the toolbar to open the New Contact window.
 - o 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.

New Contact Window

| Field | Description |
|---|--|
|  | Click this icon to add or change the priority notifications for the opportunity. |
| First Name | Enter the contact's first name. |
| Last Name | Enter the contact's last name. |
| Primary Email Invalid | Specify if the primary email address is valid or invalid. |
| Email Address | Enter the contact's primary email address. If the contact has multiple email addresses, click the drop-down list and select Email Alt1 or Email Alt2 and add the contact's alternative email addresses. |
| Office Phone | Enter the contact's office phone number. If the contact has multiple phone numbers, click the drop-down list 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. Enter information in the Street, City, and Postal Code fields, and make selections from the Country and State/Prov. fields drop-down lists. 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. |
| 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. This field does not display unless your administrator has configured a custom contact workspace for the Channel Usernames field. |
| Contact Type | Click this drop-down list to select the type of contact you are working with. |
| State | Click to select one or more of the following: Service, Outreach, or Opportunities. Or, click X to delete. |
| Organization | Click the Search icon to open the Organization Search window and search for an organization to associate with the contact. |
| Salesperson | Click this drop-down list and select the salesperson who is associated with the contact. This field defaults to the staff member who created the contact record. |
| Title | Enter the contact's job title in this field. |
| Login | Enter 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. This field applies only to B2C Service. |
| SLA | Click this field to add an SLA instance. |

| Field | Description |
|---------------|--|
| Global Opt-in | Click this drop-down list and select Yes if the contact wants to receive B2C Service mailings and surveys. Select No if the contact does not want to receive B2C Service mailings and surveys. |

- Click **OK** to add the new contact record and associate it with the opportunity.

Add or Edit a Note for an Opportunity

From the Notes tab, you can add opportunity-related details to an opportunity.

You also can choose the origin of the note you're adding (phone, fax, post, web form, or email) to document the origin of the note information accurately. And you can edit notes after you add them. 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 display.

- From an open opportunity, click the **Notes** tab.
- Perform one of these tasks:
 - To add a note, click **Add**.
 - To edit a note, click **Edit** next to the note header bar.
- 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.

If Outlook integration is activated, Outlook email can be appended to opportunities, contacts, organizations, and incidents in the Email format.

- Click in the text area and type the note.
- Click **Save**.

View Contact and Organization Notes While Editing an Opportunity

Use this procedure to view contact and organization notes when editing opportunities.

Before you start

To edit a contact or organization note, you must edit the contact or organization record.

Here's what to do

- From an open opportunity, click the **Notes** tab.

2. Click the **View** drop-down list and perform any of these tasks:
 - o To view all associated opportunity notes, select **Opportunity Notes**.
 - o To view all associated contact notes, select **Contact Notes**.
 - | **Note:** A contact must be associated with the opportunity for contact notes to display.
 - o To view all associated organization notes, select **Organization Notes**.
 - | **Note:** An organization must be associated with the opportunity for organization notes to display.

Tasks Tab Toolbar

This table describes the Tasks tab toolbar buttons.

Tasks Tab Toolbar

| 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. |
| Options | Click this drop-down list to choose report options. |

Add or Edit a Task for an Opportunity

Selecting a sales strategy for an opportunity automatically adds most tasks to the Tasks tab, although you also can add tasks manually.

You can view all tasks associated with an opportunity by clicking the opportunity's Task tab. The Tasks tab contains a toolbar for working with the tasks associated with the opportunity. See [Tasks Tab Toolbar](#).

1. From an open opportunity, click the **Tasks** tab.

2. Perform one of these tasks:
 - o Click **Add > Add New**. The New Task window opens.
 - o Right-click a task on the Tasks tab and select **Open**.

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.

Task Window

| Field | Description |
|---------------------------|--|
| *Name | Enter the name of the task. |
| Assigned | Click this drop-down list and select a staff account. Tip: To quickly find and select a name in the list, enter the letters of the staff member's name until rapid succession until the name is highlighted, then press Enter. |
| *Status | Click this drop-down list and select a status. Available options are: Not Started, In Progress, Completed, Waiting, Deferred. |
| Percent Complete | Enter a value for the percentage of the task that is complete. |
| Priority | Click this drop-down list and select a priority. Options included are Low, Normal, High. |
| 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 type of record from which you add the task determines the task type. 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 | Enter any notes about the task in this field. You may need to scroll down to see this field. |
| *Opportunity | Click Search to open the Opportunity Search window, where you can associate an opportunity with the task. |
| Organization | Click Search to open the Organization Search window, where you can associate an organization with the task. |
| Contact | Click Search to open the Contact Search window, where you can associate a contact with the task. |
| Incident | Click Search to open the Incident Search window, where you can associate an incident with the task. |
| Answer | Click Search to open the Answer Search window, where you can associate an answer with the task. |
| Campaign | Click Search to open the Campaign Search window, where you can associate a campaign with the task. |
| Mailing | Click Search to open the Mailing Search window, where you can associate a mailing with the task. |
| Survey | Click Survey to open the Survey Search window, where you can associate a survey with the task. |

| Field | Description |
|----------|---|
| Document | Click Search to open the Document Search window, where you can associate a document with the task. |

4. After completing the required fields, click **OK** to associate the task with the opportunity.

Add an Opportunity

This procedure shows you how to add an opportunity.

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.

1. Click **File > Opportunity**.
2. Complete opportunity fields as described in *Edit Key Opportunity Fields*.
3. To add detailed information to the opportunity, click the **Details** tab and complete the information as described in *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 *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 *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 *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 *Add a Quote to an Opportunity*.
8. To attach one or more files to the opportunity, click the **Attachments** tab and follow the instructions described in *Browse for a File to Attach to a Record*.
9. To view the audit log for the opportunity, click the **Audit Log** tab and complete the information as described in *Audit Logs*.
10. Click **Save**.

Close an Opportunity

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.

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 **Forecast** 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 list and select **Closed**.
5. Click the **Stage** drop-down list 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. See *Edit Details Tab Information*.
10. Click **Save**.

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.

Delete an Opportunity

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.

CAUTION: Deleting an opportunity is permanent and cannot be undone.

1. From an open opportunity, click **Delete**.
A message asks you to confirm the deletion.
2. Click **Yes** to delete the opportunity.

Note: Staff members with the Bulk Delete permission enabled can delete up to 1000 opportunity records at a time. See *Administration Permissions* and the REST API for Oracle B2C Service guide on the Oracle Help Center. Transactions associated with those opportunities are deleted asynchronously. Purging transactions is controlled by data lifecycle management policies. See *Data Lifecycle Management*.

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.
- 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.
- 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.

Sales Process

How You Work with 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.

Add or Edit a Strategy

Add a strategy for each kind of opportunity your staff members will work on.

1. Click **Configuration** on the navigation pane.
2. Expand **Opportunity Tracking**, and then double-click **Strategies**.
The Strategies tree displays on the content pane.
3. Perform one of these tasks:
 - o To add a strategy, click **New**. The editor displays on the content pane.
 - o To edit a strategy, click it in the tree.
4. Enter field information.

Strategies Editor

| Field | Description |
|-----------------------|---|
| *Strategy Name | Enter 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 | Enter 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 field information.

Stage Details Editor

| Field | Description |
|-------------------------|--|
| *Stage Name | Enter 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, 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. Enter 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 list to associate with the stage. |
| Notes | Enter any comments about the stage. |

7. To add another stage to the strategy, repeat the previous steps.

8. Click **Save**.

Add or Edit a Stage Task

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.

1. Click **Configuration**.
2. Expand **Opportunity Tracking**, and then double-click **Strategies**.
The Strategies tree displays on the content pane.
3. Find 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.
5. Perform one of these tasks:
 - o 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.
 - o To edit a task, click the arrow to the left of the stage to display the tasks associated with it, and then click the task you want to edit.

6. Enter field information.

Task Details Editor

| Field | Description |
|----------------------|--|
| Task Name | Enter the name of the task. The task details item name in the Strategies tree and the Label field in the Interface Visibility section are populated or revised as you type. |
| Owner | Click the Search icon next to the field to display staff accounts grouped by manager. Select the task owner from the list and click OK 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 list and then type a value in the field. This value helps to calculate the task due date. Selecting a strategy for an opportunity adds associated tasks to the opportunity, and calculates due dates by adding the task interval to the current date and time. |
| Notes | Enter any comments about the task. |
| Description | Enter a description of the task. |

7. To add another task to the stage, repeat the previous steps.

8. Click **Save**.

Note: Deleting a strategy, removes it from the Strategy field of all associated opportunities and replaces it 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.

Add or Edit a Sales Period

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.

1. Click **Configuration** on the navigation pane.
2. Expand **Opportunity Tracking**, and then double-click **Sales Periods**.
The Sales Periods tree displays on the content pane.
3. Perform one of these tasks:
 - o To add a sales period, click **New** on the ribbon to display the editor.
 - o To edit a sales period, click it in the tree.

4. Enter field information.

Sales Periods Editor

| Field | Description |
|----------------------------------|--|
| *Sales Period Name | Enter the name of the sales period. |
| *Type | Click this drop-down list 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 | Enter the revenue goal for the sales period and, if necessary, select a different currency from the drop-down list. 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 | Enter the number of assigned staff persons for the sales period. |
| Closed Opportunities Goal | Enter 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 | Enter any comments about the sales period. |
| Quotas | Add sales quotas for each sales representative during the sales period. See Add or Edit a Sales Quota to Sales Periods . |
| Filter | Select Account, Amount, or Currency from the drop-down list to filter the staff accounts that display in the Quotas section. See Add or Edit a Sales Quota to Sales Periods . |

5. Click **Save**.

Note: Deleting a sales period deletes all quotas associated with it.

Add or Edit a Sales Quota 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.

1. Click **Configuration** on the navigation pane.
2. Expand **Opportunity Tracking**, and then double-click **Sales Periods**.
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 list.
5. Repeat the previous step for each sales quota you want to add or edit.
6. Click **Save**.

Add or Edit a Territory or Subterritory

Opportunity Tracking uses territories and subterritories to define sales regions based on geography. Staff members can be assigned to a territory or subterritory for reporting purposes.

1. Click **Configuration** on the navigation pane.
2. Expand **Opportunity Tracking**, and then double-click **Territories**.
The Territories tree displays on the content pane.
3. Perform one of these tasks:
 - o To add a territory, click **New**.
 - o To edit a territory, click it in the tree.

To add multiple parent territories in the same session, you must first press Ctrl and click the highlighted territory in the tree before clicking **New**.

4. Enter field information.

Territories Editor

| Field | Description |
|------------------------|---|
| *Territory Name | Enter the name of the territory. The item name in the Territories tree 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. This field is blank if you are adding a territory. |
| Notes | Enter any comments about the territory. |
| 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. Perform one of these tasks:
 - o To add a subterritory to a territory, click the territory in the Territories tree, click **New**, and complete the fields.
 - o To edit a subterritory, click it in the tree and edit the fields.
6. Click **Save**.

Quote Templates

How You Work with 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 B2C Service. See [Overview of Customizable Menus](#).

Add or Edit a Quote Template

When you add or edit a quote template, you use Microsoft Word to format the document using the following procedure.

1. Click **Configuration** on the navigation pane.
2. Expand **Opportunity Tracking**, and then double-click **Quote Templates**.
The Quote Templates tree displays on the content pane.
3. Perform one of these tasks:
 - o To add a quote template, click **New** to display the editor.
 - o To edit a quote template, click it in the tree.
4. Enter field information.

Quote Templates Editor

| Field | Description |
|-----------------|--|
| *Name | Enter the name of the quote template. The item name in the Quotes Templates tree and the Label field in the Interface Visibility section are populated or revised as you type. 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 | Enter 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 **Word Editor**. An instance of Microsoft Word opens in the Quote Templates editor with an Add-Ins tab for merge fields.

- Click the **Add-Ins** tab to display the Quote Template ribbon.

Note: Because the Add-Ins tab does not exist in Word 2003, the Quote Template toolbar is a standard toolbar instead of a ribbon.

- 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.
- To insert a merge field, place your cursor in the quote template document where you want to insert the field.
- Click one of the drop-down lists in the Custom Toolbars section on the Quote Template ribbon and select a merge field to add to the quote template.

For a complete list of merge fields and their associated descriptions, click **Database**, and then double-click **Data Dictionary**.

Quote Template Ribbon

| Drop-Down List | Description |
|----------------|--|
| Single Items | Click this drop-down list 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 list. |
| Group Items | Click this drop-down list 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 list. You must create a table with column headers before using merge fields from the Group Items drop-down list. After the table is created with column headers, a merge field from the Group Items drop-down list 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 list 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 list. You must replace the "N" with a numeric value. While using a field from the Group Items drop-down list returns all of the contacts associated with an opportunity, using a field from the Indexed Items drop-down list 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. |

- Repeat the previous step 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 B2C Service 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.

- Click **Save**.

Quotes

How You Prepare Quotes

There are considerations when preparing to send a quote to a customer.

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.

This table describes the default buttons on the Quotes toolbar.

Quotes Toolbar

| Button | Description |
|----------------|--|
| Add New | Click this button to add a quote to the opportunity. See Add a Quote to an Opportunity . |
| Open | Click this button to open the selected quote. See Edit a Quote . |
| Print | Click this button to print the selected quote. See Print a Quote . |
| Copy | Click this button to copy the selected quote. See Copy a Quote . |
| Delete | Click this button to delete the selected quote. See Delete a Quote . |
| Send | Click this button to send the selected quote to the customer. See Send a Quote to a Customer . |
| Options | Click this drop-down list to choose report options. |

Add a Quote to an Opportunity

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.

1. While adding or editing an opportunity, click the **Quotes** tab.
2. Click **Add New**.

3. Enter field information.

New Quote Window

| Field | Description |
|--------------------|---|
| Name | Enter the name of the quote in this field. |
| Status | Click this drop-down list 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. This is the default status for new quotes. |
| Sent | This status is automatically selected when a quote is sent to a customer. After a quote is 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 list 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. See <i>Sales Products and Quotes</i> . 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. |
| 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 —Opens the quote product editor and where you can make changes to the product. Delete —Deletes the sales product from the quote. |

| Field | Description |
|------------------|--|
| 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 | Enter 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. See <i>Merge Opportunity and Quote Data into a Quote Template</i> . 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. |
| Notes | Enter a description of the quote in this field. |

- Click **OK** to close the New Quote window and add the quote to the opportunity.
- Click **Save**.

Quote Product Editor

This table describes the fields on the Quote product editor.

Quote Product Editor

| 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 | Enter a product ID in this field if you want to modify the original ID. |
| Adjusted Name | Enter a product name in this field if you want to change the product's name in the quote. |
| Adjusted Price | Enter 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 | Enter a quantity in this field if you want to change the default value of 1. Changing this field affects the value of the Total column on the sales product grid. |
| *Discount | Enter a percent discount in this field if you want to change the default value of 0. Changing this field affects the value of the Total column on the sales product grid. |
| Adjusted Description | Enter a description in this field if you want a description other than the original description. |

| Field | Description |
|-------|--|
| Notes | Enter any notes about the product quote in this field. |

Sales Products and Quotes

When you add a quote to an opportunity, you must select a price schedule in the Schedule drop-down list 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. After 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.

Add a Sales Product to a Quote

This 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.

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 list 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 found next to the product list.

4. Perform one of these tasks:
 - o 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.
 - o Drag a sales product from the product list to the sales product grid.
5. To edit a selected sales product in the sales product grid, right-click the product and select **Open**.
The quote product editor opens.
6. Perform one of these tasks:
 - o Enter field information described in *Quote Product Editor*.
 - o Click **OK** to save your changes, close the quote product editor, and return to the open quote.
7. Click **OK** to save your changes to the quote, close the quote, and return to the opportunity.
8. Click **Save**.

Now you can merge opportunity and quote data into a quote template to generate a quote you can send to the customer.

Merge Opportunity and Quote Data into a Quote Template

To define all the information necessary to generate the quote for the customer, add a quote to the opportunity and then add sales products to the quote.

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.

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**.
A list of available administrator-defined quote templates displays.
4. Select a quote template and click **OK**.
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 **Merge** and select a new template from the Select Template window.
7. Enter 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 **Save** to save the quote and return to the quote editor.
9. Click **OK** to close the window and add your quote to the opportunity.
A paper clip icon appears on the Quotes tab.
10. If you want to forecast the quote to close within the specified sales period, select the **Forecast** check box in the Forecast column.
The quote amount appears in the Rep Forecast field of the opportunity. See *Forecast an Opportunity*.
11. Click **Save**.

Results:

You now can view the quote audit log, which contains all activities related to the quote. See *Quote Audit Log*.

Send a Quote to a Customer

After you merge all necessary information about the opportunity into the quote template and have reviewed the quote, you are ready to send the quote to your customer.

1. From the Quotes tab of an opportunity, right-click the quote you want to send and select **Send**.
The Send Quote window opens.

Note: The Send option is not active unless all opportunity and quote data have been successfully merged into a quote template. See *Merge Opportunity and Quote Data into a Quote Template*.

2. Enter field information.

Send Quote Window

| Field | Description |
|--------------------------|---|
| To | Enter 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. |
| Cc | Enter an email address in the Cc field to send the quote to, or click this button to open the Select Names window. |
| Bcc | Enter an email address in the Bcc field to send the quote to, or click this button to open the Select Names window. |
| Subject | Enter the subject for the quote in this field. |
| Comment | Enter 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. |
| Temporary Files | Click Add Files 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. If this check box does not appear, your administrator has not configured Opportunity Tracking to send quotes as PDF documents. |

3. Click **Send** to send the quote to the recipients you've added to the Send Quote window.

Results:

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.

How You Manage 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.

After 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.

Edit a Quote

You can edit a quote before sending it to the customer. After a quote has been sent, you cannot edit it unless your profile gives you permission to do so.

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. See *Add a Quote to an Opportunity* for field descriptions.
4. Click **OK**, and then click **Save**.

Copy a Quote

After 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.

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. See *Add a Quote to an Opportunity* for field descriptions.
4. Click **OK** to save your changes to the copied quote.
5. Click **Save**.

Delete a Quote

You can delete a quote from an open opportunity.

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 confirm the deletion.
4. Click **Save**.

Print a Quote

You can print a quote from the Quotes tab when you edit an opportunity.

1. While editing an opportunity, click the **Quotes** tab.
2. Right-click the quote you want to print and select **Print**.
3. Click **File > Print**
4. Click **Print**.

Quote Audit Log

All actions related to a quote are recorded to the quote audit log, which is found 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.

This table describes the columns in the quote audit log.

Quote Audit Log Columns

| 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 | <p>This column lists the actions related to the quote.</p> <p>Created—The first time a quote is added to the opportunity and the opportunity is saved.</p> <p>Assigned—The staff member the quote is assigned to.</p> <p>Edited—The quote is edited and the opportunity is saved.</p> <p>Forecasted/Unforecasted—The quote Forecast check box is selected or cleared and the opportunity is saved.</p> <p>Changed Status—The quote status is changed and the opportunity is saved.</p> <p>Changed Price Schedule—The quote price schedule is changed and the opportunity is saved.</p> <p>Quote Template Merged/Updated/Deleted—The quote document is merged, edited, re-merged, or deleted and the opportunity is saved.</p> <p>Quote Sent—The quote has been sent.</p> |
| 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). |

12 Security Practices

Overview of Oracle B2C Service Security and Compliance

An important part of product security is your diligence in configuring B2C Service and your vigilance in its use.

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. The protection of our customers' assets is a high priority at Oracle. We strive to make your B2C Service experience secure by holding ourselves to industry-standard security and privacy requirements in our software development practices and operational methods. For added protection, B2C Service can be hosted within our community cloud environments that align with well-known regulatory control frameworks.

For guidance when deploying B2C Service in a regulated environment, refer to *Overview of Deploying B2C Service in a Controlled Environment* and the sections that follow it, in the *Securing B2C Service* guide.

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.

B2C Service 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.

How You Develop a Security Plan

When configuring your B2C Service 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 B2C Service 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.

Note: 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 B2C Service 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 B2C Service. Your answers should help determine the content of your security plan. Here are some things to consider:

- 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. If you want to read more about security, here are some suggestions:

- "Writing Information Security Policies," by Scott Barman
- "Information Security Policies and Procedures," by Thomas Peltier
- [Security Policy Templates](#)—for information about security training and security certification
- [OWASP Foundation](#)—A nonprofit organization focused on improving software security

Administration Interface Configuration

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 a B2C Service site, including your site controls and data.

B2C Service 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 B2C Service. 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 B2C Service. 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 which areas of B2C Service 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.

Related Topics

- [Overview of Navigation Sets](#)
- [Overview of Workspaces](#)
- [Custom Workspaces](#)
- [Profiles](#)
- [Create a Navigation Set](#)
- [Assign a Navigation Set to a Profile](#)

How You Use 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. 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.

Although this table doesn't contain a complete list of all the permissions available, it does provide a list of those permissions having direct security ramifications.

Role-Access Scenario

| Setting | Functionality | Roles |
|------------------------------------|---|-----------------------------|
| Administration | | |
| Administration | Create and edit these items: <ul style="list-style-type: none"> • 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 |

| Setting | Functionality | Roles |
|---------------------------|---|--|
| Access Control | Access the Access Control editor to configure staff and customer settings permissions for Community Self Service. | Administrator Supervisor |
| 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 |
| 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 these areas and functionality: <ul style="list-style-type: none"> • Password Configuration • Configuration Settings • Configuration Wizard • Message Bases • File Manager • Interfaces • Add-In Manager • Email Address Sharing | Administrator |
| Business Process Settings | Define interface appearance and functionality, including: <ul style="list-style-type: none"> • Navigation Sets • Customizable Menus | Administrator Supervisor |

| Setting | Functionality | Roles |
|---------------------------------|--|--|
| | <ul style="list-style-type: none"> Countries Products/Categories/Dispositions Standard Text Variables Holidays Product Catalog Price Schedules Tracked Link Categories | |
| 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. B2C Service 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 B2C Service 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 |
| 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 |

| Setting | Functionality | Roles |
|---------------|---|-----------------------------|
| 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 |
| 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 | | |

| Setting | Functionality | Roles |
|-----------|--|---------------|
| | 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 |
| | Edit, view, customize, print, export, and forward reports. | Supervisor |
| | View, edit, print, export, and forward reports. | Staff member |

Email Security

Although most email sent over networks is not encrypted, we recommend encrypting all data that you deem sensitive.

B2C Service 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.

Authentication

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.

Note: If you use a general Service mailbox supplied by Microsoft, such as Outlook or Office 365, you need to configure your mailbox settings in B2C Service to use OAuth authentication. This is in keeping with Microsoft's end of service support for Exchange mailboxes. When you implement this email authentication correctly, you can continue to send emails to contact centers using Microsoft mailboxes without any mail delivery problems. For more information, see [Configure OAuth Authentication Settings](#).

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. See [Configure SSL Security Settings](#), [Configure SMIME Security Settings](#), and [Certificate Validation Options](#).

For a list of configuration settings you can use to protect your site and improve your security, see [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. See [How to Control Answer Visibility](#).

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 SEC_EU_EMAIL_LINK_EXPIRE configuration setting. 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 [How You Secure Customer 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.

Image Links in Incoming HTML Email

When HTML is rendered from a customer email, the EGW_VISUAL_EMAIL configuration setting defines how inline images are retrieved and rendered. These HTML image links could be used for unauthorized data transfer and tracking purposes. For example, when an incident is opened, a web page revealing an agent's location (IP address) or browser type might be automatically accessed.

You can disable image links in incoming HTML email by setting the EGW_VISUAL_EMAIL configuration setting to No. Keep in mind that this setting not only disables image links when creating the incident thread, but also renders the email as plain text, without any formatting. There are also cases where EGW_VISUAL_EMAIL does not affect HTML threads with images, for example, when some kind of integration has taken place. It is also important to note that even after the setting is disabled, existing incidents might still be vulnerable.

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.

DoS 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, B2C Service 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. See [Web Form and Survey Security](#) and [Web Form Security](#).

Related Topics

- [Require CAPTCHA Validation on Submit](#)
- [Open CAPTCHA Within a Form](#)
- [Set the Abuse Detection Cookie](#)

Overview of Security-Related Configuration Settings

Certain configuration settings have a direct effect on security. Some affect the administration side of B2C Service 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. Configuration settings that specifically impact security are detailed in the sections that follow. Paths to each setting in the Configuration Settings editor, descriptions, and default values are also listed. Configuration settings in this section are grouped into these categories:

- Site protection
- Session data
- Password protection
- File-attachment security
- Chat security

For a complete list of security-related configuration settings by security level and significance, see [Security Level](#).

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.

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, | Blank |

| Configuration Setting | Description | Default Value |
|---|--|---------------|
| | including network groups, can access the API interface. | |
| RightNow User Interface/General/Security | | |
| CLIENT_SESSION_EXP | <p>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.</p> <p>Note: This setting is not used strictly for security. It is also used in the desktop usage administration feature.</p> | 15 |
| RightNow User Interface/Tool Bar/General | | |
| LOGIN_SECURITY_MSG | <p>Defines a message to display after staff members click the Login button on the Login window.</p> <p>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 or the Agent Browser UI opens.</p> | Blank |

Customer Portal Settings for Site Protection

| Configuration Setting | Description | Default Value |
|--------------------------------|--|---------------|
| Common/General/Security | | |
| CP_REDIRECT_HOSTS | <p>Defines which hosts are allowed as redirect targets from the customer portal. The default setting (blank) prevents all redirects outside of your interface domain.</p> <p>If you have more than one interface that you need to redirect to, each interface domain name must be specified in CP_REDIRECT_HOSTS.</p> <ul style="list-style-type: none"> • Blank = Prevents all redirects outside of your interface domain. • * = Allows all redirects, including redirects to external sites. (Not recommended.) <p>Note: 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.</p> | Blank |

| Configuration Setting | Description | Default Value |
|---|---|---------------|
| SEC_VALID_ENDUSER_HOSTS | <p>Note: 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.</p> <p>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.</p> <p>Tip: The valid list is practical only if the set of allowed hosts is confined to 10 or fewer domains.</p> | Blank |
| 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.

The ClickjackPrevention widget, included by default in the standard and mobile templates, ensures that your customer portal cannot be viewed inside a frame or iFrame.

If you do not use frames, you can edit the **standard.php** file of your template file to minimize the risk of clickjacking. For the complete procedure, see [Remove ClickjackPrevention from the Template](#).

For more information on clickjacking, including definitions for X-Frame-Options response headers, search for the Clickjacking Defense Cheat Sheet on the [OWASP Foundation](#) website.

Related Topics

- [iFrame Security Issues](#)

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 Foundation](#) website.

Redirect Security

Linking from one page to another is a security risk you should consider. For example, you may have placed a link in your URL to redirect users to different locations within your site.

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 in these 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 the `CP_REDIRECT_HOSTS` configuration setting 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.

This table displays sample values for `CP_REDIRECT_HOSTS`.

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. |

| Value | Meaning |
|----------------------------------|--|
| 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 [Email Security](#).

Session-Data Security

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. See [How You Force Session Expiration](#).

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, the `CP_CONTACT_LOGIN_REQUIRED` configuration setting enforces secure logon to your pages and controls on the customer portal. The `CP_CONTACT_LOGIN_REQUIRED` setting also prevents unauthenticated chat sessions.

B2C Service offers different session management schemes for the administration interface and the customer portal. However, for both interfaces, we perform these 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 first table.
- Require staff members to reauthenticate after a specified period of inactivity. See the `CLIENT_SESSION_EXP` setting description in the first table.
- Require all login operations to be performed over HTTPS. See the `CP_FORCE_PASSWORDS_OVER_HTTPS` setting description in the second table.

Configuration setting descriptions that affect your site's session data are listed in these tables.

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. See <i>Desktop Usage Control</i> . | 15 minutes |
| SESSION_HARD_TIMEOUT | Requires staff members to reauthenticate after a specified period of time. This setting creates a new session each time the staff member reauthenticates. The previous session is destroyed. | 12 hours |

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. 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 if the customer portal requires a customer to be logged in when accessing most pages or controls. Also prevents unauthenticated chat sessions. Note: This setting does not apply to the login, password recovery, and account creation pages, or pass-through authentication (PTA). PTA is described in <i>Configuring Pass-Through Authentication</i> . | No |
| CP_COOKIES_ENABLED | Defines if the customer portal tries to set cookies on a visitor's browser. | Yes |
| CP_FORCE_PASSWORDS_OVER_HTTPS | Requires all login operations to be performed over HTTPS. | Yes |

| Configuration Setting | Description | Default Value |
|---------------------------|--|---------------|
| | Pages that use passwords within standard widgets are automatically redirected to HTTPS. | |
| 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. 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. If you set a value for this setting, you must also set a non-zero value for CP_LOGIN_MAX_TIME. | 0 |

Password Protection

No matter your security situation, you have considerable flexibility in setting up passwords for your staff and your customers.

If the data protected by a password is not critical or subject to privacy legislation, the default values in Oracle B2C Service 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 topics in this section provide helpful information about your configuration options and identify tips for configuring secure passwords throughout your system.

How You Configure Staff-Member Passwords

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.

You configure passwords for your staff from the configuration list on the navigation pane (**Configuration > Staff Management > Password Configuration**).

The options available to you in setting up password requirements can enhance security on your site as well as help protect your customers' information. This table describes the security benefits of defining specific requirements for passwords.

Password Security Benefits

| Password Configuration | Security Benefit |
|--------------------------------|--|
| Number of Invalid Logins | <p>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).</p> <p>In B2C Service, the default is five invalid login attempts before the account is locked.</p> |
| Expiration Interval | <p>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.)</p> <p>Note: PCI-compliance requires expiration interval to be 90 days or less.</p> |
| Password Length | <p>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.)</p> <p>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.</p> <p>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.</p> |
| Numbers and Special Characters | <p>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, MaryhaddaL1t1e1am. (Default = 0.)</p> |

| Password Configuration | Security Benefit |
|------------------------------------|--|
| 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? . (Default = 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. (Default = 10.) |

How You Secure Customer Passwords

Configuration settings and password requirements enable you to secure customer passwords in B2C Service.

Configuration Settings

The EU_CUST_PASSWD_ENABLED configuration setting controls the visibility of the Password field on the customer portal login window. 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 login window by disabling this setting.

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 <i>Emailing links to answers</i> in <i>Email Security</i> . | 8 |
| 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 *How You Configure Staff-Member Passwords*). The only differences between the two editors are the default values.

See *Define Customer Password Requirements* for the procedure to define requirements for customers accessing your customer portal.

How You Recover Forgotten Passwords

Administrators must contact their Oracle account manager to recover forgotten password credentials. Other staff members can recover both their user name and password by using the B2C Service account self-service feature.

You also can use this functionality as a tool to maintain the integrity of your organization’s login policies for all staff members. Accessed by clicking Login Help on the Login window, the account self-service feature 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 [Redirection to the B2C Service Login Page](#).

This table describes the configuration settings for your forgotten-password options.

Account Self-Service Settings for Passwords

| Configuration Setting | Description | Default Value |
|---|--|---------------|
| RightNow User Interface/Tool Bar/General | | |
| ACCT_RECOVER_STATUS | <p>Specifies the functionality of the Login Help link on the B2C Service Login window. See Login Help Options.</p> <ul style="list-style-type: none"> 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 login window on the customer portal. 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 the SEC_EU_EMAIL_LINK_EXPIRE configuration setting. See [How You Secure Customer Passwords](#) and [Email Security](#).

How You Enforce Password Requirements

After assessing your specific security situation, you may want to consider enforcing password requirements.

- Lock staff accounts after three to five invalid login attempts. (The B2C Service default is five.)

- 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

Attachments that B2C Service allows for incidents, answers, community questions and comments, and features that are used in mailings and surveys 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.

Here are some guidelines to consider when working with attachments.

- 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.
- HTML files might 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.
- 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 B2C Service. 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 B2C Service application as well as the associated data, and it also allows additional levels of scanning to be applied. The `FATTACH_OPEN_ENABLED` configuration setting 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 `FATTACH_MAX_SIZE` configuration setting controls the maximum allowable attachment. The default (and the maximum allowable limit) is approximately twenty megabytes per attachment.

Note: Regardless of the file-attachment limits you define, file upload will fail if the upload takes more than five minutes.

To learn how to restrict the number of file attachments on the Ask a Question page, see [Configure File Attachments](#).

This table describes configuration settings for file attachments.

Settings for File Attachments

| Configuration Setting | Description | Default Value |
|--|---|--|
| RightNow User Interface/General/File Attach | | |
| FATTACH_MAX_SIZE | <p>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.</p> <p>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.</p> | 20971520 (20 MB) The maximum allowable limit is 120 MB. |
| FATTACH_OPEN_ENABLED | Lets staff members open file attachments on the agent desktop. | No |

Chat Security

B2C Chat (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.

For complete details and procedures about configuring Chat see these topics:

- [Chat for Agents](#)
- [Chat for Supervisors](#)
- [Chat for Customers](#)

This table describes Chat configuration settings.

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. | Blank |

| Configuration Setting | Description | Default Value |
|-------------------------------------|--|---------------|
| | To enable this hidden setting and define your allowed IP addresses and subnet masks, submit a request on our support site . | |
| 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. Note: If this setting is left blank, the server accepts requests from all hosts. | Blank |
| CP_CONTACT_LOGIN_REQUIRED | When enabled, enforces secure logon to prevent unauthorized chat sessions. | No |
| Chat/General/Server | | |
| CHAT_CORS_ALLOWLIST | Defines the list of origins and domains allowed to make cross-origin requests through the Chat server. If chat sessions in the Service Console include content such as images or URLs, that are not included on this allow list, a warning message prompts the agent to continue or cancel the action. Note: If this setting is left blank, the server accepts requests from all origins. Changes made to this allow list only apply to new, and not existing, chat sessions on the Service Console. | 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 |

The CHAT_INPUT_ALLOWLIST_JSON configuration setting describes a valid set of tags, attributes, and protocols to allow in message posts and in common fields used in chat sessions.

The configuration setting, which you can find in **Chat/General/Chat Session**, has an extensive list of default values.

Default Values for the CHAT_INPUT_ALLOWLIST_JSON Configuration Setting

| Allowed Tags | Allowed Attributes (Allowed Protocols, if applicable) |
|--------------|--|
| a | <ul style="list-style-type: none"> href (http, https) referrerpolicy |

| Allowed Tags | Allowed Attributes (Allowed Protocols, if applicable) |
|--------------|--|
| | <ul style="list-style-type: none"> • title |
| audio | <ul style="list-style-type: none"> • controls • loop • muted • src (http, https) |
| b | |
| blockquote | <ul style="list-style-type: none"> • cite (http, https) |
| br | |
| caption | |
| cite | <ul style="list-style-type: none"> • cite (http, https) |
| code | |
| col | <ul style="list-style-type: none"> • span • width |
| colgroup | <ul style="list-style-type: none"> • span • width |
| dd | |
| div | |
| dl | |
| dt | |
| em | |
| figcaption | |
| figure | |
| h1 | |
| h2 | |
| h3 | |
| h4 | |
| h5 | |
| i | |
| img | <ul style="list-style-type: none"> • align • alt • height • referrerpolicy |

| Allowed Tags | Allowed Attributes (Allowed Protocols, if applicable) |
|--------------|--|
| | <ul style="list-style-type: none"> • src (http, https) • title • width |
| li | |
| ol | <ul style="list-style-type: none"> • start • type |
| p | |
| pre | |
| q | cite (http, https) |
| small | |
| source | <ul style="list-style-type: none"> • src (http, https) • type |
| span | |
| strike | |
| strong | |
| sub | |
| sup | |
| table | <ul style="list-style-type: none"> • summary • width |
| tbody | |
| td | <ul style="list-style-type: none"> • abbr • axis • colspan • rowspan • width |
| tfoot | |
| th | <ul style="list-style-type: none"> • abbr • axis • colspan • rowspan • scope • width |
| thead | |

| Allowed Tags | Allowed Attributes (Allowed Protocols, if applicable) |
|---|--|
| tr | |
| u | type |
| ul | |
| video | <ul style="list-style-type: none"> controls height loop muted poster (http, https) preload src (http, https) width |
| :all (indicates allowed attributes on all tags) | <ul style="list-style-type: none"> dir id lang muted style title translate |

For example:

- {"h1": {}} indicates that the <h1> tag is allowed, but that no attributes are allowed.
- {"a": {"href": ["ftp", "http", "https", "mailto"]}} indicates that the <a> tag is allowed.

Server Protection

The Chat SOAP interface can be protected from potential threats by restricting access to valid chat servers.

The SEC_VALID_CHAT_API_HOSTS configuration setting 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 the CHAT_CORS_ALLOWLIST configuration setting. See “Cross-Origin Resource Sharing Protection” in *Chat API Protection*.

Chat API Protection

B2C Service 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.

Note: Access to the Chat API is defined by the hidden `CHAT_WS_API_IP_HOST` configuration setting. To enable this setting and specify the IP addresses and subnet masks you want to allow, [Submit a Service Request](#).

User Protection

By enabling the `INC_PRIVATE_TRANSCRIPT_ONLY` configuration setting, 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_ALLOWLIST` 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.

Tip: 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](#).

For more information about testing for CORS vulnerabilities, search “Test cross origin resource sharing” on the [OWASP Foundation](#) website.

External-Queue Security

External chat queues allow sites outside of B2C Service that use the Chat API to access B2C Service 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. See [Add or Edit a Chat Session Queue](#).

Self Service for Facebook Authentication

B2C Service Self Service (Self Service) lets you embed a set of 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 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 FACEBOOK_APPLICATION_SECRET) in order to authenticate the link between Facebook and B2C Service. 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. The FACEBOOK_INCIDENTS_ENABLED configuration setting is enabled by default 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 *Open Login Credentials for Social Accounts*.

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

B2C Service 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.

For details on the customer portal open login as it relates to Facebook and Twitter, as well as other customer portal login methods, see *How Customers Log in to 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 B2C Service.

- FACEBOOK_OAUTH_APP_ID and FACEBOOK_OAUTH_APP_SECRET
- TWITTER_OAUTH_APP_ID and TWITTER_OAUTH_APP_SECRET

Configuration Settings for Social Experience

| Configuration Setting | Description | Default Value |
|--|---|---------------|
| RightNow Common/3rd-Party Applications/Facebook | | |
| FACEBOOK_APPLICATION_ID | Specifies the Facebook application ID used to host Facebook for B2C Service. | Blank |
| FACEBOOK_APPLICATION_SECRET | Specifies the Facebook application secret key used to host Facebook for B2C Service. This setting is also used to authenticate staff members and customers who use B2C Service 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 |
| 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 B2C Service 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 B2C Service channel, Twitter. | Blank |

Security Level

This table describes 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.

Recommended Security-Related Settings

| Path/Configuration Setting | For high-security environment | For medium-security environment | For low-security environment |
|----------------------------|-------------------------------|---------------------------------|------------------------------|
| Hidden | | | |

| 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. Note: To enable this hidden setting and define your allowed IP addresses and subnet masks, <i>Submit a Service Request</i> . | | |
| Chat/General/Server | | | |
| CHAT_CORS_ALLOWLIST | Set to allowed origins. | Set to allowed origins. | Blank (default) |
| RightNow User Interface/General/Security | | | |
| CLIENT_SESSION_EXP 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 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 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 |
| Common/General/Security | | | |
| CP_REDIRECT_HOSTS | As needed for all security environments (default = blank). | | |

| Path/Configuration Setting | For high-security environment | For medium-security environment | For low-security environment |
|---|---|---------------------------------|------------------------------|
| 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_MODE | 2 (default) | 2 (default) | 1 |
| EGW_VISUAL_EMAIL | No (default = Yes) | No (default = Yes) | Yes |
| 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 | As small as practical for your needs. Applies to all security environments (default and maximum allowable limit = 20 MB). | | |
| 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. | Note: File upload fails if the upload takes more than 5 minutes. | | |
| FATTACH_OPEN_ENABLED | No (default) | No | As needed. |
| Chat/General/Create Incident | | | |
| INC_PRIVATE_TRANSCRIPT_ONLY | Yes | Yes | No (default) |
| 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. |

| Path/Configuration Setting | For high-security environment | For medium-security environment | For low-security environment |
|---|--|---------------------------------|------------------------------|
| 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) |
| 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 | | | |

| Path/Configuration Setting | For high-security environment | For medium-security environment | For low-security environment |
|---|---|---------------------------------|------------------------------|
| 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) |

Related Topics

- [Email Security](#)
- [Search for a Configuration Setting](#)
- [Edit a Configuration Setting](#)

Security Significance

This table describes recommended security-related settings by significance. They are grouped by high, medium, and low in security significance.

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. Note: To enable this hidden setting and define your allowed IP addresses and subnet masks, Submit a Service Request . |
| | CLIENT_SESSION_EXP | 15 This setting is also used in the desktop usage administration feature. |
| | CP_FORCE_PASSWORDS_OVER_HTTPS | Yes |

| Significance | Configuration Setting | Recommended Setting |
|--------------|--------------------------------------|---|
| | 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 |
| Medium | CHAT_CORS_ALLOWLIST | Set to allowed origins. |
| | CP_CONTACT_LOGIN_REQUIRED | As needed. |
| | CP_LOGIN_MAX_TIME | As needed. |
| | EGW_PASSWD_CREATE | Yes |
| | EGW_SECURE_UPDATE_MODE | 2 |
| | EGW_VISUAL_EMAIL | No (default = 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. |

| Significance | Configuration Setting | Recommended Setting |
|----------------------|---------------------------------|---|
| | WEBFORM_ID_BY_URL_PARAM_DEFAULT | As needed. |
| | WEBFORM_SET_COOKIE_DEFAULT | As needed. |
| | WIDGET_INSTALLATION_HOSTS | Set to allowed domain names. |
| Low | CP_COOKIES_ENABLED | As needed. |
| | CP_MAX_LOGINS | As needed. |
| | CP_MAX_LOGINS_PER_CONTACT | As needed. Note: 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. | |

| Significance | Configuration Setting | Recommended Setting |
|--------------|--------------------------|---------------------|
| | TWITTER_OAUTH_APP_SECRET | As needed. |

Related Topics

- [Search for a Configuration Setting](#)
- [Edit a Configuration Setting](#)

