Oracle Public Sector Compliance and Regulation Cloud

Implementing Compliance and Regulation

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Preface

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

Using Oracle Applications

This topic explains the text conventions used in this guide and points you to where you can find more information about using Oracle applications.

Conventions

The following table explains the text conventions used in this guide.

Convention	Meaning
boldface	Boldface type indicates user interface elements, navigation paths, or values you enter or select.
monospace	Monospace type indicates file, folder, and directory names, code examples, commands, and URLs.
>	Greater than symbol separates elements in a navigation path.

Additional Resources

- Community: Use *Oracle Cloud Customer Connect* to get information from experts at Oracle, the partner community, and other users.

- Guides and Videos: Go to the *Oracle Help Center* to find guides and videos.

- Training: Take courses on Oracle Cloud from *Oracle University.*

Documentation Accessibility

This topic covers accessibility concepts for this guide.

For information about Oracle's commitment to accessibility, visit the *Oracle Accessibility Program website*.

Videos included in this guide are provided as a media alternative for text-based help topics also available in this guide.

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Contacting Oracle

This topic explains how to contact Oracle for support and to provide feedback.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit *My Oracle Support* or visit *Accessible Oracle Support* if you are hearing impaired.

Comments and Suggestions

Please give us feedback about Oracle Public Sector Compliance and Regulation applications help and guides! You can send an e-mail to: *PSCR_US@oracle.com*.

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Oracle Public Sector Compliance and Regulation Cloud
Implementing Compliance and Regulation

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1 Setting Up Transactions

Setting Up Transaction Groups

Transaction groups are the first level of categorization that you can select when you define your business license, permit, and planning application types.

If desired, you can set up transaction groups. This setup is not required.

Adding Transaction Groups

1. Select **Common Setup** > **Transaction Group** .
2. On the Transaction Group page, click **Add** to add a new group.
3. On the Transaction Group Details page, enter a values for the group.

Page Element	Description
Group	Enter a group name for the transaction types.
Description	Enter a description of the group.

Applicable Classification	Select a product area from these options:
	
	   ○ *Business Licenses*
	
	   ○ *Permits*
	
	   ○ *Planning and Zoning*

4. Verify that the **Enabled** switch is turned on. The option is active by default for a new transaction group.
5. Click **Save**.

Modifying Transaction Groups

1. Select **Common Setup** > **Transaction Group** .
2. On the Transaction Group page, select the row for the group that you want to modify.
3. On the Transaction Group Details page you can:

   ○ Edit the description. You cannot change the group name.

   ○ Select an **Applicable Classification** check box.

   ○ Click the **Enabled** switch to enable or disable the transaction group.

4. Click **Save** to save any changes.

Deleting Transaction Groups

1. Select **Common Setup** > **Transaction Group** .
2. On the Transaction Group page, select the row for the group that you want to delete.
3. If you want to delete the group, click the **Delete** button.
4. If you want to delete multiple groups, you can delete them from the grid on the Transaction Group page:

   a. Click the **Edit** icon.
   b. Select the check boxes for the transaction group rows to delete.
   c. Click the **Delete** icon.

Setting Up Transaction Categories

Transaction categories are the second level of categorization that you can select when you define your business license, permit, and planning application types.

If desired, you can set up categories for the different types of business licenses, permits, and planning applications. This setup is not required.

Adding Transaction Categories

1. Select **Common Setup** > **Transaction Category** .
2. On the Transaction Category page, click **Add** to add a new transaction category.
3. On the Transaction Category Details page, enter a values for the transaction category.

Page Element	Description
Category	Enter a category name for the transaction type.
Description	Enter a description of the category.
Applicable Classification	Select an offering from these options: o Business Licenses o Permits o Planning and Zoning

4. Verify that the **Enabled** switch is turned on. The option is active by default for a new category.
5. Click **Save**.

Modifying Transaction Categories

1. Select **Common Setup** > **Transaction Category** .
2. On the Transaction Category page, select the row for the category that you want to modify.
3. On the Transaction Category Details page you can:

- o Edit the description. You cannot change the category name.
- o Select an **Applicable Classification**.
- o Click the **Enabled** switch to enable or disable the transaction category.
4. Click **Save** to save any changes.

Deleting Transaction Categories

1. Select **Common Setup** > **Transaction Category** .
2. On the Transaction Category page, select the row for the category that you want to delete.
3. If you want to delete the category, click the **Delete** button.
4. If you want to delete multiple categories, you can delete them from the grid on the Transaction Category page:
   a. Click the **Edit** icon.
   b. Select the check boxes for the transaction category rows to delete.
   c. Click the **Delete** icon.

Setting Up Transaction Subcategories

Transaction subcategories are the third level of categorization that you can select when you define your business license, permit, and planning application types.

If desired, you can set up subcategories for the different types of business licenses, permits, and planning applications. This setup is not required.

Adding Transaction Subcategories

1. Select **Common Setup** > **Transaction Subcategory** .
2. On the Transaction Subcategory page, click **Add** to add a new transaction subcategory.
3. On the Transaction Subcategory Details page, enter values for the transaction subcategory.

Page Element	Description
Subcategory	Enter a subcategory name for the transaction type.
Description	Enter a description of the subcategory.
Applicable Classification	Select a product area from these options: o *Business Licenses* o *Permits* o *Planning and Zoning*

4. Verify that the **Enabled** switch is turned on. The option is active by default for a new subcategory.
5. Click **Save**.

Modifying Transaction Subcategories

1. Select **Common Setup** > **Transaction Subcategory** .
2. On the Transaction Subcategory page, select the row for the subcategory that you want to modify.
3. On the Transaction Subcategory Details page you can:
   - Edit the description. You cannot change the subcategory name.
   - Select an **Applicable Classification** check box.
   - Click the **Enabled** switch to enable or disable the transaction subcategory.
4. Click **Save** to save any changes.

Deleting Transaction Subcategories

1. Select **Common Setup** > **Transaction Subcategory** .
2. On the Transaction Subcategory page, select the row for the subcategory that you want to delete.
3. If you want to delete the subcategory, click the **Delete** button.
4. If you want to delete multiple subcategories, you can delete them from the grid on the Transaction Subcategory page:
   a. Click the **Edit** icon.
   b. Select the check boxes for the transaction subcategory rows to delete.
   c. Click the **Delete** icon.

Setting Up Transaction Statuses

Oracle provides a set of statuses for transactions to control system events. Some system statuses can be mapped to an agency-defined transaction status.

Your agency assigns statuses for different transactions in the system. You can't delete the system-delivered transaction statuses, but you can modify the description. You can also define additional transaction statuses, but you must associate any new transaction status with one of the system-delivered statuses to ensure correct processing.

Using Delivered Transaction Statuses

This table lists the system-delivered transaction statuses for business licenses, permits, and planning applications, and indicates whether they can be associated with a user-defined status.

For information about permit inspection statuses, see *Setting Up Inspection Statuses*.

For information about permit plan review statuses and decision statuses, see *Setting Up Plan Review Statuses*.

Transaction Status	System Status Code	Type of Transaction (Business Licenses, Permits, or Planning Applications)	Can be mapped to a user-defined record status?
About to Expire	ATE	All	No
Active	ACT	Business Licenses	Yes

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Transaction Status	System Status Code	Type of Transaction (Business Licenses, Permits, or Planning Applications)	Can be mapped to a user-defined record status?
Application Accepted	ACP	All	Yes
Certificate of Occupancy	COO	Permits	Yes
Closed	CLS	Business Licenses	Yes
Completed	CMP	All	Yes
Delinquent	DLQ	All	No
Denied	DNI	All	Yes
Expired	EXP	All	No
Hearing	HER	Planning Application	Yes
In Process	IPC	All	Yes
Inactive	INA	Business Licenses	Yes
Inspection	INS	Permits Business Licenses	Yes
License Issued	LCI	Business Licenses	Yes
Payment Pending	PAY	All	No
Pending	PND	All	No
Pending Submittal	PDS	All	No
Permit Issued	PTI	Permit Application	Yes
Plan Review	PLR	Permit Application	Yes
Revoked	RVK	Business Licenses	No
Submitted	SUB	All	No

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Transaction Status	System Status Code	Type of Transaction (Business Licenses, Permits, or Planning Applications)	Can be mapped to a user-defined record status?
Suspended	SPD	Business Licenses	No
Unreported	URT	Business Licenses	No
Voided	VOD	All	Yes
Withdrawn	WTH	All	No

When a guest submits a business license, permit, or planning application, the transaction status is updated as follows:

Record and System Status	Description
Pending (PND)	Applied when the guest saves an application.
Pending Submittal (PDS)	Applied when the guest submits the application and workflow can't be started.
Payment Pending (PAY)	Applied when fees are due.
Submitted (SUB)	• Applied when no fees are due. • Applied after successful payment.

Adding Transaction Statuses

Define any additional statuses that your agency will use for permit and planning applications on the Transaction Status page. You must associate a new transaction status with a system status.

1. Select **Common Setup** > **Transaction Status** .
2. Select a transaction statuses tab, such as **Business License Status**, **Permit Status**, or **Planning Status**.
3. Click **Add** to define a new transaction status.
4. On the respective transaction details page, enter values for these fields:

Page Element	Description
Status	Enter a transaction status name.
Description	Enter a description for the transaction status.
System Status for Business License Applications	Select the business license transaction status that you want to use from the drop-down list:

Page Element	Description
	o *Application accepted* o *Active* o *Closed* o *Completed* o *Denied* o *Voided* o *Inactive* o *Inspection* o *In process* o *License issued*
System Status for Permit Applications	Select the permit transaction status that you want to use from the drop-down list: o *Application accepted* o *Completed* o *Certificate of occupancy* o *Denied* o *Voided* o *In process* o *Permit issued* o *Plan review* o *Inspection*
System Status for Planning Applications	Select the planning transaction status that you want to use from the drop-down list: o *Application accepted* o *Completed* o *Denied* o *Voided* o *In process* o *Plan review* (This status is for future use.) o *Hearing*

5. Verify that the **Enabled** switch is turned on. The switch is turned off by default for a new transaction status.
6. Click **Save**.

Modifying Transaction Statuses

You can modify the transaction statuses that you have defined for your agency's transactions on the details pages.

1. Select **Common Setup** > **Transaction Status** .

2. Select a transaction statuses tab, such as **Business License Status**, **Permit Status**, or **Planning Status**.
3. Select the row for the transaction status that you want to modify.
4. On the Details page you can:

   ○ For user-defined statuses, edit the description or the system status that you want to set on a record with this record status. You can't edit the **Status** field.

   ○ For system-delivered statuses, you can only edit the description. You can't edit the **Status** field.

   ○ Turn on the **Enabled** switch to enable a user-defined record status. You cannot disable system-delivered statuses.

5. Click **Save** to save any changes.

Deleting Transaction Statuses

You can delete the statuses that you have defined for your agency on the Permit Status Details or Planning Status Details page.

Note: You cannot delete most of the system-delivered statuses; you can only modify their descriptions. Oracle recommends that you disable statuses instead of deleting them.

1. Select **Common Setup** > **Transaction Status** .
2. Select a transaction statuses tab, such as **Business License Status**, **Permit Status**, or **Planning Status**.
3. Select the row for the transaction status that you want to delete.
4. On the Details page, click **Delete**, if the button is available.
5. If you want to delete multiple record statuses, you can delete them from the grid on the Transaction Status page:

   a. Click the **Edit** icon.
   b. Select the check boxes for the status rows to delete.
   c. Click the **Delete** icon.

Related Topics
- Using Workflow

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2 Setting Up Permits

Setting Up Agency-Level Options

You set up the Oracle Intelligent Advisor for Permits and Planning and Zoning on the Permit Options page during agency setup. You can also configure the summary title and text for the Anonymous User Landing Page and the Registered User Landing page.

To configure agency-level options for permits and planning applications:

1. Select **Common Setup** > **Agency** .
2. Click a row on the Agency Information tab.
3. Select the Features tab.

   Oracle delivers the list of offerings on the Features tab. The Permits offering encompasses both Permits and Planning and Zoning.

   Disregard the **Enabled** column for the Permit offering. The offering is enabled in the Functional Setup Manager (FSM).
4. Click **Options** for the Permits offering.
5. On the Permit Options page, you can update values for the following fields:

Page Elements	Definition
Oracle Policy Automation ID	Enter the unique identifier for the Oracle Policy Automation policy model to be used for this offering. The offering-specific policy model that you specify here takes priority over any agency-wide policy definition that you enter on the main Agency Information page.
Message Title	Enter a short text version of the landing page message in a title format. If you leave this field blank, the value in the **Label** field on the Link Details page for the menu navigation link Online Permits is displayed.
Message Summary	Enter a longer version of the landing page message title in a sentence format. If you leave this field blank, the value in the **Description** field on the Link Details page for the menu navigation link Online Permits is displayed.
Button Content URL	Enter a content URL for the **Read More** button. Public users click this button to access the agency's own permit information page, outside of Oracle Public Sector Permits. If you leave this field blank, the **Read More** button opens a dialog box that displays the **Landing Page Message**.

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Page Elements	Definition
	Note: If you want to link to a page outside of Oracle Public Sector Permits, you must enter a URL here.
Landing Page Message	Enter a welcome message in rich text to appear in a dialog box on the landing page, if a URL to access the agency's page is not defined.

For more information on Oracle Intelligent Advisor, see *Overview of Oracle Intelligent Advisor Configuration*.

For more information on the Landing Page Message Definition, see *Defining Summary Details*.

Related Topics
- Managing Oracle Intelligent Advisor Policies for your Agency
- Setting Up the Landing Page for Anonymous Users
- Setting Up the Landing Page for Registered Users

Setting Up Plan Review Statuses

Use delivered plan review statuses to identify the progression through a plan review cycle. You can review the statuses on the status definition pages.

You review the plan review statuses on the Plan Review Status and Decision Status pages. You cannot delete the system-defined statuses or add new statuses, but you can modify the descriptions. The descriptions allow you to enter a different status name to be displayed to agency staff.

The system derives the overall plan review status from the individual plan reviewer decisions, and updates the overall plan review with the most severe decision status. The system-defined decision statuses are listed here from most to least severe: *Rejected, Revision Required, Approved with Comments, Approved,* and *Not Required*. If plans have one or more rejections, or revisions are required, the applicant must correct the plans and resubmit them for another review cycle.

Modifying Plan Review Cycle Statuses

You can edit only the **Description** field on the Plan Review Status Details page. The agency-defined description is exposed to agency staff and public users on the plan review pages in the permit record detail.

1. Select **Common Setup** > **Transaction Status** .
2. Select the **Plan Review Status** tab.
3. You can review the delivered review cycle statuses in the **Review Status** column:

   - *In Progress*
   - *Canceled*

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        ○ *Completed*

4. Select the row for the review status that you want to modify.
5. On the Plan Review Status Details page you can edit only the description.
6. Click **Save** to save any changes.

Modifying Plan Review Decision Statuses

You can edit only the **Description** field on the Decision Status Details page. The agency-defined description is exposed to agency staff and public users on the plan review pages in the permit record detail.

1. Select **Common Setup** > **Transaction Status** .
2. Select the **Plan Review Decision** tab.
3. You can review the delivered plan review decision statuses in the **Decision Status** column:

   ○ *Approved*

   ○ *Approved with comments*

   ○ *Revision required*

   ○ *Rejected*

   ○ *Not required*

   The plan review decision statuses are delivered as enabled. The only review decision status that you can disable is *Approved with comments*.
4. Select the row for the decision status that you want to modify.
5. On the Decision Status Details page you can edit only the description.
6. Click **Save** to save any changes.

Setting Up Permit Types

Define the types of permits supported by an agency. You add a permit type and associate workflow process definitions on the Permit Type definition page.

Before you can create an application form, you must first create a permit type on the permit type definition page.

Adding Permit Type Definitions

1. Select **Permit Setup** > **Permit Type** > **Permits** .
2. On the Transaction Type – Permit Types page, click the **Add** button.
3. On the Permit Type page, enter values for the following fields:

Page Element	Description
Classification	Displays the type of application. The classification for this page indicates this is a permit application.
Subclassification	For use with planning applications. Accept the default value, *Not Applicable*.

Page Element	Description
Permit Type	Enter a name for the type of permit type.
Permit Type ID	Enter a unique alphanumeric code or short name for the permit type. Do not use special characters, including symbols or punctuation, or spaces.
Status	Select from the following to indicate the permit type status: ○ *Preliminary:* The permit type is being defined but is not available for use. ○ *Ready:* The permit type is ready to be accessed from the landing page for testing or production use, depending on the environment. ○ *Void:* The transaction type is no longer available. **Note:** The form design can be in published status or draft status and be set to *Ready.* In draft status, the form can be accessed from outside the form designer—such as the Apply page—for testing purposes in the development or test environment.
Form Design Status	A read-only field indicating whether the form design is published or currently being developed. ○ *Draft:* The form design is currently being created or modified. Form designs in draft status are not migrated to other environments and can't be cloned. ○ *Published:* The form design is complete. Form designs in published status can be migrated to other environments and can be cloned.
Autonumber Rule	Select the autonumbering rule to increment numbers for permits. You can delete an autonumbering rule when it isn't being used by any transaction types. For more information, see *Setting Up Autonumbering*.
Valid from Date and **Valid to Date**	Enter a range of dates when this permit type is valid. The default from date is the current date. The default end date is *Open*. You can update these dates as needed.
Public User Enabled	Select from the following to indicate whether the intake form can be accessed and by which user types: ○ *Enabled for all users:* Only registered public users and agency users can access the intake form. ○ *Enabled for registered users:* Only registered public users and agency users can access the intake form. ○ *Not enabled for public users* (default): Only agency users can access the intake form.

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Page Element	Description
	Note: Currently, *Enabled for all users* and *Enabled for registered users* have equivalent access.
Application Group	Select a permit application group that you want to associate with the permit type. For more information, see *Setting Up Transaction Groups*.
Category	Select an application category that you want to associate with the permit type. For more information, see *Setting Up Transaction Categories*.
Subcategory	Select an application subcategory that you want to associate with the permit type. For more information, see *Setting Up Transaction Subcategories*.
Document Group	Select a document group to manage attachments for the application type. When you specify a document group, document attachments can be classified into categories and subcategories during the application process and when you upload files. Then you can see the category for a document on the attachments page in the application details. For more information, see *Setting Up Document Groups*.
Inspection Group	Select an inspection group to associate with the permit type. The inspection group identifies all inspections necessary for the permit. For more information, see *Setting Up Inspection Groups*.
Fee Schedule	Select a fee schedule that you want to associate with the permit type. A department is required if the permit type has a fee schedule ID. For more information, see *Setting Up Fee Schedules*.
Bill Type	Select a bill type to associate with the permit type. The billing type identifies the type of invoice that can be generated from the record. The bill type is required. For more information, see *Setting Up Bill Types*.

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Page Element	Description
Department	Select a department that you want to associate with the permit type. A department is required if you add a Fee Schedule ID to the permit type. If a department is specified on the Fee Item setup page, the fee item department overrides the department specified here on the permit type. For more information, see *Setting Up Departments*.
Terms of Use ID	Select a terms of use definition to associate with the permit type. When you set up terms of use, you can make the terms available to the public user registration process, to the permit application process, or to both. The user must accept the terms and conditions for using online permits. For more information, see *Setting Up Terms of Use*.
Description	Enter a user-facing description of the permit type. On the Apply page, this description appears under the permit type name. The description helps public users understand the purpose of the permit type.
URL	Enter a URL for a web page that gives public users more information about the permit type. If you enter a URL, then a **Learn More** link appears at the end of the permit type description on the Apply page. The user clicks this link to open the specified URL. If you leave this field blank, the **Learn More** link is not visible on the Apply page.

Associating a Permit Certificate

First, your agency sets up the certificate template in the reports catalog, then associates the report ID with the permit type in the **Certificate** section. When the permit is issued, you can print it from the permit overview page.

Page Element	Description
Allow Public User to View	Turn on the switch to allow public users to view the issued permit document, which is accessed from the permit summary on the Overview page. This option is enabled by default.
Report ID	Enter the report ID for the permit template associated with this permit type. Use the delivered permit report or configure your own. See *Setting Up Reports*.

For information about viewing the permit document, see *Viewing the Permit Summary*.

Setting Up Permit Expiration

In the **Expiration** section, you can enter the expiration group that defines the expiration rules for permits with this permit type. Expiration rules determine the expiration dates that correspond to permit activity. For more information about permit expiration, see *Setting Up Permit Expiration Rules*.

Setting Up Workflow for a Permit Type

You set up workflow using the Oracle Autonomous Integration Cloud (OIC) before associating the workflow with the permit type.

For more information, see *Setting Up Process Definitions for Workflow*.

1. Select **Permit Setup** > **Permit Type** > **Permits** .
2. On the Transaction Type – Permits page, click the **Add** button.
3. In the **Workflow Setup** section on Permit Type page, enter values for the following fields:

Page Element	Description
Space Name	Enter the space where the workflow process application is stored. You can group related applications in a space as well as enable users to collaborate when developing applications.
Application ID	Enter the name of the workflow process application in OIC. For more information, see *Creating and Managing Applications*.
Version	Enter the version of the workflow process application.
Process Definition	Enter the name of the workflow process definition that applies to this particular permit.

Note: Different permit types can utilize the same workflow definition.

Setting Up Plan Reviews for a Permit Type

Define how plan reviews are conducted for permits associated with the permit type.

1. Select **Permit Setup** > **Permit Type** > **Permits** .
2. On the Transaction Type – Permits page, click the **Add** button or select an existing permit type.
3. In the **Plan Reviews** section on Permit Type page, enter values for the following fields:

Page Element	Description
Plan Review Type	Select the method used for reviewing plans for permits associated with the permit type.

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Page Element	Description
	○ *Manual:* Plan reviews are tracked as part of permitting workflow, but are performed without the use of integrated electronic document review software. ○ *Not Used:* Plan reviews are not tracked as part of permitting workflow. ○ *Electronic:* Plan reviews are tracked as part of permitting workflow, and are performed through integration with electronic document review software. For more information on plan reviews, see *Managing Manual Plan Review Cycles* and *Managing Electronic Plan Review Cycles*.
Enable Auto Assignment	Turn on this switch to enable the automatic assignment of plan reviewers for permits associated with this permit type. When this switch is on and a permit technician gives a permit associated with this permit type a status of *Accepted - Plan Review Required*, the automatic assignment process: a. Adds a reviewer row to the plan review cycle for each plan reviewer department selected for the permit type. If no plan reviewer departments are selected for the permit type, the process creates the plan review cycle, but doesn't add any reviewer rows. b. Adds the designated department lead to the **Reviewer** field for each reviewer row. If a department doesn't have a department lead selected, the process still creates a row for the department, but leaves the **Reviewer** field blank. **Note:** This switch is available only when the **Plan Review Type** is *Manual.*
Plan Reviewer Departments	Select the departments that should be included in any plan reviews associated with this permit type. Plan coordinators should add a reviewer from each of the required departments. The Reviewers grid of the Plan Review page displays the required departments that you select here. When **Enable Auto Assignment** is turned on, the process automatically adds a plan reviewer row to plan review cycles for each of the selected departments. **Note:** A plan reviewer department is available to select only if the Permits classification is selected for it on the Plan Reviewer Department page. For more information about plan reviewer departments, see *Setting Up Plan Reviewer Departments*. For more information about plan reviews, see *Electronic Plan Review Process Flow* and *Manual Plan Review Process Flow*.

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Cloning Permit Types

Click the **Clone** button to create a clone of the current permit type, which you can then use to create a different permit or to create a different version of the current permit.

For more information on cloning permits, see *Cloning Transaction Type Definitions*.

Designing Intake Forms

After you have entered the appropriate initial information for a permit, you can then begin to design the intake form that end users will use to submit an online application. You create an application form using the Intake Form Designer. To access the designer, click **Design Form**.

For more information on designing intake forms, see *Using the Intake Form Designer*.

Setting Up Permit Display Groups

Use the Display Group setup pages to display groups of permits on your agency's landing page, where you start an application.

A permit display group identifies a meaningful grouping of permit and planning application types displayed as a list on the Apply page. The list appears as the permits or planning applications that agency staff or a guest user can select to initiate the application process.

For more information about how the Apply page looks and is used, see *Choosing an Application Type*.

Before setting up permit display groups, you must set up the types of permits your agency offers. See *Setting Up Permit Types*.

Adding Permit Display Groups

1. Select **Permit Setup** > **Permit Display Group** .
2. On the Permit Display Group page, click **Add** to add a new group.
3. On the Permit Display Group Details page, enter values for the following:

Page Element	Description
Display Group ID	Enter a permit display group name.
Display Group	Enter a name for the display group that appears on the Apply page for guests and agency staff.
Description	Enter a description of the display group that appears on the Apply page for guests and agency staff.
URL	Enter a URL that agency staff can use to access additional information. This page is the only place that the URL appears, so it is not available to guests.

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Page Element	Description
Applicable Classification	Select the check box for the applications to which this display group applies. Choose from these options: ○ *Business Licenses* ○ *Permits* ○ *Planning and Zoning* This option determines whether a display group type is shown on the Apply page for public users. A display group can be included with more than one classification.

4. Verify that the **Enabled** switch is turned on. The switch is turned on by default for new permit display groups.
5. In the **Display Group Lines** section, click **Add** to set up a line on the Display Group Line Details page. The display group lines are transaction types that make up the list in the new display group.

> **Note:** A mix of different transaction types can be added to a display group. For example, you can add a planning application transaction type to a permit application display group and the other way around.

Page Element	Description
Display Order	Enter a numerical value in this field to specify the order in which you want the permit type to be displayed, if desired. The default value is *0* and upon saving, the system automatically assigns the next value.
Transaction Type ID	Select an existing transaction type ID. The description for the ID you enter here will appear in the **Transaction Type** field.
Transaction type information	Review the attribute information for the permit type to verify you have selected the correct transaction type ID: ○ **Transaction Type** ○ **Classification** ○ **Application Group** ○ **Category** ○ **Subcategory** For more information about transaction type attributes, see *Setting Up Permit Types*.

6. On the Permit Display Group Details page, click **Save**.

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Modifying Permit Display Groups and Lines

You can modify permit display groups and the permits in the list on the Permit Display Group Details and Display Group Line Details pages, respectively.

1. Select **Permit Setup** > **Permit Display Group** .
2. On the Permit Display Group page, select the row for the permit group that you want to modify.
3. On the Permit Display Group Details page, you can:
   - Modify the group name and description. You can't change the Display Group ID.
   - Turn the **Enabled** switch on or off to enable or disable the display group.
4. If you made any changes, click **Save**.
5. To modify the display group lines (the list of permits in a display group), select the row for the permit group that you want to modify on the Permit Display Group page.
6. On the Permit Display Group Details page, select a display group line in the Display Group Lines grid.
7. On the Display Group Line Details page, you can change the values in these fields:
   a. Update the **Display Order** field to change the order in which the lines appear.
   b. Update the **Transaction Type ID** field with another existing permit type ID.
8. If you made any changes, click **Save**.

Deleting Permit Display Groups and Lines

1. Select **Permit Setup** > **Permit Display Group** .
2. On the Permit Display Group page, select the row for the permit group that you want to delete.
3. If you want to delete the display group, click **Delete** on the Permit Display Group Details page.
4. If you want to delete multiple display groups, you can delete them from the Permit Display Group page:
   a. Click **Edit**.
   b. Select the check boxes for the display groups to delete.
   c. Click **Delete**.
5. To delete a display group line, go to the Permit Display Group Details page and select a display group line in the **Display Group Lines** grid.
6. On the Display Group Line Details page, click **Delete**.
7. If you want to delete multiple display group lines, you can delete them from the Permit Display Group Details page:
   a. Click **Edit**.
   b. Select the check boxes for the display group line rows to delete.
   c. Click **Delete**.

Setting Up Permit Expiration Rules

You can set up expiration rules for the different phases of the permit application lifecycle.

You set up expiration rules for permit applications to define:

- When an inactive pending application expires.
- When the application expires.

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- When the permit expires.

First, you define the rules in an effective-dated group. After setting up the expiration rules, you add the rules group ID to the application type definition and periodically run batch rules processing to update permit expiration statuses. You can track updated application expiration statuses on the transaction list page and the permit's expiration status on the Overview page in the permit details.

> **Note:** Because expiration start and end dates require specific statuses, workflow processes must include status update tasks for Application Accepted (*Accepted*) and Certificate of Occupancy (*Certificate*) or Completed (*Completed*). See *Setting Up Transaction Statuses* and *Using Workflow*.

Setting Up Expiration Rule Groups

Here's how to set up the rule group:

1. Select **Permit Setup** > **Permit Expiration Group** > **Permits** .
2. On the Permit Expiration Group page, enter values for these fields:

Page Element	Description
Expiration Group ID, **Expiration Group Name**, and **Description**	Enter an ID for the expiration group, a group name, and description.
Effective Start Date and **Effective End Date**	Enter the range of dates when the group is effective. If you want to leave the effective dates open-ended, don't enter a date for the end date. To see the effective date history for an expiration group, click *Show All Dates*. On the History Data page, you can search history by effective start date or click *Add* to add new effective-dated rules for an expiration group.
Show All Dates	Click to access the effective-dated history of the rules definition. This button is available after you create the first rule. You can also search history by effective start date. Click *Add* to create a new effective-dated row for an expiration group.

3. Verify that the **Enabled** switch is turned on. The option is active by default for a new expiration group.
4. Create expiration rules in the **Expiration Rules** section.

Defining Expiration Rules

Here's how to set up the details about the expiration rules in the group:

1. Select **Permit Setup** > **Permit Expiration Group** > **Permits** .
2. Click **Add** in the **Expiration Rules** section.
3. Enter these values to create each rule:

Page Element	Description
Expiration Basis	Select the type of expiration for the rule, based on the status of the application: o *Inactive pending application* – When the application is in a pending status, users must submit the application before the expiration date. The expiration timeframe begins when the user saves an application and ends with application submission. o *Application expiration* – Users must complete permit requirements such as the plan review before the permit can be issued. If the permit is not issued by the expiration date, the application and all tasks are canceled. The expiration timeframe begins when the agency accepts application and ends when the permit is issued. o *Permit expiration* – Users must complete the final inspection before the permit expires. The expiration timeframe begins when the agency issues the permit and ends when the Certificate of Occupancy is issued or the permit is completed. **Note:** Because expiration start and end dates require specific statuses, workflow processes must include status update tasks for Application Accepted (*Accepted*) and Certificate of Occupancy (*Certificate*) or Completed (*Completed*). See *Setting Up Transaction Statuses* and *Using Workflow*.
Expiration Duration	Enter the amount of time that the user has before the expiration date.
About to Expire	Enter when you would like a notification to appear on the application that shows the user how long until the application expires. For example, you can enter 2 days to show that a pending application expires in 2 days. You can manually extend a permit on the Overview page in the transaction details during the about to expire period. For example, if the about to expire period is 15 days, the permit can be manually extended starting at 15 days before the expiration date.
Grace Period	Enter the amount of time the application is valid beyond the expiration date. For example, if a pending application expires in 30 days, you may want to provide a grace period of an additional 3 days. You can also manually extend a permit on the Overview page in the transaction details during the grace period.
Number of Extensions	Enter the number of allowed extensions beyond the expiration date. For example, to allow up to 2 extensions you would enter 2. You can manually extend the expiration during the About to Expire and Grace Period timeframes, when the **Extend** link is available on the Overview page in the application

Page Element	Description
	details. This link is available only for agency staff with appropriate permissions. You can't manually extend the expiration for applications in a pending status.

4. Verify that the **Enabled** switch is turned on for each rule. The option is active by default for a new expiration rule.

5. Click **Save**.

Setting Up Communication Rules

You can set up communication rules to send communications when the permit application or permit is about to expire or expired. Agency staff and the contact listed on the application receive the notifications. Click **Add** in the Communication column and select **About to Expire**, **Expired**, or both, and the recurrence of the communication.

Depending on the expiration communication rules you define, you must also set up communication templates for these delivered events:

- *About to Expire Permit* – The communication event is triggered when the inactive pending application, application, or permit is about to expire.

- *Expired Permit* – The communication event is triggered when the inactive pending application, application, or permit expires.

For more information about configuring the communication templates for the email or notification you want to send when the event occurs, see *Setting Up Communication Templates*.

> **CAUTION:** After setting up communication rules, you must periodically run batch expiration rule processing to update the *About to Expire* and *Expired* statuses. The system updates the statuses and sends out the communications according to the setup. Oracle recommends that you schedule expiration rule processing to run daily.

Setting Up Automatic Permit Extensions

After you add a permit expiration rule, you have the option to automatically extend a permit's validity based on inspection activity. This is how it works: You define whether the extension occurs only when the inspection is completed with a pass result or any result, and specify the duration of the extension in number of days. Automatic extensions are counted toward the number of available extensions defined in the rule. Agency staff with system administrator permissions can still manually extend the expiration.

Here's how to automatically extend a permit:

1. Select the option to automatically push out the permit expiration date.

2. In the **Result** field, select one of the options:

   - *Any Result*: Extend the expiration date when an inspection is completed regardless of the inspection result.
   - *Pass Only*: Extend the expiration date only when an inspection is complete with a passing result.

3. In the **Extension Duration** fields, select the number of days, months, or weeks to extend the permit.

You might have multiple inspections for a permit, in which case the system extends the permit with each completed inspection.

If you have communications set up, notifications are sent when the extended permit is about to expire or when it expires. You must run expiration rule processing to update the statuses and send communications.

Setting Up Permit Expiration Based on Inspection Activity

When you set up inspection commencement rules, permits will automatically expire due to inactivity if the first inspection is not scheduled or does not pass within a specified period of time after permit issuance. A notification is sent out when the permit is about to expire based on the inspection activity.

Here's how to set up a permit to expire based on the inspection commencement:

1. Create a rule for permit expiration.
2. Select **Permit expires based on inspection commencement**.
3. Select the timeframe the permit is valid after issuance in the **Expiration Duration** fields, during which the first inspection must be scheduled or pass.
4. In the inspection commencement date field, select one of the options:
   - *Schedule date*: The first inspection must be scheduled by this date for the permit to remain active.
   - *Pass date*: The first inspection must pass by this date for the permit to remain active.

Depending on the communications you defined for the permit expiration rule, notifications are sent when the permit is about to expire or when it expires.

Associating Expiration Rules with Permit Types

After you create an expiration group, you associate the group of rules with a permit type.

1. Select **Permit Setup** > **Permit Type** > **Transaction Type** > **Permits** .
2. Click the row for the permit type.
3. On the selected Permit Type page, enter the expiration group ID. You can look up the expiration group by expiration group name and description.
4. Click **Save**.

For more information about assigning rules to a permit type, see *Setting Up Permit Types*.

Running the Expiration Rule Process

After setting up expiration rules and adding an expiration rule group ID to the permit type definition, you must set up expiration rule processing to periodically update the expiration statuses.

Run the process that updates permit and planning application expiration statuses on the Process Expiration Rules page, which you access by selecting **Common** > **Process Expiration Rules** . Oracle recommends that you schedule expiration rules processing to run daily.

> **CAUTION:** You must periodically run batch expiration rule processing to update the about to expire and expired statuses for permits that have been extended. The system updates the statuses and sends out the communications according to the setup.

For information about setting up expiration rules processing, see *Updating Application Expiration Status*.

Related Topics
- Expiration Overview

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Updating Application Expiration Status

You update the application expiration status using a process that runs against predefined rules.

You run the process that updates expiration statuses on the Process Expiration Rules page, which you access by selecting **Common** > **Process Expiration Rules** . Oracle recommends that you schedule expiration rules processing to run daily.

> **Note:** After setting up expiration rules, you must periodically run batch expiration rule processing to update the *About to Expire* and *Expired* statuses. The system updates the statuses and sends out communications according to the setup.

Here's an example of how the processing works: An agency created a rule for solar permits that indicates application expires in 30 days. The period of time when a notification appears for applications about to expire is 5 days. During processing, the system updates the status to *Expired* when the application expires. That is, when the permit is not issued within 25 days, the application is about to expire, and at 30 days, the application expires. If the rule includes a grace period, such as 3 days, the system status changes to *Expired* after 30 days, but resets if there is activity within the 3-day grace period. Processing triggers alerts and notifications when the application is about to expire and upon expiration.

When an application or permit expires, processing changes the system status to *Expired* and cancels all associated open tasks.

Entering Parameters to Process Expiration Rules

1. Access the Parameters tab on the Process Expiration Rules page.
2. Select the **Classification** for which you are updating expiration dates: *Planning and Zoning* or *Permits*.

Scheduling the Process

1. Access the Schedule tab.
2. To immediately add the process to the queue, select the **As soon as possible** option.
3. To create a schedule for the process, select the **Using a schedule** option, and enter values using the following fields:

Page Element	Description
Frequency	Select how frequently you want to run the process. Values are:
	○ *Once:* Select to run the process one time only.
	○ *Hourly or minute:* Select to run the process at regular time intervals.
	○ *Daily:* Select to run the process at regular intervals in days.
	> **Note:** *Daily* is the recommended option for running the expiration status update process.

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Page Element	Description
	o *Weekly:* Select to run the process at regular intervals in weeks. o *Monthly:* Select to run the process on specific days of the month. o *Yearly:* Select to run the process during specific months.
Start Date	Enter the date on which you want to begin your scheduled processing.
End Date	Enter the date on which you want to end your scheduling processing.
Hours and **Minutes**	Enter the time interval between scheduled processes. For example, if you enter *2* in the **Hours** field and *30* in the **Minutes** field, the process will run every 2 hours and 30 minutes beginning on the specified start date. **Note:** These fields are available only if you select a process frequency of *Hours* or *Minutes*.
Days	Enter the number of days between scheduled processes. For example, if you enter *3*, the process will run every 3 days beginning on the specified start date. **Note:** This field is available only if you select a process frequency of *Daily*.
Weeks	Enter the number of weeks between scheduled processes. For example, if you enter 6, the process will run every 6 weeks beginning on the specified start date. **Note:** This field is available only if you select a process frequency of *Weekly*.
Repeat – By day	Select this option to run the process on specific days of the month irrespective of the date. For example, if you select the **Second**and **Wednesday** options, the process will run on the second Wednesday of every month. You can select more than one week of the month and day of the week option. For example, you could schedule the process to run on the first and third Monday of every month.

Page Element	Description
	Note: This option and its associated fields are available only if you select a process frequency of *Monthly* or *Yearly*.
Repeat – By date	Select this option to run the process on specific dates of the month. You can select more than one date. **Note:** This option and its associated fields are available only if you select a process frequency of *Monthly* or *Yearly*.
Month	Select the months in which you want your process to run. **Note:** This option and its associated fields are available only if you select a process frequency of *Yearly*.

Setting Up Process Notifications

You can set up the process to send notifications to you and others when it runs.

1. Turn on the **Notify Me When This Process Ends** switch to send yourself a notification when the process finishes.
2. Access Notification tab.
3. Click **Add**.
4. On the Create Notification page, enter the email address of the person you want to receive notifications.

   By default, the recipient will receive a notification when the process ends with the following conditions:

   - On success
   - On error
   - On warning

   You can remove any of these process notification conditions.
5. Click **OK** to save the notification recipient.
6. (Optional) To delete a notification recipient, select the recipient in the Notification tab and click **Delete**.

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Submitting the Process

Once you've entered your process parameters, scheduling information, and notification recipients, you're ready to submit the process. Enter any additional information in the **Submission Notes** field and click **Submit**. Click **Process Monitor** to check the status of your process.

Importing Solution Packages

Public Sector Compliance and Regulation system administrators and implementation consultants use the Oracle Cloud Customer Connect to access the Public Sector Compliance and Regulation Solution Library – a collection of configurations that address common community development and licensing functionality with industry best practices, provided in the form of Solution Packages.

A solution package contains all the necessary configuration files in a compressed file format along with a metadata file.

Review the solution package contents online, download specific solutions that contain the corresponding setup data, review them and deploy those solutions to your pre-production environment for your understanding. Each solution package provides a link that allows you to download and review a white paper describing the contents of the particular solution package. You can review the white paper before you decide to download the solution package.

To access the Solution Library, follow this link *Public Sector Compliance and Regulation Solution Library*.

3 Setting Up Planning Applications

Setting Up Agency-Level Options

You set up the Oracle Intelligent Advisor for Permits and Planning and Zoning on the Permit Options page during agency setup. You can also configure the summary title and text for the Anonymous User Landing Page and the Registered User Landing page.

To configure agency-level options for permits and planning applications:

1. Select **Common Setup** > **Agency** .
2. Click a row on the Agency Information tab.
3. Select the Features tab.

    Oracle delivers the list of offerings on the Features tab. The Permits offering encompasses both Permits and Planning and Zoning.

    Disregard the **Enabled** column for the Permit offering. The offering is enabled in the Functional Setup Manager (FSM).
4. Click **Options** for the Permits offering.
5. On the Permit Options page, you can update values for the following fields:

Page Elements	Definition
Oracle Policy Automation ID	Enter the unique identifier for the Oracle Policy Automation policy model to be used for this offering. The offering-specific policy model that you specify here takes priority over any agency-wide policy definition that you enter on the main Agency Information page.
Message Title	Enter a short text version of the landing page message in a title format. If you leave this field blank, the value in the **Label** field on the Link Details page for the menu navigation link Online Permits is displayed.
Message Summary	Enter a longer version of the landing page message title in a sentence format. If you leave this field blank, the value in the **Description** field on the Link Details page for the menu navigation link Online Permits is displayed.
Button Content URL	Enter a content URL for the **Read More** button. Public users click this button to access the agency's own permit information page, outside of Oracle Public Sector Permits. If you leave this field blank, the **Read More** button opens a dialog box that displays the **Landing Page Message**.

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Page Elements	Definition
	Note: If you want to link to a page outside of Oracle Public Sector Permits, you must enter a URL here.
Landing Page Message	Enter a welcome message in rich text to appear in a dialog box on the landing page, if a URL to access the agency's page is not defined.

For more information on Oracle Intelligent Advisor, see *Overview of Oracle Intelligent Advisor Configuration*. For more information on the Landing Page Message Definition, see *Defining Summary Details*.

Related Topics
- Managing Oracle Intelligent Advisor Policies for your Agency
- Setting Up the Landing Page for Anonymous Users
- Setting Up the Landing Page for Registered Users

Setting Up Planning Application Types

Define the types of planning applications supported by an agency, including pre-applications. You add a planning application type and associate workflow process definitions on the Planning Application Type definition page.

Before you can create an application form, you must first create a planning application or pre-application type on the Planning Application Type definition page. The type defines attributes that will be available for the planning application or pre-application.

Adding Planning Application Type Definitions

1. Select **Planning and Zoning Setup** > **Planning Application Type** > **Planning Applications** .
2. On the Transaction Type – Planning Applications page, click the **Add** button.
3. On the Planning Type Applications page, enter values for the following fields:

Page Element	Description
Classification	Displays the type of application. The classification for this page indicates this is a planning application.
Subclassification	Displays the subclassification of the application type. If you would like to create a pre-application type, select *Pre-Application* from the drop-down list. The default value is *Not Applicable*, which indicates a standard planning application.

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Page Element	Description
Planning Application Type	Enter a name for the type of planning application.
Planning Application Type ID	Enter a unique alphanumeric code or short name for the planning application type. Do not use special characters, including symbols or punctuation, or spaces.
Status	Select from the following to indicate the planning application type status: o *Preliminary:* The planning application type is being defined but is not available for use. o *Ready:* The planning application type is ready to be accessed from the landing page for testing or production use, depending on the environment. o *Void:* The transaction type is no longer available. **Note:** The form design can be in published status or draft status and be set to *Ready.* In draft status, the form can be accessed from outside the form designer—such as the Apply page—for testing purposes in the development or test environment.
Form Design Status	A read-only field indicating whether the form design is published or currently being developed. o *Draft:* The form design is currently being created or modified. Form designs in draft status are not migrated to other environments and can't be cloned. o *Published:* The form design is complete. Form designs in published status can be migrated to other environments and can be cloned.
Autonumber Rule	Select the autonumbering rule to increment numbers for planning applications. You can delete the autonumbering rule when it isn't being used by any transaction types. For more information, see *Setting Up Autonumbering*.
Valid from Date and **Valid to Date**	Enter a range of dates when this planning application type is valid. The default from date is the current date. The default end date is *Open*. You can update these dates as needed.
Public User Enabled	Select from the following to indicate whether the intake form can be accessed and by which user types: o *Enabled for all users:* Only registered public users and agency users can access the intake form. o *Enabled for registered users:* Only registered public users and agency users can access the intake form.

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Page Element	Description
	○ *Not enabled for public users* (default): Only agency users can access the intake form. **Note:** Currently, *Enabled for all users* and *Enabled for registered users* have equivalent access.
Hearing	Select whether public hearings are applicable or not applicable to this planning application type. For more information, see *Setting Up Hearing Bodies*, *Setting Up Hearing Hierarchies*, and *Setting Up Hearing Decisions*.
Application Group	Select an application transaction group that you want to associate with the planning application type. For more information, see *Setting Up Transaction Groups*.
Category	Select a transaction category that you want to associate with the planning application type. For more information, see *Setting Up Transaction Categories*.
Subcategory	Select a transaction subcategory that you want to associate with the planning application type. For more information, see *Setting Up Transaction Subcategories*.
Activity Group	Select an activity group with the activities that you want to use for tracking planning application task due dates. Whenever an application of this application type is submitted, activities set up and mapped to the transaction type are added to the planning application's activity tracking page. For more information, see *Setting Up Activity Tracking*.
Document Group	Select a document group to manage attachments for the planning application type. When you specify a document group, document attachments can be classified into categories and subcategories during the application process and when you upload files. Then you can see the category for a document on the attachments page in the application details. For more information, see *Setting Up Document Groups*.

Page Element	Description
Fee Schedule	Select a fee schedule that you want to associate with the planning application type. A department is required when you enter a fee schedule ID. For more information, see *Setting Up Fee Schedules*.
Bill Type	Select a bill type to associate with the planning application type. The billing type identifies the type of invoice that can be generated from the record. The bill type is required. For more information, see *Setting Up Bill Types*.
Department	Select a department that you want to associate with the planning application type. A department is required if you add a Fee Schedule ID to the planning application type. If a department is specified on the Fee Item setup page, the fee item department overrides the department specified here on the planning application type. For more information, see *Setting Up Departments*.
Terms of Use ID	Select a terms of use definition to associate with the planning application type. The available values for planning applications are determined by the usage on the terms of use ID. For more information, see *Setting Up Terms of Use*.
Description	Enter a user-facing description of the planning application type. On the Apply page, this description appears under the application type name. The description helps public users understand the purpose of the application type.
URL	Enter a URL for a web page that gives public users more information about the planning application type. If you enter a URL, then a **Learn More** link appears at the end of the application type description on the Apply page. The user clicks this link to open the specified URL. If you leave this field blank, the **Learn More** link is not visible on the Apply page.

Setting Up Conditions of Approval

In the **Conditions of Approval** section, you enter the report ID and template that associate with this planning application type. The report ID determines the type of report that should be printed to list the conditions of approval

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and the conditions of approval template determines the conditions of approval that will be applied to the planning application.

For more information about conditions of approval, see *Setting Up Conditions of Approval Templates*.

Setting Up Planning Application Expiration

In the **Expiration** section, you can enter the expiration group that defines the expiration rules for this planning application or pre-application type. Expiration rules determine the expiration dates that correspond to application activity. For more information about planning application and pre-application expiration, see *Setting Up Planning Application Expiration Rules*.

Setting Up Workflow for a Planning Application

You set up workflow using the Oracle Autonomous Integration Cloud (OIC) before associating the workflow with the planning application type.

For more information, see *Setting Up Process Definitions for Workflow*.

1. Select **Planning and Zoning Setup** > **Planning Application Type** > **Planning Applications** .
2. On the Transaction Type – Planning Applications page, click the **Add** button.
3. In the **Workflow Setup** section on Planning Application Type page, enter values for the following fields:

Page Element	Description
Space Name	Enter the space where the workflow process application is stored. You can group related applications in a space as well as enable users to collaborate when developing applications.
Application ID	Enter the name of the workflow process application in OIC. For more information, see *Creating and Managing Applications*.
Version	Enter the version of the workflow process application.
Process Definition	Enter the name of the workflow process definition that applies to this particular planning application.

Note: Different planning application types can utilize the same workflow definition.

Setting Up Plan Reviews for a Planning Application Type

Define how plan reviews are conducted for planning applications associated with the planning application type.

1. Select **Planning and Zoning Setup** > **Planning Application Type** > **Planning Applications** .
2. On the Transaction Type – Planning Applications page, click the **Add** button or select an existing planning application type.
3. In the **Plan Reviews** section on Planning Application Type page, enter values for the following fields:

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Page Element	Description

Plan Review Type	Select the method used for reviewing plans for planning applications associated with the planning application type.
	
	   o *Manual:* Plan reviews are tracked as part of planning application workflow, but are performed without the use of integrated electronic document review software.
	   o *Not Used:* Plan reviews are not tracked as part of planning application workflow.
	   o *Electronic:* Plan reviews are tracked as part of planning application workflow, and are performed through integration with electronic document review software.
	For more information on plan reviews, see *Managing Manual Plan Review Cycles* and *Managing Electronic Plan Review Cycles*.

Enable Auto Assignment	Turn on this switch to enable the automatic assignment of plan reviewers for planning applications associated with this planning application type.
	
	When this switch is on and the assigned planner gives a planning application associated with this planning application type a status of *Completed - Plan Review Required*, the automatic assignment process:
	
	  a. Adds a reviewer row to the plan review cycle for each plan reviewer department selected for the planning application type. If no plan reviewer departments are selected for the planning application type, the process creates the plan review cycle, but doesn't add any reviewer rows.
	  b. Adds the designated department lead to the **Reviewer** field for each reviewer row. If a department doesn't have a department lead selected, the process still creates a row for the department, but leaves the **Reviewer** field blank.
	
	Note:
	This switch is available only when the **Plan Review Type** is *Manual.*

Plan Reviewer Departments	Select the departments that should be included in any plan reviews associated with this planning application type. Plan coordinators should add a reviewer from each of the required departments. The Reviewers grid of the Plan Review page displays the required departments that you select here. When **Enable Auto Assignment** is turned on, the process automatically adds a plan reviewer row to plan review cycles for each of the selected departments. **Note:** A plan reviewer department is available to select only if the Planning and Zoning classification is selected for it on the Plan Reviewer Department page. For more information about plan reviewer departments, see *Setting Up Plan Reviewer Departments*.

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Page Element	Description
	For more information about plan reviews, see *Electronic Plan Review Process Flow* and *Manual Plan Review Process Flow*.

Cloning Planning Application Types

Click the **Clone** button to create a clone of the current planning application type, which you can then use to create a different planning application or to create a different version of the current planning application.

For more information on cloning permits and planning applications, see *Cloning Transaction Type Definitions*.

Designing Intake Forms

After you've entered the appropriate initial information for the planning and zoning type, you can then begin to design the intake form that end users will use to submit an online planning application. You create an intake form using the designer. You access the designer by clicking the **Design Form** button.

For more information on designing intake forms, see *Using the Intake Form Designer*.

Setting Up Planning Application Display Groups

Use the Display Group setup pages to display groups of planning applications on your agency's landing page, where you start an application.

A display group identifies a meaningful grouping of planning application types displayed as a list on the Apply page. The list appears as the planning applications that agency staff or a guest can select to initiate the application process.

For more information about how the Apply page looks and is used, see *Choosing an Application Type*.

Before setting up planning application display groups, you must set up the types of planning applications that your agency offers. See *Setting Up Planning Application Types*.

Adding Planning Application Display Groups

1. Select **Planning and Zoning Setup** > **Planning Display Group** .
2. On the Planning Application Display Group page, click **Add** to add a new grouping.
3. On the Planning Application Display Group Details page, enter values for the following:

Page Element	Description
Display Group ID	Enter a planning application display group name.
Display Group	Enter a name for the display group that appears on the Apply page for guests and agency staff.

Page Element	Description
Description	Enter a description of the display group that appears on the Apply page for guests and agency staff.
URL	Enter a URL that agency staff can use to access additional information. This page is the only place that the URL appears, so it is not available to guests.
Applicable Classification	Select the check box for the applications to which this display group applies. Choose from these options: ○ *Business Licenses* ○ *Permits* ○ *Planning and Zoning* This option determines whether a display group type is shown on the Apply page for public users. A display group can be included with more than one classification.

4. Verify that the **Enabled** switch is turned on. The switch is turned on by default for new planning application display groups.

5. In the **Display Group Lines** section, click **Add** to set up a line on the Display Group Line Details page. The display group lines make up the list of planning application types in the new display group.

> **Note:** A mix of different transaction types can be added to a display group. For example, you can add a permit transaction type to a planning application display group and the other way around.

Page Element	Description
Display Order	Enter a numerical value in this field to specify the order in which you want the planning application type to be displayed, if desired. The default value is *0* and upon saving, the system automatically assigns the next value.
Transaction Type ID	Select an existing transaction type ID. The description for the ID you enter here will appear in the **Transaction Type** field.
Transaction type information	Review the attribute information for the planning application type to verify you have selected the correct transaction type ID: ○ **Transaction Type** ○ **Classification** ○ **Application Group** ○ **Category** ○ **Subcategory**

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Page Element	Description
	For more information about transaction type attributes, see *Setting Up Planning Application Types*.

6. On the Planning Application Display Group Details page, click **Save**.

Modifying Planning Application Display Groups and Lines

You can modify planning application display groups and the planning applications in the list on the Planning Application Display Group Details and Display Group Line Details pages, respectively.

1. Select **Planning and Zoning Setup** > **Planning Display Group** .
2. On the Planning Application Display Group page, select the row for the planning application group that you want to modify.
3. On the Planning Application Display Group Details page, you can:
    o Modify the group name and description. You can't change the Display Group ID.
    o Turn the **Enabled** switch on or off to enable or disable the display group.
4. If you made any changes, click **Save**.
5. To modify the display group lines (the list of planning applications in a display group), select the row for the planning application group that you want to modify on the Planning Application Display Group page.
6. On the Planning Application Display Group Details page, select a display group line in the Display Group Lines grid.
7. On the Display Group Line Details page, you can change the values in these fields:
    a. Update the **Display Order** field to change the order in which the lines appear.
    b. Update the **Transaction Type ID** field with another existing planning application type ID.
8. If you made any changes, click **Save**.

Deleting Planning Application Display Groups and Lines

1. Select **Planning and Zoning Setup** > **Planning Display Group** .
2. On the Planning Application Display Group page, select the row for the planning application group that you want to delete.
3. If you want to delete the display group, click **Delete** on the Planning Application Display Group Details page.
4. If you want to delete multiple display groups, you can delete them from the Planning Application Display Group page:
    a. Click **Edit**.
    b. Select the check boxes for the display groups to delete.
    c. Click **Delete**.
5. To delete a display group line, go to the Planning Application Display Group Details page and select a display group line in the **Display Group Lines** grid.
6. On the Display Group Line Details page, click **Delete**.
7. If you want to delete multiple display group lines, you can delete them from the Planning Application Display Group Details page:
    a. Click **Edit**.
    b. Select the check boxes for the display group line rows to delete.

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    c. Click **Delete**.

Setting Up Planning Application Expiration Rules

You can set up expiration rules for the different phases of the planning application lifecycle.

You set up expiration rules for planning applications to define:

- When an inactive pending application expires.

- When the entitlement expires.

First, you define the rules in an effective-dated group. After setting up the expiration rules, you add the rules group ID to the application type definition and periodically run batch rules processing to update permit expiration statuses.

Setting Up Expiration Rule Groups

Here's how to set up the rule group:

1. Select **Planning and Zoning Setup** > **Expiration Group** > **Planning Applications** .
2. On the Planning Expiration Group page, enter values for these fields:

Page Element	Description
Expiration Group ID, **Expiration Group Name**, and **Description**	Enter an ID for the expiration group, a group name, and description.
Subclassification	Select *Not Applicable* for a planning application or *Pre-Application*. Use *Pre-Application* if you are applying this group of rules to a pre-application transaction type.
Effective Start Date and **Effective End Date**	Enter the range of dates when the group is effective. If you want to leave the effective dates open-ended, don't enter a date for the end date. To see the effective date history for an expiration group, click *Show All Dates*. On the History Data page, you can search history by effective start date or click *Add* to add new effective-dated rules for an expiration group.
Show All Dates	Click to access the effective-dated history of the rules definition. This button is available after you create the first rule. You can also search history by effective start date. Click *Add* to create a new effective-dated row for an expiration group.

3. Verify that the **Enabled** switch is turned on. The option is active by default for a new expiration group.
4. Create expiration rules in the **Expiration Rules** section.

Defining Expiration Rules

Here's how to set up the details about the expiration rules in the group:

1. Select **Planning and Zoning Setup** > **Expiration Group** > **Planning Applications** .
2. Click **Add** in the **Expiration Rules** section.
3. Enter values to create each rule:

Page Element	Description
Expiration Basis	Select the type of expiration for the rule, based on the status of the application: ○ *Pre-application expiration* – Applies only to pre-applications. Users must complete the pre-application within the specified period of time. The expiration timeframe begins when the user saves the pre-application and ends when the user starts the planning application. ○ *Inactive pending application* – When the planning application is in a pending status, the user must submit the application before the expiration date. The expiration timeframe begins when the user saves a planning application and ends with application submission. ○ *Entitlement expiration* – Applies only to entitlements for planning applications. Users must submit a permit application after the entitlement is issued and before the expiration date. The expiration timeframe begins when the agency issues the completed entitlement and ends when the user submits the permit application. **Note:** Because start and end dates require specific statuses, workflow processes must include status update tasks for Application Accepted (*Accepted*) and Certificate of Occupancy (*Certificate*) or Completed (*Completed*).
Expiration Duration	Enter the amount of time that the user has before the expiration date.
About to Expire	Enter when you would like a notification to appear on the application that shows the user how long until the application expires. For example, you can enter 2 days to show that a pending application expires in 2 days.
Grace Period	Enter the amount of time the application is valid beyond the expiration date. For example, if a pending application expires in 30 days, you may provide a grace period of an additional 3 days.
Number of Extensions	Enter the number of allowed extensions beyond the expiration date. For example, to allow up to 2 extensions you would enter 2. You can manually extend the expiration during the About to Expire and Grace Period timeframes, when the **Extend** link is available on the Overview page in the application

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Page Element	Description
	details. This link is available only for agency staff with appropriate permissions. You can't manually extend the expiration for applications in a pending status.
	Both manual extensions and extensions that occur automatically due to inspection activity count toward the number of available extensions.

4. Verify that the **Enabled** switch is turned on for each rule. The option is active by default for a new expiration rule.
5. Click **Save**.

Setting Up Communication Rules

You can set up communication rules to send communications when the pre-application or planning application is about to expire or expired. Agency staff and the contact listed on the application receive the notifications. Click **Add** in the Communication column and select **About to Expire**, **Expired**, or both, and the recurrence of the communication.

Depending on the expiration communication rules you define, you must also set up communication templates for these delivered events:

- *About to Expire Pre-application* – The communication event is triggered when the inactive pending application or pre-application is about to expire.

- *Expired Pre-Application* – The communication event is triggered when the inactive pending application or pre-application expires.

- *About to Expire Planning and Zoning Application* – The communication event is triggered when the inactive pending application or planning application is about to expire.

- *Expired Planning and Zoning Application* – The communication event is triggered when the inactive pending application or planning application expires.

For more information about configuring the communication templates for the email or notification you want to send when the event occurs, see *Setting Up Communication Templates*.

> **CAUTION:** After setting up communication rules, you must periodically run batch expiration rule processing to update the *About to Expire* and *Expired* statuses. The system updates the statuses and sends out the communications according to the setup. Oracle recommends that you schedule expiration rule processing to run daily.

Associating Expiration Groups with Application Types

After you create an expiration group, you associate the group of rules with a planning application type.

1. Select **Planning and Zoning Setup** > **Planning Application Type** > **Transaction Type** .
2. Click the row for the planning application type.
3. On the selected Planning Application Type page, enter the expiration group ID. You can look up the expiration group by expiration group name and description.
4. Click **Save**.

For more information see *Setting Up Planning Application Types*.

Running the Expiration Rule Process

After setting up expiration rules and adding an expiration rule group ID to the planning application type definition, you must set up expiration rule processing to periodically update the expiration statuses.

Run the process that updates permit and planning application expiration statuses on the Process Expiration Rules page, which you access by selecting **Common** > **Process Expiration Rules** . Oracle recommends that you schedule expiration rules processing to run daily.

For information about setting up expiration rules processing, see *Updating Application Expiration Status*.

Related Topics
- Expiration Overview

Managing Pre-Application Meeting Configuration

Pre-applications are the initial step in the planning and zoning process, and are used to allow the property owner or developer to work with agency planners to receive feedback prior to submitting planning applications. A pre-application meeting is scheduled between the property owner or developers and agency planners to determine the necessary applications and approvals for the project.

Configuring the Pre-Application Meeting

Administrators set up and manage the pre-application meeting configuration on the Manage Pre-Application Meeting Configuration page.

1. Select **Pre-Application Setup** > **Pre-Application Meeting Setup** . Or, Select **Setup and Maintenance** tile on the **Agency Springboard** > Select **Public Sector Planning and Zoning** > **Planning Application Types** functional area > **Manage Pre-Application Meeting Configuration** task.
2. On the Manage Pre-Application Meeting Configuration page, the Pre-Application Meeting section allows you to set up applicant privileges. Enter values for the following fields:

Page Element	Description
Applicant can request	Select to allow an applicant to request a pre-application meeting. Applicants can access the Pre-Application Meeting Request page and schedule a meeting based on the availability of the agency staff. See *Working with Pre-Application Meetings*.
Applicant can reschedule and cancel	Select to allow an applicant to reschedule or cancel their meeting.

3. The Meeting Availability section allows you to set up the parameters for scheduling meetings, determined by:

    a. Planner meeting schedule or
    b. Agency meeting schedule

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Planner meeting schedule: Select to allow users to schedule meetings based on the availability of their assigned planner.

> **Note:** You also need to ensure that all the Planners are assigned a Pre-Application meeting work schedule on the Agency Staff Profile. Enter values for the following fields:

Page Element	Description
Meeting Duration in Hours	Select a value to set the maximum amount of time the meeting can be scheduled for. Users will see this value as the duration of the meeting, and they are not allowed to edit the field. See the section Scheduling a Pre-Application Meeting under *Working with Pre-Application Meetings*.
Schedule after Number of Days	Select a value to set the number of days from the current date, so that users can schedule a meeting on a date available after the number of days specified here. For example, if you select a value 5 on the 10th day of this month, the calendar on the Pre-Application Meeting Request page displays the dates that are available after the 15th day of the month.
Schedule up to Number of Days	Select a value to set the number of days that will be available for the users to select a date on the calendar for scheduling the meeting. For example, if you select a value of 90, the calendar on the Pre-Application Meeting Request page displays 90 calendar days starting from the date the user is making the selection. See the section Scheduling a Pre-Application Meeting under *Working with Pre-Application Meetings*.

Agency meeting schedule: Select to allow users to schedule meetings based on the schedule of the agency. In addition to the fields described above, enter values for the following fields:

> **Note:** If you select this option, then you need not assign Pre-Application meeting schedule to the planners as the Pre-Application meeting schedule will not be considered while determining the availability.

Page Element	Description
Pre-Application Work Schedule	Select the Agency level work schedule that needs to be considered while determining the availability for the pre-application meeting.
Maximum Concurrent Meetings	Select a value to determine the maximum number of meetings that can be scheduled at a time.

4. The **Meeting Agenda and Location** section allows you to set up the agenda and the location for the pre-application meeting.

Page Element	Description
Include Agenda	Select the check box and enter the agenda in the **Meeting Agenda** field.
Include Location	Select the check box and search for the desired location of your agency using the **Agency Information** look up. The address of the location you select is displayed in the **Meeting Location** field.

> **Note:** Users can edit the entries for the agenda and location fields while scheduling the meeting on the Pre-application Request page.

Setting Up Hearing Bodies

With Oracle Public Sector Compliance and Regulation Cloud, you will use the Public Hearing feature to configure hearing bodies and hearing hierarchies, schedule hearings, and record decisions.

Setting Up Public Hearing

A public hearing is an official meeting where members of the public, the hearing body, and the applicant of the planning and zoning application come together to discuss the facts about the application submitted by the applicants.

The following topics apply to administrators for setting up and maintaining the Public Hearing process:

- Setting up Hearing Body
- Setting up Hearing Hierarchy
- Setting up Hearing Decision

Setting Up Hearing Body

A hearing body is a group of individuals formed to evaluate the testimony presented by applicants and to provide feedback.

Adding a Hearing Body

To add a hearing body:

1. Select **Hearing Setup** > **Hearing Body** .
2. Click **Add** on the Hearing Body page and enter values for the following fields:

Page Element	Description
Hearing Body Code	Enter a unique identifier of the hearing body.

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Page Element	Description
Name	Enter a name for the hearing body.
Additional Information	Enter any text as details about the hearing body.
Enabled	Turn on the switch to make the hearing body available for use.
Appeal Period	Select the number of days after the public hearing, when an appeal is allowed.
Maximum Agenda Items	Select a value from the options. As an agency user you can configure the maximum number of agenda items that can be heard on a day.
Address fields	The agency address. The **Country** field displays *US*. As you enter a **Postal Code**, the type-ahead list shows values that include appropriate state and city combinations. After you select a value, the city and state appear as read-only fields, and two address fields appear so that you can enter the rest of the address. If you don't know the postal code, click the **Don't know** link to display a full set of address fields.

3. Select a pattern of recurrence of the meeting from these fields:

Page Element	Description

Recurrence Pattern	Select the pattern for the recurrence of the public hearing:
	
	    o Weekly
	    o Monthly

4. Select the Weekly recurrence if you want to schedule the meeting every week. Enter values for the following fields:

Page Element	Description
Weeks between Occurrences	Select the number of weeks between one meeting occurrence and the next.
Days of the Week	Select the days of the week on which you want the meeting to recur.
Recurrence Start Date Time	Select a date and time from which the meeting recurrence should be effective.

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5. Select the Monthly recurrence if you want to schedule the meeting every month. Enter values for the following fields:

Page Element	Description
Months between Occurrences	Select the number of months between one meeting occurrence and the next.

Days of the Week	Select the check box if you want to schedule the meeting on particular days of the week. Click **Add** to open the Days of the Week page and select the days of the week, for example *First Monday*:
	
	  o **Occurrence**: Select – First, Second, Third, Fourth, or Last the day of week
	
	  o **Weekday**: Select the day of the week from Monday, Tuesday, and so on.
	
	Turn on the **Enable** switch to make the setting available for use and click **Save**. Use the **Add** button to include multiple rows.
	
	Note:
	You can modify or delete the entry. Click the row and use the Days of the Week page to make the change.

Dates	Select the check box if you want to schedule the meeting on particular dates of the week. Click **Add** to open the Dates page and select from all the available dates. Turn on the **Enable** switch to make the setting available for use and click **Save**. Use the **Add** button to include multiple rows. **Note:** You can modify or delete the entry. Click the row and use the Dates page to make the change.
Recurrence Start Date Time	Select a date and time from which the meeting recurrence should be effective.

6. Click **Save** to save the new hearing body and return to the Hearing Body page.

Modifying a Hearing Body

To modify a hearing body:

1. Select **Hearing Setup** > **Hearing Body** .
2. On the Hearing Body page, click the record of the hearing body you want to edit.
3. On the Hearing Body details page you can make changes to the fields and click **Save**.

   Note: You can make changes to all the fields except the Hearing Code.

4. The Hearing Body page now lists the updated record.

Deleting a Hearing Body

To delete a hearing body:

1. Select **Hearing Setup** > **Hearing Body** .
2. On the Hearing Body page, click the record of the hearing body you want to delete.
3. On the Hearing Body details page you can click the **Delete** button. Click OK on the confirmation message.
4. The Hearing Body page lists only the existing records.

Setting Up Hearing Hierarchies

Hearing Hierarchy defines the levels of hearing bodies that an application can be escalated through. In an agency, a planning and zoning application can be escalated to a higher body in cases of appeal, where the highest hearing body decision is considered final.

Agencies set up their hearing hierarchy to address events such as an appeal. For example, a hearing begins with the Planning Committee and then an appeal escalates the application to the Planning Commission. If appealed again, the application moves to the City Council.

Adding a Hearing Hierarchy

To add a hearing hierarchy:

1. Select **Hearing Setup** > **Hearing Hierarchy** .
2. Click **Add** on the Hearing Hierarchy page and enter values for the following fields:

Page Element	Description
Hierarchy Code	Enter a unique identifier of the hearing body.
Hierarchy	Enter a name for the hearing hierarchy.
Enabled	Turn on the switch to make the hearing hierarchy available for use.
Description	Enter any text to describe the hierarchy.

3. Click **Add** and enter values for the following fields:

Page Element	Description
Hearing Body Code	Select a hearing body code to associate with the new hearing hierarchy.

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Page Element	Description
Sequence	Select a number to determine the escalation level of the selected hearing body within the hierarchy. For example, if the value 2 is selected, the selected hearing body will be the second in the hierarchy for the public hearing.
Appeal Allowed	Turn on the switch if you want to allow the agency to appeal after the hearing body places its decision. The agency will not be allowed to appeal the hearing to the next body in the hierarchy, if the switch is turned off.
Enabled	Turn on the switch if you want to allow the hearing body to be available for use.
+	Click to add a new row and add a new hearing body in the hierarchy.
🗑	Click to delete the row. The hearing body will be removed from the hierarchy.

4. Click **Save** to save the newly created hierarchy and return to the Hearing Hierarchy page, where the new hierarchy you created is listed.

Modifying a Hearing Hierarchy

To modify a hearing hierarchy:

1. Select **Hearing Setup** > **Hearing Hierarchy** .
2. On the Hearing Hierarchy page, click the hearing hierarchy row you want to edit.
3. On the Hearing Hierarchy details page make changes to the fields and click **Save**.

   | **Note:** You can make changes to all the fields except the Hierarchy Code.

Deleting a Hearing Hierarchy

To delete a hearing hierarchy:

1. Select **Hearing Setup** > **Hearing Hierarchy**
2. On the Hearing Hierarchy page, click the hearing hierarchy row you want to delete.
3. On the Hearing Hierarchy details page, click **Delete** and click OK on the confirmation page to delete the hearing hierarchy.
4. Click **Save** and return to the Hearing Hierarchy page. The page lists the updated hierarchy rows.

Setting Up Hearing Decisions

The outcome of a public hearing is referred to as hearing decision. Agency staff such as assigned planners update the decision from the hearing body into the system.

System-defined Public Hearing Decisions

Oracle delivers hearing decisions for use during the hearing process. System administrators can configure the decisions specific to their agency, which are mapped to one of the system-defined decisions listed below:

- Approved
- None
- Denied
- Continue

Adding a Hearing Decision

1. Select **Hearing Setup** > **Hearing Decision** .
2. The Hearing Decision page lists all the decisions you have configured. Click **Add**.
3. One the Hearing Decision Status detail page, enter values for the following fields:

Page Element	Description
Code	Enter a unique identifier of the hearing decision.
Name	Enter a name to identify the decision. Example, Approved with Conditions, Not Result, and so on.
Description	Enter any text to describe the decision.
Applies To	Select the decision check box for which the status applies to: o Hearing Decision (This is the default selection.) o Staff Decision
Decision	Select one of the system-defined decisions to map to the new decision you are creating: o Approved o None o Denied o Continue
Enabled	Turn on the switch to make the decision available to use.

4. Click **Save** to save the new hearing decision and return to the Hearing Decision page, which lists the newly created decision.

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Modify a Hearing Decision

To modify a hearing decision:

1. Select **Hearing Setup** > **Hearing Decision** .
2. The Hearing Decision page lists all the decisions you have configured. Click the row of the decision you want to modify.
3. On the Hearing Decision detail page, make changes to the fields and click **Save**.

   > **Note:** You can make changes to all the fields except the Code.

4. The Hearing Decision page lists the updated row.

Deleting a Hearing Decision

To delete a hearing decision:

1. Select **Hearing Setup** > **Hearing Decision** .
2. The Hearing Decision page lists all the decisions you have configured. Click the row of the decision you want to delete.
3. On the Hearing Decision detail page, click **Delete** and confirm deletion by selecting OK.
4. Click **Save** and return to the Hearing Decision page. The page lists the updated decision rows.

4 Setting Up Conditions of Approval

Setting Up Conditions of Approval Categories

Use categories to organize the various types of conditions of approval that are applied to planning applications. You set up conditions of approval categories and subcategories on the Conditions of Approval Category page.

Adding Conditions of Approval Categories and Subcategories

1. Select **Conditions of Approval Setup** > **Conditions of Approval Category** .
2. The Conditions of Approval Category page lists all the condition categories that are set up. Click **Add** to add a new condition category.
3. On the Conditions of Approval Category details page, enter a category ID, category name, and a description.
4. Click the **Enabled** switch to enable or disable the category.
5. If you want to add a subcategory, click the **Add** button to add the subcategory in the Conditions Subcategory Setup section. Click the **Add** icon for additional subcategories.
6. On the Conditions of Approval Subcategory details page, enter a subcategory ID, subcategory name, and a description.
7. Click the **Enabled** switch to enable or disable the subcategory.
8. Click **Save**.

Modifying Conditions of Approval Categories

1. Select **Conditions of Approval Setup** > **Conditions of Approval Category** .
2. On the Conditions of Approval Category page, select the row for the category that you want to modify.
3. On the Conditions of Approval Category details page, you can only modify the category name and description. You cannot change the category ID.
4. Click **Save**.

Modifying Conditions of Approval Subcategories

1. Select **Conditions of Approval Setup** > **Conditions of Approval Category** .
2. On the Conditions of Approval Category page, select the row for the category with the subcategory that you want to modify.
3. Select the subcategory that you want to modify in the Condition Subcategory Setup section.
4. On the Conditions Subcategory Setup details page, you can only modify the category name and description. You cannot change the subcategory ID.
5. Click **Save**.

Deleting Conditions of Approval Categories

When you delete a condition category, all associated subcategories are also deleted

1. Select **Conditions of Approval Setup** > **Conditions of Approval Category** .
2. On the Conditions of Approval Category page, select the row for the category that you want to delete.
3. On the Conditions of Approval Category details page, click **Delete**.
4. If you want to delete multiple condition categories, you can delete them on the Conditions of Approval Category page:

    a. Click the **Select Multiple** icon.

    b. Select the check boxes for the category rows to delete.

    c. Click the **Delete** icon.

Note: You can't delete a condition category if its conditions are applied to an application.

Deleting Conditions of Approval Subcategories

1. Select **Conditions of Approval Setup** > **Conditions of Approval Category** .
2. On the Conditions of Approval Category page, select the row for the category with the subcategory that you want to delete.
3. On the Conditions of Approval Category Details page, select the row for the subcategory that you want to delete.
4. Click the **Delete** button on the Condition Subcategory Setup details page
5. If you want to delete multiple condition subcategories, you can delete them on the Conditions of Approval Category details page:

    a. Click the **Select Multiple** icon.

    b. Select the check boxes for the subcategory rows to delete.

    c. Click the **Delete** icon.

    d. Click **Save** on the Conditions of Approval Category details page.

Note: You can't delete a condition subcategory if its conditions are applied to an application.

Setting Up Condition Type Sequences

You set up the sequence in which the condition types are applied to the planning application. All conditions of a particular type are applied based on the sequence number you configure on the Condition Type Sequence page.

Adding Condition Type Sequences

1. Select **Conditions of Approval Setup** > **Condition Type Sequence** .
2. The Condition Type Sequence page lists all the condition type sequences that are set up. Click **Add** to add a new condition type sequence.
3. On the Conditions Type Sequence details page, select a condition type and a sequence number. For example, select 1 if you want the condition type to be applied first to the submitted planning application.
4. Click **Save** to save and return to the Conditions Type Sequence page.

The Conditions of Approval report that can be generated from the planning application lists all the applied conditions following the sequence you set up here.

Setting Up Condition Category Sequences

You set up the sequence in which the condition categories are applied to planning applications. All condition types of a particular category are applied based on the sequence number you configure on the Condition Category Sequence page.

Adding Condition Category Sequences

1. Select **Conditions of Approval Setup** > **Category Sequence** .
2. The Condition Category Sequence page lists all the category sequences that are set up. Click **Add** to add a new condition category sequence.
3. On the Conditions Category Sequence details page, select values for the following fields:

   - *Category ID*: Select a category ID from the available categories .

   - *Condition Type*: Select a condition type. Select *All* if you want all the condition types to be selected for the category sequence.

   - *Sequence* : Select a number to determine the sequence of the selected category among the categories.

4. Click **Save** to save and return to the Category Sequence page.

The Conditions of Approval report that can be generated from the planning application lists all the applied condition categories following the sequence you set up here.

Setting Up Conditions of Approval

You create and configure your agency's conditions of approval using the Conditions of Approval page. Categorize conditions based on the condition type, category, subcategory, and the compliance period. Conditions can be applied automatically through templates or added manually to a submitted planning application.

Adding Conditions of Approval

1. Select **Conditions of Approval Setup** > **Conditions of Approval** .
2. The Conditions of Approval page lists all the conditions that are set up. Click **Add** to add a new condition of approval.
3. On the Conditions of Approval details page, select values for the following fields:

Page Element	Description
Detail	Enter a description about the condition of approval. You can use the Rich Text functionality for formatting options.
Conditions of Approval ID	Enter an identifier of the condition of approval.
Condition Type	Select a type of condition:

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Page Element	Description
	○ *Standard* ○ *Plan* See *Setting Up Condition Type Sequences*.
Category	Select a category for the condition of approval. See *Setting Up Conditions of Approval Categories*.
Subcategory	Select a subcategory for the condition of approval. See *Setting Up Conditions of Approval Categories*.
Compliance Period	Select one or more types of compliance period that are applicable to the new condition.

4. Ensure that the **Enabled** switch is turned on.
5. Click **Save** to save and return to the Category Sequence page.

   Use the **Save and New** button to save this condition and clear the values so that you can enter values for another condition of approval .

Modifying Conditions of Approval

1. Select **Conditions of Approval Setup** > **Conditions of Approval** .
2. On the Conditions of Approval page, select the row for the condition that you want to modify.
3. On the Conditions of Approval details page, you can modify all the field values except the conditions of approval ID.
4. Click **Save**.

Deleting Conditions of Approval

1. Select **Conditions of Approval Setup** > **Conditions of Approval** .
2. On the Conditions of Approval page, select the row for the condition that you want to delete.
3. On the Conditions of Approval details page, click **Delete**.
4. If you want to delete multiple conditions, you can delete them on the Conditions of Approval page:

   a. Click the **Select Multiple** icon.
   b. Select the check boxes for the condition rows to delete.
   c. Click the **Delete** icon.

Note: You can't delete a condition if it is applied to an application.

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Setting Up Conditions of Approval Templates

Conditions of approval are automatically applied to planning applications through templates. As agency administrators, you create and configure conditions of approval templates by selecting the conditions of your choice.

Conditions of approval templates are associated with planning application types, which determine the type of template that is applied to a submitted planning application. See the section Setting Up Conditions of Approval in *Setting Up Planning Application Types*.

Adding Conditions of Approval Templates

Use the Conditions of Approval Template page to set up conditions of approval templates.

1. Select **Conditions of Approval Setup** > **Conditions of Approval Template** .
2. The Conditions of Approval Template page lists all the templates set up in the system. Click **Add** to add a new template
3. The Conditions of Approval Template details page lists all the conditions that belong to the template. Enter values for the following fields:

Page Element	Description
Template ID	Enter an identifier of the template.
Template	Enter a name for the template.
Description	Enter a description of the template.
Add	Click the button to open the Conditions of Approval Template list page to add one or more conditions.

4. The Conditions of Approval Template list page lists all the conditions in the system with details of the category, subcategory, type, and compliance period. Search and select the conditions using the check boxes next to the condition.
5. Click **Save** to save and return to the Conditions of Approval Template detail page.
6. Ensure that the **Enabled** switch is turned on.
7. Click **Save** to save and return to the Conditions of Approval Template page.

5 Setting Up Code Enforcement

Setting Up Corrective Actions

Define the various corrective actions that can be applied to resolve code violations identified by an agency.

A corrective action can resolve more than one code violations. You add a corrective action using the Corrective Action page and assign the action to one or more code references on the code configuration page.

Adding Corrective Actions

1. Select **Code Enforcement Setup** > **Corrective Action** .
2. Click **Add** on the Corrective Action page to add a new corrective action.
3. On the Corrective Action Details page, enter values for the corrective action.

Page Element	Description
Corrective Action ID	Enter a unique identifier for the corrective action.
Summary	Enter a summary about the action that is to be taken to resolve the violation.
Description	Enter longer descriptions or instructional information that can be formatted using a rich text editor.

4. Verify that the **Enabled** switch is turned on. The option is active by default for a new corrective action.
5. Click **Save**.

Modifying Corrective Actions

You can modify corrective actions for the code violations on the Corrective Action page.

1. Select **Code Enforcement Setup** > **Corrective Action** .
2. On the Corrective Action page, select the row for the corrective action that you want to modify.
3. On the Corrective Action Details page, you can edit the summary and description. Click the **Enabled** switch to enable or disable the corrective action.
4. Click **Save** to save the changes.

Deleting Corrective Actions

You can delete corrective actions for the code violations on the Corrective Action page.

1. Select **Code Enforcement Setup** > **Corrective Action** .
2. On the Corrective Action page, select the row for the corrective action that you want to delete.
3. On the Corrective Action Details page, click the **Delete** button.

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Setting Up Code References for Code Enforcement

Code references are pointers to the documentation for a specific code used on a violation. These references instruct readers to refer to documentation for the specific item. Set up the Public Sector Compliance and Regulation system to point the user to a specific documentation regarding that code violation.

Adding Code References

1. Select **Code Enforcement Setup** > **Code Reference** .
2. Click **Add** on the Code Reference page to add a new code reference.
3. On the Code Reference Details page, enter values for the code reference.

Page Element	Description
Code Reference ID	Enter a unique identifier of the code reference.
Summary	Enter a summary about the violation that is related to the incident.
Description	Enter longer descriptions or instructional information that can be formatted using a rich text editor.
Corrective Action	Select the corrective action that can be applied to resolve the violation.
Summary	Displays information about the corrective action that will be taken to resolve the violation.

4. Verify that the **Enabled** switch is turned on. The option is active by default for a new code reference.
5. Click **Save**.

Modifying Code References

You can modify code references on the Code Reference page.

1. Select **Code Enforcement Setup** > **Code Reference** .
2. On the Code Reference page, select the row for the code reference that you want to modify.
3. On the Code Reference Details page, you can:

   ○ Change the values for the summary, description, and corrective action fields.

   ○ Click the **Enabled** switch to enable or disable the corrective action.

4. Click **Save** to save changes.

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Deleting Code References

You can delete code references on the Code Reference page.

1. Select **Code Enforcement Setup** > **Code Reference** .
2. On the Code Reference page, select the row for the code reference that you want to delete.
3. On the Code Reference Details page, click the **Delete** button.

Setting Up Code Reference Groups

A code reference group is a set of code references grouped together on the basis of the nature of violations. You set up code reference groups on the Code Reference Group page.

Adding Code Reference Groups

1. Select **Code Enforcement Setup** > **Code Reference Group** .
2. The Code Reference Group page lists all the code reference groups. Click **Add** to add a new group.
3. On the Code Reference Group Details page, enter values for the code reference group.

Page Element	Description
Code Reference Group ID	Enter a unique identifier for the code reference group.
Name	Enter a name for the code reference group.

4. Verify that the **Enabled** switch is turned on. The option is active by default for a new code reference group.
5. In the **Code References** section, click **Add** to search and include one or more code references to the group. Use the **Add** and **Delete** action icons for adding and deleting code reference records.
6. Click **Save**.

Modifying Code Reference Groups

You can modify code references groups on the Code Reference Group page.

1. Select **Code Enforcement Setup** > **Code Reference Group** .
2. On the Code Reference Group page, select the row for the code reference group that you want to modify.
3. On the Code Reference Group Details page, you can:

   ○ Change the name of the group.

   ○ Use the **Code References** section to add new or delete existing code references.

   ○ Click the **Enabled** switch to enable or disable the code reference group.

4. Click **Save** to save changes.

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Deleting Code Reference Groups

You can delete code reference groups on the Code Reference Group page.

1. Select **Code Enforcement Setup** > **Code Reference Group** .
2. On the Code Reference Group page, select the row for the code reference group that you want to delete.
3. On the Code Reference Group Details page, click the **Delete** button.

Setting Up Notices

A notice is a document issued by a code enforcement authority to the party that has violated a code. You set up code enforcement notices that are used to generate and send reports to the concerned responsible parties.

Adding Notices

1. Select **Code Enforcement Setup** > **Notice** .
2. The Notice page lists all the notices. Click **Add** to add a new notice.
3. On the Notice Details page, enter values for the notice.

Page Element	Description
Notice ID	Enter a unique identifier of the notice.
Name	Enter a name for the notice.
Report ID	Select a report to be sent as part of the notice. This report is set up on the Report Configuration page.

4. Verify that the **Enabled** switch is turned on. The option is active by default for a new notice.
5. Click **Save**.

Modifying Notices

You can modify notices on the Notice page.

1. Select **Code Enforcement Setup** > **Notice** .
2. On the Notice page, select the row for the notice that you want to modify.
3. On the Notice Details page, you can:

   o Change the notice name.

   o Select a new report ID.

   o Click the **Enabled** switch to enable or disable the notice.

4. Click **Save** to save changes.

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Deleting Notices

You can delete notices on the Notice page.

1. Select **Code Enforcement Setup** > **Notice** .
2. On the Notice page, select the row for the notice that you want to delete.
3. On the Notice Details page, click the **Delete** button.

Setting Up Notice Groups

A notice group is a set of notices grouped together on the basis of the status of the case. The notices within a group follow a sequence that you configure, to send to the concerned parties as and when required.

Adding Notice Groups

1. Select **Code Enforcement Setup** > **Notice Group** .
2. The Notice Group page lists all the notice groups. Click **Add** to add a new notice group.
3. On the Notice Group Details page, enter values for the notice group.

Page Element	Description
Notice Group ID	Enter a unique identifier of the notice group.
Name	Enter a name for the notice group.
Enabled	Verify that the **Enabled** switch is turned on. The option is active by default for a new notice group.

4. In the **Notice Associations** section, you can configure the notices that are to be sent for a particular case status and in a particular sequence.

Page Element	Description
Case Status	Select a case status to associate with the new notice group.
Sequence	Select a value to determine the sequence of the selected notice within the hierarchy. For example, if the value 2 is selected, the selected notice will be the second notice for the selected case status.
Notice ID	Select a notice that is specific to the case status and the sequence value.
Enabled	Verify that the **Enabled** switch is turned on. The option is active by default for a new notice.

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Page Element	Description

Use the **Add** and **Delete** action icons for adding and deleting notice association records.

> **Note:** You must ensure that valid notices are configured for the case status before you associate a notice group with an issue subtype. Use ORA_VIO status to create a case. Use ORA_CIT status to issue a citation.

5. In the **Ad Hoc Notice Associations** section, you can configure an ad hoc notice that the agency staff can manually add to a case.

Page Element	Description
Notice ID	Select a notice that is specific to the case.
Enabled	Verify that the **Enabled** switch is turned on. This switch is off by default.

Use the **Add** and **Delete** action icons for adding and deleting ad hoc notice association records.
6. Click **Save** to save your changes.

Modifying Notice Groups

You can modify notice groups on the Notice Group page.

1. Select **Code Enforcement Setup** > **Notice Group** .
2. On the Notice Group page, select the row for the notice group that you want to modify.
3. On the Notice Group Details page, you can:

    ○ Change the name of the notice group.

    ○ Delete notice associations and create new ones.

    ○ Click the **Enabled** switch to enable or disable the notice group.

4. Click **Save** to save changes.

Deleting Notice Groups

You can delete notice groups on the Notice Group page.

1. Select **Code Enforcement Setup** > **Notice Group** .
2. On the Notice Group page, select the row for the notice group that you want to delete.
3. On the Notice Group Details page, click the **Delete** button.

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Setting Up Inspection Counts

Define the number of inspections that are carried out to assess code violations reported at the agency. You use the Inspection Count page to set up the inspection count value and its description.

Adding Inspection Counts

1. Select **Code Enforcement Setup** > **Inspection Count** .
2. Click **Add** on the Inspection Count page to add a new inspection count.
3. In the new row, enter the count value in the **Inspection Count** field and a description in the **Description** field.

   > **Note:** The inspection count values must follow an incremental sequence of numbering, such as 1, 2, 3, and so on.

4. Verify that the **Enabled** switch is turned on. The option is active by default for a new inspection count.
5. Click **Save**.

Deleting Inspection Counts

1. Select **Code Enforcement Setup** > **Inspection Count** .
2. On the Inspection Count page, click the **Delete** icon for the row of the inspection count you want to delete.

   > **Note:** You must ensure that the sequencing of numbers in the inspection count is maintained.

Setting Up Referral Bodies

Referral bodies are those departments that an agency can refer to in cases of code violations that are not in the scope of the agency. The agency can assign the issue to the referral body based on the referral type.

Adding Referral Bodies

1. Select **Code Enforcement Setup** > **Referral Body** .

   The Referral Body page lists all the referral bodies that are configured by the agency.
2. Click **Add** on the Referral Body page to add a new referral body and enter values for the following fields:

Page Element	Description
Referral Code	Enter an identifier of the referral body.
Name	Enter a name for the referral body.

Page Element	Description
Description	Enter a description about the referral body on the basis of which, an incident or case can be referred to the body.
Referral Type	Select the type of referral, which can be a department within the agency or an external agency: ○ Agency Department. ○ External Agency.

3. Verify that the **Enabled** switch is turned on. The option is active by default for a new referral body.
4. Click **Save**.

Modifying Referral Bodies

1. Select **Code Enforcement Setup** > **Referral Body** .
2. On the Referral Body page select the row for the corrective action that you want to modify.
3. On the referral body details page, you can:

   ○ Change the name, description, and referral type values.
   ○ Click the **Enabled** switch to enable or disable the referral body.

   Note: You cannot delete a referral body.

4. Click **Save** to save changes.

Setting Up Time Rules

Time rules are a set of policies that uses the input code enforcement inspection parameters – due date type, trigger date, priority, and occurrence to calculate due dates.

The following logic is used to calculate due date:

Due Date = Trigger date + Dates based on the time rule

If the number of transactions created exceed the policy count, then the time rule that is defined for the highest policy occurrence will be triggered.

Time rules are assigned to the issue subtype of the incident, the values of which are sourced from the Code Enforcement Options page. See *Setting Up Agency-Level Options for Code Enforcement*.

Note: Important!: Agency administrators add and modify time rules and assign them to issue subtypes so that appropriate rules are applied for each subtype. Every issue subtype must have a time rule assigned for every system-defined due date type. See *Setting Up Issue Subtypes*. The following table shows the various delivered due date types and their details.

Due Date Type	Description	Events that calculate the due date	Trigger Date	Usage	Policy Occurrence Count value
ORA_INC_REV_DUEDT	Incident review date	Incident creation	Incident report date	The incident in the worklist is marked with a status of Overdue when the calculated review due date is less than the current date.	1
ORA_INIT_INS_DUEDT	Initial inspection date	Initial inspection creation	Inspection schedule date	The Inspection due date is updated with this date when the initial inspection is scheduled.	1
ORA_RE_INS_DUEDT	Re-inspection date	Re-inspection creation	Inspection schedule date	The Inspection due date is updated with this date when the re-inspection is scheduled.	2 or more
ORA_VIOL_CMPL_PRD_DUEDT	Due date for compliance	Case creation	Case creation date	The date is displayed as the compliance date on the Case page.

The value for the policy occurrence count is zero (0) at the time of case creation. | 0 |
ORA_VIOL_APPL_PRD_DUEDT	Violation appeal period	Case status change to Violation.	Case creation date	Ensures that the Request Appeal option is available only during the calculated appeal period.	1 or more
ORA_CITATN_CMPL_PRD_DUEDT	Due date for citation compliance	Citation issuance	Citation issue date	Updates the compliance date displayed on the Case detail page.	1 or more
ORA_CITATN_DUEDT	Due date for citation payment	Payment initiation	Citation issue date	Late fee is added after the citation payment due date.	1 or more
ORA_CITATN_APPL_PRD_DUEDT	Citation appeal period	Case status change to Citation.	Citation Issue Date	Ensures that the Request Appeal option is available only during the calculated appeal period.	1 or more
ORA_ABTMT_DUEDT	Abatement of violation due date			At present this due date type is not active.	

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Adding Time Rules

You configure the time rules and policies using the Time Rule page.

1. Select **Code Enforcement Setup** > **Time Rule** . The Time Rule page lists all the time rules that are configured by the agency.
2. Click **Add** on the Time Rule page to add a new time rule.
3. On the Time Rule Detail page, add values to the following fields:

Page Element	Description
Time Rule	Enter a name for the time rule.
Description	Enter a description about the time rule.
Due Date Type	Select the type of due date, which determines the time period or due date for a transaction.

4. Verify that the **Enabled** switch is turned on. The option is active by default for a new time rule.
5. In the Time Policy section, click the **Add** button to define a time policy.
6. On the Time Policy Details page, select values for the time policy:

Page Element	Description
Priority	Select the priority for the time policy: ○ High ○ Normal
Unit of Measure	Select a unit for the measurement of time: ○ Hours ○ Days **Note:** The *Hours* option is not supported at present.
Unit of Measure Value	Select a number value for the unit of measure of time you selected above.
Policy Occurrence Count	Select an occurrence count value for the event, such as an inspection.

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Modifying Time Rules

1. Select **Code Enforcement Setup** > **Time Rule** .
2. Select the time rule row you want to modify.
3. On the Time Rule Detail page you can change the time rule description, due date type, and the time policy.
4. Click the **Enabled** switch to enable or disable the time rule.
5. Click **Save** to save changes.

Deleting Time Rules

1. Select **Code Enforcement Setup** > **Time Rule** .
2. Select the time rule row you want to delete.
3. On the Time Rule Detail page, click the **Delete** button.

Modifying Time Policies

1. Select **Code Enforcement Setup** > **Time Rule** .
2. On the Time Rule page, select the time policy row to open the Time Policy Detail page. You can change values for priority, unit of measure, unit of measure value, and policy occurrence count.
3. Click **Save** to save any changes.

Deleting Time Policies

1. Select **Code Enforcement Setup** > **Time Rule** .
2. On the Time Rule page, select the time rule row for which you want to change the time policy.
3. On the Time Rule Detail page, click the time policy row to open the Time Policy Detail page.
4. Click the **Delete** button.
5. To delete multiple time policies from the Time Rule Detail page, click the **Edit** button in the Time Policy section and select the check boxes for the rows you want to delete.
6. Click **Delete**.

Setting Up Agency-Level Options for Code Enforcement

Agency-level options for code enforcement include several settings related to the public user experience, assignment and autonumbering rules, and default settings for newly created issue types.

Agency-level options for code enforcement include settings such as:

- Whether public users can report issues anonymously.
- Whether incidents are automatically routed based on the issue type and subtype.
- The work schedule of the agency.
- The time period used for displaying recent issues on the public user map.
- Autonumbering rules for notices, citations, and inspections.
- Configuration for the public user landing page.
- Default code reference groups for issues types.
- Default time-based processing rules for issue types.

For more information about agency setup, see *Setting Up Agencies*.

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To configure agency level options for code enforcement:

1. Select **Common Setup** > **Agency.**
2. Click a row on the Agency Information tab.
3. Select the **Features** tab.
4. Click **Options** for the *Code Enforcement* offering.

   The Code Enforcement Options window opens.
5. Configure the setting in the **Intake Form** section.

Page Element	Description
Contact Information Required	Enable this switch to require contact information from users who submit issue reports. If the switch is not enabled, then the page where users supply contact information includes a **Hide my contact information** switch. When users hide their contact information, name and contact information is no longer required, and any data currently in those fields gets cleared. Even if you don't require contact information, users must be registered and signed in to report an issue.

6. Configure settings in the **Issues** section.

Page Element	Description
Automatically Route Issues	Enable this switch to activate issue routing based on the issue type and subtype. When automatic routing is active, the Incoming Incidents worklist tab displays only incidents with the issue types and subtypes that are part of the user's job function. If there's only one code enforcement technician responsible for a particular issue type or subtype, then those issues are assigned to that technician automatically.
Schedule ID	Select an agency schedule from a list. This enables inspections to be scheduled based on the availability of the code officers. Due date calculations are based on the time rules set up and the schedule you select here. If the resulting due date is on a non-working day, then the next working day is set as the due date.

7. Configure the settings in the **Recent Cases** section.

   Public users can view a map with markers identifying recent issues. These settings define which issues appear on the map.

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Page Element	Description
Period	Choose how far back to look for issues by entering number of days or months, and then selecting *Days* or *Months.* Issues that were created within the specified time period appear on the map.
Status	Select *All* to display all recent issues, regardless of status. Select *Active* to display only issues that haven't been closed yet.

8. Use the **Inspection** section to configure inspection autoassignment.

Page Element	Description
Autoassignment	Indicate whether to enable automatic scheduling and assignment of incident and case inspections.
Maximum Inspections per Day per Code Officer	Enter the maximum number of inspections per day for code officers. The autoassignment process will not assign inspections to officers who are at the maximum, but users can manually exceed this maximum. If you don't enter a maximum, inspections will not be autoassigned.

9. Use **Autonumber Rules** section to select the following autonumber rules:

Page Element	Description
Notice Autonumber Rule	Select the autonumbering rule to increment numbers for notices.
Citation Autonumber Rule	Select the autonumbering rule to increment numbers for citations.
Inspection Autonumber Rule	Select the autonumbering rule to increment numbers for inspections.

> **Note:** For more information, see *Setting Up Autonumbering*. These fields are required if the Code Enforcement offering is enabled for your agency.

10. Use the **Agency Features** section to optionally enable the *Guest Users Can Report Incidents* feature.

   Use these fields in the **Agency Features** grid to enable or disable specific code enforcement features:

Page Element	Description
Feature Code	Enter the code for the feature to be enabled. The only available feature code is *ORA_ PSCR_CREATE_INCIDENT,* for the *Guest Users Can Report Incidents* feature. This feature enables public users to report issues without registering or signing in first.
Name	Displays the name of the selected feature code.
Enabled	Use this switch to enable or disable the feature.
Delete	Click this icon to remove a feature from the grid.

11. Use the **Landing Page Message Definition** section to enter these settings for the code enforcement landing page:

Page Element	Description
Message Title	Enter a short title or welcome statement for the code enforcement landing page. For example, *Welcome* or *<City Name> Code Enforcement.* This appears message appears as a title, in large text.
Message Summary	Enter a subtitle for the code enforcement landing page. For example, *Keeping our city safe and healthy.* This text appears is medium-sized text under the larger main title for the page.
Content URL	Enter a content URL for the **Read More** link that appears on the landing page next to the Message Summary text. Public users click this link to access a code enforcement information page that your agency maintains. If you leave this field blank, the **Read More** link opens a dialog box that displays the **Landing Page Message**. **Note:** If you want to link to a page outside of Oracle Public Sector Code Enforcement, you must enter a URL here.
Landing Page Message	If you do not provide a Content URL that points to an agency-maintained information page, enter the text that will appear in the Read More dialog box. Rich text formatting tools are available for this message.

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12. Use the **Code Reference Group** section to define the default code reference groups for new issue types.

Enter the first code reference group in the blank row that appears. Use the **Add** button to add additional rows. Each row has the following elements:

Page Element	Description
Group ID	Select a code reference group that will be added by default to all newly created issue types.
Enabled	Turn this switch on to have the code group added by default to newly created issue types. If the switch is off, the code group is not added to newly created issue types.
Delete	Click to remove the row from the list of default code reference groups.

13. Use the **Time-Based Rules** section to define the default time-based rules to be entered automatically into newly created issue types.

This section displays rows for all of the due date types that require time rules. You can't add or remove rows. Instead, you must supply a time rule for each due date.

For more information about time rules, see *Setting Up Time Rules*.

Page Element	Description
Due Date Type ID	Displays the unique identifier for the type of due date.
Due Date Type	Displays the description of the type of due date — for example, *Incident review date*
Time Rule ID	Select the time rule ID that specifies how the due date is calculated. The time rule ID includes a time policy that states how many days or hours until the due date. Time rules IDs are available for selection if they have the specified due day type and they are enabled.

14. Click **Save,** then close the window.

Setting Up Issue Types

Issue types are broad categories that are used to report code enforcement issues.

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Adding an Issue Type

To create a new issue type:

1. Select **Code Enforcement Setup** > **Issue Type.**
2. On the Issue Type page, click **Add.**
3. On the Issue Type Details page, enter the following general information about the issue type:

Page Element	Description
Issue Type ID	Enter a unique alphanumeric code for the issue subtype. Do not use special characters, including symbols or punctuation, or spaces.
Issue Type	Enter a short name for the issue type.
Valid From Date	Enter the first date that the issue type is available for issue reporting.
Valid To Date	Enter the last date that the issue type is available for issue reporting. The default value is *Open,* indicating that the issue type will remain available indefinitely.
Status	Select *Active* or *Inactive.* Inactive issue types are not available for issue reporting. They also are not available to add to an issue subtype definition.
Icon	Select an icon for the tile that public users click when reporting this type of issue .
Description	Enter a description of the issue type. This description appears on the back of the tile that users click when reporting this type of issue.

4. Click **Save.**

   When the issue is saved, three additional sections appear: **Issue Subtypes, Code Reference Group,** and **Time-Based Rules.**

   You don't need to enter information in the **Issue Subtypes** section. The relationship between issue types and issue subtypes is established when you set up the issue subtype. After you create the related subtypes, you can return to the Issue Type Details page to view a complete list of subtypes for the issue type.

5. Configure the list in the **Code Reference Group** section.

   a. Expand the section and review your agency's default values, if any.

      The default values come from the Code Enforcement Options page. For more information, see *Setting Up Agency-Level Options for Code Enforcement*.

      If your agency does not have default code reference groups, a blank row appears.

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b. For each code reference group, review or enter the following settings:

Page Element	Definition
Group ID	Select a code reference group that will be added by default to all newly created issue subtypes.
Enabled	Turn this switch on to have the code reference group added by default to new issue subtypes for this issue type.
	If the switch is off, the code group is not added to new issue subtypes for this issue type.

c. To add additional code reference groups to this issue type, click the **Add** icon and enter information in the new row.

d. To remove code reference groups from the issue type, click the **Delete** icon.

6. Configure the list in the **Time-Based Rules** section:

This section displays rows for all of the due date types that require time rules. You can't add or remove rows from this list. Instead, you must supply a time rule for each due date.

For more information about time rules, see *Setting Up Time Rules*.

To set up time rules for the issue type:

a. Expand the section and review your agency's default values.

These default values also come from the Code Enforcement Options page.

b. For each rule, review or enter the following settings:

Page Element	Definition
Due Date Type ID	Displays the unique identifier for the type of due date.
Due Date Type	Displays the description of the type of due date — for example, *Incident review date.*
Time Rule ID	Select the time rule ID that specifies how the due date is calculated. The time rule ID includes a time policy that states how many days or hours from the trigger date until the due date.
	Time rules IDs are available for selection if they have the specified due date type and they are enabled.

7. Click **Save** again if you made any changes in the sections for code reference groups and time-based rules.

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Viewing or Modifying an Issue Type

To view or modify an issue type:

1. Select **Code Enforcement Setup** > **Issue Type.**
2. Click the row for the issue type you want to view or modify.

   The Issue Type Detail page appears. Because the issue type has already been saved, the page displays all fields, including the sections for **Issue Subtype Details, Code Reference Group,** and **Time-Based Rules.**
3. Make any necessary updates.
4. Click **Save** if you made any updates.

Inactivating an Issue Type

You cannot delete issue types, but you can make them unavailable for use by changing the status to *Inactive.*

To inactivate an issue type:

1. Select **Code Enforcement Setup** > **Issue Type.**
2. Click the row for the issue type you want to modify.

   The Issue Type Detail page appears.
3. Change the **Status** to *Inactive.*
4. Click **Save.**

Setting Up Issue Subtypes

Code enforcement issue subtypes are the lowest level of categorization for code enforcement issues. When you set up an issue subtype, you also create the intake form and define processing rules for issues that are reported under this subtype.

Adding an Issue Subtype

To create a new issue subtype:

1. Select **Code Enforcement Setup** > **Issue Subtype.**
2. On the Issue Subtype page, click **Add.**
3. On the Issue Subtype Details page, enter the following general information about the issue subtype:

Page Element	Description
Issue Subtype ID	Enter a unique alphanumeric code for the issue subtype. Do not use special characters, including symbols or punctuation, or spaces.
Issue Subtype	Enter a short name for the issue subtype.
Issue Type ID	Select the issue type that represents the broad category under which this issue subtype falls.

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Page Element	Description
	Only active issue types are available for selection. If an issue type is later inactivated, the issue type and all of its associated issue subtypes become unavailable to public users.
Status	Select from the following to indicate the issue subtype status: ○ *Preliminary:* The issue subtype is being defined but is not available for use. ○ *Ready:* The issue subtype is ready for testing or production use, depending on the environment. ○ *Void:* The issue subtype is no longer available. **Note:** The issue subtype can be set to ready regardless of whether the intake form is in published status or draft status. A form in draft status can be accessed for testing purposes in the development or test environment.
Valid From Date	Enter the first date that the issue subtype is available.
Valid To Date	Enter the last date that the issue subtype is available. The default value is *Open,* indicating that the issue subtype will remain available indefinitely.
Public User Enabled	Select from the following to indicate which types of users can access the intake form outside of the form designer: ○ *Enabled for all users:* Both registered public users and agency users can access the intake form. ○ *Enabled for registered users:* Both registered public users and agency users can access the intake form. ○ *Not enabled for public users* (default): Only agency users can access the intake form. For more information, see *Publishing Intake Forms*.
Case Autonumber Rule	Select the autonumbering rule to increment numbers for cases based on this issue subtype. For information, see *Setting Up Autonumbering*.
Incident Autonumber Rule	Select the autonumbering rule to increment numbers for incidents based on this issue subtype.
Fee Schedule	Select the fee schedule to use for citations based on this issue subtype. For more information, see *Creating Decision Models for Fees*.

Page Element	Description
Notice Group ID	Select the notice group to use when generating notices for a case based on this issue subtype.

For more information see *Setting Up Notice Groups*. |
| District Type | Select the code enforcement district type to be used for incidents with this issue subtype.

For example, if issues with this subtype are handled by the fire department and inspected based on fire prevention districts, then the district type might be your fire prevention district type. |
| Icon | Select an icon for the tile that public users click when reporting issues with this subtype. |
| Description | Enter a description of the issue subtype. This description appears on the back of the tile that users click when reporting issues with this subtype. |

4. Click **Save.**

   When the issue is saved:

   - The **Design Form** button is activated and the **Form Status** appears at the top of the page.
   - The **Code Reference Group** and **Time-Based Rules** sections appear.

5. Review the read-only **Form Status,** which indicates whether the intake form is published or in development.

   These are the status values for the intake form:

   - *Draft:* The form design is incomplete. Form designs in draft status are not migrated to other environments and can't be cloned.
   - *Published:* The form design is complete. Form designs in published status can be migrated to other environments and can be cloned.

6. Configure the list in the **Code Reference Group** section.

   a. Expand the section and review the default values, if any.

      The default values come from the associated issue type. For more information, see *Setting Up Issue Types*.

      If your agency does not have default code reference groups, a blank row appears.

   b. For each code reference group, review or enter the following settings:

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Page Element	Definition
Group ID	Select the code reference group with the code references to be included by default in notices of violation that are based on this issue subtype. The person who generates the notice can remove specific code references from the notice.
Enabled	Turn this switch on to make the code reference group available for issues with this subtype.

    c. To add additional code reference groups to this issue subtype, click the **Add** icon and enter information in the new row.

    d. To remove code reference groups from the issue subtype, click the **Delete** icon.

7. Configure the list in the **Time-Based Rules** section.

This section displays rows for all of the due date types that are defined in the issue type. You can't add or remove rows. Instead, you must supply a time rule for each due date.

For more information about time rules, see *Setting Up Time Rules*.

To set up time rules for the issue subtype:

    a. Expand the section and review the default values.

The default values come from the issue type that you entered when creating the subtype. Changing the issue type does not update these values.

    b. For each rule, review or enter the following settings:

Page Element	Definition
Due Date Type ID	Displays the unique identifier for the type of due date.
Due Date Type	Displays the description of the type of due date — for example, *Incident review date.*
Time Rule ID	Select the time rule ID that specifies how the due date is calculated. The time rule ID includes a time policy that states how many days or hours until the due date. Time rules IDs are available for selection if they have the specified due day type and they are enabled.

8. Click **Save** if you made any changes in the sections for code reference groups and time-based rules.

9. Create the issue intake form for this issue subtype.

> **Note:** Oracle provides a template for code enforcement intake forms. Even if you plan to use the delivered form as-is, you still need to go through the process of creating the form based on the delivered template.

    a. Click the **Design Form** button.

    b. Review the default issue intake form and add any user-defined fields to the drop zone on the **Just a Few More Questions** page tab.

    c. Save the form, and when you're done designing the form, publish it.

For detailed instructions on creating the issue intake form, see *Using the Intake Form Designer for Code Enforcement*.

10. To make the issue subtype available to end users:

    a. Return to the Issue Subtype Detail page.

    b. Confirm that the **Public User Enabled** field is either *Enabled for all users* or *Enabled for registered users.*

    c. Change the **Status** to *Ready.*

    d. Click **Save.**

Modifying an Issue Subtype

To modify an issue subtype:

1. Select **Code Enforcement Setup** > **Issue Subtype.**

2. Click the row for the issue subtype you want to modify.

   The Issue Subtype Detail page appears. Because the issue subtype has already been saved, the page displays all fields, including the sections for **Code Reference Group** and **Time-Based Rules.**

3. Make any necessary updates to the issue subtype.

4. Click **Save.**

5. Use the **Design Form** button to access the form designer if you need to make changes to the intake form.

Deactivating an Issue Subtype

You cannot delete issue subtypes, but you can mark them as void.

To deactivate an issue subtype:

1. Select **Code Enforcement Setup** > **Issue Subtype.**

2. Click the row for the issue subtype you want to modify.

   The Issue Subtype Detail page appears.

3. Change the **Status** to *Void.*

4. Click **Save.**

Cloning Issue Subtypes

> **Note:**

To clone an issue subtype:

1. Select **Code Enforcement Setup** > **Issue Subtype.**

2. Click the row for the issue subtype you want to clone.

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3. On the Issue Subtype Detail page, click the **Clone** button.
4. On the Clone Issue Subtype page, review or enter the following information:

Page Element	Description
Original Issue Subtype and **Original Issue Subtype ID**	These fields display identifying information about the issue subtype that you're cloning.
New Issue Subtype and **New Issue Subtype ID**	Enter a new identifier and short description for the issue subtype that you're creating.
Clone Code Reference Groups	When this switch is on, the code reference groups in the original issue subtype are copied over to the newly created issue subtype. When this switch is off, the new issue subtype will have the default code reference groups from the issue type.
Clone Time-Based Rules	When this switch is on, the time-based rules in the original issue subtype are copied over to the newly created issue subtype. When this switch is off, the new issue subtype will have the default time–based rules from the issue type.
Clone Form Design	When this switch is on, the original issue subtype's form design is copied to the new issue subtype. When the switch is off, the new issue subtype does not have an intake form until you design one.

5. Click **Create.**

   A new issue subtype is created. The information on the Issue Subtype Details page is identical to the cloned subtype, except that the **Status** is always *Preliminary.*
6. Make any necessary modifications to the issue subtype and save.
7. Make any necessary changes to the intake form (or create the form if you did not copy it from the original issue subtype).
8. Publish the intake form.
9. Make the subtype available to end users by updating the **Status** and, if necessary, the **Public User Enabled** setting.

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6   Setting Up Business Licenses

Setting Up Business License Types

Define the types of business licenses supported by an agency, including consultations. You add a business license type and associate workflow process definitions on the Business License Type definition page.

Before you can create an application form, you must first create a business license type on the Business License Type definition page. The type defines attributes that will be available on the business license application.

Adding Business License Type Definitions

1. Select **Business License Setup** > **Business License Type** > **Business Licenses** .
2. Click **Add**.
3. Let's take a look at the fields for defining a business license type:

Page Element	Description
Classification	Displays the type of business license. The classification for this page indicates that this type is associated with a business license application.
Subclassification	Displays the subclassification. If you would like to create a consultation type, select *Consultation* from the drop-down list. The default value is *Not Applicable*, which indicates a standard business license application.
Business License Type	Enter a name for the type of business license.
Business License Type ID	Enter a unique alphanumeric code or short name for the business license type. Do not use special characters, including symbols or punctuation, or spaces.

Status	Select from the following to indicate the business license type status:
	
	  ○ *Preliminary:* The business license type is being defined but is not available for use.
	
	  ○ *Ready:* The business license type is ready to be accessed for testing or production use, depending on the environment.
	
	  ○ *Void:* The business license type is no longer available.

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Page Element	Description
	Note: The form design can be in published status or draft status and be set to *Ready.* In draft status, the form can be accessed from outside the form designer — such as the Apply page — for testing purposes in the development or test environment.
Form Design Status	A read-only field indicating whether the form design is published or currently being developed. ○ *Draft:* The form design is currently being created or modified. Form designs in draft status are not migrated to other environments and can't be cloned. ○ *Published:* The form design is complete. Form designs in published status can be migrated to other environments and can be cloned.
Autonumber Rule	Select the autonumbering rule to increment numbers for business license applications. You can delete an autonumbering rule when it isn't being used by any transaction types. For more information, see *Setting Up Autonumbering*.
Valid from Date and **Valid to Date**	Enter a range of dates when this business license type is valid. The default from date is the current date. The default end date is *Open*. You can update these dates as needed.
Public User Enabled	Select from the following to indicate whether the business intake form can be accessed and by which user types. ○ *Enabled for all users:* Only registered public users and agency users can access the intake form. ○ *Enabled for registered users:* Only registered public users and agency users can access the intake form. ○ *Not enabled for public users* (default): Only agency users can access the intake form. **Note:** Currently, *Enabled for all users* and *Enabled for registered users* have equivalent access.
Application Group	Select an application transaction group that you want to associate with the business license type. For more information, see *Setting Up Transaction Groups*.
Category	Select a transaction category that you want to associate with the business license type. For more information, see *Setting Up Transaction Categories*.

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Page Element	Description
Subcategory	Select a transaction subcategory that you want to associate with the business license type. For more information, see *Setting Up Transaction Subcategories*.
NAICS Group	Select a group of North American Industry Classification System (NAICS) codes for the business license type. The NAICS group associated with the business license type determines which NAICS codes are available to select when applying for a business license. For more information, see *Setting Up NAICS Groups*. **Note:** If you don't select a value in this field, applicants using this business license type can select any NAICS code that is added and enabled for any NAICS group.
Tax Class	Select a tax class that should apply to the business license. A class tax defines the attributes that will apply to the license, its renewal, and on amendments. For more information, see *Setting Up Business License Tax Classes*. **Note:** The predefined field group for Tax Related Details must be included in the intake form design to ensure that the tax related detail section is included in the intake form and the license detail.
License Period Format and **Period Format Preview**	Select the format for displaying the license period, when the license is valid as defined in the application. This value will be displayed on the business license in the format you select, as shown in the preview field. For example, an annual license period displays the year if you select *yyyy*, where yyyy indicates the year. If the license period is quarterly, semi-monthly, or fiscal year, you might select *MMM yyyy*, where MMM indicates the first three letters of the month.
Document Group	Select a document group to manage attachments for the business license type. When you specify a document group, document attachments can be classified into categories and subcategories during the application process and when you upload

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Page Element	Description
	files. Then you can see the category for a document on the attachments page in the application details. For more information, see *Setting Up Document Groups*.
Fee Schedule	Select a fee schedule that you want to associate with the business license type. A department is required when you enter a fee schedule ID. For more information, see *Setting Up Fee Schedules*.
Bill Type	Select a bill type to associate with the business license type. The billing type identifies the type of invoice that can be generated from the record. The bill type is required. For more information, see *Setting Up Bill Types*.
Department	Select a department that you want to associate with the business license type. A department is required if you add a Fee Schedule ID to the business license type. If a department is specified on the Fee Item setup page, the fee item department overrides the department specified here on the business license type. For more information, see *Setting Up Departments*.
Terms of Use ID	Select a terms of use definition to associate with the business license type. The available values for business licenses are determined by the usage on the terms of use ID. For more information, see *Setting Up Terms of Use*.
Description	Enter a user-facing description of the business license type. On the Apply page, this description appears under the application type name. The description helps public users understand the purpose of the application type.
URL	Enter a URL for a web page that gives public users more information about the business license type. If you enter a URL, then a **Learn More** link appears at the end of the application type description on the Apply page. The user clicks this link to open the specified URL. If you leave this field blank, the **Learn More** link is not visible on the Apply page.

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Associating a Business License Certificate

First, your agency sets up the certificate template in the reports catalog, then associates the report ID with the business license type in the **Certificate** section. You can generate the certificate for this type of business license from the business license overview page when the license is issued.

Page Element	Description
Allow Public User to View	Turn on the switch to allow public users to view the issued business license certificate, which is accessed from the business license summary on the Overview page.
Report ID	Enter the report ID for the business license certificate template associated with this business license type. Use the delivered business license certificate report or configure your own. See *Setting Up Reports*.

For information about viewing the business license certificate, see *Viewing the Business License*.

Setting Up License Activity and Expiration Options

Depending on the business license type definition, businesses can renew or amend their licenses online. You also associate expiration rules with the business license type in the **License Activity and Expiration** section.

Page Element	Description
Allow Amendment	Turn on the switch to enable the applicant and agency staff to submit an application for an amended business license using this business license type. After you enable amendments, you define the workflow for amendments in the **Workflow Setup** section.
Allow Renewal	Turn on the switch to enable the applicant and agency staff to submit an application for a license renewal using this business license type. After you enable renewals, you define the workflow for renewals in the **Workflow Setup** section.
Expiration Group	Enter the expiration group that defines the expiration rules for this business license type. Expiration rules determine the expiration dates for the application and business license or consultation. For more information about business license expiration, see *Setting Up Business License Expiration Rules*.

Setting Up Workflow for Business Licenses

You set up a workflow for the initial application as well as amendments and renewals, if applicable, when you define the business license type. Before you begin, you must define a workflow for each type of application using the Oracle Autonomous Integration Cloud (OIC).

For more information about setting up workflows, see *Setting Up Process Definitions for Workflow*.

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You'll see the workflow setup fields for applications but also for amendments and renewals, depending on how you've set up your business license type. The columns will have headers like this:

- **Application**: Default column when you're creating the business license type.
- **Amendment**: Additional column when you switch on **Allow Amendment**.
- **Renewal**: Additional column when you switch on **Allow Renewal**.

Page Element	Description
Space Name	Enter the space where the workflow process application is stored. You can group related applications in a space as well as enable users to collaborate when developing applications.
Application ID	Enter the name of the workflow process application in OIC. For more information, see *Creating and Managing Applications*.
Version	Enter the version of the workflow process application.
Process Definition	Enter the name of the workflow process definition that applies to this particular business license.

Note: Different business license types can utilize the same workflow definition.

Cloning Business License Types

Click the **Clone** button to create a clone of the current business license type, which you can then use to create a different business license or to create a different version of the current business license.

For more information on cloning transaction types, see *Cloning Transaction Type Definitions*.

Designing Intake Forms

After you've entered the appropriate initial information for the business license type, you can then begin to design the intake form that end users will use to submit an online application for a business license. You create an intake form using the designer. You access the designer by clicking the **Design Form** button.

For more information on designing intake forms, see *Using the Intake Form Designer*.

Setting Up Business License Display Groups

Use the Display Group setup pages to display groups of business licenses on your agency's landing page, where you start an application.

A display group identifies a meaningful grouping of business license types displayed as a list on the Apply page. The list appears as the business licenses that agency staff or a guest can select to initiate the application process.

For more information about how the Apply page looks and is used, see *Choosing an Application Type*.

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Before setting up business license display groups, you must set up the types of business licenses your agency offers. See *Setting Up Business License Types*.

Adding Business License Display Groups

1. Select **Business License Setup** > **Business License Display Group** .
2. On the Business License Display Group page, click **Add** to add a new group.
3. On the Business License Display Group Details page, enter values for the following:

Page Element	Description
Display Group ID	Enter a business license display group name.
Display Group	Enter a name for the display group that appears on the Apply page for guests and agency staff.
Description	Enter a description of the display group that appears on the Apply page for guests and agency staff.
URL	Enter a URL that agency staff can use to access additional information. This page is the only place that the URL appears, so it is not available to guests.
Applicable Classification	Select the check box for the applications to which this display group applies. Choose from these options: o *Business Licenses* o *Permits* o *Planning and Zoning* This option determines whether a display group type is shown on the Apply page for public users. A display group can be included with more than one classification.

4. Verify that the **Enabled** switch is turned on. The switch is turned on by default for new display groups.
5. In the **Display Group Lines** section, click **Add** to set up a line on the Display Group Line Details page. The display group lines are transaction types that make up the list in the new display group.

   Note: A mix of different transaction types can be added to a display group. For example, you can add a planning application transaction type to a permit application display group and the other way around.

Page Element	Description
Display Order	Enter a numerical value in this field to specify the order in which you want the business license types to be displayed, if desired. The default value is *0* and upon saving, the system automatically assigns the next value.

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Page Element	Description
Transaction Type ID	Select an existing transaction type ID. The description for the ID you enter here will appear in the **Transaction Type** field.
Transaction type information	Review the attribute information for the business license type to verify you have selected the correct transaction type ID: o **Transaction Type** o **Classification** o **Application Group** o **Category** o **Subcategory** For more information about transaction type attributes, see *Setting Up Business License Types*.

6. On the Business License Display Group Details page, click **Save**.

Modifying Business License Display Groups and Lines

You can modify the display groups and the business licenses in the list on the Business License Display Group Details and Display Group Line Details pages, respectively.

1. Select **Business License Setup** > **Business License Display Group** .
2. On the Business License Display Group page, select the row for the business license group that you want to modify.
3. On the Business License Display Group Details page, you can:

   o Modify the group name and description. You can't change the Display Group ID.

   o Turn the **Enabled** switch on or off to enable or disable the display group.

4. If you made any changes, click **Save**.
5. To modify the display group lines (the list of business licenses in a display group), select the row for the business license group that you want to modify on the Business License Display Group page.
6. On the Business License Display Group Details page, select a display group line in the Display Group Lines grid.
7. On the Display Group Line Details page, you can change the values in these fields:

   a. Update the **Display Order** field to change the order in which the lines appear.
   b. Update the **Transaction Type ID** field with another existing business license type ID.

8. If you made any changes, click **Save**.

Deleting Business License Display Groups and Lines

1. Select **Business License Setup** > **Business License Display Group** .
2. On the Business License Display Group page, select the row for the business license group that you want to delete.
3. If you want to delete the display group, click **Delete** on the Business License Display Group Details page.

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4. If you want to delete multiple display groups, you can delete them from the Business License Display Group page:

    a. Click **Edit**.
    b. Select the check boxes for the display groups to delete.
    c. Click **Delete**.

5. To delete a display group line, go to the Business License Display Group Details page and select a display group line in the **Display Group Lines** grid.

6. On the Display Group Line Details page, click **Delete**.

7. If you want to delete multiple display group lines, you can delete them from the Business License Display Group Details page:

    a. Click **Edit**.
    b. Select the check boxes for the display group line rows to delete.
    c. Click **Delete**.

Setting Up Business License Expiration Rules

You can set up expiration rules for business licenses and consultations that will be associated with the business license types your agency offers.

You can set up expiration rules for business licenses to define:

- When an inactive pending application expires.

- When the business license expires based on either a fixed date or when the license was issued.

For business license consultations, you can set up rules to define when an inactive pending application expires or when the consultation recommendations expire. As you set up the expiration rules, keep in mind the type of business license the rules are for.

First, you define the rules in an effective-dated group. After setting up the expiration rules, you add the rules group ID to the business license type definition and periodically run batch rules processing to update the expiration statuses. Oracle recommends that you schedule expiration rule processing to run daily.

Setting Up Expiration Rule Groups

Here's how to set up the rule group:

1. Select **Business License Setup** > **Business Expiration Group** .
2. Select **Add** on the Expiration Group page.

    You enter values for these fields on the Business License Expiration Group page to define the group.

Page Element	Description
Expiration Group ID, **Expiration Group Name**, and **Description**	Enter an ID for the expiration group, a group name, and description.

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Page Element	Description
Subclassification	Select *Not Applicable* for a business license or *Consultation* for a business license consultation. Use *Consultation* if you are applying this group of rules to a business license type definition with a consultation subclassification.
Effective Start Date and **Effective End Date**	Enter the range of dates when the group is effective. If you want to leave the effective dates open-ended, don't enter a date for the end date. To see the effective date history for an expiration group, click *Show All Dates*. On the History Data page, you can search history by effective start date or click *Add* to add new effective-dated rules for an expiration group.
Show All Dates	Click to access the effective-dated history of the rules definition. This button is available after you create the first rule. You can also search history by effective start date. Click *Add* to create a new effective-dated row for an expiration group.

3. Verify that the **Enabled** switch is turned on. The option is active by default for a new expiration group.
4. Create expiration rules in the **Expiration Rules** section.

Defining Expiration Rules

Here's how to set up the details about the expiration rules in the group:

1. Click **Add** in the **Expiration Rules** section on the Business License Expiration Group page.
2. Select the **Expiration Basis** for your rules. The expiration basis is the type of expiration rule you are defining. For business licenses, you can create these rules:

   o *Inactive pending application*

     When the business license application is in a pending status, the applicant must submit the application before the expiration date.

     The expiration timeframe begins when the applicant saves a business license application and ends when the application is submitted.

   o *License expiration - fixed date* or *License expiration - issued date*

     You must select whether the license expiration is based on a fixed date or when the license is issued. For example, if you want to set up the license to expire every year on June 30, you select the fixed date expiration rule. You must enter the expiration interval for licenses that expire on a fixed date. You define whether the license expires monthly, quarterly, yearly, and so on. Or you can set up the rules so that the license is valid for an amount of time, such as 6 months, from the time when the license was issued.

     Both fixed date and issued date expiration rules are initiated when the business license has an *Active* status.

   o *Consultation expiration*

     This rule type is only available when the expiration group subclassification is *Consultation*.

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The expiration timeframe begins when the business license consultation is complete and recommendations have been made. The business owner must submit the business license application before the consultation findings expire, as defined by the rule.

3. For each expiration basis, you enter details to define the rule.

Page Element	Description
Expiration Period	Enter the amount of time that the user has before the expiration date. For example, the applicant must submit an application within 30 days before the application expires, or a license is valid for 1 year from when it was issued. For fixed-date expirations, enter the date the license expires.
About to Expire	Enter when you would like a notification to appear on the application or license that shows the user how long until the application or license expires. For example, you can enter 5 days to show that a pending application expires in 5 days.
Grace Period	Enter the amount of time the application, license, or consultation findings are valid beyond the expiration date defined in the rules.
	The grace period for the inactive pending application rule is the amount of time the business is allowed to submit the application after the pending application expires.
	For the consultation expiration rule, the grace period is the amount of additional time that the consultation findings are valid after the consultation expires.
	If the business renews during the grace period defined in the license expiration rule, no penalties and interest are charged.

4. Verify that the **Enabled** switch is turned on for each rule. The option is active by default for a new expiration rule.
5. Click **Save**.

Setting Up Communication Rules

You can set up communication rules to send communications when the application, license, or consultation is about to expire or expired. Agency staff and the business owner listed on the application, license, or consultation receive the notifications. Click **Add** in the Communication column and select **About to Expire**, **Expired**, or both, and the recurrence of the communication.

Depending on the expiration communication rules you define, you must also set up communication templates for these delivered events:

- *About to expire business license* – The communication event will be triggered when the inactive pending application or license is about to expire.

- *Expired business license*– The communication event will be triggered when the inactive pending application or license expires.

- *About to expire business license consultation*– The communication event will be triggered when the inactive pending consultation application or license consultation is about to expire.

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- *Expired business license consultation*– The communication event will be triggered when the inactive pending consultation application or license consultation expires.

For more information about configuring the communication templates for the email or notification you want to send when the event occurs, see *Setting Up Communication Templates*.

> **CAUTION:** After setting up communication rules, you must periodically run batch expiration rule processing to update the *About to Expire* and *Expired* statuses. The system updates the statuses and sends out the communications according to the setup. Oracle recommends that you schedule expiration rule processing to run daily.

Associating Expiration Groups with Business License Types

After you create an expiration group, you associate the group of rules with a business license type.

1. Select **Business License Setup** > **Business License Type** > **Transaction Type** .
2. Click the row for the business license type.
3. On the selected Business License Type page, enter the expiration group. You can look up the expiration group by expiration group name and description.
4. Click **Save**.

For more information see *Setting Up Business License Types*.

Running the Expiration Rule Process

After setting up expiration rules and adding an expiration rule group ID to the business license type definition, you must set up expiration rule processing to periodically update the expiration statuses.

Run the process that updates transaction expiration statuses on the Process Expiration Rules page, which you access by selecting **Common** > **Process Expiration Rules** . Oracle recommends that you schedule expiration rules processing to run daily.

For information about setting up expiration rules processing, see *Updating Application Expiration Status*.

Related Topics
- Expiration Overview

Setting Up Business License Renewals

Agencies generally issue business licenses for a fixed period of time and offer the option to renew the license to continue business operation. Several setup steps are required for your agency to support business license renewals.

- Define expiration rules for business license expiration, including when the license is about to expire and expires.

  Businesses can renew their business licenses starting when the license is about to expire. They can also renew the license when the license expires and after the license has expired.

  > **Note:** You must run expiration rule processing to update the expiration status after you set up the expiration rules.

> See *Setting Up Business License Expiration Rules*.

- Set up renewal fee items and fee schedule.

  Select the Renewals option and map to the decision model you'll use for calculating the item on the Fee Item Details page in the fee schedule.

  See *Setting Up Fee Schedules*.

- Identify tax attributes that apply to renewal applications.

  Define the tax class and the attributes that are applicable to renewal applications on the Business License Tax Class setup page.

  See *Setting Up Business License Tax Classes*.

- Set up the business license type to support renewals.

  Associate the business license type with an expiration group and select the option to allow renewals. The **Expiration Group** code is required when you select **Allow Renewal**. You also select a tax class, fee schedule, and workflow that will be used for renewals.

  See *Setting Up Business License Types*.

- Design the intake form for the renewals application.

  The **License Activity** display settings on the predefined elements in the intake form determine what information can be entered or updated as part of the renewals application process. For example, you can enable predefined elements such as Business Information and Retail Business Details with fields for the business to fill out.

  See *Configuring Activity Filtering for Business Licenses*.

Setting Up Business License Amendments

Businesses that want to update business information for their license can apply for an amendment. Several setup steps are required for your agency to support business license amendments.

- Set up amendment fee items and fee schedule.

  Select the **Amendment** option and map to the decision model you'll use for calculating the item on the Fee Item Details page in the fee schedule.

  See *Setting Up Fee Schedules*.

- Set up the business license type to support amendments.

  Select the option to allow amendments. You also select a workflow that will be used for amendments.

  See *Setting Up Business License Types*.

- Design the intake form for the amendments application.

  The **License Activity** display settings on the predefined elements in the intake form determine what information can be entered or updated as part of the amendments application process. For example, you

can enable predefined elements such as Business Information and Retail Business Details with fields for the business to fill out.

See *Configuring Activity Filtering for Business Licenses*.

Setting Up Business License Tax Classes

Define the types of taxes that will be used to calculate taxes applicable to business licenses. You add a tax classification and associate various tax attributes on the Business License Tax Class page.

Tax classes define the tax attributes that will be applied to business licenses. Applicable taxes are calculated based on the values entered by registered users in their license application.

Adding Business License Tax Class Definitions

1. Select **Business License Setup** > **Business License Tax Class** .
2. On the Business License Tax Class page, click the **Add** button.
3. On the Business License Tax Class detail page, enter values for the following fields:

Page Element	Description
ID	Enter an identifier of the business class.
Name	Enter a name for the tax class.
Description	Enter any information, such as details about the type of business to which this tax class can apply.
Sequence Number	Select a number to determine where in the list should this attribute appear on the business license application. For example, if the value 2 is selected, the attribute will be the second in the list.
Tax Attribute	Select a tax attribute that should apply to the business license.
Description	Enter a description about the tax attribute, which will be displayed in the business license application. The description helps public users understand the purpose of the tax applied.

Applies To	Select the license type to which the attribute will apply:
	
	   o *Origination*: The attribute will be applicable to the origination license.
	
	   o *Renewal*: The attribute will be applicable to the license when it is being renewed.

Page Element	Description
	You choose the attributes that should be displayed in the application according to the activity status of the business license — *Origination* and *Renewal*.

4. Turn on the **Enabled** switch. The switch is turned off by default for new attributes.
5. Click the **Add** icon to include a new attribute record. Use the **Delete** icon to remove the attribute row.
6. Click **Save**.

Setting Up Business Consultation Meetings

Consultations are the initial step in the business licensing process, and are used to allow the business owner to work with agency specialists to receive feedback prior to submitting business license applications. A consultation meeting is scheduled between the business owner and agency specialists to determine the necessary applications and approvals for the license procurement.

Configuring the Consultation Meeting

Administrators set up and manage the consultation meeting configuration on the Manage Business Consultation Configuration page.

1. Select **Business License Setup** > **Business License Meeting Setup**. Or, Select **Setup and Maintenance** tile on the **Agency Springboard** > Select **Public Sector Business Licenses** > **Business License Application Types** functional area > **Manage Business License Meeting Setup** task.
2. On the Manage Business Consultation Configuration page, the Consultation Meeting section allows you to set up applicant privileges. Enter values for the following fields:

Page Element	Description
Applicant can request	Select to allow an applicant to request a consultation meeting. Applicants can access the business consultation meetings page and schedule a meeting based on the availability of the agency staff.. See *Working with Business Consultation Meetings*.
Applicant can reschedule and cancel	Select to allow an applicant to reschedule or cancel their meeting.

3. The Meeting Availability section allows you to set up the parameters for scheduling meetings, determined by:

   a. Specialist meeting schedule or
   b. Agency meeting schedule

   Specialist meeting schedule: Select to allow users to schedule meetings based on the availability of their assigned specialist.

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> **Note:** You also need to ensure that all the specialists are assigned a consultation meeting work schedule on the Agency Staff Profile. Enter values for the following fields:

Page Element	Description
Meeting Duration in Hours	Select a value to set the maximum amount of time the meeting can be scheduled for. Users will see this value as the duration of the meeting, and they are not allowed to edit the field. See the section Scheduling a Consultation Meeting under *Working with Business Consultation Meetings*.
Schedule after Number of Days	Select a value to set the number of days from the current date, so that users can schedule a meeting on a date available after the number of days specified here. For example, if you select a value 5 on the 10th day of this month, the calendar on the Business Consultation Meeting Request page displays the dates that are available after the 15th day of the month.
Schedule up to Number of Days	Select a value to set the number of days that will be available for the users to select a date on the calendar for scheduling the meeting. For example, if you select a value of 90, the calendar on the Business Consultation Meeting Request page displays 90 calendar days starting from the date the user is making the selection. See the section Scheduling a Consultation Meeting under *Working with Business Consultation Meetings*.

Agency meeting schedule: Select to allow users to schedule meetings based on the schedule of the agency. In addition to the fields described above, enter values for the following fields:

> **Note:** If you select this option, then you need not assign Consultation meeting schedule to the specialists as the Consultation meeting schedule will not be considered while determining the availability.

Page Element	Description
Consultation Work Schedule	Select the Agency level work schedule that needs to be considered while determining the availability for the consultation meeting.

4. The **Meeting Agenda and Location** section allows you to set up the agenda and the location for the consultation meeting.

Page Element	Description
Include Agenda	Select the check box and enter the agenda in the **Meeting Agenda** field.

Page Element	Description
Include Location	Select the check box and search for the desired location of your agency using the **Agency Information** look up. The address of the location you select is displayed in the **Meeting Location** field.

> **Note:** Users can edit the entries for the agenda and location fields while scheduling the meeting on the Business Consultation Meeting Request page.

Setting Up NAICS Codes

Federal statistical agencies use the North American Industry Classification System (NAICS) to classify business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

Understanding NAICS Code Setup

NAICS codes enable an applicant to select an industry standard classification for a business when applying for a license. To set up NAICS codes for your agency:

1. Add NAICS codes on the NAICS Codes page.
2. Create subsets of NAICS codes on the NAICS Groups page.

   For more information, see *Setting Up NAICS Groups*.
3. Select a NAICS group for each business license type on the Business License Type page.

   The NAICS group associated with the business license type determines which NAICS codes are available to select when applying for a business license.

   For more information, see *Setting Up Business License Types*.

Adding NAICS Codes

1. Select **Common Setup** > **NAICS Code** .
2. On the NAICS Code page, click **Add**.
3. On the NAICS Code Details page, enter values for the following:

Page Element	Description
NAICS Code	Enter the industry classification code.
Industry Title	Enter a short descriptive title for the NAICS code.
Description	Enter a long description for the NAICS code.

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Page Element	Description

4. Verify that the **Enabled** switch is turned on. The switch is turned on by default for new NAICS codes.
5. Click **Save**.

Modifying NAICS Codes

1. Select **Common Setup** > **NAICS Code** .
2. On the NAICS Code page, select the NAICS code that you want to modify.
3. On the NAICS Code Details page you can:

   - Edit the industry title and description.
   - Enable or disable the NAICS code using the **Enabled** switch.

     If you disable a NAICS code, but it's still included in the list of enabled codes for a NAICS group, it will continue to be available to select on business license applications. You can't add a disabled NAICS code to a NAICS group.
   - Delete the NAICS code. You will be prompted to confirm the permanent deletion.

4. Click **Save**.

Deleting NAICS Codes

1. Select **Common Setup** > **NAICS Code** .
2. Click **Select Multiple**.
3. Select the check boxes next to all the NAICS codes that you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Setting Up NAICS Groups

North American Industry Classification System (NAICS) groups are subsets of NAICS codes.

The NAICS group associated with a business license type determines which NAICS codes are available to select when applying for a business license. You add, modify, and delete NAICS groups on the NAICS Group page.

Adding NAICS Groups

1. Select **Common Setup** > **NAICS Group** .
2. On the NAICS Group page, click **Add**.
3. On the NAICS Code Details page, enter values for the following:

Page Element	Description
NAICS Group ID	Enter the unique identifier for the group.

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Page Element	Description
NAICS Group	Enter a name for the group.
Description	Enter a description for the group.

4. Turn on the **Enabled** switch to make the group available on other pages. The switch is turned off by default for new NAICS groups.
5. To add NAICS codes to the group:
   a. In the NAICS Code grid, click **Add**.
   b. Select the code that you want to add in the **NAICS Code** column.

      If you want to view a list of available NAICS codes, click **NAICS Code** to access the NAICS Code page.
   c. Turn on the **Enabled** switch to enable the code for the group. The switch is turned off by default for added codes.
6. Click **Save**.

Modifying NAICS Groups

1. Select **Common Setup** > **NAICS Group** .
2. On the NAICS Group page, select the NAICS group that you want to modify.
3. On the NAICS Group Details page you can:
   - Edit the description.
   - Enable or disable the NAICS group using the **Enabled** switch.

     Disabled NAICS groups can't be selected in the prompt list for a business license type.

     > **Note:** The enabled codes associated with a disabled group continue to be available to select for business license applications.

   - Add, delete, enable, or disable the NAICS codes associated with the group.

     A disabled code can no longer be selected for a business license application.
   - Delete the NAICS group. You will be prompted to confirm the permanent deletion.
4. Click **Save**.

Deleting NAICS Groups

1. Select **Common Setup** > **NAICS Group** .
2. Click **Select Multiple**.
3. Select the check boxes next to all the NAICS groups that you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Related Topics
- Setting Up NAICS Codes
- Setting Up Business License Types

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7 Creating Intake Forms

Intake Form Designer Topics

The following topics apply to using the Intake Form Designer to create and publish intake forms, which registered users access online to initiate transactions, such submitting a permit application, reporting an issue, and so on.

- *Using the Intake Form Designer*
- *Using the Intake Form Designer for Code Enforcement*
- *Working with Sandboxes*
- *Working with Pages*
- *Working with Predefined Field Groups*
- *Using Predefined Field Groups*
- *Working with Group Boxes*
- *Working with Fields*
- *Adding Rich Text Areas*
- *Defining Fields Displaying a List of Values*
- *Displaying Form Elements Conditionally*
- *Adding Logic*
- *Adding Contextual Help to Forms*
- *Reorder Intake Form Elements*
- *Configuring Activity Filtering for Business Licenses*
- *Setting Form Options*
- *Mapping Form Fields to Decision Model Attributes*
- *Considering User Experience*
- *Testing Intake Forms*
- *Publishing Intake Forms*
- *Cloning Transaction Type Definitions*
- *Managing Transaction Type Configurations*

Using the Intake Form Designer

This topic describes the purpose of the Intake Form Designer, lists the prerequisites that must be completed prior to creating a form, and introduces you to the designer interface.

To initiate a transaction, such as a permit, an intake form needs to be submitted to capture the information required for the process. Examples of transactions include permit applications, planning and zoning applications, and so on. You use the Intake Form Designer to create application forms that public users can access online, fill out, submit, and monitor.

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Oracle does not deliver a predefined form for each type of transaction because for each form and for each municipality, the information required will be unique. For example, for a fence permit, the City of San Diego may require only basic information about the material to be used and the measurements. On the other hand, the City of Sacramento may require the same information as San Diego, but also require the contact information of the contractor building the fence, the exact location of the fence, the area enclosed by the fence, and so on. Each municipality has its own set of requirements, and the Intake Form Designer enables you to tailor the forms to reflect your agency's requirements.

With the Intake Form Designer, you can create unique application forms for each transaction type offered. The Intake Form Designer provides modular sets of common fields, called predefined field groups, which are ready-to-use form elements you can assemble like building blocks to create the intake form. If a predefined field group does not contain all the fields you require, you can add user-defined fields to capture the additional information.

The type of intake form you create depends on the offering.

Public Sector Compliance and Regulation Offering	Intake Form Types
Permits	Permit applications
Planning and Zoning	Planning pre-application Planning application
Code Enforcement	Report an issue
Business Licenses	Business license: • Consultation • Origination • Amendment • Renewal **Note:** For business licenses, typically the consultation activity uses a separate intake form. You can use a single form design to address origination, amendment, and renewal license activity.

Once you have created, configured, and tested your form, you can publish the form for public users to access, complete, and submit for review and approval.

Note: For simplicity in this documentation, the Intake Form Designer is often referred to as "the designer," and an intake form is often referred to as a "form."

Completing Prerequisites

Before creating a form, you need to:

- Create a transaction type.

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A transaction type represents the type of intake form you will create such as a permit application, a business license application, and so on.

For more information on creating a transaction type, see *Setting Up Permit Types*, *Setting Up Business License Types*, *Setting Up Planning Application Types*, *Setting Up Issue Types*.

- Set up any fees associated with the form.

  For more information on fees, see *Setting Up Fee Items*and *Setting Up Fee Schedules*.

- Set up workflow for the transaction.

  For more information on workflow, see *Setting Up Process Definitions for Workflow*.

Accessing the Designer

Before you can create an application form, you must first create a transaction type on the Transaction Type page.

From the Transaction Type page for the appropriate offering, select the **Design Form** button.

Working with the Designer Interface

This example illustrates the interface of the designer when you begin creating an application form.

This example illustrates the Intake Form Designer interface. The controls in the image are described in the text surrounding the image.
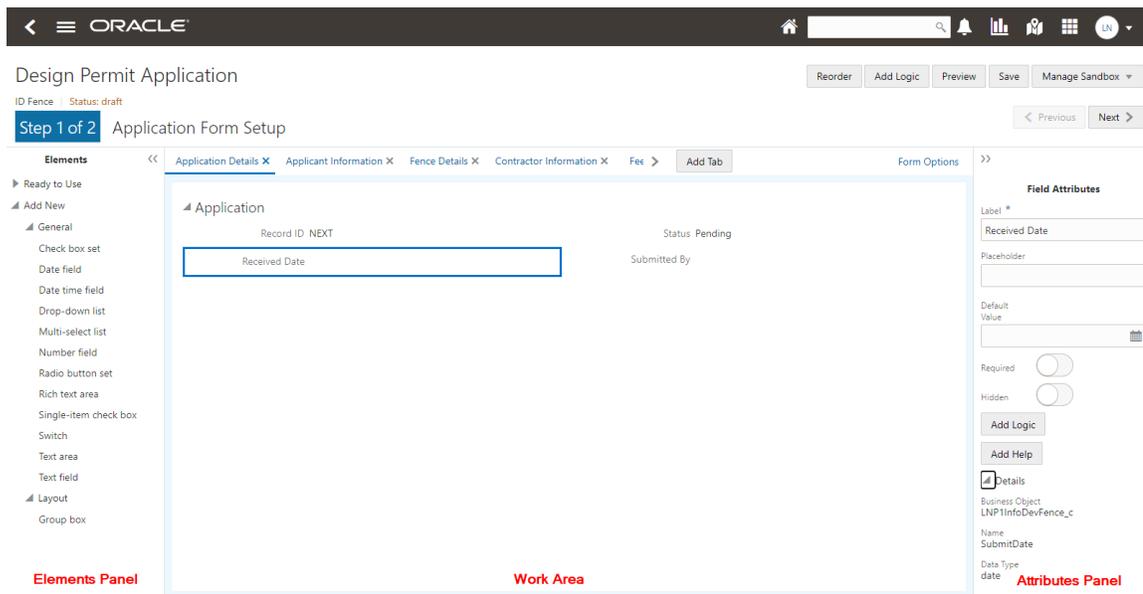
Note: While the Intake Form Designer interface is practically identical for all offerings, using the designer for Code Enforcement uses only a subset of the designer's features. For more information on using the designer to create intake forms for Code Enforcement, see *Using the Intake Form Designer for Code Enforcement*.

Page Element	Description
Status	Indicates the status of the current design. • *Draft*: the form is in sandbox mode, and currently being designed and tested. • *Published*: the form design is complete and it no longer needs to be in sandbox mode. A published form can be migrated to other environments. For more information on form status, see *Working with Sandboxes* and *Publishing Intake Forms*.
Reorder	Click to open the Reorder Intake Form window to move form elements to different locations within the form design. For more information on reordering intake forms, see *Reorder Intake Form Elements*.
Add Logic	Enables you to add programming logic scripts using the Groovy programming language. For more information on Groovy, see *Adding Logic*.
Preview	Enables you to preview your form to get a snapshot of the current layout. For more information, see *Testing Intake Forms*.
Save	Saves changes made to the form design.
Manage Sandbox	Enables you to manage the development sandbox associated with the intake form while you are creating it and to publish it after development and testing is complete. For more information on sandboxes, see *Working with Sandboxes*. For more information on publishing, see *Publishing Intake Forms*.
Next	Takes you to the Fee Mapping page, which is the next step in the form design process. If the transaction type is not associated with a fee schedule, the Fee Mapping page is not displayed. For more information on mapping fees, see *Mapping Form Fields to Decision Model Attributes*.
Form Options	Click to display the Form Options dialog box where you can set options that apply to the entire form. For more information on form options, see *Setting Form Options*.
Elements panel	The Elements panel contains all of the items that you use to build an intake form. It displays lists of all pre-defined field groups and user-defined elements you can add to your form design by dragging and dropping. The *Ready to Use* section contains: • *Field Groups:* predefined sets of fields. • *Fields:* user-defined fields you have created and set to be *reusable fields,* which can be defined once and included in multiple intake forms. The *Add New* section contains: • *General:* the list of all the field types for user-defined fields you add manually to intake forms. • *Layout:* HTML constructs, such as group box containers, that you add to your intake forms.

Page Element	Description
	For more information see, *Working with Predefined Field Groups*, *Working with Pages*, and *Working with Fields*.
Add Tab	Adds additional pages to your form. You navigate between the pages by using the page tab for each page. For more information, see *Working with Pages*.
Workspace	The area where you drag and drop form elements from the Elements panel and configure them. This is the main work area used for creating, configuring, and designing the layout out your forms.
Attributes panel	Displays the available attributes that you can configure for the currently selected form element. For example, if you have a field selected, the attributes panel reads "Field Attributes," and it contains attributes specific to that field type. If you have a group box selected, the attributes panel reads "Group Box Attributes," and it contains attributes specific to group boxes.

Using the Keyboard to Drag and Drop Elements

You can drag and drop form elements manually using your mouse, or you can use keyboard hot keys.

Key	Description
Enter	Use to: • Expand or collapse the Ready to Use or Add New element lists. • Drop a selected element onto the selected drop zone
Tab	Use the tab key to select either the first element in the list or the last selected item in the list if a previous visit was made to the list.
Up and Down Arrows	Use to: • Select an item in the Ready to Use or Add New element lists. • Select a location from the drop zone list. The selected drop zone is highlighted.
Space	When an element is selected, the space key highlights the selected element and displays available drop zones for the current page on the Select a Drop Zone dialog box. The drop zones can be the page or group boxes contained by the page. For user-defined fields, the drop zones are group boxes.

Organizing the Tasks for Creating Forms

This section provides the core set of tasks to complete when creating an intake form. The remaining topics in this chapter discuss the details of each task.

Step	Link
Add page tabs.	*Working with Pages*

Step	Link
Add predefined field groups.	*Working with Predefined Field Groups*
Modify field attributes in predefined field groups.	*Working with Fields*
Add group boxes.	*Working with Group Boxes*
Add user-defined fields.	*Working with Fields*
Testing intake forms.	*Testing Intake Forms*
Publishing intake forms.	*Publishing Intake Forms*

Using the Intake Form Designer for Code Enforcement

This topic describes how to use the Intake Form Designer for the Code Enforcement offering.

Public users access an online form, fill out it out, and submit it to report issues. You use the Intake Form Designer to create intake forms for Oracle Public Sector Compliance and Regulation offerings, including Code Enforcement.

Using the Intake Form Designer to create intake forms for the Code Enforcement offering is similar to creating intake forms for the other Public Sector Compliance and Regulation offerings, such as permits or planning applications. However, in the case of Code Enforcement, creating intake forms relies on a delivered template that has all the pages and fields already in place for a working form right from the start. You can add user-defined fields in specific areas to capture additional information if needed. This underlying template both simplifies and streamlines the form design process, requiring you to create little, if anything, from scratch.

This topic describes the concepts and steps you'll need to understand to create intake forms specifically for the Code Enforcement offering. For concepts that apply to all Oracle Public Sector Compliance and Regulation offerings, you will be linked to that common topic in the "Creating Intake Forms" chapter of this guide.

Prerequisites

Before creating an intake form for a Code Enforcement issue subtype, these items must exist:

- Issue type
- Issue subtype

For more information see *Setting Up Issue Types* and *Setting Up Issue Subtypes*.

Accessing the Intake Form Designer for Code Enforcement

An intake form for a Code Enforcement incident is associated with an issue subtype.

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To access the Intake Form Designer, click **Design Form** from the Issue Subtype page.

For more information on creating issue subtypes, see *Setting Up Issue Subtypes*.

Working with the Intake Form Designer

After you have created an issue subtype, you use the Intake Form Designer to create the form public users will access to report issues to your agency.

This example illustrates the general user interface of the Intake Form Designer used to create issue intake forms for Code Enforcement.

Page Element	Description

Status	Indicates the status of the current design.
	
	  • *Draft*: the form is in sandbox mode, and currently being designed and tested.
	
	  • *Published*: the form design is complete and it no longer needs to be in sandbox mode. A published form can be migrated to other environments.
	
	For more information on form status, see *Working with Sandboxes*.

Reorder	Enables you to move form elements from the initial location. > **Note:** > For Code Enforcement, you can reorder only the group boxes and user-defined fields you have added to the editable area of the template. For more information on reordering form elements, see *Reorder Intake Form Elements*.
Add Logic	Enables you to add programming logic scripts using the Groovy programming language.

Page Element	Description
	For more information on Groovy, see *Adding Logic*.
Preview	Enables you to preview your form to get a quick snapshot of the current layout. For more information, see *Testing Intake Forms*.
Save	Saves changes made to the form design.
Manage Sandbox	Enables you to manage the development sandbox associated with the intake form while you are creating it and to publish it after development and testing is complete. For more information on sandboxes, see *Working with Sandboxes*. For more information on publishing, see *Publishing Intake Forms*.
Form Options	Click to display the Form Options dialog box where you can set options that apply to the entire form. For more information on form options, see *Setting Form Options*.
Elements panel	Displays the list of user-defined elements you can add to your form design, such as the fields you can add to your form by dragging and dropping into the drop zone on selected pages. **Note:** The elements within the Ready to Use node are not intended to be added to your intake forms manually. They have already been added by way of the underlying template. For Code Enforcement, the Ready to Use node is intended to be used by internal Oracle development teams.
Workspace	This is the main area displaying page tabs and drop zones used for configuring your forms.
Attributes panel	Displays the available attributes that you can configure for the currently selected form element. For example, if you have a field selected, the attributes panel reads "Field Attributes," and it contains attributes specific to fields. If you have a group box selected, the attributes panel reads "Group Box Attributes," and it contains attributes specific to group boxes.

Working with Page Tabs

Page tabs appear across the top of the work area.

Each page tab represents a separate page that the public user will access at runtime to provide the necessary information when reporting an issue. The majority of the intake form for Code Enforcement is defined by the underlying template, which you can't modify. Because the page tabs are defined in the underlying template, you can't add or remove page tabs that appear in the default Code Enforcement intake form.

Note: You can't add or remove page tabs from the default intake form template.

The page tab containing the pencil icon indicates where the drop zone resides. The drop zone is the area of the intake form where you can add user-defined fields and group boxes to configure the intake form to include any additional requirements for that issue subtype.

For example, if you want to add a field to capture the length of the overgrown grass being reported, you can drag and drop a Number field type into the drop zone.

The following table provides descriptions of the default page tabs provided by the template. The page tabs derived from the template are:

Page Tab	Description
Provide the Location of the Issue	Used for specifying the location of an issue that's being reported. This tab includes a map with a crosshair marker for identifying a location. A search field enables user to easily find a location and place it in the crosshairs. A separate text field captures additional location information such as an apartment number or a description of where to find the issue at the given address.
Tell us what's going on	Used to describe the issue that's being reported. This tab includes a freeform text field for describing the issue. The tab also supports attachments so that users can upload photos, videos, or other documentation.
Just A Few More Questions	Used to collect additional information about the issue that's being reported. In the delivered template, the only field on this page is a switch for indicating if the issue is a health hazard or public safety risk. This tab also has a drop zone where you can add your own fields for collecting additional information.
Provide Contact Information	Used to collect the name and contact information for the person who is reporting the issue. The template includes a switch for hiding the user's information, but this switch is visible to the end user only if the agency allows anonymous reporting. This option is configured on the Code Enforcement Options page. See *Setting Up Agency-Level Options for Code Enforcement*.

Working with the Drop Zone

The drop zone is the area of the issue subtype intake form where you can add user-defined fields and group boxes. You can locate drop zones by selecting the page tabs with the pencil icon.

This example illustrates the pencil icon on a page tab, which indicates which tab(s) a drop zone resides where you can add custom fields.

Just a Few More Questions ✎

Note: The drop zone is the only area on the form that you can add and configure group boxes and fields.

You can drag and drop these form elements into a drop zone:

- User-defined fields
- Group boxes

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This example illustrates dragging and dropping a user-defined field type from the Elements panel into the drop zone.
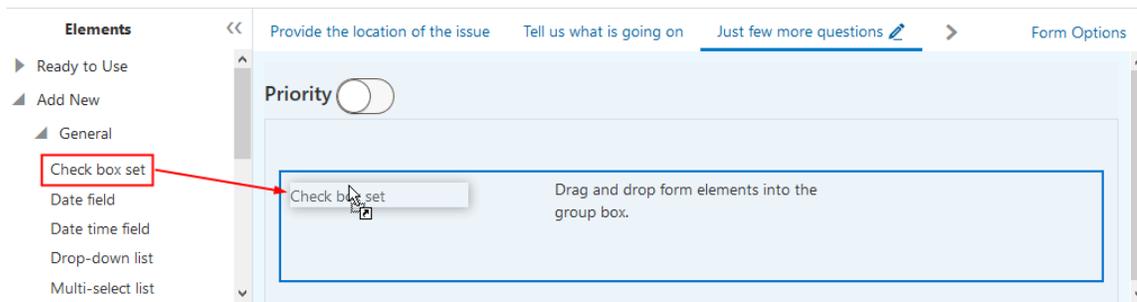
The drop zone itself is a group box into which you can drag user-defined fields and other group boxes if needed.

> **Note:** While the drop zone is technically a group box, you can't modify its attributes or remove it from the page.

Working with User-Defined Fields

You can drag and drop user-defined fields directly into the drop zone, or you can add group boxes to the drop zone and drag and drop user-defined fields into the group boxes.

To add a user defined field to the drop zone:

1. Expand the Add New list.
2. Expand the General list.
3. Select the desired field type by clicking and holding.
4. Drag and drop the field type onto the drop zone.

To modify field attributes:

1. Select the field in the drop zone.
2. Use the Field Attributes panel to configure the field.
3. Click **Save.**

For more information on working with fields, see *Working with Fields*.

Working with Group Boxes

You can use group boxes to organize user-defined fields you add to the drop zone. User-defined fields can be added only to the drop zone or to group boxes.

For more information on group boxes, see *Working with Group Boxes*.

Displaying Form Elements Conditionally

In some cases, you may want to display or hide certain elements in the drop zone only if the public user has made specific selections on previous fields also in the drop zone.

> **Note:** The fields that you want to display conditionally must be within a group box container. You can display group boxes conditionally, but not a field on its own. You can't control the display of the drop zone. Conditional display applies only to elements contained within the drop zone.

For more information on conditional display, see *Displaying Form Elements Conditionally*.

Setting Form Options

Form options enable you to configure features that apply to the entire form. For example, for the Code Enforcement issue intake form, you can control whether a review page displays to show the public user all their selections before submitting.

For more information on form options, see *Setting Form Options*.

Working with Sandboxes

When developing intake forms, you design and modify the form layout within a sandbox. A sandbox is an Oracle Fusion Applications technology that enables intake form developers to work on projects simultaneously, save, and test their work without affecting other developers or testers in the environment.

For more information on sandboxes, see *Working with Sandboxes*.

Testing Intake Forms

After creating an issue intake form, you can test it by:

- Viewing it in preview mode.
- Making it available from the landing page where you can select *Report an Issue,* which can be done in draft mode and published mode.

For more information on testing, see *Testing Intake Forms*.

Publishing Intake Forms

While you are actively designing or modifying an intake form, the intake form resides in draft mode in a development sandbox. You can test the intake form in draft mode while it is still in the sandbox. To make the intake form available to migrate to another environment, the intake form needs to be published.

For more information on publishing forms, see *Publishing Intake Forms*.

Cloning Transaction Type Definitions

You can clone issue subtype definitions and the associated intake form layout to:

- Avoid duplicating work while creating similar issue subtypes and intake forms.
- Create a new version of an existing issue subtype and intake form.

To clone an issue subtype and its associated intake form, click **Clone** on the Issue Subtype page.

For more information on cloning, see *Cloning Transaction Type Definitions*.

Managing Transaction Type Configurations

After developing your intake forms on your development and/or test environment, you need to migrate the setup data and configuration data from the source development/test environment to the target production environment.

For more information on migrating setup data and configuration data from one environment to another, see *Managing Transaction Type Configurations*.

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Example: Adding User-Defined Fields to an Intake Form for an Issue Subtype

While the default intake form based on the underlying template is ready to be used without any changes, this section illustrates how you can add user-defined fields to the drop zone if you need to capture additional information.

This example creates an intake form for an issue subtype that enables public users to report an issue for an abandoned vehicle. Assume that the code enforcement organization wants to capture all of the information in the default intake form and also a user-defined field to indicate if there are multiple vehicles on the property.

To create an intake form for an issue subtype:

1. Ensure a valid issue and issue subtype exist.

   You create issue types and issue subtypes separately.

   For more information see *Setting Up Issue Types* and *Setting Up Issue Subtypes*.
2. While on the Issue Subtype page, make sure your issue subtype is saved and click **Design Form.**
3. In the Intake Form Designer, locate the page tab with the drop zone.

   This example illustrates the pencil icon on a page tab, which indicates which tab(s) a drop zone resides where you can add custom fields.

   Just a Few More Questions ✎

4. Expand the Add New list in the Elements panel.
5. In the General list, select *Switch,* and drag and drop it in the drop zone.

   This example illustrates dragging and dropping a field type into the drop zone.
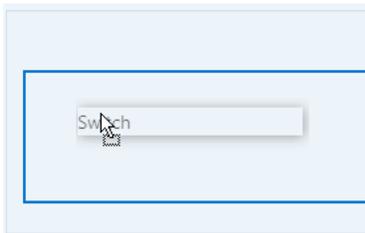
   Switch

6. Select the switch, and observe the attributes you can configure for that field in the Field Attributes panel on the right.
7. Update the **Label** value.

   For example *Are there multiple abandoned vehicles on the property?*

   This example illustrates setting the label attribute.

8. Click **Save.**

Result:

This example illustrates a user-defined field added to the drop zone of an issue subtype form layout.

Working with Sandboxes

This topic provides an overview of the concept of sandboxes and how they are used within the Intake Form Designer, and it describes sandbox usage and behavior.

Most modern development environments typically require several different individuals to work simultaneously on application changes while sharing the same data model and configuration starting point. The Intake Form Designer utilizes the Oracle Fusion Applications technology referred to as *sandboxes* to enable form developers to work on projects simultaneously, save their work, and test their forms without affecting other members of the implementation team in the environment.

The sandbox acts as the development and test mode of your application form. During sandbox mode, the form design can be viewed only internally by application developers or business analysts. In sandbox mode you can create your form, add required form elements, add UI elements, and test your changes. When you have completed all of your design, development, and test work, you can then publish the form so it can be migrated to other environments and be accessed by public users.

Note: Creating and modifying transaction types and intake forms should be completed on your development environment or your test environment. After making changes, publishing, and testing transaction types and intake forms on your development or test system, you would then migrate the new and modified definitions to your production system. Refer to the Functional Setup Manager documentation for information on migrating data from the test system to the production system, as well as *Managing Transaction Type Configurations*.

Types of Sandboxes

Oracle Fusion Applications provides these types of sandboxes:

- Classic sandboxes
- Unified sandboxes

Classic sandboxes are the default sandboxes that are enabled out-of-the-box and always stay enabled. During implementation, ensure that unified sandboxes are enabled.

Note: To create intake forms, the unified sandboxes feature *must be enabled.*

For Public Sector Compliance and Regulation offerings, unified sandboxes are an opt in feature that you enable in Functional Setup Manager. It is required to have unified sandboxes on your development and/or test environment (depending on the number of pods you have licensed). *Do not* enable unified sandboxes on your production environment. Unified sandboxes are utilized during development and configuration work, which should not be taking place on your production environment. If the unified sandboxes feature is enabled on your production environment, it can lead to unexpected results, especially during the migration of data from a source environment to the target production environment.

For more information on sandboxes, see the Fusion Applications Common topic: *Sandboxes*.

Starting a Sandbox Instance for a New Application Form

Before you can create an application form in Intake Form Designer, you must first create the transaction type. For example, for the permit offering, the transaction type is a permit. When you save a permit type, the application creates a sandbox instance. From that point, the transaction type and the associated form design exist within the newly created sandbox instance.

Each form your implementation team is currently developing exists within its own, separate sandbox instance.

Until you publish the form, the transaction type and the form design remain in the sandbox instance. When you publish a transaction type, the system eliminates its sandbox instance.

Starting a Sandbox Instance for a Published Intake Form

After an application form has been published, you can initiate sandbox instances to make any required changes discovered after the initial publication.

To initiate a sandbox for a published form:

1. Open the transaction type for the form.
2. Select **Design Form.**
3. Begin making the desired changes.
4. Click **Save.**

By clicking **Save,** the Intake Form Designer creates a new sandbox instance to store the current changes.

Viewing the Sandbox Status

You can determine if a form is in sandbox mode using the Status indicator located in the top left-hand corner of the Intake Form Designer. The Status indicator appears when you are creating the form or previewing the form. The sandbox status does not appear on the published version of the form.

Status	Description
draft	The form is in sandbox mode. All changes exist in the sandbox instance only.
published	The form design is complete and is not in sandbox mode. When a form is published it can be migrated to other environments.

Managing Sandboxes

Use the **Manage Sandbox** drop-down list to select the actions for the current sandbox.

| Page Element	Description
Publish	Select when your initial testing and design work is complete and you no longer require the use of the development sandbox. The sandbox is deleted and the form design is set to a state of *published.* Form designs in the published state can't be modified until they are back in the draft state inside of a different sandbox instance. A form design that is published can be migrated from the source environment to the target environment.
Refresh	Select to synchronize the current sandbox with current system data. Sandboxes share common elements, such as field groups, reusable fields, and other system metadata. If those common elements are updated, sometimes that requires the sandbox to be refreshed so that it is synchronized with current system metadata to enable successful saving or publishing.
Revert to Last Published	Select to remove all current changes and modifications and return the form design to the state of the most recent successful publish. Use this option when you are making changes that you no longer need and you'd like to return to the previous published state or you have encountered an issue with the sandbox.
Manage Sandbox (FA)	Select to go to the Sandboxes page in Oracle Fusion Applications to view details about the sandbox or update it manually. The sandbox naming convention is: *<Transaction Type Code>__sb_<number of publications>.* For example, if for a permit, the Type Code value is *REMODEL,* and the sandbox has been published twice previously, the sandbox for that permit is named *REMODEL__sb_2.* For information on managing sandboxes using the Sandboxes page, refer to the Fusion Applications Common sandbox documentation.

Managing Labels for Application Form Elements

This topic describes how to manage changes made to labels for existing and user-defined form elements.

When making changes to the labels for elements within your application form, you need to consider what type of element it is. Changing the label of some elements is a global change, while changing the label of other elements is a local change.

- Global: A global label change means that a change to the label affects *every* intake form definition using that field or element.

- Local: A local label change means that a change to the label affects *only* the current intake form definition where the field or element appears.

When you select a form element or field and a label change would have global effects, a warning icon appears above the Label field in the attributes panel.

When selecting an item in the workspace, if changing the label for that item has global effect on all application forms using the item, the system displays a warning icon.
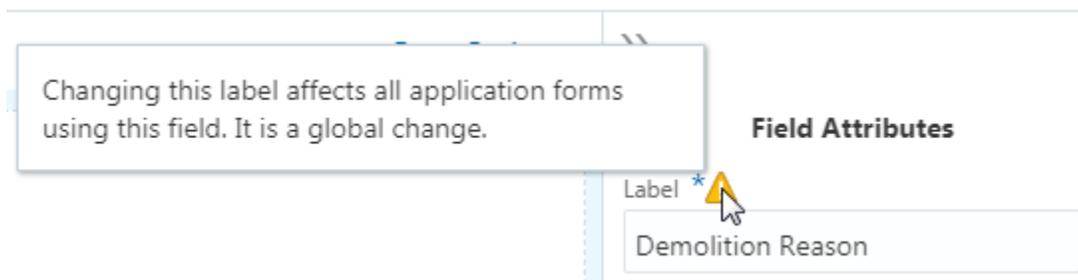
> **Note:** If you change the label of a field after a form has been migrated and used in the production system, keep in mind this can affect reporting and the storage of historical data. You may have multiple labels representing the same data.

Form Element	Scope of Label Change	Label Change Considerations
Predefined Field Group	Global	The label of a predefined field group is the heading used to describe the grouping of the fields it contains. Changing the label of a predefined field group is a global change. For example, if you change the label in the Applicant predefined element used in the fence permit intake form, that change will be reflected in the Applicant predefined element used in the electrical permit intake form (and any other application form using the Applicant predefined field group).

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Form Element	Scope of Label Change	Label Change Considerations
Predefined Field Group: Parent Field	Local	Some fields appearing in predefined form elements are part of the parent record within the data structure storing the transaction data. You know a field in a predefined field group is part of the parent record when the warning icon *does not* appear above the **Label** field in the attributes panel. For example, the Description field in the Application predefined field group does not display the warning icon. Changing this label affects only the current intake form definition. It is a local change.
Predefined Field Group: Child Field	Global	Some fields appearing in predefined field groups are part of a child record within the data structure storing the transaction data. You know a field in a predefined field group is part of a child record when the warning icon appears next to the **Label** field in the attributes panel. For example, the Demolition Reason field in the Demolition predefined field group displays the warning icon. Changing this label affects all intake form definitions using the Demolition predefined element. It is a global change.
User-Defined Fields	Local	You can change the labels for the fields that you add to your application forms, such as text fields, number fields, drop-down lists, and so on. Because you add these fields manually to your application form, you can change the default labels as needed to suit your business requirements. The scope of any changes to the label for user-defined fields apply *only* to the current intake form.
HTML Constructs	Local	A general HTML construct refers to layout elements such as group boxes and page tabs. You can change the labels for general HTML constructs as needed to suit your business requirements. The scope of the construct and any changes to the label apply *only* to the current intake form definition. For example, changing the label of the default label for HTML constructs such as *Group box* or *Field 0* to your desired label affects only the current intake form definition.

Form Element	Scope of Label Change	Label Change Considerations
		Note: If you change a label for a page tab or a group box used in an intake form after the form has been migrated and used in the production system, make sure to update any instructions or documentation that may reference the previous label.

Note: For HTML constructs, such as pages and group boxes, and for user-defined fields the labels display using the language used to create or modify the application form layout. There is no automatic translation of these elements. For example, if you created the intake form in English, but then signed in using Korean for testing, you will see the English labels for those constructs, unless you have provided translated values using the Fusion Applications User Interface Text tool. For more information on the User Interface Text tool, see: *Considerations for Selecting a Tool to Change Text*.

Working with Pages

This topic describes how to add page tabs to your intake form and how to modify page attributes.

An intake form can include one or more page tabs to contain the field groups and fields that you want to add to your form.

Adding Pages

When you create an intake form, by default, the application includes one page tab for your form.

To add additional page tabs to your intake form, click the **Add Tab** button at the top of the workspace.

Setting Page Attributes

This example illustrates the page attributes. Details are in the surrounding text.

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Page Element	Description
Label	The name of the page that appears on the page tab. The default name is Page 1, Page 2, and so on. Change the name to your desired label.
Add Help	Click to launch the Contextual Help page, which you can use to add help information to aid end users in completing the application form. Page-level help should provide information pertaining to the overall page content. If the information applies to a specific UI element on the page, such as a field group, group box, or field, consider adding help directly to that UI element. For more information on adding contextual help, see *Adding Contextual Help to Forms*.
Control Display	Expand the Display section to view this attribute. Determine if the page displays or is hidden based on the value of a previous element in the form, such as a single-item check box or a switch. For more information on controlling page display, see *Displaying Form Elements Conditionally*.
Hide from public user	Expand the Security section to view this attribute. Hides the page tab and all the elements on the page from the public user at runtime. Only agency staff can view and update information for a page with this attribute turned on. In addition to hiding the UI element from the public user in the interface, the application also secures the back end for that specific UI element, such as preventing any unauthorized access to the fields within the UI element using a REST API, for example. **Note:** An intake form must have at least one page that is viewable to the public user. That is, Hide from public user must *not be enabled* for at least one page tab in the form.

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Page Element	Description
	Note: You can't add a predefined field group to a page set to be hidden from the public. The Hide from public user attribute can be set only for pages and group boxes, and it applies only to user-defined fields within those containers. You can't apply the Hide from public user attribute to field groups. **Note:** The Hide from public user setting and the Confidential setting are mutually exclusive. **Note:** You can't apply this setting to pages containing fields that have default values or fields that are set as required.
Confidential	Expand the Security section to view this attribute. Turn this attribute on to specify that the user-defined fields within the page container hold confidential information. At run time, fields with confidential information will be hidden to all users except for users without the appropriate privilege. These users can see the confidential information: • Agency users directly associated with processing the business license. • The public user who entered the information. **Note:** The field does appear in the JSON payload for the page, however the field value will be null. **Note:** The Confidential attribute applies only to the Business Licenses offering. **Note:** You can't add a predefined field group to a page with the Confidential attribute turned on. The Confidential attribute can be set only for pages and group boxes, and it applies only to user-defined fields within those containers. You can't apply the Confidential attribute to field groups. **Note:** The Hide from public user setting and the Confidential setting are mutually exclusive. **Note:** You can't apply this setting to pages containing fields that have default values or fields that are set as required.

Deleting Pages

If you delete a page from your form, keep in mind that any UI elements you have added to the page, such as predefined form elements, group boxes, and fields will also be removed from your form.

To delete a page from your form:

1. Click the **Remove** button on the page tab (the "x").
2. On the Confirm dialog box, click **OK.**
3. Save your changes.

Working with Predefined Field Groups

This topic provides an overview of predefined field groups and how you use them to build your application forms.

Oracle provides a set of predefined field groups to help you build application forms easily. Each predefined field group contains a collection of fields commonly used to capture information for a particular facet of the transaction type. For example, the Applicant field group captures information about the person applying for a permit, and the Electrical field group captures information about the scope of electrical work for a project. Using predefined field groups, you can assemble application forms in a matter of minutes.

Predefined field groups are:

- Pre-mapped to attributes in the application view object (VO).

- Grouped logically to provide descriptive metadata for a particular element of an intake form, such as Applicant, Electrical Equipment, Pool Information, and so on.

You drag the desired predefined field group from the Elements panel onto the workspace and use various combinations of predefined and user-defined form elements to assemble your application forms.

For example, assume that you need to create a form for applying for a fence permit. In this case, you can drag the Applicant field group, the Fence field group, along with other field groups you need onto the workspace to build your form.

For more information on the delivered predefined field groups, see *Using Predefined Field Groups*.

Adding Predefined Field Groups

To add a predefined field group to your form:

1. Make sure the page to which you want to add the predefined field group is the active page.
2. Expand the Ready to Use list in the Elements panel to the left of the workspace.
3. Click on the desired field group to activate it.
4. Select the field group to drag and drop it in the workspace.

This example illustrates dragging and dropping a field group onto the workspace.
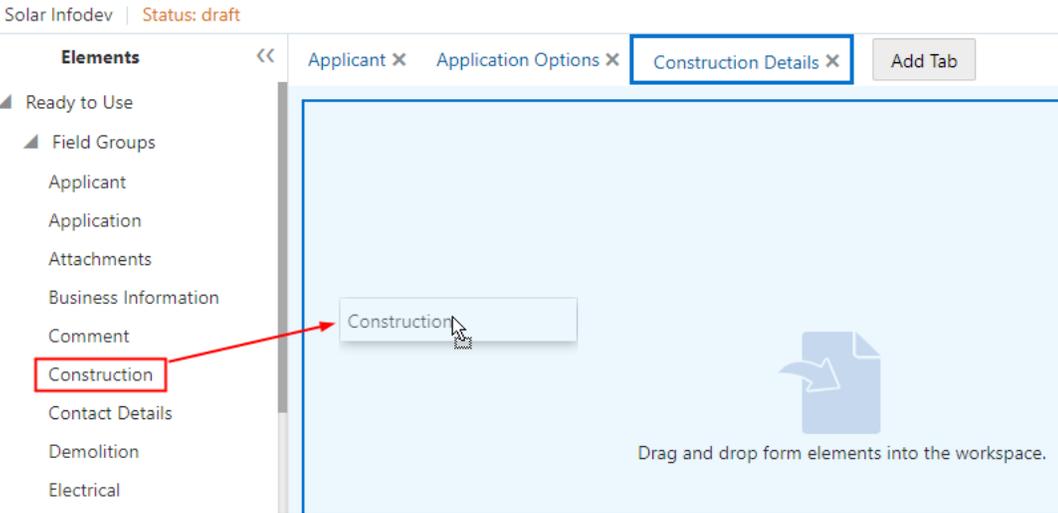
Note: Intake Form Designer places the predefined field groups in the workspace in the same order in which they are dropped, in sequence, from top to bottom.

Note: When adding the Terms of Use predefined field group, it is recommended to add the field group to a page tab that also includes at least one other form element. Otherwise, the page may appear blank to agency staff when accessed at runtime because the Terms of Use field group is displayed only to public users, not to agency staff.

Adding Required Predefined Field Groups

The field groups you add to your intake form design will vary, depending on the type of form you are creating. While most field groups are optional to add to your forms, some field groups are required to ensure that specific information is captured or represented in the underlying data structure. In some cases, it is the offering that requires the data, while in other cases a field group may have built-in dependencies on another field group.

Offering	Required Field Groups
Permits	Applicant
	Application
	Fee Summary (if fees are involved)
Planning and Zoning	Applicant
	Application
	Fee Summary (if fees are involved)
Business Licenses	Applicant
	Application
	Business Information

Offering	Required Field Groups
	Business Owners Business Locations Fee Summary (if fees are involved) **Note:** The Business Owners and Business Locations field groups depend on the Business Information field group. They must appear *after* the Business Information field group in the sequence, either in a subsequent page tab or below it on the same page tab.

The Applicant predefined field group is required to be added to your application forms. The internal save logic checks for a valid applicant address when an end user attempts to save or submit an application form. The Application predefined field group displays useful information, including the transaction ID, status, description, important dates related to the application, and so on.

Deleting Predefined Field Groups from a Form

To delete a predefined field group, click the **Remove** button in the Attributes panel.

Setting Predefined Field Group Attributes

Select the field group to view its attributes in the Attributes pane. To select the field group, click around the border or within empty space within the field group. If you click near a field, the field will become selected.

Page Element	Description
Remove	Click to remove the field group from the page.
Label	The name of the predefined field group that describes the set of fields in the field group. For example, the fields in the Photovoltaic field group apply to solar projects. Modify the label to suit your requirements. For example, you may want to change the delivered field group named *Photovoltaic* to *Solar.* **Note:** Changing the label for predefined field groups is a global change, affecting other intake forms using the field group. After changing the label, note that the label of the field group in the left panel's field group list is updated to reflect the modified label. The change you make will be available globally only after you publish the current intake form. Make sure future intake form developers on your implementation team are aware of the change to avoid confusion.
Show Label	Control whether to show the label. By default, the system shows labels for predefined field groups (Show Label is on). To hide the label, turn off Show Label. When turned off, the system hides the label at both design-time and runtime. Typically, you'd want the label to be visible to describe the logical grouping of the fields in the form element.

Page Element	Description
	In some cases, the page tab name and the predefined field group label might be redundant, in which case you may opt to hide the label.
	You may also want to group multiple predefined field groups within a single group box. In this case, you can hide the individual predefined field group labels within the group box container, using the group box label to represent the combined set of fields.
	Note: When you turn off Show Label, the system disables the collapsible feature for a predefined field group.
	Note: If the predefined field group is delivered without a label, the Show Label attribute does not appear when you select that form element.
Add Help	Click to launch the Contextual Help dialog box, which you can use to add help text to a predefined field group for assisting users with interacting with your intake form. When adding help for a predefined field group, the help text should apply to the overall contents of the predefined field group. You can add help also at the page level and the field level, depending on the scope of the help text.
	For more information on adding contextual help to your intake form, see *Adding Contextual Help to Forms*.
License Activity	**Note:** This attribute applies only to the Business Licenses offering.
	Expand the Display section to view this feature.
	License activity filtering enables you to control the display of field groups, depending on the current business license activity selected by the applicant.
	For more information on setting display filters, see *Configuring Activity Filtering for Business Licenses*.
Control Display	Expand the Display section to view this feature.
	Click to define other elements in the form to control wether the field group displays.
	For more information on controlling the display of form elements, see *Displaying Form Elements Conditionally*.

Adding a Predefined Field Group Multiple Times to the Same Form

The same predefined field group can be dragged into your form multiple times. This is referred to as a multiple-instance element. How you adjust the Multi-Instance Options attribute determines how the application stores the data for that predefined field group.

Note: The Multi-Instance Options attribute appears only for the Comments and the Attachments field groups.

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If you make no changes to the Multi-Instance Options attribute, the data entered within that predefined field group corresponds to one row of data only. In this case, the system duplicates the display of the data in each area of the form it is displayed. This option enables you to show the same data on a different tab within the form, if necessary. Updating the data in one instance of the predefined field group updates the data displayed in the other instances as well.

For example, assume you want the same comment text to appear on multiple pages in your form. You can do this by adding the Comments field group to the desired pages without making any updates to the Value field in the Multi-Instance Options attribute.

If you make changes to the Multi-Instance Options attribute, the application considers each instance of the predefined field group unique, and then each individual occurrence of the predefined field group is associated with its own row of data.

For example, assume you wanted to incorporate multiple comment sections in your form. In this case, you can add the Comments field group to multiple locations of your form, and then you set the Multi-Instance Options attribute to different values. One might relate to fencing comments while another might relate to contractor comments. Another example would be to enable the end user to upload multiple attachments that apply to separate documents. One attachment might be photos of a property while another attachment might be blueprint or design documents.

Managing Lookups for Predefined Field Groups

Some of the existing field groups contain fields associated with delivered lookup types. For example, the Primary Industry lookup is associated with the ORA_PSC_CC_INDUSTRY_TYPE lookup type.

This example illustrates a field on a field group associated with an existing lookup. Details are in the surrounding text.

To manage a lookup for a predefined field group:

1. Identify the lookup fields in a field group, which contain the magnifying glass icon, like the Primary Industry field on the Business Information field group.
2. Select the field.
3. Expand the Details section in the Field Attributes panel.
4. Make note of the List ID associated with the field. This is the lookup type that you will access and update on the Lookups page.
5. Click **Manage List** to open the Lookups page displaying the associated lookup type.

   This example illustrates the Lookups page displaying the lookup type associated with a field on a field group. Details are in the surrounding text.

For more information on managing lookup types, see *Setting Up Lookups*.

Using Predefined Field Groups

This topic lists and describes the set of predefined field groups delivered to help you build forms quickly and consistently.

Predefined field groups are prebuilt user interface modules that you can use as building blocks for assembling forms. Field groups provide a set of fields and functionality to capture information for various sections of an application form.

Common Predefined Field Groups

Field Group	Description
Applicant	Identification and contact information for the public user who is filling out the form (or on whose behalf an agent is completing the form). This field group includes the applicant's name, address, phone, and email. When updating address, email, and phone information, the user has the option to save the changes to the user's account profile.
Application	Displays information about the form itself, such as status, relevant dates, and descriptions.
Attachments	Enables you to attach and download files, such as documents or images. You determine document properties displayed in the list of attachments and during upload. Contains multiple instance options to create unique instances of the attachment field group.
Authorized Agent	Enables applicants to self-identify as authorized agents acting on behalf of a contractor. This field group contains a switch for self-identifying as an authorized agent, a field for tracking authorized agent verification status, and read-only fields that are populated with the applicant's name and contact information if the applicant is an authorized agent.

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Field Group	Description
	This field group should be used in conjunction with the Contractor field group. Typically the Authorized Agent field group is placed immediately after the Contractor field group on a permit or planning application intake form page.
Comment	Enables you to enter additional comments or descriptions pertaining to information on the form. Contains multiple instance options to create unique instances of the comments field group.
Contact Details	Enables you to add information for individuals or organizations that are contacts for an application. When users enter contact information in an application, they can create new contacts or choose existing profile contacts. When creating a new application contact, the user can indicate whether the new contact should also be added as a profile contact. When choosing an existing profile contact, the user can modify contact details and indicate whether the original profile contact record should be updated as well.
Contractor	Enables applicants to provide information about one or more licensed contractors who are performing the work for a permit or planning application. This field group includes an integration option that is configured as part of your agency-level contractor options. For more information, see *Setting Up Contractor License Options*.
Demolition	If demolition is required as part of the job, this field group captures information related to the scope of the demolition and if hazardous materials or utilities need to be considered, such as electricity, gas, water, and so on.
Fee Summary	Lists the items selected, the cost for each item, and the total amount to be paid when submitting the form. **Note:** This does not include additional inspection or other fees which may be assessed at a later time.
Property	Describes the parcel as it is registered with the municipality, such as the parcel ID, parcel type, and so on.
Site and Zoning	Describes features of the property related to acreage, flood preparedness, as well as zoning and land usage information.
Terms and Conditions	Provides access to the terms and conditions regulating the usage of the online form, and provides a way for the user to accept the terms. This field group is hidden from agency staff who complete a form on behalf of a public user. This field group does not identify which Terms of Use definition to use, so if you add this field group to an application intake form, you need to also add a Terms of Use definition on the Permit Type or Planning Application Type page. The **Display Mode** property has these options: • *Link:* the form displays a **Terms and Conditions** link that the user clicks to open a window with the full terms and the check box for accepting the terms. • *Embedded:* the full text of the terms appears directly on the form. If the display mode is *Link,* these two additional properties are available:

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Field Group	Description
	• **Help Text:** Enter informational text that appears on the form along with the Terms and Conditions link.
	• **Display Label:** Enable this option to display the description of the Terms of Use definition on the form along with the Terms and Conditions link.
	Note: This field group is not used to set up public user registration terms and conditions. The Public User Setup page includes all registration-related configuration.

Attachments Field Group

You can configure the attachments field group and add it into your form multiple times. Attachments provide supporting documentation needed by agency staff when processing a transaction.

Configurable Features	Description
Component Attributes	You can name the attachments component title in the **Label** field.
Component Multi-Instance Options	Use these multiple instance options to create unique instances of the attachment field group: • **ID** • **Value** For more information about multiple instance options, see *Working with Predefined Field Groups*.
Attachment Columns:	You can configure these attachment properties in the attachments list: • **File Name**: Display the file name of the uploaded file. • **Description**: Display the user-entered description. • **File Size**: Display the size of the uploaded file.
Business Columns: • **DocumentCategory** • **DocumentSubcategory**	Agency-defined document categories and document subcategories enable you to organize the various types of attachments. You can configure these fields for document categories and document subcategories: • **Label**: Change the field name. • **Show in List**: Display the field in the attachments grid. • **Show in Detail**: Display the field in the attachment detail information. • **Show in Upload**: Display the field on the modal page for uploading an attachment. • **Searchable**: Enable search on the document category or document subcategory field. • **Sortable**: Enable sorting for the document category or document subcategory field.

Predefined Business License Field Groups

Field Group	Description
Business Detail	Describes the products and services to be sold, and captures additional information through a series of questions about the business.
Business Information	Captures information to help describe the business, such as name, ownership type, mailing address, and so on. **Note:** You must add this field group to all business license intake forms. It must come before the Business Locations and Business Owners field groups either in a previous tab, or above them in the same tab.
Business Locations	Captures information about the physical location of the business such as address, parcel number, and phone number. **Note:** You must add this field group to all business license intake forms. It must come after the Business Information field group either in a subsequent tab, or below it on the same tab.
Business Owners	Captures information about the business owners or corporate officers. **Note:** You must add this field group to all business license intake forms. It must come after the Business Information field group either in a subsequent tab, or below it on the same tab.
Days and Hours of Operation	Describes the days and hours of operations for the business.
Industry Classification	Captures the North American Industry Classification System (NAICS) code for the business.
Restaurant	Describes restaurant-related information such as seating, square footage, and food and alcohol service times. Additionally, captures information about activities that may require separate licenses or permits.
Retail Business Details	Captures information related to retail business including products and services sold, retail space, fire and safety inspection details, and so on.
Tax Related Details	Captures measurable attributes used to calculate taxes, such as number of employees, estimated or actual gross receipts, square footage, number of rental units, and so on.

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Predefined Permit Field Groups

Field Group	Description
Business Information	Captures information to help describe the business, such as name, description, number of employees, industry, and so on.
Construction Information	Captures information regarding the current construction site and the proposed construction project.
Electrical Equipment	Describes a structure's electrical features, such as outlet types, amps, voltage, and electric appliances.
Fence Information	Describes the proposed fence attributes, such as type, material, dimensions, location, and so on.
Grading Information	Describes the scope of grading work, such as the acreage affected, materials to be used and the amount of material.
Insurance	Provides a contractor's insurance type and policy information.
License Qualification	Enables a contractor to add any state licences they have.
Mechanical Equipment	Describes features of the job site related to ventilation, heating, cooling, fire safety, and so on.
Photovoltaic Information	Describes attributes of a site's solar energy configuration, such as roof area, coverage area, inverter information, and so on.
Plumbing Equipment	Describes attributes of a site's plumbing configuration.
Pool Information	Describes attributes of a pool, such as type, depth, location, surrounding fencing, and so on.
Regulated Business Activity	Enables you to specify any regulated activity or controlled substances allowed on the premises, such as alcohol, carnival rides, casino games, and so on.
Right of Way Use	Enables you to provide any details related to the use of a right-of-way on the property or to gain access to the property, such as traffic, parking, or pedestrian impact.
Roof Information	Describes features of a structure's roof, such as existing roof type, proposed roof type, number of layers, and so on.
Signage	Describes features of signage, such as the sign's dimensions, use, whether permanent or temporary, and illumination.
Special Event	Enables you to specify information about an event, including the safety plan, concessions, facilities, potential impacts, and traffic plans.

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Field Group	Description
Water Heater	Describes features of water heaters, such as quantity of new or replaced, type, fuel type, and tank capacity.
Yard Sale	Enables you to specify yard sale information, such as the start time, end time, and the number of days.

Predefined Planning and Zoning Field Groups

Field Groups	Description
Dwellings	Describes features of housing such as number of units, floor area information, density bonus, rent-controlled units, and so on.
Impervious Surface	Describes features of areas covered by impervious materials, such as concrete or asphalt, including exemptions from certain requirements, existing and proposed impervious surface areas, and the property lot area.
Planning	Describes features included in planning and zoning, such as proposed number of units, change to the number of units, assessed value of the current building, development type, commercial building area, existing land use, lot areas, setbacks, and so on.

Managing Lookup Types Associated with Fields in Predefined Field Groups

Some field groups have fields that are associated with existing lookup types delivered with your offering. To view or modify the lookup type, you can access the lookup from the Intake Form Designer using the **Manage List** button.

For more information on managing lookup lists for predefined field groups, see the section "Managing Lookups for Predefined Field Groups" in *Working with Predefined Field Groups* and refer to *Setting Up Lookups*.

Working with Group Boxes

This topic describes how to add group boxes to your form and discusses group box layout options and attributes.

Use group boxes as containers to indicate the items contained within a group box are grouped logically. Once you add a group box to a page, you can drag these items into the group box:

- Predefined field groups
- User-defined fields
- Other group boxes (nested group boxes)

Adding Group Boxes

To add a group box:

1. Open the Add New list in the Elements panel.

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2. Open the Layout list.
3. Click and hold on the Group box option.
4. Drag and drop the group box into the workspace.

Deleting Group Boxes

To delete a group box:

1. Select the group box.
2. Click the **Remove** button in the Attributes panel.

> **Note:** If you remove a group box from a page, the system removes all of the contents of that group box also.

Setting Group Box Attributes

Select a group box to view the Group Box Attributes panel.

Page Element	Description
Remove	Click to remove the group box from the page.
Label	Add a name for the group box, describing the collection of items within it.
Collapsible	Turn on to enable the group box to be collapsed when an end user clicks it, hiding items it contains. If not turned on, the group box is always expanded and its items are always visible.
Flexible Box Layout	Use the Flexible Box Layout attribute to establish a group box container based on the CSS flexible box layout model. In the flexible box layout model, the items contained within the parent container assume a layout position automatically, based on space in the container. As the available unused space grows or shrinks, the items in the container grow to fill the unused space or shrink to avoid overflowing the parent. With Flexible Box Layout enabled, the system displays as many controls within the group box in one line until all of the space is utilized, then the system wraps the row, beginning a new line. When disabled, the controls within the group box display as stacked items, with each additional control displaying directly beneath the previous control.
Show Label	Select to hide the group box label (specified in the Label field). **Note:** You can add help only to group boxes with Show Label turned on. If Show Label is turned off, the **Add Help** button does not appear on the attributes panel and any help icons associated with any previously added help no longer appear.
Hide Border	Hides the group box border. When turned on, the border is not visible.
Add Help	Click to launch the Contextual Help page, which you can use to add help information to aid public users in completing the intake form. The **Add Help** button appears only if Show Label is turned on. Help text added for group boxes should apply to the overall group box content. Help can be added also at the page level, field group level, and field level depending on the scope of the help text.

Page Element	Description
	For more information on adding Contextual Help, see *Adding Contextual Help to Forms*.
License Activity	**Note:** This attribute applies only to the Business Licenses offering. Expand the Display section to view this feature. License activity filtering enables you to control the display of group boxes, depending on the current business license activity selected by the applicant. For more information on setting display filters, see *Configuring Activity Filtering for Business Licenses*.
Control Display	Expand the Display section to the view this attribute. Click to select an element in the form that controls the display of the group box. For more information, see *Displaying Form Elements Conditionally*.
Hide from public user	Expand the Security section to view this attribute. Hides the group box and all the elements in the group box container from the public user at runtime. Only agency staff can view and update information within a group box with Hide from public user turned on. In addition to hiding the UI element from the public user in the interface, the application also secures the back end for that specific UI element, such as preventing any unauthorized access to the fields contained within that UI element using a REST API, for example. **Note:** The Hide from public user setting and the Confidential setting are mutually exclusive. **Note:** You can't apply this setting to group boxes containing fields that have default values or fields that are set as required.
Confidential	Expand the Security section to view this attribute. Turn this attribute on to specify that the user-defined fields within the group box container hold confidential information. At run time, fields with confidential information will be hidden to all users except for users without the appropriate privilege. These users can see the confidential information: • Agency users directly associated with processing the business license. • The public user who entered the information. **Note:** The field does appear in the JSON payload for the page, however the field value will be null.

Page Element	Description
	Note: The Confidential attribute applies only to the Business Licenses offering. **Note:** You can't add a predefined field group to a group box with the Confidential attribute turned on. The Confidential attribute can be set only for pages and group boxes, and it applies only to user-defined fields within those containers. You can't apply the Confidential attribute to field groups. **Note:** The Hide from public user setting and the Confidential setting are mutually exclusive. **Note:** Don't apply this setting to group boxes containing fields that have default values or fields that are set as required.

Example: Nesting Group Boxes

Nested group boxes can be used to represent subcategories of information and to enhance layout options, such as creating columns for form elements.

The following example illustrates nested group boxes, which you achieve by dropping group boxes within group boxes.

This example illustrates an outer group box container with two inner group boxes nested within to logically divide page content.

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Note: The system does not impose a limit to the depth of nested group boxes you can insert. For more complicated pages, for example, you may find that group boxes could be nested to 4–5 levels deep. Make sure to consider how a page with multiple levels of nested group boxes will render on all the devices you intend to support for your user base.

Example: Using Group Boxes to Combine Predefined Elements

In some cases you may want to give the appearance of multiple field groups being combined. You can do this using a group box to act as the outer container for the set of field groups. When using a group box to contain field groups, consider the following items:

- The collapsible attribute of the group box container controls the visibility of the contained field groups. If the group box container is set to be collapsible, when the user collapses that group box, all of the elements within that group box will be hidden.

- If you want the field groups within the group box to be categorized under just the label of the group box, turn off the Show Label attribute of the contained field groups.

In the following example, assume you want to combine the Fence Information and Comment field groups, giving the appearance that Fence Information field group also contains a Comment field.

To combine field groups within a group box container:

1. Open the Add New list in the Elements panel.
2. Open the Layout list.
3. Drag and drop a Group box into the workspace.
4. Select the group box and make these changes on the Group Box Attributes panel:

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Group Box Attribute	Sample Value
Label	Fence Information
Flexible Box Layout	Off

5. Open the Ready to Use list.
6. Open the Field Groups list.
7. Drag and drop the Fence field group into the group box
8. Select the Fence field group, and turn off Show Label on the Attributes panel.
9. Drag and drop the Comment field group into the group box.

10. Select the Comment field group, and turn off Show Label on the Attributes panel.
11. Save your changes.

At runtime, the example steps above produce a single, collapsible section in the form that includes both the Fence Information and the Comment predefined elements.

This example illustrates the collapsed Fence Information group box.

▶ Fence Information

This example illustrates the expanded Fence Information group box containing multiple field groups.

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▲ Fence Information

Type of Work		Front Fence Height	
Type of Use		Rear Fence Height	
Pool Enclosure	⬭	Left Fence Height	
Fence Type		Right Fence Height	
Other Fence Type		Location	
Foundation Type		Corner Lot	⬭
Automatic Closing Gate	⬭	Material	
Lock	⬭	Other Material	
Comment			

Example: Using Group Boxes to Combine Field Groups and User-Defined Fields

Similar to combining field groups within a single group box container, you can also combine field groups and user-defined fields within a single group box container creating the appearance of user-defined fields being part of a delivered field group.

In the following example, assume you need to associate a field with the Fence Information element to capture the color of a proposed fence.

To combine predefined elements and user-defined elements with group boxes:

1. Open the Add New list in the Elements panel.
2. Open the Layout list.
3. Drag and drop a group box into the workspace.
4. Select the group box and make these changes on the Group Box Attributes panel:

Group Box Attribute	Sample Value
Label	Fence Information
Flexible Box Layout	Off

5. From the Ready to Use > Field Groups list, drag and drop the Fence field group into the group box.
6. Select the Fence field group, and turn off Show Label on the Attributes panel.
7. From the Add New > General list, drag and drop a text field into the Fence Information group box.
8. Select the text field, and enter *Color* for the Label in the Field Attributes panel.

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9. Save your changes.

The following example illustrates how at runtime, the group box containing the field group and the user-defined field create the appearance of the manually created field being part of the delivered field group.

Working with Fields

This topic describes how to modify field attributes and add user-defined fields to your intake forms.

When end users are completing an application for a transaction, such as a permit, they enter the required information in fields. Fields can be added to intake forms by:

- Adding predefined field groups to your form. Each field group is delivered with a set of fields.
- Adding user-defined elements (fields) to your form.

Setting Field Attributes

Select a field to view the Field Attributes panel. Fields in predefined field groups and user-defined fields typically have the same set of attributes. Not all attributes apply to each field type.

The type of field you select determines the attributes appearing in the Field Attributes panel. For example, for a number field, you can set a default value and a placeholder value, but for a single-item check box, neither of these attributes apply and therefore don't appear.

The following table describes the field attributes.

> **Note:** Not all attributes apply to every field type. Only the attributes that apply to the currently selected field appear.

Page Element	Description
Remove	Click to remove the selected field from the layout. The **Remove** button appears only for user-defined fields you added manually. You can't remove fields from a delivered field group. > **Note:** > If your form has been used in a production environment, rather than removing a field it is recommended to hide the field. Removing a field that is already storing production data can lead to unexpected results and data inconsistencies.
Label	Add a custom label to the field. > **Note:** > In the case of a user-defined field, the system forces the field ID value to match the Label value, but removes any spaces. The field ID represents how the field appears in the underlying data model. For example, a user-defined field with the label *Additional Requests,* will have a field ID value of > **AdditionalRequests_c.** For more information on working with field labels and field IDs, see the section below named "Working with Field Labels and Field IDs."
Placeholder	Add descriptive text to provide hints for entering data. For example, the placeholder text could read: *Enter date in this format" MM/DD/YY,* or simply *MM/DD/YY.*

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Page Element	Description
	The placeholder value does not get saved to the database when a form is submitted.
Default Value	Enter a default value required for the field. The default value gets saved at runtime if the user does not change it. The control you use to set the default value is consistent with the field type you added to the intake form. For example, for the date field you use a date picker control, for a switch field you use a switch, and so on. > **Note:** > In cases where both the Placeholder and Default Value attributes appear for a field type and you have provided values for both, the default value supersedes the placeholder value. That is, at runtime, users see the default value, not the placeholder value, but if they delete the default value, the placeholder value appears to help users enter a valid value.
Decimal Places	Applies to number fields only. Set the number of decimal places for number fields, depending on what you are measuring and the precision you require. The limit is 10 decimal places. When adding decimal places to a number field, keep in mind that the number of digits contained within a number field can't exceed 16. The total number of digits is the sum of all integer digits and decimal digits. For example, if a field has 2 decimal places, that field has 14 integer digits that can be entered without exceeding any limits. If this limit is reached, this can cause unexpected rounding results.
Reusable	Enable if you want to reuse a user-defined field on other intake forms. When you save the intake form, fields that are set to be reusable appear within the Ready to Use > Fields section in the Elements panel. > **Note:** > A reusable field can't be set to be required or hidden. For more information, see the "Reusing Fields" section below.
Required	Enable if this is a required field for which a user must enter a value. > **Note:** > A required field can't be hidden or reusable. > **Note:** > You can't delete a field that has been set to be required. You must first turn off the Required attribute, save the form layout, and then delete the field. Deleting a required field from an intake form that has already been published may affect forms submitted previously.

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Page Element	Description
Hidden	Hides the field from the user. If a predefined element contains fields that you do not need, select this option so the user does not have access to the field. **Note:** A hidden field can't be required or reusable.
Manage List	Add values for fields containing a list of values, such as check boxes, lists, and so on. **Note:** Depending on the lookup type, the location where you manage the lists differs. For existing lookups delivered on predefined field groups, you use the Lookups page. For lookups that you associate with a user-defined field, such as a drop-down list, you use the Custom Lookups page. The **Manage List** button takes you to the appropriate page for the lookup type, with the correct list displayed. For more information, see *Defining Fields Displaying a List of Values*.
Add Help	Click to launch the Contextual Help page, which you can use to add help information to aid public users in completing the intake form. Help text added at the field level should apply specifically to that field. You can also add help to predefined elements, group boxes, and pages, depending on the scope of the help text. For more information on adding Contextual Help, see *Adding Contextual Help to Forms*.
Add Logic	Click to add scripting logic using the Groovy programming language. **Note:** For user-defined fields that you have added to your intake form manually, the **Add Logic** button appears only after you have saved your form. For more information on adding logic to your forms, see *Adding Logic*.
Edit	Click to display the Rich Text Editor dialog box for entering formatted text to the application form. Appears only for rich text areas. For more information on rich text areas, see *Adding Rich Text Areas*.

Using the Field Details Section

Under the main controls used to configure fields described above is the field details section. It provides additional information that you may need to know for various tasks such as reporting or writing business logic.

Page Element	Description
Business Object	The business object to which this instance of a field belongs.

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Page Element	Description
Name	Also referred to as the field ID. This value is the internal name of the field as it appears in the database view object, the REST request JSON, or how you'd refer to it in a Groovy script for example.
Data Type	The data type of the values the field stores, such as *string* or *number.*
List ID	Applies to lookup fields, containing a list of values (LOVs). Knowing this value can make it easier to confirm the lookup list you need to access if values on the list need to be updated. **Note:** Depending on the lookup type, the location where you manage the lists differs. For existing lookups delivered with the Fusion offering, you use the Lookups page. For lookups that you associate with a user-defined field, such as a drop-down list, you use the Custom Lookups page.

Adding User-Defined Fields

Note: You can add user-defined fields to group boxes only. You can't add user-defined fields directly to a page or to a delivered field group.

To add a user-defined field:

1. Expand the Add New section of the Elements panel.
2. Open the Layout list.
3. Add a group box to the current page.
4. Open the General list in the Add New section.
5. Select a field type, and drag and drop it in the desired group box.

   Note: User-defined fields must be contained by a group box.

6. Select the user-defined field you added, and use the Field Attributes panel to configure your field.

   Note: User-defined fields and fields provided in predefined field groups use the same set of attributes.

7. Save your changes.

   Once saved, the system applies your user-defined field to the application data model so field data can be captured, stored, and retrieved.

Working with Field Labels and Field IDs

Fields are identified by the label and the field ID. The label is displayed on the user interface for the end users, and the field ID is used internally at the database level. In some cases, such as when working with reporting or when writing business logic, you will need to know a field's label and the associated field ID.

All fields have a field ID whether they are field group fields or user-defined fields. A user-defined field has **_c** appended to the field ID to indicate that it is custom. The field IDs for user-defined fields are automatically generated by concatenating the label when they are first saved. For example, the field ID for the label *My Field* is **MyField_c.**

Use the Field Details section in the Field Attributes panel or the Field ID Search feature in the Groovy Script Editor to find the field ID for the selected field.

For more information on the Field Details section, see the "Using the Field Details Section" in this topic.

For more information on the Field ID search feature, see *Adding Logic*.

When adding a user-defined field, a default label and field ID is automatically assigned based on the order in which the field was added, such as *Field 1* (**Field1_c**), *Field 2* (**Field2_c**), and so on. When you first save a user-defined field, the field ID gets created at the database level and can't be changed.

> **Note:** If you save a user-defined field *without* providing a custom label, the field ID will remain the default field ID value, even if you provide a custom label later. For example, if you save a user-defined field with the default label of *Field 1* and later change it to *My Field,* the field ID will still be **Field1_c.**

When you add a field and save it, that field gets created in the database, and remains in place regardless if you remove it from the form design later. If you remove a field from a form that has already been saved, the string **- Retired** is appended to the field ID, which helps you to identify and avoid them when setting up features like reports or audits, for example. These unused fields are considered orphaned fields because they are no longer mapped to a field in the intake form.

Because there are a limited number of user-defined fields that can be created for a single intake form (roughly 625), there is an internal process in place to manage orphaned fields. To conserve database resources, if you later create a field of the same name and the same data type as an orphaned field, the orphaned field may be assigned to the new field based on the following criteria:

- Unique field IDs, such as *IamaContractor_c,* are reassigned if the orphaned field ID value and data type the same.

- Default field IDs, such as *Field1_c,* are reassigned if the orphaned field ID is also default and the data type is the same.

Choosing User-Defined Field Types

Expand the Add New section in the Elements panel and open the General list to view the field types you can add to your forms.

> **Note:** You must first add a group box to your form, and then you can drop one or more user-defined field types into the group box container.

Field Type	Description
Text field	Adds a character field to hold text values.
	A text field is limited to a length of 200 characters. If you need to provide a field that enables users to enter more characters, consider a text area field.
Number field	Stores numeric values. The value can be an integer or it can contain decimals depending on how you set the Decimal Places attribute.

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Field Type	Description
	Note: The total number of digits allowed is 16.
Date field	Stores date values, such as 09-26-2020.
Date time field	Stores date *and* time values, such as 09-26-2020 11:25 AM.
Switch	On-off field, such as an "active" field indicating whether an item is active or not, which would be either on or off (yes or no).
Text area	A long character field enabling the user to enter longer descriptions. A text area field is limited to a length of 1500 characters.
Rich text area	A long character field enabling the user to enter longer descriptions or instructional information that can be formatted using a rich text editor. For more information on rich text area fields, see *Adding Rich Text Areas*.
Single-item check box	Displays a single option for the end user to select, such as, "I have read the terms and conditions, and I agree to the terms and conditions." This is different from a check box set, which displays a list of multiple items for an end user to select. In the case of a single-item check box, the label of the field acts as the text the end user reads and responds to on the application form.
Check box set	A set of check boxes from which the end user can make multiple selections. For example, the label for the check box set might be Heating Source(s), with values such as *Oil, Gas, Wood, Solar,* and so on. This field needs to be associated with a list of lookup values. For more information, see *Defining Fields Displaying a List of Values*.
Radio button set	A set of radio buttons from which the end user can make a single selection. For example, the label for the check box set might be Fence Type, with values such as *Stone, Wood, Vinyl,* and so on. This fields needs to be associated with a list of lookup values. For more information, see *Defining Fields Displaying a List of Values*.
Drop-down List	A drop-down list allowing the user to select a single item. This field needs to be associated with a list of lookup values. For more information, see *Defining Fields Displaying a List of Values*.
Multi-select List	A drop-down list allowing the user to select multiple items. This field needs to be associated with a list of lookup values. For more information, see *Defining Fields Displaying a List of Values*.

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Field Type	Description

Reusing Fields

You may want to include some user-defined fields on multiple intake forms. Rather than recreating the same field multiple times for each intake form, you can create the field on one intake form and set it to be reusable, which enables that field to be available to add to other intake forms for your agency.

> **Note:** Fields set as reusable can be used on intake forms within the same offering. For example, if you create a reusable field in the Permits offering, and you have also licensed the Planning and Zoning offering, that reusable field *will not be* available to use for Planning and Zoning intake forms.

Prior to setting a user-defined field to be reusable, consider these items:

Consideration	Description
Values	If a reusable field is added multiple times to the same form design, it must be intended to reflect the same purpose and value.
Fees	Reusable fields can't be incorporated in the fee calculations executed by decision models defined in Oracle Integration Cloud.
Deletion	Currently, you can't delete reusable fields from the Fields list in the Elements panel. You can remove unnecessary fields from the intake form.
Limited quantity	You can define up to 625 fields as being reusable.
Required fields	Required fields can't be set to be reusable.
Hidden fields	Hidden fields can't be set to be reusable.
Groovy	You can add logic to reusable fields, however, the logic should be specific to that field only. If the logic applies to the transaction type level, such as a specific permit type, then add the logic at the transaction type level using the **Add Logic** button in the toolbar.
Creation	The reusable field is created, when you click **Save.** > **Note:** Once the field is saved with the Reusable switch turned on, the field is reusable, *and the Reusable switch becomes disabled.* You can't convert a reusable field to be a non-reusable field. Likewise, you can't convert a non-reusable field to be a reusable field, once the intake form design including the field(s) has been saved.
Updating	Changing the label, placeholder, or default value on any reusable field will update those values for all transaction types using the field.

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Consideration	Description
Cloning	When you clone a transaction type, reusable fields are also cloned. **Note:** During the cloning process, the new intake form design is saved. The save process, disables the Reusable switch for both reusable and non-reusable fields.

To make a user-defined field reusable:

1. Review the guidelines above and carefully determine if the field should be reusable.
2. Select the user-defined field.
3. Turn on the **Reusable** switch in the Field Attributes panel.
4. Click **Save.**
5. Confirm that the label for the reusable field appears in the Ready to Use > Fields section in the Elements panel.

Hiding Fields

In some cases, you may not want to display all of the fields associated with a delivered field group you've added to a form. You can hide unneeded fields so they do not appear to the user at runtime.

To hide fields:

1. Place your cursor in the field to select it.
2. Turn on the Hidden switch on the Field Attributes panel.

Once you have hidden a field, the design-time interface continues to display the field, but places a darkened background around the field to indicate it is a hidden field. The application does not display the field at runtime.

This example illustrates the shading around a field to indicate that is hidden during design time.

In this example of the design-time interface, Location and Material are not set to be hidden, but Corner Lot and Other Material are. Notice that the hidden fields display with the darkened background.

The following example of the runtime illustrates that the hidden fields do not display when an end user accesses the form. Only Location and Material render on the form at runtime, while Corner Lot and Other Material are not rendered.

This example illustrates the fields indicated as hidden in the previous example in design time do not appear on the form at runtime.

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Location

Material

> **Note:** Required fields can't be hidden fields. If you set a field to be required, the Hidden switch becomes disabled. If a field is set to be hidden, and you set it to be required, the system sets the Hidden switch to off automatically and disables the Hidden switch.

Adding Rich Text Areas

This topic describes how to add rich text areas to your intake forms so that you can display formatted text in application intake forms.

Rich Text Area Overview

In some cases, you may need to add rich text areas to your application forms so that you can display formatted text for users filling out the application. For example, if you needed to provide additional information, such as instructions or reference material, you can provide that within a rich text area.

> **Note:** The rich text area provides a way for *your agency* to provide read-only formatted text for end users. A rich text area does not enable the end user to be able to insert formatted text into the form.

When you add a rich text area element to your form, an Edit button appears in the Field Attributes panel when you select the rich text area element. The Edit button launches the Rich Text Editor dialog box.

This example illustrates the Rich Text Editor dialog box displaying bold, colored, and italicized text; normal text; and text within a numbered list.

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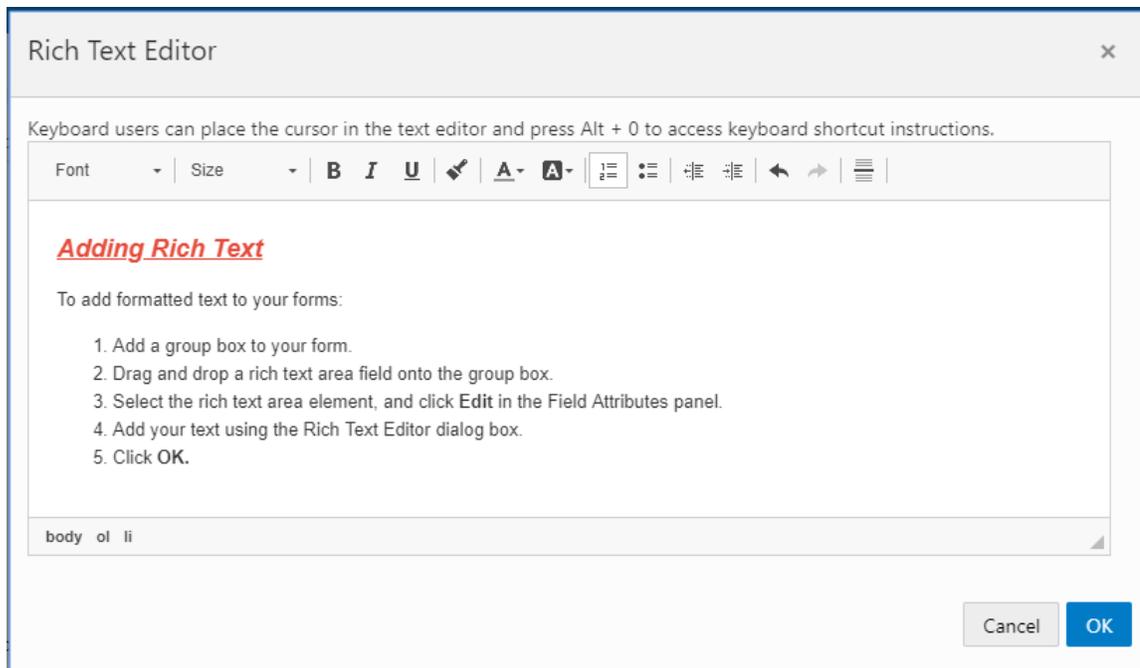
The Rich Text Editor dialog box provides these formatting options:

- Font size
- Bold, italic, underline
- Copy formatting
- Text color
- Text background color
- Numbered and bulleted lists
- Undo and redo
- Increase and decrease indentation
- Horizontal line

Adding a Rich Text Area to a Form

To add a rich text area:

1. Insert a group box into your form where you want to place the rich text area.
2. From the Add New > General list, drag and drop a rich text element into the group box.
3. Select the rich text area element.

   This example illustrates the rich text area element being selected prior to rich text being added.

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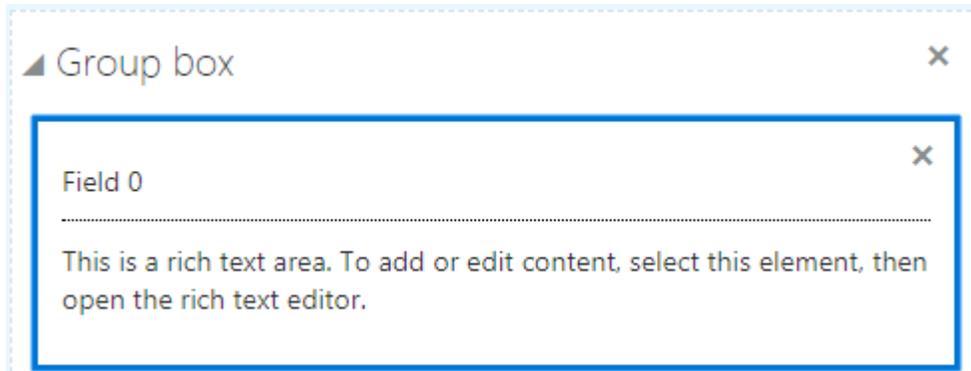
4. In the Field Attributes panel, click **Edit** to open the Rich Text Editor dialog box.

> **Note:** If needed, you can use the **Description** field to enter a description of the contents of the rich text area for other implementation team members. The description you enter only appears in the designer; it is not be displayed at run time.

5. Add text and use the desired formatting options.
6. Click **OK.**
7. Save your form layout.

Defining Fields Displaying a List of Values

This topic describes how to add a list-of-values (LOV) to user-defined fields.

Some of the user–defined fields that you can add to your form are considered "list-of-value" fields, or LOV fields. List-of-value fields enable end users to select field values from a predefined set of values (a lookup) to populate the field when entering data on the form. For example, radio sets and drop-down lists are list-of-value fields.

The list of values is a *lookup type,* and the individual items in the lookup type are *lookup values.*

When adding a list-of-value field type to your application form, you first add the field to the form, just as you would any other field. You then either select an existing lookup type to associate with the field, or you can create a new lookup type if needed. To manage lookup types you use the Custom Lookups page.

This example illustrates the Lookup Type page.

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A list of values is a set of fixed field values defined for a specific purpose that is not expected to change over time. Removing items from the list, for example, could make previously saved data invalid.

An example of a field with a list of values could be the Property Zone Type field, where the values for a user to select are: *Business, Residential,* and *Agricultural.*

Once you have clicked the **Select** button, for a lookup type row, a check mark appears next to that lookup type to indicate it is the lookup type associated with the current LOV field.

This example illustrates the check mark that appears to the left of the lookup type to indicate lookup type selected for the current field.
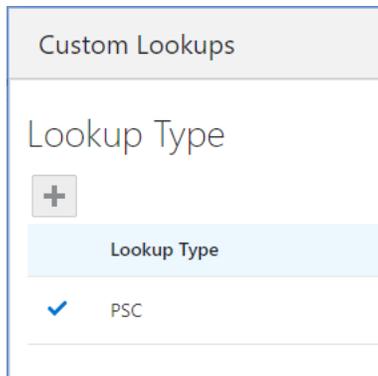
Note: A single user-defined lookup type should be used by only one user-defined field.

Note: Once you have saved a user-defined field with a lookup type selected, its lookup type can't be changed.

Identifying List of Value Type Fields

You associate a list of values with these field types:

- Radio button set
- Check box set
- Drop-down list
- Multi-select list

The following example illustrates a radio set, which is a set of radio buttons allowing a user to select a single value from the list of values.

Text surrounding the image describes it.
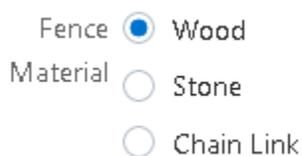
The following example illustrates a check box set, which is a list of multiple items allowing a user to select multiple values from the list of values.

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Text surrounding the image describes it.

The following example illustrates a drop-down list, which is a list allowing a user to select a single value from the list of values.
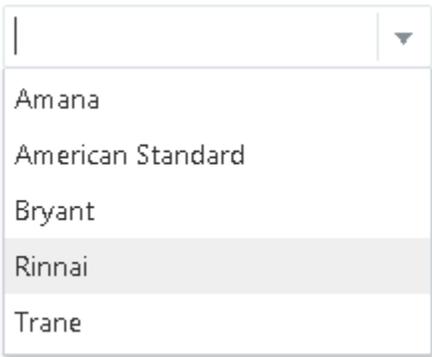
Text surrounding the image describes it.

The following example illustrates a multi-select list, which is a drop-down list allowing a user to select multiple values from the list of values.

Text surrounding the image describes it.
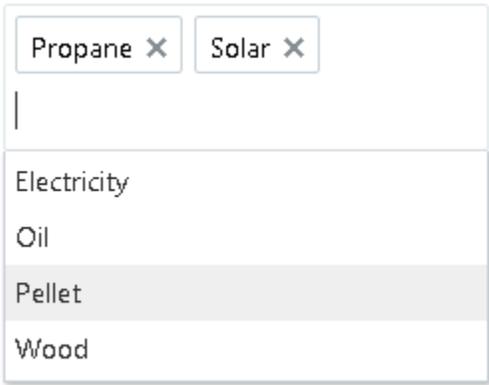
Selecting an Existing Lookup Type for a Field

To select an existing lookup type:

1. Add the list-of-value type field to your form layout.

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2. Select the new field.
3. Click **Manage List** in the Field Attributes panel.

   This opens the Lookup Type page.
4. On the Custom Lookups page, identify the lookup type to associate with the list-of-value field you added.

   Use the Meaning column to identify the appropriate list, or you can click **View More Details** to view the description and the actual lookup values in the lookup type.
5. Click **Select** in the Actions column to associate the desired lookup type with your field.

   > **Note:** Once you select a lookup type, the Lookup Type page closes automatically. You can click **Manage List** to confirm your selection if needed.

6. Save the form layout.

Adding a New Lookup Type for a Field

1. Add the list-of-value type field to your form layout.
2. Select the new field.
3. Click **Manage List** in the Field Attributes panel.

   This opens the Lookup Type page.
4. On the Custom Lookups page, click **Add.**
5. On the Lookup Type Details page, enter these values.

Page Element	Description
Lookup Type	The system name, beginning with *PSC,* using uppercase letters, numbers, or underscores. For example, *PSC_ROOF_TYPE.* > **Note:** > All lookup types created and used within the Intake Form Designer *must* begin with *PSC.*
Meaning	Add a short, user-friendly description. This value appears in the Meaning column of the list of lookup types, which can help to identify the contents of the list. For example, *Roof Type.*
Description	Provide any additional information to help identify the purpose and intended usage of the lookup type.

6. Add lookup values to the lookup type.
   a. In the Look Up Values grid, click **Add.**
   b. Modify these values:

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Page Element	Description
Lookup Code	A short code used to identify the lookup value to the system, like a key value.
Display Sequence	If required, you can set the sequence in which lookup values display in the lookup list, using a numeric sequence.
Enabled	By default, a new lookup value is enabled. To disable a lookup value, turn off this switch.
Start Date	Date on which a lookup value becomes valid.
End Date	Date on which a lookup value is no longer valid.
Meaning	The value that displays to the end user at runtime to select from the list.
Description	Any additional information to describe the content or purpose of a lookup value.

   c. Click **Save.**

   d. Repeat for additional lookup values in the lookup type.

Example:

This example illustrates the Lookup Type Details page, showing a completed lookup type with a set of lookup values.

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7. On the Lookup Types page click **Select** to associate the new lookup type with the field.

   Or, click **Close** to associate the lookup type with another field later.

8. Save the form layout.

Understanding the Scope of Lookup Types Created in the Intake Form Designer

The items in the following table describe the scope of the list of value fields that you can create and use in the Intake Form Designer.

Scope Item	Description
User-defined fields	You can create a list of values for user-defined fields only. You can't create a list of values for a field contained within a delivered field group. Some of the list of value fields in predefined field groups are associated with lookup lists that you can manage using the **Manage List** button. **Note:** Once you create a lookup list for a user-defined field and publish the intake form, that lookup list can also be viewed outside of the designer using the Lookup Type page. However, it is recommended to manage lookup lists for user-defined fields only in the Intake Form Designer. For more information on the Lookup Type page, see *Setting Up Lookups*.
Intake Form Designer-only	The lookup types that you create within the Intake Form Designer can be used *only* within the Intake Form Designer. Only in specific circumstances can you associate a field in your form layout with lookup types created outside the Intake Form Designer. The interface used to create and select lookup types for use in your intake forms looks identical to the Lookups page (Navigator > Common Setup > Lookups), which is the interface used to manage lookups for Public Sector Community Development offering pages, such as the permit offering or the planning

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Scope Item	Description
	and zoning offering. However, the lookup types created on the Lookup pages *can not be used* for your intake forms nor visa versa. For example, you can't use the UOM Type lookup type (ORA_PSC_CC_UOM_TYPE) from the Lookup Type page for your intake form fields.
Other licensed offering(s) in the same database	In select cases, if you are an existing Fusion Application Cloud customer, and you have other licensed offerings in the same database as the Public Sector Compliance and Regulation offerings, you can utilize lookup types not beginning with *PSC* for your intake form fields if required.

For example, if you also license Fusion Application Cloud for Financials, which shares the same database as the Public Sector Compliance and Regulation offerings, you can select lookup types using the Intake Form Designer interface, assuming you are aware of the values it displays and how it is maintained.

To access these lookup types, you need to modify the filtering on the Lookups page. By default, the Intake Form Designer filters on PSC or the exact name of the selected lookup.

Refer to the following example for more information on modifying the filtering option. |

Example: This example illustrates modifying the default filtering for the Intake Form Designer lookups.

To modify the filtering on the Lookup Type page:

1. Click the Filter By button.
2. Select how you want to filter, as in by *Lookup Type* or by *Meaning.*
3. Select the operator to use for your filtering, such as *Starts with, Contains,* and so on.
4. Click **Apply.**

Displaying Form Elements Conditionally

This topic describes how you can show or hide elements on your forms depending on selections users make on other form elements.

You can configure some form elements to be either displayed or hidden, depending on the value of other fields in the form. Form elements that can control the display of other elements are *controlling elements,* and form elements that can be shown or hidden based on the value of controlling elements are *controlled elements.* The following table describes the elements involved in conditional display.

For example, assume you wanted to display the Photovoltaic field group only if the user has selected the Solar single-item check box in a "Building Options" section of a permit application form. In this case, you can set the Solar single-item check box as the controlling element for the Photovoltaic field group, having the Photovoltaic element (the controlled element) display only when the Solar single-item check box is selected.

Display Type	Element Types	Description
Controlling Element	• Single-item check box • Switch	Form elements that determine whether another form element is displayed, depending on the value selected by the user.

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Display Type	Element Types	Description
		Note: Only single-item check boxes and switches can be controlling elements.
Controlled Element	• Field group • Group box • Page	Form elements that can be displayed conditionally, depending on the value of the associated controlling element. To control when these elements appear, click the **Control Display** button on the Attributes tab, which appears only for these element types.

Procedure: Configuring Conditional Display

To configure conditional display for a form element:

1. Add the controlling element to a group box in your application form.

   The controlling element can be a user-defined element of these types:

   ○ Single-item check box

   ○ Switch

   > **Note:** The controlling element must appear before the controlled element that references it.

2. Add the form element that you want to display or hide conditionally (the controlled element).

   The controlled element can be:

   ○ Field group

   ○ Group box

   ○ Page

3. Select the controlled element you just added so that it is the active element in the layout.
4. In the Attributes panel, click **Control Display.**
5. On the Control Element Display dialog box, click Add to add a row to the grid, then double-click in the newly added row, and make the appropriate selections.

   > **Note:** Once you add a row to the grid and activate it by double-clicking, you must enter value before clicking OK.

   This example illustrates the Control Element Display dialog box set to show a condition of a controlling element, such as hide this element if a switch element in the form is false.

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Control Element Display

If you add multiple rows of display conditions in the grid, and any display condition evaluates to true, the element will be hidden.

Display ▲	Controlling Element		Value	
Hide if	Application Options - Plumbing	▼	False	▼

Cancel　　OK

Element	Description
Add	Click to add a new row to the grid. After adding a row, double-click the row to make it active. **Note:** If you add multiple rows of conditions to the grid, the system assumes an "OR" operator exists between each row. If any of the conditions are confirmed, that display option will be enabled.
Delete	Click to delete the selected row in the grid.
Display	Currently, *Hide if* is the only display option. You hide an element based on the value of the controlling switch or single-item check box, otherwise, the element is displayed.
Controlling Element	Select the form element that will control the display of the selected predefined form element or group box. The drop-down list displays all user-defined switches and single-item check boxes that exist *on or before* the current page in the form. Selecting the controlling element appearing before the controlled element adheres to the logical sequence a user would take when completing the application form. **Note:** If the selected element is a group box, the drop-down list does not display any switches or single-item check boxes within that group box.

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Element	Description
Value	Select the value of the controlling element that determines when the display option will be rendered: ○ *True:* A condition is true if a single-item check box is selected or a switch is on. ○ *False:* A condition is false if a single-item check box is deselected or a switch is off.

6. Click **OK.**
7. Save your form.

The controlled element appears with an icon below the element label to indicate it is an item whose display is controlled by another element in the intake form.

This example illustrates the icon displayed for a controlled element.

Working with the Conditional Display of Pages

This section describes items to consider when using the conditional display feature with pages, which includes:

- Hiding a page based on a controlling element.

- Hiding all elements on a page.

Note: A page can become hidden if the page itself is a controlled element and also if all items on the page are controlled elements and all become hidden.

You can control the display of an entire page based on the value of a controlling element in the intake form. Doing so introduces dynamic display features to your intake form that can streamline the form significantly. Based on the user's selection of a single-item check box or a switch can determine whether a page displays or is hidden, providing user's an improved experience. Using this feature, only the pages relevant to the user's transaction would be displayed. As selections are made, the pages appear or become hidden accordingly.

This example illustrates single-item check boxes controlling the display of the corresponding intake form pages.

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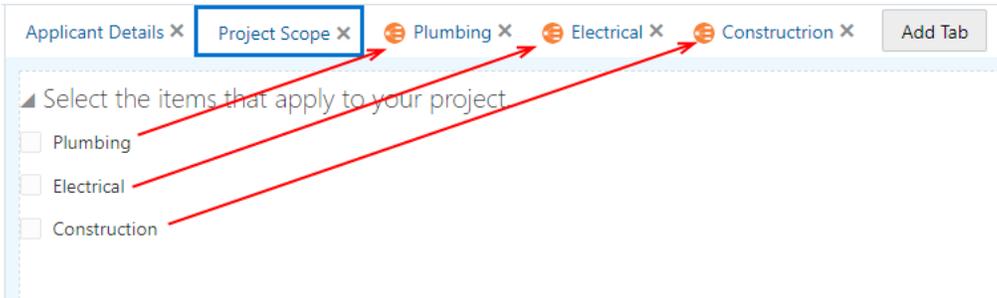
> **Note:** The train stop drop-down list also changes dynamically to reflect the current set of pages as pages appear or become hidden.

In cases where all of the elements on a particular page are controlled elements and each element's controlling element's display conditions cause all the elements on the page to be hidden, the system will hide the entire page.

In the following example, each element on the page is a controlled element. If each element becomes hidden as a result of the values selected for the controlling element, the entire page becomes hidden.

This is an example of all elements on a page being controlled elements. Details are in the surrounding text.
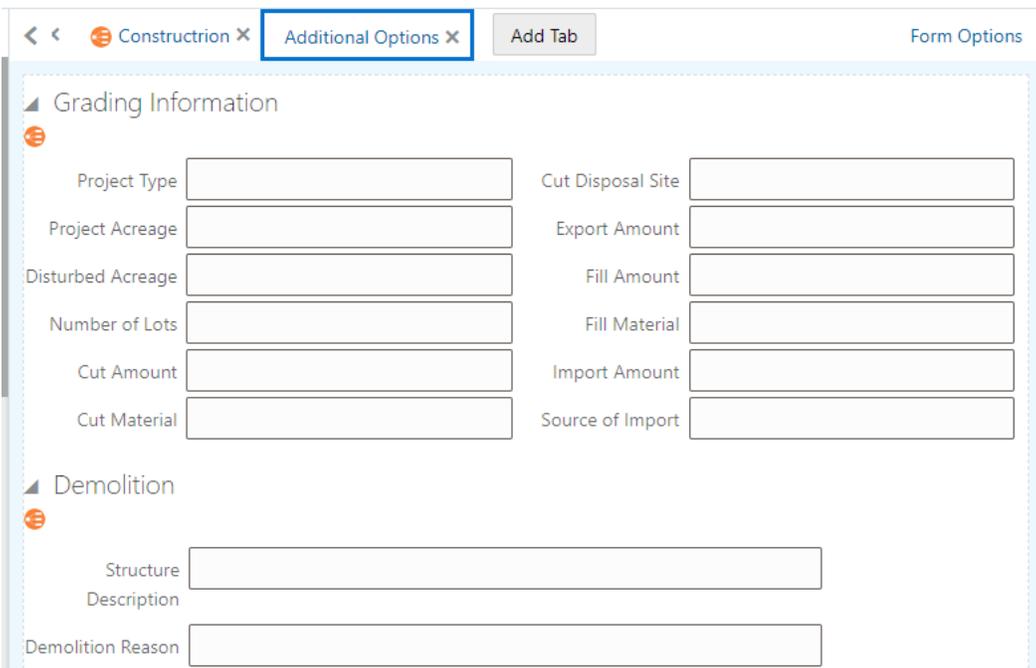
Adding Logic

This topic describes how to add business logic to intake forms using the Groovy programming language.

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Groovy Overview

You can add business logic to your intake form using the Apache Groovy programming language.

Groovy is an:

- Object oriented language that can be used for scripting or programming.
- Extension of the Java programming language, using similar constructs and syntax.

For Java developers, Groovy can be compared to other programming languages, such as Python or Ruby, that don't intend to replace Java, but act as a companion language, extending capabilities and providing additional flexibility.

When designing intake forms, you can add Groovy scripts to provide:

- Validators
- Triggers
- Object functions
- Global functions

The logic can be added at these levels:

- Field: Field-level logic applies only to the currently selected field.
- Object: Object-level logic can be used within a single intake form design.
- Global: Global functions can be called from any intake form in your offering.

The types of scripts you can add depends on the level on which you are adding the logic (field or object).

Script Type	Level
Validator	Field and Object
Trigger	Object
Object Function	Object
Global Function	Object

Before adding Groovy to your intake forms, you will need to become familiar with the Groovy language and how it is intended to be used within Oracle Fusion applications.

For more information on Groovy usage within Oracle, refer to *Oracle Applications Cloud: Groovy Scripting Reference.*

For more information on Groovy usage within Oracle, refer to *Oracle Applications Cloud: Groovy Scripting Reference.*

For general information on the Groovy language, see *Apache Groovy documentation.*

Working with the Groovy Script Editor

To access the Groovy Script Editor:

1. Save the intake form you are creating.

   The field(s) you reference in your logic at the field level or the object level must exist in the underlying database object, which occurs when you save the form after adding any new elements.

   > **Note:** For the user-defined fields you added manually to your intake forms, the **Add Logic** button doesn't display in the Field Attributes panel *until* you have saved your intake form.

2. Click the **Add Logic** button in the Field Attributes panel or in the intake form header.

   - When clicking **Add Logic** in the Field Attributes panel, your code operates at the field level.
   - When you click **Add Logic** in the intake form header, your code operates at the object level.

   This example illustrates the separate field-level and object-level **Add Logic** buttons.

3. Use the Groovy Script Editor to add the logic, script name, error message, and additional options, depending on the type of script you are writing.

The following example illustrates adding validation logic to a field using the Groovy Script Editor.

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Groovy Script Editor

Validators

```
1 /* Field Validator for field LaborCost_c Custom Object LNP1IDFencePermit_c.
  This logic is global and will be active anytime this field is in an intake
  form. */
2
3 newValue > 0
```

Script Name *

LaborCost_c_validator ▼

Description

Value Greater Than 0

Error Message *

The value entered for Labor Cost must
be greater than zero.

Field ID Search

Label

▼

Field ID

Save   Remove   Close

Only the page elements that apply to the type of script you are writing appear in the editor.

Page Element	Script Type	Description
Work Area	All	In the work area, add your logic. The first line in the comments (/* <text> */) is automatically generated, and it provides you the field name and object name as they are referenced internally. For a field contained in a delivered field group, the field name will be similar to the field label, such as *DemOverallHeight*. In the case of a user-defined field, the field name will match the field label you have entered, with a "_c" as a suffix to indicate it is a custom field. For example, if you have a user-defined field named Rooms, the field name appearing in the script will be *Rooms_c*. The custom object name is the type code as defined on the Transaction Type page, and it is preceded by the offering code, such as *LNP1* or *PZ1* and a "_c" suffix. LNP1 is the prefix for permits and PZ1 is the prefix for planning and zoning applications. For example, if for a permit the Transaction Type Code is *Fence*, the custom object name in the script will be *LNP1Fence_c*.
Script Name	All	By default, the script name follows this structure:

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Page Element	Script Type	Description
		field_script type or object_script type For example, the user-defined field Years Experience would have the following default validator script name: *YearsExperience_c_ validator.* You can change the script name if needed. To add multiple scripts of the current type, select *New* from the drop-down list.
Description	All	Add text to describe the purpose of the script.
Type	Triggers	Used only for triggers. Defines when the trigger runs, such as during the *Create* event. See the "Add Triggers" section below for more information.
Error Message	Validators Triggers	Provide the message that the system displays the user to correct any issues. For example, in the case of a validator script, the message appears if the data entered for the field does not pass the validation logic.
Field ID Search	Validators Triggers	Use the **Label** field to search for the **Field ID** value, which reflects the name under which the field is stored in the database and how you'd refer to it in your script.
Parameters	Object Functions Global Functions	Used only for object functions and global functions. Enables you to define the parameters the function will accept.
Return Type	Object Functions Global Functions	Used only for object functions and global functions. Enables you to set the data type for the return value of the function.
Error Message	Validators Triggers	Provide the message that the system displays the user to correct any issues. For example, in the case of a validator script, the message appears if the data entered for the field does not pass the validation logic.
Save	All	Saves the current code.
Remove	All	Removes the business logic from the associated field or object.

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Page Element	Script Type	Description
		This may be required in some cases prior to removing the field from the intake form.
Close	All	Closes the editor without first saving any changes.

Note: While you can delete fields with Groovy logic associated with them, make sure the Groovy logic evaluates to True prior to deleting the field, otherwise you risk making the entire transaction type invalid.

Note: When referencing a field for *field level* logic, use *newValue* and *oldValue* to reference the current field value. At the object level, use the internal field name, such as *YearsExperience_c.* You can access the internal name of the field a few ways. You can select the field, and click **Add Logic,** to see how the field is referenced in the Groovy Script Editor. You can also review how the field is referenced in the JSON payload from a REST request, such as a describe request.

Setting the Scope of a Groovy Script

The following table outlines the possible scope of a Groovy script.

Scope	Description	Where Set
Field	You can add Groovy logic to act on a single field. The code you add runs only against the selected field. You can add Groovy to fields in delivered predefined field groups or to user-defined fields you have added manually.	Select the field to which you want to add validation logic, and click **Add Logic** in the Field Attributes panel for that field.
Object	If your script involves more than one field, you need to add that code at the object level. The *object* refers to the current intake form you are creating. For example, if you are creating a fence permit, the logic you add for the current object applies to fields in that fence permit definition.	When in the designer with the intake form open, click the **Add Logic** button at the top of the form, next to the **Preview** button.
Global	You can create global functions that can be called by any field-level script or object-level script in your offering.	When in the designer with a intake form open, click the **Add Logic** button in the header at the top of the form. You can access the Global Functions option only by opening the Groovy Script Editor at the object level.

This example illustrates the Groovy Script Editor at the field level. Details are in the surrounding text.

Note: When you add logic at the field level, you can add Validator scripts only.

This example illustrates the Groovy Script Editor at the object level. Details are in the surrounding text.

When you add logic at the object level, you can add these types of scripts:

- Validators
- Triggers
- Object Functions
- Global Functions

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> **Note:** For scripts at the field level use *newValue* and *oldValue* to reference the current field. At the object level, use the field name, such as *NumberofRooms_c* to reference fields.

Work With the Transaction Type Data Structure

Accessing data stored within the transaction type business object requires and understanding of the underlying data structure. To understand the data structure, you need to become familiar with the JSON payload for a transaction intake form.

Use your REST client utility such as cURL or Postman to access the REST endpoint for an intake form.

You can use a "describe" request to view the data structure of the intake form, using a GET operation. For example:

```
https://servername.fa.us2.oraclecloud.com/fscmRestApi/resources/11.13.18.05/LNP1Id<transaction_type>_c/
describe
```

This example illustrates the parent-child relationship of the data within a transaction type.

```
Transaction Type Parent
{
"LnpRecordKey"
 "LnpRecordId"
 "VersionType"
.
.
.
.
"UserDefinedA"
"UserDefinedB"
"links":[
```

```
Transaction Type Children
{
.
.
FieldGroups
LnpGlobalCustom
RecordAuthorizedAgent
RecordComment
RecordContractorLicense
RecordParcel
RecordParcelAddressOwner
.
.
}
```

The describe results show you the metadata for the business object, such as the name, type, and so on, such as LnpRecordKey, integer, and so on.

You can also submit a request to access data for a specific transaction by including the LnpRecordKey value to the request. For example:

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```
https://servername.fa.us2.oraclecloud.com/fscmRestApi/resources/11.13.18.05/LNP1Id<transaction_type>_c/
<LnpRecordKey>
```

This example illustrates transaction type JSON returned in a REST client.

```
1   {
2       "LnpRecordKey": 300100185175048,
3       "LnpRecordId": "53",
4       "VersionType": "O",
5       "Classification": "PMT",
6       "Status": "Submitted",
7       "SystemStatus": "SUB",
8       "Applicant": 300100170576056,
9       "PersonPreNameAdjunct": "MR.",
10      "PersonFirstName": "Peter",
11      "PersonMiddleName": null,
12      "PersonLastName": "Skate",
13      "PersonNameSuffix": null,
14      "PersonTitle": null,
15      "DateOfBirth": null,
```

The top portion of the JSON reflects the parent object, and the sections within the "links" block are the child objects. The parent object contains attributes from the transaction type, some general field groups, such as Application and Applicant, and any user-defined fields you have added.

The majority of the fields in the field groups reside in a single object, the FieldGroups object (FieldGroupsVO). Reusable fields reside in LnpGlobalCustom object (LnpGlobalCustomVO).

> **Note:** Lnp refers to the Permits offering. Other offerings, such as Planning and Zoning or Business Licenses, use other naming conventions, such as PnzGlobalCustomVO.

Knowing the object on which you are writing your logic is essential for achieving the desired scope of your results. When you write logic at your transaction type level, as in `Custom Object LNP1FencePermit_c`, that logic applies locally, only for that transaction type. If you write logic at a child object level, as in `Custom Object FieldGroupsVO`, that logic is global and would apply to any instance of that field group or field group field in any transaction type where it appears.

> **Note:** Be very careful when writing logic globally to the FieldGroups child object. Logic that applies in one scenario, may not apply to all. Logic at the FieldGroups level always fires even if a particular field in that object isn't used in the current transaction. If you write logic at the FieldGroups level, consider including code to check if the value(s) of field(s) is not null prior to running a validation, for example.

When you open the Groovy Script Editor, comments at the top of the work area indicate where the logic you write will apply. For example:

```
/* Object Validator for Custom Object LNP1FencePermit_c */
```

What element you have selected in the workspace and where you click the **Add Logic** button (in the header or in the Field Attributes panel) determines where your logic applies, either locally to the current transaction type only, or globally. The following table provides selected scenarios to illustrate how the comments at the top of the work area indicate the scope of the logic for that script.

Workspace Selection	Comment	Logic Scope
1. Select a field in a child field group, such as Front Fence Height in the Fence field group. 2. Click **Add Logic** in the Field Attributes panel.	`/* Field Validator for field FenHeightFront Custom Object FieldGroupsVO */`	The Logic applies to the Front Fence Height field in the selected field group. This field is stored in the child Field Groups view object, where all other fields appearing in field groups are stored. Logic written at this level for this

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Workspace Selection	Comment	Logic Scope
		field will apply globally to all instances where this field group is used.
1. Select a field in a child field group, such as Front Fence Height in the Fence field group. 2. Click **Add Logic** in the header.	`/* Object Validator for Custom Object FieldGroupsVO */`	The Logic applies to the Field Groups view object, and logic applies globally to all instances where this field group is used. Because the logic is written at the object level it can apply to multiple fields in the Field Groups view object. **Note:** Most field groups are considered child objects with the fields being stored in the Field Groups view object. Applicant and Application are considered parent objects, with their fields stored in the transaction type parent object.
1. Select a user-defined field (in this case Years Experience). 2. Click **Add Logic** in the Field Attributes panel.	`Field Validator for field YearsExperience_c`	The logic applies to the user-defined field *Years Experience* locally for that transaction type. **Note:** If the field is set to be reusable, then the logic you add applies to all instances where that field is used.
1. Select a group box or page tab. 2. Click **Add Logic** in the header.	`Object Function for Custom Object LNP1IDFencePermit_c`	The logic applies locally to multiple fields to the current transaction type.
1. Reusable user-defined field selected. 2. Click **Add Logic** in the Field Attributes panel.	`Field Validator for field ContractorName_c Custom Object LnpGlobalCustomVO`	The logic applies globally to that reusable in *any* intake form where it is used.

When you are writing logic on a field or object at the child level, such as FieldGroups, you can reference the fields that reside on that object directly. For example:

```
/* Object Validator for Custom Object FieldGroupsVO */

FenHeightFront < FenHeightRear
```

If you are writing logic that is local to your transaction type intake form, and you want to access values in a child object, such as FieldGroups, for validations and comparisons, you can't directly reference the field names in your logic. The FieldGroups view object is a collection, so you need to parse the child record using the **hasNext()** method. For example:

```
/* Object Validator for Custom Object LNP1InfoDevResFence01_c */

// Identify and assign the object.
def vo = FieldGroups

while (vo.hasNext()) {
 // Access the next row in the row iterator.
 def currow = vo.next()
 // Run validation.
 currow.FenHeightFront < currow.FenHeightRear
```

```
}
```

If you are writing logic that is local to your transaction type intake form, and you want to access values in a child object, such as LnpGlobalCustom, for validations and comparisons, you need to write code similar to accessing FieldGroups, but because LnpGlobalCustom isn't a collection, you don't need to use the **hasNext()** iteration method. For example:

First, instantiate the child object:

def vo = LnpGlobalCustom

Then use dot notation to access the desired field:

vo.EstimatedCost_c > 100

> **Note:** You can also use dot notation to access the field, such as **LnpGlobalCustom.EstimatedCost_c**.

Using the Field ID Search

When you reference a field in your script, you use the internal field ID, not the label that you see on the form design. For fields stored in child objects, you also need to know the object name. The Field ID search feature enables you to find the internal field name and object name.

1. Use the **Label** drop-down list to select or search for the label of the field as it appears in the form design.

   Initially, the drop-down list contains only a subset of the fields stored in the transaction type parent object. To search for additional fields, you need to enter partial search criteria to begin building a result list matching possible fields.
2. Select the desired field label from the result list.
3. Use the value displayed for the **Field ID** in your script.

   Fields stored on the transaction intake form object do not list an object, while fields stored in the field groups or global custom object show the object and field in dot notation, as in **ObjectName.FieldName**.

   The following examples illustrate that depending on where the field is stored, it may or may not include an object name.

   This example illustrates using field ID search on a user-defined field, showing just the field name.

Field ID Search
Label
Materials Cost ▼
Field ID
MaterialsCost_c

   This example illustrates using field ID search on a field group field, showing the object and field.

Field ID Search
Label
Front Fence Height ▼
Field ID
FieldGroups.FenHeightFront

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This example illustrates using field ID search on a reusable field, showing the object and field.

Preventing Logic Executing During a Save

Applicants have the option to save the intake form if they need to step away to gather more information, for example. If you don't want your logic to run until the applicant is completely finished and submitting the form, you need to account for the *Pending* status in your logic. To enable applicants to save a form without being faced with a list of validation errors, it is recommended to add the following code to the top of each of your scripts.

```
if (Status == "Pending") {
return true
}
```

Note: You can use similar constructs as needed within your logic as needed to allow the form to be saved without running the business logic.

Add Validation Logic

A *validator script* provides data integrity for end user input. A validator script is a logical construct that returns either *true* or *false.*

The essential components of a validator script include:

- Groovy logic
- Error message

For example, assume you have a form with the field *Years Experience* to indicate the number of years experience of a solar panel installer. To meet permit criteria for your agency policy, you can validate that the applicant doesn't enter zero by adding the following validation script to the field.

```
newValue > 0
```

At runtime, if the field value entered does not meet your validation logic criteria during a save or submit request. The validator script returns either true or false. If the return is false, the system displays the error message so the user can resolve the issue.

This example illustrates the runtime message displayed by a Groovy validation script.

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Validator scripts can be run at the field level and at the object level. Field-level validation is for single-field validation, and object-level validation involves validation of multiple fields. Use the object level when you reference multiple fields in the validation, and use the field name, not *newValue*. For example:

```
TotalCosts_c <= EstimatedCosts_c
```

> **Note:** The Groovy script executes only when the user either saves or submits the form. If there is any delivered validation for a field contained within a delivered field group, that delivered validation runs before any Groovy validation you have added. Before adding Groovy logic to a field delivered in a predefined field group, make sure to test the field group at runtime to become familiar with any existing, internal validation.

> **Note:** In the case of multiple field-level validations, each runs independently. If you have added object-level validations also, the object-level validation runs *only* if all field-level validations have passed.

Add Triggers

Triggers enable you to invoke processing logic based on an event.

In addition to the common attributes, including Script Name, Description, and Error Message, you also set the Type. Setting the type is how you define the event on which the trigger is based.

Type	Description
Create	Fires when a new instance of an object is created. Use to assign programmatic default values to one or more fields in the object. > **Note:** > Create events run only when the intake form is saved the first time. It does not run on subsequent saves or submits.
Invalidate	Fires on a valid parent object when a child row is created, removed, or modified, or also when the first persistent field is changed in an unmodified row.
Modify	Fires when an attempt is made to modify an object. Returning false stops the row from being deleted and displays the optional trigger error message.
Remove	Fires when an attempt is made to delete an object. Returning false stops the row from being deleted and displays the trigger error message.
Before Insert	Fires before a new object is inserted into the database.
After Insert	Fires after a new object is inserted into the database.
Before Update	Fires before an existing object is modified in the database.

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Type	Description
	Note: If you want the trigger logic to run on each save and submit, not just on the initial Create event, use the Before Update event.
After Update	Fires after an existing object is modified in the database.
Before Delete	Fires before an existing object is deleted from the database.
After Delete	Fires after an existing object is deleted from the database.
Before Commit	Not supported.
After Commit	Not supported.
Before Rollback	Not supported.
After Rollback	Not supported.
After Transaction Posted	Not supported.

Add Functions

You can create functions at the object and the global level.

Level	Description
Object	Object functions provide business logic to be used within the scope of the current business object, which is the current transaction type, such as an intake form for a permit.
Global	Global functions can be called from any intake form design within the offering.

The interface for creating functions is the same for creating object or global functions, and it contains the same general options in the editor, such as Script Name, Description, and Error Message, plus the additional items listed below.

This example illustrates defining a function, parameters, and return type. Details are in the surrounding text.

Page Element	Description
Parameters	Define the parameters received by the function when it is called. Add the name of the parameter and its data type. Refer to the following table for data type descriptions. Click **Add** to include multiple parameters in the grid. Click **Delete** to remove a row from the grid.
Return Type	Define the data type of the value returned by the function. Refer to the following table for data type descriptions.

You can apply these data types.

Data Type	Description
Void	Applies only to return values. Use in situations when the function does not provide a return value to the caller, such as when the functions performs a task, writes an output line, and so on.
String	A text value.
Integer	A whole number, either positive or negative.
Boolean	A logical true or false value.
Long	An integer value in the range of $\pm 2^{63}$-1.
BigInteger	An integer of arbitrary precision.

Data Type	Description
Double	A floating-point decimal value in the range of $\pm1.79769313486231570 \times 10^{308}$
Big Decimal	A decimal number of arbitrary precision.
Date	A date value with optional time component.
List	An ordered collection of objects.
Map	An unordered collection of name/value pairs.
Object	An entire business object, which in this case refers to an instance of an intake form.

Once you create the function, you can call it from other scripts. For example:

```
/* Object Trigger for Custom Object LNP1SolarPermit_c */

/* Define variables and explicitly cast the type (Integer).*/

def n1 = (Integer) EquipmentCosts_c
def n2 = (Integer) LaborCosts_c

/* Call the global function add2 to add total costs, passing in the variables.*/

TotalCosts_c = adf.util.add2(n1, n2)
```

For a function defined at the object level, you can call the function using just the function name, such as `add2`.

For a function defined at the global level, you need to add as a prefix `adf.util`. For example, if the global function name is add2, you call the function using `adf.util.add2(param1, param2)`.

In this example, there is global function named `add2`, which adds two parameters passed in. On the Triggers page, the trigger script is set to run on the Create event type, and the values for *EquipmentCosts_c* and *LaborCosts_c* are passed to the function to calculate the value of the *TotalCosts_c* field.

> **Note:** When defining variables for number data types, explicitly cast the data type of the parameters you define. So, if the field is an integer, explicitly specify *(Integer),* or if the field is a float number, specify *(Double).* For example: `def n1 = (Integer) EquipmentCosts_c`

Example: Basic Calculations

You can use functions to calculate, but you can also use basic expressions, such as A + B, A - B, and so on. For example:

```
TotalCost_c = EquipmentCosts_c + LaborCosts_c
```

Example: Accessing User Security Context

To access information regarding the current user, instantiate the getSecurityContext() object. In this example, the script checks if the user is assigned a particular role, and if not, displays the error message.

```
/*Get the security context.*/
```

```
def secCtx = adf.context.getSecurityContext()

/*Check if the user has the desired role.*/

if (secCtx.isUserInRole('PSC_ROLE_NAME')) {

/*If user has role, then check if field is not blank. If field is blank,
returns false, showing error message.*/

 return newValue != null
}

/*If the user doesn't have the role, returns true, bypassing the error message.*/

return true
```

Example: Validating a Phone Number

To validate the format of a phone number, such as 111–222–3333, you can use a regular expression. For example:

```
newValue ==~ /^(\d{3}\-\d{3}-\d{4})/
```

Copying a Field Value to Another Field

To make a field reflect the value of another field (to copy it), you can use a trigger. For example, you may have a field named Estimated Project Cost that will be reflected in the Final Cost field once the permit has been processed. To do this:

1. Use the Triggers tab.
2. Enter this code:

   ```
   FinalCost_c = EstimateProjectCost_c
   ```

3. Select *Before Update* from the **Type** drop-down list.

Working with Dates

When working with dates, switches and so on, and you are checking for null values, it is recommended to use the following construct:

```
(!ExpirationDate_c)
```

Instead of using something like:

```
(ExpirationDate_c == null || ExpirationDate_c == "")
```

This can help to avoid script saving issues and unexpected validation results.

Adding Contextual Help to Forms

This topic describes how to add help text to various parts of your intake forms to aid public users when they are filling out an application form.

Working with Contextual Help

If you determine that the end user needs additional information to understand a user-interface element in your intake form, you can add contextual help text to that user-interface element. If you add contextual help to a user-interface element in your intake form design, the system displays a Help icon next to the label of that user-interface element.

You can see the Help icon in both the design and runtime mode. At runtime, end users click the Help icon to display your help text in a popup, without leaving the page.

Note: At design time, the Help icon does not display the help text popup when clicked.

You can add contextual help text to these intake form elements:

- Page tabs
- Field groups
- Group boxes
- Fields (applies to fields in field groups and to user-defined fields)

Note: For group boxes and field groups, you can add help only when the Show Label attribute is turned on.

You can't add contextual help text to these intake form elements:

- Radio sets
- Check box sets

If you need to add help for radio sets or check box sets, use a group box to contain the control and add the help text to the group box container.

Adding Contextual Help

To add contextual help:

1. Select the page element to which you want to add contextual help.

   Note: You cannot add help text directly to radio sets and check box sets. Add help text to a group box surrounding the radio sets or check box sets.

2. Click the **Help** button in the attributes panel.
3. On the Contextual Help Setup page, note the Type Code, Page Name, and Page Object values.

   These values uniquely identify the page element to which you are associating the contextual help. You can't change these values. They are read-only and maintained by the application.

Item	Value
Type Code	An automatically generated value consisting of the internal product code and the permit type code derived from the permit type definition.

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Item	Value
Page Name	The name of the page tab on which you are adding help. Regardless of what the page label is on the tab, the application displays each tab using the default name in sequence, such as tabs1, tabs2, and so on. For example, the second page tab in an intake form may have the name *Fence Information,* however in the Page Name field it will appear as *tabs2.*
Page Object	Identifies the page element for which you are adding help. Regardless of the page element's label, the application displays the internal naming convention as the field value, which is the page element type code + sequence added. For example, for the second field added to the form the field value is *fields2,* which indicates the element is a field and it is the second field added to the form. The page element type codes are: ○ Field groups: *ccas* ○ Group boxes: *widgets* ○ Fields in field groups: *<field group>_<internal field name>* (such as *ccas2_ReleaseDate*) ○ User-defined fields: *fields*

4. In the **Description** field, add text to describe the purpose of the help text so other implementation team members can understand the content.

5. Click the **Add New** button in the Contextual Help Details grid to display the Add Context Help Details dialog box.

   The **Type** drop-down list will show *Agency Defined.*

   > **Note:** Help topics of type *System Defined* are provided by Oracle and should not be altered or removed. Use the *Agency Defined* help topic type to add help topics specific to your implementation. If you want your custom help text to display instead of delivered help text, disable the System Defined help topic, create your custom topic, and enable it.

6. Activate the **Help Content** edit box by clicking to the right of the **Help Content** field label.

7. In the Help Content edit box, enter your help text.

   The system provides rich-text editing features, which enables you to implement limited formatting options, as needed.

8. When you've added the content, and you are ready for it to be viewed by end users, turn on the Enabled switch.

   > **Note:** To prevent the help content from displaying at run time, turn off the Enabled switch.

9. Click **Save** on the Contextual Help Details page.

10. Click **Save** on the Contextual Help page.

11. Confirm that the help icon appears on the page tab or next to the page control label in your intake form design.

For more information on contextual help, see *Setting Up Contextual Help*.

Reorder Intake Form Elements

This topic describes how you can move form elements, such as pages, field groups, group boxes, and user-defined fields to different locations within the form design.

As you build intake form designs, you may need to move form elements from one location to another for a variety of reasons, such as improved logical grouping, control display requirements, end-user feedback, and so on. You use the Reorder Intake Form modal page to move form elements and reorder the intake form design.

> **Note:** For Code Enforcement intake forms, you can reorder the elements within the drop zone only.

This example illustrates the Reorder Intake Form page. Details are in the surrounding text.
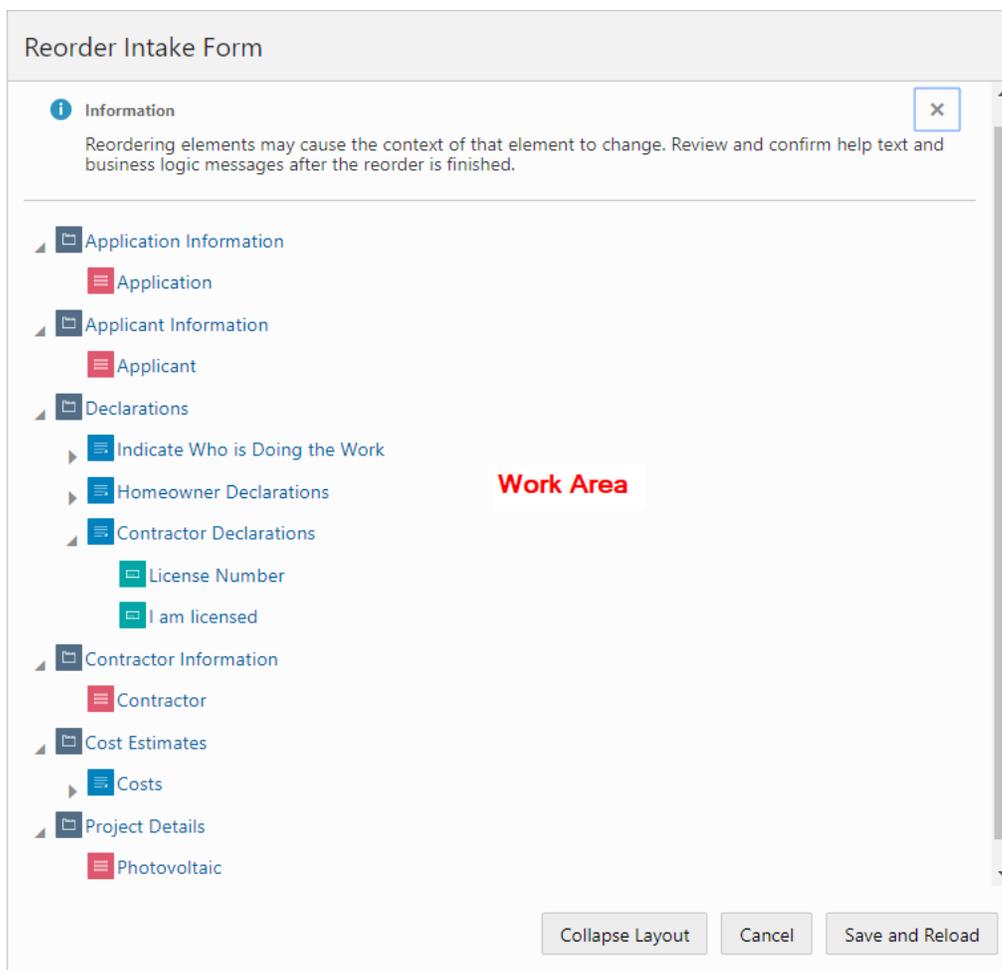
> **Note:** The label of the element appears as it is defined in the form design. Any label that is set to be hidden, such as the label for a field group or group box, will appear in the element tree.

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Page Elements	Description
Work Area	The work area is where you view the current structure and order of your intake form in the element tree and perform any required reordering tasks. The work area displays each page tab, field group, group box, and user-defined field in the form design as a node within a hierarchical element tree.
Collapse Layout	Collapses element tree view to display only the highest-level node in the hierarchy, the page tabs.
Expand Layout	Expands the element tree to display more detail in the hierarchy, exposing field groups, group boxes, and user-defined fields (if the their group box container was previously expanded). The **Expand Layout** button appears only after the element tree has been collapsed. **Note:** By default, user-defined fields are hidden to simplify the initial display. You need to manually expand the group box node that contains them.
Cancel	Closes the window and does not save any changes made.
Save and Reload	Saves the changes you have made to the order and reloads the form design to display the new order.

You can identify the element nodes in the hierarchical tree using this key.

Page Element	Description
	Indicates a page tab.
	Indicates a field group.
	Indicates a group box.
	Indicates a user-defined field. **Note:** The individual fields contained in a field group are not displayed.

Moving Elements Using Drag and Drop

1. Left-click and hold to select the element you want move.
2. Drag the selected element to the desired location, using the drop indicator as a guide.

   The drop indicator shows you whether you are dropping an element before, within, or after another element.

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This example illustrates dragging and dropping form elements in the element tree. Details are in the surrounding text.
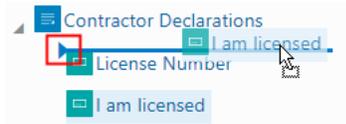
3. Release the left mouse button to drop the element in the indicated position.

Moving Elements Using Cut and Paste

1. Cut the element you want to move by selecting it and:

   ○ Pressing Ctrl + X.

   ○ Right-clicking and selecting *Cut* from the pop-up actions menu.

2. Paste the element to the desired location by selecting the new location and:

   ○ Pressing Ctrl + V and selecting the appropriate action from the pop-up menu.

   ○ Right-clicking and selecting the appropriate action from the pop-up menu.

Menu Item	Description
Cut	Cuts the selected item to the clipboard.
Paste Before	Pastes a cut item before the currently selected element.
Paste After	Pastes a cut item after the currently selected element.
Paste Inside	Pastes a cut item inside the currently selected element, such as a page tab or group box.
Paste First	Pastes a cut item as the first item within the currently selected container, such as page tab or a group box.

Moving Elements Using the Keyboard

You can use these keyboard shortcuts when reordering form elements.

Shortcut	Description
Tab	Use to arrive at the first focusable element in the work area, which is the first page element node, and then to each button in the order they appear.
Shift + Tab	Use to go the reverse direction of Tab.
Up and Down Arrows	Use to move up and down the:

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Shortcut	Description
	• Element tree • Popup actions menu
Right Arrow	Use to expand an element node to reveal the elements it contains. For example, use Right Arrow to show the user-defined fields contained within a group box.
Left Arrow	Use to collapse an element node.
Shift + F10	Use to display the pop-up menu displaying available actions.
Esc	Use to close the actions pop-up menu.
Enter	Use to select an item on the actions pop-up menu.
Ctrl + X	Cuts the selected element.
Ctrl + V	Displays the actions pop-up menu after an element has been cut, enabling you to select a paste option.

Reordering Page Element Considerations

The designer does not allow you to move form elements into invalid positions within the hierarchy, and the same rules applied when creating the initial form design apply also when reordering the form design. The following table outlines the rules governing each form element and any items you may need to consider when reordering elements in a form design.

Form Element	Reordering Rules and Considerations
Page tabs	Page tabs can't be dropped into another element. They can only be reordered within the element tree.
Field groups	You can: • Drop into another page tab • Drop into a group box • Reorder position within its container You can't: • Drop into another field group • Drop outside of a page tab or group box • Drop on a user-defined field • View or move fields contained by field groups
Group boxes	You can: • Drop into another group box

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Form Element	Reordering Rules and Considerations
	• Drop into a page tab **Note:** By default, a dropped group box is added as the last element on the containing page or group box. You can't: • Drop into a field group or a user-defined field • Drop outside of a page tab
User-defined fields	You can: • Drop into group boxes only • Move location within a group box

The following table describes various conditions to consider when reordering form elements.

Condition	Description
Security	You can't drop an element into a page tab or group box that has security settings applied, such as the **Hide from public user** or the **Confidential** attribute enabled. **Note:** The **Confidential** attribute applies only to the Business License offering. Elements set to contain confidential information for the Business License offering can't be reordered.
Control Display	A controlled element can't appear before its controlling element in the form design order. For example, if a group box's display is controlled by a single-item check box, you can't move that group box to a position above that single-item check box.
Add Logic (Groovy)	Groovy logic executes when the form is being submitted, so the order of the form design does not affect the logic. However, it is recommended that you review the error messages displayed by your Groovy scripts to make sure the context is still valid after reordering.
Add Help	The display of help text does not depend on the order of the form design. However, it is recommended to review any help you have added to form elements to make sure the context is still valid after reordering.

Configuring Activity Filtering for Business Licenses

This topic describes how to configure display filtering for business license intake forms so that only applicable form elements appear in the intake form for the current business license activity.

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Activity Filtering Overview

A business license can be involved in different activities, including:

- Origination: the initial application to be approved to establish and originate the business license.
- Amendment: the license holder makes changes to a submitted application or an existing business license.
- Renewal: the license holder renews the existing license for the next license period.

When creating a business license type, you have the options of enabling the license for renewal and amendment activity by turning on the **Allow Amendment** and **Allow Renewal** switches.

> **Note:** License activity filtering does not apply to intake forms for business license consultations, which are separate intake form types.

Depending on the activity, it may not be necessary to view and edit all of the information contained in the business license. However, it would be inefficient to design a separate form for each license activity. Use license activity filtering so that you can create a single intake form that can be used for all the business license activities.

For example, using license activity filtering you can set some form elements to display only for license origination, or only for amendments, while others can be set to display for all business license activity.

You can apply license activity filtering to:

- Field groups
- Group boxes

Setting Filtering Display Options

To view the license activity display options:

1. Select the form element.
2. Expand the Display section in the Attributes panel.

   This example illustrates the license activity filtering options. Details are in the surrounding text.
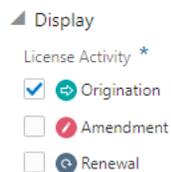
Page Element	Description
Origination	The element is available for origination activity.
Amendment	The element is available for amendment activity.
Renewal	The element is available for renewal activity.

Page Element	Description

3. Select at least one license activity for the element.

> **Note:** You can select any combination of license activities, but at least one license activity filtering option must be selected for a field group or group box being added to a business license intake form design.

4. Save your changes.

Viewing the Runtime Display

This table illustrates how the selected license activity filtering options behave at runtime.

Origination	Amendment	Renewal	Behavior
Selected	Not Selected	Not Selected	Form element displays and is editable only for the origination activity. **Note:** An element set to display for only origination will display in both amendment and renewal as read-only.
Selected	*Selected*	Not Selected	Form element displays for the origination and the amendment activities.
Selected	*Selected*	*Selected*	Form element displays for the origination, amendment, and the renewal activities.

Setting Form Options

This topic describes the options you can set for the entire form to control the ways public users interact with the form.

Enabling the Review Page

The review page presents all the fields of a multi-tab form on a single, scrollable page for efficient review of the entered data prior to submitting the form.

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By default, the review page displays:

- Form fields as read-only, but the end user can click the Edit button for each field group to modify the fields as needed.

- All field groups expanded.

- For multi-page view or single-page view.

- For all forms, unless disabled.

To disable the review page:

1. In the Intake Form Designer, click the Form Options link.
2. On the Form Options dialog box, turn off Review Page.
3. Click **OK.**
4. Click **Save.**

Setting a Confirmation Step

You can enable one of the pages in a form as a confirmation page to display after the end user has filled in the information and submitted the form. You create the confirmation step in the designer and then set it to be the confirmation step in the Form Options.

When set as the Confirmation Step, the page displays:

- At design time with the page tab filled in grey to indicate it is the confirmation step.

- At runtime as the last page in the train stop drop-down list.

Note: The confirmation step does not display as part of the single page view.

To enable the review page:

1. In the designer, click the Form Options link.
2. On the Form Options dialog box, select the desired page from the Confirmation Step drop-down list.
3. Click **OK.**
4. Click **Save.**

Mapping Form Fields to Decision Model Attributes

This topic describes how the fields added to an intake form in the designer are mapped to the fee model defined for the transaction type.

The Fee Mapping page in the designer is used to map attributes in the decision model to the fields added to the intake form. The Fee Mapping page is the second step in the Intake Form Designer, where designing the layout is the first step.

This image illustrates the Fee Mapping page in the design of a permit application.

You assign a fee schedule to an application type on the Transaction Type page using the **Fee Schedule** field. You map attributes from the fee schedule's underlying decision model created in Oracle Integration Cloud to the fields you have added to your intake form either through delivered field groups or by adding fields manually.

> **Note:** Not all model attributes need to be mapped. Because a fee schedule can be reused by multiple transaction types, only the model attributes required for fee calculations for the current application type need to be mapped. All other model attributes can be left blank.

For more information on setting up fee schedules, see *Setting Up Fee Schedules*.

For more information on decision models, see *Creating Decision Models for Fees*.

Mapping Application Fields to the Fee Item in the Decision Model

To access the Fee Mapping page in the form designer:

1. Navigate to the Transaction Type page:

   - **Business License Setup** > **Business License Type**
   - **Permit Setup** > **Permit Type**
   - **Planning and Zoning Setup** > **Planning Application Type**

2. Select the transaction type that you want to view in the designer.
3. Click the **Design Form** button.
4. Click the **Next** button while in the application form setup step.
5. The fields on the Fee Mapping page are as follows:

Page Elements	Description
Effective Start Date and **Effective End Date**	The effective-dated entry for the fee schedule associated with the transaction type. If multiple effective dates exist, you must map fee items for each effective date.

Page Elements	Description

Applies to Type	The type of application that the fee item applies to as defined in the fee schedule:
	
	  o *Origination* - Original applications. This is the default value.
	
	  o *Amendment* - Applications for amendments to business licenses.
	
	  o *Renewal* - Business license renewal applications.

Model Attribute	The name of the attribute as it appears in the decision model in Oracle Autonomous Integration Cloud. Not all model attributes must be mapped. Because fee schedules can be reused by multiple transaction types, only the model attributes required for fee calculations for the current transaction type need to be mapped. All other model attributes can be left blank.
Attribute Type	The data type of the model attribute, such as string, number, boolean, and so on.
Record Type Attribute	The field added to the intake form layout either contained in a predefined form element or a user-defined element you have added manually.

6. Select the record type attribute from the drop-down list that you want to map to the decision model attribute.
7. Click **Save**.

Considering User Experience

This topic describes concepts related to using forms that implementation teams need to consider when designing forms.

Required Fields

The system validates that required fields contain values prior to a submit request.

If a required field is empty the system displays the following error message on the page.

This example illustrates how the system displays messages to indicate what is required for a field.
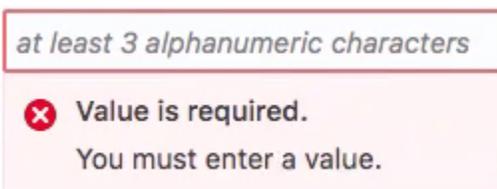
The system displays an itemized list at the top of the form when clicking Submit so that in the case of multiple pages, the user can navigate quickly to the item and provide an acceptable value. The error message lists the error and the

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location to which the end user must navigate to correct the error. The list if errors can be expanded and collapsed as needed.

This example illustrates an error message appearing at the top of the form, displaying in the list the error, and the location of the offending field.
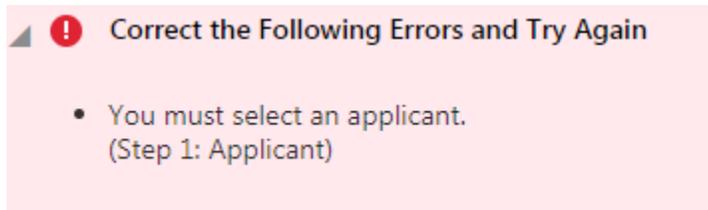
Runtime Application Form Save Behavior

You can save an intake form as a draft prior to submitting it. You may need to save an intake form as a draft for a variety of reasons, such as needing to gather additional information or the form requiring more time than anticipated. After saving the form, the user can return to it to provide more information and ultimately submit the form.

> **Note:** Saving a form is not currently an option for the Code Enforcement offering.

When saving a form as a draft, not all of the data validation occurs. However, the user will need to resolve any critical errors that the application can't save, such as adding a value with an incompatible data type. For example, the system can't save an alphabetic character entered into a field of a number data type.

The complete data validation process and logic runs for user-defined fields and field groups when the form is submitted.

When users take advantage of saving forms, consider these items:

Consideration	Description
Save	• Validates user-defined fields. • Ignores empty required fields. • Validates field groups fields.
Submit	• Validates user-defined fields. • Flags empty required fields. • Validates field groups fields.

Groovy	To compensate for the ability to bypass Groovy validation during a save, incorporate the "pending" status in your logic. An intake form is in "pending" status when it has been saved but not submitted. For example, add the following to the top of applicable Groovy scripts:
	
	`if (Status == "Pending") {`
	`return true`
	`}`

Upgrade	Intake forms from previous releases with fields set as required need to be updated to include the validation adjustments associated with the ability to ignore required fields during a save. 1. Open the intake form.

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Consideration	Description
	2. Locate all the fields set as required, and *turn off* the **Required** switch.
	3. Save and publish the form.
	4. Locate all the fields that need to be set as required, and *turn on* the **Required** switch.
	5. Save and publish the form.

Runtime Train Stop Drop-Down Behavior

The train stop drop-down list, appears in the center of the application form header to provide:

Feature	Description
Context	The system automatically prepends the appropriate step number to the application form page name. The step numbers are assigned in the order the pages appear in the designer (from left-to-right).
	For example, assume you have three pages in your form: Application Details, Fence Details, Property Details. The train-stop drop-down list displays the pages as:
	• Step 1: Applicant Details
	• Step 2: Fence Details
	• Step 3: Property Details
Current Page	To show the current page the user is viewing, the system displays a single, right-pointing, chevron character (>) to the left of page label in the drop-down list.
Navigation	Select any page in the application form, including the review page, to access it immediately.
Switch to Single/Multi-page view	Toggle between the multi-page view or the single-page view.

Using the Single-Page View

When accessing the single-page view in review or advanced-edit mode, end users will notice these characteristics of the page elements.

Page Element	Behavior
Edit button	Enables the end user to activate the form fields for editing. Initially, the system displays them in read-only mode. Once clicked, the system toggles the Edit button to the Done button.
Done button	Once the end user completes any changes, clicking Done:
	1. Performs any configured data validation.
	2. Saves changes to the database.
	3. Returns the form fields to read-only.
	4. Toggles the button back to read Edit.
Group boxes	If a group box contains multiple group boxes, only the outer (parent) group box displays an Edit/Done button.

Page Element	Behavior
Field groups	If there are multiple field groups in a group box, they will appear to be a single page section, with one Edit/Done button controlling all the field groups within the parent group box. Otherwise, if the field groups are on the page tab separately (not within the same parent group box container), then the system displays an Edit/Done button for each field group.
Expand All/Collapse All	Expands or collapses all the elements on the page, including group boxes and field groups within parent group boxes.

> **Note:** The Edit button and the Done button do not appear on a page rendered in advanced edit mode if the form is displayed in a read-only context. For example, if the user viewing the form does not have sufficient privileges or if the user has already submitted the form, the fields in the form will be disabled and the Edit button and Done button will not be rendered on the page.

Advanced-Edit Mode

If needed, agency staff members can update a form after a public user has submitted the form. Agency staff members access the submitted form using the Permit Details page in the Permit List or by deep linking. Editing a form after a public user has submitted it is referred to as *advanced-edit mode.*

When in advanced-edit mode, the system:

- Displays only the field groups enabled for advanced-edit mode.
- Presents the form in the single-page view.

Agency staff members click the Edit button to activate fields and update data, and they click Done to save changes.

> **Note:** Customers cannot configure whether a delivered field group appears in advanced-edit mode. Field groups enabled for advanced-edit mode are controlled and delivered by Oracle development. Only the field groups that are appropriate for agency staff members to update are enabled for advanced-edit mode.

Testing Intake Forms

This topic describes the methods and considerations involved with testing your application intake forms.

You design, create, and test application forms on your development or test environment. Depending on what you have licensed, you may have a combined development and test environment, or you may have a separate development and test environment.

You can test forms in these modes:

- Preview mode
- Sandbox mode

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Once your forms have been created and thoroughly tested, you then migrate the newly created forms to your production system for public user access.

Testing Forms in Preview Mode

You can perform initial testing using the Intake Form Designer preview mode.

To enter preview, click the **Preview** button. In preview mode, you can test the layout of the user interface and the tab flow in a simulated runtime scenario.

While the preview mode provides you an accurate view of how your intake form will appear in runtime mode, it does not enable you to enter data and save it. It can be used to get a quick, high-level view of the appearance of your form layout. To test the full functionality and data validation of your intake form, you need to access and test the form from the landing page in either sandbox mode or published mode.

> **Note:** The Intake Form Designer does not activate the **Save** button in preview mode.

Enabling Sandbox Mode Testing

You can test your intake form thoroughly in scenarios public users will encounter while the form design is still in the draft state within the sandbox. Testing in sandbox mode enables you to fully test and interact with the intake form without having to publish it. For example, you can:

- Access the intake form from the landing page in the same way public users will.
- Run any data validations or business logic while filling out the form.
- Engage OIC definitions associated with the intake form, such as workflow and fee models.
- Test the other processes involved in the entire lifecycle of the permit, such as approvals, inspections, and so on.

To enable sandbox mode testing:

1. Save your intake form.
2. Return to the Transaction Type page for your offering, such as the Permit Type page.
3. Open the transaction type associated with the intake form you want to test.
4. Set **Status** to *Ready.*
5. Set the **Public User Enabled** to either *Enabled for all users* or *Enabled for registered users.*
6. Specify any other required definitions related to the intake form, such as workflow process definitions, fee schedules, and so on.

   > **Note:** You need to update your workflow definitions to allow access from a transaction type within a sandbox. The workflow process definitions need an additional integration implemented called the Sandbox Connector. For more information on updating workflow definitions for sandbox testing, see *Setting Up the Sandbox Connector*.

7. Click **Save.**
8. Configure security for user IDs you intend to use for sandbox testing.

   When testing in sandbox mode, the user IDs you use to access the landing page and the intake forms require additional security roles.

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Role	Access Description
PSC Custom Sandbox Access (CUSTOM_SANDBOX_ACCESS)	This role gets created automatically during implementation, and it enables access to definitions that exist within a sandbox. User IDs without this role can access published transaction types only. This role should be used only in non-production environments, such as the development or the test environment. To implement this role, add this role to any user you intend to use to test intake forms in sandbox mode. To configure a sandbox test user, create an agency user and use the Agency Staff Access page to add: ○ All roles typically applied to the simulated user type. ○ PSC Custom Sandbox Access role.

Note: The data you enter and save during testing on your development and/or testing environments remains in the underlying database tables after the form is migrated to the production system.

Configuring Security for Sandbox Mode Testing

When testing in sandbox mode, the user IDs you use to access the landing page and the intake forms require additional security roles.

Role	Access Description
PSC Custom Sandbox Access (CUSTOM_SANDBOX_ACCESS)	This role gets created during implementation. Enables access to definitions that exist within a sandbox only. This role should be used only in non-production environments, such as the development or the test environment. To implement this role, add this role to any user you intend to use to test intake forms in sandbox mode. To create a sandbox test user: 1. Create an agency user. 2. Use the Agency Staff Access page to add to the user: ○ All roles typically applied to the simulated user type. ○ PSC Custom Sandbox Access role.

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Migrating Application Forms Between Environments

After you have completed your testing of the application form on the development or the test environment, you can publish the intake form. To migrate an intake form from the current environment to another environment, the intake form must be published.

> **Note:** Intake forms in draft status are ignored by the migration process.

To migrate data from a source environment to a target environment, follow the procedure in Functional Setup Manager for migrating transaction type metadata and intake form layout metadata.

For more information on migrating definitions between environments, see *Managing Transaction Type Configurations*.

Publishing Intake Forms

This topic describes the steps to complete to publish intake forms.

You need to publish intake forms in order to:

- Clone intake forms and transaction types.
- Migrate intake forms from a source environment to a target environment, such as when migrating from the test environment to the production environment.

Before you publish an intake form, it is highly recommended that you ensure it is thoroughly tested in sandbox mode.

For more information on testing options, see *Testing Intake Forms*.

> **Note:** Intake forms in draft status can't be cloned or migrated.

To publish a form:

1. Confirm that you have saved and tested all changes made to your form.
2. In the Intake Form Designer, click **Publish.**
3. Navigate to the Transaction Type page:

   To navigate to the Transaction Type page for the offering, such as the Permit Type page for Permits.
4. On the Transaction Type page, open the appropriate transaction type, and set these values:

   - **Transaction Type Status**: *Ready*
   - **Public User Enabled**: *Enabled for all users* or *Enabled for registered users*.
   - Specify any related definitions required for your transaction type, such as workflow process definitions, fee schedules, and so on.
5. Click **Save.**

> **Note:** After publishing a transaction type application, the application may not be accessible immediately. It can take several minutes to apply the most recent changes and transfer the application from the sandbox to the live runtime system.

Related Topics

Cloning Transaction Type Definitions

This topic describes how to clone transaction type definitions and the associated form design. It also covers the attributes that will be shared between the source and clone definition and the attributes you will need to modify on the cloned definition.

You can clone a transaction type to:

- Save time when creating a similar transaction type, rather than creating a new transaction type for each situation from scratch.

- Create a new version of a currently published transaction type after making a significant correction or addition to the transaction definition.

In some cases, it may be more efficient to create a new transaction type and form, while in other cases, it may be more efficient to clone an existing transaction type and form.

When you clone a transaction type, you make a cloned copy of:

- Most of the transaction type metadata, such as the specified Classification, Auto Number Rule, Department, Fee Schedule, and so on. Some of the metadata is not cloned, such as Transaction Type, Transaction Type Code, Transaction Type Status, Help Text and so on, as you'll need to modify those values for the cloned copy.

- All of the intake form layout in the Intake Form Designer, including pages, group boxes, field groups, and user-defined fields you have added to your application form.

When deciding to clone a transaction type, you may consider:

- The number of fields and pages within the existing application form layout that you'd need to change.

- Similarity between the existing transaction type and new transaction type.

- Number of shared attributes.

Note: In general, if you intend to make numerous modifications to the cloned copy, it may be more efficient to start a new transaction type from scratch.

When cloning to make a new transaction type, you will want to make sure you are aware of:

- The attributes that will be shared between the source definition and the clone.

- The attributes you need to modify to create unique values between the source definition and the clone.

Note: All modifications you make to a should be done in your test environment and not on your production environment. After you have thoroughly tested your changes in the test environment, your modifications should be migrated using the Functional Setup Manager task flows.

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Transaction Type Metadata Considerations

All of the field values on the Transaction Type page will appear in the cloned transaction type, except for selected field values listed in the following table.

Make sure to update any of the copied information on the Transaction Type page to reflect the requirements of the new transaction type. For example, if the Department, Fee Schedule, or Workflow information, should be different, make sure to update it for the new transaction type definition so it is associated with the correct items.

Page Element	Description
Type	The type name doesn't have to be unique. You can create a new transaction type by using a unique value or enter the same value as the source transaction type, if you are creating a new transaction definition with the same transaction type.
Type Code	The type code must be unique. Enter a transaction type code that identifies this version of the transaction type definition.
Status	Initially, for a newly created transaction type the status on the Transaction Type page is always set to *Preliminary.*
Valid From Date	The application inserts the current date for the cloned transaction type.
Valid To Date	Update to reflect your business requirements.
Public User Enabled	Initially, for a newly created transaction type this is always set to *Not enabled for public users.*

For more information on the fields on the Transaction Type page, see *Setting Up Permit Types*.

Intake Form Layout Attribute Considerations

The following table describes specific considerations for UI elements in your form layout with respect to cloning transaction types and what gets copied from the initial source intake form to the target clone.

Element	Description
Field groups	The cloned copy of the transaction type contains the same layout as the source definition. If the intake form utilized any of the delivered field groups, the application copies the field groups into the cloned copy of the definition, using the same layout as the source definition. For example, if you added the Fence field group to the source permit definition to the second page tab, the Fence field group would appear in the cloned copy of the transaction type on the same page tab.
Labels	The labels for fields and UI elements, such as pages, group boxes, field groups, and so on, are the same between the source and cloned definition.
User-defined fields	Any fields you have added manually to the source will be copied, as is, to the cloned definition. For any fields that you have defined a list of values, make sure it applies to your new transaction type.

Element	Description
Security	The cloned definition will have the same security configuration as the source definition for: • Data security for column authorization and data redaction. • Cases where Hide from public user has been implemented.
Help	If any help has been added to the form for a page, field group, group box, or field, for the source definition, the application does not copy help references into the cloned definition. **Note:** You can remove the help references from the cloned form, but do not delete the help text from the Contextual Help page if other forms are still using that help text.
Groovy scripts	If any Groovy logic has been added to the source intake form, the cloning process does not copy the Groovy logic into the target clone definition.
Fees	Any fee mapping, which is defined in the second step of the Intake Form Designer, is copied to the target clone definition.

Cloning a Transaction Type to Create a New Transaction Type

When you clone a transaction type, you also clone the associated form design. You can clone just the transaction type definition without cloning the application form design; however, you can't clone just the form design by itself.

Note: When you clone a transaction type, the type status defaults to *Preliminary* on the new transaction type, and the status of the new application form defaults to *Draft* in the Intake Form Designer.

This example illustrates the Clone Permit Type page, which is described in the steps for cloning a permit type.

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Clone Permit Type

Original Permit Type	Solar Permit
Original Permit Type Code	LLSolar0918a
* New Permit Type	
* New Permit Type Code	
Use Original Workflow Setup	(on)
Clone Form Design	(on)

Cancel   Create

To clone a permit transaction type:

1. Select **Permit Setup > Permit Type.**
2. Open the desired transaction type.

   > **Note:** Only transaction types with a status of Published can be cloned.

3. Click the **Clone** button.
4. On the Clone Type page, enter the following values:

Page Element	Description
New Transaction Type	Enter a transaction type name. The transaction type name can be the same as an existing transaction type name so that you can have different versions of the same transaction type. For example, if the original transaction type name is *Fences*, you can reuse the name for the new transaction type definition, but you must enter a unique type code to distinguish the two.
New Transaction Type Code	Enter a unique transaction type code. Oracle recommends manually adding a version number to the source transaction type code if you want different versions of the same transaction type definition. For example, if the original type code is *Solar-001*, you can enter a new code, *Solar-001-v2*
Use Original Workflow Setup	Turn on the switch to use the original workflow setup as defined in the original transaction type. Turn off the switch to leave the workflow setup fields blank on the new transaction type. You must enter a workflow setup values.

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Page Element	Description
Clone Form Design	Turn on the switch on to clone the application form design associated with the original transaction type. Turn off the switch to create a completely new application form using the Intake Form Designer.

> **Note:** Providing a unique type code is required to make the transaction type definition unique.

5. Click the **Create** button.
   The cloning process opens the cloned copy of the transaction type.

   > **Note:** When saving the cloned definition, the application places the cloned definition within a sandbox.

6. Make any other required changes to the cloned transaction type definition and form design.
   See the previous sections for more information regarding what items to check.

   > **Note:** If there are numerous custom fields in the application form, when you have the layout open in Intake Form Designer, it can take several minutes to perform the initial save. While saving, the application is creating all of the custom fields, creating the other elements, and running validation.

7. Publish the application form in the Intake Form Designer.
   For more information on publishing a transaction type, see *Publishing Intake Forms*.
8. Return to the Transaction Type page to change the status to *Ready for Use*.

Considerations for Creating a New Version of a Transaction Type Using Cloning

In some cases, you may want create a new version of an existing, published transaction type to correct an error or make a change.

If the change made is insignificant, as in it does not change the meaning of a field or page element, then in most cases cloning is not required, and you can simply make the change directly to the transaction type definition. For example, assume you have a field for an email address on your form, and it had been requested to change the label from *E-mail* to *Email* (removing the hyphen). In this case, the change can be made directly to the form and republishing it.

However, in other situations, the change may be significant, in that it affects reporting associated with transaction type, alters historical data, makes future data out of sync with historical data, and so on.

Significant changes where cloning a transaction type is recommended include:

Transaction Type Element	Examples of Significant Changes
Field groups	- Changing the label of a field group. - Adding - Removing - Updating the security (Hide from public user)

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Transaction Type Element	Examples of Significant Changes
	• Changing the label, hidden, or required setting of a field within a field group.
User-defined form elements	• Adding • Removing • Setting to required • Updating a default value • Updating the security (Hide from public user)
HTML UI constructs	• Adding page tabs • Removing page tabs • Adding group boxes • Removing group boxes

Creating a New Version of a Transaction Type Using Cloning

Creating a new version of a transaction type using the cloning feature involves:

- Deactivating the published version of the transaction type.
- Cloning the published version of the transaction type.
- Activating the cloned copy of the transaction type.

To deactivate a published transaction type:

1. Select **Permit Setup** > **Permit Type.**
2. Open the definition for the published transaction type.
3. Set the **Transaction Type Status** field to *Void.*
4. Click **Save.**

To clone the published transaction type:

1. With the transaction still open from the previous steps, click **Clone.**
2. Enter the same Transaction Type value as used for the recently deactivated transaction type.
3. Enter a unique Transaction Type Code.

   Note: Providing a unique transaction type code makes the transaction type definition unique. To keep track of versions, you can add v2, v3, v4 to the code, for example.

4. Save the cloned definition.

   Note: When saving the cloned definition, the application places the cloned definition within a sandbox.

5. Make any other required changes to the cloned definition transaction type and form design.

   See the previous sections for more information regarding what items to check.
6. Click **Publish** in the Intake Form Designer to publish the cloned definition.

   For more information on publish a transaction type, see *Publishing Intake Forms*.

To activate the new transaction type:

1. Select **Permit Setup** > **Permit Type** or press Back from the Intake Form Designer interface.
2. Open the definition for the published transaction type.
3. On the Transaction Type page, set these values:
   - Transaction Type Status: *Ready for Use.*
   - Public User Enabled: *Enabled for all users* or *Enabled for registered users.*
4. Click **Save.**

Impact of Updating Existing Transaction Types and Republishing

This table describes the impact of various changes when you update and republish a transaction type.

Modification	Impact
Update a label for a user-defined field	• Submitted transactions: applies to all submitted transactions. • New transactions: available on all new transaction intake forms. • Auditing: No impact. Labels don't appear in auditing; the audit goes against the field IDs. • Reporting: ○ OTBI: no impact to OTBI, which doesn't incorporate fields. ○ CSA: New label will not appear in CSA. Manual update of the label in CSA and republish. Once done this applies to all transactions, old and new. ○ BIP: if BIP depends on CSA, then the BIP report template needs to have the new label manually updated.
Add a new user-defined field	• Submitted transactions: the field will appear on all submitted transactions, which means if an update is required for a submitted transaction this field will also appear on the page and be part of the payload. • New transactions: the field appears on all new transactions. • Auditing: available for auditing, but the field needs to be added to the auditing report. • Reporting: ○ CSA: available after you edit the CSA, include the new field, and republish. ○ BIP: available after the new field is included in the report template and the CSA is republished.
Set a field as required	• Submitted transactions: any update to the transaction will require that this field have a value. • New transactions: appear as required for any new transaction. • Auditing: no impact. • Reporting: n impact.
Add or edit Groovy script	• Submitted transactions: if modifying, the new logic will fire. • New transactions: applies to all new transactions. • Auditing: no impact. • Reporting: no impact.
Hide a field	• Submitted transactions: field will be hidden for all submitted transactions.

Modification	Impact

	• New transactions: hidden for any new transactions.
	
	• Auditing: field would be still part of the audit report until removed.
	
	• Reporting:
	
	BIP - remove from template
	
	    ○ CSA: manually remove field from CSA and republish,
	
	    ○ BIP: manually remove field from template.

Add a user-defined list of values (LOV) field	• Submitted transactions: applies to all submitted transactions. • New transactions: applies to all new transactions. • Auditing: same as adding a user-defined field. • Reporting: same as adding a user-defined field.
Add or edit a list of values (LOV)	• Submitted transactions: no impact. • New transactions: applies to all new transactions. • Auditing: no impact. • Reporting: immediately reflected in CSA.
Update list of values (LOV) display criteria (Enabled/Disabled) (Start Date/End Date)	• Submitted transactions: applies to all submitted transactions. • New transactions: applies to all new transactions. • Auditing: no impact. • Reporting: immediately reflected in CSA.
Add or edit control display settings	• Submitted transactions: may impact submitted transactions. • New transactions: applies to all new transactions. • Auditing: no impact. • Reporting: no impact
Make changes to reusable field	• Submitted transactions: applies to all submitted transactions. • New transactions: applies to all new transactions. • Auditing: available for audits after being incorporated into the audit report. • Reporting: no impact.

Impact of Cloning the Transaction Type and Retiring the Previous Version

This table describes the impact of various changes when you clone a transaction type to replace the previous version.

When cloning, you are creating a new transaction type, so in general, you should expect these impacts as the standard update:

- Auditing: any new transaction that is created is available to audit framework, which requires you to enable the object to be audited and configure the report as needed.

- Reporting: a new CSA needs to be created for each new transaction type.

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Modification	Modification
Update a label for a user-defined field	• Submitted transactions: no impact as there are no submitted transaction yet. • New transactions: appears for all new transactions. • Auditing: standard uptake. • Reporting: standard uptake. You can reuse the same BIP or create a new BIP template.
Add a new user-defined field	• Submitted transactions: no impact. • New transactions: appears for all new transactions. • Auditing: standard uptake. • Reporting: standard uptake. You can reuse BIP template after editing and republishing or create a new BIP template.
Set a field group field or a user-defined field as required	• Submitted transactions: no impact. • New transactions: appears for all new transactions. • Auditing: standard update. Layout changes are not auditable. • Reporting: no impact to BIP.
Add or edit Groovy script	• Submitted transactions: no impact. • New transactions: appears for all new transactions. • Auditing: Groovy changes are not tracked by audits. • Reporting: no impact to BIP. Groovy changes to not affect reporting.
Hide a field	• Submitted transactions: no impact. • New transactions: appears for all new transactions. • Auditing: layout changes are not tracked in Audits. • Reporting: no impact to BIP. Layout changes are not reflected in reporting.
Add a user-defined list of values (LOV) field	• Submitted transactions: If the LOV is pointing to an existing list then updates to this list will affect submitted transactions. If a new list is created for the user-defined field, then there is no impact to existing fields. • New transactions: appears for all new transactions. • Auditing: same as adding a user-defined field. • Reporting: no impact to BIP.
Update a user-defined list of values (LOV)	• Submitted transactions: If the LOV is pointing to an existing list then updates to this list will affect submitted transactions. If a new list is created for the user-defined field, then there is no impact to existing fields. • New transactions: appears for all new transactions. • Auditing: no impact. • Reporting: LOVs are immediately reflected in CSA.
Update list of values (LOV) display criteria (Enabled/Disabled) (Start Date/End Date)	• Submitted transactions: If the LOV is pointing to an existing list then updates to this list will affect submitted transactions. If a new list is created for the user-defined field, then there is no impact to existing fields. • New transactions: appears for all new transactions. • Auditing: no impact.

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Modification	Modification
	• Reporting: may affect reporting on submitted transactions as both values can be incorporated depending on date settings.
Control display settings	• Submitted transactions: no impact. • New transactions: applies to all new transactions. • Auditing: no impact. • Reporting: no impact.
Reusable custom fields	• Submitted transactions: applies to all submitted transactions. • New transactions: applies to all new transactions. • Auditing: standard uptake. • Reporting: not currently supported.

Managing Transaction Type Configurations

This topic describes the considerations and steps related to migrating transaction type definitions, such as permits, planning and zoning applications, and code enforcement, from your test environment to your production environment.

Transaction Type Lifecycle Overview

Any implementation of Oracle Applications Cloud usually requires migrating setup data from one environment to another at various points in the subscription lifecycle.

For example, you set up your initial configuration of the Public Sector Compliance and Regulations offerings in the test environment, which is your source system. Then, after thorough testing and verification, you move the setup and configuration data from your test environment to the target environment, which is your production system.

You use the Fusion Applications Functional Setup Manager to perform these migration tasks.

This example illustrates that you use Functional Setup Manager to migrate data between your test and your production environment.

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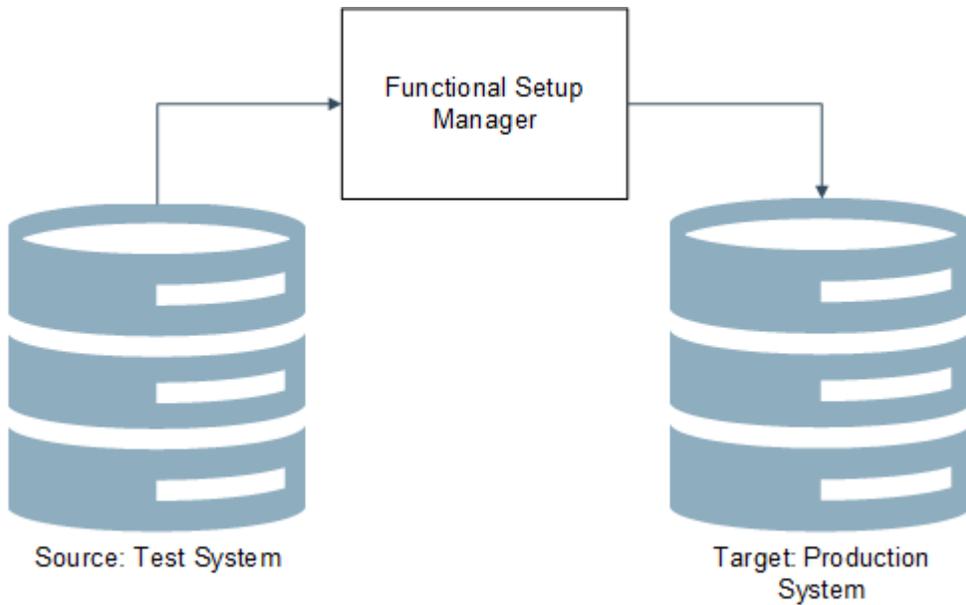
You access Functional Setup Manager by selecting **Navigator** > **Setup and Maintenance** or by clicking the Setup and Maintenance tile on the springboard. To access Functional Setup Manager, you need to have the System Administrator role associated with your user account.

The functional areas in Functional Setup Manager that apply to your transaction type definitions and application form definitions are:

Offering	Functional Area
Public Sector Permits	Permit Types
Public Sector Planning and Zoning	Planning Application Types
Public Sector Code Enforcement	Incident and Case Types

Like using Functional Setup Manager to setup your configuration, when migrating data, you use a top-down approach. That is, if you are not exporting the entire configured offering, and you are exporting by functional area, you need to export the functional areas in the order they appear.

For more information on using Functional Setup Manager, see *Using Functional Setup Manager*.

Note: All configuration changes should be completed and tested in your test environment and then migrated to the production environment. Changes made directly to the production environment might be overridden during subsequent test-to-production migration activity.

For additional information related to migrating configuration data from your test environment to your production environment for the Public Sector Compliance and Regulation offerings, see *Oracle Public Sector Compliance and Regulation: Test to Production (Doc ID 2551940.1)* on My Oracle Support.

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Set the Target Instance URL

On the source system (your test environment), you need to define the URL target system (your production environment) so that setup data and configuration data can be sent to the target.

To set the target instance URL:

1. Sign on to the test environment.
2. Click the Setup and Maintenance tile on the springboard to access Functional Setup Manager.
3. On the right side of the Functional Manager Setup interface, click the Tasks tab to open the Tasks drawer.
4. Click Search, and search for *Manage Configuration Set Migration Target Security Policy.*
5. On the Manage Configuration Set Migration Target Security Policy page, enter the URL for your target environment, and the appropriate security credentials for the System Administrator role.

   Note: It is recommended to include the port number when you specify the URL value. For example: https://server.example.com:443 You can get the target port value by accessing the Manage Configuration Set Migration Target Security Policy page on your production system (your target).

6. Save.

Managing Unified Sandboxes on the Source and Target System

Public Sector Compliance and Regulation requires the Unified Sandboxes feature to be enabled on your test environment, where you are actively designing and configuring your implementation. It is recommended that you *disable* the Unified Sandboxes feature on your production system.

For migrating transaction types from your test system to your production system, especially, make sure to disable the Unified Sandboxes feature on your target, production system. Because you should be completing all configuration tasks on your source test system, sandboxes shouldn't be required on the production system. Having the Unified Sandboxes enabled on the production system can cause the Configuration Set Migration utility not to render or function properly.

To disable Unified Sandboxes:

1. Sign on to your target, production system.
2. Navigate to Functional Setup Manager.
3. Select your solution, such as Public Sector Permits, Public Sector Planning and Zoning, or Public Sector Code Enforcement.

   Note: Disable Unified Sandboxes in all solutions you have licensed for Public Sector Compliance and Regulation.

4. Click the **Change Feature Opt In** link.
5. Locate the Application Extensions feature, and click the pencil icon in the Features column.
6. Make sure the Unified Sandboxes feature is disabled.

   Note: If there are any open sandboxes, they need to be deleted or published before you can disable this feature.

7. Click **Done.**

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Migrating Transaction Type Foundational Metadata

Before you use Functional Setup Manager to export transaction type configuration data, you need to create and migrate a configuration set, which includes the underlying metadata required to be in place as a prerequisite prior to migrating other transaction type setup data.

Because the Public Sector Compliance and Regulation solutions are metadata-driven, you need to migrate the metadata that is the foundation of the transaction definitions. This is the data stored in the Oracle Metadata Services (MDS) layer. You do this by creating a configuration migration set. Once that is complete, you can then begin using Functional Setup Manager export and import features to transfer the rest of required definitions between test and production systems.

Note: Before you migrate transaction type metadata from your test system, ensure that the transaction type definitions and associated intake forms are complete, tested, and published.

CAUTION: These steps must be completed before you use the Functional Setup Manager export and import options.

Note: Prior to running the configuration set migration process, ensure that all transaction types are published and there is no development and design of intake forms underway. Creating transaction types and intake forms is not supported while the configuration set migration process is running. Once the configuration set migration process has completed successfully, you may resume development and design of intake forms.

To migrate transaction type metadata:

1. Sign on to the test system, which is the source system.
2. Click the Setup and Maintenance tile on the springboard to access Functional Setup Manager.
3. Select the appropriate offering (Permits, Planning and Zoning, or Code Enforcement).
4. Expand the Permit Types, Planning Application Types, or the Incident and Case Types functional area (depending on your offering).

   Note: These steps for creating a migration set apply only to the Permit Types, the Planning Application Types, and the Incident and Case Types functional areas.

5. Click the configuration you want (depending on your offering). For example for permits, click the *Manage Permit Configuration* link.

   Note: This link takes you to the Manage Configuration Set Migration Target Security Policy. You can also access this page in Fusion Application by selecting **Navigator** > **Configuration** > **Migration** .

6. If you have not already specified your target instance URL, you must do that prior to the next step.

   See the previous section for more information.
7. Select the Outgoing tile and create an outgoing migration set to export to your production environment.

   When creating a configuration set, the utility compares differences between source and target, and determines the metadata that needs to be exported to the target system. When the process is complete, the resulting migration set is downloaded in the form of a downloadable jar file.
8. After finishing the creation and migration of the *outgoing* migration set, sign on to the production system (the target system), and complete the steps for applying the *incoming* migration set.

This example illustrates an incoming configuration set.
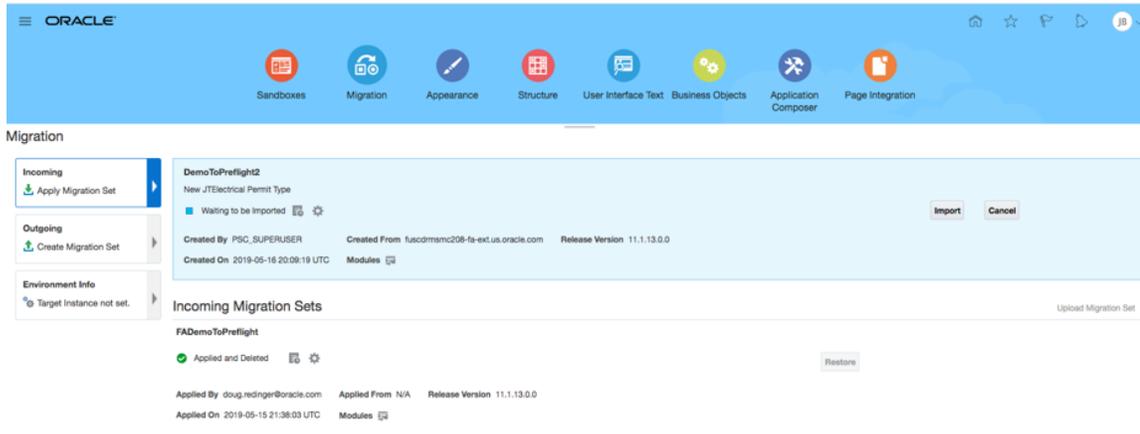
For more information on these steps, refer to *Oracle Applications Cloud documentation: Configuring and Extending Applications.*

Exporting and Importing Remaining Transaction Type Data

After you have completed migrating the configuration set on the source system, you then export the remaining transaction type data using the Functional Setup Manager options for the functional area or the entire offering.

> **Note:** You can export and import at the functional area-level by selecting the **Actions** button for the functional area or at the entire offering level by selecting the **Actions** button at the top right.

This example illustrates using the functional area export options.

After exporting from the test system, you then sign on to the production system and import the corresponding business object data.

When you export business object data, you have the option to select only those business objects that you utilize. For example, if you are not using application groups, you could deselect *Manage Application Groups* from the Business Objects list.

The objects you export will be in the form of a downloadable jar file.

For more information on these Functional Setup Manager export and import features, see:

Using Functional Setup Manager: Managing Setup Using CSV File Packages

Using Functional Setup Manager: Exporting and Importing Setup Data

8 Setting Up Inspections

Setting Up Inspection Statuses

Oracle delivers inspection statuses for use during the inspection process. You review the statuses on the Inspection Status page.

You review inspection statuses during permit setup on the Inspection Status page. You cannot delete the system-defined statuses or add new statuses, but you can modify the associated inspection status names and descriptions.

Modifying Inspection Statuses

1. Select **Common Setup** > **Transaction Status** .
2. Select the **Inspections** tab.
3. You can review the delivered inspection statuses in the **System Status** column:
   - *Pending*
   - *Requested*
   - *Scheduled*
   - *Completed*
   - *Canceled*
   - *Deleted*
4. Select the row for the inspection status that you want to modify.
5. On the Inspection Status Details page you can edit the inspection status name and description.

   The status name is used as the display status for the inspection in the permit application.
6. Click **Save** to save any changes.

Inspection Evaluation Overview

The inspector evaluates a building site for adherence to codes and regulations required for a permit. The example here provides information about an inspection set up to use automatic score calculation with the bottom up scoring method.

A permit might require one or more inspections, each inspection might have one or more checklists, and each checklist might have checklist items or not, depending on the inspection configuration. The inspector performs an inspection by assessing the checklist items, if any, then checklists, and up to the inspection level. The evaluation results that the inspector enters are rolled up to the next level until a final inspection score is calculated if scoring is used.

Scoring is not required. The score is the rolled up to the next level automatically only if scoring used. Otherwise, you specify the result manually on each level.

The following example describes the setup and results of performing an inspection using the bottom up method of scoring. Scoring bottom to top indicates that the inspector starts with a zero score and adds points for each criterion that is met.

Example: Using the Bottom Up Scoring Method

Before you begin, set up the assessment type, rating method, passing rule, scoring method, and checklist, which includes the checklist items. In this case, you don't need to set up the checklist group, because checklist and checklist group are mutually exclusive of each other.

This example illustrates setup for an inspection on the Inspection Type Details page. Details are in the surrounding text.

The setup includes the following:

1. Assessment Method

   The assessment method is defined on the assessment type page and used in the inspection type definition. During the inspection, the inspector selects an available assessment which is associated with a system result. The system result determines the scoring calculation as follows:

Displayed Assessment	System Result	Scoring Calculation
Pass	Pass	Score = All Points
Corrected on Site	Corrected	Score = All Points
Fail	Fail	Score = No Points
NA (not applicable)	Other	Score = No Points

   Note: Only the displayed assessment value is configurable by the agency. The available system results are Pass, Fail, Corrected, and Other. You must have one assessment with a system result of Pass and one assessment with a system result of Fail. You can define multiple assessments with system results of Corrected and Other.

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See *Setting Up Inspection Assessment Types*.

2. Inspection Scoring Method

   The scoring method is defined on the inspection type. In this example, the scoring method is *Bottom Up*.

   See *Setting Up Inspection Types*.

3. Rating Method

   When you use a scoring method, you also must set up a rating method. The rating method defines the range of scores used at the inspection type level.

   See *Setting Up Rating Methods*.

4. Checklist

   The checklist used in the inspection is defined on the inspection type. For example, the checklist could be Electrical for a residential addition. For multiple checklists, you enter a checklist group name. A checklist group can have different inspection checklists, such as both Electrical and Plumbing for a residential addition.

   See *Setting Up Inspection Checklists*.

5. Checklist Item

   The inspection score is defined in the inspection checklist details. In this example, each checklist item is set up with a possible score of 25. The inspector's assessment determines how many points are applied to the checklist. When the inspection result is Pass, the item receives the complete score.

   See checklist details in *Setting Up Inspection Checklists*.

Based on the setup, an example inspection evaluation might look like this:

Checklist Item	Possible Score	Inspector's Checklist Item Result (Assessment)	Assessment System Status	Calculated Score	Checklist Total Score
1	25	Pass	Pass	25	Item 1 = 25
2	25	Pass	Pass	25	Item 1 + Item 2 = 50
3	25	Corrected on Site	Corrected	25	Item 1 + Item 2 + Item 3 = 75
4	25	Fail	Fail	0	Item 1 + Item 2 + Item 3 + Item 4 = 75

For multiple checklists, the sum of the checklist scores determines the inspection score.

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Setting Up Inspection Assessment Types

Assessment types identify the results available for assessing an inspection, for example, Pass and Fail. You add, modify, or delete assessment types and codes for inspections on the Assessment Type pages.

An assessment type includes one or more assessment codes, which identify the possible results for the inspection type. Assessment types are also used for inspection checklist and checklist item results.

Assessment types function independently of the scoring method, maximum score, and minimum score, for example:

- If the system result is Pass or Corrected, the full score is assigned.

- If the system result is Other or Fail, the score is 0.

Scoring for each system result is predefined in the system for inspections.

This example illustrates the Assessment Type Details page containing the field values described in the following table.

Adding Inspection Assessment Types

1. Select **Inspection Setup** > **Assessment Type** .
2. On the Assessment Type page, click **Add** to add an assessment type.
3. On the Assessment Type Details page, enter an assessment type name and description.
4. In the Assessment Details section, click **Add** in the assessment code row.
5. Enter values in the fields of the assessment code row:

Page Element	Description
Assessment	Enter a code name.
Description	Enter descriptive text for the code.
System Result	Select the system-defined result value that you want to set for this assessment code: ○ *Other* ○ *Pass* ○ *Fail* ○ *Corrected*

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Page Element	Description
	You must map each assessment code to a system result value. Each assessment type must include a system result of *Pass* and a system result of *Fail*. The default value is *Other*.
	Note: You must assign *Fail* to only one code. Likewise, you must assign *Pass* to only one code.
	The system result is used in the inspection result processing. If scoring is used, the system result of *Pass* and *Corrected* receive the maximum score. The system results *Other* and *Fail* receive no score.
	The system result is also used to determine whether an inspection result is pass (system result *Pass*) or fail (system result *Fail*). For example, the Inspection Summary report includes violation information when a checklist or checklist item result is associated with the system result *Fail*.

6. Click the **Add** icon at the end of the row to add another assessment code row.
7. Click **Save**.

Modifying Inspection Assessment Type Details

1. Select **Inspection Setup** > **Assessment Type** .
2. Select the row for the assessment type you want to modify.
3. In the header fields on the Assessment Type Details page, you can only modify the assessment type description. You cannot change the name.
4. In the **Assessment Details** section, you can:
   - Change the description of an assessment code. You cannot change the code name.
   - Select a new value in the **System Result** column. Available values are *Pass, Fail, Corrected,* or *Other.* Each assessment code must be mapped to a system-defined result value. The default value is *Other*. You can only use *Pass* and *Fail* once.
5. If you made any changes, click **Save**.

Deleting Inspection Assessment Types

1. Select **Inspection Setup** > **Assessment Type** .
2. On the Assessment Type page, click the **Edit** icon.
3. Select one or more check boxes for the assessment type rows you would like to delete.

   Note: When you delete an assessment type, you also delete the associated details.

4. Click the **Delete** icon.

Deleting Inspection Assessment Type Details

1. Select **Inspection Setup** > **Assessment Type** .

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2. On the Assessment Type page, select the row for the assessment type you are working with.
3. On the Assessment Type Details page, click the **Delete** icon at the end of the assessment code row you would like to delete. You delete details one row at a time.
4. Click the **Save** button.

Setting Up Rating Methods

A inspection rating method may have one or more rating ranges, which an inspector uses to evaluate the object of an inspection. You add, modify, or delete rating methods and rating details for inspections on the Rating Method page.

If you are using scoring for inspections, you must also set up rating methods. Rating methods are used at the inspection type level and are not required at the checklist or checklist item levels.

Adding Rating Methods

You add an inspection rating method by setting up the rating method code with a description and rating details. For example, an agency might use *GRADES* as the rating method code, with a description of *Standard Grades*. The rating details might include grades such as A (high) to F (low), and provide a range of scores to each rating. If the rating for an A grade is defined by 90-100 points, an inspection score of 95 would receive an A.

1. Select **Inspection Setup > Rating Method** .
2. On the Rating Method page, click **Add** to add a rating method.
3. On the Rating Method Details page, enter a rating method name and description. The description is a user-friendly name for the inspection rating method.
4. To add rating method values, click the **Add** button for the first row in the detail grid, and the **Add** icon for the next rows.
5. Enter values for the rating method:

Page Element	Description
Rating	Enter a short name for the rating.
Minimum Score and **Maximum Score**	Enter minimum and maximum numerical values to specify the range for this rating. Do not use decimals. The range for this rating cannot overlap the range for another rating.

6. Click **Save**.

For example, if your rating method uses grades A through F, you specify the rating range for each grade in the **Rating Method Values** table. The range for each rating cannot overlap the range for another rating.

Rating	Minimum Score	Maximum Score
A	91	100
B	81	90

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Rating	Minimum Score	Maximum Score
C	71	80
D	61	70
F	0	60

Modifying Rating Methods

1. Select **Inspection Setup** > **Rating Method** .
2. On the Rating Method page, select the row for the rating method you want to modify.
3. In the header fields on the Rating Method Details page, you can only modify the rating method description. You cannot change the name of the rating method.
4. Click **Save**.

Modifying Rating Method Values

You can change the minimum and maximum scores for a rating on the Rating Method Details page.

1. Select **Inspection Setup** > **Rating Method** .
2. On the Rating Method page, select the row for the rating method you want to modify.
3. On the Rating Method Details page, select the rating row in the values grid that you want to modify.
4. Change the values in the **Minimum Score** or **Maximum Score** fields for this rating on the Rating Method Value Details page. You can use the arrow icons to increase or decrease the score values. The range for this rating cannot overlap the range for another rating. You cannot change the name of the rating.
5. Click **Save**.

Deleting Rating Methods

1. Select **Inspection Setup** > **Rating Method** .
2. On the Rating Method page, select the row for the rating method you want to delete.
3. On the Rating Method Details page, click **Delete**.

   Note: When you delete a rating method, all associated rating details are also deleted.

4. To delete multiple rating methods, click the **Edit** icon on the Rating Method page.
5. Select the check boxes for the rating methods you want to delete.
6. Click the **Delete** icon.

   Note: When you delete multiple rating methods, all associated rating details are also deleted.

7. Click **Save**.

Deleting Rating Method Values

1. Select **Inspection Setup** > **Rating Method** .
2. On the Rating Method page, select the row for the rating method you want to modify.
3. On the Rating Method Details page, select the ratings row in the value grid that you want to delete.

4. On the detail page for the individual rating, click **Delete**.
5. To delete multiple rating method values, click the **Edit** icon in the **Rating Method Values** section.
6. Select the check boxes for the rating method values you want to delete.
7. Click the **Delete** icon.
8. Click **Save**.

Setting Up Passing Rules

A passing rule identifies the different ways an inspection can be scored. You add, modify, and delete passing rules for inspections on the Passing Rule page.

Passing rule definitions provide the criteria for determining whether an inspection passes or fails. If the scoring method is not used in the inspection type definition, a passing rule is not required.

Adding Passing Rules

A passing rule may have one or more scoring ranges that you specify in the passing rule details.

1. Select **Inspection Setup** > **Passing Rule** .
2. On the Passing Rule page, click **Add** to add a new passing rule.
3. On the Passing Rule Details page, enter a unique code for the passing rule and a description.
4. To add scoring ranges, click **Add** in the Passing Rule Criteria section.
5. Enter values in the fields on the rule details page:

Page Element	Description
Description	Enter a description for the scoring range.
Minimum Score and **Maximum Score**	Enter minimum and maximum numerical values to specify the scoring range. You cannot use decimals.
Number of Major Violations	Enter a value for the maximum number of major violations allowed.
Pass	Turn on the **Pass** switch if the specified scoring range combined with the number of violations results in a passing inspection. If the specified range and violations do not result in a passing inspection, leave the option disabled. **Note:** For passing inspections that are based on a passing rule with the **Pass** switch on, the inspection result displays the assessment name that is defined with the system status *Pass*. If the **Pass** switch is off, the inspection result displays the assessment name that is defined with the system status *Fail*. The system uses the assessment type that is associated with the inspection type.

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6. Click **Save**.

Modifying Passing Rules

1. Select **Inspection Setup** > **Passing Rule** .
2. On the Passing Rule page, select the row for the passing rule you want to modify.
3. In the header fields on the Passing Rule Details page, you can only modify the passing rule description. You cannot modify the passing rule code.
4. Click **Save**.

Modifying Passing Rule Details

You can change the scoring range for a passing rule on the Passing Rule Details page.

1. Select **Inspection Setup** > **Passing Rule** .
2. On the Passing Rule page, select the row for the passing rule you want to modify.
3. On the Passing Rule Details page, select the scoring row in the details grid that you want to modify.
4. You can change the following scoring details:

   a. Description of the scoring range.
   b. Minimum and maximum scores to update the scoring range. Use the arrow icons to increase or decrease the score values.
   c. Number of major violations allowed.

   You can also indicate that the specified scoring range combined with the number of violations can result in a passing inspection, by clicking the **Pass** slider. Turn off the option using the slider if the scoring range combined with the violations does not result in passing an inspection,
5. Click **Save**.

Deleting Passing Rules

When you delete a passing rule, all associated passing rule criteria are also deleted.

1. Select **Inspection Setup** > **Passing Rule** .
2. On the Passing Rule page, select the row for the passing rule you want to delete.
3. On the Passing Rule Details page, click **Delete**.
4. If you want to delete multiple passing rules, you can delete them from the Passing Rule page:

   a. Click the **Edit** icon.
   b. Select the check boxes for the passing rule rows to delete.
   c. Click the **Delete** icon.

Deleting Passing Rule Criteria

1. Select **Inspection Setup** > **Passing Rule** .
2. On the Passing Rule page, select the row for the passing rule with the passing rule criteria you want to delete.
3. In the **Passing Rule Criteria** section, select the row for the passing rule criteria you want to delete.
4. On the Passing Rule Criteria Details page, click the **Delete** button.
5. If you want to delete multiple scoring ranges, you can delete them from the Passing Rule Details page:

   a. Click the **Edit** icon.
   b. Select the check boxes for the passing rule criteria rows to delete.

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    c. Click the **Delete** icon.

Setting Up Inspection Checklist Categories

Use checklist categories and subcategories organize the various types of checklists items for inspections.

You set up inspection checklist categories and subcategories on the Inspection Checklist Category page.

Use the checklist categories and subcategories for categorizing checklist items when you set up inspection checklists on the Inspection Checklist Item Details page. See *Setting Up Inspection Checklists*.

Adding Checklist Item Categories

1. Select **Inspection Setup** > **Checklist Category** .
2. On the Checklist Category page, click **Add** to add a checklist category.
3. On the Checklist Category Details page, enter a category ID and description.
4. If you want to add a subcategory, click the **Add** button to add the first subcategory in the **Checklist Subcategory** section. Click the **Add** icon for additional subcategories.
5. On the Checklist Subcategory Details page, enter a subcategory ID and a description.
6. Click **Save**.

Modifying Checklist Item Categories

1. Select **Inspection Setup** > **Checklist Category** .
2. On the Checklist Category page, select the row for the category that you want to modify.
3. On the Checklist Category Details page, you can only modify the category description. You cannot change the category ID.
4. Click **Save**.

Modifying Checklist Item Subcategories

1. Select **Inspection Setup** > **Checklist Category** .
2. On the Checklist Category page, select the row for the category with the subcategory that you want to modify.
3. Select the subcategory that you want to modify in the **Checklist Subcategory** section.
4. You can only change the description on the Checklist Subcategory Details page.
5. Click **Save**.

Deleting Checklist Item Categories

When you delete a checklist category, all associated subcategories are also deleted.

1. Select **Inspection Setup** > **Checklist Category** .
2. On the Checklist Category page, select the row for the category that you want to delete.
3. On the Checklist Category Details page, click **Delete**.
4. If you want to delete multiple checklist categories, you can delete them on the Checklist Category page:
   - Click the **Edit** icon.
   - Select the check boxes for the category rows to delete.
   - Click the **Delete** icon.

Deleting Checklist Subcategories

1. Select **Inspection Setup** > **Checklist Category** .
2. On the Checklist Category page, select the row for the category with the subcategory that you want to delete.
3. On the Checklist Category Details page, select the row for the subcategory that you want to delete.
4. Click the **Delete** button on the Checklist Subcategory Details page.
5. If you want to delete multiple subcategories, you can delete them on the Checklist Category Details page:

    ◦ Click the **Edit** icon.

    ◦ Select the check boxes for the subcategory rows to delete.

    ◦ Click the **Delete** icon.

Setting Up Inspection Checklists

Inspection checklists identify all the items that the inspector must assess during an inspection. You set up inspection checklists and checklist items on the Inspection Checklist pages.

Before adding inspection checklists, you set up:

- Inspection assessment types for your agency, if you want to associate a checklist with an assessment type.

    See *Setting Up Inspection Assessment Types*.

- Inspection checklist categories and subcategories, if you want to categorize your checklist items.

    See *Setting Up Inspection Checklist Categories*.

You add, modify, and delete checklists and checklist items in the inspection setup pages. The checklist and checklist items are copied to the inspection when the inspection schedule is created, and appear on the Inspection Checklist page, the Checklist Items page, and the Checklist Item Result page.

> **Note:** When you modify an inspection checklist or checklist item, the updated checklist is applied to new inspections using the checklist. Existing inspections use the version of the checklist definition in use when the inspection was scheduled.

You identify the checklist or checklist group to use for an inspection on the Inspection Type page. To set up a checklist group after setting up checklists, see *Setting Up Inspection Checklist Groups*.

This example illustrates the Inspection Checklist Details page containing the field values described in the preceding table.

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Inspection Checklist Details

Cancel   Delete   Save

* Checklist	CK-FNC-0100
* Description	FNC_Checklist
Maximum Score	100
Scoring Method	Not used ▾

* Enabled	(on)
Assessment Type	PassFail
Minimum Passing Score	35
Comment	

Checklist Items

Search... 🔍 ▼

Checklist Item	Description	Required	Score	Major Violation	
Fence-Height	Fence-Height	Yes		No	›
Fence-Material	Fence-Material	Yes		No	›
Fence-Type	Fence-Type	Yes		No	›
Footings	Footings	Yes		No	›
Gate	Gate	Yes		No	›

Show 8 items ▾

Adding Inspection Checklists

1. Select **Inspection Setup** > **Inspection Checklist** .
2. On the Inspection Checklist page, click **Add** to add a checklist.
3. On the Inspection Checklist Details page, enter a checklist ID and description.
4. Verify that the **Enabled** switch is turned on. The switch is turned on by default for new checklists.
5. You can also enter values for these fields:

Page Element	Description
Assessment Type	Enter an assessment type. The system determines a passing result based on the assessment type defined for the checklist. The assessment that is defined with system status *Pass* is used for the passing result. Otherwise, the assessment that is defined with the system status *Fail* is used. Assessment types function independently of the scoring method, maximum score, and minimum score. See *Setting Up Inspection Assessment Types*.
Maximum Score	Enter the maximum score possible for the checklist. This value is required if the scoring method is *Top down*, which will be available in a future release.
Minimum Passing Score	Enter a minimum score for a passing grade. This value is required for the scoring method *Bottom up*. If the total score for the checklist is equal to or greater than the minimum passing score, the checklist receives a passing result.
Scoring Method	Select a scoring method to be used for the checklist:

Page Element	Description
	o *Bottom up*: Scoring from the bottom up indicates that the scoring starts with zero and the inspector adds points for the criteria that are met. o *Not used*: This is the default value and indicates that no scoring method is used for this checklist. You must specify the result manually for each level: checklist item, checklist, and inspection. If you don't use the scoring method you can't use the passing rule and rating method. This also means that results are not automatically calculated starting with the checklist items to the checklist to the inspection level. **Note:** The scoring method specified for the checklist should match the scoring method in the Inspection Type definition.
Comment	Enter any additional information.

6. Click **Save**.

Adding Inspection Checklist Items

1. Select **Inspection Setup** > **Inspection Checklist** .
2. On the Inspection Checklist page, select the row for the checklist to which you want to add checklist items.
3. On the Inspection Checklist Details page, click the **Add** button in the **Checklist Items** section to add the first checklist item. Click the **Add** icon for additional checklists.
4. Enter values for fields on the Checklist Item Details page. Required fields include the checklist item ID and description.

Page Element	Description
Checklist Item and **Description**	Enter an ID and description for the checklist item.
Score	Enter the score the item receives if it passes the inspection.
Major Violation	Turn on the switch to indicate that this checklist item is considered a major violation if it does not pass inspection.
Category and **Subcategory**	Enter a category and subcategory for the checklist item. See *Setting Up Inspection Checklist Categories*.
Instructions	Click the **Add** button in the **Instructions** section to add instructions for inspecting the checklist item. Add instructions on the Instruction Details page, including an instructions ID and the instructional text.

5. The **Required** switch is turned on by default to indicate that the inspection of the item is required. The inspector can't submit the inspection result until all required checklist item and checklist results are complete.

   If the checklist item is not required, you can turn off the switch.

6. Click **Save**.

Modifying or Deleting Checklists

1. Select **Inspection Setup** > **Inspection Checklist** .
2. On the Inspection Checklist page, select the row for the checklist you want to modify.
3. On the Inspection Checklist Details page, you can change the values for all fields except for the checklist ID.
4. If you made any changes, click **Save**.
5. If you want to delete the checklist, click **Delete**.

   | **Note:** When you delete a checklist, all associated checklist items are also deleted.

6. If you want to delete multiple checklists, you can delete them from the Inspection Checklist page:

   a. Click the **Edit** icon.
   b. Select the check boxes for the checklist rows to delete.
   c. Click the **Delete** icon.

Modifying or Deleting Checklist Items

1. Select **Inspection Setup** > **Inspection Checklist** .
2. On the Inspection Checklist page, select the checklist row associated with the checklist item.
3. On the Inspection Checklist Details page, select the row for the checklist item in the **Checklist Items** section.
4. On the Checklist Item Details page, you can change the values for all fields except for the checklist item ID.
5. If you made any changes, click **Save**.
6. If you want to delete the checklist item, click **Delete**.
7. If you want to delete multiple checklist items, you can delete them from the Inspection Checklist Details page using the **Edit** and **Delete** icons.
8. Click **Save**.

Modifying or Deleting Checklist Item Instructions

1. Select **Inspection Setup** > **Inspection Checklist** .
2. On the Inspection Checklist page, select the checklist row.
3. On the Inspection Checklist Details page, select the row for the checklist item that contains the instructions.
4. On the Checklist Item Details page, select the row for the instructions that you want to modify or delete.
5. Change the instructional text on the Instruction Details page. You can't change the instructions ID.
6. If you made any changes, click **Save**.
7. If you want to delete the instructions, click **Delete**.
8. If you want to delete multiple instructions, you can delete them from the Checklist Item Details page using the **Edit** and **Delete** icons.
9. Click **Save**.

Setting Up Inspection Checklist Groups

A checklist group comprises inspection checklists that you can associate with a permit. You define a checklist group by selecting one or more inspection checklists.

You set up inspection checklist groups on the Checklist Group page.

Before setting up inspection checklist groups, you must set up your checklists on the Inspection Checklist page. See *Setting Up Inspection Checklists*.

Adding Inspection Checklist Groups

1. Select **Inspection Setup** > **Checklist Group** .
2. On the Checklist Group page, click **Add** to add a checklist group.
3. On the Checklist Group Details page, enter a name and a description for the group of inspection checklists.
4. Click **Save**.
5. To add an inspection checklist to the group, click **Add** in the **Checklists** section.
6. On the Checklist Details page, enter the ID for an existing checklist in the **Checklist** field.
   The description for the checklist ID you entered appears in the **Description** field.
7. Click **Save**.

Modifying Inspection Checklist Groups

You can modify or delete checklist groups and lines on the Inspection Checklist Group page.

1. Select **Inspection Setup** > **Checklist Group** .
2. On the Checklist Group page, select the row for the checklist group that you want to modify.
3. On the Checklist Group Details page, you can only modify the checklist group description. You cannot change the group name.
4. Click **Save** to save any changes.

Deleting Inspection Checklist Groups

1. Select **Inspection Setup** > **Checklist Group** .
2. On the Checklist Group page, select the row for the checklist group that you want to delete.
3. On the Checklist Group Details page, click **Delete**.
4. If you want to delete multiple checklist groups, you can delete them from the Checklist Group page:
   a. Click the **Edit** icon.
   b. Select the check boxes for the checklist group rows to delete.
   c. Click the **Delete** icon.

Removing Inspection Checklist from an Inspection Checklist Group

Note: You cannot modify inspection checklists on the Inspection Checklist Group pages; you can only remove them from the group.

1. Select **Inspection Setup** > **Checklist Group** .

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2. On the Inspection Checklist Group page, select the row for the checklist group from which you want to remove one or more inspection checklists.

3. On the Inspection Checklist Group Details page, select the row for the inspection checklist that you want to remove from the group.

4. On the Inspection Checklist Details page, click **Delete**.

5. If you want to remove multiple inspection checklists from the group, you can delete them from the Inspection Checklist Group Details page:

   a. Click **Edit** in the **Inspection Checklists** section.

   b. Select the check boxes for the inspection checklist rows to delete.

   c. Click **Bulk Delete**.

   d. Click **Save**.

Setting Up Inspection Types

Define inspection types used by your agency to identify the requirements and options for different types of inspections. You set up information such as scheduling, assessments, checklists, billing, signatures required, and comments on the Inspection Type pages.

The inspection type is associated with the permit for the scheduled inspection and defines the different attributes for performing the inspection.

This example illustrates the Inspection Type Details page containing the field values described in the following table.

> **Note:** When you modify an inspection type, the updated values are applied to new inspections using the inspection type. Existing inspections use the original inspection type definition. This does not apply to the **Schedule Cutoff Time** and **Schedule Change Policy** fields, which are referenced when the inspection is scheduled and not stored on the inspection itself.

Adding Inspection Types

You add inspection types for your agency on the Inspection Type page. You must set up the attributes for the inspection type before you begin.

1. Select **Inspection Setup** > **Inspection Type** .
2. On the Inspection Type page, click **Add New** to add a new inspection type.
3. Enter values for fields on the Inspection Type Details page. Required fields include **Inspection Type** and **Description**, **Estimated Duration in Hours**, and **Autonumber Rule**.

Page Element	Description
Inspection Type and **Description**	Enter a unique ID and description for the inspection type.
Estimated Duration in Hours	Enter the estimated number of hours this type of inspection will take. This field is required for scheduling. For more information, see *Setting Up Inspection Scheduling*.
Scheduling Method	Select the scheduling method for inspections associated with this inspection type. Select *Ready* to enable applicants to indicate the date and time when the site is ready to be inspected. Inspections with this scheduling method are assigned and scheduled by inspection supervisors using the supervisor calendar. Select *Schedule* to enable applicants to select a date and time when requesting inspections. Select *Request* to enable applicants to select a preferred date and time range for requested inspections. Inspections with this scheduling method are assigned and scheduled by inspection supervisors using the supervisor calendar. For more information on inspection scheduling, see *Setting Up Inspection Scheduling* and *Assigning Inspections Using the Supervisor Calendar*.
Assessment Type	Enter an assessment type, which is used in the inspection result processing. For more information, see *Setting Up Inspection Assessment Types*.
Passing Rule	Enter a passing rule, which defines the criteria for determining whether an inspection passes or fails. For more information, see *Setting Up Passing Rules*.
Rating Method	Enter a rating method, which defines the scoring ranges used by the passing rule to determine whether an inspection passes or fails.

Page Element	Description
	You must set up a rating method if you are using scoring. For more information, see *Setting Up Rating Methods*.

Scoring Method	Select a scoring method from these options:
	
	   o *Bottom up*: Scoring bottom to top indicates that the inspector starts with zero and adds points for each criterion that is met. You must set up a passing rule for bottom up scoring.
	   o *Not used*: This is the default value and indicates that no scoring method is used for this inspection. You must specify the result manually for each level: checklist item, checklist, and inspection.
	
	     If you don't use the scoring method you can't use the passing rule and rating method. This also means that results are not automatically calculated starting with the checklist items to the checklist to the inspection level.
	
	Note:
	The scoring method specified for the checklist should match the scoring method in the Inspection Type definition.

Autonumber Rule	Enter the ID for the automatic numbering rule to use for generating the inspection transaction key. For more information, see *Setting Up Autonumbering*.
Checklist Group	You can enter a checklist group. If you enter a checklist group, you cannot also enter a checklist ID. For more information, see *Setting Up Inspection Checklist Groups*.
Checklist	You can enter the ID for a single checklist. You cannot enter both a checklist group and a checklist ID. For more information, see *Setting Up Inspection Checklists*.
Billable	Click this slider if this inspection type is billable. When you turn on this switch, the **Bill Type** field becomes required.
Bill Type	Enter a bill type. This field is required if the **Billable** switch is turned on. For more information, see *Setting Up Bill Types*.
Policy Name and **Policy Version**	Enter the name of the template and version number the Oracle Intelligent Advisor policy.

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Page Element	Description
	For more information, see *Overview of Oracle Intelligent Advisor Configuration*.

Inspector Signature
 	
Owner Signature
 	
Contractor Signature
	Select a signature option for the inspector, owner, and contractor associated with the inspection type:
	
	    ○ *Required*: The signature field appears on the Inspection Results page.
	
	    Note:
	    Inspectors can't submit a completed inspection if required signatures are missing.
	
	    ○ *Not Required*: The signature field does not appear on the Inspection Results page.
	    ○ *Optional*: A signature is optional for this inspection type.
	The default value for the **Inspector Signature** is *Required*.
	
	The default value for the **Owner Signature** and **Contractor Signature** is *Optional*.

Schedule Cutoff Time	Enter the time after which applicants and non-supervisor agency staff can no longer schedule inspections for the current day or the next day using the Scheduling modal page. For example, if the cut off is 3:00 PM and the current time is 4:30 PM, the inspection can't be scheduled for today or tomorrow. The inspection must be scheduled for the day after tomorrow.
	
	    Note:
	    This field does not affect an inspection supervisor's ability to override inspection assignment times through the Scheduling modal page. It also does not affect automatic batch assignment.

Inspection District Type	Enter the inspection district type for this inspection, for example a building, electrical, or plumbing inspection district. When the inspection with this inspection type is scheduled, the system finds the inspector who is assigned to a district belonging to the inspection district type defined on the inspection type. This field is required for scheduling. For more information, see *Setting Up Inspection Scheduling*.
Schedule Change Policy	Enter the acceptable number of hours prior to the inspection that the user can change the schedule or cancel an inspection. For more information, see *Setting Up Inspection Scheduling*.
Hide Inspector Comments	Turn on this switch if you want to hide inspector comments from public users. The default value for this switch is off so that inspector comments are visible.

4. Verify that the **Enabled** switch is turned on if you want to enable this inspection type when you save it. The switch is turned on by default for a new inspection type.
5. Click **Save**.

Modifying or Deleting Inspection Types

You can modify or delete inspection types on the Inspection Type page.

1. Select **Inspection Setup** > **Inspection Type** .
2. On the Inspection Type page, select the row for the inspection type you want to modify.
3. On the Inspection Type Details page, you can change the values for all fields except for the inspection type code.
4. If you made any changes, click **Save**.
5. To delete the inspection type, click **Delete**.
6. If you want to delete multiple inspection types, you can delete them from the Inspection Type page:
   a. Click the **Edit** icon.
   b. Select the check boxes for the inspection type rows to delete.
   c. Click the **Delete** icon.

Setting Up Inspection Groups

An inspection group identifies a group of inspection types associated with a permit. You can set up inspection groups on the Inspection Group page.

The inspection group includes one or more inspection types. You can define inspection groups separately from permit type definitions.

Before setting up inspection groups, you must set up inspection types for your agency on the Inspection Type page. See *Setting Up Inspection Types*.

Adding Inspection Groups

1. Select **Inspection Setup** > **Inspection Group** .
2. On the Inspection Group page, click **Add** to add a new inspection group.
3. On the Inspection Group Details page, enter a name and a description for the inspection group.
4. Click the **Enabled** switch to enable the new inspection group.
5. To add inspection types to include in the group, click **Add** in the Inspection Types section.
6. Enter values in the columns of the inspection type row:
   a. **Inspection Type**: Enter an existing inspection type.
      The description for the inspection type you entered will appear in the **Description** field.
   b. **Required**: Click the switch if the inspection type is required for the inspection group.

      > **Note:** Even if an inspection type is not required, it may become required based on business rules during processing.

   c. **Final Inspection**: Click the switch if this inspection type is the final inspection. One and only one row must be set as the final inspection.

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     d. Click the **Add** icon to add another type; otherwise, click **Save**.

7. On the Inspection Group Details page, click **Save**.

Modifying or Deleting Inspection Groups

You can modify or delete inspection groups on the Inspection Group page.

1. Select **Inspection Setup** > **Inspection Group** .
2. On the Inspection Group page, select the inspection group that you want to modify.
3. On the Inspection Group Details page, you can only modify the inspection group description. You cannot change the group name.
4. Click the **Enabled** switch to enable or disable the inspection group.
5. If you want to delete the inspection group, click **Delete** on the Inspection Group Details page.
6. Click **Save** to save any changes.
7. If you want to delete multiple inspection groups, you can delete them from the Inspection Group page:
    a. Click **Edit**.
    b. Select the check boxes for the inspection group rows to delete.
    c. Click **Delete**.
8. In the inspection types grid, you can:
    a. Click the **Required** switch to enable or disable an inspection type.
    b. Click the **Final Inspection** switch to set an inspection type as the final inspection. One and only one row must be set as the final inspection.
    c. Click **Add** to add a new inspection type row.
    d. Click the **Delete** icon at the end of the row to remove an inspection type from the group.

> **Note:** You cannot change the inspection type ID or description, but you can remove an inspection type and add another.

9. Click **Save** to save any changes.
10. If you want to remove an inspection type from the group, click **Delete**.
11. If you want to remove multiple inspection types from the group, you can delete the rows from the Inspection Group Details page:
    a. Click **Edit**.
    b. Select the check boxes for the inspection type rows to delete.
    c. Click **Delete**.
    d. Click **Save**.

Setting Up Inspection Calendars

Inspection calendars establish the days of the week and daily hours that are available for scheduling specific types of inspections.

Administrators add, modify, and delete inspection calendars on the Inspection Calendar page.

Adding an Inspection Calendar

1. Select **Inspection Setup** > **Inspection Calendar** .

2. On the Inspection Calendar page, click **Add**.
3. On the Inspection Calendar Details page, enter values for the following fields:

Page Element	Description
Calendar ID	Enter a unique ID for the calendar.
Inspection Type	Select the type of inspection to which this calendar applies. For more information on inspections types, see *Setting Up Inspection Types*.
Inspection District	Select the district to which this calendar applies. > **Note:** > A small municipality may have only one defined district ID that includes its entire inspection area. A large municipality may have multiple defined district ID. This enables you to create inspection calendars for different areas to optimize your distribution of resources. For more information on districts, see *Setting Up Districts*.
Description	Enter a description for the calendar. For example, you might enter *Final fence inspection calendar*.
Start Date	Enter the first day of the calendar.
End Date	Enter the last date of the calendar. You can leave this field blank to give the calendar an open end date.
Start Time and **End Time**	Enter the start and end time for the calendar. For example, you might enter a start time of *09:00* and an end time of *16:00*.
Recurrence	Select whether the calendar reoccurs weekly. If you select *Weekly recurrence*, enter the number of weeks between occurrence in the **Weeks Between Occurrences** field.
Weeks Between Occurrences	Enter how many weeks are between each occurrence. For example, if you select a recurrence of *Weekly* with *1* week between occurrences, the calendar repeats every week.

Page Element	Description
	Note: When the recurrence frequency for an inspection calendar is greater than 1, the first week of scheduling is the week that contains the start date, where Sunday is considered the first day of the week. Therefore, it is recommended that you set the start date to the Sunday of the first week in which you want to schedule inspections. For example, you create an inspection calendar for Mondays and Fridays where the recurrence frequency is 2, alternating weeks. Setting the calendar start date to January 1, 2019 causes January 4, 2018 to be available for scheduling but not December 31, because it is before the start date. Also, January 7 and 11 are in the alternate week, so the next days available for scheduling are January 14 and 18. If you set the start date to January 5, which is still part of the first week that the calendar is active, the system considers this same week as the start week, but no days are available until January 14 and 18.
Inspection Days	Select the days of the week that are available for inspection scheduling.

4. Click **Save**.

Note: For overnight inspection calendars that go past 12 a.m. (midnight), you must create two calendars: one for the time period up until midnight, and one for the time period after midnight. For example, to create a weekday overnight calendar that starts at 09:00 p.m. and ends at 05:00 a.m. the following day, the first calendar would have a start time of 09:00 p.m. and an end time of 12:00 a.m. on Monday, Wednesday, and Friday. The second calendar would have a start time of 12:00 a.m. and an end time of 05:00 a.m. on Tuesday, Thursday, and Saturday.

Modifying an Inspection Calendar

1. Select **Inspection Setup** > **Inspection Calendar** .
2. Click a row on the Inspection Calendar page.
3. On the Inspection Calendar Details page you can:

   o Update the inspection calendar field values.

      Note: You cannot edit the **Calendar ID**.

   o Delete the calendar. You will be prompted to confirm the permanent deletion.
4. Click **Save**.

Deleting Inspection Calendars

1. Select **Inspection Setup** > **Inspection Calendar** .
2. Click **Edit**.
3. Select the check boxes next to all the inspection calendars you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Setting Up Inspection Scheduling

When agency users and registered public users schedule an inspection, the system is actually determining which inspectors are available and qualified to perform the inspection. Therefore, to schedule inspections, it is necessary to define all of the appropriate employee data for inspectors.

Inspectors are considered qualified if they have been assigned the inspection type and district associated with the inspection. The availability of inspectors is based on their work schedules and whether they have been assigned to other inspections previously.

In addition, the time slots that are available for scheduling are impacted by inspection calendars and holiday calendars, which define when inspections can and can't be performed, respectively.

The system determines which inspectors can be scheduled to perform an inspection based on two sets of criteria.

1. Qualifications: To be qualified to perform an inspection, agency staff must be defined as inspectors, and assigned to inspection types, districts and work schedules.
2. Availability: Agency holidays and inspection calendars, inspector work schedules, and existing inspector assignments determine the availability of inspectors.

The following table lists the different types of data that need to be defined so that the system can determine inspector qualifications and availability. The Frequency column lists how many instances of the data type can be defined. The Required column lists whether a data type is required for time slots to appear on the Scheduling modal page during inspection scheduling.

For more information on inspection requests see *Requesting Inspections*.

Criteria Type	Data Type	Frequency	Required	Impact of Missing Data
Qualification	Inspection Type	One per inspection	Yes	Only defined inspection types are available to select when requesting inspections. The **Select a Time** button is not available if the inspection type's scheduling method is not *Schedule*.
Qualification	District	One per inspection Note that the address selected for the inspection needs to be associated to a property for which there is an assigned inspection district.	Yes	No scheduling times are available on the Scheduling modal page. Note that the inspection type and a property associated with the permit must have the same district type. If they don't, the Select a Time button is unavailable for the inspection request.
Qualification	Inspectors	One per employee who performs inspections	Yes	No scheduling times are available on the Scheduling modal page.

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Criteria Type	Data Type	Frequency	Required	Impact of Missing Data
Qualification	Assigned Inspection Type	One or more per inspector	Yes	No scheduling times are available on the Scheduling modal page.
Qualification	Assigned Inspection District	One or more per inspector	Yes	No scheduling times are available on the Scheduling modal page. Note that the assigned inspection district and the property associated with the permit must have the same district type. If they don't, the Select a Time button is unavailable for the inspection request.
Availability	Work Schedule	One or more for each period of the day inspectors work; may include one break	Yes	No scheduling times are available on the Scheduling modal page.
Availability	Assigned Work Schedule	One or more per inspector	Yes	No scheduling times are available on the Scheduling modal page.
Availability	Inspection Calendar	One or more for each combination of inspection type and district	No	The inspection can be scheduled at any time of day (or whenever inspectors are available).
Availability	Assigned Inspection	Automatically created when an inspection is assigned	No	No time slots are unavailable for scheduling due to previously assigned inspections.
Availability	Holiday Calendar	One per agency	No	No days are unavailable for scheduling due to holidays or other agency non-working days.

Inspection Types

You define inspection types using the Inspection Type page. The system uses the estimated duration to determine whether an inspector is available for the entire time required to complete an inspection. The inspection district type is a pre-defined district type with the category of *Inspection.*

For more information on inspection types, see *Setting Up Inspection Types*.

Inspection Districts

You must create an inspection district and assign it to inspectors to enable qualified inspectors and make time slots available when scheduling inspections. The district for the inspection is based on the district type assigned to the inspection type. The system uses this district type to determine the district ID associated with the property for which an inspection is being scheduled. A property may have more than one district type associated with it, but only one of them has a district type category of *Inspection.*

The system determines the property for the inspection based on the inspection address. The address for a new inspection defaults to the primary address associated with the permit for which you are scheduling an inspection. You may select other addresses that are associated with the permit. If no address is associated with an inspection, the system can't determine the district for the inspection so the Select a Time and Select a Different Time buttons are disabled.

For more information on district types, districts, parcels, and addresses see:

- *Setting Up District Types*
- *Setting Up Districts*
- *Assigning Districts to Parcels*
- *Assigning Districts to Addresses*
- *Setting Up Property Addresses*

Work Schedules

You must create work schedules and assign them to inspectors to make the inspectors available for inspection scheduling.

> **Note:** If the recurrence for a work schedule is *Weekly,* and the weeks between occurrences is greater than 1, the system uses the week of the valid from date as the starting point for scheduling.

For more information on work schedules, see *Setting Up Work Schedules*.

Inspectors

To make inspectors available for inspection scheduling, you must perform the following steps on the Agency Staff page:

- Assign the *ORA_BUILDING_INSPECTOR* job function to the inspector.
- Assign inspection types to the inspector by adding job attributes to the *ORA_BUILDING_INSPECTOR* job function.
- Assign inspection districts to the inspector by adding job attributes to the *ORA_BUILDING_INSPECTOR* job function.
- Assign work schedules to the inspector by adding job attributes to the *ORA_BUILDING_INSPECTOR* job function.

For more information on assigning job functions and job attributes to agency staff, see *Setting Up Agency Staff*.

Inspection Calendars

Setting up inspection calendars is optional for scheduling inspections. Without inspection calendars, however, the system can potentially allow inspections to be scheduled for any time during a 24 hour period, if there are work schedules that comprise all 24 hours.

You define inspection calendars for a specific combination of inspection type and district. You can define more than one calendar for the same inspection type and district.

For more information on inspection calendars, see *Setting Up Inspection Calendars*.

Holiday Calendar

Setting up holiday calendars is optional for scheduling inspections. Holiday calendars establish the days that agency offices are closed and no field service operations are offered. The dates established as events on the holiday calendar are not available for inspection scheduling regardless of how the inspection calendars or work schedules are defined.

For more information on holiday calendars, see *Setting Up Holiday Calendars*.

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9 Setting Up Plan Reviews

Setting Up Plan Reviewer Departments

A plan review department represents an area of expertise for reviewers of plan documents.

For example, a plan review department of Building is associated with experts in building-related codes and regulations whereas a plan reviewer department of Fire is associated with experts in fire-related codes and regulations.

You select a plan review department for a plan reviewer when you add a department job attribute for your plan reviewer job function during agency staff setup. For more information on adding job functions and job attributes, see *Managing Agency Staff Profiles*.

System administrators add, modify, and delete plan reviewer departments on the Plan Reviewer Department page.

Adding Plan Reviewer Departments

1. Select **Common Setup** > **Plan Reviewer Department**.
2. On the Plan Reviewer Department page, click **Add**.
3. Enter values for the following fields:

Page Element	Description
Department ID and **Department**	Enter an ID and name for the department
Description	Enter a description for the department.

Applicable Classification	Select the types of transactions that the department applies to. You must select at least one classification. Options are:
	
	   ○ *Permits*
	
	   ○ *Planning and Zoning*
	
	Note:
	These options are available to select only if you have more than one offering installed.

Department Lead	Select a plan reviewer as the **Department Lead**. Only agency staff that are assigned the job attribute for the department are available to select. The automatic plan reviewer assignment process adds the department lead as the default plan reviewer for the department. You enable automatic plan review assignment and select the default plan reviewer departments on the Permit Type and

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Page Element	Description
	Planning Application Type pages. See *Setting Up Permit Types* and *Setting Up Planning Application Types*.

4. Turn on the **Enabled** switch to make the plan reviewer department available as a value on other pages.
5. Click **Save**.

Modifying Plan Reviewer Departments

1. Select **Common Setup** > **Plan Reviewer Department** .
2. On the Plan Reviewer Department page, select the plan reviewer department that you want to modify.
3. On the Plan Reviewer Department Details page you can:

   o Edit the description and department lead. You cannot change the values of the **Department ID** and **Department** fields.
   o Update the applicable classifications.
   o Enable or disable the plan reviewer department using the **Enabled** switch.

      Note: When you disable a plan reviewer department that is already associated with a plan review the department remains associated with that plan review.

   o Delete the plan reviewer department. You will be prompted to confirm the permanent deletion.
4. Click **Save**.

Deleting Plan Reviewer Departments

1. Select **Common Setup** > **Plan Reviewer Department** .
2. Click **Select Multiple**.
3. Select the check boxes next to all the plan reviewer departments you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Note: You can't delete a plan reviewer department that is already in use as part of a plan reviewer's job attribute, or selected for a permit type or planning application type. In this case, to prevent the plan reviewer department from being used in the future, turn off the **Enabled** switch to disable it.

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10 Setting Up Activity Tracking

Setting Up Activity Tracking

This topic gives you an overview of the steps involved in setting up activity tracking for the administrative actions that are required during the application process.

1. Set up activity statuses, if desired, and review system statuses.
   See *Setting Up Activity Statuses*.
2. Set up activities.
   See *Setting Up Activities*.
3. Define activity groups.
   See *Setting Up Activity Groups*.
4. Add activities to the groups, and configure the activity rules that are used to calculate due dates of tasks.
   See *Defining Planning Application Activity Rules*.
5. Assign the activity group to the planning application type.
   See *Setting Up Planning Application Types*.

Setting Up Activity Statuses

Use delivered activity statuses to identify the progression of an activity using activity due dates tracking.

You can review the delivered activity statuses on the Activity Status page:

- *Canceled*
- *Completed*
- *In progress*
- *Incomplete*
- *Not required*
- *Pending*

You can't delete the system-delivered statuses, but you can modify the descriptions. You can also define additional activity statuses that are associated with either the *In progress* or *Not required* system status.

Adding Activity Statuses

Define any additional statuses that your agency will use for activity tracking on the Activity Status page.

1. Select **Common Setup** > **Transaction Status** .
2. Select the **Activity Status** tab.
3. Click **Add** to define a new status.
4. On the Activity Status Details page, enter values for these fields:

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Page Element	Description
Status	Enter a status name.
Description	Enter a description for the status. The description is exposed to agency staff for an activity using activity due dates tracking.
System Status	Select the system status that you want to use. **Note:** You must associate the new status with a system status to ensure correct processing. o *In process* o *Not required*

5. Verify that the **Enabled** switch is turned on. The switch is turned off by default for a new status.
6. Click **Save**.

Modifying Activity Statuses

You can modify the activity statuses that you have defined on the Activity Status Details page, but you can only edit the **Description** field of system-defined statuses. The description is exposed to agency staff for an activity on the activity due dates tracking page.

1. Select **Common Setup** > **Transaction Status** .
2. Select the **Activity Status** tab.
3. Select the row for the status that you want to modify.
4. For user-defined statuses, you can:

    o Edit the description.

    o Select the system status that you want to use for processing: *In progress* or *Not required*.

    o Turn on the **Enabled** switch to enable a user-defined record status.

5. For system-delivered statuses, you can only edit the description. You can't edit the **Status** field or disable the status.
6. Click **Save** to save any changes.

Setting Up Activities

When configuring activity tracking for your agency, you set up the activities that take place during the application process.

Activities are time-sensitive tasks that help you track due dates related to the progression of a planning application. You set up activities on the Activities Details page for reuse in the activity groups associated with the planning application

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type. When a planning application is submitted, you manage the activities to complete the application. For example, you might set up an activity called Administrative Close for completing the hearing decision report.

You can modify or delete an activity, but when an activity is assigned to an activity group, you can't delete the activity.

Let's take a look at how to set up application activities:

1. Select **Common Setup** > **Activity** .
2. On the Activity page, click **Add** to add a new activity.
3. On the Activity Details page, you'll find these fields:

Page Element	Description
Activity ID	Enter a unique identifier for the activity. You can't modify this field after saving the activity.
Activity	Enter a name for the activity.
Description	Enter a description of the activity.
Classification	Displays *Planning and Zoning* to indicate the offering this activity will be used for.

4. Turn on the **Enabled** switch when the activity is ready for use.
5. Click **Save**.

Setting Up Activity Groups

When configuring activity tracking for your agency and after defining reusable activities, you define the grouping of activities that apply to a planning application type.

First, define the activity group that will be mapped to one or more planning application types. You can reuse activity groups for different application types. Then assign the activities that have already been set up to activity groups and set up the rules for calculating due dates. The groups identify the list of tasks involved in processing a planning application.

You can modify or delete an activity group, but you can't delete the activity group when it's associated with a planning application type.

Here's how to define the activity group:

1. Select **Common Setup** > **Activity Group** .
2. On the Activity Group page, click **Add** to add a new group.
3. On the Activity Group Details page, enter a values for the group.

Page Element	Description
Activity Group ID	Enter a unique identifier for the activity group.

Page Element	Description
Activity Group	Enter a name for the activity group.
Description	Enter a description of the activity group.
Classification	Displays *Planning and Zoning* to indicate the offering this activity group will be used for.

4. Add activities to the group in the **Activity** section.

   You can click the **Activity** link to see the list of activities available for use in the group.

5. Turn on the **Enabled** switch when the activity group is ready for use.

6. Click **Save**.

The next step is to define the rules for each activity that are used to calculate due dates and manage the activity.

Defining Planning Application Activity Rules

You define planning application activity rules for each activity in an activity group to track and manage tasks based on important due dates.

The rules are based on events that occur during the planning application lifecycle—which include when the application is received, application acceptance, the hearing schedule, and the hearing decision—and determine how the activity due dates are calculated.

Activity Rule Example

Let's take a look at an example. First, the agency sets up a reusable activity *City Clerk Publishes Final Packet,* which can be part of multiple agency groups. This activity reminds the planning application staff to publish the final packet before the public hearing. After the activity is assigned to an activity group, the agency defines the rules for tracking the activity. In this example, the activity is related to the hearing, based on the City Council hearing date. That is, the City Council hearing date is the base date and activities may be due before or after. Here the task is due 7 days before the hearing date, and if the hearing is canceled or rescheduled, agency staff can repeat the activity with a new base date.

The example Activity Group – Activity setup page shown here is described in the surrounding text.

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Activity

* Activity ID	008
Activity	City Clerk Publishes Final Packet
Description	City Clerk Publishes Final Packet
* Base Date	Hearing Date
* Hearing Body	City Council
* Due Date	7 Days before base date
Redo Activity with New Base Date	(on)
Enabled	(on)

Cancel   Delete   Save

When the hearing with the City Council is scheduled, the activity based on the rule is inserted into the activity tracking list for the planning application as shown here.

The due date for the activity is calculated to be 7 days before the hearing date. The hearing date in this example is 10/21/20 and the activity is due 10/14/20.

Notice how the activity or activities with same base date in the group are activated on the application's activity tracking page. In this example, all of the activities associated with the hearing base date appear in the list when the hearing date is scheduled.

Defining Activity Rules

Here's how to define activity rules that are used to determine due dates of tasks:

1. Select **Common Setup > Activity Group** .
2. On the Activity Group page, select the row with the activity group that you want to add activities to.
3. Click the **Add** button in the **Activity** section on the Activity Group Details page.
4. On the Activity page, select an activity from the reusable activities you set up in the first step of due date tracking setup. For more information, see *Setting Up Activities*.

   The activity name and description are displayed once you select an activity.
5. Next select the base date for calculating due dates, when the event in the application timeline occurs. Choose one of the following from the **Base Date** list:

Activity Base Date	Event Description
Submission Date	The date when the application was submitted in the agency system.

Activity Base Date	Event Description
Acceptance Date	The date when the agency accepts the application after submission. The workflow process populates the acceptance date in the application
Hearing Date	The scheduled hearing date for the planning application. The calculated activity due date is updated when the hearing date changes.
Hearing Decision Date	The date when the hearing body makes a decision about the planning application, such Approved or Denied.

6. For each base date, enter the due date rule in days in the **Due Date** field. For example, if an activity deadline is 30 days after the application acceptance date, enter *30* in the **Due Date** field and select *Days after base date*. You can also indicate whether the due date is prior to the base date by selecting *Days before base date*.

7. Then set up the unique rules for each activity based on the event date.

   ○ If you select the *Submission Date* base date, you provide a due date and also indicate whether the application can be resubmitted. For example, when an application is submitted, state law provides up to 30 days to review the application and determine its completeness. When an application is resubmitted, the 30-day allowance begins again. It can only be resubmitted if it's incomplete.

   ○ The *Acceptance Date* base date selection only requires due date values.

   ○ For the *Hearing Date* and *Hearing Decision Date* base dates, enter the due date and values for the following fields:

Page Element	Description
Hearing Body	This field applies only to the Hearing Date Hearing Decision Date base dates. Select from the available hearing bodies that evaluate the application. Your agency sets up the hearing bodies you can choose from. For more information, see *Setting Up Hearing Bodies*.
Hearing Decision	This field applies only to the Hearing Decision Date base date. Select one or more decisions about the planning application: *Approved, Continue, Denied*, and *None*. The calculated activity due date is based on the date the hearing decision is made with one of the specified outcomes.
Redo Activity with New Base Date	Indicate whether the activity needs to be redone whenever the base date changes. For example, the activity based on the current due date is complete, but you want to redo the activity based on a new date. A new row automatically appears on the activity tracking page with the new base date and calculated due date.

8. Turn on the **Enabled** switch when the activity rule is ready for use. You can turn off the switch to disable the activity rule but you can't delete it if the activity group is in use.

9. Click **Save**.

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Setting Up Actions Based on Activities

You can set up business rules in the Business Rules Framework to automatically update a workflow step and send communications based on an entitlement activity status change in the activity tracking.

The Business Rules Framework is an event-driven, action framework that enables you to execute various actions based on conditions in the business rules you define. Here the business rules can automate workflow and communications actions based on the progression of planning application activities. For more information about the Business Rules Framework, see *Business Rules Framework Overview*.

Before you begin, set up activity tracking, define the workflow process in Oracle Autonomous Integration Cloud (OIC), and set up communication templates. For information about workflow, see *Setting Up Process Definitions for Workflow*. For information about setting up communication templates, see *Setting Up Communication Templates*.

The workflow advances and communications are sent when the activity conditions are met. In this example, the workflow status for the human task Review Application Completeness is automatically set to *Complete* when the Completeness Review activity in activity tracking is set to *Completed.* Also, when the status of the Completeness Review activity is changed to *Completed,* the selected communication templates from the Planning Activity Updated communication event are sent.

Let's look at setting up the business rule with the conditions to trigger workflow advancement and communication actions:

1. Select **Common Setup** > **Business Rules Framework** .
2. Select the **Planning and Zoning** tile.
3. In the list of planning and zoning events, select the Planning Activity Updated event.
4. Click **Add** to create a business rule.
5. Define the conditions for the action in the **Conditions** section.

   - 1. *Activity* Equals *Completeness Review* AND
   - 2. *Activity Status* Equals *Completed*

   Example of entitlement activity conditions described in the surrounding text

Sequence	(	Field	Operator	Value	)	Grouping Verb	Actions
1	(	Activity	Equals	Completeness Review	)	AND	➕ 🗑
2	(	Activity Status	Equals	Completed	)		➕ 🗑

6. Select actions:

   - The *Update Workflow* action that updates a workflow process instance.
   - The *Send Communication* action that sends emails and notifications based on communication templates.

   Workflow advancement and communications actions described in the surrounding text

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▲ Actions

Action Name		Action Description	Configure	Actions
Update Workflow	▼	Updates a Workflow Process Instance	Configure	✚ 🗑
Send Communication	▼	Sends a communication	Configure	✚ 🗑

7. Click the **Configure** link for the *Update Workflow* action to configure the workflow action values in the Update Workflow table.

Identify the workflow step and the action that should be used when updating a task. In this example, the values are *Review Application Completeness* for the PSC_ACTIVITY_TYPE workflow property and *Completed* for the action.

8. Click the **Configure** link for the *Send Communication* action to select communication templates from the Planning Activity Updated communication event in the Activity Tracking resource. .

You can select templates by template code or channel type. You can also process all Planning Activity Updated templates. Click the **Edit Templates** link to access and update the templates.

When the activity conditions are satisfied, the business rule triggers the workflow and communications actions.

Related Topics

- Setting Up Business Rule Conditions
- Setting Up Business Rule Actions

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11 Managing Audit Policies

Implementation Concepts for Audit Policies

This topic discusses audit configuration for business object attributes.

Audit enables tracking the change history of particular attributes of a business object. However, those objects and their attributes must be selected for audit and auditing must be enabled for that application. Your configuration settings determine which attributes to audit for a given object, and when the audit starts and ends. Auditing takes into account all the operations performed on an object and its attributes, such as create, update, and delete. To configure audit business object attributes, use the Manage Audit Policies task in the Setup and Maintenance work area.

Selecting an Application

To set up auditing, you must select a web application that contains the required business objects that can be audited. From the list of business objects, select those business objects that you want to audit. Selecting a business object also displays its attributes that are enabled for auditing.

Selecting Attributes

For each selected business object to be audited, select the corresponding attributes to include in the audit. All attributes that belong to that object are by default selected for audit and appear on the user interface. However, you can add or remove attributes from the list. When you remove an attribute from the list, you stop auditing it even when the parent object is selected for audit. So, if you want an attribute to be audited, you must add it to the list. If the object selected in an audit hierarchy is also a part of several other audit hierarchies, the attribute configuration for that object is applicable to all the hierarchies in that application.

> **Tip:** For business objects based on flexfields, select the Flexfields (Additional Attributes) check box to view and add or remove flexfield attributes, to include or exclude them from the audit.

Starting and Stopping Audit

The business object is ready for audit after you select its attributes and save the configuration changes. However, to start auditing, the audit level for Oracle Applications Cloud must be set to **Auditing** on the Manage Audit Policies page.

To stop auditing an object, you can deselect the entire object and save the configuration. As a result, all its selected attributes are automatically deselected and are not audited. To continue to audit the business object with select attributes, deselect those attributes that are not to be audited. When users view the audit history for an application, they can specify the period for which they want the results. Therefore, make a note of when you start and stop auditing an application.

For example, users intend to view the audit history of an object for the previous week, but auditing for that object was stopped last month. They wouldn't get any audit results for that week, because during the entire month that object wasn't audited. Even if you enable audit for that object today, users can't get the wanted results because audit data until today isn't available.

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Audit Configuration for Oracle Fusion Middleware Products

To set up auditing for Oracle Applications Cloud, select the Manage Audit Policies task from the **Setup and Maintenance** work area within your offering. To set up auditing for Oracle Fusion Middleware products, select the level of auditing mapped to a predefined set of metadata and the events that have to be audited. Information about configuring audit for Oracle Fusion Middleware products is provided in Oracle Fusion Middleware guides.

You can also create a configuration file and deploy it to audit a specific Oracle Fusion Middleware product. The configuration details for Oracle Fusion Middleware products are available as audit-specific assets that you can use to create the config.xml configuration file. To get a list of audit-specific assets, see Audit Events for Oracle Applications Cloud Middleware (Doc ID 2114143.1) on My Oracle Support at https://support.oracle.com.

- Oracle Fusion Middleware Products

  Configure business objects to enable auditing in Oracle Fusion Middleware products. Refer to the Oracle Fusion Middleware Security and Administrator's Guide for Web Services.

- Oracle Fusion Security Products

  Configure business objects to enable auditing in Oracle Fusion security products. Refer to Oracle Fusion Middleware Application Security Guide.

Using Auditing to Monitor Changes

You can enable business objects to allow auditing, recording, and retrieving information about when the objects were created, modified, and removed.

Audit Policies Overview

Auditing is used to monitor user activity and all configuration, security, and data changes that have been made to an application. Auditing involves recording and retrieving information pertaining to the creation, modification, and removal of business objects. All actions performed on the business objects and the modified values are also recorded. The audit information is stored without any intervention of the user or any explicit user action.

Use audit policies to select specific business objects and attributes to be audited. The decision to create policies usually depends on the type of information to be audited and to the level of detail required for reporting.

Enabling Audit Functionality

For Oracle Applications Cloud, you must configure the business objects and select the attributes before enabling audit. If you enable audit without configuring the business objects, auditing remains inactive. By default, auditing is disabled for all applications. To enable and manage audit, ensure that you have a role with the assigned privilege Manage Audit Policies (FND_MANAGE_AUDIT_POLICIES_PRIV). For appropriate assignment of roles and privileges, check with your security administrator.

If you don't want an object to be audited, you can stop the audit process by setting the Audit Level option to *None*.

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Auditing Public Sector Compliance and Regulation Data

You use auditing to monitor data changes that have been made to data within the Public Sector offerings.

To enable auditing for Public Sector Compliance and Regulation data:

1. Sign in as a setup user.
2. Select **Setup and Maintenance** and go to the following:

     o Offering: Select any Public Sector offering.

     o Functional Area: Application Extensions

     o Task: Manage Audit Policies

3. In the Manage Audit Policies page, click Oracle Fusion Applications, to configure the required audits.
4. Click **Configure Business Object Attributes**.
5. On the Configure Business Object Attributes page, select *Public Sector Common Components* from the drop-down list of products.

   Select *Public Sector Tech Stack* for configuring user-defined business object attributes generated by your intake forms. See *Auditing Custom Object Data*.
6. Select from the list of objects in the **Audit Name** column:

Objects Category	Parent Object	Child Object
Fees	Fee Transactions	(None)
Fee Schedule	Fee Schedule	Fee Items
Permits, Planning and Zoning, and Business Licenses	Common Transaction Data	o Business Licenses Data o Business Tax Related Data o Permits and Planning and Zoning Data

7. In the **Audited Attributes** area, click the Add icon.

   The Select and Add Audit Attributes dialog box opens.
8. Select the desired attributes.
9. Click **OK**.

   The selected attributes are displayed in the **Audited Attributes** area.
10. Click **Save**.

Related Topics
   • Implementation Concepts for Audit Policies
   • Auditing Custom Object Data

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Auditing Custom Object Data

You can use Oracle Fusion Applications auditing features to configure auditing for user-defined business object attributes generated by your intake forms.

This topic describes how to:

- Configure business object attribute auditing for specific transaction types.

- Run an audit report for specific transaction types.

You use the Oracle Fusion Applications auditing features to set up auditing for Public Sector Compliance and Regulation business objects.

Transaction-Specific Auditing Scope

A specific transaction type, such as a permit or a planning application are the business objects you can audit. Each transaction type, such as a permit, contains a limited set of fields that you can audit, which include:

- User-defined fields. These are the fields you added manually to your intake form.

- Fields from the base view object for that transaction type. These fields are the same for all transaction types, and they appear in the attributes list regardless if they appear in the intake form or not.

The transaction types included for custom object auditing are:

- Permits

- Planning and Zoning

- Business Licenses

> **Note:** You will see Code Enforcement business objects in the list, but these objects are not supported for auditing at this time. You can select them but the attributes list will be empty.

You can audit other aspects of transaction data, such as changes to fee schedules and fee items, which is discussed in another topic. For more information, see *Auditing Public Sector Compliance and Regulation Data*.

> **Note:** The fields added to your intake forms by the field groups you've added *are not* currently available to be audited. Fields added to the intake form by field groups reside in a child table to the base view object for the transaction type. Auditing fields in child tables is not currently supported.

To determine what fields in a specific transaction are able to be audited, you can use any REST client to submit a describe for that transaction type. For example, you can send a GET request using the following URL:

```
https://servername.fa.us2.oraclecloud.com/fscmRestApi/resources/11.13.18.05/LNPFENCEPERMIT_c/describe
```

Where *FENCEPERMT* is the name of the transaction type. *LNP* is prepended and *_c* is appended automatically by the Intake Form Designer.

The attributes appearing in the returned payload of the describe that *can't be audited* appear within the FieldGroups section. For example:

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```
"FieldGroups" : {
 "discrColumnType" : false,
 "title" : "Permit Details",
 "attributes" : [ {
 ...
```

Configuring Business Object Attribute Auditing for a Specific Transaction Type

Note: Before you can begin setting up auditing for a specific transaction type, the intake form needs to be published.

To configure auditing for a specific transaction type:

1. Access Functional Setup Manager.
2. Open your licensed offering from the Setup list, such as *Public Sector Permits* or *Public Sector Planning and Zoning.*
3. Select the Application Extensions functional area, and click the Manage Audit Policies task.

   Note: You can use the Search Tasks feature as well to navigate to the Manage Audit Policies task.

4. On the Manage Audit Policies page, locate the Oracle Fusion Applications group box.
5. To enable auditing, set **Audit Level** to *Auditing.*
6. Click **Configure Business Object Attributes.**
7. On the Configure Business Object Attributes page, select *Supply Chain Management Common Components* from the **Product** drop-down list, and expand the *FscmCustomReferenceAuditAM* node.

   Note: The Public Sector Compliance and Regulation offering resides in the Oracle Fusion Applications Financials and Supply Chain (FSCM) database. When searching for Public Sector Compliance and Regulation custom business objects, you will find them within the Supply Chain Management Common Components section. If you are also an Oracle FSCM customer, you will see FSCM business objects mixed with your Public Sector Compliance and Regulation products within the FscmCustomReferenceAuditAM node.

8. Click the business object for which you want to configure auditing.

   The business object name is the same as your transaction type code, such as the **Permit Type** value on the Permit Type page.
9. With the business object selected, select Actions > Create in the Attribute column on the right.
10. In the Select and Add Audit Attributes dialog box, select the attributes you want to audit.

    Note: The attributes available are limited to the base view object values and the custom fields you have added to your form.

11. Click **OK.**
12. Save your changes.

For more information, see the Oracle Fusion Applications documentation on *business object auditing*.

Running an Audit Report

To run an audit report:

1. Select **Navigator** > **Tools** > **Audit Reports.**

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2. For **Date,** specify a date or date range for your audit report.

3. Select *Supply Chain Management Common Components* from the **Product** drop-down list.

4. From the **Business Object Type** drop-down list, select the permit type name for which you enabled auditing.

5. Use the **Date, User,** and **Event Type** criteria to refine your search, as needed.

6. Click **Search.**

For more information see the Oracle Fusion Applications documentation for *audit reports*.

Viewing Audit History

You use audit history to view changes to the application data such as the business objects that were created, updated, and deleted.

Before you begin, you must have a role with the assigned privilege View Audit History (FND_VIEW_AUDIT_HISTORY_PRIV). For appropriate assignment of roles and privileges, check with your security administrator.

To view the Fee Schedule audit history or to create a report:

1. To open the Audit History work area, select **Setup and Maintenance** > **Navigator** > **Tools** > **Audit Reports** .

2. Enter the following search values:

Audit Reports Search Field	Value
Date	Enter the date for the audit results you want to see.
Product	Select *Public Sector Common Components*.
Business Object Type	○ *Fee Transactions* ○ *Fee Schedule* ○ *Common Transaction Data*

3. Select the option to **Include child objects**.

The default search displays a summary of the audit history in the search results table. It includes key data such as date, user, product, event type, business object type, and description. For a detailed report, search again with modified search criteria. You can export the report summary to Microsoft Excel.

Search Parameter	Result of Selection
Business Object Type **Note:** This parameter is applicable only for the business objects that belong to Oracle Applications Cloud.	• Narrows the search results to that specific business object within the selected product. • Enables the **Show Attribute Details** check box.

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Search Parameter	Result of Selection
Include Child Objects	Displays all the child objects that were listed for that business object when audit was set up. For example, a sales order object that contains several items as child objects. **Note:** Displays the objects at the immediate parent-child level only. To view the children at subsequent levels, select the child object as the business object type and search again.
Show Impersonator	Displays the details of the impersonator who modified the objects during an impersonation session.
Show Attribute Details	Enables the attribute list so that users can select either all attributes or a specific attribute to view the changes. Based on the selection, the search results indicate whether the attribute is created, updated, or deleted, and the corresponding old and replaced values.
Show Additional Object Identifier Columns	Displays the instances (contexts) in which the business object was used. The context values identify the objects and the transactions in which they were used. Each context is unique and assigns a unique description to the business object.

Note: The default report displays a standard set of columns that contain prominent details of the audit history. To view additional details, you can change the display of columns.

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12 Modifying Existing Application Pages

Overview of Existing Page Modification

This topic provides an overview of how you can modify an existing page delivered by Oracle in a Public Sector Compliance and Regulation offering.

You can use the Configure Page feature to modify specific attributes of an existing page delivered by Oracle in a Public Sector Compliance and Regulation offering. You can make these modifications:

- Change field labels.

- Hide fields.

> **Note:** In the current release, you can modify *only* the Parcel Details page.

Examples of page modifications include:

- Suppose the existing page has a field label that doesn't correspond to the terminology used in your agency. Suppose the delivered field label is *Flood Zone,* but your agency uses *Flood Zone Code.* You can use the Configure Page option to modify the label.

- Suppose the existing page contains a field tracking information your agency does not track, such as the Patio field. You can use the Configure Page feature to hide that field.

Access Page Edit Mode

This topic describes how to access edit mode for existing application pages that you can modify.

Before accessing edit mode, make sure you are signed on with a user who is assigned one of the following job roles:

- PSC Business Analyst

- PSC System Administrator

Also, make sure the existing page supports configuration. Not all existing pages can be modified. Pages that can be modified display the Configure Page icon in the global header.

> **Note:** In the current release, you can modify only the Parcel Details page.

This example illustrates the **Configure Page** icon, which is described in the surrounding text.

Click the **Configure Page** icon to launch page edit mode.

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Use the Page Edit Mode Interface

This topic describes the features and controls you can use to modify an existing application page.

To access the page edit mode, click the Configure Page icon in the global header. For more information see *Access Page Edit Mode*.

This example illustrates the user interface of the page edit mode. Details are in the surrounding text.
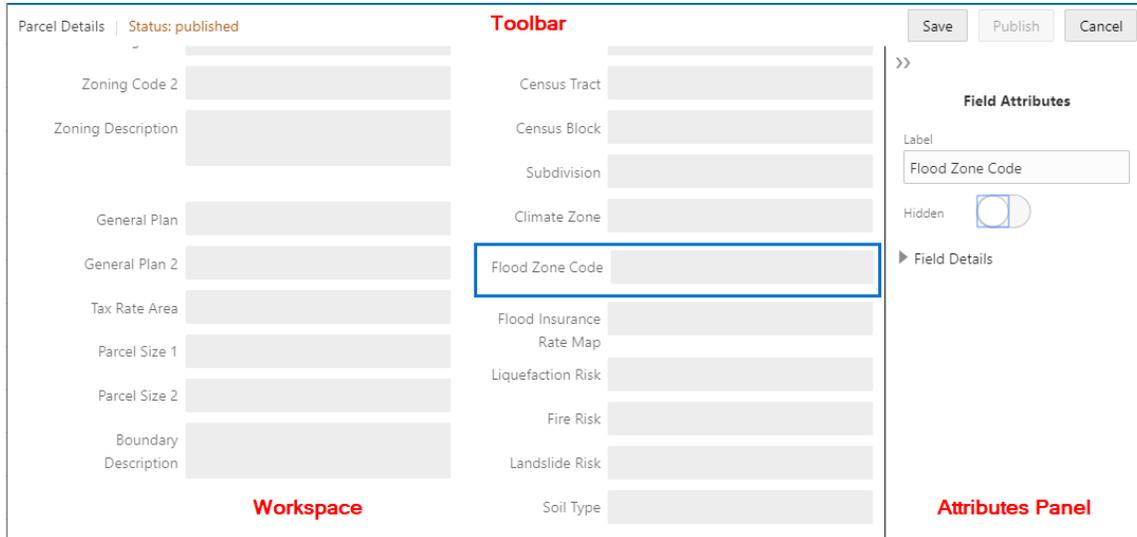
When in page edit mode, the interface consists of these items:

- Toolbar
- Workspace
- Attributes Panel

Using the Toolbar

The toolbar spans the top of the interface below the global header and displays the following information and controls.

Page Element	Description
Page Name	Displays the name of the page as it appears in the application, such as *Parcel Details.*
Status	Indicates the status of the current page. • *Draft:* indicates the page is currently being edited, but the current changes are not available for general use. Draft mode becomes enabled when you click **Save** when editing a page. • *Published:* the page is available for general use with the most current modifications included. In the development or testing environment, a published page is available for developers and testers to access and test. In the production environment, a published form is available for end users to access.

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Page Element	Description
	Note: The status is displayed only if you are modifying the page or you have previously modified and published the page.
Save	Saves the current changes to the page to store them, without publishing them. Clicking **Save** puts the page in draft mode.
Publish	Click to create a sandbox and publish the current changes in the sandbox so that the page reflects the changes for runtime access and use. **Note:** The Publish button is available only after your have clicked **Save.**
Cancel	Click to exit the edit mode without saving or publishing any changes.
Close	Click to exit edit mode. The **Close** button appears when there is no change on the page to be saved or published, such as after you have just published page modifications.
Manage Sandbox	Click to access the Oracle Fusion Applications Sandboxes page where you can view the status of your sandbox and refresh your sandbox if needed. When modifying an existing page, the sandbox exists only during the publishing process request. While you modify a page and save any changes, the system tracks your changes in an internal metadata storage object. When you click **Publish,** the changes are added to the sandbox, and the sandbox is published. **Note:** The Manage Sandbox button appears only if the sandbox associated with your form layout becomes out of sync during a publish request, requiring a refresh. Identify the sandbox for your page modifications according to this naming scheme: *PSCSC_<page name>__sb_<number of publish requests>* For example: *PSCSC_ParcelDetailsInformation__sb_2* For more information on sandboxes, see *Working with Sandboxes*.

Using the Workspace

The workspace displays the content of the page that you can modify. Select a field on the page to display its attributes in the Attributes panel.

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Using the Attributes Panel

The Attributes Panel contains the attributes you can modify for a selected page element, such as a field.

This example illustrates the Field Attributes panel when modifying existing pages. Details are in the surrounding text.

Field Attributes

Label

Parcel Type

Hidden ⬤

◢ Field Details

Business Object

ParcelVO

Field Name

ParcelType

> **Note:** In the current release, only fields can be modified on an existing page.

You can view and set these field attributes:

Page Element	Description
Label	Use to modify the existing label for the page. > **Note:** > The length limit for modified field labels on existing pages is 100 characters. > **Note:** > Do not change the meaning of a field label in an attempt to use it to reflect a value different from its intended purpose. For example, don't change "Flood Zone" to "School Zone." Each field may have logic behind it, dependencies in workflow, dependencies related to fees, and so on. The ability to change field labels is intended to support minor changes in terminology.
Hidden	Use to hide a field on the existing page. When the switch is on, the associated field is hidden. > **Note:** > Fields that are set to be required can't be hidden.
Business Object	The name of the database view object associated with the page.
Field Name	The name of the field as it appears in the REST payload, which you can view using a describe command for the associated REST resource.

The **Business Object** and **Field Name** values are read-only values provided for informational purposes to help implementation teams assess any areas affected by a page modification, which affects:

- Sub pages using the same view object field

- Reporting

- Auditing

> **Note:** Changes made to a field on an existing page may affect fields appearing within field groups added to intake forms if they share the same view object.

Modify Existing Pages

This topic describes the steps in the procedure for modifying an existing page delivered in an Oracle Public Sector Compliance and Regulation offering.

Change Labels

To change a a label:

1. Navigate to the page you want to modify.
2. Click the Configure Page button in the global header.
3. In the workspace, select the field you want to modify.
4. In the Field Attributes panel, enter your modified label in the **Label** field.
5. Click **Save.**
6. Click **Publish.**

Hide Fields

To hide a field:

1. Navigate to the page you want to modify.
2. Click the Configure Page button in the global header.
3. In the workspace, select the field you want to hide.
4. In the Field Attributes panel, turn on the **Hidden** switch.
5. Click **Save.**
6. Click **Publish.**

After you have hidden a field, the layout in page edit mode displays the field within a box with a hidden icon next to the hidden field to indicate its hidden runtime status.

This example illustrates a field on an existing page that has been hidden.
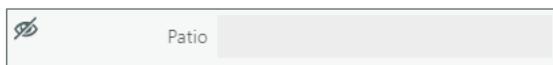
Managing Existing Page Modifications

This topic describes concepts necessary to keep in mind when migrating existing page modifications between environments, such as from the test environment to the production environment.

Similar to migrating transaction types from one environment to another, the data related to page modifications gets migrated in multiple parts using these features:

- Functional Setup Manager's export and import feature.

- Configuration Set Migration feature, which you access using the Functional Setup Manager step "Manage Existing Page Modifications" in the System Administration functional area.

Note: The Configuration Set Migration feature migrates all published sandbox changes, not just the modifications to existing pages. For example, current intake form changes and branding image changes will also be migrated in the configuration set.

Related Topics
- Managing Transaction Type Configurations

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13 Managing Mobile Applications

Managing Mobile Application Offline Settings

This topic describes how to enable and configure offline data caching for the Oracle Inspector mobile application.

You can enable offline data caching for the Oracle Inspector mobile application. When enabled and the mobile application is online, inspectors can download to the mobile application the data they will need while completing inspections offline. While offline, the mobile application refers to the cached data to complete the inspection and make the necessary updates.

The mobile application tracks each update while it is offline, and when the mobile application is back online, the mobile application automatically synchronizes with the agency data and makes any updates to the agency data.

To enable and configure offline data caching, access the Mobile Offline Configuration page by selecting **Common Setup** > **Mobile Offline Settings.**

Page Element	Description
Enable Offline Data Caching	Turn on to enable offline data caching for the Oracle Inspector mobile application. When enabled, the mobile application can download required data for offline tasks. **Note:** By default, offline data caching is enabled for the mobile application. If the inspector doesn't want to use offline data, then the option needs to be disabled explicitly.
Check for Updates	Set an interval in minutes for the mobile application to check for updates to the cached data. If any updates are found, the mobile application downloads them automatically.
Days to Cache Before Today	Set the number of days of previous inspection data to cache on the device. Typically, inspectors using the mobile application won't need all the historical data stored by an agency, but they will need an optimal window of recent data to have accessible for offline processing or reference. For example, if this value is set to 2, then the mobile application caches the inspection-related data for the current day (Today) and the previous 2 days. **Note:** The current day (today) is always cached.
Days to Cache After Today	Set the number of days of scheduled inspections to cache after the current day (today). For example, if this value is set to 2, then the mobile application caches the inspection-related data for the current day (today) and inspections scheduled on the next 2 days.

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Page Element	Description
	Note: The current day (today) is always cached.
Days to Retain Cache	Set the amount of days to retain the cache within the mobile application after download.
Cache Refresh Period in Hours	Set the period in hours for the mobile application to refresh the cached data automatically if online. For example, if the inspector logs into the mobile application at 9:00 AM in the morning, it will download the data based on the offline settings. On the following day, again at 9:00 AM when the inspector logs into the application the data will be downloaded. **Note:** Inspectors can refresh the cache manually, as needed, from the Oracle Inspector mobile application.

When you enable mobile offline data caching, consider the following items:

- The amount of free space on the device determines the amount of cache that you want to download to the mobile device. The amount of space required for a typical amount of inspection-related data for 3–5 days can be approximately 50–100 MB, however, when attachments are involved the cache consumes more space.

- The mobile application attempts to synchronize the mobile device with the agency data every five minutes, regardless whether the device is online or not.

- Each inspection is a separate unit of work. If there is a synchronization issue for one inspection, that issue does not have an impact on the other inspections.

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