Oracle Public Sector Permitting and Licensing

Implementing Your Agency

26B

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G52796-01

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Get Help

There are a number of ways to learn more about your product and interact with Oracle and other users.

Get Help in the Applications

Use help icons to access help in the application. If you don't see any help icons on your page, click your user image or name in the global header and select Show Help Icons.

Get Training

Increase your knowledge of Oracle Cloud by taking courses at *Oracle University*.

Join Our Community

Use *Cloud Customer Connect* to get information from industry experts at Oracle and in the partner community. You can join forums to connect with other customers, post questions, and watch events.

Share Your Feedback

We welcome your feedback about Oracle Applications user assistance. If you need clarification, find an error, or just want to tell us what you found helpful, we'd like to hear from you.

You can email your feedback to *oracle_fusion_applications_help_ww_grp@oracle.com*.

Thanks for helping us improve our user assistance!

2 Implementing Oracle Permitting and Licensing Using Functional Setup Manager

Security Details for Implementing Oracle Permitting and Licensing

This topic describes important security roles, requirements, or considerations specific to implementing Oracle Permitting and Licensing.

Primary Role	Access Description	Associated Job Roles and Abstract Roles
Application Implementation Consultant	Configure Oracle Permitting and Licensing offerings.	Application Implementation Consultant

For more information on creating roles for Oracle Permitting and Licensing, see *Creating Custom Roles for Oracle Permitting and Licensing*.

For more information on all the predefined security data such as abstract roles, job roles, privileges and so on, see the *Security Reference for Oracle Permitting and Licensing.*

Using Functional Setup Manager

This topic discusses how to use the Functional Setup Manager.

Oracle Functional Setup Manager provides an integrated, end-to-end process for functional administrators to manage the implementation and maintenance of Oracle Permitting and Licensing services.

Business users configure features and manage setup data using the Functional Setup Manager. Subscription to offerings, enabling functional areas, opting in features, and setting up guided end-to-end tasks pertaining to the offerings are all driven through the Functional Setup Manager.

For a detailed understanding of the Functional Setup Manager, see the Oracle Fusion Cloud Applications documentation: *Using Functional Setup Manager*.

Viewing Offerings and Functional Areas

To view the Public Sector offerings and their functional areas in Functional Setup Manager:

1. Select **Navigator** > **Setup and Maintenance** or select the **Setup and Maintenance** tile on the springboard.
2. Select a Public Sector offering from the Setup drop-down list.

   The page lists all the functional areas on the left and the corresponding tasks on the right.

Note: When configuring your offering using Functional Setup Manager, configure the functional areas in the order they appear in Functional Setup Manager from top-to-bottom. Functional areas depend on the configuration data for the functional areas appearing before them in the list.

Working with Help Links

You enable Help links in Functional Setup Manager during your implementation so that you can directly access related documentation. To enable Help links:

1. Select **Navigator** > **Setup and Maintenance** or select the **Setup and Maintenance** tile on the springboard.
2. Select an Oracle Permitting and Licensing offering from the Setup drop-down list.

   The page lists all the functional areas on the left and the corresponding tasks on the right.
3. Click **View** in the Task section and select **Columns** > **Help**. This option is turned off by default.
4. To view Help icons in the tasks list, select the **Settings and Actions** button in the header and click **Show Help Icons**.

Selecting Feature Opt In

At the top of the Functional Areas section, use the Change Feature Opt In link to display the Opt In page for your offering. Each offering, such as Permits or Business Licenses, provides a set of standard features, and each offering has a different set of opt in features that you can choose to enable additionally. After you enable an op in feature, the setup pages for that feature will be displayed within the functional areas within Functional Setup Manager for that offering.

Note: The reference entity feature is included for internal testing and demonstration purposes only. Reference entities aren't supported for production use. Reference entities are planned to be supported in a future release only.

Feature	Business License	Code Enforcement	Permits	Planning and Zoning
Solution Packages	x	x	x	x
Permit Inspections			x	
Business License Inspection	x			
Reference Entities	x	x	x	x
Permit Types		x		
Accounting	x	x	x	x
OPA Questionaire			x	x
Digital Assistant			x	x
System Administration	x	x	x	x

Feature	Business License	Code Enforcement	Permits	Planning and Zoning
Application Extensions	x	x	x	x

Migrating Data From Your Test Environment to Your Production Environment

This topic describes the utilities used to migrate setup data from your test environment to your production environment.

In your pod you have these environments:

Environment	Description
Test	The test environment is where you learn about the product, enter your setup and configuration data, and test your changes. For example, this is where you add the data for setting up your agency, create your permits, specify branding modifications for your site, and so on.
Production	The production environment is the environment your agency employees and your end users access to complete transactions. The production environment reflects the "finished product" of what was configured and tested in the test environment.

After you have made changes and tested them in the test environment, you then migrate any changed metadata and setup data from your test environment to your production environment. You use the Functional Setup Manager export and import utilities to complete these tasks.

For more information on the Functional Setup Manager export and import utilities, see *Using Functional Setup Manager*.

For more information on managing transaction type data, see:

- *Managing Transaction Type Configurations*.
- *Oracle Public Sector Community Development: Test to Production* (Doc ID 2551940.1) on My Oracle Support.

3 Setting Up Geographical Information

Importing Geographies

Use the Manage Geographies task to import geographical information.

The Manage Geographies task of the Agency Profile functional area in Oracle Functional Setup Manager enables you to import geographies into your interface tables. For detailed instructions on importing geographies, see the Oracle Fusion Cloud Applications documentation: "Geographies" in *Implementing Applications*.

Importing geographies automatically populates data for the following tasks:

- Manage Countries (*Setting Up Counties*)
- Manage States (*Setting Up States*)
- Manage Counties (*Setting Up Counties*)
- Manage Cities (*Setting Up Cities*)
- Manage Public Sector Currencies (*Setting Up Currencies*)

Setting Up Countries

A country definition includes the country name and various identifying codes.

You add, modify, and delete countries on the Country page.

Adding a Country

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

Page Element	Description
Country Code	Enter a the unique code that your system uses for the country. For example, you might enter *FRA* for France.
ISO Alpha 2 Code	Enter the two-letter International Organization of Standardization (ISO) code for the country. For example, you would enter *FR* as the code for France.
ISO Numeric 3 Code	Enter the three-digit United Nations (UN) M.49 code for the country. For example, you would enter *250* as the code for France.
Country Name	Enter the name of the country as it appears in your system.

Page Element	Description

4. Click **Save**.

Modifying a Country

1. Select **Common Setup** > **Country**.
2. Click a row on the Country page.
3. On the Country Details page you can:
    - Update the country field values.

      Note: You cannot edit the **Country Code**.

    - Delete the country. You will be prompted to confirm the permanent deletion.
4. Click **Save**.

Deleting Countries

1. Select **Common Setup** > **Country**.
2. Click **Edit**.
3. Select the checkboxes next to all the countries you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Setting Up States

A state definition includes information such as the state name, country, and various ID codes.

You add, modify, and delete states on the State page.

Adding a State

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

Page Element	Description
Country	Enter the code for the country that the state is in.
State Code ISO	Enter the International Organization of Standardization (ISO) code for the state.
Code	Enter the unique code that your system uses for the state.

Page Element	Description
State Name	Enter the name of the state.
Type	Enter the subdivision type.
GNIS ID	Enter the Geographic Names Information System (GNIS) ID for the state's location.

4. Click **Save**.

Modifying a State

1. Select **Common Setup** > **State**.
2. Click a row on the State page.
3. On the State Details page you can:
    - Update the state field values.

      Note: You cannot edit the **Country** or **State Code ISO** fields.

    - Delete the state. You will be prompted to confirm the permanent deletion.
4. Click **Save**.

Deleting States

1. Select **Common Setup** > **State**.
2. Click **Edit**.
3. Select the checkboxes next to all the states you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Setting Up Cities

A city definition includes information such as the city name, country, state, and certain ID codes.

You add, modify, and delete cities on the City page.

Adding a City

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

Page Element	Description
Country Code and **State Code**	Enter the codes for the country and state in which the city is located.

Page Element	Description
County	Enter the five-digit International Committee for Information Technology Standards (INCITS) code for the county in which the city is located.
FIPS Code	Enter the seven-digit Federal Information Processing Standard (FIPS) code for the city.
City Name	Enter the name of the city.
GNIS ID	Enter the Geographic Names Information System (GNIS) ID for the city's location.

4. Click **Save**.

Modifying a City

1. Select **Common Setup** > **City**.
2. Click a row on the City page.
3. On the City Details page you can:
   - Update the city field values.

     Note: You cannot edit the **Country Code**, **State Code**, or **County** fields.
   - Delete the city. You will be prompted to confirm the permanent deletion.
4. Click **Save**.

Deleting Cities

1. Select **Common Setup** > **City**.
2. Click **Edit**.
3. Select the checkboxes next to all the cities you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Setting Up Counties

A county definition includes information such as the county name, country, state, and certain ID codes.

You add, modify, and delete counties on the County page.

Adding a County

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

Page Element	Description
Country and **State**	Enter the codes for the country and state that the county is in.
INCITS Code	Enter the five-digit International Committee for Information Technology Standards (INCITS) code for the county.
County Name	Enter the name of the county.
FIPS Code	Enter the seven-digit Federal Information Processing Standard (FIPS) code for the county.
GNIS ID	Enter the Geographic Names Information System (GNIS) ID for the county's location.

4. Click **Save**.

Modifying a County

1. Select **Common Setup** > **County**.
2. Click a row on the County page.
3. On the County Details page you can:
    - Update the county field values.

      > **Note:** You cannot edit the **Country**, **State**, or **INCITS Code** fields.

    - Delete the county. You will be prompted to confirm the permanent deletion.
4. Click **Save**.

Deleting Counties

1. Select **Common Setup** > **County**.
2. Click **Edit**.
3. Select the checkboxes next to all the counties you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Setting Up Currencies

A currency definition includes currency codes, a description, and the number of decimals that can be used to represent an amount in the currency.

You add, modify, and delete currencies on the Currency page.

Adding a Currency

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

Page Element	Description
Currency Code	Enter a the unique code that your system uses for the currency.
ISO Code	Enter the three-digit International Organization of Standardization (ISO) 4217 numeric code for the currency. For example, you would enter *840* for the US dollar.
Description	Enter a short description of the currency.
Decimal Position	Enter the number of decimal places that can be used to represent an amount for the currency. For example, the United States dollar uses two decimal positions.

4. Click **Save**.

Modifying a Currency

1. Select **Common Setup** > **Currency**.
2. Click a row on the Currency page.
3. On the Currency Details page you can:
   - Update the currency field values.

     Note: You cannot edit the **Currency Code** field.
   - Delete the currency. You will be prompted to confirm the permanent deletion.
4. Click **Save**.

Deleting Currencies

1. Select **Common Setup** > **Currency**.
2. Click **Edit**.
3. Select the checkboxes next to all the currencies you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

4 Setting Up Your Agency

Setting Up Agencies

An agency is an organization that offers a range of services to its constituents, including issuing permits and licenses. You set up a variety of agency-level settings, including options for plan reviews and inspections, on the Agency Details – Agency Information page.

Oracle Permitting and Licensing doesn't currently support multiple agencies, so you can set up exactly one agency, with agency ID *1*.

Here's how to go to the Agency setup:

1. When starting from Home with Ask Oracle, select **Setup and Maintenance of Offerings** to access the Functional Setup Manager.
2. Select **Setup: Public Sector <Offering>** > **Functional Area: Agency Profile** > **Task: Manage Agencies**.
3. On the Agency page, click the row for your agency.
4. On the Agency Details page, select the **Agency Information** tab.

Managing Agency Information

Administrators add and modify agency information on the Agency Details – Agency Information page.

1. On the Agency Details page, click the **Agency Information** tab.
2. Enter values for these fields in the **General** section:

Page Element	Description
Agency ID	Enter the number *1* as the ID for your agency.
Name	Enter a name for the agency.
Description	Enter a short description for the agency.
Country	Enter the country in which the agency is located.
Currency	Enter the currency that the agency uses for financial transactions. This value is informational only. It does not affect the currencies for fees, cash drawers, or payment adaptors.
Time Zone	Select your agency's local time zone. All times displayed in Oracle Permitting and Licensing use this time zone.

Page Element	Description
Time Format, **Date Format**, and **Number Format**	Select the default formats that the agency uses to display times, dates, and numbers for anonymous users.
Oracle Policy Automation ID	Enter the unique identifier for an agency-wide Oracle Intelligent Advisor policy model. Oracle Intelligent Advisor is a separate Oracle product. Oracle Intelligent Advisor policy models provide logic models for questionnaires that help public users determine which applications they need to complete. The policy model that you enter here is used by offerings that do not have an offering-specific policy model. To specify an offering-level policy definition, select the Features tab on the Agency Information page, then click the **Options** link for the offering. For more information on Oracle Intelligent Advisor, see *Overview of Oracle Intelligent Advisor Configuration*.

3. In the **Payments** section, you can configure the payment settings.

Page Element	Description
Partial Payments	Select a value to indicate whether partial payment is allowed only for agency users, allowed for all users, or not allowed.
Payment Allocation Order	Select a value to prioritize the payment allocation either as oldest or newest. The selected order first applies to the applications and then the fees.

4. In the **Property** section, you can configure these property settings.

Page Element	Description
Parcel Owner Format	This field is reserved for future functionality. Currently, regardless of your selection, parcels have one field to identify the parcel owner and an additional field to identify a secondary owner.
Hide property owners from public users	Turn on this switch to hide property owner information from public users.
Users can create a new address on applications	Enables registered users to create a new address on the Search Property page during application intake.
Identify and import property information using GIS	Enables registered users to identify and import property information using the GIS.

5. In the **Business** section, you can configure these business settings.

Page Element	Description
Business Number Rule	Select the autonumbering rule to increment numbers for businesses. **Note:** This field is required if the Business Licenses offering is enabled for your agency. Autonumbering rules need to be defined after you create the agency, so be sure to return to the agency pages to add the business number rule that you define.
Location Number Rule	Select the autonumbering rule to increment numbers for business locations. **Note:** This field is required if the Business Licenses offering is enabled for your agency. Autonumbering rules need to be defined after you create the agency, so be sure to return to the agency pages to add the location number rule that you define.

6. In the **Search** section, you can search an agency using the default search filter or type.

Page Element	Description
Default Search Filter	Select a default search filter. The available search filters are *Address*, *Parcel,* and *Owner*.
Default Search Type	Select the default search type. The available search types are *Starts with* and *Contains*.

7. In the **Copy Applications** section, you can define the number of copies that can be created for an application.

Page Element	Description
Maximum Copies Allowed	Use the increment and decrement buttons to increase or decrease the number of copies that can be created for an application at a time. By default, this is set to five, but the agency can enter any number between 0 to 100.

8. The fields in the **Business Rules Framework** section apply to setting up email notifications for business rules in a status of Error and for setting up automated retries for unsuccessful business rule actions.

   For more information on setting up email notifications and automated action retries, see *Viewing Business Rule Logs* and *Scheduling Automated Retry*.
9. In the **Plan Reviews** section, you can set up plan reviews with these options for both the Permits and Planning and Zoning offerings.

Page Element	Description
Default Plan Review Date Type Filter	Select a default value for the date type filter on the Plan Reviews console page for agency staff: - *Cycle Due* - The date when the plan review cycle is scheduled to be completed. - *Cycle Created* - The date when the plan review cycle was created. - *Reviewer Due* - The date by which the plan reviewer must provide a decision. - *Reviewer Decision* - The date when the plan reviewer provided a decision. - *Cycle Decision* - The date when the cycle decision was provided. - *All Dates* - All date types.
Default Plan Review Date Filter	Select a value in the time period filter to correspond with the date type filter on the Plan Reviews console page for agency staff: - *Today* - *Yesterday* - *Tomorrow* - *Last 14 Days* or *Next 14 Days* - *Last 30 Days* or *Next 30 Days* You can't select specific dates as the default date value.
Exclude Saturday and Sunday	Turn on this switch to calculate plan review due dates not counting Saturday and Sunday. The holiday calendar is always taken into account to exclude holidays. For more information. see *Setting Up Plan Review Due Dates*.

For more information about the agency's Plan Reviews list page, see *Using the Plan Review Console*.

10. In the **Inspections** section, you can set up inspections with these options for both the Permits and Business Licenses offerings.

Page Element	Description
Default Inspection Status Filter	Select a default value for the inspection status filter on the Inspections list page for agency staff displayed using the Redwood Experience: - **Pending** - Displays inspections with no inspector assigned and the status is *Pending*. - **Requested** - Displays inspections that were requested and the status is *Requested*. - **Scheduled** - Displays inspections that were scheduled and the status is *Scheduled*. - **Completed** - Displays inspections with a *Completed* status. - **Canceled** - Displays inspections with a *Canceled* status.

Page Element	Description
	This field is optional but defaults to Requested for a new agency or offering implementation. If the default value is blank, inspections with any of the listed status types are displayed. **Note:** This field is only available when your agency has enabled the agency's Inspections list page using the Redwood Experience in the Functional Setup Manager.
Default Inspection Date Filter	Select a value in the time period filter to correspond with the date type filter on the Inspections list page for agency staff displayed using the Redwood Experience: - *Today* - *Yesterday* - *Tomorrow* - *Next Week* or *Last Week* - *Next Month* or *Last Month*
Inspection Count Limit	Enter the maximum number of inspections in a day that can be assigned to an inspector. The default value is 20.

Note: The **Default Inspection Date Type Filter** field is displayed only when the classic Inspections list page has been enabled in the Functional Setup Manager.

For more information about the Inspections list for agency staff, see *Managing Inspections for an Agency*.

11. In the **Application** section, you can do this setup:

Page Element	Description
Automatic Saving for Intake Forms	Enables agencies to automatically save the applications for intake forms.
Enable images on apply page	Enables agencies to attach images to display group definitions. The images can help convey the type of applications within that group. After enabling, you can use the Application Display Group Details page to upload an appropriate image for that display group. For more information, see *Setting Up Application Display Groups*.
Guest users can estimate fees	Enables guest users (that is, nonregistered users) to estimate fees prior to submitting an application. For more information, see *Estimating Fees*.

12. Click **Save**.

Adding an Agency Address

Administrators add and modify agency addresses on the Agency Details – Addresses page.

1. On the Agency Details page, select the **Addresses** tab.
2. On the Addresses page, and the **+ Add** button.
3. On the Addresses drawer, enter values for the following fields:

Page Element	Description
Address ID	Enter a unique ID for the address.
From Date and **To Date**	Enter the date range for which the address is valid.
Address fields	The address fields comprise the agency address. - The **Country/Region** field displays *United States.* - Enter the street address in **Address Line 1** and **Address Line 2**. - Select a city from the **City** drop-down list. The options are displayed with the city and state combination. When you select the city, the state is automatically added to the **State** field. - After you select a city and state, click the **Postal Code** drop-down list, where the appropriate postal code for the city and state appears.
Primary	Turn on the switch to indicate that this is the primary address for the agency. An agency may have only a single primary address.

4. Click **Save**.

Modifying or Deleting an Agency Address

1. On the Agency Details page, select the **Addresses** tab.
2. On the Addresses page, click an address row.
3. On the **Addresses** drawer, you can do this:
   - Update the agency address field values.

     > **Note:** You can't change a primary address row to nonprimary one. Instead, when you update a nonprimary row to primary, all other address rows are saved as nonprimary.

     Click **Save** to save your changes.
   - Delete the address. Click **Delete** for the address on the drawer. You will be prompted to confirm the permanent deletion.

     > **Note:** You can't delete the primary address; select a different address as primary first, then delete the address.
4. Click **Save**.

Adding Agency Languages

On the Agency Details page, select the **Languages** tab.

For information on adding languages and establishing language defaults for an agency, see *Setting Up Languages*.

Configuring Agency-Level Options for Specific Offerings

On the Agency Details page, select the **Features** tab.

The Features tab lists the Public Sector offerings that are enabled in Functional Setup Manager (FSM) for your agency. Use the **Review Options** button to configure offering-specific settings.

For more information about configuring these options, see

- Permits: *Setting Up Agency-Level Options for Permits*
- Planning Applications: *Setting Up Agency-Level Options for Planning Applications*
- Code Enforcement: *Setting Up Agency-Level Options for Code Enforcement*
- Business Licenses: *Setting Up Agency-Level Options for Business Licenses*

Configuring Agency-Level Email

On the Agency Details page, select the **Email Configuration** tab.

For more information about managing the agency sender email address used in communications such as ad hoc communications, see *Setting Up Agency-Level Email*.

Setting Up Related Transaction Linking

The Related Transactions tab allows you to set up access for your users to link their applications with other related transactions. You control the way related transactions are linked with applications based on whether an applicant or a contact user is working with the application.

On the Agency Details page, select the **Related Transactions** tab.

Turn on the switches to allow linking related transactions for applicants and contacts:

- **Applicants can link transactions to only their own applications**
- **Applicants can link transactions to any application**
- **Contacts can link transactions to any application that they manage**
- **Contacts can link transactions to any other application**

> **Note:** If none of the setup options are turned on, then the **Link** and **Actions** options on the Related Transactions page won't be available for applicants and contacts.

Click **Save**.

See *Working with Related Transactions*.

Setting Up Languages

Add languages and establish language defaults for your agency.

To enable user language preference and locale support you must:

1. Define the supported languages for your agency.
2. Define the default language for anonymous user setup.

Adding Supported Agency Languages

Supported languages are available for users to select as the default language on the My Preferences page accessed from the profile icon in the global banner. Additionally, you must select one supported language as the default language for anonymous user setup.

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access the Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Agencies** from the tasks list.
5. Click the row for your agency on the Agency Information tab.
6. Select the Languages tab.
7. Click **+ Add**.
8. Enter values for the following fields:

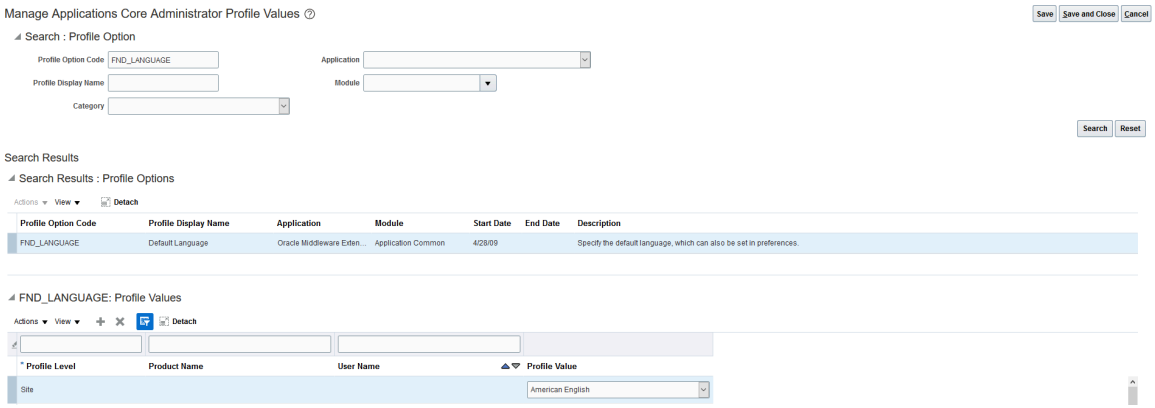
Page Elements	Definition
Language	Select the language you want to add.
Primary	Select to indicate that this is the primary language for the agency. An agency may have only one primary language.
From Date and **To Date**	Enter the date range for which the language is valid.

9. Click **Save**.

Define the Default Language for Anonymous User Setup

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access the Functional Setup Manager.
2. From the **Setup** drop-down list, select *Public Sector Permits* or *Public Sector Planning and Zoning*.
3. From the **Functional Areas** list in the left panel, select *Application Extensions*.

4. Select the **Manage Applications Core Administrator Profile Values** task.
   This is an example of the Manage Applications Core Administrator Profile Values page.



5. Enter *FND_LANGUAGE* in the **Profile Option Code** field and click **Search**.
6. Add a profile value with a **Profile Level** of *Site* and a **Profile Value** of the supported language that you want to establish as the default.
7. Click **Save and Close**.

Setting Up Agency Integrations

Add Oracle Integration Cloud (OIC) integrations for your agency.

Adding an Agency Integration

You can define and enable the OIC integrations on the Integrations tab of the Agency Information page. For example, you can add an integration that publishes your agency's accounting information to OIC where it can be transformed and imported by third-party applications.

For more information on publishing accounting information to OIC, see Setting Up OIC to Publish Public Sector Accounting Information (Doc ID 2784020.1) in *My Oracle Support*.

1. Select **Common Setup** > **Agency**.
2. Click the row for your agency on the Agency Information tab.
3. Select the Integrations tab.
4. Click **Add**.
5. Enter values for the following fields:

Page Elements	Definition
Integration Type	Select the type of integration that you want to add. **Note:** Currently, the only valid value for this field is *Publish Accounting,* which enables you to publish your agency's accounting information to OIC.

Page Elements	Definition
Integration Name and **Integration Version**	Enter the exact name and version number of the OIC integration that you want to add for your agency.
Integration Parameter	This field is reserved for future use. It is not used for publishing accounting information.
Integration Enabled	Turn this switch on to enable the integration. When a *Publish Accounting* integration is enabled, the Export Journals to ERP process publishes accounting information to OIC. For more information on the Export Journal to ERP process, see *Exporting Journal Entries*.

6. Click **Save**.

Setting Up Conditions

A condition indicates a dependency or contingency for completing the application process. You set up, modify, and delete condition definitions on the Conditions page.

Conditions Overview

A condition indicates a status, criterion, or action that you can apply to an object in the system, such as an address, parcel, person, contractor license, business license, or transaction. A transaction can be a permit, planning application, or business license application.

Conditions are defined with a severity that might affect operations when applied. Condition rules with a **Hold** severity prevent one or more of the operations that are selected at the time of applying the condition. Condition rules with a **Lock** severity prevent all operations as described in the table here.

Rule	Applicable Objects	Usage
Prevent Application Progress: • Business License Amendment • Business License Renewal	Address, Parcel, Person, Business License, and Contractor License	Agency staff applies a condition to a record that prevents an applicant from submitting any new permit, planning application, or business license that contains the address, parcel, person, business license, or contractor license. License amendment and renewal are related to business license.
Prevent Workflow Advancement	Address, Parcel, Person, Contractor License, business license, and Transaction	Agency staff applies a condition to a permit, planning application, or business license application record that prevents workflow from advancing. The workflow tasks cannot be completed until the condition is resolved.

Rule	Applicable Objects	Usage
Prevent Issue or Final	Address, Parcel, Person, Contractor License, business license, and Transaction	Agency staff applies a condition to a transaction record that prevents the permit, planning, or business application cycle from completing its final step until the condition is resolved. This rule can be used to prevent the issuance of the permit or business license certificate. Additionally, the same rule can also applied to prevent the final workflow task. Your workflow process definition must explicitly identify the final human task that is blocked by this condition. Use the PSC_FINAL_ACTIVITY custom property to identify this task. See *Using Custom Properties*.
Prevent Payment	Address, Parcel, Person, Contractor License, business license, and Transaction	Agency staff applies a condition to a transaction application record that prevents a user from processing a payment.
Prevent Inspection Schedule	Address, Parcel, Person, Contractor License, business license, and Transaction	This condition rule prevents agency staff from scheduling a new permit inspection. It does not affect existing inspections that have already been scheduled.
Prevent Inspection Result	Address, Parcel, Person, Contractor License, and Transaction	This condition rule prevents agency staff from finalizing the permit inspection results.
Prevent Final Inspection	Address, Parcel, Person, Contractor License, and Transaction	Agency staff applies a condition to a permit to prevent adding or proceeding with a final inspection.

Setting Up and Applying Conditions Using Business Rules Framework

The Business Rules Framework enables you to set up conditions that should apply to a permit, planning application, or business license application based on the criteria you define in the business rules.

You must configure the Workflow to trigger the Business Rules Framework process, which in turn applies the condition to the submitted transaction. The submitted applications are listed in the Transactions page with the conditions applied, ready for further processing.

> **Note:** Ensure that the appropriate workflow definition is set up for the business license, permit, or planning application type that will associate with the condition. See *Setting Up Permit Types*, *Setting Up Planning Application Types*, and *Setting Up Business License Types*.

For more information on adding and configuring events with business rules for conditions, see *Setting Up Apply Condition Actions*. For information on viewing the applied conditions and resolving them, see *Working with Application Conditions*

Viewing Business Rules Information

Apart from the condition information, the condition details page shows the business rules framework information related to the condition in use:

- *Offering*: The offering for which the condition is used.
- *Event Name*: The name of the event that defines the business rules.
- *Event Description*: The description of the event.
- *Rule Name*: The name of the rule that defines the criteria and the condition action.
- *Enabled*: The switch shows if the business rule is enabled for the current condition.

Note: The Business Rules Framework section is applicable only to conditions with object type *Transaction*.

Adding Condition Definitions

To add condition definitions:

1. Select **Common Setup** > **Condition**.
2. On the Condition page, click the **Add New** button.
3. On the Condition Details page, enter values for the following fields:

Page Element	Description
Condition Name	Enter a unique condition name.
Object Type	Select an object type to categorize the condition, based on the object type to which it is applied: o Address o Parcel o Person o Contractor License o Business License o Transaction
Display Message	Enter a message that is displayed to external users.
Severity	Select a severity level for each condition from these options: o *Lock* At the most severe level, the *Lock* condition suspends all operations, including workflow advancing, payment processing, inspection scheduling, and inspection results. o *Hold* Agency staff can select which rules to apply to conditions with the *Hold* level of severity. o *Notice* The *Notice* level functions as an alert and has no effect on operations. For more information, see *Working with Application Conditions*.

Page Element	Description
	For information on conditions on business licenses, see *Applying Conditions to Licenses*.
Apply Condition to Transactions	Applies the condition automatically to any existing permit and planning applications belonging to the address, parcel, person, business license, or contractor license. The condition on business license will apply only to the license renewal and amendment applications. You turn off the switch to disable the condition from automatically applying to the existing transactions. **Note:** This switch is not available by default for the **Transactions** object type. At the time of applying the condition, users can decide to enable or disable the option on the Condition Details page.
Condition Rules	Select the rules for the condition. Condition rules are applied by default depending on the severity of the condition: o *Lock* severity: All condition rules are automatically applied and no actions can be taken until the condition is resolved. o *Hold* severity: Select one or more default condition rules. o *Notice* severity: No condition rules apply. See the list of available condition rules in the "Conditions Overview" section of this topic.
Priority	Select the level of priority for this condition: o *High* o *Low* o *Medium*
Description	Enter a description of the condition.
Additional Information	Enter any additional information regarding this condition.
Allow Updates by Parcel Import	Turn on this switch to allow parcel conditions to be automatically resolved by the Parcel Import process. A condition will be automatically resolved only when the parcel import option is selected to resolve the parcel or address condition if it's not found in the import file.

Page Element	Description
	A condition will also be resolved by the Parcel Import Process when an existing condition is found in the import file, and the status field for that condition is set to *Resolve* in the import file.
Business Rules Framework	This section shows the details of this condition's association with the events in the Business Rules Framework.

4. Verify that the **Enabled** switch is turned on. New conditions are active by default.

> **Note:** You can't disable or delete the condition if it's being used by the Business Rules Framework to automatically apply conditions or if the condition is already applied to any object.

5. Click **Save**.

Modifying Conditions

1. Select **Common Setup** > **Condition**.
2. Click a row on the Condition page.
3. On the Condition Details page you can update the display message, severity, description, and the **Enable** switch.
4. Click **Save**.

Deleting Conditions

You can delete a condition only if it isn't being used. If you try to delete a condition that is applied to a transaction, or contractor license, or business license, you will see an error message stating that you can't remove the condition because it has already been applied.

You also can't delete or disable a condition in the condition setup when the condition is used by the Business Rules Framework in the Apply Condition action.

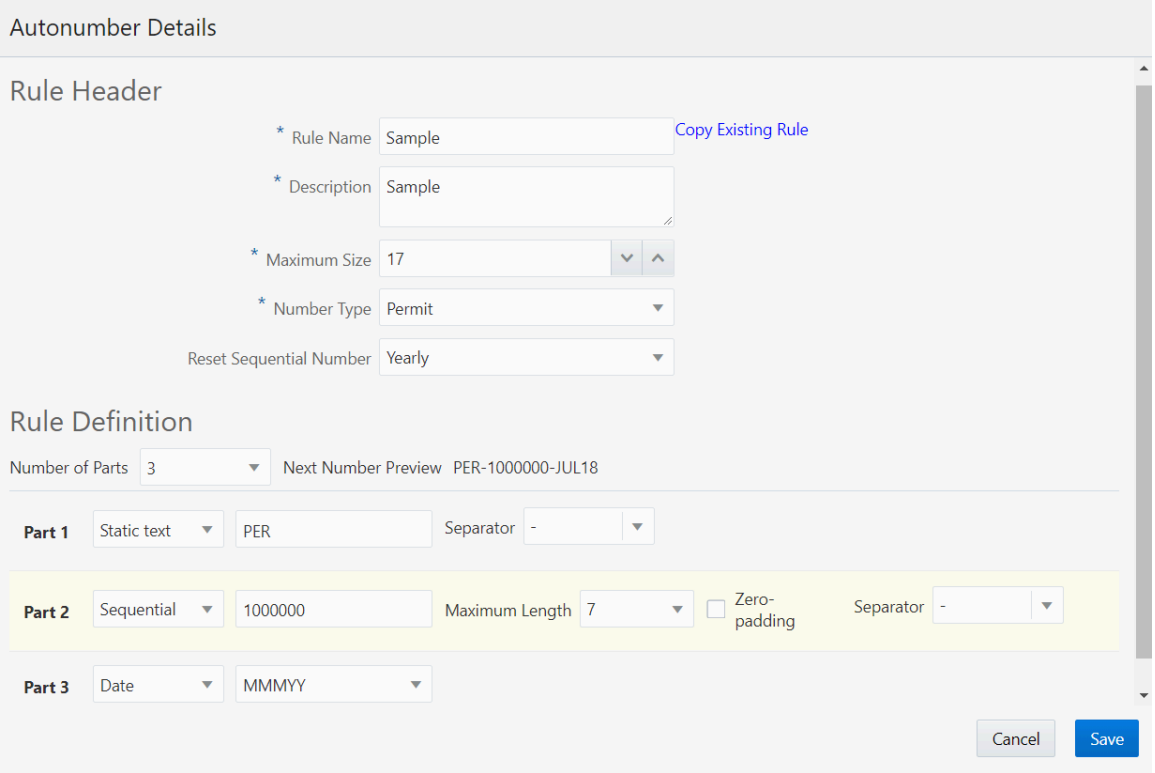
1. Select **Common Setup** > **Condition**
2. Click a row on the Condition page.
3. On the Condition Details page, click **Delete** to delete the condition.

Setting Up Autonumbering

Set up autonumber rules to increment identifying numbers for documents such as permits and invoices. The identifying numbers can include multiple parts, and each part can represent either a sequential number, static text, or a date.

You add, modify, and delete autonumber rules on the Autonumber page.

This example illustrates the Autonumber Details page.



Adding an Autonumber Rule

1. Select **Common Setup** > **Autonumber.**
2. On the Autonumber page, click **Add.**
3. On the Autonumber Details page, enter values for the fields in the **Rule Header** section:

Page Element	Description
Rule Name	Enter a unique name for the rule. The name can't include spaces.
Copy Existing Rule	Click this link to copy the rule definition from an existing autonumber rule. The copy action copies the number type and the reset frequency as well as the actual rule definition. Clicking the link opens a a modal window with a list of existing autonumber definitions. Locate the definition you want to copy, then click the **Select** button for that definition
Description	Enter a description for the autonumber rule.
Maximum Size	Indicate the maximum length of the generated number.

Page Element	Description
	Note: As you set up your autonumber rule, take care that the maximum size of the autonumber accommodates the maximum length of each part of the identifier plus any separators that you define.
Number Type	Select the type of object that uses this autonumber rule. When you choose an autonumber rule for an object, only rules with the appropriate type are available. These are the available number types: o *Business entity* o *Business license* o *Case* o *Cashier session* **Note:** If you select this number type, make sure that the rule uses only *Sequential* part types. o *Code inspection* o Deposit account o *Deposit slip* o *Incident* o *Inspection* o *Invoice* o *Permit* o *Planning application* o *Project* o *Receipt* **Note:** You can't change the number type for a rule that is already in use.
Reset Sequential Number	The identifier that an autonumber rule generates can include a mix of static text, a date, and a sequential number. Select how often the sequential number portion of the identifier is reset to zero: o *Calendar month:* The sequential number resets to zero at the beginning of each month. o *Calendar year:* The sequential number resets to zero on January 1 of each year. o *Fiscal year:* The sequential number portion resets to zero on the first day of your fiscal year. When you select this option, the **Fiscal Year End Month** field appears.

Page Element	Description
	○ *None:* Sequential numbers continue to increment as defined without resetting.
Fiscal Year End Month	If you reset the sequential number portion of the identifier on the first day of the fiscal year, select the month when your fiscal year ends. For example, if your fiscal year end month is *June,* then the sequential number resets to zero on July 1 of each year.

4. In the **Rule Definition** section of the page, enter the number of parts, or segments, for the rule:

> **CAUTION:** The autonumber rule definition determines the system generated application ID of your transaction such as permit, planning application, and business license.Therefore, you must define the rule in a way that generates a unique application ID. Failing to do so can result in duplicate application IDs, which will cause issues in the application.

Page Element	Description
Number of Parts	Select the number of parts, or segments, comprising the rule, up to 5 parts. Segments can be static text, a date, or a sequential number. For example, the identifier `IVC-0000010067-OCT10` is made of 3 segments (static text, then a sequential number, then a date) separated by hyphens. The identifier `INVOICE_001` is made of 2 segments (static text and a sequential number) separated by an underscore. When you select the number of parts, the corresponding number of rows appear in the rule definition grid. For example, if there are two parts, then rows labeled **Part 1** and **Part 2** appear.

5. In the rule definition grid, select the part type for each row, then enter the related information in the additional fields that appear.

Part Type	Related Information
Static Text	In the unlabeled field that appears next to the part type, enter text that remains the same for all identifiers. For example, enter *IVC* or *INVOICE.* **Note:** Do not include spaces in the static text. Cashier session IDs must be numeric, so don't include any static text in an autonumber definition with the *Cashier Session* number type.
Sequential	a. In the unlabeled field that appears next to the part type, enter the next document number to use. The number must be *1* or greater. The system increases this number by one each time a new identifier is generated and saved. b. In the **Maximum Length** field, Enter the maximum number of digits for the sequential number. Select a number from one to ten.

Part Type	Related Information
	c. Select the **Zero Padding** checkbox to add zeros before the generated number to make up the number of digits in the definition. For example, if the maximum length of this part is 5 digits, and the current number is 15, zero padding formats this part as 00015.
Date	In the unlabeled field that appears next to the part type, select the date format. **Note:** Don't include dates for *Cashier Session* autonumbers, which must be numeric only. The available date formats are made of these date codes in various combination: o Years: *YYYY* represents the year with its full four digits, and *YY* represents the year by its last two digits. o Month Numbers: *MM* represents the month as a two-digit number. o Month Abbreviations: *MMM* represents the month as a three-character abbreviation in English, such as JAN for January. The values are not translated into the user's session language. Formats that include *MMM* are available only if the agency's language is English. o Days: *DD* represents days as two-digit numbers. This is the only option for days. o Quarters: *Q* represents quarters. For example, the code for the first quarter of the year is *1.* If you select *Fiscal year* in the **Reset Sequential Number** field, all numeric months, years, and quarters are counted from the beginning of the fiscal year. For example, if the **Fiscal Year End Month** is *June,* then: o The *MM* value for June is *12,* for July is *01,* and so forth. o The *YYYY* value is the calendar year when the fiscal year ends. In the year 2025, January-June are part of the 2024-2025 fiscal year, so *YYYY* is 2025 during those months. But July-December of 2025 are part of the 2025-2026 fiscal year, so *YYYY* is 2026 during those months. o The *Q* value for April through June is *4,* for July through September is *1,* and so forth.

6. In the rule grid, select a **Separator** to appear after each part except the last.
   Select from the following separators:
   - *(None)*
   - - (hyphen)
   - / (forward slash)
   - * (asterisk)
7. Verify the generated number for the selected date format and separators in the **Next Number Preview** field.
8. Click **Save.**
   An error appears if the overall maximum size of the autonumber doesn't accommodate the maximum lengths of all of the parts and separators that you define.

Modifying an Autonumber Rule

1. Select **Common Setup** > **Autonumber.**

2. On the Autonumber page, click the row you want to modify.
3. Update the rule header and rule definition fields on the Autonumber Details page.
4. Click **Save.**

Deleting an Autonumber Rule

Note: You can't delete autonumber rules that are already in use.

1. Select **Common Setup** > **Autonumber.**
2. Click the row you want to modify.
3. On the Autonumber Details page, click **Delete.**

Setting Up Code Types

Code types are specific published codes, guidelines, ordinances, and so forth. Examples might include the International Building Code, published by the International Code Council (ICC), and the National Fire Code, published by the National Fire Protection Association (NFPA).

Note: Code types are not currently used in the public sector application.

You add, modify, and delete code types on the Code Type page.

Adding a Code Type

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

Page Element	Description
Code Type ID	Enter a unique code type ID for a specific code type. For example, enter *IFC* for International Fire Code.
Name	Enter the complete name of the code type.
Description	Enter a description of the code type.

4. Click **Save.**

Modifying a Code Type

1. Select **Common Setup** > **Code Type.**
2. Click a row on the Code Type page.
3. On the Code Type Detail page you can update the code name and description.

4. Click **Save.**

Deleting Code Types

1. Select **Common Setup** > **Code Type.**
2. To view a definition before deleting it, click the row to be deleted, then click the **Delete** button on the Code Type Details page.
3. To delete one or more definitions without viewing details:
    a. Click **Edit.**
    b. Select the checkboxes next to the definitions that you want to delete.
    c. Click **Delete.**

    You will be prompted to confirm the permanent deletion.

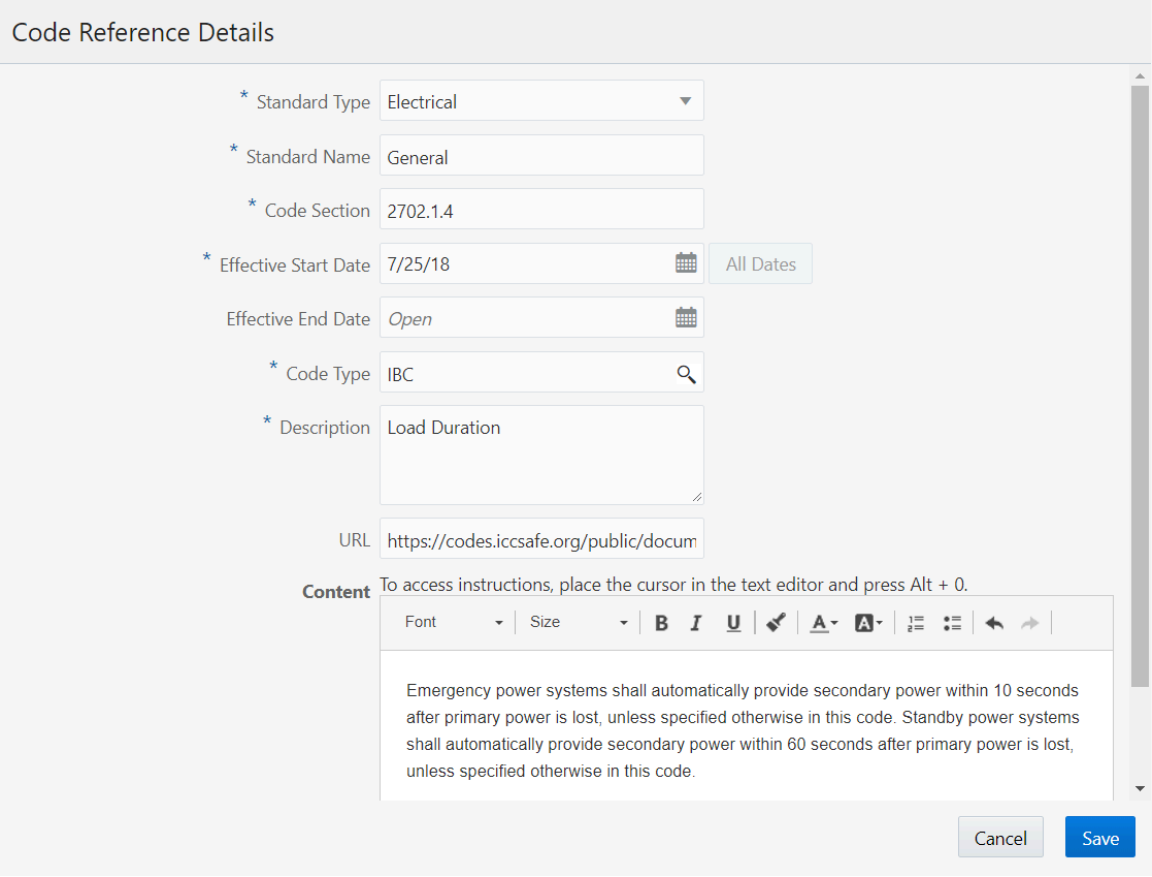
Setting Up Code References

Code references provide detailed specifications that come from a broad range of codes, guidelines, ordinances, and so forth. Even if the source document does not use the word “code,” use the Code References pages to enter the information into the system. A code reference maps to a specific section in the source document.

> **Note:** The code references described in this topic are not currently used in the public sector application. To set up code references for code enforcement, see *Setting Up Code References for Code Enforcement*.

You add, modify, and delete code references on the Code Reference page.

This example illustrates the Code Reference Details page.



Prerequisites

Before you set up code references, you must define:

- Code types, which represent specific published documents that contain codes, guidelines, and so forth.

  See *Setting Up Code Types*.

- Standard types, which describe the different fields or disciplines that codes relate to. Examples might include fire safety or electrical systems.

  Set up standards types by defining values for the ORA_PSC_CC_STD_CODE_TYPE lookup type. Define these values on the Lookup Type pages. See *Setting Up Lookups*.

Adding a Code Reference

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

Page Element	Description
Standard Type	Select the type of standard that the code falls under. Standard types represents fields or disciplines such as *Materials, Engineering,* or *Installation.*

Page Element	Description
Standard Name	Enter the title of the section that contains this code reference. This title comes from the source document.
Code Section	Enter the section number for this code reference. The number uniquely identifies this reference within the source document.
Effective Start Date and **Effective End Date**	Enter the official effective start date of the code reference, and optionally enter an end date.
Code Type	Select a code type from the values that you defined on the Code Type page. The code type identifies the source document. See *Setting Up Code Types*
Description	Enter a description of the reference.
URL	Enter a URL link to the source document.
Content	Enter detailed content copied from the source document.

4. Click **Save.**

Modifying a Code Reference

1. Select **Common Setup** > **Code Reference.**
2. Click a row on the Code Reference page.
3. On the Code Reference Detail page, make any necessary changes.
4. Click **Save.**

Deleting a Code Reference

1. Select **Common Setup** > **Code Reference.**
2. Click a row on the Code Reference page.
3. On the Code Reference Detail page, click **Delete.**

   You will be prompted to confirm the permanent deletion.

Setting Up Project Types

A project type describes the kind of project that an agency staff can select at the time of creating a project. You add new project types based on the nature of the project you are adding. Selection of a project type is mandatory while creating a new project, so, a minimum of one project type is required to be set up.

You add, modify, and delete project types on the Project Type page.

Adding a Project Type

1. Select **Common Setup** > **Project Type**.
2. On the Project Type page, click **Add**.
3. On the Project Type Detail page, enter values for the following fields:

Page Element	Description
Project Type	Enter the type of project, such as Commercial Project or Residential Project.
Rule ID	Select a rule ID. Rule ID is an autonumbering sequence that you set up for a particular project type. When you are creating a project with a certain project type, a project ID is generated based on the sequence defined for the project type. Rule IDs are created using the Autonumber page. For more information, see *Setting Up Autonumbering*.
Description	Enter a description of the project type.
Long Description	Enter a detailed description of the project type.
Document Group	Select a document group to allow your users to organize the various categories of attachment files into a grouping. See *Setting Up Document Categories and Subcategories* and *Setting Up Document Groups*.

4. Verify that the **Enabled** switch is turned on. The switch is turned On by default for a new project type.
5. Click **Save**.

Modifying a Project Type

1. Select **Common Setup** > **Project Type**
2. Click a row on the Project Type page.
3. On the Project Type Detail page you can:
    - Update the rule ID, description, and long description.

- Turn off the **Enabled** switch to deactivate the project type.

4. Click **Save**.

Deleting a Project Type

1. Select **Common Setup** > **Project Type**
2. To view a definition before deleting it, click the row to be deleted, then click the **Delete** button on the Project Type Details page.
3. To delete one or more definitions without viewing details:
   a. Click **Edit** on the Project Type page.
   b. Select the checkboxes next to the definitions that you want to delete.
   c. Click **Delete**. You will be prompted to confirm the permanent deletion.

Note: You can delete a project type only if it is **not** used by any project. When you attempt to delete a project type that is used by a project, the Public Sector Cloud Service displays a message that you cannot delete the project type as it is already in use by a project.

Setting Up Time Rules

Transactions for permits, planning applications, and code enforcement use time rules to calculate due dates for various activities.

Time policies, which are grouped together to form a time rule for a specific classification, are defined by priority and occurrence of each transaction that is related to the due date type set up for the time rule.

In general, 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.

Based on the transaction classification, time rules are assigned to transaction types:

Transaction	Assigned to
Code Enforcement	Incident's issue type and subtype. See *Setting Up Agency-Level Options for Code Enforcement* and *Setting Up Issue Subtypes*.
Permit	Permit type. See *Setting Up Agency-Level Options for Permits* and *Setting Up Permit Types*.
Planning Application	Planning application type. See *Setting Up Agency-Level Options for Planning Applications* and *Setting Up Planning Application Types*.

Note: Agency administrators add and modify time rules and assign them to transaction types so that appropriate rules are applied for each transaction type. Every transaction type must have a time rule assigned for every system-defined due date type. The following table shows the various delivered due date types and their details:

Due Date Type	Description	Classification	Events that calculate the due date	Trigger Date	Usage	Policy Occurrence Count value
ORA_PER_REVIEW_DUEDT	Permit plan review	Permit	Plan review cycle creation for a permit	Cycle creation date	The plan review cycle due date and department due dates are generated when the plan review cycle is created. The permit type must be configured to use time rules.	1 or more
ORA_PNZ_PLAN_REVIEW_DUEDT	Planning and zoning plan review	Planning and Zoning	Plan review cycle creation for a planning application	Cycle creation date	The plan review cycle due date and department due dates are generated when the plan review cycle is created. The planning application type must be configured to use time rules.	1 or more
ORA_ABATE_APPL_PRD_DUEDT	Appeal in case of mandatory abatement	Code Enforcement	Case status change to Mandatory Abatement	Date on which the case status changed to Mandatory Abatement	The appeal due date is updated with this date when the case status is changed to mandatory abatement.	1 or more
ORA_INC_REV_DUEDT	Incident review date	Code Enforcement	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	Code Enforcement	Initial inspection creation	Inspection schedule date	The Inspection due date is updated with this date when the initial	1

Due Date Type	Description	Classification	Events that calculate the due date	Trigger Date	Usage	Policy Occurrence Count value
					inspection is scheduled.	
ORA_RE_INS_DUEDT	Re-inspection date	Code Enforcement	Re-inspection creation	Reinspection 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	Code Enforcement	• Case creation • Inspection resulting in Violation or Remains in Violation.	Case creation date	The date is displayed as the compliance date on the Case page. The value for the policy occurrence count is one (1) at the time of case creation.	1 or more 2 or more for subsequent inspections that result in Violation or Remains in Violation.
ORA_VIOL_APPL_PRD_DUEDT	Violation appeal period	Code Enforcement	• Case creation • Case status change to violation as a result of a hearing decision. • Inspection resulting in Violation or Remains in Violation.	• Case creation date • Inspection completion date • Hearing decision date	Ensures that the Request Appeal option is available only during the calculated appeal period.	1 for case creation and 2 or more for either an inspection that resulted in Remains in Violation or a hearing decision that was updated to Violation.
ORA_CITATN_CMPL_PRD_DUEDT	Due date for citation compliance	Code Enforcement	• Citation issuance • Inspection resulting in Remains in Citation.	• Citation issue date • Inspection completion date that resulted in Remains in Citation.	Updates the compliance date displayed on the Case detail page.	The first issuance of citation. Subsequently, this rule is applied when citations are issued or when inspections result in Remains in Citation.
ORA_CITATN_DUEDT	Due date for citation payment	Code Enforcement	Payment initiation	Citation issue date	Late fee is added after the citation	1 or more

Due Date Type	Description	Classification	Events that calculate the due date	Trigger Date	Usage	Policy Occurrence Count value
					payment due date.	
ORA_CITATN_APPL_PRD_DUEDT	Citation appeal period	Code Enforcement	Case status change to Citation.	Citation Issue Date Inspection completion date	Ensures that the Request Appeal option is available only during the calculated appeal period.	1 or more as per citation issuance.

Adding Time Rules

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

1. Select **Common 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.
Classification	Select a transaction type: o Code Enforcement o Planning and Zoning o Permit
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: o High

Page Element	Description
	○ Normal
Unit of Measure	Displays the unit of measure of time, which is days.
Unit of Measure Value	Select the number of days.
Policy Occurrence Count	Select an occurrence count value for the event, such as an inspection. **Note:** The value can't be 0.
Default	Turn on this switch to set the time policy as the default for the time rule. The first time policy that you create for each priority type is set as the default policy. When you create additional time policies for a priority type, you can select any one of them as the default policy. Designating a time policy as the default removes the default designation from the previously designated policy.

Modifying Time Rules

1. Select **Common 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 **Common 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 **Common 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 **Common 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 checkboxes for the rows you want to delete.
6. Click **Delete**.

Related Topics

- Setting Up Plan Review Due Dates

Setting Up Lookups

This topic describes how to add and change values that appear in lookup lists. Lookup lists are referenced by various fields in the application that display a static set of values from which the end user can select a value.

Lookup Types and Lookup Values Overview

Lookup types in applications are used to represent a set of codes and their translated meanings. To the end users, a lookup type displays a list of values from which they select values.

You use the Lookup Types page to access lookup types, and you use the Lookup Type Details page to modify lookup types, add lookup values, and add lookup types, where authorized.

When working with lookups, you deal with lookup types and lookup values.

Lookup Element	Description
Lookup Type	A lookup type is a static list of values users view to make entries in the application. The application references a lookup type to display its list of values.
Lookup Value	A lookup value is a single item contained within a lookup type. For example, *Paid* is a lookup value for the Fee Status lookup type. Lookup types typically contain numerous lookup values.

Lookup types are delivered as seed data for your service. You can only modify selected lookup types, such as Business Type, UOM Type, Standard Code Type, and so on. Most lookup types are read-only.

Modifying Lookup Types

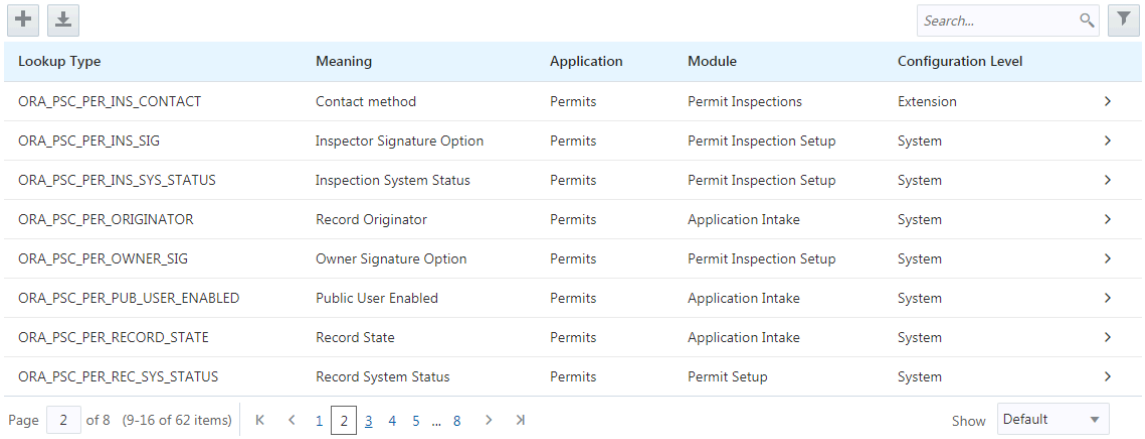
Lookup types can be associated with lookup lists on:

- Pages in your offering.
- Predefined field groups added to intake forms.
- User-defined fields added to intake forms.

Note: Lookup lists created for user-defined fields in an intake form can only be viewed from the Lookup Type page after the form has been published. Managing lookup lists for user-defined fields should be completed only within the Intake Form Designer.

This example illustrates the Lookup Type page. Details are in the surrounding text.

Lookup Type



To modify a lookup type:

1. Select **Common Setup** > **Lookups.**
2. On the Lookup Types page use the Search box to filter the lookup types by keyword.

   For example, to view the Business Type lookup type, enter *business* in the Search box.
3. Click on the row for the lookup type you want to view.
4. View the contents of the Lookup Type Details page.

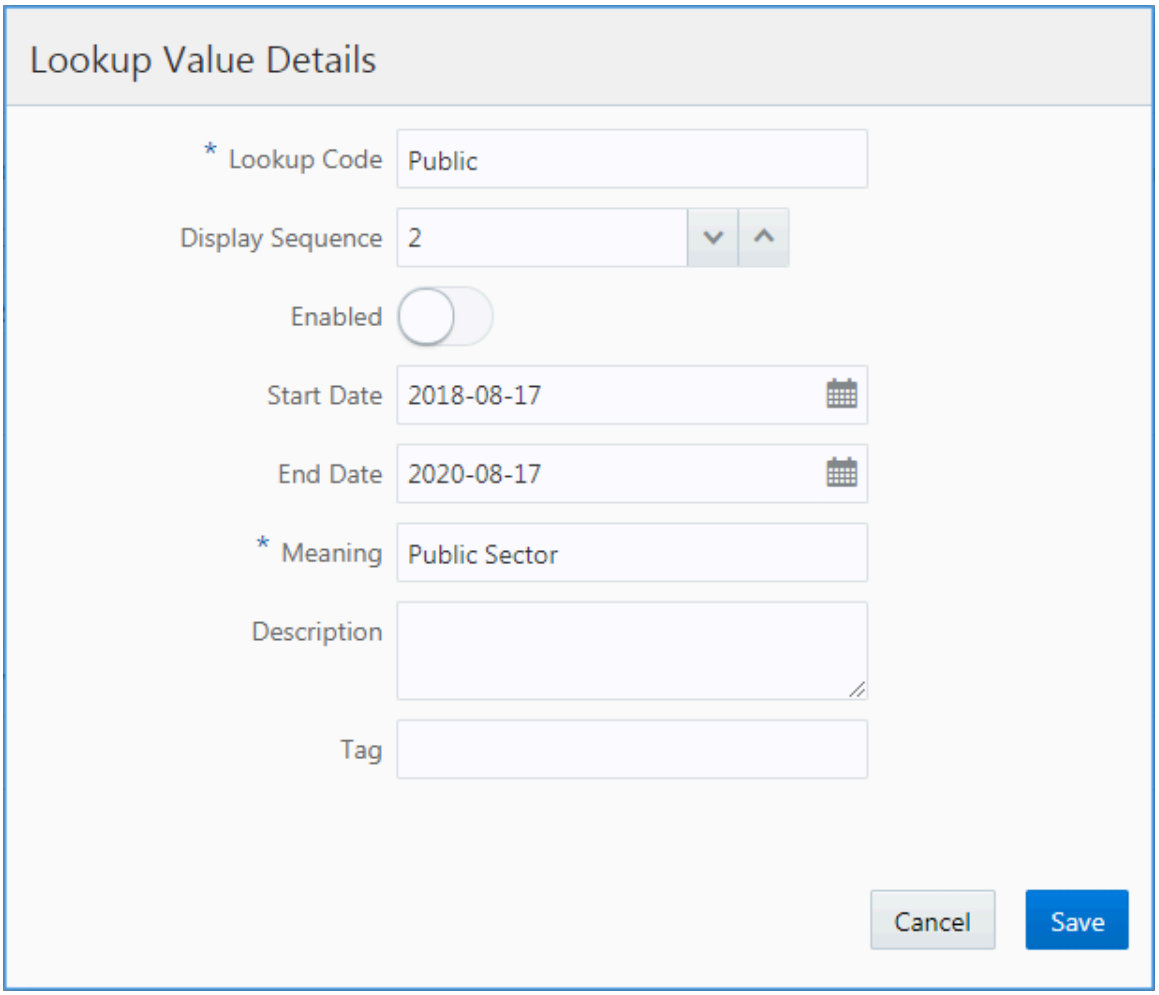
Page Element	Description
Lookup Type	Identifies the lookup type within the application.
Application	Identifies the application that uses the lookup type. For example, Permits, Common Components, and so on.
Meaning	The actual UI display name used to represent the list of values contained in the lookup type.
Configuration Level	Indicates at what level the lookup can be modified. Options are: o *System:* Only Oracle development teams can modify lookup types at this configuration level. o *Extension:* Customers can perform minimal tasks, such as add lookup values. o *User:* Customers can add lookup values, delete lookup values, update the meaning, and update the description.
Module	The internal application module using the lookup type, such as Billing Entry, Billing Setup, and so on.
Description	Identifies the purpose and use of the lookup type.

5. If you need to add lookup values, refer to the following section for steps for that task.

6. Click **Cancel** to close the lookup type, or click **Save** if you made any changes.

Adding Lookup Values

This example illustrated the Lookup Value Details page. Details are in the surrounding text.



You can add lookup values to lookup types with a configuration level set to *User* or *Extension.*

To add lookup values:

1. Select **Common Setup** > **Lookups.**
2. On the Lookup Types page use the Search box to filter the lookup types by keyword.

   For example, to view the Business Type lookup type, enter *business* in the Search box.
3. Click on the row for the lookup type you want to view.
4. On the Lookup Type Details page, click **Add** under Lookup Value Type.

5. On the Lookup Value Details page, enter these values:

Page Element	Description
Lookup Code	An internal application code for each lookup value that is not visible to users. It is typically a shorter, less user-friendly representation of the item. For example, ORA_DRIVER_LIC for State Driver's License, or LEN for Length, if listing units of measurement. **Note:** Lookup lists created in the designer for user-defined fields on an intake form begin with *PSC*.
Display Sequence	Control in what sequence the lookup value appears in the list displayed to users, where 2 appears above 3. If you do not specify a sequence, the application displays the items in the order they were entered.
Enabled	Turn on to make a lookup value active. If a lookup value is not enabled, then the application does not display it to the end user in the list of values for that lookup type. **Note:** It is not recommended to disable lookup values once your implementation is in production because this can invalidate existing transaction data.
Start Date	Set a start date for the lookup value to become active. Even if the lookup value is enabled, if a start date is set, the application does not display the lookup value until the start date is reached.
End Date	Set an end date for a lookup value to no longer be displayed in a list of values.
Meaning	The display name for the lookup value. End users see this value in the list of values displayed at run time. They do not see the Lookup Code value.
Description	Provide any additional information to help identify the purpose of the lookup value or clarification regarding what it represents.
Tag	Tags allow you to add a label to your lookup codes. A tag can be used to categorize lookups based on facilitating searches or guiding how a lookup should be used.

6. Click **Save.**

Working with Configuration Levels

The configuration level attribute determines who can modify a lookup type and what can be modified. The configuration levels are:

- *System:* Only Oracle development teams can modify lookup types at this configuration level.
- *Extension:* Customers can perform minimal tasks, such as add lookup values.
- *User:* Customers can add lookup values, delete lookup values, update the meaning, and update the description.

Task	User	Extension	System
Add a lookup type	Yes	No	No
Delete a lookup type	Yes	No	No
Modify lookup type meaning	Yes	No	No
Modify lookup type description	Yes	No	No
Add lookup values	Yes	Yes	No
Delete lookup values	Yes (if you created it)	Yes (if you created it)	No
Modify lookup value attributes	Yes (except for Lookup Code)	Yes (if you created it, and except for Lookup Code)	No

Note: You can add values to lists defined in the designer for user-defined fields. Values entered through the Lookup Type page become available at runtime as soon as they are saved. Values added to lookup lists through the Intake Form Designer display at runtime only after the intake form is published.

Adding Lookup Types

To add a lookup type:

1. Select **Common Setup** > **Lookups.**
2. On the Lookup Types page click **Add** for the Lookup Type grid.
3. On the Lookup Type Details page, enter these values:
    - Lookup Type (The value you enter must be uppercase and can't begin with the prefix ORA_, which is used to distinguish your custom lookup types from delivered lookup types.)
    - Meaning
    - Module
    - Description
4. Click **Add** for the Lookup Value grid for each lookup value you need to add to the lookup type.
5. Click **Save.**

Managing Instructional Text

Agency staff can set up and manage instructional or assistive text that can be configured to appear on applications.

For more information about embedding instructional text in each section of the contractor field group of a contractor registration form or business license application, see *Using the Intake Form Designer for Business Licenses*.

Here's how to create instructional text:

1. Select **Common Setup** > **Instructional Text**.
2. On the Instructional Text page, click **Add**.
3. On the Instructional Text details page, enter values for the fields:

Page Element	Description
Text ID	Enter a unique identifier for the instructional text. The name can't include spaces.
Text Name	Enter a name for the instructional text.
Description	Enter a description for the instructional text.
Category	Select a category used to filter or group the instructional text. This setup is optional. For example, select *Contractor* to group instructional text set up for display on contractor sections used for collecting contractor license information. You can set up instructional text categories on the Lookup page. For more information, see *Setting Up Lookups*.
Effective Start Date and **Effective End Date**	Enter the range of dates when the instructional text is effective. If you want to leave the effective dates open-ended, don't enter a date for the end date. **Note:** You can't update the start date after saving the instructional text details.
Show All Dates	Click to access the History Data page where you can update existing effective dated rows, and add new ones.
Content	Add content using the available formatting options in the text editor.

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

Setting Up Units of Measure

Units of measure are used to express measurements such as quantity or duration. Each unit of measure must have a unit type such as *Area, Length, Time,* or *Volume.*

You add, modify, and delete units of measure on the Unit of Measure pages.

Adding a Unit of Measure

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Define Units of Measure for Public Sector** from the tasks list.
5. On the Unit of Measure page, click the **Add** (+) button.
6. On the **New unit of measure** drawer, enter values for the following fields:

Page Element	Description
Unit of Measure	Enter a unique unit of measure ID. For example, WK for week.
Description	Enter a description of the unit of measure. For example, Week.
Unit Type	Select the type of measurement. The delivered unit types are *Area, Length, Time,* and *Volume.* You can define additional values on the Lookup Type Details page. Add new values to the *ORA_PSC_CC_UOM_TYPE* lookup type.
ISO Code	Enter the 2-character ISO unit of measure code.

7. Click **Save**.

Modifying a Unit of Measure

1. Click a row on the Unit of Measure page.
2. On the Unit of measure details drawer, make the necessary modifications.
3. Click **Save.**

Deleting a Unit of Measure

1. Click a row on the Unit of Measure page.
2. On the Unit of measure details drawer, click the **Delete** button.

   You will be prompted to confirm the permanent deletion.

Setting Up Unit of Measure Conversions

A unit of measure (UOM) conversion definition specifies the factor for converting a unit of measure to an equivalent amount of a different unit of measure.

You add, modify, and delete unit of measure conversions on the UOM Conversion page.

Adding a UOM Conversion

1. Select **Common Setup** > **UOM Conversion.**
2. On the UOM Conversion page, click **Add.**
3. On the UOM Conversion Detail page, enter values for the following fields:

Page Element	Description
UOM	Select the unit of measure that is the starting unit for the conversion.
UOM To	Enter the target unit of measure. This unit of measure must be the same type as the original unit of measure. For example, you can convert a unit of length to another unit of length, but you can't convert a unit of length to a unit of weight.
Conversion Rate	Enter the conversion factor used to convert the original unit of measure to the target unit of measure. For example, to convert minutes to hours, enter a conversion rate of *60*.

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

Modifying a UOM Conversion

1. Select **Common Setup** > **UOM Conversion.**
2. Click a row on the UOM Conversion page.
3. On the UOM Conversion Detail page you can:
   - Update the UOM conversion field values.
   - Disable the UOM conversion by turning the **Enabled** switch off.
4. Click **Save.**

Deleting UOM Conversions

1. Select **Common Setup** > **UOM Conversion.**
2. To view a definition before deleting it, click the row to be deleted, then click the **Delete** button on the Unit of Measure Conversion Details page.
3. To delete one or more definitions without viewing details:

a. Click **Edit.**
b. Select the checkboxes next to the definitions that you want to delete.
c. Click **Delete.**

   You will be prompted to confirm the permanent deletion.

Setting Up Data Format Exchange Maps

The Data Format Exchange utility is a data-mapping utility that enables you to map fields between source and target locations.

> **Note:** This utility is useful in situations where data must be exported from or imported to Oracle Permitting and Licensing. Currently, this utility is only used by the Export Journals to ERP process.

Business analysts create and modify Data Format Exchange maps on the Data Format Exchange page.

Adding a Data Format Exchange Map

1. Select **Common Setup** > **Data Format Exchange**.
2. On the Data Format Exchange page, click **Add**.
3. For the Definition step, enter values for the following fields:

Page Element	Description
Mapping Name and **Description**	Enter a name and description for the data mapping.
Source Type	Select the type of source format to be included in the data mapping. **Note:** Currently, *VO* is the only valid value for this field.
Target Type	Select the type of target format to be included in the data mapping. **Note:** Currently, *CSV* is the only valid value for this field.
Enabled	Turn this switch on to make the data mapping available to select in the **Mapping Name** field on the Export Journals to ERP page. For more information on exporting journals, see *Exporting Journal Entries*.

4. Click **Next**.
5. For the Source step, enter values for the following fields:

Page Element	Description
Source Name	Selects the source view to be included in the data mapping, such as *Journals to Export*.

6. Click **Next**.
7. For the Target step, click **Upload** to select a file that will be updated with the results of the field mapping.
8. Click **Next**.
9. For the Mapping step, enter values for the following fields:

Page Element	Description
Target Field	Displays each field in the target format.
Source Field	Select the source field that you want to map to each target field.
Transform	Select an option to modify the value for the target field. **Note:** Currently, *Constant* is the only valid value for this field.
Transform Parameter	Specify the parameter used to determine the value for the target field. For example, if the target field is *Effective Date* and the **Transform** value is *Constant*, the **Transform Parameter** might be *01/01/2018*.

10. Click **Submit** to save the Data Format Exchange map.

Note: At any point during the process, you can click **Previous** to go back one step. You can also click **Cancel** to exit the data mapping setup process and discard your changes.

Modifying a Data Format Exchange Map

1. Select **Common Setup** > **Data Format Exchange**.
2. Select a mapping on the Data Format Exchange page.
3. For the Definition step, you can enable or disable the data mapping.
4. Click **Next**.
5. You can't update any fields in the Source step.
6. Click **Next**.
7. For the Target step, you can click the file link to download a copy of the file.
8. Click **Next**.
9. For the Mapping step, you can update the values of the **Source Field**, **Transform**, and **Transform Parameter** fields.

10. Click **Submit** to save your changes to the Data Format Exchange map.

> **Note:** At any point during the process, you can click **Previous** to go back one step. You can also click **Cancel** to exit the data mapping update process and discard your changes.

Setting Up Agency-Level Email

Agency system administrators can configure agency specific sender email IDs and use them in ad hoc communications.

Use the Email Configuration page to define and manage the sender email address used in communications such as ad hoc communications from the agency.

Here's how to navigate to the agency-level email configuration:

1. When starting from Home with Ask Oracle, select **Setup and Maintenance of Offerings** to access the Functional Setup Manager.
2. Select **Setup: Public Sector <Offering>** > **Functional Area: Agency Profile** > **Task: Manage Agencies**.
3. On the Agency page, click the row for your agency.
4. On the Agency Details page, select the **Email Configuration** tab.

For more information about agency-level settings, see *Setting Up Agencies*.

Adding a Default Email

If your agency uses the Business Rules Framework to send error notifications, you must configure and enable at least one **Agency Default** email on the Email Configuration page, which will be used as the sender email address on error notification emails. For more information about agency-level setup of Business Rules Framework, see *Viewing Business Rule Logs*.

Here's how to add a default agency email:

On the Email Configuration page, click the **+ Add** button.

In the **New email configuration** drawer, enter values for these fields:

Page Element	Description
Email	Enter the email address, for example, Agency@CityName.com.
Description	Enter a description of the email address.
Enabled	Turn on this switch to enable the email address.
Agency Default	Turn on this switch to make this email address the default email for the agency. If you enable this switch, these fields are disabled: • Address Type • Offering • Functional Category

Page Element	Description
	They are used for web form response emails and other use cases. For more information, see the section,"Setting Up Email Addresses for Web Form Responses," in this topic.
Address Type	Select the email address type from the available values: Sender, Recipient, or Both.
Offering	Select to configure email addresses for web form responses. If it is not specific to web form responses, then select Common.
Functional Category	This option is applicable for web form response-related email address configuration.

Click **Save**.

Setting Up Email Addresses for Web Form Responses

Agency staff can configure different email addresses to use in the Reply-To address for web forms.

For example, you could set up a Reply-To email address for each offering so that responses from public users are directed to a specific department.

For web form response events, in the Communication Template Details page, include the ${Webform Reply-To} attribute in the To-address. For more information, see *Setting Up Communication Templates*.

Here's how to set up an email address for web form responses and other use cases:

Page Element	Description
Email	Enter the web form response email address, for example, ReplyToDept@CityName.com.
Description	Enter a description of the web form response email address.
Enabled	Turn on this switch to enable the email address.
Agency Default	Turn off this switch so that this email address isn't the default email for the agency. You must turn off this switch to enter information in the next fields.
Address Type	Select the email address type from the available values: Sender, Recipient, or Both.
Offering	Select the offering, such as Permits, Business Licenses, Code Enforcement, or Planning and Zoning, to configure email addresses for web form responses. If the email isn't specific to web form responses, then select Common.
Functional Category	Select "Web form" if this email is applicable to web form response-related email address configuration, otherwise you can indicate that it isn't applicable.

Setting Up Safe Domains

Safe domains are used to maintain a list of website links and image links which are safe to be added in the rich text editor. You add, enable, and delete domains on the Safe Domains page.

Agency users and registered public users use the rich text editors while entering comments. These may sometimes contain text or image links to third-party websites. Safe domains allow agencies to maintain a list of domains which are safe to be referenced in rich text editors. Only the domains added as safe along with

To set up a new safe domain:

1. From the Fusion Applications Permitting and Licensing homepage, click **Agency Springboard** > **Setup and Maintenance**.
2. On the Functional Setup Manager, select your offering from the **Setup** drop-down list.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*. The right panel shows the required tasks for the selected functional area.
4. Select **All Tasks** from the **Show** drop-down list and then select **Manage Safe Domains** from the tasks list.
5. On the Safe Domains page, click the **Add Safe Domain** button.
6. On the **New safe domain** drawer, enter values for the following fields:

Page Element	Description
Domain Name	Enter the domain name to be added to the safe domains list. Once a domain name is added, all subdomains sharing the same ending and extension will also be included in the safe domains list. For example, if the newly added domain name is https://www.agency, then the sub domain names, such as https://www.sub.agency, https://www.agency/home, https://www.xyzagency.com/home will also be included in the safe domains list.
Enabled	Turn the switch on to add the new domain to the safe domains list.
Include image	Turn the switch on to include the image resource type for the safe domain.
Include link	Turn the switch on to include the link resource type for the safe domain.

5 Setting Up Agency Schedules

Setting Up Holiday Calendars

Holiday calendars establish the days that agency offices are closed and no field service operations are offered.

These days appear as unavailable, non-working days in calendar views throughout the system such as for public user and inspector calendars. Non-working days in holiday calendars apply to all employees and do not need to be defined for employee profiles.

Each holiday calendar spans a date range that you define. Within that date range, you define individual events for each non-working holiday.

Administrators add, modify, and delete holiday schedules and events on the Holiday Calendar page.

Adding a Holiday Calendar

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

Page Element	Description
Calendar ID and **Description**	Enter a unique ID and description for the calendar. For example, you might enter an ID of *2019* and a description of *Holiday Calendar 2019*.
Valid from Date and **Valid to Date**	Enter the date range for the holiday calendar. For example, you might enter a **Valid from Date** of *2019–01–01* and a **Valid to Date** of *2019–12–31* to represent a calendar that spans the entire 2019 calendar year.

4. Add an event.
   > **Note:** You must have values defined for all required holiday calendar fields before you can add an event.
5. Click **Save**.
   > **Note:** When you click **Save**, the Holiday Calendar page closes.

Adding an Event

1. Select **Common Setup** > **Holiday Calendar**.
2. Click a row on the Holiday Calendar page.
3. On the Holiday Schedule Details page, click **Add**.
4. On the Event Details page, enter an **Event ID**, an **Event Date**, and a **Description** for the event. For example, you might enter an ID of *MD*, a date of *May 29, 2017*, and a description of *Memorial Day*.
5. Click **Save**.

Modifying a Holiday Calendar

1. Select **Common Setup** > **Holiday Calendar**.
2. Click a row on the Holiday Calendar page.
3. On the Holiday Calendar Details page you can:
    - Update the holiday schedule field values.

      Note: You cannot edit the **Calendar ID**.
    - Delete the holiday calendar. You will be prompted to confirm the permanent deletion.
    - Add, modify, or delete events.
4. Click **Save**.

   Note: When you click **Save**, the Holiday Calendar page closes.

Modifying an Event

1. Click a row on the Holiday Calendar Details page.
2. On the Event Details page you can:
    - Update the event date or description.
    - Delete the event. You will be prompted to confirm the permanent deletion.
3. Click **Save**.

Deleting Holiday Calendars

1. Select **Common Setup** > **Holiday Calendar**.
2. Click **Edit**.
3. Select the checkboxes next to all the holiday schedules you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Deleting Events

1. Click **Edit** on the Holiday Calendar Details page.
2. Select the checkboxes next to all the events you want to delete.
3. Click **Delete**. You will be prompted to confirm the permanent deletion.

Setting Up Work Schedules

Work schedules establish the days of the week and daily hours of operation for agency employees.

Create schedules based on the type of employee and work location. Calendar views, such as inspector calendars, reference work schedules to determine the time slots that are displayed on the calendar as available for scheduling. Algorithms for assigning resources also use work schedules to determine availability. You assign work schedules to employee profiles using the Agency Staff page. See *Setting Up Agency Staff*.

Administrators and business analysts add, modify, and delete work schedules on the Work Schedule page.

Adding a Work Schedule

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Public Sector Work Schedules**from the tasks list.
5. On the Work Schedule page, click **+** button.
6. On the Work schedule details drawer, enter values for the following fields:

Page Element	Description
Schedule ID and **Description**	Enter a unique ID and description for the schedule. For example, you might enter an ID of *OFFICESAT* and a description of *Saturday Office Schedule*.
Start Date	Enter the first day of the schedule.
End Date	Enter the last date of the schedule. You can leave this field blank to give the schedule an open end date.
Work Start Time and **Work End Time**	Enter the start and end time for the schedule. For example, you might enter a work start time of *09:00 AM* and a work end time of *05:00 PM*.
Break Start Time and **Break End Time**	Enter the start and end time for a break within the schedule. For example, you might enter a break start time of *12:00 PM* and a break end time of *01:00 PM*. **Note:** These fields are optional, but if you enter a break start time, you must also enter a break end time.
Recurrence and **Weeks Between Occurrences**	Select whether the schedule reoccurs weekly and how many weeks are between each occurrence. For example, if you select a recurrence of *Weekly* with *1* week between occurrences, the schedule repeats every week.
Work Days	Select the days of the weeks to which the schedule applies.

7. Click **Save**.

Note: For overnight work shifts that go past 12 am (midnight), you must create two schedules: one for the time period up until midnight, and one for the time period after midnight. For example, to create a weekday overnight shift that starts at 09:00 pm and ends at 06:00 am the following day, the first schedule would have a start time of 09:00 pm and an end time of 12:00 am on Monday through Friday. The second schedule would have a start time of 12:00 am and an end time of 06:00 am on Tuesday through Saturday.

Modifying a Work Schedule

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Public Sector Work Schedules** from the tasks list.
5. Click a row on the Work Schedule page.
6. On the Work schedule details drawer, you can:
    - Update the work schedule field values.

      Note: You cannot edit the **Schedule ID** field.
    - Delete the schedule. You will be prompted to confirm the permanent deletion.
7. Click **Save**.

Deleting Work Schedules

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Public Sector Work Schedules** from the tasks list.
5. Click a row on the Work Schedule page.
6. On the Work schedule details drawer, click **Delete**. You will be prompted to confirm the permanent deletion.

6 Setting Up Your Agency Staff

Setting Up a Fusion Business Unit and Legal Entity

This topic discusses the *one-time setup* for Oracle Permitting and Licensing administrators who are not using Fusion Human Capital Management (HCM), Enterprise Resource Planning (ERP), and Sales Cloud.

If you have implemented both Fusion Financials and Oracle Permitting and Licensing offerings, then you must ensure that you migrate Financials Business Unit related tasks before any Permitting and Licensing migrations. Migrate any changes you have made to the business unit configurations in the Financials offering before the Permitting and Licensing offering or the implementation projects are migrated from a nonproduction environment to your production environment.

The following setup steps are prerequisites for creating an agency staff in the system.

> **Note:** For Fusion HCM, ERP, and Sales Cloud customers, these steps are not required as the business unit and legal entity are already set up.

Configure the following tasks in the order mentioned here:

1. Set up reference data sets (to create a Set ID).
2. Create a business unit.
3. Create a legal address.
4. Create a Legislative Data Group.
5. Create a Legal Entity.
6. Register a Legal Entity.
7. Create Legal Entity HCM Information.

Setting up Reference Data Sets

1. Select the **Setup and Maintenance** tile on the Agency Springboard. On the Setup page, select the offering: Public Sector Permits, Public Sector Planning and Zoning, Public Sector Code Enforcement, or Public Sector Business Licenses. Then select the *Agency Staff* functional area.
2. On the right panel locate the Manage Reference Data Sets task and click the row to open the Manage Reference Data Sets page.
3. On the Manage Reference Data Sets page, click the **New** button and include values for the fields:

Page Element	Description
Set Code	Enter a code value that represents your agency.
Set Name	Enter a name that represents your agency.
Description	Enter a description about your agency.

4. Click **Save and Close** to save the newly created SetID.

Creating a Business Unit

1. Select the **Setup and Maintenance** tile on the Agency Springboard. On the Setup page, select the offering: Public Sector Permits, Public Sector Planning and Zoning, Public Sector Code Enforcement, or Public Sector Business Licenses. Then select the *Agency Staff* functional area.
2. On the right panel locate the Manage Business Units task and click the row to open the Manage Business Units page.
3. On the Manage Business Unit page, click the **New** button and include values for the fields:

Page Element	Description
Name	Enter a name for the business unit.
Default Set	Select the SetID you created in the previous section.

4. Click **Save and Close** to save the newly created business unit.

Creating a Legal Address

1. Select the **Setup and Maintenance** tile on the Agency Springboard. On the Setup page, select the offering: Public Sector Permits, Public Sector Planning and Zoning, Public Sector Code Enforcement, or Public Sector Business Licenses. Then select the *Agency Staff* functional area.
2. On the right panel, locate the Manage Legal Addresses task and click the row to open the Manage Legal Addresses page.
3. On the Manage Legal Addresses page, click the New button and enter the agency address in the Agency Line 1 field. The other fields are optional.
4. Click **OK** to return to the Manage Legal Addresses page and click **Save and Close** to save the newly created address.

Creating a Legislative Data Group

1. Select the **Setup and Maintenance** tile on the Agency Springboard. On the Setup page, select the offering: Public Sector Permits, Public Sector Planning and Zoning, Public Sector Code Enforcement, or Public Sector Business Licenses. Then select the *Agency Staff* functional area.
2. On the right panel, select the task named Manage Legislative Data Group and click **Select** to open the Manage Legislative Data Groups page.
3. On the Manage Legislative Data Groups page, click **Create** to enter the new legislative data group details.
4. Enter your legislative data group name in the *Name* field. Search and select your country from the *Country* field.
5. Click **Submit** to save and return to the Manage Legislative Data Group page.
6. Click **Done**.

Creating a Legal Entity

1. Select the **Setup and Maintenance** tile on the Agency Springboard. On the Setup page, select the offering: Public Sector Permits, Public Sector Planning and Zoning, Public Sector Code Enforcement, or Public Sector Business Licenses. Then select the *Agency Staff* functional area.
2. On the right panel, locate the task named Manage Legal Entity and click to open the Select Scope page.

3. On the Select Scope page select the Manage Legal Entity task radio button.
4. Click the Legal Entity drop-down and select **Create New**. Click **Apply and Go to Task** button to open the manage Legal Entities page.
5. On the Manage Legal Entities page, click the **New** button to open the Create Legal Entity page and enter values for the fields:

Page Element	Description
Country	Select the country (United States is the default selection).
Name	Enter the name of your agency.
Legal Entity Identifier	Enter a code for your agency.
Payroll Statutory Unit	Select the checkbox.
Legal Employer	Select the checkbox.
Legal Address	Select the legal address (created in the previous section) using the Search and Select page.
EIN or TIN	Enter your agency's EIN or TIN value. You can enter a value of your choice if you do not have EIN or TIN for your agency. **Note:** If you are using Fusion HCM or Fusion ERP, the value you enter here must be legitimate. It is recommended that you refer to Fusion documentation to know about the required value for entry in the field.
Legal Reporting Unit Registration Number	Enter your agency's legal reporting unit registration number. You can enter a value of your choice if you do not have a registered number for your agency. **Note:** If you are using Fusion HCM or Fusion ERP, the value you enter here must be legitimate. It is recommended that you refer to Fusion documentation to know about the required value for entry in the field.

6. Click **Save and Close** to save the newly created legal entity.

Registering a Legal Entity

1. Select the **Setup and Maintenance** tile on the Agency Springboard. On the Setup page, select the offering: Public Sector Permits, Public Sector Planning and Zoning, Public Sector Code Enforcement, or Public Sector Business Licenses. Then select the *Agency Staff* functional area.
2. On the right panel, select the task named Manage Legal Entity Registration and click **Select** to open the Select Scope page.
3. On the Select Scope page select the Manage Legal Entity Registrations task radio button.
4. Click the Legal Entity drop-down and choose *Select and Add*. Select *Click Apply and Go to Task* button to open the Manage Legal Entities page.
5. On the Manage Legal Entities page expand the Search section and enter the legal entity name you created in the previous section. Click **Search**.
6. Select the row from the search results and click **Save and Close**, to save the entity and open the Manage Registrations page.
7. View your values on the new Manage Registrations page and click **Done** to confirm and complete the registration process.

Creating Legal Entity HCM Information

1. Select the **Setup and Maintenance** tile on the Agency Springboard. On the Setup page, select the offering: Public Sector Permits, Public Sector Planning and Zoning, Public Sector Code Enforcement, or Public Sector Business Licenses. Then select the *Agency Staff* functional area.
2. On the right panel, select the task named Manage Legal Entity HCM Information and click Select to open the Select Scope page.
3. On the Select Scope page select the Manage Legal Entity HCM Information task radio button.
4. Click the Legal Entity drop-down and choose *Select and Add*. Click *Apply and Go to Task* button to open the Manage Legal Entities page.
5. On the Manage Legal Entities page expand the Search section and enter the legislative data group you created in the previous section. Click **Search**.
6. Select the row from the search results and click **Save and Close**, to save the entity and open the Legal Entity page.
7. On the Legal Entity page, click **Edit** and then click **Update** to open the Update Legal Entity page to enter an action reason.
8. On the Update Legal Entity page, select *Action Reason* drop-down button and select the option *Reorganization*. Click **OK** to save and return to the Legal Entity page.
9. On the Legal Entity page, select the Payroll Statutory tab to associate the data group to the HCM legal entity.
10. Under the Payroll Statutory Information section select the Associated Legislative Data Group drop-down. Search and select the legislative data group you created using the previous section.
11. Click **OK** to return to the Edit Legal Entity page. Click **Submit** and then click **Done** to complete the creation of a Legal Entity HCM Information.

For information on creating an employee record, refer to the documentation *Managing Agency Staff Profiles*.

Defining Job Titles

This topic discusses how to define job titles for agency staff. You can set up effective dates as well as bill rates for each job title for use in fee calculations.

Viewing Job Titles

View the various job titles that your agency has defined for their staff:

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Agency Job Titles**from the tasks list.
5. The Job Title page lists all the job titles defined.
6. Click a row to open the Job Title Detail drawer and view or edit the details of the job title.
7. Click **Save** if you have made any changes or click **Cancel** to return to the Job Title page.
8. Enter various details and click **Save** to save the new job title and return to the Job Title page.

Adding Job Titles

Administrators define new job titles for their staff using the Job Title page:

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Public Sector Work Schedules**from the tasks list.
5. On the Job Title page, click **+** button.
6. Enter details for the fields on the New job title details drawer:

Page Element	Description
Job Title	Enter a name for the job title.
Description	Enter a description for the job title.
Valid From	Select a start date when the job title is applicable.
Valid To	Select a date until which the job title is applicable.
Rate	Enter rate amount that the staff member charges for the recorded time. This value will appear as the default rate on the time recording pages for permits, plan reviews, inspections, and code enforcement cases. For more information, see *Adding Time Entries* and *Reporting Inspection Time*.
Frequency	Displays the frequency of the rate amount entered. The value is *Hourly*.
Currency	Displays the currency of the billing amount entered. The value is *USD*.

Page Element	Description

7. Click **Save**.

Setting Up Agency Staff

This topic provides an overview of job functions along with a list of delivered job functions. It also discusses how to set up Fusion business units and legal entities for Oracle Permitting and Licensing services.

Job Function Overview

Job functions are assignments made to staff members using the Agency Staff page. Job functions help you in assigning job specific attributes to an agency staff member. For example, you can assign the job function of a building inspector to an agency staff member and associate attributes such as Inspection District and Work Schedule.

For more information about setting up the various job attributes, such as permit, inspection, or issue types, see the Implementing Permitting and Licensing guide.

Job Function and ID	Attribute and Usage
Building Inspector ORA_BUILDING_INSPECTOR	• **Work Schedule** — *Inspections*: Determine inspector availability for assignment to inspections. A building inspector can have more than one work schedule. • **Inspection Districts** — *Inspections*: Determine the districts for which an inspector can be assigned to inspections. You can leave the value of the inspection district job attribute blank to enable a building inspector to be assigned to inspections from all districts. • **Inspection Types** — *Inspections*: Determine if the inspector can be assigned to a given type of inspection. You can leave the value of the inspection type job attribute blank to enable a building inspector to be assigned to all inspection types. • **Permit Types** — *Inspections*: Permit types are not used for inspector assignment.
Business Analyst ORA_BUSINESS_ANALYST (Applicable in future releases)	• **Inspection Districts** • **Inspection Types** • **Permit Types** (Applicable in future releases)
Business License Inspector ORA_BL_INSPECTOR	• **Work Schedule** — *Inspections*: Determine inspector availability for assignment to inspections. A business license inspector can have more than one work schedule. • **Inspection Districts** — *Inspections*: Determine the districts for which an inspector can be assigned to inspections. You can leave the value of the inspection district job attribute blank to enable a business license inspector to be assigned to inspections from all districts.

Job Function and ID	Attribute and Usage
	• **Inspection Types** — *Inspections*: Determine if the inspector can be assigned to a given type of inspection. You can leave the value of the inspection type job attribute blank to enable a business license inspector to be assigned to all inspection types.
Business License Inspector Supervisor ORA_BL_INSPECTOR_SUPERVISOR	• **Work Schedule** — *Inspections*: Work schedules are not used for business license inspector supervisors. • **Inspection Districts** — *Inspections*: Determine the districts for which a supervisor can view or schedule inspections. You can leave the value of the inspection district job attribute blank to enable a business license inspector supervisor to view or schedule inspections for all districts. • **Inspection Types** — *Inspections*: Determine the inspection types that can be viewed or scheduled by this supervisor. You can leave the value of the inspection type job attribute blank to enable a business license inspector supervisor to view or schedule inspections for all inspection types.
Business License Manager ORA_BL_MANAGER	**Note:** No job attributes are currently required for this job function. Business license managers have access to all consultations and licenses.
Business License Specialist ORA_BL_SPECIALIST	• **Business License Application Types** — Determine the license and consultation types that this specialist can be assigned to. • **Consultation Meeting Schedule** — Determine the availability of the specialist for scheduling business consultation meetings. **Note:** You can assign only one schedule.
Cashier ORA_CASHIER	• **Permit Types** (Applicable in future releases) • **Cashier ID** — *Cashiering*: Determine Cashier ID of the Cashier **Note:** You can assign only one schedule.
Chief Building Officer ORA_CHIEF_BUILDING_OFFICER (Applicable in future releases)	• **Inspection Districts** • **Inspection Types** • **Permit Types** (Applicable in future releases)
Code Enforcement Officer ORA_CODE_ENFORCEMENT_OFFICER	• **Code Enforcement Districts** The possible values are districts from code enforcement district types. Only users who are associated with a code enforcement district can be autoassigned to issues in that district.

Job Function and ID	Attribute and Usage
	• **Code Enforcement District Types** — Used at the time of scheduling inspections. **Note:** To give a user responsibility for all district types, create a **District Type** attribute row, but leave the attribute value blank. If you assign a district type attribute value to a user, it provides him with access to all districts within that district type. *Warning*: If you enable the agency-level option for autoassignment of incidents and cases, but do not set up any district or district type attributes, the incidents and cases will never be routed to the user. • **Code Enforcement Inspection Work Schedule** **Note:** You can assign only one schedule.
Code Enforcement Supervisor ORA_CODE_ENFORCEMENT_SUPERVISOR	• **Issue Type** — The possible values are the issue types that you create. A user who is associated with an issue type is responsible for all related subtypes, so don't assign users to both an issue type and a subtype that belongs to that issue type. • **Issue Subtype** — The possible values are the issue subtypes that you create. Only assign a user to a subtype when the user is not responsible for all of the subtypes that belong to the related issue type. These attribute values establish which issue types and subtypes the person is responsible for. This information is used when routing or assigning incidents and cases. **Note:** To give a user responsibility for all types of issues, create an **Issue Type** attribute row, but leave the attribute value blank. If you assign an issue type attribute value to a user, it provides him with access to all issue subtypes within that issue type. *Warning*: If you don't set up any issue type or subtype attributes, and you activate the system-level setting for automatically routing incidents, incidents will never be routed to the user.
Code Enforcement Technician ORA_CODE_ENFORCEMENT_TECHNICIAN	• **Issue Type** — The possible values are the issue types that you create. A user who is associated with an issue type is responsible for all related subtypes, so don't assign users to both an issue type and a subtype that belongs to that issue type. • **Issue Subtype** — The possible values are the issue subtypes that you create. Only assign a user to a subtype when the user is not responsible for all of the subtypes that belong to the related issue type. These attribute values establish which issue types and subtypes the person is responsible for. This information is used when routing or assigning incidents and cases. **Note:** To give a user responsibility for all types of issues, create an **Issue Type** attribute row, but leave the attribute value blank. If you assign an issue type attribute value to a user, it provides him with access to all issue subtypes within that issue type. *Warning*: If you don't set up any issue type or subtype attributes, and you activate the system-level setting for automatically routing incidents, incidents will never be routed to the user.

Job Function and ID	Attribute and Usage
Economic Development Officer ORA_ECONOMIC_DEVELOPMENT_OFFICER (Applicable in future releases)	**Permit Types** (Applicable in future releases)
Finance Administrator ORA_FINANCE_ADMINISTRATOR (Applicable in future releases)	• **Inspection Districts** • **Inspection Types** • **Permit Types** (Applicable in future releases)
Inspector Supervisor ORA_INSPECTOR_SUPERVISOR	• **Work Schedule** — *Inspections*: Work schedules are not used for inspector supervisors. • **Inspection Districts** — *Inspections*: Determine the districts for which a supervisor can view or schedule inspections. You can leave the value of the inspection district job attribute blank to enable an inspector supervisor to view or schedule inspections for all districts. • **Inspection Types** — *Inspections*: Determine the inspection types that can be viewed or scheduled by this inspector supervisor. You can leave the value of the inspection type job attribute blank to enable an inspector supervisor to view or schedule inspections for all inspection types. • **Permit Types** — *Inspections*: Permit types are not used for inspector supervisor assignment.
Permit Technician ORA_PERMIT_TECHNICIAN (Applicable in future releases)	• **Inspection Districts** • **Inspection Types** • **Permit Types** (Applicable in future releases)
Plan Coordinator ORA_PLAN_COORDINATOR	• **Permit Types** — Determine the permit types of the plan reviews that this plan coordinator can assign and update. **Note:** You can leave the value of this job attribute blank to enable a plan coordinator to assign and update plan reviews for all permit types. • **Plan Reviewer Department** — Determine the plan reviewer departments of the permit and planning and zoning plan reviews for which this plan coordinator can assign plan reviewers and make plan review updates. **Note:** You can leave the value of this job attribute blank to enable a plan coordinator to assign and update plan reviews for all departments.

Job Function and ID	Attribute and Usage
	• **Planning Application Types** — Determine the planning application types including preapplications for which this plan coordinator can assign plan reviewers and make plan review updates. **Note:** You can leave the value of this job attribute blank to enable a plan coordinator to assign and update plan reviews for all planning application types. The values of the application type and department attributes also determine which plan reviews a plan coordinator can see when they turn on the **My Job** switch on the Plan Reviews console pages.
Plan Reviewer ORA_PLAN_REVIEWER	• **Permit Types** — Determine the permit types that this plan reviewer can be assigned to. **Note:** You can leave the value of this job attribute blank to enable a plan reviewer to be assigned to any permit type. • **Plan Reviewer Department** — Determine the plan reviewer department that this plan reviewer belongs to. The Add Reviewers modal page displays a list of available reviewers by plan reviewer department when assigning a plan reviewer to a plan review. **Note:** You can leave the value of this job attribute blank to enable a plan reviewer to be assigned to any department. • **Planning Application Types** — Determine the application types that this plan reviewer can be assigned to. **Note:** You can leave the value of this attribute blank to enable a plan reviewer to be assigned to all planning application types. • **Plan Review Districts** — Determine the plan review districts for which a reviewer is available on the Add Reviewers modal page when assigning reviewers to a plan review. **Note:** You can leave the value of this attribute blank to make a plan reviewer available for all plan review districts. The values of the application type and department attributes also determine which plan reviews a plan reviewer can see when they turn on the **My Job** switch on the Plan Reviews console pages.
Planner ORA_PLANNER	• **Planning Application Types** — Determine the application types that this Planner can be assigned to. • **Pre-application Meeting Schedule** — Determine the availability of the planner for scheduling preapplication and planning meetings.

Job Function and ID	Attribute and Usage
	Note: You can assign only one schedule.
Principal Planner ORA_PRINCIPAL_PLANNER	• **Permit Types** — Determine the permit types of the plan reviews that this principal planner can view in the Plan Review Console. **Note:** You can leave the value of this job attribute blank to enable a principal planner to view plan reviews for all permit types. • **Plan Reviewer Department** — Determine the plan reviewer departments of the plan reviews that this principal planner can view in the Plan Review Console. • **Planning Application Types** — Determine the planning application types of the plan reviews that this principal planner can view in the Plan Review Console. **Note:** You can leave the value of this job attribute blank to enable a principal planner to view plan reviews for all planning application types.

Setting Up Fusion HCM Business Units and Legal Entities for Oracle Permitting and Licensing Services

If you are an existing Fusion customer and if you have already set up business units and legal entity, then you can assign the same for your Agency Staff. However, if you are a new Oracle Permitting and Licensing-only customer then as a prerequisite for entering Agency Staff data, you need to create one business unit and one legal entity that can be used for your agency staff.

See *Setting Up a Fusion Business Unit and Legal Entity*.

Configuring Agency Job Groups

This topic provides an overview of the Agency Staff Group Configuration and discuss the procedure to configure agency job groups.

You can use the Agency Staff Groups for identifying a common set of Job attributes that can be applied to a group of Employees.

Groups provide the flexibility to assign attributes at various levels. You can define a group for a given department, division, or for specific districts based on the commonalities of the job attributes.

Examples of Groups are:

1. Inspectors working in District A
2. Permit Technicians responsible for Fence Permits

You can configure a group with default Job Functions and their attribute values for your users.

Users entering their employee profile information can select a group job function, which results in loading default job functions and their attribute values automatically populated.

Note: Users cannot edit the job function attribute values on the Agency Staff page when using the Job Group function.

Configuring Agency Job Groups

Administrators set up and configure the agency staff group on the Job Group page. Agency users can select a group on the Agency Staff Profile page, and a default set of job functions and attribute values are assigned to the employee. To set up the job functions and attributes for a group:

1. Select **Agency Staff** > **Job Group**.
2. On the Job Group page, click **Add** to add a new group or **Edit** to change the group attributes. Click **Add**.
3. Enter the details of the job group on the Job Group Details page.
4. Verify that the **Enabled** switch is turned on if you want to enable this group when you save. This switch is turned on by default for a new group.
5. Under the Job Function section, click **Add** to select job functions and include their attributes.
6. Click **Save** to return to the Job Group page.

Note: Agency users select the group from a list on the Agency Staff page. The job functions and their corresponding attributes cannot be changed by users.

Managing Agency Staff Profiles

Agency administrators create and manage profiles for their agency staff.

Managing Agency Staff Profile

Administrators set up the agency staff profile on the Agency Staff page.

If you have implemented Fusion Human Capital Management (HCM), you must search and select an existing staff member using their worker ID. If the HCM implementation is disabled, you have the option of creating a new entry for the staff member by entering the details, or by selecting the staff record from existing workers.

To create an agency staff profile:

1. Select **Agency Staff**.
2. On the Agency Staff page, click **Add** to add a new agency staff member – employee.
3. On the Agency Staff Profile page, you add values to the various fields. For the Business Unit and the Legal Entity, see the documentation *Setting Up a Fusion Business Unit and Legal Entity* .

Page Element	Description
Select Existing Worker	Turn on the switch to allow the search and selection of an existing Fusion employee. The following fields are display only, populating details from Fusion information:

Page Element	Description
	◦ Person ID ◦ Person Number ◦ Hire Date ◦ Business Unit ◦ Legal Entity ◦ Generated User Account ◦ Send Credential Email ◦ User Name If you want to create a new staff profile, enter information in the fields provided. **Note:** If your agency has HCM implementation, this switch is turned on by default and is unavailable for edit. You must select an existing staff member using the Worker ID field. For the selected staff member, you can't make changes to the name, person number, person type, user name, email, hire date, and manager fields.
Worker ID	Enter an ID or click the prompt to open the Look Up page and search for the Fusion employees. You can sort the search results by any of these: ◦ Worker ID ◦ First Name ◦ Last Name ◦ Email ◦ Hire Date ◦ Work Phone Number ◦ Business Unit Name ◦ Legal Entity ◦ Manager ◦ Person Number ◦ User Name Select an employee row from the search result on the Look Up page and the details are populated on the Agency Staff page.
Person Type	Shows the type of person, such as Employee.
Enabled	Set a status for the staff member from the options:

Page Element	Description
	○ Active ○ Inactive **Note:** You set the status to Inactive when the employee is inactivated in your HR system. If you are a Fusion HCM/ERP/Sales Cloud customer then the inactivation of Employees in HCM will not automatically inactivate the Employee data in Public Sector Cloud. You must manually update this field. Also, turning off the switch on this page will not inactivate the user ID. You need to use your security console to inactivate the User ID. If Oracle Identity Cloud Service (IDCS) is your identity provider (IdP), you must inactivate the user ID using your IDCS console.
Is a Supervisor	Turn on the switch if the employee is a supervisor.
Job Group	Select a group to assign a job group section with the relevant job functions. Accordingly, the system populates the Job Group Assignments section. **Note:** You cannot make any changes to the values in the job group assignments on this page. To update the values, navigate to the Job Group page.
Link User Account	Select the switch to link the employee detail to the existing user account.
Link User name	Search and select the name of the existing user to link to the new employee.

4. Click **Save** to save the agency staff profile and return to the Agency Staff page.

When the agency staff profile is saved, automatic role assignments are created based on the **Manage Role Provisioning Rules** settings in the Functional Setup Manager (FSM). Subsequently, this Fusion employee information must be processed to synchronize with the Oracle Identity Cloud Service (IDCS) system.

As an administrator, you must manually schedule and initiate a process to synchronize your agency staff profiles into the IDCS system using the **Synchronize Agency Staff Roles** process.

Scheduling the Synchronize Agency Staff Roles Process

1. Access the Scheduled Processes page from the Fusion application Navigator > Tools > Scheduled Processes.

2. On the Scheduled Process Overview page, click the **Schedule New Process** button and enter values for the fields on the Schedule New Process modal page:

Page Element	Description
Type	Select the *Job* option.
Name	Select the **Synchronize Agency Staff Roles** option from the drop-down menu.

3. Click **OK**.
4. On the Process Details page, view options and click **Submit**. You'll see a confirmation message that the process was submitted.
5. Once the process is successfully completed, the Overview page displays the process details with the status *Succeeded*.
6. You can download the log file to view details of the updated role records.

Tip: To ensure that your employee records in IDCS are updated with the latest of automatically assigned roles, it is recommended that you run this process whenever you create new employee records.

For more details on running processes, See the Oracle Applications Cloud documentation *Submit Scheduled Processes and Proess Sets*.

Job Function Assignment without using Agency Job Groups

You can assign job functions to employees directly, without having to use Job Groups.

1. On the Agency Staff page search and select the employee that you want to add job functions to.
2. Under the Job Function section, click **Add** to select job functions and include their attributes.
3. Click **Save** and return to the Agency Staff page to view the job function assignments.

To include job functions using Agency Job Groups, see the documentation *Configuring Agency Job Groups*.

Assigning Agency Security Access

Administrators assign roles to various staff members. The security roles assigned to an employee determine the navigations and data that the user can access.

1. Select Agency Staff and then select Agency Staff Access. The Agency Staff Access page lists all the agency staff members.
2. You can click the chevron for a row to view the employee access details. This page lists all the security roles assigned to the employee user. You can add new security roles to the employee on this page.
3. Click the **Add New Role** button to open the Role Detail page and assign a role for the user.
4. Click **Save** to save your changes and return to the Agency Staff Access page.
5. Click **Save** to save the changes you made to the Agency Role details of the staff member.
6. You can add or delete the security roles assigned to the user on this page.

Note: All Agency users must be assigned the **PSC Agency Staff** role. Additionally job specific roles can be assigned to the user. For the complete list of security roles, you can refer to the Security Reference Manual. Also refer to *Using the Security Console*.

Note: For users requiring access to Permits, in addition to the **PSC Agency Staff** and job specific roles such as **PSC Permit Technician**, **PSC Plan Reviewer** and others, you must assign the following roles to the users: **CUSTOM_MANAGE_PERMITS**, **CUSTOM_MANAGE_PERMITS**, and **CUSTOM_PSC_MANAGE_PERMITS_AGENCY**.

Managing Mobile Application Activation

As agency administrators, you must enable access to your field officers for using the inspection application on their mobile devices.

You use the Agency Mobile Setup page to select the field officers and send them the email containing the activation link. Only the agency staff with the job function of code enforcement officer or building inspector are entitled to install and use the mobile application. Code officers and building inspectors receiving the email must install and configure the mobile application on their mobile devices.

Mobile Application Activation

To send the mobile application activation link:

1. Select **Agency Staff** > **Mobile Application Activation**.
2. The Agency Mobile Setup page lists all the agency staff that are either building inspectors or code enforcement officers.

   The job function assignments are set up on the Agency Staff page. See *Setting Up Agency Staff*.
3. Select the staff member you want to send the email notification and click the **Send** button on the row.
4. Click OK to confirm that the email containing the mobile activation link will be sent to the selected agency staff. The activation link is for one-time use only.

   The notification status for the row changes to *Request sent*, and the **Resend** button appears in the Send Mobile Setup Notification column.

Note: You can select multiple staff members to the email notification at once. Click the **Edit** icon on the Agency Mobile Setup page and use the checkboxes to select your recipients. Select the **Send Mobile Setup Notification** button to send the email to all the selected field officers.

Importing Agency Staff Data

This topic explains how to prepare and import agency staff resource data from an external data source into Public Sector Agency Staff tables using the File-Based Data Import feature.

Agencies with Fusion HCM implementation: File-based data import can be used if your agency has implemented Fusion HCM. You either enter employee details manually into the Public Sector Agency Staff tables using the Public Sector user interface (Agency Staff page) or run the schedule import process to copy the employee data.

Agencies without Fusion HCM implementation: If your agency has not implemented Fusion HCM and you are using a third-party application to maintain employee information, you can use the import process to copy data from the third party tables into the Public Sector Agency Staff tables.

In addition to the removal or inclusion of employee records, data changes can include changes to the details of an employee, such as the address, email, role, or designation.

Scheduling the Employee Data Import and Export Process

Administrators can set up a schedule to process a batch file that imports employee data from a .CSV file into the Public Sector Agency Staff tables. The imported data file, which is usually generated from a third-party application, can be used to set up and periodically update user details within Public Sector Agency Staff.

Using the Predefined Template to Import Data using File-Based Data Import

Oracle Permitting and Licensing provides a template to help you import data using the File-Based Data Import tool. The Import template is a spreadsheet that includes the commonly used fields, in addition to the required, along with instructions to use them.

To download the Agency Staff Import Template, see this posting in My Oracle Support (Doc ID 3036254.1).

Importing Employee Data

1. Access the File Import and Export page from the Fusion application by clicking **Navigator** > **File** > **Import and Export**.
2. On the File Import and Export page, in the Search Results section, click the **Add** button to upload the template zip file to the Universal Content Management (UCM).
3. On the Upload File modal page, click **Browse** and select the file for upload. Use the **Account** field to select the account for the file you are uploading.
4. Click **Save and Close**. You will see the file listing on the File Import and Export page with the details of the upload.

Scheduling the Import Export process using File-Based Data Import

1. Access the Scheduled Processes page from the Fusion application **Navigator** > **Tools** > **Scheduled Processes**.
2. On the Scheduled Process page, click the **Schedule New Process** button and enter values for the fields on the Schedule New Process modal page:

Page Element	Description
Type	Ensure that the Job option is selected.
Name	Search and select the **Load Interface File for Import** value from the list of names.
Description	Displays a description about the selected process.

3. Click **OK**. The service now opens the Process Details page for you to select the import process for the process name you entered in the above step:

Page Element	Description
Import Process	Click the drop-down menu, search and select the **Import Agency Staff** value using the lookup list.
Data File	Click the drop-down menu and select the generated ZIP file you uploaded earlier, as described in the previous section.

4. Click **Submit** and accept the confirmation message to complete the submission.

Note: The submission only confirms that the files are sent for processing. To view the details of the completed process, you must access the log file. The log file lists all the successfully processed records and the records that are in error, with the details of the error.

Records in Error

Note: When you fix the errors in the spreadsheet and prepare to resubmit it for processing, you must delete the records that were processed successfully in the previous run. All the records preceding the ones in error are created in the Public Sector Agency Staff tables. Resubmitting the template having those records results in creating duplicate entries of the staff records.

Scenarios for importing employee data from a third-party system to Public Sector Agency Staff profile

Prerequisite

The scenarios listed here assume that the following prerequisite has already been set up: Each record in the template should contain a unique identifier called the Interface ID. The interface ID is used as a key identifier while establishing parent-child relationships across the pages of the template spreadsheet.

Consider importing the employee details into the tables of Public Sector Agency Staff. You can perform the following actions using the Import template:

- Add a new staff member
- Assign personal attributes
- Assign job functions and attributes
- Assign roles
- Disable an agency profile

The following scenarios detail how you can create a new agency staff record and seamlessly update various parameters of your existing agency staff.

Note: The *InsertUpdateFlag* field on the Import template is the determining factor as to whether the record is for a new agency staff or for updating an existing agency staff. Enter the value “I” if you are inserting a new record, or “U” if you are updating an existing record. Also note that the **Person Number** field is mandatory if you are updating a record.

Scenario 1: Adding a new agency staff

Consider creating a new agency staff record staff in your Public Sector Agency Staff.

If your agency is not a Fusion HCM customer, you use the template to enter details in all the pages of the template spreadsheet and then schedule the import process to import the newly added employee record. You must enter the value “I” in the InsertUpdateFlag field to qualify the record as a new agency staff entry.

The following example shows the data on the spreadsheet detailed in the above scenario – Adding a new staff member.

Record Number	*Interface ID	*InsertUpdateFl	*First Name	*Last Name	*Email	*Business Unit	*Legal Entity
1	467436	I	John	Simmons	john.s@example.	Sample Corporation	Sample Corporation
2	467437	I	Robert	James	robert.j@exampl	Sample Corporation	Sample Corporation

Note: The above example displays a limited number of fields. For a complete list of fields, refer to the Import template spreadsheet.

If your agency has implemented Fusion HCM, you use the HCM loader or enter the necessary employee details manually. In such cases, the following Public Sector specific attributes are required to be updated:

- Job Title
- Agency Department
- Agency ID
- Agency Location
- Job Group
- Is Supervisor
- Enabled

Scenario 2: Updating personal details of an agency staff

Consider updating changes to the personal details of an agency staff in your Public Sector Agency Staff. You can perform the following actions:

- Change work phone number
- Change location
- Change department
- Change job title

- Assign job group
- Revoke job group
- Change supervisor status

The following example shows the data on the spreadsheet detailed in the above scenario.

Record Number	*Interface ID	*Person Number	*Work Phone Number	*Location	*Department	*Job Title	*Is Supervisor
1	467436	PERNUM8	16348773	300100168879618	1001	Agency Staff	Y
2	467437	PERNUM9	32178939	300100168879618	1001	Building Inspector	N

Note: The above example displays a limited number of fields. For a complete list of fields, refer to the Import template spreadsheet.

Scenario 3: Updating job functions and their attributes

Consider updating changes to job functions and their attributes of an agency staff in your Public Sector Agency Staff. You can perform the following actions:

- Assign job functions and attributes
- Assign additional job attributes to existing functions
- Remove job attributes
- Remove job functions

The following example shows the data on the spreadsheet detailed in the above scenario.

Record Number	*Interface ID	*Assignment Flag	*Person Number	Agency ID	Job Function ID	Job Attribute	Attribute Value
1	467436	I	PERNUM8	1	ORA_BUILDING_INSPECTOR	ORA_INSPECTION_TYPES	Plumbing
2	467437	D	PERNUM9	1	ORA_CASHIER	ORA_CASHIER_ID	7574343

Scenario 4: Updating roles

Consider updating roles of an agency staff in your Public Sector Agency Staff. You can perform the following actions:

- Assign additional roles
- Revoke roles

The following example shows the data on the spreadsheet detailed in the above scenario.

Record Number	*Interface ID	*Role Action	*Person Number	*Role Name
1	467436	A	PERNUM8	Employee
2	467437	R	PERNUM9	Application Implementation Consultant

Scenario 5: Disabling agency staff profile

Consider disabling an agency staff profile in your Public Sector Agency Staff. You can perform the update without having to make any manual entry in your records. The user interface as well as the Import Agency Staff functionality allow you to disable agency staff profiles.

The following example shows the Enabled field on the spreadsheet, as detailed in the above scenario.

Record Number	*Interface ID	*Person Number	*Work Phone Number	*Location	*Department	*Job Title	Enabled
1	467436	PERNUM8	16348773	300100168879618	1001	Building Inspector	Y
2	467437	PERNUM9	32178939	300100168879618	1001	Agency Staff	N

Note: The above example displays a limited number of fields. For a complete list of fields, refer to the Import template spreadsheet.

7 Setting Up Public Users

Setting Up Public Users

Public user setup includes configuration options related to public user registration and account management. Agencies can also configure required address fields for applicants by country.

Here's how an agency sets up public users:

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select All Tasks from the **Show** drop-down list.
5. Select **Manage Public User Setup** from the tasks list.
6. In the **Terms of Use** section of the Public User Setup page, configure these options:

Page Element	Description
Require the user to accept the terms of use before registering	Use this switch if public users must accept your terms of use as part of the registration process.
Terms of Use ID	If you require public users to accept your terms of use during registration, select the terms of use definition for the registration process. This field is visible only if the **Require the user to accept the terms of use before registering** switch is enabled. **Note:** If you change the Terms of Use ID, account holders who have already registered are required to accept the new terms the next time they sign in. In this scenario, a window with the new terms opens as soon as the public user signs in. The user must select the agreement checkbox to continue.

7. In the **Attachments** section of the page, configure these options:

Page Element	Description
Allow agency staff and registered users to manage documents in account management	Turn on Use this switch to enable attachments in user accounts. When you enable attachments, both users and agency staff can add attachments to user accounts and modify information about existing attachments.

Page Element	Description
	Agency staff can also delete attachments, but public users can't delete attachments unless you also enable the "Allow registered users to delete documents in account management" switch on this page.
Allow registered users to delete documents in account management	Turn on this switch to allow public users to delete attachments that are associated with their account. This setting does not affect agency staff, who can always delete account attachments. This switch is visible only if you enable attachments by turning on the "Allow agency staff and registered users to manage documents in account management" switch.
Document Group ID	If you want to enable document categories and subcategories for public user account and profile attachments, select the document group with the appropriate categories. A document group consists of a set of related categories. If you leave this field blank, the public user attachment pages won't have fields for identifying attachment categories and subcategories. This field is visible only if you enable attachments by turning on the "Allow agency staff and registered users to manage documents in account management" switch.

8. In the **Privacy Consideration** section of the page, you can select only one option. The agency either hides name and contact information for all registered users from public view or gives the registered user the option of hiding their information.

Page Element	Description
Hide contact information of all registrants from public view	Turn on this switch to hide the name and contact information of all applicants and contacts registered in the system from public view on applications. Only the applicant, their contacts with application access, and agency staff can view the contact information on an application. When you select this option, registered users won't see the option to hide their name and contact information on the registration page or in account management.
Provide option for registrants to hide their contact information from public view	Turn on this switch to give public users the option on the Register page to hide their name and contact information when a member of the public views the user's applications. This switch is turned on by default. If this switch is turned on, the initial registration page gives users the opportunity to hide their information. The public can still view the property address even if the user's information is hidden. After a user registers, either the user or agency staff can update this preference using Account Management functionality.

9. In the **IVR Access Code** section of the page, configure this option.

   This section is only available when IVR is enabled for permits or business license.

Page Element	Description
Enable IVR Access Code (Enable Interactive Voice Response Access Code)	Turn on this switch to: o Display the **IVR Access Code** field during account registration on the Register page. o Require applicants to provide their 4-digit PIN when accessing inspection records using IVR. o Enable registered public users to maintain their 4-digit PIN in account management. When you turn off this switch, the **IVR Access Code** is hidden on the Register and Manage Account pages. When you turn off this switch, the **IVR Access Code** field is hidden on the Register page and applicants can use the IVR system without a PIN. For more information, see *The Public User Registration Process* and *Managing Public User Accounts*.

   Oracle recommends requiring an IVR access code for applicants calling into an IVR system. For more information about configuring IVR for agencies, see *Setting Up Agency-Level Options for Permits* and *Setting Up a Proxy Role and User for Interactive Voice Response*.

10. In the **User Category** section of the page, configure this option:

Page Element	Description
Enter a user category for appropriate notification content and URL redirection parameters for system access	Enter the user category to be assigned to registered public users. Typically you should use the delivered category *DEFAULT*. The user category that you specify will be associated with user accounts that are created by the public user registration process. The category controls the templates for account-related notifications such as emails for first-time registration and for resetting the account password. The category also controls URL redirection so that when users set or reset their password in the Oracle Applications Cloud, they are immediately transferred to the permitting and licensing system. For more information about user categories, see *Managing Users in Oracle Permitting and Licensing* and *Setting the Next URL for the Default User Category*.

11. Click **Save.**

Setting Up Address Style Format By Country

For agencies in the United States, the validation on the applicant's address requires the first address line, city, state, postal code, and United States for the country regardless of whether the address fields are required in this setup. The

validation of address style format by country occurs in the permit application intake form displayed using the Redwood Experience and on the Manage Account page. For more information, see *Address Styles*. See also *Completing an Application* and *Managing Public User Accounts*.

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select Permits.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select All Tasks from the **Show** drop-down list.
5. Select **Manage Address Formats** from the tasks list.
6. Search for the country's postal address format.
7. In the **Format Variation Layout** section of the Postal Address Format page, mark which address elements to require.
8. Click **Save and Close**.

Setting Up Public User Roles

To ensure that registered public users have appropriate system access, you must define which role is assigned to the user IDs that are created during the registration process.

When a public user registers, the Oracle system assigns a single role to the new user. Because the user is assigned just one role, access to different areas of the system is established through a role hierarchy. In this hierarchy, the various roles that provide access to different areas of the system are all children of a single parent role that you create.

During implementation, you created all custom roles required for system access, including those for the public user. Use the Public User Roles page to identify the role to be assigned during user registration.

Identifying the Single Role to Be Assigned During Public User Registration

To identify the single role to be assigned during public user registration:

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Public Users*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Public Sector User Roles** from the tasks list.
5. If the Public User Roles page already lists a role, delete it before you add the new role.

   The button for adding a role is hidden if a row already exists. You can't modify the existing row, so you must instead delete it and then add a new one.

   To delete the existing row:

   a. Click the row to access the **Role details** drawer.
   b. Click the **Delete** button.
6. On the Public User Roles page, click the **Add** button.
7. On the **New role** drawer, use the **Role ID** field to select the single role to be assigned during the public user registration process: PSC Custom Registered Public User (CUSTOM_PSC_REGISTERED_PUBLIC_USER).

   The **Role ID** is the only enterable field on the drawer. To select a role based on the descriptive role name rather than the numerical role ID, start typing in the **Role ID** field to search by role name.

> **Note:** If you can't find the PSC Custom Registered Public User role, you may not have created all of the necessary custom roles. For more information on setting up custom roles, see *Creating Custom Roles for Oracle Permitting and Licensing*.

8. Click **Save.**

Overview of Application Access for Contacts

All application contacts must have a contact type that describes the role of the person relative to the specific application, such as business manager, contractor, or organization. Different contact types have different levels of application access, as set up by your agency, but applicants, the primary contact, and business owners on business license applications always have the highest level of access and can manage other contacts.

When an applicant submits an application, they are automatically assigned the *Applicant* contact type, which is delivered with full application access that can't be modified.

You can change the applicant to another active registered contact on the application and assign a different level of access to the *Previous Applicant*. The new applicant receives full application access. For more information, see *Changing the Applicant on an Application*.

Business owners on business license applications are automatically assigned the *Business Owner* contact type that gives them access to business license applications as contacts. This contact type is only valid for business license applications.

When you add a contact to an application, you select a contact type. The application access level defined by the agency is used unless you select a higher level of access. For a given business license, permit, or planning application, if a contact's type allows access or the contact has been granted access, *and* the contact email matches the account email for a registered user, then the contact can access the application after the application is submitted.

The contact types and levels of access that a contact can have are different for business licenses and permit and planning applications:

- Business license application contacts can have three levels of access: None, Full, or View, pay, and print to view the application, pay fees, and print the business license certificate. In addition to the business license application, business license contacts can view the business license and business entity information.
- Contacts for permit and planning applications can have two levels of access: None or Full.

Contacts with application access can see both their own applications and the applications they're a contact for. To access the application, the contact can search for it using the search field in the global banner or click the **Applications** tile on the landing page once they're logged in.

> **Note:** Before contacts can manage attachments, comments, and contacts, your agency must add the PSC Contact User duty role (ORA_PSC_CONTACT_USER_DUTY) to the PSC Custom Registered Public User role (CUSTOM_PSC_REGISTERED_PUBLIC_USER) and enable application access for the contact type.

Application Access Details

Contacts with full application access can do the following. For more information about the primary contact's application access, see the next section.

- View complete applicant information, including information that is hidden from the general public.
- View permit and planning application plan review data and comments.
- Add and update contractors, including activating or inactivating a contractor on a permit or planning application.
- View comments, including workflow comments.
- View contacts and attachments.
- Manage contacts.

  Contacts with full access can manage contacts except for the applicant, primary contact, or business owners.
- Add and update comments, and attachments until the application is closed.
- Delete comments and attachments that the contact added.
- View inspections, inspection comments, and inspection checklists.
- Schedule inspections.
- View fee information.
- Print the permit, and print payment receipts.

  Business license contacts with Full or View, pay, and print access can print the business license certificate.
- Make payments related to a permit or planning application.

  Business license contacts with Full or View, pay, and print access can make payments related to the business license.
- View communications that are visible to the applicant. However, only applicants can access web forms and web form attachments.

Contacts can also add or delete links to related transactions on the applications they manage, but you must grant registered public user access for managing links to related transactions in the agency setup. For more information, see *Setting Up Agencies*.

> **Note:** The setup for owner access or contact access control is not universal across all functions. For example, if the agency sets the ability to link or relate transactions to agency only, the applicant, business owner, or contact with application access will still not be able to do so.

Primary Contact

The applicant is the primary contact unless the applicant selects a different primary contact on the application form or after the application is submitted. A contact with any contact type can be a primary contact. Primary contacts always have the same access to an application as the applicant, including the ability to manage other contacts. Applicants and primary contacts can upgrade another contact's access or make a different contact the primary contact.

Business owners with full access as well as applicants and primary contacts can manage other contacts, including changing the primary contact and upgrading a contact's level of access to an application.

Setting Up Contact Types

A contact type describes the role or position of a contact person for an application. The contact type that you assign to a contact determines whether the contact has access to the application. You set up contact types on the Contact Type page.

Contact types are used only for application contacts, not for profile contacts.

Delivered contact types include *Applicant*, *Previous Applicant*, and *Business Owner,* which is only used for business licenses.

For information about application access for contact types, see *Overview of Application Access for Contacts*.

Adding a Contact Type

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access the Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Contact Types** from the tasks list.
5. On the Contact Type page, click **Add** to add a new contact type.
6. On the **New contact type** drawer, enter values for the contact type fields.

Page Element	Description
Contact Type Code	Enter the contact type code.
Contact Type	Enter the type of contact, such as *Business Owner, Individual,* or *Emergency Contact.*
Description	Enter a description of the contact type.

In the **Application access** section, you can set up the level of access the contacts can have for various application types:

Page Element	Description
Permit Access	Select whether contacts with this contact type are granted full or no access to the permit application.
Planning Access	Select whether contacts with this contact type are granted full or no access to the planning application.
Business and License Access	Select the level of application access you want to grant to the contacts with this contact type:

Page Element	Description
	○ **Full** ○ **None** ○ **View, pay, and print**: The contact user can only view the business license application, pay fees, and print the license certificate. **Note:** Business license contacts with access will also get view access to business entity and all business license activities, including **Origination**, **Amendment**, and **Renewal**. To access an application, the contact must be a registered user, and the contact email must match the account email.

7. Verify that the **Enabled** switch is turned on.
   The switch is on by default for a new contact type.
8. Click **Save.**

Modifying a Contact Type

1. Navigate to the Contact Type page and select the row of the contact that you want to modify.
2. On the **Contact type details** drawer, you can:
   - Edit the Contact Type.
   - Edit the Description.
   - Edit the Application Access.

   Note: You can't change the *Applicant* or *Previous Applicant* type.
3. Click **Save**.

Deleting Contact Types

You can delete a contact type only if it is not applied to a contact associated with an application. Note that you can't delete the delivered contact types, including *Applicant*, *Previous Applicant*, and *Business Owner* or *Corporate Officer*.

1. Navigate to the Contact Type page and select the checkbox for the contact type that you want to delete. If you want to delete multiple contact types, select the checkboxes for the contact type rows to delete.
2. Click the **Delete** button.

   Note: You can also use the **Delete** button available on the **Contact type details** drawer for each contact type category.

Setting Up Terms of Use

The Terms of Use page stores rules and guidelines to which user must agree as a condition of using a service. The terms act as a legal contract. They are also known as Terms and Conditions or Terms of Service. When you set up a terms of

use definition, you also specify the contexts where the definition is available. For example, you can specify that certain terms can be used for public user registration but not for permit, planning and zoning, or business license applications.

You add, modify, and delete terms of use definitions on the Terms of Use page. After setting up terms of use for a specific offering, you associate the terms of use ID with the application type.

Adding Terms of Use

1. Select **Common Setup** > **Terms of Use.**
2. On the Terms of Use page, click **Add.**
3. On the Terms of Use Details page, enter values for the following fields.

Page Element	Description
Terms of Use ID	Enter an identifier for the terms of use definition. If a definition changes over time, create multiple definitions with the same ID and new effective dates. The effective dates of the different versions must not have gaps or overlap.
Effective Start Date	Enter the first day that the definition is valid.
Effective End Date	Enter the date, if any, when the definition will no longer be valid. To keep the definition valid indefinitely, do not enter a date. If no date is specified, the field displays the text *Open end date.* After a definition is saved, the end date becomes read-only. Although you can't make manual changes, the system can still update the end date to accommodate new effective-dated entries. For example, if the currently effective definition has an open end date, and you create a new definition with a later start date, the original definition's end date changes to the day before the new definition goes into effect.
Show All Dates	Click this button to access the effective-dated history of the definition. This button is not available during the creation of a new definition. On the page that displays this history, use the **Add** button to add a new effective-dated entry for the definition. The new entry inherits the same Terms of Use ID. You provide the new effective start date and other details for the definition. The system provides logic to prevent gaps or overlaps in the effective-dated history.
Description	Enter a description of the terms of use. This is not part of the Terms of Use text that public users see.
Usage	Select the **Business License** checkbox to make this terms of use definition available for business license applications. This option makes the definition available to the Terms of Use ID field on the Business License Type page. Note that it is also necessary to add the Terms of Use element to the business license application form.

Page Element	Description
	Select the **Permits** checkbox to make this terms of use definition available for permits applications. This option makes the definition available to the Terms of Use ID field on the Permit Type page. Note that it is also necessary to add the Terms of Use element to the permit form. Select the **Planning and Zoning** checkbox to make this terms of use definition available for planning applications. This option makes the definition available to the Terms of Use ID field on the Planning Application Type page. Note that it is also necessary to add the Terms of Use element to the planning application form. Select the **Registration** check box to make this terms of use available for registration functionality. This option makes the definition available to the Terms of Use ID field on the Public User Setup page. See *Setting Up Public Users*. You must select at least one check box.
Content	Enter and format the detailed content of the terms to which a user must agree. This is the text that users see when they are asked to agree to the terms.

4. Click **Save.**

Modifying Terms of Use

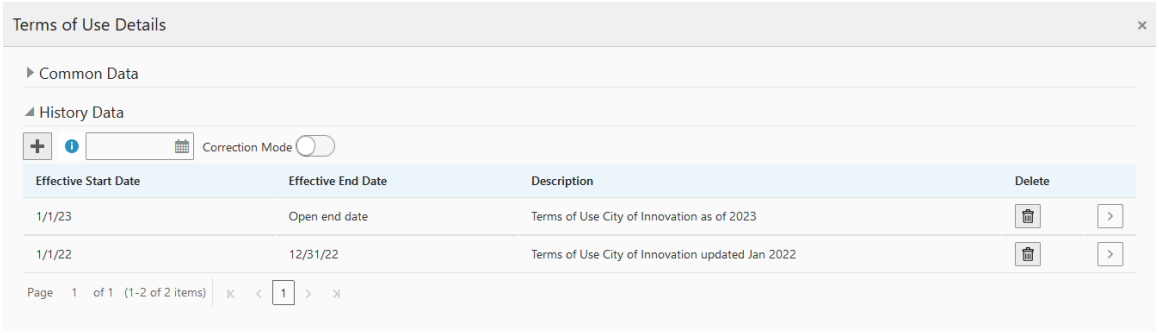
1. Select **Common Setup** > **Terms of Use.**
2. Click a row on the Terms of Use page.
3. On the Terms of Use Details page, you can update the description, usage, and content.
4. Click **Save.**

Managing Effective-Dated Terms of Use Definitions

1. Select **Common Setup** > **Terms of Use**.
2. Click a row on the Terms of Use page to open the Terms of Use Details page.
3. Click the **Show All Dates** button to view the effective-dated history of the definition you opened.
4. Expand the **Common Data** section to see the **Terms of Use ID**.

5. Expand the **History** section to see a list of all effective-dated versions of this terms of use definition.

   This example illustrates the Terms of Use Details page that displays the effective-dated history of a terms of use definition.



6. Click in the **Search date range** to open a calendar and search for an effective-dated row.
7. System administrators can turn on the **Correction Mode** switch to change start and end dates or delete a historical row. When the switch is turned off, you can only delete the current effective-dated row and dates are display only.
8. Click the **Add** button in the **History** section to create a new version of the definition or click an effective-dated row to open the Terms of Use Details page for the specific dates.

   In the new definition, you can enter any of the data except for the Terms of Use ID.

Deleting Terms of Use

1. Select **Common Setup** > **Terms of Use.**
2. Click a row on the Terms of Use page.
3. On the Terms of Use Details page, click **Delete.**

   You are prompted to confirm the permanent deletion.

8 Setting Up Property Information

Security Details for Setting Up Property Information

This topic describes important security roles, requirements, or considerations specific to setting up property information.

Primary Role	Access Description	Associated Job Roles and Abstract Roles
PSC Property Setup Inquiry	View property setup.	PSC Agency Staff - All agency users
PSC Property Setup Administration	Administer property setup.	PSC Geographical Information System Administrator PSC System Administrator PSC Business Analyst
PSC Property Setup Conditions Management	Manage property setup conditions.	PSC Geographical Information System Administrator PSC System Administrator PSC Business Analyst PSC Zoning Administrator PSC Planning Assistant PSC Associate Planner PSC Economic Development Officer PSC Business Analyst PSC Building Inspector PSC Principal Planner PSC Plan Reviewer PSC Permits Supervisor PSC Permit Technician
PSC Property Setup Attachments Management	Add, update, and delete property setup attachments.	PSC Geographical Information System Administrator PSC System Administrator PSC Business Analyst

Primary Role	Access Description	Associated Job Roles and Abstract Roles
PSC Add Property Setup Attachments	Add property setup attachments.	PSC Geographical Information System Administrator PSC System Administrator PSC Business Analyst
PSC Update Property Setup Attachments Added by Self	Update property setup attachments added by themselves.	PSC Geographical Information System Administrator PSC System Administrator PSC Business Analyst
PSC Delete Property Setup Attachments Added by Self	Delete property setup attachments added by themselves.	PSC Geographical Information System Administrator PSC System Administrator PSC Business Analyst
PSC Delete Property Setup Attachments Added by Others and Self	Delete property setup attachments added by others and themselves.	PSC Geographical Information System Administrator PSC System Administrator PSC Business Analyst

For more information on creating roles for Oracle Permitting and Licensing, see *Creating Custom Roles for Oracle Permitting and Licensing*.

For more information on all the predefined security data such as abstract roles, job roles, privileges and so on, see the *Security Reference for Oracle Permitting and Licensing.*

Importing Property Information Using Functional Setup Manager

You can import property information as CSV file packages using Oracle Functional Setup Manager.

When you enter or update a large volume of property data, using the setup task UI to manage them individually may not be the most efficient method. To create or update property data in bulk, use Oracle Functional Setup Manager to import the data in the form of CSV file packages.

Oracle Permitting and Licensing enables you to import data for the following property-related tasks.

Task	Key Attributes	Manual Setup Instructions
Manage Parcels	ParcelIdEntered	*Setting Up Parcels*

Task	Key Attributes	Manual Setup Instructions
Manage Parcel Owners	OwnerName Address1 PostalCode OwnerCode (represents the ParcelIdEntered which is typically the Assessor's Parcel Number)	*Setting Up Property Owners*
Manage Parcel Addresses	Address1 Address2 AddressCode (represents the ParcelIdEntered, which is typically the Assessor's Parcel Number) PostalCode	*Setting Up Property Addresses*
Manage Parcel Values	ParcelIdEntered EffectiveStartDate EffectiveEndDate	*Setting Up Parcel Values*
Manage Districts	ParcelIdEntered DistrictId	*Setting Up Districts*
Manage Parcel Districts	DistrictId	*Assigning Districts to Parcels* *Assigning Districts to Addresses*

The import process uses key attributes to determine whether a row of data is new or updated. For example, when importing parcel address data, the process checks the combination of the Address1, Address2, PostalCode and AddressCode attributes for each row. If the combination of these attribute values in a row already exists in the PSC_COM_PARCEL_ADDRESS table, the system updates the values for that row in the table. If the combination of these attribute values does not exist in the table, the import process inserts a new row in the table.

To import an address with a parcel through FSM, there must be a ParcelNumber value in the AddressCode attribute of the address import file. To import a parcel owner through FSM, there must be a ParcelNumber value in the OwnerCode attribute of the address import file.

To import an address with no parcel through FSM, you must enter a value of *0* in the ParcelId and ParcelNumber attributes of the address import file.

CAUTION: While preparing the import file for Parcel Address and Parcel Owner, you must populate the Address Code and Owner Code columns with the values from the ParcelIdEntered column.

Tip: If you want to make any manual modifications to a downloaded CSV file before importing it, it is recommended that you use a CSV editor. Opening the CSV file using spreadsheet software such as Microsoft Excel can change the formatting of the fields, which could lead to errors during the import process.

See the Oracle Applications Cloud documentation: *Export and Import CSV File Packages* in *Using Functional Setup Manager*.

Setting Up District Types

You add, modify, and delete district types on the District Type page.

Adding a District Type

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage District Types** from the tasks list.
5. On the District Type page, click **+ Add**.
6. On the **New district type** drawer, enter values for the following fields:

Page Element	Description
District Type	Enter a unique identifier for the district type.
Description	Enter a description of the district type.
District Type Category	Select a category for the district type from the system-defined values: - *Code Enforcement* - *Council* - *Economic Development* - *Zoning* - *Inspection* - *Plan review*: District types with this value can be used to filter plan reviewers for assignment to plan reviews. See *Managing Plan Reviewers* and *Using the Plan Review Console*. - *General*
Allow Updates by Parcel Import	Turn on this switch to allow Parcel Districts and Address Districts to be automatically removed by the Post Parcel Import Processing.

Page Element	Description
	Note: Parcel Districts and Address Districts which have parcels with inspection in the *Pending*, *Scheduled* or *Requested* statuses will not be removed.

7. If the district type category is *Code Enforcement, or Inspection,* configure these settings:

Page Element	Description
GIS Layer Enabled	Indicates whether to use GIS to identify the district of an incident, case, or inspection based on the issue location. The issue subtype for an incident or case is associated with a specific district type. If you enable the GIS layer for the district type, the system can look up the issue location on the map to determine the district that the incident, or case, or inspection falls in . For Inspections, you can find the respective parcel district if your agency is using GIS.
District Layer Service URL	Enter the URL of the GIS map service that contains district information for the specified district type. This field becomes visible when the GIS Layer Enabled switch is active.
District in GIS	Select the map service attribute that provides a district identifier. This field becomes visible when the GIS Layer Enabled switch is active.
Allow Updates by Parcel Import	Turn on this switch to use the import. For more information, see *Setting Up GIS to Property Import Mapping*.

8. Turn the **Enabled** switch on to make the row available as a lookup value on other pages.
9. Click **Save**.

Modifying a District Type

1. Navigate to the District Type page and select the row for the district that you want to modify.

2. On the **District type details** drawer, you can:
    - Edit the Description.
    - Edit the District Type Category.

      Note: You cannot edit the **District Type** field.
    - Enable or disable the district type using the **Enabled** switch. Only enabled district types are available to select as values on other pages.
    - Delete the district type. You will be prompted to confirm the permanent deletion.

      Note: You cannot delete a district type that is already associated with a district or an inspection type.
3. Click **Save**.

Setting Up Districts

You add, modify, and delete districts on the District page.

Adding a District

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Districts** from the tasks list.
5. On the District page, click **+ Add**.
6. On the **New district** drawer, enter values for the following fields:

Page Element	Description
District	Enter a unique identifier for the district.
Description	Enter a description of the district.
District Type	Select a district type from the agency-defined values. If you have associated a District Type to a GIS layer, choose District in GIS. See *Setting Up District Types*.

7. Click **Save**.

Modifying a District

1. Navigate to the District page and select the district that you want to modify.
2. On the District details drawer, you can:

- Edit the district description.
- Edit the district type.

  > **Note:** You cannot edit the **District** field.

- Delete the district. You will be prompted to confirm the permanent deletion.

3. Click **Save**.

Setting Up Parcels

A parcel of real estate is a tract or plot of land.

A parcel that is held by an owner is a property. A parcel location can be found on a map and is associated with a physical address. An owner or a contracted business can apply for a permit to develop or modify a structure on a parcel, or create a planning application for planning and zoning requests.

You add, modify, and delete parcels on the Parcel page.

Adding a Parcel

1. Select **Parcel** on the Agency Springboard.
2. On the Parcel page, click **Add**.
3. In the Basic Information section of the **New parcel drawer**, enter information in the following fields:

Page Element	Description
(Hold) (Lock) (Notice)	Indicates that a condition has been placed on the parcel. If multiple conditions are applied, then the icon displays the most severe condition. Click the icon to see a list of all applicable conditions, including the condition name, severity, description, and when the condition was applied. Click a condition row to open the Parcel Conditions page in a new window.
Parcel Number	Enter the assessor's parcel number (APN) for the parcel. The APN is a number assigned to parcels of real property by the tax assessor of a particular jurisdiction for identification and record-keeping purposes. The APN is unique within the jurisdiction, and may conform to certain formatting standards that convey basic identifying information such as the property type or the location on a map.
Parcel Type	Enter a parcel type such as *Condo* or *Single Family Home*.
Status	Select the current status of the parcel. Values are:

Page Element	Description
	○ *Active* ○ *Retired* ○ *Provisional*
Enabled	Turn the **Enabled** switch on to make the parcel available as a lookup value on other pages.
Property Description	Enter a description of the parcel.

4. In the Land Use section of the **New parcel drawer**, enter details about the land associated with the parcel using the following fields:
    - **Zoning Code**
    - **Zoning Code 2**
    - **Zoning Description**
    - **General Plan**
    - **General Plan 2**
    - **Tax Rate Area**
    - **Parcel Size 1**
    - **Parcel Size 2**
    - **Boundary Description**
    - **Jurisdiction**
    - **Census Tract**
    - **Census Block**
    - **Subdivision**
    - **Climate Zone**
    - **Flood Zone**
    - **Flood Insurance Rate Map**
    - **Liquefaction Risk**
    - **Fire Risk**
    - **Landslide Risk**
    - **Soil Type**

5. In the Building section of the **New parcel drawer**, enter details about the building associated with the parcel using the following fields:
    - **Year Built**
    - **Structure Size 1**
    - **Structure Size 2**
    - **Number of Dwelling Units**
    - **Bedrooms**
    - **Bathrooms**
    - **Pool**
    - **Patio**
    - **Additional Structure**
6. In the Location and Map Information section of the **New parcel drawer**, enter mapping and location details for the parcel using the following fields:
    - **Map Name**
    - **Book Number**
    - **Map Book Page**
    - **Block Number**
    - **Lot Number**
    - **Section Number**
    - **Latitude**
    - **Longitude**
    - **X Coordinate**
    - **Y Coordinate**
7. Click **Save**.

Modifying a Parcel

1. Select **Parcel** on the Agency Springboard.
2. Select a parcel on the Parcel page.

> **Note:** The search interface for this page uses the typical filter by functionality, or the enhanced search if Search Cloud Service is enabled. For more information on Search Cloud Service, see *Setting Up Oracle Search Cloud Service*.

3. On the Parcel Details page click **Edit** to:
    - Update the parcel field values.
    - Change the status of the parcel.
    - Enable or disable the parcel using the **Enabled** switch. Only enabled parcels are available as lookup values on other pages.
4. Click **Save**.

Deleting Parcels

1. Select **Parcel** on the Agency Springboard.
2. On the Parcel page, click **Select Multiple**.
3. Select the checkboxes next to the parcels that you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Note: Agency staff and applicants cannot delete parcels. Only system administrators can delete parcels. Additionally, only parcels that have not yet been associated with a permit can be deleted.

Migrating APO Data

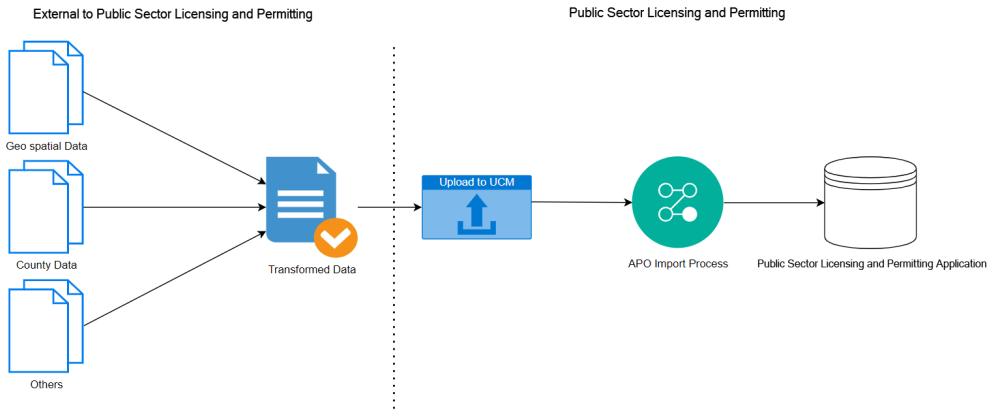
Agencies can migrate address, parcel, and owner (APO) data to Oracle Permitting and Licensing using Import Management, and an end-to-end process with OCI – Data Integration for data transformation.

APO Import Process

Most agencies receive the APO-related data from different sources like the geospatial applications, county, city, tax departments, and so on. This source data needs to be curated to specific formats as prescribed by the Oracle Permitting and Licensing APO Import Process before it can be loaded into the Oracle Permitting and Licensing application. The conversion of the raw APO data into this specific format involves a series of transformation and mapping activities which may get complex depending upon the nature of the source data.

If you already have your APO data in the specific format, then you can use the Import Management tool to import the data onto the Oracle Permitting and Licensing application.

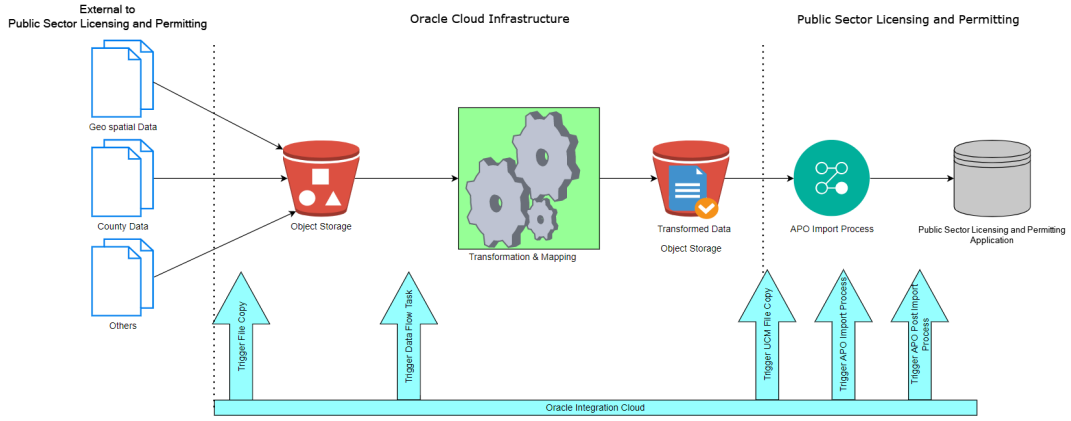
Reference architecture for APO import process



If you don't have your APO data in the prescribed format, you can use an end-to-end data import porcess using the Oracle Integration Cloud - Data Integration (OCI - Data Integration). See the section in this topic called "End-to-End APO Import Using OCI – Data Integration, OIC and Import Management."

With OCI – Data Integration you can easily transform your raw APO data. This transformed data can now be imported using the Import Management tool onto the Oracle Permitting and Licensing application.

Reference architecture for Oracle Permitting and Licensing end-to-end APO import process



Note: You must have the appropriate subscriptions/licenses for Oracle Cloud Infrastructure (OCI) services like Oracle Data Integration Cloud, Oracle Object Storage Cloud, and Oracle Integration Cloud (OIC) services to complete this process.

APO Import Process Using the Import Management

Use Import Management from the Tools work area, to import all your external APO data from CSV files. The Import Management job performs the APO data import after validation of the data with a pre-defined set of rules and Import Options configurations. You can create or update the APO records through import. The import options and other details differ by the type of data that you are importing.

Here are some notes:

- Before importing, understand how the data in your file maps to the attributes in Oracle Permitting and Licensing APO objects and what values are expected in the import file.
- The data records in the CSV source file may not be processed in the listed order.

  In Import Management, each of the six types of APO data are in separate source files. If the existing data file combines either two or more objects data (for e.g. parcel, address and owner data), then you must separate these into different files before starting the import process. You can either perform a manual transformation/ translations or use any suitable tool to prepare a separate source file for each object in an object's template format. Or you can use the end-to-end APO import process detailed in this document to help you with data transformation.
- You can schedule an APO Import Process using the Oracle Permitting and Licensing application, if you already have your APO data in the prescribed format (that is, transformed data ready for import) and the appropriate subscription/license for Oracle Integration Cloud (OIC). For more details, see the section on Scheduling an APO Import Process Using the Import Property Information Process.

Manage APO Import Objects

Import APO Objects correlate with the APO master tables in Oracle Applications. Understand APO import objects and their attributes to manage the data that you want to import.

Import APO Object Details

Click **Tools** > **Import Management** > **Import Objects**.

To see the details of APO import objects, select a specific APO object on the Import Object Details page. The table shows the details about each importable object on the Import Object Details page.

Display Name	Language Independent Code	User Key
Parcel	PublicSectorParcel	ParcelIdEntered
Parcel Address	PublicSectorParcelAddress	ParcelIdEntered
Parcel Owner	PublicSectorParcelOwner	ParcelIdEntered
Parcel Value	PublicSectorParcelValue	ParcelIdEntered
Parcel District	PublicSectorParcelDistrict	ParcelIdEntered
Address District	PublicSectorAddressDistrict	DistrictId

Display Name	Required	Validation
Parcel	• ParcelIdEntered • EnabledFlag • ParcelStatus	• ParcelStatus should be in ('ORA_FIN', 'ORA_RET','ORA_PROV') • ParcelSizeOneUnit/ParcelSizeTwoUnit/ StructureSizeOneUnit/ StructureSizeTwoUnit value should be from configured UOM in the system. • EnabledFlag (Y/N) (Value will be updated as 'N' if no value in the file) • Cannot modify the status of reconciled parcels.
Parcel Address	• ParcelIdEntered • EnabledFlag • InputSource • Country • Postal Code	• ParcelIdEntered (should be valid if not null) • Mark the row for update as error if it returns more than one row in the Parcel Address table for that key combination (setup in the parcel import option). • PrimaryFlag (Y/N) (Value will be updated as 'N' if no value in the file) • Country should be two character code setup in the system. Eg. US • EnabledFlag (Y/N) (Value will be updated as 'N' if no value in the file)

Display Name	Required	Validation
		• InputSource (U/S) (Value will be updated as 'U' if no value in the file) • Address1 (Will be derived based on concatenation of individual street columns: Street Number, Street Direction, Street Name, Street Type, Street Suffix and Unit Number. Ensure that you do not leave these fields blank in the input file. Street Name will always be entered by the user.)
Parcel Owner	• ParcelIdEntered • EnabledFlag • Country • Address1 • Postal Code	• Mark the row for update as error, if it returns more than one row in the Parcel Owner table for that key combination (setup in the parcel import option). • ParcelIdEntered should be valid that exists in the system. • EnabledFlag (Y/N) (Value will be updated as 'N' if no value in the file) • PrimaryFlag (Y/N) (Value will be updated as 'N' if no value in the file) • Country should be two character code setup in the system. Example: US
Parcel Value	• ParcelIdEntered • EffectiveStartDate • EffectiveEndDate	• ParcelIdEntered should be valid that exists in the system. • EffectiveEndDate should be greater than EffectiveStartDate. **Note:** If EffectiveStartDate is not in the input import file, then the import job will flag that row as error. • ParcelSizeOneUnit/ParcelSizeTwoUnit value should be from configured UOM in the system. • Currency Code should be from configured Currency in the system. **Note:** If the system has the same combination of EffectiveStartDate, EffectiveEndDate and ParcelIdEntered values in the import file, then update is performed. If the EffectiveStartDate is different, then that row will be constituted as a new row and the import job will perform the insert.
Parcel District	• ParcelIdEntered • DistrictId	• ParcelIdEntered should be valid that exists in the system.

Display Name	Required	Validation
		• DistrictId should be valid that exists in the system.
Address District	• Address Combination as configured in the import options for functional key. • DistrictId	• Address combination should be valid and not mapped to a parcel. • DistrictId should be valid that exists in the system. **Note:** The input import file for Address District will have all address columns in it for the user to populate. The Address District import job checks for matching combination of address field values in the system. If present, the address district row is created. If not, the row is marked as error and address row is not created.

If you enter values for surrogate keys like ParcelId, AddressId and OwnerId in the input file, these will not be considered. Rather the program generates the surrogate key value for new records.

For creating Address without parcel, you should leave the Parcel number blank in the input import file.

Bulk Insert/Update has been implemented with the APO high volume import jobs. So you would need to complete the insert first before trying to update the records. For example, within the same input file you cannot have two rows for the same parcel, first one for insert and the second one for update. As that new parcel is not yet created in the system, the second row will always be considered as insert and not update.

Import Data Using Templates

Templates make it easy for you to use the auto mapping feature. For auto mapping to work, the column headers in the source file must match the names of the columns (attributes) of the objects imported. The column headers shown in the first row of the downloadable templates are the same as the column names of the corresponding objects. Therefore, building source files from the templates allows the auto mapping process.

For example, if your source file has a column "ParcelIdEntered" then it's mapped to the Parcel ID Entered column. However, if your source file's column header is **APN**, then automapping fails and you should map manually.

Download Import Object Templates

1. Click **Tools** > **Import Management** > **Import Objects**.
2. On the Manage Import Objects page, click the Download icon for the object, such as Parcel, for which you want to download the template.

Populate Import Templates

Extract the contents of the ZIP file to a folder. The extracted folder contains the template text files for each of the parent and child objects. The read me text file within the folder contains instructions on how to use the template files to create source file for importing data.

Here are the steps to import data using the downloaded template:

1. Open the CSV template file for the object you want to import.

   The file for each object contains two rows. The first row contains all the column names in a format that's compatible with the automatic mapping functionality. The second row contains the display names as shown on the import mapping user interface.
2. Before populating the CSV template file with the data to be imported, delete the display name values in the second row, and populate the columns with the data to import.
3. Use the updated file as the source when you're creating an import activity on the import user interface.

The automatic mapping functionality maps all the columns automatically. You can see both the mapped column names and the corresponding column names in your language on the Map Fields page.

Manage APO Import Mappings

An import mapping lets you quickly map your source object attributes to the object attributes in Oracle Permitting and Licensing. You must be an administrator or setup user to create import mappings.

You can create an import mapping in two ways:

1. Create an import mapping manually.
2. Generate import maps from the sample source file.

Create Import Mapping Manually

1. Click **Tools** > **Import Management** > **Import Objects**.
2. Click the Parcel link under the Display Name column to create a mapping for the Parcel object.
3. On the Manage Mapping page, click the Create Import Mapping button.
4. On the Edit Import Mapping page, enter the name of the mapping, and provide a description for the mapping.

   The Target Attributes section displays the attributes of the Parcel object that should map to the source file columns.

   Check the Required column to see if the attribute is required or is a user key.
5. In the Source File section, click the Add Column button to insert a column to the mapping file.
6. Click the Save and Close button to save the mapping.

   To edit or download the mapping file, click the mapping number link for your mapping on the Manage Mapping page.

   On the Edit Import Mapping page, click Download Map from the Actions menu.

Generate Import Maps from Source File

1. Click **Tools** > **Import Management** > **Import Objects**.
2. Click the Parcel link under the Display Name column to create a mapping for the Parcel object.
3. On the Manage Mapping page, click the Create Import Mapping button.
4. On the Edit Import Mapping page, enter name of the mapping, select the object such as Parcel, and provide a description for the mapping.

   The Target Attributes section displays the attributes of the Parcel object that should map to the source file columns. Also, check the Required column to see if the attribute is required or is a user key.
5. From the Actions menu under Source File section, click Select Source File.

6. In the Source File dialog box, choose the CSV file that should be the source for your mapping file. This creates the mapping file based on the column header and example values in the source file.
7. Click the Save and Close button.

Import Data

To import data:

1. Click **Tools** > **Import Management**.
2. On the Manage Imports page, click the **Create Import Activity** button.
3. On the Enter Import Options page, provide values for each field as shown in the following table:

Page Element	Description
Name	Name of the import.
Object	Object that you are importing. Oracle Permitting and Licensing APO objects: a. Parcel b. Parcel Address c. Parcel Owner d. Parcel Value e. Parcel District f. Address District If you can't find your object, then search for it by clicking the Search link. In the Search and Select dialog box, enter the object name in the Object text box and click the Search button. Select your object from the result list and click OK. You can also use the Advanced Search option by clicking the Advanced button. Here, you can search based on various filter criteria such as object name, attachment supported, creation date, and so on. If the object you're importing isn't listed, then verify if you have the roles and privileges required to import the object.
File Name	Browse and select a text file in CSV format. The first row of the source file is treated as the header row. Provide a file name within 40 characters.

4. Optionally, to set additional import configurations, click the Advanced Options section.

   Here you can configure settings under Source File, Import Options, or Create Schedule sections.

5. In the Source File and Import Options regions, some of the options in the following table might not be available depending on the object that you are importing:

Page Elements	Description
Import Mode	The mode of import, that is, whether it should be an update or create, is determined by the data in the import file. o Update and create – A new record is created if a matching record is not found. o Create – All records in the file are new records which have to be created. If there are any existing matching records, then they are marked as errors.
Enable High-Volume Import	The high-volume import mode is designed to import millions of records at once. All the APO objects are delivered for high volume import. By default, this mode is enabled for the six objects.
Notification email	The email of the individual who receives import processing notifications. The user submitting the import receives an email notification automatically. To have more than one email recipient, separate the email addresses with a semicolon.
Delimiter	If your file doesn't use a comma to separate values, then select the correct delimiter in the Delimiter drop-down list. Possible values are: o Caret Symbol o Closing Curly Bracket o Closing Parenthesis o Closing Square Bracket o Colon o Comma o Exclamatory Mark o Minus o Opening Curly Bracket o Opening Parenthesis o Opening Square Bracket o Pipe Symbol o Plus o Question Mark o Semi-Colon o Star Symbol o Tilde Symbol
Decimal Separator	The decimal separator used in your import file.

Page Elements	Description
Date Format	The format of the date fields in your file.
Time Stamp Format	The format of the time fields in your file.
File Encoding	The format in which your source file is encoded.

6. In the Create Schedule region, schedule the import to run immediately or at a future date. If you select a future date, then provide the date and time to start the import. This is a one-off schedule and cannot be used for recurring scheduling.
7. Click Next.
   The Map Fields page shows the first row of the data from your source file. By default, the application tries to automatically map each of the source file columns to the appropriate target object attribute. The target attribute cannot be dragged to attribute display name in the import activity.
   > **Note:** The data in the unmapped columns are not imported.
8. You select a predefined mapping from the list of available mappings under the Import Mapping drop-down list. If you are reusing an import mapping, then both the source and target columns are already populated.
   Leave the Attribute Display Name field blank for any column that you don't want to import.
9. In the case of hierarchical import, you can see the mapping information for child objects in the subsequent tabs. Note that data validation isn't done for these objects.
10. Click Next.
    On the Review and Submit page, review the import activity configuration. If you had not run the pre-validation on the Map Fields page, then you get a notification message to run the validation process. You can view any unmapped columns of parent or child objects on this page.
    Validation errors, if any, are displayed on the Mapping Validation screen. If you get warnings about unmapped columns, then you can ignore these columns, and proceed to submit the import job.
11. Click Submit to queue the import.

APO Import Options

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access the Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Parcel Import Options** from the tasks list.
5. Click a row on the Parcel Import Options page to configure the following for the APO high-volume import jobs.

Page Elements	Description
Import files	Toggles are provided for all 8 jobs. The import process can be initiated for a particular object through orchestration or Import Management UI, only if the toggle is ON.

Page Elements	Description
	The user can preselect import mapping for all objects. The Default import mapping is the automatic mapping based on the input file template.
Parcel options	The **Retire Parcels Not Found in Import File** setting can be used to retire those parcels not included in the input parcel file. This option should only be used when the parcel input file contains a complete set of active parcels, including parcels with no changes.
Address options	The **Disable Addresses Not Found in Import File** setting can be used to disable those parcel addresses not included in the input parcel address file. This option should only be used when the address input file contains a complete set of addresses for each parcel, including addresses with no changes. The **Select Fields to Identify New Addresses** setting can be used to decide the functional key that will determine Insert vs Update. If the combination of selected address field values in the address import file also exists in the database for the same parcel, the existing address will be updated. If not, a new address will be created. An existing address will be updated only if all the field values match.
Owner options	The **Disable Owners Not Found in Import File** setting can be used to disable those parcel owners not included in the input parcel address file. This option should only be used when the owner input file contains a complete set of owners for each parcel, including owners with no changes. The **Select Fields to Identify New Owners** can be used to decide the functional key that will determine Insert versus Update. If the combination of selected owner field values in the owner import file also exists in the database for the same parcel, the existing owner will be updated. If not, a new owner will be created. An existing owner will be updated only if all the field values match.
Select fields to identify new addresses	The user can select fields to identify new addresses. Toggles are provided to *Unit*, *Address Line 2*, *Floor*, *City*, *State*, and *Postal Code* fields.
District options	The **Delete District Assignments Not Found in Import File** setting can be used to delete those Parcel Districts or Address Districts not included in the input Parcel District or Address District file. This option should be used only when the district import file contains a complete set of districts for each parcel or address without parcel.
Parcel condition options	The **Resolve Parcel Conditions Options Not Found in Import File** setting can be used to resolve the parcel conditions in your database that are not in the parcel condition import file. This option should only be used when the parcel condition import file contains a complete set of active parcel conditions. The import process resolves only those parcel conditions which has the **Allow Updates by Parcel Import** option turned on in the Condition Details page. For more information, see *Setting Up Conditions*.
Address condition options	The **Resolve Address Conditions Options Not Found in Import File** setting can be used to resolve those address conditions in your database that are not in the address condition import file. This option should only be used when the address condition import file contains a complete set of active address conditions. The import process resolves only those address conditions which has the **Allow Updates by Parcel Import** option turned on in the Condition Details page. For more information, see *Setting Up Conditions*.
Processing options	Use the **Preview Mode** switch to check how many rows will be successfully processed by the import process. When the import process is run on the preview mode, actual upsert will not be performed on the base tables.

Page Elements	Description
	Additional post processes can be added in the Optional Processes.

APO Import Error Review

The Import Wizard captures the following errors:

- Errors that occur during data load into interface table. Common errors like data type mismatch and data length mismatch errors are trapped here.
- Errors that occur due to validation business logic coded in the pl sql. The data loaded in the interface table from the input file are validated for all errors.

Rows that fail the validation are flagged with appropriate error codes in the interface table. Import wizard will create a rejected csv file with the errored rows for the user to correct. The errors would be sorted by the record number from the input file.

For example, Parcel District input file has three rows, out of which errors are reported on two rows.

End-to-End APO Import Using OCI – Data Integration, OIC and Import Management

In the end-to-end APO import process, the OCI – Data Integration helps you transform your raw APO data as received from different sources and then import the transformed data onto the Oracle Permitting and Licensing application using Import Management.

Listed here are the various products and services from Oracle that will help you to seamlessly perform this end-to-end APO import process:

- *Oracle Integration Cloud* is used to perform orchestration across various components in the import process.
- *OCI – Data Integration* is used to perform transformation and mapping of raw data into formatted data that can be loaded into Oracle Permitting and Licensing APO Import Process.
- *Object Storage* is used to store copy of external data files for processing and to store formatted data after transformation and mapping.
- APO Import Process is the Import Management job which is designed to perform Oracle Permitting and Licensing APO data import after validation of the data with pre-defined set of rules and Import Options configurations.

> **Note:** You must procure appropriate subscriptions/licenses to OCI services like Oracle Data Integration Cloud, Oracle Object Storage Cloud and Oracle Integration Cloud services to complete this process.

For detailed steps on how to perform an end-to-end APO import process, refer *Migrating APO Data to Oracle Permitting and Licensing*.

Scheduling an APO Import

You can schedule a recurring import process for address, parcel, and owner (APO) data and provide default options for ad hoc executions of the APO Import process.

You can set a schedule for an APO Import Process after an Oracle Integration Cloud (OIC) orchestration has run to completion. You can schedule this process in the Oracle Permitting and Licensing application even if you have not used the Oracle Cloud Infrastructure - Data Integration (OCI-Data Integration) for your data transformation.

> **Note:** If you have not used the OCI-Data Integration for data transformation, ensure that the CSV files are available and ready in the Oracle Permitting and Licensing application before the import starts.

To schedule an APO import process:

1. Navigate to Property Information > Import Parcel Information.
2. On the Import Property Information page, use the Schedule option to schedule a run.

Field	Description
Schedule	Displays the schedule option as set in the Schedule tab below. The available options are **As soon as possible** and **Using a schedule**.
Notify Me When This Process Ends	Enable the switch to receive notification when the process is completed.
Parameters Agency ID	Enter your agency ID.
Schedule	Select the schedule for the run. The available options are **As soon as possible** and **Using a schedule**.
Notification	Use the + (add) button to add recipients and conditions for receiving the notification.

Setting Up Property Addresses

An address is the physical address associated with a property.

Oracle Permitting and Licensing enables you to define property addresses by:

1. Adding addresses to existing parcels. You can add multiple addresses to one parcel.
2. Defining addresses that are independent of an existing parcel. After defining these addresses, you can associate them with one or more parcels.

Adding an Address to an Existing Parcel

You add addresses to parcels on the Parcel Address page.

1. Select **Parcel** on the Agency Springboard.

   Select a parcel on the Parcel page.

   Click Parcel Address in the navigation bar.
2. On the Parcel Address page, click **Add**.
3. In the **New address drawer**, you can:
   - Turn the **Enabled** switch on to make the row available as a lookup value on other pages.
   - Turn the **Primary** switch on to indicate that this is the primary address associated with the parcel. A parcel may have only one primary address.
4. In the Address Information section of the Parcel Address Details page, enter the following information:

Page Element	Description
Hold - Hold Lock - Notice -	Indicates that a condition has been placed on the parcel. If multiple conditions are applied, then the icon displays the most severe condition. Click the icon to see a list of all applicable conditions, including the condition name, severity, description, and when the condition was applied. Click a condition row to open the Parcel Conditions page in a new window.
Address Fields	The property address. The Country field displays *US*. As you enter a **Postal Code**, the type-ahead list shows values that include appropriate city and state 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.
Address Line 1 and **Address Line 2**	Enter the street number or post office box number, along with any additional address information such as apartment or suite number.
City and **State**	Enter the city and state for the address.
Postal Code	Enter the postal code for the address. The available values for this field are filtered based on the city and state that you select.

5. In the Building and Location Information section of the Parcel Address Details page, enter the building and location details for the parcel address using the following fields:
    - **Building Type**
    - **Floor**
    - **Unit Number**
    - **Street Number**
    - **Street Name**
    - **Street Direction**
    - **Street Type**
    - **Longitude**
    - **Latitude**
    - **X Coordinate**
    - **Y Coordinate**
    - **Street Suffix**
    - **Crossroad 1**
    - **Crossroad 2**
    - **Landmark**
6. In the Contact Information section of the Parcel Address Details page, enter the contact information details for the parcel address using the following fields:
    - **Name 1** and **Name 2**
    - **Email Address**
    - **Home Phone Number**
    - **Work Phone Number**
    - **Cell Phone Number**
    - **Fax Number**
7. Click **Save**.

Adding an Address

You define addresses that are independent of existing parcels on the Address page.

1. Select **Property Address** on the Agency Springboard.
2. On the Address page, click **Add**.
3. In the **New address drawer**, turn the **Enabled** switch on to make the row available as a lookup value on other pages.
4. In the **Building and location information** section of the **New address drawer**, enter the following information:
5. In the Building and Location Information section of the **New address drawer**, enter the building and location details for the parcel address using the following fields:
    - **Building Type**
    - **Floor**
    - **Unit Number**

- **Street Number**
- **Street Name**
- **Street Direction**
- **Street Type**
- **Longitude**
- **Latitude**
- **X Coordinate**
- **Y Coordinate**
- **Street Suffix**
- **Crossroad 1**
- **Crossroad 2**
- **Landmark**

6. In the Contact Information section of the **New address drawer**, enter the contact information details for the parcel address using the following fields:
   - **Name 1** and **Name 2**
   - **Email Address**
   - **Home Phone Number**
   - **Work Phone Number**
   - **Cell Phone Number**
   - **Fax Number**
7. Click **Save**.

Modifying a Property Address

1. You modify parcel addresses on the Address Details page. You can access this page two ways.
   - Select **Property Address** on the Agency Springboard.

     Select the address you want to modify and click **Edit**.
   - Select **Parcel** on the Agency Springboard.

     Select a parcel on the Parcel page.

     Click Parcel Address in the navigation bar.

     Select an address associated with the parcel.
2. Click **Edit**. On the Address Details page you can:
   - Update the address field values.
   - Enable or disable the address using the **Enabled** switch. Only enabled parcel addresses are available as lookup values on other pages.
   - Indicate whether this is the primary address associated with a parcel using the **Primary** switch.
3. Click **Save**.

Associating Parcels with an Address

1. You associate parcels with addresses on the Parcel page. You can access this page two ways.
    - Select **Property Address** on the Agency Springboard.

      On the Address page, select the address for which you want to associate parcels.

      Select Parcel in the navigation bar.
    - Select **Parcel** on the Agency Springboard.

      Select a parcel on the Parcel page.

      Click Parcel Address in the navigation bar.

      Select an address associated with the parcel.

      Select Parcel in the navigation bar.
2. On the Parcel page, click **Add**.
3. On the **New address drawer**, select the parcel that you want to associate with the address in the **Parcel ID** field.
4. (Optional) If you want this address to be the primary address for the parcel, turn on the **Primary** switch.
5. Click **Save**.

Deleting Property Addresses

1. You can delete property addresses from the Addresses and Parcel Addresses pages.
    - Access the Addresses page by selecting **Property Address** on the Agency Springboard.
    - Access the Parcel Addresses page by selecting **Parcel** on the Agency Springboard.

      Select a parcel on the Parcel page.

      Click Parcel Address in the navigation bar.
2. Click **Select Multiple**.
3. Select the checkboxes next to the parcel addresses that you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Setting Up Property Owners

You add, modify, and delete property owners on the Owner page.

Adding a Property Owner

1. Select **Parcel** on the Agency Springboard.

   Select a parcel on the Parcel page.

   Click Parcel Owner in the navigation bar.
2. On the Parcel Owner page, click **Add**.
3. In the Basic Information section of the Parcel Owner Details page, enter information in the following fields:

Page Element	Description
(Hold) (Lock) (Notice)	Indicates that a condition has been placed on the parcel. If multiple conditions are applied, then the icon displays the most severe condition. Click the icon to see a list of all applicable conditions, including the condition name, severity, description, and when the condition was applied.
Enabled	Turn the **Enabled** switch on to make the row available as a lookup value on other pages.
Primary	Turn the **Primary** switch on to indicate that this is the primary owner associated with the parcel. A parcel may have only one primary owner.
Owner and **Secondary Owner**	Enter the names of the owner and secondary owner of the parcel.
Owner Type	Enter the type of owner for the parcel such as *Personal* or *Town*.

4. In the Location Information section of the Parcel Owner Details page, enter details about the location associated with the parcel owner using the following fields:

Page Element	Description
Address Fields	The property owner address. The Country field displays *US*. As you enter a **Postal Code**, the type-ahead list shows values that include appropriate city and state 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.
Street Number, **Street Direction**, **Street Name**, and **Street Type**	Enter the street information for the parcel owner.
Building Type	Enter the type of building associated with the parcel owner.
Floor	Enter the floor of the building for the parcel owner.
Unit Number	Enter the unit number for the parcel owner.

Page Element	Description

5. In the Contact Information section of the Parcel Owner Details page, enter the contact information details for the parcel owner using the following fields:
    - **Email Address**
    - **Home Phone Country Code**
    - **Home Phone Number**
    - **Work Phone Country Code**
    - **Work Phone Number**
    - **Cell Phone Country Code**
    - **Cell Phone Number**
    - **Fax Country Code**
    - **Fax Number**
6. In the Transfer Information section of the Parcel Owner Details page, enter transfer details for the parcel owner using the following fields:
    - **Last Transfer Type**
    - **Document Number**
7. Click **Save**.

Modifying a Property Owner

1. Select **Parcel** on the Agency Springboard.

   Select a parcel on the Parcel page.

   Click Parcel Owner in the navigation bar.

   Select an owner associated with the parcel.

   > **Note:** Select **Property Owner**on the Agency Springboard to select a parcel owner to modify from a list of all parcel owners.

2. On the Parcel Owner Details page you can:
    - Update the parcel owner field values.
    - Enable or disable the parcel owner using the **Enabled** switch. Only enabled parcel owners are available as lookup values on other pages.
    - Indicate whether this is the primary owner associated with the parcel using the **Primary** switch.
3. Click **Save**.

Deleting Property Owners

1. Select **Parcel** on the Agency Springboard.

   Select a parcel on the Parcel page.

   Click Parcel Owner in the navigation bar.
2. On the Parcel Owner page, click **Select Multiple**.
3. Select the checkboxes next to the parcel owners that you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Assigning Districts to Parcels

You add, modify, and delete parcel district assignments on the Parcel District page.

Assigning districts to parcels is required setup for inspection scheduling. For more information, see *Setting Up Inspection Scheduling*.

Also, inspection assignments are based on inspection type and inspection district job attributes that are associated with job functions, such as Building Inspector. For more information, see *Setting Up Agency Staff*.

Assigning a District to a Parcel

1. Select **Parcel** on the Agency Springboard.

   Select a parcel on the Parcel page.

   Click Parcel District in the navigation bar.
2. On the Parcel District page, click **Add**.
3. On the Parcel District Details page, enter the district you want to associate with the parcel in the **District** field.
4. Click **Save**.

Modifying a Parcel District Assignment

1. Select **Parcel** on the Agency Springboard.

   Select a parcel on the Parcel page.

   Click Parcel District in the navigation bar.
2. Select a district on the Parcel District page.
3. On the Parcel District Details page you can:
   - Select a different district to assign to the parcel.
   - Delete the assigned district. You will be prompted to confirm the permanent deletion.
4. Click **Save**.

Deleting Parcel District Assignments

1. Select **Parcel** on the Agency Springboard.

Select a parcel on the Parcel page.

Click Parcel District in the navigation bar.

2. Click **Select Multiple**.
3. Select the checkboxes next to the parcel district relationships you want to delete.
4. Click **Delete**. You will be prompted to confirm the permanent deletion.

Assigning Districts to Addresses

You assign districts to addresses on the Address District page.

Inspections are scheduled and assigned based on the district associated with a property. For properties associated with a parcel, you assign districts to the parcel on the Parcel District page. See *Assigning Districts to Parcels*. For properties with an address, but no parcel, use the Address District page to assign districts to a property.

For more information on inspection scheduling and assignment, see *Setting Up Inspection Scheduling*.

Assigning a District to an Address

1. Select **Property Address** on the Agency Springboard.

   Select an address on the Address page.

   Click Address District in the navigation bar.

   > **Note:** The Address District page is available only for addresses with no parcel.

2. On the Address District page, click **Add**.
3. On the Address District Details page, enter the district you want to associate with the address in the **District** field.
4. Click **Save**.

Deleting an Address District Assignment

1. Select **Property Address** on the Agency Springboard.

   Select an address on the Address page.

   Click Address District in the navigation bar.

   > **Note:** The Address District page is available only for addresses with no parcel.

2. Select a district on the Address District page.
3. On the Address District Details page, click **Delete**. You will be prompted to confirm the permanent deletion.

> **Note:** If you associate an address that has a district assigned to it to a parcel, the system automatically removes the district assignment. This is because the district assignment is now defined through the parcel associated with the address rather than through the address itself.

Setting Up Parcel Values

You add, modify, and delete parcel values on the Parcel Value setup pages. You can have multiple effective-dated rows for parcel values.

To switch to viewing other effective-dated entries, click the **Date Range** drop-down list and select the effective-dated row you want to view.

When starting from Home with Ask Oracle, select **Setup and Maintenance of Offerings** to access the Functional Setup Manager. Select **Setup: Public Sector Permits/Public Sector Business Licenses** > **Functional Area: Agency Profile** > **Task: Manage Parcel Values**.

Adding a Parcel Value

Here's how to add a parcel value:

1. On the Parcel page, click the parcel number you are working with.
2. In the parcel record, click the **Parcel Value** link in the left-hand navigation panel.
3. Click the **Add Parcel Value** button.
4. On the Parcel Value Details page, enter information in the following fields:

Page Element	Description
Parcel Number	Displays the parcel number associated with the **Parcel ID** that you selected.
Effective Start Date and **Effective End Date**	Enter the start date when the fee schedule is effective. The default value for the effective end date is open-ended and can't be changed. For more information, see "Working with Effective Dates in Parcel Values" in this topic.
Parcel Size 1 and **Parcel Size 1 UOM** (parcel size 1 unit of measure)	Enter a numeric value and a unit of measure to define the size of the parcel.
Parcel Size 2 and **Parcel Size 2 UOM** (parcel size 2 unit of measure)	Enter a numeric value and a unit of measure to define an additional size for the parcel.
Land Value	Enter the monetary value of the land associated with the parcel.
Improvement Value	Enter the monetary value of any improvements made to the parcel.
Personal Property Value	Enter the monetary value of any personal property associated with the parcel.
Fixtures	Enter the monetary value of any fixtures associated with the parcel.

Page Element	Description
Owner Exemption, Fixture Exemption, and **Other Exemption**	Enter the monetary value of any exemptions associated with the parcel.
Net Assessed Value	Enter the assessed monetary value of the parcel.
Currency Code	Enter the currency that applies to the parcel value.
Property Use Code	Enter the property use code associated with the parcel.

5. Click **Save**.

Working with Effective Dates in Parcel Values

You can have multiple effective dates for a parcel value. Parcel values with multiple effective-dated entries appear only once in the list on the Parcel Value page, showing the current or only effective-dated row.

To switch to viewing other effective-dated entries when they exist, click the **Date Range** drop-down list and select the effective-dated row you want to view.

Here's how to add an effective-dated parcel value:

1. On the Parcel Value page, select the row.
2. On the Parcel Value Details page, click the **Add New Effective Date** button.
3. Enter the effective start date.

Here are considerations for managing effective-dated entries:

- Only users with permissions can delete current or historical rows, as well as edit effective start dates. Administrators must apply this security privilege for managing effective dates to the administrator role: PSC_MANAGE_EFFECTIVE_DATES_PRIV.

  The system recalculates date ranges when updates are made and prevents duplicate start dates.
- All agency staff can delete future-dated rows.

Only agency staff with the system administrator role for managing effective dates can click **Delete** to remove an entire parcel value definition, along with all of its effective-dated entries.

Modifying or Deleting a Parcel Value

All agency staff can delete future-dated rows, but you must have permission to delete current or historical rows, as well as edit effective start dates.

1. On the Parcel page, click the row for the parcel number you are working with.
2. In the parcel record, click the **Parcel Value** link in the left-hand navigation panel.
3. Click the row for the value you want to modify or delete.
4. On the Parcel Value Details page, you can:

- Click the **Date Range** drop-down list to select the effective-dated row you want to view if there are multiple effective-dated rows.
- Update the parcel value information. You must have permissions to edit effective start dates.

  Click **Save** to save your updates.
- Click the **Delete Effective Date** button to delete future-dated rows. You must have permissions to delete current or historical rows.

5. Click the **Delete** button in the Parcel Value Details page header to remove an entire parcel value definition, along with all of its effective-dated entries. You must have permissions to delete the parcel value definition.

Setting Up Ownership Types

Ownership type indicates how a business was established; for example, a corporation or a nonprofit. You set up ownership types for your agency on the Ownership Type page.

Adding an Ownership Type

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Ownership Types** from the tasks list.
5. On the Ownership Type page, click the **Add** (+) button.
6. On the **New ownership type** drawer, enter a name for the ownership type.
7. Enter a description.
8. Verify that the **Enabled** switch is turned on.
9. Click **Save**.

Modifying an Ownership Type

1. On the Ownership Type page, click the row for the ownership type that you want to modify.
2. On the **Ownership type details** drawer, you can:

   - Modify the ownership type description. You can't change the type name.
   - Turn on or off the **Enabled** switch to enable or disable the ownership type, respectively.
3. Click **Save**.

Deleting an Ownership Type

1. On the Ownership Type page, click the row for the ownership type that you want to delete.
2. On the **Ownership type details** drawer, click the **Delete** button.

   You will be prompted to confirm the permanent deletion.

Setting Up Property Conditions

A property condition identifies the general condition of the property. This value is used to indicate the general age of a property, a property's physical condition, or other condition.

You add, modify, and delete property conditions on the Property Condition page.

Adding a Property Condition

1. Select **Common Setup** > **Property Condition.**
2. On the Property Condition page, click **Add.**
3. On the Property Condition Detail page, enter values for the following fields:

Page Element	Description
Property Condition	Enter the property condition, such as *Poor* or *Good.*
Description	Enter a description of the property condition.

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

Modifying a Property Condition

1. Select **Common Setup** > **Property Condition.**
2. Click a row on the Property Condition page.
3. On the Property Condition Detail page you can:
   - Update the property condition description.
   - Turn off the **Enabled** switch to deactivate the property type.
4. Click **Save.**

Deleting Property Conditions

1. Select **Common Setup** > **Property Condition.**
2. To view a definition before deleting it, click the row to be deleted, then click the **Delete** button on the Property Condition Details page.
3. To delete one or more definitions without viewing details:
   a. Click **Edit.**
   b. Select the checkboxes next to the definitions that you want to delete.
   c. Click **Delete.**
      You will be prompted to confirm the permanent deletion.

9 Setting Up Contractor Licenses

Setting Up Contractor License Options

Contractor license options are system-wide settings that control contractor license processing and data. You can maintain multiple sets of options, each with its own identifying code. But only one code at a time can be active.

Use contractor options to control:

- Whether you integrate with an external licensing body to validate license information during application intake.
- Whether to allow users to manually choose classifications for licenses.
- Whether to decline an application based on the status of the license.
- Which sections for supplemental license information are visible to users.
- Which ownership and insurance types the applicant can select in the intake form.

You can also establish an integration with an external licensing body to load license information into your contract records.

Configuring Contractor License Options

Here's how staff with an agency administrator or business analyst role can set up contractor options:

1. Select **Contractor Setup** > **Contractor License Options**.
2. Click **Add** to create a new set of options, or click an existing row to modify it.
3. If you're creating a new set of options, enter a unique **Code** as an identifier.
4. Enter a **Description** for this set of configuration options.

   The description should be suitable for end-users because both public users and agency staff see the description when entering contractor information.
5. Use the **Active** switch to indicate whether this is your active contractor configuration.

   Only one set of configuration options can be active. If another configuration is already active, then an error message explains that you must turn off this switch for the active configuration first.
6. Use these switches to enable additional configuration options:

Page Element	Description
Integrated with External Source	When this option is enabled, users can retrieve license information from an external licensing body in the intake form. Click the **Integrations** link to identify the Oracle Integration Cloud (OIC) integration that retrieves the information. When integration is inactive, the **Limit to Contractor List** option is automatically enabled and the **License Types** link appears. Whether the **Integrated with External Source** switch is on or off, you can set up an integration to load license data using batch processing in the **Integrations** section.

Page Element	Description
Limit to Contractor List	When this option is enabled: o Users can only select licenses from the agency's contractor records in the intake form, whether or not there's an active integration. o The agency can still add licenses to the contractor records from an external source using an integration. When this option is off, licenses entered in the intake form are retrieved first from the contractor records if they exist there, then from the external licensing body.
Limit License Usage to Authorized Contacts	Turn on this switch to allow only authorized contacts access to the agency-maintained list of approved contractors when selecting a contractor license. For business license applications, this option only applies when the application type uses the *Select from List* display option for collecting contractor information. For information, see *Using the Intake Form Designer for Business Licenses*.
Document Group	Select a document group. When you specify a document group, document attachments can be classified into categories and subcategories when you upload files. Then you can see the category for a document on the Attachments page in the contractor license details. For more information, see *Setting Up Document Groups*.

Working with Integrations

To enable integration with an external contractor license source:

1. Click the **Integrations** link to configure integration settings in the Integrations grid.
2. Click the **Add** action to add an integration. You can only add one of each type of integration.
3. Enter the following for each integration:

Page Element	Description
Type	Identifies the process that uses integration: o *Verify license online* retrieves information for a specific license that a user enters in the main contractor page or in the intake form for a permit or planning application. These pages have a button that the user clicks to initiate information retrieval. o *Batch load license data* establishes the integration used to load information for multiple licenses into your contractor records when batch processing runs. You can create only one row for each integration type.
Integration Name and **Integration Parameter**	Enter the name of the OIC integration that retrieves contractor license and contact information and the query parameters for the OIC integration end point. Oracle Public Sector calls the PSCR

Page Element	Description
	CONTRACTOR BATCH LOAD integration by using the parameter DataSource,MergeOption, LastUpdated,DataToLoad.
Integration Version	Enter the version number of the OIC integration.
Key	Leave this field blank. The source key is maintained in the OIC integration definition.
Integration Enabled	Indicate whether the integration type is enabled.

Adding License Types

You can add license types whether or not your system is integrated with an external source. Applicants select a contractor license type when entering contractor information in the intake form.

Oracle recommends adding a license type with the value *LICENSE* to the **License Types** grid. That way, if your system is integrated with an external source and the integration doesn't return license types, then *LICENSE* appears as the default value on the contractor license.

To select license types for this set of license options:

1. Click the **License Types** link to maintain license types.
2. Click the **Add** action to add a license type.
3. Enter the following information for each license type:

Page Element	Description
License Type	Enter the unique identifier for the license type.
Description	Enter the descriptive name of the license type.
Enabled	Indicate whether the license type is enabled.

Working with License Classifications

To set up license classifications for this set of license options:

1. Click the **Classifications** link to maintain the license classifications in the Classifications grid.
2. Click the **Add** action to add a classification.

3. Enter the following information for each license classification:

Page Element	Description
Code	Enter the unique identifier for the license classification. The contractor licensing body sets these codes.
Description	Enter the descriptive name of the license classification.
Enabled	Indicate whether the license classification is enabled.

Working with License Statuses

The statuses that the licensing body assigns are called *source statuses.* When integration is turned on, you map a source status to an agency's internal status.

CAUTION: The license status defaults to *Other* for unmapped source statuses. Applications that include licenses with an *Other* status are automatically declined.

To set up license status mapping rules:

1. Click the **Status Rules** link to maintain a mapping in the Status Rules grid.
2. Click the **Add** action to add a mapping.
3. Enter the following information for each status rule:

Page Element	Description
Status	Select the agency status for this rule. When a license has this status in the contractor records, and the **Decline Application** switch is on, the application can't be submitted. If using an integration, select the agency status to assign to licenses that have the specified source status. If multiple source statuses map to a single agency status, there will be multiple rows for the agency status.
Source Status	Enter a license status that's assigned by the licensing body. This field is only available when you're integrating with a licensing body. When integration is turned on, you map a source status to an agency's internal status.
Decline Application	Enable this switch to prevent applications from being submitted when a contractor license has this agency status, or this source-to-agency status mapping when integrated with an external licensing body. This option also prevents you from adding contractor licenses with the source status to the permit details.
Enabled	Indicate whether the status rule is enabled.

Page Element	Description

Displaying Category Sections

Sections are specific categories of supplemental information about licenses. License classifications appear in a section on the intake form and contractor record. Other sections include information about bonds and insurance such as Workers' Compensation. The sections you enable at the agency level appear on the Select Display Options page in the application designer.

You can change section titles by updating the section description on Contractor License Sections setup page. For more information, see *Setting Up Contractor License Sections*.

To enable the sections you want to display:

1. Click the **Sections** link to maintain sections in the **Sections** grid.
2. Click the **Add** action to add a section.
3. In the list of available sections, use the **Enabled** switch to control section visibility. Turning off the switch hides the section on the intake form and contractor record from both agency staff and public users.

For information about displaying contractor license sections with instructional text on business license applications and contractor registration intake forms, see *Using the Intake Form Designer for Business Licenses*.

Selecting Ownership Types

Applicants select an ownership type from the list when providing license information on the intake form. You define which ownership types are available to choose from.

To select the ownership types you want to display:

1. Click the **Ownership Types** link to maintain the types of business ownership that can be associated with the contractor's license in the application.
2. Click the **Add** action in the Ownership Types grid.

   Using the lookup prompt, you can select from the ownership types that you set up on the Ownership Types page, for example, Corporation, Partnership, or Sole Proprietorship. For information about setting up ownership types, see *Setting Up Ownership Types*. If an ownership type is retrieved from an integration but isn't in the contractor license options, the ownership type is added to the contractor license option details.
3. Turn on the **Enabled** switch to indicate the ownership type is active.

Setting Up Insurance Types

To set up the insurance types you want to display:

1. Click the **Insurance Types** link to display the Insurance Types grid.
2. Click the **Add** action to add the types of insurance information that can be associated with a license.
3. Enter values in the **Insurance Type** and **Description** fields.
4. Turn on the **Enabled** switch to indicate the insurance type is active.

Setting Up Contractor License Sections

Contractor license information can include sections with different types of data such as license classification information, workers' compensation information, and contractors' bonds. To ensure that users see meaningful labels for these sections, use the Contractor License Sections page to maintain section descriptions.

> **Note:** This page is only for updating descriptions. You enable contractor license sections at the agency level on the Contractor License Option Details page. See *Setting Up Contractor License Options*.

To maintain the descriptions of contractor license sections:

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. From the **Functional Areas** list in the left panel, select *Agency Profile*.
4. The right panel shows the required tasks for the selected functional area. Select *All Tasks* from the **Show** drop-down list and then select **Manage Contractor License Sections** from the tasks list.
5. Review the **Description** for each delivered section, and update the descriptions as needed.

   These are the delivered sections:

Section Code	Delivered Description
ORA_HEADING	Profile Heading
ORA_LICENSE	License
ORA_CONDITIONS	Condition
ORA_BUSINESS	Business
ORA_CLASS	Classification
ORA_CB	Contractor Bond
ORA_BQI	Other Bonds
ORA_WC	Workers' Compensation
ORA_CONTACTS	Contact Person

6. Click **Save.**

Setting Up Contractor Integration

This topic describes how to import and activate integration settings that enable you to validate contractor information against data from the contractor licensing body.

Oracle provides pre-built integrations with specific contractor licensing bodies. To set up this integration, download the integration files from My Oracle Support and then import them into Oracle Integration Cloud (OIC). To use an integration after you set it up, use the Contractor License Options page. For more information, see *Setting Up Contractor License Options*.

To set up contractor integration:

1. Go to My Oracle Support (MOS) and access Doc ID 2672514.1, *Public Sector Compliance and Regulation Setting Up Contractor Integration*.
2. Follow the instructions on the MOS page, and save the IAR integration file for your contractor licensing body.
3. Access the main console in OIC.
4. Click **Integrations** in the left frame.
5. Click the **Import** button at the top of the Integrations page.
6. Select the integration file for your licensing body, then click the **Import** button.
7. Click **Connections** in the left frame.
8. Test the **Generic REST Trigger** connection:
    a. Access the detail page for the **Generic REST Trigger** connection.
    b. Click the **Test** button.
    c. When the test is 100% complete, click **Save** and then **Close.**
9. Test the integration for the imported licensing body:
    a. Access the detail page for the licensing body connection.
    b. Click the **Test** button.
    c. When the test is 100% complete, click **Save** and then **Close.**
10. Click **Integrations** in the left frame to return to the Integrations page.
11. Turn on the activation switch for the new licensing body integration.
12. In the Activate Integration window that appears, click the **Activate** button.

Preparing to Load Contractor Licenses

Oracle provides a prebuilt Oracle Integration Cloud (OIC) integration to load licenses and license contacts from a manually provided file, or you can get licenses from a contractor licensing body. Import a package and activate integration settings in OIC before you load contractor licenses.

Your OIC configuration depends on which batch load method you're using. You can retrieve licenses from:

- A contractor licensing body.

  This option is only available with integration to an external service and integration is enabled on the Contractor License Option Details page. This option applies when you want to update the licenses in your contractor list.

- A file.

  You can manually load a file with contractor licenses regardless of whether an integration with a licensing body is enabled or not. Contractor contact information associated with a license can be manually loaded using a file only. When an online integration is not available and integration is disabled on the Contractor License Option Details page, licenses can only be loaded using a file. This option can help you migrate contractor data from a legacy system.

For information about integration settings, see *Setting Up Contractor License Options*.

Here's how agencies configure OIC to load contractor licenses:

1. Go to My Oracle Support (MOS) and access Doc ID 2759502.1, *Configuring Oracle Integration Cloud (OIC) for Loading Contractor Licenses in Oracle Permitting and Licensing*.
2. Follow the instructions on the MOS page, and save the PAR package file for loading licenses from a contractor licensing body or a license file.
3. Access the main console in OIC.
4. Click **Packages** in the left frame.
5. Click the **Import** button at the top of the Packages page.
6. Select the package file for loading licenses from an external licensing body or license file, then click the **Import** button.
7. Click **Connections** in the left frame.
8. Configure, test, and save these connections in the package:
    a. FTP Read Contractor File
    b. PSC Rest Connector
    c. CSLB Rest Trigger
    d. CSLB REST CONNECTOR
9. Click **Integrations** in the left frame.
10. Configure and activate these integrations in the package:
    a. CSLB BATCH LOAD - REST
    b. CSLB POST LICENSE - REST

Loading Contractor Licenses and Contacts

You can use batch processing to load contractor license records manually from a file or through an integration with a licensing body. Merge options enable you to load a full file or update licenses matching those in the agency-maintained contractor list. You also have the option to load license contacts from a file.

Processing can be executed as needed, such as when you want to migrate contractor data from a legacy system, or on a scheduled basis to refresh license records in the contractor list. Staff with agency administrator or business analyst roles can configure the system for batch processing. Here's how batch load processing works:

- *Contractor licenses* - The batch load process for contractor licenses replaces licenses, classifications, bonds, other bonds, and insurances already in the system if a match with this information is found. If an exact match isn't found, the process creates a new license. Any records not matching the rows are agency-managed rows and the agency must manually evaluate and remove records.
- *Contacts* - The batch load process for contacts replaces license contacts already in the license details with the contact information from the file if there's a matching email, first name, middle name, and last name. If an exact match of email and name isn't found, the process creates a new license contact.

For more information, see *Contractor License Overview*.

Before You Begin

Oracle provides a prebuilt Oracle Integration Cloud (OIC) integration to load licenses. You import a package and activate integration settings in OIC before you run batch processing.

For information about OIC configuration for an integration with a licensing body and connections for loading a file with license records, see *Setting Up Contractor Integration* and *Preparing to Load Contractor Licenses*.

Entering Parameters

1. Select **Contractors** > **Load Contractors**.
2. Click the Parameters tab on the Load Contractors page.
3. In the **Data to Load** field, select the type of data that you want to load:
    - *Licenses*
    - *Contacts*
    - *Licenses and contacts*

    Note: You can add contact information to the batch load layout from a file only. A license must exist to load the contacts.
4. Enter these parameters for your batch process if your data type is *Licenses*.

    For loading *Contacts* and *Licenses and contacts*, the data source is *File* and the other options are not available.

Page Element	Description
Data Source	Select an option to indicate the source of the license records that you want to load: - *File* – Processing picks up license information from a file to merge with license records. - *Integration service* – Processing connects with a licensing body through an integration service to get the license file and merge license records.
Merge Option	Select how you want to merge the data from the source with your system: The *Entire file* option works in two ways: - Loads any new licenses from the file that do not exist in the contractor list. - Updates existing licenses in the contractor list from the file. Use the *Contractor list* option to update licenses that already exist in the contractor list. The process skips licenses that don't exist in the contractor list.
Period in Which Licenses Were Last Updated	Identify which records you want to merge by when they were last updated. For example, if you want to merge the records from the source that were updated in the last two weeks, select the number *2* and the unit of time, *Weeks*. - Select a number 1 or greater. - Select a unit of time, including *None, Days, Weeks,* or *Months*. If you don't want to load records based on a given period, select *None*. **Note:** To identify licenses that were updated in the specified period only, the license data must have a last updated date. If a licensing body doesn't use a last updated date, select *None*.

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: o *Once:* Select to run the process one time only. o *Hourly or minute:* Select to run the process at regular time intervals. o *Daily:* Select to run the process at regular intervals in days. 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*.

Page Element	Description
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. **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 receives 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**.

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.

Setting Up Contractor License History

To preserve the historical accuracy of contractor license information for an application, snapshots of the contractor license details are taken during the permit lifecycle and stored with the permit when its status becomes terminal. An API is also provided for agencies to customize the timing of any additional historical snapshots, in addition to those taken at delivered workflow statuses.

Agency staff and registered users applying for permits and viewing permit details in the Redwood Experience see the latest contractor license information without manually refreshing each license, but only agency staff can view the contractor license history saved with the permit.

Here's more information about how contractor license history works:

- The agency must have the Redwood Experience for Application Intake, Make a Payment, and Transactions List enabled.
- The contractor licenses must exist in the contractor list or come from an external source because information is automatically retrieved from these sources.
- Contractor license history is captured at some of the delivered application workflow statuses such as Submitted, Permit Issued, Inspection, Completed, Certificate of Occupancy, Denied, Withdrawn, and Expired.

  A history snapshot can be captured without workflow when an application status is Submitted or Completed, depending on agency setup.
- The agency can set up the publicSectorRecordContractorHistories REST API to take additional history snapshots when called from the workflow. The duty role with access to add application contractor history is PSC Transaction Contractor History Administration.

Related Topics

- Working with Contractors and Agents in Applications

Working with Contractor Expiration

Agencies can manage contractor license and contractor license insurance expiration using scheduled rules set up in the Business Rules Framework. The rules can be configured to automate communications and the resolution of contractor conditions associated with expiring or expired contractor licenses and license insurance.

Your agency can also set up the system to automatically apply contractor license conditions when the contractor license or insurance expires. For more information, see *Applying Conditions to Contractor Licenses*.

Here's how administrators can configure the communication and condition resolution actions for the contractor expiration:

1. Navigate to the Business Rules Framework.
2. Select **Scheduled Rules**.

   For more information about working with scheduled rules, see *Setting Up Scheduled Rules*.
3. Use the Search function to find these events:
   - Contractor License Expiration
   - Contractor License Insurance Expiration
4. In the **Criteria** section, add the criteria for contractor licenses, including **License Status** and **Expire Date**.
5. Add the actions for the rule like this:

Action	Description
Send communication	Select this action to automatically send notification emails to the business and the license holder when a license or insurance is about to expire or has expired. If you select the action to send communication, you also need to select templates for these communication events: Contractor License Expiration and Contractor License Insurance Expiration. Set up a template for each event. All attributes from the Contractor Licenses resource are available for personalization in the message body of outgoing communications. Templates need to be set up in the Communication Events page. The License Holder Email and Business Email attributes are available when setting up the communication recipients. For more information, see *Setting Up Send Communication Actions* and *Setting Up Communication Templates*.
Resolve conditions	Select this action to automatically resolve specified contractor conditions related to contractor license or insurance expiration. For more information, see *Applying Conditions to Contractor Licenses* and *Setting Up Resolve Condition Actions*.

10 Setting Up Comments

Managing Comments

This topic provides an overview about Standard Comments and discusses how to manage comments.

Standard Comments Overview

Standard comments are predefined comments that users can easily and quickly use, instead of manually entering the text. Standard comments are generic and complete, which make them reusable.

Users can use standard comments across all Oracle Permitting and Licensing offerings. You can use standard comments while updating your applications.

System administrators set up application categories and subcategories using the Application Category page, based on the type of comments you wish to have. Standard comments are set up using the Standard Comments page.

Managing Comments

You manage the comments by setting up how you want the comments to be available for the agency staff members.

1. Select **Comments** > **Manage Comments**.
2. On the Manage Comments page, you add values to all these fields:

Page Element	Description
Number of days comment is recent	Enter a numeric value or use the increment/decrement buttons. The number of days a comment is listed as Recent is based on the value in this field.
Rich Text Editor	Use the switch to enable or disable **Rich Text Editor** formatting for comments.
Comment Summary Length	Enter a numeric value or use the increment/decrement buttons. This value determines the maximum number of characters that can be displayed in the Comment Summary field. **Note:** The system allows a maximum length of two hundred (200) characters in the comment summary.
Default Visibility of Comments	Turn on the **Private** switch next to a comment application group to set its comments as private and locked. All new comments for the groups are set as public by default. Comments set as private will only be visible to the agency staff.

Page Element	Description

3. Click **Save** to save the changes.

Setting Up Standard Comment Categories and Subcategories

This topic discusses how to set up Standard Comment Categories and Subcategories.

Setting Up Standard Comment Categories and Subcategories

You set up the comments categories and subcategories on the Application Category page.

1. Select **Comments Setup** > **Comment Categories**.

   On the Application Category page, click **Add** to add a new category.
2. On the Application Category Details page, you add values to all these fields:

Field Name	Description
Application Category	Enter a category.
Description	Enter a description for the category. This description displays detailed information about the category when searching for categories.

3. Turn on the **Enabled** switch if you want to enable this category when you save it. The switch is turned off by default for a new category.
4. In the Application Groups section, you can include application groups that you want this category to be available for. Click **Add** to open the Application Group Details page, select the application group.
5. Turn on the **Enabled** switch if you want to enable the selected group when you save the page.
6. Click Save to save the newly added application group and return to the Application Category Details page.
7. To add an application subcategory, select the Application Subcategories section and click **Add**.
8. On the Application Subcategory Details page, you add values to all these fields:

Field Name	Description
Application Subcategory	Enter a subcategory
Description	Enter a description for the subcategory. This description displays detailed information about the subcategory when searching for subcategories.

9. Turn on the **Enabled** switch if you want to enable this subcategory when you save it. The switch is turned off by default for a new subcategory.
10. Click **Save** to save the newly added application subcategory and return to the Application Category Details page.
11. Click **Save** to save the record and return to the Application Category page.

Modifying Standard Comment Categories and Subcategories

You modify the comments categories and subcategories on the Application Category Details page.

1. Select **Comments Setup** > **Comment Categories**.
2. On the Application Category page, click the chevron on a category line to select and modify the category.
3. On the Application Category Details page, enter new values in the *Application Category* and *Description* fields.
4. Verify that the **Enabled** switch is turned on if you want to enable this category when you save it.
5. Use the Application Groups section to select the application group that you want this category to be available for.
6. In the Application Subcategories section, you can edit the application subcategories.
7. Click **Save** to save the changes. You can use the **Delete** button to delete the category.

Viewing, Adding, Modifying, and Deleting Standard Comments

This topic discusses how to view, add, modify, and delete Standard comments.

Viewing Standard Comments

You search and view Standard Comments on the Standard Comments page.

1. Select **Comments Setup** > **Standard Comments**.
2. Use the application category or application subcategory fields to filter comments on the Standard Comments page.

Adding Standard Comments

You add comments using the **Add** button on the Standard Comment page.

1. Select **Comments Setup** > **Standard Comment**
2. On the Standard Comments page, click **Add** to open the Standard Comment Details page and add a new comment.
3. On the Standard Comment Details page, enter values for these fields:

Page Element	Description
Comment Code	Enter a comment code.
Application Category	Enter an application category

Page Element	Description
Application Subcategory	Enter an application subcategory
Description	Enter a comment.

4. Verify that the **Enabled** switch is turned on if you want to enable this comment when you save.
5. Click the **Save** button to save the new comment and return to the Standard Comment page.

Modifying Standard Comments

You modify comments on the Standard Comment Details page.

1. On the Standard Comments page, click the chevron on a comment line to select and modify the comment.
2. To modify the comment, you can change the values entered in the Application Category and Application Subcategory fields, and edit the description.
3. Verify that the **Enabled** switch is turned on if you want to enable this modified comment when you save.
4. Click **Save**.

Deleting Standard Comments

You delete comments on the Standard Comment Details page.

1. On the Standard Comments page, click the chevron on the comment line which you want to delete.
2. On the Standard Comment Details page, click the **Delete** button to delete the comment.
3. Click Yes on the confirmation page to delete the comment and return to the Standard Comments page.

11 Setting Up Documents

Setting Up Document Categories and Subcategories

You set up document categories and subcategories on the Document Category pages to organize the various types of attachment files. Applicants select the document's category or category and subcategory when attaching documents.

After defining the document category, you add the document categories to the document group and then enter the document group ID on the transaction type for permits, planning applications, and business licenses.

System administrators can configure the categories and subcategories to identify required documents and the stage in the application process where the documents are required. If you add a document group to the application type and the document group includes document categories that are configured to identify required documents, the **Required Documents** section appears on the application intake form and the Attachments page in the application details. The system checks for the presence of attachments with the required category or category and subcategory pair at the different steps in the application and displays an error if the required documents haven't been added.

Adding Document Categories

1. Select **Common Setup** > **Document Category**.
2. On the Document Category page, click **Add** to add a new document category.
3. Enter values on the Document Category Details page:

Page Element	Description
Category ID	Enter an identifier for the category.
Category	Enter a name for the category.
Description	Enter a description of the category.
Enabled	Turn the switch on to make the category available for use. The category is disabled by default.

4. Turn on one or more of the switches in the **Required Document Application Step** section to indicate when documents with this category are required:

Option	Description
Submittal (application submittal)	Applicants can't submit the application without adding the specified document first. Only documents required at the Submittal step are required before the applicant can submit the application.

Option	Description
Issuance (application issuance)	The permit or business license can't be issued without this document. This step doesn't apply to planning applications. Validating documents at this step requires workflow setup. See *Using Custom Properties*.
Acceptance (application acceptance)	Agency staff can't accept this document into the system if this document is missing. Validating documents at this step requires workflow setup. See *Using Custom Properties*.
Final inspection	Inspectors can't create a final inspection without this document. This switch is only available if your agency uses Permits or Business Licenses. This step doesn't apply to planning applications.
Complete (application complete)	The application process won't be complete until this document has been attached. Validating documents at this step requires workflow setup. See *Using Custom Properties*.

If you select an application step for a category, you can't select the same required step for the subcategory. For example, if a document with the Blueprints category is required at the application Complete step, you can't require a document with a Blueprints category and Final Plans subcategory combination at the application Complete step. Only a document with the Blueprints category (and no subcategory) will satisfy the requirement at the Complete step.

5. Click **Configure User Assistance** to enter rich text to provide information about the requirements for the specified document. The help (question mark) icon appears in the list of required documents on the Attachments grid in the application intake form. Click **OK** to save the information.
6. Click **Save**.
7. If you want to add a subcategory, click **Add** in the **Document Subcategory** section.
8. On the Document Subcategory Details page, enter an ID, name, and description for the subcategory.
9. Click **Save**.

Adding Document Subcategories

1. Select **Common Setup** > **Document Category**.
2. On the Document Category page, click a category row.
3. On the Document Category Details page, click **Add** in the Document Subcategory section to add a new document category.
4. Enter values on the Document Subcategory Details page.

Page Element	Description
Subcategory ID	Enter an identifier for the subcategory.
Subcategory	Enter a name for the subcategory.

Page Element	Description
Description	Enter a description of the subcategory.
Enabled	Turn the switch on to make the subcategory available for use. The subcategory is disabled by default.

5. Turn on one or more of the switches in the **Required Document Application Step** section to indicate when documents with this subcategory are required:

Option	Description
Submittal (application submittal)	Applicants can't submit the application without adding the specified document first. Only documents required at the Submittal step are required before the applicant can submit the application.
Issuance (application issuance)	The permit or business license can't be issued without this document. This step doesn't apply to planning applications. Validating documents at this step requires workflow setup. See *Using Custom Properties*.
Acceptance (application acceptance)	Agency staff can't accept this document into the system if this document is missing. Validating documents at this step requires workflow setup. See *Using Custom Properties*.
Final inspection	Inspectors can't create a final inspection without this document. This switch is only available if your agency uses Permits or Business Licenses. This step doesn't apply to planning applications.
Complete (application complete)	The application process won't be complete until this document has been attached. Validating documents at this step requires workflow setup. See *Using Custom Properties*.

If you select an application step for a category, you can't select the same required step for the subcategory. That is, you can't require both a document with a Blueprints category and a document with a Blueprints category and Final Plans subcategory combination, at the same step.

If you don't select any of the application steps for the subcategory, the application steps for the category apply to the category and subcategory pair.

6. Click **Configure User Assistance** to enter rich text to provide information about the requirements for the specified document. This link only appears for the subcategory if the document category is required at the Submittal step.

   The system displays the user assistance configured for the subcategory if provided, but if not, displays the text for the category, if present. The help (question mark) icon appears in the list of required documents on the Attachments grid in the application intake form. Click **OK** to save the information.
7. Click **Save**.

Modifying Document Categories and Subcategories

1. Select **Common Setup** > **Document Category**.
2. On the Document Category page, select the row for the category that you want to modify.
3. On the Document Category Details page, you can modify the category name and description, and turn the **Enabled** switch on or off.
4. Click **Save** to save any changes.
5. To modify a document subcategory:

   a. Select the associated category to open the Document Category Details page.
   b. Select the subcategory that you want to modify.
   c. On the Document Subcategory Details page, you can change the subcategory name and description, and turn the **Enabled** switch on or off.
   d. Click **Save**.

Deleting Document Categories and Subcategories

You can't delete categories and subcategories if they are already referenced on an uploaded attachment.

1. Select **Common Setup** > **Document Category**.
2. On the Document Category page, select the row for the category that you want to delete.
3. If you want to delete the document category, click **Delete** on the Document Category Details page.

   > **Note:** When you delete a document category, all associated subcategories are also deleted.

4. If you want to delete multiple document categories, you can delete them on the Document Category page:

   a. Click **Edit**.
   b. Select the checkboxes for the document category rows to delete.
   c. Click **Delete**.
5. To delete the document subcategory, click **Delete** on the Document Subcategory Details page.
6. If you want to delete multiple subcategories, you can delete them from the Document Category Details page using the **Edit** and **Delete** buttons.

Setting Up Document Groups

You set up document groups using the Document Group pages to organize the various categories of attachment files into a grouping.

When you assign a document group to an application or transaction type, the categories and subcategories associated with that document group can be selected for document attachments associated with those transactions. After you set up the document categories, add them to a group then add the group ID to the application type definition.

If you add a document group to an application type and the document group includes document categories and subcategories that are configured to identify required documents, the **Required Documents** section appears on the application intake form and the Attachments page in the application details. The system checks for uploaded attachments with the required category or category and subcategory pair at different steps in the application and displays an error if the required documents haven't been added. For more information, see *Setting Up Document Categories and Subcategories* and Setting Up Required Documents.

Adding Document Groups

1. Select **Common Setup** > **Document Group**.
2. On the Document Group page, click **Add** to add a new document group.
3. Enter values on the Document Group Details page:

Page Element	Description
Group ID	Enter an identifier for the group.
Group	Enter a name for the group.
Description	Enter a description of the group.
Enabled	Turn the switch on to make the group available for use. The group is disabled by default.

4. Click **Save**.
5. Add document categories that make up the grouping by clicking **Add** in the **Document Category** section.
6. Enter a document category ID or use the lookup prompt to find a category ID.

   If desired, you can click the **Document Category** link to research which category to choose.

   The **Required Document Application Step** displays the step in the application process at which a document with that category is required.
7. Click **Save**.

Modifying Document Groups

1. Select **Common Setup** > **Document Group**.
2. On the Document Group page, select the row for the group that you want to modify.

3. On the Document Group Details page, you can modify the group name and description, and turn the **Enabled** switch on or off.

   Disabled document groups can't be selected in the prompt list for an application or transaction type.

   > **Note:** Disabling a document group does not affect attachments for existing or new transactions associated with permit types to which that document group is assigned. The categories and subcategories associated with a disabled group continue to display for existing attachments, and are still available to select for new attachments.

4. Click **Save** to save any changes.
5. You add, remove, disable, and enable document categories for the group in the **Document Category** section.

   When you disable a single category associated with a document group, that category and its subcategories continue to display for existing attachments, but are unavailable for new attachments.

   To modify a document category, you must go to the Document Category definition pages. See *Setting Up Document Categories and Subcategories*.

   > **Note:** If you disable a category on the Document Category Details page, but it's still included in the list of enabled categories for a document group, it will continue to be available in the prompt list for attachments.

Deleting Document Groups

You can't delete categories and subcategories if they are already referenced on an uploaded attachment.

1. Select **Common Setup** > **Document Group**.
2. On the Document Group page, select the row for the group that you want to delete.
3. Click **Delete** on the Document Group Details page.
4. If you want to delete multiple document groups, you can delete them on the Document Group page:
   a. Click **Edit**.
   b. Select the checkboxes for the document group rows to delete.
   c. Click **Delete**.
5. To delete a document category from the group, click the **Delete** icon for the document category row in the **Document Category** section.

Setting Up Required Documents

Required documents help agencies to control when information is needed throughout the application process. The system checks for the presence of attachments with the required category or category and subcategory pair and displays an error if the required documents haven't been added at the specified step.

The list of required documents appears on the application intake form and on the Attachments page in the application details after submittal. Once the application form has been saved, agency staff with permissions can manage the document requirements on the application, such as adding or deleting which documents are required. Agency staff with permissions can also view override history.

The documents with a specified category or category and subcategory pair can be required at these application steps, depending on agency setup: Application Submittal, Application Issuance, Application Acceptance, Final Inspection, and

Application Complete. Only documents required at the *Submittal* step are required before the applicant can submit the application. The **Required Documents** list displays the category and application step requirements and whether the attachment has been uploaded.

Agency staff with permissions can override document requirements and remove files. Public users can't delete required documents once they have been uploaded for previous application steps.

Here's how to set up required documents:

1. Create the document category and subsequent subcategories that you need. Here you can select the **Required Document Application Step** for each document category or category and subcategory pair.

   See *Setting Up Document Categories and Subcategories*.
2. Add the document categories and subcategories to the document group.

   See *Setting Up Document Groups*.
3. Associate the document group with the permit, planning, or business license types that require the specified documents.

   See *Setting Up Business License Types*, *Setting Up Permit Types*, and *Setting Up Planning Application Types*.
4. Update your workflow tasks that prompt for required documents, including the application acceptance, application issuance, and application completion workflow events.

   You must set up the custom properties PSC_ACTIVITY_TYPE and PSC_FINAL_ACTIVITY for each workflow event. For details, see *Using Custom Properties*.
5. If you're using workflow communications, set up communication templates for these Business Rules Framework events:

   - Business License Missing Document
   - Permit Missing Document
   - Planning Missing Document

   See *Business Rules Framework Event Details* and *Setting Up Send Communication Actions*.

12 Setting Up Communications

Setting Up the Twilio Security Endpoint

This topic discusses how to enable and set up the Twilio security endpoint for text message communications.

Text communications through Twilio is an optional feature provided in Oracle Functional Setup Manager (FSM). Before configuring this feature, you must first enable it.

Enabling the Twilio Integration

1. Access FSM by selecting **Setup and Maintenance** in the navigator.
2. Select a Oracle Permitting and Licensing offering such as *Public Sector Permits* or *Public Sector Planning and Zoning*.
3. Click the **Change Feature Opt In** link.
4. Click the **Features** icon for the System Administration functional area.
5. Click the **Enable** check box for the Text Communications through Twilio feature.

> **Note:** You can deselect the **Enable** check box to disable the Text Communications through Twilio feature.

Configuring the Twilio Security Endpoint

Once the Twilio integration is enabled, you can configure the Twilio security endpoint on the Manage Twilio Security Endpoint page.

1. Access FSM by selecting **Setup and Maintenance** in the navigator.
2. Select a Oracle Permitting and Licensing offering such as *Public Sector Permits* or *Public Sector Planning and Zoning*.
3. Select the **System Administration** functional area.
4. In the **Show** field, select All Tasks.
5. Select the **Manage Twilio Security Endpoint** task.
6. On the Manage Twilio Security Endpoint page, enter information for the following fields:

Page Element	Description
URL	Enter the URL to access Twilio's token endpoint. This should include the host and the context root information. Use the sandbox endpoint for testing and then use the live URL when you go live.
Security Policy	Select the applicable token from the drop-down list.
Username	Enter the API client_id value for your Twilio endpoint account.
Password	Enter the Twilio endpoint API secret code for your Twilio endpoint account.

Page Element	Description

7. Click **Save and Close** to save the configuration and return to the Setup page.

Delivered Communication Events

Oracle Permitting and Licensing delivers a robust registry of communication events that are triggered by transactions and processes within the application. You can view a partial list of communication events and descriptions in this topic.

The delivered communication events are found on the Communication Events page in the classic interface. Access the Communication Event page through the Functional Setup Manager by selecting the **System Administration** functional area for an offering, then the **Manage Communication Events** task. Click a communication event row to open the event details and create a template. For more information, see *Setting Up Communication Templates*.

Ad Hoc Communications

Event	Description
Ad Hoc Application Event	General application event.

Code Enforcement Document Attachments

Communication Event Name	Communication Description
Code Enforcement Case Document Attached	Applicant attaches a code enforcement case document.

Contacts Communications

Communication Event Name	Communication Description
Permit Contact Added to Application	Generates a notification that is sent to contacts when a permit application is submitted.
Permit Additional Contact Added	Generates a notification to contacts added to a permit application after it has been submitted.
Planning and Zoning Contact Added to Application	Generates a notification that is sent to contacts when a planning application is submitted.
Planning and Zoning Additional Contact Added	Generates a notification to contacts added to a planning application after it has been submitted.

These notifications require the Send Communication action for the delivered Business Rules Framework events and the email template for the Communication Events in this table. For more information, see *Setting Up Send Communication Actions*.

In the templates, use the *Contact* and *Contact Type* attributes to address the email. For more information, see *Using Attributes in Communication Templates*.

Deposit Account Communications

Communication Event Name	Communication Description
User Access Changed	Enables the agency to trigger a notification when deposit account access is modified.
Account Established	Enables the agency to trigger a notification after establishing a deposit account.
Additional Funds	Enables the agency to trigger a notification when funds have to be deposited into deposit account.
User Invite	Enables the agency to trigger a notification when a user is invited to manage a deposit account.
Deposit Received	Enables the agency to trigger a notification after receiving a first deposit.

Expiration Communication Resources

Communication Event Name	Communication Description
About to Expire Permit Expired Permit	Generates a notification when a permit is about to expire or expired. For example, when the permit is about to expire or expired, the agency staff and the contact listed on the application receive a notification.
Permit About to Expire Based on Inspection Commencement Permit Expired Based on Inspection Commencement	Generates a notification when a permit is about to expire or expired due to inactivity, because the first inspection hasn't been scheduled or passed. For example, when a permit is about to expire or expired due to inactivity because the first inspection hasn't commenced, the agency staff and the contact on the application receive a notification.
About to Expire Planning and Zoning Application Expired Planning and Zoning Application	Generates a notification when the planning application is about to expire or expired. For example, when the planning application is about to expire or expired, the agency staff and the contact listed on the application receive a notification.
About to Expire Pre-Application Expired Pre-Application	Generates a notification when the preapplication is about to expire or expired. For example, when the preapplication is about to expire or expired, the agency staff and the contact listed on the application receive a notification.
About to Expire Business License	Generates a notification when the business license is about to expire or expired.

Communication Event Name	Communication Description
Expired Business License	For example, when the business license is about to expire or expired, the agency staff and the contact listed on the application receive a notification.
Contractor License Expiration Contractor License Insurance Expiration	Generates a notification when the scheduled rules for Contractor License Expiration and Contractor License Insurance Expiration events are set up to send communications in the Business Rules Framework. All attributes from the Contractor Licenses or Contractor License Insurances resource, respectively, are available for personalization in the message body of outgoing communications. Agencies can select the License Holder Email and Business Email attributes as communication recipients.

For more information about permit and planning application expiration, see *Expiration Overview* and *Working with Application Expiration*.

Communication Event Name	Communication Description
About to Expire Business License Expired Business License	Generates a notification when a business license is about to expire or expired. For example, when the business license is about to expire or expired, the agency staff and the contact listed on the application receive a notification.
About to Expire Business License Consultation Expired Business License Consultation	Generates a notification when a business license consultation is about to expire or expired. For example, when the business license consultation is about to expire or expired, the agency staff and the contact listed on the application receive a notification.

For more information about business license and business license consultation expiration, see *Viewing Business License Expiration*.

Fee Communications

Communication Event Name	Communication Description
New Fees Due	When agency staff manually adds a new fee, the applicant receives a notification that new fees have been assessed and are due.
Scheduled Event: Updated Business License Application Fees Due	Scheduled rule event based on assessed or updated business license activity fees with a due status.
Scheduled Rule: Updated Permit Fees Due	Generates a communication when the fees for a permit in a *Due* status are added or changed, the fee status is changed to *Due*, or a fee amount that is due is recalculated or changed. Use this event with scheduled rules to send communications that consolidate the fees for a permit.
Scheduled Rule: Updated Planning Application Fees Due	Generates a communication when the fees for a planning application in a *Due* status are added or changed, the fee status is changed to *Due*, or a fee amount that is due is recalculated or changed.

Communication Event Name	Communication Description
	Use this event with scheduled rules to send communications that consolidate the fees for a planning application.

For more information on manually adding a fee item, see *Working with Fees and Payments*.

For more information on sending communications with consolidated fees, see *Setting Up Scheduled Rules* in the Business Rules Framework and *Setting Up Fee Notices*.

Permits Communications

Communication Event Name	Communication Description
After Permit Application Submitted	After a permit application is submitted.
Before Permit Issuance	Before a permit certificate is issued.
Before Permit Application Submitted	Before a permit application is submitted.
Permit Canceled	Applicant receives an email or alert notification when a permit is canceled.
Permit Application Updated	Initiates actions when a permit application is updated. Must be used within a Workflow model.
Permit Withdrawn	Applicant receives an email or alert notification when a permit is withdrawn.
Permit Missing Document	Permit application step is missing a required document.

Planning and Zoning Communications

Communication Event Name	Communication Description
After Planning and Zoning Application Submitted	After a planning and zoning application is submitted.
Planner Assigned	A planner is assigned for an application
Before Planning and Zoning Application Submitted	Before a planning and zoning application is submitted.
Planning Application Canceled	Notifies that the planning application is canceled
Planning Pre-Application Canceled	Notifies that the planning preapplication is canceled.

Communication Event Name	Communication Description
Planning Pre-Application Withdrawn	Notifies that the planning preapplication is withdrawn.
Planner Reassigned	A planner is reassigned for the application.
Planning Application Withdrawn	Notifies that the planning application is withdrawn.

Hearing Communications

Communication Event Name	Communication Description
Hearing Appealed	Notifies that an appeal is submitted for the public hearing.
Hearing Decision Changed	Notifies that the public hearing decision is updated.
Hearing Canceled	Notifies that the public hearing is canceled.
Hearing Schedule Finalized	Notifies that the public hearing is scheduled on a finalized date.
Hearing Rescheduled	Notifies that there is a change in the date of the public hearing.
Hearing Scheduled Tentatively	Notifies that the public hearing is scheduled on a tentative date.

Planning Meeting Communications

Communication Event Name	Communication Description
Planning Application Meeting Canceled	Notifies that the planning application meeting is canceled.
Planning Application Meeting Remove Invitees	Notifies that the invitee has been removed from the meeting.
Planning Application Meeting Rescheduled	Notifies that the planning application meeting is rescheduled on a tentative date.
Planning Application Meeting Scheduled	Notifies that the planning application meeting is scheduled on a tentative date.
Planning Application Meeting Invitee Added	Notifies that the invitee has been added to the planning meeting.
Planning Application Meeting Updated	Notifies that there is a change in the planning application meeting date.

Communication Event Name	Communication Description
Pre-Application Meeting Canceled	Notifies that the preapplication meeting is canceled.
Pre-Application Meeting Remove Invitees	Notifies that the invitee has been removed from the meeting.
Pre-Application Meeting Rescheduled	Notifies that the preapplication meeting is rescheduled on a tentative date.
Pre-Application Meeting Scheduled	Notifies that the preapplication meeting is scheduled on a tentative date.
Pre-Application Meeting Invitee Added	Notifies that the invitee has been added to the preapplication meeting.
Pre-Application Meeting Updated	Notifies that there is a change in the preapplication meeting date.

Permit Inspections

The following communication events are provided for permit inspections.

Note: This resource and events are registered with the Business Rules Framework. For more information, see *Business Rules Framework Overview* and *Setting Up Business Rules for Inspections*.

Note: For information about inspection communications that are suppressed when an inspection type is designated as *Unannounced,* see *Setting Up Inspection Types*.

Communication Event Name	Communication Description
Before Permit Inspection Saved	Before a permit inspection is saved.
Final Permit Inspection Passed	Generates a notification when an inspector submits the final inspection for a permit with a passing result. For example, when an inspector submits the final inspection for a permit with a passing result, the permit technician or applicant receives a notification. For more information about resulting inspections, see *Submitting Inspection Results*.
Permit Inspection Canceled	Generates a notification when the applicant or agency staff cancel an inspection. For example, when the applicant or agency staff cancel an inspection, the applicant, inspection contact, inspector, and inspection supervisor can receive a notification. For more information, see *Rescheduling, Postponing, and Canceling Inspections* and *Managing Inspections for an Agency*.

Communication Event Name	Communication Description
	Note: This event is also triggered when the permit associated with an inspection is withdrawn or expires.
Permit Inspection Complete	Generates a notification when the inspector completes an inspection and submits the inspection results or when inspections are updated from *Scheduled* to *Completed* status. For example, when the inspector completes any inspection and submits the inspection results, the applicant or agency staff receive a notification that the inspection is complete, regardless of the inspection result. For more information about performing inspections, see *Submitting Inspection Results*.
Permit Inspection ETA Updated	Generates a notification when the inspector updates the estimated time of arrival at an inspection site. For example, when the inspector updates the estimated time of arrival at an inspection site for a scheduled inspection, the contact at the inspection location receives a notification. For more information about performing inspections, see *Working with Inspection Details*.
Permit Inspection Requested	Generates a notification when an inspection has been requested. For example, when an inspection request has been created, the permit technician can receive an email notification. For more information about requesting inspections, see *Requesting and Scheduling Inspections*.
Permit Inspection Rescheduled	Generates a notification when the applicant or agency staff reschedule an inspection. For example, when the applicant or agency staff reschedule an inspection, the applicant, inspection contact, inspector, and inspection supervisor can receive a notification. For more information about rescheduling an inspection, see *Managing Inspections for an Agency* and *Rescheduling, Postponing, and Canceling Inspections*.
Permit Inspection Postponed	Generates a notification when the applicant or agency staff postpone an inspection indefinitely. Registered public users can only postpone inspections if allowed in the agency-level permit and business license options. For example, when the applicant or agency staff postpone an inspection, the applicant, inspection contact, inspector, and inspection supervisor can receive a notification. For more information about postponing an inspection, see *Rescheduling, Postponing, and Canceling Inspections*.
Permit Inspection Scheduled	Generates a notification when an inspection has been scheduled and assigned to an inspector. For example, when the inspection has been scheduled and assigned to the inspector, the inspector and inspection contact can receive an email notification. For more information about assigning an inspection, see *Managing Inspections for an Agency* and *Requesting and Scheduling Inspections*.

These Reference Entity attributes can be used in the permit inspection events for communications, with the exception of the Before Permit Inspection Saved event: Reference Entity Name, Reference Entity ID, Reference Entity Location, and Reference Entity Inspection attributes (Name, ID, and Description).

Payment History Resource

Communication Event Name	Communication Description
Payment Received	A successful payment triggers a notification configured using an email template.
Refund Notice	Enables the agency to trigger a template that generates a successful refund notification.

Permit Document Attachments

Communication Event Name	Communication Description
Permit Document Attached	Notifies agency staff when a document was uploaded by a contact with permit access for a permit when plan review or inspection information is not relevant.
Permit Document Attached for Inspector	Notifies inspectors that a document was uploaded for a permit inspection.
Permit Document Attached for Plan Coordinator	Notifies plan coordinators that a document was uploaded for a permit plan review cycle.
Permit Document Attached for Plan Reviewers	Notifies plan reviewers that a document was uploaded for a permit plan review cycle.
Permit Document Attached for Inspection Supervisor	Notifies inspection supervisors that a document was uploaded for a permit inspection.

Planning Application Document Attachments

Note: The Planning Application Document and Planning Application Plan Review Document resources and events are registered with the Business Rules Framework. For more information, see *Business Rules Framework Overview* and *Setting Up Business Rules*.

Communication Event Name	Communication Description
Planning Application Document Attached	Notifies agency staff when the applicant uploads a planning application document. The Planning Application Document resource contains planning application header data for communication template setup including these attributes: Assigned Planner and Created By in the Email, User Name, and User ID attribute groupings. There are no plan review attributes in the communication template or in the Business Rules Framework criteria.

Communication Event Name	Communication Description
Planning Application Document Attached for Plan Reviewers	Notifies plan coordinators and plan reviewers when the applicant uploads a planning application document for plan review. The Planning Application Plan Review Document resource contains planning application plan review cycle and reviewer data for communication template setup including these attributes: Assigned Planner and Plan Check Coordinator in the Email, User Name, and User ID attribute groupings; and Plan Reviewer List in the Email and User ID attribute groupings. The communication template and Business Rules Framework criteria include plan review cycle attributes.
Planning Missing Document	Planning application step is missing a required document.

Business License Workflow Communications

Communication Event Name	Communication Description
Business License 001 Business License 002 Business License 003 Business License 004 Business License 005	These delivered events are not associated with specific actions in the Public Sector system. Instead, they are generic events that are delivered for use with workflow. For example, you can use these events when configuring workflow to send notifications related to permit status changes. When you set up workflow in the Oracle Integration Cloud, you implement notifications by creating a workflow event that sends a communication event name, template name, and permit ID to the Communication Center. The Communication Center then takes care of sending the notification. See *Setting Up Process Definitions for Workflow*.

Permits Workflow Communications

Communication Event Name	Communication Description
Workflow 001 Workflow 002 Workflow 003 Workflow 004 Workflow 005	These delivered events are not associated with specific actions in the Public Sector system. Instead, they are generic events that are delivered for use with workflow. For example, you can use these events when configuring workflow to send notifications related to permit status changes. When you set up workflow in the Oracle Integration Cloud, you implement notifications by creating a workflow event that sends a communication event name, template name, and permit ID to the Communication Center. The Communication Center then takes care of sending the notification. See *Setting Up Process Definitions for Workflow*.

Planning and Zoning Workflow Communications

Communication Event Name	Communication Description
PNZ Workflow 001 PNZ Workflow 002	These delivered events are not associated with specific actions in the Public Sector system. Instead, they are generic events that are delivered for use with workflow. For example, you can use these events

Communication Event Name	Communication Description
PNZ Workflow 003 PNZ Workflow 004 PNZ Workflow 005	when configuring workflow to send notifications related to planning application status changes to applicants and owners. When you set up workflow in the Oracle Integration Cloud, you implement notifications by creating a workflow event that sends an communication event name, template name, and planning application ID to the Communication Center. The Communication Center then takes care of sending the notification. See *Setting Up Process Definitions for Workflow*.

Plan Review

The following communication events are provided for plan reviews.

> **Note:** This resource and events are registered with the Business Rules Framework. For more information, see *Business Rules Framework Overview* and *Setting Up Business Rules*.

Communication Event Name	Communication Description
Permit Plan Review Finalized	Generates a communication when a permit plan review is finalized.
Permit Plan Review Ready To Finalize	Generates a communication when a permit plan review is ready to be finalized.
Permit Plan Review Completed or Canceled	Generates a communication when a permit plan review is completed or canceled. **Note:** This event is also triggered when the permit associated with a plan review is withdrawn.
Planning Plan Review Finalized	Generates a communication when a planning application plan review is finalized.
Planning Plan Review Ready to Finalize	Generates a communication when a planning application plan review is ready to be finalized.
Planning Plan Review Completed or Canceled	Generates a communication when a planning application plan review is completed or canceled. **Note:** This event is also triggered when the planning application associated with a plan review is withdrawn.
Permit Plan Review Cycle Due Date Scheduled Event	Generates a communication when the plan review cycle due date approaches for a permit. This communication can be sent to all of the plan reviewers, the person who created the plan review, or to a manually entered email value.
Permit Plan Review Department Due Date Scheduled Event	Generates a communication when the plan reviewer due date approaches for a permit.

Communication Event Name	Communication Description
Planning Plan Review Cycle Due Date Scheduled Event	Generates a communication when the plan review cycle due date approaches for a planning preapplication or planning application. This communication can be sent to all of the plan reviewers, the person who created the plan review, or to a manually entered email value.
Planning Plan Review Department Due Date Scheduled Event	Generates a communication when the plan reviewer due date approaches for a planning preapplication or planning application.
Planning Activity Updated	Indicates that an activity is updated. Must be used within a workflow model.

For more information about plan review communications, see *Managing Plan Review Cycles*.

Business License

Business license communication events enable agencies to automatically send communication when the business license status changes. You need to set up Workflow tasks and the communication template to trigger communication events. The following communication events are provided for business licenses.

> **Note:** This resource and events are registered with the Business Rules Framework. For more information, see *Business Rules Framework Overview* and *Setting Up Business Rules*.

Communication Event Name	Communication Description
After Business License Application Submitted	After a business license application is submitted.
Before Business License Issuance	Before a business license certificate is issued.
Before Business License Application Submitted	Before a business license application is submitted.
Business Consultation Meeting Canceled	Notifies that the consultation meeting is canceled.
Business Consultation Meeting Scheduled	Notifies that the consultation meeting is scheduled on a tentative date.
Business Consultation Meeting Updated	Notifies when there is a change in the meeting subject, agenda, duration, or location.
Business Consultation Meeting Remove Invitees	Notifies that the invitee has been removed from the meeting.
Business Consultation Meeting Rescheduled	Notifies that the consultation meeting is rescheduled on a tentative date.

Communication Event Name	Communication Description
Business Consultation Meeting Invitee Added	Notifies that the invitee has been added to the consultation meeting.
Business License Application Canceled	Notifies that the Business License application is canceled.
Business License Consultation Application Withdrawn	Notifies that the Business License Consultation application is withdrawn.
Business License Application Canceled	Applicant receives email or alert notification when a business license is canceled.
Business License Application Withdrawn	Applicant receives email or alert notification when a business license is withdrawn.
Business License Inactivated	Notifies that the business license is inactivated.
Business License Reactivated	Notifies that the Business License is reactivated.
Business License Missing Document	Business License application step is missing a required document.
Business License Application and Consultation Updated	Initiates actions when a business license or consultation application is updated.
A specialist is assigned for the application	Notifies that the specialist has been assigned to the application.
A specialist is reassigned for the application	Notifies that the specialist has been reassigned to the application.
Business License Credential Expiration	Applicant and application contacts receive a notification that a credential associated with the business license has expired. This event is associated with a scheduled rule. See *Setting Up Credential Conditions*.
Expiring Business License by Location	Notifies that one or more Business Licenses are about to expire or expire at the location.
Complete Pending Renewal Application	Notifies that the pending renewal application should be completed and then submitted.
License Reporting Due	Indicates that license reporting is due.
License Reporting Notice	Indicates that license reporting is about to be due.

Business License Document Attachments

The following communication events are provided for business license inspections.

Note: This resource and events are registered with the Business Rules Framework. For more information, see *Business Rules Framework Overview* and *Setting Up Business Rules*.

Communication Event Name	Communication Description
Business License Document Attached	Notifies agency staff when a document was uploaded by a contact with business license access for a business license activity when inspection information is not relevant.
Business License Document Attached for Inspector	Notifies business license inspectors that a document was uploaded for a business license inspection.
Business License Document Attached for Inspection Supervisor	Notifies business license inspection supervisors that a document was uploaded for a business license inspection.

Business License Inspections

The following communication events are provided for business license inspections.

Note: This resource and events are registered with the Business Rules Framework. For more information, see *Business Rules Framework Overview* and *Setting Up Business Rules*.

Note: For information about inspection communications that are suppressed when an inspection type is designated as *Unannounced,* see *Setting Up Inspection Types*.

Communication Event Name	Communication Description
Business License Final Inspection Passed	Generates a notification when an inspector submits the final inspection for a business license with a passing result. For example, when an inspector submits the final inspection for a business license with a passing result, the agency staff or applicant receives a notification. For more information, see *Performing Inspections on the Inspector Application*.
Business License Inspection Canceled	Generates a notification when the applicant or agency staff cancel an inspection. For example, when the applicant or agency staff cancel an inspection, the applicant, inspection contact, inspector, and inspection supervisor can receive a notification. For more information, see *Managing Inspections for an Agency* and *Managing Inspections for a Business License Application*. **Note:** This event is also triggered when the permit associated with an inspection is withdrawn or expires.
Business License Inspection Complete	Generates a notification when the inspector completes an inspection and submits the inspection results or when inspections are updated from *Scheduled* to *Completed* status. For example, when the inspector completes any inspection and submits the inspection results, the applicant or agency staff receive a notification that the inspection is complete, regardless of the inspection result.

Communication Event Name	Communication Description
	For more information, see *Submitting Inspection Results*.
Business License Inspection ETA Updated	Generates a notification when the inspector updates the estimated time of arrival at an inspection site. For example, when the inspector updates the estimated time of arrival at an inspection site for a scheduled inspection, the contact at the inspection location receives a notification. For more information, see *Performing Inspections on the Inspector Application*.
Business License Inspection Requested	Generates a notification when an inspection has been requested. For example, when an inspection request has been created, the agency staff can receive an email notification. For more information about requesting inspections, see *Requesting and Scheduling Inspections*.
Business License Inspection Rescheduled	Generates a notification when the applicant or agency staff reschedule an inspection. For example, when the applicant or agency staff reschedule an inspection, the applicant, inspection contact, inspector, and inspection supervisor can receive a notification. For more information about rescheduling an inspection, see *Managing Inspections for an Agency* and *Requesting and Scheduling Inspections*.
Business License Inspection Postponed	Generates a notification when the applicant or agency staff postpone an inspection indefinitely. Registered public users can only postpone inspections if allowed in the agency-level permit and business license options. For example, when the applicant or agency staff postpone an inspection, the applicant, inspection contact, inspector, and inspection supervisor can receive a notification. For more information about postponing an inspection, see *Modifying Inspection Requests*.
Business License Inspection Scheduled	Generates a notification when an inspection has been scheduled and assigned to an inspector. For example, when the inspection has been scheduled and assigned to the inspector, the inspector and inspection contact can receive an email notification. For more information about assigning an inspection, see *Managing Inspections for an Agency* and *Assigning Inspections*.
Before Business License Inspection Saved	Before a business license inspection is saved.

Code Enforcement

The following communication events are provided for code enforcement.

> **Note:** This resource and events are registered with the Business Rules Framework. For more information, see *Business Rules Framework Overview* and *Setting Up Business Rules*.

Communication Event Name	Communication Description
Incident Location Updated	The location of the incident is updated.
Incident Assigned to Officer	The incident is assigned to an officer.
Incident Priority Updated	The priority of the incident is updated.
Incident Status Updated	The status of the incident is updated.
Incident Assigned to Technician	The incident is assigned to a technician.
Case Created	The case is created.
Case Location Updated	The location of the case is updated.
Case Status Updated	The status of the case is updated.
Code Enforcement Case Document Attached	Applicant attached a code enforcement case document.
Code Enforcement Case Fee Due Date Scheduled Event	Schedule rule event based on a code enforcement case fee due date.
Code Enforcement Violation	Scheduled rule event based on code enforcement violation.
Responsible Party's Case Access Updated	Responsible party's access to case is approved or denied.

User Profile Notifications

The User Profile Notifications resource provides the following communication events.

Communication Event Name	Communication Description
Welcome Business Profile	Sends a welcome notification and instructions to a permit application who creates a new business profile.
Welcome Personal Profile	Sends a welcome notification and instructions to a permit applicant who creates a new personal profile.
User Account Information Changed	Notifies a public user when the user's account is updated by agency personnel.
User Profile Information Changed	Notifies a public user when the user's account profile is updated by agency personnel.

Setting Up Communication Templates

Communication events trigger delivery of different communication types to various users. The agency defines the content, format, and recipients using communication templates.

Agency users add, modify, and delete communication templates on the Communication Event Details page.

The communication events themselves are delivered with Oracle Permitting and Licensing. For a partial list of the available communication events, see *Delivered Communication Events*.

Adding Communication Templates

1. Select **Communication Setup** > **Communication Events** in the navigator.
2. Click the event on the Communication Event page for which you want to add a template.
3. On the Communication Event Details page, click **Add** in the Communication Template section.
4. On the Communication Template Details page, enter a unique identifier code and name for the communication template.

   To make the code unique, Oracle recommends that you create it using a portion of the communication event name. For example, you might use *SUB01* for the email template of the Application Submit communication event. This is because communication template codes must be unique across all communication events. If you create a communication template for one event that has the same code as a template for another event, you will receive an error when you try to save it.
5. Enter values or click Insert (+) and choose from the list to set up the template:

Page Element	Description
Channel Type	Specify the type of communication that this template generates. Values are: - *Alert:* Generates text that is displayed to users when they log in to the application. **Note:** You only use this channel type when setting up the General Alert (PSC_GENERIC_ALERT) communication event. - *Email:* Generates an email that is sent to users. - *Emails and Notifications:* Generates both an email and a notification with the same message. - *Notification:* Generates a notification that appears when users click the notification icon in the application. - *Text:* Generates a short message service (SMS) text message that is sent to users. Currently, the text channel type is available only for ad hoc communications. Text for events will be supported in the future. **Note:** The fields that are available to define on this page vary depending on the channel type and display format that you select.

Page Element	Description
Visibility	Select which users can see this communication listed on the application's Communication Details page. All communications can be accessed by agency staff. Values are: - *Applicant and contacts*: Includes agency staff, the applicant, and contacts added to the transaction. - *Agency staff only*: Includes only agency staff. - *Applicant*: Includes agency staff and the applicant on the transaction.
Enabled	Turn this switch on to activate the communication template. When this switch is turned off, the application does not generate the communication when the associated event is triggered.
Start Date Time and **End Date Time**	Enter the time period for which the alert is displayed. These fields appear only for the *Alert* channel type.
Display Format	Select the format of the email or notification that this communication template generates. Values are: - *HTML*: Displays rich text, links, and images - *Text*: Displays plain, unformatted text. This field appears only for the email or notification channel types.
Add Attribute	These fields enable you to insert variables for attributes into your communications. You select the field and the attribute that you want to insert in that field, and click **Insert** to enter a variable for that attribute. For more information about inserting variables for attributes, including resource and contact attributes, see *Using Attributes in Communication Templates*.
Add Grid	Add a grid with attributes from a related resource in the message body. This button appears only for the email and notification channel types, and the display format must be *HTML*. For more information, see *Using Attributes in Communication Templates*.
Attachments 	Click + to add an attachment from your local device. After adding an attachment, you can click the Actions icon to view attachment details, download attachments, or delete attachments. **Note:** - The maximum number of attachments in a single email is 5. - The maximum total size of an email, including all attachments, can't be more than 10 MB.

Page Element	Description
	○ If the total attachment size exceeds this value, the email will not be sent to the recipients even though it is saved in OPAL communications. If the communication has a report attached that has been generated dynamically by a business rule in the Business Rules Framework, when adding the attachment, select the output repository where the generated report resides. For more information, see *Setting Up Generate Report Actions*.
To 	Click the Insert button to view a drop-down menu from which you can search for and select recipients. The display shows the options and the count of values available, which are determined by the transaction you are working with and the channel type you selected in the Template Attributes section. For example, when you select a value here for the email channel type, the email ID is inserted into the field. You can delete the ID using the X icon, but you cannot edit it. Enter or click + and select the email addresses, user IDs, or phone numbers of the people or organizations that you want to send the communication to. Enter email addresses for the *Email* and *Emails and Notifications* channel types; user IDs for the *Alert, Emails and Notifications,* and *Notification* channel types; and phone numbers for the *Text* channel type. For web form response events, include the ${Webform Reply-To} attribute in the To address. For more information about configuring web form responses, see *Setting Up Agency-Level Email*.
Cc and **Bcc** 	Enter or click + and select the email addresses of the people or organizations that you want to receive a copy or blind copy of the communication. These fields appear only for the *Email* and *Emails and Notifications* channel types.
From 	Enter or click + and select the email address, user ID, or phone number of the person or organization who is sending the generated message. For texts, select the phone number of the person or organization who is sending the generated text message from the drop-down list. The numbers are retrieved from Twilio, a third-party messaging service.
Subject 	Enter a brief description of the purpose and content of the communication, or click + and select from the list of transaction attributes. This field appears only for email or notification channel types. **Note:** When configuring a business license communication, agency users can select the *Business URL* attribute that provides a link to open the associated business entity Overview page. The *Business URL* option is available under *Transaction attributes* of the **Subject**.

Page Element	Description
Message Body	Enter the main body text of the communication. For the *Alerts* and *Text* channel types and emails and notifications using the *Text* display format, you can enter only plain, unformatted text. For emails and notifications using the *HTML* display format, you can enter rich text, links, and images, or click + and select from the list of transaction attributes. **Note:** ○ When you enter a website address as a text or an image link, the system verifies if it is present in the safe domains list. If not, add it as a safe domain. Only links of safe domains can be included in the rich text editor. See *Setting Up Safe Domains*. ○ When configuring a business license communication, agency users can select the *Business URL* attribute that provides a link to open the associated business entity Overview page. The *Business URL* option is available under *Transaction attributes* of the **Message Body**.
Remarks	Enter any additional information about the communication template. These remarks are not included in the generated communication.

6. Click **Save**.

Considering Contact Attribute Source for Multi-Form Intake Applications

When setting up communications to contacts added to a single intake form containing multiple application types, such as business license types, it is recommended to consider the source of the contact information and configure you communication templates accordingly.

Note: Configuring single intake forms to contain multiple application types is supported only for Business Licenses currently.

When selecting the **To** attribute in the Email Attributes section of a communication template, you can select the *Contact email* or *Transaction attributes* as sources for contact information to which notifications can be sent. In the case of a single intake form containing multiple business license types, the information from the General Information Contacts field group doesn't get stored in the system until the intake form is successfully submitted. So, for a pending application, the attributes selected under the *Contact email* option can't be sent notifications. However, the contact attributes selected from the *Transaction attributes* option will exist in the case of a pending application. For example, if your agency wants to send a notification of a pending application about to expire to the applicant, select *Transaction attributes, Applicant 1 email.*

Modifying Communication Templates

1. Select **Communication Setup** > **Communication Events**.
2. Click the row on the Communication Event page for which you want to modify a template.

3. Click the row in the Communication Template grid that you want to modify.
4. On the Communication Template Details page you can:
    - Click **Clone** to create a copy of the communication template.
    - Update the communication template field values.

    > **Note:** You cannot edit the **Code** or **Channel Type** fields.
5. Click **Save**.

Deleting Communication Templates

1. Select **Communication Setup** > **Communication Events**.
2. Click the row on the Communication Event page for which you want to delete templates.
3. Click **Edit** in the Communication Template grid.
4. Select the checkboxes next to all the communication templates that you want to delete.
5. Click **Delete**. You will be prompted to confirm the permanent deletion.

Using Attributes in Communication Templates

You can add attributes to your communication templates when defining the recipients and content.

You insert attributes into your communication templates on the Communication Event Details page, which you access by selecting an event from the list on the Communication Event page. You can select from attributes in the resource for the event you're working with, contact type attributes, and additional attributes available from other resources.

> **Note:** Contact type attributes are not available for ad hoc emails, notifications, and texts in the Communication Center because the communication must be associated with a transaction to populate contacts. Parent resource attributes from an event are also not available in the ad hoc communications template in the Communication Center.

The endpoint attributes of communication service REST APIs correspond to the variables you use to set up a communication template.

Adding Predefined Variables for Attributes

When you create a template, you can insert variables for attributes into the message fields. Predefined variables for attributes are available to use for communications associated with any event. For example, using the contact types in the communication template, you can send communication to the contacts listed on the application.

You insert attributes listed under *Resource attributes* to retrieve values you find in fields on applications that are referenced in the parent resource. *Contact type attributes* are especially designed to gather contact information from applications referenced in the resource of the selected event.

1. On the Communications Event Details page, go to the **Add Attributes** fields.
2. Select the field and the attribute that you want to add to the field.
3. Click **Insert**.

For example, if you select *Body* and the *Permit ID* attribute, and click **Insert**, the *${Permit ID}* variable is inserted into the **Message Body** field of the communication template. When the application generates a communication using the

template with the variable attribute, the permit ID that is associated with the triggered communication event is inserted into the body text.

Here's an example of a letter template and the output:

Example Expressions with Variable Attributes	Output
Dear **${Payer First Name} ${Payer Last Name}**, Thank you for your payment of **${CommunicationUtils.format('amount', ${Payment Amount},'9,999,999.99')}** for permit **${Permit Id}**, which was received on **${CommunicationUtils.format('date', ${Payment Date})}**. If you have any questions please contact the office between 9:00 a.m. and 4:30 p.m., Monday through Friday.	Dear John Smith, Thank you for your payment of $835.00 for permit REM-2017-000035, which was received on 15-AUG-2017. If you have any questions please contact the office between 9:00 a.m. and 4:30 p.m., Monday through Friday.

The communication engine supports the following predefined functions for variable attributes in your templates.

Function	Description	Variable Attribute	Output
Current Date	Returns the system date in the agency time zone without the time. There is no need to use the format utility. **Note:** The Current Date is internally formatted using the formatDate() function based on the agency time zone. Using an additional formatDate() function causes an error.	${Current Date}	For example, 2016-04-25.
Current Date Time	Returns the system date in the agency time zone with the time. There is no need to use the format utility. **Note:** The Current Date Time is internally formatted using the formatDate() function based on the agency time zone. Using an additional formatDate() function causes an error.	${Current Date Time}	For example, 2016-04-25 23:44:52.0.

Function	Description	Variable Attribute	Output
Format Number	Formats the number to the given format. The formats supported are Java Number Formats.	${CommunicationUtils.format('num ${Fees Total Amount},'###,###,###')} To support backward compatibility, the following format is currently available: ${CommunicationUtils.formatNumb '9,999,999')}	For example, 46,064.
Format Date and Time	Formats the date and time in the agency time zone with the given format. The supported formats use Java Simple Date Format.	Example 1: ${CommunicationUtils.format('datet ${Creation Date},'yyyy-MM-dd HH:mm:ss')} Example 2: ${CommunicationUtils.format('datet ${Creation Date})} Example 3: ${CommunicationUtils.format('date' ${Creation Date},'yyyy-MM-dd')} To support backward compatibility, the following formats are currently available: Example 4: ${CommunicationUtils.formatDate($ Date},'yyyy-MM-dd HH:mm:ss')} Example 5: ${CommunicationUtils.formatDate($ Date})}	Example 1 output: 2019-11-22 20:04:00. Example 2 output: 11/22/19 8:04 PM. Example 3 output: 2019-11-22 Example 4 output: 2019-11-22 20:04:00 Example 5 output: 11/22/19
Format Amount	Formats the amount into the default local currency format.	Example 1: ${CommunicationUtils.format('amou ${Fees Total Amount})} Example 2: ${CommunicationUtils.format('am ${Fees Total Amount},'en_US')} To support backward compatibility, the following format is currently available: Example 3: ${CommunicationUtils.formatAmou	All the examples produce the output: $1,345,667.00
Link	Provides the hyperlink from the message.	Input is expected to be the link URL and the label that you want to display: ${CommunicationUtils.format('url', ${URL},${Label})}	The examples produce the output: *Setting Up Communication Templates*.

Function	Description	Variable Attribute	Output
		${CommunicationUtils.format('url', ${URL},'Setting Up Communication Events')} To support backward compatibility, the following format is currently available: ${CommunicationUtils.setLink(${Url ${Label})}	
Add Grid	Inserts a table in the message body	This applies to specific communication templates where the Add Grid functionality is enabled. ${CommunicationUtils.format('grid', 'publicSectorFeeDues', 'Assessed Date, Currency Code','${AssessedDate}, ${FeeCurrencyCode}')} To support backward compatibility, the following format is currently available: ${CommunicationUtils.insertGrid('p 'Assessed Date, Currency Code','${AssessedDate}, ${FeeCurrencyCode}')}	Inserts a table inside the communication message.

Guidelines for Using Formatting Functions

When you are creating or updating communication templates, follow these guidelines to review and edit the usage of the formatting functions such as setLink(), formatAmount(), formatDate(), and insertGrid() in the message:

- *Creating New Template*: You must use only format() functions as defined in the above table.
- *Updating Existing Template*: Currently, the system supports single references to these formatting functions for a given communication. The communication will not be triggered if there are multiple usages of these formatting functions within the communication definition. So, to avoid any errors in the communication delivery, you must update the templates to ensure the usage of only format() functions.
- *Nesting format() functions*: Currently not supported.
- *Format() to display grid*: This is a special format function that handles the date and amount attribute formatting as per agency setup options. So, there is no additional format() allowed for grid attributes.
- *Using the $ symbol in message*: To include a '$' character into the message text, you prefix the '$' with the character '\' (backslash key). This enables the communication processor to read the '$' character as a string, and not as an attribute.

Using Contact Type Attributes

After your agency sets up contact types, you can insert variables for contact type attributes when composing communications for contacts by type, as well as for primary contacts or all contacts. For example, you might set up the

system to send contractors a copy of the email sent when a permit or planning application is withdrawn. In this case, you would create a template for a withdrawn event with an *Email* or *Emails and Notifications* channel type, and insert the email variable for the *Contractor* contact type attribute in the email **Cc** field. You can insert variables for contact attributes into the address fields as well as the subject line and message body.

Here are the available contact type attributes and examples of the variables:

- **Email**: Inserts a variable for the email address of contacts with the specified contact type. Select this attribute to send emails. This example shows the variable for email addresses of all contacts:

  ```
  ${CommunicationUtils.format('contact','publicSectorApplicationContactTypes','AllContacts','${ContactEmailAddress
  ```

- **Phone**: Inserts a variable for the phone number of contacts with the specified contact type. Select this attribute to send texts. This example shows the variable for phone numbers of primary contacts:

  ```
  ${CommunicationUtils.format('contact','publicSectorApplicationContactTypes','Primary
  Contact','${ContactPhoneNumber}')},
  ```

- **User ID**: Inserts a variable for the user ID of contacts with the specified contact type. Select this attribute to send notifications. This example shows the variable for user IDs of contractors:

  ```
  ${CommunicationUtils.format('contact','publicSectorApplicationContactTypes','Contractor','${ContactUserId}')},
  ```

- **User Name**: Inserts a variable for the name of contacts with the specified contact type. You can select this attribute to insert the user's name in the message body to personalize the communication, such as "Dear Linda." This example shows the variable for user names of business owners:

  ```
  ${CommunicationUtils.format('contact','publicSectorApplicationContactTypes','Business
  Owner','${ContactUserName}')},
  ```

For information about setting up contact types, see *Setting Up Contact Types*.

Inserting Additional Attributes in Templates

Some attributes are available across resources for you to use when creating templates. You can insert a grid in the message body that contains the additional attributes. This option is available only for events in the Permits Workflow Communication resource. Formatting is not supported for related resource attributes.

The data for the attributes are displayed in the generated communication as a table. To add the grid to your template:

1. Select **Communication Setup** > **Communication Events** in the Navigator.
2. On the Communication Event page, select an event in the Permits Workflow Communication resource for which you want to add a template.
3. Click **Add** in the Communication Template grid on the Communication Event Details page.
4. Set up the communication properties as described in *Setting Up Communication Templates*.

   You must use the *Emails, Emails and Notifications,* or *Notification* channel type, and the MIME type must be *HTML* to render the grid in the generated communication.
5. Click **Add Grid**. Add Grid is only available for certain communications events.

   Use the Sequence Number, Sort By, and URL Display Name to order the attributes in the grid. You can sort Ascending or Descending for only one attribute.

   If the Attribute Name is a URL, you can create a URL Display Label for it which will create a clickable link.
6. On the Define Grid Attributes page, select up to 5 attributes that you want to appear in the generated table. The attribute source name appears on the page.

7. Click **Insert Grid in Message**.

For example, if you select the *Fee Description, Fee Item,* and *Fee Record* attributes, and click **Insert Grid in Message**, the following is inserted into the **Message Body** field of the communication template:

```
${CommunicationUtils.format('grid','publicSectorFeeDues','Fee Description,Fee Item,Fee
Record','${Feedescription},${FeeItemId},${FeeRecordKey}')}
```

Each attribute name is displayed in the generated email or notification as a column title, and record values populate each row. If you want to change the order of the columns, you can manually move the attributes around in the template.

Setting Up Fee Notices

Agencies can set up fee notices for permit and planning applications containing a combined list of fees due to be sent on a regular basis.

The automated process sends notices with fees for an application consolidated into a list in each notification. Every time a fee with a *Due* status is added or recalculated, the application is identified as updated in the system. The notice with combined fees is sent out to the designated recipient on the schedule you define.

Fees are added to the notice for an application based on the date when:

- A fee with a *Due* status is added or changed.
- The fee status is changed to *Due*.
- The amount of a fee with a *Due* status is recalculated or changed.

You'll need a communication template with a fees grid for the notice, scheduled rules setup in the Business Rules Framework, and processing instructions for communication frequency.

Create a Communication Template

You set up a communication template specifically for the consolidated fees notice using designated communication events and variables for fee attributes:

1. On the Communication Event page, select the *Scheduled Rule: Updated Permit Fees Due* or *Scheduled Rule: Updated Planning Application Fees Due* communication event to create the template.

   For more information, see *Setting Up Communication Templates*.
2. In the message body, insert variables for fee attributes in a grid format. Click **Add Grid** and select the fee due attributes, such as *Fee Item, Assessed Date,* and *Amount*.

   For more information, see "Inserting Additional Attributes in Templates" in *Using Attributes in Communication Templates*.

Set Up a Scheduled Rule

You configure a scheduled rule in the Business Rules Framework that identifies the permit or planning application for which the fee is updated and specifies the communication template to use. For more information about setting up scheduled rules, see *Setting Up Scheduled Rules*.

After you create a communication template, set up the rule:

1. Select the **Scheduled Rules** tile in the Business Rules Framework and select a business objects, *Permits Workflow Communications* or *Planning and Zoning Workflow Communications*.
2. Add the following criteria in the **Criteria** section of the rule to identify the permit or planning application for which the fee is updated in the defined time frame:
   - *Fees Balance Due > 0* (includes only due fees) or
     Fees Outstanding Balance > 0 (includes both due and pending fees)
   - *Fees Due Updated Date = ${Current Date}* (for daily notices) or
     Fees Due Updated Date ≥ ${Current Date} - 7 (for weekly notices)

   > **Note:** You must enter both criteria to avoid notices sent whether fees are updated or not.

   For more information, see *Setting Up Business Rule Criteria*.
3. In the **Action** section of the rule, select *Send Communication* and configure the action to use the template you already created. For more information, see *Setting Up Send Communication Actions*.

Set Up a Scheduled Process

The Process Monitor uses the scheduled rule set up in the Business Rules Framework to initiate batch processing on a regular basis. The process checks for any change in fee items with a status of *Due* for a permit or planning application and sends the communications on the schedule you define here.

After you configure the communication template and rule, set up processing instructions for the rule:

1. To schedule the rule directly in the Process Monitor from the Business Rules Framework, click the **Schedule Rules** link on the Scheduled Rule Details page. You can also use the **Process Monitor** link to set up a new Schedule Rules process or see all of the scheduled and running processes.
2. Enter values on the Schedule Rules page:

Tab	Values
Parameters	Select the scheduled rule that you set up in Business Rules Framework.
Schedule	Run: *Using a schedule* Frequency for daily notices: *Daily* and *Every 1 Day* Frequency for weekly notices: *Weekly* and *Every 1 Week* Start and End Date: Enter agency-determined values
Notification	Not applicable

3. Click **Submit**.

For more information about using the Process Monitor, see *Using the Process Monitor*.

Setting Up Notifications for Plan Review Due Dates

You can set up communications to notify reviewers and plan coordinators about plan review cycle or department due dates. Your emails and notifications for planning applications can also include the assigned planner.

Configure a communication template and scheduled rule to send either an in-app notification or email, on or before the plan review due date. You can also configure the rule to schedule communications after the due date for overdue reviews. The Business Rules Framework uses scheduled rules based on the plan review cycle due date and reviewer due dates to determine when a communication is sent.

For information about other plan review communication events, such as when a plan review is finalized, completed, or canceled, see *Delivered Communication Events*.

Communication Templates for Due Dates

Communication events work in conjunction with the scheduled rule in the Business Rules Framework to send the notifications. Before you configure the scheduled rule, set up the communication templates for the delivered plan review due date events.

Communication Event	Description
Permit Plan Review Cycle Due Date Scheduled Event	Generates a communication when the plan review cycle due date approaches for a permit. This communication can be sent to all of the plan reviewers, the person who created the plan review, or a manually entered email value.
Permit Plan Review Department Due Date Scheduled Event	Generates a communication when the plan reviewer due date approaches for a permit. This communication can be sent to all of the plan reviewers, the person who created the plan review, or a manually entered email value.
Planning Plan Review Cycle Due Date Scheduled Event	Generates a communication when the plan review cycle due date approaches for a planning preapplication or planning application. This communication can be sent to all of the plan reviewers, the person who created the plan review, the assigned planner, or a manually entered email value.
Planning Plan Review Department Due Date Scheduled Event	Generates a communication when the plan reviewer due date approaches for a planning preapplication or planning application. This communication can be sent to all of the plan reviewers, the person who created the plan review, the assigned planner, or a manually entered email value.

For sending notifications based on plan review cycle due dates, refer to the template attributes for plan check coordinators and reviewers here:

Template Attribute Name	Field
Assigned Planner Email	The assigned planner email. Only available for the planning plan review event.

Template Attribute Name	Field
Assigned Planner Name	The assigned planner name. Only available for the planning plan review event.
Assigned Planner User ID	The assigned planner user ID. Only available for the planning plan review event.
Plan Check Coordinator Email	The **Created By** email.
Plan Check Coordinator Name	The **Created By** name.
Plan Check Coordinator User ID	The **Created By** user ID.
Plan Reviewer Email List	The email list of all assigned reviewers.
Plan Reviewer User ID List	The user ID list of all assigned reviewers.

For sending notifications based on reviewer departmental due dates, refer to the template attributes for plan check coordinators and reviewers here:

Template Attribute Name	Field
Assigned Planner Email	The assigned planner email. Only available for the planning plan review event.
Assigned Planner Name	The assigned planner name. Only available for the planning plan review event.
Assigned Planner User ID	The assigned planner user ID. Only available for the planning plan review event.
Plan Check Coordinator Email	The **Created By** email.
Plan Check Coordinator Name	The **Created By** name.
Plan Check Coordinator User ID	The **Created By** user ID.
Plan Reviewer Email	The email of the reviewer on the department row.
Plan Reviewer Name	The name of the reviewer on the department row.
Plan Reviewer User ID	The user ID of the reviewer on the department row.

For more detailed information about configuring templates, see *Setting Up Communication Templates*.

Scheduled Rules

After creating templates, add new scheduled rules in the Business Rules Framework for the business objects that are used to send plan review due date communications.

1. Select a business object:
    - *Permit Plan Review Cycle Due Date*
    - *Permit Plan Reviewer Due Date*
    - *Planning Application Plan Review Cycle Due Date*
    - *Planning Application Plan Reviewer Due Date*
2. Enter criteria.

    Configure scheduled rules for each business object to include criteria for sending a notification. For example, you can enter these criteria for a reviewer due date rule:

Criteria Sequence	Field	Operator	Value	Description
1	Plan Reviewer Due Date	Equals	${Current Date}+4	The due date is within four days of the current date.
2	Plan Reviewer Review Status	Equals	In Progress	The review is in progress.

    To send the communication on the day the plan review is due, enter this value in row 1: *${Current Date}*.
3. Configure the action.

    Select the *Send Communication* action and the communication template that corresponds to the business object.
4. Schedule the scheduled rule.

    Select the rule name in the **Parameters** tab. On the **Schedule** tab, select *As soon as possible* in the **Run** field to send the notification once. To send the notification on a regular basis, select *Using a schedule* in the **Run** field and provide a frequency and start date.

For more information about setting up scheduled rules, see *Setting Up Scheduled Rules*

13 Setting Up Analytics

Setting Up Reports

The report parameters that you define filter the data that is generated for the reports. You can use delivered or provide customized reports.

For reports initiated from within Oracle Permitting and Licensing, you add and modify report IDs and configuration details, which includes adding, modifying, and deleting report parameters, on the Report Configuration Details page.

For a list of delivered reports, their descriptions, and where you can find them, see *Permitting and Licensing Analytics*.

You can also create your own reports in Oracle BI Publisher and allow users to access them through the available report generation buttons. For example, users with appropriate permissions can click the **Print** button on some application pages, such as the Print Deposit Slip page or the Inspection Detail page in the permit application details.

For more information on modifying and creating analytics and reports, see the Oracle Applications Cloud documentation: *Creating and Administering Analytics and Reports*.

Adding Report Configuration Details

You can add a report in addition to the delivered reports.

1. Select the Setup and Maintenance tile on the Agency Springboard to access Functional Setup Manager.
2. From the Setup drop-down list, select your offering.
3. Select Analytics and Reporting from Functional Areas and then select the Manage Report Configurations task.
4. On the Report Configuration page, click Add.
5. Enter values for the following fields:

Page Elements	Definition
Report ID and **Description**	Enter an identifier and description of the report.
Path	Enter a path to the desired report. For example, the path for the Inspection Summary report in the Oracle Business Intelligence (BI) Catalog is */shared/Public Sector/Inspections/InspectionSummary.xdo*.
Output Format	Select *PDF* or *RTF* to indicate the format of the generated report.
Report Category	Select a product area to classify the report.
Available for Rules Framework Action	Turn on if you want your report to be available to be generated based on a Business Rules Framework rule.

Page Elements	Definition
	For more information on generating reports using the Business Rules Framework, see *Setting Up Generate Report Actions*

6. Click **Save**.

Updating Report Configuration Details

1. On the Report Configuration page, select the row for the report you want to modify.
2. On the Report Configuration Details page, you can:
   - Update the description.
   - Enter the BI Catalog path for the report. For example, the path for the Inspection Summary report is */shared/Public Sector/Inspections/InspectionSummary.xdo*.

     If you create your own report, you can point the existing report generation buttons on the application pages to your custom report using this path.
   - Select the output format, such as *HTML*, *PDF*, or *RTF*.
   - Select the report category, such as *Incident*, *Planning Application*, and so on.
   - Turn on **Available for Rules Framework Action** if you want your report to be available for being generated based on a Business Rules Framework rule.
3. Click **Save**.

Adding Report Parameters

1. On the Report Configuration page, select the row for the report for which you want to add a parameter.
2. On the Report Configuration Details page, click **Add** in the Parameters grid.
3. Enter values for the following fields:

Page Elements	Definition
Parameter ID and **Parameter Name**	Enter a unique ID and name for the report parameter.
Parameter Data Type	Enter the data type for the report parameter.

4. Click **Save**.

Modifying or Deleting Report Parameters

1. On the Report Configuration page, select the row for the report you want to modify.
2. On the Report Configuration Details page click the row in the Parameters grid that you want to modify.
3. On the Parameter Details page, you can:
   - Update the report parameter field values.
   - Delete the report parameter. You will be prompted to confirm the permanent deletion.

4. Click **Save**.

Setting Up Dashboards

You add, modify, and delete dashboard configurations on the Dashboard Configurations page.

Dashboards are a collection of analyses grouped together to present data. A dashboard contains analyses and prompts which filter information and other objects to present on one or more pages.

Dashboard Configuration enables you to configure existing out-of-the-box OTBI dashboards or custom dashboards created by the agency. They are available in both Reports and Analytics and the Permitting and Licensing Dashboards workareas.

For a list of delivered dashboards and their descriptions, see *Permitting and Licensing Analytics*.

Adding a Dashboard Configuration

1. Select the **Setup and Maintenance** tile on the Agency Springboard to access Functional Setup Manager.
2. From the **Setup** drop-down list, select your offering.
3. Select Analytics and Reporting from **Functional Areas** and then select the Manage Dashboard Configuration task.
4. On the **Dashboard Configuration** page, click **Add**.
5. On the **New dashboard configuration** drawer, enter values for the following fields:

Page Element	Description
Dashboard ID	Enter a unique name for the dashboard.
Description	Enter a description of the dashboard
Path	Enter the Oracle Business Intelligence (BI) Catalog portal path for the dashboard. For example, the portal path for the Permits dashboard is *%2Fshared%2FPublic%20Sector%2F_portal %2FPublic%20Sector&page=Permits*.
Sort Order	Enter a unique integer in increasing order of value. This information is used to display the configured dashboards in ascending order under the Reports and Analytics button.
Enabled	Turn on this switch to activate this dashboard.

6. Click **Save**.

You can access configured dashboards by clicking the **Reports and Analytics** button and selecting the dashboard link in the header on the Agency Springboard.

Modifying or Deleting a Dashboard Configuration

1. On the Dashboard Configuration page, select the configuration that you want to modify.
2. On the Dashboard configuration details drawer, you can:
    - Update the dashboard configuration field values.

      Note: You cannot edit the **Dashboard ID**.

    - Delete the dashboard configuration. You will be prompted to confirm the permanent deletion.
3. Click **Save**.

Creating and Editing Dashboards

If you are an advanced user and administrator who wants to modify and create analytics and reports, and perform generic setup and maintenance tasks for business intelligence that apply to some or all product families, see Oracle Applications Cloud documentation: "Analyses, Reports, and Dashboards Modification" in *Creating and Administering Analytics and Reports*.

Listing of Prebuilt Analytics

This reference points to the list of prebuilt analytics for Oracle Permitting and Licensing.

Your Permitting and Licensing applications come with a variety of prebuilt analytics for your users. Use the prebuilt analytics right out of the box, or make a copy and modify them however you like. See the Related Topics for a link to the analytics listing in downloadable format.

Related Topics

- Oracle Permitting and Licensing Reports and Analyses

Permitting and Licensing Analytics

Analyze your agency and key performance indicators with analytics, reports, and interactive dashboards, which you can access through transactional pages, the Reports and Analytics workarea, or the business intelligence (BI) catalog.

You can find information about the BI reports and dashboards for Oracle Permitting and Licensing here.

For a complete list of delivered analytics, see the *Listing of Prebuilt Analytics*.

There are different ways to view and work with your analytics and reports. You view analytics, dashboards, and reports in the course of your work on your usual pages. You can also find them on the Reports and Analytics workarea page or in the BI catalog. Click the **Browse Catalog** button to access reports and dashboards in the catalog. For information about using the Reports and Analytics workarea, see *Generating Reports*.

For information about hiding access from registered public users, see the security topics for implementation in My Oracle Support (Doc ID 2730290.1).

This table lists the delivered reports for Oracle Permitting and Licensing and where you can find them.

Report Name	Description	Location
Building Permit	Displays permit-related information.	• Overview page of the permit record details See *Viewing the Permit Overview*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Permits**
Business License Certificate	Displays the generated business license certificate.	• Overview page of the issued business license See *Viewing the Business License*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Business License**
Case Timeline	Displays all the Code Enforcement events associated with a particular case in a chronological order.	• Timeline page See *Working with Case Timeline*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Code Enforcement** > **Cases**)
Cashier Session Reconciliation	Provides details about cashier session reconciliation activity.	• Reconcile Cashier Session page See *Reconciling Cashier Sessions*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Billing and Payments**
Citation Notice	Displays information about the code violation along with following details: • Corrective actions • Compliance date • Appeal by date • Citation fees • Citation fees payment due date. This report is sent to the party responsible for the reported violation.	• Notice of Citation page See *Using the Code Technician Worklist*. • Citations page See *Working with Citations*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Code Enforcement** > **Notices**)
Conditions of Approval	Displays the conditions of approval associated with a planning application, including a description of the work, the assigned planner, and the conditions of approval.	• Conditions of Approval page See *Working with Conditions of Approval*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Planning Application**
Deposit Slip	Lists deposit information.	• Print Deposit Slip page See *Printing Deposit Slips*.

Report Name	Description	Location
		• Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Billing and Payments**
Health Metrics Report	Health metric based insight into Permits, Planning Applications and Business License transactions based on their backlog, in progress, duration and closure trends.	**Shared Folders** > **Public Sector** > **Permits**
Hearing Agenda Report	Displays the hearing agenda for the decision making body.	• Hearing Scheduler page See *Working with Public Hearings*. • Reports and Analytics or BI Catalog for the Planning report: **Shared Folders** > **Public Sector** > **Planning Application** • Reports and Analytics or BI Catalog for the Code Enforcement report: **Shared Folders** > **Public Sector** > **Code Enforcement** > **Cases**
Hearing Notification Report	Displays all hearing-related activities for a planning application, such as the owner and application addresses, hearing body name, hearing schedule and hearing appeal details.	Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Planning Application**
Inspection Activity	Displays all inspection activity for an agency over a specified date range.	Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Inspections**
Inspection Job Card	Displays a record of inspections made by the inspector, who will make notes on it and sign it during each visit to your job site.	Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Permits**
Inspection Summary	Displays inspection-related information for the permit or business license application.	• Inspection overview panel in the Inspector Application for mobile devices. See *Working with Inspection Details*. • Inspections page in the permit application details. See *Reviewing Inspection Details*. • Inspections page in the business license activity details. See *Reviewing Inspection Details*. • Reports and Analytics or BI Catalog: > **Shared Folders** > **Public Sector** > **Inspections**
Payment Invoice	Displays invoice information.	• Invoice History page See *Viewing Invoice History*.

Report Name	Description	Location
		• Reports and Analytics or BI Catalog: > **Shared Folders** > **Public Sector** > **Billing and Payments**
Payment Receipt	Lists payment receipt information.	• Payment Successful page See *Payment Flow Overview*. • Fees and Payments page of the permit record details displayed in the Redwood Experience See *Working with Fees and Payments*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Billing and Payments**
Permit Activity	Displays permit summary information for an agency over a specified date range.	Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Permits**
Permit Valuation and Revenue	Displays permit information including valuation and fees.	Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Permits**
Planning Application	Displays planning activity over a specified date range. You select which applications are included the report. You can generate the report for one or more specific applications, or for all applications handled by your agency.	• See *Working with Reports*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Planning Application**
Primary Approved Permit	Displays applicant and detailed application information, as well as a description of the work, address, parcel, and district.	• See *Working with Reports*. • Reports and Analytics or BI Catalog: > **Shared Folders** > **Public Sector** > **Planning Application**
Public User Information	Lists information about public user accounts.	Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Account Management**
Refund Receipt	Lists refund receipt information.	• Refund Detail page See *Viewing and Processing Refunds*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Billing and Payments**
Transactions with Reconciled Provisional Parcels	Lists the transactions that refer to the reconciled provisional parcels. Using this report you can see the provisional parcels that have been replaced with final parcels as a result of parcel reconciliation. You should update the provisional parcel IDs that are referred in the transactions with the final parcel IDs.	BI Catalog: **Shared Folders** > **Public Sector** > **Parcels** See *Reconciling Provisional Parcels*.

Report Name	Description	Location
Violation Notice	Displays information about the code violation, corrective actions, and the compliance date. This report is sent to the party responsible for the reported violation.	• Notice of Violation page See *Using the Code Technician Worklist*. • Notices page See *Working with Notices*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Code Enforcement** > **Notices**
Violation Notice Detail Report	Displays information about the code violation, corrective actions, and the compliance date. This report is sent to the party responsible for the reported violation. This report retrieves images (.jpg and .png) from case attachments.	• Notice of Violation page See *Using the Code Technician Worklist*. • Notices page See *Working with Notices*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Code Enforcement** > **Notices**
Welcome Letter	Informs the applicant that the application has been assigned and is under review. Provides application and assigned planner information.	• See *Working with Reports*. • Reports and Analytics or BI Catalog: **Shared Folders** > **Public Sector** > **Planning Application**

Dashboards organize analytical content and catalog objects, and present them in a meaningful way. Oracle Permitting and Licensing delivers a selection of prebuilt dashboards.

Access dashboards by clicking **Reports and Analytics** and selecting the *Browse Catalog* button in the header. Go to **Shared Folders** > **Public Sector** > **Dashboards**. For more information, see *Setting Up Dashboards*. For a complete list of delivered dashboards and analytics, see the Related Topics for a link to the analytics listing in downloadable format.

Hiding Catalog Folders

You may want to remove access to predefined catalog folders so that those associated with offerings you don't use aren't displayed. You can hide the entire predefined catalog or selectively display root catalog folders for offerings, which are controlled by the Custom BI Web cat Reporting Duty role and associated roles for each offering. Administrators with IT Security Manager privileges can hide predefined folders by removing their associated roles from the duty role.

For more information, see Oracle Cloud Applications documentation: *Manage Predefined Catalog Permission* in *Creating and Administering Analytics and Reports*.

Related Topics

- Listing of Prebuilt Analytics
-

Creating Deep Links

Create deep links in your analytics that let you navigate from an analytic to specific attributes and objects in your transaction pages without navigating through the menu structure.

You can use deep links to easily view the transaction details in Oracle Permitting and Licensing from your Oracle Transactional Business Intelligence (OTBI) reports.

Here's how to create deep links:

1. Click the **Reports and Analytics** header icon on the Agency Springboard, and select **BI Catalog**.
2. Create or edit an analysis. Use a subject area that includes the attribute you want to link to in the transactional pages. For example, use *Public Sector Cloud - Permits Real Time.*
3. In the **Selected Columns** pane on the **Criteria** tab, click (**Options**) for the attribute column on which you want a deep link.
4. Select **Column Properties**.
5. Open the **Interaction** tab in the Column Properties dialog box.
6. In the Primary Interaction list in the **Value** section, select **Action Links** to display the Action Links table.
7. Select the **Do not display in a pop-up if only one action link is available at runtime** option.
8. Click **Add Action Link**.
9. In the New Action Link dialog box, enter the link text for the navigation.
10. Click the **Create New Action** icon and select **Navigate to a Web Page**.
11. In the Create New Action dialog box, enter the URL to navigate to, which references parameters you define in the prompt. For shared analyses, enter a URL with your website host name:

    ```
    http://<hostname>/fscmUI/deeplink?root=@{1}&context=LnpRecordKey%253D@{2}
    ```

    - Replace *<hostname>* with the host name of your Oracle Permitting and Licensing instance.
    - Replace *deeplink* with the Public Sector homepage. For example, *publicSector.html*.
12. Click **Define Parameters** to add corresponding parameters for the URL.
13. In the **Define Parameters** section, click **Add Parameter** to add the following mandatory parameters:

Name	Prompt	Type of Value	Value	Fixed	Hidden	Optional
1	root	Value	PSCLNP_ RECORD_DETAIL	Selected	Selected	Selected
2	context	Column Value	"<table.name>"."<	Selected	Selected	Selected

    For example, the context could be "Construction"."<LNP Record Key>," where the LNP Record Key is "Permit Number." This creates a deep link on the permit number to navigate to the permit transaction detail page.
14. Click **Options** to set how the page opens.
15. In the Action Options dialog box, select **Open in New Window** to open the page in a new window.
16. Save your work.

17. If you have provided the Return Application name, a **Return** icon is available in the transactional page to return to the analysis.

14 Setting Up Subject Areas

Subject Areas Overview

This topic describes how subject areas work.

A subject area is a grouping of information pieces pulled from your transactional database that relate to each other in a particular context. Examples of context are permits, inspections, plan reviews, planning applications, and so on. These contexts correlate to key aspects of your business transactions, and are designed to provide answers to questions about how well things are going. Prebuilt subject areas come right out of the box to answer key business questions.

Any information your organization tracks can be grouped into a subject area, then used to build analytics. All you have to do is drag columns from your subject area to your analytics editor and you have an analytic. You can edit prebuilt analytics the same way, by adding or removing columns from your subject area. When you edit prebuilt analytics, don't forget to make a copy and give it your own name.

Subject Areas and Business Questions

This topic describes how business questions form the basis of your subject areas and analytics.

Subject areas are designed around business questions. All analytics are built from subject areas. So whether you're creating your own analytics, or modifying the analytics that come with your Public Sector applications, you first want to figure out what questions you want answered.

Here are some examples of subject areas and the business questions they can answer.

Subject Area Name	Example Business Questions
Public Sector Cloud - Permits Real Time	• What is the busiest time for permit applications? • When does the agency issue the most permits? • What is the total permit activity by permit type in a given period?
Public Sector Cloud - Permit Inspection Activity Real Time	• What is the workload distribution across all inspections? • What are the primary reasons for major inspection violations? • What is the total demand for inspections in a given period?
Public Sector Cloud - Plan Review Real Time	• How long on average are plan review cycles? • How many plan review cycles on average are needed for an application? • How many plan reviews had override decisions?

Subject Area Context and Analytic Results

This topic discusses the subject area context and the column details of the analysis.

If your analytic doesn't look right, or columns of information aren't showing up, it could be an issue with context. The context defines what column details the analysis displays. Adding a permit type column doesn't mean all permit type show up in the analysis. It depends on the context you're using to create the analysis. If you build an analysis, and it doesn't show what you're expecting, be sure that you're adding your columns and facts in context.

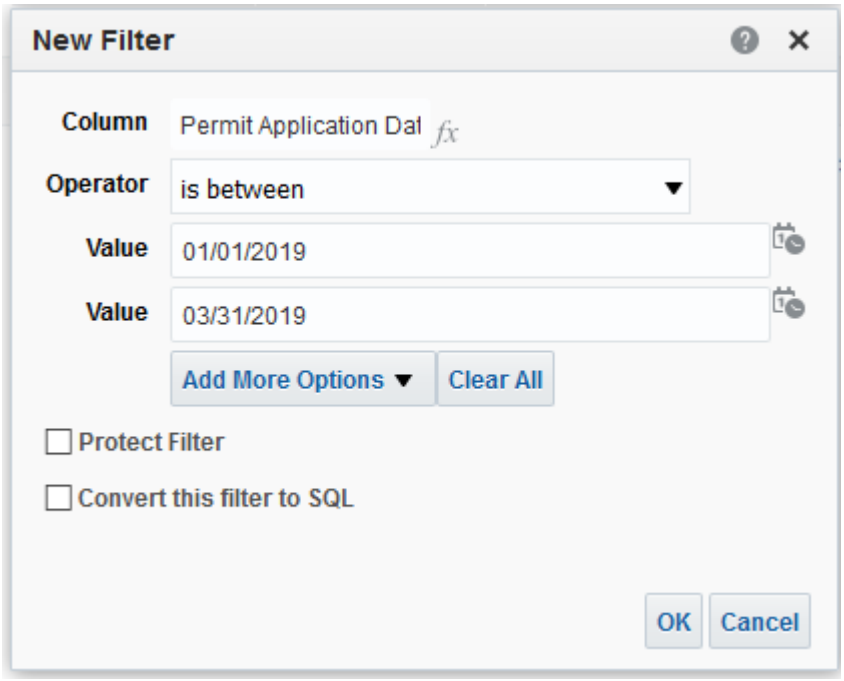
The subject area dimension folders contain the columns and the facts folders define the relationship of the columns. If you add the permit type column to your analysis, and then add the Fact, **Permit Count** to the same analysis, then only the permit types that have one or more permit show on this analysis in this context. There might be hundreds of permit types that doesn’t have permits associated, so they don't show up on your permit activity analysis.

The following is an example that might help explain this further. In this exercise you will build a permit activity analysis.

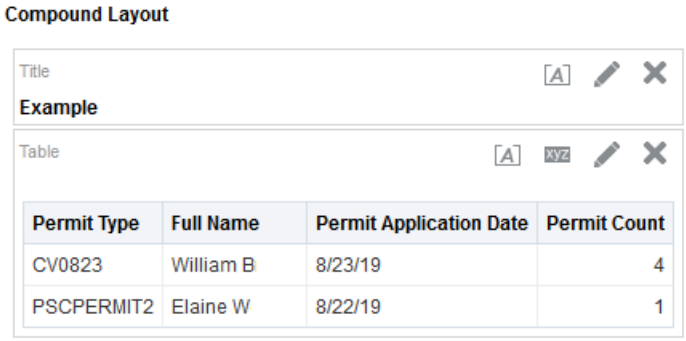
To build a simple permit activity analysis from a subject area:

1. Click **New** and select the *Analysis* option.
2. Select **Public Sector Cloud - Permits Real Time**:
    - From the dimension Permit Type, add **Permit Type**.
    - From the dimension Permit - Applicant, add **Full Name**.
    - From the dimension Permit, add **Permit Application Date**.
    - From the Permit Amounts (fact) folder, add **Permit Count**.
3. You can filter Permit Application Date to see a specific date range. Edit the filter by clicking or hovering over the button next to its name.

4. Select the filter to show only a specific date range and click **OK**.
   This figure illustrates choosing a filtering option to show only records in a specific date range.



5. Click **Results**. The Results tab shows your analysis at this point. Move back and forth from **Criteria** to **Results** at any time to see your analysis.
   This figure illustrates the results of a simple permit activity analysis from a subject area:



Permit Type	Full Name	Permit Application Date	Permit Count
CV0823	William B	8/23/19	4
PSCPERMIT2	Elaine W	8/22/19	1

6. Name and save your analysis.

Note: You can't use Direct Database Query in your analysis. Direct Database Query isn't supported in SaaS OTBI. To create direct database SQL report, you can create a BI Publisher SQL data model and then create a report.

Multiple Subject Areas in a Single Analytic

This topic discusses how to use multiple subject areas in a single analysis.

Subject areas can be tricky to master, but once you get familiar with them you can easily mix and match subject area components for your analytics. The reason you would want to do this is just for flexibility. You might want to look at your business from different perspectives.

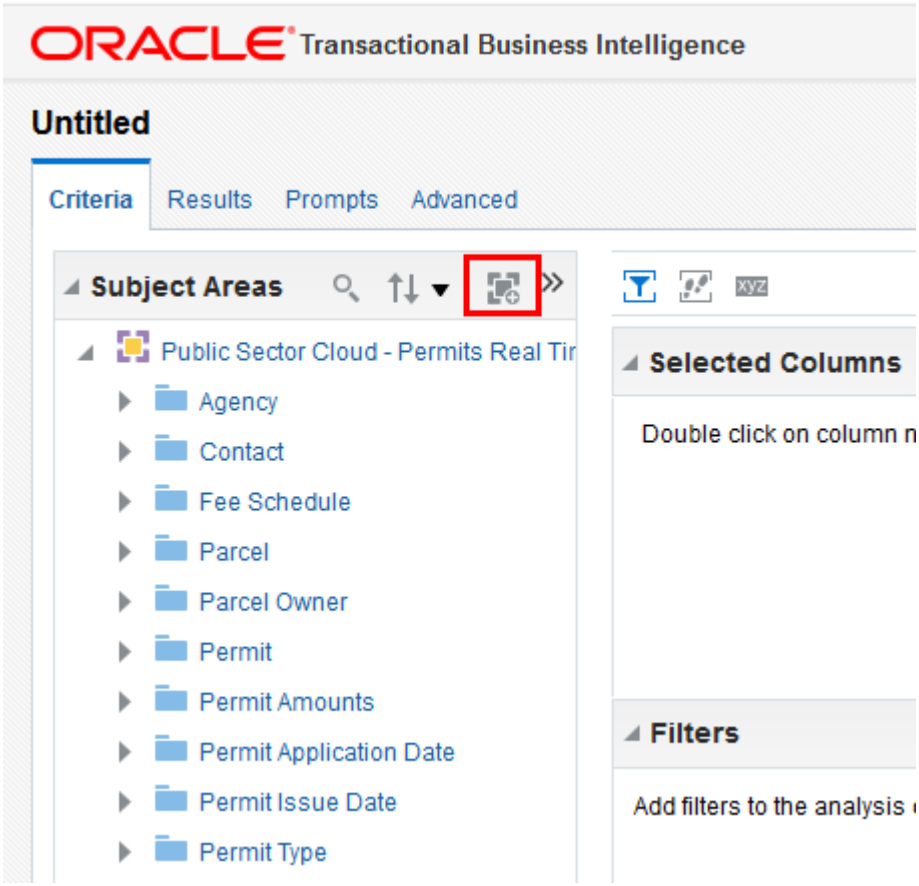
You can create an analysis that combines attributes and metrics from custom permit and standard permit-related subject areas that share a common dimension. Or, if that isn't enough, you can create an analysis that combines data from multiple standard subject areas.

To start with, let's learn how to add a subject area to the editing palette. Whether you're creating a new analysis, or using an existing analysis to add objects from your custom subject area, the steps for adding multiple custom or standard subject areas to your palette are the same.

To add multiple subject areas to editing palettes:

1. Create your analysis using a single subject area.
2. In the Subject Areas section, click the **Add / Remove Subject Areas** icon.

   This shows the **Add / Remove Subject Areas** icon.



3. Select or remove one or more standard or custom subject areas from this analysis by selecting or deselecting subject area. If you have created custom subject areas, they also appear in this list under the name you assigned to them.

Cross Subject Area Queries

Each subject area contains a collection of attributes and measures relating to the one-dimensional STAR model and grouped into individual folders. The term STAR refers to the semantic model where a single fact is joined to multiple

dimensions. You can create an analysis that combines data from more than one subject area. This type of analysis is referred to as a cross-subject area query. Cross-subject area queries are classified into three broad categories:

- Combining queries from multiple subject areas.
    - Using common (conformed) dimensions.
    - Using local and common (conformed) dimensions.
- Using a “set” operation (Union or Union All, for example) to combine more than one result set from different subject areas.
- Combining Logical SQL using the Advanced tab.

A common dimension is a dimension that exists in all subject areas that are being joined in an analysis. For example, the Contact dimension is the common dimension for the **Public Sector Cloud - Permit Inspection Activity Real Time** and **Public Sector Cloud - Permits Real Time** subject areas.

A local dimension is a dimension that exists only in one subject area. For example, Inspection Type and Inspection Status are local dimensions for the **Public Sector Cloud - Permit Inspection Activity Real Time** subject area.

The following are some general guidelines to follow when working with multiple subject areas:

- If all metrics and attributes needed for the analysis are available in a single subject area and fact metrics, use that subject area only and don't create a cross-subject area query. Such an analysis performs better and is easier to maintain.
- When joining two subject areas in an analysis, make sure at least one attribute from a common dimension is used in the analysis.
- When using common dimensions always choose attributes from the common dimension from a single subject area. For instance if you're using the Contact dimension to build a query between subject area 1 and subject area 2, then select all Contact dimension attributes from either subject area 1 or from subject area 2. (Not some contact attributes from subject area 1 and some from subject area 2.) In some scenarios, the common dimension may have more attributes in one subject area than the other. In such a situation, you can only use the subset of common attributes for a cross-subject area query.
- Always include a measure from each subject area that's being used in your analysis. You don't have to display measures or use them, but you should include them. You can hide a measure if not needed in the analysis.
- When using common and local dimensions use SET VARIABLE ENABLE_DIMENSIONALITY=1; in the Advanced SQL tab.

Queries from Multiple Subject Areas

The simplest and fastest way to generate an analysis is to use a single subject area. If the dimension attributes and fact metrics that you're interested in are all available from a single subject area, then you should use that subject area to build the analysis. Such an analysis results in better performance and is much easier to maintain.

If your analysis requirements can't be met by any single subject area because you need metrics from more than one subject area, you can build a cross-subject area query using common dimensions. There's a clear advantage to building a cross-subject area query using only common dimensions, which is recommended.

Keep in mind that if you use three subject areas for an analysis, your common dimensions must exist in all three subject areas. Joining on common dimensions gives you the benefit of including any metric from any of the subject areas in a single analysis.

While you can create an analysis joining any subject area to which you have access, only a cross-subject area query that uses common dimensions returns data that's at the same dimension grain. This happens so that the data is cleanly merged and the result is an analysis that returns exactly the data you want to see.

Knowing how cross-subject area queries are executed in BI helps you understand the importance of using common dimensions when building such an analysis. When a cross-subject area analysis is generated, separate queries are executed for each subject area in the analysis and the results are merged to generate the final analysis. The data that's returned from the different subject areas is merged using the common dimensions. When you use common dimensions, the result set returned by each subject area query is at the same dimensional grain, so it can be cleanly merged and rendered in the analysis.

Common Dimensions for an Analysis

Here is an example of combining common dimensions. In this case, we combine the Permit Count, Permit Type, Inspection Count, and Inspection District Type. The common dimension in both subject areas used for this analysis is Permit Type and different fact metrics are pulled from each subject area.

The following subject areas are used for this example analysis:

- Subject area 1: “Public Sector Cloud – Permits Real Time”
- Subject area 2: “Public Sector Cloud – Permit Inspection Activity Real Time”

Customer is the common dimension used for this example analysis:

- “Public Sector Cloud – Permits Real Time”.“Permit Type” – Permit Type
- “Public Sector Cloud – Permit Inspection Activity Real Time“ – Permit Type

The following are the metric measures for this example analysis:

- “Public Sector Cloud – Permits Real Time“.“Permit Amounts” – Permit Count
- “Public Sector Cloud – Permit Inspection Activity Real Time“.“Inspection Amounts” – Inspection Count

Local and Common Dimensions for an Analysis

This example pulls the Permit Count by Permit Type and Inspection Count by Inspection District Type. Permit Type is a common dimension in both subject areas used for this query. Inspection District is a local dimension to the Public Sector Cloud – Permit Inspection Activity Real Time subject area. Different fact metrics are pulled from each subject area. Note that use of local dimension may impact the grain of the analysis. In such cases the metrics may get repeated for each of these rows.

The following are the subject areas used for this example analysis:

- Subject area 1: “Public Sector Cloud – Permits Real Time”
- Subject area 2: “Public Sector Cloud – Permit Inspection Activity Real Time”

Permit Type is the common dimension for this example analysis: “Public Sector Cloud – Permits Real Time”.“Permit Type” – Permit Type.

The following is the local dimensions used for this example analysis: “Public Sector Cloud - Permit Inspection Activity Real Time”.“Inspection District” – Inspection District.

The following are the metrics (measures) used for this analysis:

- “Public Sector Cloud – Permits Real Time”.“Permit Amounts” – Permit Count
- “Public Sector Cloud – Permit Inspection Activity Real Time“.“Inspection Amounts” – Inspection Count

The following is the logical SQL used for this analysis:

```
SET VARIABLE ENABLE_DIMENSIONALITY=1;SELECT

 0 s_0,

 "Public Sector Cloud - Permits Real Time"."Permit Type"."Permit Type" s_1,

 "Public Sector Cloud - Permit Inspection Activity Real Time"."Inspection District"."District Type" s_2,

 "Public Sector Cloud - Permits Real Time"."Permit Amounts"."Permit Count" s_3,

 "Public Sector Cloud - Permit Inspection Activity Real Time"."Inspection Amounts"."Inspection Count" s_4

FROM "Public Sector Cloud - Permits Real Time"

ORDER BY 1, 2 ASC NULLS LAST, 3 ASC NULLS LAST

FETCH FIRST 75001 ROWS ONLY
```

Set Operations to Combine Result Sets from a Subject Area

This example creates a compound analysis query that's a union of two result subsets from two subject areas, combining results from:

- Permit Count by Permit Type from the Public Sector Cloud – Permits Real Time subject area (result 1)
- Inspection Count by Inspection District from the Public Sector Cloud - Permit Inspection Activity Real Time subject area (result 2)

```
SELECT saw_0, saw_1 FROM ((SELECT 'Permits ~ ' ||"Permit Type"."Permit Type" saw_0, "Permit Amounts"."Permit
 Count" saw_1 FROM "Public Sector Cloud - Permits Real Time")
UNION
(SELECT 'Inspection ~ ' ||"Inspection District"."District Id" saw_0, "Inspection Amounts"."Inspection Count"
 saw_1 FROM "Public Sector Cloud - Permit Inspection Activity Real Time")) t1 ORDER BY saw_0
```

Logical SQL Using the Advanced Tab

If your requirement can't be met by either of the two methods already discussed, then there's another advanced technique you can try. This technique lets you join multiple logical SQL statements based on common IDs or keys, which can be written against the same or different subject areas, just as used in normal SQL. Both Outer and Equijoin are supported.

This example illustrates how you can combine Permits and Fees data in an analysis by combining the logical SQL found on the Advanced tab.

Step 1: Write a BI Answers query using the “Public Sector Cloud – Permits Real Time” subject area to show the Fee amount and Applicant Name. Once the correct results are achieved, go to the Advanced tab and grab the logical SQL associated with this query.

Logical SQL for Query 1:

```
SELECT
 0 s_0,
 "Public Sector Cloud - Permits Real Time"."Applicant"."Applicant Name" s_1,
```

```
 "Public Sector Cloud - Permits Real Time"."Permit"."Permit Number" Per_No,
 "Public Sector Cloud - Permits Real Time"."Permit Amounts"."Fee Amount" s_3
FROM "Public Sector Cloud - Permits Real Time"
```

Step 2: Write a second BI Answers query using the " Public Sector Cloud - Receipts Real Time"."Transactions" subject area to show fees paid for the permit. Once the correct results are achieved, go to the Advanced tab and grab the logical SQL associated with this query.

Logical SQL for Query 2:

```
SELECT
 0 s_0,
 "Public Sector Cloud - Receipts Real Time"."Transactions"."Application ID" s_1,
 "Public Sector Cloud - Receipts Real Time"."Fact - Receipts"."Amount Received for a given period" s_2
FROM "Public Sector Cloud - Receipts Real Time"
```

Step 3: Go to the Advanced tab in BI Answers and copy/paste the following logical SQL which is an OBIEE - Equijoin of the two previous SQL statements based on Opportunity ID. Use any text editor to combine the logical SQL statements copied from Steps 1 and 2.

```
SELECT
permit.s_1, permit.Per_No, permit.s_3, fees.s_2
FROM
(
SELECT
 0 s_0,
 "Public Sector Cloud - Permits Real Time"."Applicant"."Applicant Name" s_1,
 "Public Sector Cloud - Permits Real Time"."Permit"."Permit Number" Per_No,
 "Public Sector Cloud - Permits Real Time"."Permit Amounts"."Fee Amount" s_3
FROM "Public Sector Cloud - Permits Real Time"
) permit,
(
SELECT
 0 s_0,
 "Public Sector Cloud - Receipts Real Time"."Transactions"."Application ID" s_1,
 "Public Sector Cloud - Receipts Real Time"."Fact - Receipts"."Amount Received for a given period" s_2
FROM "Public Sector Cloud - Receipts Real Time"
) fees
WHERE permit.Per_No = fees.s_1
```

Note: If you create a new analysis using this SQL, any hierarchical columns, member selection, groups or formatting is stripped out.

Custom and Standard Subject Areas Joins

Analyses can be build using combinations of standard, as well as both custom and standard subject areas. The add subject area option appears once you have created an analysis from a single subject area. You can delete subject areas using these same steps. When you create your analysis, you select a single subject area during the creation steps. Once the analysis is created, you add additional standard or custom subject areas.

Listing of Subject Areas for Oracle Permitting and Licensing

This reference points to the list of subject areas for Oracle Permitting and Licensing.

Oracle Permitting and Licensing comes with a variety of standard subject areas for permits, planning applications, code enforcement, and business licenses. See the Related Topics for a link to the subject area list.

Related Topics

- Subject Areas for Transactional Business Intelligence in Oracle Permitting and Licensing

15 Setting Up Custom Subject Areas

Custom Subject Areas

Oracle Permitting and Licensing Cloud contains prebuilt subject areas, but you can also create your own subject area for your unique reporting needs.

The subject areas that you create is called a custom subject areas.

Concepts and Terminology in Custom Subject Areas

Before creating a custom subject area, you should understand the concepts and terminology used with custom subject areas. These concepts are discussed in their related topics in detail.

- **Objects:** Objects within Oracle Permitting and Licensing Cloud represent an entity; for example, a contact list. When you create entities such as permit types within Oracle Permitting and Licensings, you create custom objects.
- **Fields or attributes**: A field, also called an attribute, is where entity information is stored. A contact type is stored in a field under the contact list entity or object.
- **Measures**: Measures are a set of functions that you can apply on date, numeric, or currency type fields of the selected primary or child objects while defining a custom subject area.
- **Date Leveling**: Date leveling is a date hierarchy representation between dates and their associated measures. For example, total actual annual gross revenue by month.

Creating Custom Subject Areas

This topic covers how you create and edit custom subject areas, and how you can activate or inactivate a custom subject area while editing.

You cannot modify a predefined report subject area, however, you can create custom subject areas to meet your reporting needs.

> **Note:** Before you create a custom subject area, review all the included subject areas to see if the one you want is already available.

Adding a Custom Subject Area

You add custom subject areas using train stops that appear at the top of the page. These train stops enable you to move back and forth during the configuration process. You can also save your configuration at a logical point and then continue to create later.

> **Note:** You can only create custom subject areas when you are not in an active sandbox.

To create a custom subject area using train stops:

1. Navigate to Application Composer.
2. Click **Custom Subject Areas** on the Overview page of Application Composer.
3. Select **Create** from the **Actions** menu.

These are the steps in the train stops that you can use for configuring your custom subject area:

1. Define Custom Subject Area

   In this step, you provide the name for your subject area and select the primary object that is the basis for the reports you create later using the custom subject area. Subject areas usually have names or labels that correspond to the type of information they contain. Display labels have the Custom: prefix added automatically.
2. Select Child Objects

   In this step, you select the child objects whose data you want to use in your reports. You can add child objects only if the primary object has child objects. Otherwise, the add icon is disabled. You can only add one child object per level. The parent-child-grandchild-grand grandchild hierarchy supports adding up to three levels of child objects with one child object at each level, for example, parent-child1-child1.1-child1.1.1.
3. Configure Fields

   In this step, you select the fields that you want to display on your reports. You typically add at least one field from each of the objects that you have selected for your custom subject area.

   Select the desired measures to generate for number, date, or currency fields from all the available objects so that the subject area includes only those measures that you want to analyze. Also, define at least one measure.

   In the **Measure Aggregations** column, select an option from the list of predefined formulas that you can apply to the Measure field. When you select the formula, the application applies the selected formulas to the selected field and measures.

   > **Note:** You can choose measures only for the lowest child. For example, if only a primary object exists with no children, you can select measures for the primary object. Otherwise, if any child objects exist, you can select measures only at the lowest child object level, not for the parent object.

   You can change the display labels of the fields that you select in this step. Additionally, you can use the Select Fields dialog to remove fields that belong to the primary object. The Select Fields dialog appears when you click Select Fields when configuring fields for your custom subject area.

   After you publish your custom subject area, the fields you have selected for your subject area are automatically added to their owning object's folder. If you have also defined measures, those fields are automatically added to the Facts folder. If you did not define a measure, then one is automatically created for the custom subject area.

   For more information on measures, see *Measures*.
4. Configure Date Leveling

   If required, select the Date columns for date leveling. For more information on date leveling, see *Date Leveling*.
5. Configure Security

   Select the required security level for the **Everyone** Role Name, which is added by default, or add additional Role Names by clicking in the **+** icon and define the security level for each one of them.

   The security definition here only controls who can access the custom subject area definition to create reports. It doesn't control data visibility which is automatically controlled based on the user running the reports.

For more information on securing custom subject areas, see *Custom Subject Area Security*.

6. Review and Submit

   Review the custom subject area configuration for all added objects, attributes, and measures, and if satisfied, click **Submit**. If changes are required click **Back** to navigate back to the required screen.

   After you submit, the custom subject area configuration is prepared for publishing. You can create and submit a custom subject area either immediately or save and close the custom subject area at any point and submit it later. You must first submit a custom subject area for publishing before you can select it from within Oracle BI Composer. After you save or submit a custom subject area, you cannot modify its primary object.

   To access the published custom subject area in BI:

   - From the Navigator menu, select **Tools** > **Reports and Analytics**.
   - In the Contents pane, click **Create**.
   - Select the published custom subject area and start creating your report.

Editing Custom Subject Areas

You can edit a published or saved custom subject area and then republish it when your changes are done. Modifying a custom subject area does not affect the reports that you had created using that custom subject area before making the changes. You can use the modified custom subject area if you need to enhance existing reports.

To edit a custom subject area:

1. On the Overview page of the Application Composer, click **Custom Subject Areas**.
2. Locate the custom subject area that you want to edit, and click the Edit icon.

   You can filter out inactive custom subject areas in Application Composer by viewing custom subject areas in Active status. This is safer than deleting them, because the inactive subject areas are still available and can be found by searching.
3. Make the desired changes and then click **Submit** to republish the custom subject area.

While you can edit a custom subject area in any status, there are considerations on what you can or can't do when editing. When editing a published custom subject area, it is not possible to:

- Change the primary object.
- Add or remove child objects.
- Remove previously added measures.
- Add more aggregation types for measures that are already published.

> **Note:** You cannot modify a predefined report subject area. Instead, you must create separate custom subject areas to meet your reporting needs. Before you create a custom subject area, be sure to review all the included subject areas to see if the one you want is already available.

Activating or Inactivating Custom Subject Areas

When editing custom subject areas, you can activate or inactivate custom subject areas when your reporting or business requirements change. This step enables you to control what information is displayed on the reports that use the information from custom subject areas.

You can inactivate only those custom subject areas that are published and have a status of OK, and can activate only previously inactivated custom subject areas.

To inactivate a custom subject area, select it in the list and then click the **Inactivate** button. To activate an inactive custom subject area, select it and click **Activate**. Note that if no custom subject area is selected in the list, the button doesn't appear.

When searching for custom subject areas, you can filter out inactive custom subject areas in Application Composer by viewing only those in Active status. Inactivating a custom subject area is safer than deleting it, because the inactive subject areas are still available and can be found by searching.

Objects in Custom Subject Areas

This topic covers how you use the various types of objects in the Application Composer to create custom subject areas.

A custom subject area is a set of entities (objects), attributes, and measures that you use to build reports.

Objects can be classified under broad categories of custom objects and standard objects. Every custom subject area has a primary object, which is the focus of any reports that you create. You can also optionally add child objects to the custom subject area. Custom subject areas support both custom and standard objects. The objects that you create are called custom objects.

Before designing your custom subject area, use Intake Form Designer to identify or create the objects and fields that you want to use.

Primary Objects

A primary object is any top-level object. You create a custom subject area based on the primary object. Additionally, the primary object is the focus of the report that you create based on the custom subject area.

The list of available primary objects includes all objects, which are either top-level custom objects, or standard objects that are configured by the owning application. After you save your custom subject area, you can't change its primary object; but you can create another custom subject area using a different primary object.

Based on how you want to configure your custom subject area, you can add one child to an object.

Child Objects

A child object is an object that has a one-to-many relationship with a parent object and can be a parent object of another child object. Add a child object to a custom subject area if you want your report to include data from both the primary object and its children. If an object's parent object is already a child object (of another parent object) then the object is a grandchild object. For example, if object Y is a child of object X, and object Z is a child of object Y, then object Z is a grandchild of object X. Custom subject areas support parent-child-grandchild-great-grandchild objects.

You can only add one child object to the primary object per level, as long as there are child objects available. If there are no child objects for the chosen primary object, the list that enables selecting child objects does not appear.

The parent-child-grandchild-great-grandchild hierarchy supports adding up to three levels of child objects with one child object at each level; for example, parent-child1-child1.1-child1.1.1.

Note: Once you publish a custom subject area, you can't add or remove child objects.

Fields or Attributes in Custom Subject Areas

This topic explains the various types of fields or attributes that you use for configuring your custom subject area.

Fields or attributes store entity information in the application. Fields can be standard or custom.

Types of Reporting Fields

The fields you can use to create reports are as follows:

- Text
- Number
- Date
- Percentage
- Date time
- Currency
- Check box
- Fixed choice list
- Dynamic choice list
- Long text

Note: You cannot create reports using the Rich text area field.

When you create a custom field, you can create reports for the following data types:

- Boolean

  Note: Note: If you are using the Boolean data type for fields other than checkboxes, those fields are displayed as either 0 or 1 on your custom reports.

- Number
- Currency
- Date
- String
- Percentage
- Phone
- Date time
- Long text

Measures

Measures are a set of functions. Examples include a SUM of the actual gross revenue in USD, or a COUNT of the number of building permits worth over $500,000.

The designer defines the aggregation function (SUM, COUNT, and so on) for custom measures, so end users don't need to do so themselves when they create an analysis. You can apply these functions on fields of type Date, Numeric, or Currency.

Measures available to a particular type of field may differ depending on the field type. After you define the measures for the required fields and publish the custom subject area, you can select these fields and the applied measures when creating your report in the Oracle BI Composer. You can only specify aggregate formulas to apply to a measure when creating a custom subject area. It is not possible to edit a measure in an already published custom subject area.

Here are some measures you can apply to fields of type Numeric, Currency, or Date.

- For Numeric and Currency fields, a measure can be:
  - All

    > **Note:** All is not a measure, but an option in the UI that selects all of the measures.

  - Sum: Calculates the sum of the values.
  - Average: Calculates the mean value.
  - Count: Calculates the number of rows that are not null.
  - Count Distinct: Calculates the number of rows that are not null. Each distinct occurrence of a row is counted only once.

    > **Note:** Although Count Distinct is usually used in cases requiring a count on a foreign key (because a count of distinct rows is what's wanted), it is not required. If your requirements allow multiple instances of the same foreign key value to be counted multiple times, you can use Count rather than Count Distinct.

  - Maximum: Calculates the highest numeric value.
  - Minimum: Calculates the lowest numeric value.
  - First: Selects the first occurrence of the item.
  - Last: Selects the last occurrence of the item.
  - Median: Calculates the middle value.
  - Standard Deviation: Calculates the standard deviation to show the level of variation from the average.
  - Standard Deviation Population: Calculates the standard deviation using the formula for population variance and standard deviation.
- For Date fields, a measure can be:
  - All
  - Maximum
  - Minimum

You can select measures based on your reporting needs. For example, you can use measures to view product sales per store, state, or country. Or, to view the number of support tickets opened or closed per day, week, or month, and so on.

If you do not define a measure, then one will be automatically created for the subject area when you submit the custom subject area for publication.

Date Leveling

Date leveling is a hierarchy representation of dates and associated measures, which enables you to view the data over different periods of time.

To use this hierarchy, create a report that shows the total Actual Gross Revenue amount for each year. Drill down from year to show gross revenue per quarter, sales per month, gross revenue per week and gross revenue per day, and then drill back up to gross revenue per year. The date hierarchy aggregates the measures by the required hierarchy or leveling period.

To configure date leveling when defining a custom subject area, use the **Configure Date Leveling** step of the train stop to either allow or disallow leveling. You may need to expand the field list in the **Date** field to select or clear the Date Leveling checkbox, as applicable.

For more information on where the Configure Date Leveling step appears in the train stop, see *Creating Custom Subject Areas*.

Custom Subject Area Security

You can secure a custom subject area by granting or revoking access rights from the role names that access the custom subject area. This topic covers how you can grant or revoke access rights from those role names.

For information about custom subject area data source security in Oracle Analytics Publisher, see *Public Sector Compliance and Regulation Custom Subject Area Security Guide for Implementation* (Doc ID 2730290.1) in My Oracle Support.

Managing Role Names and Access Rights

While defining a custom subject area using the train stops, you can use the Actions list in the Configure Security step to manage role names and access rights.

> **Note:** You cannot delete the role name listed as **Everyone**.

Read access is granted by default. If you want to revoke Read access from a listed role name, select **No access** for that role name.

You can create custom subject areas even for the objects in which you do not have access to the data, which allows you to build custom subject areas without compromising data security.

Publication Statuses of Custom Subject Areas

This topic covers what happens when you submit a custom subject area for publishing, and what the submission statuses indicate.

After you successfully publish your custom subject area, you can start building reports using Oracle Business Intelligence (BI) Composer based on your published subject area.

What Happens When You Submit for Publishing

When you submit a custom subject area for publishing, two processes occur in the background. The first process is synchronous and creates Oracle Applications Development Framework (Oracle ADF) artifacts. You must wait until this first process is over. The second process is asynchronous and creates centralized metadata repository (RPD) fragments and submits them to the Oracle BI server.

> **Note:** You must refresh the status to know whether the custom subject area is submitted successfully. You may have to refresh the status multiple times, because the creation of Oracle ADF and RPD artifacts may require some time.

A custom subject area can have one of the following statuses:

- Pending: This status indicates either of the following:
  - You saved and closed the configuration process for a custom subject area before submitting it for publishing.
  - A failure occurred in the background processes when creating Oracle ADF and RPD artifacts.
- In Process: This status indicates that the data is in the process of being published to Oracle BI.

  Note: If the in-process status doesn't change to **OK**, even after multiple refresh attempts, then there could be an error in publishing. If an error occurs, then the details are displayed, as well as information about how to fix problems, where applicable. These error status details allow you to pinpoint and fix problems quickly.
- OK: This status indicates that the custom subject area has been published successfully. You can use Oracle BI Composer to create reports using the objects, attributes, and measures that you have configured in the subject area.

Including Custom Fields on Reports

This topic discusses how to create a custom subject area using an attribute and create a report.

Creating a Custom Subject Area

In this example, you create a custom subject area using the LNP1KitchenRemodel object.

1. If you are working in a sandbox, exit the sandbox.
2. Click the **Navigator** menu at the top.
3. Click the **Application Composer** link.

> **Note:** You might need to click the **more >>** link first.

You are on the main page of Application Composer, where you create a custom subject area using the LNP1KitchenRemodel object.

4. Change the **Application** from *CRM Cloud* to *ERP and SCM Cloud*.
5. In the Overview region, click the **Custom Subject Areas** link.

You are on the Custom Subject Areas page. You can use this page to search or create custom subject areas.

6. In the Search Results region, click the **Create** button.
7. Enter a name for the custom subject area that you are creating. Enter *Kitchen Remodel* in the **Label** field.
8. In the Primary Object region, click the **Primary Object** list.
9. Click the **LNP1KitchenRemodel** list item.
10. In the upper-right region of the page, click the **Next** button.
11. In the upper-right region of the page, click the **Add Child Object** button.
12. In the Add Child Object dialog box, click the **Child Object** list.
13. Click the **ContactList** list item.
14. Click **OK**.
15. In the upper-right region of the page, click **Next**.

You now define the fields for the LNP1KitchenRemodel primary object.

16. Ensure that the selected value in the **Fields From**list is **LNP1KitchenRemodel**. Click the **Select Fields** button.
17. On the **Select Fields** modal page, select the fields that you want to include for the LNP1KitchenRemodel primary object.
18. Repeat steps 16 and 17 for the ContactList child object.
19. In the upper-right region of the page, click **Next**.
20. You now select fields to apply date leveling. In the **Date Field Leveling** table, click the **Expand** button of the LNP1KitchenRemodel object.
21. Select the **Allow Leveling** option for the **Business Start Date** field.
22. In the upper-right region of the page, click **Next**.
23. Leave the default role access of **Read** for Everyone. In the upper-right region of the page, click **Next**.
24. Review your custom subject area. In the upper-right region of the page, click **Save**.
25. In the upper-right region of the page, click **Submit**.

A confirmation message appears.

26. Click **OK**.

You successfully created a custom subject area.

Creating a Report Using a Subject Area

In this example, you create a report in Oracle Business Intelligence Composer (BI Composer) using the Kitchen Remodel subject area.

1. Click the **Navigator** menu at the top.
2. Click the **Reports and Analytics** link under Tools.

Note: You might need to click the**more >>** link first.

The Reports and Analytics page appears.

3. In the left pane, click **Create** and select *Analysis*.

   From the Select Subject Area dialog box that appears, you must first select a subject area to build your report. In this activity, you are building a report using the **Kitchen Remodel** subject area.
4. In the Select Subject Area dialog, select the checkbox next to **Custom:Kitchen Remodel** and click Continue.

   Tip: You can add more than one subject area to a report by selecting the checkbox next to additional subject areas.
5. You are in the Select Columns step of Oracle Business Intelligence Composer (BI Composer) wizard. In the left box, click the **Expand** button of the Custom:Kitchen Remodel tree.
6. Add the following fields to the **Selected Columns** box on the right:

   a. RecordNumber under LNP1KitchenRemodel tree.
   b. Submission Date under LNP1KitchenRemodel tree.
   c. Status under LNP1KitchenRemodel tree.
   d. Expiration Date under LNP1KitchenRemodel tree.
   e. Female Owned under LNP1KitchenRemodel tree.
   f. First Name under ContactList tree.
   g. Last Name under ContactList tree.
   h. Gender under ContactList tree.
   i. Phone Number under ContactList tree.
   j. State under ContactList tree.
7. In the upper-right region of the page, click **Next**.

   You are in the Select Views step of the wizard.
8. Enter *Kitchen Remodel Permits* in the **Title** field.
9. Click the **Table** list.
10. Click the **Table (recommended)** list item.
11. Click the **Preview** option on the right of the **Title** field to view a preview of the table. Click **OK**.
12. In the upper-right region of the page, click the **Next** button.

    You are in the Edit Graph step of the wizard.
13. In the upper right region of the page, click **Next**.
14. You are in the Sort and Filter step of the wizard.
15. In the upper right region of the page, click **Next**.

    You are in the Highlight step of the wizard.
16. In the upper right region of the page, click **Next**.

    You are in the Save step of the wizard.
17. Enter Kitchen Remodel Permits in the **Analysis Name** field.
18. In this activity, you will save your report in only **My Folders**. In the **Save In** area, click the **My Folders** tree.
19. In the upper right region of the page, click **Submit**.

    A confirmation message appears.
20. Click **OK**.
21. You can now view the report you just created. Click the **Expand** button of the **My Folders** tree.
22. Locate the report you just created.

    You successfully created a report in BI Composer using the Kitchen Remodel subject area.

Custom Subject Areas: Frequently Asked Questions

This topic provides answers to some frequently asked questions regarding custom subject areas.

Can I change a custom subject area's primary object?

No. Once you save a custom subject area, you cannot change its primary object; however, you can create a new custom subject area with a different primary object.

What happens if I change a custom subject area after it is published?

You can edit a published custom subject area and then republish it after your changes are done. Modifying a custom subject area does not affect the reports that you created using that custom subject area before making the changes. You can use the modified custom subject area should you need to enhance existing reports.

> **Note:** You cannot edit a primary object when you modify a custom subject area. Should you need to do so, create a new custom subject area using a different (new) primary object.

16 Setting Up Time Recording

Time Recording Overview

Time recording enables agencies to track the amount of time their employees spend on various activities.

Agencies can use this recorded time to:

- Bill for time spent.
- Report on key performance indicators.

To set up your agency for time recording, you define:

1. Time recording categories and subcategories.
   See *Setting Up Time Categories and Subcategories*.
   > **Note:** This step is not strictly required because you can add time entries without categories or subcategories. You must define time recording categories and subcategories, however, before associating them with time entry types.
2. Time entry types.
   See *Setting Up Time Entry Types*.
3. Fee schedules.
   See *Setting Up Fee Schedules*.
   > **Note:** This step is required for billing based on time spent.

Once you've setup up your time recording framework, agency staff can enter time and assess fees on the transaction pages. For more information, see *Adding Time Entries* and *Assessing Fees for Time Entries*.

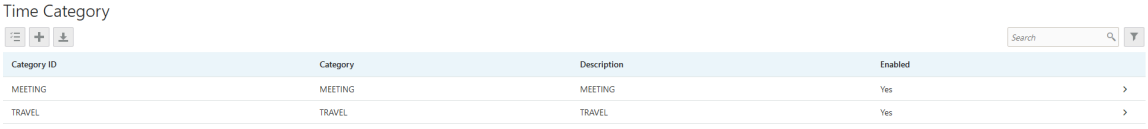
Setting Up Time Categories and Subcategories

Time categories and subcategories enable agencies to classify how their staff is spending their time.

Categories and their subcategories are reusable across transactions and products, and can be used to calculate fees and generate reporting information.

You add, modify, and delete time categories and subcategories on the Time Category page (**Time Recording Setup** > **Time Category**).

This example shows the Time Category page



Adding a Time Category

1. On the Time Category page, click **Add**.
2. On the Time Category Details page, enter a **Category ID**, a **Category**, and a **Description** for the category.
3. Turn on the **Enable** switch to make this category available to select for time entry types. This switch is turned off by default for new time categories.
4. Add a subcategory.

   > **Note:** You must have values defined for all required time category fields before you can add a subcategory.

5. Click **Save**.

Adding a Time Subcategory

1. Click a row on the Time Calendar page.
2. On the Time Category Details page, click **Add**.
3. On the Time Subcategory Details page, enter a **Subcategory ID**, a **Subcategory**, and a **Description** for the subcategory.
4. Ensure that the **Enable** switch is turned on so that the subcategory is available to select for time entry types. This switch is turned on by default for new time subcategories.
5. Click **Save**.

Modifying a Time Category

1. Click a row on the Time Calendar page.
2. On the Time Category Details page, you can:
   - Update the time category fields.

     > **Note:** You can't edit the **Category ID** field.

   - Enable or disable the time category.
   - Delete the time category. You will be prompted to confirm the permanent deletion.
   - Add, modify, or delete time subcategories.
3. Click **Save**.

Modifying a Time Subcategory

1. Click a Time Subcategory row on the Time Category Details page.
2. On the Time Subcategory Details page, you can:
   - Update the time subcategory fields.

     > **Note:** You can't edit the **Subcategory ID** field.

   - Enable or disable the time subcategory.
   - Delete the time subcategory. You will be prompted to confirm the permanent deletion.
3. Click **Save**.

Deleting Time Categories

1. On the Time Category page, click **Select Multiple**.
2. Select the checkboxes next to all the time categories you want to delete.
3. Click **Delete**. You will be prompted to confirm the permanent deletion.

Deleting Time Subcategories

1. On the Time Category Details page, click **Select Multiple**.
2. Select the checkboxes next to all the time subcategories you want to delete.
3. Click **Delete**. You will be prompted to confirm the permanent deletion.

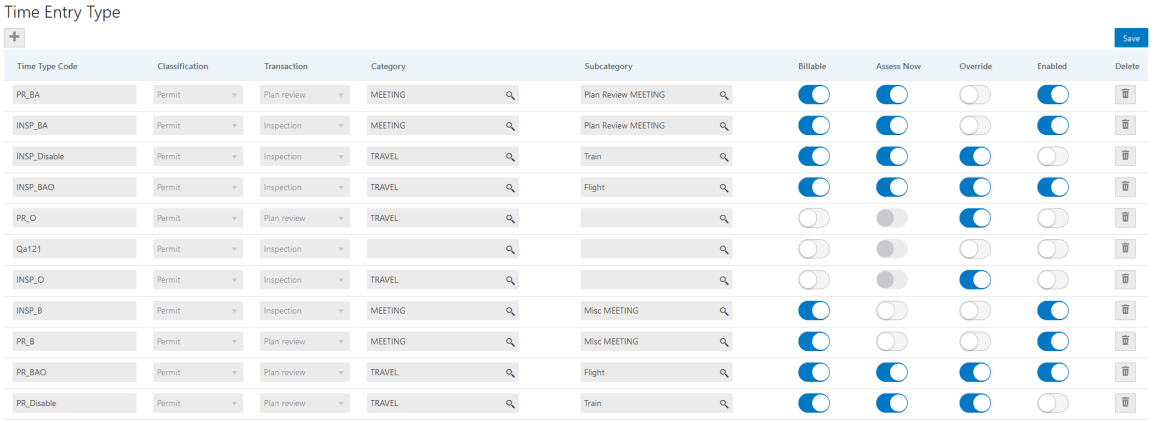
Setting Up Time Entry Types

Time entry types enable you to associate time categories and subcategories with the transactions where they can be used to record time.

Each time entry type represents a unique, reusable combination of time category, time subcategory, classification, and transaction. For example, you might create a time entry type for air travel associated with a permit inspection.

You add, modify, and delete time entry types on the Time Entry Type page (**Time Recording Setup** > **Time Entry Type**).

This example shows the Time Entry Type page



Adding a Time Entry Type

1. On the Time Entry Type page, click **Add**.
2. For the new time entry type row, enter values for the following fields:

Page Element	Description
Time Type Code	Enter the code that agency staff members use to enter all the default values associated with this time entry type when adding time entries.
Classification	Select a product area, such as *Permit* or *Planning and Zoning*.

Page Element	Description
Transaction	Select a specific transaction, such as *Plan Review*, *Inspection*, or *Planning Application*. **Note:** The transactions that are available to select depend on the Classification you selected.
Category and **Subcategory**	Select the time category and subcategory for the time entry type. For more information on time categories and subcategories, see *Setting Up Time Categories and Subcategories*. **Note:** You can leave these fields blank. You can't select a subcategory without first selecting a category.
Billable	Turn this switch on to make entries associated with this time entry type billable by default.
Assess Now	Turn this switch on to immediately assess fees for entries associated with this time entry type by default. **Note:** This switch is available only when the **Billable** switch is turned on.
Override	Turn this switch on to enable agency staff to override the **Billable** default setting when adding a time entry.
Enabled	Turn this switch on to make the time entry type available to select when adding time entries.

3. Click **Save**.

Modifying a Time Entry Type

Once you save a time entry type, you can no longer edit the following fields:

- **Time Type Code**
- **Classification**
- **Transaction**
- **Category**
- **Subcategory**

You can toggle the four switches:

- **Billable**
- **Assess Now**
- **Override**
- **Enabled**

Deleting a Time Entry Type

Click the **Delete** button next to a time entry type row to delete it.

> **Note:** You can't delete a time entry type if it is used for any time entries.