Oracle Talent Management Cloud
Implementing Talent Management Base

19C
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Preface

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

Using Oracle Applications

Using Applications Help

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. Not all pages have help icons. You can also access Oracle Applications Help.

Watch: This video tutorial shows you how to find help and use help features.

You can also read Using Applications Help.

Additional Resources

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

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

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

Conventions

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

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<th>Convention</th>
<th>Meaning</th>
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<tr>
<td><em>boldface</em></td>
<td>Boldface type indicates user interface elements, navigation paths, or values you enter or select.</td>
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<tr>
<td><em>monospace</em></td>
<td>Monospace type indicates file, folder, and directory names, code examples, commands, and URLs.</td>
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<tr>
<td><em>&gt;</em></td>
<td>Greater than symbol separates elements in a navigation path.</td>
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Documentation Accessibility

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

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

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

Comments and Suggestions
Please give us feedback about Oracle Applications Help and guides! You can send an e-mail to: oracle_fusion_applications_help_ww_grp@oracle.com.
1 Overview

Implementing Talent Management Base: Guide Overview

Before you start using any of the Oracle Fusion services in Oracle Talent Management Cloud, you must set up the base functional areas in the Workforce Development offering. This guide describes how to set up these functional areas to implement Talent Management Base. This topic explains the scope of this guide and summarizes the contents of each chapter.

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>Note: This guide also covers Oracle Taleo Recruiting Cloud Service

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2 Synchronization of Users and Roles from LDAP

User and Role Synchronization: Explained

User accounts for users of Oracle Fusion Applications are maintained in your Lightweight Directory Access Protocol (LDAP) directory. The LDAP directory also holds information about roles provisioned to users.

During implementation, any existing information about users and their roles must be copied from the LDAP directory to the Oracle Fusion Applications tables. To copy this information, you use the task Run User and Roles Synchronization Process. This task calls the Retrieve Latest LDAP Changes process. You can perform the task Run User and Roles Synchronization Process from either an implementation project or the Setup and Maintenance work area.

Once the Oracle Fusion Applications tables are initialized with this information, it’s maintained automatically.
Chapter 3

Geographies for HCM

How Geography Structure, Hierarchy, and Validation Fit Together

There are three components that are dependent on each other when defining a country: geography structure, geography hierarchy, and geography validation. Every country has to have the geography structure defined first before the hierarchy can be defined, and the geography hierarchy has to be defined before the validation can be defined.

Geography Structure

Firstly, you need to create a geography structure for each country to define which geography types are part of the country structure, and how the geography types are hierarchically related within the country structure. For example, you can create geography types called State, City, and Postal Code. Then you can rank the State geography type as the highest level within the country, the City as the second level, and the Postal Code as the lowest level within the country structure. Geography structure can be defined using the Manage Geographies task, or can be imported using tasks in the Define Geographies activity.

Geography Hierarchy

Once the geography structure is defined, the geographies for each geography type can be added to the hierarchy. For example, in the hierarchy of United States you can create a geography called California using a State geography type.

As part of managing the geography hierarchy you can view, create, edit, and delete the geographies for each geography type in the country structure. You can also add a primary and alternate name and code for each geography. A geography hierarchy can be created using the Manage Geographies task, or can be imported using tasks in the Define Geographies activity.

Geography Validation

After defining the geography hierarchy, you need to specify the geography validations for the country. You can choose which address style format you would like to use for the country, and for each selected address style format you can map geography types to address attributes. You can also select which geography types to include in geography or tax validation, and which geography types will display in a list of values during address entry in other user interfaces. The geography validation level for the country, such as error or warning, can also be selected.

Geography Structures

This topic describes geography structures and the tasks you can perform using geography structures.

A geography structure is a hierarchical grouping of geography types for a country. The following table describes the geography structure for the United States.
You can use the geography structure to relate geography types for a country and define geography types for a country.

**Relate Geography Types for a Country**

You can determine how a country’s geographies are hierarchically related by creating the hierarchy of the geography types in the geography structure. When you define a country’s structure, the geography type Country is implicitly at the highest level of the geography structure with level as 1. The subsequent geography types that you add after country are numbered in sequence.

You must add a geography type as a level in the country structure before you can define a geography for that geography type in a country. For example, before defining the state of California, the State geography type must be added to the United States country structure. To quickly create country structure, you can copy a structure from another country and modify the geography types for the country.

**Define Geography Types for a Country**

You can use any of the master reference geography types to create your geography structure. If required, you can create a geography type, before adding it to the country structure. Each geography type is added at a lower level to the current lowest level.

⚠️ **Note:** You cannot delete geography types that have associated geography data. You can only delete the lowest level geography type of the country structure.

You can use a geography type that you create within the country structure for other country structures as well.

**Geography Hierarchy**

This topic describes geography hierarchy and various aspects of geography hierarchy.

Geography hierarchy is a data model that creates conceptual parent-child relationships between geographies. At the highest level of the geography hierarchy is country, which is the parent, and the hierarchy contains several child geographies. The following table shows sample parent-child relationships in a geography.

<table>
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<th>Parent of San Mateo county</th>
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<tr>
<td>California</td>
<td>Parent of San Mateo county</td>
</tr>
<tr>
<td>San Mateo County</td>
<td>Parent of Redwood City</td>
</tr>
<tr>
<td>Redwood City</td>
<td>Parent of 94065</td>
</tr>
</tbody>
</table>
When you enter just 94065, the application determines that the postal code is in California and the corresponding city is Redwood City.

The application uses geography hierarchy information to facilitate business processes that rely on geography information, such as, tax calculation, order sourcing rules, and sales territory definition. The geography hierarchy information is centrally located and shared among other application offerings.

The geography hierarchy includes:

- **Geography:** Geography is a physical space with boundaries that is a defined instance of a geography type, such as country, state, province or city. For example, San Jose is a geography of the City geography type.
- **Geography type:** Geography types are divisional grouping of user defined geographies, for example, Continent, Country Regions, and Tax Regions.
- **Geography usage:** Geography usage indicates how a geography type or geography is used in the application.
- **Master reference geography hierarchy:** The geography hierarchy data is considered the single source of reference for all geography related data such as geography types and geographies.

The geography usage for the entire hierarchy is the master reference, and defined geography types and geographies are the master reference geography types and geographies. For example, you can create geography types called State, City, and Postal Code. Then, you can rank the State as the highest level, City as the second level, and Postal Code as the lowest level within the country structure.

- **User defined zones:** User defined zones are a collection of geographical data, created from master reference data for a specific purpose. For example, while the territory zones are collections of master reference geographies ordered with a hierarchy, the tax and shipping zones are without a hierarchical grouping.

### Geography Validation

Geography validation determines the geography mapping and validation for a country's address styles, as well as the overall geography validation control for a country.

The **No Styles Format** address style format is the default address style format for a country. By defining the mapping and validation for this format you will ensure that validations can be performed for any address in the country. After the **No Styles Format** is defined you can set up additional mapping for specific address styles.

For each address style format, you can define the following:

- Map to attribute
- Enable list of values
- Tax validation
- Geography validation
- Geography validation control
Attribute Mapping

For every address style format, you can map each geography type to an address attribute. For example, you can map the State geography type to the State address attribute for the United States, or map the State geography type to the County address attribute for the United Kingdom. The geography types that appear are based on how the country structure is defined. The list of address attributes that appear are based on address formats delivered with the application, or your customer defined address formats.

Note: You only need to map geography types that you want to use for geography or tax validation purposes.

Enable List of Values

Once a geography type is mapped to an attribute, then you can specify whether the geography type will appear in a list of values during address entry in user interfaces. It is very important to review carefully if you want to enable a list of values. You should only enable a list of values if you have sufficient geography data imported or created for that geography. If the setup for master geography data is incomplete, then the geography data is either not imported or created. As a result, the list of values for the address attribute does not list any geography data.

Once you have enabled a list of values for an address attribute, you can only select the geography data available for the geography type. This means that if a specific geography value is not available in the geography hierarchy, you can’t create an address with a different geography value.

Tax Validation

You can also specify whether a geography type will be included in tax validation. For example, for the United States North America address style format you specify that County, State, and City are used for tax validation. This will mean that when a transaction involves an address with the North America address style, the address must have the correct county, state, and city combination based on the geography hierarchy data, to be considered valid for tax calculation.

Geography Validation

You must set up geography validation for those geography elements that you plan to use in your sales territories. Setting up validation also helps users fill in missing address information, and validate addresses during entry. For example, you can have users select states or other address elements from lists to ensure accuracy during entry, and you can have the application fill in missing values. For example, when the user enters a Postal Code, the application can retrieve the city and state.

You can specify whether a geography type will be included in geography validation. For example, when the user enters a United States address using the North America address style format, the address must have the correct country, state, and postal code combination based on geography hierarchy data to be considered geographically valid.

If an address element is mapped to a geography type, but not selected for geography validation usage, then during address entry suggested values will be provided for the address element, but the address element will not be validated.

You need to verify that the default mapping between Geography Type and Map to Attribute is valid in the Geography Mapping and Validation region and update it if required when you define geography validation. Oracle recommends that you use the following valid mapping for the countries that GBG | Loqate supports:

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<td>• Settlement</td>
<td>• City</td>
</tr>
<tr>
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<td>• Postal code</td>
</tr>
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<td>• Country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Kanton</td>
<td>• State</td>
</tr>
<tr>
<td>Country Name</td>
<td>Country Code</td>
<td>Geography Type</td>
<td>Map to Attribute</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------</td>
<td>-------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Taiwan</td>
<td>TW</td>
<td>• Bezirk</td>
<td>• County</td>
</tr>
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<td></td>
<td>• Gemeinde</td>
<td>• City</td>
</tr>
<tr>
<td></td>
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</tr>
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<td>TH</td>
<td>• Country</td>
<td>• Country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• County</td>
<td>• State</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Town</td>
<td>• City</td>
</tr>
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<td></td>
<td></td>
<td>• Postal Code</td>
<td>• Postal code</td>
</tr>
<tr>
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<td>TN</td>
<td>• Country</td>
<td>• Country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Governorate</td>
<td>• State</td>
</tr>
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<td></td>
<td></td>
<td>• Delegation</td>
<td>• City</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sector</td>
<td>• Additional address attribute 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Postal Code</td>
<td>• Postal code</td>
</tr>
<tr>
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<td>TR</td>
<td>• Country</td>
<td>• Country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sehir</td>
<td>• Province</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ilce</td>
<td>• County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Kasaba</td>
<td>• City</td>
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<td></td>
<td>• Postal Code</td>
<td>• Postal code</td>
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<td>• Country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Emirate</td>
<td>• State</td>
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<td>• City</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Area</td>
<td>• Additional address attribute 2</td>
</tr>
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<td>• Postal Code</td>
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<td>• Country</td>
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<tr>
<td></td>
<td></td>
<td>• State</td>
<td>• State</td>
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<td></td>
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<td>• County</td>
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<td>• Country</td>
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<td></td>
<td>• Departamento</td>
<td>• State</td>
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<td>• City</td>
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<tr>
<td></td>
<td></td>
<td>• Postal Code</td>
<td>• Postal code</td>
</tr>
<tr>
<td>Vatican City</td>
<td>VA</td>
<td>• Country</td>
<td>• Country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Municipal</td>
<td>• Province</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Settlement</td>
<td>• City</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Postal Code</td>
<td>• Postal code</td>
</tr>
<tr>
<td>Vietnam</td>
<td>VN</td>
<td>• Country</td>
<td>• Country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Region</td>
<td>• Additional address attribute 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tihn</td>
<td>• Province</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Quan</td>
<td>• Province</td>
</tr>
<tr>
<td>Country Name</td>
<td>Country Code</td>
<td>Geography Type</td>
<td>Map to Attribute</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Thank Pho</td>
<td>• Country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Postal Code</td>
<td>• City</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Postal code</td>
</tr>
</tbody>
</table>

**Note:** For either the tax or geography validation, do not skip more than one consecutive level unless you are certain that the selected geography types can uniquely identify geographies. For example, the United States country structure is: State, County, City, and Postal Code, and you want to select just State and Postal Code for geography or tax validation. However, for the combination of California and 94065, the city can be either Redwood Shores or Redwood City. In this case, you should also select at least the City geography type for geography or tax validation.

**Geography Validation Control**

You can select the geography validation level for a country. Validation will check if the entered address maps to the geography hierarchy data available for the country, and the geography validation control determines whether you can save an address that did not pass validation during address entry. For example, if the validation level is **Error**, then an address cannot be saved if the values do not match the geography hierarchy data.

These are the geography validation levels you can choose:

- **Error** - only completely valid addresses can be saved, with all mandatory address elements entered.
- **No Validation** - all addresses can be saved including incomplete and invalid addresses.

Regardless of the result of validation, the validation process will try to map any address attribute to a geography of the country, and store any mapping it could establish based on the available data. This is called **Geography Name Referencing** and it is executed as part of validation. The result of this referencing is used in several business processes in the application to map an address to a specific geography or zone.

The Geography Dimension value in territories is derived from sell-to addresses of sales accounts. To use geography dimensions in territories, you must validate the geography elements in the addresses, such as state, city, and postal code. You can validate the address by enabling geography validation for each country using the Manage Geographies task. Perform the following in the Manage Geographies task:

- Enable at least one level in the geography hierarchy for geography validation.
- Enable geography validation for all geography levels that you intend to use for territory definition for each country.
- If needed, enable a list of values containing specific geography elements. This will help users search and select appropriate geography values during addresses entry and eliminate all possibilities of wrong address entry.

You can set geography validation control to **Error** in the Manage Geography Validation page. This ensures that users can only use valid geography elements in addresses.

**Note:** If you have already created addresses before setting up geography validation for a country, you must enable geography validation and then execute the Run Maintain Geography Name Referencing task for that country. This validates all your geography elements.
Manage Geography Structures, Hierarchies, and Validation

This example shows how you can configure the geography structure, hierarchy, and validation for a country geography, using the United Kingdom country geography as an illustration.

The following table summarizes the key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy an existing country structure?</td>
<td>No, create a new country structure.</td>
</tr>
<tr>
<td>What is the structure of the geography types?</td>
<td>Create geography types with the following ranking structure:</td>
</tr>
<tr>
<td></td>
<td>1. County</td>
</tr>
<tr>
<td></td>
<td>2. Post Town</td>
</tr>
<tr>
<td>What is the geography hierarchy?</td>
<td>Create the following hierarchy:</td>
</tr>
<tr>
<td></td>
<td>1. Country of United Kingdom</td>
</tr>
<tr>
<td></td>
<td>2. County of Berkshire</td>
</tr>
<tr>
<td></td>
<td>3. Post Town of Reading</td>
</tr>
<tr>
<td>Which address style format will you use when mapping geography validations?</td>
<td>The default address style format, called the No Styles Format.</td>
</tr>
<tr>
<td>Are you using Oracle Fusion Tax for tax purposes?</td>
<td>No, don’t select <strong>Tax Validation</strong> for the geography types.</td>
</tr>
</tbody>
</table>

Define the Geography Structure

You can add the County and Post Town geography types to the United Kingdom geography structure.

1. On the Manage Geographies page, enter GB in the **Code** field. Click **Search**.
2. On the Manage Geographies page, click **Structure Defined**.
3. On the Manage Geography Structure page, click the **Create** button next to the **Copy Country Structure From** field.
4. In the Geography Structure section, select the County list item in the **Add Geography Type** field.
5. Click **Add**.
6. Select the Post Town list item in the **Add Geography Type** field.
7. Click **Add**.
Define the Geography Hierarchy

You can add the geographies for the County and Post Town geography types using the geography hierarchy user interfaces to create the geography hierarchy for United Kingdom. You can also use the Manage File Import Activities task to import geography hierarchies using a .csv or xml file.

1. On the Manage Geographies page, enter GB in the Code field. Click Search.
2. On the Manage Geographies page, click Hierarchy Defined.
3. In the Geography Hierarchy section, click United Kingdom to highlight the table row, and click Create.
4. In the Create County page, Primary and Alternate Names section, enter Berkshire in the Name field.
5. Click Save and Close.
6. In the Geography Hierarchy section, click Berkshire to highlight the table row, and click Create.
7. In the Create Post Town page, Primary and Alternate Names section, enter Reading in the Name field.
8. Click Save and Close.

Define the Geography Validations

You can define the geography mapping and validation for the United Kingdom default address style format to specify the geography validations for the geography types you added to United Kingdom. You can then map the geography types to attributes, enable the geography types for Lists of Values and Geography Validation, and set the geography validation level.

1. On the Manage Geographies page, click Validation Defined.
2. In the Address Style section, click No Styles Format to highlight the table row.
3. For the County geography type, click the County list item in the Map to Attribute field.
4. Select the Enable List of Values and Geography Validation options.
5. For the Post Town geography type, click the City list item in the Map to Attribute field.
6. Select the Geography Validation option.
7. In the Geography Validation Control section, select Error in the Geography Validation Level for Country list.
8. Click Save and Close.

Geocoding

This topic explains geocoding and how to enable this option in the application.

Geocoding is the process of finding latitude and longitude coordinates from geographic data such as street addresses or postal codes. Once these coordinates are available, you can use the spatial services feature to identify points of interest, such as customer and contact addresses, in the vicinity. The application integrates the Geocoding feature with eLocation (http://elocation.oracle.com/maps_oracle_dot_com_main.html), which is a Geocoding service provided by Oracle.

By default, the Geocoding option is turned off in the application. You can enable the Geocoding option by going to the Setup and Maintenance work area and performing the following:

- Offering: Customer Data Management
- Functional Area: Enterprise Profile
Task: Manage Geographies

If the Geocoding feature is enabled, the feature can be scheduled to run at regular time intervals. This ensures that newly created or updated locations are picked up and geocoded whenever you create or update an address using the user interface, web services, bulk import, or file-based import.

Related Topics
- What are Spatial Services

Set Up Geocoding

This procedure lists the steps to set up geocoding in Oracle Cloud applications.

Geocoding is a process that determines the latitude and longitude coordinates for a location. By default, geocoding is turned off in the application. You can use geocoding to display customers in the vicinity of a mobile address.

Enable Geocoding for a Country

To enable geocoding for a country, complete these steps:

1. In the Setup and Maintenance work area, go to the following:
   - Offering: Customer Data Management
   - Functional Area: Enterprise Profile
   - Task: Manage Geographies

2. On the Manage Geographies page, search for the country for which you want to enable geocoding. You can either search by the country name or country code.

3. Click Search. The search results for the matching country names are displayed.

4. Select the country for which you want to enable the geocoding option.

5. Select Geocoding Defined for the country.

Populate Location Latitude and Longitude Information

Once geocoding is enabled, you can schedule this feature to run at regular time intervals so that newly created or updated locations are picked up and geocoded. To schedule the geocoding feature to run at regular intervals, complete these steps:

1. Navigate to Tools > Scheduled Processes work area.


3. Click the Name list and search for Populate Location Latitude and Longitude Information, and then click OK.

4. Enter the parameters such as Start Date and End Date, and click Submit.

How You Import Geographies

A geography, such as Tokyo or Peru, describes a boundary on the surface of the earth. You can create new geographies by importing data through interface tables. There are two options for populating the interface tables: using the tool of your preference to load the data or using file-based data import. If you plan to provide the data details in a source file, use the file-
based import feature. If you will populate the interface table directly, run the geography loader process to import the data. Having a good understanding of the import entity, interface table, and destination table will help you prepare your import data.

Note: You must use File-Based data Import in a cloud implementation because you cannot populate the interface tables directly in a cloud implementation.

Consider the following when importing geographies:

- Oracle-licensed geography reference data
- File-based import option
- Geography loader process option
- Import object entity, interface table, and destination tables

Oracle-Licensed Geography Reference Data
Oracle Applications Cloud includes third-party master geography data for multiple countries that can be imported. You can import Oracle-licensed data from GBG | Loqate, for those countries where the data is available, such as the U.S. You can import geography data using the Manage Geographies task. Search for the country, and select Import Geography Data from the Actions menu. If the licensed data is not available or already set up for a particular country, then the Import Geography Data action is disabled.

File-Based Import Option
The file-based import process reads the data included in your XML or text file, populates the interface tables, and imports the data into the application destination tables.

To access the File-Based Data Import functionality, in the Setup and Maintenance work area, go to the following:

- Offering: Customer Data Management
- Functional Area: Enterprise Profile
- Task: Manage Import Activities

For more information, see the Importing Geographies chapter in the Oracle Engagement Cloud Understanding File-Based Data Import and Export guide.

Geography Loader Process Option
Populate the interface table with your import data, then to schedule the import of data from the interface table to the destination table, in the Setup and Maintenance work area, use the following:

- Offering: Customer Data Management
- Functional Area: Enterprise Profile
- Task: Run Geography Loader

Import Object Entity, Interface Table, and Destination Tables
The geography import object consists of one entity and interface table that forms the geography. If you are using file-based import, you can map your source file data to import entity attributes that correspond to the interface table columns. The import activity process populates the interface table based on the mapping and your source file. If using the geography loader scheduled process, populate the interface table directly using your preferred tool.
If you need the unique IDs of existing application data for your import data, then, in the Setup and Maintenance work area, use the following to export the information:

- Offering: Customer Data Management
- Functional Area: Trading Community Foundation
- Task: Schedule Export Processes

The following table lists the object entity, the interface table, the destination tables, and the resulting application object.

<table>
<thead>
<tr>
<th>File-Based Import Entities</th>
<th>Interface Tables</th>
<th>Destination Tables</th>
<th>Application Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImpGeography</td>
<td>HZ_IMP_GEOGRAPHIES_T</td>
<td>HZ_GEOGRAPHIES</td>
<td>Geography</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HZ_GEOGRAPHY_IDENTIFIERS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HZ_GEOGRAPHY_TYPES_B</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HZ_HIERARCHY_NODIES</td>
<td></td>
</tr>
</tbody>
</table>

**Related Topics**

- Overview of Implementing Customer Data Management

### Replace Existing Master Geography Data with Revised Oracle-Licensed Geography Data

You must import and set up reference geography data for the countries where you do business. Using the Oracle-licensed geography reference data, you no longer have to source geography data from a third party. You can import Oracle-licensed data from GBG | Loqate, including the country structure and hierarchy information, either to create a new geography setup or replace your existing geography data.

This topic describes the steps to replace your existing master geography data with the revised Oracle-licensed geography data.

### Create an Export File of All Territories

In case you have implemented Customer Data Management along with the sales functionality, you must export all territories before deleting the master geography data because removing the master geography data invalidates the territory definitions that are based on the Geography dimension. You can either export the definitions of all territories to a file or make manual corrections. If there are a large number of territories, export the territories definition to a file for the territories import process. However, if there are very few affected territories, then you can choose to either export the territories definition to a file or make corrections manually.

This procedure is applicable only if there are territories defined using the Geography dimension.

Perform the following steps to create an export file of all territories.

1. From the Territories and Quotas work area, click **View Active Territories** in the Tasks pane.
2. In the View Active Territories page, select the territory at the highest level.
3. Click the **Actions** list, and select **Export**, and then **Export Selected Territory Hierarchy**.
4. In the Warning dialog box, click **OK**.
5. Click the **Actions** list and select **Export**, and then **View Export Status**.
6. Review the status of the export job and verify if it has completed successfully.
7. In the Exported Data File column, click the .zip file against your export job, and click **Save**. All the territories are exported to a compressed file on your system.
8. Click **OK**.
9. Click **Done** in the View Active Territories page.

### Delete the Territory Geography Data

A territory definition has references to the territory geography data and master geography data. Since territory geography data is based on the master geography data, in case you have implemented Customer Data Management along with the sales functionality, you must delete the territory geography data prior to deleting the master geography data. When you delete the territory geography data, all territories that are defined using geography dimension become invalid.

This procedure is applicable only if territory geographies are defined.

Perform the following steps to delete the territory geography data.

1. In the Setup and Maintenance work area, go to the following:
   - Offering: Sales
   - Functional Area: Territories
   - Task: Manage Territory Geographies
2. On the Manage Territory Geographies page, click **View All Hierarchies**.
3. Select the highest level node for the country for which you want to replace the master geography data and click the **Delete** icon.
4. In the Warning dialog box, click **OK**.
5. In the Confirmation dialog box, click **OK**. The parent node of the territory geography data and its children are deleted.
6. Repeat steps 3 to 5 to delete all the higher nodes in the territory geography data.
7. Click **Save and Close**.

The Territory Management application retains a copy of the dimension members referenced in the territory definitions. This copy is updated when you trigger the **Load and Activate** process from the Enable Dimensions and Metrics task. Therefore, although the territory geography data is deleted, the territory definitions may appear to remain valid.

### Delete the Master Geography Data

To delete the master geography data for a country, you must create a support request with proper justification. Note that when the master geography data is deleted, the geography and its children are deleted and all the related territory, tax, and shipping zone references become invalid. So, you must back up this master geography data before deleting the master geography data.

### Import Oracle-Licensed Geography Reference Data

Use this procedure to import geography reference data licensed by Oracle. If the country data you want to import is not available, then the Import Geography Data action is disabled.

The geography data is provided by GBG | Loqate and is third-party content. As per Oracle policy, this software and documentation may provide access to or information about content and services from third parties. Oracle and its affiliates
Perform the following steps to import Oracle-licensed geography reference data.

1. In the Setup and Maintenance work area, go to the following:
   - Offering: Customer Data Management
   - Functional Area: Enterprise Profile
   - Task: Manage Geographies
2. On the Manage Geographies page, enter either the country name or the two-letter ISO code (for example, US), and click Search.
3. Select the country in the search results.
4. Click the Actions list, and select Import Geography Data.
5. In the Warning dialog box, click OK.
6. In the Confirmation dialog box, click OK.

The import of larger countries may require several hours to complete.

You can track the progress of the import process by selecting Scheduled Processes from the Navigator.

Note: To access the Scheduled Processes work area, you must be signed in as a user with the Employee abstract role. The initial user does not have this role assigned, but the other users you created do.

After the import is complete, you can search for the country again in the Manage Geographies page. Check marks now appear in the Structure Defined and Hierarchy Defined columns indicating the import completed successfully.

Next, click the Validation Defined icon to define the validations, enable List of Values, and choose address style format for a country as set up before. For more information, see the "Geography Validation: Explained" topic.

The Geocoding Defined and Address Cleansing Defined columns are used for additional features which you must license from Oracle and set up separately.

- Geocoding makes it possible to display customers in the vicinity of a mobile address. You set up Geocoding Enabled for those countries where you are using Around Me functionality in Engagement Cloud Mobile.
- Cleansing makes it possible to validate addresses down to the street level.

Run the Geography Name Referencing Process

The Geography Name Referencing (GNR) process validates address elements in location tables, such as HZ_LOCATIONS, against the master geography data.

Perform the following steps to run the GNR process.

1. Navigate to Tools > Scheduled Processes work area.
3. Click the Name list and search for Validate Geographies Against Master Geographies, and then click OK.
4. Click OK in the Schedule New Process dialog box.
5. In the Process Details dialog box, enter the following details:
   - Location Table Name: HZ_LOCATIONS
   - Run Type: ALL
6. Enter the country code in the Country Code field.
7. Click Submit.
8. In the Confirmation dialog box, click OK.
9. Click Close.
10. In the Scheduled Processes page, click the Refresh icon.
11. Verify if the status of the process has completed successfully.

Recreate and Load the Territory Geography Data

In case you have implemented Customer Data Management along with the sales functionality, you can recreate the territory geography data, after the master geography data is imported, using either of the following methods:

- Import process: If you created the original territory geography data using the import process, then use the same import file to recreate the territory geography structure. For more information about importing the territory geography data using the import file, see "Importing Territory Geography Hierarchies Using File-Based Data Import: Quick Start" in the Oracle Engagement Cloud Understanding File-Based Data Import and Export guide.

- Manual creation process: You can manually recreate the territory geography data structures, as they existed before their deletion, using the Manage Territory Geographies task. For more information about creating zones and adding geographies to a zone, see "Managing Territory Geographies: Worked Example" topic.

After you have recreated the territory geography data, perform the following steps to load the data.

1. In the Setup and Maintenance work area, go to the following:
   - Offering: Sales
   - Functional Area: Territories
   - Task: Enable Dimensions and Metrics
2. On the Enable Dimensions and Metrics page, click the Actions list, and select Load and Activate. The process loads the territory geography data to make dimension members available for selection when defining territories.
3. In the Confirmation dialog box, click OK.
4. Click Done.

Restore the Invalid Territory Definitions

After recreating the territory geography hierarchies and running the Load and Activate option from the Enable Dimensions and Metrics task, the geography dimensions are populated with the new geography members. The geography members in the territory appear as invalid because your territories still reference the old copies of the dimension members that were deleted. The new members are not referenced automatically by the territories. You must re-reference the territory definitions from the old geography dimension members to the new ones.

You can restore the invalid territory definitions by either importing the previously created export file or making manual corrections to the territories.

To restore valid territory definitions using territories import:

1. Open the export file you saved in the “Creating an Export File of All Territories” step. The compressed file contains four CSV files.
2. Open TERR_HEADER.CSV file.
3. Enter REPLACE in the Action column for all territories that are based on geography dimension.
4. Save the file in CSV format and compress it together with three other CSV files.
5. From the Territories and Quotas work area, click View Active Territories in the Tasks pane.
6. Click the Actions list, and select Import to Proposal, and then Import Territories.
7. Select the newly created compressed file and click OK.
8. Click the Actions list and select Import to Proposal, and then View Import Status.
9. Review the status of the export job and verify if it has completed successfully.
10. Click OK.
11. From the Tasks pane, click Manage Territory Proposals.
12. In the Manage Territory Proposals page, on the Current Territory Proposals table, search for the proposal with your import file name.
13. Click the import file name to open the territory proposal.
14. Click Edit Coverage to verify that the territory definitions are valid.
15. Verify that there are no values listed as invalid in the Selected Dimension Members section.
16. Click Save and Close.
17. Click Activate. The territory proposal of your import file is activated.

To restore valid territory definitions through manual corrections:

1. From the Territories and Quotas work area, click Manage Territory Proposals in the Tasks pane.
2. In the Manage Territory Proposals page, click the Create icon.
3. In the Create Territory Proposals dialog box, enter a name and click Save and View.
4. In the Territory Proposals page, add all the territories with the Geography dimension value other than the value "Any" to the proposal.
5. Select a territory and click Edit Coverage.
6. In the Edit Coverage page, select Geography from the Dimensions list. The invalid dimension members are displayed in the Selected Dimension Members pane.
7. Expand the values in the Available Dimension Members section or search for the member that has the same name as the one marked invalid in the Selected Dimension Members pane.
8. Select one or more new geography dimension members from Available Dimension Members pane and click Add icon to the Selected Dimension Members pane.
9. Click the Remove icon to remove the invalid members from the Selected Dimension Members pane.
10. Click Save and Close.
11. Repeat steps 4 to 10 for all territories that were based on Geography dimension.
12. Click Activate. After the activation process is complete, your territory definitions are valid again and are referencing to the new geography data.

Although this method is always applicable, it is most appropriate when you have to restore territory definitions for a smaller number of territories.

To run the batch assignment process for opportunities:

1. From Navigator, click Scheduled Processes.
2. In the Schedule Processes page, click Schedule New Process.
3. In the Schedule New Process dialog box, search for the Revenue Territory Based Assignment process and select it.
4. Click OK.
5. In the Process Details dialog box, enter OpenOpportunitiesByCreationDate in the View Criteria Name field. This selects all revenue lines belonging to open opportunities that were created in the last 'X' days.
6. Enter BindOptyCreationDateFrom= followed by the date.

For example, if BindOptyCreationDateFrom=2014-01-01, then all open opportunities which were created between 1st January 2014 till the current date, are processed.
7. Click **Submit** to schedule the process.
8. In the Confirmation dialog box, make a note of the process identifier for monitoring the process, and click **OK**.
9. Click **Close**.
10. In the Schedule Processes page, click the **Refresh** icon.
11. Review the status of the process job and verify if it has completed successfully.

**Note:** Review a small subset of the open opportunities to confirm that the territory assignment is as expected.

To run the batch assignment process for sales accounts:

1. Ensure that the `ZCA_SA_AUTO_ASSIGN_ON_CREATE` and `ZCA_SA_AUTO.Assign.ON_UPDATE` profile options are set to Yes in the Manage Customer Center Profile Options task.
2. From Navigator, click **Customers**.
3. In the Customers page, click **Create Account**.
4. In the Create Account page, enter a name and address of the sales account, and select the **Address is sell to** check box.
5. Click **Save and Close**.
6. From Navigator, click **Customers**.
7. In the Search pane, search for the name of the sales account you created and select it.
8. In the section Customer Information, select **Sales Account Team**. The details of the sales account and territories associated with the sales account are displayed.

This indicates that the sales account was created successfully and the batch assignment was run automatically to assign the matching territories to the sales account.

To run the batch assignment process manually from the Scheduled Processes page, perform the following steps.

1. From Navigator, click **Scheduled Processes**.
2. In the Schedule Processes page, click **Schedule New Process**.
3. In the Schedule New Process dialog box, search for the **Request Sales Account Assignments** process and select it.
4. Click **OK**.
5. Enter `SalesAccount_Work_Object` in the Work Object Code field and `SalesAccountTerritory_Candidate_Object` in the Candidate Object Code field.
6. Select **Territory** in the Assignment Mode list.
7. Enter `AllSalesAccountsVC` in the View Criteria Name field. This selects all sales accounts.
8. Click **Submit** to schedule the process.
9. In the Confirmation dialog box, make a note of the process identifier for monitoring the process, and click **OK**.
10. Click **Close**.
11. In the Schedule Processes page, click the **Refresh** icon.
12. Review the status of the process job and verify if it has completed successfully.

**Note:** Review a small subset of the accounts to confirm that the territory assignment is as expected.

**Related Topics**

- Managing Territory Geographies: Worked Example
Overview of Geography Import

A geography is any region with a boundary around it. It might be a state, a country, a city, a county, or a ward. You must create or import geographies before you can associate them with company-specific zones and addresses.

You can import geography data from an external data source into Oracle Engagement Cloud using the File-Based Data Import feature.

Consider the following questions when importing your data:

- How does your legacy or source system store and represent the geography information when compared to Oracle Engagement Cloud?
- Do you have to configure values in Oracle Engagement Cloud to map your existing data to the Geography import object?
- Do you have to extend Oracle Engagement Cloud to add attributes?
- What import features are available to import your business data?
- How do I verify my imported data?

**Note:** Oracle Engagement Cloud ships with third-party master geography data for multiple countries. You can import geography data using the Manage Geographies task. Search for the country, and select Import Geography Data from the Actions menu. If the licensed data isn’t available for a country, then the Import Geography Data action is disabled. For more information, see the procedure Replacing Existing Master Geography Data with Revised Oracle-Licensed Geography Data.

How Business Objects are Structured

You must understand how your geography data corresponds with the data in Oracle Engagement Cloud to map your legacy data to the data in Oracle Engagement Cloud.

You must import a separate country structure import object for each country. Each of these import objects must contain the geography types that are used in the country’s structure, organized in a hierarchy using geography level numbers. For example, if you’re importing the country structure of Australia, the country structure might be:

1. Country
2. State
3. County
4. Town
5. ZIP

How Business Objects are Structured

Every import object is a collection of attributes that help to map your data to the Oracle Applications Cloud data and to support one-to-many relationships between the structural components of a geography.

You must know the attribute details of the import objects so that you can prepare your import data. You can use the import reference guide (File-Based Data Import for Engagement) files that contain:

- Attribute descriptions
- Values that populate attributes by default when you don’t provide values
• Validation information for each attribute

The validation information includes the navigation path to the task where you can define values in Oracle Application Cloud. For example, if you have values in your data that correlate to a choice list in Oracle Application Cloud, then the validation information provides the task name where you can define your values. For additional information, such as a list of reference guide file names and locations, see the topic How Geography Import Objects Work Together.

Configurable Attributes

Here is how you can configure the objects to import your legacy or source data:

• Use the Application Composer to design your object model extensions and to generate the required artifacts to register your extensions.

• Make the artifacts available for importing the object.

You can map these configurable attributes to your source file data. You can use the same source file to import both the configurable attributes and the standard import object attributes.

How You Import Geographies Using File-Based Data Import

You must first prepare a source data file to import geographies. The source file can be either an XML file or a text file, such as a CSV file.

You use the file import process to:

1. Read the data in your source file.
2. Populate the interface tables according to your mapping.
3. Import the data into the application destination tables.

The Define File Import Setup and Maintenance task list includes the tasks required to:

• Configure the import objects
• Create source-file mappings
• Schedule the import activities

You can also access these tasks from the Data Import and Export functional area of the Sales offering.

You submit file import activities for each import object. When you’re creating a new geography, you use the Geography object to import your data. You must have the Master Data Management Administrator job role to access and submit the import activities for geographies.

When importing geography information, you must provide the parent reference information for all parent levels for the entity.

How You Verify Your Imported Data

You can use the File Import activity reports to verify imported data. Alternatively, you can also navigate to the Geographies work area to view the geography information that you have imported.

Related Topics

• How File-Based Data Import Works

• About File-Based Import Documentation
How Geography Import Objects Work Together

You use the Geography import object to import geographies and objects related to the geography. This topic describes the Geography import object and introduces:

- Target import objects
- Target import object attributes
- Target import object attribute reference guide files used for evaluating and mapping source file data

Overview of Geography Target Import Objects

Use the Geography import object to import geographies and objects related to geographies. The Geography import object is split into smaller objects to organize the individual attributes of the geography.

The target import objects in the Geography import object contain information about the geography hierarchy. When updating an existing geography, you must provide the parent reference information of the existing geography.

Use the ImpGeography target import object to create and update geography information.

Note: Before you import geography data for a country, you must define the country’s geography structure.

Geography Target Import Object Attributes

Compare attributes that you want to import with the available target object attributes and their valid values. Use a reference file to evaluate your source data and Oracle Engagement Cloud attributes for mapping and validation. See the Oracle Engagement Cloud File-Based Data Import for Engagement guide (https://docs.oracle.com/en/cloud/saas/engagement/19b/oefbs/index.html). See the topic for your import object, which includes links to reference files for target import objects. A reference guide file includes:

- Attribute descriptions
- Default values
- Validations for the attributes

Review the validation for each attribute to know if you need to do any setup tasks.

Define and Manage Import Mappings

You must define a mapping between your source data and a combination of the target object and target object attributes to import your source file data. To define and manage import mappings, do one of these:

1. Navigate to the following in the Setup and Maintenance work area:
   - Offering: Sales
   - Functional Area: Data Import and Export
   - Task: Manage File Import Mappings
2. Define the mapping when you define the import activity. Navigate to the following in the Setup and Maintenance work area:
   - Offering: Sales
   - Functional Area: Data Import and Export
   - Task: Manage File Import Activities

⚠️ Note: If any of your source attributes doesn’t have a corresponding target object attribute, then you can extend the Geography object. Review the Application Composer Extensibility features for the Geography object for more information.

Reference Files for Geography Target Import Objects

To access reference files for this object’s target import objects, see the Oracle Engagement Cloud File-Based Data Import for Engagement guide (https://docs.oracle.com/en/cloud/saas/engagement/19b/oefbs/index.html). See the topic for your import object, which includes links to reference files for target import objects.

Here is a list of reference files and their target import objects.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Attribute Reference File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImpGeography</td>
<td>Contains information that saves a country’s geography hierarchy details, such as geography type, geography code, and so on.</td>
<td>HZ_IMP_GEOGRAPHIES_T_Reference</td>
</tr>
</tbody>
</table>

 Related Topics

- How File-Based Data Import Works
- About File-Based Import Documentation

Example of Importing Geographies

This example demonstrates how to import data using the File-Based Data Import tool. In this example, you have a source file containing geography data that you want to import into the application to make the geography data available for real time address validation and tax purposes.

The following table summarizes the key decisions that you must make in this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What type of object are you importing?</td>
<td>Geography</td>
</tr>
<tr>
<td>What file type are you using for your source data?</td>
<td>Text file</td>
</tr>
<tr>
<td>Where are you uploading your source data file from?</td>
<td>Your desktop</td>
</tr>
</tbody>
</table>
Decisions to Consider | In This Example
--- | ---
What data type is your source data file? | Comma separated
Which fields are you importing into the application? | All, except for the RecordTypeCode field
When do you want to process the import? | Immediately

Summary of the Tasks

You perform the following steps to create an import activity and activate the import:

1. Determining what information is in the source file.
2. Creating and scheduling the import activity.
3. Monitoring the import results.

Before You Start

1. Ensure that the combination of the Source ID and Parent Source ID values is unique for each row of data within a single import. However, your source data files don’t need to have the same Source ID and Parent Source ID values as your previously imported geography data. If the geography structure levels and the parents for each geography value are the same, then the changed IDs will not affect the import.
2. Ensure that all the parents of a child geography are included in your data file so that the child geography can be added. For example, if you originally imported US, CA, and San Francisco, and now you want to import the city of San Jose in CA, then your data file must include US, CA, and San Jose.
3. Check that your source data file has the correct values for the geography data that you have already loaded. For example, if your initial import included the value US for country and CA as state, and in a subsequent import you have California as a state, then your geography import creates two state records (CA and California) in the application data, with the US as the country parent.

Determine What Information Is in the Source File

1. The source geography data files must include a unique Source ID value for each row of data and Parent Source ID value for the parent of that row of data. The Source or Parent Source IDs should not be longer than 18 characters.
2. You can structure your geography source data, as shown in the following table.

<table>
<thead>
<tr>
<th>Geography Level</th>
<th>Name</th>
<th>Source ID</th>
<th>Parent Source ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Country)</td>
<td>US</td>
<td>1</td>
<td>NA</td>
</tr>
<tr>
<td>2 (State)</td>
<td>CA</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>3 (County)</td>
<td>Alameda</td>
<td>111</td>
<td>11</td>
</tr>
<tr>
<td>4 (City)</td>
<td>Pleasanton</td>
<td>1111</td>
<td>111</td>
</tr>
</tbody>
</table>
Create and Schedule the Import Activity

You can create an import activity, enter the import details, and schedule the import. An import activity includes selecting the source file or file location, mapping the source file to the database, and scheduling the import.

1. Navigate to the following in the Setup and Maintenance work area:
   - Offering: Sales
   - Functional Area: Data Import and Export
   - Task: Manage File Import Activities

2. In the Manage Import Activities page, click Create.

3. In the Create Import Activity: Map Fields page, map each field from your source file to the target object and attribute, as shown in the following table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Master Reference Geographies</td>
</tr>
<tr>
<td>Object</td>
<td>Geography</td>
</tr>
<tr>
<td>File Type</td>
<td>Text File</td>
</tr>
<tr>
<td>File Selection</td>
<td>Specific file</td>
</tr>
<tr>
<td>Upload From</td>
<td>Desktop</td>
</tr>
<tr>
<td>File Name</td>
<td>Choose relevant file from desktop</td>
</tr>
<tr>
<td>Data Type</td>
<td>Comma separated</td>
</tr>
</tbody>
</table>

Note: Ensure that the file type that you select in the Create Import Activity: Set Up page matches the file type of the source data file.

4. Click Next.

5. In the Create Import Activity: Map Fields page, map each field from your source file to the database object and attribute, as shown in the following table.

<table>
<thead>
<tr>
<th>Column Header</th>
<th>Example Value</th>
<th>Ignore</th>
<th>Object</th>
<th>Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Geography</td>
<td>Primary Geography</td>
<td>United States</td>
<td>Imp Geography</td>
<td>Primary Geography</td>
</tr>
<tr>
<td>Name</td>
<td>Name</td>
<td></td>
<td></td>
<td>Name</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If you don’t want to import a column in the text file, then you can select **Ignore**.

> **Note:** If you can’t map the fields from your source file to the relevant target object, then see the import object spreadsheets.

6. Click **Next**.
7. In the Create Import Activity: Create Schedule page, select **Immediate** in the Schedule field so that the import will start as soon as you activate it.
   Instead of immediately importing the data, you can choose a date and time to start the import. You can also specify whether the import will be repeated and the frequency of the repeated import.
8. Click **Next**.

### Monitor the Import Results

You can monitor the processing of the import activity and view the completion reports for both successful records and errors.

1. In the Create Import Activity: Review and Activate page, verify your import details in the Import Details, File Details, Import Options, and Schedule sections. Update the import details if required by navigating to the previous screens using the **Back** link.
2. Confirm your import details, and click **Activate** to submit the import.
   After the import activity has finished, the Status field value changes to Completed.

### Overview of Country Structure Import

You can import country structure data from an external data source into Oracle Engagement Cloud using the File-Based Data Import feature. A country structure is a hierarchical grouping of geography types for a country. For example, the geography structure for United States has the geography type of State at the topmost level, followed by the County, the City, and the Postal Code.

You can use the country structure to store information about:

- The relationships between geographies within a country
- The types of geographies for a country
Consider the following questions when importing your data:

- How does your legacy or source system store and represent the country structure information when compared to Oracle Engagement Cloud?
- Do you have to configure values in Oracle Engagement Cloud to map your existing data to the Country Structure import object?
- Do you have to extend Oracle Engagement Cloud to add attributes?
- What import features are available to import your business data?
- How do I verify my imported data?

How Business Objects Are Structured

You must understand how your country structure data corresponds with the data in Oracle Engagement Cloud to map your legacy data to the data in Oracle Engagement Cloud.

You must import a separate country structure import object for each country. Each of these import objects must contain the geography types that are used in the country’s structure, organized in a hierarchy using geography level numbers. For example, if you’re importing the country structure of Australia, you need to follow this country structure:

1. Country
2. State
3. County
4. Town
5. ZIP

Import Object for the Country Structure

The import object for country structures is GeoStructureLevel.

How Business Object Attributes are Structured

Every import object is a collection of attributes that help to map your data to the Oracle Applications Cloud data and to support one-to-many relationships between the structural components of a country structure.

You must know the attribute details of the import objects so that you can prepare your import data. You can use the import reference guide (File-Based Data Import for Engagement) files that contain:

- Attribute descriptions
- Values that populate attributes by default when you don’t provide values
- Validation information for each attribute

The validation information includes the navigation path to the task where you can define values in Oracle Application Cloud. For example, if you have values in your data that correlate to a choice list in Oracle Application Cloud, then the validation information provides the task name where you can define your values. For additional information, such as a list of reference guide file names and locations, see the topic How Country Structure Import Objects Work Together.

Configurable Attributes

Here is how you can configure the objects to import your legacy or source data:

- Use the Application Composer to design your object model extensions and to generate the required artifacts to register your extensions.
• Make the artifacts available for importing the object.

You can map these configurable attributes to your source file data. You can use the same source file to import both the configurable attributes and the standard import object attributes.

How You Import Country Structures Using File-Based Data Import
You must first prepare a source data file to import accounts. The source file can be either an XML file or a text file, such as a CSV file.

You use the file import process to:

1. Read the data in your source file.
2. Populate the interface tables according to your mapping.
3. Import the data into the application destination tables.

The Define File Import Setup and Maintenance task list includes the tasks required to:

• Configure the import objects
• Create source-file mappings
• Schedule the import activities

You can also access these tasks from the Data Import and Export functional area of the Sales offering.

You must have the Master Data Management Administrator job role to access and submit the import activities for country structures.

How You Verify Your Imported Data
You can use the File Import activity reports to verify imported data. Alternatively, you can also navigate to the Country Structure work area to view the country structure information that you have imported.

Related Topics
• How File-Based Data Import Works
• About File-Based Import Documentation

How Country Structure Import Objects Work Together
You use the Country Structure import object to import country structures and objects related to the country structure. This topic describes the Country Structure import object and introduces:

• Target objects
• Target import object attributes
• Target import object attribute reference guide files used for evaluating and mapping source file data

Overview of Country Structure Target Import Objects
Use the Country Structure import object to import country structures and objects related to country Structures. The Country Structure import object is split into smaller objects to organize the individual attributes of the country structure. The
target import objects in the Country Structure import object are grouped into information about the country structure and information about the other objects.

When updating an existing country structure, you must provide the parent reference information of the existing country structure. This reference information connects the imported geography structure to the existing one. Use the ImpGeoStructureLevel target import object to create and update country structure information.

### Country Structure Target Import Object Attributes

Compare attributes that you want to import with the available target object attributes and their valid values. Use a reference file to evaluate your source data and Oracle Engagement Cloud attributes for mapping and validation. See the Oracle Engagement Cloud File-Based Data Import for Engagement guide (https://docs.oracle.com/en/cloud/saas/engagement/19b/oefbs/index.html). See the topic for your import object, which includes links to reference files for target import objects. A reference guide file includes:

- Attribute descriptions
- Default values
- Validations for the attributes

Review the validation for each attribute to know if you need to do any setup tasks.

### Define and Manage Import Mappings

You must define a mapping between your source data and a combination of the target object and target object attributes to import your source file data. To define and manage import mappings, do one of these:

1. Predefine the mappings in the Setup and Maintenance work area:
   - Offering: Sales
   - Functional Area: Data Import and Export
   - Task: Manage File Import Mappings

2. Define the mapping when creating an import activity in the Setup and Maintenance work area:
   - Offering: Sales
   - Functional Area: Data Import and Export
   - Task: Manage File Import Activities

**Note:** If any of your source attributes doesn’t have a corresponding target object attribute, then you can extend the Country Structure object. Review the Application Composer Extensibility features for the Country Structure object for more information.

### Reference Files for Country Structure Target Import Objects

To access reference files for this object’s target import objects, see the Oracle Engagement Cloud File-Based Data Import for Engagement guide (https://docs.oracle.com/en/cloud/saas/engagement/19b/oefbs/index.html). See the topic for your import object, which includes links to reference files for target import objects.

For detailed information about importing geographies using file-based import, refer to Document No. 1481758.1, Importing Master Reference Geography Data, on the Oracle Support site.
Here is a list of reference files and their target import objects.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImpGeoStructureLevel</td>
<td>Information that specifies a country’s geography structure.</td>
<td>HZ_IMP_GEO_STRUCTURE__LEVELS__Reference</td>
</tr>
</tbody>
</table>

**Related Topics**

- How File-Based Data Import Works
- About File-Based Import Documentation
- How You Import Country Structures

**How You Import and Export Territory Geography Zones**

Territory geography zones are geographical boundaries that you can set up to replicate your organization’s regions, such as a Pacific Northwest sales region. You can set up territory geography zones in one application instance, and then after the territory geography zones are defined you can export the territory zones and import them into another application instance.

To define your territory geography zones and then import your territory zones into another application instance, you must complete the following steps:

1. Import the master reference geography data into the application.
2. Define your territory geography zones using the Manage Territory Geographies task.
3. Export the territory geography zones.
4. Import the territory geography zones into another application instance.

**Import the Master Reference Geography Data**

Firstly, you must import the master reference geography data. Master reference geography data includes geography elements, such as country, state, and city, and is required for any geographical information that you store in the application, such as address information used in customer and sales records. For more information, see the topic Geography Hierarchy: Explained. Master reference geography data can be imported into the application using the Manage File Import Activities task in Setup and Maintenance.

**Define Your Territory Geography Zones**

After the master reference geography data has been imported, you can then create your territory geography zones in the application using the Manage Territory Geographies task in Setup and Maintenance. For more information, see the topic Managing Territory Geographies: Worked Example.

**Export the Territory Geography Zones**

After you have completed importing the master reference geography data and defining your territory geography zone tasks, you can create a configuration package to export the territory zone data. For more information, refer to the Exporting Setup Data demo listed in the related topics section.
Import the Territory Geography Zones

After you have downloaded your configuration package for your territory geography zone setup, you can import the territory zones into another application instance.

Note: Ensure that you import your master reference geography data into the new application instance before you import the configuration package.

Related Topics
- Managing Territory Geographies: Worked Example

How You Setup Address Cleansing

Address cleansing validates, corrects, and standardizes address information that you enter in the application. Address cleansing, unlike geography validation, validates both the geography attributes and the address line attributes.

To use the address cleansing functionality, you need to have license for the customer data quality application, because the feature is delivered using data quality integration.

You can specify the real-time address cleansing level for each country by choosing either of these options:

- None: Specifies no real time address cleansing.
- Optional: Provides option to cleanse addresses.

Once you have enabled address cleansing for a country, a Verify Address icon appears at address entry points in the application. Click the icon to perform address cleansing and receive a corrected, standardized address. If the application does not find a matching address, then an alert message is displayed.

FAQs for Geographies

When do I define address cleansing?

When address data entered into the application needs to conform to a particular format, in order to achieve consistency in the representation of addresses. For example, making sure that the incoming data is stored following the correct postal address format.

Why can't I update a geography structure by copying an existing country structure?

You can only update a geography structure by adding existing geography types, or by creating new geography types and then adding them to the geography structure. You can only copy an existing country structure when you are defining a new country structure.
Why can't I delete a level of the country geography structure?
If a geography exists for a country geography structure level then you can't delete the level. For example, if a state geography has been created for the United States country geography structure, then the State level cannot be deleted in the country geography structure.

Can I add any geography to the geography hierarchy?
Yes. However, the geography type for the geography that you want to add must be already added to the country geography structure.

Can I edit a specific geography in the geography hierarchy?
Yes. In the Manage Geography Hierarchy page you can edit details such as the geography's date range, primary and alternate names and codes, and parent geographies.

How can I add a geography that is at a lower level to any geography in a geography hierarchy?
Select the geography that you want to create a geography at lower level, and then click the Create icon. This will allow you to create a geography for a geography type that is one level lower to the geography type you selected. The structure of the country’s geography types are defined in the Manage Geography Structure page.
4 Currencies and Currency Rates

Manage Currencies

Considerations for Defining Currencies

When creating or editing currencies, consider these points relevant to entering the currency code, date range, or symbol for the currency.

Currency Codes
You can’t change a currency code after you enable the currency, even if you later disable that currency.

Date Ranges
You can enter transactions denominated in the currency only for the dates within the specified range. If you don’t enter a start date, then the currency is valid immediately. If you don’t enter an end date, then the currency is valid indefinitely.

Symbols
Some applications support displaying currency symbols. You may enter the symbol associated with a currency so that it appears along with the amount.

Euro Currency Derivation

Use the Derivation Type, Derivation Factor, and Derivation Effective Date fields to define the relationship between the official currency (Euro) of the European Monetary Union (EMU) and the national currencies of EMU member states. For each EMU currency, you define its Euro-to-EMU fixed conversion rate and the effective starting date. If you have to use a different currency for Euro, you can disable the predefined currency and create a new one.

Derivation Type
The Euro currency derivation type is used only for the Euro, and the Euro derived derivation type identifies national currencies of EMU member states. All other currencies don’t have derivation types.

Derivation Factor
The derivation factor is the fixed conversion rate by which you multiply one Euro to derive the equivalent EMU currency amount. The Euro currency itself must not have a derivation factor.

Derivation Effective Date
The derivation effective date is the date on which the relationship between the EMU currency and the Euro begins.

FAQs for Manage Currencies
When do I create or enable currencies?

Create or enable any currency for displaying monetary amounts, assigning currency to ledgers, entering transactions, recording balances, or for any reporting purpose. All currencies listed in the International Organization for Standardization (ISO) 4217 standard are supported.

The default currency is set to United States Dollar (USD).

What's the difference between precision, extended precision, and minimum accountable unit for a currency?

Precision refers to the number of digits placed after the decimal point used in regular currency transactions. For example, USD would have 2 as the precision value for transactional amounts, such as $1.00.

Extended precision is the number of digits placed after the decimal point and must be greater than or equal to the precision value. For calculations requiring greater precision, you can enter an extended precision value such as 3 or 4. That would result in the currency appearing as $1.279 or $1.2793.

Minimum accountable unit is the smallest denomination for the currency. For example, for USD that would be .01 for a cent. In Setup and Maintenance work area, search for the Manage Currencies task to set these values for a currency.

What's a statistical unit currency type?

The statistical unit currency type denotes the Statistical (STAT) currency used to record financial statistics in the financial reports, allocation formulas, and other calculations.

Manage Conversion Rate Types

Guidelines for Creating Conversion Rate Types

Maintain different conversion rates between currencies for the same period using conversion rate types. The following conversion rate types are predefined:

- Spot
- Corporate
- User
- Fixed

You can use different rate types for different business needs. During journal entry, the conversion rate is provided automatically based on the selected conversion rate type and currency, unless the rate type is User. For User rate types, you must enter a conversion rate. You can define additional rate types as needed. Set your most frequently used rate type as the default. Conversion rate types can't be deleted.

Assign conversion rate types to automatically populate the associated rate for your period average and period end rates for the ledger. For example, you can assign the conversion rate type of Spot to populate period average rates, and the
conversion rate type of Corporate to populate period end rates. Period average and period end rates are used in translation of account balances.

Conversion rate types are used to automatically assign a rate when you perform the following accounting functions:

- Convert foreign currency journal amounts to ledger currency equivalents.
- Convert journal amounts from source ledgers to reporting currencies or secondary ledgers.
- Run revaluation or translation processes.

When creating conversion rates, decide whether to:

- Enforce inverse relationships
- Select pivot currencies
- Select contra currencies
- Enable cross rates and allow cross-rate overrides
- Maintain cross-rate rules

Enforce Inverse Relationships

The Enforce Inverse Relationship option indicates whether to enforce the automatic calculation of inverse conversion rates when defining daily rates. The following table describes the impact of selecting or not selecting the option.

<table>
<thead>
<tr>
<th>Action</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected</td>
<td>When you enter a daily rate to convert currency A to currency B, the inverse rate of currency B to currency A is automatically calculated and entered in the adjacent column. If either rate is changed, the application automatically recalculates the other rate. You can update the application calculated inverse rate, but once you do, the related rate is updated. The option enforces the inverse relationship is maintained but doesn’t prevent you from updating the rates.</td>
</tr>
<tr>
<td>Not Selected</td>
<td>The inverse rate is calculated, but you can change the rate and update the daily rates table without the corresponding rate being updated.</td>
</tr>
</tbody>
</table>

Select Pivot Currencies

Select a pivot currency that is commonly used in your currency conversions. A pivot currency is the central currency that interacts with contra currencies. For example, you set up a daily rate between the US dollar (USD) and the Euro currency (EUR) and another between the USD and the Canadian dollar (CAD). USD is the pivot currency in creating a rate between EUR and CAD. EUR and CAD are the contra currencies. Select the pivot currency from the list of values which contains those currencies that are enabled, effective, and not a statistical (STAT) currency. The description of the pivot currency is populated automatically based on the currency definition.

If you want the application to create cross rates against a base currency, define the base currency as the pivot currency. Selected pivot currencies can be changed in the Rate Types page.

Select Contra Currencies

Select currencies available on the list of values as contra currencies. The available currencies are those currencies which are enabled, effective, not STAT currency, and not the pivot currency selected earlier. The description of the contra currency is populated automatically based on the currency definition. Add or delete contra currencies in the Contra Currencies region of the Rate Types page.
Enable Cross Rates and Allow Cross Rate Overrides

Check the Enable Cross Rates check box to calculate conversion rates based on defined currency rate relationships. General Ledger calculates cross rates based on your defined cross rate rules. Associate your cross rate rules with a conversion rate type, pivot currency, and contra currencies. Cross rates facilitate the creation of daily rates by automatically creating the rates between contra currencies based on their relationship to a pivot currency. If the Enable Cross Rates option is deselected after entering contra currencies, the application stops calculating cross rates going forward for that particular rate type. All the earlier calculated cross rates for that rate type remain in the database unless you manually delete them.

For example, if you have daily rates defined for the pivot currency, USD to the contra currency, EUR, and USD to another contra currency, CAD, the application automatically creates the rates between EUR to CAD and CAD to EUR. You don’t have to manually define the EUR to CAD and CAD to EUR rates.

Select the Allow Cross Rates Override check box to permit your users to override application generated cross rates. If you accept the default of not selected, the application generated cross rates cannot be overridden.

Maintain Cross Rate Rules

Define or update your cross rate rules at any time by adding or removing contra currency assignments. Add a contra currency to a cross rate rule and run the Daily Rates Import and Calculation process to generate the new rates. If you remove a cross rate rule or a contra currency from a rule, any cross rates generated previously for that contra currency remain unless you manually delete them. Changes to the rule aren’t retroactive and don’t affect previously stored cross rates. The Cross Rate process generates as many rates as possible and skips currencies where one component of the set is missing.

Note: With a defined web service that extracts daily currency conversion rates from external services, for example Reuters, currency conversion rates are automatically updated for the daily rates and all cross currency relationships.

Related Topics

- What’s the difference between calendar and fiscal period naming

Examples of Using Conversion Rate Types in a Journal

The four predefined conversion rate types are:

- Spot
- Corporate
- User
- Fixed

Scenario

You are the general ledger accountant for Vision US Inc. You are entering a journal entry to capture three transactions that were transacted in three different foreign currencies.

- Canadian Dollar CAD: A stable currency
- Mexican Peso MXP: A fluctuating currency
- Hong Kong Dollar HKD: An infrequently used currency
You enter two journal lines with accounts and amounts for each foreign currency transaction. Based on your company procedures, you select the rate type to populate the rate for **Corporate** and **Spot** rate types from your daily rates table. You manually enter the current rate for the **User** rate type.

The following table lists the currency, the rate type that you select, and the reasons for the rate type selection.

<table>
<thead>
<tr>
<th>Selected Currency</th>
<th>Selected Rate Type</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD</td>
<td>Corporate</td>
<td>Entered a periodic type of transaction. Your company has established a daily rate to use for the entire month across divisions for all transactions in Canadian dollars, a stable currency that fluctuates only slightly over the month.</td>
</tr>
<tr>
<td>MXP</td>
<td>Spot</td>
<td>Entered a periodic type of transaction. Your company enters daily rates each day for the Mexican peso because the currency is unstable and fluctuates.</td>
</tr>
<tr>
<td>HKD</td>
<td>User</td>
<td>Entered a one time transaction. Your company does not maintain daily rates for Hong Kong dollars.</td>
</tr>
</tbody>
</table>

Your company does not currently use the **Fixed** rate type. From January 1, 1999, the conversion rate of the French franc FRF against the Euro EUR was a fixed rate of 1 EUR to 6.55957 FRF. Your French operations were started in 2007, so you maintain all your French business records in the Euro.

**FAQs for Manage Conversion Rate Types**

**What's the difference between spot, corporate, user, and fixed rate types?**

Spot, corporate, user, and fixed conversion rate types differ based on fluctuations of the entered foreign currency and your company procedures for maintaining daily rates.

- **Spot**: For currencies with fluctuating conversion rates, or when exact currency conversion is needed.
- **Corporate**: For setting a standard rate across your organization for a stable currency.
- **User**: For infrequent entries where daily rates for the entered foreign currency aren’t set up.
- **Fixed**: For rates where the conversion is constant between two currencies.

If you have infrequent foreign currency transactions, the User rate type can simplify currency maintenance. The User rate type can also provide an accurate conversion rate on the date of the transaction.

**Manage Daily Rates**
Enter Daily Rates Using the Daily Rates Spreadsheet

You are required to enter the daily rates for currency conversion from Great Britain pounds sterling (GBP) to United States dollars (USD) for 5 days.

To load rates using the Create Daily Rates Spreadsheet, you must first install Oracle ADF Desktop Integration client software. Oracle ADF Desktop Integration is an Excel add-in that enables desktop integration with Microsoft Excel workbooks. You can download the installation files from the Tools work area by selecting Download Desktop Integration Installer.

Entering Daily Rates

1. From the General Accounting work area, select the **Period Close** link.
2. From the Tasks panel, click the **Manage Currency Rates** link.
   
   Use the Currency Rates Manager page to create, edit, and review currency rate types, daily rates, and historical rates.
3. Click the Daily Rates tab.
   
   Use the Daily Rates tab to review and enter currency rates.
4. Click the **Create in Spreadsheet** button.
   
   Use the Create Daily Rates spreadsheet to enter daily rates in a template that you can save and reuse.
5. Click in the **From Currency** field. Select the GBP - Pound Sterling list item.
6. Click in the **To Currency** field. Select the USD - US Dollar list item.
7. Click in the **Conversion Rate** field. Select the Spot list item.
8. Click in the **From Conversion Date** field. Enter a valid value: 10/2/2017.
9. Click in the **To Conversion Date** field. Enter a valid value: 10/6/2017.
10. Click in the **Conversion Rate** field. Enter a valid value: 1.6.
11. Click **Submit** and click **OK** twice.
12. Review the **Record Status** column to verify that all rows were inserted successfully.
13. Save the template to use to enter daily rates frequently. You can save the spreadsheet to a local drive or a shared network drive.
14. Optionally, edit the rates from the Daily Rates user interface or resubmit the spreadsheet.

Related Topics

- Guidelines for Using Desktop Integrated Excel Workbooks

Update Currency Rates

You’re required to change today’s daily rates that were already entered. The rates you’re changing are for currency conversion from Great Britain pounds sterling (GBP) to United States dollars (USD) for your company InFusion America.

Currency conversion rates were entered by an automatic load to the Daily Rates table. They can also be entered through a spreadsheet.

Updating Currency Rates

1. Navigate to the Period Close work area.
   
   Use the Period Close work area to link to close processes and currency process.
2. Click the Manage Currency Rates link.

   Use the Currency Rates Manager page to create, edit, and review currency rate types, daily rates, and historical rates.

3. Click the Daily Rates tab.

   Use the Daily Rates tab to review and enter currency rates.

4. Click the From Currency list. Select the GBP - Pound Sterling list item.

5. Click the To Currency list. Select the USD - US Dollar list item.

6. Enter the dates for the daily rates that you are changing. Enter today's date.

7. Click the Rate Type list. Select the Spot list item.

8. Click the Search button.

9. Click in the Rate field. Enter the new rate of 1.7 in the Rate field.

10. Click in the Inverse Rate field. Enter the new inverse rate of 0.58822 in the Inverse Rate field.

11. Click the Save button.

Related Topics

- Guidelines for Using Desktop Integrated Excel Workbooks
5  **Enterprise Structures: Initial Configuration**

**Overview**

Oracle Fusion Applications have been designed to ensure your enterprise can be modeled to meet legal and management objectives. The decisions about your implementation of Oracle Fusion Applications are affected by your:

- Industry
- Business unit requirements for autonomy
- Business and accounting policies
- Business functions performed by business units and optionally, centralized in shared service centers
- Locations of facilities

Every enterprise has three fundamental structures that describe its operations and provide a basis for reporting.

- Legal
- Managerial
- Functional

In Oracle Fusion, these structures are implemented using the chart of accounts and organization hierarchies. Many alternative hierarchies can be implemented and used for reporting. You are likely to have one primary structure that organizes your business into:

- Divisions
- Business Units
- Departments

Align these structures with your strategic objectives.
This figure illustrates a grid with Business Axis, representing the enterprise division, Legal Axis representing the companies, and the Functional Axis representing the business functions.

Legal Structure

The figure illustrates a typical group of legal entities, operating various business and functional organizations. Your ability to buy and sell, own, and employ comes from your charter in the legal system. A corporation is:

- A distinct legal entity from its owners and managers.
• Owned by its shareholders, who may be individuals or other corporations.

Many other kinds of legal entities exist, such as sole proprietorships, partnerships, and government agencies.

A legally recognized entity can own and trade assets and employ people in the jurisdiction in which the entity is registered. When granted these privileges, legal entities are also assigned responsibilities to:

• Account for themselves to the public through statutory and external reporting.
• Comply with legislation and regulations.
• Pay income and transaction taxes.
• Process value added tax (VAT) collection on behalf of the taxing authority.

Many large enterprises isolate risk and optimize taxes by incorporating subsidiaries. They create legal entities to facilitate legal compliance, segregate operations, optimize taxes, complete contractual relationships, and isolate risk. Enterprises use legal entities to establish their enterprise’s identity within the laws of each country in which their enterprise operates.

The figure illustrates:

• A separate card represents a series of registered companies.
• Each company, including the public holding company, InFusion America, must be registered in the countries where they do business.
• Each company contributes to various divisions created for purposes of management reporting. These are shown as vertical columns on each card.

For example, a group might have a separate company for each business in the United States (US), but have its United Kingdom (UK) legal entity represent all businesses in that country.

The divisions are linked across the cards so that a business can appear on some or all of the cards. For example, the air quality monitoring systems business might be operated by the US, UK, and France companies. The list of business divisions is on the Business Axis.

Each company’s card is also horizontally striped by functional groups, such as the sales team and the finance team. This functional list is called the Functional Axis. The overall image suggests that information might, at a minimum, be tracked by company, business, division, and function in a group environment. In Oracle Fusion Applications, the legal structure is implemented using legal entities.

Management Structure

Successfully managing multiple businesses requires that you segregate them by their strategic objectives, and measure their results. Although related to your legal structure, the business organizational hierarchies don’t have to be reflected directly in the legal structure of the enterprise. The management structure can include divisions, subdivisions, lines of business, strategic business units, profit, and cost centers. In the figure, the management structure is shown on the Business Axis. In Oracle Fusion Applications, the management structure is implemented using divisions and business units as well as being reflected in the chart of accounts.

Functional Structure

Straddling the legal and business organizations is a functional organization structured around people and their competencies. For example, sales, manufacturing, and service teams are functional organizations. This functional structure is represented by the Functional Axis in the figure. You reflect the efforts and expenses of your functional organizations directly on the income
statement. Organizations must manage and report revenues, cost of sales, and functional expenses such as research and development and selling, general, and administrative expenses. In Oracle Fusion Applications, the functional structure is implemented using departments and organizations, including sales, marketing, project, cost, and inventory organizations.

Guidelines for Configuring Global Enterprises

Start your global enterprise structure configuration by discussing what your organization’s reporting needs are and how to represent those needs in the Oracle Fusion Applications. The following are some questions and points to consider as you design your global enterprise structure in Oracle Fusion.

- Enterprise Configuration
- Business Unit Management
- Security Structure
- Compliance Requirements

Enterprise Configuration

- What is the level of configuration needed to achieve the reporting and accounting requirements?
- What components of your enterprise do you need to report on separately?
- Which components can be represented by building a hierarchy of values to provide reporting at both detail and summary levels?
- Where are you on the spectrum of centralization versus decentralization?

Business Unit Management

- What reporting do I need by business unit?
- How can you set up your departments or business unit accounts to achieve departmental hierarchies that report accurately on your lines of business?
- What reporting do you need to support the managers of your business units, and the executives who measure them?
- How often are business unit results aggregated?
- What level of reporting detail is required across business units?

Security Structure

- What level of security and access is allowed?
- Are business unit managers and the people that report to them secured to transactions within their own business unit?
- Are the transactions for their business unit largely performed by a corporate department or shared service center?

Compliance Requirements

- How do you comply with your corporate external reporting requirements and local statutory reporting requirements?
• Do you tend to prefer a corporate first or an autonomous local approach?
• Where are you on a spectrum of centralization, very centralized or decentralized?

Model Your Enterprise Management Structure

This example uses a fictitious global company to demonstrate the analysis that can occur during the enterprise structure configuration planning process.

Scenario

Your company, InFusion Corporation, is a multinational conglomerate that operates in the United States (US) and the United Kingdom (UK). InFusion has purchased an Oracle Fusion Enterprise Resource Planning (ERP) solution including Oracle Fusion General Ledger and all of the Oracle Fusion subledgers. You are chairing a committee to discuss creation of a model for your global enterprise structure including both your US and UK operations.

InFusion Corporation

InFusion Corporation has 400 plus employees and revenue of 120 million US dollars. Your product line includes all the components to build and maintain air quality monitoring applications for homes and businesses. You have two distribution centers and three warehouses that share a common item master in the US and UK. Your financial services organization provides funding to your customers for the initial costs of these applications.

Analysis

The following are elements you must consider in creating your model for your global enterprise structure.

• Your company is required to report using US Generally Accepted Accounting Principles (GAAP) standards and UK Statements of Standard Accounting Practice and Financial Reporting Standards. How many ledgers do you want to achieve proper statutory reporting?
• Your managers need reports that show profit and loss (revenue and expenses) for their lines of business. Do you use business units and balancing segments to represent your divisions and businesses? Do you secure data by two segments in your chart of accounts which represents each department and legal entity? Or do you use one segment that represents both to produce useful, but confidential management reports?
• Your corporate management requires reports showing total organizational performance with drill-down capability to the supporting details. Do you need multiple balancing segment hierarchies to achieve proper rollup of balances for reporting requirements?
• Your company has all administrative, account payables, procurement, and Human Resources functions performed at their corporate headquarters. Do you need one or more business units in which to perform all these functions? How is your shared service center configured?
Global Enterprise Structure Model

The following figure and table summarize the model that your committee has designed and uses numeric values to provide a sample representation of your structure. The model includes the following recommendations:

- Creation of three separate ledgers representing your separate legal entities:
  - InFusion America Inc.
  - InFusion Financial Services Inc.
  - InFusion UK Services Ltd.

- Consolidation of results for application components, installations, and maintenance product lines across the enterprise

- All UK general and administrative costs processed at the UK headquarters

- US Systems' general and administrative costs processed at US Corporate headquarters
• US Financial Services maintains its own payables and receivables departments
In this chart, the green globe stands for required and gold globe stands for optional setup. The following statements expand on the data in the chart.

- The enterprise is required because it serves as an umbrella for the entire implementation. All organizations are created within an enterprise.
- Legal entities are also required. They can be optionally mapped to balancing segment values or represented by ledgers. Mapping balancing segment values to legal entities is required if you plan to use the intercompany functionality. The InFusion Corporation is a legal entity but isn’t discussed in this example.
- At least one ledger is required in an implementation in which you record your accounting transactions.
- Business units are also required because financial transactions are processed in business units.
- A shared service center is optional, but if used, must be a business unit.
- Divisions are optional and can be represented with a hierarchy of cost centers or by a second balancing segment value.
- Departments are required because they track your employees.
- Optionally, add an item master organization and inventory organizations if you’re tracking your inventory transactions in Oracle Fusion Applications.
Some Oracle Fusion Human Capital Management implementations don’t require recording accounting transactions and therefore, don’t require a ledger.

Design an Enterprise Configuration

This example illustrates how to set up an enterprise based on a global company operating mainly in the US and the UK with a single primary industry.

Scenario

InFusion Corporation is a multinational enterprise in the high technology industry with product lines that include all the components that are required to build and maintain air quality monitoring systems for homes and businesses. Its primary locations are in the US and the UK, but it has smaller outlets in France, Saudi Arabia, and the United Arab Emirates (UAE).

Enterprise Details

In the US, InFusion employs 400 people and has company revenue of 120 million US dollars. Outside the US, InFusion employs 200 people and has revenue of 60 million US dollars.

Analysis

InFusion requires three divisions.

- The US division covers the US locations.
- The Europe division covers UK and France.
- Saudi Arabia and the UAE are covered by the Middle East division.

InFusion requires legal entities with legal employers, payroll statutory units, tax reporting units, and legislative data groups for the US, UK, France, Saudi Arabia, and UAE, to employ and pay its workers in those countries.

InFusion requires a number of departments across the enterprise for each area of business, such as sales and marketing, and a number of cost centers to track and report on the costs of those departments.

InFusion has general managers responsible for business units within each country. Those business units may share reference data. Some reference data can be defined within a reference data set that multiple business units may subscribe to. Business units are also required for financial purposes. Financial transactions are always processed within a business unit.

Resulting Enterprise Configuration

Based on this analysis, InFusion requires an enterprise with multiple divisions, ledgers, legal employers, payroll statutory units, tax reporting units, legislative data groups, departments, cost centers, and business units.
This figure illustrates the enterprise configuration that results from the analysis of InFusion Corporation.

Enterprise Information for Non-HCM Users

The Manage Enterprise HCM Information task includes default settings for your enterprise such as the employment model, worker number generation, and so on. If you're not implementing Oracle Fusion Human Capital Management (HCM), then
the only action you may need to perform using this task is to change the enterprise name, if necessary. The other settings are HCM-specific and aren’t relevant outside of Oracle Fusion HCM.

Example of Adding a New Division After Acquiring a Company

This example describes how you can restructure your enterprise after acquiring a new division.

Scenario

You are part of a senior management team at InFusion Corporation. InFusion is a global company with organizations in the following countries:

- United States (US)
- United Kingdom (UK)
- France
- China
- Saudi Arabia
- United Arab Emirates (UAE)

The company’s main area of business is in the high tech industry, and it recently acquired a new company. You must analyze the company’s current enterprise structure and determine the new organizations to create in the new company.

Details of the Acquired Company

The acquired company is a Financial Services business based in Germany. The Financial Services business differs significantly from the high tech business. Therefore, you want to keep the Financial Services company as a separate business with all the costs and reporting managed by the Financial Services division.

Analysis

The following table summarizes the key decisions that you must consider when determining what new organizations to set up and how to structure the enterprise.

<table>
<thead>
<tr>
<th>Decision to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create location?</td>
<td>The Financial Services company and its departments are based in Frankfurt. Therefore, you only have to create one location.</td>
</tr>
<tr>
<td>Create separate division?</td>
<td>Yes. Although the new division will exist in the current enterprise structure, you want to keep the Financial Services company as a separate line of business. By creating a separate division, you can</td>
</tr>
</tbody>
</table>
### Decision to Consider | In This Example
---|---
manage the costs and reporting separately from the InFusion Corporation. Additionally you don’t have to modify any organizations in the enterprise setup.

**Create business unit?**
- Yes. The Financial Services business requires you to create several jobs that don’t exist in your high tech business. You can segregate the jobs that are specific to financial services in a new business unit.

**How many departments?**
- The Financial Services company currently has departments for sales, accounting, and marketing. As you have no plans to downsize or change the company, you can create three departments to retain the structure.

**How many cost centers?**
- Although you can have multiple cost centers to track the department costs, you decide to create one cost center for each department.

**How many legal entities?**
- Define a legal entity for each registered company or some other entity recognized by law. Using the legal entity, you can:
  - Record assets
  - Record liabilities
  - Record income
  - Pay transaction taxes
  - Perform intercompany trading

  In this case, you only need one legal entity.

You must define the legal entity as a legal employer and payroll statutory unit. As the new division operates only from Germany, you can configure the legal entity to suit Germany’s legal and statutory requirements.

> **Note:** You can identify the legal entity as a payroll statutory unit. When you do so, the application transfers the legal reporting unit associated with the legal entity to Oracle Fusion HCM as a tax reporting unit.

**Create legislative data group?**
- Yes. Because you currently don’t employ or pay people in Germany, you must create one legislative data group to run payroll for the workers in Germany.

---

## Resulting InFusion Enterprise Structure

Based on the analysis, you must create the following:

- One new division
- One new location
- Three new departments
- Three new cost centers
- One new legal entity
• One new legislative data group

The following figure illustrates the structure of InFusion Corporation after adding the new division and the other organizations.

Enterprise Structures Explained

Divisions

Managing multiple businesses requires that you segregate them by their strategic objectives and measure their results.
Responsibility to reach objectives can be delegated along the management structure. Although related to your legal structure, the business organizational hierarchies don’t reflect directly the legal structure of the enterprise. The management entities and structure can include:

- Divisions and subdivisions
- Lines of business
- Other strategic business units
- Their own revenue and cost centers

These organizations can be included in many alternative hierarchies and used for reporting, as long as they have representation in the chart of accounts.

**Divisions**

A division refers to a business-oriented subdivision within an enterprise, in which each division organizes itself differently to deliver products and services or address different markets. A division can operate in one or more countries, and can be many companies or parts of different companies that are represented by business units.

A division is a profit center or grouping of profit and cost centers, where the division manager is responsible for achieving business goals including profits. A division can be responsible for a share of the company’s existing product lines or for a separate business. Managers of divisions may also have return on investment goals requiring tracking of the assets and liabilities of the division. The division manager generally reports to a corporate executive.

By definition a division can be represented in the chart of accounts. Companies can use product lines, brands, or geographies as their divisions: their choice represents the primary organizing principle of the enterprise.

Historically, divisions were implemented as a node in a hierarchy of segment values. For example, Oracle E-Business Suite has only one balancing segment, and often the division and legal entity are combined into a single segment where each value stands for both division and legal entity.

**Use of Divisions in Oracle Fusion Human Capital Management (HCM)**

Divisions are used in HCM to define the management organization hierarchy, using the generic organization hierarchy. This hierarchy can be used to create organization-based security profiles.

**Overview**

A legal entity is a recognized party with rights and responsibilities given by legislation.

Legal entities have the following rights and responsibilities to:

- Own property
- Trade
- Repay debt
- Account for themselves to regulators, taxation authorities, and owners according to rules specified in the relevant legislation

Their rights and responsibilities may be enforced through the judicial system. Define a legal entity for each registered company or other entity recognized in law for which you want to record assets, liabilities, expenses and income, pay transaction taxes, or perform intercompany trading.
A legal entity has responsibility for elements of your enterprise for the following reasons:

- Facilitating local compliance
- Minimizing the enterprise's tax liability
- Preparing for acquisitions or disposals of parts of the enterprise
- Isolating one area of the business from risks in another area. For example, your enterprise develops property and also leases properties. You could operate the property development business as a separate legal entity to limit risk to your leasing business.

The Role of Your Legal Entities

In configuring your enterprise structure in Oracle Fusion Applications, the contracting party on any transaction is always the legal entity. Individual legal entities:

- Own the assets of the enterprise
- Record sales and pay taxes on those sales
- Make purchases and incur expenses
- Perform other transactions

Legal entities must comply with the regulations of jurisdictions, in which they register. Europe now allows for companies to register in one member country and do business in all member countries, and the US allows for companies to register in one state and do business in all states. To support local reporting requirements, legal reporting units are created and registered.

You are required to publish specific and periodic disclosures of your legal entities' operations based on different jurisdictions' requirements. Certain annual or more frequent accounting reports are referred to as statutory or external reporting. These reports must be filed with specified national and regulatory authorities. For example, in the United States (US), your publicly owned entities (corporations) are required to file quarterly and annual reports, as well as other periodic reports, with the Securities and Exchange Commission (SEC), which enforces statutory reporting requirements for public corporations.

Individual entities privately held or held by public companies don't have to file separately. In other countries, your individual entities do have to file in their own name, as well as at the public group level. Disclosure requirements are diverse. For example, your local entities may have to file locally to comply with local regulations in a local currency, as well as being included in your enterprise's reporting requirements in different currency.

A legal entity can represent all or part of your enterprise's management framework. For example, if you operate in a large country such as the United Kingdom or Germany, you might incorporate each division in the country as a separate legal entity. In a smaller country, for example Austria, you might use a single legal entity to host all of your business operations across divisions.

Model Legal Entities

Oracle Fusion Applications support the modeling of your legal entities. If you make purchases from or sell to other legal entities, define these other legal entities in your customer and supplier registers. These registers are part of the Oracle Fusion Trading Community Architecture.

When your legal entities are trading with each other, represent them as legal entities and as customers and suppliers in your customer and supplier registers. Use legal entity relationships to determine which transactions are intercompany and require intercompany accounting. Your legal entities can be identified as legal employers and therefore, are available for use in Human Capital Management (HCM) applications.
Several decisions you should consider when you create legal entities.

- The importance of using legal entity on transactions
- Legal entity and its relationship to business units
- Legal entity and its relationship to divisions
- Legal entity and its relationship to ledgers
- Legal entity and its relationship to balancing segments
- Legal entity and its relationship to consolidation rules
- Legal entity and its relationship to intercompany transactions
- Legal entity and its relationship to worker assignments and legal employer
- Legal entity and payroll reporting
- Legal reporting units

The Importance of Using Legal Entities on Transactions

All of the assets of the enterprise are owned by individual legal entities. Oracle Fusion Financials allow your users to enter legal entities on transactions that represent a movement in value or obligation.

For example, a sales order creates an obligation on the legal entity that books the order and promises to deliver the goods on the acknowledged date. The creation also creates an obligation on the purchaser to receive and pay for those goods. Contract law in most countries contains statutes that state damages can be sought for both:

- Actual losses, putting the injured party in the same state as if they had not entered into the contract.
- What is called loss of bargain, or the profit that would have made on a transaction.

In another example, if you revalued your inventory in a warehouse to account for raw material price increases, the revaluation and revaluation reserves must be reflected in your legal entity’s accounts. In Oracle Fusion Applications, your inventory within an inventory organization is managed by a single business unit and belongs to one legal entity.

Legal Entity and Its Relationship to Business Units

A business unit can process transactions on behalf of many legal entities. Frequently, a business unit is part of a single legal entity. In most cases, the legal entity is explicit on your transactions. For example, a payables invoice has an explicit legal entity field. Your accounts payables department can process supplier invoices on behalf of one or many business units.

In some cases, your legal entity is inferred from your business unit that’s processing the transaction. For example, Business Unit ACM UK has a default legal entity of InFusion UK Ltd. When a purchase order is placed in ACM UK, the legal entity InFusion UK Ltd is legally obligated to the supplier. Oracle Fusion Procurement, Oracle Fusion Project Portfolio Management, and Oracle Fusion Supply Chain applications rely on deriving the legal entity information from the business unit.

Legal Entity and Its Relationship to Divisions

The division is an area of management responsibility that can correspond to a collection of legal entities. If wanted, you can aggregate the results for your divisions by legal entity or by combining parts of other legal entities. Define date-effective hierarchies for your cost center or legal entity segment in your chart of accounts to facilitate the aggregation and reporting by division. Divisions and legal entities are independent concepts.

Legal Entity and Its Relationship to Ledgers

One of your major responsibilities is to file financial statements for your legal entities. Map legal entities to specific ledgers using the Oracle Fusion General Ledger Accounting Configuration Manager. Within a ledger, you can optionally map a legal entity to one or more balancing segment values.
Legal Entity and Its Relationship to Balancing Segments

Oracle Fusion General Ledger supports up to three balancing segments. Best practices recommend one segment represents your legal entity to ease your requirement to account for your operations to regulatory agencies, tax authorities, and investors. Accounting for your operations means you must produce a balanced trial balance sheet by legal entity. If you account for many legal entities in a single ledger, you must:

1. Identify the legal entities within the ledger.
2. Balance transactions that cross legal entity boundaries through intercompany transactions.
3. Decide which balancing segments correspond to each legal entity and assign them in Oracle Fusion General Ledger Accounting Configuration Manager. Once you assign one balancing segment value in a ledger, then all your balancing segment values must be assigned. This recommended best practice facilitates reporting on assets, liabilities, and income by legal entity.

Represent your legal entities by at least one balancing segment value. You may represent it by two or three balancing segment values if more granular reporting is required. For example, if your legal entity operates in multiple jurisdictions in Europe, you might define balancing segment values and map them to legal reporting units. You can represent a legal entity with more than one balancing segment value. Do not use a single balancing segment value to represent more than one legal entity.

In Oracle Fusion General Ledger, there are three balancing segments. You can use separate balancing segments to represent your divisions or strategic business units to enable management reporting at the balance sheet level for each. This solution is used to empower your business unit and divisional managers to track and assume responsibility for their asset utilization or return on investment. Using multiple balancing segments is also useful when you know at the time of implementation that you’re disposing of a part of a legal entity and want to isolate the assets and liabilities for that entity.

Implementing multiple balancing segments requires every journal entry that isn’t balanced by division or business unit, to generate balancing lines. You can’t change to multiple balancing segments after you begin using the ledger because your historical data isn’t balanced by the new balancing segments. Restating historical data must be done at that point.

If your enterprise regularly spins off businesses or holds managers accountable for utilization of assets, identify the business with a balancing segment value. If you account for each legal entity in a separate ledger, no requirement exists to identify the legal entity with a balancing segment value.

While transactions that cross balancing segments don’t necessarily cross legal entity boundaries, all transactions that cross legal entity boundaries must cross balancing segments. If you make an acquisition or are preparing to dispose of a portion of your enterprise, you may want to account for that part of the enterprise in its own balancing segment even if the portion isn’t a separate legal entity. If you don’t map legal entities sharing the same ledger to balancing segments, you can’t distinguish them using intercompany functionality or track individual equity.

Legal Entity and Its Relationship to Consolidation Rules

In Oracle Fusion Applications you can map legal entities to balancing segments and then define consolidation rules using your balancing segments. You are creating a relationship between the definition of your legal entities and their role in your consolidation.

Legal Entity and Its Relationship to Intercompany Transactions

Use Oracle Fusion Intercompany feature to create intercompany entries automatically across your balancing segments. Intercompany processing updates legal ownership within the enterprise’s groups of legal entities. Invoices or journals are created as needed. To limit the number of trading pairs for your enterprise, set up intercompany organizations and assign them to your authorized legal entities. Define processing options and intercompany accounts to use when creating intercompany transactions and to assist in consolidation elimination entries. These accounts are derived and automatically entered on your intercompany transactions based on legal entities assigned to your intercompany organizations.
Intracompany trading, in which legal ownership isn’t changed but other organizational responsibilities are, is also supported. For example, you can track assets and liabilities that move between your departments within your legal entities by creating departmental level intercompany organizations.

**Tip:** In the Oracle Fusion Supply Chain applications, you can model intercompany relationships using business units, from which legal entities are derived.

### Legal Entity and Its Relationship to Worker Assignments and Legal Employer

Legal entities that employ people are called legal employers in the Oracle Fusion Legal Entity Configurator. You must enter legal employers on worker assignments in Oracle Fusion HCM.

### Legal Entity and Payroll Reporting

Your legal entities are required to pay payroll tax and social insurance such as social security on your payroll. In Oracle Fusion Applications, you can register payroll statutory units to pay and report on payroll tax and social insurance for your legal entities. As the legal employer, you might be required to pay payroll tax, not only at the national level, but also at the local level. You meet this obligation by establishing your legal entity as a place of work within the jurisdiction of a local authority. Set up legal reporting units to represent the part of your enterprise with a specific legal reporting obligation. You can also mark these legal reporting units as tax reporting units, if the legal entity must pay taxes as a result of establishing a place of business within the jurisdiction.

### Business Units

A business unit is a unit of an enterprise that performs one or many business functions that can be rolled up in a management hierarchy. A business unit can process transactions on behalf of many legal entities. Normally, it has a manager, strategic objectives, a level of autonomy, and responsibility for its profit and loss. Roll business units up into divisions if you structure your chart of accounts with this type of hierarchy.

In Oracle Fusion Applications you do the following:

- Assign your business units to one primary ledger. For example, if a business unit is processing payables invoices, then it must post to a particular ledger. This assignment is required for your business units with business functions that produce financial transactions.
- Use a business unit as a securing mechanism for transactions. For example, if you run your export business separately from your domestic sales business, then secure the export business data to prevent access by the domestic sales employees. To accomplish this security, set up the export business and domestic sales business as two separate business units.

The Oracle Fusion Applications business unit model provides the following advantages:

- Enables flexible implementation
- Provides consistent entity that controls and reports on transactions
- Shares sets of reference data across applications

Business units process transactions using reference data sets that reflect your business rules and policies and can differ from country to country. With Oracle Fusion Application functionality, you can share reference data, such as payment terms and transaction types, across business units, or you can have each business unit manage its own set depending on the level at which you want to enforce common policies.
In summary, use business units for:

- Management reporting
- Transaction processing
- Transactional data security
- Reference data sharing and definition

**Brief Overview of Business Unit Security**

A number of Oracle Fusion Applications use business units to implement data security. You assign roles like Accounts Payable Manager to users to permit them to perform specific functions, and you assign business units for each role to users to give them access to data in those business units. For example, users who have been assigned a Payables role for a particular business unit, can perform the function of payables invoicing on the data in that business unit. Roles can be assigned to users manually using the Security Console, or automatically using provisioning rules. Business Units can be assigned to users using the Manage Data Access for Users task found in Setup and Maintenance.

**Related Topics**

- Reference Data Sets and Sharing Methods

**How Business Units Work with Reference Data Sets**

Reference data sharing enables you to group set-enabled reference data such as jobs or grades to share the data across different parts of the organization. Sets also enable you to filter reference data at the transaction level so that only data assigned to certain sets is available to be selected. To filter reference data, Oracle Fusion Human Capital Management (HCM), applications use the business unit on the transaction. To set up reference data sharing in Oracle Fusion HCM, you create business units and sets, and then assign the sets to the business units.

**Common Set Versus Specific Sets**

Some reference data in your organization may be considered global, and should therefore be made available for use within the entire enterprise. You can assign this type of data to the Common Set, which is a predefined set. Regardless of the business unit on a transaction, reference data assigned to the Common Set is always available, in addition to the reference data assigned to the set that corresponds to the business unit on the transaction.

Other types of reference data can be specific to certain business units, so you can restrict the use of the data to those business units. In this case, you can create sets specifically for this type of data, and assign the sets to the business units.

**Business Unit Set Assignment**

When you assign reference data sets to business units, you assign a default reference data set to use for all reference data types for that business unit. You can override the set assignment for one or more data types.

**Example: Assigning Sets to Business Units**

InFusion Corporation has two divisions: Lighting and Security, and the divisions each have two locations. Each location has one or more business functions.
The following figure illustrates the structure of InFusion Corporation.

When deciding how to create business units, InFusion decides to create them using the country and business function level. Therefore, they created the following business units:

- Sales_Japan
- Marketing_Japan
- Sales_US
- Sales_UK
- Marketing_India
- Sales_India

Because locations, departments, and grades are specific to each business unit, InFusion does not want to share these types of reference data across business units. They create a reference data set for each business unit so that data of those types can be set up separately. Because the jobs in the Sales business function are the same across many locations, InFusion decides to create one additional set called Jobs. They override the set assignment for the Jobs reference data group and assign it to the Jobs set. Based on these requirements, they create the following sets:

- Sales_Japan_Set
- Mktg_Japan_Set
- Sales_US_Set
- Sales_UK_Set
- Mktg_India_Set
- Sales_India_Set
- Grades_Set

The following table describes the default set assignment and the set assignment overrides for each business unit in InFusion:
### Table: Business Unit Default Set Assignment and Set Assignment Overrides

<table>
<thead>
<tr>
<th>Business Unit</th>
<th>Default Set Assignment</th>
<th>Set Assignment Overrides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales_Japan</td>
<td>Sales_Japan_Set for grades, departments, and locations</td>
<td>Jobs set for jobs</td>
</tr>
<tr>
<td>Marketing_Japan</td>
<td>Mktg_Japan_Set for grades, departments, and locations</td>
<td>None</td>
</tr>
<tr>
<td>Sales_US</td>
<td>Sales_US_Set for grades, departments, and locations</td>
<td>Jobs set for jobs</td>
</tr>
<tr>
<td>Sales_UK</td>
<td>Sales_UK_Set for grades, departments, and locations</td>
<td>Jobs set for jobs</td>
</tr>
<tr>
<td>Marketing_India</td>
<td>Mktg_India_Set for grades, departments, and locations</td>
<td>None</td>
</tr>
<tr>
<td>Sales_India</td>
<td>Sales_India_Set for grades, departments, and locations</td>
<td>Jobs set for jobs</td>
</tr>
</tbody>
</table>

When setting up grades, departments, and locations for the business units, InFusion assigns the data to the default set for each business unit. When setting up jobs, they assign the Jobs set and assign the Common Set to any jobs that may be used throughout the entire organization.

When using grades, departments, and locations at the transaction level, users can select data from the set that corresponds to the business unit they enter on the transaction, and any data assigned to the Common Set. For example, for transactions for the Marketing_Japan business unit, grades, locations, and departments from the Mktg_Japan_Set is available to select, as well as from the Common Set.

When using jobs at the transaction level, users can select jobs from the Jobs set and from the Common Set when they enter a sales business unit on the transaction. For example, when a manager hires an employee for the Sales_India business unit, the list of jobs is filtered to show jobs from the Jobs and Common sets.

The following figure illustrates what sets of jobs can be accessed when a manager creates an assignment for a worker.
Enterprise Structures Configurator (ESC)

Establishing Enterprise Structures Using the Enterprise Structures Configurator: Explained

The Enterprise Structures Configurator is an interview-based tool that guides you through the process of setting up a basic enterprise structure. By answering questions about your enterprise, the tool creates a structure of divisions, legal entities, business units, and reference data sets that reflects your enterprise structure. After you create your enterprise structure, you also follow a guided process to determine whether to use positions, and whether to set up additional attributes for jobs and positions. After you define your enterprise structure and your job and position structures, you can review them, make any necessary changes, and then load the final configuration.
This figure illustrates the process to configure your enterprise using the Enterprise Structures Configurator.

To be able to use the Enterprise Structures Configurator, you must select the Enterprise Structures Guided Flow feature for your offerings on the Configure Offerings page in the Setup and Maintenance work area. If you don’t select this feature, then you must set up your enterprise structure using individual tasks provided elsewhere in the offerings, and you can’t create multiple configurations to compare different scenarios.

**Establish Enterprise Structures**

To define your enterprise structures, use the guided flow within the Establish Enterprise Structures task to enter basic information about your enterprise, such as the primary industry. You then create divisions, legal entities, business units, and reference data sets. The Establish Enterprise Structures task enables you to create multiple enterprise configurations so that you can compare different scenarios. Until you load a configuration, you can continue to create and edit multiple configurations until you arrive at one that best suits your enterprise.

**Establish Job and Position Structures**

You also use a guided process to determine whether you want to use jobs only, or jobs and positions. The primary industry that you select in the Establish Enterprise Structures task provides the application with enough information to make an
initial recommendation. You can either accept the recommendation, or you can answer additional questions about how you manage people in your enterprise, and then make a selection. After you select whether to use jobs or positions, you are prompted to set up a descriptive flexfield structure for jobs, and for positions if applicable. Descriptive flexfields enable you to get more information when you create jobs and positions.

Review Configuration
You can view a result of the interview process prior to loading the configuration. The review results, show the divisions, legal entities, business units, reference data sets, and the management reporting structure that the application will create when you load the configuration.

Load Configuration
You can load only one configuration. When you load a configuration, the application creates the divisions, legal entities, business units, and so on. After you load the configuration, you then use individual tasks to edit, add, and delete enterprise structures.

Rolling Back an Enterprise Structure Configuration: Explained
The Enterprise Structures Configurator (ESC) provides the ability to roll back an enterprise configuration in the following circumstances:

Roll Back a Configuration Manually
You can manually roll back an enterprise configuration after loading it, for example, because you decide you do not want to use it. Clicking the Roll Back Configuration button on the Manage Enterprise Configuration page rolls back any enterprise structures that were created as a part of loading the configuration.

Roll Back a Configuration Automatically
If an error occurs during the process of loading the configuration, then the application automatically rolls back any enterprise structures that were created before the error was encountered.

Configuration Workbench
The Oracle Fusion Enterprise Structures Configurator is an interview based tool to help you analyze how to represent your business in the Oracle Fusion Applications. The interview process poses questions about the name of your enterprise, legal structure, management reporting structure, and primary organizing principle for your business. Based on your answers, the applications suggest the best practices to use to implement business units in your enterprise. You can use or modify these answers to ensure that both your reporting and administrative goals are met in your Oracle Fusion deployment.

How You Create Legal Entities in the Enterprise Structures Configurator
Use the Enterprise Structures Configurator, to create legal entities for your enterprise automatically, based on the countries in which divisions of your business operate, or you can upload a list of legal entities from a spreadsheet.
Automatically Creating Legal Entities

If you are not certain of the number of legal entities that you need, you can create them automatically. To use this option, you first identify all of the countries in which your enterprise operates. The application opens the Map Divisions by Country page, which contains a matrix of the countries that you identified, your enterprise, and the divisions that you created. You select the check boxes where your enterprise and divisions intersect with the countries to identify the legal entities that you want the application to create. The enterprise is included for situations where your enterprise operates in a country, acts on behalf of several divisions within the enterprise, and is a legal employer in a country. If you select the enterprise for a country, the application creates a country holding company.

The application automatically creates the legal entities that you select, and identifies them as payroll statutory units and legal employers. For each country that you indicated that your enterprise operates in, and for each country that you created a location for, the application also automatically creates a legislative data group.

Any legal entities that you create automatically cannot be deleted from the Create Legal Entities page within the Enterprise Structures Configurator. You must return to the Map Divisions by Country page and deselect the legal entities that you no longer want.

Example: Creating Legal Entities Automatically

InFusion Corporation is using the ESC to set up its enterprise structure. The corporation has identified two divisions, one for Lighting, and one for Security. The Lighting division operates in Japan and the US, and the Security division operates in the UK and India.

This figure illustrates InFusion Corporation’s enterprise structure.

![Enterprise Structure Diagram]

This table represents the selections that InFusion Corporation makes when specifying which legal entities to create on the Map Divisions by Country page.

<table>
<thead>
<tr>
<th>Country</th>
<th>Enterprise</th>
<th>InFusion Lighting</th>
<th>InFusion Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>US</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Based on the selections made in the preceding table, the ESC creates the following four legal entities:

- InFusion Lighting Japan LE
- InFusion Lighting US LE
- InFusion Security UK LE
- InFusion Security India LE

Creating Legal Entities Using a Spreadsheet
If you have a list of legal entities already defined for your enterprise, you can upload them from a spreadsheet. To use this option, you first download a spreadsheet template, then add your legal entity information to the spreadsheet, and then upload directly to your enterprise configuration. You can export and import the spreadsheet multiple times to accommodate revisions.

Related Topics
- Examples of HCM Organization Models
- Guidelines for Using Desktop Integrated Excel Workbooks
- How Legal Employers Work with Payroll Statutory Units and Tax Reporting Units

Considerations for Creating Business Units in the Enterprise Structures Configurator
Business units are used within Oracle Fusion applications for management reporting, processing of transactions, and security of transactional data. Using the Enterprise Structures Configurator, you create business units for your enterprise either automatically or manually.

Automatically Creating Business Units
To create business units automatically, you must specify the level at which to create business units. Business units within your enterprise may be represented at one of two levels:

- Business function level, such as Sales, Consulting, Product Development, and so on.
- A more detailed level, where a business unit exists for each combination of countries in which you operate and the functions in those countries.

You can automatically create business units at the following levels:

- Country
- Country and Division
- Country and business function
- Division
- Division and legal entity
- Division and business function
- Business function
- Legal entity
- Business function and legal entity

Select the option that best meets your business requirements, but consider the following:
- If you use Oracle Fusion Financials, the legal entity option is recommended because of the manner in which financial transactions are processed.
- The business unit level that you select determines how the application automatically creates reference data sets.

After you select a business unit level, the application generates a list of business units, and you select the ones you want the application to create. If you select a level that has two components, such as country and division, then the application displays a table listing both components. You select the check boxes at the intersections of the two components.

The business units listed by the application are suggestions only, and are meant to simplify the process to create business units. You aren’t required to select all of the business units suggested. When you navigate to the next page in the ESC guided flow, the Manage Business Units page, you can’t delete any of the business units created automatically. You must return to the Create Business Units page and deselect any business units that you no longer want.

Example: Selecting Business Unit Levels
InFusion Corporation is using the Enterprise Structures Configurator to set up its enterprise structure. InFusion has identified two divisions, one for Lighting, and one for Security. They operate in four countries: US, UK, Japan, and India, and they have created a legal entity for each of the countries. The sales and marketing functions are based in both India and Japan, while the US and the UK have only the sales function.

This figure illustrates InFusion Corporation’s enterprise structure.
The following table lists the options for business unit levels and the resulting business units that the application suggests for InFusion Corporation.

<table>
<thead>
<tr>
<th>Business Unit Level</th>
<th>Suggested Business Units</th>
</tr>
</thead>
</table>
| Country                             |  • US  
|                                     |   • UK  
|                                     |   • Japan  
|                                     |   • India  |
| Country and Division                 |  • InFusion Lighting: Japan  
|                                     |   • InFusion Lighting: US  
|                                     |   • Infusion Security: UK  
|                                     |   • Infusion Security: India  |
| Country and business function        |  • Sales: Japan  
|                                     |   • Marketing: Japan  
|                                     |   • Sales: US  
|                                     |   • Sales: UK  
|                                     |   • Marketing: India  
|                                     |   • Sales: India  |
| Division                            |  • InFusion Lighting  
|                                     |   • InFusion Security  |
| Division and Legal Entity            |  • InFusion Lighting: Japan  
|                                     |   • InFusion Lighting: US  
|                                     |   • Infusion Security: UK  
|                                     |   • Infusion Security: India  |
| Division and Business Function       |  • InFusion Lighting, Sales  
|                                     |   • InFusion Lighting, Marketing  
|                                     |   • InFusion Security, Sales  
|                                     |   • InFusion Security, Marketing  |
| Business Function                    |  • Sales  
|                                     |   • Marketing  |
| Legal Entity                         |  • Legal Entity: Japan  
|                                     |   • Legal Entity: US  
|                                     |   • Legal Entity: UK  
|                                     |   • Legal Entity India  |
| Legal Entity and Business Function   |  • Legal Entity: Japan, Sales  
|                                     |   • Legal Entity: Japan, Marketing  
|                                     |   • Legal Entity: US, Sales  
|                                     |   • Legal Entity: UK, Sales  
|                                     |   • Legal Entity India, Marketing  
|                                     |   • Legal Entity India, Sales  |
Manually Creating Business Units
If none of the levels for creating business units meets your business needs, you can create business units manually, and you create them on the Manage Business Units page. If you create business units manually, then no reference data sets are created automatically. You must create them manually as well.

Related Topics
- Reference Data Sets and Sharing Methods
- What reference data objects can be shared across asset books

Creating Reference Data Sets in the Enterprise Structures Configurator: Explained
If you created business units automatically, then the Enterprise Structures Configurator automatically creates reference data sets for you. The Enterprise Structures Configurator creates one reference data set for each business unit. You can add additional sets, but you cannot delete any of the sets that were created automatically.

A standard set called the Enterprise set is predefined.

Common Set
The Common set is a predefined set that enables you to share reference data across business units. When you select set-enabled data at the transaction level, the list of values includes data in the:

- Common set
- Set associated with the data type for the business unit on the transaction

For example, when you create an assignment, the list of values for grades includes grade in the:

- Common set
- Set that is assigned to grades for the business unit in which you creating the assignment

Jobs and Positions
Considerations for Using Jobs and Positions
Jobs and positions represent roles that enable you to distinguish between tasks and the individuals who perform those tasks.

Note the following:

- The key to using jobs or positions depends on how each is used.
- Positions offer a well-defined space independent of the person performing the job.
- Jobs are a space defined by the person.
- A job can be defined globally in the Common Set, whereas a position is defined within one business unit.
- You can update the job and department of a position at any time. For example, if you hire someone into a new role and want to transfer the position to another department.
During implementation, one of the earliest decisions is whether to use jobs or a combination of jobs and positions. The determinants for this decision are:

- The primary industry of your enterprise
- How you manage your people

**Primary Industry of Your Enterprise**

The following table outlines information about Primary industries and how they set up their workforce.

<table>
<thead>
<tr>
<th>Primary Industry</th>
<th>Workforce Setup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>Positions</td>
</tr>
<tr>
<td>Utilities</td>
<td>Positions</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Positions</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>Positions</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>Positions</td>
</tr>
<tr>
<td>Educational Services</td>
<td>Positions</td>
</tr>
<tr>
<td>Public Transportation</td>
<td>Positions</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing, and Hunting</td>
<td>Jobs</td>
</tr>
<tr>
<td>Construction</td>
<td>Jobs</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>Jobs</td>
</tr>
<tr>
<td>Information</td>
<td>Jobs</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>Jobs</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>Jobs</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>Jobs</td>
</tr>
<tr>
<td>Administrative and Support and Waste Management and Remediation Services</td>
<td>Jobs</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>Jobs</td>
</tr>
</tbody>
</table>
Management of People
Consider the following scenarios how industries manage their employee turnover:

- Scenario 1: Replace employees by rehiring to the same role.
- Scenario 2: Replace headcount but the manager uses the headcount in a different job.
- Scenario 3: Rehire employees to the same position, but the manager requests reallocation of budget to a different post.

The following table displays suggestions of what the industry should use, either jobs or positions, in these three scenarios:

<table>
<thead>
<tr>
<th>Primary Industry</th>
<th>Workforce Setup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation and Food Services</td>
<td>Jobs</td>
</tr>
<tr>
<td>Other Services (Except Public Administration)</td>
<td>Jobs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project (An industry that supports project-based forms of organization in which teams of specialists from both inside and outside the company report to project managers.)</td>
<td>Positions</td>
<td>Jobs</td>
<td>Jobs</td>
</tr>
<tr>
<td>Controlled (An industry that is highly structured in which all aspects of work and remuneration are well organized and regulated.)</td>
<td>Positions</td>
<td>Positions</td>
<td>Positions</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Positions</td>
<td>Jobs</td>
<td>Positions</td>
</tr>
<tr>
<td>Retail</td>
<td>Positions</td>
<td>Jobs</td>
<td>Positions</td>
</tr>
<tr>
<td>Education</td>
<td>Positions</td>
<td>Jobs</td>
<td>Positions</td>
</tr>
<tr>
<td>Other</td>
<td>Positions</td>
<td>Jobs</td>
<td>Jobs</td>
</tr>
</tbody>
</table>

Related Topics
- How Grades and Grade Rates Work with Jobs, Positions, Assignments, Compensation, and Payroll

Job and Position Structures
Job and position structures identify the descriptive flexfield structure that enables you to specify additional attributes that you want to capture when you define jobs and positions. Job and position attributes provide further detail to make jobs and
positions more specific. You also use attributes to define the structure of your jobs and positions. You can specify attributes at the enterprise level for jobs and positions, at the business unit level for positions, and at the reference data set level for jobs. Job and position structures are optional.

Enterprise-Level Job Attributes

When you define a job, you enter a value for the name of the job. To make job names more specific, set up attributes to identify additional details about the job, such as the nature of the work that is performed or the relative skill level required. If these attributes apply to all jobs within your enterprise, set up enterprise-level job attributes. Standard capabilities mean that you can use the different segments of the name to identify common jobs or job holders for analysis or compensation, or for grouping records in reports, for example, to find all jobs of a specific job type. You should not use attributes with values that change regularly, for example, salary ranges or expense approval levels that change every year.

This figure illustrates how job type and job level provide further details for the HR Application Specialist job.

Enterprise-Level Position Attributes

Position attributes at the enterprise level are similar to those for jobs. Each position that you define identifies a specific role in the enterprise, which you can manage independently of the person in the position. A position belongs to one specific department or organization. The name of each position must be unique. To simplify the process of managing unique names for positions, set up enterprise-level attributes to identify separate components of the position name. For example, you can set up an attribute for position title and one for position number. When defining the attributes that make up the structure of a position name, consider whether any of your attributes are part of the definition of a common job type. Using job types for a position can help you manage common information that applies to many different positions. For example, you can define a job type of Manager.Level 1 and use this for comparison of positions across departments or lines or business, or for setting common job requirements. You can then define multiple manager type positions in your HR department, each of which has responsibility for a different management function or group.
This figure illustrates how title and position number provide further details for the manager position.

![Position Attributes Diagram]

**Business Unit-Level Attributes for Positions**

If you have information that you want to capture for positions that is specific to each business unit, then you can define attributes at the business unit level for positions. When you create positions, these attributes appear in addition to any enterprise-level attributes. For example, you may want to identify the sales region for all positions in the sales business unit. You can set up a text attribute called Sales Region and use it to enter the necessary information when creating positions for the sales business unit.

**Reference Data Set-Level Attributes for Jobs**

If you have information for jobs that applies to specific reference data sets, set up attributes for jobs at the reference data set level. When you create jobs, these attributes appear in addition to any enterprise-level attributes. For example, you may want to identify all information technology (IT) jobs within a specific set. You can set up a text attribute called Function and use it to enter IT in jobs that you create that perform an IT function within a specific set.

**Examples of Jobs**

Jobs are typically used without positions by service industries where flexibility and organizational change are key features.

**Software Industry**

For example, XYZ Corporation has a director over the departments for developers, quality assurance, and technical writers.

- Recently, three developers have resigned from the company.
- The director decides to redirect the headcount to other areas.
- Instead of hiring all three back into development, one person is hired to each department, quality assurance, and technical writing.
In software industries, the organization is fluid. Using jobs gives an enterprise the flexibility to determine where to use headcount, because the job only exists through the person performing it. In this example, when the three developers leave XYZ Corporation, their jobs no longer exist, therefore the corporation has the flexibility to move the headcount to other areas.

This figure illustrates the software industry job setup.

Examples of Positions

Positions are typically used by industries that use detailed approval rules, which perform detailed budgeting and maintain headcounts, or have high turnover rates.

Retail Industry

ABC Corporation has high turnovers. It loses approximately 5% of its cashiers monthly. The job of the cashier includes three positions: front line cashier, service desk cashier, and layaway cashier. Each job is cross-trained to take over another cashier’s position. When one cashier leaves from any of the positions, another existing cashier from the front line, service desk or layaway can assist where needed. But to ensure short lines and customer satisfaction, ABC Corporation must replace each cashier lost to turnover. Since turnover is high in retail it’s better for this industry to use positions.

Note the following:

- An automatic vacancy is created when an employee terminates employment.
- The position exists even when there are no holders. Having the position continue to exist is important if the person who leaves the company is a manager or supervisor with direct reports.
- All direct reports continue reporting to the position even if the position is empty.
- You don’t have to reassign these employees to another manager or supervisor. The replacement manager is assigned to the existing position.

Also, an added advantage to using Positions is when you hire somebody new, many of the attributes are inherited from the position. This speeds up the hiring process.
This figure illustrates the retail position setup.

Health Care Industry

Health care is an industry that must regulate employment, roles, and compensation according to strict policies and procedures. Fixed roles tend to endure over time, surviving multiple incumbents. Industries that manage roles rather than individuals, where roles continue to exist after individuals leave, typically model the workforce using positions.

The hospital has a structured headcount and detailed budgeting. For example, a specific number of surgeons, nurses, and interns of various types are needed. These positions must be filled in order for the hospital to run smoothly. Use jobs and positions when you apply detailed headcount rules.
This figure illustrates the hospital position setup.

FAQs for Enterprise Structures Initial Configuration

What happens if I don't use the Enterprise Structures Configurator to set up my enterprise structures?

The Enterprise Structures Configurator is an interview-based tool that guides you through setting up divisions, legal entities, business units, and reference data sets. If you do not use the Enterprise Structures Configurator, then you must set up your enterprise structure using the individual tasks that correspond to each enterprise component. In addition, you can't set up multiple configurations and compare different scenarios. Using the Enterprise Structures Configurator is the recommended process for setting up your enterprise structures.

What's an ultimate holding company?

The legal entity that represents the top level in your organization hierarchy, as defined by the legal name entered for the enterprise. This designation is used only to create an organization tree, with these levels:

- Ultimate holding company as the top level
- Divisions and country holding companies as the second level
- Legal employers as the third level
What happens if I override the set assignment?

For the selected business unit, you can override the default reference data set for one or more reference data groups. For example, assume you have three reference data groups: Vision 1 SET, Vision 2 SET, and Vision 3 SET, where Vision SET 1 is the default set for business unit United Kingdom Vision 1 BU. You can override the default so that:

- Grades are assigned to Vision 2 SET.
- Departments are assigned to Vision 3 SET.
- Jobs are assigned to the default set, Vision 3 SET.
6 Enterprise Structures: Maintenance

Define Reference Data Sharing

Reference Data Sharing

Reference data sharing facilitates sharing of configuration data such as jobs and payment terms, across organizational divisions or business units. You define reference data sets and determine how common data is shared or partitioned across business entities to avoid duplication and reduce maintenance effort. Depending on the requirement (specific or common), each business unit can maintain its data at a central location, using a set of values either specific to it or shared by other business units.

A common reference data set is available as the default set, which can be assigned to several business units sharing the same reference data. For commonly used data such as currencies, you can use the common reference data set and assign it to multiple business units in various countries that use the same currency. In cases where the default set can’t be assigned to an entity, you can create specific sets. The data set visible on the transactional page depends on the sharing method used to share reference data.

For example, XYZ Corporation uses the same grades throughout the entire organization. Instead of different business units setting up and using the same grades, XYZ Corporation decides to create a set called Grades, which contains the grades. All business units in the organization have the Grades set so that the grades can be shared and used.

Note: For specific information about configuring reference data sharing for a particular object or product, refer to the relevant product documentation.

Related Topics

- Reference Data Sets

Reference Data Sets and Sharing Methods

Oracle Fusion Applications reference data sharing feature is also known as SetID. The reference data sharing functionality supports operations in multiple ledgers, business units, and warehouses. As a result, there is a reduction in the administrative burden and the time to implement new business units. For example, you can share sales methods, or transaction types across business units. You may also share certain other data across asset books, cost organizations, or project units.

The reference data sharing features use reference data sets to which reference data is assigned. The reference data sets group assigned reference data. The sets can be understood as buckets of reference data assigned to multiple business units or other application components.

Reference Data Sets

You begin this part of your implementation by creating and assigning reference data to sets. Make changes carefully as changes to a particular set affect all business units or application components using that set. You can assign a separate set to each business unit for the type of object that’s being shared. For example, assign separate sets for payment terms, transaction types, and sales methods to your business units.
Your enterprise can determine that certain aspects of your corporate policy can affect all business units. The remaining aspects are at the discretion of the business unit manager to implement. This allows your enterprise to balance autonomy and control for each business unit. For example, your enterprise holds business unit managers accountable for their profit and loss, but manages working capital requirements at a corporate level. In such a case, you can let managers define their own sales methods, but define payment terms centrally. In this example:

- Each business unit has its own reference data set for sales methods.
- One central reference data set for payment terms is assigned to all business units.

The reference data sharing is especially valuable for lowering the cost of setting up new business units. For example, your enterprise operates in the hospitality industry. You are adding a new business unit to track your new spa services. The hospitality divisional reference data set can be assigned to the new business unit to quickly set up data for this entity component. You can establish other business unit reference data in a business unit-specific reference data set as needed.

Reference Data Sharing Methods

Variations exist in the methods used to share data in reference data sets across different types of objects. The following list identifies the methods:

- Assignment to one set only, no common values allowed. This method is the simplest form of sharing reference data that allows assigning a reference data object instance to one and only one set. For example, Asset Prorate Conventions are defined and assigned to only one reference data set. This set can be shared across multiple asset books, but all the values are contained only in this one set.

- Assignment to one set only, with common values. This method is the most commonly used method of sharing reference data that allows defining reference data object instance across all sets. For example, Receivables Transaction Types are assigned to a common set that’s available to all the business units. You need not explicitly assign the transaction types to each business unit. In addition, you can assign a business unit-specific set of transaction types. At transaction entry, the list of values for transaction types includes the following:
  - Transaction types from the set assigned to the business unit.
  - Transaction types assigned to the common set that’s shared across all business units.

- Assignment to multiple sets, no common values allowed. The method of sharing reference data that allows a reference data object instance to be assigned to multiple sets. For instance, Payables Payment Terms use this method. It means that each payment term can be assigned to one or more than one set. For example, you assign the payment term Net 30 to several sets, but assign Net 15 to a set specific only to your business unit. At transaction entry, the list of values for payment terms consists of only the set that’s assigned to the transaction’s business unit.

Note: Oracle Fusion Applications contains a reference data set called Enterprise. Define any reference data that affects your entire enterprise in this set. Also update the data set going forward as you create new reference data items.

Related Topics

- Items and Supplier Site Reference Data Sharing
- What reference data objects can be shared across cost organizations
- What reference data objects can be shared across project units
- What reference data objects can be shared across asset books
Assignment of Reference Data Sets to Reference Objects

You can assign the reference data sets to reference objects using the Manage Reference Data Set Assignments page. For multiple assignments, you can classify different types of reference data sets into groups and assign them to the reference entity objects. The assignment takes into consideration the determinant type, determinant, and reference group, if any.

Determinant Types

The partitioned reference data is shared using a business context setting called the determinant type. A determinant type is the point of reference used in the data assignment process. The following table lists the determinant types used in the reference data assignment.

<table>
<thead>
<tr>
<th>Determinant Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Book</td>
<td>Information about the acquisition, depreciation, and retirement of an asset that belongs to a ledger or a business unit.</td>
</tr>
<tr>
<td>Business Unit</td>
<td>The departments or organizations within an enterprise.</td>
</tr>
<tr>
<td>Cost Organization</td>
<td>The organization used for cost accounting and reporting on various inventory and cost centers within an enterprise.</td>
</tr>
<tr>
<td>Project Unit</td>
<td>A logical organization within an enterprise that is responsible for enforcing consistent project management practices.</td>
</tr>
<tr>
<td>Reference Data Set</td>
<td>References to other shared reference data sets.</td>
</tr>
</tbody>
</table>

Determinant

The determinant (also called determinant value) is a value that corresponds to the selected determinant type. The determinant is one of the criteria for selecting the appropriate reference data set.

Reference Groups

A transactional entity may have multiple reference entities (generally considered to be setup data). However, all reference entities are treated alike because of similarity in implementing business policies and legal rules. Such reference entities in your application are grouped into logical units called reference groups. For example, all tables and views that define Sales Order Type details might be a part of the same reference group. Reference groups are predefined in the reference groups table.

FAQs for Define Reference Data Sharing

What reference data objects can be shared across business units?

The following table contains the reference data objects for the Oracle Fusion Applications that can be shared across business units and the method in which the reference data for each is shared.
<table>
<thead>
<tr>
<th>Application Name</th>
<th>Reference Data Object</th>
<th>Method of Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trading Community Model</td>
<td>Customer Account Relationship</td>
<td>Assignment to one set only, no common values allowed</td>
</tr>
<tr>
<td>Trading Community Model</td>
<td>Customer Account Site</td>
<td>Assignment to one set only, no common values allowed</td>
</tr>
<tr>
<td>Trading Community Model</td>
<td>Salesperson</td>
<td>Assignment to one set only, no common values allowed</td>
</tr>
<tr>
<td>Opportunity Management</td>
<td>Sales Method Group</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Work Management</td>
<td>Assessment Templates</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Enterprise Contracts</td>
<td>Contract Types</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Sales</td>
<td>Sales Method</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Common Components</td>
<td>Activity Templates</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Payables</td>
<td>Payment Terms</td>
<td>Assignment to multiple sets, no common values allowed</td>
</tr>
<tr>
<td>Receivables</td>
<td>Accounting Rules</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Receivables</td>
<td>Aging Buckets</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Receivables</td>
<td>Auto Cash Rules</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Receivables</td>
<td>Collectors</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Receivables</td>
<td>Lockbox</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Receivables</td>
<td>Memo Lines</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Receivables</td>
<td>Payment Terms</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Application Name</td>
<td>Reference Data Object</td>
<td>Method of Sharing</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Receivables</td>
<td>Remit To Address</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Receivables</td>
<td>Revenue Contingencies</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Receivables</td>
<td>Transaction Source</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Receivables</td>
<td>Transaction Type</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Advanced Collections</td>
<td>Collections Setups</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Advanced Collections</td>
<td>Dunning Plans</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Tax</td>
<td>Tax Classification Codes</td>
<td>Assignment to multiple sets, no common values allowed</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Departments</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Jobs</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Locations</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Grades</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Project Billing</td>
<td>Project and Contract Billing</td>
<td>Assignment to multiple sets, no common values allowed</td>
</tr>
<tr>
<td>Project Foundation</td>
<td>Project Accounting Definition</td>
<td>Assignment to one set only, no common values allowed</td>
</tr>
<tr>
<td>Project Foundation</td>
<td>Project Rates</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Order Management</td>
<td>Hold Codes</td>
<td>Assignment to one set only, with common values</td>
</tr>
<tr>
<td>Order Management</td>
<td>Orchestration Process</td>
<td>Assignment to one set only, with common values</td>
</tr>
</tbody>
</table>
Define Legal Jurisdictions and Authorities for Human Capital Management

Overview

You are required to register your legal entities with legal authorities in the jurisdictions where you conduct business. Register your legal entities as required by local business requirements or other relevant laws. For example, register your legal entities for tax reporting to report sales taxes or value added taxes.

Define jurisdictions and related legal authorities to support multiple legal entity registrations, which are used by Oracle Fusion Tax and Oracle Fusion Payroll. When you create a legal entity, the Oracle Fusion Legal Entity Configurator automatically creates one legal reporting unit for that legal entity with a registration.

Jurisdictions

Jurisdiction is a physical territory such as a group of countries, country, state, county, or parish where a particular piece of legislation applies. French Labor Law, Singapore Transactions Tax Law, and US Income Tax Laws are examples of particular legislation that apply to legal entities operating in different countries' jurisdictions. Judicial authority may be exercised within a jurisdiction.

Types of jurisdictions are:

- Identifying Jurisdiction
- Income Tax Jurisdiction
- Transaction Tax Jurisdiction

Identifying Jurisdiction

For each legal entity, select an identifying jurisdiction. An identifying jurisdiction is your first jurisdiction you must register with to be allowed to do business in a country. If there's more than one jurisdiction that a legal entity must register with to commence business, select one as the identifying jurisdiction. Typically the identifying jurisdiction is the one you use to uniquely identify your legal entity.

Income tax jurisdictions and transaction tax jurisdictions don't represent the same jurisdiction. Although in some countries, the two jurisdictions are defined at the same geopolitical level, such as a country, and share the same legal authority, they're two distinct jurisdictions.

Income Tax Jurisdiction

Create income tax jurisdictions to properly report and remit income taxes to the legal authority. Income tax jurisdictions by law impose taxes on your financial income generated by all your entities within their jurisdiction. Income tax is a key source of funding that the government uses to fund its activities and serve the public.
Transaction Tax Jurisdiction
Create transaction tax jurisdictions through Oracle Fusion Tax in a separate business flow, because of the specific needs and complexities of various taxes. Tax jurisdictions and their respective rates are provided by suppliers and require periodic maintenance. Use transaction tax jurisdiction for legal reporting of sales and value added taxes.

Legal Authorities
A legal authority is a government or legal body that’s charged with powers to make laws, levy and collect fees and taxes, and remit financial appropriations for a given jurisdiction.

For example, the Internal Revenue Service is the authority for enforcing income tax laws in United States. In some countries, such as India and Brazil, you’re required to print legal authority information on your tax reports. Legal authorities are defined in the Oracle Fusion Legal Entity Configurator. Tax authorities are a subset of legal authorities and are defined using the same setup flow.

Legal authorities aren’t mandatory in Oracle Fusion Human Capital Management (HCM), but are recommended and are generally referenced on statutory reports.

Create Legal Jurisdictions, Addresses and Authorities
Define legal jurisdictions and related legal authorities to support multiple legal entity registrations, which are used by Oracle Fusion Tax and Oracle Fusion Payroll.

Legal Jurisdictions
Create a legal jurisdiction by following these steps:

1. Navigator > Setup and Maintenance > Manage Legal Jurisdictions > Go to Task.
2. Select Create.
3. Enter a unique Name, United States Income Tax.
4. Select a Territory, United States.
5. Select a Legislative Category, Income tax.
6. Select Identifying, Yes. Identifying indicates the first jurisdiction a legal entity must register with to do business in a country.
7. Enter a Start Date if desired. You can also add an End Date to indicate a date that the jurisdiction may no longer be used.
8. Select a Legal Entity Registration Code, EIN or TIN.
9. Select a Legal Reporting Unit Registration Code, Legal Reporting Unit Registration Number.
10. Optionally enter one or more Legal Functions.
11. Save and Close.

Legal Addresses for Legal Entities and Reporting Units
Create a legal address for legal entities and reporting units by following these steps:

1. Navigator > Setup and Maintenance > Manage Legal Address > Go to Task.
2. Select Create.
4. Enter Address Line 1, Oracle Parkway.
5. Optionally enter Address Line 2, and Address Line 3.
6. Enter or Select the postal code, 94065.
7. Select **Geography** 94065 and **Parent Geography** Redwood Shores, San Mateo, CA.
9. **OK**.
10. **Save and Close**.

### Legal Authorities

Create a legal authority by following these steps:

1. **Navigator** > **Setup and Maintenance** > **Manage Legal Authorities** > **Go to Task**.
2. Enter the **Name**, California Franchise Tax Board.
3. Enter the **Tax Authority Type**, Reporting.

    ✎ **Note**: Create an address for the legal authority.

4. Select **Create**.
5. The **Site Number** is automatically assigned.
6. Optionally enter a **Mail Stop**.
7. Select **Country**, United States
8. Enter **Address Line 1**, 121 Spear Street, Suite 400.
9. Optionally enter **Address Line 2** and **Address Line 3**.
10. Enter or Select the postal code, 94105.
11. Select **Geography** 94105 and **Parent Geography** San Francisco, San Francisco, CA.
12. **OK**.
14. Optionally click the **One-Time Address** check box.
15. The **From Date** displays today’s date. Update if necessary.
16. Optionally enter a **To Date** to indicate the last day the address can be used.

    ✎ **Note**: You can optionally enter **Address Purpose** details.

17. Select **Add Row**.
18. Select **Purpose**.
19. The **Purpose from Date** will default to today’s date.
20. Optionally enter a **Purpose to Date**.
21. **OK**.
22. **Save and Close**.

### Create Legal Entities, Registrations, and Reporting Units

Define a legal entity for each registered company or other entity recognized in law for which you want to record assets, liabilities, and income, pay transaction taxes, or perform intercompany trading.

#### Legal Entity

Create a legal entity by following these steps:

1. **Navigator** > **Setup and Maintenance** > **Manage Legal Entity** > **Go to Task**.
2. Accept the default **Country**, United States.
3. Enter **Name**, InFusion USA West.
4. Enter **Legal Entity Identifier**, US0033.
5. Optionally enter **Start Date**. When the start date is blank the legal entity is effective from the creation date.
6. Optionally enter an **End Date**.
7. Optionally, if your legal entity should be registered to report payroll tax and social insurance, select the **Payroll statutory unit** check box.
8. Optionally, if your legal entity has employees, select the **Legal employer** check box.
9. Optionally, if this legal entity is not a payroll statutory unit, select an existing payroll statutory unit to report payroll tax and social instance on behalf of this legal entity.
10. Enter the **Registration Information**
12. Search for and select a **Legal Address**, 500 Oracle Parkway, Redwood Shores, CA 94065. The legal address must have been entered previously using the **Manage Legal Address** task.
13. **OK**.
14. Optionally enter a **Place of Registration**.
15. Enter the **EIN or TIN**.
16. Enter the **Legal Reporting Unit Registration Number**.
17. **Save and Close**.
18. **Navigator > Setup and Maintenance > Define Legal Entries > Manage Legal Entity > Select** to set scope.
19. Select the **Manage Legal Entity**.
20. In the *Legal Entity* list, select **Select and Add**.
21. Click **Apply and Go to Task**.
22. Select your legal entity.
23. **Save and Close**. This sets the scope for your task list to the selected legal entity.
24. **Save and Close**.

**Legal Entity Registrations**
A legal entity registration with the same name as that of the legal entity is created by default. To verify this, locate the **Manage Legal Entity Registrations** task and then select **Go to Task**. To create another registration for the legal entity follow these steps:

1. **Navigator > Setup and Maintenance > Manage Legal Entity Registrations**: Verify that the **Legal Entity** scope value is set correctly.
2. **Go to Task**.
3. Select **Create**.
4. Enter **Jurisdiction**.
5. Enter **Registered Address**.
6. Enter **Registered Name**.
7. Optionally enter **Alternate Name**, **Registration Number**, **Place of Registration**, **Issuing Legal Authority**, and **Issuing Legal Authority Address**, **Start Date**, and **End Date**.
8. **Save and Close**.

**Legal Reporting Unit**
When a legal entity is created, a legal reporting unit with the same name as that of the entity is also automatically created. To create more legal reporting units or modify the settings follow these steps:

1. **Navigator > Setup and Maintenance > Define Legal Reporting Unit**. > Manage Legal Reporting Unit. Verify that the **Legal Entity** scope value is set correctly.
2. **Go to Task**
3. Select **Create**.
4. Enter **Territory**, United States.
5. Enter **Name**.
6. Optionally enter a **Start Date**.
7. Enter **Registration Information**.
8. Search for and select **Jurisdiction**.
9. Enter **Main Legal Reporting Unit** information.
10. Select the value Yes or No for the **Main Legal Reporting Unit**. Set value to yes only if you are creating a new main (primary) legal reporting unit.
11. Enter the **Main Effective Start Date**, 1/1/11.
12. **Save and Close**.

**Related Topics**
- Overview
- Plan Legal Reporting Units
- Model Legal Entities

**Define Legal Entities for Human Capital Management**

**Legislative Data Groups**

Legislative data groups are a means of partitioning payroll and related data. At least one legislative data group is required for each country where the enterprise operates. Each legislative data group is associated with one or more payroll statutory units. Each payroll statutory unit can belong to only one legislative data group.

Payroll-related information, such as elements, is organized by legislative data group. Each legislative data group:
- Marks a legislation in which payroll is processed.
- Is associated with a legislative code, currency, and its own cost allocation key flexfield structure.
- Is a boundary that can share the same set up and still comply with the local laws.
- Can span many jurisdictions as long as they’re within one country.
- Can contain many legal entities that act as payroll statutory units.

**How Legal Employers Work with Payroll Statutory Units and Tax Reporting Units**

When you set up legal entities, you can identify them as legal employers and payroll statutory units, which makes them available for use in Oracle Fusion Human Capital Management (HCM). Depending on how your organization is structured, you may have only one legal entity that is also a payroll statutory unit and a legal employer, or you may have multiple legal entities, payroll statutory units, and legal employers.

**Legal Employers and Payroll Statutory Unit**

Payroll statutory units enable you to group legal employers so that you can perform statutory calculations at a higher level, such as for court orders or for United Kingdom (UK) statutory sick pay. In some cases, a legal employer is also a payroll statutory unit. However, your organization may have several legal employers in one payroll statutory unit. A legal employer can belong to only one payroll statutory unit.
Payroll Statutory Units and Tax Reporting Units

Payroll statutory units and tax reporting units have a parent-child relationship, with the payroll statutory unit being the parent.

Tax Reporting Units and Legal Employers

Tax reporting units are indirectly associated with a legal employer through the payroll statutory unit. One or more tax reporting units can be used by a single legal employer, and a tax reporting unit can be used by one or more legal employers. For example, assume that a single tax reporting unit is linked to a payroll statutory unit. Assume also that two legal employers are associated with this payroll statutory unit. In this example, both legal employers are associated with the single tax reporting unit.

Use the Manage Legal Reporting Unit HCM Information task to designate an existing legal reporting unit as a tax reporting unit. If you create a new legal reporting unit that belongs to a legal employer (that is not also a payroll statutory unit), you select a parent payroll statutory unit and then, when you run the Manage Legal Reporting Unit HCM Information task, you designate it as a tax reporting unit and select the legal employer.

Related Topics

- Overview

Examples of HCM Organization Models

These examples illustrate different models for human capital management (HCM) organizations that include a legislative data group (LDG). This example includes LDGs, which aren’t an organization classification, to show how to partition payroll data by associating them with a payroll statutory unit.

Simple Configuration

This example illustrates a simple configuration that doesn’t include any tax reporting units.

Note the following:

- The legal employer and payroll statutory units are the same, sharing the same boundaries.
- Reporting can only be done at a single level. Countries such as Saudi Arabia and the United Arab Emirates (UAE) might use this type of model, as these countries report at the legal entity level.
This figure illustrates a simple configuration where the enterprise has only one legal entity, which is both a payroll statutory unit and a legal employer.

Multiple Legal Employers and Tax Reporting Units

This example illustrates a more complex configuration. In this enterprise, you define one legal entity, InFusion US as a payroll statutory unit with two separate legal entities, which are also legal employers. This model shows multiple legal employers that are associated with a single payroll statutory unit. Tax reporting units are always associated with a specific legal employer (or employers) through the payroll statutory unit.

The implication is that payroll statutory reporting boundaries vary from human resources (HR) management, and you can categorize the balances separately by one of the following:

- Payroll statutory unit
- Legal employer
- Tax reporting unit

This configuration is based on tax filing requirements, as some tax-related payments and reports are associated with a higher level than employers. An example of a country that might use this model is the US.
This figure illustrates an enterprise that has one payroll statutory unit and multiple legal employers and tax reporting units.

One Payroll Statutory Unit and Two Tax Reporting Units

This model makes no distinction between a legal employer and a payroll statutory unit. You define tax reporting units as subsidiaries to the legal entity.

In this enterprise, legal entity is the highest level of aggregation for payroll calculations and reporting. Statutory reporting boundaries are the same for both payroll and HR management. An example of a country that might use this model is France.
This figure illustrates an example of an organization with one legal entity. The legal entity is both a legal employer and a payroll statutory unit and that has two tax reporting units.

One Payroll Statutory Unit with Several Tax Reporting Units

In this model, the enterprise has one legal entity. Legal employers and tax reporting units are independent from each other within a payroll statutory unit, because there is no relationship from a legal perspective. Therefore, you can run reporting on both entities independently.

Using this model, you wouldn’t typically:

- Report on tax reporting unit balances within a legal employer
- Categorize balances by either or both organizations, as required

An example of a country that might use this model is India.
This figure illustrates an enterprise with one legal entity that’s a payroll statutory unit and a legal employer. The tax reporting units are independent from the legal employer.

**Multiple Payroll Statutory Units with Several Tax Reporting Units**

In this model, the enterprise has two legal entities. The legal employers and tax reporting units are independent from each other within a payroll statutory unit, because there is no relationship from a legal perspective. Therefore, you can run reporting on both entities independently.

Using this model, you wouldn’t typically:

- Report on tax reporting unit balances within a legal employer
- Categorize balances by either or both organizations, as required
An example of a country that might use this model is the United Kingdom (UK).

This figure illustrates an enterprise with two legal entities, and legal employers and tax reporting units are independent from each other.

Related Topics

• Overview
Creating Calculation Cards for Deductions at Different Levels: Examples

You can create and manage calculation cards at several different levels, from an individual person to a payroll statutory unit. Use the cards to capture information specific to a person or organization, such as an employee’s tax filing status or an employer’s tax identification number. Calculation card entries override default values defined at other levels. The priority of information, from highest to lowest, is as follows:

1. Personal calculation card (payroll relationship level)
2. Tax reporting unit calculation card
3. Payroll statutory unit calculation card
4. Calculation value definitions (legislative data group level)

**Note:** Not all countries or territories support creating calculation cards for payroll statutory units and tax reporting units. The enterable values at each level also vary by country or territory. The basic steps to create and manage calculation cards are the same at all levels.

Use these examples to understand when you might define calculation cards at each level.

**Personal Calculation Card**

Scenario: An employee qualifies for a special reduced tax rate.

Task: Manage Calculation Cards task in the Payroll Administration work area.

**Tax Reporting Unit Card**

Scenario: The income tax exemption amount is 2000 at the legislative data group level, but a tax reporting unit in a particular state or province uses an exemption amount of 2500. Enter this default value for the tax reporting unit, which can be overridden on personal calculation cards.

Task: Manage Legal Reporting Unit Calculation Cards task in the Setup and Maintenance work area.

**Payroll Statutory Unit Card**

Scenario: During application setup, the implementation team defines default contribution rates for the payroll statutory unit.

Task: Manage Legal Entity Calculation Cards task in the Setup and Maintenance work area.

**Calculation Value Definition**

Scenario: You can view the predefined income tax rates for your country, but you cannot edit them.

Task: Manage Calculation Value Definitions task in the Payroll Calculation work area.

If an employer qualifies for a special tax rate, enter these values on a calculation card at the appropriate level.
FAQs for Define Legal Entities for Human Capital Management

What's a legal employer?

A legal employer is a legal entity that employs workers. You define a legal entity as a legal employer in the Oracle Fusion Legal Entity Configurator.

The legal employer is captured at the work relationship level, and all assignments within that relationship are automatically with that legal employer. Legal employer information for worker assignments is also used for reporting purposes.

What's a legal address?

A legal address is the mailing address of a legal entity or legal authority. A legal address is also the address a legal entity uses to register with a legal authority.

You can use legal addresses to send correspondence, such as invoices, bills, reports, and so on, to a legal entity or authority.

**Note:**
- You must create legal addresses before creating legal entities
- You can create legal addresses for legal authorities when creating legal authorities

What's a payroll statutory unit?

Payroll statutory units are legal entities that are responsible for paying workers, including the payment of payroll tax and social insurance. A payroll statutory unit can pay and report on payroll tax and social insurance on behalf of one or many legal entities, depending on the structure of your enterprise. For example, if you're a multinational, multiple company enterprise, then you register a payroll statutory unit in each country where you employ and pay people. You can optionally register a consolidated payroll statutory unit to pay and report on workers across multiple legal employers within the same country. You associate a legislative data group with a payroll statutory unit to provide the correct payroll information for workers.

What's a tax reporting unit?

Use a tax reporting unit to group workers for the purpose of tax and social insurance reporting. A tax reporting unit is the Oracle Fusion Human Capital Management (HCM) version of the legal reporting unit in Oracle Fusion Applications.

To create a tax reporting unit, you use the Oracle Fusion Legal Entity Configurator to define a legal entity as a payroll statutory unit. When you identify a legal entity as a payroll statutory unit, the application transfers the legal reporting units that are associated with that legal entity to Oracle Fusion HCM as tax reporting units. You can then access the tax reporting unit using the Manage Legal Reporting Unit HCM Information task.
If you identify a legal entity as a legal employer, and not as a payroll statutory unit, you must enter a parent payroll statutory unit. The resulting legal reporting units are transferred to Oracle Fusion HCM as tax reporting units, but as children of the parent payroll statutory unit that you entered, and not the legal entity that you identified as a legal employer.
7 Workforce Structures: Organizations

Design an Enterprise Configuration

This example illustrates how to set up an enterprise based on a global company operating mainly in the US and the UK with a single primary industry.

Scenario

InFusion Corporation is a multinational enterprise in the high technology industry with product lines that include all the components that are required to build and maintain air quality monitoring systems for homes and businesses. Its primary locations are in the US and the UK, but it has smaller outlets in France, Saudi Arabia, and the United Arab Emirates (UAE).

Enterprise Details

In the US, InFusion employs 400 people and has company revenue of 120 million US dollars. Outside the US, InFusion employs 200 people and has revenue of 60 million US dollars.

Analysis

InFusion requires three divisions.

- The US division covers the US locations.
- The Europe division covers UK and France.
- Saudi Arabia and the UAE are covered by the Middle East division.

InFusion requires legal entities with legal employers, payroll statutory units, tax reporting units, and legislative data groups for the US, UK, France, Saudi Arabia, and UAE, to employ and pay its workers in those countries.

InFusion requires a number of departments across the enterprise for each area of business, such as sales and marketing, and a number of cost centers to track and report on the costs of those departments.

InFusion has general managers responsible for business units within each country. Those business units may share reference data. Some reference data can be defined within a reference data set that multiple business units may subscribe to. Business units are also required for financial purposes. Financial transactions are always processed within a business unit.

Resulting Enterprise Configuration

Based on this analysis, InFusion requires an enterprise with multiple divisions, ledgers, legal employers, payroll statutory units, tax reporting units, legislative data groups, departments, cost centers, and business units.
This figure illustrates the enterprise configuration that results from the analysis of InFusion Corporation.
Guidelines for Using Single or Multiple Classifications for an Organization

Organization classifications define the purpose of the organization, whether it’s a department, a division, or a legal entity. In some enterprises, organization classifications overlap, which means that the same organization can be assigned multiple classifications. For example, one organization within an enterprise might be both a project organization and a department. The classifications of organizations vary according to business objectives, legal structure, industry, company culture, size and type of growth. You can create organizations in Oracle Fusion with one or more classifications to reflect your enterprise structure.

Defining an Organization with One Classification

Define each organization in your enterprise as a separate organization with a single classification to reflect your enterprise structure and provide flexibility for expansion. The advantage of setting up separate organizations is the ability to add further organizations to expand the enterprise easily. For example, if your enterprise acquires another company which has a different line of business in a country in which you employ people, you can create a division, a legal entity, and additional departments. Classify the new legal entity as a legal employer and payroll statutory unit for the company’s payroll tax and social insurance.

Defining an Organization with Multiple Classifications

Define an organization with multiple classifications if the organization has multiple purposes. For example, use an organization within the sales applications as a department that employs salespeople and classify it as a department and a sales organization. Or, if your enterprise operates and employs people in multiple countries, create a legal entity for each country using the Manage Legal Entity task. Then use the Manage Departments task to classify the legal entity as a department.

Related Topics

• Model Your Financial Reporting Structure

Disability Organizations

Set up disability organizations to identify the external organizations with which workers with disabilities are registered. You manage disability organizations in the Workforce Structures work area. Disability organizations can also assess the degree to which a person is affected by the disability.

Disability organizations:

• Provide information and support to people with disabilities. The Royal National Institute of Blind People is an example of a disability organization.

• Can also assess the degree to which the disability affects a person

Disability Organizations and Person Records

When you create person records for workers with disabilities, you select the disability organization with which the worker is registered, identify the registration and expiration dates, and enter any other descriptive or legislative information that pertains to the disability.
To create disability organizations as TCA parties, use the Manage Third Parties task in the Setup and Maintenance work area, and select disability organization party usage code.

Related Topics
- Person Records
- Creating Third Parties Options

Departments

A department is an organization to which you assign workers. It is an organization with one or more operational objectives or responsibilities that exist independently of its manager. You track the department’s financial performance through one or more cost centers. For example, sales, research and development, and human resources. You can report and keep track of headcount by creating a department hierarchy using Oracle Fusion Trees.

Departments and cost centers example:

This figure illustrates how departments belong to legal entities within the enterprise structure.
Departments and Cost Centers
A cost center represents the smallest segment of an organization for which you allocate and report on costs. The manager of a department is typically responsible for cost control by meeting a budget and may be responsible for the assets used by the department. You can track the financial performance of a department through one or more cost centers.

Uploading Departments Using a Spreadsheet
If you have a list of departments already defined for your enterprise, you can upload them from a spreadsheet. To use this option, you first download a spreadsheet template, add your department information to the spreadsheet, and then upload directly to your enterprise configuration. You can upload the spreadsheet multiple times to accommodate revisions.

Related Topics
• Upload Workforce Structures Using a Spreadsheet

Cost Centers and Departments
The two important components to be considered in designing your enterprise structure are cost centers and departments.

A cost center represents the smallest segment of an organization for which you collect and report costs. A department is an organization with one or more operational objectives or responsibilities that exist independently of its manager and has one or more workers assigned to it.

Cost Centers
A cost center represents the destination or function of an expense rather than the nature of the expense which is represented by the natural account. For example, a sales cost center indicates that the expense goes to the sales department.

A cost center is generally attached to a single legal entity. To identify the cost centers within a chart of accounts structure use one of these two methods:

• Assign a cost center value in the value set for each cost center. For example, assign cost center values of PL04 and G3J1 to your manufacturing teams in the US and India. These unique cost center values allow easy aggregation of cost centers in hierarchies (trees) even if the cost centers are in different ledgers. However, this approach requires defining more cost center values.

• Assign a balancing segment value with a standardized cost center value to create a combination of segment values to represent the cost center. For example, assign the balancing segment values of 001 and 013 with cost center PL04 to represent your manufacturing teams in the US and India. This creates 001-PL04 and 013-PL04 as the cost center reporting values. The cost center value of PL04 has a consistent meaning. This method requires fewer cost center values to be defined. However, it prevents construction of cost center hierarchies using trees where only cost center values are used to report results for a single legal entity. You must specify a balancing segment value in combination with the cost center values to report on a single legal entity.

Departments
A department is an organization with one or more operational objectives or responsibilities that exist independently of its manager. For example, although the manager may change, the objectives don’t change. Departments have one or more workers assigned to them.
A manager of a department is typically responsible for:

- Controlling costs within their budget
- Tracking assets used by their department
- Managing employees, their assignments, and compensation

The manager of a sales department may also be responsible for meeting the revenue targets.

The financial performance of departments is generally tracked through one or more cost centers. In Oracle Fusion Applications, departments are defined and classified as Department organizations. Oracle Fusion Human Capital Management (HCM) assigns workers to departments, and tracks the headcount at the departmental level.

The granularity of cost centers and their relationship to departments varies across implementations. Cost center and department configuration may be unrelated, identical, or consist of many cost centers tracking the costs of one department.

### Department Classifications

A department can be classified as a project organization, sales and marketing organization, or cost organization.

Oracle Fusion Human Capital Management (HCM) uses trees to model organization hierarchies. It provides predefined tree structures for department and other organizational hierarchies that can include organizations with any classification.

#### Project Organization

Classify departments as a project owning organization to enable associating them with projects or tasks. The project association is one of the key drivers for project access security.

In addition, you must classify departments as project expenditure organizations to enable associating them to project expenditure items. Both project owning organizations and project expenditure organizations can be used by Oracle Fusion Subledger Accounting to derive accounts for posting Oracle Fusion Projects accounting entries to Oracle Fusion General Ledger.

#### Sales and Marketing Organization

In sales applications, you can define sales and marketing organizations. Sales organization hierarchies are used to report and forecast sales results. Salespeople are defined as resources assigned to these organizations.

In some enterprises, the HCM departments and hierarchies correspond to sales organizations and hierarchies. Examining the decision on how to model sales hierarchies in relationship to department hierarchies when implementing Customer Relationship Management to eliminate any possible redundancy in the definition of the organizations is important.

The following figure illustrates a management hierarchy, in which the System Components Division tracks its expenses in two cost centers, Air Compressors and Air Transmission. At the department level, two organizations with a classification of Department are defined, the Marketing Department and Sales Department. These two departments can be also identified as a Resource Organizations, which enable assigning resources, such as salespeople, and other sales specific information to
them. Each department is represented in the chart of accounts by more than one cost center, enabling granular as well as hierarchical reporting.

Cost Organization
Oracle Fusion Costing uses a cost organization to represent a single physical inventory facility or group of inventory storage centers, for example, inventory organizations. This cost organization can roll up to a manager with responsibility for the cost center in the financial reports.

A cost organization can represent a costing department. Consider this relationship when determining the setup of departments in HCM. No system dependencies are required for these two entities, cost organization and costing department, to be set up in the same way.

How You Create a Chart of Account to Create a Department
This example demonstrates how to create a chart of account for HCM implementations. You must set up a minimal chart of account to associate a company and cost center with departments. This topic describes a simple scenario primarily intended for use within HCM. For more detailed information on setting up a chart of account, refer to the Financials product documentation.

Vision Corporation US is a US-based legal entity with cost centers in Arizona and California. In this example, we will create an Arizona cost center and associate it with the Sales Department.
The following table summarizes key decisions that you must consider when creating a chart of account.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In this Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What should be the validation type for the value set?</td>
<td>Independent. Only this type is supported for creating General Ledger (GL) cost center information for departments in HCM.</td>
</tr>
<tr>
<td>What should be the segment labels for the chart of account?</td>
<td>The first segment is Primary Balancing Segment and the second segment is Cost Center Segment. Selecting these labels in this order is crucial in specifying the General Ledger cost center information for a department.</td>
</tr>
</tbody>
</table>

Summary of Tasks

In the Setup and Maintenance work area, create a chart of account and cost center value sets to create a chart of account structure and instance, and then associate it with the department.

1. Create the chart of account value set for the Vision Corporation US enterprise.
2. Specify Arizona and California as the values for the chart of account value set.
3. Create the cost center value set for the Vision Corporation US enterprise.
4. Specify Arizona and California as the values for the cost center value set.
5. Create the chart of account structure by associating it with the chart of account and cost center value sets you created earlier.
6. Create the chart of account structure instance by associating it with the structure.
7. Specify the General Ledger cost center information by associating it with the chart of account and the cost center you created earlier, for creating the sales department.

Creating a Chart of Account Value Set

1. In the Setup and Maintenance work area, go to the following:
   - Offering: Workforce Deployment
   - Functional Area: Financial Reporting Structures
   - Task: Manage Chart of Accounts Value Sets
2. Click Create.
3. Complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Set Code</td>
<td>Vision Corporation US Value Set 1</td>
</tr>
<tr>
<td>Description</td>
<td>Vision Corporation US Value Set 1</td>
</tr>
<tr>
<td>Module</td>
<td>Common Shared Setups</td>
</tr>
<tr>
<td>Validation Type</td>
<td>Independent</td>
</tr>
</tbody>
</table>
Specifying Values for the Chart of Account Value Set

1. On the Manage Chart of Accounts Value Sets page, search and select Vision Corporation US Value Set 1 from the search results.
2. Click Manage Values.
3. Click Create.
4. Complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>AZ</td>
</tr>
<tr>
<td>Description</td>
<td>Arizona</td>
</tr>
<tr>
<td>Enabled</td>
<td>Select the check box</td>
</tr>
</tbody>
</table>

5. Click Save and Close.
6. Create additional values for the Vision Corporation US Value Set 1 as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>CA</td>
</tr>
<tr>
<td>Description</td>
<td>California</td>
</tr>
<tr>
<td>Enabled</td>
<td>Select the check box</td>
</tr>
</tbody>
</table>

7. On the Manage Values page, click Save and Close.

Creating a Cost Center Value Set

1. In the Setup and Maintenance work area, go to the following:
   - Offering: Workforce Deployment
   - Functional Area: Financial Reporting Structures
Task: Manage Chart of Accounts Value Sets

2. Click **Create**.
3. Complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Set Code</td>
<td>Vision Corporation US Cost Center Value Set 1</td>
</tr>
<tr>
<td>Description</td>
<td>Vision Corporation US Cost Center Value Set 1</td>
</tr>
<tr>
<td>Module</td>
<td>Common Shared Setups</td>
</tr>
<tr>
<td>Validation Type</td>
<td>Independent</td>
</tr>
<tr>
<td>Value Data Type</td>
<td>Character</td>
</tr>
<tr>
<td>Value Subtype</td>
<td>Text</td>
</tr>
<tr>
<td>Maximum Length</td>
<td>5</td>
</tr>
</tbody>
</table>

4. Click **Save and Close**.

### Specifying Values for the Cost Center Value Set

1. On the Manage Chart of Accounts Value Sets page, search and select Vision Corporation US Cost Center Value Set 1 from the search results.
2. Click **Manage Values**.
3. Click **Create**.
4. Complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>AZ</td>
</tr>
<tr>
<td>Description</td>
<td>Arizona</td>
</tr>
<tr>
<td>Enabled</td>
<td>Select the check box</td>
</tr>
</tbody>
</table>

5. Click **Save and Close**.
6. Create additional values for the Vision Corporation US Value Set 1 as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>CA</td>
</tr>
<tr>
<td>Description</td>
<td>California</td>
</tr>
</tbody>
</table>

---

Oracle Talent Management Cloud
Implementing Talent Management Base

Chapter 7
Workforce Structures: Organizations
Creating a Chart of Account Structure

1. In the Setup and Maintenance work area, go to the following:
   - Offering: Workforce Deployment
   - Functional Area: Financial Reporting Structures
   - Task: Manage Chart of Accounts Structures

2. Search and select the GL# key flexfield code.
3. Click Manage Structures.
4. Click Create.
5. Complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure Code</td>
<td>Vision Corp CoA Cost Center</td>
</tr>
<tr>
<td>Name</td>
<td>Vision Corp CoA Cost Center</td>
</tr>
<tr>
<td>Description</td>
<td>Vision Corporation Chart of Account Cost Center</td>
</tr>
<tr>
<td>Delimiter</td>
<td>Select any value</td>
</tr>
</tbody>
</table>

6. Click Save.
7. In the Segments section, click Create.
8. Complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment Code</td>
<td>Vision._ Corp_COA</td>
</tr>
<tr>
<td>API Name</td>
<td>visionCorpCoa</td>
</tr>
<tr>
<td>Name</td>
<td>Vision Corporation COA</td>
</tr>
<tr>
<td>Sequence Number</td>
<td>1</td>
</tr>
<tr>
<td>Prompt</td>
<td>Vision Corporation COA</td>
</tr>
<tr>
<td>Short Prompt</td>
<td>Vision</td>
</tr>
<tr>
<td>Enabled</td>
<td>Select the check box</td>
</tr>
<tr>
<td>Field</td>
<td>Value</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Display Width</td>
<td>1</td>
</tr>
<tr>
<td>Range Type</td>
<td>Low</td>
</tr>
<tr>
<td>Column Name</td>
<td>SEGMENT1</td>
</tr>
<tr>
<td>Default Value Set Code</td>
<td>Vision Corporation US Value Set 1</td>
</tr>
<tr>
<td>Selected Labels</td>
<td>Primary Balancing Segment</td>
</tr>
</tbody>
</table>

9. Click **Save and Close**.

10. Create another segment with the following values

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment Code</td>
<td>Vision_Corp_CostCenter_COA</td>
</tr>
<tr>
<td>API Name</td>
<td>visionCorpCostcenterCoa</td>
</tr>
<tr>
<td>Name</td>
<td>Vision Corporation Cost Center COA</td>
</tr>
<tr>
<td>Sequence Number</td>
<td>2</td>
</tr>
<tr>
<td>Prompt</td>
<td>Vision Corporation Cost Center COA</td>
</tr>
<tr>
<td>Short Prompt</td>
<td>Vision1</td>
</tr>
<tr>
<td>Enabled</td>
<td>Select the check box</td>
</tr>
<tr>
<td>Display Width</td>
<td>1</td>
</tr>
<tr>
<td>Range Type</td>
<td>Low</td>
</tr>
<tr>
<td>Column Name</td>
<td>SEGMENT2</td>
</tr>
<tr>
<td>Default Value Set Code</td>
<td>Vision Corporation US Cost Center Value Set 1</td>
</tr>
<tr>
<td>Selected Labels</td>
<td>Cost Center Segment</td>
</tr>
</tbody>
</table>

11. Click **Save and Close**.

12. On the Create Key Flexfield Structure page, click **Save and Close**.
Creating a Chart of Accounts Structure Instance

1. In the Setup and Maintenance work area, go to the following:
   o Offering: Workforce Deployment
   o Functional Area: Financial Reporting Structures
   o Task: Manage Chart of Accounts Structure Instances
2. Search and select the GL# key flexfield code.
3. Click Manage Structure Instances.
4. Click Create.
5. Complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure Instance Code</td>
<td>Vision COA Structure Instance</td>
</tr>
<tr>
<td>API name</td>
<td>VisionCoaStructureInstance</td>
</tr>
<tr>
<td>Name</td>
<td>Vision Corporation COA Structure Instance</td>
</tr>
<tr>
<td>Structure Name</td>
<td>Vision Corp CoA Cost Center</td>
</tr>
</tbody>
</table>

6. Click Save and Close.

Specifying the General Ledger Cost Center Information for Creating a Department

1. In the Workforce Structures work area, click the Manage Departments tab.
2. Click Create.
3. Select the Create new option.
4. Enter Sales Department in the Name field.
5. Click Next.
6. In the GL Cost Center Information section, complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record Identifier</td>
<td>10</td>
</tr>
<tr>
<td>Company Value Set</td>
<td>Vision Corporation US Value Set 1</td>
</tr>
<tr>
<td>Company</td>
<td>AZ</td>
</tr>
<tr>
<td>Cost Center Value Set</td>
<td>Vision Corporation US Cost Center Value Set 1</td>
</tr>
<tr>
<td>Cost Center</td>
<td>AZ</td>
</tr>
</tbody>
</table>
7. Click **Next** to review the specified information.
8. Click **Submit**.

Locations

A location identifies physical addresses of a workforce structure, such as a department or a job. You create and manage locations using the Manage Locations task in the Workforce Structures work area.

You can also create locations to enter the addresses of external organizations that you want to maintain, such as employment agencies, tax authorities, and insurance or benefits carriers.

The locations that you create exist as separate structures that you can use for reporting purposes, and in rules that determine employee eligibility for various types of compensation and benefits. You enter information about a location only once. Subsequently, when you set up other workforce structures you select the location from a list.

Location Sets

When you create a location, you must associate it with a set. Only those users who have access to the set's business unit can access the location set and other associated workforce structure sets, such as those that contain departments and jobs.

Note the following:

- You can also associate the location to the common set so that users across your enterprise can access the location irrespective of their business unit.
- When users search for locations, they can see the locations that they have access to along with the locations in the common set.
The following figure shows how locations sets restrict access to users.

Uploading Locations Using a Spreadsheet

If you have a list of locations already defined for your enterprise, you can upload them from a spreadsheet.

To use this option:

- Download a spreadsheet template
- Add your location information to the spreadsheet
- Upload directly to your enterprise configuration

You can upload the spreadsheet multiple times to accommodate revisions.

Related Topics

- What happens if I inactivate a location
- Upload Workforce Structures Using a Spreadsheet

FAQs for Organization Structures
What's a reporting establishment?

A reporting establishment is an organization that’s used for statutory reporting other than tax and social insurance reporting. A reporting establishment has a parent-child relationship with a legal employer, with the legal employer being the parent organization. A legal employer can be the parent of multiple reporting establishments. You create reporting establishments using the Manage Legal Reporting Unit HCM Information task in the Setup and Maintenance work area.

In some countries, such as France, a reporting establishment can also be a tax reporting unit.

What's the difference between a job set and a job family?

A job family is a group of jobs that have different but related functions, qualifications, and titles. They are beneficial for reporting. You can define competencies for job families by associating them with model profiles.

A job set is an organizational partition of jobs. For example, a job set can include global jobs for use in all business units, or jobs for a specific country or line of business. When you select a job for a position or an assignment, you can view the available jobs in your business unit set and the common set.

Related Topics

- What's a job set

What's the purpose of the legislative action attributes?

When you create transfer or termination related actions using the Manage Actions task in the Setup and Maintenance work area, you can also enter legislative attributes for the actions. You can use the attributes to:

- Indicate whether an action is transfer-related.
- Specify the termination type for termination-related actions.

For example, the termination-related action Resignation can have the termination type as voluntary and the action Reduction in Force can have the termination type as involuntary. Typically you enter this information to meet specific legislative requirements or for reporting purposes.

Can I delete an organization?

No you can’t. However, you can disable an organization if it’s no longer required. For example, if the enterprise is downsizing, then you can set the status of the organization to inactive. Changing the status of the organization disables the organization and the organization is no longer available to select.

How do I create a disability organization?

Use the Manage Third Parties task in the Setup and Maintenance work area. Disability organizations are one of the choices when creating third-party organizations.
How can I identify my organization in a report?

Use the organization manager information to enter a reporting name to help you identify an organization in a report. You use organization hierarchies for statutory, legal and management reporting.

You can see all employees in the Manager list.

Why can't I see my location in the search results?

You can search for approved locations only. Also, if you created a location in Oracle Fusion Trading Community Model, then you can't access that location from Oracle Fusion Global Human Resources. For use in Oracle Fusion HCM, you must recreate the location from the Manage Locations page.

How can I associate a location with an inventory organization?

From the Oracle Fusion Global Human Resources, go to the Manage Locations page. Use the Manage Locations task in the Workforce Structures work area.

To appear on the Create or Edit Location pages, your inventory organization must be effective on today’s date and must exist in the location set that you selected.

What happens if I select an inventory organization when I am creating or editing a location?

The location is available for selection in purchase documents of that inventory organization in Oracle Fusion Inventory Management. If you don’t select an inventory organization, then the location is available in purchase documents across all inventory organizations.

What happens if I select a geographic hierarchy node when I create or edit a location?

The calendar events that you created for the geographic node start to apply for the location and may impact the availability of worker assignments at that location. You manage locations using the Manage Locations task in the Workforce Structures work area.

The geographical hierarchy nodes available for selection on the Locations page display from a predefined geographic hierarchy.

Related Topics

- How an Employee’s Schedule Is Determined
8 Workforce Structures: Others

Define Grades

Grades

From the Manage Grades page, create grades to record the level of compensation for workers. You can:

- Create grades for multiple pay components, such as salary, bonus, and overtime rates
- Define one or more grades that are applicable for jobs and positions

This list of valid grades, combined with the settings for two profile options, enables you to restrict the grades that can be selected when you set up assignments for a worker.

Grades and Sets

You assign each grade to a set. If you assign a grade to the common set, then the grade is available for use in all business units. To limit a grade to a single business unit, you can assign it to a set that is specific to that business unit.

Grade Steps

Grade steps are distinct increments of progression within a grade. You can set up grades with or without grade steps.
The following figure illustrates the difference between grades with and without steps.

**Grade Rates**
Grade rate values are the compensation amounts associated with each grade. You can set up rates at the same time that you create grades, or set them up independently from grades.

For grades with steps, you set up the step rates when you include them in a grade ladder. Grade rates are optional.

**Grade Ladders**
You can combine grades into grade ladders to group your grades or grades with steps in the sequence in which your workers typically progress. For example, you might create three grade ladders for your enterprise: one for technical grades, another for management grades, and a third for administrative grades.

**Related Topics**
- How Grades and Grade Rates Work with Jobs, Positions, Assignments, Compensation, and Payroll
- Examples of Grades, Grade Rates, and Grade Ladders
Lookup Types for Grades

The Lookup type for Grades task identifies the lookup type for managing grades that has an extensible configuration level.

The GRADE_PAY_RATE_TYPE lookup type identifies compensation components you want to set up for grade rates. The predefined values are salary, bonus, and overtime. Review these lookup values, and update them as appropriate to suit enterprise requirements.

Grade Rates

Grade rates contain the pay values that are related to each grade.

Grade rate values can be either a fixed amount or a range of values, and you can set up rates for different types of pay such as salary, overtime, and bonuses.

Note the following:

- Grade rates for some jobs or positions might include an hourly salary rate and an overtime rate.
- Grade rates for other jobs or positions might contain a salary rate type with a range of amounts and a bonus rate type with a fixed amount.
- Grade rates typically serve only as a guideline to validate that the salary you propose during the compensation process for a worker on a certain grade is appropriate for that grade.

This figure illustrates a grade that has two rate types associated with it:

- Salary rate type that has a range of values
- Bonus rate type with a fixed amount
- Overtime rate type that also has a fixed amount

**Rate Types**

The types of rates that you can set up depend on the values for lookup type GRADE_PAY_RATE_TYPE. Examples of rate types are salary, bonus, and overtime pay.

**Grade Rates and Legislative Data Groups**

You assign a legislative data group to each grade rate. Depending on how your enterprise is configured, you may have several legislative data groups. You can set up grades that are shared across different areas of your business, and enter rates that are specific to each legislative data group.

**Grade Rates and Grades**

You can do the following:

- Set up grade rates when you set up grades
- Set up grade rates independently from grades

For grades with steps, you enter rates when you attach the grades to a grade ladder.

**Related Topics**

- How Grades and Grade Rates Work with Jobs, Positions, Assignments, Compensation, and Payroll
- Examples of Grades, Grade Rates, and Grade Ladders

**Grade Ladders**

Grade ladders group grades and grades with steps in the sequence in which your workers typically progress. You create grade ladders either from the Manage Progression Grade Ladders page (in the Compensation work area) or from the Manage Grade Ladders page (in the Workforce Structures work area).
Grade ladders describe the grades and steps to which a worker is eligible to progress and compensation value associated with that grade and step. You may create different grade ladders for your enterprise: one for technical grades, another for management grades, and a third for administrative grades.

**Ladders with Grades**
You create ladders with grades by building a hierarchy of grades that were created without steps. When you set up this type of ladder, only grades without steps are available to add to the ladder. You can’t create a grade ladder with a combination of both grades and grades with steps.

You don’t define any grade rates when you set up a ladder with grades; the rates for the grades within the ladder are inherited from the rates that were added when you set up the grades. To add or edit rates for grades, you must use the Manage Grade Rates task.

**Ladders with Grade Steps**
You create ladders with grade steps using grades that were created with steps. When you set up this type of ladder, only grades with steps are available to add to the ladder.

You define step rates when you set up the ladder, and the rates are unique to each ladder. You can’t share step rates between grade ladders.

**Related Topics**
- Examples of Grades, Grade Rates, and Grade Ladders

**How Grades, Grade Rates, and Sets Work with Legislative Data Groups**
You assign grades to sets, and grade rates to legislative data groups from the Workforce Structures > Manage Grade Rates page.

If you have grades that are common across multiple business units, you can:

- Assign them to the set that’s associated with business units.
- Set up grade rates that are specific to each legislative data group.
The following figure illustrates how you can use sets to share grades across multiple business units and change the grade rates for each legislative data group.

Grades and Sets
Sets enable you to share grades that are common across business units in your enterprise. You can assign grades to either a specific set or to the common set to each grade. If you assign the grade to the common set, then the grade is available for use in all business units.

Grade Rates and Legislative Data Groups
Grade rate values are associated with each component of compensation for your workers. While grades may be common across different areas of your enterprise, grade rates vary among the countries in which you employ people.

For example, if your enterprise has engineer jobs in the United States, the United Kingdom, and Australia, you can set up grades for a set that is shared between the countries, but set up different grade rates for each country in the applicable currency.

How You Set Up Grade Ladders for Pay Scale Requirements
This example illustrates how to use a grade ladder to create a pay scale that’s typical of technicians in the metal industry in Germany. The ladder includes four grades, and each grade includes four steps.
The following table summarizes key decisions for the grades, rates, and grade ladder in this scenario.

<table>
<thead>
<tr>
<th>Decision to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are steps required for the grades?</td>
<td>Yes.</td>
</tr>
<tr>
<td>Which step in each grade should be the ceiling step?</td>
<td>The last step in each grade.</td>
</tr>
<tr>
<td>What type of rates are necessary?</td>
<td>Salary rates only.</td>
</tr>
<tr>
<td>Will the ladder be created using grades or grades with steps?</td>
<td>Grades with steps.</td>
</tr>
</tbody>
</table>

Summary of the Tasks
To set up the pay scale, complete these tasks:

- Create grades
- Create a grade ladder

Creating Grades
1. In the Workforce Structures work area, click Manage Grades to open the Manage Grades page.
2. On the Manage Grades page, click Create to open the Create Grade: Grade Details page.
3. In the Grade Details region of the Create Grade: Grade Details page, complete the fields as shown in this table, using the default values unless otherwise indicated.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Set</td>
<td>Common</td>
</tr>
<tr>
<td>Name</td>
<td>Technicians 03</td>
</tr>
<tr>
<td>Code</td>
<td>Tech03</td>
</tr>
</tbody>
</table>

4. Click Next to access the Create Grade: Grade Steps page.
5. In the Grade Steps region of the Create Grade: Grade Steps page, click Add Row.
6. Add four steps for the grade by completing the fields as shown in this table. You must click Add Row after adding each step.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step Name</td>
<td>Year 1</td>
</tr>
<tr>
<td>Step Name</td>
<td>Year 2</td>
</tr>
<tr>
<td>Step Name</td>
<td>Year 3</td>
</tr>
</tbody>
</table>
7. Verify that Year 4 is the ceiling step.
8. Click Submit. You will add the grade rates when you create the grade ladder.
9. In the Warning dialog, click Yes.
10. In the Confirmation dialog, click OK.
11. Repeat steps 2 through 9 to add three more grades with steps. Complete the information for each grade using the information in these tables. The ceiling step in each grade is Year 4.

<table>
<thead>
<tr>
<th>Field</th>
<th>Grade 2</th>
<th>Grade 3</th>
<th>Grade 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Set</td>
<td>Common</td>
<td>Common</td>
<td>Common</td>
</tr>
<tr>
<td>Name</td>
<td>Technicians 04</td>
<td>Technicians 05</td>
<td>Technicians 06</td>
</tr>
<tr>
<td>Code</td>
<td>Tech04</td>
<td>Tech05</td>
<td>Tech06</td>
</tr>
</tbody>
</table>

Creating a Grade Ladder

1. In the Workforce Structures work area, click Manage Grade Ladders to open the Manage Grade Ladders page.
2. On the Manage Grade Ladders page, click Create to access the Create Grade Ladder: Grade Ladder Details page.
3. In the Grade Ladder Details region of the Create Grade Ladder: Grade Ladder Details page, complete the fields as shown in this table, using default values unless otherwise indicated.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Set</td>
<td>Common</td>
</tr>
<tr>
<td>Name</td>
<td>Metal Technicians</td>
</tr>
<tr>
<td>Grade Type</td>
<td>Grade with steps</td>
</tr>
</tbody>
</table>

4. Click Next to access the Create Grade Ladder: Grades page.
5. In the Search Grades region of the Create Grade Ladder: Grades page, enter TECH in the Code field and click Search.
6. Select Tech03 and click **Add to Grade Ladder**.
7. Select Tech04 and click **Add to Grade Ladder**.
8. In the Add to Grade Ladder Hierarchy dialog, select **At the top** and click **OK**.
9. Select Tech05 and click **Add to Grade Ladder**.
10. In the Add to Grade Ladder Hierarchy dialog, select **At the top** and click **OK**.
11. Select Tech06 and click **Add to Grade Ladder**.
12. In the Add to Grade Ladder Hierarchy dialog, select **At the top** and click **OK**.
13. Verify that the grades appear in numerical order, with Tech06 at the beginning of the ladder and Tech03 at the end of the ladder.
14. Click **Next** to access the Create Grade Ladder: Rate Values page.
15. On the Create Grade Ladder: Rate Values page, select the legislative data group for Germany.
16. In the Grade Step Rates region, click **Add Row**.
17. Complete the following fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Technician Ladder Rates</td>
</tr>
<tr>
<td>Rate Type</td>
<td>Salary</td>
</tr>
<tr>
<td>Frequency</td>
<td>Monthly</td>
</tr>
<tr>
<td>Annualization Factor</td>
<td>12</td>
</tr>
<tr>
<td>Currency</td>
<td>EUR</td>
</tr>
</tbody>
</table>

18. In the Step Rate Values region, enter rates for the four steps in each grade by completing the fields as shown in this table.

<table>
<thead>
<tr>
<th>Grade Name</th>
<th>Step Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technicians 03</td>
<td>Step 1</td>
<td>1,750.73</td>
</tr>
<tr>
<td>Technicians 03</td>
<td>Step 2</td>
<td>1,878.90</td>
</tr>
<tr>
<td>Technicians 03</td>
<td>Step 3</td>
<td>2,009.79</td>
</tr>
<tr>
<td>Technicians 03</td>
<td>Step 4</td>
<td>2,143.92</td>
</tr>
<tr>
<td>Technicians 04</td>
<td>Step 1</td>
<td>2,238.57</td>
</tr>
<tr>
<td>Technicians 04</td>
<td>Step 2</td>
<td>2,408.39</td>
</tr>
<tr>
<td>Technicians 04</td>
<td>Step 3</td>
<td>2,577.68</td>
</tr>
<tr>
<td>Technicians 04</td>
<td>Step 4</td>
<td>2,744.81</td>
</tr>
<tr>
<td>Technicians 05</td>
<td>Step 1</td>
<td>2,831.87</td>
</tr>
</tbody>
</table>
Grade Name | Step Name | Value  
--- | --- | ---  
Technicians 05 | Step 2 | 3,047.14  
Technicians 05 | Step 3 | 3,257.52  
Technicians 05 | Step 4 | 3,469.00  
Technicians 06 | Step 1 | 3,586.36  
Technicians 06 | Step 2 | 3,851.38  
Technicians 06 | Step 3 | 4,122.34  
Technicians 06 | Step 4 | 2,143.92  

19. Click **Next**.  
20. On the Create Grade Ladder: Review page, review the grade ladder hierarchy and the rates, and click **Submit**.  
21. In the Warning dialog, click **Yes**.  
22. In the Confirmation dialog, click **OK**.

**Related Topics**

- **Examples of Grades, Grade Rates, and Grade Ladders**

**Example of Setting Up Grade Ladders for Spine Point Requirements**

This example illustrates how you can use grades, rates, and a grade ladder to represent spine points. You manage grade ladders using the Manage Grade Ladders task in the Workforce Structures work area.

**Spine Points**

Some public sector organizations in the United Kingdom (UK) use spine points to structure their grades. Each spine point corresponds to one or more steps within a grade, as grades often overlap each other.
Grade Structure

You can use grade ladders to meet the requirements of a grade structure with spine points. The following table illustrates a grade structure with spine points that is similar to the one used for university workers in the UK.

<table>
<thead>
<tr>
<th>Spine Point</th>
<th>Salary</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25,674</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>26,361</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>27,068</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>27,796</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>30,394</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>31,778</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>32,648</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>33,542</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>34,466</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>35,425</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>38,441</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>39,510</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>40,634</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>41,746</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>42,914</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>44,118</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>45,358</td>
<td></td>
</tr>
</tbody>
</table>

Analysis

To set up grades for the spine point structure, you must:

- Create three grades with steps and name each step using the spine point number.
- Create a grade ladder with all three grades.
- Create step rates with annual salary amounts.
Resulting Grades, Rates, and Grade Ladder
The following table lists the grades and steps needed to meet the requirements of the grade structure with spine points.

<table>
<thead>
<tr>
<th>Grade Name</th>
<th>Steps</th>
<th>Ceiling Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1</td>
<td>• Spine Point 1</td>
<td>Spine Point 5</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 6</td>
<td></td>
</tr>
<tr>
<td>Grade 2</td>
<td>• Spine Point 6</td>
<td>Spine Point 11</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 12</td>
<td></td>
</tr>
<tr>
<td>Grade 3</td>
<td>• Spine Point 12</td>
<td>Spine Point 17</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine Point 17</td>
<td></td>
</tr>
</tbody>
</table>

The following table lists the grades, steps, and rates to add to the ladder.

<table>
<thead>
<tr>
<th>Grade Name</th>
<th>Steps</th>
<th>Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1</td>
<td>• Spine Point 1</td>
<td>25, 674</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 2</td>
<td>26, 631</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 3</td>
<td>27, 068</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 4</td>
<td>27, 796</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 5</td>
<td>30, 394</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 6</td>
<td>31, 778</td>
</tr>
<tr>
<td>Grade 2</td>
<td>• Spine Point 6</td>
<td>31, 778</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 7</td>
<td>32, 648</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 8</td>
<td>33, 542</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 9</td>
<td>34, 466</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 10</td>
<td>35, 425</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 11</td>
<td>38, 441</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 12</td>
<td>39, 510</td>
</tr>
<tr>
<td>Grade 3</td>
<td>• Spine Point 12</td>
<td>39, 510</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 13</td>
<td>40, 634</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 14</td>
<td>41, 746</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 15</td>
<td>42, 914</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 16</td>
<td>44, 118</td>
</tr>
<tr>
<td></td>
<td>• Spine Point 17</td>
<td>45, 358</td>
</tr>
</tbody>
</table>
Related Topics

- Examples of Grades, Grade Rates, and Grade Ladders

FAQs for Define Grades

Can I edit the legislative data group for a grade rate?

No. If you need to change the legislative data group for a grade rate, you must change the grade rate to inactive and create a new grade rate with the correct legislative data group.

How can I add rates to grade steps?

Rates can be added to a grade with steps, when you add the grade to a grade ladder.

What's the difference between grade ladders and progression grade ladders?

Grade ladders group grades and grades with steps in the sequence in which your workers typically progress. Progression grade ladders are hierarchies used to group grades and steps and define their sequence. They include the associated progression rules and rates for each grade and step within the ladders. Oracle Fusion Human Capital Management has both a Grade Ladder and a Progression Grade Ladder For a specific grade ladder definition; you should use one of these, but not both.

The differences between them are:

<table>
<thead>
<tr>
<th>Progression Grade Ladders</th>
<th>Grade Ladder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewed in Manage Progression Grade Ladders page in Compensation work area</td>
<td>Viewed in Manage Grade Ladders page in Workforce Structures work area</td>
</tr>
<tr>
<td>Required if you are using grade step progression or rate synchronization processes</td>
<td></td>
</tr>
<tr>
<td>Enables population of worker salary record from grade or step rates during employment transactions</td>
<td></td>
</tr>
<tr>
<td>Only one rate (grade rate or step rate) allowed per progression grade ladder</td>
<td></td>
</tr>
<tr>
<td>Associated with a single legislative data group</td>
<td></td>
</tr>
</tbody>
</table>
Define Collective Agreements

Worker Union Management

You manage worker unions using the Manage Worker Unions task in the Workforce Structures or Setup and Maintenance work area.

Worker Unions

The worker union is a Human Capital Management (HCM) organization. You can create a new worker union or select an existing organization to define a worker union. The details of a worker union are country-specific and the country value is mandatory for a worker union. You can optionally attach any supporting documents for the worker union. A worker union holds date-effective attributes. Therefore, you can track the changes to the worker union over a period of time. You can also inactivate the worker union. You can configure additional attributes specific to any legislation or customer using the available descriptive flexfields and extensible flexfields.

You can provide additional information for the worker union organization, such as worker union code and its description. You can optionally associate worker unions with their affiliated bargaining units. The values in the Bargaining Unit and Location fields are filtered to match the country you selected. You can add more than one work union contact and enter the contact details, such as contact name, union title, work phone, and work Email.

How You Manage Collective Agreements

Use the Manage Collective Agreements task in the Workforce Structures or Setup and Maintenance work areas to manage collective agreements.

Collective Agreement Details

The details of a collective agreement are country-specific, therefore you must enter a value for the country. You may enter the bargaining unit, legal employer, and union values depending on the country. For example, you can create a collective agreement without the bargaining unit and legal employer, or only with the legal employer. When you select the value in the Country field, the values in the Bargaining Unit, Legal Employer, and Union fields are filtered to match the country selected. You can optionally associate collective agreements with worker unions and attach documents to the collective agreement.

You can provide details of the parties negotiating the collective agreement, such as the employee and employer organizations. The employee organization can be the trade union or bargaining unit representing the employee while the employer organization is represented by the company management.

A collective agreement is date-effective, therefore, you can track changes to a collective agreement over time. You can also inactivate the collective agreement. You can configure additional attributes specific to a legislation or customer using the available descriptive flexfields and extensible flexfields. If you specify a Valid To date for a collective agreement, it lapses after that date and you can’t link it to an employee.

Note: If the collective agreement is linked to an assignment, you can’t edit the Identification Code, Country, Bargaining Unit, Union, and Legal Employer fields. Additionally, you can’t delete the collective agreement.
Collective Agreements

A collective agreement is a special type of commercial agreement that’s negotiated collectively between the management (on behalf of the company) and trade unions (on behalf of employees). The agreement regulates the terms and conditions of employees in their workplace, their duties, and the duties of the employer.

Collective Agreement Linking

You can link a collective agreement to an assignment provided the bargaining unit, country, and legal employer of the collective agreement are consistent with the assignment. If you created a collective agreement without associating it with a legal employer or bargaining unit, you can link the collective agreement to any assignment within the same country.

You can link a union, bargaining unit, or collective agreement with a worker assignment provided that its country and legal employer is consistent with the assignment.

The union, bargaining unit, and collective agreement that you can select for linking with an assignment are filtered as described in this table:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Filter Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union</td>
<td>The list of values is filtered to show unions that are active as of the start date and whose country matches the country of the legal employer on the worker assignment.</td>
</tr>
<tr>
<td>Bargaining Unit</td>
<td>• The list of values is filtered to show bargaining units that are active as of the start date and are associated with the selected union.</td>
</tr>
<tr>
<td></td>
<td>• If you don’t select a union, the list of values is filtered to show bargaining units that are active as of the start date, and whose country matches the legal employer country or have no country tag itself.</td>
</tr>
<tr>
<td>Collective Agreement</td>
<td></td>
</tr>
</tbody>
</table>

Note: Collective agreements list of values is filtered to show only those values that match the country of the legal employer on the worker assignment.

If you select a bargaining unit without selecting a union, the list of values is filtered this way:

• List of values shows collective agreements that are active and don’t have an associated union or bargaining unit value.
• List of values shows collective agreements that are active and match the selected bargaining unit, but don’t have an associated union.

If you select a union without selecting a bargaining unit, the list of values is filtered this way:

• List of values shows collective agreements that are active and don’t have an associated union or bargaining unit value.
• List of values shows collective agreements that are active and match the selected union, but don’t have an associated bargaining unit.

If you don’t select a union or bargaining unit, the Collective Agreement list of values is filtered to show all active collective agreements as of the start date.
FAQs for Define Collective Agreements

What's a collective agreement?
A special type of commercial agreement that's negotiated collectively between the management (on behalf of the company) and trade unions (on behalf of employees). The collective agreement regulates the terms and conditions of employees in their workplace, their duties, and the duties of the employer.

What's a bargaining unit?
A specific group of employees who are represented by one authorized union or association for purposes of collective bargaining.

Why can't I see the collective agreements region for my direct report?
By default, the collective agreements region is read-only and hidden out of the box on the promote and transfer pages. You can unhide the region using the Page Composer.

Related Topics
- Modify Pages
- Modify Page Components Using Resource Catalog

Define Jobs and Positions

Jobs
Jobs are typically used without positions by service industries where flexibility and organizational change are key features. As part of your initial implementation, you specify whether to use jobs and positions, or only jobs.

Basic Details
Basic details for a job include an effective start date, a job set, a name, and a code.
A job code must be unique within a set. Therefore, you can create a job with the code DEV01 in the US set and another job with the same code in the UK set. However, if you create a job with the code DEV01 in the Common set, then you can't create a job with the same code in any other set.

**Benchmark Information**

You can identify a job as being a benchmark job. A benchmark job represents other jobs in reports and salary surveys. You can also select the benchmark for jobs. Benchmark details are for informational purposes only.

**Progression Information**

A progression job is the next job in a career ladder. Progression jobs enable you to create a hierarchy of jobs and are used to provide the list of values for the Job field in the Promote Worker and Transfer Worker tasks.

The list of values includes the next three jobs in the progression job hierarchy. For example, assume that you create a job called Junior Developer and select Developer as the progression job. In the Developer job, you select Senior Developer as the progression job. When you promote a junior developer, the list of values for the new job will include Developer and Senior Developer. You can select one of these values, or select another one.

**Jobs and Grades**

You can assign grades that are valid for each job. If you're using positions, then the grades that you specify for the job become the default grades for the position.

**Evaluation Criteria**

You can define evaluation criteria for a job, including the evaluation system, a date, and the unit of measure for the evaluation system. The Hay system is the predefined evaluation system that's available. An additional value of Custom is included in the list of values for the Evaluation System field, but you must add your own criteria and values for this system.

**Uploading Jobs Using a Spreadsheet**

If you have a list of jobs already defined for your enterprise, you can upload them from a spreadsheet.

To use this option:

1. Download a spreadsheet template.
2. Add your job information to the spreadsheet.
3. Upload directly to your enterprise configuration.

You can upload the spreadsheet multiple times to accommodate revisions.

**Related Topics**

- Guidelines for Using Desktop Integrated Excel Workbooks
- Considerations for Enforcing Grades at Assignment Level

**Examples of Jobs**

Jobs are typically used without positions by service industries where flexibility and organizational change are key features.
Software Industry

For example, XYZ Corporation has a director over the departments for developers, quality assurance, and technical writers.

- Recently, three developers have resigned from the company.
- The director decides to redirect the headcount to other areas.
- Instead of hiring all three back into development, one person is hired to each department, quality assurance, and technical writing.

In software industries, the organization is fluid. Using jobs gives an enterprise the flexibility to determine where to use headcount, because the job only exists through the person performing it. In this example, when the three developers leave XYZ Corporation, their jobs no longer exist, therefore the corporation has the flexibility to move the headcount to other areas.

This figure illustrates the software industry job setup.

![Diagram of XYZ Corporation's technology department with job titles: Developer, Quality Assurance Specialist, Technical Writer.]

Examples of Positions

Positions are typically used by industries that use detailed approval rules, which perform detailed budgeting and maintain headcounts, or have high turnover rates.

Retail Industry

ABC Corporation has high turnovers. It loses approximately 5% of its cashiers monthly. The job of the cashier includes three positions: front line cashier, service desk cashier, and layaway cashier. Each job is cross-trained to take over another cashier’s position. When one cashier leaves from any of the positions, another existing cashier from the front line, service desk or layaway can assist where needed. But to ensure short lines and customer satisfaction, ABC Corporation must replace each cashier lost to turnover. Since turnover is high in retail it’s better for this industry to use positions.

Note the following:

- An automatic vacancy is created when an employee terminates employment.
• The position exists even when there are no holders. Having the position continue to exist is important if the person who leaves the company is a manager or supervisor with direct reports.

• All direct reports continue reporting to the position even if the position is empty.

• You don’t have to reassign these employees to another manager or supervisor. The replacement manager is assigned to the existing position.

Also, an added advantage to using Positions is when you hire somebody new, many of the attributes are inherited from the position. This speeds up the hiring process.

This figure illustrates the retail position setup.

Health Care Industry
Health care is an industry that must regulate employment, roles, and compensation according to strict policies and procedures. Fixed roles tend to endure over time, surviving multiple incumbents. Industries that manage roles rather than individuals, where roles continue to exist after individuals leave, typically model the workforce using positions.

The hospital has a structured headcount and detailed budgeting. For example, a specific number of surgeons, nurses, and interns of various types are needed. These positions must be filled in order for the hospital to run smoothly. Use jobs and positions when you apply detailed headcount rules.
This figure illustrates the hospital position setup.

Job and Position Lookups

This topic identifies common lookups that are related to job and position for which you can create new lookup values. Review the Job lookups, and update them as appropriate to suit enterprise requirements.

Job Lookups

The following table describes Job lookup types.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOB_FUNCTION_CODE</td>
<td>Describes the primary function of a job. Used for grouping and reporting jobs of like functions.</td>
</tr>
<tr>
<td>MANAGER_LEVEL</td>
<td>Describes the seniority of a manager.</td>
</tr>
<tr>
<td>EVAL_SYSTEM</td>
<td>Identifies the evaluation system used for the job or position.</td>
</tr>
<tr>
<td>EVAL_SYSTEM_MEAS</td>
<td>Identifies the measurement unit for the evaluation criteria.</td>
</tr>
</tbody>
</table>

Position Lookups

The following table describes Position lookup types.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECURITY_CLEARANCE</td>
<td>Classifies if security clearance is needed.</td>
</tr>
</tbody>
</table>
Lookup Type | Description
---|---
EVAL_SYSTEM | Identifies the evaluation system used for the job or position.
EVAL_SYSTEM_MEAS | Identifies the measurement unit for the evaluation criteria.
BARGAINING_UNIT_CODE | Identifies a legally organized group of people which has the right to negotiate on all aspects of terms and conditions with employers or employer federations.
PROBATION_PERIOD | Specifies the unit of measurement for the probation period of a position. For example, 365 Day, 52 Week, 12 Month, or 1 Year.

Related Topics
- Overview of Lookups

Upload Workforce Structures Using a Spreadsheet

Using a spreadsheet, you can upload multiple objects at a time, for the following workforce structures:
- Jobs
- Locations
- Departments

For example, to upload multiple jobs at a time:
- Select Manage Jobs in the Workforce Structures work area
- Display the Create menu
- Select Create in Spreadsheet

Uploading Using a Spreadsheet

For each workforce structure, you can do the following:
- Download a predefined spreadsheet template from the application
- Work on the spreadsheet offline, and upload the spreadsheet to the application when your changes are complete
- Upload the spreadsheet multiple times to accommodate revisions

Effective Start Date

Ensure that the effective start date of the workforce structure is same as or earlier than the hire date of persons associated with the workforce structure; for example, enter a job start date earlier than the hire date of persons associated with the job. You may want to consider creating all objects as of a common early date, for example, create all locations with the start date 1-1-1950.
Entering Descriptive Flexfield Values
Use the Attribute columns in the main sheet to enter values for the descriptive flexfields that are already defined for the object. Use the DFF Reference sheet to understand which attribute columns map to which descriptive flexfields, since this information isn’t displayed in the main sheet.

⚠️ Note: You can’t enter values in the DFF Reference sheet, you can only view details of the descriptive flexfields.

Uploading Jobs Using a Spreadsheet
When uploading jobs using a spreadsheet, you:
- Can’t create a new job profile
- Can only associate an existing job profile
- Must enter the name of an existing job profile in the spreadsheet

Related Topics
- Guidelines for Using Desktop Integrated Excel Workbooks

Position Synchronization
If position synchronization is enabled, assignments inherit specified values from the associated position.

Synchronized Attributes
You can select any of the following attributes for synchronization when position synchronization is enabled:
- Department
- Job
- Location
- Grade
- Grade Ladder
- Manager
- Full Time or Part Time
- Regular or Temporary
- Assignment Category
- FTE and Working Hours
- Start Time and End Time
- Probation Period
- Union, Bargaining Unit and Collective Agreement
- Synchronize Mapped Flexfields

Position Changes
All active assignments that are synchronized from position automatically inherit changes from the position. Assignment attributes synchronized from position automatically inherit changes from the position. For those attributes not synchronized from position, you can either retain the existing values or update values from the position.
The Review page in the Edit Position page displays the list of impacted assignments with a status for each assignment. The status indicates if there are any issues due to the position change. You must correct all errors before submitting the position changes.

**Assignment Changes**

When you change the position in existing assignments you have a choice whether to inherit the values for those attributes which are not synchronized from the position. If you choose not to inherit, then the previous values remain unchanged.

**Position Synchronization Configuration Changes**

If the position synchronization configuration is changed after person and assignments are created, then the Synchronize Person Assignment from Position process must be run to apply the changes in assignments.

**Position Hierarchy Configuration Changes**

When the manager is synchronized from the HCM position hierarchy and you change the parent position, all assignments inherit the new manager from the current parent position. When you remove a position from the hierarchy, all child positions move one level up in the hierarchy. Hence, the grandparent position is the new parent position.

The incremental flattening process is triggered when you add or change a parent position. The flattening process will update the changes in the position hierarchy.

When you change the position in an existing assignment, the manager value is updated based on the parent position of the changed position. If the parent position doesn’t have an incumbent, the incumbent in the position in the next level up in the hierarchy is the new manager.

**Uploading Changes Using HCM Data Loader**

When you create or update assignments using HCM Data Loader, you can synchronize them from positions. In this case, you must:

- Enable position synchronization before you load the assignments. If you enable it after the assignments are loaded, then you can synchronize from positions for current and future dates only.
- Set the **Synchronize from Position** (Position Override) attribute on the employment terms or assignment object to **Y**.

After loading the assignments, you must run the Synchronize Person Assignments from Position process to synchronize the assignments. When you run the process, set the **Past Period to Be Considered in Days** parameter to an appropriate value. For example, if you set this parameter to 60 days, then any assignment records with start dates during the previous 60 days are synchronized from positions. By default, **Past Period to Be Considered in Days** is set to 30 days.

**Related Topics**

- How Assignment Values Are Inherited from Position

**Set Up Position Synchronization**

Position synchronization is inheritance of values in an assignment from the values specified in the associated position. You can enable position synchronization at the enterprise and legal entity levels using the Manage Enterprise HCM Information and Manage Legal Entity HCM Information tasks (in the Setup and Maintenance work area) respectively.
Enterprise Level Setup
You can enable position synchronization either at the enterprise or the legal employer levels. Select the Enable Position Synchronization attribute in the Edit Enterprise page to enable position synchronization for the enterprise. By default, this attribute is deselected. You can also specify whether the inherited values can be overridden at the assignment level.

If you enable position synchronization at the legal entity and the enterprise levels, then the settings specified at the legal employer level takes precedence over the settings specified at the enterprise level.

Legal Employer Level Setup
Set the Enable Position Synchronization attribute to Yes in the Position Synchronization page to specify the attributes to be configured with the position for the legal employer.

Select No for the Enable Position Synchronization attribute, to exclude a specific legal employer.

You can also use the same settings as defined for the enterprise. In this case, you must select the Use Enterprise option, which is the default value. If position synchronization is configured only at the enterprise level, then the assignment inherits the attribute values from the position selected. You can also override these values at the assignment level.

HCM Position Hierarchy
Position hierarchy defines positions’ relationships. The HCM position hierarchy is built based on these relationships. You enable the HCM position hierarchy on the Manage Enterprise HCM Information page in the Setup and Maintenance work area.

When you enable HCM position hierarchy:

- You can specify the parent position for a position on the Create and Edit Position pages in the Workforce Structures work area. When you search for positions based on a parent position, it will show all child positions for the specific parent position.
- You can also use the hierarchy to synchronize the line manager in the assignment from the line manager value in the parent position.
- You can view the positions that are part of the HCM position hierarchy on the My Team page and view the incumbents for a position.
- You can inactivate a position only if an incumbent with an inactive assignment exists.

Updating the Position Hierarchy
You can only correct the HCM position hierarchy. You can enable or disable the position hierarchy configuration by flattening the existing hierarchy. You must run the Synchronize Person Assignments from Position process to flatten the position hierarchy.

When the position hierarchy is flattened, then schedule to run the Synchronize Person Assignments from Position process. This will apply the manager changes in assignments if the position hierarchy is changed after person and assignments are created. The assignment changes can exist on the current date, date in the future, or in the past.

You can’t change the position hierarchy configuration if the line manager is synchronized based on the HCM position hierarchy. However, if line manager synchronization was configured as of a date in the past, then you can correct the position hierarchy configuration.
Graphical Position Hierarchy

The HCM position hierarchy shows the relationship between positions and their parent positions. You can view and edit the hierarchy on the HCM Position Hierarchy page, if your data security profile allows you.

You can identify a position's parent on the Manage Positions page if the Use HCM Position Hierarchy option is enabled for the enterprise.

The nodes of the position hierarchy represent positions and parent positions. You can:

- Add child positions under a position either by creating a new position or by selecting an existing position as the child.
- Create a copy of an existing position by specifying a new name and code. The rest of the information is copied from the original position to the copy. You can change any information that you want.
- Edit the position.
- View the incumbent details including name, person type, person number, position entry and exit dates, and their status as of the current date.
- Delete any position that doesn’t have any incumbents or child positions.

In each position node, you can view:

- Position name and code.
- Business unit, job, department, and location.
- Number of incumbents for the position.
- Open Full Time Equivalent (FTE)
- Current incumbents in the position.

Considerations for Using Position or Position Hierarchy for Synchronizing Assignment Manager

To select a line manager synchronization option for the enterprise or for individual legal entities, use the Manage HCM Enterprise Information and Manage HCM Legal Entity Information in the Setup and Maintenance work area respectively. This topic discusses the line manager synchronization options available.

HCM Position Hierarchy

Use the HCM Position Hierarchy to synchronize the line manager on the assignment with the incumbent of the parent position in the position hierarchy.

When there is a change in the position hierarchy, the affected assignments are automatically updated. Alternately, when you update a position using the HCM Data Loader run the Synchronize Person Assignments from Position process for the assignments to inherit the position changes. For example, if a position is moved under a different parent position, if there are any direct reports they’re automatically reassigned to the incumbent in the new parent position. If there is no manager in the parent position, the application checks for the incumbent in the grandparent position, or until it finds an incumbent. If there are multiple incumbents in a parent position, the incumbent with the longest tenure in the position is assigned as the new manager. You can change the manager to the other incumbent on the Manage Employment page.

If you move a position or remove it from the hierarchy, the grandparent position becomes the new parent position for all the child positions. For example, if you have a hierarchy as follows: Manager (grandparent), Team lead (parent), and Developer
(child), and you move the Team Lead position to a different branch. The Manager position is the new parent position for the Developer position.

**Note:** If you’re using HCM position hierarchy, remove the function privilege for the Manage Position Trees task in the Setup and Maintenance work area for your users. You can also hide the Manager field on the Create Position and Edit Position pages using personalization if you synchronize the line manager using position hierarchy.

**Position Manager**

Use the position manager to synchronize the line manager on the assignment with the line manager defined for the position. You can use this option if you’re not using the HCM Position Hierarchy and want to manually maintain the manager at the position.

**Related Topics**

- Guidelines for Loading Positions

**Synchronize Person Assignment from Position Process**

To synchronize the position changes with the affected assignments, run the Synchronize Person Assignments from Position process. The Initialize Position Synchronization process to load position synchronization changes is incorporated into the Synchronize Person Assignments from Position process. Run the Synchronize Person Assignment from Position to:

- Update affected assignments in the enterprise or legal entity if position synchronization is enabled (either initially or later, as a change).
- Prevent data corruption
- Synchronize the line manager based on the HCM position hierarchy.
- Update assignments affected by the position changes, uploaded using HCM Data Loader.

**Note:** You must schedule this process to run on a regular basis. If you are synchronizing the manager, then it’s recommended to run this process daily.

Use the Schedule New Process page in the Scheduled Processes work area to run the Synchronize Person Assignment from Position process.

Before you run the process, you must enable position synchronization on the Manage Enterprise HCM Information or Manage Legal Entity HCM Information tasks in the Setup and Maintenance work area.

**Process Parameters**

**Past Period to Be Considered in Days**

Number of days in the past to be considered for updating the attribute in the assignments. The default value is 30 days.

**Run at Enterprise Level**

Select **Yes** to run the process for the enterprise, or **No** to run it for a specific legal entity.

**Legal Entity**
Legal entity for which you want to run the process.

Process Results
This process updates all affected assignments with the changes from the position. This includes:

- Changes due to position synchronization.
- Past or future-dated changes to the position hierarchy.
- Rollback of line manager changes in assignments for reverse termination.
- Line manager hierarchy changes
- Flexfield-mapping changes.
- Changes in position loaded using HCM Data Loader

Synchronize Assignment Flexfields From Position Flexfields
You map position flexfields with assignment flexfields using the Manage Assignment Flexfields Mapping task in the Functional Setup Manager.

Use the task to map assignment descriptive flexfield segments to position descriptive flexfield segments. Synchronizing mapped flexfields includes the following steps:

1. Define flexfield mapping
2. Enabling flexfield synchronization
3. Synchronizing assignment flexfields from position flexfields

Define Flexfield Mapping
To map flexfields, follow these steps.

1. In the Functional Setup Manager, click the Manage Assignment Flexfields Mapping task.
2. Specify the following information.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Context</td>
<td>The context for the position descriptive flexfield. If you want to map a global position flexfield segment, leave the source context blank.</td>
</tr>
<tr>
<td>Source Segment</td>
<td>The position descriptive flexfield segment of the selected context or the global segment if the context was left blank.</td>
</tr>
<tr>
<td>Destination Context</td>
<td>The context for the assignment descriptive flexfield you want to map the position flexfield to. If you want to map it to a global assignment flexfield segment, leave the destination context blank.</td>
</tr>
<tr>
<td>Destination Segment</td>
<td>The assignment descriptive flexfield segment of the selected assignment context or the global segment if the context was left blank.</td>
</tr>
<tr>
<td>Enterprise Configuration: Enable Position Synchronization</td>
<td>Specify whether you want to use this flexfield mapping for position synchronization for the enterprise. Leave this field blank if the flexfield mapping applies to a specific legal employer.</td>
</tr>
</tbody>
</table>
Enabling Flexfield Synchronization

To enable flexfield synchronization, follow these steps.

1. In the Setup and Maintenance work area, click the Manage Enterprise HCM Information task to enable the setting for the enterprise, or click the Manage Legal Entity HCM Information task to enable the setting for a specific legal entity.
2. Click Edit and select Update.
3. Select the Enable Position Synchronization and Synchronize Mapped Flexfields check boxes in the Position Synchronization Configuration section.
4. Click Submit.

Synchronizing Assignment Flexfields from Position Flexfields

To synchronize assignment flexfields from position flexfields, follow these steps.

1. In the Navigator, click Scheduled Processes.
2. Click Schedule New Process.
3. Run the Synchronize Person Assignments from Positions process.

Considerations for Flexfield Mapping in Position Synchronization

You map position descriptive flexfields to assignment descriptive flexfields using the Manage Assignment Flexfield Mapping task in Oracle Fusion Functional Setup Manager.

Use this mapping to automatically populate values for those assignment flexfields mapped to the position flexfields, when position synchronization is enabled. This topic describes what to consider when you’re mapping flexfields.

Enterprise or Legal Entity Levels

Before you map flexfields, you must decide whether you want the mapping to be available for the enterprise or for specific legal entities only. You can reuse a mapping across different legal entities. Settings at the legal employer level takes precedence over enterprise settings, if both are specified.

Context Specific or Global

You must decide whether to map context specific or global flexfield segments because you can’t map a context specific flexfield segment to a global flexfield segment. You can’t map two or more segments of different contexts or multiple position segments to the same assignment segment.

When you change the position value in an assignment, all synchronized global segments inherit the value from the new position. You can manually update those segments that have a blank value in the position.
When you change the position value in an assignment, all context specific segments inherit the value from the new position. If the new position has similar values to the old position and additional contexts defined, the assignments retain the same values and inherit the additional values from the new position.

Selecting and removing a position in an assignment makes the context and segments editable but the current values aren’t removed if they are synchronized from the position.

**Numeric or Character**

You can map flexfields of the same type (for example, numeric-to-numeric or character-to-character only), same precision, and the same value set (same value set ID).

**Related Topics**

- Considerations for Managing Descriptive Flexfields

**Position Code Generation Methods**

Position code uniquely identifies a position. Use the Manage Enterprise HCM Information task in the Setup and Maintenance work area to generate position codes for your enterprise.

You can generate position codes in one of the following ways:

- Manually
- Automatically prior to submission
- Automatically upon final save

**Manual:** Use this method to manually enter a position code when creating a position. You can update the position code in the Manage position page. This method is the default method for generating the position code.

**Automatic prior to submission:** Use this method to automatically create and display the position code when you create a position. This method may create gaps in the position code sequence if the transaction is canceled after the position code is generated.

**Automatic upon final save:** Use this method to create position codes only after the Create Position transaction is approved. You can’t see the position code when you are creating the position but can see it on the Manage Position page after the transaction is approved. This method generates position codes without gaps in the sequence.

The Automatic prior to submission and Automatic upon final save methods use an enterprise number sequence. All position codes that are generated using the automatic methods are numeric only. By default, the sequence starts from 1; however, you can change the starting number. The position code increments by one for each new position created.

You can change the position code generation method from Automatic prior to submission method to the Automatic upon final save method and the other way around. You can also change from the automatic method to the manual method and the other way around but you must be careful which method you choose if you have existing data. You can’t edit an automatically generated position code.

**Initial Position Code**

You can specify the initial position code for your enterprise when you generate the position code automatically. The application uses this number for the first position record that you create using the automatic position code setting and increments the number by one for subsequent position records. By default, the initial position code is 1. The validation on the
initial position code helps you in identifying the starting position code in automatic position code generation when the method is changed from manual to automatic.

Using the initial position code option, you can retain the legacy position codes for existing positions. Additionally, you can automate the number generation for new positions, starting from the last legacy person number plus one. You can change the initial position code.

FAQs for Jobs and Positions

What happens if I select Synchronize Mapped Flexfields?
When you select this option, assignment flexfields are synchronized with the mapped position flexfields.
You must first map position flexfields to assignment flexfields using the Manage Assignment Flexfield Mapping task in the Functional Setup Manager, and then select this option in the Manage Enterprise HCM Information task. When position synchronization is enabled, the position flexfields are inherited in the assignments.

What happens if I specify a parent position?
You can specify a parent position when you enable HCM position hierarchy using the Manage Enterprise HCM Information task in the Setup and Maintenance work area. A parent position is one, which is the next position up in the position hierarchy.
On the Manage Positions page, click the parent position link to view the position details and click the icon next to the parent position to refresh the search with the parent position.
As a prerequisite, you specify a parent position to synchronize the line manager from the parent position. When you select to synchronize the line manager using the position hierarchy the incumbent in the parent position is populated as the new manager.

What happens if I specify the standard working hours in a position?
In an assignment, the standard working hours are inherited from the position. The working hours and the standard working hours provided in the position are used to calculate the FTE (Full Time Equivalent) in the assignment. If there is a FTE value already existing in the position, you can choose to update it based on the ratio of the working hours to standard working hours.
When position synchronization is enabled, even if FTE value exists for the position, it is not copied to the assignment during synchronization. Instead, the assignment FTE value is calculated as a ratio of working hours to standard working hours, if specified.

Related Topics
- Work Day Information

Why can't I see the position code for the new position?
Based on your enterprise settings, the position code is generated after the Create Position transaction is approved. For example, once the transaction is approved, you can see the position code on the Manage Position page.

Manage Trees
HCM Trees

Oracle Fusion trees are graphical representations of hierarchical data such as the structure of your organization. You manage trees in the Workforce Structures work area.

Oracle Fusion Human Capital Management (HCM) provides predefined tree structures for department, organization, position, and geography trees.

Note the following:

- You cannot change the predefined HCM tree structures.
- With the exception of geography trees, you can create multiple trees for each HCM tree type, and multiple versions of each tree.

For all HCM tree types, however, only one version of each tree can be active at one time.

Department Trees

Using the predefined tree structure for a department tree, you can create multiple department trees and then create multiple versions of each tree to build hierarchical representations of the departments within your organization. You can secure data by using department trees in an organization security profile.

Note the following:

- The first node of the tree is a department, and all of the child nodes are also departments.
- You can have only one first node for a department tree.
- You can’t add a department as a node more than one time in the same tree version.

Organization Trees

If you use the Oracle Fusion Enterprise Structures Configurator to set up your enterprise structure, you can automatically create a default organization tree, with the following:

- Ultimate holding company as the first node
- Divisions and country holding companies as the second level
- Legal employers as the third level

You can modify the organization tree, and create additional organization trees. If you do not use the Enterprise Structures Configurator, you can create organization trees based on the predefined organization tree structure. In an organization tree, you can select any type of organization for the first node and for the child nodes, but have only one first node.

You can secure HCM data using an organization tree, to identify organizations in an organization security profile.

Position Trees

Using the predefined tree structure for a position tree, you can create multiple position trees and then create multiple versions of each tree to establish reporting relationships among positions. You can have only one first node for a position tree.

You can use position trees for the following purposes:

- Review position hierarchies for budgeting and organizational planning.
- Secure access to positions by identifying a position hierarchy in a position security profile. For example, you can create a position security profile that includes all positions in a position hierarchy under a specified first position. You can also include the position security profile in a person security profile to secure access to person records. In this
case, the person security profile includes the person records of the people who occupy the positions in the position security profile.

The following figure illustrates a position hierarchy that you can establish using a position tree.

![Position Hierarchy Diagram]

**Geography Trees**

Using the predefined geography tree structure, you create a version to represent the countries in which your enterprise operates. For each country, you can define lower-level nodes such as states, and cities. For example, United Kingdom - England - London. Although you can create multiple versions, you can create only one geography tree in the hierarchy. You can have only one first node for a geography tree.

You use the geography tree to specify the locations to which calendar events apply.

Note the following:

- If an event applies to your entire enterprise, then you can attach it to the first node in the tree. For example, Global.
- If an event applies only to specific countries in your enterprise, then you can attach it to the nodes for those specific countries. For example, United Kingdom.
- If an event applies only to specific states or cities in a country, then you can attach it to the state or city level nodes. For example, England, London.
This figure illustrates the geographical hierarchy that you can establish using a geography tree.

Related Topics

- Create a Calendar Event Using a Geographic Tree
- How can I associate calendar events with countries
- Guidelines for Managing Trees and Tree Versions
Person Number Generation Methods

You can select one of the following person number generation methods for your enterprise on the Edit Enterprise page of the Manage Enterprise HCM Information task in the Setup and Maintenance work area:

- Manual
- Automatic prior to submission
- Automatic upon final save

**Manual:** You can use the Manual method to manually enter a person number when creating person records. You can update person numbers in the Manage Person page.

**Automatic prior to submission:** The Automatic prior to submission method automatically creates and displays person numbers when creating person records. This method is the default method for person number generation.

> **Note:** The Automatic prior to submission method may create gaps in the person number sequence if the transaction is canceled after the person number is generated.

**Automatic upon final save:** The Automatic upon final save method creates person numbers only after the Add Person transaction is approved. You can't view the person number when creating the person record. However, you can view the person number on the Manage Person page after the transaction is approved. This method generates person numbers without gaps in the sequence.

> **Note:** Person numbers are also assigned to contacts if they are created as a part of the Add Person transaction. For example, if a person is assigned person number 5 and two contacts are created during the Add Person transaction, then the contacts will be assigned person number 6 and 7. This means the next new person will be assigned person number 8.

The Automatic prior to submission and Automatic upon final save methods use an enterprise number sequence. By default, the sequence starts from 1; however, you can change the starting number. The person number increments by one for each new person record created.

You can change the person number generation method but you must be careful of the method that you select if you have existing data. You can change from Automatic prior to submission method to the Automatic upon final save method and change it back again. You can also change from the automatic method to the manual method and change this to the former.

**Initial Person Number**

You can specify the initial person number for your enterprise when you generate person numbers automatically. The application uses this number for the first person record that you create using the automatic person number setting, and increments the number by one for subsequent person records. By default, the initial person number is 1.

Using the initial person number option, you can retain the legacy person numbers for existing persons. Additionally, you can automate the number generation for new persons, starting from the last legacy person number plus one. You can change the initial person number.
Person Numbers for Contact Records

Workers and contacts have the same number sequence when the generation method is Automatic. You can correct automatically generated person numbers for contacts on the Manage Person page if the person number generation method is Manual. If contacts are later hired as workers, they retain their original person numbers.

Related Topics
- Worker Numbers

Person Types

You use person types to identify different groups of people in your enterprise. For example, for purposes of reporting, you may want to identify the following:

- Contractual workers in your enterprise with the Contingent Worker person type.
- Regular employees with the Employee person type.

On the basis of the person type, you can:

- Maintain information for a group of people
- Secure access to information

System Person Types

These are predefined person types that the application uses to identify a group of people. You can't change, delete, or create additional system person types.

User Person Types

Each system person type contains a user person type that you can configure to your requirements. You can change, remove, or create additional user person types to suit your enterprise requirements. For example:

- If your enterprise refers to its employees as associates instead of employees, you change the Employee user person type to Associate.
- If you want to classify employees further as equity partners, non-equity partners, and associates, you add these user person types under the Employee system person type. There is no limit to the number of user person types that you can add to a system person type.

Person Names and Languages

You can define how to display people's names in the application and in which language. You can define whether to display a person's name in the global or the local language.

Person name has two parts, style and format.
Name Styles
The name style determines these things:

- Which components of a person’s name to display. For example, one country may display first name and last name while another may display the middle name too
- What’s the order of display of the components
- Which components are required and which are optional. For example, title may be optional in some countries.

The legal employer sets the legislative context for the person record. So, if the legal employer is a Canadian legal entity, the Canadian name style is used. When a country-specific name style doesn’t exist, a universal name style (last name, first name, title, and middle names) is used.

*Note:* A person’s contacts have the same name style as the person for whom they’re contacts.

Name Formats
A name format is an arrangement of the name components.

- The format is an arrangement of these name components: first name, last name, and title. You can choose from these predefined name formats: Display name, List name, Full name, and Order name.
- The format can differ based on the display context. For example, in an ordered list of names, last name may appear before first name, but in other contexts first name appears before last name.

Global or Local
The profile option HR: Local or Global Name Format controls whether users see local names or global names. The profile option HR: Local or Global Name Format controls whether users see local names or global names by default. Global names use one name format. Users who manage people across countries may want to see the names displayed consistently so may use global names for example. Users who view or manage persons in a single country may prefer to see local names.

Person-Name Languages
Each enterprise has a global-name language. Person names appear in this language by default. When you create a person record, you can define what language to use for the local name. Names appear in this language for users whose HR: Local or Global Name Format profile option value matches the language.

Let’s look at an example:

- The global-name language for the enterprise is American English.
- You set the local-name language in a person record to Japanese. Users whose HR: Local or Global Name Format profile option is set to Japanese see the person’s name in Japanese.
- All other users (those who are viewing global-format names or whose HR: Local or Global Name Format profile option is set to a value other than Japanese) see the person’s name in American English. Users can set preferences to select the language in which they want to see person names displayed in.
Person Name Styles

Person name styles define the person name components for a country. Only one style can exist for a country, while you can predefine name styles for some countries.

Note the following:

- You can create name styles for countries that have none.
- You can copy an existing style to use as the basis.
- You can create a new name style in case of specific requirements for a country.

For countries that do not have a predefined person name style, the universal name style applies by default.

You can edit predefined name styles by doing the following:

- creating additional components
- selecting mandatory components
- changing order of components
- selecting list of values for the components

You cannot delete predefined components and make mandatory components optional. You can delete only those components that were added to a predefined name style. You cannot delete a predefined name style.

Note: You can create, edit, and delete user-defined name style and its components any time. If a user-defined name style is deleted after person names have been created using that style, the universal name style applies by default.

Person Name Components

Last Name is a mandatory name component for all person name styles. You can set other person name components as mandatory, based on specific requirements for a country.

Note the following:

- The name components Name Information 1 through Name Information 14 are reserved for localization requirements.
- You can use the components Name Information 15 through Name Information 30 to define specific person name components for a country.

For example, if you want to capture Mother’s Maiden Name for a country, you can use the name component Name Information 15, and denote the display name for this component as Mother’s Maiden Name.
Person Name Formats

A person name format type determines how a person’s name appears across Applications.

- Each person name format type contains a sequence of name components that represents different parts of a person’s name, for example, first name, last name, and punctuation marks.
- You can change the sequence of, remove, or include additional name components according to your requirements.

The following figure displays a sample name format, including the components and punctuation marks.

![Diagram of Person Name Format](image)

Predefined Name Format Types

Oracle Fusion HCM provides the following predefined format types.

<table>
<thead>
<tr>
<th>Format Type</th>
<th>Usage</th>
<th>Default Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Name</td>
<td>Names that appear in reports.</td>
<td>[Last Name], [First Name] [Middle Name] [Title]</td>
</tr>
<tr>
<td>Display Name</td>
<td>Names that appear singly, for example, on the Person Management page header.</td>
<td>[First Name] [Prefix] [Last Name]</td>
</tr>
<tr>
<td>List Name</td>
<td>Names that appear in lists</td>
<td>[Prefix] [Last Name], [First Name]</td>
</tr>
<tr>
<td>Format Type</td>
<td>Usage</td>
<td>Default Structure</td>
</tr>
<tr>
<td>-------------</td>
<td>-------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Order Name</td>
<td>Names that appear in name-ordered lists where the full name alone isn't sufficient to sort the list.</td>
<td>[Last Name] [First Name]</td>
</tr>
</tbody>
</table>

Note: When you create or edit format types, to avoid creating blank person names, ensure that you include at least one name component that is never blank.

Local and Global Name Formats
Oracle Fusion HCM includes local and global formats for each format type.

When you create a new format on the basis of an existing format type, you identify it as either local or global. For local format types, you must also select the legislation that the format type applies to:

- A local format is suitable for users in a single legislation who prefer to see person names in a character set appropriate to their legislation.
- A global format is suitable for users in a multinational enterprise who prefer to see person names in a single (typically, Western) character set, so that all names, regardless of origin, have the same representation.

How You Specify Work Phones
A person can have only one primary phone. Typically, employees see others' phone details only if it’s work related and primary. If you specify a nonwork phone as primary then workers can’t see the phone details.

Who can see which phone number is controlled by Oracle's virtual private database policy, which can't be changed

Access Security and Privileges
You can see a coworker's work and nonwork phone numbers if your role has these privileges:

- Manage person phones data
- View person phones data
- Report person phones data

It’s important to understand these phone lookup codes since the virtual private database policy relies on the lookup codes:

<table>
<thead>
<tr>
<th>Lookup Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1</td>
<td>Work Phone</td>
</tr>
<tr>
<td>W2</td>
<td>Second Work Phone</td>
</tr>
<tr>
<td>W3</td>
<td>Third Work Phone</td>
</tr>
</tbody>
</table>
If you want to change the phone type, keep in mind the lookup code and how the VPD policy works with that lookup code. Lookup codes starting with W indicate the phone number is public and can be viewed by all. Lookup codes not starting with W indicate the phone number is private and can be seen only by people with the required privileges.

### How You Update Person Search Keywords

Several attributes of person, employment, and profile records are used as person-search keywords. Keyword values are copied automatically from the originating records to the PER_KEYWORDS table, where they are indexed to improve search performance.

#### Process to Update Person Keywords

An event is raised when the value of a keyword attribute changes, for example, if a person acquires a language skill or a different phone number. In response, services run a process to update the relevant attributes for the person in the PER_KEYWORDS table. Therefore most changes are made in PER_KEYWORDS immediately and automatically. When you create a new person record, keyword values for that person are copied automatically to the PER_KEYWORDS table.

#### Why You Run the Process

Although most changes to the PER_KEYWORDS table are automatic, you need to run the Update Person Search Keywords process regularly because of these reasons:

- The automatic process doesn’t apply future-dated changes to the PER_KEYWORDS table.
- The process ensures that all changes are copied to the PER_KEYWORDS table, despite any temporary failures of the automatic process.

#### How to Schedule the Process

You can run the Update Person Search Keywords process manually or schedule it to run at regular intervals (for example, weekly at a specified time).

The likely volume and frequency of changes to person records in your enterprise will determine how often you run the process:

- If the volume and frequency are high, you need to schedule the process to run frequently.
- If the volume and frequency are low, running the process once a month is recommended.

Running the Update Person Search Keywords process refreshes the whole PER_KEYWORDS table. Therefore, you must run the process at times of low activity to avoid performance problems.

<table>
<thead>
<tr>
<th>Lookup Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>WF</td>
<td>Work Fax</td>
</tr>
<tr>
<td>WM</td>
<td>Work Mobile Phone</td>
</tr>
</tbody>
</table>
Person-Record Keyword Searches

The application searches for keywords in these person attributes: department, person number, job name and code, position name and code, person name, primary email, primary phone, work location, competencies, language skills, licenses and certifications, school education, awards and honors, memberships, areas of interest, and areas of expertise.

Access to Restricted Information

Line managers can access their workers' restricted information such as competencies, language skills, licenses and certifications, school education, awards and honors, and affiliations. Restricted information is included in search results when the searcher is a line manager. For example, if a line manager searches for a language skill and a match is found in any direct or indirect reports, that information appears in the search results. However, if the match is found in public information such as areas of expertise, it appears in the search results for any user.

Keyword Indexing

Keywords are indexed values, which means that they are copied from person records and organized in a keywords table for fast retrieval. Most changes to person records are copied to ensure that the source and indexed values don’t differ. Your enterprise can also run a keyword-refresh process to update all keywords and fix any discrepancies. Depending on when this process was last run, some recent changes to person records may not appear in search results.

Name and Keyword Search

The person search uses a person’s full name instead of the first name or last name. The full name definition may vary for each country. For example, the full name definition for India may be First Name Middle Name Last Name, while the full name definition for Canada may be First Name Known As Last Name Suffix. You control the definition of the full name using the Manage Person Name Formats task in the Setup and Maintenance work area.

There is an implied OR condition between the search criteria when you use keyword search. When you use the name search, there is an implied AND condition between the search criteria. For example, when you enter Chris Harper in the Name field, all person records that have both Chris and Harper in the full name are shown in the search results. Here are some examples:

<table>
<thead>
<tr>
<th>You enter...</th>
<th>Search Results</th>
</tr>
</thead>
</table>
| Harper Chris | • Jenner, Chris  
|              | • Harper, Smith 
|              | • Chris, Ray  
|              | • Harper, Liam 
|              | • Harper, Chris 
|              | • Harper, Christopher |
| Chris Harper | • Jenner, Chris  
|              | • Harper, Smith 
|              | • Chris, Ray  
|              | • Harper, Liam 
|              | • Harper, Chris 
|              | • Harper, Christopher |
| Chris%       | • Jenner, Chris |
Date-Effective Search

In the person search UI, you can enter an effective as-of date. When date-effective values such as work location are copied to the keywords table, their history isn’t copied: only the latest change is stored in the keywords table. Therefore, if you enter both a keyword value and an effective as-of date, the search results may not be as expected. Here’s an example:

- You change the work location of assignment 12345 from Headquarters to Regional Office on 27 January, 2011.
- The changed work location is copied automatically to the keywords table on 27 January, 2011.
- You search for a person on 1 February, 2011 using the keyword Headquarters and the effective as-of date 10 January, 2011.

Although the work location on 10 January, 2011 was Headquarters, assignment 12345 doesn’t appear in the search results because the work location stored in the keywords table at the time of the search is Regional Office.

How You Optimize Person Search Keywords

The Oracle Text index in the PER_KEYWORDS table is utilized for person searches in Person Management work area, and the Directory. This index may become fragmented over a period of time and may cause a delay in displaying search results.

Why You Run a Process

You run the Optimize Person Search Keywords Index process to identify the fragmented indexes and help improve the overall search performance. To launch this process, use the Navigator > Scheduled Processes > Schedule New Process button in the search results table.

**Note:** You must run the Update Person Search Keywords process first and then the Optimize Person Search Keywords process. You can’t schedule both processes simultaneously. If you schedule them at the same time, the second process will wait for the first process to complete before it starts.
When to Run the Process

You must run the Optimize Person Search Keywords Index process daily at times of low activity with the options, Full mode and the appropriate maximum time. The default time is 180 minutes. Although, if the process is run consistently over time it may take about 10-30 minutes only. You can decide the frequency of running the process based on the size of your customer base, system usage, database usage, data loaders used, index fragmentation, and schedule of the Update Person Search Keywords process.

How You Communicate Person and Assignment Changes to Consumer Applications

You may need to alert other Oracle Fusion applications when you make changes to person and assignment details to synchronize their information with Oracle Fusion Global Human Resources.

To share the changes made to person and assignment details with consumer applications, you must run the Synchronize Person Records process. The process generates an HCM event, ChangedPersonDetails, that consumer applications listen to. When you start the process, you can specify the start and end dates. The process generates events for the changes made between the start and end dates that you specified. If you specify no date, the process runs on the system date, and generates events for changes made on that date.

If you make changes to person records daily, it is recommended that you schedule Synchronize Person Records to run daily on the system date (without specifying start and end dates).

⚠️ Note: In the Coexistence for HCM environment, you can run Synchronize Person Records after you upload person records to Oracle Fusion for the first time. When you run the process, specify the start date (start date of the oldest person record) and end date (system date). When you load person records subsequently, run Synchronize Person Records on the system date (without specifying start and end dates). Don’t schedule the process to run daily.

Changes Notified to Consumer Applications

When you run Synchronize Person Records, the process generates the ChangedPersonDetails event when you make changes to the following person and assignment details:

- **Person details:**
  - Name
  - Work email
  - Phones
  - Image
  - Service dates

- **Assignment details:**
  - Job
  - Position
o Department
o Work location
o Work location address
o Manager
o Work type

Note: The ChangedPersonDetails event is not generated if you make changes to the following existing person details:
- Job
- Position
- Department
- Work location
- Work location address

Person Lookups

This topic identifies common lookups that are person-related and have user or extensible configuration levels. Review these lookups, and update them as appropriate to suit enterprise requirements using the Manage Common Lookups task.

Person Information Lookups

Person information lookups are described in the following table:

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
<th>Configuration Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORA_PER_EXT_IDENTIFIER_TYPES</td>
<td>Type of a person’s identifier in an external application, such as time device badge identifier, third-party payroll identifier, or third-party payroll alternate identifier</td>
<td>User</td>
</tr>
<tr>
<td>PER_NATIONAL_IDENTIFIER_TYPE</td>
<td>Type of a person’s national identifier, such as social security number, civil registration number, or national insurance number</td>
<td>User</td>
</tr>
<tr>
<td>PERSON_TYPE_STATUS</td>
<td>Status of a user person type, such as active or inactive</td>
<td>User</td>
</tr>
<tr>
<td>EMAIL_TYPE</td>
<td>Type of a person’s email address, such as home email or work email</td>
<td>Extensible</td>
</tr>
</tbody>
</table>

Note: A person can have only one work email by default. If you want to add a secondary work email, you must define another lookup type.
<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
<th>Configuration Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS_TYPE</td>
<td>Type of a person's address, such as home address or mailing address</td>
<td>Extensible</td>
</tr>
<tr>
<td>PHONE_TYPE</td>
<td>Type of a person's phone, such as home phone or mobile phone</td>
<td>Extensible</td>
</tr>
<tr>
<td>PER_CM_MTHD</td>
<td>Communication methods for a person, such as email or instant messenger</td>
<td>Extensible</td>
</tr>
<tr>
<td>PER_CONTACT_TIMES</td>
<td>Times of day when a specified phone number can be used, such as evenings or weekends</td>
<td>Extensible</td>
</tr>
<tr>
<td>PER_ETHNICITY</td>
<td>Person's ethnicity, such as Hispanic, Asian, or American Indian</td>
<td>User</td>
</tr>
<tr>
<td>PER_RELIGION</td>
<td>Person's religion, such as Christianity, Hinduism, or Islam</td>
<td>Extensible</td>
</tr>
<tr>
<td>PROFESSION</td>
<td>Person's profession reported on a visa or work permit, such as engineer, nurse, or teacher</td>
<td>Extensible</td>
</tr>
<tr>
<td>TITLE</td>
<td>Person's title, such as Miss, Doctor, or Professor, forming part of the person's name</td>
<td>Extensible</td>
</tr>
<tr>
<td>HONORS</td>
<td>Higher qualifications, such as CPA, PhD, or DDS, forming part of the person's name</td>
<td>Extensible</td>
</tr>
<tr>
<td>PER_HIGHEST_EDUCATION_LEVEL</td>
<td>Person's highest level of academic qualification, such as BSc, Diploma, or MA.</td>
<td>User</td>
</tr>
<tr>
<td>MILITARY_RANK</td>
<td>Person's military rank, such as private, sergeant, or corporal, forming part of the person’s name</td>
<td>Extensible</td>
</tr>
<tr>
<td>BLOOD_TYPE</td>
<td>Person's blood group, such as A rhesus negative or B rhesus positive</td>
<td>User</td>
</tr>
<tr>
<td>CONTACT</td>
<td>Relationship between a person and the person's contact, such as partner, child, or brother</td>
<td>User</td>
</tr>
<tr>
<td>MAR_STATUS</td>
<td>Person’s marital status, such as single, married, or legally separated</td>
<td>User</td>
</tr>
</tbody>
</table>

Document Information Lookups

Document information lookups are described in the following table.
<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
<th>Configuration Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PER_DRIVERS_LICENSE_TYPE</td>
<td>Type of a person’s driver’s license, such as permanent or temporary</td>
<td>Extensible</td>
</tr>
<tr>
<td>PER_CITIZENSHIP_STATUS</td>
<td>Status of a person’s citizenship, such as active or expired</td>
<td>Extensible</td>
</tr>
<tr>
<td>PER_PASSPORT_TYPE</td>
<td>Type of a person’s passport, such as emergency or regular</td>
<td>Extensible</td>
</tr>
<tr>
<td>PER_VISA_PERMIT_TYPE</td>
<td>Type of a person’s visa or work permit, such as temporary worker or residence permit</td>
<td>User</td>
</tr>
<tr>
<td>PER_VISA_PERMIT_STATUS</td>
<td>Status of a person’s visa or work permit, such as pending or active</td>
<td>Extensible</td>
</tr>
</tbody>
</table>

Disability Information Lookups
Disability information lookups are described in the following table.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
<th>Configuration Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISABILITY_CATEGORY</td>
<td>Type of a person’s disability, such as hearing loss or visual impairment</td>
<td>User</td>
</tr>
<tr>
<td>DISABILITY_REASON</td>
<td>Causes of a person’s disability, such as accident or illness</td>
<td>Extensible</td>
</tr>
<tr>
<td>DISABILITY_STATUS</td>
<td>Status of a person’s disability registration, such as approved or pending</td>
<td>User</td>
</tr>
<tr>
<td>ORA_PER_SELF_DISCLOSE_DISABILITY</td>
<td>Type of self-disclosure responses for a disability based on the country selection.</td>
<td>User</td>
</tr>
</tbody>
</table>

User and Role-Provisioning Setup Options

This topic introduces the user and role-provisioning options, which control the default management of some user-account features. To set these options, perform the Manage Enterprise HCM Information task in the Workforce Structures functional area for your offering. You can edit these values as necessary and specify an effective start date for changed values.
User Account Creation

The **User Account Creation** option controls:

- Whether user accounts are created automatically when you create a person, user, or party record
- The automatic provisioning of roles to users at account creation

> **Note:** User accounts without roles are suspended automatically. Therefore, roles are provisioned automatically at account creation to avoid this automatic suspension.

The **User Account Creation** option may be of interest if:

- Some workers don’t need access to Oracle Applications Cloud.
- Your existing provisioning infrastructure creates user accounts, and you plan to integrate it with Oracle Applications Cloud.

User Account Role Provisioning

After a user account exists, users both acquire and lose roles as specified by current role-provisioning rules. For example, managers may provision roles to users manually, and the termination process may remove roles from users automatically. You can control role provisioning by setting the **User Account Role Provisioning** option.

> **Note:** Roles that you provision to users directly on the Security Console aren’t affected by this option.

User Account Maintenance

The **User Account Maintenance** option controls whether user accounts are suspended and reactivated automatically. By default, a user’s account is suspended automatically when the user is terminated and reactivated automatically if the user is rehired.

User Account Creation for Terminated Workers

The **User Account Creation for Terminated Workers** option controls whether user-account requests for terminated workers are processed or suppressed. This option takes effect when you run the **Send Pending LDAP Requests** process.

**Related Topics**

- User Account Creation Option
- User Account Role Provisioning Option
- User Account Maintenance Option
- User Account Creation for Terminated Workers Option
The Manager Hierarchy: How It's Maintained

In many situations, a person's manager hierarchy must be readily available. For example, a person's line manager may be required during an approval process, and business intelligence reports often retrieve data based on a manager hierarchy. This topic describes how the manager hierarchy is maintained.

How the Manager Hierarchy Is Maintained

A person's manager hierarchy could be derived from active data tables, but the impact of that approach on performance is unpredictable. Therefore, the complete manager hierarchy for each person is extracted from data tables and stored in a separate manager hierarchy table. This table is known as the denormalized manager hierarchy. The denormalized manager hierarchy ensures that a person's manager hierarchy is both easily accessible and up to date.

Running the Refresh Manager Hierarchy Process

Whenever a change is made to a person's manager hierarchy through the application pages, the change is reflected automatically in the denormalized manager hierarchy table. You use the Refresh Manager Hierarchy process to populate the denormalized manager hierarchy table when person records are migrated from other applications.

You run the Refresh Manager Hierarchy process in the Scheduled Processes work area. To run the process, you must have the Human Resource Specialist job role. The process has no default schedule. You can run the process occasionally to perform a complete refresh of the denormalized manager hierarchy. Alternatively, you can specify a schedule to run the process at regular intervals. Refresh Manager Hierarchy processes all types of manager hierarchies.

In addition to performing full refreshes of the manager hierarchy, you can perform incremental refreshes. With this approach, you refresh the hierarchy based on manager changes occurring in the previous N days. Schedule a full refresh every month or quarter and an incremental refresh every day or week, for example.

FAQs for Person

What happens if I change the status of a user person type?

The status of a user person type determines whether it's available across Oracle Fusion HCM.

If you inactivate a user person type, there is no impact on worker assignments that are currently associated with that person type. However, starting from the date of inactivation, you can't select that person type to associate with worker assignments.

⚠️ **Note:** You cannot inactivate a default user person type. You must first select a different user person type as the default.
What's the purpose of the default user person type?

Each system person type contains a default user person type that the application uses to associate with person records for reporting and display purposes.

When you hire a worker and specify assignment information, the application associates the default user person type with that worker assignment. However, if you select a different person type, then the application considers the selected person type as the default one for that worker.

When does the application update stored names with a person name format?

When you run the Update Person Names process in the Scheduled Processes work area. When you update a name format, you must run the process so that the application updates the stored names according to the updated format type rules. You can run the process for a specific name format and legislation combination.

How can I switch between local and global formats to display person names?

You use the HR: Local or Global Name Format profile option. If you select the global name format, then person names appear in the same format across all legislations. If you select a particular legislation, then person names appear in a format specific to that legislation.

For example, if you set the profile option to Japan, then Japanese person names appear in the local name format that was created for Japan. However, person names that were stored using formats other than those of the Japanese legislation appear according to the global name format.

What's the difference between person name formats and person name styles?

Person name formats determine the order of the person name components for a specific format type.

The sequence of components for predefined name format types can be configured for a country. For example: Display Name can be defined as First Name, Last Name, and List Name can be defined as Last Name, First Name.

Person name styles define the person name components that can be captured for a country; for example, first name, last name, title, previous last name, known as, and so on. Person name styles can be configured by selecting the required name components for a country.
What are the lookup types associated with person identifiers?

The ORA_PER_EXT_IDENTIFIER_TYPES lookup type provides the predefined identifier types. You can add more types such as a person’s parking pass identifier by adding values to this lookup type. The predefined identifier types are Time Device Badge identifier, Third-Party Payroll identifier, and Third-Party Payroll Alternate identifier.

How can I enable the Employment Details tab in the Personal Information work area?

The tab isn’t available out of the box. To enable the tab, you must create a sandbox and set the Visible property of the tab to Yes. To do this, select Configuration > Structure from the Navigator menu, expand the Me category, and click Personal Information. Then, set the property for the tab in the Tabs area.

Related Topics

- Edit and Reorder Groups and Page Entries for Navigation
10  Employment

How Action Components Work Together

Actions track changes to Human Capital Management (HCM) records, such as changes to employment and assignment records. When you create or update these records, the action identifies the cause of the creation or change.

Action

You can view a history of effective-dated changes (assignment history, for example), and the action and reason details are particularly useful for reporting and tracking.

You can use actions to categorize the type of change. Each predefined termination action is associated with a termination type (either voluntary or involuntary) to help categorize the termination. For example, the termination actions Death and Reduction in Force are categorized as voluntary and involuntary respectively.

In certain cases, actions determine the business flow. For example, you can select from a list of employment-related actions, such as Assignment Change, Transfer, or Termination. The action you select determines the path you take through the current business flow.

To create your own actions, use the Manage Actions task in the Setup and Maintenance work area.

> **Note:** If you are creating your own termination-related action, it is highly recommended that you specify the termination type for the action, whether it is voluntary or involuntary. This information is useful for analysis and reporting purposes.

Action Reason

You can optionally associate reasons with actions, which is primarily useful for analysis and reporting purposes. For example, a generic action of termination could have reasons such as voluntary retirement or involuntary layoff. You can view the action and reason details in the Employee Termination Report. Line managers can view predictions about who is likely to leave voluntarily, which are based on existing and historical terminations data.

The process that generates the predictions uses the action and reason data to identify whether a termination is voluntary or involuntary. When managers allocate compensation to their workers, they can select from a list of action reasons that help identify the type of or reason for the compensation allocation.

Action Type

An action type:

- Identifies the type of business process associated with the action and determines what happens when you select an action.
- Is associated with one or more predefined actions.

You can associate the actions you create with the predefined action types. For example, the Hire an Employee action type is associated with the Hire action. You could create an action Hire Part-Time and associate it with the Hire an Employee action.
type. Your action will then appear in the Actions list in the Hire an Employee page. To hire a part-time employee, users can select the Hire Part-Time action instead of the predefined Hire action.

**Action Tracking**

When an assignment-related action occurs, a record of the action is stored in the PER_ACTION_OCCURRENCES table. For example, when you cancel a work relationship, the assignment record is deleted. However, the record of this action is stored in the PER_ACTION_OCCURRENCES table. You can search for a person whose work relationship was canceled by querying this table. The PARENT_ENTITY_KEY_ID column in the table stores the person ID of the person whose work relationship was canceled.

*Related Topics*

- What's the purpose of the legislative action attributes

**Employment Model**

The employment model comprises two types of entities, which are work relationships and assignments. To configure employment models for the enterprise or for individual legal employers, use the Manage Enterprise HCM Information and Manage Legal Entity HCM Information tasks in the Setup and Maintenance work area respectively.

When you configure the employment model for the enterprise or legal employer (when you create or update the enterprise or legal employer), you can select from four options:

- Single Assignment
- Single Assignment with Contract
- Multiple Assignments
- Multiple Contracts with Single Assignment

**Single Assignment**

If you select Single Assignment, each work relationship of any type has one assignment only.
The assignment is created automatically when the work relationship is created.

Single Assignment with Contract
If you select Single Assignment with Contract, users can include contract information in the single assignment.

Creating the work relationship automatically creates the assignment. Including contract information in the assignment is optional.

Multiple Assignments
If you select Multiple Assignments, each work relationship of any type can include one or more assignments.
Creating the work relationship automatically creates one assignment. Additional assignments are optional; you create those manually.

**Multiple Contracts with Single Assignment**

If you select Multiple Contracts with Single Assignment, users can include multiple contracts. However, each contract is associated with a single assignment.

Creating the work relationship automatically creates one assignment. Additional assignments are optional; you create those manually. Including contract information in the assignment is optional.

**Related Topics**

- Assignments
- Work Relationships
When to Select the Employment Model

By default, every enterprise uses the single-assignment employment model. To select a different employment model for the enterprise or for individual legal employers, use the Manage Enterprise HCM Information and Manage Legal Entity HCM Information tasks in the Setup and Maintenance work area respectively. This topic discusses the choices you can make and identifies any restrictions.

You can select a different employment model for individual legal employers.

Single Assignment v. Multiple Assignment

If you select:

- Single Assignment or Single Assignment with Contract, all work relationships in the enterprise or legal employer are restricted to a single assignment.
- Multiple Assignments, all work relationships in the enterprise or legal employer can include one or more assignments; therefore, work relationships can include a single assignment when appropriate.
- Multiple Contracts with Single Assignment, all assignments in the enterprise or legal employer can be associated with its individual contract.

Changing the Employment Model for the Enterprise or Legal Employer

In general, you can change the employment model for the enterprise or legal employer both during initial implementation and later. However, there are some restrictions on switching to and from particular employment models.

The following table identifies the valid and restricted switching options.

<table>
<thead>
<tr>
<th>From</th>
<th>To Single Assignment</th>
<th>To Single Assignment with Contract</th>
<th>To Multiple Assignments</th>
<th>To Multiple Contracts with Single Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Assignment</td>
<td>N/A</td>
<td>See note</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Single Assignment with Contract</td>
<td>See note</td>
<td>N/A</td>
<td>See note</td>
<td>Yes</td>
</tr>
<tr>
<td>Multiple Assignments</td>
<td>Yes</td>
<td>See note</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>Multiple Contracts with Single Assignment</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: Yes, provided that no work relationships exist in the enterprise or legal employer.
Employment Lookups

This topic identifies common lookups that are employment-related and have user or extensible configuration levels. Review these lookups, and update them as appropriate to suit enterprise requirements. You review lookups using the Manage Common Lookups task in the Setup and Maintenance work area.

Worker Contract Lookups

Worker contract lookups are described in the following table.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
<th>Configuration Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTRACT_TYPE</td>
<td>Type values, such as fixed-term, full-time, and seasonal</td>
<td>User</td>
</tr>
</tbody>
</table>

Assignment Lookups

Assignment lookups are described in the following table.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
<th>Configuration Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUDGET_MEASUREMENT_TYPE</td>
<td>Work measure values, such as headcount and FTE</td>
<td>Extensible</td>
</tr>
<tr>
<td>EMP_CAT</td>
<td>Assignment categories, such as full-time regular and part-time temporary</td>
<td>User</td>
</tr>
<tr>
<td>EMPLOYEE_CATG</td>
<td>Worker type values, such as white collar, blue collar, and civil servant</td>
<td>User</td>
</tr>
<tr>
<td>BARGAINING_UNIT_CODE</td>
<td>Codes that identify bargaining units, such as health professionals, steel workers, and public service workers</td>
<td>User</td>
</tr>
<tr>
<td>PER_SUPERVISOR_TYPE</td>
<td>Manager types, such as line manager, project manager, and technical manager</td>
<td>Extensible</td>
</tr>
</tbody>
</table>

Note: If your enterprise uses matrix management (where a worker assignment has multiple managers of different types), then you must review the predefined manager types in the PER_SUPERVISOR_TYPE lookup and add any missing types. You may also need to create job roles for managers other than line managers and ensure that they have appropriate access to the records of workers who report to them.
Terminations Lookups
Terminations lookups are described in the following table.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
<th>Configuration Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PER_PDS_REHIRE_REASON</td>
<td>Reasons, such as misconduct and poor performance, for not recommending rehire of a worker</td>
<td>User</td>
</tr>
</tbody>
</table>

Areas of Responsibility Lookups
Areas of responsibility lookups are described in the following table.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
<th>Configuration Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PER_RESPONSIBILITY_TYPES</td>
<td>Worker responsibilities, such as benefits representative, union representative and fire warden</td>
<td>Extensible</td>
</tr>
</tbody>
</table>

Employment Configuration Options
You can configure employment-related options at the enterprise level by using the Manage Enterprise HCM Information task in the Setup and Maintenance work area. The following table provides the description and default value for each option.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided Flows: Future-Dated Records Validation</td>
<td>You can use this option to control whether managers can update assignments with future-dated records using the self service employment pages. You can select from the following values:</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>None: No validation is displayed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Error: An error message is displayed indicating that the assignment has a future-dated record and the user is prevented from updating the assignment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Warning: A warning message is displayed indicating that the assignment has a future-dated record. The user can choose to ignore the message and continue with the transaction.</td>
<td></td>
</tr>
<tr>
<td>Validation For Existing Subordinates Termination</td>
<td>You can use this option to control whether users can terminate workers with direct reports using the Terminate Work</td>
<td>Error</td>
</tr>
</tbody>
</table>
Considerations for Configuring Employment Pages

The employment-related pages of Oracle Fusion Global Human Resources meet typical needs for the two-tier employment model. In addition, some attributes are hidden by default: you can display any of these attributes, or hide any that are displayed by default, to suit enterprise requirements.

To configure a page, use the Manage Customizations option in the Settings and Actions menu in the global area (select the drop-down list next to the login name).
Configuring Employment Pages for the Line Manager

Line managers can update assignment working hours and work locations for their direct and indirect reports. By default, these changes are made at the assignment level.

Displaying Hidden Attributes

Some employment-related attributes are hidden by default in employment pages, such as Manage Employment Information and Create Work Relationship, and in the employment information in the New Person pages. The default appearance of these pages simplifies the interactions that they support while meeting the needs of the typical user. However, you can tailor these pages to include any of the hidden attributes.

Check and Correct Employment-Related Data Issues

Use the Correct Employment Data Integrity Issues process to detect and correct any employment data integrity-related issues. Run this process from the Scheduled Processes work area.

The process reports and fixes the following issues:

- Invalid Person Type Usage Records
- Legal Employer Varies for Assignment and Work Relationship
- Work Terms With Primary Assignment Field Set to Y
- Business Unit Varies for Assignment and Work Terms
- Inactive Work Relationship Active Work Terms or Assignment
- Legislation Varies for Assignment and Work Relationship
- Assignment With People Group Without Structure Information
- Person Type Missing in Assignment Record
- User and System Person Types Vary in Assignments
- Supervisor Records Created After Termination Date
- Supervisor Records Extending Beyond Termination Date
- User and System Person Types Vary in Person Type Usages
- Overlapping Working Hour Pattern Records
- Flexfield Structure and People Group Vary in Assignments
- Primary Field Set to Y When Manager Type Not Line Manager

You must run the following procedures in the order specified to detect and correct any issues, and verify the results:

1. Selecting the process
2. Using Summary mode
3. Using Report mode
4. Using Update mode
5. Confirming whether issues are corrected

Selecting the Process

1. Click Navigator > Tools > Scheduled Processes.
2. Click **Schedule New Process**, and click **Job** in the **Type** field.
3. Expand the **Name** list, and click **Search**.
4. Type **Employment** in the **Name** box, and click **Search**.
5. In the search results table, select **Correct Employment Data Integrity Issues**, and click **OK**.
6. In the **Schedule New Process** dialog box, click **OK**.

### Using Summary Mode
Run the process in Summary mode to generate a .csv file listing the count of the issues, if any. You can run the process in this mode for a person or all people.

1. In the **Process Details** dialog box, select **Summary** from the **Mode** list.
2. In the **Name** list, select the person for whom you want to run the process.

**Note:** If you don’t select a name from the list, the process runs for all people.

3. Click **Submit**, and click **OK** in the **Confirmation** dialog box. Note the process ID.
4. Click **Close** in the **Process Details** dialog box.

You can view the .zip file when you select the row containing the process ID in the search results table in the Overview page.

### Using Report Mode
If you find any issues in the .csv file, run the process in Report mode to generate a .zip file. The .zip file contains a .csv file for each integrity check. The .csv file provides details of the issues and the people affected by it.

1. Click **Schedule New Process**. Select **Correct Employment Data Integrity Issues** from the **Name** list, and click **OK**.
2. In the **Process Details** dialog box, select **Report** from the **Mode** list.
3. Click **Submit**, and click **OK** in the **Confirmation** dialog box. Note the process ID.
4. Click **Close** in the **Process Details** dialog box.

You can view the .zip file when you select the row containing the process ID in the search results table in the Overview page.

### Using Update Mode
Run the process in Update mode to correct the issues. After you run the process, a .zip file is generated that contains a .csv file for each integrity check. The .csv file provides details of the issues post the update.

1. Click **Schedule New Process**. Select **Correct Employment Data Integrity Issues** from the **Name** list, and click **OK**.
2. In the **Process Details** dialog box, select **Update** from the **Mode** list.
3. Click **Submit**, and click **OK** in the **Confirmation** dialog box. Note the process ID.
4. Click **Close** in the **Process Details** dialog box.

You can view the .zip file when you select the row containing the process ID in the search results table in the Overview page.

### Confirming Whether Issues are Corrected
Run the process again in Summary mode to confirm that the issues are corrected.

**Related Topics**
- Submit Scheduled Processes and Process Sets
People Group

Use the People Group key flexfield to record people group information and assign people to specific groups, such as unions or working groups. For example, you may want to assign people to unions or pension plans to determine eligibility or regulate access to payrolls.

The key flexfield is part of the Global Human Resources application and is identified by the PPG flexfield code and People Group Flexfield name.

How to Enable People Group for Use in HCM

You can enable the flexfield either at the enterprise level (using the Manage Enterprise HCM Information task) or the legal employer level (using the Manage Legal Entity HCM Information task).

People Group is an optional field and is available on all assignment and employment pages (except the Change Manager page).

>Note: The People Group field is hidden out-of-the-box, you can enable it through personalization.

Where People Group Information is Stored

- The information is stored in the PEOPLE_GROUP_ID column of the PER_ALL_ASSIGNMENTS_M table.
- The PEOPLE_GROUP_ID column is a foreign key to the PEOPLE_GROUP_ID column in the PAY_PEOPLE_GROUPS table.

Related Topics

- Overview of Key Flexfields

How You Configure the Default Expense Account

You need to set up a default expense account in your human resources application for every person who uses expenses in the Oracle Financials Cloud.

>Note: If you don’t set up default expense accounts for all users, they can’t submit expense reports.

Default Expense Account is a key flexfield. It is part of the General Ledger application and is identified by the GL# flexfield code and Accounting Flexfield name.

Enable Default Expense Account for use in HCM

1. Navigate to the Setup and Maintenance work area.
2. In the Tasks panel drawer, click Search.
3. Search and click the Define Business Units task name.
4. Click the Assign Business Unit Business Function task name and select the business unit.
5. Click **Apply and Go to Task**.
6. Select the primary ledger and default legal entity.
7. Click **Save**.

### Where You Maintain the Default Expense Account

The Default Expense Account and Expense Check Send-to Address fields are optional and displayed on all assignment and employment related pages, except these pages:

- Change Location
- Change Working Hours
- Change Manager

In the Expense Check Send-to Address field, you specify where to send the worker’s expense reimbursement check. The values for this field are populated using the PER_WORKER_ADDRESS_TYPE application lookup.

> **Note:** These fields are hidden out-of-the-box. You can unhide the fields using personalization.

### Where the Default Expense Account is Stored

- The information is stored in the DEFAULT_CODE_COMB_ID column of the PER_ALL_ASSIGNMENTS_M table.
- The DEFAULT_CODE_COMB_ID column is a foreign key to the CODE_COMBINATION_ID column in the GL_CODE_COMBINATIONS table.

### Related Topics

- Overview of Key Flexfields
- Example of Loading a Default Expense Account for a Worker

## Assignments

### How You Set Up Assignment States

Each assignment contains an assignment status. The assignment status contains an HR status, a payroll status, and optionally user statuses. The HR status and payroll status values are linked to the assignment status and are set automatically when the assignment status changes.

This table summarizes the values of the three statuses.

<table>
<thead>
<tr>
<th>Assignment Status</th>
<th>HR Status</th>
<th>Payroll Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active - payroll eligible</td>
<td>Active</td>
<td>Process</td>
</tr>
<tr>
<td>Active - no payroll</td>
<td>Active</td>
<td>Do not process</td>
</tr>
<tr>
<td>Active - process when earning</td>
<td>Active</td>
<td>Process when earning</td>
</tr>
<tr>
<td>Assignment Status</td>
<td>HR Status</td>
<td>Payroll Status</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Active - process nonrecurring element entry</td>
<td>Active</td>
<td>Process nonrecurring element entry</td>
</tr>
<tr>
<td>Suspended - payroll eligible</td>
<td>Suspended</td>
<td>Process</td>
</tr>
<tr>
<td>Suspended - no payroll</td>
<td>Suspended</td>
<td>Do not process</td>
</tr>
<tr>
<td>Suspended - process when earning</td>
<td>Suspended</td>
<td>Process when earning</td>
</tr>
<tr>
<td>Suspended - process nonrecurring element entry</td>
<td>Suspended</td>
<td>Process nonrecurring element entry</td>
</tr>
<tr>
<td>Inactive - payroll eligible</td>
<td>Inactive</td>
<td>Process</td>
</tr>
<tr>
<td>Inactive - no payroll</td>
<td>Inactive</td>
<td>Do not process</td>
</tr>
<tr>
<td>Inactive - process when earning</td>
<td>Inactive</td>
<td>Process when earning</td>
</tr>
<tr>
<td>Inactive - process nonrecurring element entry</td>
<td>Inactive</td>
<td>Process nonrecurring element entry</td>
</tr>
</tbody>
</table>

**Assignment Status**

When you create or edit an assignment, you select an action that categorizes the change and determines what are the next steps. Some actions make an automatic change to the assignment status. For example, when you create an assignment, its status is set automatically to Active - payroll eligible. The same action sets the HR status to Active and the payroll status to Process. Otherwise, you must set the assignment status directly.

**Payroll Status**

The payroll status Process When Earning indicates that payroll is processed only during payroll periods with earnings. The Process When Earning status typically is used in countries with cumulative tax rules, to stop tax refunds when payments are not issued. The status Process Nonrecurring Element Entry indicates that only the active element entry for the nonrecurring element is processed. The Process Nonrecurring Element Entry status typically is used for one-time payments for terminated employees.

**User Status**

You can define one or more user names for each assignment status value, using the Manage Assignment Status task in the Setup and Maintenance work area. If multiple user statuses exist for an HR status, you must designate any one user status as the default status corresponding to the HR status. The default assignment status is attached to an assignment unless you specify a default user status. For example, when you create an assignment, its status is set automatically to the default assignment status corresponding to the HR status Active.
Considerations for Enforcing Grades at Assignment Level

This topic describes the effects of the following employment-related profile options:

- **PER_ENFORCE_VALID_GRADES**
- **PER_DEFAULT_GRADE_FROM_JOB_POSITION**

**Enforce Valid Grades (PER_ENFORCE_VALID_GRADES)**

If you set the **PER_ENFORCE_VALID_GRADES** site-level profile option to Yes, users can select a grade for an assignment. The grades can be selected only from those grades that are valid for the job or position.

- If users select a job and position for the assignment, they can select grades that are valid for the position only.
- If valid grades are defined for neither the job nor the position, users can select from all grades.

If you set this profile option to No (default value), users can select from all grades.

**Default the Grade from the Job or Position (PER_DEFAULT_GRADE_FROM_JOB_POSITION)**

You set the **PER_DEFAULT_GRADE_FROM_JOB_POSITION** site-level profile option to Yes, when there is only one valid grade for a job or position. In this scenario, by default, the valid grade is used in the assignment. Additionally, if an entry grade is defined for a position, by default, the grade is used when the user creates a new assignment.

If you set this profile option to No (default value), users can select from all grades.

**Work Day Information**

Work day information defines the standard working hours for each worker assignment in the enterprise or legal employer. Use the Manage Enterprise HCM Information and Manage Legal Entity HCM Information tasks in the Setup and Maintenance work area, to specify work day information at the enterprise and legal employer levels respectively.

**Sources of Work Day Information**

If you assign a schedule to the enterprise, legal employer, or department, work day information is taken automatically from that schedule. Otherwise, you can enter work day information for the enterprise, legal employer, and department.

You can also define work day information for positions. In any assignment, standard working hours are inherited from one of the following entities in this order of preference:

1. Position
2. Department
3. Legal employer
4. Enterprise

**How Work Day Information Is Used**

For assignment budgeting purposes, FTE is calculated automatically by dividing the assignment working hours by the standard working hours, which the assignment inherits from the position, department, legal employer, or enterprise. If standard working hours aren’t available for any of these entities, then FTE can’t be calculated. Although you can also enter FTE manually, automatic calculation of FTE is efficient for FTE reporting and promotes consistency among the various uses of FTE information.
Considerations for Using Worker Numbers

Every person record in the enterprise has a person number. You can also allocate worker numbers to employee and contingent worker work relationships. Worker numbers are optional: they’re provided primarily for Oracle E-Business Suite customers who have used employee and contingent worker numbers and want to continue using them.

Enabling Worker Numbers

By default, worker numbers aren’t used. You can enable worker numbers at the enterprise and legal-employer levels using the Manage Enterprise HCM Information and Manage Legal Entity HCM Information tasks in the Setup and Maintenance work area respectively. If you enable worker numbers, each employee and contingent worker work relationship must have a worker number. If you don’t enable worker numbers, they can’t be used. If you enable the worker number at both the enterprise and legal employer levels, then the setting at the legal employer takes precedence.

Selecting the Number-Generation Method

Use the Manage Enterprise HCM Information task in the Setup and Maintenance work area, to select the number generation method for the enterprise. Worker numbers can be generated either manually or automatically.

If you select manual generation, you’re recommended to define a numbering scheme to suit local requirements. For example, determine whether uniqueness within the enterprise or at the legal-employer level is important, and define the numbering scheme accordingly.

If you select automatic worker-number generation, numbers can be allocated from either an enterprise sequence or a legal employer sequence. If you use a legal-employer sequence, worker numbers aren’t guaranteed to be unique in the enterprise. When you use a legal-employer sequence, the worker number doesn’t change if you rehire in the same legal employer. However, the worker number changes if you rehire in a different legal employer or globally transfer to a different legal employer.

If you use an enterprise sequence, the worker number doesn’t change when you:

- Rehire in the same legal employer.
- Rehire in a different legal employer.
- Globally transfer to a different legal employer.

Setting the Number-Generation Method for a Legal Employer

All legal employers automatically inherit the enterprise number-generation method if a method isn’t specified at the legal employer level. You can override the number-generation method at the legal employer level by

- Selecting manual worker-number generation for a legal employer at any time.
- Selecting automatic worker-number generation for a legal employer, provided that no employee or contingent worker work relationships exist for that legal employer.

Use the Manage Legal Entity HCM Information task in the Setup and Maintenance work area, to select the number generation method for the legal employer.
Attributes for Assignment and Work Relationship Descriptive Flexfields

You can select an assignment or work relationship attribute as a flexfield parameter. You can then specify the derivation value for the assignment or work relationship descriptive flexfield. Use the Manage Descriptive Flexfields task in the Setup and Maintenance work area to specify the derivation value.

The following table lists the attributes for the assignment and work relationship descriptive flexfields.

<table>
<thead>
<tr>
<th>Descriptive Flexfield</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment (PER_ASG_DF)</td>
<td>ACTION_CODE</td>
</tr>
<tr>
<td></td>
<td>REASON_CODE</td>
</tr>
<tr>
<td></td>
<td>EMPLOYMENT_CATEGORY</td>
</tr>
<tr>
<td></td>
<td>ASSIGNMENT_STATUS_TYPE</td>
</tr>
<tr>
<td></td>
<td>ASSIGNMENT_STATUS_TYPE_ID</td>
</tr>
<tr>
<td></td>
<td>BARGAINING_UNIT_CODE</td>
</tr>
<tr>
<td></td>
<td>BUSINESS_UNIT_ID</td>
</tr>
<tr>
<td></td>
<td>COLLECTIVE_AGREEMENT_ID</td>
</tr>
<tr>
<td></td>
<td>ORGANIZATION_ID</td>
</tr>
<tr>
<td></td>
<td>EFFECTIVE_END_DATE</td>
</tr>
<tr>
<td></td>
<td>EFFECTIVE_START_DATE</td>
</tr>
<tr>
<td></td>
<td>GRADE_ID</td>
</tr>
<tr>
<td></td>
<td>JOB_ID</td>
</tr>
<tr>
<td></td>
<td>LEGAL_ENTITY_ID</td>
</tr>
<tr>
<td></td>
<td>LEGISLATION_CODE</td>
</tr>
<tr>
<td></td>
<td>LEGISLATION_CODE_VALUE</td>
</tr>
<tr>
<td></td>
<td>LOCATION_ID</td>
</tr>
<tr>
<td></td>
<td>PERSON_ID</td>
</tr>
<tr>
<td></td>
<td>PERSON_TYPE_ID</td>
</tr>
<tr>
<td></td>
<td>PRIMARY_ASSIGNMENT_FLAG</td>
</tr>
<tr>
<td></td>
<td>PRIMARY_FLAG</td>
</tr>
<tr>
<td></td>
<td>UNION_ID</td>
</tr>
<tr>
<td></td>
<td>EMPLOYEE_CATEGORY</td>
</tr>
<tr>
<td></td>
<td>SYSTEM_PERSON_TYPE</td>
</tr>
</tbody>
</table>

| Work Relationship (PER_PPS_DF)| LEGAL_ENTITY_ID                                 |
|                              | LEGISLATION_CODE                                |
|                              | PERIOD_OF_SERVICE_ID                            |
|                              | PERIOD_TYPE                                     |
|                              | PERSON_ID                                       |
|                              | PRIMARY_FLAG                                    |

Using Attribute Values for Value Sets

You can use the assignment or work relationship attributes as input parameters when you create a value set by selecting the table validation type. The following is the syntax that you can use for the WHERE Clause field:

FIELD NAME = :{PARAMETER.<parameter name>}

ORACLE
For example, JOB_ID = :{PARAMETER.JOB_ID} and COUNTRY_CODE = :{PARAMETER.LEGISLATION_CODE}

Related Topics

- Default Segment Values
- Overview of Value Sets

FAQs for Assignments

How can I display assignment numbers in the manager name list of values in employment flows?

Use the Manage Administrator Profile Values task in the Setup and Maintenance work area. Search for the profile option PER_EMP_MANAGER_NAME_LOV and update the profile value to N. The profile value is Y by default.

What happens if the position that I selected in an assignment has no open headcount or FTE?

If the Overlap Allowed attribute is set to Yes in Edit Position page, then a warning is displayed and you can continue with the assignment. If the attribute is set to No, then you must select a different position as the number of incumbents for the selected position has already been reached.

How do I enable Position Incumbents validation?

The Position Incumbents validation prevents users from selecting a position in an assignment that doesn’t have vacant Full Time Equivalents (FTEs) or headcount. If overlap of headcount is allowed at the position, then a warning is displayed if the open FTE or headcount is exceeded. If overlap isn’t allowed, users can’t continue unless they select a different position that has vacant FTE or headcount. This validation is available out of the box if users have installed Oracle Fusion HCM for the first time. If users are already using Oracle Fusion HCM and upgrading it, then you must enable the validation to use it. To enable the validation:

1. Select the predefined Position Incumbent Validation (ORA_PER_EMP_POS_INCUMBENT_VALIDATION) context in the Organization Information extensible flexfield to view the Apply Incumbent Validation attribute in the Manage Enterprise page.
2. Select the Apply Incumbent Validation attribute in the Position Incumbent Validation section in the Edit Enterprise page.

Related Topics

- Considerations for Managing Extensible Flexfields

What happens to existing assignments when a position’s attributes are changed?

If position synchronization is enabled for an enterprise or legal employer and you change a position’s attributes, you can view all assignments that will inherit the change. After the changes are approved, all incumbents with active assignments automatically inherit the change, if they have set the Synchronize from Position option to Yes in the Assignments page.

Seniority Dates
Overview of Seniority Dates

All topics in this section pertain to version 3 (V3) of the seniority dates functionality. You can define and manage the seniority of workers using version 3 of the seniority dates functionality.

You can configure seniority dates using the Configure Seniority Dates task and a fast formula. You can manage them using the Manage Seniority Dates task.

For more information, see these white papers on My Oracle Support (https://support.oracle.com).

- Calculating Seniority Dates Using Fast Formula (2370526.1)
- Comparison between Different Seniority Dates Versions (2414630.1)
- Enabling Enterprise and Legal Employer Seniority Dates During Hire (2432162.1)
- Seniority Changes in V3 Seniority Dates (2446329.1)
- Seniority Dates Version 1 Frequently Asked Questions (2434532.1)
- Seniority Dates Version 2 (2438572.1)
- Common Use Cases Configured Using V3 Seniority Dates (2476188.1)

Note: If you’re using V3 seniority dates, you can’t view and manage V1 seniority dates of the legal employer and enterprise on the Manage Work Relationship page.

Related Topics

- Seniority Dates
- Examples of Calculating Seniority Dates
- Examples of Calculating Cumulative Seniority Dates

How You Configure Seniority Dates

You can configure the rules for creating seniority dates using the Configure Seniority Dates task.

The seniority date rule defines the name and behavior of the seniority date. For example, you can define an enterprise seniority date at person level. When the first work relationship is created for a person, the enterprise seniority date is calculated from the start date of the work relationship.

Configuration Options

You can use the following options in the Configure Seniority Date Rules page:

- **Active**: You can enable or disable the seniority date rule using this option. If the rule is active, seniority dates are automatically generated when the employment data is changed, according to the rule definition. If the rule isn’t active, seniority dates aren’t generated.

  Note: You can’t edit or delete a seniority date rule if the corresponding seniority date rule has been used to populate seniority dates for a person in the application. However, you can disable the seniority date rule in the Active field.
• **Seniority Rule Name:** You must select from one of the predefined values, such as the bargaining unit seniority date - assignment level, enterprise seniority date - person level, and legal employer seniority date - work relationship level. These values are defined in the ORA_PER_SENIORITY_ITEMS lookup type. You can add a new value to the Seniority Rule Name list by adding the value as a lookup code to this common lookup type.

• **Attribute:** You can define the seniority date configuration based on this attribute. For example, legal employer is the seniority attribute in case of a legal employer seniority date and enterprise is the seniority attribute in case of an enterprise seniority date. When the seniority attribute is created or modified, the corresponding seniority date will be populated in the application according to the rules in the setup.

• **Level:** You can configure seniority dates at the person, work relationship, and assignment levels.

  At the person level, all the work relationships and assignments for the given person are considered while deriving the seniority date. At the work relationship level, all the assignments for the given work relationship are considered while deriving the seniority date. At the assignment level, all the date effective records for the given assignment are considered while deriving the seniority date.

• **Adjustment Formula:** You can configure an adjustment formula to calculate the seniority date adjustments using the Employment Seniority Date Adjustment formula type.

• **Cumulative:** Identifies the calculation logic of seniority when there is a gap in service. When this option is set to yes, the application also considers the previous seniority calculations for the calculation of seniority. For example, consider a worker who was associated with an organization from 1-Jan-2001 to 31-Dec-2009 and the Cumulative option is set to yes for both the seniority dates. The details of his association and the seniority calculation is shown in the following table.

<table>
<thead>
<tr>
<th>Action</th>
<th>Start Date</th>
<th>End Date</th>
<th>Legal Employer</th>
<th>Legal Employer Seniority</th>
<th>Enterprise Seniority</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hire</td>
<td>1-Jan-2001</td>
<td>31-Dec-2001</td>
<td>Vision US</td>
<td>1 year</td>
<td>1 year</td>
<td></td>
</tr>
<tr>
<td>Global Transfer</td>
<td>1-Jan-2002</td>
<td>31-Dec-2002</td>
<td>Vision CA</td>
<td>1 year</td>
<td>2 years</td>
<td>The enterprise seniority is the sum of 1 year in the current work relationship and 1 year in the previous work relationship.</td>
</tr>
<tr>
<td>Termination</td>
<td>31-Dec-2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehire</td>
<td>1-Jan-2007</td>
<td>31-Dec-2007</td>
<td>Vision UK</td>
<td>1 year</td>
<td>3 years</td>
<td>The enterprise seniority date is configured to be cumulative. Therefore, the enterprise seniority is the sum of 1 year in the current work relationship and 2 years in the previous work relationship.</td>
</tr>
<tr>
<td>Global Transfer</td>
<td>1-Jan-2008</td>
<td>31-Dec-2009</td>
<td>Vision US</td>
<td>3 years</td>
<td>6 years</td>
<td>The legal employer seniority date</td>
</tr>
</tbody>
</table>
is configured to be cumulative. Therefore, the seniority for the Vision US legal employer is the sum of 2 years in the current work relationship and 1 year in the previous work relationship.

The enterprise seniority date is configured to be cumulative. Therefore, the enterprise seniority is the sum of 2 years in the current work relationship and 4 years in the previous work relationship.

<table>
<thead>
<tr>
<th>Action</th>
<th>Start Date</th>
<th>End Date</th>
<th>Legal Employer Seniority</th>
<th>Enterprise Seniority</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Termination</td>
<td>31-Dec-2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Allow Edit**: Specify whether users can override the seniority date using the Manage Seniority Dates task. If you set the value in this field to No, you can't edit the corresponding seniority date on the Manage Seniority Dates page.

- **Display in Guided Flows**: Specify whether the seniority date can be displayed in the guided processes. If this option is set to yes for a seniority date, the seniority date is displayed in the guided processes in view-only mode.

- **Override Seniority Basis**: Seniority is calculated in days or hours based on the seniority basis value in the worker’s assignment. You can define an override for the seniority basis at the individual seniority rule level. For example, you can specify that a seniority rule must always be calculated in hours even though the worker’s assignment basis is days.

- **Conversion of Hours**: When you can’t use a single set of conversion rules, you can convert hours to days using the Employment Seniority Hours to Days Conversion formula type. You can define the hours for:
  - Hours to day conversion
  - Hours to month conversion
  - Hours to year conversion

- **Seniority Filters**: You can optionally display seniority filters in the configuration options and restrict the population of seniority dates by using different filter conditions. For example, if you use a filter condition worker type equal to employee, the seniority dates are populated for employees only.

  **Note**: There are additional seniority filter options hidden out of the box in the Seniority Date Rule List table. You can display these filter options using the View menu from the table.
Related Topics

- Seniority Dates

How to Override Seniority Basis

You calculate seniority in days or hours using the seniority basis value in the worker’s assignment. Using the Configure Seniority Dates task, you can override the seniority basis for a particular seniority rule. For example, you can say that a seniority rule must always be calculated in hours even though the worker’s assignment basis is days. The default value for the override in the application is Either Days or Hours.

Let’s see how seniority rule is calculated depending on the override values you specify for the seniority basis.

<table>
<thead>
<tr>
<th>Seniority Basis on the Assignment</th>
<th>Overridden Seniority Basis</th>
<th>Basis for Calculating Seniority Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days</td>
<td>Days</td>
<td>Calendar days</td>
</tr>
<tr>
<td>Hours</td>
<td>Days</td>
<td>Calendar days</td>
</tr>
<tr>
<td>Days</td>
<td>Hours</td>
<td>Hours loaded in the seniority hours table</td>
</tr>
<tr>
<td>Hours</td>
<td>Hours</td>
<td>Hours loaded in the seniority hours table</td>
</tr>
<tr>
<td>Days</td>
<td>Either Days or Hours</td>
<td>Calendar days</td>
</tr>
<tr>
<td>Hours</td>
<td>Either Days or Hours</td>
<td>Hours loaded in the seniority hours table</td>
</tr>
</tbody>
</table>

Seniority Date Configuration Levels

You can configure seniority dates at the person, work relationship, and assignment levels using the Configure Seniority Dates task in the Setup and Maintenance work area.

Seniority Date Level

You can use the following levels in the Configure Seniority Date Rules page:

- Person: All the work relationships and assignments for the person are considered while deriving the seniority date at the person level.
- Work Relationship: All the assignments under the work relationship are considered while deriving the seniority date at the work relationship level.
- Assignment: Only the individual assignment is considered while deriving the seniority date at the assignment level.
Process to Migrate Seniority Dates

You run the Migrate to Version 3 of Seniority Dates process to migrate the seniority dates data to the new version (V3) from earlier versions (V1 or V2). Use the Scheduled Processes work area to schedule and run the process.

**Note:** Before you migrate to V3, you must update the seniority basis for all worker assignment records to the appropriate values in days or hours. You can do this using HCM Data Loader.

You can run the process only once to migrate seniority data from V1 to V3 or V2 to V3. For example, if you use V1 and V2 and migrate from V1 to V3, you can't migrate from V2 to V3. This is because the seniority dates are already converted to V3. In this case, you have to manually convert the V2 data to V3.

After you migrate to V3, you can't migrate back to V1 or V2 because only one version of seniority date can be active at a time.

**What Happens When You Run the Process**

**V1 to V3 conversion:** V1 seniority dates only display the hire date and seniority date for the enterprise and legal employer and you don't configure any seniority rules. When you run the process to migrate seniority data from V1 to V3, the application automatically creates these seniority rules:

- Legal Employer Seniority Date - Work Relationship Level - Migrate
- Enterprise Seniority Date - Person Level - Migrate

The process hides the seniority dates on the Manage Work Relationship page and the application stops populating V1 seniority dates. However, the application will retain the value of the V1 seniority dates. If there are adjusted values for V1 seniority dates, the application automatically creates the corresponding adjustments for V3 seniority rules. Therefore, the resulting seniority dates values are the same in V3. The seniority dates region in the employment information UI will display V3 seniority dates instead of V1 seniority dates. After the migration to V3, seniority data is maintained in the PER_SENIORITY_DATES_F table and the PER_PERIODS_OF_SERVICE table is no longer used to maintain V1 seniority dates.

**Note:** All existing V1 seniority data is retained in the PER_PERIODS_OF_SERVICE table.

**V2 to V3 conversion:** In V2, you can configure seniority rules at various levels. When you run the process to migrate seniority data from V2 to V3, the application automatically converts the V2 seniority rules to V3 and retains the seniority date. The advanced configuration options of V3 seniority dates become available on the Configure Seniority Dates page. The seniority dates are now populated in the PER_SENIORITY_DATES_F table instead of the PER_SENIORITY_DATES table. The new seniority dates are displayed on the Manage Seniority Dates page.

**Note:** You must re-evaluate the integrations, extracts, reports, derived factors, eligibility profiles, and fast formulas. This is because these items may be using the tables or database items where the underlying seniority dates version is V1 or V2. The existing data is retained from the older version of seniority dates.

**Process Parameter**

The Migrate to Version 3 of Seniority Dates process uses the Migrate Seniority Data From parameter. This parameter indicates whether you want to migrate seniority dates data to V3 from V1 or V2 based on your current application setup.
Related Topics

- Overview of Scheduled Processes
- Submit Scheduled Processes and Process Sets
- Seniority Date Versions
- Considerations for Migrating to V3 Version of Seniority Dates

**Seniority Dates User Entities**

You can use user entities to describe seniority date information for V3 seniority dates. The following table describes the user entities that are available for seniority dates:

<table>
<thead>
<tr>
<th>User Entity Name</th>
<th>Description</th>
<th>User Entity Context</th>
</tr>
</thead>
</table>
| PER_ SENIORITY_ DATES_ V3_SDC_UE | This user entity is used to describe the seniority date information for V3 seniority dates. | The following contexts must be provided for this user entity:  
  - PERSON_ID  
  - EFFDT  
  - SENIORITY_DATE_CODE |
| PER_ SENIORITY_ DATES_V3_UE | This user entity is used to describe the seniority date information for V3 seniority dates. | The following contexts must be provided for this user entity:  
  - PERSON_ID  
  - EFFDT |
| PER_ SENIORITY_ HOURS_V3_UE | This user entity is used to describe the seniority hours information for an hours-based worker in V3 seniority dates. | The following context must be provided for this user entity:  
  - PERSON_ID |

**FAQs for Seniority Dates**

Why can't I see the seniority rule on the Employment Info page when it's displayed on the Manage Seniority Dates page?

To display the rule on the Employment Info page, set the Display in Guided Flows option to Yes on the Configure Seniority Date Rules page.

How can I find the most recent hire date when using V3 seniority dates?

You can do so by configuring a non-cumulative rule at the person level for the enterprise attribute. For more information, see the document (Doc ID 2476188.1) on My Oracle Support: https://support.oracle.com
How can I find out which version of seniority dates I am using?
Run this query in your database instance: SELECT VERSION_CODE FROM FUSION.PER_EMPL_CONFIGURATIONS

How can I exclude pending workers from the seniority dates calculation?
You must clear the Pending worker check box in the Worker Type seniority filter on the Configure Seniority Date Rules page.

FAQs for Employment

Can I delete an action or action reason?
No. If you no longer want users to select an action or action reason you can enter an end date, beyond which the action or reason is unavailable.

Can I create additional action types?
No. You can’t create your own action types. You can associate the actions you create with the predefined action types, using the Manage Actions task in the Setup and Maintenance work area.
11 Workforce Records

Overview of Workforce Records

In the Setup and Maintenance work area, most of the setup tasks for workforce details are in the Workforce Information functional area. If you create an implementation project, these tasks are in the Define Workforce Records task list. You define a person’s name format, name style, availability, employment values, document types and checklists as a part of the Workforce Information functional area.

You define other workforce related tasks such as person number generation methods using the Manage Enterprise HCM Information task.

The Workforce Information functional area and the Define Workforce Records task list cover tasks in the following areas:

<table>
<thead>
<tr>
<th>Area</th>
<th>Includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>Calendar events, work schedules and assignment, work shifts and workday patterns</td>
</tr>
<tr>
<td>Person Record Values</td>
<td>Person lookups, flexfields, profile options, person name formats and style, and person types</td>
</tr>
<tr>
<td>Employment Record Values</td>
<td>Employment lookups, flexfields, profile options, and assignment statuses</td>
</tr>
<tr>
<td>Documents</td>
<td>Document lookups, flexfields, and document types</td>
</tr>
<tr>
<td>Checklists</td>
<td>Flexfields, lookups, templates, and actions</td>
</tr>
<tr>
<td>Processes for Person Search</td>
<td>Settings for person search processes</td>
</tr>
</tbody>
</table>

Related Topics

- Person Number Generation Methods

Checklists

Checklist Templates

Create checklists for actions that require the completion of standard tasks, such as creating users, reassigning resources, or onboarding new hires. You create and maintain tasks within a checklist template. For example, you can create a checklist for onboarding new hires.

Create checklist templates using the Manage Checklist Templates task in the Setup and Maintenance work area. By default, when a checklist is created, the status is Draft. If the checklist is ready for use set it to Active, else set it to Inactive.
The following figure shows the components of a checklist template and their major relationships.

### HR Specialist Creates Checklist Template

- **Checklist Template**
- **Tasks**
- **Responsibility Types**
- **Validity**
  - Specify the validity period during which the checklist template is available for allocation.
- **Checklist Category**
  - Select a category depending on whether you want to create a standard checklist or an enterprise onboarding checklist.
    - You manage standard checklists using the Manage Allocated Checklists task.
    - You manage enterprise onboarding and enterprise onboarding step checklists in the Onboarding work area.
    - You manage checklists of types other than enterprise onboarding or enterprise onboarding step, using the Checklist Tasks app and Quick Actions menu.
- **Action Name**
  - Actions track changes in personal circumstances, for example, new hire, transfer, or termination. Assign an action to allocate the checklist to persons automatically when they experience the action. The checklist template is still available for manual allocation, even if it's linked to an action.
### Eligibility Profile

Link an eligibility profile at the checklist template level or at the task level to determine to whom the template or task is applicable. The checklist template or task is assigned only if it matches specific eligibility criteria such as person type, business unit, or legal employer and so on. Create the eligibility profile with **Checklist** as the value for Profile Usage.

The value you select in **Assignments to Use** can only be one of these options:

- Any assignment - enterprise
- Any assignment exclude inactive - enterprise
- Employee assignment only - enterprise
- Primary Employee assignment only - enterprise

For the eligibility criteria, you can enter criteria only in the Person and Employment tabs as they contain attributes which are applicable for the checklist. Additionally, you could create a fast formula.

### Allocation and Completion Criteria

Set the criteria for checklist allocation and completion. Here’s how the criteria impacts checklist allocation and completion:

- **Allocation Criteria:** The checklist is allocated if it meets the specified criteria. Select a criterion to determine when the checklist will be allocated.
  - Allocated manually, or when the record is created or approved. The checklist can be allocated manually or based on the action. For example, if a transfer action record is created on March 16th, 2019 and the transfer is effective on March 19th, 2019 it will be allocated on March 16th which is the date on which the record was created.
  - When the checklist action record becomes effective. The value entered in Days for Initiation field will determine the number of days before or after which the action occurs to allocate the checklist. The checklist is allocated based on the action. For example, if a transfer action record is created on March 16th, 2019 and effective on...
March 19th, 2019 it will be allocated on March 19th which is the date on which the action record is effective. If you enter 2 in Days for Initiation field, it will be allocated on 21st March which is 2 days after the effective date.

- **Completion Criteria**: The checklist is marked completed automatically if it meets the specified criteria. Select a criterion to determine when the checklist will be marked complete:
  
  - All mandatory tasks completed. That is, whenever all the mandatory tasks in that checklist are completed, checklist status will be set to completed.
  - All mandatory and optional tasks completed. That is, whenever all mandatory and optional tasks are completed, the checklist status will be set to completed.
  - All mandatory tasks completed, offset period elapsed for optional tasks. That is, the offset days determine when the checklist can be marked as completed. If you specify a certain number of days, example 5, then after 5 days even if the optional tasks are still incomplete, the checklist status will be completed.

**Tasks**

Tasks are activities in the checklist and maybe required or optional. You can create tasks that are both parallel and sequential. However, a task can have only one preceding task. HR specialists and line managers can create tasks and include it in a standard checklist template. Line managers can add new tasks or assign tasks from the task library in Onboarding. Create tasks that need to be completed within a specific duration. When the task is allocated, the target end date is derived based on the duration entered. The checklist status is set to Completed based on the option selected in the Completion Date field.

**How Eligibility Profile, Task Performers and Task Owners are Determined**

The date when the action becomes effective for certain checklist actions is predetermined.

<table>
<thead>
<tr>
<th>Checklist Action</th>
<th>Date When Action Becomes Effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>End Assignment Termination</td>
<td>Last day of the current active assignment</td>
</tr>
<tr>
<td>End Temporary Assignment</td>
<td></td>
</tr>
<tr>
<td>End Global Temporary Assignment</td>
<td></td>
</tr>
<tr>
<td>Termination</td>
<td></td>
</tr>
<tr>
<td>Add Assignment</td>
<td>First day of the new active assignment</td>
</tr>
<tr>
<td>Add Temporary Assignment</td>
<td></td>
</tr>
<tr>
<td>Add Global Temporary Assignment</td>
<td></td>
</tr>
<tr>
<td>Change Location</td>
<td></td>
</tr>
<tr>
<td>Change Manager</td>
<td></td>
</tr>
<tr>
<td>Global Transfer</td>
<td></td>
</tr>
<tr>
<td>Promote</td>
<td></td>
</tr>
<tr>
<td>Transfer</td>
<td></td>
</tr>
<tr>
<td>Add Pending Worker</td>
<td>Proposed start date of the pending worker</td>
</tr>
</tbody>
</table>

For example, in a checklist for the termination action let’s see how the eligibility profile is evaluated and when task performers such as line manager and HR representative are notified of their tasks.
What Happens When Offset Days is Specified

You can specify offset days for a task to determine when the task should be evaluated and when task owners and performers should be determined. Say you create a checklist for the transfer action which is effective 17-Jun 2019. You have 3 tasks one each for the current manager, new manager, and HR representative. Let’s see how the task allocation date changes for each task performer based on the offset values you specify:

<table>
<thead>
<tr>
<th>Task Details</th>
<th>Task 1</th>
<th>Task 2</th>
<th>Task 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Complete Performance Appraisal</td>
<td>Set Development Goals</td>
<td>Orientation Session with New Employee</td>
</tr>
<tr>
<td>Task Performer</td>
<td>Line Manager</td>
<td>Line Manager</td>
<td>AoR (HR representative)</td>
</tr>
<tr>
<td>Offset Days</td>
<td>-3 days</td>
<td>1 day</td>
<td>4 days</td>
</tr>
<tr>
<td>Task allocated and notification sent to task performers on</td>
<td>14-Jun 2019</td>
<td>18-Jun 2019</td>
<td>21-Jun 2019</td>
</tr>
<tr>
<td>Task performer determined based on offset days</td>
<td>Current Line Manager</td>
<td>New Line Manager</td>
<td>New HR representative</td>
</tr>
</tbody>
</table>

Considerations for Creating Checklist Templates

When you create a checklist template, you must consider whether you want to create a Standard checklist template or an Enterprise Onboarding checklist template.

- Standard checklist: A generic checklist type that can be used for any process involving a series of tasks. Such checklists can be allocated and managed using the basic Manage Allocated Checklists task.
- Enterprise Onboarding checklist: A specific checklist type used in the employee onboarding process. The Onboarding work area includes advanced features to manage the onboarding process in a systematic manner.

You create checklist templates using the Manage Checklist Template task in Setup and Maintenance.
Standard Checklists

Select either the On boarding or Off boarding category to create a standard checklist. As a Line Manager, you can allocate the checklist to your worker using the Manage Allocated Checklists Task. Task performers access the tasks assigned to using their Worklist.

Enterprise Onboarding Checklists

Select the Enterprise Onboarding or Enterprise Onboarding Step category to create an Enterprise Onboarding checklist. The checklists are used in the Onboarding work area to onboard new hires. Task performers view and manage their tasks from the Onboarding work area specific to their role. When you select Enterprise Onboarding, additional features and options appear which aren't available when you select any other category. These include:

- Dashboard: The Dashboard tab appears only when you select Enterprise Onboarding. You can configure messages, notes, or greetings that appear on the Onboarding home page. Other types of content that can be included are links or videos that are specific to the organization, and those that should be shared with new hires as part of the onboarding process.
- Enterprise Onboarding Step: An Onboarding step includes tasks that need to be performed in each phase of the onboarding process. On the Onboarding home page, the steps appear as per the sequence specified in Enterprise Onboarding parent checklist.
- Messages: Enables messages to be included for each step. The message appears on the worker’s Onboarding home page at each step. The following attributes are supported in the step message - FirstName, LastName, FullName, and DisplayName.
- Notes: Task level instructions to provide more details for the new hire.

Examples of Task Delay Duration

You can delay the start of a task by specifying the number of days after which the task should be allocated to a task performer. The delay duration along with other checklist allocation criteria you specify will determine when the task is allocated to a task performer.

**Note:** If you specify delay duration for a task that has a preceding task, then the delay duration is calculated from the day on which the preceding task is marked as complete. For example, you set Task A as the preceding task for Task B and Task B has a delay duration of 2 days. If Task A is completed on 19th July, Task B will be allocated and initiated on 21st July. Also, Task B will be listed in the Tasks Awaiting Allocation section.

In these examples let’s see how the task allocation date changes based on the checklist allocation criteria and the delay duration.

**Example 1**
Allocate a checklist task to a task performer 2 days after the new hire record is created.

<table>
<thead>
<tr>
<th>Allocation Criteria</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a new hire record</td>
<td>10-Jun-2019</td>
</tr>
<tr>
<td>New hire’s Start Date</td>
<td>9-Jun-2019</td>
</tr>
</tbody>
</table>
### Example 2
Allocate a checklist task to a task performer 2 days after the new hire record becomes effective.

<table>
<thead>
<tr>
<th>Allocation Criteria</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a new hire record</td>
<td>10-Jun-2019</td>
</tr>
<tr>
<td>New hire’s Start Date</td>
<td>9-Jun-2019</td>
</tr>
<tr>
<td>Create a checklist template with action Hire and set checklist allocation criteria to When the action record becomes effective and Days for Initiation as 4</td>
<td></td>
</tr>
<tr>
<td>Create a task Verify Personal Information with performer as Worker</td>
<td></td>
</tr>
<tr>
<td>Specify Delay Duration</td>
<td>2 days</td>
</tr>
<tr>
<td>Checklist task is allocated and task notification sent (10-Jun-2019 plus 4 days)</td>
<td>16-Jun-2019</td>
</tr>
</tbody>
</table>

Example 3
Allocate a checklist task to a task performer 5 days after a pending worker record is created.

<table>
<thead>
<tr>
<th>Allocation Criteria</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a pending worker record</td>
<td>24-May-2019</td>
</tr>
<tr>
<td>Pending worker’s proposed start date</td>
<td>3-Jun-2019</td>
</tr>
</tbody>
</table>
Allocation Criteria | Date
--- | ---
Create a checklist template with action Add Pending Worker and set checklist allocation criteria to Checklist manually allocated or record created and approved | 
Create a task Submit Identity Proofs with performer as Worker | 
Specify Delay Duration | 5 days | 
Checklist task is allocated and task notification sent (24-May 2019 plus 5 days) | 29-May 2019

Example 4
Allocate a checklist task to a task performer 5 days after a pending worker record is effective.

Allocation Criteria | Date
--- | ---
Create a pending worker record | 24-May-2019 | 
Pending worker’s proposed start date | 3-Jun-2019 | 
Create a checklist template with action Add Pending Worker and set checklist allocation criteria to When the action record becomes effective and Days for Initiation as -2 | 
Create a task Submit Identity Proofs with performer as Worker | 
Specify Delay Duration | 5 days | 
Checklist task is allocated and task notification sent (3-Jun-2019 minus 2 days plus 5 days) | 6-Jun-2019

How You Create Checklist Tasks
Create, maintain, and view tasks used in checklist templates using the Manage Checklist Templates task in the Setup and Maintenance work area. You can create a task directly in a checklist that’s assigned to a user when the checklist is triggered or create tasks in the task library that can be assigned manually by a line manager or HR specialist. At the time of creating the checklist, you can specify if the task is required or optional.
Based on whether you want the task to be available for use in a checklist immediately or later you set the status as Active or Inactive.

**Action Type**

Specify the type of task that should be performed, whether it requires the performer to go to an external website or can be performed in an internal application. For example, the task could require a new hire to enroll for benefits. You can use the available task types in any checklist category.

**Attachment and Comments**

Enable attachments and comments when you create the task. This allows the task performer to add attachments and comments when performing the task.

**Task Duration**

Set the task duration. The target end date is derived based on the duration entered.

**Task Performer**

Task performer is the person who carries out the task. You select one of the following performers:

- Worker
- Line Manager: The worker’s line manager
- Initiator: The person who initiates the transaction, such as the action itself or the manual checklist allocation
- User: A specific person
- Area of Responsibility: Persons with the selected responsibility are automatically assigned the task. The performer name displays the responsibility type name and not the name of the person who has that area of responsibility.

If there are multiple performers for a task, then the task needs to be created for each performer by specifying the precedence to control the sequence.

**Task Owner**

Task owner is the person responsible for ensuring task completion. Task owners can review task allocation details. Managers and HR specialists can view the tasks and monitor the status themselves or assign alternative owners for the tasks. If the performer to whom the task is assigned is invalid (person derived as performer is terminated, for example) or not assigned, the task owner is designated as the performer by default. If a checklist is assigned automatically to a person based on an action, then the task owner is the user who performed the action on the person.

> **Note:** When you use HDL or REST API to allocate a checklist through a user who doesn’t have a person record, then nothing is shown in the Contacts Info section of the task. When such a task is assigned to new hires, the Contacts Info section appears blank.

**Notifications and Reminders**

You can control notifications at the task level and notify owners or performers or both when a task is assigned, updated, completed, and unassigned. You can enable reminders that will get initiated before the due date or after the assigned date. You can also set reminders and frequency for these notifications. Task performers and owners access their tasks either from the Recent Notifications Alert or from the My Tasks section in their BPM worklist. Optionally, they can create a user view to filter the tasks in their worklist. For example, task owners may create a user view to only display those tasks that they own and not display tasks for which they’re performers.
## Notes

Include instructions and details for task performers on how and where to perform the task.

## How You Configure Application Tasks Based on Task Performer

Here’s a list of tasks in the application which task performers can access based on their role:

<table>
<thead>
<tr>
<th>Task Performer</th>
<th>Application Task Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Manager</td>
<td>My Team</td>
</tr>
<tr>
<td></td>
<td>• Manage Absence Records</td>
</tr>
<tr>
<td></td>
<td>• My Manager Evaluations</td>
</tr>
<tr>
<td></td>
<td>• Request Noncatalog Learning for My Team</td>
</tr>
<tr>
<td>Worker or task initiator</td>
<td>Me</td>
</tr>
<tr>
<td></td>
<td>• Absence Balance</td>
</tr>
<tr>
<td></td>
<td>• Add Absence</td>
</tr>
<tr>
<td></td>
<td>• Contact Info</td>
</tr>
<tr>
<td></td>
<td>• Career Development</td>
</tr>
<tr>
<td></td>
<td>• Career Planning</td>
</tr>
<tr>
<td></td>
<td>• Check-ins</td>
</tr>
<tr>
<td></td>
<td>• Document Records</td>
</tr>
<tr>
<td></td>
<td>• Edit My Details</td>
</tr>
<tr>
<td></td>
<td>• Existing Absences</td>
</tr>
<tr>
<td></td>
<td>• Family and Emergency Contacts</td>
</tr>
<tr>
<td></td>
<td>• Goals</td>
</tr>
<tr>
<td></td>
<td>• Identification Info</td>
</tr>
<tr>
<td></td>
<td>• My Public Info</td>
</tr>
<tr>
<td></td>
<td>• Manage Absence Records</td>
</tr>
<tr>
<td></td>
<td>• My Compensation</td>
</tr>
<tr>
<td></td>
<td>• Personal Details</td>
</tr>
<tr>
<td></td>
<td>• Performance Evaluations</td>
</tr>
<tr>
<td></td>
<td>• Payment Methods</td>
</tr>
<tr>
<td></td>
<td>• People to Cover</td>
</tr>
<tr>
<td></td>
<td>• Primary Care Physician</td>
</tr>
<tr>
<td></td>
<td>• Publish Video</td>
</tr>
<tr>
<td></td>
<td>• Report a Life Event</td>
</tr>
<tr>
<td></td>
<td>• Request Noncatalog Learning</td>
</tr>
<tr>
<td></td>
<td>• Schedule Absence</td>
</tr>
<tr>
<td></td>
<td>• Social Security Accounts</td>
</tr>
<tr>
<td></td>
<td>• Skills and Qualifications</td>
</tr>
<tr>
<td></td>
<td>• Tax Withholding</td>
</tr>
<tr>
<td></td>
<td>• Your Benefits</td>
</tr>
</tbody>
</table>
Note:

- You need to set the profile option to Y for the application task to be visible in the list of values. For example, for the application task - Family and Emergency Contact, set the profile option PER_PERSONAL_INFORMATION_RESPONSIVE_ENABLED to Y and HCM_RESPONSIVE_PAGES_ENABLED to Y.
- A task performer must have the required access to the work area or task to be able to do the task in the application. For example, a worker assigned the task of updating their personal details can do so only if they have access to the Personal Details area in the application.
- If you select User as the performer then all the tasks are displayed.

Onboarding Checklist Descriptive Flexfield

You can use the Manage Checklist Descriptive Flexfield task in the Setup and Maintenance work area to create a descriptive flexfield for use in an Enterprise Onboarding Step checklist. This descriptive flexfield applies to any onboarding step checklist task that uses the Configurable Form action type. For example, consider that you want to gather feedback from new hires on their onboarding experience. You can use the descriptive flexfield to create the feedback form.

Create a context within the descriptive flexfield representing the name of the feedback form, for example, Onboarding Feedback. Create context specific segments and values to define the questions and responses respectively. When users create a task with the Configurable Form action type, they can see the Onboarding Feedback option in the Configurable Form drop-down list and select it.

Defining Checklist Descriptive Flexfield Context and Segments

Use the Manage Descriptive Flexfields task in Setup and Maintenance and select the PER_PERSON_ALLOCATED_TASKS_DFF to specify the context, context sensitive segment, and the values required to display at run time.

Activating Checklist Descriptive Flexfields

Activate the descriptive flexfield after you define the context and context sensitive segment values by deploying the flexfield. You must sign out and sign in to the application to see your descriptive flexfield.

Associating the Task Action Type to the Checklist Descriptive Flexfield

If the Action Type is Configurable Form, the form created using the checklist descriptive flexfield displays in the Configurable Form drop-down list when creating the task. At run time, the form appears as part of an onboarding task that workers need to complete.

Configure a Checklist Descriptive Flexfield

You want to create an onboarding satisfaction survey and add it as one of the tasks in a new hire checklist. You create the survey as a context in the checklist descriptive flexfield and associate the survey with the task by setting the task action type to Configurable Form.

Summary of Tasks

1. Create the context for the descriptive flexfield and add three context sensitive segments.
2. Deploy the flexfield.
3. Associate the descriptive flexfield with the task.

Creating the Descriptive Flexfield

1. In the Setup and Maintenance work area, go to the following:
   - Functional Area: Workforce Information
   - Task: Manage Checklist Descriptive Flexfields

2. On the Manage Checklist Descriptive Flexfields page, select PER_PERSON_ALLOCATED_TASKS_DFF and click Edit.

3. Click Manage Contexts.

4. In the Create Context section, enter values listed in the following table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Name</td>
<td>Onboarding Survey</td>
</tr>
<tr>
<td>Description</td>
<td>Onboarding feedback survey</td>
</tr>
<tr>
<td>Context Code</td>
<td>Auto-populated but can be modified</td>
</tr>
<tr>
<td>API Name</td>
<td>Auto-populated but can be modified</td>
</tr>
<tr>
<td>Enabled</td>
<td>Checked</td>
</tr>
</tbody>
</table>

5. Click Save.

6. In the Context Sensitive Segment section, enter the values listed in the following table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Values for Segment 1</th>
<th>Values for Segment 2</th>
<th>Values for Segment 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Name</td>
<td>I found the Orientation program interesting and interactive.</td>
<td>What is your overall impression of your first few days?</td>
<td>Overall rating of your onboarding experience.</td>
</tr>
<tr>
<td>Description</td>
<td>I found the Orientation program interesting and interactive.</td>
<td>What is your overall impression of your first few days?</td>
<td>Overall rating of your onboarding experience.</td>
</tr>
<tr>
<td>Context Code</td>
<td>Auto-populated but can be modified</td>
<td>Auto-populated but can be modified</td>
<td>Auto-populated but can be modified</td>
</tr>
<tr>
<td>API Name</td>
<td>Auto-populated but can be modified</td>
<td>Auto-populated but can be modified</td>
<td>Auto-populated but can be modified</td>
</tr>
<tr>
<td>Enabled</td>
<td>Checked</td>
<td>Checked</td>
<td>Checked</td>
</tr>
<tr>
<td>Data Type</td>
<td>Character</td>
<td>Character</td>
<td>Number</td>
</tr>
<tr>
<td>Table Column</td>
<td>ATTRIBUTE1</td>
<td>ATTRIBUTE2</td>
<td>ATTRIBUTE_ NUMBER2</td>
</tr>
<tr>
<td>Value Set</td>
<td>PER_YES_NO</td>
<td>50 Characters</td>
<td>1 Number with No validation</td>
</tr>
</tbody>
</table>
Chapter 11
Workforce Records

Field | Values for Segment 1 | Values for Segment 2 | Values for Segment 3
--- | --- | --- | ---
Prompt | I found the Orientation program interesting and interactive. | What is your overall impression of your first few days? | Overall rating of your Onboarding experience.
Display Type | List of Values | Text Box | Text Box
BI Enabled | Checked | Checked | Checked

7. Click on Save and Close till you return to the Manage Checklist Descriptive Flexfields page.
8. Click Deploy Flexfield.
9. Click OK and then Done.

Deploying the Flexfield
Deploy the flexfield that you created to make it available in the Tasks page.

1. On the Manage Checklist Descriptive Flexfield page, click Deploy Flexfield.
2. In the Confirmation dialog box, click OK, and click Done.
   You must sign out and sign in before you can see the changes you deployed at run time. The flexfield context and the associated segments automatically appear when you select the Configurable Form action type in the Create Task page.

Associating the Descriptive Flexfield with a Task

1. In the Setup and Maintenance work area, go to the following:
   - Functional Area: Workforce Information
   - Task: Manage Checklist Template
2. On the Manage Checklist Template page, click Create.
3. Enter General checklist details and click Save.
4. Click the Tasks tab.
5. Click Add and then enter the details of the task.
6. Select Configurable Form as the action type.
7. Select the descriptive flexfield context Onboarding Survey from the Configurable Form drop-down list.
8. Complete details in other tabs.
9. Click Save and Close.

Configure Electronic Signature Using DocuSign

You use the DocuSign signature type so that new hires can electronically sign the document during onboarding. DocuSign is your third-party service provider who manages electronic signatures.

Before You Start

1. Register and obtain a license from DocuSign. Note that this is a one-time activity.
2. Note down the account key, integration key, user name, and password from the DocuSign site.

Configuring the Manage Electronic Signature Task

1. In the Setup and Maintenance work area, go to the following:
   - Offering: Workforce Deployment
2. On the Manage Electronic Signature Configurations page, click Add.
3. Use the details obtained from the DocuSign web site to enter the keys:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module</td>
<td>Checklist</td>
</tr>
<tr>
<td>Account Key</td>
<td>Obtained from DocuSign</td>
</tr>
<tr>
<td>Integration Key</td>
<td>Obtained from DocuSign</td>
</tr>
<tr>
<td>Provider URL</td>
<td>URL of the DocuSign production or demo server.</td>
</tr>
<tr>
<td>User Name</td>
<td>Obtained from DocuSign</td>
</tr>
<tr>
<td>Password</td>
<td>Obtained from DocuSign</td>
</tr>
<tr>
<td>Status</td>
<td>Set to Active to enable integration.</td>
</tr>
</tbody>
</table>

4. Click Save.

Upload the Document
1. Upload the new hire document to DocuSign and note down the template ID that DocuSign generates.
2. Use tags to map details from the new hire record to fields in the document in DocuSign. You can use predefined tags or add custom tags to the predefined tags list. At run time, these tags you add will be replaced with relevant information from the new hire record.
   - Predefined tags: Full Name, Email Address, and Date Signed
   - Custom tags: Create and add ORA_JOB_TITLE and ORA_LEGAL_ENTITY for Assignment Name and Legal Employer. At run time, the tags you add will be replaced with relevant information from the new hire record.
3. Add the role ORA_ESIGN_CHECKLIST in the Recipient field on the DocuSign site to make it applicable to checklists.

Configure the Task Action Type
1. In the Setup and Maintenance work area, go to the following:
   - Offering: Workforce Deployment
   - Functional Area: Workforce Information
   - Task: Manage Checklist Template
2. On the Create Checklist Templates page, enter details in the General tab.
3. Click Save and then click the Tasks tab.
4. Click Add and enter details for the task.
5. Select Digital Signature as the Action Type.
6. Enter the template ID that you obtained from the DocuSign site.
7. Click Save.

Here’s what happens when you assign this task to new hires. They are automatically taken to the DocuSign site where they can read and electronically sign the document. The signed document is stored on DocuSign.
Note: Make sure that the email address in the person's record is set as Primary.

For more information on integration with DocuSign, see the white paper: Onboarding Checklists - Integration with DocuSign (2486626.1) on My Oracle Support at https://support.oracle.com

How You Use the Report Task Action Type in a Checklist

The Report task action type in a checklist enables task performers to view or download a BI Publisher report when performing the task. For example, a Human Resources (HR) specialist can view all the data collected as part of the recruiting process or view the performance rating report during an exit interview.

Note: Make sure you provide task performers' access to the BI Publisher area otherwise they can’t view the report.

What to Include in the Report Path

This is what you can include in the report:

- Specify the BI Publisher report folder path followed by the report name concatenated with a "/".
- Include optional parameters in the format parameter name={parameter value}.
- Use the prefix "?" before the first parameter followed by "&" before additional parameters.

Note: Don’t include Shared Folders in the path even if the report is in Shared Folders. Don’t include spaces, replace all spaces with the + character.

Here are checklist specific parameters you can include in the report path:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Parameter Value</th>
<th>What it Does</th>
</tr>
</thead>
<tbody>
<tr>
<td>P_ALLOCATED_TASK_ID</td>
<td>{AllocatedTaskId}</td>
<td>Gets details of the task or checklist.</td>
</tr>
<tr>
<td></td>
<td>{AllocatedChecklistId}</td>
<td></td>
</tr>
</tbody>
</table>

Let’s say you specify this in the report path: /Samples/Salary+Report.xdo?P_ALLOCATED_TASK_ID={AllocatedTaskId}

The application runs the report with the parameter P_ALLOCATED_TASK_ID mapped to the current allocated task ID.

If you don’t specify any parameters then the default layout and output format are used to render the report. For example, if you specify this: /Custom/Reports/ChecklistCompletionReport.xdo The application runs the report with the default options and generates the output in PDF format.

How You Allocate Checklists

An allocated checklist is a specific instance of a checklist template. You consider the date when the record is created or approved or the date when the action record becomes effective to allocate a checklist. Human Resource (HR) specialists can
access the Manage Allocated Checklists task from Quick Actions > My Client Groups. Line managers can access the task from Quick Actions > My Team.

**Automatic or Manual Allocation**

If the checklist is associated with an action such as new hire or transfer, the checklist is automatically allocated to workers when they experience the action. If not, you must manually assign the checklist to workers. If you associate the checklist or task with eligibility criteria, they’re allocated only if the worker meets the eligibility criteria. Task performers and owners are derived based on what you specify for each task in the checklist template.

*Note:*

The figure shows the tasks workers perform for automatically allocated checklists for which they’re eligible.
Task Performers and Owners

Task performers access tasks allocated to them from either the Onboarding App or the Checklist Tasks App, depending on the checklist allocated to them. If you assign a task to multiple performers, one of the performers can claim the task by accessing the notification.

**Note:**
- If you allocate a checklist using HDL it doesn't send notifications.
- While allocating checklists using REST the only restriction is that eligibility evaluation happens at the checklist task level and not at the checklist level.

Task Statuses for Allocated Checklists

You can manage checklists and tasks after they're allocated to workers, using the Manage Allocated Checklists task. Human Resource (HR) specialists can access this task from Quick Actions > My Client Groups. Line managers can access the task from Quick Actions > My Team. These statuses indicate what progress is made on the checklist or task.

<table>
<thead>
<tr>
<th>Status</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiated</td>
<td>The checklist and the tasks in the checklist are automatically set to Initiated when you allocate the checklist.</td>
</tr>
<tr>
<td>Completed</td>
<td>The checklist or task is complete based on the criteria specified in the Completion Date field. On completion, the task doesn’t disappear from the allocated checklist or the worklist. You will need to manually delete it.</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>The checklist or task is marked as not applicable because it’s wrongly allocated to a person. A task performer or owner can mark a wrongly assigned task as not applicable.</td>
</tr>
<tr>
<td>Outstanding</td>
<td>The checklist or task isn’t complete by the target date.</td>
</tr>
<tr>
<td>Other Task Statuses</td>
<td>Other statuses to indicate tasks are in progress or are suspended because resources aren’t available.</td>
</tr>
</tbody>
</table>

Enterprise Onboarding Checklists

An Enterprise Onboarding checklist template is a specific checklist that you create to onboard new hires either on or after their joining date. Line managers, HR specialists, and employees use the Onboarding work area to access, manage, and complete tasks related to onboarding.

HR specialists create Enterprise Onboarding checklist templates using the Manage Checklist Templates task in the Setup and Maintenance work area or using the Manage Checklist Template quick action in My Client Groups > Employment.
Checklists of the Enterprise Onboarding category are available to line managers and HR specialists only in the Manage Allocated Checklists responsive UI.

Category

Define a master checklist using Enterprise Onboarding category. The master checklist links steps in the onboarding process. You need to configure at least one step that needs to be linked to this master checklist. There’s no maximum limit for the number of checklist steps that can be created. You can specify the sequence of the steps. You add tasks to the checklist of category Enterprise Onboarding Step. For example, in your master checklist, you can configure a step titled Your First Day to include onboarding tasks that the employee needs to complete on their joining date. You can add one or more tasks that a new hire needs to perform before their first day, such as providing identity proofs.

Note:
- If you don’t specify an action in the master checklist which is of the Enterprise Onboarding category, then it won’t be allocated automatically. The checklist will still be available for manual allocation.
- If your Enterprise Onboarding checklist has multiple steps, then it’s recommended that the action specified in the first step checklist be the same as the action in the master checklist.
- Only one Enterprise Onboarding checklist is allocated automatically. In case another Enterprise Onboarding checklist is manually allocated with a specific Allocation Date, only the most recent checklist based on the checklist allocation date will be displayed on the Onboarding home page of the new hire.
- In case there are any eligibility profiles associated to the checklist template, the Enterprise Onboarding checklist will get allocated randomly as there is no order in which the checklist is evaluated for eligibility. The first checklist that meets the criteria gets allocated to the new hire.

Tasks

You can configure tasks as optional or required. You can also configure tasks that are dependent on other tasks for completion. Managers can’t send task reminders for such tasks until the preceding task is completed. For example, verifying personal information details could be a task that needs to be completed on the first day. This information is mandatory and needs to be completed before the worker can request for their identity badge on the first day. On the worker dashboard, such tasks are displayed with a locked icon. When you send a reminder, the reminder is per task and not a single reminder for multiple tasks. Tasks that are incomplete in a particular step are automatically carried forward to the next step in the onboarding process.

Task Library

HR administrators add tasks to the task library which is a repository of tasks. These tasks are assigned by line managers or HR specialists during the onboarding process using Add Task. Tasks from the task library can also be selected and added while creating a checklist template.

Action Types

Action types determine the type of task the task performer needs to complete. The available action types are:

<table>
<thead>
<tr>
<th>Action Type</th>
<th>Enables you to</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Task</td>
<td>Select a task from a list of tasks that can be performed within the application itself. You can select the task based on the performer of the task.</td>
<td>Update personal details.</td>
</tr>
<tr>
<td>Action Type</td>
<td>Enables you to</td>
<td>Example</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Configurable Form</td>
<td>Define configurable forms and capture additional details. Although the details will be captured using the form, the information won’t be updated in the respective fields of the application. Workers can upload documents and add comments using this task type. The attachments aren’t stored in Document Records, but are stored in Unified Content Manager.</td>
<td>Fill forms related to corporate policy, tax, benefits.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> This action type requires additional setup. Use the Manage Checklist Descriptive Flexfields task to create a descriptive flexfield associated to PER_PERSON_ALLOCATED_TASKS_DFF.</td>
<td></td>
</tr>
<tr>
<td>Electronic Signature</td>
<td>Create tasks where workers can electronically sign during the onboarding process. There are two signatures types you could use:</td>
<td>Sign a non-disclosure agreement.</td>
</tr>
<tr>
<td></td>
<td>• Basic: Allows users to provide their consent by entering their name and email address. You can see the date on which the consent was provided. Only the full name of the person providing their signature will be validated against the logged in user’s full name. There’s no validation for email address.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• DocuSign: Allows users to electronically sign the document in DocuSign. Requires integration with third-party service provider, DocuSign.</td>
<td></td>
</tr>
<tr>
<td>Document</td>
<td>Attach a document that workers can download, see, and read as part of their tasks.</td>
<td>Read the induction manual for new hires.</td>
</tr>
<tr>
<td>External URL</td>
<td>Define an external URL that workers will use to perform the task.</td>
<td>Link to the benefits provider site.</td>
</tr>
<tr>
<td>Manual Task</td>
<td>Create a task that workers need to perform outside of the application.</td>
<td>Introduce the new hire to the team.</td>
</tr>
<tr>
<td>Questionnaire</td>
<td>Add a questionnaire to collect feedback from workers.</td>
<td>Feedback on orientation program</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> You need to use Oracle Talent Management Cloud to create the questionnaire. Also, select HR Checklists as the subscriber when creating the questionnaire.</td>
<td></td>
</tr>
<tr>
<td>Action Type</td>
<td>Enables you to</td>
<td>Example</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------</td>
<td>---------</td>
</tr>
<tr>
<td>Report</td>
<td>Specify and include a link to a published BI report.</td>
<td>Report that has recruiting data collected during onboarding</td>
</tr>
</tbody>
</table>

**Note:** Ensure that you provide the required privileges to access the BI Publisher area since the generated report will open in that area.

<table>
<thead>
<tr>
<th>Video</th>
<th>Add a video. Requires you to add an embedded URL if you want the video to open up in the same window, else it will open up in a new tab or window.</th>
<th>Welcome video from the CEO to address new hires in the organization.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If you need to use a video hosted on an external website (example, Youtube), different websites have different ways for providing embedded URL for the video. This isn’t owned by Oracle but by the external website.</td>
<td>For example, Welcome video from the CEO to address new hires in the organization.</td>
</tr>
<tr>
<td></td>
<td>For example, Welcome video from the CEO to address new hires in the organization.</td>
<td>For example, Welcome video from the CEO to address new hires in the organization.</td>
</tr>
</tbody>
</table>

**Messages**

Include messages to display on the home page when the worker signs in during the onboarding process. You can add messages specific to each step including onboarding sponsor details for new hires to contact when completing their onboarding tasks.

**Dashboard**

Configure different content types such as links or videos that appear on the worker dashboard. Furthermore, you can add notes related to the onboarding process, which will be displayed on the Note Board of a new hire. You can only add text as part of the notes and provide links to any attachments.

**Create an Enterprise Onboarding Step Checklist**

This example shows how to configure an Enterprise Onboarding Step checklist with onboarding tasks that new hires need to complete on their first day and within the first week. The Enterprise Onboarding Step checklist is a child checklist comprising one or more tasks that you associate to high level steps in a master Enterprise Onboarding checklist.

In this example, you create two checklists one that includes tasks to be done on the first day and the second to include tasks to be done in the first week. The checklist is applicable for new hires located in the US. You use the Manage Checklist Template task to create and manage checklists.

**Summary of Tasks**

To create the checklists, you need to:

1. Enter general details
2. Create mandatory tasks and enable notifications to be sent when the task is completed
3. Provide other instructions for the tasks
Prerequisites

1. Create an eligibility profile `Work_Location_US` for workers in the US.

Entering General Details

1. In the Setup and Maintenance work area, go to the following:
   - Functional Area: Workforce Information
   - Task: Manage Checklist Template

2. On the Manage Checklist Templates page, click Create to open the Create Checklists page.
3. Create two separate checklists with values as detailed below:

<table>
<thead>
<tr>
<th>Fields</th>
<th>Checklist 1</th>
<th>Checklist 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>On Your First Day - Step 1</td>
<td>Your First Week - Step 2</td>
</tr>
<tr>
<td>Description</td>
<td>This checklist includes tasks to be completed on the first day.</td>
<td>This checklist includes tasks to be completed within the first week.</td>
</tr>
<tr>
<td>Category</td>
<td>Enterprise Onboarding Step</td>
<td>Enterprise Onboarding Step</td>
</tr>
<tr>
<td>Status</td>
<td>Active</td>
<td>Active</td>
</tr>
<tr>
<td>Date From</td>
<td>1-Jan-2018</td>
<td>1-Jan-2018</td>
</tr>
<tr>
<td>Date To</td>
<td>10-Jan-2021</td>
<td>10-Jan-2021</td>
</tr>
<tr>
<td>Country</td>
<td>All Countries</td>
<td>All Countries</td>
</tr>
<tr>
<td>Eligibility Profile</td>
<td>Work_Location_US</td>
<td>Work_Location_US</td>
</tr>
<tr>
<td>Category</td>
<td>Enterprise Onboarding Step</td>
<td>Enterprise Onboarding Step</td>
</tr>
<tr>
<td>Action Name</td>
<td>Hire</td>
<td>Hire</td>
</tr>
<tr>
<td>Allocation Criteria</td>
<td>When the action record becomes effective</td>
<td>When the action record becomes effective</td>
</tr>
<tr>
<td>Days for Initiation</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Completion Criteria</td>
<td>When all mandatory tasks are completed</td>
<td>When all mandatory tasks are completed</td>
</tr>
<tr>
<td>Message</td>
<td>Hello, you’re in step 1 of the onboarding process.</td>
<td>Hello, you’re in step 2 of the onboarding process.</td>
</tr>
</tbody>
</table>

4. Click Save.

Creating Tasks

1. Click the Tasks tab and click Create.
2. Complete the fields, as shown in the table for each of the two high level steps. The tasks must be associated to the respective Enterprise Onboarding Step checklists created as prerequisites.

3. Create the tasks that need to be included in each of the checklists as shown in the table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Values for task included in On Your First Day - Step 1</th>
<th>Values for task included in Your First Week - Step 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Names</td>
<td>Request Access Badge</td>
<td>Verify Your Personal Information</td>
</tr>
<tr>
<td>Description</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Status</td>
<td>Active</td>
<td>Active</td>
</tr>
<tr>
<td>Eligibility Profile</td>
<td>Leave blank</td>
<td>Leave blank</td>
</tr>
<tr>
<td>Preceding Task</td>
<td>Leave blank</td>
<td>Leave blank</td>
</tr>
<tr>
<td>Mandatory</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Target Duration</td>
<td>3 Days</td>
<td>1 Day</td>
</tr>
<tr>
<td>Performer</td>
<td>Worker</td>
<td>Worker</td>
</tr>
<tr>
<td>Owner</td>
<td>Area of Responsibility</td>
<td>Line Manager</td>
</tr>
<tr>
<td></td>
<td>HR Representative</td>
<td></td>
</tr>
<tr>
<td>Action Type</td>
<td>Manual</td>
<td>Application Task</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select the relevant application task from the list of values.</td>
</tr>
<tr>
<td>Notification and Reminders</td>
<td>When task is completed</td>
<td>Leave Blank</td>
</tr>
<tr>
<td></td>
<td>Owner</td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td>Complete this task before the end of your first day.</td>
<td>Don’t forget to update your details before the end of your first week.</td>
</tr>
</tbody>
</table>

4. Similarly, create one more task titled Provide Identity Proofs to include in On Your First Day - Step 1 and two more tasks titled Meet Your Team and Review Campus Map Directions to include in Your First Week - Step 2.

5. Click Save and Close.

Related Topics

- Search for a Task
Create an Enterprise Onboarding Checklist

This example shows how to configure an Enterprise Onboarding checklist that acts as a master checklist in the onboarding process. When you create an Enterprise Onboarding checklist, the checklist tasks that you configure appear as high level steps or phases in the Onboarding home page. The high level steps link to an Enterprise Onboarding Step checklist comprising the actual onboarding tasks.

In this example, you create a master checklist and include two high level steps titled On Your First Day and Your First Week for new hires located in the US. When you create the step, you link it to On Your First Day - Step 1 and Your First Week - Step 2, the Enterprise Onboarding Step checklists that you created as a prerequisite. Further, you add instructions and notes that appear on the Onboarding home page.

**Note:** If you want the checklist to be automatically allocated based upon an action, the action needs to be configured in the master checklist which is of the category Enterprise Onboarding. Additionally, the same action needs to be configured in the first step checklist which is of the checklist category Enterprise Onboarding Step.

Summary of Tasks

To create the checklists, you need to:

1. Enter general information
2. Create a checklist of the category Enterprise Onboarding, add the steps as high level tasks and specify the sequence
3. Add a welcome message with instructions
4. Configure the content types for the dashboard

Prerequisites

1. Create two Enterprise Onboarding Step checklists titled On Your First Day - Step 1 and Your First Week - Step 2. In the On Your First Day - Step 1 checklist include two tasks titled Provide Identity Proofs and Request Identity Badge. In the Your First Week - Step 2 checklist include three tasks namely Verify Your Personal Information, Review Campus Map Directions, and Meet Your Team.

Entering General Details

1. In the Setup and Maintenance work area, go to the following:
   - Functional Area: Workforce Information
   - Task: Manage Checklist Template
2. On the Manage Checklist Templates page, click Create to open the Create Checklists page.
3. Complete the fields in the General tab as shown in the table:

<table>
<thead>
<tr>
<th>Fields</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>New Hire Onboarding</td>
</tr>
<tr>
<td>Description</td>
<td>Onboarding checklist</td>
</tr>
<tr>
<td>Category</td>
<td>Enterprise Onboarding</td>
</tr>
<tr>
<td>Status</td>
<td>Active</td>
</tr>
</tbody>
</table>
Implementing Talent Management Base

Chapter 11

Workforce Records

<table>
<thead>
<tr>
<th>Fields</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date From</td>
<td>1-Jan-2018</td>
</tr>
<tr>
<td>Date To</td>
<td>10-Jan-2021</td>
</tr>
<tr>
<td>Country</td>
<td>All Countries</td>
</tr>
<tr>
<td>Eligibility Profile</td>
<td>Leave blank</td>
</tr>
<tr>
<td>Action Name</td>
<td>Hire</td>
</tr>
<tr>
<td>Allocation Criteria</td>
<td>When the action record becomes effective</td>
</tr>
<tr>
<td>Completion Criteria</td>
<td>When all mandatory tasks are completed</td>
</tr>
</tbody>
</table>

4. Click Save.

Creating the High Level Tasks and Specifying the Sequence

1. In the Tasks tab, click Add Task.
2. Create the tasks that need to be included in each of the checklists as shown in the table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Values to include for On Your First Day</th>
<th>Values to include for Your First Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Names</td>
<td>On Your First Day - Step 1</td>
<td>Your First Week - Step 2</td>
</tr>
<tr>
<td>Description</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Status</td>
<td>Active</td>
<td>Active</td>
</tr>
<tr>
<td>Eligibility Profile</td>
<td>Leave blank</td>
<td>Leave blank</td>
</tr>
<tr>
<td>Sequence</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Action Type</td>
<td>Checklist</td>
<td>Checklist</td>
</tr>
<tr>
<td>Checklist Name</td>
<td>On Your First Day - Step 1</td>
<td>Your First Week - Step 2</td>
</tr>
</tbody>
</table>

3. Click Save and OK.
4. Click Save and Close.

Adding a Message

1. Click the Message tab and enter the title and message shown in the table:
As a new employee, you’re required to complete all onboarding tasks.

2. Click Add and specify details of the onboarding sponsor for workers to contact during the onboarding process. The contact details display on the workers Onboarding home page.

3. Click Save.

Configuring the Content Types for the Dashboard

1. In the Notes section, click Add and complete the fields as shown in the table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Title</td>
<td>Orientation</td>
</tr>
<tr>
<td>Description</td>
<td>Check your email for the schedule</td>
</tr>
<tr>
<td>Content Status</td>
<td>Active</td>
</tr>
<tr>
<td>Content Type</td>
<td>Standard Note</td>
</tr>
</tbody>
</table>

2. In the What’s Happening section, click Add and complete the fields as shown in the table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Insight</td>
</tr>
<tr>
<td>Content Title</td>
<td>Company Information</td>
</tr>
<tr>
<td>Status</td>
<td>Active</td>
</tr>
<tr>
<td>Content URL</td>
<td><a href="https://www.oracle.com/index.html">https://www.oracle.com/index.html</a></td>
</tr>
<tr>
<td>Event Date</td>
<td>Leave blank</td>
</tr>
<tr>
<td>Image URL</td>
<td>Leave blank</td>
</tr>
</tbody>
</table>

3. Click OK.
4. Click Save.

Related Topics

- Search for a Task
How You Enable Email Notifications During Preboarding

Typically, pending workers don’t have a corporate email address. And all preboarding email notifications are sent only to the email address marked as Work. So, in order for pending workers to receive email notifications you need to specify their personal email address as type Work in their personal information record.

Note:
- The email address you enter in the Work Email field isn’t validated.
- After the pending worker becomes an employee, you will need to replace the personal email address with the corporate email address in the Security Console.

How You Enable Access for Preboarding

You must give the necessary access to new hires so that they can access their preboarding tasks before their start date. There’s no separate work area for preboarding. They do these tasks in the Onboarding work area.

Provide Access

When you create a pending worker, their user credentials are automatically generated. Based on how you configure the email template in the Security Console, a notification with the credentials goes to either the new hire or their manager. If the manager gets the notification, they can forward the details to the new hire.

You need to do either of these additional tasks if you use the Single Sign-on (SSO) mode for authentication:
- Enable the SSO Chooser feature, which allows pending workers to be authenticated.
- Create an SSO account in the corporate LDAP and share the details with the new hires.

If you use VPN or IP white listing for authentication, you need to give necessary privileges to pending workers so that they can access the application.

Grant Roles

You need to grant new hires the Pending Worker role that contains the Manage Onboarding by Worker privilege. Alternatively, you may create a custom role that’s a copy of the pending worker role and add more privileges.

For more information on granting document records privilege to pending workers, see the following white paper: Granting Document Records Access to Pending Workers (2451071.1) on My Oracle Support at https://support.oracle.com

Related Topics
- Examples of Location-Based Access in Oracle HCM Cloud

Onboarding Lookups

This topic identifies lookups related to onboarding and have user or extensible configuration levels. Review these lookups, and update them as appropriate to suit enterprise requirements. You review lookups using the Manage Common Lookups task in the Setup and Maintenance work area.
Onboarding Lookups

Onboarding lookups are described in the following table:

<table>
<thead>
<tr>
<th>Lookup type</th>
<th>Description</th>
<th>Configuration Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORA_PER_ONB_CONTACT_TITLE</td>
<td>Title of onboarding sponsor</td>
<td>Extensible</td>
</tr>
<tr>
<td>ORA_PER_ONB_CONTENTCATEGORY</td>
<td>Content category indicates the onboarding event</td>
<td>Extensible</td>
</tr>
<tr>
<td>ORA_PER_CHK_TASKCATEGORY</td>
<td>Task category</td>
<td>Extensible</td>
</tr>
</tbody>
</table>

FAQs for Checklists

How do changes in the checklist template affect allocated checklists?
Changes you make in a checklist template don’t affect allocated checklists because each allocated checklist is a specific instance of the checklist template. Similarly, changes you make in allocated checklists don’t affect the checklist template.

Where can a performer view details of the person to whom the task is allocated?
Task performers can see all enterprise onboarding tasks through the Onboarding app and other checklist tasks using the Checklist Tasks app.

When does a checklist task get allocated to the task initiator?
When a task is allocated, the hierarchy followed is: It’s first allocated to the task performer. If the performer isn’t available, then it’s assigned to the line manager of the person to whom the checklist is allocated and if the line manager isn’t available, it’s allocated to the task initiator.

Where do the checklist category values come from?
The values for a category are dependent on the country selected. If a category is configured for a country, then it will be displayed in the list. The country- category mapping is configured in the Manage Checklist Lookups task.

What’s the purpose of the Country field in a checklist template?
The Country field is for information purpose only. It doesn’t filter checklists based on this field. If you want to restrict checklists based on country, then use eligibility profiles.

Can I allocate enterprise checklists to future-dated hires?
No, you can’t since the person record doesn’t exist as of the checklist allocation date for workers of type employees, contingent workers, and nonworkers. But, you can allocate the checklist for a pending worker with a proposed start date in the future as the pending worker record exists as of the checklist allocation date.

Can a checklist or task be triggered based on another checklist or task?
No. You either allocate checklists manually or they are triggered automatically using the events framework. For example, checklists are allocated automatically during assignment actions such as Hire, Promote, and Transfer. Similarly, tasks are allocated based on the eligibility criteria defined either at the checklist level or the task level.
Can data from one configurable form be used in another configurable form in a checklist?
No, the data collected from a configurable form is specific to that Descriptive Flexfield Context. If you require that multiple configurable forms use the same data, you must create a configurable form with a global DFF context.

Can checklist notifications be configured according to my organization's requirements?
Yes, for more information see Configuring Checklists Notifications Using Report: Worked Example.

Related Topics
• Configure Checklist Notifications Using Reports

What notification templates are available for checklists?
There are three checklist notification templates available:
• ChecklistWelcomeReport (ChecklistWelcomeDataModel): Triggered only when checklist of the category Enterprise Onboarding is allocated.
• TaskActionRequiredReport (TaskNotificationDataModel): Triggered for all task types when an action needs to be performed by the user.
• TaskFYIREport (TaskNotificationDataModel): Triggered for all task types as an information only notification.

Can I include attachments in checklist notifications?
No, you can’t.

Why can’t I modify the layout of the Onboarding checklist page?
You can’t modify the page layout because it will disturb the color themes. The Onboarding checklist page uses overlapping and alternating color themes for some sections.

Where can I find the documents that are signed using DocuSign?
The signed document is saved and stored on the service provider site that's DocuSign. It isn’t available in HCM Cloud.

Can more than one Onboarding checklist be allocated to the same worker at the same time?
No, only one Enterprise Onboarding checklist is allocated automatically. In case another Enterprise Onboarding checklist is manually allocated with a specific Allocation Date, only the most recent checklist will be displayed on the Onboarding home page of the new hire.

Can I generate reports for task progress, pending tasks, and overdue tasks with new hire details?
You can’t. Currently, there are no seeded reports for Onboarding. You can only create reports using BI Publisher.

How can I send an email communication to new hires?
You can’t send emails to new hires from the Onboarding application. You can however explore the Alerts Composer functionality to meet email notification requirements.

Document Records
Document Types and Categories

You use document records to create and manage documents such as medical certificates, licenses, and visas. Use the Manage Document Records task from Quick Actions, person spotlight, My Team work area, or person smart navigation to create and maintain document records for a person. To supplement the predefined document types, categories, and subcategories, you can create your own to suit the requirements of your enterprise.

Document Types

Document types (for example, leave approval or medical report) provide a lower level categorization of documents. The type of documents you can access depends on your role. For example, line managers, but not HR managers, may be able to view workers’ payslips. Using the document type security profile, you can restrict which users or roles can access particular documents. The document type also indicates if the document requires approval. If you want to track the expiry of the document record, define **Valid Till** as a required or relevant attribute in the document type and specify the expiration notification period.

Document Categories

Document categories (for example, absence) provide a way to group these documents into meaningful categories at a higher level. Document subcategories (for example, general or medical) provide further grouping of documents. Use the **DOCUMENT_CATEGORY** lookup type to define new document categories and subcategories. Define document categories as values for the **DOCUMENT_CATEGORY** lookup type and document subcategories as extended lookup values for the selected category.

Related Topics

- Examples of Document Type Security Profiles

How You Set Preferences for Document Delivery

You typically define delivery preferences for documents that are delivered periodically from employers to workers, for example, payslips, or year end tax statements. You can select default delivery methods for a document type, including online and paper, and specify other delivery related preferences. You set these preferences using the Manage Document Types task in the Setup and Maintenance work area.

Online Delivery Consent

You can specify whether worker consent is required for delivering documents online-only. If you set the Online Delivery Consent Required option to Yes and Initial Consent Granted to No, then the Delivery Method is automatically selected as Paper and the option is disabled for edit; the option is automatically deselected (while still disabled) when you set back Initial Consent Granted to No.

Overriding Default Preferences

You set default delivery preferences on the document type and override the preferences on associated work structures. You can override default delivery preferences at various levels for a payroll statutory unit (for payroll documents) or legal employer (for other document categories). These levels are arranged in a hierarchy. For example, delivery preferences set for a location override those set for a department and delivery preferences set for a department override those set for a legal employer. The document type is at the highest level in the hierarchy. The default delivery preferences you specify for a document type apply to all documents, if you do not override them at lower levels.
Person Level Overrides

You can enable persons to override the delivery preferences for their documents, on the Document Delivery Preferences page in the Personal Information work area. The delivery preferences that workers specify on this page override delivery preferences specified elsewhere for the document type.

Make Document Records Available from a Specific Date

You can view document records using the Manage Document Records task from Quick Actions, person spotlight, My Team work area, or person smart navigation. Additionally, you can specify a date from when the document records for a document type can be viewed. To do this, follow these steps:

Creating the Document Type

1. Navigate to the Setup and Maintenance work area.
2. Click the **Tasks** panel tab, and click **Search**. The Search page is displayed.
3. Enter **Manage Document Types** in the search box, and click the **Search** icon.
4. In the search results, click **Manage Document Types**. The Manage Document Types page is displayed.
5. In the Search Results area, click the **Create** icon. The Create Document Type page is displayed.
6. In the Document Type Information area, click **Yes** for the **Publish Required** option when you enter the details.
7. Select the restrict options for the document record and attachment preferences, and click **Submit**.
8. Click **Yes**, and then click **OK**.

Creating Document Records using HDL

Enter the attribute values as shown in the following table when you create the document records using HCM Data Loader.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publish</td>
<td>Y</td>
</tr>
<tr>
<td>Publish Date</td>
<td>Date you want to publish the document records. For example, 2017/12/01.</td>
</tr>
</tbody>
</table>

> **Note:** You can only provide these attribute values using HCM Data Loader.

For more information about loading document records using HCM Data Loader, see the Integrating with HCM guide in the Help Center.

Document Record Preferences

You can restrict the creation, update, and deletion of document records post approval for a document type. By default, the preferences for document records aren’t restricted. To access the document record preferences, use the Manage Document Types task in the Setup and Maintenance work area.

The following table describes the different combinations that you can select for the document record preferences.
When you click Yes for the Restrict Create option, the application automatically selects Yes for the Restrict Update and Restrict Delete options. Additionally, the Restrict Update and Restrict Delete options are disabled. When you click Yes for the Restrict Update option, the application automatically selects Yes for the Restrict Delete option. Additionally, the Restrict Delete option is disabled.

Create a Context for the Document Descriptive Flexfield

When you create a document record, the flexfield segments are displayed based on the context selected for the document type. You can configure the flexfield context for a document type such that it’s automatically selected when you create a document record. This example shows how you can do so.

To automatically populate the context, you must enter a context code for the document flexfield that exactly matches the internal document type.

The internal document type is generated as follows:

- Document type is valid for a specific country: The internal document type is derived as country code_document type name, all in uppercase. The spaces and hyphens in the document type name are replaced with underscores. For example, if the document type name is Loan Request and the document type is valid for India only, the internal document type takes the value IN_LOAN_REQUEST.

- Document type is global: The internal document type is derived as GLB_document type name. For example, if the document type name is Loan Request and the document type is valid for all countries, the internal document type takes the value GLB_LOAN_REQUEST.

Configuring the Context for the Document Descriptive Flexfield

1. Click Navigator > Setup and Maintenance.
2. On the Tasks panel drawer, click Search.
3. In the search box, enter Manage Document Descriptive Flexfields, and click the Search icon.
4. Click the Manage Document Descriptive Flexfields task name.
5. In the Search Results section, select the row for the Documents of Record Attributes descriptive flexfield, and click the Edit icon.
6. Click Manage Contexts and click the Create icon in the Search Results section.
7. In the Display Name field, enter the document type name. For example, enter Loan Request.
8. In the Context Code field, enter the code using a combination of the country code and the document type name. For example, if the document type name is Loan Request and the document type is specific to India, enter IN_LOAN_REQUEST.
Note: You must enter the context code using the following format: country code_document type name, all in uppercase. Replace any spaces or hyphens in the document type name with underscore (_). If the document type is applicable globally, replace country code with GLB.

9. Click **Save and Close**. The Manage Contexts page appears.
10. In the **Search Results** section, select the row for the context that you created, and click the **Edit** icon.
11. In the **Context Sensitive Segments** section, click the **Create** icon.
12. Create the context segments according to your business requirements. For example, you can create segments, such as Loan Start Date, Loan Type, and Loan Reason.
13. Click **Save and Close** four times.
14. Click **Deploy Flexfield**.
15. In the **Confirmation** dialog box, click **OK**, and click **Done**.

After this, the flexfield context and its associated flexfield segments are automatically populated in the Create Document Record page when you select a document type.

Control Access to Document Records

You can control a worker’s access to document records by giving the appropriate access. You can grant either the view or manage access to document records based on the document type.

You can restrict access to selected document types by granting view access only for those document types. On the Document Records page, workers can view all document records for which they have view and manage access. They can edit and delete those document records for which they have manage access.

Example

Let’s say you want a worker to view all document records but manage documents of type adoption and birth. Here’s how you do it:

1. Create a document security profile by including the document types (adoption and birth) that require manage access.
2. Create a custom role for the worker with the View Person Documentation aggregate privilege.
3. Assign the document security profile created in step 1 to the delivered employee role (that contains Manage Person Documentation by Worker aggregate privilege).
4. Assign the delivered and custom employee roles to the user.

For more information about controlling access to document records, see the Oracle Human Capital Management Cloud Securing HCM guide on the Oracle Help Center (https://docs.oracle.com/en/cloud/saas/index.html).

Work Schedules

Overview of Worker Schedule Configuration

To define worker schedules, you configure calendar events and work schedules. Complete these tasks in the Setup and Maintenance work area. Use the Workforce Deployment offering, Workforce Information functional area.
## Sequence | Task | Description
--- | --- | ---
1 | Manage Availability Lookups | Use the `ORA_PER_GEOGRAPHIC_TREE_NODES` lookup type to define geographic nodes of the geographic tree used to define calendar events for area1 through area4 locations. For example, United Kingdom (area1), England (area2), and London (area3).

Use the `PER_CAL_EVENT_CATEGORY` lookup type to define calendar event categories beyond the delivered Public holiday category.

2 | Manage Geography Trees | Create the geographic tree and tree versions. Add the geographic tree nodes to the tree versions. Also, audit, activate, and flatten the tree versions.

3 | Manage Calendar Events | Create calendar events, such as May Day, Thanksgiving, and Boxing Day, to include and exclude at various levels of the organizational or geographical hierarchy.

4 | Manage Locations | Update locations, as appropriate, to override calendar events for default geographic hierarchies. For example, a group of workers in Bangalore is working with a project team in France. For the duration of the project, you want the Bangalore team to observe the French public holidays too.

This task is part of the Workforce Structures functional area.

5 | Manage Work Shifts | Create work shifts, such as Morning, Afternoon, and Evening, Day, Night, and Swing.

6 | Manage Work Workday Patterns | Create workday patterns using the work shifts, such as a weekly work pattern with the Day shift starting on Monday and ending on Wednesday. The Night shift starts on Thursday and ends on Friday.

7 | Manage Eligibility Profiles | Create profiles that automatically determine which workers are eligible for a particular work schedule. For example, you want to identify workers in the support department.

8 | Manage Work Schedules | Create work schedules composed of work patterns, calendar event category exceptions, such as public holidays, and eligibility profiles.
How an Employee's Schedule Is Determined

You can set up employee work time in different ways. An employee’s official schedule for a selected time period is automatically determined using this information:

- Current schedule or work hours
- Calendar events and work schedule resource exceptions
- Absence entries
Search Order
This flow chart shows you the order that the application searches for an employee’s schedule, before applying it to the assignment.

Published Schedule (Workforce Management)
The published schedule is built using the employment work week, primary work schedule, or standard working hours for each employee. It can also be built using published schedules from other scheduling applications. The published schedule shows applicable calendar events and absences.

Employment Work Week
The employment work week is configured on the employee’s employment record. Schedules built from the work week also show applicable calendar events and absences.

Primary Work Schedule
The primary work schedule is linked to one of these levels. Schedules built from the work schedule also show assigned calendar events and resource exceptions, as well as applicable absences.

1. Primary assignment of the worker
2. Position
3. Job
4. Department
5. Location
6. Legal Employer
7. Enterprise

The process moves through the schedule hierarchy in the specified order and stops as soon as it finds a primary schedule. This example hierarchy shows primary work schedules associated with three levels.

![Schedule Hierarchy Diagram]

Departments 1 and 3 don’t have primary schedules. So, the primary schedule at the enterprise-level applies to all those employees, with one exception. One employee in department 3 has a schedule for their primary assignment. That primary assignment schedule applies instead of the enterprise-level schedule. Department 2 has a primary schedule, and it applies to all employees in that department.

All employee schedules are affected by the calendar events and resource exceptions that exist in the primary work schedule, regardless of level. They’re also affected by any absences they report during the selected time period.

**Standard Working Hours**

The standard working hours are defined on the employee’s primary assignment. Schedules built with these hours also show applicable calendar events and absences.

**Default Hours**

If the application doesn’t find a schedule, it uses the default hours 8:30a to 5:00p.

**Coverage Type Options for a Calendar Event**

When you create a calendar event, you determine which set of workers the event must apply to. You must use one of these types of hierarchies to determine coverage:

- Organizational
- Geographic
You create calendar events using the Manage Calendar Events task in the Setup and Maintenance work area.

**Note:** A calendar event, by default, applies to all workers belonging to the hierarchy nodes you included in the coverage. However, for workers assigned work schedules, the event only applies if you add the event as an exception in the work schedule.

For either hierarchy to be visible when you create a calendar event, you must ensure that the hierarchy is active.

### Organization Hierarchy

Use an organizational hierarchy to apply a calendar event to your workers’ assignments on the basis of the department that they belong to. For example, you want the Annual Sales Team Outing calendar event to apply to workers in the Sales department and its subordinate nodes. You don’t want it to apply to the Research department. Create organizational hierarchies using the Manage Organization Trees task in the Setup and Maintenance work area. This task is part of the Workforce Deployment offering, Workforce Structures functional area.

### Geographic Hierarchy

Use a geographic hierarchy to apply a calendar event to your workers’ assignments on the basis of the country, or state they belong to. For example, in the UK you may want to identify January, 2 as a holiday in Scotland but not in England, Wales, or Northern Ireland. Create geographic hierarchies using the Manage Geography Trees task in the Setup and Maintenance work area. This task is part of the Workforce Deployment offering, Workforce Information functional area.

### Examples of Calendar Event Coverage Configurations

When you use a geographic or organizational hierarchy for calendar event coverage, you can select which nodes in the hierarchy to cover. You can also override the calendar event name or its category for a specific node in the hierarchy. You create calendar events using the Manage Calendar Events task in the Setup and Maintenance work area. The task is part of the Workforce Deployment offering, Workforce Information functional area.

### Adding and Removing Coverage in a Hierarchy

You want to apply the New Phone System Training calendar event to all workers in your enterprise except those working in the Support department. When an event applies to most of a hierarchy, it’s efficient to use the Include tool. This tool lets you include the whole hierarchy in the coverage and then use the Exclude tool to leave out the exceptions.

This figure shows a visual summary of the inclusion and exclusion.
Overriding Coverage for Specific Locations

You set up public holidays and other calendar events for workers at your India and France locations using a geographic hierarchy. For 6 months, your Bangalore workers work closely with their counterparts in Paris on a critical project. During this time, you want the Bangalore workers to follow the events you set for France. On the Manage Locations page, edit the location information for Bangalore and set the geographic hierarchy to France.

This figure shows a visual summary of this calendar event coverage using a sample geographical hierarchy.

Overriding Coverage for Specific Geographic Levels

You set up public holidays and other calendar events for workers at your India location using a geographic hierarchy. But, you now want to set up exclusive regional holiday events for Bangalore and Hyderabad. On the Manage Locations page, edit the location information for the worker, setting the geographic hierarchy to Hyderabad or Bangalore instead of India, as appropriate. This edit associates each worker with calendar events defined exclusively for the worker’s Hyderabad or Bangalore location. The Manage Locations task is in the Setup and Maintenance work area, Workforce Deployment offering, Workforce Structures functional area.

This figure shows a visual summary of this calendar event coverage using a sample geographical hierarchy.
Overriding Coverage for Specific Employees
Some Bangalore workers are closely working on a project with their French counterparts for a year. For that duration, you want to change coverage for these Bangalore workers so that they follow the calendar events set up for the France location. For each worker, open the Manage Employment page for each Bangalore worker, and set the geographic hierarchy to France.

Overriding the Calendar Event Name in a Hierarchy
You set up the May Day calendar event for all locations in your enterprise. But, you want the event to be referred to as Labor Day for your workers in France. On the Calendar Event page, select the France location node on your geographical hierarchy. Use the Override tool to enter a new name for the event.

Overriding the Calendar Event Category in a Hierarchy
You associated the Good Friday calendar event with the Public Holiday event category and applied the coverage to all departments in your enterprise. But, you want to change the event category to a voluntary holiday instead of a public holiday for your finance department. On your organization hierarchy, select the Finance node and use the Override tool to select a different category.

Create a Calendar Event Using a Geographic Tree
This example demonstrates how to create a geography tree. It then covers how to associate calendar events, such as May Day, Thanksgiving, and Boxing Day, with employees on the basis of their location:

- Country, such as IN, UK, or US
- State nodes, such as Telangana, Karnataka, England, Scotland, or California
- City nodes, such as Hyderabad, Bangalore, San Mateo, London, or Edinburgh

Finally, this example demonstrates how you can override the default calendar event geographical hierarchy.
Task Summary

Create a geographic tree and associated calendar events using this basic process:

1. Define the country, state and city level nodes in the **Geographic Tree Nodes** lookup.

   > **Note:** You define this lookup only when you want to define calendar events for states and cities.

2. Create a geography tree based on the delivered tree structure HCM Geography Tree Structure and add a tree version.
3. Add geographic tree state and city nodes.
4. Audit, activate and row-flatten the tree version.
5. Define calendar events for the country, state, and city level nodes.
6. Define geography hierarchy overriding for the location.
7. View the defined calendar events for the worker.

Complete these configurations using tasks in the Setup and Maintenance work area, Workforce Deployment offering, Workforce Information functional area.

Defining the Nodes in the Geographic Tree Nodes Lookup

To use a geographic tree to define calendar events for a country, state or a city, you must first define the nodes. Define nodes by adding them as lookup codes for the **ORA_PER_GEOGRAPHIC_TREE_NODES** lookup type.

1. In the Workforce Information area, click **Manage Availability Lookups**.
2. On the Manage Availability Lookups page, select the lookup type **ORA_PER_GEOGRAPHIC_TREE_NODES**.
3. To add the nodes, complete the fields, as shown in this table. The lookup code should be a unique short code for the country, state, or city you are defining.

<table>
<thead>
<tr>
<th>Lookup Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>GL</td>
<td>Global</td>
</tr>
<tr>
<td>IN</td>
<td>India</td>
</tr>
<tr>
<td>IN_TELA</td>
<td>Telangana, India</td>
</tr>
<tr>
<td>TELA_HYD</td>
<td>Hyderabad, Telangana</td>
</tr>
<tr>
<td>IN_KARN</td>
<td>Karnataka, India</td>
</tr>
<tr>
<td>KARN_BAN</td>
<td>Bangalore, Karnataka</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UK_ENG</td>
<td>England, United Kingdom</td>
</tr>
<tr>
<td>ENG_LON</td>
<td>London, England</td>
</tr>
</tbody>
</table>
Creating a Geographic Tree and Adding a Tree Version

1. In the Workforce Information area, click **Manage Geography Trees**.
2. Create a geographic tree by completing these steps:
   a. On the Manage Trees and Tree Versions page, **Actions** menu, select **Create Tree**.
   b. On the Create Tree: Specify Definition page, complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enterprise Locations</td>
</tr>
<tr>
<td>Code</td>
<td>ENT_LOC</td>
</tr>
</tbody>
</table>

c. Click **Next**.
d. On the Create Tree: Specify Labels page, click **Next**.
e. On the Create Tree: Specify Access Rules page, click **Submit**.
3. Create a geographic tree version by completing these steps:
   a. On the Manage Trees and Tree Version page, select the tree that you just created.
   b. On the **Create** icon menu, select **Create Tree Version**.
   c. On the Create Tree Version: Specify Definition page, complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enterprise Locations Version 1</td>
</tr>
<tr>
<td>Effective Start Date</td>
<td>January 1, 2018</td>
</tr>
</tbody>
</table>

d. Click **Next**.
e. On the Confirmation dialog box, click **OK**.
Adding Geography Tree Nodes
Add the geographic tree nodes to your tree version.

1. On the Create Tree Version: Specify Nodes page, click the Create icon.
   a. On the Add Tree Node dialog box, in the Data Source field, select Geographic Tree Calendar Top Scopes Data Source.
   b. In the Available Nodes field, select Global.
   c. Move it to the Selected Nodes field. You select Global because the first node in a geographic tree must be the root node.
   d. Click OK.
3. Click the Create icon.
   a. On the Add Tree Node dialog box, in the Data Source field, select Geographic Tree Territory Code Data Source.
   b. In the Available Nodes field, select these country level nodes:
      - GB United Kingdom
      - IN India
      - US United States
   c. Move them to the Selected Nodes field.
   d. Click OK.
4. On the Create Tree Version: Specify Nodes page, expand the Global node.
5. Select a country node, for example, GB United Kingdom.
6. Click the Create icon.
   a. On the Add Tree Node dialog box, in the Data Source field, select Geographic Tree Calendar Events Data Source. This enables you to define state and city level nodes.
   b. In the Available Nodes field, select England, United Kingdom and Scotland, United Kingdom.
   c. Move them to the Selected Nodes field.
   d. Click OK.
7. On the Create Tree Version: Specify Nodes page, expand the GB United Kingdom node
8. Select England, United Kingdom.
9. Click the Create icon.
   a. On the Add Tree Node dialog box, in the Data Source field, select Geographic Tree Calendar Events Data Source.
   c. Move it to the Selected Nodes field.
   d. Click OK.
10. On the Create Tree Version: Specify Nodes page, click Submit.
11. On the Confirmation dialog box, click OK.

You created a geographic hierarchy tree for Global > United Kingdom > England, United Kingdom > London, England. Repeat steps 6 and 11 to create country and state level nodes for India and the United States, such as:

- India, Telangana, Hyderabad
- India, Karnataka, Bangalore
- United States, California, San Mateo
Auditing, Activating and Row-Flattening the Geographic Tree Version

1. On the Manage Trees and Tree Versions page, expand the geographic tree that you created.
2. Select the tree version that you created.
3. On the Actions menu, select Audit.
   a. On the Trees Audit Result page, click Online Audit.
   b. On the Confirmation dialog box, click OK.
   c. On the Tree Audit Result page, click Done.
4. On the Manage Trees and Tree Versions page, ensure that the tree version that you created is still selected.
5. On the Actions menu, select Set Status > Active.
   a. On the Confirmation dialog box, click OK.
6. On the Manage Trees and Tree Versions page, ensure that the tree version that you created is still selected.
7. On the Actions menu, select Flatten > Row Flattening. Flattening the tree version makes tree retrieval and display faster.
   a. On the Row Flattening page, click Online Flattening.
   b. On the Confirmation dialog box, click OK.
   c. On the Row Flattening page, click Done.
8. On the Manage Trees and Tree Versions page, click Done.

Defining a Calendar Event

1. In the Workforce Information area, click Manage Calendar Events.
2. On the Manage Calendar Events page, click the Create icon.
   a. On the Create Calendar Event page, complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>May Day</td>
</tr>
<tr>
<td>Short Code</td>
<td>MD_HYD</td>
</tr>
<tr>
<td>Category</td>
<td>Public Holiday</td>
</tr>
<tr>
<td>Start Date</td>
<td>5/1/18 12:00 AM</td>
</tr>
<tr>
<td>End Date</td>
<td>5/2/18 12:00 AM</td>
</tr>
</tbody>
</table>

b. In the Coverage section, complete the fields, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hierarchy Type</td>
<td>Geographic</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>Enterprise Locations</td>
</tr>
</tbody>
</table>

This hierarchy is the tree that you defined on the Manage Geography Trees page. The newly created nodes appear in the Coverage Source section.

c. In the Coverage Source section, expand the India > Telangana, India nodes.
d. Select **Hyderabad, Telangana**.
e. Click Include.
f. Click Submit.
g. On the Confirmation dialog box, click OK.

On the Manage Calendar Events page, you can see that the Calendar event **May Day** was created. Repeat step 2 to create other events, such as:

- Thanksgiving day for San Mateo
- Boxing day for England

3. On the Manage Calendar Events page, click **Done**.

### Overriding the Default Geography Hierarchy

Now that you have successfully created calendar events, you can override the default geographic hierarchy for the worker’s location, as appropriate. For example, Hyderabad developers are supporting a project management team in Edinburgh, Scotland. For the duration of the project, you want the Edinburgh workers to observe the same public holidays as the Hyderabad workers.

1. Select the **Workforce Structures** offering.
2. In the Workforce Structures area, click **Manage Locations**.
3. On the **Manage Locations** page, search for the worker’s location, for example, using the name **Edinburgh**.
4. In the Results in Table section, select **Edinburgh**.
5. On the **Edit** menu, select **Update**.
   a. On the Update Location dialog box, select the action reason, such as **Seasonal Closure**.
   b. Click **OK**.
6. On the Edit Location page, in the Contact Details section, **Geographic Hierarchy** field, select **Hyderabad**.
7. Click **Save**.
8. On the Confirmation dialog box, click **OK**.
9. Click **Submit**.
10. On the Warning dialog box, click **Yes**.
11. On the Manage Locations page, click **Done**.

You can also define geography hierarchy overriding for England and San Mateo to associate calendar events of these locations to the appropriate workers.

### Viewing the Defined Calendar Events

1. Sign in as a worker in Hyderabad.
2. Click **Me > Time**.
3. On the calendar for May, you can view the event **May Day**.

### Related Topics

- Guidelines for Managing Tree Structures
- Guidelines for Improving the Performance of a Tree Structure
Work Schedule Types

You define availability details for a period of time using work schedule types. You can create 2 types of work schedules for Oracle Fusion HCM applications using the Manage Work Schedules task in the Setup and Maintenance work area. This task is part of the Workforce Deployment offering, Workforce Information functional area.

<table>
<thead>
<tr>
<th>Work Schedule Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>A time-based work schedule has a fixed work day pattern. For example, you define an 8-hour schedule, 5 days a week. You can create a time-based work schedule that starts at 8:00 a.m. and ends at 5:00 p.m. A worker assigned to a time-based work schedule is considered to be available for a fixed number of hours each day.</td>
</tr>
<tr>
<td>Duration</td>
<td>HCM applications ignore work schedules of this type. Use either Time or Elapsed type work schedules instead.</td>
</tr>
<tr>
<td>Elapsed</td>
<td>In an elapsed work schedule, workers don't have a fixed start or end time. For example, some workers may start work at 9.00 a.m., and some at 11.00 a.m. A worker assigned to an elapsed work schedule is considered to be available for a number of hours in a day.</td>
</tr>
</tbody>
</table>

Options to Configure Exceptions in Schedules

When you create a work schedule, you can include exceptions, such as public holidays or training sessions. You can then determine their affect on worker availability using that schedule. Include any of these exceptions in a work schedule:

<table>
<thead>
<tr>
<th>Exception Type</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calendar Event</td>
<td>An exception for a single event on a single day, or across multiple days, such as a public holiday or training event.</td>
</tr>
<tr>
<td>Calendar Event Category</td>
<td>An exception for all calendar events that compose the event category, such as all UK public holidays.</td>
</tr>
<tr>
<td>Resource Exception</td>
<td>An exception for all of the workers associated with the work schedule. For example, all workers associated with the Night Shift schedule are scheduled to attend a training event and so aren’t available for their regular work.</td>
</tr>
</tbody>
</table>

**Work period** exceptions show on the Time work area calendar when either or both of these display options are enabled: Employment schedule and My schedule. **Off period** exceptions don’t.

Create and Assign a Work Schedule

This example demonstrates how to create and assign a work schedule composed of shifts, patterns, and calendar events. The work schedule is for a support department in India and spans the calendar year. The department has 2 shifts during the
week. The day shifts are Monday through Wednesday from 9:00 AM to 5:00 PM. The night shifts are Thursday and Friday from 5:00 PM to 1:00 AM. The work schedule starts with the day shift. All support workers are eligible for all public holidays. In this example, 1 support worker, Vijay Singh, is scheduled to attend the Advance Communication Skills training on February 8. His work schedule must indicate that he is unavailable on that day.

**Task Summary**

Create and assign a work schedule using this basic process:

1. Create calendar events in the **Public Holiday** category.
2. Create the day and night shifts.
3. Create a weekly work pattern composed of the day and night shifts.
4. Create a work schedule composed of the weekly work pattern and a **Public Holiday** calendar event category exception.
5. Assign this work schedule to the **Support IN** department.
6. Assign this work schedule to Vijay Singh and add the training calendar event exception, indicating that he is unavailable during the training.

**Prerequisites**

Make sure that these tasks are complete. The tasks are in the Setup and Maintenance work area, Workforce Deployment offering, Workforce Information functional area.

1. Ensure that the geographic hierarchy that you created for your enterprise contains a country node for **India**. Use the **Manage Geographic Trees** task to confirm that the country node exists or create it.
2. Ensure that the **Support_Workers** eligibility profile exists and identifies all workers in your support department. Use the **Manage Eligibility Profiles** task to confirm that they profile exists or create it.

**Creating Calendar Events**

Complete this task in the Setup and Maintenance work area, Workforce Deployment offering, using the Workforce Information functional area.

1. In the Workforce Information section, click **Manage Calendar Events**.
2. On the Manage Calendar Events page, click **Create**.
3. On the Create Calendar Event page, complete the fields, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The name of the public holiday, such as <em>Gandhi Jayanti</em></td>
</tr>
<tr>
<td>Category</td>
<td>Public Holiday</td>
</tr>
<tr>
<td>Start Date</td>
<td>The date when the public holiday starts, such as <em>October 2 12:00 AM</em></td>
</tr>
<tr>
<td>End Date</td>
<td>The date when the public holiday ends, such as <em>October 2 11:59 PM</em></td>
</tr>
<tr>
<td>Short Code</td>
<td>A code to identify the public holiday, such as <em>GANJAY</em></td>
</tr>
<tr>
<td>Hierarchy Type</td>
<td>Geographic</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>The geographic hierarchy that you created for your enterprise, such as <em>Enterprise Locations</em></td>
</tr>
</tbody>
</table>
4. In the Coverage section that displays the selected geographic hierarchy, expand the hierarchy and select the India node.
5. Click Include.
6. Click Submit.
7. On the Confirmation dialog box, click OK.
8. To add other calendar events, repeat steps 2 through 7.
9. Click Done.

Creating Shifts
1. In the Workforce Information section, click Manage Work Shifts.
2. Create the 2 shifts by completing these steps twice.
   a. On the Manage Work Shifts page, Create icon menu, select Create Time Shift.
   b. On the Create Time Shift dialog box, complete the fields for 1 of the shifts, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Day Shift Value</th>
<th>Night Shift Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Day Shift</td>
<td>Night Shift</td>
</tr>
<tr>
<td>Start Time</td>
<td>09:00 AM</td>
<td>05:00 PM</td>
</tr>
<tr>
<td>Duration</td>
<td>8 Hours</td>
<td>8 Hours</td>
</tr>
<tr>
<td>Shift Detail Type</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

   c. Click Save and Close.
3. On the Manage Work Shifts page, click Done.

Creating a Workday Pattern
1. In the Workforce Information section, click Manage Work Workday Patterns.
2. On the Manage Work Workday Patterns page, Create icon menu, select Create Time Workday Pattern.
3. On the Create Time Workday Pattern dialog box, complete the fields, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Weekly Work Pattern</td>
</tr>
<tr>
<td>Length in Days</td>
<td>7</td>
</tr>
</tbody>
</table>

4. Add the 2 workday pattern details by completing these steps twice.
   a. In the Workday Pattern Details section, click the Add Row icon.
   b. Complete the fields for 1 of the patterns, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Day Shift Value</th>
<th>Night Shift Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Day</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>End Day</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>
5. Click **Save and Close**.
6. On the Manage Work Workday Patterns page, click **Done**.

### Creating a Work Schedule

1. In the Workforce Information section, click **Manage Work Schedules**.
2. On the Manage Work Schedules page, click **Create**.
3. On the Create Work Schedule page, complete the general fields, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Work Schedule for Support</td>
</tr>
<tr>
<td>Category</td>
<td>Work</td>
</tr>
<tr>
<td>Type</td>
<td>Time</td>
</tr>
<tr>
<td>Effective From Date</td>
<td>January 1 of the current year</td>
</tr>
<tr>
<td>Effective To Date</td>
<td>December 31 of the current year</td>
</tr>
</tbody>
</table>

4. Add the pattern by completing the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td>1</td>
</tr>
<tr>
<td>Name</td>
<td>Weekly Work Pattern</td>
</tr>
</tbody>
</table>

5. Add the exception by completing the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Calendar event category</td>
</tr>
<tr>
<td>Name</td>
<td>Public holiday</td>
</tr>
</tbody>
</table>

6. Add the **Support_Workers** eligibility profile.
7. Click **Submit**.
8. On the Manage Work Schedules page, click **Done**.

### Assigning the Work Schedule to a Department

1. In the Workforce Information section, click **Manage Work Schedule Assignment Administration**.
2. On the Manage Work Schedule Assignment Administration page, search for and click **Work Schedule for Support**.

3. On the Edit Work Schedule Assignment Administration: Work Schedule for Support page, in the Resource Assignments section, click the **Add Row** icon.

4. Complete the fields, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Type</td>
<td>Department</td>
</tr>
<tr>
<td>Name</td>
<td>Support IN</td>
</tr>
<tr>
<td>Start Date</td>
<td>January 1 of the current year</td>
</tr>
<tr>
<td>End Date</td>
<td>December 31 of the current year</td>
</tr>
<tr>
<td>Primary</td>
<td>Yes</td>
</tr>
</tbody>
</table>

5. Click **Submit**.

6. On the Confirmation dialog box, click **OK**.

7. On the Manage Work Schedule Assignment Administration page, click **Done**.

### Modifying the Work Schedule of a Worker

1. Click **Navigator > Person Management**.

2. On the Person Management: Search page, search for and click the worker, such as **Vijay Singh**.

3. On the Tasks panel tab, click **Manage Work Schedule Assignment**.

4. On the Manage Work Schedule Assignment page, click the **Add Row** icon.

5. Complete the fields in the Schedules section, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Work Schedule for Support.</td>
</tr>
<tr>
<td>Start Date</td>
<td>January 1 of the current year</td>
</tr>
<tr>
<td>End Date</td>
<td>December 31 of the current year</td>
</tr>
<tr>
<td>Primary</td>
<td>Yes</td>
</tr>
</tbody>
</table>

6. In the Exceptions section, click the **Add Row** icon.

7. Complete the fields, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Resource Exception</td>
</tr>
<tr>
<td>Name</td>
<td>In the choice list, click <strong>Create</strong>. Create a resource exception called <strong>Advanced Communication Skills</strong> that starts and ends on <strong>February 8</strong>.</td>
</tr>
<tr>
<td>Availability</td>
<td>Off Period</td>
</tr>
</tbody>
</table>
FAQs for Work Schedules

What's a half day calendar event?
An event that divides the duration shift on the day in half and shows the worker's availability for the first half of the day. You can apply the event on elapsed work schedules.

How can I associate calendar events with countries?
On the Manage Trees page, you must create a geographic tree version using the predefined HCM Geographic Hierarchy tree structure and add country nodes. When you create a calendar event, select that geographic tree version and select countries that you want the calendar event to apply to.

You can also define calendar events for nodes below country level such as states, cities, or cantons. For example, in the UK you may want to declare a holiday in Scotland, but not in England, Wales or Northern Ireland.

How do I create a calendar event category?
Add lookup codes to the Calendar Event Category lookup type. Use the Manage Availability Lookups task in the Setup and Maintenance work area.

When do calendar events affect workers?
When you include that event as an exception in a work schedule and assign it as a primary work schedule to the worker's assignment. However, if no work schedule exists for the worker's assignments, then the calendar events that cover the worker's location or department apply.

What's a primary work schedule?
Schedule that the application uses to determine the worker's availability.

Only primary schedules determine worker availability. For example, you want to assign two schedules for different time periods to a worker's primary assignment. If you want those schedules to determine the worker's availability for those time periods, you must select both schedules as primary. You manage work schedules using the Manage Work Schedule Assignment task in the Person Management work area.

If you assign only a single work schedule, that schedule automatically determines worker availability.

How do I change exceptions in work schedules for individual workers?
When you assign a schedule to a worker using the Manage Work Schedule Assignment page, you can change how the exceptions affect that worker's availability. For example, you added a calendar event as an exception that affects all workers. A particular worker must remain available to handle critical customer queries, so you change the worker's availability for that exception.

FAQs for Workforce Records
How can I enable the network at work features?

As an Implementor, you can enable and configure network at work using the Configure Offerings page in the Setup and Maintenance work area. You select the Network at Work functional area under the Workforce Deployment offering.

Social network integration is disabled by default. You can enable social network integration and specify whether to enable the Follow action and publish HCM profile updates to Oracle Social Network.
12 Workforce Profiles

Overview of Profile Management

Profile management provides a framework for developing and managing talent profiles that meet your industry or organizational requirements. Profiles summarize the qualifications and skills of a person or a workforce structure such as a job or position.

Profiles are valuable for tracking workers’ skills, competencies, and accomplishments, and for various talent management activities, such as career planning, identifying training needs, performance management, and in the recruitment process for identifying job requirements and suitable applicants.

This topic discusses:

- Profile search
- Profile comparison
- Best-fit analysis

Profile Search

You can search for worker, job, and position profiles based on certain criteria. For example, a Human Resource (HR) Specialist in London requiring to fill an Applications Developer position internally, can search for profiles of all workers who are based in London and have experience with Java and PL/SQL.

Profile Comparison

Use the Compare option in the Organization Chart tab on the person gallery to compare profiles. You can compare profiles to determine next career moves or training needs for workers, and identify suitable candidates for jobs. For example, John is looking for his next career move. He can compare his profile to that of a job to determine whether his competency ratings match the targeted competency ratings in a job profile. If his Teamwork rating is 3 and the rating requirement for the job is 4, he has a deficiency of -1. John and his manager can use this gap to drive development plans and other talent management-related functions.

Best-Fit Analysis

Use the best-fit analysis to determine the person profile that most closely matches a job profile and vice versa. For example, if you want to fill a Developer vacancy, and the job profile requires a B.S. degree in Computer Science, level 4 expertise in Java, and a rating of at least 3 in Teamwork, you can review an automatically-generated list of workers who most closely match this set of requirements. You can also use the best-fit analysis to find workers who are similar to a selected worker, or jobs that are similar to a selected job.

Note: If you’re an existing customer and have Oracle Recruiting Cloud or Oracle Learning Cloud, you must enable the enhanced Talent Profile feature. For more information, see the documents in this article: Controlled Availability -- Upgrading Oracle Fusion Profile Management (Doc ID 2421964.1) on My Oracle Support at https://support.oracle.com.
Related Topics

- Comparing Items
- How Best-Fit is Calculated

Oracle Fusion Profile Management Components: How They Work Together

You can configure Oracle Fusion Profile Management to meet your business requirements using these components: the content library, profiles and profile types, content subscribers, educational establishments, instance qualifier sets, and rating models.
This figure illustrates how the components of Profile Management fit together.

Content Library
The content library provides the foundation for profiles as it stores both content types and content items.

Profile Types
Profile types are templates that you use to create profiles. Profile types determine:

- Whether the profile is for a person or for a workforce structure such as a job or a position.
- The content of the profile.
You select content types from the content library to create content sections for the profile type.

Profiles
You create person profiles for individual workers and model profiles for workforce structures, such as jobs or positions. The profile type that you select for the model profile determines the information that you complete for the profile. For example, a person profile might contain information about a person’s education, language skills, competencies, and activities and interests. A job profile might contain information about the requirements for the job, such as competencies, language skills, degrees, or certifications.

Content Subscribers
Content subscribers are applications external to Profile Management that use content types.

Educational Establishments
You can define educational establishments to enable workers to add education information, such as degrees, to their profile.

Instance Qualifier Sets
You assign instance qualifiers to content types. Instance qualifier sets uniquely identify multiple instances of a content item on a profile. For example, if multiple people update a performance rating for a competency on a worker’s profile, instance qualifiers provide a unique identifier to each instance of the competency. The unique identifier enables you to determine who provided each rating.

Rating Models
When you create content types in the content library, you can attach rating models to determine the scale for measuring performance and proficiency. You can also use rating models to measure the risk and impact of loss for workers, and to measure their potential.

Rating Models
Use rating models to rate workers on their performance and level of proficiency in the skills and qualities that are set up on the person profile. You can also use rating models to specify target proficiency levels for items on a model profile, so that the model profile can be compared to workers’ profiles. Use the Manage Profile Rating Models task in the Profiles work area to create a rating model.

To rate workers on their performance and proficiency, attach rating models to the content types included in the person profile. Then you can rate workers on the items within the type. For example, you can rate workers on the Communication content item within the Competencies content type.
For model profiles, you can specify target proficiency levels for items on the profile, to compare model profiles with worker profiles. Using the ratings:

- Managers can compare a model profile to workers’ profiles with and determine the best person suited to fill a position.
- Workers can compare their profile to model profiles to identify:
  - Suitable positions within the organization.
  - Skill gaps and fill the gaps before applying for other positions.

Rating models that measure workers’ potential and the impact and risk of loss are also available.

Rating models can include some or all of the following components, depending on the use for the model:

- Rating levels
- Review points
- Rating categories
- Distributions

**Rating Levels**

Rating levels identify the qualitative values, such as 1, 2, 3, or 4, that you use to rate a worker.

For rating models that are used by Oracle Fusion Performance Management, you must:

- Define numeric ratings, particularly for rating models in performance documents that use calculated ratings.
- Define rating levels using whole numbers, with the highest number indicating the best rating. Rating levels determine high and low ratings in the analytics.

**Review Points**

Define review points for rating models in performance documents that use the average, sum, or band calculation method. The review points and point ranges that you define for the rating model are used to calculate ratings.

**Rating Categories**

Using rating categories you can group rating levels together for analysis tools used in the talent review process, such as the box chart that is used in the talent review process. You can group rating levels into categories such as low, medium, and high, and those categories then become the labels for the analytic. You should not change rating categories after setting them up, as the changes could affect the analytic.

**Distributions**

Oracle Fusion Compensation Management and Oracle Fusion Performance Management both use rating model distributions to determine the targeted minimum and maximum percentage of workers that should be given each rating level.

Compensation Management uses the distribution values that you set up directly on rating models. However, you can set up distributions using the Manage Target Ratings Distribution task for rating models that are used in Performance Management.

**Related Topics**

- How You Compare Workers Using the Performance and Potential Box Chart
- Considerations for Creating Performance Template Sections
- Considerations for Using Performance Template Section Calculation Rules
How You Update Talent Ratings

Talent ratings are ratings that are used to evaluate a worker, including performance, potential, proficiency, readiness, and impact. Ratings are used in multiple products within the HCM product family such as Oracle Fusion Profile Management, Oracle Fusion Performance Management, and Oracle Fusion Talent Review.

Talent Rating Types

The following table displays the talent ratings and their description. Depending on application settings and roles assigned, you can view, add, and update these talent ratings across multiple products within the HCM product family.

<table>
<thead>
<tr>
<th>Talent Ratings</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talent score</td>
<td>Evaluate a person’s overall value to the organization using a rating model your organization defines.</td>
</tr>
<tr>
<td>Performance rating</td>
<td>Evaluate an item, section, or overall performance document.</td>
</tr>
<tr>
<td>Potential level</td>
<td>Evaluate a person based on the execution of the person’s work.</td>
</tr>
<tr>
<td>Potential score</td>
<td>Evaluate a person’s attainable level of excellence or ability to achieve success.</td>
</tr>
<tr>
<td>N box cell assignment</td>
<td>Evaluate a person’s current contribution and potential contribution to the organization on a box chart matrix with N boxes. N represents the number of boxes in the grid.</td>
</tr>
<tr>
<td>Advancement readiness</td>
<td>Evaluate a person’s readiness for the next position in their career development.</td>
</tr>
<tr>
<td>Risk of loss</td>
<td>Evaluate the likelihood of a person leaving the company.</td>
</tr>
<tr>
<td>Impact of loss</td>
<td>Evaluate the real or perceived effects on an organization when the person leaves.</td>
</tr>
<tr>
<td>Proficiency</td>
<td>Evaluate a person’s skill level for a competency.</td>
</tr>
<tr>
<td>Behavior ratings</td>
<td>Evaluate a person’s actions for a behavior associated with a competency.</td>
</tr>
</tbody>
</table>

Updating Talent Ratings

You can update talent ratings depending on application settings and roles assigned to you. The following table shows where talent ratings can be updated.
---|---|---|---|---
Talent score | Yes | Yes | No | No
Performance rating | Yes | Yes | Yes | No
Potential level | Yes | Yes | No | No
Potential score | Yes | Yes | No | No
N box cell assignment | No | Yes | No | No
Advancement readiness | Yes | No | No | No
Risk of loss | Yes | Yes | No | Yes
Impact of loss | Yes | Yes | No | Yes
Proficiency | Yes | No | Yes | No

*Note:* You can update Behavior ratings under Competencies on the Edit Skills and Qualifications page for a person.

When you update talent ratings:

- The performance rating on a performance document is always the one entered by the manager during a worker’s performance evaluation. The performance rating from the worker’s performance document is then displayed on the worker’s profile when configured to do so in the performance template.
- In Oracle Fusion Compensation Management, if configured, you can also update the performance, performance goals section, and competencies section ratings, which appear in performance documents.
- The talent review process uses talent ratings on the worker’s profile to build talent review information. When a talent review meeting concludes, a worker’s profile is automatically updated with the calibrated ratings. Therefore, the performance rating displayed in a worker’s performance document might be different from the one displayed in the worker’s profile.

Related Topics

- How You Configure Performance Ratings in Compensation
- How You Modify the Skills and Qualifications Page to View Talent Ratings

Content Types and Content Items
Content Types

Content types are the skills, qualities, and qualifications that you want to track in talent profiles. The content library contains predefined content types such as competencies, languages, and degrees, but you can create custom content types as needed. You can also create free-form content types. Use the Manage Content Types task in the Profiles work area to create a custom content type.

Depending on your business requirements, you can use predefined content types or create custom content types. A predefined or custom content type, can be a free-form content type or not.

Content Types Other than Free-Form

In addition to a code, name, and description, content types that aren’t free-form contain the following details:

- Properties: Represents the information that you want to capture for the content type. You define properties for a content type on the Field Properties tab on the Edit Content Type page.

  Note: On the Field Properties tab, the values of the following fields are automatically generated and can’t be edited:
  - Content Type ID
  - Content Item ID
  - Name
  - From Date
  - Content Supplier

- Relationships: Associations between content types, where one content type is a parent of another, or where one content type supports another. You define relationships for a content type on the Relationships tab on the Edit Content Type page. On the Relationships tab, the Proficiency Calculation Rule field is applicable for the Behaviors content type only. The value of this field is set to Average by default and can’t be edited.

  You can specify whether one content type is a parent of another, or whether one content type supports another. Content items inherit the relationship of associated content types. After you create a relationship, you can’t delete it. You can only specify an end date for it so that the relationship is no longer applicable from the end date.

  You can’t create:
  - Two kinds of relationships between two content types. For example, the content type A can’t be both the parent and child of the content type B.
  - A relationship between a content type and itself. For example, a content type can’t be related to itself.

- Subscribers: Codes that represent other Oracle Cloud products or applications that use content types. To use a content type in an Oracle Cloud application, you must add the predefined subscriber code associated with the application to the content type. Custom subscriber codes aren’t supported. You add subscriber codes to a content type on the Subscribers tab on the Edit Content Type page.

Examples of predefined content types that aren’t free-form are:

- Categories
- Competencies
- Components
Free-Form Content Types

A free-form content type contains only a code, name, and a description, and does not have any properties defined for it until you add it to a profile type. Free-form content types do not include any content items.

Note: Free-form content types don’t contain relationships or properties. You add properties for free-form content types when you add them to a profile type.

You can use free-form content types when you don’t need a content item because the attribute captured for the content section is free-formed or less-structured. For example, you can’t set up a free-form content type to store information for career-related information.

Examples of predefined free-form content types are:

- Accomplishments
- Advancement Readiness
- Areas of Study
- Career Preferences
- Career Potential
- Career Statement
- Criticality
- Enrollments
- Highest Education Level
- Learning
- Performance Rating
- Previous Employment
- Risk of Loss
- Special Projects
- Talent Score
- Work Requirements
Content Type Properties

Content type properties represent the information that you want to capture for a content type. Content items inherit the fields and field properties that you define for the content type to which the item belongs. Use the Manage Content Types task in the Profiles work area to create or edit a content type and define its properties. You view properties for a content type on the Field Properties tab on the Edit Content Type page.

You define properties for content types that aren’t free-form. For free-form content types, the properties are defined when you add them as a content section to a profile type.

The values of the following content type properties for content types that aren’t free-form content types are automatically generated for a profile item and should not be modified:

- CONTENT_ITEM_ID
- CONTENT_SUPPLIER_CODE
- CONTENT_TYPE_ID
- DATE_FROM
- NAME

Note: The DATE_FROM property stores the start date information of a content item within the content type. This field is used for maintaining the history of content items and isn’t recommend to be displayed on the UI.

Attributes of Content Type Properties

Each content type property has a field for which you set attributes. You determine attributes for each content type property that will be used for defining the relevant content items. The attributes that you can set for each content type property that you include for a content type are displayed in the following table.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Default Value</strong></td>
<td>Value that appears by default for the property on the UI</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>Determines if the property is editable, hidden, or display only for a content item</td>
</tr>
<tr>
<td><strong>Label</strong></td>
<td>Label for the property displayed on UI when the property is included within a content type</td>
</tr>
<tr>
<td><strong>Required</strong></td>
<td>Determines if the user is required to populate the field</td>
</tr>
<tr>
<td><strong>Source</strong></td>
<td>Name of the lookup type that provides values for the property. This attribute is specified for properties ITEM_TEXT_1 to ITEM_TEXT_10</td>
</tr>
</tbody>
</table>

Content Type Properties List

The following table describes a list of content type properties you can define for a content type that isn’t free-form. These properties appear on the Field Properties tab on the Edit Content Type page.
Content Type Property | Specifies
--- | ---
**COUNTRY_ID** | The country ID associated with the content item within the content type

**ITEM_DATE_1 to ITEM_DATE_10** | Any date. Use these fields to enter dates for profile items

**ITEM_NUMBER_1 to ITEM_NUMBER_7** | Any numeric data

**ITEM_TEXT_1 to ITEM_TEXT_10** | Data that requires selecting values from a list. Each field can store up to 30 characters of data. You provide values for **ITEM_TEXT_1 to ITEM_TEXT_10** properties by specifying a lookup type for their **Source** attribute

**ITEM_TEXT_11 to ITEM_TEXT_30** | Nontranslatable data, such as a code or serial ID. Each field can store up to 30 characters of data

**ITEM_TEXT_TL_1 to ITEM_TEXT_TL_5** | Translatable data. Each field can store up to 240 characters of data

**ITEM_TEXT_TL_6 to ITEM_TEXT_TL_10** | Translatable data. Each field can store up to 2000 characters of data

**ITEM_TEXT_TL_11 to ITEM_TEXT_TL_15** | Translatable data. Each field can store up to 4000 characters of data

**RATING_MODEL_ID** | The rating model. The rating model you specify for a content type is also applicable for content items associated with the content type. However, for the content items added to the Competencies content type, the rating model selected for the Competencies content section takes precedence

**STATE_PROVINCE_ID** | The state ID associated with the content item within the content type

Content Subscribers

Content subscribers are codes that represent functional areas that use content types. You manage subscriber codes using the Manage Content Subscribers task in the Profiles work area.

To use a content type in a functional area, you must add the associated predefined subscriber code to the content type.

Example: You add a new custom content type Corporate Citizenship to the Person profile type. To view the content section for Corporate Citizenship in the Skills and Qualifications work area, you must add the HRMS content subscriber code to the new content type.

*Note:* Custom subscriber codes aren’t supported.

By default, the application provides predefined subscriber codes for:

- Oracle Fusion applications such as:
  - Talent Review
  - Succession Management
• Performance Management
• Network at Work
• Resource Management

• Work areas within Oracle Fusion applications such as:
  • Person Management
  • Profiles

📝 **Note:** Different subscriber codes are used to make content types available for job profiles and person profiles in the Profiles work area.
  • Skills and Qualifications
  • Team Talent

• Other Oracle Cloud applications such as Oracle Taleo Recruiting Cloud Service

**Predefined Subscriber Codes for Oracle Fusion Applications**

To make a content type available within an Oracle Fusion application, you must add the associated predefined subscriber code to the content type.

The following table displays the predefined subscriber codes and the corresponding Oracle Fusion application where the subscribed content types are displayed.

<table>
<thead>
<tr>
<th>Subscriber Code</th>
<th>Oracle Fusion Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRTR</td>
<td>Talent Review</td>
</tr>
<tr>
<td>SM</td>
<td>Succession Management</td>
</tr>
<tr>
<td>HRA</td>
<td>Performance Management</td>
</tr>
<tr>
<td>HRS</td>
<td>Network at Work</td>
</tr>
<tr>
<td>RM</td>
<td>Resource Management</td>
</tr>
</tbody>
</table>

**Predefined Subscriber Codes for Work Areas**

To make a content type available in a work area within the application, you must add the associated predefined subscriber code to the content type.

The following table displays the predefined subscriber codes, the corresponding work area where the subscribed content types are displayed, and the navigation to the work area.
Predefined Subscriber Codes for Other Cloud Applications

To make a content type available in Oracle Taleo Recruiting Cloud Service, you must add the predefined subscriber code TALEO to the content type.

Examples of Content Type Relationships

You can associate content items of related content types with each other using content relationships. Use the Relationships tab on the Edit Content Type page to define content type relationships. The following scenarios illustrate the use of content type relationships.

Tracking Product Expertise

The Resource Manager component of Oracle Fusion Trading Community Model uses content type relationships to track the areas of expertise of workers. Using the predefined content type relationship where the Categories content type is a parent of Products, and Products is a parent of Components; resource managers can keep track of the categories, products, and components that they consider as areas of expertise for their resources.

Note: Because these content types and relationships apply only to the Resource Manager component of Oracle Fusion Trading Community Model, this product is the only predefined content subscriber to these content types.
Specifying Target Outcomes for Goals
Workers can manage their goals by associating their goals with target outcomes, which are content types such as Competencies and Memberships. You can set up a relationship on the Competencies content type where Competencies is supported by Goals. Workers can then set up goals that have a specific competency as a target outcome.

Content Items
Content items are the individual skills, qualities, and qualifications within the content types in the content library. For example, within the Competencies content type, communication is a content item. Use the Manage Content Items task in the Profiles work area to create content items that meet your business needs.

This topic discusses:
- Item properties
- Related content items
- Proficiency descriptions

Item Properties
Content items inherit the fields and field properties that you define for the content type to which the item belongs. For example, one of the fields defined for the Memberships content type is ITEM_DESCRIPTION field. The attributes of this field are set up so that the label is Description, the field is editable, and the field doesn't require an entry. When you set up a content item for the Memberships content type, the application displays a field labeled Description, in which you can enter text to describe the agency, but the field isn't required.

Related Content Items
If the content type for which you are creating an item has related content types, then you can enter the related content items for the item. For example, if you have a content type relationship where the Goals content type supports the Competencies content type, then on the content items for competencies, you can enter the related goals.

Proficiency Descriptions
If the content item belongs to a content type that has a rating model defined for it, then you can either use the existing descriptions for the ratings within the model, or define descriptions for the ratings that are specific to the content item. When ratings exist for the content item, the descriptions defined for the item are used instead of those on the rating model.

How You Enable Approvals for Content Types
By default, any changes to a talent profile aren't subject to approval. When you edit a talent profile, all changes are visible immediately on the talent profile. HR specialists and implementors can enable approvals for each content type so that worker edits on the worker's talent profile require approval.

Content types are defined as content sections in profile types. You can enable approvals for a content section when you edit or create a profile type by using the Manage Profile Types task. You can open the task:
- In the Setup and Maintenance work area. To open the Setup and Maintenance work area, select Navigator > Setup and Maintenance.
- In the Profiles work area. To open the Profiles work area, select Navigator > My Workforce > Profiles.
As an HR specialist or implementor, follow these steps to enable approval for a content section when you create or edit the person profile type on the Manage Profile Types page:

1. On the Content Sections tab, click the link to the content section.
2. Click the content section link in the Content Sections region to open the Content Section page.
3. Select the **Approval Required** check box to enable approval for that content section.
4. Click **OK** to save your changes.

> **Note:** You can enable approval for a content section added to only the Person profile type.

**Related Topics**
- Managing Approval Rules: Explained

### Creating Custom Content Types and Content Items: Worked Example

This example demonstrates how to set up a new custom content type and content items to track the corporate citizenship activities of your workers so that you can rate them on their involvement in the organization. This example also demonstrates how to set up a rating model to use with the content type and add the new content type to the person profile.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can a predefined rating model be used to rate corporate citizenship?</td>
<td>No. The predefined rating models don’t have relevant rating descriptions.</td>
</tr>
<tr>
<td>Should the content type be a free-form content type?</td>
<td>No. Content items are needed, and the content should be stored in the content library.</td>
</tr>
<tr>
<td>What field and properties should the content type contain?</td>
<td>Add two fields to the content type:</td>
</tr>
<tr>
<td></td>
<td>- ITEM_TEXT_20</td>
</tr>
<tr>
<td></td>
<td>- RATING_MODEL_ID</td>
</tr>
<tr>
<td></td>
<td>The ITEM_TEXT_20 field uses a label <strong>Comments</strong> to enter comments about the workers’ corporate involvement. The RATING_MODEL_ID field uses a label <strong>Company Contribution</strong> to attach the rating model for corporate citizenship to the content type.</td>
</tr>
<tr>
<td></td>
<td>Both fields should require entry and should be editable.</td>
</tr>
<tr>
<td>Does the content type need any content subscribers?</td>
<td>Yes. In order to be visible on the person profile, the new content type must be added to the HRMS content subscriber code.</td>
</tr>
<tr>
<td>What content items are needed to track the required information?</td>
<td>- Corporate social responsibility</td>
</tr>
<tr>
<td></td>
<td>- Corporate environmental responsibility</td>
</tr>
<tr>
<td></td>
<td>- Corporate industrial citizenship</td>
</tr>
<tr>
<td></td>
<td>- Corporate state citizenship</td>
</tr>
</tbody>
</table>
In This Example
- Corporate borough, council, or municipal citizenship

When the content type is added to the person profile as a content section, what properties should the fields contain?

Both the Comments and the Company Contribution fields:
- Display in the detail view of the content section
- Are required
- Must be included in search results

To track corporate citizenship for your workers, complete the following tasks:
- Create a rating model.
- Create a content type.
- Create content items.
- Add the content type to the person profile type.

Creating a Rating Model
1. In the Setup and Maintenance work area, search for the Manage Profile Rating Models task and click Go to Task.
2. On the Manage Rating Models page, click Create.
3. On the Create Rating Model page, complete the following fields, as shown in this table. Use the default values except where indicated.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Citizenship</td>
</tr>
<tr>
<td>Rating Name</td>
<td>Corporate Citizenship</td>
</tr>
<tr>
<td>Description</td>
<td>Rating model for corporate citizenship</td>
</tr>
</tbody>
</table>

4. On the Rating Levels tab, complete the following fields, as shown in this table.

<table>
<thead>
<tr>
<th>Rating Level</th>
<th>Name</th>
<th>Short Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demonstrates limited or unused influence.</td>
<td>Limited</td>
</tr>
<tr>
<td>2</td>
<td>Demonstrates clear evidence of influence.</td>
<td>Clear Evidence</td>
</tr>
<tr>
<td>3</td>
<td>Provides a successful image of the company as socially responsible in limited environments.</td>
<td>Successful Image</td>
</tr>
<tr>
<td>4</td>
<td>Actively called upon to use influence as a corporate representative in selected environments.</td>
<td>Influential in Selected Environments</td>
</tr>
<tr>
<td>5</td>
<td>Demonstrates high level of influence and can operate effectively in all environments.</td>
<td>High Level of Influence</td>
</tr>
</tbody>
</table>
5. Click **Save and Close**.

Creating a Content Type

1. In the Setup and Maintenance work area, search for the Manage Profile Content Types task and click Go to Task.
2. On the Manage Content Types page, click **Create**.
3. On the Create Content Type page, add a content type by completing the following fields, as shown in this table. Use the default values except where indicated.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Citizenship</td>
</tr>
<tr>
<td>Name</td>
<td>Corporate Citizenship</td>
</tr>
<tr>
<td>Description</td>
<td>Ratings for corporate citizenship behaviors for workers.</td>
</tr>
</tbody>
</table>

4. Set up the following field properties, as shown in this table. Use the default values except where indicated.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Field Label</th>
<th>Required</th>
<th>Display Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM_TEXT_20</td>
<td>Comments</td>
<td>Selected</td>
<td>Editable</td>
</tr>
<tr>
<td>RATING_MODEL_ID</td>
<td>Company Contribution</td>
<td>Selected</td>
<td>Editable</td>
</tr>
</tbody>
</table>

5. Click **Save and Close**.
6. On the Manage Content Types page, select the Corporate Citizenship content type and click **Edit**.
7. On the Edit Content Type page, select the Subscribers tab.
8. On the Subscribers tab, click **Add**.
9. In the Subscriber Code field, select HRMS.
10. Click **Save and Close**.

Creating Content Items

1. In the Setup and Maintenance work area, search for the Manage Profile Content Items task and click Go to Task.
2. On the Manage Content Items page, click **Create**.
3. In the Create Content Item dialog box, complete the following fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Type</td>
<td>Corporate Citizenship</td>
</tr>
<tr>
<td>Content Item</td>
<td>Corporate Social Responsibility</td>
</tr>
</tbody>
</table>

4. On the Create Content Item: Corporate Social Responsibility page, select the Corporate Citizenship rating model in the Rating field.
5. Click **Save and Close**.
6. Repeat steps 2 through 5 to add content items for Corporate Environmental Responsibility, Corporate Industrial Citizenship, Corporate State Citizenship, and Corporate Borough, Council, or Municipal Citizenship.

Adding the Corporate Citizenship Content Type to the Person Profile Type

1. In the Setup and Maintenance work area, search for the Manage Profile Types task and click Go to Task.
2. On the Manage Profile Types page, locate the Person profile type and click Edit.
3. On the Edit Profile Type: Person page, select the Content Sections tab.
4. In the Content Sections region, click Add Content Section.
5. In the Content Types dialog box, select Citizenship.
6. In the Content Sections region, click Citizenship.
7. On the Content Section page, set up the following field properties, as shown in this table. Use the default values except where indicated.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Display</th>
<th>Required</th>
<th>Searchable</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM_TEXT240_1</td>
<td>Detail</td>
<td>Selected</td>
<td>Selected</td>
</tr>
<tr>
<td>RATING_LEVEL_ID1</td>
<td>Detail</td>
<td>Selected</td>
<td>Selected</td>
</tr>
</tbody>
</table>

8. On the Edit Profile Type: Person page, click Save and Close.
9. In the Content Access Section region, click Add.
10. In the Role field, select Employee.
11. Select the Update check box.
12. Click Add.
13. In the Role field, select Manager.
14. Click OK.
15. Click Add.
16. In the Role field, select HR Specialist.
17. Click OK.
18. On the Edit Profile Type: Person page, click Save and Close.

Create Free-Form Custom Content Types

This example demonstrates how to set up a free-form custom content type, add it to the HRMS content subscriber code, and then add the content type to the person profile type.

Your company wants to track the previous employment information for workers, including employer name, dates of employment, and job description. However, you don’t want to set up and maintain content items for each employer, and this information applies only to person profiles. You decide to use a free-form content type for this information. You can set up the free-form content type with minimal information. Then when you add it to the person profile as a content section, you can define properties for employer name, dates of employment, and job description. Workers can complete their employment information on their profile based on how you set up the content section. The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must the content type be a free-form content type?</td>
<td>Yes. Content items aren’t needed, and the content must not be stored in the content library.</td>
</tr>
</tbody>
</table>
### Decisions to Consider

<table>
<thead>
<tr>
<th>Does the content type need any content subscribers?</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes. In order to be visible on the person profile, the new content type must be added to the HRMS content subscriber code.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>When the content type is added to the person profile as a content section, what fields are needed?</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>To capture the previous employer, a text field is needed. To capture employment dates, two date fields are needed. To capture job description, another text field is needed. Therefore, the following fields must be added:</td>
<td></td>
</tr>
<tr>
<td>• ITEM_TEXT30_1</td>
<td></td>
</tr>
<tr>
<td>• ITEM_DATE_1</td>
<td></td>
</tr>
<tr>
<td>• ITEM_DATE_2</td>
<td></td>
</tr>
<tr>
<td>• ITEM_TEXT240_1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What properties are needed for the ITEM_TEXT30_1 field?</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>The field isn’t required and the information isn’t available as search criteria, so you must only set up these field properties as follows:</td>
<td></td>
</tr>
<tr>
<td>• Label: Previous Employer</td>
<td></td>
</tr>
<tr>
<td>• Display: Detail (section must appear in detail view of profile)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What properties are needed for the ITEM_DATE_1 field?</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>The field isn’t required and the information isn’t available as search criteria, so you must only set up these field properties as follows:</td>
<td></td>
</tr>
<tr>
<td>• Label: From Date</td>
<td></td>
</tr>
<tr>
<td>• Display: Detail</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What properties are needed for the ITEM_DATE_2 field?</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>The field isn’t required and the information isn’t available as search criteria, so you must only set up these field properties as follows:</td>
<td></td>
</tr>
<tr>
<td>• Label: To Date</td>
<td></td>
</tr>
<tr>
<td>• Display: Detail</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What properties are needed for the ITEM_TEXT240_1 field?</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>The field isn’t required and the information isn’t available as search criteria, so you must only set up these field properties as follows:</td>
<td></td>
</tr>
<tr>
<td>• Label: Job Description</td>
<td></td>
</tr>
<tr>
<td>• Display: Detail</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What role access must be granted for the content section?</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees, managers, and HR specialists must all have access to update the section.</td>
<td></td>
</tr>
</tbody>
</table>

To set up a free-form content type to track previous employment information for workers, you must:

- Set up a free-form content type
- Add the free-form content type to the person profile type

### Setting Up a Free-Form Content Type

1. In the Setup and Maintenance work area, search for the Manage Profile Content Types task and click Go to Task.
2. On the Manage Content Types page, click Create.
3. On the Create Content Type page, complete the following fields, as shown in this table.
Field | Value
--- | ---
Code | PREVEMP
Name | Previous Employment
Description | Track previous employment information for workers.

4. Select the **Free-Form Type** check box.
5. Click **Save and Close**.
6. On the Manage Content Types page, select the **Previous Employment** content type and click **Edit**.
7. On the Edit Content Type page, select the **Subscribers** tab.
8. On the Subscribers tab, select HRMS in the **Subscriber Code** field.
9. Click **Save and Close**.

### Adding the Free-Form Content Type to the Person Profile Type

1. In the Setup and Maintenance work area, search for the **Manage Profile Types** task and click **Go to Task**.
2. On the Manage Profile Types page, select the **Person** profile type, and click **Edit**.
3. On the Edit Profile Type: Person page, select the **Content Sections** tab and click **Add Content Section**.
4. In the Content Types dialog box, select the **Previous Employment** content type.
5. In the Content Sections region, click the **Previous Employment** content type and enter the following properties on the Content Section page, as shown in this table.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Label</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM_TEXT30_1</td>
<td>Previous Employer</td>
<td>Detail</td>
</tr>
<tr>
<td>ITEM_DATE_1</td>
<td>From Date</td>
<td>Detail</td>
</tr>
<tr>
<td>ITEM_DATE_2</td>
<td>To Date</td>
<td>Detail</td>
</tr>
<tr>
<td>ITEM_TEXT240_1</td>
<td>Job Description</td>
<td>Detail</td>
</tr>
</tbody>
</table>

6. In the Content Access Section region, click **Add**.
7. In the Role field, select **Employee**.
8. Select the **Update** check box.
9. Click **Add**.
10. In the Role field, select **Manager**.
11. Click **OK**.
12. Click **Add**.
13. In the Role field, select **HR Specialist**.
14. Click **OK**.
15. On the Edit Profile Type: Person page, click **Save and Close**.
Considerations for Associating Behaviors with Competencies

Behaviors are subcomponents of a competency. You must create a relationship between the Competencies and Behaviors content types so that you can associate their content items. You associate behaviors with competencies using the Relationships tab on the Edit Content Type page of the Behaviors or Competencies content type. Open the Edit Content Type page by using the:

- Manage Content Types task in the Profiles work area.
- Manage Profile Content Types task in the Setup and Maintenance work area.

The following features aren’t available for the Behaviors content type:

- Print behaviors in the Talent Profile Summary report
- Search for persons or competencies based on behaviors using the advanced search
- Upload behaviors content such as from a third-party supplier or HCM Data Loader
- Support for using behaviors in other Oracle Fusion products

When associating behaviors with competencies, you must decide:

- The type of relationship between the Behaviors and Competencies content types
- The duration of each relationship
- Related content items

Deciding the Relationship

You can define the following relationships between the behavior and competencies content types:

- Parent and child relationship: You can define Behaviors as a child of the Competencies content type. Using this relationship, you define a hierarchy where Behavior content items are added to the Competencies content item. For example, when Behaviors is a child of Competencies, you can add the Behaviors content items to one or more Competencies content items. In this relationship, you must associate the same rating model with Competencies and associated Behaviors.
- Supports or supported by relationship: You can enable Behaviors to support the Competencies content type, and vice versa. The supported or supporting content items are not in a hierarchical relationship with one another. That is, each content item associated with a content type is independent of the content items of the other content type. Therefore, you can associate different rating models with each content type, and then add their content items to a profile and review them together.

Note: The proficiency calculation rule is applicable for the Behaviors content type only. The value of the Proficiency Calculation Rule field on the Relationships tab on the Edit Content Type page for Behaviors is set to Average by default and can’t be edited. Using this rule, the application calculates the proficiency rating for the competency as the average of the behavior ratings. The rating provided at the competency level is ignored by the application.

Deciding the Relationship Duration

You can define a duration for the relationship between the Behaviors and Competencies content types. There can be multiple relationships provided their dates don’t overlap. You can delete a relationship only when the content type or its related content type is not added to any profiles (model or person). Once the content type or its related content type is added to a profile, you cannot delete the relationship. However, you can enter a To Date for the relationship to end it. You can also relate
the content items of Competencies and Behaviors content types, and define the duration of the relationship between content items. Further, you can delete or end the relationship between content items.

**Deciding the Related Content Items**

After you establish the relationship between the Behaviors and Competencies content types; you must:

1. Create the content items for each content type.
2. Relate the content items between each content type. You relate a content item of a content type with content items of another content type using the Related Content Items tab. The tab is available on the Edit Content Item page. You open the Edit Content Item page by using the Manage Content Items task in the Profiles work area or Setup and Maintenance work area. On the Related Content Items tab, you can view the relationship type between the two content types. You can also decide the duration until when the content items are related with each other.

---

**Talent Profiles**

**Profile Types**

Profile types include person profile types and model profile types. Use the Manage Profile Types task in the Profiles or Setup and Maintenance work area to create a profile type.

**Person Profile Types**

The person profile type:

- Is the template that you use to create profiles of your workers or nonworkers.
- Contains the skills, qualities, and qualifications that you want to track for your workers.

**Model Profile Types**

The model profile type:

- Is a template for workforce structures such as jobs and positions. You can set up multiple model profile types.

> **Note:** You must use the Job profile type to create profiles for jobs or positions.

- Identifies the targeted and required skills and qualifications for a job or position.
- Identifies work requirements, such as work schedule and travel frequency.

**About Defining Profile Types**

To define profile types, you first specify whether the profile type is a person or model profile. For model profiles, you also specify the workforce structures for which the model profile can be used. However, to create a position profile you must use the Job profile type as the template. To define the structure of the profile type, you add one or more content sections using content types from the content library and free-form content types. Define the following for each content section:

- Instance qualifier sets
- Section properties
- Role access
Note: You access the Behaviors content section only after you select the Competencies content section on the Edit Profile Type page.

Instance Qualifier Sets
If you have defined instance qualifier sets for the content type, you select the instance qualifier set to use for the sections. You can’t define instance qualifiers for the Behaviors content type.

Section Properties
The properties determine the fields and how they are displayed when you create profiles based on the type. For example, properties determine the label for the field, whether the field is required, and whether the field should be included in profile searches.

You define all of the properties for free-form content types.

Role Access
You can specify user roles such as Employee or Manager, which define who can view the content section, and who can update the section.

Effective Dates of Profiles
You can associate multiple profiles with a workforce structure. However, only one profile can be in effect at a time for the workforce structure. Therefore, the effective start and end dates of multiple profiles associated with a workforce structure must not overlap.

Related Topics
- Model Profiles
- Create Job Profiles
- Create Position Profiles

How You Create Person Profiles
The person profile is a profile type you create for individual workers. Person profile data, such as the skills, qualifications, accomplishments, and career preferences of a person, is displayed on Skills and Qualifications and Career Planning pages on a worker’s person profile. HR specialists or implementors can create person profiles from the application, or implementors can upload them using tools such as HCM Data Loader.

The application provides the functionality to automatically create person profiles for person records. You can enable or disable this functionality using the Autocreate Person Profiles check box. By default, this check box is already selected. The Autocreate Person Profiles check box is available on the Edit Profile Type page of the person profile type. Use the Manage Profile Types task in the Profiles or Setup and Maintenance work area to edit the person profile type.

When the Autocreate Person Profiles check box is selected:
- The application automatically creates the person profile for that person when someone accesses the Skills and Qualifications page for a person.
- The person profile added for a pending worker is activated on the effective hire date for an employee or the effective placement date for a contingent worker.
If you choose to deselect the **Autocreate Person Profiles** check box for the person profile type and no profile exists for a person, the application displays an error message to create or upload profile when you access that person’s Skills and Qualifications page. However, when uploading talent profile data from external sources, you must deselect the **Autocreate Person Profiles** check box to avoid duplication of person profiles.

**Related Topics**

- Person Records
- How can I hide an attribute on the person profile

## How You Upload Talent Profile Data

Talent profile data is the person and job profiles data displayed on Skills and Qualifications and Career Planning pages. You access these pages for a worker in the worker’s person spotlight. Examples of talent profile data include ratings and corresponding rating models, content items, and educational establishments. You can upload talent profile data for initial migration or mass data entry.

The following tools support upload of talent profile data:

- Oracle ADF Desktop Integration (ADFdi) workbook
- Oracle Fusion HCM Data Loader
- Oracle Fusion HCM Spreadsheet Data Loader

**Note:** The tools available to you for uploading talent profile data depend on the setting of the HCM Data Loader Scope parameter. The ADFdi workbook isn’t affected by the HCM Data Loader Scope parameter. You can continue to upload competencies using the ADFdi workbook regardless of the parameter setting.

For more information about:

- Uploading content items using an ADFdi workbook, see Uploading Competencies and Content Items into Oracle Fusion Profile Management (1453118.1) on My Oracle Support at https://support.oracle.com.
- All data loaders mentioned earlier, see Oracle Human Capital Management Cloud Integrating with Oracle HCM Cloud Guide.

## Uploading Actions

The following table displays the type of talent profile data you typically upload and the actions you perform to load that data.

**Note:** Use the **Open Competency Excel Template** option to generate the ADFdi workbook for uploading competencies. The option is available on the Manage Content Items page in the Profiles work area.

<table>
<thead>
<tr>
<th>Uploading Tool</th>
<th>Talent Profile Data Type</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADFdi workbook</td>
<td>- Content Item (only Competency)</td>
<td>- Create</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Update</td>
</tr>
<tr>
<td>HCM Data Loader</td>
<td>- Educational establishment</td>
<td>- Create</td>
</tr>
<tr>
<td></td>
<td>- Talent profile rating model</td>
<td>- Update</td>
</tr>
<tr>
<td></td>
<td>- Talent profile type (only Person and Job)</td>
<td>- Delete</td>
</tr>
</tbody>
</table>
### Uploading Tool

<table>
<thead>
<tr>
<th>Uploading Tool</th>
<th>Talent Profile Data Type</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Talent profile content item</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Talent profile content item relationship</td>
<td></td>
</tr>
<tr>
<td>HCM Spreadsheet Data Loader</td>
<td>• Educational establishment</td>
<td>• Create</td>
</tr>
<tr>
<td></td>
<td>• Talent profile rating model</td>
<td>• Update</td>
</tr>
<tr>
<td></td>
<td>• Talent profile type (only Person and Job)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Talent profile content item</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Talent profile content item relationship</td>
<td></td>
</tr>
</tbody>
</table>

### Related Topics
- Guidelines for Using Desktop Integrated Excel Workbooks

### Add Content to a Worker's Profile

Depending on the content section access settings for HR specialists and managers, they can edit content or add it to a worker's profile. To view, add, or edit content of a worker’s profile, they must use the worker’s Skills and Qualifications page.

As an HR specialist, follow these steps to either edit the content or add it to the worker’s profile:

1. Click **My Client Groups > Profiles** to open the Search: Profiles page.
2. Click the name of the worker in the Results section to open the Skills and Qualifications page of that worker.

   **Tip:** Alternatively, use the Manage Talent Profile task in the Person Management work area to open a person’s Skills and Qualifications page.

3. Click **Edit** on the Skills and Qualifications page to either edit the content, or add it to the worker’s profile.

As a manager, follow these steps to either edit the content or add it to a report’s profile:

1. Click **My Team > Team Talent**.
2. Click a report’s person card to open the Skills and Qualifications page for the report.
3. Click **Edit** on the Skills and Qualifications page to either edit the content, or add it to the report’s profile.

### Talent Profile Summary

The Talent Profile report provides talent-related information for a worker. This topic describes options that you can select when printing the report. To print the report, select the Manage Talent Profile task in the Person Management work area. On the Edit Profile page, select **Actions - Print Profile**. Talent review meeting participants can also print the report for one or more workers from the Talent Review dashboard.

### Report Sections

The Talent Profile report can contain a person summary and five configurable sections. This table describes the contents of each section.

<table>
<thead>
<tr>
<th>Report Section</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience</td>
<td>Current and previous assignments.</td>
</tr>
</tbody>
</table>
## Report Section

<table>
<thead>
<tr>
<th>Report Section</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talent Overview</td>
<td>Performance evaluation information for up three years. The section includes the evaluation period, overall rating, overall comments, and a bar graph comparing the performance ratings. You can also include talent ratings.</td>
</tr>
<tr>
<td>Education and Qualifications</td>
<td>Competency ratings and evaluation types, degrees, licenses and certifications, honors and awards, and memberships.</td>
</tr>
<tr>
<td>Career Options and Interests</td>
<td>Career preference and advancement readiness information, including willingness to travel, relocate, consider part-time employment, or adopt flexible work schedules. You can also include preferred career moves and any jobs in a worker’s interest list.</td>
</tr>
<tr>
<td>Goals</td>
<td>Development and performance goal information, such as goal names, completion dates, statuses, and descriptions. This section includes a graph of goal achievements for the worker.</td>
</tr>
</tbody>
</table>

### Print Formats

You can print the Talent Profile Summary in the following formats:

<table>
<thead>
<tr>
<th>Print Format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDF</td>
<td>Includes a photograph of the worker and all selected graphs.</td>
</tr>
<tr>
<td>RTF</td>
<td>Includes a photograph of the worker and all selected graphs.</td>
</tr>
<tr>
<td>Microsoft Excel</td>
<td>Includes all selected workers in an Excel workbook, with one profile per worksheet and the worker’s name as the tab label. This format doesn’t include the photograph, performance history, or goals graphs.</td>
</tr>
<tr>
<td>HTML</td>
<td>Includes selected graphs but doesn’t include the photograph.</td>
</tr>
</tbody>
</table>

## Content Sections

### Content Sections

Content sections are sections in a profile, person or model, containing profile items. The properties for the content sections are configured under the profile type. You define properties for each content section. However, the accessibility of a content section for person profiles is dependent on the role and security privileges assigned to you.

### Content Section Properties

Content section properties or content properties are attributes that are used to define data included in a profile. A free-form content type doesn’t have any properties defined for it until you add it to the profile type as a content section. Therefore, you define all properties for free-form content types. You can change content section properties inherited from the content library and free-form content types or add new properties, as needed. Use the Manage Profile Types task in the Profiles or Setup
and Maintenance work area to select and edit a content section associated with a profile and define its properties. You must have the HR specialist or implementor role or privileges to perform this task.

**Content Section Approval**

For a content section in a profile type, you can specify whether the approval is required when a worker adds the content section that the worker can access to a profile. Use the **Approval Required** check box on the Content Section page to enable or disable approval for a content section. You open the Content Section page, when you add or edit a content section for the person or job profile type on the Manage Profile Types page in the Profiles or Setup and Maintenance work area. You must have the HR specialist or implementor role or privileges to perform this task.

**Content Section Access**

For accessing the content for person profiles, you must give the required access for the content section to a role. You can specify the level of access as view, edit, or report for each role. For example, users in the line manager role can be given edit access to add and edit the Competencies content and view access to only read the Degrees content for their workers. You can include content-type data in Oracle Business Intelligence Publisher reports. Use the Manage Profile Content Section Access task in the Setup and Maintenance work area to secure access to content sections in person profiles. You must have the IT Security Manager role or privileges to perform this task.

If you search for person profiles, the search results display profiles that match the search criteria. However, you can view content sections details of a person profile based on the access level given to your role. You search for person profiles on the Search: Profiles page in the Profiles work area.

Content sections in person profiles are unsecured when person profiles are included in:

- Best-fit analyses
- Profile comparisons
- Oracle Transactional Business Intelligence reports

No access is required for content sections added to model profiles as their content aren’t secured.

**Related Topics**

- How You Secure Content Sections in Person Profiles

**Content Section Properties**

Content sections are sections in a profile, person or model, containing profile items. The properties for the content sections are configured under the profile type. Content section properties are attributes that are used to define data included in a profile. Use the Manage Profile Types task in the Profiles or Setup and Maintenance work area to select and edit a content section associated with a profile and define its properties. A free-form content type doesn’t have any properties defined for it until you add it to the profile type as a content section. Therefore, you define all properties for free-form content types. You can change content section properties inherited from the content library and free-form content types as needed.

**Attributes of Content Section Properties**

The following table displays a list of attributes that you can set for each content section property that you included for a content section.
### Content Section Properties List

The following table describes a list of content section properties that appear on the pages with a profile item that belongs to the content section.

<table>
<thead>
<tr>
<th>Content Section Property</th>
<th>Specifies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COUNTRY_ID</strong></td>
<td>The country ID associated with the profile item. Ensure that the value of the <strong>Value Set Name</strong> attribute is CountryPVO and <strong>View Attribute</strong> attribute is GeographyName, where CountryPVO is the name of the value set and GeographyName is the attribute in the CountryPVO value set that provides a list of values for the <strong>COUNTRY_ID</strong> property</td>
</tr>
<tr>
<td><strong>DATE_FROM</strong></td>
<td>The start date information of a content section. This property is used for maintaining the history of profile items and isn’t recommend to be displayed on the UI</td>
</tr>
<tr>
<td><strong>DATE_TO</strong></td>
<td>The end date information of a content section. This property is used for maintaining the history of profile items and isn’t recommend to be displayed on the UI</td>
</tr>
<tr>
<td><strong>ITEM_DATE_1</strong> to <strong>ITEM_DATE_10</strong></td>
<td>Any date. Use these properties to enter dates for profile items</td>
</tr>
<tr>
<td><strong>ITEM_DECIMAL_1</strong> to <strong>ITEM_DECIMAL_5</strong></td>
<td>Numeric data that includes decimals. For example, price USD 2.99</td>
</tr>
</tbody>
</table>

**Note:** The functionality associated with the **Searchable** attribute isn’t available for use in the application.
<table>
<thead>
<tr>
<th>Content Section Property</th>
<th>Specifies</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM_NUMBER_1 to ITEM_NUMBER_10</td>
<td>Numeric data that doesn't include decimals. For example, age 29 years</td>
</tr>
<tr>
<td>ITEM_TEXT30_1 to ITEM_TEXT30_5</td>
<td>Data that requires selecting values from a check box</td>
</tr>
<tr>
<td>ITEM_TEXT30_6 to ITEM_TEXT30_15</td>
<td>Data that requires selecting values from a list. Ensure that the value of the Value Set Name attribute is a lookup type. For example, HRT_RISK_REASON is a lookup type for selecting risk of loss reasons</td>
</tr>
</tbody>
</table>
| ITEM_TEXT_240_1 to ITEM_TEXT_240_15 | A simple text string, such as a name. Each property can store up to 240 characters of data. If the ITEM_TEXT_240_1 property is used in:  
- A predefined free-form content type, you can't enter duplicate data for this property for a profile item  
- A custom free-form content type, you can enter duplicate data for this property for a profile item  
- A predefined or custom content type that aren't free-form, you can't enter duplicate data for this property for a content item |
| ITEM_TEXT2000_1 to ITEM_TEXT2000_5 | Long text data, such as a comment. Each property can store up to 2000 characters of data |
| IMPORTANCE | The priority of the content section. The value of this property is used in the best-fit algorithm |
| INTEREST_LEVEL | The level of interest. This property is added to the Competency content section. The value of this property is based on the Interest Rating Model and is automatically generated for a profile item |
| MANDATORY | Whether the item in a content type is required or not. This property is used by content types that are added to the Job profile type. Ensure that the value of the Value Set Name attribute is YES_NO. If added to a content type, the label for this property, is displayed as a check box column for content items within the content type for a job profile. The default label for this property is Required |
| QUALIFIER_ID1 to QUALIFIER_ID2 | The instance qualifier information assigned to the profile content section. To uniquely identify different instances of competencies, you must not modify the predefined value of the QUALIFIER_ID1 and QUALIFIER_ID2 properties for the Competency content section included in the Person profile type |
| LAST_UPDATE_DATE | The last updated date of the content section. The value of this property is automatically generated for a profile item |
| RATING_LEVEL_ID1 to RATING_LEVEL_ID3 | The rating level information of a profile content section |
| RATING_MODEL_ID1 to RATING_MODEL_ID3 | The rating model information of a profile content section. The RATING_MODEL_ID1 property is used for storing the rating model information for the Competencies content section associated with a job or person profile type. The default value for this property is Proficiency Rating Model |
| STATE_PROVINCE_ID | The state ID associated with the profile item. This property is used in conjunction with the COUNTRY_ID property. Ensure that the value of the Value Set Name attribute is StateProvincePVO and View Attribute is GeographyName, where StateProvincePVO is the name of the value set and GeographyName is the attribute in the StateProvincePVO value set that provides a list of values for the STATE_PROVINCE_ID property |
Note:

- For content sections associated with free-form content types, the values of the properties `CONTENT_TYPE_ID` and `DATE_FROM` are automatically generated for a profile and should not be modified.
- For content sections associated with content types that aren’t free-form, the values of the properties `CONTENT_TYPE_ID`, `CONTENT_ITEM_ID`, and `DATE_FROM` are automatically generated for a profile and should not be modified.
- The `SOURCE_ID` property isn’t used by the application and can be ignored.

Examples of Person Profile Content Access for Roles

You must identify which job roles and abstract roles need access to content sections and the level of access each role needs. This topic provides examples of content-section access for some roles and identifies tasks that users with those roles can perform.

Scenario

The First Software organization associates the following content sections with the person profile type. These content sections are available as searchable profile content.

- Competencies
- Degree
- Languages
- Licenses and Certifications

The organization has employee, line manager, and license manager roles. An appropriate person security profile is assigned to each role. According to the person security profile:

- Users with the employee role can search for workers according to their access privileges for person records in the directory and manage their own records.
- Users with the line manager role can manage the person records of their reports.
- Users with the license manager role can manage the person records of workers in their department.

The access level for each content section for a role is defined as shown in the following table.

<table>
<thead>
<tr>
<th>Content Section</th>
<th>Access Level for the Employee Role</th>
<th>Access Level for the Line Manager Role</th>
<th>Access Level for the License Manager Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competencies</td>
<td>Edit</td>
<td>Edit</td>
<td>None</td>
</tr>
<tr>
<td>Degree</td>
<td>Edit</td>
<td>Edit</td>
<td>None</td>
</tr>
<tr>
<td>Languages</td>
<td>Edit</td>
<td>Edit</td>
<td>None</td>
</tr>
<tr>
<td>Licenses and Certifications</td>
<td>View</td>
<td>Edit</td>
<td>Edit</td>
</tr>
</tbody>
</table>
Content Access for Employees
As the employee role has the edit access level for all content sections in the organization, all users associated with the role can do the following tasks:

- Search for all workers in the directory and view the publicly accessible content of a person profile
- Search for their own person profile using the searchable profile content
- View their own person profile content for which they have edit or view access. In the example, all employees can view their competencies, degree, languages, and licenses and certifications content on their profile
- Edit their own person profile content for which they have edit access. In the example, all employees can edit their competencies, degree, and languages content on their person profile
- View, add, and remove attachments for their person profile content

Content Access for Line Managers
As the line manager role has the edit access level for all content sections in the organization, all users associated with the role can do the following tasks:

- Search for direct reports within their own person security profile on the Team Talent page
- View secured content of person profiles of their direct reports within their own person security profile. In this example, all line managers can view competencies, degree, languages, and licenses and certifications content on their reports' person profile
- Edit secured content of person profiles of their direct reports within their own person security profile. In this example, all line managers can edit competencies, degree, languages, and licenses and certifications content on their reports' person profile
- View, add, and remove attachments for person profile content of their direct reports within their own person security profile

Content Access for License Managers
As the license manager role has the edit access level for only the Licenses and Certifications content section in the organization, all users associated with the role can do the following tasks:

- Search for workers within their own person security profile in the directory using the searchable profile content
- View Licenses and Certifications content for person profiles of workers within their own person security profile
- Edit Licenses and Certifications content of person profiles of workers within their own person security profile

Related Topics
- How You Secure Content Sections in Person Profiles

Instance Qualifier Sets
An instance qualifier set is a group of codes that uniquely identify different occurrences of the same profile item such as competency content section or a performance rating. Use the Manage Instance Qualifiers task in the Profiles work area to view and edit predefined an instance qualifiers. You can’t use any custom instance qualifiers.

Purpose
Instance qualifiers identify the role of a person or the application that updated a content type. For example, if a worker, the worker’s peer, and the worker’s manager all enter a rating for a competency on the worker’s profile, instance qualifier
sets uniquely identify each instance, or the rating given by each different role. Uniquely identifying different instances of competencies enables you to specify which instance is used when you view or compare profiles. Instance qualifiers also affect data entered for content types. For example, if configured, a worker with an employee profile can enter a competency with the Evaluation Type instance qualifier as Self only.

Properties
Each instance qualifier contains a code and a description, which indicate the role or the application that updated the content type.

The following examples list the instance qualifiers displayed on the UI or BI reports when the content type is updated by:

- An application: If an employee’s potential rating is updated in a talent review meeting, the instance qualifier of the rating appears as TRPOTENTIAL in BI reports. Similarly, if the rating is updated on the employee’s Career Planning page, the instance qualifier appears as PROFILEPOTENTIAL in BI reports.
- A role: If a competency is updated by an employee, the value of the Evaluation Type instance qualifier appears as Self on the employee’s Edit Skills and Qualifications page and BI reports. Similarly, if the competency is updated by a manager, the value of the Evaluation Type qualifier appears as Supervisor.

Each instance qualifier has the following properties:

- Priority
- Employee and manager views
- Search ability
- Default instance qualifier for employee and manager

Priority
Priority determines:

- The order in which different instances of a competency are displayed.
- Which instance to use when searching and comparing profiles. The lowest number indicates the highest priority. The lowest number is displayed on the competency gap chart, comparison results for profiles, and best-fit results for a profile.

Employee and Manager Views
If the security privileges associated with employee and manager roles enables them to view or edit a content section, then you can use employee and manager views to determine which instances are visible to employees and to managers.

Search Ability
You can specify whether items that have been assigned the instance qualifier code should be included in profile searches. For example, you might not want the ratings for competencies given by peers to display when other workers are searching person profiles.

Default Instance Qualifier
You can specify the default instance qualifier to use when managers and employees update a competency. Each time an employee or manager updates a competency, the record is assigned the instance qualifier code that is identified as the employee or manager default code.
# Lookups

## Profile Management Lookups

This topic identifies common lookups that are profile management-related and have user or extensible configuration levels. Review these lookups, and update them as appropriate to suit enterprise requirements.

### Profile Management Lookups

Profile management lookups are described in the following table.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
<th>Configuration Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRT_CONTENT_SUPP_CODE</td>
<td>Codes to identify where the content type originated, such as from the customer or from a third party. Human Resource (HR) Specialists assign supplier codes when setting up new content types.</td>
<td>Extensible</td>
</tr>
<tr>
<td>HRT_COMPETENCY_EVAL_TYPE</td>
<td>Types of competency ratings, such as self, supervisor, and peer. Evaluation types are used in instance qualifier sets to identify the role of the person who provided a competency rating for a worker.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_DEGREE_LEVEL</td>
<td>Required levels of education for a job or position profile, such as a Bachelor’s Degree or Masters degree.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_DURATION</td>
<td>Time periods for when a worker would like to make a career move. Workers select a duration for their career move in the career preferences information on the career planning card.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_EDUCATION_LEVEL</td>
<td>Types of education that a degree provides, such as a Bachelor’s degree or one year college. HR Specialists use education levels when creating content items in the Degrees content type.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_IMPORTANCE</td>
<td>Values for the importance level of each content type. Importance values are used in the best-fit analysis calculation.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_NOTES_TYPE</td>
<td>Values for categories of notes, such as external and internal.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_PAY_FREQUENCY</td>
<td>Frequencies at which a worker is paid. Workers specify a preferred pay frequency</td>
<td>User</td>
</tr>
<tr>
<td>Lookup Type</td>
<td>Description</td>
<td>Configuration Level</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>HRT_READINESS</td>
<td>Time periods in which a worker is ready for advancement to a specified job or position profile. Managers and HR Specialists use readiness levels when editing the talent ratings information on workers’ career planning cards.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_RISK_REASON</td>
<td>Reasons for why a worker is at risk for leaving the company. Managers and HR Specialists use risk reasons when editing the talent ratings information on workers’ career planning cards.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_SATISFACTION_METHOD</td>
<td>Methods by which an item such as a competency is verified, such as assessment or demonstration. Managers and HR Specialists use these values to identify the method that was used to evaluate the proficiency of a worker in a particular skill or quality.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_TASK_PRIORITY</td>
<td>Codes for the priority of a task, such as High and Medium. Talent review facilitators specify a priority when assigning tasks during a talent review.</td>
<td>Extensible</td>
</tr>
<tr>
<td>HRT_TASK_TYPE</td>
<td>Categories of tasks, such as Preparation and Presentation. Talent review facilitators specify a task type when assigning tasks during a talent review.</td>
<td>Extensible</td>
</tr>
<tr>
<td>HRT_TRAVEL_FREQUENCY</td>
<td>Percentages of time a worker is expected to travel for a job or position, for example, 25 percent or 50 percent. Managers and HR specialists specify the required travel frequency on job and position profiles. Workers also specify a travel frequency when they edit their work requirements on the experience and qualifications card.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_VALIDITY_PERIOD</td>
<td>Periods of time for which content items such as licenses and certifications are valid. Managers and human resource (HR) specialists select validity periods when setting up content items for the Licenses and Certifications content type.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_WORK_DAYS</td>
<td>Work days for a job or position, such as Monday through Friday. Managers and HR specialists specify the expected work days on job and position profiles.</td>
<td>User</td>
</tr>
</tbody>
</table>
Oracle Talent Management Cloud
Implementing Talent Management Base

Chapter 12
Workforce Profiles

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
<th>Configuration Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRT_WORK_HOURS</td>
<td>Work hours for a job or position, such as 9:00 a.m. to 5:00 p.m. Managers and HR specialists specify the expected work hours on job and position profiles.</td>
<td>User</td>
</tr>
</tbody>
</table>

How You Add Common Lookup Types to a Content Section Property

Associate common lookup types with a content section property when defining content sections for a profile type. You can then provide a list of values for the content section property. For example, you can add a list of industries to a content section called Industry Expertise. Use the Manage Profile Types task from the Setup and Maintenance work area to add content sections and associate common lookup types with a content section property. You can use existing common lookup types, or create your own. Common lookups can be associated with these content section properties: ITEM_TEXT30_6 through ITEM_TEXT30_15.

**Note:** This functionality doesn’t apply to these content section properties when they are associated with the following content sections: Career Preferences, Potential, Risk, Advancement Readiness, Career Statement, Talent Score, Performance Rating, and Work Requirements.

Related Topics

- Overview of Lookups

Add Common Lookups to a Content Section Property

This example illustrates how to use common lookup types to create a list of values for a content section property.

**Development Readiness**

The Human Resource (HR) department at InFusion Corporation wants to track development readiness for employees using the person profile. They would also like to indicate whether a worker is a candidate for serving as a mentor to another worker.

**Values for Development Readiness**

The HR department has decided on three possible levels for a worker’s development readiness:

- 1 to 2 years
- 3 to 5 years
- Ready Now

To indicate whether a worker is a candidate for being a mentor, they want three choices:

- Yes
- No
- Maybe
Analysis

InFusion analyzes the existing content types in the content library, and decides that none of the content types works. They must create a free-form content type called Development Readiness. The content type is free-form because content items aren’t needed, and the information needn’t be stored in the content library.

Next, they analyze the existing common lookups, and determine that they can use an existing lookup type, HRT_READINESS but add lookup codes and meanings to suit their needs. For the indicator for mentorship, they must create a common lookup.

After creating the content type and lookup and changing the lookup codes for HRT_READINESS, they must add the content type as a content section to the person profile. Adding the content section to the person profile enables HR Specialists and managers to add the section to workers’ profiles. They can then rate workers on their readiness level and ability to be a mentor.

Note: You can attach lookup values to only these content section properties: ITEM_TEXT30_6 through ITEM_TEXT30_15.

Resulting Setup

To track development readiness for workers, InFusion must complete the following setup:

1. Using the Manage Common Lookups task in the Setup and Maintenance work area, locate the HRT_READINESS lookup type.
2. Add codes for 1 to 2 years, 3 to 4 years, and Ready Now.
3. Using the Manage Common Lookups task, create a common lookup called HRT_MENTOR, and add the three values of Yes, No, and Maybe.
4. Using the Manage Content Types task in the Setup and Maintenance work area, create a free-form content type called Development Readiness. Add HRMS and TM as the content subscribers.
5. Using the Manage Profile Types task in the Setup and Maintenance work area, select the Person profile type and add Development Readiness to it.
6. Using the Manage Profile Types task, select the Development Readiness content section to access the Content Section page.

   Set up the content section by adding two properties as described in this table.

<table>
<thead>
<tr>
<th>Property</th>
<th>Label</th>
<th>Display</th>
<th>Value Set Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM_TEXT30_6</td>
<td>Development Readiness</td>
<td>Summary</td>
<td>HRT_READINESS</td>
</tr>
<tr>
<td>ITEM_TEXT30_7</td>
<td>Potential Mentor</td>
<td>Summary</td>
<td>HRT_MENTOR</td>
</tr>
</tbody>
</table>

7. In the Content Section Access region on the Content Section page, add the HR Specialist and Manager roles. Select the option for each role to be able to edit the content section.

Note: Don’t add the Employee role.

HR specialists and managers can then access worker profiles and add the Development Readiness content section to the profiles.
Related Topics

- Overview of Lookups

Writing Assistant

How You Upload Writing Assistant Data Using Spreadsheets

Human resource (HR) specialists can upload and associate new Writing Assistant data for competencies using an application-generated spreadsheet. Use the Export option on the Manage Content Items page in the Profiles work area to generate the spreadsheet for uploading writing assistant data. The uploaded data is associated with each separate competency.

The application-generated spreadsheet for uploading Writing Assistant data contains the following two worksheets:

- Feedback Suggestions - Upload feedback suggestions for each proficiency level for each competency.
- Development Tips - Upload development tips associated for each competency.

Spreadsheet Generation

You can generate the spreadsheet to upload and associate Writing Assistant data with competencies as follows:

1. Navigate to the Manage Content Items page from the Setup and Maintenance work area by querying on the Manage Profile Content Items task and selecting Go to Task.
2. In the Search Results region, click the Export icon and select the Writing Assistant Excel Template action. A File Download dialog box appears.
3. Click Save. Select a destination on your local hard disk to save the CompetencyFeedbackSuggestion.xlsx spreadsheet.

Upload and Update Feedback Suggestions

To upload feedback suggestions, specify all the required columns in the Feedback Suggestions worksheet and click Upload. After you click Upload, click Save to commit the feedback suggestions for proficiency levels for associated competencies into the application database.

To update an existing feedback suggestion, click Download to download all feedback suggestions for competencies into the spreadsheet. You can then update the suggested text and click Upload. After you click Upload, click Save to commit the feedback suggestions for proficiency levels for associated competencies into the application database.

Note: You can enter the same suggestion text for multiple competencies and for multiple proficiency levels.

Upload and Update Development Tips

To upload development tips, specify all the required columns in the Development Tips worksheet and click Upload. After you click Upload, click Save to commit the development tips for associated competencies into the application database.

To update an existing development tip, click Download to download all development tips for competencies into the spreadsheet. You can then update the suggested text and click Upload. After you click Upload, click Save to commit the updated development tips for associated competencies into the application database.

Note: You can enter the same suggestion text for multiple competencies.
Related Topics

- How Writing Assistant Works with Performance Documents
- Guidelines for Using Desktop Integrated Excel Workbooks
- How You Set up Writing Assistant for Performance Documents

Writing Assistant

Writing Assistant is a tool that provides suggestions for a manager when writing comments or feedback for a worker’s competency or rating level during performance evaluation. Writing Assistant suggests statements associated with competencies and proficiency levels within those competencies, to help describe a worker’s observed and wanted actions. The Writing Assistant data is displayed in the form of feedback suggestions and development tips. Use the Export option on the Manage Content Items page in the Profiles work area to generate the spreadsheet for uploading writing assistant data.

Requirements for Using Writing Assistant Data

To use Writing Assistant, human resource specialists must upload data associated with a competency using an application-generated spreadsheet. The application enables suggestions only for those competencies that have a rating. Using Writing Assistant, managers can select a proficiency level for a competency, view suggested comments for the selected proficiency level or for the competency as a whole, and copy and edit the suggested comments.

Related Topics

- How Writing Assistant Works with Performance Documents
- Guidelines for Setting Up Performance Templates

Questionnaires

Questionnaires

You can create questionnaires to gather information in applications that support them. For example, you can use questionnaires to collect feedback in a performance evaluation. This topic describes aspects of questionnaire creation and maintenance. Use the Manage Questionnaire Templates, Manage Questionnaires, and Manage Question Library tasks in the Setup and Maintenance work area.

Subscriber Applications

Applications which are eligible to use questionnaires are called subscriber applications. You must select the subscriber application for each questionnaire. When you select the subscriber on the Manage Questionnaires page, you can create questionnaires for the selected subscriber only. In addition, the subscriber filters your search results to display only questionnaires created for that subscriber.

Note: Some subscriber applications use Setup and Maintenance tasks to manage questionnaire components while others provide their own tasks or don’t allow modification of questionnaires. See the documentation for the subscriber applications for more information.
Folders
You maintain folders to store questionnaires. For each subscriber application, you can create as many folders as required to differentiate or identify the questionnaires.

Questionnaire Templates
All questionnaires are based on templates, which promote consistency. When creating a questionnaire, you must select a template on which to base the questionnaire. The template can provide default settings or enforce mandatory requirements such as specific sections and questions that must be in all questionnaires created using the template. You can configure templates for:

- Specific applications
- General audiences, such as an entire organization or all internal customers
- Targeted audiences, such as particular roles (managers, for example)
- Specific purposes, such as providing feedback for performance evaluation periods or rate worker potential in an assessment for a talent review

You can create questionnaires only from templates that were created for the same subscriber as the questionnaire.

Questionnaire Presentation
You can specify how the questionnaire appears in the subscriber application. For example, you can:

- Make the questionnaire single- or multiple-paged.
- Add sections to group questions by type or other classification.
- Mark questions as required.

Questions and Responses in the Question Library
You create questions in the question library. Four types of questions exist:

- Text
- Single choice
- Multiple choice
- No response

For each question type, you also configure responses and select a presentation method. For example, for single-choice questions, you can specify that the possible responses appear either in a list or as radio buttons.

For the Single-Choice and Multiple-Choice question types, you can create conditional questions by selecting Display the question conditionally check box. You need to specify the controlling question code and response. Based on the respondent’s answer to a previous question, you can display a question. The conditional question and the controlling question must both exist in the questionnaire to display the conditional question.

For example, for a controlling question such as, Did you receive assistance with this form? If the controlling response is Yes, then you can display the conditional question, Which type of assistance did you receive?

You can also add response feedback visible to respondents to display a targeted message to their response, if the subscribing application uses response feedback.

Tip: You can assign your own response codes to the responses that you create in choice-based questions. The application provides the response code by default. But you can remove the response code and enter a code of your choice so that it is meaningful and helpful in organizing your setup.
Questionnaire and Question Scoring
For subscriber applications that support scoring, you can configure questions that score the responses provided by respondents. You can configure questionnaires to calculate the cumulative total of responses (Sum), the average score, or the percentage based on the maximum available score.

Questionnaire and Template Access
You can control access to questionnaires and templates by setting privacy options. If you set the Privacy option to Private, only the named owner can edit the questionnaire or template. Otherwise, anyone with access can edit the questionnaire or template.

Related Topics
- How Performance Documents Work with Questionnaires

How You Configure Questionnaire Templates
This topic describes how questionnaire template options affect questionnaires generated from the template. You can override some of these options in individual questionnaires.

Use the Manage Questionnaire Templates task in the Setup and Maintenance work area.

Questionnaire Scoring and Calculation Rules
You can select Score Questionnaire to configure the questionnaire to calculate scores based on responses. Questionnaires made from the template can then be scored for subscribers that support scoring. A questionnaire based on a scored template doesn’t have to be scored. To score a questionnaire, you must also select the overall score calculation rule that specifies the formula used to calculate scores.

Note: Scoring only applies to subscriber applications that allow scoring.

If you edit the template and deselect Score Questionnaire, existing questionnaires made from the template aren’t affected. Only questionnaires made in the future from the template aren’t scored.

Section Presentation and Order
A questionnaire has at least one section. You can use sections to group questions by type or category, for example.

The Section Presentation option controls how the questionnaire uses sections. This table describes the Section Presentation values.

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Sections</td>
<td>One section appears that contains all questions.</td>
</tr>
<tr>
<td>Stack Regions</td>
<td>Multiple sections appear as specified on the Section Order option.</td>
</tr>
</tbody>
</table>

The Section Order option controls section order. This table describes the Section Order values.
Value | Description
--- | ---
Sequential | One section appears that contains all questions.
Random | Each respondent views the sections in a different order. Reviewers view the sections in sequential order to provide consistency when reviewing responses.

You can specify whether questionnaires based on this template can override these values.

**Question and Response Order**

The Question Order and Response Order values control the order that questions and possible responses appear to a respondent. Response order only applies to single-choice and multiple-choice questions, which contain a list of responses.

This table describes the Question Order and Response Order values.

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical</td>
<td>Questions appear in the specified order.</td>
</tr>
<tr>
<td>Random</td>
<td>Each respondent views the questions in a different order. Reviewers view the questions in sequential order to provide consistency when reviewing responses.</td>
</tr>
</tbody>
</table>

You can override the default values of these options for individual sections. You can also specify whether questionnaires based on this template can override these values.

**Allowed Response Types**

The Allowed Response Types value identifies the response types that can appear in questionnaires created from the template. Only questions with the selected response types can appear in the questionnaire.

For example:

- If you select neither Single Choice from List nor Radio Button List, then you can't include single-choice questions.
- If you select both Radio Button List and Check Multiple Choices, then you can include both single-choice and multiple-choice questions. However, each can use only the selected response type.

**Section Format**

The Allow Additional Questions option controls whether authorized users can add questions in the subscriber application. For example, for performance documents, that could be managers or workers.

If you select the Required option, then respondents must answer all questions in the section.

If you select New Page option, the section starts a new page. A section may fill more than one page, depending on the number of questions specified in the Maximum Number of Questions per Page field.

**Questions and Responses in Sections**

In the Questions table, you manage questions for a selected section. You can:

- Add questions from the question library. You can change the response type for these questions.
• Create questions, either those that are scored, or aren't. Questions you create become part of the question library. You must also add the question to the section after creating it from the section.

• Edit questions. Your edits are also reflected in the question library.

• Remove questions.

• Change question order by dragging them in the section. Questions appear in this order in the questionnaire if question order is Vertical for the section.

If the section itself isn’t required, then you can mark individual questions as required. Otherwise, respondents must answer all questions.

Preview
You can use the Preview action to review sections, questions, responses, response feedback, and test scoring.

Questionnaire Questions and Responses
You can include text, single-choice, multiple-choice, and no response questions in questionnaires. This topic explains how to construct questions of each type and define the expected responses. You can manage questions using the Manage Question Library task in the Setup and Maintenance work area.

You can also create, edit, and copy questions directly in questionnaire templates and questionnaires. Use the Manage Questionnaire Templates and Manage Questionnaire tasks in the Setup and Maintenance work area.

Subscriber Applications
When creating a question, you must select a subscriber application for the question and a folder in which to include it. You can create folders for each subscriber application to store questions for the subscriber. A question is only available to questionnaires with the same subscriber.

Text Questions
Respondents enter their responses in a text field. For the response, you can specify:

• Both a minimum and a maximum number of characters.

• Either plain text or rich text. Select rich text to let respondents use formatting, such as bold and underline.

Single-Choice Questions
Respondents select one response from several. You specify whether the responses appear in a list or as radio buttons.

You can select a rating model to quickly provide consistent responses. When you select a rating model, the rating levels appear as responses. You can add, remove, or edit the responses. If you change the rating model, the question doesn’t update to reflect the changes. For example, if the rating model contains five rating levels, the short descriptions for each level appear as responses from which the respondent can select.

You can add feedback to display messages to respondents for responses. The response feedback appears when the respondent submits the questionnaire.

When you configure a single-choice question as a radio button and specify that it isn’t required, the No opinion response appears automatically as a response. This option allows respondents to change their responses to no opinion if they already selected a response that they can’t deselect.
Multiple-Choice Questions
Respondents can provide one or more answers. Specify whether the responses are presented as check boxes or a choice list. You can set both a minimum and maximum number of required responses. As with single-choice questions, you can associate a rating model with the response type. You can add response feedback to multiple-choice questions, as with single-choice questions.

No-Response Questions
Use this question type when no response is required. You can use it to add instructions or information to the section.

Response Scoring
You can configure single- and multiple-choice questions to score the responses. To score responses, you can either set them up to use user-defined scoring or select a rating model to use the predefined numeric rating. Responses using rating models are only scored when the question is configured for scoring. The application uses the score from the responses to calculate the score of questionnaires that are configured to be scored. With the rating models, you can edit the short description and score.

Note: The Potential Assessment, a specific questionnaire type, calculates potential ratings. The potential assessment is available only in the talent review business process. Set up the potential assessment using the Manage Potential Assessment task in the Setup and Maintenance work area.

Attachments
For all types of questions, including no-response questions, specify whether respondents can add attachments.

Create a Questionnaire
This topic summarizes how to create a questionnaire. Use the Manage Questionnaires task in the Setup and Maintenance work area. Select Navigator > Setup and Maintenance.

Selecting the Questionnaire Template

1. In the Folders section of the Manage Questionnaires page, select the subscriber application for the questionnaire.
2. In the Search Results section, click Create. The Create Questionnaire dialog box opens.
3. Enter Questionnaire Template ID or Name values, if available. Alternatively, click Search to list all available templates.
4. In the Search Results section, select a template and click OK. The Create Questionnaire: Basic Information page opens.

Entering Questionnaire Basic Information

1. A unique numeric questionnaire ID appears automatically. You can overwrite this value.
2. If this is a scored questionnaire, an overall score calculation rule appears. You can select a different rule.
3. Enter a questionnaire name and select a folder. Use folders to organize questionnaires by type or purpose, for example.
4. Leave the Owner field blank and the Privacy value set to Public if anyone who can access the questionnaire can edit it. Otherwise, select an owner and set Privacy to Private.
5. Leave the Status value set to Draft until the questionnaire is ready.
6. In the Instructions and Help Materials section, enter and format any instructions for questionnaire users. This text appears at the top of page one of the questionnaire.
7. Add file or URL attachments, if appropriate. Links appear at the top of the questionnaire and beneath any instruction text.
8. Click Next. The Create Questionnaire Contents page opens.

Entering Questionnaire Contents

The Section Order, Section Presentation, and Page Layout values are as specified in the questionnaire template. Depending on template settings, you may be able to change these values. Sections appear as defined in the questionnaire template. Depending on template settings, you can edit some or all section settings. You can also delete predefined sections and create additional sections.

1. Select the first section to view its questions in the Questions section. You can delete a question or change its response type and Required setting.
2. If you create additional sections, you add questions to them. In the Questions section, click Add to open the Add Questions dialog box. Search for a question, select it, and click OK.
3. You can also create questions for a section. Select a section, and in the Questions section, click Create to open the Create Question page. Select the folder, and enter question and response details, and click Save and Close. The question becomes available in the question library as well. Add the question to the section using the instruction in step 2.
4. Edit questions as required. Select a question and click Edit to open the Edit Question page. Enter question and response details, and click Save and Close. The question is updated in the questionnaire and the question library.
5. When all sections and questions are complete, click Next to open the Create Questionnaire Review page.
6. Click Preview to preview the questionnaire. For scored questionnaires, click Test to verify the scoring.
7. Click OK to close the Preview dialog box. Click Save to save your questionnaire.

Set the questionnaire Status value to Active when the questionnaire is ready for use.

Questionnaire Scoring: Explained

You can configure questionnaires to calculate a score based on responses to questions in the questionnaire. This topic describes aspects of creating questionnaires that are scored. You must create a questionnaire template from which to create a questionnaire. Use the Manage Questionnaire Templates and Manage Questionnaires tasks in the Setup and Maintenance work area.

Subscriber Applications

Only eligible subscriber applications can use scored questionnaires. Recruiting is the only subscriber eligible to use scored questionnaires.

Questionnaire Scoring Setup

To score a questionnaire, in the questionnaire template, select Score Questionnaire. All questionnaires made from the template can then be scored. If you edit the template and deselect Score Questionnaire, existing questionnaires made from the template aren’t affected. Only questionnaires made in the future from the template aren’t scored.

Scored Questions

To create a questionnaire that can be scored, you must add questions that have responses configured for scoring to the section. You can either add questions from the question library or create scored questions in the section itself.

You can add questions that aren’t configured for scoring to a scored questionnaire. These questions aren’t included in the overall score calculation.
Overall Score Calculation Rule
The calculation rule determines the method used to calculate the overall questionnaire score from the question scores of scored questions. The table shows the calculation rules and the formula each uses to calculate the questionnaire score.

<table>
<thead>
<tr>
<th>Overall Score Calculation Rule</th>
<th>Formula to Calculate Questionnaire Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum</td>
<td>Sum of question scores</td>
</tr>
<tr>
<td>Percentage</td>
<td>(Sum of question scores / Sum of maximum possible question scores) * 100</td>
</tr>
<tr>
<td>Average</td>
<td>Sum of question scores / Number of scored questions</td>
</tr>
</tbody>
</table>

When calculating the score, questions that are configured for scoring have no value when no score is provided.

Questionnaire Score Calculation Example
As an example for calculating the score, consider a questionnaire with the attributes shown in the table.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculation rule</td>
<td>Average</td>
</tr>
<tr>
<td>Total number of questions</td>
<td>10</td>
</tr>
<tr>
<td>Number of questions configured for scoring</td>
<td>9</td>
</tr>
<tr>
<td>Number of questions that can't be scored</td>
<td>1</td>
</tr>
<tr>
<td>Maximum value of each response</td>
<td>5</td>
</tr>
</tbody>
</table>

For this questionnaire, the maximum possible score is 45 (9 x 5). The maximum average score is 5 (45/9).

A respondent responds to the questionnaire and selects the maximum value of 5 for eight of the nine scored questions, leaving one blank. The respondent also selects a response for the question that isn’t scored. The application calculates the questionnaire score in the following manner:

- The sum of the responses is 40 (8 x 5). The question that isn’t scored doesn’t affect the score.
- Using the Average calculation rule, the final questionnaire score is 4.44 (40/9).

Preview
Click Preview to review the questionnaire questions and scoring. Select answers and click Test to see the resulting questionnaire score and any response feedback. Click Reset to clear the scores and test again.
Question Scoring Setup Options

For eligible subscriber applications, you can configure questions to calculate a score based on responses. This topic describes aspects of creating questions that can be used to score questionnaires. Use the Manage Question Library task in the Setup and Maintenance work area.

Subscriber Applications
Only eligible subscriber applications can use scored questions.

Eligible Question Types
Two question types are eligible for scoring:

• Single choice
• Multiple choice

If you select single choice, the question score is the value of the selected response. For multiple-choice questions, the total value of all selected responses is the question score.

Score Question
To score the question, select Score Question. Scored questionnaires use scored questions to determine the questionnaire score. You set the default calculation rule in the template, but this can be overridden in the questionnaire.

You can edit a saved question to remove scoring for any subsequent uses of the question. If you remove scoring from a question that is in use in a scored questionnaire, the scoring is retained in that questionnaire.

You can add scored questions to questionnaires that aren't scored. In questionnaires that aren't scored, response scores aren't available.

Tip: Use the Preview feature to ensure that the scoring works as you anticipated.

Minimum and Maximum Calculated Scores
For multiple-choice questions you can define either, or both, minimum and maximum calculated scores. These are the maximum and minimum scores the question can attain, regardless of how many responses the respondent selects, or the score of the responses.

You can define the maximum and minimum calculated scores to keep them within a range that aligns with your business process. For example, you can set maximum and minimum scores to ensure that:

• Questions in a questionnaire have consistent maximum and minimum values
• Questions are not weighted too heavily with either too high a positive or too low a negative score

If you don’t define the maximum calculated score or maximum number of responses, the maximum possible score is the sum of all responses.

Response Configuration
To provide responses for users to select, you must add responses. You can then specify additional configuration for the responses.
Minimum and Maximum Number of Selections
For multiple-choice questions, you can optionally define the minimum and maximum number of selections that respondents make to the question. If respondents don’t select the specified number of responses, an error message appears.

Short Description
When you add responses, you can define the score for the response. You must enter a short description, which appears to respondents. You can enter any score for the response and as many responses as your business process requires.

The scores can be the same or varied. For example, you can have five responses with 5 as the score for each. Or, you can have five responses with values of 1, 2, 3, 4, and 5.

Tip: After adding responses, use the Preview feature to ensure that the list of responses isn’t too long for respondents to view effectively.

Rating Model
You can select a rating model to provide a predefined short description and score. However, you can edit both the short descriptions and scores.

Response Feedback
You can add feedback to display messages associated with the responses selected by the respondent. This feedback may appear to the respondent or to a reviewer depending upon configuration in the subscribing application.

Preview
Click Preview to review the question and responses. Select answers and click Test to see the resulting score and any response feedback. Click Reset to clear the scores and test again.

Create a Scored Questionnaire Template, Questionnaire, and Questions
This example demonstrates how to configure a questionnaire template and questionnaire that is used to score question responses and provide a subsequent questionnaire score. The questionnaire is based on the simple template. The template is used to establish default settings for the questionnaire and enforce your business requirements. You also configure two scored questions to add to the template.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is this template configured for scoring the questionnaire?</td>
<td>Yes</td>
</tr>
<tr>
<td>What calculation rule is used to calculate the questionnaire score?</td>
<td>Sum</td>
</tr>
<tr>
<td>How many sections?</td>
<td>Two</td>
</tr>
</tbody>
</table>
Decisions to Consider | In This Example
--- | ---
How many scored questions should I create in the questionnaire template? | Two
Add existing questions to template? | No

Summary of the Tasks
Configure the questionnaire template and questionnaire.

1. Create the questionnaire template.
2. Configure questionnaire contents and create sections.
3. Create a scored single-choice question for Section 1.
4. Add the single-choice question to Section 1.
5. Create a scored multiple-choice question for Section 2.
6. Add the multiple-choice question to Section 2.
7. Review and preview the questionnaire.

Creating the Questionnaire Template
1. In the **Set Up and Maintenance** work area, on the Tasks tab, select **Search**.
2. In the **Search** field, enter **Manage Questionnaire Templates** and click **Search**.
3. On the Search page, click **Manage Questionnaire Templates**.
4. On the Manage Questionnaire Templates page, in the Search Results section, click **Create**.
5. On the Create Questionnaire Template: Basic Information page, from the **Subscriber** list, select **Learning**.
6. Select **Score Questionnaire**.
7. From the **Overall Score Calculation Rule** list, select **Sum**.
8. Complete the remaining fields, as shown in this table. Use the default values unless otherwise indicated.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Vision Scored Questionnaire Template</td>
</tr>
<tr>
<td>Status</td>
<td>Active</td>
</tr>
<tr>
<td>Description</td>
<td>Any</td>
</tr>
<tr>
<td>Allow changes to instructions</td>
<td>Select</td>
</tr>
<tr>
<td>Instructions and Help Materials</td>
<td>Any</td>
</tr>
</tbody>
</table>

9. On the Create Questionnaire Template: Contents page, complete the fields, as shown in this table. Use the default values unless otherwise indicated.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow changes to format options</td>
<td>Select</td>
</tr>
</tbody>
</table>
Field | Value
--- | ---
Allow changes to sections | Select

10. **Click Save and Close.**
11. **On the Manage Questionnaires Template page, click Done.**

**Configuring Questionnaire Contents and Creating Sections**

1. In the **Set Up and Maintenance** work area, on the Tasks tab, select **Search**.
2. In the **Search** field, enter **Manage Questionnaires** and click **Search**.
3. **On the Search page, click Manage Questionnaires.**
4. **On the Manage Questionnaires page, in the Folders section, in the Subscriber field, select Learning.**
5. In the Search Results section, click **Create**.
6. **On the Create Questionnaire dialog, in the Name field, enter Vision Scored Questionnaire Template.**
7. In the Search Results section, select Vision Scored Questionnaire Template and click **OK**.
8. **On the Create Questionnaire: Basic Information page, in the Name field, enter Vision Scored Questionnaire.**
9. In the **Folder** field, select a folder.
10. **Click Next to open the Create Questionnaire: Contents page.**
11. In the Sections section, click **Create** to open the Create Section dialog box.

*Note:* If a section already exists, you can select and edit it as required instead of creating one.

12. **Complete the fields, as shown in this table. Use the default values unless otherwise indicated.**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Section 1</td>
</tr>
<tr>
<td>Description</td>
<td>Any</td>
</tr>
<tr>
<td>Introduction</td>
<td>Any</td>
</tr>
</tbody>
</table>

13. **Click OK to return to the Create Questionnaire Template: Contents page.**
14. **In the Sections section, in the Section 1 row, select Required.** Use the default values for other fields.
15. **In the Sections section, click Create open the Create Section dialog box.**
16. **Complete the fields, as shown in this table. For other fields, use the default values unless otherwise indicated.**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Section 2</td>
</tr>
<tr>
<td>Description</td>
<td>Any</td>
</tr>
<tr>
<td>Introduction</td>
<td>Any</td>
</tr>
</tbody>
</table>

17. **Click OK to return to the Create Questionnaire Template: Contents page.**
18. **In the Section 2 row, complete the fields, as shown in this table. For other fields, use the default values unless otherwise indicated.**
Creating a Scored Single-Choice Question for Section 1

1. In the Sections section, select the row titled Section 1.
2. In the Section 1: Questions section, click Create to open the Vision Scored Questionnaire Template: Create Question dialog box.
3. From the Status list, select Active.
4. From the Folder list, select Search to open the Search and Select: Folder dialog box.
5. Click Search.
6. Select a folder, then click OK to reopen the Vision Scored Questionnaire Template: Create Question dialog box. The question is added to the selected folder in the question library.
7. In the Question Text field, enter Select when you think the person will be ready for a management position.
8. From the Question Type list, select Single Choice.
9. Select Score Question.
10. In the Response section, from the Presentation list, select Radio Button List.
11. Click Add.
12. In the Short Description column, enter Ready now.
13. In the Score column, enter 5.
14. Repeat steps 11 and 12 for four additional entries and enter the values shown in the table.

<table>
<thead>
<tr>
<th>Short Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ready in 1 year</td>
<td>4</td>
</tr>
<tr>
<td>Ready in 2-3 years</td>
<td>3</td>
</tr>
<tr>
<td>Ready in 4-5 years</td>
<td>2</td>
</tr>
<tr>
<td>Ready in more than 5 years</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Alternatively, you can select a predefined rating model to score the question rather than adding short descriptions and scores.

15. Click Save and Close to open the Confirmation dialog box. The question is added to the question library.
16. Click OK to return to the Create Questionnaire Template: Contents page.

Adding the Single-Choice Question to Section 1

1. In the Section 1: Questions section, click Add to open the Add Questions dialog box.
2. In the Keywords field, enter Select when.
3. Click Search.
4. In the Search Results table, select Select when you think the person will be ready for a management position.
5. Click OK to return to the Create Questionnaire Template: Contents page.

Creating a Scored Multiple-Choice Question for Section 2

1. In the Sections section, select the row titled Section 2.
2. In the Section 2: Questions section, click Create to open the Vision Scored Questionnaire Template: Create Question dialog box.
3. From the Status list, select Active.
4. From the Folder list, select Search to open the Search and Select: Folder dialog box.
5. Click Search.
6. Select a folder, then click OK to reopen the Vision Scored Questionnaire Template: Create Question dialog box. The question is added to the selected folder in the question library.
7. In the Questions section, complete the fields as shown in this table. For other fields, use the default values unless otherwise indicated.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question Text</td>
<td>Select all the tasks that you think this person can assume for the coming year.</td>
</tr>
<tr>
<td>Question Type</td>
<td>Multiple Choice</td>
</tr>
<tr>
<td>Score Question</td>
<td>Select</td>
</tr>
<tr>
<td>Minimum Calculated Score</td>
<td>0</td>
</tr>
</tbody>
</table>

8. In the Response section, complete the fields as shown in this table. For other fields, use the default values unless otherwise indicated.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow attachments</td>
<td>Select</td>
</tr>
<tr>
<td>Minimum Number of Selections</td>
<td>1</td>
</tr>
<tr>
<td>Maximum Number of Selections</td>
<td>3</td>
</tr>
</tbody>
</table>

9. Click Add.
10. In the Short Description column, enter Mentoring.
11. In the Score column, enter 5.
12. Click the icon in the Response Field column to open the text field.
13. In the text field, enter This person will be assigned a person to mentor for six months.
14. Repeat steps 9-13 to add two rows. Complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Description</td>
<td>Hiring</td>
</tr>
<tr>
<td>Score</td>
<td>-5</td>
</tr>
<tr>
<td>Field</td>
<td>Value</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Response Field</td>
<td>Incorrect. A manager may participate in interviews only. The recruiter handles hiring.</td>
</tr>
<tr>
<td>Short Description</td>
<td>Teaching</td>
</tr>
<tr>
<td>Score</td>
<td>5</td>
</tr>
<tr>
<td>Response Field</td>
<td>This person will be required to teach one class for 3 months.</td>
</tr>
</tbody>
</table>

15. Click **Save and Close** to open the **Confirmation** dialog box. The question is added to the question library.

16. Click **OK** to return to the Create Questionnaire Template: Contents page.

### Adding the Multiple-Choice Question to Section 2

1. In the Section 2: Questions section, click **Add** to open the **Add Questions** dialog box.
2. In the **Keywords** field, enter **Select all the tasks**.
3. Click **Search**.
4. In the Search Results table, select **Select all the tasks that you think this person can assume for the coming year**.
5. Click **OK** to return to the Create Questionnaire: Contents page.
6. Click **Next** to open the Create Questionnaire: Review page.

### Reviewing and Previewing the Questionnaire

1. Click **Preview**.
2. In the **Preview: Vision Scored Questionnaire** dialog box, select responses to the questions and click **Test**.
3. Verify that the scores appear.
4. Click **Reset** to test again.
5. Click **Done** to return to the Create Questionnaire: Review page.
6. Click **Save and Close**.
7. In the **Confirmation** dialog box, click **OK** to return to the Manage Questionnaire page.

### How to Use Translation Editor with Questionnaires and Questions

You can translate questionnaire templates, questionnaires, and questions using the translation editor. With the translation editor, you can review and translate text for more than one language at a time without signing out of your current session. For each translatable field, the translation editor helps to ensure your data is translated the way you intend. The translations appear wherever the questionnaire templates, questionnaires and questions appear.

### Eligible Languages

The languages that you can translate are those that are installed and active in the application. The translated text appears in the application for the respective language a user selects when signing in.
Text that Can Be Translated
Using the translation editor, you can translate any text fields that you can edit in questionnaire templates, questionnaires, or questions. For questionnaires and templates, you can translate:

- Name, description, and introduction
- Section title, description, and introduction

For questions, you can translate:

- Question text
- Question response short description
- Question response feedback

Translation Editor Usage
Click the Translation Editor icon to edit the translatable text in a questionnaire, questionnaire template, or question. The icon appears on the pages and sections where the fields you can appear. In the Edit Translation dialog box that appears, you can enter text for any available language for each field. The translated text appears in the application for the respective language a user selects when signing in. For example, if you translate a question from English to Spanish, a Spanish-speaking user sees the Spanish translation. If the translated text is in a language that’s the same as the language of your current session, you can see the translation apply to the UI immediately.

When you create a new questionnaire, template, or question, you must first save it before using the translation editor. Once the object is saved to the database, the translation editor becomes available.

Translation Inheritance
Questionnaires inherit translations from the template. You can edit the translations to change them. Question translations that you configure are also inherited by that question if it’s used later in another questionnaire or template. You can edit the translation either in the Question Library, or in the questionnaire or template in which it’s used.

Related Topics
- Enter or Edit Translated Text

Feedback

Considerations for Configuring Feedback Visibility Options
You can configure Feedback visibility options and default options to specify who can see feedback. Use the Manage Feedback Visibility task in the Setup and Maintenance work area, Workforce Deployment (or Workforce Development) offering, Workforce Profiles functional area.

Feedback Context
You can set feedback for the following contexts:

- ORA_NO_CONTEXT: Used for feedback notes for a person in the person spotlight, person smart navigation, and elsewhere throughout Oracle Fusion applications.
• ORA_TALENT_REVIEW_TYPE: Used for feedback notes only for talent review meetings. Notes created in a talent review are visible as Feedback elsewhere in Oracle Fusion applications, but no Feedback created elsewhere appears in talent review meetings.

Visibility Options and Defaults
Select roles to make them eligible to view feedback. Users can select the roles when they create feedback so that the roles can view it. All settings are available unless you deselect them.

The options and descriptions for each visibility option are shown in the table.

<table>
<thead>
<tr>
<th>Visibility Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyone</td>
<td>A public note visible to any person in the organization</td>
</tr>
<tr>
<td>Managers only</td>
<td>Managers in the hierarchy of the worker about whom the Feedback is created</td>
</tr>
<tr>
<td>Managers and the worker</td>
<td>Managers in the hierarchy of the worker, and the worker who receives the feedback</td>
</tr>
<tr>
<td>Only me</td>
<td>A private note created by an author about the author or another person and visible only to the author</td>
</tr>
<tr>
<td>Only worker and me</td>
<td>A private note created by an author about the worker and visible only to the worker and author of the note</td>
</tr>
</tbody>
</table>

HR specialists can view all feedback except that with the Only me visibility setting.

Note: Feedback visibility is also determined by data security; you can only create or see notes for people whom you have authorization to view.

Defaults
You can edit the default value that appears in the Visibility choice list when a person creates feedback. If you select the No default option, no predefined option appears in the field. Users can select the available options whether a default is set or not. Default settings for the contexts are as follows:

- ORA_NO_CONTEXT: No default
- ORA_TALENT_REVIEW_TYPE: Managers only

If you don’t edit the visibility options or defaults, the default settings apply.

Deleted Context Settings
If you delete context settings, users can still add and view feedback, but you can no longer edit the context settings. When you delete feedback context settings, the following rules apply:

- If you delete only ORA_NO_CONTEXT, the predefined default values for ORA_NO_CONTEXT applies for the person feedback. All visibility options are available, and the default setting is No default.
- If you delete only ORA_TALENT_REVIEW_TYPE, the ORA_NO_CONTEXT settings apply for both the person feedback and talent review feedback.
- If you delete both ORA_NO_CONTEXT and ORA_TALENT_REVIEW_TYPE, the predefined default values for ORA_NOCONTEXT apply for both the person feedback and talent review feedback.
Contextual Notes

Contextual Notes in Application Pages

Enhance Talent Management application pages using the Notes resource catalog component for persons and objects using Oracle Page Composer. The Notes feature is similar to the Feedback feature in employee’s Person Spotlight and Performance Document. The Contextual Notes is an extension of the existing Anytime Feedback feature.

You can embed the Notes component on persons and objects using Oracle Page Composer. The Notes component appears with the title, Feedback or Notes, based on the component configuration, Person Notes and Object Notes.

The following image shows the person notes embedded in the Goal Details page:

You can create and share notes about employees by configuring the Notes resource catalog component in the following Talent Management scenarios:

- Notes for an employee in the context of an employee’s performance goal
- Notes for an employee in the context of a performance goal plan
- Notes for an employee in the context of a performance review period
- Notes for an employee in the context of an employee’s development goal
- Notes for an employee in the context of an employee’s career development

You can create and share object notes by configuring the Notes resource catalog component in the following Talent Management scenarios:

- Notes for a talent review meeting
• Notes for a succession plan
• Notes for a talent pool

Related Topics
• For more information, see Implementing Contextual Notes in Oracle HCM Cloud Talent Management (2375556.1) on My Oracle Support at https://support.oracle.com
• Contextual Notes

Considerations for Configuring Contextual Notes
Using Page Composer, you can add the Notes resource catalog component to an application page. Based on the object type, you must define parameters to configure the following aspects of the component:

• Context
• User Interface
• Visibility Settings

Context for Person Notes
To configure the context or scope of the notes, you specify the following parameters in implementing a number of scenarios for Person Notes.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Type</td>
<td>Use string PER_PERSON to implement Person Notes.</td>
</tr>
<tr>
<td>Object ID</td>
<td>Use a valid expression to tie notes to a specific object. The expression must yield a valid Person ID value to implement Person Notes cases; for example #{bindings. PersonId. inputValue}.</td>
</tr>
<tr>
<td>Context Type</td>
<td>Use a string value that represents a specific context. For Feedback, select one of the following values:</td>
</tr>
<tr>
<td></td>
<td>• Blank value</td>
</tr>
<tr>
<td></td>
<td>• ORA_TALENT_REVIEW_TYPE</td>
</tr>
<tr>
<td></td>
<td>When you select this context type, the Notes component appears in all instances of Feedback. This is an exception.</td>
</tr>
<tr>
<td>Context ID</td>
<td>Use a valid expression to tie notes to a specific contextual object, #{bindings. MeetingId. inputValue}. For Anytime Feedback, the Context ID is set to blank value, if the Context Type is a blank value.</td>
</tr>
</tbody>
</table>

If Person Notes is associated with a person without any additional context, the Notes component appears all instances of the Feedback component. If you specify additional context parameters to the Feedback Notes, then it is treated as configured person notes. If notes is associated to a well-defined context with all the context parameters, then it will not appear in any of the Feedback instances but will appear in all instances of the same context.
Context for Object Notes

To configure the context or scope of the object notes, you specify the following parameters in implementing a number of scenarios for Object Notes.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Type</td>
<td>Use a string representing the object type to tie the object notes, for example ORA_ REVIEW_ PERIOD.</td>
</tr>
<tr>
<td>Object ID</td>
<td>Use a valid expression to tie notes to a specific contextual object. For example#{bindings. ReviewPeriod. inputValue}.</td>
</tr>
<tr>
<td>Context Type</td>
<td>Indicates the meaning associated with the context type. For ORA_ PERFORMANCE_ GOAL</td>
</tr>
<tr>
<td>Context ID</td>
<td>Use a valid expression, for example #{bindings. MeetingId. inputValue} to tie notes to a specific contextual object.</td>
</tr>
</tbody>
</table>

In the configuration of Object Notes, notes created by users will be associated with the specified object without any additional context.

User Interface

You can define the appearance of the Notes component in the application page. In addition to Resource Catalog component standard features, you can use the following features:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Used By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Title</td>
<td>By default, the title text appears as Notes. If a string expression is provided, the title text for the object appears as: Notes: &lt;PARAMETER VALUE&gt;</td>
<td>Object Notes, For Person Notes, you can’t change the object title.</td>
</tr>
<tr>
<td>Show Details Page</td>
<td>By default, the Notes component appears as an action link that opens a separate view of the notes. When you set this option, the Notes component appears as an embedded region on the page with a list view of notes.</td>
<td>Person Notes and Object Notes</td>
</tr>
<tr>
<td></td>
<td>If you want Show Details Page, select the arrow in the field and then select Expression Builder. In the Expression Editor window enter the value true in the text box.</td>
<td></td>
</tr>
<tr>
<td>Show Quick Create</td>
<td>By default, the Notes component doesn’t appear separately. When you set this option, employees can quickly create the Note without the need to go to the list view of Notes.</td>
<td>Person Notes and Object Notes</td>
</tr>
<tr>
<td></td>
<td>If you want the users to quick create notes, you must select the arrow in the field and then select Expression Builder. In the</td>
<td></td>
</tr>
</tbody>
</table>
Parameter | Description | Used By
--- | --- | ---
| | Expression Editor window enter the value true in the text box. | Person Notes and Object Notes
| View Only | When you set this option, the Notes component appears in the View mode for users. | 
| | If you want the users to view the notes, you must select the arrow in the field and then select Expression Builder. In the Expression Editor window enter the value true in the text box. | 

### Visibility Settings of Person Notes

When you manage Feedback Visibility options, you not only define the visibility options for Feedback, you also specify the default visibility options. You can override the default Visibility settings of Person Notes by performing the following steps:

1. From Functional Setup Manager, search for and select the Manage Common Lookups task.
2. Add the value of your Context Type to the extensible lookup type, ORA_FEEDBACK_CONTEXT_TYPE.
3. Search for the Manage Feedback Visibility task and review visibility options.

> **Note:** You can delete visibility options for the Feedback context.

<table>
<thead>
<tr>
<th>Visibility Options</th>
<th>When Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyone</td>
<td>Enables everyone to view the feedback</td>
</tr>
<tr>
<td>Managers only</td>
<td>Enables only their managers to view the feedback</td>
</tr>
<tr>
<td>Managers and &lt;Recipient Name&gt;</td>
<td>Enables the manager and notes recipient to view the feedback</td>
</tr>
<tr>
<td>Only me</td>
<td>Enables only the creator of notes to view the feedback</td>
</tr>
</tbody>
</table>

Set one of the earlier-mentioned visibility options as the default setting for the person notes or else you can specify the **No default** option and later when creating a note, users can specify the visibility of the note.

### Visibility Settings of Object Notes

Contrary to the Person Notes component, you can’t change visibility setting of Object Notes.
Visibility Options | When Selected
---|---
Everyone | Enables everyone to view the notes
Only me | Enables only the creator of notes to view the notes

For the default visibility setting, you can specify **Everyone**.

### Context Parameter Values of Contextual Notes in Talent Management

When configuring the contextual notes to an application page, you provide context parameters for the person notes and object notes. The following table provides the Object Type, Object ID, Context Type, and Context ID parameter values for the Talent Management application pages.

<table>
<thead>
<tr>
<th>Navigation and Application Page</th>
<th>Object Type</th>
<th>Object ID</th>
<th>Context Type</th>
<th>Context ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add or Edit Goal page, Goal Details region</td>
<td>Predefined Value</td>
<td>#bindings. PersonId. inputValue</td>
<td>A user-defined value:</td>
<td>#{bindings. BaseGoalId. inputValue}</td>
</tr>
<tr>
<td></td>
<td>PER_PERSON</td>
<td></td>
<td>EXAMPLE_PERFORMANCE_GOAL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Predefined Value</td>
<td>#bindings. PersonId. inputValue</td>
<td>A user-defined value:</td>
<td>#{bindings. GoalPlanId. inputValue}</td>
</tr>
<tr>
<td></td>
<td>PER_PERSON</td>
<td></td>
<td>EXAMPLE_GOAL_PLAN</td>
<td></td>
</tr>
<tr>
<td>For a review period in the employee’s <strong>Goals</strong> page</td>
<td>Predefined Value</td>
<td>#bindings. PersonId. inputValue</td>
<td>A user-defined value:</td>
<td>#{bindings. ReviewPeriodId. inputValue}</td>
</tr>
<tr>
<td></td>
<td>PER_PERSON</td>
<td></td>
<td>EXAMPLE_REVIEW_PERIOD</td>
<td></td>
</tr>
<tr>
<td>In Career Development for a development goal</td>
<td>Predefined Value</td>
<td>#bindings. PersonId. inputValue</td>
<td>A user-defined value:</td>
<td>#{bindings. BaseGoalId. inputValue}</td>
</tr>
<tr>
<td>Add or Edit Goal page</td>
<td>PER_PERSON</td>
<td></td>
<td>EXAMPLE_DEVELOPMENT_GOAL</td>
<td></td>
</tr>
<tr>
<td>My Career Development page</td>
<td>Predefined Value</td>
<td>#bindings. PersonId. inputValue</td>
<td>A user-defined value:</td>
<td>Same as Object ID</td>
</tr>
<tr>
<td></td>
<td>PER_PERSON</td>
<td></td>
<td>EXAMPLE_CAREER_PLAN</td>
<td>#{bindings. PersonId. inputValue}</td>
</tr>
<tr>
<td>Talent Review Meeting page</td>
<td>A user-defined value:</td>
<td>#bindings. MeetingId. inputValue</td>
<td>Leave the field blank</td>
<td>Leave the field blank</td>
</tr>
<tr>
<td></td>
<td>EXAMPLE_TALENT_REVIEW_MEETING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create or Edit Succession Plan page</td>
<td>A user-defined value:</td>
<td>#bindings. PlanId. inputValue</td>
<td>Leave the field blank</td>
<td>Leave the field blank</td>
</tr>
<tr>
<td></td>
<td>EXAMPLE_SUCCESSION_PLAN</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Use Contextual Notes in an Employee's Performance Goal

An organization implements continuous performance management process. Managers in the organization need to share their feedback on the performance of the employees throughout the review period. To facilitate this feature, you can embed Contextual Notes in the Goal Details page and configure it with the performance goal. You must provide the expressions for Object ID and Context ID. You can choose any string for Context Type. If you select ORA_PERFORMANCE_GOAL value, the workers will also view notes in the Check-In documents for the goal.

The following table summarizes the key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which Notes do you want to add to the performance goal?</td>
<td>Person Notes</td>
</tr>
<tr>
<td>What are the visibility settings for the Notes component?</td>
<td>Everyone can view it</td>
</tr>
<tr>
<td>Do you want to change the default Visibility setting?</td>
<td>No</td>
</tr>
</tbody>
</table>

This worked example includes details for the following tasks you perform when you add and use the Notes Resource Catalog Component:

1. Adding Notes component to the Goal Details page
2. Configuring contextual notes parameters
3. Creating Notes in the Goal Details page

Adding Notes Component

The Contextual Notes container exists in the Talent Management application pages. You must add the Notes component, define the context parameters and specify the options to configure it in the application page and define the visibility settings of the note. In this example, you add and configure the Notes component to the performance goal of an employee by performing the following steps:

1. Sign into the application as a user with configuration privileges.
2. In the Setting and Actions menu, go to Administration and select Manage Sandboxes.
3. Create sandbox and then activate it.
4. Navigate to the employee’s Goals page.
5. In the Setting and Actions menu, go to Administration and select Edit Pages.
6. In the Edit Pages window, select the level -- Site, HCMCountry, or HCMOrganization -- at which you want to add the component.
7. From the View menu, select Source.
8. Click Add Content.
9. In the Add Content window, click Add in the Notes component.
You can find the Notes component added to the page.

Configuring Person Notes to an Employee’s Performance Goal

1. In the page where the Notes component is added, click the wrench icon to configure the contextual parameters. Enter the following expression values for the notes parameters:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Type</td>
<td>PER_PERSON</td>
</tr>
<tr>
<td>Object ID</td>
<td>#{bindings.PersonId.inputValue}</td>
</tr>
<tr>
<td>Context Type</td>
<td>EXAMPLE_PERFORMANCE_GOAL</td>
</tr>
<tr>
<td>Context ID</td>
<td>#{bindings.BaseGoalId.inputValue}</td>
</tr>
</tbody>
</table>

2. To define the appearance of the Notes component in the application page, in addition to Resource Catalog component standard features, you can use and specify the following attributes for the Notes component in the Component Properties window:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Title</td>
<td>You can’t change the title text of person notes. The Notes appears as: Feedback for &lt;PERSON NAME&gt;</td>
</tr>
<tr>
<td>Show Details Page</td>
<td>Leave the field blank</td>
</tr>
<tr>
<td>Show Quick Create</td>
<td>Leave the field blank</td>
</tr>
<tr>
<td>View Only</td>
<td>Leave the field blank</td>
</tr>
</tbody>
</table>

3. Click **Apply** and then **OK**.
4. Click **Save and Close**.

You can override the default Visibility options of Person Notes using the Manage Common Lookups and Manage Feedback Visibility tasks in Functional Setup Manager. In this example, as we are going by default values, we don’t need any changes or overrides to the visibility settings.

Creating Notes in Goal Details Page

After the implementor adds the Notes component to the Goal Details page, an employee, Ravi can find the Feedback link in the Goal Details page. Create a note by performing the following steps:

1. Click the **Feedback** link in the Goal Details page.
2. The Notes component with the title **Feedback for Ravi** appears. Enter your comments about the person in the text box.
3. Select **Everyone** in **Visibility** list of the notes so that anyone can view this feedback.
4. Click **Create Note**. The note is created.

You can create multiple notes and the number of notes is displayed in the Feedback header.
Add an Object Note to a Succession Plan

This example describes how to add the notes resource catalog component to a succession plan.

Large and Associates is an organization that has more than 5000 employees across 10 countries. It manages business travel, meetings, and events for many companies and organizations. It has several key positions and succession planning is vital for ensuring its business continuity. HR specialists working in this organization want a Notes component to be part of their succession plans. They know that this will enable plan owners to add information about the plan, such as the necessary competencies of suitable successors or the compensation details of the job position. The HR specialists also want to restrict the visibility of the notes added only to the creator of the notes as the notes may contain confidential information. The application implementor is aware that it’s sufficient to add the Notes component to any one succession plan to make it available in all succession plans. After plan owners add their notes for a succession plan, they can see it only within the succession plan.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which Notes component can I add to a succession plan?</td>
<td>Object notes</td>
</tr>
<tr>
<td>Should I change the default visibility setting of the object Notes component?</td>
<td>Yes. Must change the default Everyone visibility setting to Only Me.</td>
</tr>
</tbody>
</table>

This worked example includes details for the following tasks you must perform to add the Notes resource catalog component to a succession plan and use it:

1. Adding the Notes resource catalog component to a succession plan
2. Creating notes for a succession plan

Prerequisites

This worked example assumes that the following tasks are complete:

1. Sign in the application as a user with configuration privileges.
2. Activate a sandbox.

Adding a Note Component to a Succession Plan

1. In the Succession Planning work area, click the Succession Plans tab.
2. Select an active succession plan and click Edit.
3. On the Settings and Actions menu, click Edit Pages to open the Edit Pages dialog box.
4. In the Edit column, select the level Site.
5. Click Add Content.
6. Click the Add Content button that appears in the Change Layout section.
7. In the Add Content window, click Add for the Notes component.
8. Click Close to close the Add Content window.
9. Click the Edit wrench icon to configure the contextual parameters.
10. Enter the expression values only for the parameters given in the following table and leave the other fields blank.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Type</td>
<td>LARGEASSOC_SUCCESSION_PLAN</td>
</tr>
<tr>
<td>Object ID</td>
<td>#{bindings.PlanId.inputValue}</td>
</tr>
</tbody>
</table>

11. Configure the display options.
12. Click **Apply**.
13. Click **OK**.
14. Click **Close** to indicate that you have completed the Site level changes.
15. Click **Save and Close** to close the Edit Plan page.
16. Publish the sand box.

Creating Notes

After the application implementor adds the notes component to a succession plan, it’s available as a Notes link in all plans.

A plan owner can create multiple notes for the succession plan. To create a note, the plan owner must perform the following steps:

1. In the Succession Planning work area, click the Succession Plans tab.
2. Select the plan for which you want to create a note and click **Edit**.
3. Click the Notes link to open the Notes window.
4. Set the visibility of the notes to **Only Me**.
5. Add the notes text.
6. Click **Create Note**.
7. Click **Done** to close the Notes window.

Related Topics

- Configuring and Extending Applications
- Implementing Talent Management Base

What's the difference between Anytime Feedback and Contextual Notes?

Both are Notes features and are similar in many ways. The **Contextual Notes** component is an extension of **Anytime Feedback**. You can embed it into Talent Management application pages where required and configure it as per your requirements.

The Anytime Feedback feature comes with the application in specific pages and can't be moved around in the application.

What's the difference between Person Notes and Object Notes?

Person Notes captures notes about a person, for example Anytime Feedback.

Object Notes captures notes for an object, for example Notes on a succession plan.

The following table explains the similarities and differences between the Person and Object Notes features.
### Feature | Person Notes Component | Object Notes Component
--- | --- | ---
**Display Option** | Header text appears as Feedback for `<Recipient Name>`
You can’t change the header text. | The default header text of Notes appears as Notes `<expression>`. You can provide a string expression such as Share Your Thoughts
You can change header text for all instances of the component.

**Visibility Options** | You can override the default visibility settings for any context type. | Can’t change the predefined visibility settings

**OTBI Reporting** | Can create analytical reports for Feedback notes using OTBI | Can’t create analytical reports for object notes using OTBI

**Security** | Access to Person Notes is similar to restrictions for a person record. Data security restrictions defined for data roles are applicable.
Access to data is secured using data roles. | You don’t need any specific access to view Object Notes.
Data security restrictions defined for data roles aren’t applicable.

### Can I view object notes created by others?
Based on the defined Visibility settings, you can view notes created by others. For Object Notes, the administrator and the creator of Notes can set the visibility of the notes. If it is set to Everyone, then you can view it.

### Can I delete the contextual notes?
Yes, if you created the notes that is embedded in the page. The administrator can delete the Notes component from the page and not from the database.

### FAQs for Workforce Profiles

#### What's a rating category?
A label for a grouping of rating levels. Rating categories are used in talent management processes such as performance management and talent reviews to group ratings for analysis tools (performance and potential box chart, for example.)

#### Why are some content type relationships not editable?
Predefined content type relationships aren’t editable. You can only edit content type relationships that you define.
How can I define a relationship between the Goals content type and other content types?

Set up the relationship on the content type that you want to relate to goals using the relationship type: Is supported by. For example, to define a relationship between the Goals and the Competencies content types, set up the relationship on the Competencies content type, instead of the Goals content type.

What's a free-form content type?

Free-form content types enable you to capture information in a profile that you needn't store in the content library. For example, you can set up a free-form content type to store information about the previous employment information for your workers. Use the Manage Content Types task in the Profiles work area to create a free-form content type.

A free-form content type contains only a code, name, and a description, and doesn't have any properties until you add it to a profile type. Free-form content types don't include any content items. You can use free-form content types when you don't need a content item because the attribute captured for the content section is free-formed or less-structured. For example, you can set up a free-form content type to store information for accomplishments, career statements, and honors and awards.

Why can't I change the relationship type of a content item?

You can't change a content item's relationship type because it is derived from its content type. You can only change relationships at the content type level from the Edit Content Type page in the Profiles work area. You can't change predefined relationships.

How can I delete an attribute from the person profile?

You must have the HR specialist role to delete an attribute from the person profile.

✍️ **Note:** You can hide predefined attributes, but you can't delete them.

To delete an attribute that isn't a predefined attribute from the person profile:

1. Click **Manage Profile Types** on the Tasks tab in the Profiles work area.
2. Search for the Person profile type and select the row for the profile type in the Search Results section.
3. Click **Edit** in the Search Results section to open the Edit Profile Type page.
4. On the Content Sections tab, select the content section that includes the attribute you want to delete.
5. In the Content Sections region, click the selected content section link to open the Content Section page.
6. In the Content Properties section, select the row for the attribute and click **Delete**.
What happens if I edit a questionnaire that's in use?

You're prompted to either create a new version of the questionnaire or update the existing version.

If you update the existing version, the status remains **Active**, the questionnaire version remains the same, and the **In Use** status is **Yes**. The changes take affect as soon as you save the questionnaire. Respondents see the modified version when they start a new response, open a saved response, or view a completed read-only questionnaire. If respondents answered questions and saved the questionnaire prior to the change, their saved responses continue to appear when they reopen it after the change. You can edit the questionnaire as needed; however it’s best to limit the modifications to those that have a minimal impact, such as changing text. Adding questions, marking questions as required, or changing responses to choice-based questions can result in issues for questionnaires that are already completed.

If you create a new version, the previous version isn’t affected. The status of the new version is set to **Draft** and the questionnaire version number increases by one. The **In Use** status is set to **Prior Version**. When a questionnaire is completed using this version, the **In Use** status changes to **Yes**. The changes take effect when you set the status to **Active** and save the questionnaire. Respondents see the new version when they start a new response or open a saved response. Completed questionnaires display the questionnaire version under which it was completed. If respondents answered questions and saved the questionnaire prior to the new version, their saved responses don’t appear when they reopen the new version.

What happens if I enable custom approval rules for the person profile type?

HR specialists and implementors can enable custom approval rules for the person profile type:

- They can define approval rules for each content section related to the person profile type.
- When a worker submits changes for all approval-enabled content through the Edit Skills and Qualifications page of the worker’s talent profile, notification is sent to approvers based on the default approval rules.

To enable the custom approval rules for the person profile type, select the Person profile type on the Manage Profile Types page and click **Edit**. You then select the **Enable Custom Approval Rules** check box on the Edit Profile Type page. For configuring approval rules for person profiles, use the Manage Approval Rules interface.

**Related Topics**

- Managing Approval Rules: Explained

Can I edit skills and qualification data of a person's profile?

Yes. Depending on the content section access settings for your role, you can view and edit any of the predefined or custom content of a worker's profile.
How can I add content to my profile?

Select Me > Skills and Qualifications on the Home page. Click Edit on the Skills and Qualifications page to edit or add the content to your profile. Depending on the content section access settings for your role, you can view and edit any of the predefined or custom content on your profile.

What happens if I don't add a label for a content section property?

If you don't enter a value in the Label field for a content section property, the application uses the value in the Column Name field as the default value. To open the Content Section page, click the Manage Profile Types task in the Profiles work area, click Create to create a profile type. Then on the Content Sections tab add a content section, and click the link to the added content section in the Content Sections region.

How can I diagnose issues with Oracle Fusion Profile Management data?

After populating the Oracle Fusion Profile Management data tables, you can run the Profile Management Integrity Validations test if you have access to the Diagnostic Dashboard. Select Run Diagnostic Tests from the Setting and Actions menu in the global area. The validations test generates a report that contains details of any rows that are invalid, which you can repair or remove.

For Profile Management, the test validates four categories of data integrity:

- Business Group Validation: Checks the business group is valid and exists in the Oracle Fusion Global Human Resources business group table.
- Foreign Key Validation: Foreign key attributes must not be null.
- Field Level Validation: Field level attributes must match the business rules set up in Profile Management
- Row Count Validation: The row count on the setup tables must be greater than 0.
Notifications and Approvals

Notifications and Approvals: Overview

Approval management uses human workflow to automate tasks that are passed from a user or an application to another user or group for consideration or action. Workflows are routed in a predefined sequence to achieve an end result. Examples of tasks include approving a time card or completing an employee performance appraisal.

Approval management:
- Controls workflows for business processes such as hiring an employee or managing promotions.
- Enables you to define task routing policies that can be as simple or as complex as needed.
- Is fully integrated with HCM to derive approvers based on the supervisory hierarchy, areas of responsibility (such as HR or Benefit Representatives) and other criteria, such as job levels.

For workflows, Oracle Fusion Applications uses the approval management extensions of the human workflow services from Oracle Service-Oriented Architecture (SOA) Suite as well as the Oracle Business Process Management (BPM) Worklist application.

Oracle SOA Suite:
- Is a comprehensive software suite used to build, deploy, and manage service-oriented architectures.
- Provides a human workflow service that handles all interactions with users or groups in business processes.

For more information about using human workflow in SOA Suite, see Developing SOA Applications with Oracle SOA Suite.

Oracle BPM Worklist provides an interface for:
- Users to access tasks assigned to them and perform actions based on their roles in the workflow.
- Implementors to perform approval management setup, to define who should act on which types of transactions under what conditions.

For more information about working on tasks, see Managing and Monitoring Processes with Oracle Business Process Management.

Roles for HCM Workflow Access

Predefined roles provide access to workflow functionality. Users with these roles can, for example, set up approval rules and manage submitted approval tasks. This table identifies the predefined Oracle Business Process Management (BPM) role for HCM workflow access and the predefined job role that inherits it. You can assign the predefined BPM role to a custom job role, if required.

<table>
<thead>
<tr>
<th>BPM Role Name</th>
<th>BPM Role Code</th>
<th>Inherited by Job Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPM Workflow Human Capital Management Administrator</td>
<td>BPMWorkflowHCMAadmin</td>
<td>Human Capital Management Application Administrator (ORA_HRC_HUMAN_CAPITAL_MANAGEMENT_APPLICATION_ADMINISTRATOR_JOB)</td>
</tr>
</tbody>
</table>
The role BPM Workflow All Domains Administrator Role (BPMWorkflowAllDomainsAdmin) provides workflow access for all Oracle Fusion product families. This role isn’t assigned to any predefined job role, but you can add it to custom job roles.

### Disable or Enable Workflow Notifications

When workflow tasks are assigned to users, they get notifications through email and the Notifications icon in the global header. Depending on setup, notifications can be sent through other channels also, such as instant messaging. Workflow tasks are managed in the Worklist: Notifications and Approvals work area and configured in the Setup and Maintenance work area using the Manage Task Configurations or other approval setup task. If you have the BPM Workflow System Admin Role (BPMWorkflowAdmin) role, you can disable or enable these notifications for all users. For example, you can disable notifications during testing, to avoid sending test notifications to users, and then enable notifications when ready.

When you disable workflow notifications:

- The setting applies only to email notifications that are sent as part of workflow tasks, not to all emails in general.
- Users can still find their workflow tasks in the Worklist: Notifications and Approvals work area.

### Setting Notification Mode

To disable or enable workflow notifications:

1. Click the **Notifications** icon on the global header.
2. Click **More Details**.
3. In BPM Worklist, click your user name and select **Administration**.
4. On the Application Preferences page that’s on the Administration tab, select a value from the **Notification Mode** list:
   - **All**: Email and any other configured notification channels are enabled. Workflow notifications are included in the global header. This is the default value.
   - **None**: All notifications are disabled, including email and new workflow notifications in the global header.
   - **Email**: Only email notifications are enabled. New workflow notifications won’t appear in the global header, and any other configured notification channels are disabled.

   **Note**: If you or another administrator has selected news feed as the default home page layout, then users also get notifications in the Things to Finish section on the home page, as well as the Notifications page. The same mode setting that applies to the notifications in the global header also applies to the Things to Finish section and the Notifications page.

5. Click **Save**.
Synchronize Notifications in the Global Header with Workflow Tasks

When workflow tasks are assigned to users, they get an email as well as a notification in the global header. They can also find all of their workflow tasks in the Worklist: Notifications and Approvals work area. The notifications in the global header don’t immediately reflect changes to the task status due to actions taken through email, the Worklist: Notifications and Approvals work area, or BPM Worklist. Use the Synchronize Notifications in Global Header scheduled process to update the notifications with the latest task statuses, which are always reflected in the Worklist: Notifications and Approvals work area.

Note: If you or another administrator has selected news feed as the default home page layout, then users also get notifications in the Things to Finish section on the home page, as well as the Notifications page. The scheduled process also applies to notifications in these UIs. For example, the Things to Finish section automatically reflects changes made in the global header, but not changes made through email until the scheduled process runs.

Scheduling the Process

In the Scheduled Processes work area, submit the Synchronize Notifications in Global Header process with a defined schedule. For example, schedule the process to run every two hours.

Effects of the Synchronization

After the scheduled process runs, notifications in the global header might move from the Pending Notifications list to the All Notifications list. For example:

1. A notification is pending a user’s approval.
2. The user approves the task using the Worklist: Notifications and Approvals work area. The task status changes, but the notification in the global header is still in the Pending Notifications list.
3. After synchronization, the notification moves to the All Notifications list because the user has changed the task status to Approved, and the notification is no longer pending action.

If the news feed home page layout is selected, then after synchronization, the notification:

- Is removed from the list in the global header
- Is no longer a card in the Things to Finish section
- Moves from the Assigned to Me tab on the Notifications page to the All tab

The scheduled process doesn’t update the title of notifications in the global header. Similar to email subjects, the notification titles are static.

Related Topics

- Submit Scheduled Processes and Process Sets
Defining Approvals for Human Capital Management: Explained

You can manage approval policies using the tasks Manage Approval Transactions for Human Capital Management and Manage Task Configurations for Human Capital Management.

Managing Approval Transactions

Using the Manage Approval Transactions page, you can configure approval policies for many HCM tasks, including, but not limited to, the following:

- Hire
- Promote
- Transfer
- Terminate

You can select approvers for a task, arrange approvers in the required sequence, define approval rules for each approver, and configure conditions for each rule.

Managing Task Configurations

The Manage Task Configurations for Human Capital Management task navigates to the BPM Worklist. You can use the BPM Worklist to review and configure approval policies for HCM tasks; however, we recommend that you use the Manage Approval Transactions for Human Capital Management task. Using either UI, you can configure the following approval details:

- When to issue approval notifications
- Who can access task contents
- What actions are available to approvers
- What to do when errors occur during approval routing
- When tasks expire or when should tasks be escalated
- When approvers can add additional approvers

Note: The HCM Simplified UI does not allow you to modify rules that were created using Advanced Mode in the BPM Worklist. If you originally created your rule conditions using Advanced Mode in the BPM Worklist, you must continue to use the BPM Worklist to make changes.

Approval Flow

Approval Management configuration options for Oracle Fusion Human Capital Management determine most of the actions that are available to the participants in the approval process. For example:

- Either approver can reject the transaction. By default, the approval process stops when the transaction is rejected.
- The second-level manager can push the transaction back to the first-level manager, who then has a second opportunity to review the transaction and either approve or reject it, as appropriate.
- Insertion of approvers in the approval list is permitted.
- Approvers can delegate their approval responsibilities to other approvers.

If you change the default settings of the Approval Management configuration options for a task, then different actions or action outcomes become available to this approval flow.

**Managing HCM Approval Transactions: Explained**

Use the Transaction Console to easily monitor daily tasks related to HCM approvals. In the Navigator menu, select Tools then Transaction Console.

The Transaction Console provides diagnostic information and search capabilities that enable HCM Administrators to:

- See the current status of all of the approval tasks in the application.
- Monitor tasks that have failed, and take appropriate actions like withdraw or reassign to resolve stuck transactions.
- Search approval tasks based on user defined criteria.
- Save search criteria.
- Export the queried results to a spreadsheet.
- Set up approval rules and routing policies.
- Set up transaction flows to bypass approvals.

**Approval Rules Tab**

To view or configure the approval rules for a transaction, search for the transaction and click the Configure button in the Rules column in the search results. This opens the Rules configuration page where you can edit and save approval rules.

**Transaction Summary Tab**

You can monitor all of the tasks in the application and can search and filter the results based on various criteria. The Transaction Summary tab provides information on whether a process has failed or is pending, and how many instances of the process have failed or are pending. An approval process may fail due to various reasons, for example, if there is a network or database outage or an issue in the approval rules setup. An approval process may also remain in a pending state waiting for approval. For failed processes, you can view the error message generated in the application, and for pending processes, you can view the list of approvers. You can also view the current status of the approval which shows who the transaction is with or who might have already approved it. You can either withdraw a failed process or configure the approval rules and resubmit the process. If you withdraw the process, then the process is canceled and you can either start or submit a new transaction.

**Bypassing Approvals**

The application automatically initiates the approval process upon submitting a transaction, if the transaction has approvals configured. You can override this behavior by enabling the Bypass Approvals option for the transaction. If you bypass approval for a transaction, the transaction is committed immediately upon submit and is not routed for approval.

✏️ **Note:**

When you submit a termination transaction, you can select the Deferred processing option to postpone processing the transaction until the termination date. This option is typically used in future-dated terminations. However, if you enable Bypass Approvals for the termination transaction, the Deferred processing option will not be available for selection.
Related Topics

- Considerations for Hiding Terminations

Approval Management Configuration Options for Oracle Fusion Human Capital Management: Explained

Approval Management has the following default configuration options for all applications in the Oracle Fusion Human Capital Management family.

<table>
<thead>
<tr>
<th>Configuration Option</th>
<th>Default Value</th>
<th>Effect of Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad hoc insertion of approvers</td>
<td>True</td>
<td>Ad hoc insertion of approvers in the approval list is allowed. Users who add approvers may also modify or remove the approvers that they add.</td>
</tr>
<tr>
<td>Allow delegate</td>
<td>True</td>
<td>Approvers can delegate their approval responsibilities to other users. One approver replaces another, but the approver list is otherwise unaltered.</td>
</tr>
<tr>
<td>Allow push back</td>
<td>True</td>
<td>An approver can push the transaction back to the previous approver, who thereby has a second opportunity to review the transaction.</td>
</tr>
<tr>
<td>Allow reassign</td>
<td>True</td>
<td>Any approver can reassign the approval to a different approver. The approval list is recalculated based on the new approver.</td>
</tr>
<tr>
<td>Allow request information</td>
<td>True</td>
<td>Approvers can request more information from another approver or the person who submitted the transaction.</td>
</tr>
<tr>
<td>Allow self-approval</td>
<td>False</td>
<td>The person who submits the transaction can’t approve it.</td>
</tr>
<tr>
<td>Allow withdraw</td>
<td>True</td>
<td>The requester or an administrator can withdraw a transaction while the approval process is incomplete. Approvers who have already approved are notified of the withdrawal. The transaction is removed from the worklists of approvers who haven’t yet approved.</td>
</tr>
<tr>
<td>On error notify</td>
<td>Human Resources Application Administrator</td>
<td>A Human Resources Application Administrator is notified automatically when an error occurs.</td>
</tr>
<tr>
<td>Period before task expires</td>
<td>None</td>
<td>Approval tasks don’t expire.</td>
</tr>
<tr>
<td>Configuration Option</td>
<td>Default Value</td>
<td>Effect of Default Value</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Period before task escalates</td>
<td>None</td>
<td>Approval tasks aren’t escalated to other approvers.</td>
</tr>
<tr>
<td>Escalated approver</td>
<td>None</td>
<td>Approval tasks aren’t escalated to other approvers.</td>
</tr>
<tr>
<td>Repeated approver frequency</td>
<td>Once per approval</td>
<td>An approver receives one notification per transaction, even when the approver appears multiple times in the approver list.</td>
</tr>
<tr>
<td>Re-evaluate approver list</td>
<td>True</td>
<td>The approver list is regenerated after every response.</td>
</tr>
<tr>
<td>Rejection outcome</td>
<td>Stop all</td>
<td>When an approver rejects a transaction, the approval process stops and the transaction is canceled.</td>
</tr>
</tbody>
</table>

**Managing Approval Rules: Explained**

Use the Manage Approval Transactions for Human Capital Management task to configure approval policies for HCM tasks such as Hire or Promote. This interface works in conjunction with the BPM Worklist, but enables users to identify approvers and configure approval rules easily for some frequently performed HCM tasks.

**Configuring Approval Policies**

For a selected task, you can configure the approval policy by arranging approvers in the required order, defining approval rules for each approver, and submitting the approval policy. The approval policy takes effect immediately and supersedes the current approval policy for the selected task; however, in-progress approvals complete as expected and do not switch to the new policy.

**Approvers**

You can add the following types of approvers:

- Management Hierarchy or Supervisory Hierarchy
- Users
- Approval groups, which you define in BPM Worklist
- Position hierarchy
- Representatives, who are workers with assigned responsibilities, for example Benefits Representative
- Application role
- Job-level based line manager hierarchy
- Self auto approve
When to Use the BPM Worklist

Use the BPM Worklist to:

- Configure notifications, including when notifications are issued
- Configure process details, such as expiration and escalation policies
- Define approval groups
- Define approval rules in advanced mode

For any HCM tasks that are not available in the Manage Approval Transactions interface, you can use the BPM Worklist to configure all aspects of approvals. To configure in the BPM Worklist, use the Manage Task Configurations for Human Capital Management task.

**Note:** The HCM Simplified UI does not allow you to modify rules that were created using Advanced Mode in the BPM Worklist. If you originally created your rule conditions using Advanced Mode in the BPM Worklist, you must continue to use the BPM Worklist to make changes.

Approver Types: Explained

You can include any number of approvers of various types in your approval sequence by dragging and dropping them into the approval flow. This topic explains each of the approver types.

Management Hierarchy or Supervisory Hierarchy

You can include the following predefined types of managers in your approval sequence:

- Line manager
- Resource manager
- Project manager
- Regional manager

If your enterprise defines additional types of managers, then they appear automatically in the Approvers section of the Manage Approval Rules page. You can include them in the approval sequence.

Users

You can include one or more Oracle Fusion Applications users in the approval sequence.

Approval Groups

You create approval groups using the BPM Worklist. When defining your approval sequence, you can enter the names of one or more existing approval groups.
Position Hierarchy

If you include a position hierarchy in your approval sequence, then position holders are invited to approve the transaction. For positions with more than one position holder, the transaction is approved by the first position holder to approve.

Responsibility Holders

You can include holders of the following predefined responsibilities in your approval sequence:

- Human Resources Representative
- Benefits Representative
- Union Representative
- Payroll Representative

If your enterprise defines additional responsibility types, then they appear automatically in the Approvers section of the Manage Approval Rules page. You can include them in the approval sequence.

Human Resource (HR) Specialists assign responsibilities to workers using the Manage Areas of Responsibility task. A worker becomes an approver for a transaction if he or she has that responsibility for the transaction subject. For example, if you specify the Benefits Representative as an approver for a promotion, then the Benefits Representative of the worker who is being promoted is invited to approve the promotion.

\[\text{Note:} \] If you use a responsibility holder, then ensure that responsibility holders are already defined in the application. For example, if you include a HR representative as an approver for an employee process, then all employees must have HR representatives assigned to them.

Application Roles

You can use any of the existing duty roles to include in your approval sequence. If your enterprise defines duty roles for security purposes, then you can enter the duty role to include them in the approval sequence. Users with job or data roles that inherit the duty role become transaction approvers.

Job Level

You can include a job level in your approval sequence.

Job level routings are based on the manager hierarchy defined in Oracle Fusion Human Capital Management. The approval list is generated based on the starting level specified in a rule and continues until an approver with a sufficient job level is found. The approval flow uses the job level defined in the Manage Jobs interface.

Related Topics

- How You Assign Areas of Responsibility

HCM Approval Rules: Explained

Using the Manage Approval Transactions for Human Capital Management task, you can specify one or more approval rules for each task. To create more than one approval rule, you either add a rule or duplicate a selected rule and edit it as
appropriate. When you create multiple approval rules for a task, they are evaluated in the order of the rule’s priorities. When the priorities are the same for different rules, they are executed in an undefined order, sequentially.

Approval rules comprise one or more IF statements and one or more THEN statements.

**IF Statements (Conditions)**

IF statements are tests that determine when an approval rule takes effect. For example, you could specify that an approval rule for a promotion takes effect when the worker’s department is Sales or the worker’s job is Area Manager.

You can specify multiple IF statements. If you join multiple statements with "AND" operators, then all statements must be true before the approval rule takes effect. If you join multiple statements with "OR" operators, then at least one of the statements must be true before the approval rule takes effect.

**THEN Statements (Actions)**

THEN statements specify:

- Who the approvers are
- What actions approvers can take

The following table summarizes the approval actions.

<table>
<thead>
<tr>
<th>Approval Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval required</td>
<td>Notifications are issued to the identified approvers and their response is required.</td>
</tr>
<tr>
<td>Automatic approval</td>
<td>No notifications are issued to the identified approvers. The transaction is either approved or rejected automatically, and the approvers are recorded as having approved or rejected the transaction. The value of the Set Outcome To attribute for manager hierarchies determines whether the transaction is approved or rejected.</td>
</tr>
<tr>
<td>FYI only</td>
<td>Notifications are issued to the identified approvers, but no response is expected.</td>
</tr>
</tbody>
</table>

For more information about creating approval rules, see the Oracle Fusion Middleware User's Guide for Oracle Business Rules.

**Management Hierarchy Approval-Rule Attributes**

When you define approval policies using the Manage Approval Transactions for Human Capital Management task, you can create one or more approval rules for manager hierarchies of predefined and locally defined types. This topic describes the values that you can specify in the THEN statements of approval rules for manager hierarchies.
## Attributes

The following table summarizes the attributes of the manager-hierarchy approval rules and their default values.

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Description</th>
<th>Values</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Type</td>
<td>Allows users to choose from Approval required (participants need to act on the transaction), Information only (participants get FYI notifications), and Automatic approval (participants do not need to act, transaction is auto approved).</td>
<td>• Approval required</td>
<td>Approval required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Information only</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Automatic approval</td>
<td></td>
</tr>
<tr>
<td>Route Using</td>
<td>Allows users to choose which manager to route through.</td>
<td>• Resource manager</td>
<td>Line Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Line manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Project manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Regional manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Customer—Defined Manager Types</td>
<td></td>
</tr>
<tr>
<td>Approval Chain of</td>
<td>Allows users to choose which approval chain to use.</td>
<td>• Requester</td>
<td>Requester</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• User</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Worker</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Worker’s Current Line Manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Worker’s Proposed Line Manager</td>
<td></td>
</tr>
<tr>
<td>Start With Changed from</td>
<td>• Identifies both the first approver and the manager hierarchy. By default, approval requests are sent to the requester’s first-level manager, and the manager hierarchy is the one associated with the requester’s primary assignment. The requester is the worker who submits the transaction. If you select a user in Approval Chain of, then the manager hierarchy is the one associated with that user’s primary assignment. For example, when promoting one of your direct reports you could select as initial approver a human resource (HR) specialist who is outside your manager hierarchy; approval requests from this rule would be</td>
<td>• Manager</td>
<td>Manager</td>
</tr>
<tr>
<td>Initial Approver</td>
<td></td>
<td>• Employee</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Second Level Manager</td>
<td></td>
</tr>
<tr>
<td>Attribute Name</td>
<td>Description</td>
<td>Values</td>
<td>Default Value</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
<td>--------</td>
<td>---------------</td>
</tr>
<tr>
<td>Number of Levels</td>
<td>Controls how far up the selected manager hierarchy approval requests are sent. The first level is based on the Start With value. Approval routing stops when either the number of levels or the topmost approver is reached, whichever occurs first.</td>
<td>Worker’s Current Line Manager, 1 or higher</td>
<td>1</td>
</tr>
<tr>
<td>Top Approver</td>
<td>Specifies an approver above whom approvals are not routed. Approval routing stops when either the number of levels or the topmost approver is reached, whichever occurs first.</td>
<td>Worker, Worker’s Proposed Line Manager, Requester, User, Manager, Second Level Manager</td>
<td>Manager</td>
</tr>
</tbody>
</table>

For the top approver value, you can select:

- A different manager (first-level or second-level, as appropriate).
- A user who is a manager from the same manager hierarchy as the initial approver.

If you select a user who is not a manager or is from a different manager hierarchy from the initial approver, then the topmost approver is not found. In this case, routing of approvals stops when the number-of-levels value is reached.

Set Outcome ToThis only renders when Action Type is set to Automatic approval.

Specifies the outcome for automatic approvals. If you set this value to Approve, then all identified approvers are recorded as having approved the transaction, even though the approval is automatic. Similarly, if you set this value to Reject, then all identified approvers are

- Approve
- Reject
- None
Position Hierarchy Approval-Rule Attributes

When you define approval policies using the Manage Approval Transactions for Human Capital Management task, you can create one or more approval rules for a specified position hierarchy.

Attributes

The following table summarizes the attributes of the position-hierarchy approval rules and their default values.

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Description</th>
<th>Values</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Type</td>
<td>Allows users to choose from Approval required (participants need to act on the transaction), Information only (participants get FYI notifications), and Automatic approval (participants do not need to act, transaction is auto approved).</td>
<td>• Approval required&lt;br&gt;• Information only&lt;br&gt;• Automatic approval</td>
<td>Approval required</td>
</tr>
<tr>
<td>Job Level</td>
<td>• The number of job levels. Approvals are routed to approvers between the initial and topmost approvers in the position hierarchy based on this value. &lt;br&gt;• You can specify the job levels as absolute values (for example, a minimum of 2 and a maximum of 4). Alternatively, you can specify the values relative to either the initial approver or the requester. The requester is the person who submits the transaction. &lt;br&gt;• Approval routing stops when either the number of job levels or the topmost approver is reached, whichever is sooner.</td>
<td>Minimum and maximum values relative to:&lt;br&gt;• Initial approver&lt;br&gt;• Requester&lt;br&gt;Absolute minimum and maximum values</td>
<td>At most 1 relative to initial approver&lt;br&gt;At least 1 relative to initial approver</td>
</tr>
<tr>
<td>Position Hierarchy</td>
<td>• The name of the position hierarchy</td>
<td>All position hierarchies in the enterprise</td>
<td>None</td>
</tr>
</tbody>
</table>
### Attribute Name | Description | Values | Default Value
--- | --- | --- | ---
Starting Position Changed from Initial Approver | You can select from all position hierarchies in the enterprise | All positions in the selected position hierarchy | None
Job Level | The position of the first approver. The approval notification is sent to all workers who have the position, and the transaction is approved by the first worker to approve. | Minimum and maximum values relative to:  - Initial approver  - Requester | At most 1 relative to initial approver At least 1 relative to initial approver
Top Position | The position of the topmost approver. The approval notification is sent to all workers who have the position, and the transaction is approved by the first worker to approve. Approval routing stops when either the number of levels or the topmost approver is reached, whichever is sooner. | All positions in the selected position hierarchy | None
Include | Allows users to choose which approvers to include. | • All Approvers  • First and last approvers  • Last approver only | All approvers
Defining an HCM Approval Policy: Worked Example

This example shows how to define an approval policy for employee hires in the Sales department using the Manage Approval Transactions for Human Capital Management task.

If the Department of the new hire is Sales, approvals should route to the first level line manager of the requester and FYI only to the HR Representative of the worker.

If the Department of the new hire is Finance, approvals should route to the second level line manager of the requester and FYI only to the HR Representative of the worker.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>This Example</th>
</tr>
</thead>
</table>
| Who will approve employee hire requests? | Managers in the Sales department.  
The human resources representative of any new hire doesn’t need to approve but is informed of the hire after the relevant manager has approved. |
| Which approval actions must approvers take? | Managers must approve the hire.  
The human resources representative receives an approval notification for all hires, but no response is needed. |
| Can the required level of management approval vary? | The required level of approval varies with the grade of the new hire.  
The requester’s:  
• First-level manager approves the trainee grades 1 through 3  
• Second-level manager approves the professional grades 4 and above |

Summary of the Tasks

To define the approval policy in this example, you:

1. Navigate to the Manage Approval Rules: Hire an Employee page.
2. Assemble the approval sequence.
3. Define the approval rule for trainee grades.
4. Define the approval rule for professional grades.
5. Define the approval rule for all grades.

Navigating to the Manage Approval Rules: Hire an Employee Page

1. In the Setup and Maintenance work area, click the Search button and search for the task Manage Approval Transactions for Human Capital Management.
2. In the Search Results region, click the task name.
3. On the Manage Approval Transactions page, enter the search term Hire in the **Name** field.
4. Click **Search**.
5. In the Search Results region, click the Configure button in the Rules column for the transaction Hire an Employee.

### Assembling the Approval Sequence

1. On the Manage Approval Rules: Hire an Employee page, confirm that an entry for Line Manager appears in the Approval Sequence region.
2. In the Approvers region, click the **Add** icon on the Human Resources Representative entry to add it to the right of the Line Manager entry in the Approval Sequence region.

### Defining the Approval Rule for Trainee Grades

1. In the Approval Sequence region, select the Line Manager entry.
2. Click the **Edit** icon to edit the rule settings.
3. In the **Name** field of the **Edit Rule Settings** window, enter the rule name SalesHiresTraineeGrades. (The name can’t contain spaces.)
4. In the IF statement for the SalesHiresTraineeGrades rule, click the **Add** icon to the right of the first condition to create an additional condition.
5. Complete the fields of the two condition statements as shown in this table.

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Operator</th>
<th>Attribute Value</th>
<th>And or Or</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
<td>==</td>
<td>Sales</td>
<td>and</td>
</tr>
<tr>
<td>Grade</td>
<td>&lt;=</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

6. In the THEN statement for the SalesHiresTraineeGrades rule, complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Approval required</td>
</tr>
<tr>
<td>Route Using</td>
<td>Line Manager</td>
</tr>
<tr>
<td>Approval Chain of</td>
<td>Requester</td>
</tr>
<tr>
<td>Start with</td>
<td>Manager</td>
</tr>
<tr>
<td>Number of Levels</td>
<td>1</td>
</tr>
<tr>
<td>Top Approver</td>
<td>Manager</td>
</tr>
</tbody>
</table>
Defining the Approval Rule for Professional Grades

1. Click **Add Rule**.
2. Click the **Edit** icon to edit the rule settings.
3. In the **Name** field of the **Edit Rule Settings** window, enter the rule name SalesHiresProfessionalGrades.
4. In the IF statement for the SalesHiresProfessionalGrades rule, click the **Add** icon to the right of the first condition twice to create two additional conditions.
5. Complete the fields of the three condition statements as shown in this table.

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Operator</th>
<th>Attribute Value</th>
<th>And or Or</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
<td>==</td>
<td>Sales</td>
<td>and</td>
</tr>
<tr>
<td>Grade</td>
<td>&gt;</td>
<td>3</td>
<td>and</td>
</tr>
<tr>
<td>Grade</td>
<td>&lt;=</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

6. In the THEN statement for the SalesHiresProfessionalGrades rule, complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action</strong></td>
<td>Approval required</td>
</tr>
<tr>
<td><strong>Route Using</strong></td>
<td>Line manager</td>
</tr>
<tr>
<td><strong>Approval Chain of</strong></td>
<td>Requester</td>
</tr>
<tr>
<td><strong>Start with</strong></td>
<td>Second Level Manager</td>
</tr>
<tr>
<td><strong>Number of Levels</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Top Approver</strong></td>
<td>Second Level Manager</td>
</tr>
</tbody>
</table>

Defining the Approval Rule for All Grades

1. In the Approval Sequence region, select the Human Resources Representative entry.
2. In the Rules region for the new rule, click the **Edit** icon to edit the rule settings.
3. In the **Name** field of the **Edit Rule Settings** window, enter the rule name SalesHiresAllGrades.
4. In the IF statement for the SalesHiresAllGrades rule, complete the fields of the condition statement as shown in this table.

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Operator</th>
<th>Attribute Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
<td>==</td>
<td>Sales</td>
</tr>
</tbody>
</table>
5. In the THEN statement of the SalesHiresAllGrades rule, complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Information Only</td>
</tr>
<tr>
<td>Representative Type</td>
<td>Human Resource Representative</td>
</tr>
<tr>
<td>Representative of</td>
<td>Worker’s Proposed Representative</td>
</tr>
</tbody>
</table>

6. Click Submit.

**Modifying Approval Notifications Using Page Composer: Explained**

Using the Oracle Page Composer, you can selectively show and hide various components of a notification, including fields, labels, and regions. You can edit labels, color, and page layout.

Users with this role: Human Capital Management Application Administrator role or any other role that has this privilege PER_CUSTOMIZE_APPROVAL_NOTIFICATION_PRIV can modify notifications.

**Note:** Any modifications made to a notification will affect all notifications of the same transaction type.

**Modifying Notifications**

To modify a notification using the Page Composer, click the Edit button on the top right corner of the notification. You can edit the notification using either the design view or the source view. The design view:

- Is the basic or default view.
- Supports region changes, such as changing the page layout, showing or hiding regions, and adding customer-defined content in regions.
- Can be easily used by functional users who are not familiar with the Oracle Application Development Framework (ADF).

The source view:

- Supports component changes, such as changing the task flow, editing individual component properties, and showing or hiding individual components.
- Is targeted to technical users and requires an understanding of ADF components.

You can preview the changes before submitting them by clicking the Apply button. The Reset Page option removes all past edits (regardless of when they were made) and restores the page to its default state. Modifications made in a Worklist notification are also visible in an email notification.
Making Changes in Design View

The Design view supports:

- Changing the display, including changing the header font, hiding the region header, hiding the complete region, and enabling or disabling the ability to resize or remove regions.
- Changing the page style, including specifying a different style sheet for the page.
- Modifying the content style such as font, background, and margins; specifying a different style sheet for the content.
- Adding the following customer-defined content in the notification:
  - A box with content
  - HTML markup tags
  - A link to a page or website
  - A box with content, including options to move and resize the box
  - Formatted text
  - A web page within the notification

Making Changes in Source View

The Source view supports:

- Defining a header for the notification
- Defining text for the notification body

Related Topics

- Overview of Page Modification

Modifying an Approval Notification Using Page Composer: Worked Example

This example demonstrates how to modify an approval notification. You received a notification in your worklist to approve a transaction involving creation of a grade. You can add a comment for the subsequent approvers and attach a document to the notification, listing the existing grades and their descriptions. You also want to make changes to certain notification components.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In this Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display the Edit Grade Details link?</td>
<td>No, hide the region containing the link.</td>
</tr>
<tr>
<td>Display a screenshot of the Grade Creation page?</td>
<td>Yes, add a link to the screenshot in the Details region</td>
</tr>
</tbody>
</table>
Decisions to Consider | In this Example
---|---
Change the notification header? | Yes, change from "Create Grade <Grade Name>, <Grade Code>, <Effective Date>" to "Created New Grade"
Change the Effective Start Date label? | Yes, change to Grade Effective Date
Highlight the Grade Effective Date? | Yes, display the date in bold

Making Changes Using the Design View

1. Click the Edit button on the top right corner of the notification page.
2. The Design view appears by default. Click the Edit icon in the Related Links region.
3. In the Display Options tab, deselect Show Component and click Apply. You can see that the Related Links region disappears. Click OK to confirm.
4. Click the Add Content button below the page header.
5. Click the Open link in the ADF Faces Components row.
6. Click the Add link in the Image row. An Image region is added in the notification.
7. Click the Edit icon in the Image region and provide the URL of the screenshot in the Destination field. The image now includes a link to the screenshot. Move the image region to the end of the Details region.

Making Changes Using the Source View

1. Click the View dropdown button on the top of the page and select Source to change from Design to Source view.
2. Click the page header to select the panelHeader component. Click Edit to open the Component Properties window.
3. In the Text field, click Select Text Resource. Create a text resource and enter the Display Value Created New Grade. Select this text resource and click OK. The page header is now changed.
4. Select the Effective Start Date field in the Transaction Details region. A warning message appears indicating that the changes will be applied to all instances wherever the task flow is used. Click Edit and follow the same steps as in the previous step to change the label to Grade Effective Date.
5. Click the Content Style tab in the Component Properties window.
6. Select the Font Style as bold. The date now displays in bold.
7. Click Save to apply all the changes.

Related Topics

- Overview of Page Modification

FAQs for Approvals
How do I define the approval policy for a task?

Use the Manage Approval Transactions for Human Capital Management task to define the approval policy. On the Manage Approval Rules page for a supported task, such as Hire an Employee, begin by deciding who will approve transactions. Using either drag and drop or the Add action, move those approvers from the Approvers section to the approval sequence and arrange them in the required order. By default, an approver is added to the sequence immediately following the currently selected approver, but you can use drag and drop to change the approver order. When you have defined the approval sequence, select the first approver in the approval sequence to display any predefined approval rule for that approver type. You can edit the displayed approval rule and create additional approval rules, as appropriate. Edit the rule settings to specify a name for each rule. Define approval rules for the remaining approvers in the approval sequence. When you have defined the approval rules for all approvers, submit the approval policy.

What happens if I edit or delete an approval rule?

If you edit or delete an approval rule on the Manage Approval Rules page, then approvals currently in progress complete as if the rule had not been edited or deleted.

New approvals follow the latest version of the rule.

Note: For more information about approvals, see Frequently Asked Questions About Approvals (Doc ID 1987850.1) on My Oracle Support at https://support.oracle.com.

Why do I see a placeholder like "attribute16" in a list of values in my product??

If you see a placeholder like "attribute16" in a list of values in your product, it is because a flexfield that should be used for the value was not registered and deployed yet or the attribute was not configured. For more information about flexfields, see Flexfields Setup in this guide.

Workflow Email Notification Setup

Overview of Setting Up Workflow Email Notifications

Email notifications are enabled by default and sent to appropriate users as part of a workflow process. Each workflow task has default email setup, for example, to send emails to assignees whenever they’re assigned a task. You don’t need to do anything for the email notifications to work. To adjust the predefined setup, you generally use the Manage Task Configurations or other approval setup task in the Setup and Maintenance Work Area.
Access to Email Notifications Setup

You do most of the setup for email notifications in the Notifications subtab for the specific workflow task that you’re configuring. All setup on the Notifications subtab applies to email notifications. A few settings also apply to workflow notifications that appear in the global header or are sent through any other configured channels, such as instant messaging.

1. In the Setup and Maintenance work area, go to the following:
   - Functional Area: Application Extensions or another functional area
   - Task: Manage Task Configurations or another approval setup task

2. In BPM Worklist, on the Task Configuration tab, select the workflow task to configure and click the Edit task icon in the Tasks to be configured toolbar.

3. Open the Notifications subtab and make your changes.

4. Click the Commit task icon in the Tasks to be configured toolbar when you’re ready to deploy your changes.

The following figure shows the Task Configuration tab, with the first task in the Tasks to be configured pane selected, the Edit task icon clicked, and the Notifications subtab open. In this example, the Task Status column indicates that email notifications are sent whenever the selected task is assigned to anyone, and when the task is complete or results in error.
What You Can Set Up

You can, for example:

- Define when email notifications are sent, and to whom
- Add content to email headers
- Define what appears in the From field for the emails
- Set an address to send all email notifications to during testing

You can click the **Expand More** icon on the Notifications subtab to open the More section and see other setup options for email notifications. In general, leave the default settings in this section for every workflow task. Settings in this section include the following check boxes, which, if selected, would:

- **Make notification secure (exclude details):** Exclude business transaction details in email notifications.
- **Hide End User Web URL in notifications:** Remove the default first line in the email body: Access this task in the Workspace Application or take direct action using the links in this email. This line includes a link that opens BPM Worklist. It is recommended to select this check box.
- **Make notification actionable:** Include links in email notifications that users can click to directly take action, for example to approve or reject.
- **Send task attachments with email notifications:** Include files attached to the task as attachments in the email notifications.

Define When to Send Workflow Email Notifications

By default, each workflow task is set up to send email notifications as part of the approval process. For any workflow task, you can change the setup to determine when email notifications are sent, and to whom.

**Setting Up Notification Scenarios**

To define the scenarios for sending email notifications:

1. Navigate to the Notifications subtab in BPM Worklist for the task you want to edit.
2. Click the **Add Notification** icon to enable additional notification scenarios, or edit existing rows directly.
   a. In the **Task Status** column, select when to send the email, for example when the task has expired. Aside from the actions or statuses available to end users, you can also select any of the following:
      - **Alerted:** Usually, an error condition that can be fixed. The task is assigned to the error assignee, or someone else if the task doesn’t have error assignees.
      - **Update:** Whenever the task is updated, for example by adding a comment or attachment, without affecting the approval status or routing.
      - **Update Outcome:** Whenever the outcome of the task is updated, for example approved or rejected.
      - **All other actions:** Any action that’s not already in the list of values.
   b. In the **Recipient** column, select whom to send the email to.
      - **Assignees:** The users or groups whom the task is currently assigned to.
      - **Initiator:** The user who created the task.
      - **Approvers:** The users who already approved the task as part of a sequential approval chain.
      - **Owner:** The task owner, who’s responsible for the business process that the task is related to.
• **Reviewer:** The user who can only add comments and attachments to a task.

3. To disable specific notification scenarios, select a row and click the Delete Notification icon.

4. Click the Save icon in the Tasks to be configured toolbar.

The following figure shows the table on the Notifications subtab with predefined scenarios for a workflow task. In this example, email notifications are sent to assignees whenever the task is assigned to them. The task initiator also gets a notification when the task is complete, and administrators are notified if the task results in error.

### Setting Up Email Reminders

To send email reminders in addition to the defined notification scenarios:

1. Select the Enable Reminder check box.
2. From the Repeat list, select the number of reminders to send, for example 2.
3. From the Initiating Action list, specify if the reminder is sent based on when the task is assigned to a user or when the task expires.
4. Define a frequency for the time between reminders, for example 3 days.
5. Click the Save icon in the Tasks to be configured toolbar.

The following figure shows the reminder setup with the given sample settings, along with After Assignment selected as the initiating action. For this example, an email reminder is sent three days after the user is assigned the task. One more reminder is sent three days after that, if the user still hasn’t acted on the assigned task.

---

**Related Topics**

- Actions and Statuses for Workflow Tasks
- Define People to Support Workflow Tasks
Add Header Content to Workflow Email Notifications

Each workflow task is configured with scenarios for sending email notifications as part of the approval process. For each notification scenario in the Notifications subtab, the Notification Header column determines what’s in the email header, a region that appears before the email body.

- By default, all predefined notification scenarios have emails with blank headers.
- Any notification scenarios you add in the Notifications subtab would have the following header value:
  \[\text{concat} \left( \text{string}('Task '), \text{/task:task/task:title}, \text{string(' requires your attention.')} \right)\]. It is recommended to change that value to \text{null}.

For some workflow tasks, you can enable configurable email notifications based on report layouts to be used instead of the standard email notifications. The Notification Header setting doesn’t apply to those configurable email notifications.

Adding Company Name or Logo

If you do want to add, for example, your company name or logo to the email header:

1. Navigate to the Notifications subtab in BPM Worklist for the task you want to edit.
2. For the specific notification scenario on the Notifications subtab, click the icon in the Notification Header column.
3. In the Edit Notification Message dialog box, delete any existing content and enter the following in the Notification Message field.
   - For company name: Enter text in single quotes, for example ‘Oracle’. You can also use HTML formatting, for example ‘<h2>Oracle</h2>’.
   - For company logo: Enter the URL to your logo, following this syntax: ‘<img src="https://cloud.oracle.com/res/images/header/oracle-cloud-logo.png" width="230" height="69" alt="Oracle Logo">’. Replace the URL and alternative text with your own.
4. Click the Save icon in the Tasks to be configured toolbar.

Set Up the From Field in Workflow Email Notifications

By default, the From field in workflow email notifications shows an email address without a sender name. You can't change the email address, but you can specify the sender name. For example, if you indicate that Your Company is the text to display, then the From field shows: Your Company <<your pod>.fa.sender@workflow.mail.<your data center>.cloud.oracle.com>.

You can set up the sender name in application preferences for all workflow tasks, or have different setup for specific workflow tasks. If not specified at the task level, the sender name setting defaults from the preferences.
Setting Up for All Workflow Tasks

To define the sender name for all workflow tasks that have no other applicable setup:

1. Open the Administration tab. If you’re not in BPM Worklist:
   a. Click the Notifications icon in the global header.
   b. Click More Details.
   c. Click your user name and select Administration.
2. On the Application Preferences page that’s on the Administration tab, select one of the Email "From:" Display Name options.
   o Select to specify the text to display. Enter your value or leave blank if you want nothing to appear in the From field.
   o Select Submitter to show the person who created the task.
   o Select Previous Approver to show the previous assignee in the approval chain. When the notification is sent to the first assignee in the approval chain, the From field shows the person who created the task.
3. Click Save.
Setting Up for a Specific Workflow Task

To specify the sender name for a specific workflow task:

1. Navigate to the Notifications subtab in BPM Worklist for the task you want to edit.
2. On the Notifications subtab, click the **Expand More** icon.
3. Select one of the **Email "From:" Display Name** options.
   - Select **Not Applicable** so that what appears in the From field depends on the application preferences that apply to all workflow tasks.
   - Select to specify the text to display. Enter your value in quotes, for example "Oracle", or leave blank if you want nothing to appear in the From field.
   - Select **Previous Approver** to show the previous assignee in the approval chain. When the notification is sent to the first assignee in the approval chain, the From field shows the person who created the task.
4. Click the **Save** icon in the **Tasks to be configured** toolbar.

Send Test Workflow Email Notifications to One Address

While you’re testing workflow setup, you can send all email notifications to a single address so that your users don’t receive any test emails. The test emails are still sent based on the notification scenarios defined for the particular workflow task.

Specifying the Email Address

To enter the email address to send test emails to:

1. Click the **Notifications** icon in the global header.
2. Click **More Details**.
3. Click your user name and select **Administration**.
4. On the Application Preferences page that’s on the Administration tab, click the Test Notification Email Address icon.
5. In the dialog box, enter an email address in the Test Notification Email Address field.
6. Click OK and then Save.

After you’re done testing, go back and delete the email address that you entered.

Configurable Workflow Notifications

HCM Configurable Workflow Notifications: Overview

As part of workflow tasks, the application automatically sends notifications to your users. For example, when a user submits a performance goal for approval, the approvers receive a notification with the approval request. For some flows, Oracle Business Intelligence (BI) Publisher reports determine the notification content and format, and you can edit the report to configure the email and in-app notifications. These report-based notifications are not only configurable, but also optimized for viewing on mobile devices. In addition to getting notifications in email, users can also view in-app notifications, for example by

- Clicking the Notifications icon in the global header and opening a notification
- Going to the Worklist: Notifications and Approvals work area and opening a notification
- Clicking the In-App Notification link at the end of an email notification

Such business flows include the following HCM workflow tasks:

- Absence recording approvals
- Discretionary disbursement approvals
- Donation approvals
- Profile management
- Profile approvals
- Goal management
- Goal approvals
- Career development
- Feedback
- Performance management
- Performance document approvals
- Talent review
- Add assignment
- Add contact
- Add contingent worker
- Add nonworker
- Add pending worker
- Add terms
- Approve time cards
- Change assignment
- Change manager
• Change work schedule
• Change working hours
• Create contracts
• Document records
• Manage areas of responsibility
• Manage checklists
• Manage directs
• Manage employment
• Manage grades
• Manage grade ladders
• Manage grade rates
• Manage jobs
• Manage locations
• Manage organizations
• Manage positions
• Manage work relationship
• New hire
• Person external identifiers
• Person notes
• Personal information
• Promotion
• Share information
• Termination
• Transfer

Process Overview
The process to generate email and in-app notifications is the same as generating other types of report output. The process involves various types of objects in the business intelligence catalog, including data models, subtemplates, style templates, and reports.
This figure shows how these BI objects work together to generate the notification content.

- **Data Sources**: Store the attributes and attribute values for business objects and transactions in the application (example of data sources being transaction tables)
- **Data Model**: Determines which attributes from data sources are available to be included in the notification and how that data is retrieved
- **Subtemplate**: Provides common components, for example a branding logo and buttons, that can be reused in multiple reports
- **Style Template**: Provides styles such as the type of lines and fonts to use in tables, or the font type, size, and color to use for headings
- **Report**: Contains a layout template that determines:
  - Which attributes appear in the notification, from the data model used for the report
  - What the notification looks like, leveraging components from the subtemplate and styles from the style template used for the report
- **HTML**: Is the output generated from the report
- **Email Notification**: Has the HTML output embedded in the email body
- **In-App Notification**: Has the HTML output embedded in the application UI

Each workflow task with configurable notifications has a corresponding predefined report in the BI catalog. For example, the goal management approval notifications report contains the PerformanceGoalApprovalNotificationsReport layout template and uses the PerformanceGoalApprovalNotificationsDM data model. The generated output is included in emails that are sent to users for goal approval.
Notification Modifications

After you enable configurable email and in-app notifications, the predefined reports and related objects in the BI catalog work by default. The report-based notifications provide the same information as the standard notifications, but in a format optimized for mobile devices. If you must modify the notifications, you can edit copies of the predefined reports and data models, but not the style template. You proceed as you would to edit any report or data model in the catalog, for example:

1. Find a predefined report for goal approvals in the business intelligence catalog.
2. Use the Customize option to create a copy of the report that’s linked to the original.
3. Edit the copied report layout template.

For more information about configuring reports, see Oracle Human Capital Management Cloud Creating and Administering Analytics and Reports. You should get familiar with reports and BI Publisher in general before configuring workflow email and in-app notifications. Aspects specific to email and in-app notifications include:

- You use only the Template Builder for Word add-in to configure the .rtf template in Microsoft Word. You don’t use the layout editor or other tools available for configuring report layout.
- You usually edit a copy of predefined layout templates, rather than create reports or layout templates.

Security

To configure reports and data models for email and in-app notifications, you must have one of these duty roles or privilege:

- BI Platform Administrator duty role
- Publisher Data Model Developer duty role
- Manage BI Publisher Template privilege

Setup

You configure profile options to specify the HCM applications that use the BI Publisher reports rather than the default FYI and approval notifications. To use BI Publisher reports rather than the default workflow and approval notifications, you must:

- Configure profile options for email and in-app notifications to specify the HCM applications that use the BI Publisher reports.
- Download and install the Template Builder for Word add-in.

You configure profile options using the Manage Administrator Profile Values task in the Setup and Maintenance work area.

This table shows the profile option codes that determine which business processes use BI Publisher templates for email notifications. It also describes the effect of each code.

<table>
<thead>
<tr>
<th>Business Processes</th>
<th>Profile Option Code</th>
<th>Profile Display Name</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Absence Management</td>
<td>BIP_EMAIL_NOTIFICATION_</td>
<td>BIP_EMAIL_NOTIFICATION_</td>
<td>The application first checks this setting. If set to <strong>true</strong>, all</td>
</tr>
<tr>
<td></td>
<td>HCM_ANC</td>
<td>HCM_ANC</td>
<td>Absence Management business processes that can use BI Publisher</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>reports for workflow notifications use them.</td>
</tr>
<tr>
<td>All Global Human Resources</td>
<td>BIP_EMAIL_NOTIFICATION_</td>
<td>BI Publisher Notifications</td>
<td>The application first checks this setting. If set to <strong>true</strong>, all</td>
</tr>
<tr>
<td></td>
<td>HCM_PER</td>
<td>Enabled for Global Human</td>
<td>Global Human Resources business processes that can use BI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resources</td>
<td></td>
</tr>
</tbody>
</table>
## Notifications and Approvals

### Business Processes | Profile Option Code | Profile Display Name | Effect
---|---|---|---
All Talent Management | BIP_EMAIL_NOTIFICATION_HCM_TALENT | BI Publisher Notifications Enabled for Talent Management | Publisher reports for workflow notifications use them.

### Business Processes | Profile Option Code | Profile Display Name | Effect
---|---|---|---
All HCM | BIP_EMAIL_NOTIFICATION_HCM | BIP EMAIL NOTIFICATION PER FAMILY LEVEL | The application checks this setting next. If set to true, all HCM business processes that can use BI Publisher reports for workflow notifications use them.

This table shows the profile option codes that determine which business processes use BI Publisher templates for in-app notifications. It also describes the effect of each code.

### Business Processes | Profile Option Code | Profile Display Name | Effect
---|---|---|---
All Absence Management | BIP_ONLINE_NOTIFICATION_HCM_ANC | BIP_ONLINE_NOTIFICATION_HCM_ANC | The application first checks this setting. If set to true, all Absence Management business processes that can use BI Publisher reports for in-app notifications use them.

### Business Processes | Profile Option Code | Profile Display Name | Effect
---|---|---|---
All Global Human Resources | BIP_ONLINE_NOTIFICATION_HCM_PER | BI Publisher Worklist Notifications Enabled for Global Human Resources | The application first checks this setting. If set to true, all Global Human Resources business processes that can use BI Publisher reports for in-app notifications use them.

### Business Processes | Profile Option Code | Profile Display Name | Effect
---|---|---|---
All Talent Management | BIP_ONLINE_NOTIFICATION_HCM_GOALS | BI Publisher Worklist Notifications Enabled for Goals and Career Management | The application first checks this setting. If set to true, all Talent Management business processes that can use BI Publisher reports for in-app notifications use them.

### Business Processes | Profile Option Code | Profile Display Name | Effect
---|---|---|---
All Talent Management | BIP_ONLINE_NOTIFICATION_HCM_TALENT | BI Publisher Worklist Notifications Enabled for Talent Management | The application first checks this setting. If set to true, all Talent Management business processes that can use BI Publisher reports for in-app notifications use them.

**Related Topics**

- Set Up for RTF and Excel Report Layout Templates
- Overview of Workflow Tasks
Templates and Data Models Used for HCM Notifications Based on Reports

You can configure Oracle Business Intelligence (BI) Publisher reports to send notifications (email and in-app) for some HCM workflow tasks. Each business process uses different BI Publisher templates and data models for the email and in-app notifications.

Templates and Associated Data Models

This table shows the BI Publisher templates and the associated data models that are available for each business process.

<table>
<thead>
<tr>
<th>Business Process</th>
<th>Template (Data Model)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Development</td>
<td>CareerDevelopmentApprovalFYIReport (CareerDevelopmentApprovalNotificationDM)</td>
</tr>
<tr>
<td></td>
<td>CareerDevelopmentApprovalReport (CareerDevelopmentApprovalNotificationDM)</td>
</tr>
<tr>
<td></td>
<td>CareerDevelopmentFYINotification (CareerDevelopmentFyiDM)</td>
</tr>
<tr>
<td>Feedback</td>
<td>NoteSentToManagerReport (PersonNotes)</td>
</tr>
<tr>
<td></td>
<td>NoteSentToWorkerReport (PersonNotes)</td>
</tr>
<tr>
<td>Goal Management</td>
<td>PerformanceGoalApprovalNotificationsReport (PerformanceGoalApprovalNotificationsDM)</td>
</tr>
<tr>
<td></td>
<td>PerformanceGoalNotificationsReport (PerformanceGoalNotificationsDM)</td>
</tr>
<tr>
<td>Performance Management</td>
<td>PerformanceApprovalNotificationsReport (PerformanceApprovalDM)</td>
</tr>
<tr>
<td></td>
<td>PerformanceFYINotificationsReport (PerformanceFYIDM)</td>
</tr>
<tr>
<td>Profile Management</td>
<td>ProfileChangeNotificationReport (ProfileChangeNotification)</td>
</tr>
<tr>
<td></td>
<td>ProfilesApprovalNotificationFYIReport (ProfilesApprovalNotificationDM)</td>
</tr>
<tr>
<td></td>
<td>ProfilesApprovalNotificationReport (ProfilesApprovalNotificationDM)</td>
</tr>
<tr>
<td>Talent Review</td>
<td>TalentCalibFYIReport (TalentCalibFYIDM)</td>
</tr>
<tr>
<td>Time and Labor</td>
<td>ApprovalEmailNotification (ApprovalEmailNotification)</td>
</tr>
<tr>
<td>Workforce Deployment</td>
<td>AddAssignmentReport (EmploymentCreateProcesses)</td>
</tr>
<tr>
<td></td>
<td>AddContactReport (AddContact)</td>
</tr>
<tr>
<td></td>
<td>AddCWKReport (EmploymentCreateProcesses)</td>
</tr>
<tr>
<td></td>
<td>AddNWKReport (EmploymentCreateProcesses)</td>
</tr>
<tr>
<td></td>
<td>AddPWKReport (EmploymentCreateProcesses)</td>
</tr>
<tr>
<td>Business Process</td>
<td>Template (Data Model)</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>AddTermsReport (EmploymentCreateProcesses)</td>
<td></td>
</tr>
<tr>
<td>AddWorkRelationshipReport (EmploymentCreateProcesses)</td>
<td></td>
</tr>
<tr>
<td>AssignmentChangeReport (EmploymentUpdateProcesses)</td>
<td></td>
</tr>
<tr>
<td>CancelWorkRelationshipReport (EmploymentWRProcesses)</td>
<td></td>
</tr>
<tr>
<td>ChangeLegalEmployerReport (EmploymentCreateProcesses)</td>
<td></td>
</tr>
<tr>
<td>ChangeLocationReport (EmploymentUpdateProcesses)</td>
<td></td>
</tr>
<tr>
<td>ChangeManagerReport (EmploymentUpdateProcesses)</td>
<td></td>
</tr>
<tr>
<td>ChangeSalaryReport (ChangeSalary)</td>
<td></td>
</tr>
<tr>
<td>ChangeWorkHoursReport (EmploymentUpdateProcesses)</td>
<td></td>
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<tr>
<td>CreateGradeLadderReport (ManageGradeLadders)</td>
<td></td>
</tr>
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<td>CreateGradeRateReport (ManageGradeRates)</td>
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</tr>
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<td>CreateGradeReport (ManageGrades)</td>
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</tr>
<tr>
<td>CreateJobReport (ManageJobs)</td>
<td></td>
</tr>
<tr>
<td>CreateLocationReport (ManageLocations)</td>
<td></td>
</tr>
<tr>
<td>CreateOrganizationReport (ManageOrganizations)</td>
<td></td>
</tr>
<tr>
<td>CreatePositionReport (ManagePositions)</td>
<td></td>
</tr>
<tr>
<td>DeleteGradeLadderReport (ManageGradeLadders)</td>
<td></td>
</tr>
<tr>
<td>DeleteGradeRateReport (ManageGradeRates)</td>
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</tr>
<tr>
<td>DeleteGradeReport (ManageGrades)</td>
<td></td>
</tr>
<tr>
<td>DeletePositionReport (ManagePositions)</td>
<td></td>
</tr>
<tr>
<td>EligibleJobsReport (EmploymentUpdateProcesses)</td>
<td></td>
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<tr>
<td>ExternalIdentifierReport (ExternalIdentifier)</td>
<td></td>
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<tr>
<td>ManageDirectsReport (EmploymentUpdateProcesses)</td>
<td></td>
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<td>ManageDorReport (ManageDOR)</td>
<td></td>
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<td>ManageEmploymentReport (EmploymentUpdateProcesses)</td>
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<tr>
<td>ManageWorkRelationshipReport (EmploymentWRProcesses)</td>
<td></td>
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<tr>
<td>NewHireReport (EmploymentCreateProcesses)</td>
<td></td>
</tr>
<tr>
<td>NoteSentToManagerReport (PersonNotes)</td>
<td></td>
</tr>
<tr>
<td>NoteSentToWorkerReport (PersonNotes)</td>
<td></td>
</tr>
<tr>
<td>NotifyCopyConflictReport (EmploymentWRProcesses)</td>
<td></td>
</tr>
<tr>
<td>NotifyDeleteConflictReport (EmploymentWRProcesses)</td>
<td></td>
</tr>
<tr>
<td>NotifyMultipleConflictReport (EmploymentWRProcesses)</td>
<td></td>
</tr>
</tbody>
</table>
Best Practices for Layouts in Workflow Notifications

Predefined workflow notifications based on report layout templates all follow a general format. When you edit a copy of these layout templates in Microsoft Word, follow the predefined layout as closely as possible for consistency. Also keep in mind shared components and mobile considerations.
General Structure
In general, the workflow notifications contain a set of components that are displayed in a certain order. The callouts in this figure identify the email notification components listed in the following table.

The callouts in this figure identify the in-app notification components listed in the following table. In addition to describing each component, the table also indicates if the component appears in the email notification, in-app notification, or both.
<table>
<thead>
<tr>
<th>Callout</th>
<th>Component</th>
<th>Notification Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Buttons with the primary actions to take on the task, such as Approve and Reject. These buttons aren’t part of the configurable, report-based notification content.</td>
<td>In-app</td>
</tr>
<tr>
<td>2</td>
<td>Notification header listing key attributes of the workflow task and the associated transaction.</td>
<td>Both</td>
</tr>
<tr>
<td>3</td>
<td>Buttons for the primary actions to take on the task, such as Approve and Reject.</td>
<td>Email</td>
</tr>
<tr>
<td>4</td>
<td>Notification body that usually includes transaction and line level details, displayed in tables or sets of attributes with corresponding values. The data model for the report restricts the total number of rows displayed in some of the tables. If the limit is exceeded, the table footer provides a link to the transaction details page, where users can view all the rows. To change this limit, you can edit a copy of the data model.</td>
<td>Both</td>
</tr>
<tr>
<td>5</td>
<td>Approval history, including any attachments that users in the history uploaded for the task. You can’t edit the approval history.</td>
<td>Email (or both, in rare cases)</td>
</tr>
</tbody>
</table>
Callout | Component | Notification Type
---|---|---
6 | Component, which usually appears in the body of only email notifications. For in-app notifications, you can usually view the history by clicking the **Actions** button and selecting **History**. | Email
7 | Buttons for the primary actions again. | Email
| A link to the corresponding transaction page, and another link to the in-app notification. | Email

When you modify notifications, try to keep to this general structure and don’t remove essential elements such as the action buttons. Likewise, don’t change the styles in your layout template. The predefined style template should still apply to your notification; don’t edit a copy of the style template and apply that to your notification.

To add components to your notification, for example another table, consider first downloading another style template from My Oracle Support. This template contains Quick Parts content that you can use in Word when you do more advanced work on layout templates. For example, from the Quick Parts gallery, you can select and add the table that’s consistent in format with predefined tables already on your notification.

By default, the components that you add in the layout template appear in both email and in-app notifications, where available. You can add conditions to explicitly make a particular element, for example a field, appear only in one type of notification and not the other.

### Shared Components
A predefined subtemplate in the business intelligence (BI) catalog applies to all predefined layout templates for workflow notifications. The subtemplate contains components that are shared among the notifications, for example:

- Branding logo, if you add one to the subtemplate, which would appear as the first component in the email body. The logo appears in email notifications only.
- Action buttons in email notifications.
- Links at the end of the email notification, one to the corresponding transaction page, and another to the in-app notification.

When you make a copy of a predefined layout template to edit, the copy automatically inherits the same predefined subtemplate. To edit these shared components, make a copy of the predefined subtemplate, edit the copied version, and apply it to your own layout templates.

### Mobile Considerations
Because users can view the workflow notifications on mobile devices, always consider mobile first and keep the notifications as simple as possible. For example:

- Don’t put too much content horizontally, such as too many columns in tables.
- Keep all text, including attributes and column headings, as short as possible.
- Center align lists of attributes and their values, if they appear outside tables.

Make sure to test your email notifications on mobile devices.

### Related Topics
- Subtemplates
• Define the Number of Rows in Tables

Add a Branding Logo and Change Other Shared Components in Workflow Notifications

A predefined subtemplate contains common components for all workflow notifications based on predefined report layouts. For example, the subtemplate has a place for you to add a branding logo, which would appear at the beginning of email notifications. You can modify other shared components so that the same changes apply to your notifications. For example, for email notifications, you can also change the text on action buttons, or the text of the links that appear at the end of emails.

Note:
• You must edit a copy of the subtemplate in the Custom folder of the business intelligence (BI) catalog. Don’t directly update the predefined subtemplate.
• The exact steps can vary depending on your version of Microsoft Word.

Modifying Shared Components in the Subtemplate

To edit a copy of the predefined subtemplate that contains the shared components:

1. Click Navigator > Reports and Analytics.
2. Click the Browse Catalog icon.
3. In the BI catalog (the Folders pane), expand Shared Folders > Common Content > Templates.
4. For Workflow Notification Subtemplate, click More and select Customize.

If you're not using the Customize option:

a. Click Copy in the toolbar with Workflow Notification Subtemplate selected.
b. In the BI catalog, expand Shared Folders > Custom > Common Content > Templates. Create a Templates folder in this location if it doesn’t exist.
c. Click Paste in the toolbar.
d. Click the Edit link for the copied subtemplate.

All reports using the predefined subtemplate are automatically redirected to point to your subtemplate in the Custom folder. This applies:

• To all reports, predefined or not
• No matter if you copy and paste the subtemplate or use the Customize option
• Only if your subtemplate has the same name and relative file path within Custom as the predefined subtemplate

5. In the Templates section, click the link in the Locale column.
6. Save the subtemplate .rtf file to your computer.
7. Open the .rtf file with Microsoft Word.

• To add a logo, insert your own image in the subtemplate.
• To change button or link text, edit the text accordingly. Make the same edits wherever that button or link text appears in the subtemplate.


Caution: To ensure that your layout templates reflect these changes without additional rework, don’t edit any other text in the subtemplate .rtf file.

8. Update Word options to ensure that existing links remain intact in the subtemplate.
   a. Click File > Options > Advanced.
   b. In the Word Options dialog box, click Web Options in the General section.
   c. In the Web Options dialog box, open the Files tab.
   d. Deselect the Update links on save check box.

9. Save your changes in Word.

Uploading the Modified Subtemplate

To upload your subtemplate to the BI catalog:

1. In the BI catalog, expand Shared Folders > Custom > Common Content > Templates.
2. Click Edit for Workflow Notification Subtemplate.
3. In the Templates section, click the Upload icon.
4. Select your modified .rtf subtemplate and a locale, and click OK to overwrite the original subtemplate.

Related Topics

• Subtemplates
• How You Modify Copies of Predefined Reports
• Generate Sample Report Data

Use Quick Parts for Workflow Notifications

Use the Quick Parts feature in Microsoft Word to easily insert reusable pieces of formatted content. When you edit copies of predefined report layout templates for workflow notifications in Word, you can add predefined Quick Parts content to your .rtf file. For example, you can insert a table in a format that’s consistent with predefined notifications. The predefined Quick Parts content is available in a style template .dotx file on My Oracle Support.

Note: The exact steps can vary depending on your version of Microsoft Word.

Prerequisites

To get the predefined Quick Parts content into your Quick Parts gallery:

2. Download the .dotx file and save it to your Microsoft Word template folder, for example C:\Users\<user name>\AppData\Roaming\Microsoft\Templates.

Also, to preview your layout template changes before uploading the .rtf file back to the business intelligence (BI) catalog:

• Generate sample report data from the data model for the report that you’re editing.
• Download a local copy of the subtemplate that applies to the layout template.
Adding Quick Parts Content to Workflow Notifications

To insert content from the Quick Parts gallery into a layout template:

1. In the BI catalog, find the predefined report with the layout template that you want to modify.
2. For the report, click **More** and select **Customize**.
   
   If you’re not using the Customize option:
   
   a. Copy the predefined report and paste it in an appropriate subfolder within the Custom folder.
   
   b. Click the **Edit** link for the copied report.
3. Click **Edit** for the layout template to insert Quick Parts content into, and save the .rtf file to your computer with a new file name.
4. Open the .rtf file with Microsoft Word.
5. Put your cursor where you want to insert new content.
6. From the Insert tab on the ribbon, click **Quick Parts** within the Text group, and select the component to insert.
7. Edit the inserted component as needed and add any other components.
8. Save your changes in Word.

Previewing the Layout Template Changes

To preview your edits before uploading your layout template to the BI catalog:

1. On the ribbon, open the BI Publisher tab and click **Sample XML** within the Load Data group to import sample data from the data model. Skip this step if you already loaded sample data.
2. At the beginning of the document, replace the path with the location of the downloaded subtemplate file on your computer. For example, change `<?import:xdoxsl:///Common Content/Templates/Workflow Notification Subtemplate.xsb?>` to `<?import:file:///C:/Template_Directory/FinFunWorkflowNotificationSub.rtf?>`.
3. From the BI Publisher tab on the ribbon, click **HTML** in the Preview group.
4. If the preview reflects your changes as expected, then change the path back to the original location.
5. Save your changes in Word.

Uploading the Modified Layout Template

To upload your layout template to the BI catalog after previewing the changes:

1. Back in the BI catalog, click **Edit** for the report within the Custom folder, if that page isn’t still open.
2. Click the **View a list** link.
3. Click the **Create** icon on the table toolbar.
4. In the Upload or Generate Layout section, click **Upload**.
5. Upload your edited .rtf file with a unique layout name.
6. Back on the page for editing the report, click **Delete** for the layout template that you downloaded earlier.
7. Click the **Save Report** icon.

Related Topics

- Configurable Email Notifications: Implementation Considerations
- How You Modify Copies of Predefined Reports
- Generate Sample Report Data
- Style Templates
Set Up Content to Appear in Only Email or In-App Workflow Notifications

For workflow tasks that have configurable email and in-app notifications, the same .rtf report layout template is used for both types of notifications. When you edit a copy of predefined templates in Microsoft Word to modify the notifications, you can make content conditional. For example, you can add an attribute from the data models used for the report, and set the attribute to appear only in in-app notifications.

The logo, action buttons, and links at the end of email notifications are predefined to appear only in emails, based on the subtemplate. The approval history is usually predefined to also appear in the body of only email notifications. Any conditional setting you apply to these components in the .rtf template won’t override the predefined setup.

Prerequisites
Generate sample report data from the data model used for the report, and save the .xml file to your computer.

Defining Conditional Regions
To define a conditional region of content that appears only in email or in-app notifications:

1. Open your .rtf report layout template in Microsoft Word.
2. On the ribbon, open the BI Publisher tab and click Sample XML within the Load Data group.
3. Select the .xml file you downloaded to import sample data from the data model.
4. In your .rtf document, select the content you want to make conditional.
5. On the ribbon, click Conditional Region within the Insert group.
6. In the Conditional Region dialog box, on the Properties tab, select BINDISONLINENOTIF from the Data field list in the General section. The values in this list come from the sample data you imported from the data model.
7. Select Date/Text from the next list.
8. In the Condition 1 section, select Equal to from the Data field list.
9. In the corresponding text field, enter true for content to appear only in in-app notifications, or false for content to appear only in emails.
10. Make sure that form fields containing the conditional logic are inserted around your selected content. The beginning form field, c, should be immediately before the conditional content, and the closing form field, ec, should be immediately after. Move the form fields as needed.

   Tip: To make sure you’re looking at the correct form fields, double-click the c form field to open the Conditional Region dialog box and see the BINDISONLINENOTIF setting.

11. Save your changes in Word.

Entering Conditional Code
If the data model for your report doesn’t have the BINDISONLINENOTIF attribute, then:

1. In your .rtf report layout template, put your cursor immediately before the content you want to make conditional.
2. Enter the following code, which functions the same as the c form field:
   - <if:BINDISONLINENOTIF='true'> for in-app only
   - <if:BINDISONLINENOTIF='false'> for email only
3. Put your cursor immediately after your conditional content.
4. Enter <end if>, which functions the same as the EC form field.
5. Save your changes in Word.

Related Topics

- Generate Sample Report Data

Configure Notifications in Career Development Using Reports

This example shows how to configure workflow email and in-app notifications for the career development business process using Oracle Business Intelligence (BI) Publisher reports. You use Microsoft Word to edit the .rtf template used for notifications. You can modify the BI Publisher templates only if you have the BI Administrator role.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which template do I update?</td>
<td>CareerDevelopmentFYINotification, for changes to worker development goal content</td>
</tr>
<tr>
<td>Do I add prompts and headers to the template?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do I add data model attributes to the template?</td>
<td>Goal ID</td>
</tr>
<tr>
<td>Which language do I use for the .rtf template?</td>
<td>English (United States)</td>
</tr>
</tbody>
</table>

Summary of the Tasks

Configure a career development notification by:

1. Exporting the data model XML file.
2. Downloading the report layout template.
3. Editing prompts and headers in the template.
4. Previewing the document.
5. Adding data model attributes to the template.
6. Uploading the modified report layout to the BI Publisher catalog.

If you only want to add or edit prompts and headers in the template, use tasks 1, 2, 3, 4, and 6. To only add data model attributes to the template, use tasks 1, 2, 4, 5, and 6.

Prerequisites

2. Download and install the Template Builder for Word to use Microsoft Word to edit the layout templates. To download, install, and set up Template Builder for Word, see Creating RTF Templates by Using BI Publisher 11g Template Builder for Word: http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/bi/bip/tb4word/tbwordbip.htm.
3. To preview the configured templates, download a local copy of the subtemplate that applies to your custom own report layout template:
   - Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
   - Click Catalog.
   - In the BI catalog, go to **Shared Folders > Common Content > Templates** for the predefined subtemplate.
   - Click Edit for Workflow Notification Subtemplate.
   - In the Templates section, click the link in the Locale column.
   - Save the subtemplate .rtf file to your computer.

4. Click Catalog to open the Catalog page.

### Exporting the Data Model XML File
In this task, you export the XML file that includes the data model attributes predefined for the notifications. Perform this task to enable previewing your modified template. This task is also required if you intend to add data model attributes to the template.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog to open the Catalog page.
3. In the Folders section, expand **Shared Folders > Human Capital Management > Workflow Notifications** and select Data Models to display the data models in the right pane.

   **Note:** To ensure that all data sets include requested elements with null values in the output XML data, do the following:
   - In the Data Model section, select Properties.
   - In the Properties section, select Include Empty Tags for Null Elements.
   - In the Data Model section, select Data Sets.

   **Note:** To add data model attributes to the template, perform steps 5 and 6. Otherwise, skip to step 7.

5. Click the Data tab.
6. Enter the following attributes for an existing goal that are key attributes and enable you to pull in all the goal attributes:
   - **GoalID**
   - **NotificationType**

7. Click View to see the sample data in the report, and all the available attributes.
8. Click Export to open the Opening CareerDevelopmentFyiDM dialog box.
9. Select Save File and click OK.
10. Save the CareerDevelopmentFyiDM_.xml file to a local drive.

### Downloading the Report Layout Template
In this task, you create a copy of the report layout template in the Custom folder, and download a copy of the template to your local hard drive to modify it.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator role to open the Oracle Business Intelligence Home page.
2. Click **Catalog** to open the Catalog page.
3. In the Folders section, expand **Shared Folders > Human Capital Management** and select **Workflow Notifications** to display the templates in the right pane.
4. Under **CareerDevelopmentFYINotification**, click **More**, and then select **Customize**. A copy of the CareerDevelopmentFYINotification is created automatically in the Custom folder.
5. On the CareerDevelopmentFYINotification page, under **CareerDevelopmentFYINotification**, click **Edit**.
6. Save the template to your local drive with the name UpdatedCareerDevelopmentFYINotificationLayout.rtf to distinguish it from the original template.

**Editing Prompts and Headers in the Template**

To modify workflow email and in-app notifications, you edit a local copy of the .rtf report layout templates in Microsoft Word.

![Note: The exact steps can vary depending on your version of Microsoft Word.](Image)

1. Open the UpdatedCareerDevelopmentFYINotificationLayout.rtf template in Microsoft Word with the Template Builder installed, if not already open. The document contains all notifications for the career development business process except approval notifications.
2. Scroll to the notification with the header **Development Goal Added**.
3. Place your cursor at the end of the **Development Goal Added** header.
4. Enter **to Your Development Plan**. The text now reads: **Development Goal Added to Your Development Plan**.
5. Place the cursor at the end of the text **PPERFORMERNAME added development goal GOAL_NAME for you.**.
6. Enter a new sentence: **You can access the goal to track your development.**
7. Save the document.

**Previewing the Document**

Before uploading the .rtf files to the business intelligence (BI) catalog, you should preview the output with the changes you made. You can avoid uploading a broken report that displays an error in the emails sent to users.

1. In the Ribbon, open the BI Publisher tab and click **Sample XML** within the Load Data group.
2. Browse to and select the CareerDevelopmentFYiDM).xml file you downloaded to import sample data from the data model.
3. In the **Data Loaded Successfully** dialog box, click **OK**.
4. At the top of the document, replace the path with the location of the downloaded subtemplate file on your computer. For example, change `<? import:xdoxsl:///Common Content/Templates/Workflow Notification Subtemplate.xsb?>` to `<?import:file:C:///Template_Directory/Workflow Notification Subtemplate.rtf?>`.
5. From the BI Publisher tab in the Ribbon, click **HTML** in the Preview group.
6. If the preview reflects your changes as expected, then change the path back to the original location.
7. From the BI Publisher tab in the Ribbon, click **Validate Template** in the Tools group.
8. Also in the Tools group, click **Check Accessibility**.
9. Save your changes in Word.

**Adding Data Model Attributes to the Template**

In this task, you add to the report template attributes that exist in the predefined data model. You will add the Goal ID and Category Meaning data model attributes to the template.

1. Open the UpdatedCareerDevelopmentFYINotificationLayout.rtf template in Microsoft Word with the Template Builder installed, if not already open.
2. Select the BI Publisher tab.
3. In the Load Data section, click **Sample XML**.
4. In the dialog box to select XML data that appears, browse to open the CareerDevelopmentFYiDM).xml file you saved in the Exporting the Data Model XML File task and click **Open**.
5. In the **Data loaded successfully** dialog box, click OK.
6. Scroll to the **Development Goal Added** notification.
7. Place the cursor after the sentence: **PPERFORMERNAME added development goal GOAL_NAME for you.** and press the Enter key.
8. On the new line, enter **Goal ID:**.
9. Enter a space after **Goal ID:**.
10. On the BI Publisher tab, in the Insert section, click the 123 **Field** button to open the **Field** dialog box.
11. In the DATA_DS folder, select **PGOALID** and click **Insert**. The field appears in the document.
12. Click **Close** to return to the UpdatedCareerDevelopmentFYINotificationLayout.rtf template.
13. Preview the template using the steps in the Previewing the Document task.
14. Save and close the document.
15. Proceed to the task Uploading the Modified Report Layout to the Oracle BI Publisher Catalog.

**Uploading the Modified Report Layout to the Oracle BI Publisher Catalog**

You must perform this task to use the modified report layout for notifications.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog to open the Catalog page.
3. In the Folders section, expand **Shared Folders > Custom > Human Capital Management** and select Workflow Notifications.
4. Under **CareerDevelopmentFYINotification**, click **Edit**.
5. On the CareerDevelopmentFYINotification Data Model page, on the right side of the page, click **Add New Layout** to open the page with the Create Layout and Upload or Generate Layout sections.
6. In the Upload or Generate Layout section, click the **Upload** icon.
7. In the **Upload Template File** dialog box, in the **Layout Name** field, enter **Updated Career Development Notifications Template**.
8. In the **Template File** field, browse for the modified **UpdatedCareerDevelopmentFYINotificationLayout.rtf** template on your local drive, select the template, and click **Open**.
9. On the **Upload Template File** dialog box, from the **Type** list, select **RTF Template**.
10. From the **Locale** list, select **English (United States)**.
11. Click **Upload** to open the **Processing** dialog box.
12. On the CareerDevelopmentFYINotification Data Model page, on the right side, click **View a list** to open the Layout page.
13. In the row for the **Updated Career Development Notifications Template**, select the **Default Layout** check box.
14. On the right side of the page, click the **Save Report** icon.

**Related Topics**

- Set Up for RTF and Excel Report Layout Templates
- How You Modify Copies of Predefined Reports

**Configure Notifications in Goal Management Using Reports**

This example shows how to configure workflow email and in-app notifications for the goal management business process using Oracle Business Intelligence (BI) Publisher reports. You use Microsoft Word to edit the .rtf template used for notifications. You can modify the BI Publisher templates only if you have the BI Administrator role.

The following table summarizes key decisions for this scenario.
Decisions to Consider | This Example
--- | ---
Which template do I update? | PerformanceGoalNotificationsReport, for updates to notifications about goal content
Do I add prompts and headers to the template? | Yes
Do I add data model attributes to the template? | Yes, for Goal ID and Goal Plan ID
Which language do I use for the .rtf template? | English (United States)

Summary of the Tasks
Configure a goal management notification by:

1. Exporting the data model XML file.
2. Downloading the report layout template.
3. Editing prompts and headers in the template.
4. Previewing the document.
5. Adding data model attributes to the template.
6. Uploading the modified report layout to the BI Publisher catalog.

If you only want to add or edit prompts and headers in the template, use tasks 1, 2, 3, 4, and 6. To only add data model attributes to the template, use tasks 1, 2, 4, 5, and 6.

Prerequisites

2. Download and install the Template Builder for Word to use Microsoft Word to edit the layout templates. To download, install, and set up Template Builder for Word, see Creating RTF Templates by Using BI Publisher 11g Template Builder for Word: [http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/bi/bip/tb4word/tbwordbip.htm](http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/bi/bip/tb4word/tbwordbip.htm).
3. To preview the configured templates, download a local copy of the subtemplate that applies to your own report layout template:
   - Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
   - Click **Catalog**.
   - In the BI catalog, go to **Shared Folders > Common Content > Templates** for the predefined subtemplate.
   - Click **Edit for Workflow Notification Subtemplate**.
   - In the **Templates** section, click the link in the Locale column.
   - Save the subtemplate .rtf file to your computer.

Exporting the Data Model XML File

In this task, you export the XML file that includes the data model attributes predefined for the notifications. Perform this task to enable previewing your modified template. This task is also required if you intend to add data model attributes to the template.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
3. On the Catalog page, in the Folders section, expand Shared Folders > Human Capital Management > Workflow Notifications and select Data Models to display the data models in the right pane.
4. Under Performance Goal Notifications Data Model, click Edit to open the Diagram tab on the Performance Goal Notifications Data Model page.

Note: To ensure that all data sets include requested elements with null values in the output XML data, do the following:
   o In the Data Model section, select Properties.
   o In the Properties section, select Include Empty Tags for Null Elements.
   o In the Data Model section, select Data Sets.

Note: To add data model attributes to the template, perform steps 5 and 6. Otherwise, skip to step 7.
5. Click the Data tab.
6. Enter the following attributes for an existing goal that are key attributes and enable you to pull in all the goal attributes:
   o GoalID
   o NotificationType
7. Click View to see the sample data in the report, and all the available attributes.
8. Click Export.
9. In the Opening PerformanceGoalNotificationsDM dialog box, select Save File and click OK.
10. Save the PerformanceGoalNotificationsDM_.xml file to a local drive.

Downloading the Report Layout Template
In this task, you create a copy of the report layout template in the Custom folder, and download a copy of the template to your local hard drive to modify it.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
3. On the Catalog page, in the Folders section, expand Shared Folders > Human Capital Management and select Workflow Notifications to display the templates in the right pane.
4. Under PerformanceGoalNotificationsReport, click More, and then select Customize. A copy of the PerformanceGoalNotificationsReport is created automatically in the Custom folder.
6. On the Opening PerformanceGoalNotifications.rtf dialog box, select Save File and click OK to save the document to your local hard drive. Save the template with the name UpdatedPerformanceGoalNotifications.rtf to distinguish it from the original template.

Editing Prompts and Headers in the Template
To modify workflow email and in-app notifications, you edit a local copy of the .rtf report layout templates in Microsoft Word.

Note: The exact steps can vary depending on your version of Microsoft Word.

1. Open the UpdatedPerformanceGoalNotifications.rtf template in Microsoft Word with the Template Builder installed, if not already open. The document contains all notifications for the goal management business process.
2. Scroll to the notification with the header Realign the Goal ALIGNED_GOAL_NAME Because the Goal GOAL_NAME was Canceled.
3. Place the cursor in front of the **Description** header text.
4. Enter **Goal**. The text now reads **Goal Description**.
5. In the header **Realign the Goal ALIGNED_GOAL_NAME Because the Goal GOAL_NAME was Canceled**, place your cursor after **Realign**, enter **Your**, and delete the. The text now reads **Realign Your Goal ALIGNED_GOAL_NAME Because the Goal GOAL_NAME was Canceled**.
6. Save the document.
7. Proceed to the task Previewing the Document.

### Previewing the Document

Before uploading the .rtf files to the business intelligence (BI) catalog, you should preview the output with the changes you made. You can avoid uploading a broken report that displays an error in the emails sent to users.

1. In the Ribbon, open the BI Publisher tab and click **Sample XML** within the Load Data group.
2. Browse to and select the `PerformanceGoalNotificationsDM_.xml` file you downloaded to import sample data from the data model.
3. In the **Data Loaded Successfully** dialog box, click **OK**.
4. At the top of the document, replace the path with the location of the downloaded subtemplate file on your computer. For example, change `<? import:xdoxsl:///Common Content/Templates/Workflow Notification Subtemplate.xsb?>` to `<?import:file:C:///Template_Directory/Workflow Notification Subtemplate.rtf?>`.
5. From the BI Publisher tab in the Ribbon, click **HTML** in the Preview group.
6. If the preview reflects your changes as expected, then change the path back to the original location.
7. From the BI Publisher tab in the Ribbon, click **Validate Template** in the Tools group.
8. Also in the Tools group, click **Check Accessibility**.
9. Save your changes in Word.

### Adding Data Model Attributes to the Template

In this task, you add to the report template attributes that exist in the predefined data model. You will add the Goal ID and Category Meaning data model attributes to the template.

1. Open the `UpdatedPerformanceGoalNotifications.rtf` template in Microsoft Word with the Template Builder installed, if not already open.
2. Select the BI Publisher tab.
3. In the Load Data section, click **Sample XML**.
4. In the dialog box to select XML data that appears, browse to open the `PerformanceGoalNotificationsDM_.xml` file you saved in the Exporting the Data Model XML File task and click **Open**.
5. In the **Data loaded successfully** dialog box, click **OK**.
6. Scroll to the **Aligned Goal Canceled** notification.
7. Place the cursor after **Goal Name** and press the Enter key.
8. On the new line, enter **Goal ID**.
9. Place the cursor after the data code **GOAL_NAME** and press the Enter key to enter a new line.
10. On the BI Publisher tab, in the Insert section, click the **123 Field** button to open the **Field** dialog box.
11. In the GOALDETAILS folder, select **GOAL_ID** and click **Insert**. The field appears in the document.
12. Place the cursor after the data code **Goal Description** and press the Enter key.
13. On the new line, enter **Goal Category**.
14. Place the cursor after the data code **DESCRIPTION** and press the Enter key to enter a new line.
15. On the **Field** dialog box, in the GOALDETAILS folder, select **CATEGORY_MEANING** and click **Insert**. The field appears in the document.
16. Click **Close** to return to the `PerformanceGoalNotifications.rtf` template.
17. Preview the template using the steps in the Previewing the Document task.
18. Save and close the document.
19. Proceed to the task Uploading the Modified Report Layout to the Oracle BI Publisher Catalog.
Uploading the Modified Report Layout to the Oracle BI Publisher Catalog

You must perform this task to use the modified report layout for notifications.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
5. On the Performance Goal Notifications Data Model page, on the right side of the page, click Add New Layout to open the page with the Create Layout and Upload or Generate Layout sections.
6. In the Upload or Generate Layout section, click the Upload icon.
7. In the Upload Template File dialog box, in the Layout Name field, enter Updated Performance Goal Notifications Template.
8. In the Template File field, browse for the modified UpdatedPerformanceGoalNotificationsTemplate.rtf template on your local drive, select the template, and click Open.
9. In the Upload Template File dialog box, from the Type list, select RTF Template.
10. From the Locale list, select English (United States).
11. Click Upload to open the Processing dialog box and return to the Performance Goal Notifications Data Model page.
12. On the right side of the page, click View a list to open the Layout page.
13. In the row for the Updated Performance Goal Notifications Template, select the Default Layout check box.
14. On the right side of the page, click the Save Report icon.

Related Topics
- Set Up for RTF and Excel Report Layout Templates
- How You Modify Copies of Predefined Reports

Configure Performance Management Notifications Using Reports

This example shows how to configure workflow email and in-app notifications for the performance management business process using Oracle Business Intelligence (BI) Publisher reports. You use Microsoft Word to edit the .rtf template used for notifications. You can modify the BI Publisher templates only if you have the BI Administrator role.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which template do I update?</td>
<td>PerformanceFyiNotificationsReport</td>
</tr>
<tr>
<td>Do I add prompts and headers to the template?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do I add predefined data model attributes to the template?</td>
<td>Yes, for Evaluation ID</td>
</tr>
<tr>
<td>Which language do I use for the .rtf template?</td>
<td>English</td>
</tr>
</tbody>
</table>
Summary of the Tasks

Configure a performance management notification by:

1. Exporting the data model XML file.
2. Downloading the report layout template.
3. Editing prompts and headers in the template.
4. Previewing the document.
5. Adding data model attributes to the template.
6. Uploading the modified report layout to the BI Publisher catalog.

If you only want to add or edit prompts and headers in the template, use tasks 1, 2, 3, 4, and 6. To only add data model attributes to the template, use tasks 1, 2, 4, 5, and 6.

Prerequisites

2. Download and install the Template Builder for Word to use Microsoft Word to edit the layout templates. To download, install, and set up Template Builder for Word, see Creating RTF Templates by Using BI Publisher 11g Template Builder for Word: http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/bi/bip/tb4word/tbwordbip.htm.
3. To preview the configured templates, download a local copy of the subtemplate that applies to your report layout template:
   - Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
   - Click Catalog.
   - In the BI catalog, go to Shared Folders > Common Content > Templates for the predefined subtemplate.
   - Click Edit for Workflow Notification Subtemplate.
   - In the Templates section, click the link in the Locale column.
   - Save the subtemplate .rtf file to your computer.

Exporting the Data Model XML File

In this task, you export the XML file that includes the data model attributes predefined for the notifications. Perform this task to enable previewing your modified template. This task is also required if you intend to add data model attributes to the template.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog
3. On the Catalog page, in the Folders section, expand Shared Folders > Human Capital Management > Workflow Notifications and select Data Models to display the data models in the right pane.
Note: To ensure that all data sets include requested elements with null values in the output XML data, do the following:
- In the Data Model section, select Properties.
- In the Properties section, select Include Empty Tags for Null Elements.
- In the Data Model section, select Data Sets.

Note: To add data model attributes to the template, perform steps 5 and 6. Otherwise, skip to step 7.

5. Click the Data tab.
6. Enter the Evaluation ID of an actual performance evaluation in the EvaluationID field to pull in all the performance document attributes. The Evaluation ID is a key attribute that enables you to see all available data attributes. Leave any existing sample data in these fields for any other fields.
7. Click View to see the sample data in the report, and all the available attributes.
8. Click Export.
9. In the Opening PerformanceFYIDM dialog box, select Save File and click OK.
10. Save the PerformanceFYIDM.xml file to a local drive.

Downloading the Report Layout Template
In this task, you create a copy of the report layout template in the Custom folder, and download a copy of the template to your local hard drive to modify it.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
3. On the Catalog page, in the Folders section, expand Shared Folders > Human Capital Management and select Workflow Notifications to display the templates in the right pane.
4. Under PerformanceFyiNotificationsReport, click More, and then select Customize. A copy of the PerformanceFyiNotificationsReport is created automatically in the Custom folder.
6. On the Opening PerformanceFyiNotificationsReport .rtf dialog box, select Save File and click OK to save the document to your local hard drive. Save the template with the name UpdatedPerformanceFyiNotificationsReport.rtf to distinguish it from the original template.

Editing Prompts and Headers in the Template
To modify workflow email and in-app notifications, you edit a local copy of the .rtf report layout templates in Microsoft Word.

Note: The exact steps can vary depending on your version of Microsoft Word.

1. Open the UpdatedPerformanceFyiNotifications.rtf template in Microsoft Word with the Template Builder installed, if not already open. The document contains all notifications for the performance management business process.
2. Scroll to the Performance Document Reopened notification.
3. Select the Performance Document Reopened header text.
5. Scroll to the body text MGR_NAME reopened your performance document CUSTOMARY_NAME and place your cursor after the period.
6. Enter You can continue your evaluation.
7. Scroll to the Review Period text.
8. Place the cursor right before Review Period. Enter **Performance Document**. The text now reads Performance Document Review Period. (For TR, using Meeting Date - Enter Talent Review. The text now reads Talent Review Meeting Date.)

9. Save the document.


### Previewsing the Document

Before uploading the .rtf files to the business intelligence (BI) catalog, you should preview the output with the changes you made. You can avoid uploading a broken report that displays an error in the emails sent to users.

1. In the Ribbon, open the BI Publisher tab and click **Sample XML** within the Load Data group.
2. Browse to and select the PerformanceFYIDM_.xml file you downloaded to import sample data from the data model.
3. In the **Data Loaded Successfully** dialog box, click **OK**.
4. From the BI Publisher tab in the Ribbon, click **HTML** in the Preview group.
5. From the BI Publisher tab in the Ribbon, click **Validate Template** in the Tools group.
6. Also in the Tools group, click **Check Accessibility**.
7. Save your changes in Word.

### Adding Data Model Attributes to the Template

In this task, you add to the report template attributes that exist in the predefined data model.

1. Open the UpdatedPerformanceFYINotifications.rtf template in Microsoft Word with the Template Builder installed, if not already open.
2. Select the BI Publisher tab.
3. In the Load Data section, click **Sample XML**.
4. In the dialog box to select XML data that appears, browse to open the PerformanceFYIDM_.xml file you saved in the Exporting the Data Model XML File task and click **Open**.
5. In the **Data loaded successfully** dialog box, click **OK**.
7. Place the cursor after **Review Period** and press the Enter key.
8. On the new line, enter **Person ID**.
9. Place the cursor after the data code REVIEW_PERIOD_NAME and press the Enter key to create a new line.
10. On the BI Publisher menu bar, in the Insert section, click the 123 **Field** button to open the Field dialog box.
11. In the PERSON_DETAILS folder, select **PERSON_ID** and click **Insert**. The field appears in the document.
12. Place the cursor after the **Person ID** text you entered in step 8 and press the Enter key.
13. On the new line, enter **Current Date**.
14. Place the cursor after the data code PERSON_ID you added in step 11 and press the Enter key to add a new line.
15. In the DATA_DS folder, select **PCURRENTDATE** and click **Insert**. The field appears in the document.
16. Click **Close** to return to the PerformanceFYINotifications.rtf template.
17. Preview the template using the steps in the Previewsing the Document task.
18. Save and close the document.
19. Proceed to the task Uploading the Modified Report Layout to the Oracle BI Publisher Catalog.

### Uploading the Modified Report to the Oracle BI Publisher Server

You must perform this task to use the customized template for notifications.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click **Catalog**
3. On the Catalog page, in the Folders section, expand **Shared Folders > Custom > Human Capital Management** and select Workflow Notifications.
4. Under the PerformanceFYIDM, click Edit.
5. On the PerformanceFyiNotificationsReport page, on the right side of the page, click Add New Layout to open the page with the Create Layout and Upload or Generate Layout sections.
6. In the Upload or Generate Layout section, click the Upload icon.
7. In the Upload Template File dialog box, in the Layout Name field, enter Updated Performance FYI Notifications Report Template.
8. In the Template File field, browse for the modified UpdatedPerformanceFyiNotificationsReport.rtf template on your local drive, select the template, and click Open.
9. In the Upload Template File dialog box, from the Type list, select RTF Template.
10. From the Locale list, select English (United States).
11. Click Upload to open the Processing dialog box and return to the Performance FYI Notifications Data Model page.
12. On the right side of the page, click View a list to open the Layout page.
13. In the row for the Updated Performance FYI Notifications Template, select the Default Layout check box.
14. On the right side of the page, click the Save Report icon.

Related Topics

- Set Up for RTF and Excel Report Layout Templates
- How You Modify Copies of Predefined Reports

Configure Profile Management Notifications Using Reports

This example shows how to configure workflow email and in-app notifications for the profile management business process using Oracle Business Intelligence (BI) Publisher reports. You use Microsoft Word to edit the .rtf template used for notifications. You can modify the BI Publisher templates only if you have the BI Administrator role.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which template do I update?</td>
<td>ProfileChangeNotificationReport, for changes to worker profile content</td>
</tr>
<tr>
<td>Do I add prompts and headers to the template?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do I add data model attributes to the template?</td>
<td>Yes, for Content Type Name</td>
</tr>
<tr>
<td>Which language do I use for the .rtf template?</td>
<td>English (United States)</td>
</tr>
</tbody>
</table>

Summary of the Tasks

Configure a profile management notification by:

1. Exporting the data model XML file.
2. Downloading the report layout template.
3. Editing prompts and headers in the template.
4. Previewing the document.
5. Adding data model attributes to the template.
6. Uploading the modified report layout to the BI Publisher catalog.

If you only want to add or edit prompts and headers in the template, use tasks 1, 2, 3, 4, and 6. To only add data model attributes to the template, use tasks 1, 2, 4, 5, and 6.

Prerequisites

2. Download and install the Template Builder for Word to use Microsoft Word to edit the layout templates. To download, install, and set up Template Builder for Word, see Creating RTF Templates by Using BI Publisher 11g Template Builder for Word: http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/bi/bip/tb4word/tbwordbip.htm.
3. To preview the configured templates, download a local copy of the subtemplate that applies to your custom report layout template:
   - Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
   - Click Catalog.
   - In the BI catalog, go to Shared Folders > Common Content > Templates for the predefined subtemplate.
   - Click Edit for Workflow Notification Subtemplate.
   - In the Templates section, click the link in the Locale column.
   - Save the subtemplate .rtf file to your computer.
4. Click Catalog to open the Catalog page.

Exporting the Data Model XML File

In this task, you export the XML file that includes the data model attributes predefined for the notifications. Perform this task to enable previewing your modified template. This task is also required if you intend to add data model attributes to the template.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog to open the Catalog page.
3. In the Folders section, expand Shared Folders > Human Capital Management > Workflow Notifications and select Data Models to display the data models in the right pane.
4. Under ProfileChangeNotification, click Edit to open the Diagram tab on the Profile Change Data Model page.

   ▶ Note: To ensure that all data sets include requested elements with null values in the output XML data, do the following:
   - In the Data Model section, select Properties.
   - In the Properties section, select Include Empty Tags for Null Elements.
   - In the Data Model section, select Data Sets.

   ▶ Note: To add data model attributes to the template, perform steps 5 and 6. Otherwise, skip to step 7.

5. Click the Data tab.
6. Enter the following attributes for an existing worker profile that are key attributes and enable you to pull in all the available profile attributes for changes to worker profile content data:
   - Context Name
Notifications and Approvals

Leave any existing sample data in these fields for any other fields.

**Note:** To configure a template for worker job profile interest, use the following key attributes:

- Image Person Id
- Person Id
- Job Profile Id
- Profile Interest Id
- Notification Name

7. Click **View** to see the sample data in the report, and all the available attributes.
8. Click **Export**.
9. Save the ProfileChangeNotification_.xml file to a local drive.

### Downloading the Report Layout Template

In this task, you create a copy of the report layout template in the Custom folder, and download a copy of the template to your local hard drive to modify it.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator role to open the Oracle Business Intelligence Home page.
2. Click **Catalog**.
3. On the Catalog page, in the Folders section, expand **Shared Folders > Human Capital Management** and select **Workflow Notifications** to display the templates in the right pane.
4. Under **ProfileChangeNotificationReport**, click **More**, and then select **Customize**. A copy of the ProfileChangeNotificationReport is created automatically in the Custom folder.
5. On the ProfileChangeNotificationReport page, under **ProfileChangeNotificationReport**, click **Edit**.
6. On the **Opening ProfileChangeNotificationReport.rtf** dialog box, select **Save File** and click **OK** to save the document to your local hard drive. Save the template with the name UpdatedProfileReport.rtf to distinguish it from the original template.

### Editing Prompts and Headers in the Template

To modify workflow email and in-app notifications, you edit a local copy of the .rtf report layout templates in Microsoft Word.

**Note:** The exact steps can vary depending on your version of Microsoft Word.

1. Open the UpdatedProfileReport.rtf template in Microsoft Word with the Template Builder installed, if not already open. The document contains all notifications for the profile management business process that involve changes to worker profile content or job profile interest data. It doesn’t include approval notifications.
2. Scroll to the notification with the header **CONTENT_TYPE_NAME Added**.
3. Place the cursor at the end of the text: **A competency was added to PPROFILENAME talent profile by PLOGGEDINPERSONNAME.**
4. Enter to fulfill update job requirements.
5. Place your cursor in front of the label Competency, and enter New.
6. Save the document.
7. Proceed to the task Previewing the Document.

**Previewing the Document**

Before uploading the .rtf files to the business intelligence (BI) catalog, you should preview the output with the changes you made. You can avoid uploading a broken report that displays an error in the emails sent to users.

1. In the Ribbon, open the BI Publisher tab and click Sample XML within the Load Data group.
2. Browse to and select the ProfileChangeNotification_.xml file you downloaded to import sample data from the data model.
3. In the Data Loaded Successfully dialog box, click OK.
4. At the top of the document, replace the path with the location of the downloaded subtemplate file on your computer. For example, change `<? import:xdoxsl:///Common Content/Templates/Workflow Notification Subtemplate.xsb?>` to `<?import:file:C:///Template_Directory/Workflow Notification Subtemplate.rtf?>`.
5. From the BI Publisher tab in the Ribbon, click HTML in the Preview group.
6. If the preview reflects your changes as expected, then change the path back to the original location.
7. From the BI Publisher tab in the Ribbon, click Validate Template in the Tools group.
8. Also in the Tools group, click Check Accessibility.
9. Save your changes in Word.

**Adding Data Model Attributes to the Template**

In this task, you add to the report template attributes that exist in the predefined data model. You will add the Content Type Name data model attribute to the template.

1. Open the UpdatedProfileReport.rtf template in Microsoft Word with the Template Builder installed, if not already open.
2. Select the BI Publisher tab.
3. In the Load Data section, click Sample XML.
4. In the dialog box to select XML data that appears, browse to open the ProfileChangeNotification_.xml file you saved in the Exporting the Data Model XML File task and click Open.
5. In the Data loaded successfully dialog box, click OK.
6. Scroll to the CONTENT_TYPE_NAME Added notification.
7. Place the cursor after Description and press the Enter key.
8. On the new line, enter Content Type.
9. Place the cursor after the data code DESCRIPTION_COMP and press the Enter key to create a new line.
10. On the BI Publisher tab, in the Insert section, click the 123 Field button to open the Field dialog box.
11. In the CONTENT_TYPES folder, select CONTENT_TYPE_NAME and click Insert. The field appears in the document.
12. Click Close to return to the UpdatedProfileReport.rtf template.
13. Preview the template using the steps in the Previewing the Document task.
14. Save and close the document.
15. Proceed to the task Uploading the Modified Report Layout to the Oracle BI Publisher Catalog.

**Uploading the Modified Report Layout to the Oracle BI Publisher Catalog**

You must perform this task to use the modified report layout for notifications.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog to open the Catalog page.
3. In the Folders section, expand Shared Folders > Custom > Human Capital Management and select Workflow Notifications.


5. On the ProfileChangeNotification Data Model page, on the right side of the page, click Add New Layout to open the page with the Create Layout and Upload or Generate Layout sections.

6. In the Upload or Generate Layout section, click the Upload icon to open the Upload Template File dialog box.

7. In the Layout Name field, enter Updated Profile Notifications Template.

8. In the Template File field, browse for the modified UpdatedProfileReport.rtf template on your local drive, select the template, and click Open.

9. In the Upload Template File dialog box, from the Type list, select RTF Template.

10. From the Locale list, select English (United States).

11. Click Upload to open the Processing dialog box.

12. On the ProfileChangeNotification Data Model page, on the right side, click View a list to open the Layout page.

13. In the row for the Updated Profile Notifications Template, select the Default Layout check box.

14. On the right side of the page, click the Save Report icon.

Related Topics

- Set Up for RTF and Excel Report Layout Templates
- How You Modify Copies of Predefined Reports

Configure Notifications in Talent Review Using Reports

This example shows how to configure workflow email and in-app notifications for the talent review business process using Oracle Business Intelligence (BI) Publisher reports. You use Microsoft Word to edit the .rtf template used for notifications. You can modify the BI Publisher templates only if you have the BI Administrator role.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which template do I update?</td>
<td>TalentCalibFYIReport, for updates to notifications about talent review meetings</td>
</tr>
<tr>
<td>Do I add prompts and headers to the template?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do I add data model attributes to the template?</td>
<td>Yes, for meeting date and meeting ID</td>
</tr>
<tr>
<td>Which language do I use for the .rtf template?</td>
<td>English (United States)</td>
</tr>
</tbody>
</table>

Summary of the Tasks

Configure a talent review notification by:

1. Exporting the data model XML file.
2. Downloading the report layout template.
3. Editing prompts and headers in the template.
4. Previewing the document.
5. Adding data model attributes to the template.
6. Uploading the modified report layout to the BI Publisher catalog.

If you only want to add or edit prompts and headers in the template, use tasks 1, 2, 3, 4, and 6. To only add data model attributes to the template, use tasks 1, 2, 4, 5, and 6.

Prerequisites

2. Download and install the Template Builder for Word to use Microsoft Word to edit the layout templates. To download, install, and set up Template Builder for Word, see Creating RTF Templates by Using BI Publisher 11g Template Builder for Word: http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/bl/bi/bip/tb4word/tbwordbip.htm.
3. To preview the configured templates, download a local copy of the subtemplate that applies to your custom own report layout template:
   - Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
   - Click Catalog.
   - In the BI catalog, go to Shared Folders > Common Content > Templates for the predefined subtemplate.
   - Click Edit for Workflow Notification Subtemplate.
   - In the Templates section, click the link in the Locale column.
   - Save the subtemplate .rtf file to your computer.

Exporting the Data Model XML File

In this task, you export the XML file that includes the data model attributes predefined for the notifications. Perform this task to enable previewing your modified template. This task is also required if you intend to add data model attributes to the template.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
3. On the Catalog page, in the Folders section, expand Shared Folders > Human Capital Management > Workflow Notifications and select Data Models to display the data models in the right pane.
4. Under TalentCalibFYIDM, click Edit to open the Diagram tab on the Talent Calib FYI Data Model page.

   Note: To ensure that all data sets include requested elements with null values in the output XML data, do the following:
   - In the Data Model section, select Properties.
   - In the Properties section, select Include Empty Tags for Null Elements.
   - In the Data Model section, select Data Sets.

   Note: To add data model attributes to the template, perform steps 5 and 6. Otherwise, skip to step 7.
5. Click the Data tab.
6. Enter the following attributes for an existing meeting that are key attributes and enable you to pull in all the meeting attributes:
   - MeetingId
7. Click View to see the sample data in the report, and all the available attributes.
8. Click Export.
9. In the Opening TalentCalibFYIDM dialog box, select Save File and click OK.
10. Save the TalentCalibFYIDM_.xml file to a local drive.

**Downloading the Report Layout Template**

In this task, you create a copy of the report layout template in the Custom folder, and download a copy of the template to your local hard drive to modify it.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
3. On the Catalog page, in the Folders section, expand Shared Folders > Human Capital Management and select Workflow Notifications to display the templates in the right pane.
4. Under TalentCalibFYIReport, click More, and then select Customize. A copy of the TalentCalibFYIReport is created automatically in the Custom folder.
6. On the TalentCalibFYIReport dialog box, select Save File and click OK to save the document to your local hard drive. Save the template with the name UpdatedTalentCalibReport.rtf to distinguish it from the original template.

**Editing Prompts and Headers in the Template**

To modify workflow email and in-app notifications, you edit a local copy of the .rtf report layout templates in Microsoft Word.

> **Note:** The exact steps can vary depending on your version of Microsoft Word.

2. Scroll to the first notification with the header Talent Review Meeting Scheduled.
3. Place the cursor after the You are invited to the talent review meeting MEETING_TITLE. Meeting details are listed in this notification. body text.
4. Enter Ensure that you update content for your reports before the meeting.
5. Place the cursor right in front of Meeting Date. Enter Talent Review. The text now reads Talent Review Meeting Date.
6. Save the document.
7. Proceed to the task Previewing the Document.

**Previewing the Document**

Before uploading the .rtf files to the business intelligence (BI) catalog, you should preview the output with the changes you made. You can avoid uploading a broken report that displays an error in the emails sent to users.

1. In the Ribbon, open the BI Publisher tab and click Sample XML within the Load Data group.
2. Browse to and select the TalentCalibFYIDM_.xml file you downloaded to import sample data from the data model.
3. In the Data Loaded Successfully dialog box, click OK.
4. From the BI Publisher tab in the Ribbon, click HTML in the Preview group.
5. From the BI Publisher tab in the Ribbon, click Validate Template in the Tools group.
6. Also in the Tools group, click Check Accessibility.
7. Save your changes in Word.

Adding Data Model Attributes to the Template
In this task, you add to the report template attributes that exist in the predefined data model. You will add the Meeting Date and Meeting ID data model attributes to the template.

1. Open the UpdatedTalentCalibReport.rtf template in Microsoft Word with the Template Builder installed, if not already open.
2. Select the BI Publisher tab.
3. In the Load Data section, click Sample XML.
4. In the dialog box to select XML data that appears, browse to open the TalentCalibFYIDM_.xml file you saved in the Exporting the Data Model XML File task and click Open.
5. In the Data loaded successfully dialog box, click OK.
6. Scroll to the first notification with the header Talent Review Meeting Scheduled.
7. Place the cursor after Meeting Date and press the Enter key.
8. On the new line, enter Meeting ID.
9. Place the cursor after the data code MEETING_DATE and press the Enter key to create a new line.
10. On the BI Publisher tab, in the Insert section, click the 123 Field button to open the Field dialog box.
11. In the G_1 folder, select MEETING_ID and click Insert. The field appears in the document.
12. Click Close to return to the UpdatedTalentCalibReport.rtf template.
13. Preview the template using the steps in the Previewing the Document task.
14. Save and close the document.
15. Proceed to the task Uploading the Modified Report Layout to the Oracle BI Publisher Catalog.

Uploading the Modified Report Layout to the Oracle BI Publisher Catalog
You must perform this task to use the modified report layout for notifications.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog to open the Catalog page.
3. In the Folders section, expand Shared Folders > Custom > Human Capital Management and select Workflow Notifications.
5. On the TalentCalibFYIReport page, click Add New Layout to open the page with the Create Layout and Upload or Generate Layout sections.
6. In the Upload or Generate Layout section, click the Upload icon.
7. In the Upload Template File dialog box, in the Layout Name field, enter Updated Talent Review Notifications Template.
8. In the Template File field, browse for the modified UpdatedTalentCalibReport.rtf template on your local drive, select the template, and click Open.
9. In the Upload Template File dialog box, from the Type list, select RTF Template.
10. From the Locale list, select English (United States).
11. Click Upload to open the Processing dialog box and return to the TalentCalibFYIDM Data Model page.
12. On the right side of the page, click View a list to open the Layout page.
13. In the row for the Updated Talent Review Notifications Template, select the Default Layout check box.
14. On the right side of the page, click the Save Report icon.

Related Topics
- Set Up for RTF and Excel Report Layout Templates
Configure Workforce Deployment Notifications Using Reports

This example shows how to configure the promotion workflow email and in-app notification for the workforce deployment business process using Oracle Business Intelligence (BI) Publisher reports. You use Microsoft Word to edit the .rtf template used for notifications. You can modify the BI Publisher templates only if you have the BI Administrator role.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which template do I update?</td>
<td>PromotionReport, for updates to notifications about a worker’s promotion</td>
</tr>
<tr>
<td>Do I add prompts and headers to the template?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do I add data model attributes to the template?</td>
<td>Yes, for Person Type and Annual Salary</td>
</tr>
<tr>
<td>Which language do I use for the .rtf template?</td>
<td>English (United States)</td>
</tr>
</tbody>
</table>

Summary of the Tasks

Configure a promotion notification by:

1. Exporting the data model XML file.
2. Downloading the report layout template.
3. Editing prompts and headers in the template.
4. Previewing the document.
5. Adding data model attributes to the template.
6. Uploading the modified report layout to the BI Publisher catalog.

If you only want to add or edit prompts and headers in the template, use tasks 1, 2, 3, 4, and 6. To only add data model attributes to the template, use tasks 1, 2, 4, 5, and 6.

Prerequisites

2. Download and install the Template Builder for Word to use Microsoft Word to edit the layout templates. To download, install, and set up Template Builder for Word, see Creating RTF Templates by Using BI Publisher 11g Template Builder for Word: http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/bi/bip/tb4word/tbwordbip.htm.
3. To preview the configured templates, download a local copy of the subtemplate that applies to your own report layout template:
   - Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
   - Click Catalog.
In the BI catalog, go to **Shared Folders > Common Content > Templates** for the predefined subtemplate.

- Click Edit for Workflow Notification Subtemplate.
- In the Templates section, click the link in the Locale column.
- Save the subtemplate .rtf file to your computer.

**Exporting the Data Model XML File**

In this task, you export the XML file that includes the data model attributes predefined for the notifications. Perform this task to enable previewing your modified template. This task is also required if you intend to add data model attributes to the template.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click **Catalog**.
3. On the Catalog page, in the Folders section, expand **Shared Folders > Human Capital Management > Workflow Notifications** and select Data Models to display the data models in the right pane.
4. Under Promotion data model, click **Edit** to open the Diagram tab on the Promotion data model page.

   **Note:** To ensure that all data sets include requested elements with null values in the output XML data, do the following:
   - In the Data Model section, select Properties.
   - In the Properties section, select Include Empty Tags for Null Elements.
   - In the Data Model section, select Data Sets.

   **Note:** To add data model attributes to the template, perform steps 5 and 6. Otherwise, skip to step 7.

5. Click the Data tab.
6. Enter the following attributes for the promotion that are key attributes and enable you to pull in all the goal attributes:
   - TransactionID
7. Click **View** to see the sample data in the report, and all the available attributes.
8. Click **Export**.
9. In the **Opening Promotion_.xml** dialog box, select **Save File** and click **OK**.
10. Save the **Promotion_.xml** file to a local drive.

**Downloading the Report Layout Template**

In this task, you create a copy of the report layout template in the Custom folder, and download a copy of the template to your local hard drive to modify it.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator role to open the Oracle Business Intelligence Home page.
2. Click **Catalog**.
3. On the Catalog page, in the Folders section, expand **Shared Folders > Human Capital Management** and select **Workflow Notifications** to display the templates in the right pane.
4. Under **PromotionReport**, click **More**, and then select **Customize**. A copy of the PromotionReport is created automatically in the Custom folder.
5. On the PromotionReport page, under **PromotionReport**, click **Edit**.
6. On the **Opening PromotionReportR11.rtf** dialog box, select **Save File** and click **OK** to save the document to your local hard drive. Save the template with the name UpdatedPPromotionReport.rtf to distinguish it from the original template.
Editing Prompts and Headers in the Template

To modify email and in-app notifications, you edit a local copy of the .rtf report layout templates in Microsoft Word.

✏ **Note:** The exact steps can vary depending on your version of Microsoft Word.

1. Open the UpdatedPromotionReportR11.rtf template in Microsoft Word with the Template Builder installed, if not already open. The document contains all notifications for the workforce deployment business process.
2. Scroll to the notification with the header **Promotion Details**.
3. Place the cursor in front of the **Description** header text.
4. Enter **Your**. The text now reads **Your Promotion Details**.
5. Scroll to the prompt **Mail Stop**. Replace Mail Stop with **Post Office Box**.
6. Save the document.
7. Proceed to the task Previewing the Document.

Previewing the Document

Before uploading the .rtf files to the business intelligence (BI) catalog, you should preview the output with the changes you made. You can avoid uploading a broken report that displays an error in the emails and in-app notification sent to users.

1. In the Ribbon, open the BI Publisher tab and click **Sample XML** within the Load Data group.
2. Browse to and select the PromotionReportDM_.xml file you downloaded to import sample data from the data model.
3. In the **Data Loaded Successfully** dialog box, click **OK**.
4. At the top of the document, replace the path with the location of the downloaded subtemplate file on your computer. For example, change `<? import:xdoxsl:///Common Content/Templates/Workflow Notification Subtemplate.xsb?>` to `<?import:file:C:///Template_Directory/Workflow Notification Subtemplate.rtf?>`.
5. From the BI Publisher tab in the Ribbon, click **HTML** in the Preview group.
6. If the preview reflects your changes as expected, then change the path back to the original location.
7. From the BI Publisher tab in the Ribbon, click **Validate Template** in the Tools group.
8. Also in the Tools group, click **Check Accessibility**.
9. Save your changes in Word.

Adding Data Model Attributes to the Template

In this task, you add to the report template attributes to data model. You will add the Person Type and Annual Salary data model attributes to the template.

1. Open the UpdatedPerformanceGoalNotifications.rtf template in Microsoft Word with the Template Builder installed, if not already open.
2. Select the BI Publisher tab.
3. In the Load Data section, click **Sample XML**.
4. In the dialog box to select XML data that appears, browse to open the **Promotion_.xml** file you saved in the Exporting the Data Model XML File task and click **Open**.
5. In the **Data loaded successfully** dialog box, click **OK**.
6. Scroll to the **Employee Details** notification.
7. Place the cursor after **Name** and press the Enter key.
8. On the new line, enter **Person Type**.
9. Place the cursor after the data code **ParentEntityName** and press the Enter key to enter a new line.
10. On the BI Publisher tab, in the Insert section, click the **123 Field** button to open the **Field** dialog box.
11. In the EMPLOYEEDETAILS folder, select **PERSON_TYPE** and click **Insert**. The field appears in the document.
12. Place the cursor after the data code **Department** and press the Enter key.
13. On the new line, enter **Annual Salary**.
14. Place the cursor after the data code Department and press the Enter key to enter a new line.
15. On the Field dialog box, in the EMPLOYEEDETAILS folder, select ANNUAL_SALARY and click Insert. The field appears in the document.
16. Click Close to return to the PromotionReportR11.rtf template.
17. Preview the template using the steps in the Previewing the Document task.
18. Save and close the document.
19. Proceed to the task Uploading the Modified Report Layout to the Oracle BI Publisher Catalog.

Uploading the Modified Report Layout to the Oracle BI Publisher Catalog
You must perform this task to use the modified report layout for notifications.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog
4. Under the PromotionReport, click Edit.
5. On the PromotionReport Data Model page, on the right side of the page, click Add New Layout to open the page with the Create Layout and Upload or Generate Layout sections.
6. In the Upload or Generate Layout section, click the Upload icon.
7. In the Upload Template File dialog box, in the Layout Name field, enter Updated Promotion Template.
8. In the Template File field, browse for the modified Updated PromotionReportR11.rtf template on your local drive, select the template, and click Open.
9. In the Upload Template File dialog box, from the Type list, select RTF Template.
10. From the Locale list, select English (United States).
11. Click Upload to open the Processing dialog box and return to the PromotionReport page.
12. On the right side of the page, click View a list to open the Layout page.
13. In the row for the Updated Promotion Report Template, select the Default Layout check box.
14. On the right side of the page, click the Save Report icon.

Related Topics
- Set Up for RTF and Excel Report Layout Templates
- How You Modify Copies of Predefined Reports

Configure Document Records Notifications Using Reports
This example shows how to configure the document records workflow email and in-app notification for the document records business process using Oracle Business Intelligence (BI) Publisher reports. You use Microsoft Word to edit the .rtf template used for notifications. You can modify the BI Publisher templates only if you have the BI Administrator role.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which template do I update?</td>
<td>ManageDorReport, for updates to notifications about a worker's document records</td>
</tr>
<tr>
<td>Do I add prompts and headers to the template?</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Decisions to Consider | This Example
--- | ---
Do I add data model attributes to the template? | Yes, for Person Name and Person Number
Which language do I use for the .rtf template? | English (United States)

Summary of the Tasks
Configure a document record notification by:

1. Exporting the data model XML file.
2. Downloading the report layout template.
3. Editing prompts and headers in the template.
4. Previewing the document.
5. Adding data model attributes to the template.
6. Uploading the modified report layout to the BI Publisher catalog.

If you only want to add or edit prompts and headers in the template, use tasks 1, 2, 3, 4, and 6. To only add data model attributes to the template, use tasks 1, 2, 4, 5, and 6.

Prerequisites

2. Download and install the Template Builder for Word to use Microsoft Word to edit the layout templates. To download, install, and set up Template Builder for Word, see Creating RTF Templates by Using BI Publisher 11g Template Builder for Word: [http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/bi/bip/tb4word/tbwordbip.htm](http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/bi/bip/tb4word/tbwordbip.htm).
3. To preview the configured templates, download a local copy of the subtemplate that applies to your own report layout template:
   - Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
   - Click Catalog.
   - In the BI catalog, go to **Shared Folders > Common Content > Templates** for the predefined subtemplate.
   - Click Edit for Workflow Notification Subtemplate.
   - In the Templates section, click the link in the Locale column.
   - Save the subtemplate .rtf file to your computer.

Exporting the Data Model XML File
In this task, you export the XML file that includes the data model attributes predefined for the notifications. Perform this task to enable previewing your modified template. This task is also required if you intend to add data model attributes to the template.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
3. On the Catalog page, in the Folders section, expand **Shared Folders > Human Capital Management > Workflow Notifications** and select Data Models to display the data models in the right pane.
4. Under ManageDOR data model, click **Edit** to open the Diagram tab on the ManageDOR data model page.

   **Note:** To ensure that all data sets include requested elements with null values in the output XML data, do the following:
   - In the Data Model section, select Properties.
   - In the Properties section, select Include Empty Tags for Null Elements.
   - In the Data Model section, select Data Sets.

   **Note:** To add data model attributes to the template, perform steps 5 and 6. Otherwise, skip to step 7.

5. Click the Data tab.
6. Enter the following attributes for the document record that are key attributes and enable you to pull in all the attributes:
   - **TransactionID**
7. Click **View** to see the sample data in the report, and all the available attributes.
8. Click **Export**.
9. In the **Opening ManageDOR_.xml** dialog box, select **Save File** and click **OK**.
10. Save the **ManageDOR_.xml** file to a local drive.

**Downloading the Report Layout Template**
In this task, you create a copy of the report layout template in the Custom folder, and download a copy of the template to your local hard drive to modify it.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator role to open the Oracle Business Intelligence Home page.
2. Click **Catalog**.
3. On the Catalog page, in the Folders section, expand **Shared Folders > Human Capital Management** and select **Workflow Notifications** to display the templates in the right pane.
4. Under **ManageDorReport**, click **More**, and then select **Customize**. A copy of the ManageDorReport is created automatically in the Custom folder.
5. On the ManageDorReport page, under **ManageDorReport**, click **Edit**.
6. On the **Opening ManageDorReportR13.rtf** dialog box, select **Save File** and click **OK** to save the document to your local hard drive. Save the template with the name ManageDorReport.rtf to distinguish it from the original template.

**Editing Prompts and Headers in the Template**
To modify email and in-app notifications, you edit a local copy of the .rtf report layout templates in Microsoft Word.

   **Note:** The exact steps can vary depending on your version of Microsoft Word.

1. Open the ManageDorReportR13.rtf template in Microsoft Word with the Template Builder installed, if not already open. The document contains all notifications for the workforce deployment business process.
2. Scroll to the notification with the header **New Document Record**.
3. Place the cursor in front of the **Description** header text.
4. Enter **Your**. The text now reads **Your New Document Record**.
5. Scroll to the prompt **Issuing Authority**. Replace Issuing Authority with **Issuing Agency**.
6. Save the document.
7. Proceed to the task Previewing the Document.
Previewing the Document

Before uploading the .rtf files to the business intelligence (BI) catalog, you should preview the output with the changes you made. You can avoid uploading a broken report that displays an error in the emails and in-app notification sent to users.

1. In the Ribbon, open the BI Publisher tab and click Sample XML within the Load Data group.
2. Browse to and select the ManageDorDM_.xml file you downloaded to import sample data from the data model.
3. In the Data Loaded Successfully dialog box, click OK.
4. At the top of the document, replace the path with the location of the downloaded subtemplate file on your computer. For example, change `<? import:xdoxsl:///Common Content/Templates/Workflow Notification Subtemplate.xsb?>` to `<?import:file:C:///Template_Directory/Workflow Notification Subtemplate.rtf?>`.
5. From the BI Publisher tab in the Ribbon, click HTML in the Preview group.
6. If the preview reflects your changes as expected, then change the path back to the original location.
7. From the BI Publisher tab in the Ribbon, click Validate Template in the Tools group.
8. Also in the Tools group, click Check Accessibility.
9. Save your changes in Word.

Adding Data Model Attributes to the Template

In this task, you add to the report template attributes to data model. You will add the Person Name and Person Number attributes to the template.

1. Open the ManageDorReport.rtf template in Microsoft Word with the Template Builder installed, if not already open.
2. Select the BI Publisher tab.
3. In the Load Data section, click Sample XML.
4. In the dialog box to select XML data that appears, browse to open the ManageDOR_.xml file you saved in the Exporting the Data Model XML File task and click Open.
5. In the Data loaded successfully dialog box, click OK.
6. Place the cursor after the data code ParentEntityName and press the Enter key to enter a new line.
7. On the BI Publisher tab, in the Insert section, click the 123 Field button to open the Field dialog box.
8. In the PersonHeader folder, select PERSON_NAME and click Insert. The field appears in the document.
9. Place the cursor after the data code PERSON_NAME and press the Enter key to enter a new line.
10. In the PersonHeader folder, select PERSON_NUMBER and click Insert. The field appears in the document.
11. Click Close to return to the ManageDorReportR13.rtf template.
12. Preview the template using the steps in the Previewing the Document task.
13. Save and close the document.
14. Proceed to the task Uploading the Modified Report Layout to the Oracle BI Publisher Catalog.

Uploading the Modified Report Layout to the Oracle BI Publisher Catalog

You must perform this task to use the modified report layout for notifications.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
4. Under the ManageDorReport, click Edit.
5. On the ManageDorReport Data Model page, on the right side of the page, click Add New Layout to open the page with the Create Layout and Upload or Generate Layout sections.
6. In the Upload or Generate Layout section, click the Upload icon.
7. In the Upload Template File dialog box, in the Layout Name field, enter Updated ManageDor Template.
8. In the Template File field, browse for the modified Updated ManageDorReportR13.rtf template on your local drive, select the template, and click Open.
9. In the **Upload Template File** dialog box, from the **Type** list, select **RTF Template**.
10. From the **Locale** list, select **English (United States)**.
11. Click **Upload** to open the **Processing** dialog box and return to the ManageDorReport page.
12. On the right side of the page, click **View a list** to open the Layout page.
13. In the row for the **Updated ManageDor Report Template**, select the **Default Layout** check box.
14. On the right side of the page, click the **Save Report** icon.

**Related Topics**
- Set Up for RTF and Excel Report Layout Templates
- How You Modify Copies of Predefined Reports

**Configure Checklist Notifications Using Reports**

This example shows how to configure the checklist task workflow email and in-app notification for the workforce deployment business process using Oracle Business Intelligence (BI) Publisher reports. You use Microsoft Word to edit the .rtf template used for notifications. You can modify the BI Publisher templates only if you have the BI Administrator role.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which template do I update?</td>
<td>TaskFYIReport, for updates about a worker’s checklist task</td>
</tr>
<tr>
<td>Do I add prompts and headers to the template?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do I add data model attributes to the template?</td>
<td>Yes, for Task Contact Details</td>
</tr>
<tr>
<td>Which language do I use for the .rtf template?</td>
<td>English (United States)</td>
</tr>
</tbody>
</table>

**Summary of the Tasks**

Configure a checklist notification by:

1. Exporting the data model XML file.
2. Downloading the report layout template.
3. Editing prompts and headers in the template.
4. Previewing the document.
5. Adding data model attributes to the template.
6. Uploading the modified report layout to the BI Publisher catalog.

If you only want to add or edit prompts and headers in the template, use tasks 1, 2, 3, 4, and 6. To only add data model attributes to the template, use tasks 1, 2, 4, 5, and 6.

**Prerequisites**

2. Download and install the Template Builder for Word to use Microsoft Word to edit the layout templates. To download, install, and set up Template Builder for Word, see Creating RTF Templates by Using BI Publisher 11g Template Builder for Word: http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/11g/controlpan/tb4word/tbwordbip.htm.

3. To preview the configured templates, download a local copy of the subtemplate that applies to your own report layout template:
   - Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
   - Click Catalog.
   - In the BI catalog, go to Shared Folders > Common Content > Templates for the predefined subtemplate.
   - Click Edit for Workflow Notification Subtemplate.
   - In the Templates section, click the link in the Locale column.
   - Save the subtemplate.rtf file to your computer.

Exporting the Data Model XML File
In this task, you export the XML file that includes the data model attributes predefined for the notifications. Perform this task to enable previewing your modified template. This task is also required if you intend to add data model attributes to the template.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
3. On the Catalog page, in the Folders section, expand Shared Folders > Human Capital Management > Workflow Notifications and select Data Models to display the data models in the right pane.
4. Under TaskNotification data model, click Edit to open the Diagram tab on the TaskNotification data model page.

   **Note:** To ensure that all data sets include requested elements with null values in the output XML data, do the following:
   - In the Data Model section, select Properties.
   - In the Properties section, select Include Empty Tags for Null Elements.
   - In the Data Model section, select Data Sets.

   **Note:** To add data model attributes to the template, perform steps 5 and 6. Otherwise, skip to step 7.

5. Click the Data tab.
6. Enter the following attributes for the checklist that are key attributes and enable you to pull in all the attributes:
   - TransactionID
7. Click View to see the sample data in the report, and all the available attributes.
8. Click Export.
9. In the Opening TaskNotification_.xml dialog box, select Save File and click OK.
10. Save the TaskNotification_.xml file to a local drive.

Downloading the Report Layout Template
In this task, you create a copy of the report layout template in the Custom folder and download a copy of the template to your local hard drive to modify it.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
3. On the Catalog page, in the Folders section, expand Shared Folders > Human Capital Management and select Workflow Notifications to display the templates in the right pane.
4. Under TaskFYIReport, click More, and then select Customize. A copy of the TaskFYIReport is created automatically in the Custom folder.
6. On the Opening TaskFYIReport.rtf dialog box, select Save File and click OK to save the document to your local hard drive. Save the template with the name UpdatedTaskFYIReport.rtf to distinguish it from the original template.

### Editing Prompts and Headers in the Template

To modify email and in-app notifications, you edit a local copy of the .rtf report layout templates in Microsoft Word.

> **Note:** The exact steps can vary depending on your version of Microsoft Word.

1. Open the UpdatedTaskFYIReport.rtf.rtf template in Microsoft Word with the Template Builder installed, if not already open. The document contains all notifications for the workforce deployment business process.
2. Scroll to the notification with the header FYI: Task.
3. Place the cursor in front of the FYI: header text.
4. Enter Checklist. The text now reads FYI: Checklist Task.
5. Save the document.

### Previewing the Document

Before uploading the .rtf files to the business intelligence (BI) catalog, you should preview the output with the changes you made. You can avoid uploading a broken report that displays an error in the emails and in-app notification sent to users.

1. In the Ribbon, open the BI Publisher tab and click Sample XML within the Load Data group.
2. Browse to and select the TaskNotification_.xml file you downloaded to import sample data from the data model.
3. In the Data Loaded Successfully dialog box, click OK.
5. From the BI Publisher tab in the Ribbon, click HTML in the Preview group.
6. If the preview reflects your changes as expected, then change the path back to the original location.
7. From the BI Publisher tab in the Ribbon, click Validate Template in the Tools group.
8. Also in the Tools group, click Check Accessibility.
9. Save your changes in Word.

### Adding Data Model Attributes to the Template

In this task, you add to the report template attributes to data model. You will add the Task Contact Details data model attributes to the template.

1. Open the UpdatedTaskFYIReport.rtf template in Microsoft Word with the Template Builder installed, if not already open.
2. Select the BI Publisher tab.
3. In the Load Data section, click Sample XML.
4. In the dialog box to select XML data that appears, browse to open the TaskNotification_.xml file you saved in the Exporting the Data Model XML File task and click Open.
5. In the Data loaded successfully dialog box, click OK.
6. Scroll to the Task Details notification.
7. Place the cursor after Status and press the Enter key.
8. On the new line, enter Task Contact Details.
9. Place the cursor after the data code MEANING and press the Enter key to enter a new line.
10. On the BI Publisher tab, in the Insert section, click the 123 Field button to open the Field dialog box.
11. In the AllocatedTaskDetails folder, select CONTACTDETAILS and click Insert. The field appears in the document.
12. Click Close to return to the TaskFYIReport.rtf template.
13. Preview the template using the steps in the Previewing the Document task.
14. Save and close the document.
15. Proceed to the task Uploading the Modified Report Layout to the Oracle BI Publisher Catalog.

### Uploading the Modified Report Layout to the Oracle BI Publisher Catalog

You must perform this task to use the modified report layout for notifications.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
5. On the TaskNotification Data Model page, on the right side of the page, click Add New Layout to open the page with the Create Layout and Upload or Generate Layout sections.
6. In the Upload or Generate Layout section, click the Upload icon.
7. In the Upload Template File dialog box, in the Layout Name field, enter Updated TaskFYIReport Template.
8. In the Template File field, browse for the modified Updated TaskFYIReport.rtf template on your local drive, select the template, and click Open.
9. In the Upload Template File dialog box, from the Type list, select RTF Template.
10. From the Locale list, select English (United States).
11. Click Upload to open the Processing dialog box and return to the TaskFYIReport page.
12. On the right side of the page, click View a list to open the Layout page.
13. In the row for the Updated TaskFYI Report Template, select the Default Layout check box.
14. On the right side of the page, click the Save Report icon.

### Configure Feedback Notifications Using Reports

This example shows how to configure workflow email and in-app notifications for feedback using Oracle Business Intelligence (BI) Publisher reports. You use Microsoft Word to edit the .rtf template used for notifications. You can modify the BI Publisher templates only if you have the BI Administrator role.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which template do I update?</td>
<td>NoteSentToManager, for updates to notifications about feedback sent to managers</td>
</tr>
<tr>
<td>Do I add prompts and headers to the template?</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Summary of the Tasks

Configure a goal management notification by:

1. Exporting the data model XML file.
2. Downloading the report layout template.
3. Editing prompts and headers in the template.
4. Previewing the document.
5. Adding data model attributes to the template.
6. Uploading the modified report layout to the BI Publisher catalog.

If you only want to add or edit prompts and headers in the template, use tasks 1, 2, 3, 4, and 6. To only add data model attributes to the template, use tasks 1, 2, 4, 5, and 6.

Prerequisites

2. Download and install the Template Builder for Word to use Microsoft Word to edit the layout templates. To download, install, and set up Template Builder for Word, see Creating RTF Templates by Using BI Publisher 11g Template Builder for Word: http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/bi/bip/tb4word/tbwordbip.htm.
3. To preview the configured templates, download a local copy of the subtemplate that applies to your own report layout template:
   - Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
   - Click Catalog.
   - In the BI catalog, go to Shared Folders > Common Content > Templates for the predefined subtemplate.
   - Click Edit for Workflow Notification Subtemplate.
   - In the Templates section, click the link in the Locale column.
   - Save the subtemplate .rtf file to your computer.

Exporting the Data Model XML File

In this task, you export the XML file that includes the data model attributes predefined for the notifications. Perform this task to enable previewing your modified template. This task is also required if you intend to add data model attributes to the template.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog.
3. On the Catalog page, in the Folders section, expand Shared Folders > Human Capital Management > Workflow Notifications and select Data Models to display the data models in the right pane.
4. Under Person Notes, click Edit to open the Diagram tab on the PersonNotes page.
**Note:** To ensure that all data sets include requested elements with null values in the output XML data, do the following:
- In the Data Model section, select Properties.
- In the Properties section, select Include Empty Tags for Null Elements.
- In the Data Model section, select Data Sets.

**Note:** To add data model attributes to the template, perform steps 5 and 6. Otherwise, skip to step 7.

5. Click the Data tab.
6. In the empty text field, enter the Note_ID for an existing feedback note to pull in all the feedback attributes.
7. Click View to see the sample data in the report, and all the available attributes.
8. Click Export.
9. In the **Opening PersonNotes** dialog box, select Save File and click OK.
10. Save the **PersonNotes_.xml** file to a local drive.

### Downloading the Report Layout Template
In this task, you create a copy of the report layout template in the Custom folder, and download a copy of the template to your local hard drive to modify it.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator role to open the Oracle Business Intelligence Home page.
2. Click **Catalog**.
3. On the Catalog page, in the Folders section, expand **Shared Folders > Human Capital Management** and select **Workflow Notifications** to display the templates in the right pane.
4. Under **NoteSentToManagerReport**, click More, and then select Customize. A copy of the NoteSentToManagerReport is created automatically in the Custom folder.
5. On the NoteSentToManagerReport page, under **NoteSentToManagerReport**, click Edit.
6. On the **Opening NoteSentToManagerReport.rtf** dialog box, select Save File and click OK to save the document to your local hard drive. Save the template with the name UpdatedNoteSentToManagerReport.rtf to distinguish it from the original template.

### Editing the Template
To modify workflow email and in-app notifications, you edit a local copy of the .rtf report layout templates in Microsoft Word.

**Note:** The exact steps can vary depending on your version of Microsoft Word.

1. Open the UpdatedNoteSentToManagerReport.rtf template in Microsoft Word with the Template Builder installed, if not already open.
2. Place the cursor at the end of the text **AUTHOR_DISPLAY_NAME added feedback about WORKER_DISPLAY_NAME**.
3. Enter recently. The text now reads **AUTHOR_DISPLAY_NAME added feedback about WORKER_DISPLAY_NAME recently**.
4. Place the cursor in front of the feedback code that includes `<html2fo:NOTE_TEXT>` and press the Enter key to add a line.
5. Enter Check out this feedback: When you preview the document, the feedback note appears below the text that you entered.
6. Save the document.
7. Proceed to the task Previewing the Document.
Previewing the Document
Before uploading the .rtf files to the business intelligence (BI) catalog, you should preview the output with the changes you made. You can avoid uploading a broken report that displays an error in the emails sent to users.

1. In the Ribbon, open the BI Publisher tab and click Sample XML within the Load Data group.
2. Browse to and select the PerformanceGoalNotificationsDM_.xml file you downloaded to import sample data from the data model.
3. In the Data Loaded Successfully dialog box, click OK.
4. From the BI Publisher tab in the Ribbon, click HTML in the Preview group.
5. From the BI Publisher tab in the Ribbon, click Validate Template in the Tools group.
6. Also in the Tools group, click Check Accessibility.
7. Save your changes in Word.

Adding Data Model Attributes to the Template
In this task, you add to the report template attributes that exist in the predefined data model. You will add the DISPLAY_NAME and WORKER_DISPLAY_NAME data model attributes to the template.

1. Open the UpdatedNoteSentToManagerReport.rtf template in Microsoft Word with the Template Builder installed, if not already open.
2. Select the BI Publisher tab.
3. In the Load Data section, click Sample XML.
4. In the dialog box to select XML data that appears, browse to open the PersonNotes_.xml file you saved in the Exporting the Data Model XML File task and click Open.
5. In the Data loaded successfully dialog box, click OK.
6. Place the cursor after the code containing <html2fo: NOTE_TEXT> and press the Enter key twice to add two new lines.
7. On the new line, enter Author Name:
8. On the BI Publisher tab, in the Insert section, click the 123 Field button to open the Field dialog box.
9. In the AUTHORNAME folder, select DISPLAY_NAME and click Insert. The field appears in the document.
10. Place the cursor after the data code DISPLAY_NAME and press the Enter key.
11. On the new line, enter Worker Name:
12. On the Field dialog box, in the WORKERNAME folder, select WORKER_DISPLAY_NAME and click Insert. The field appears in the document.

Note: Ensure that you don’t alter or remove the code WORKER_DISPLAY_NAME or Online Notification that appear at the bottom of the template.

13. Click Close to return to the UpdatedNoteSentToManagerReport.rtf template.
14. Preview the template using the steps in the Previewing the Document task.
15. Save and close the document.
16. Proceed to the task Uploading the Modified Report Layout to the Oracle BI Publisher Catalog.

Uploading the Modified Report Layout to the Oracle BI Publisher Catalog
You must perform this task to use the modified report layout for notifications.

1. Sign in to the Oracle Business Intelligence Publisher server with the BI Administrator Role to open the Oracle Business Intelligence Home page.
2. Click Catalog
4. Under NoteSentToManagerReport, click Edit.
5. On the NoteSentToManagerReport Data Model page, on the right side of the page, click Add New Layout to open the page with the Create Layout and Upload or Generate Layout sections.
6. In the Upload or Generate Layout section, click the Upload icon.

7. In the Upload Template File dialog box, in the Layout Name field, enter Updated Feedback Notifications Template.

8. In the Template File field, browse for the modified UpdatedNoteSentToManagerReport.rtf template on your local drive, select the template, and click Open.

9. In the Upload Template File dialog box, from the Type list, select RTF Template.

10. From the Locale list, select English (United States).

11. Click Upload to open the Processing dialog box and return to the NoteSentToManagerReport Data Model page.

12. On the right side of the page, click View a list to open the Layout page.

13. In the row for the Updated Feedback Notifications Template, select the Default Layout check box.

14. On the right side of the page, click the Save Report icon.

Workflow Task Life Cycle Setup

Define When to Automatically Dismiss or Withdraw Workflow Tasks

Only workflow tasks with a final status, such as Completed or Withdrawn, can be purged and removed from users’ worklists. Tasks go from the Assigned status to the Completed status when the final assignee approves or rejects the tasks, or, with for your information (FYI) tasks, when assignees explicitly dismiss the tasks. If assignees don’t take actions that result in a final task status, within a certain period of time, then the tasks are automatically dismissed (FYI tasks) or withdrawn (all other tasks).

When Tasks are Eligible for Automatic Dismissal or Withdrawal

The FYI Notifications Expiration Period profile option determines when FYI tasks are eligible for automatic dismissal. In the Setup and Maintenance work area, use the following:

- Functional Area: Application Extensions
- Task: Manage Applications Core Administrator Profile Values

On the Manage Applications Core Administrator Profile Values page:

- Leave the profile option with the default value of 7, or replace it with a different number.
- The profile value represents the number of days after the FYI task is created.

When assignees don’t read or dismiss an FYI task within the specified number of days after the task was created, the task is then eligible to be automatically dismissed. All other tasks are eligible for automatic withdrawal when assignees don’t take action to send the task to a final status within six months after the task was created.

When Eligible Tasks Are Automatically Dismissed or Withdrawn

Different processes run to automatically dismiss eligible FYI tasks or withdraw all other eligible tasks.

- **FYI Tasks:** The process runs every three days, starting the first day of each month. For example, it runs on May 1, 4, 7, and so on, and again on June 1 and every three days after. So, if you leave the FYI Notifications Expiration Period profile value at 7, then depending on when the process runs, an FYI task can be automatically dismissed within seven to ten days after it’s created. The process changes the FYI task status from Assigned to Completed.

- **All Other Tasks:** The process runs every three days, starting the second day of each month. For example, it runs on May 2, 5, 8, and so on, and again on June 2 and every three days after. The process changes the status of eligible tasks to Withdrawn.
How Workflow Tasks Are Archived and Purged

Workflow tasks with a final status, such as Completed or Expired, can be archived and purged. Archiving keeps a copy of the task data for audit, data retention or analysis, and other purposes. Purging removes the completed tasks from users' worklists and permanently deletes the original data.

Archive

Tasks are automatically archived once a month without you doing any setup. You can't change or stop this automatic archive. You can, however, also run the Archive Workflow Tasks scheduled process as needed; for example, you need the latest data archived immediately for reporting purposes. The process includes all eligible tasks that aren't yet archived.

Archived data includes task details, approval history, comments, and attachments. How you view or use the archived data depends on the products you’re using. For example, the data might be displayed in a table on a page, or available through a business intelligence subject area that you can select to create an analysis.

Purge

Archived tasks that were last updated over 30 days ago are immediately purged after the monthly automatic archive, without you doing any setup. You can’t change or stop this automatic purge.

Define the Due Date and Expiration Policies for Workflow Tasks

For workflow tasks that should be completed within a general time frame, you can set a due date, expiration policies, or both. The current assignee will get notified before the due date to take action. Even after the due date passes, the task doesn’t expire and the assignee, as well as any subsequent approvers, can still act on it. But if you set expiration policies, the task can expire based on your settings. Expired tasks are in a final state and no one can make any more updates to them. To set due dates and expiration policies, use the Manage Task Configurations or other approval setup task in the Setup and Maintenance work area.

Overall Process

To set the due date, expiration policies, or both:

1. In the Setup and Maintenance work area, go to the following:
   - Functional Area: Application Extensions or another functional area
   - Task: Manage Task Configurations or another approval setup task
2. In BPM Worklist, on the Task Configuration tab, select the workflow task to configure and click the Edit task icon in the Tasks to be configured toolbar.
3. Open the Deadlines subtab and make your changes.
4. Click the **Commit task** icon in the **Tasks to be configured** toolbar when you’re ready to deploy your changes. This figure shows the Deadlines subtab.

**Specify a Due Date**

On the Deadlines subtab, specify the time frame that all approvers should complete the task in. For example, if you enter 14 days for the **Due Date** fields, that means the task is due 14 days after it’s created.

**Indicate How Tasks Expire**

Follow these steps:

1. On the Deadlines subtab, expand the Expiration Settings section.
2. Indicate how the task would expire, based on what’s not done during a specified time frame.
   - **Task Level**: If all approvals aren’t done.
   - **Assignee Level**: If the assignee doesn’t act on the task.
Define Policies with Assignee Level Expiration

To set expiration policies, including any escalations or renewals, with Assignee Level selected:

1. In the Expiration Settings section of the Deadlines subtab, specify a duration and optionally select the *Exclude Saturday and Sunday* check box. For example, if you enter 30 days and select the check box, then:
   - For sequential routing, the task expires if the last assignee doesn’t act on the task within 30 weekdays after the task is routed to that assignee. If the first assignee doesn’t act in 30 weekdays, the task is passed to the next assignee, who gets another 30 weekdays. And so on, until the last assignee.
   - For parallel routing, the task expires if the current assignees don’t act on the task within 30 weekdays after the task is assigned.

2. If you want tasks to get escalated or renewed after they expire, select the *Escalate* or *Renew* option. Otherwise, leave the *Expire only* option selected.

3. To escalate, indicate how many times the approval escalates up the management chain. For example, you enter 2 in the *Maximum Escalation Levels* field. When the task expires:
   - For sequential routing, the task is routed to the manager (User 2) of the last assignee (User 1).
   - For parallel routing, the task is routed to the managers (User 2) of all current assignees (User 1).

When User 2 doesn’t act within 30 weekdays, then the task is escalated to the manager of User 2, who has another 30 weekdays before the task goes into a final Expired status.

4. To renew, indicate how many times the task can get renewed. For example, you enter 2 in the *Maximum Renewals* field. When the task expires:
   - For sequential routing, the last assignee gets another 30 weekdays.
   - For parallel routing, the current assignees get another 30 weekdays.

Define Policies for Task Level Expiration

To set expiration policies, including any escalations or renewals, with Task Level selected:

1. In the Expiration Settings section of the Deadlines subtab, specify a duration and optionally select the *Exclude Saturday and Sunday* check box. For example, if you enter 30 days and select the check box, then the task expires if not all approvals are done 30 weekdays after the task is routed to the first assignee. If there are three assignees and the first two take 25 weekdays to act, then the last assignee only gets 5 weekdays.

2. If you want tasks to get escalated or renewed after they expire, select the *Escalate* or *Renew* option. Otherwise, leave the *Expire only* option selected.

3. To escalate, indicate how many times the approval escalates up the management chain.
   - For example, you enter 2 in the *Maximum Escalation Levels* field and select *Director* in the *Highest Approver Title* field. When the task expires, it’s routed to the manager (User 2) of the current assignee (User 1). When User 2 doesn’t act within 30 weekdays, then:
     - If User 2 isn’t a director, the task is escalated to the manager of User 2, who has another 30 weekdays before the task goes into a final Expired status.
     - If User 2 is a director, then the task goes into a final Expired status.

4. To renew, indicate how many times the task can get renewed. For example, you enter 2 in the *Maximum Renewals* field. When the task expires, all pending assignees get another collective 30 weekdays to act. If they don’t all act within that period, then the task is renewed for another 30 weekdays. If the task still isn’t complete in that time, then it goes into a final Expired status.
Set Up the Worklist Region on My Dashboard

You can add the Worklist: Notifications and Approvals region to My Dashboard, which is a blank dashboard by default. This region displays the workflow tasks assigned to the person using My Dashboard. After you add the Worklist region, select a value for the Welcome Dashboard Worklist Timeout Interval (ATK_HOME_PAGE_WORKLIST_TIMEOUT) profile option.

Adding the Region

To add the Worklist: Notifications and Approvals region to My Dashboard:

1. Click Navigator > My Dashboard.
2. Click your user image or name in the global header, and select Edit Pages in the Administration menu group.
3. Click the Add Content button where you want to place the region.
4. Open the Application Content folder in the Add Content dialog box.
5. Click Add for the Worklist: Notifications and Approvals item.
6. Click Close.
7. Save your work, and then click the Close button.

Defining the Timeout Interval

When users open My Dashboard and it contains the Worklist: Notifications and Approvals region, data for the region is retrieved. The Welcome Dashboard Worklist Timeout Interval profile option determines how long to continue retrieving before timing out and displaying no data. In the Setup and Maintenance work area, use the following:

- Functional Area: Application Extensions
- Task: Manage Application Toolkit Administrator Profile Values

Note: If you don’t see this task, then make sure that the Application Toolkit Component Maintenance feature is enabled at the offering level in the Offerings work area.

On the Manage Application Toolkit Administrator Profile Values page, set the Welcome Dashboard Worklist Timeout Interval profile option.

- If you don’t set a value for this profile option, which is blank by default, then the region doesn’t time out.
- Retrieving data for the Worklist region affects the performance of My Dashboard as a whole. So, select a value for this profile option if your users have the Worklist region on My Dashboard and notice performance issues.

After the timeout, users can refresh the region to try retrieving the data again.

Related Topics

- Set Profile Option Values
- Configuring Offerings: Procedure
- Update Existing Setup Data
14 Alerts Composer

Overview

Alerts Composer is a tool that enables you to send informational notifications to Oracle HCM Cloud users by email and worklist. You can configure the notification templates and add recipients. On the home page, click Navigator > Alerts Composer to open the tool.

Notifications are triggered based on predefined conditions for two types of alerts.

- **Event Alerts**: Event Alerts are based on the context provided by the calling client. They’re triggered when a specific event occurs in the application. You can’t modify the triggering criteria for notifications. For example, Time Exceptions from Compliance Rules is a predefined Event alert which is triggered when compliance exceptions are available. Notifications are sent to managers informing them of the exceptions.

- **Resource Alerts**: Resource Alerts are based on Oracle HCM Cloud REST API resources. The resources must be deployed in the environment. You can modify the triggering criteria for notifications by defining filters on the resource attributes if you have the required privileges to access the REST resources. For example, Visa Expiration is a predefined Resource alert which is triggered when a worker visa is approaching expiration. A filter is defined on the `emps` resource for the visa attribute. Notifications are sent to the worker and the manager informing them of visa expiration.

Key Features

Using the Alerts Composer tool, you can:

- Configure the notification templates and email formats and define language-specific templates.
- Define multiple templates for the same triggering criteria.
- Use Groovy expressions and define variables to substitute runtime values.
- Schedule jobs for processing the Resource alert notifications.
- Verify the alerts history and notifications activity.

Related Topics

- Alerts Composer

Functional Privileges and Access Levels: Explained

To use the Alerts Composer tool and run the alerts, you require these functional privileges.

<table>
<thead>
<tr>
<th>Functional Security Privilege</th>
<th>Description</th>
<th>Assigned to Job Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Alerts Composer</td>
<td>Allows access to Alerts Composer.</td>
<td>Human Capital Management Integration Specialist</td>
</tr>
</tbody>
</table>
Additionally, you require functional privileges to access REST API resources to create or modify user-defined and predefined resource alerts. For example, you require the functional privilege Use REST Services - Employees to access the `emps` resource and its child resources to manage the alert templates that are based on this resource.

### Access Levels

Access levels are predefined for alerts to control the actions that can be performed on the alerts. For example, you can add new templates and modify predefined templates for an alert if its Access Level is set to Extensible or User but not if its Access Level is set to System.

You can view the access level for an alert when editing the alert; however, you can’t modify it. Alerts that are predefined with access levels System or Extensible are always enabled. You can’t disable them. Alerts that are user-defined are enabled by default. You can disable them.

The following table shows the access levels for alerts.

<table>
<thead>
<tr>
<th>Access Level</th>
<th>System</th>
<th>Extensible</th>
<th>User</th>
</tr>
</thead>
<tbody>
<tr>
<td>View alerts</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Disable alerts</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Add new templates</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Modify templates</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Delete templates</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Disable templates</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Add recipients</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Functions and Groovy Expressions: Explained

This topic describes various functions and Groovy expressions that you can use when configuring alerts using the Alerts Composer.
The return attributes for the person can be one of these:

- PersonId
- WorkEmail
- DisplayName
- FirstName
- LastName
- UserName

### Functions

The following table describes the functions that are supported for alerts.

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
<th>Usage</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Name: hrRep &lt;br&gt; Display name: Human resources representative</td>
<td>Returns zero or one HR Representative person attributes for the PersonId or AssignmentId provided. &lt;br&gt; If no record is found, then a NULL value is returned.</td>
<td>Name is : ${AlertUtils.hrRep(emps. PersonId). DisplayName} &lt;br&gt; Name is : ${AlertUtils.hrRep(assignments[0]. AssignmentId). DisplayName}</td>
<td>Name is : John Smith</td>
</tr>
<tr>
<td>- Name: payRep &lt;br&gt; Display name: Payroll representative</td>
<td>Returns zero or one Payroll Representative person attributes for the PersonId or AssignmentId provided. &lt;br&gt; If no record is found, then a NULL value is returned.</td>
<td>Email is : ${AlertUtils.payRep(emps. PersonId). WorkEmail} &lt;br&gt; Email is : ${AlertUtils.payRep(assignments[0]. AssignmentId). WorkEmail}</td>
<td>Email is : <a href="mailto:john.smith@abme.com">john.smith@abme.com</a></td>
</tr>
<tr>
<td>- Name: benRep &lt;br&gt; Display name: Benefits representative</td>
<td>Returns zero or one Benefits Representative person attributes for the PersonId or AssignmentId provided. &lt;br&gt; If no record is found, then a NULL value is returned.</td>
<td>User Name is : ${AlertUtils.benRep(emps. PersonId). UserName} &lt;br&gt; User Name is : ${AlertUtils.benRep(assignments[0]. AssignmentId). UserName}</td>
<td>User Name is : JSMITH</td>
</tr>
<tr>
<td>- Name: unionRep &lt;br&gt; Display name: Union representative</td>
<td>Returns zero or one Union Representative person attributes for the PersonId or AssignmentId provided. &lt;br&gt; If no record is found, then a NULL value is returned.</td>
<td>Name is : ${AlertUtils.unionRep(emps. PersonId). DisplayName} &lt;br&gt; Name is : ${AlertUtils.unionRep(assignments[0]. AssignmentId). DisplayName}</td>
<td>Name is :nullJulie Jones })}</td>
</tr>
<tr>
<td>- Name: empManager &lt;br&gt; Display name: Employee manager</td>
<td>Returns zero or one employee’s manager person attributes for the PersonId or AssignmentId provided. &lt;br&gt; If no record is found, then a NULL value is returned.</td>
<td>Manager is : ${AlertUtils.empManager(emps. PersonId). DisplayName} &lt;br&gt; Manager is : ${AlertUtils.empManager(assignments[0]. AssignmentId). DisplayName}</td>
<td>Manager is :nullBarry Bollinger })}</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
<td>Usage</td>
<td>Example</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Name: <strong>person</strong></td>
<td>Returns zero or one person’s person attributes for the PersonId or AssignmentId provided. If no record is found, then a NULL value is returned.</td>
<td>Person Name is <code>${AlertUtils.person(emps.PersonId). DisplayName}</code> Person Name is <code>${AlertUtils.person(assignments[0].AssignmentId). DisplayName}</code></td>
<td>Person Name is Edward</td>
</tr>
<tr>
<td>Name: <strong>userName</strong></td>
<td>Returns zero or one person’s person attributes for the UserName provided. If the user name is not found, then a NULL value is returned.</td>
<td>${AlertUtils.userName(emps.UserName). WorkEmail}</td>
<td><a href="mailto:simon.stringer@abme.com">simon.stringer@abme.com</a></td>
</tr>
<tr>
<td>Name: <strong>getSysdate</strong></td>
<td>Returns the system date.</td>
<td>${AlertUtils.getSysdate()}</td>
<td>Date : 2016-04-25</td>
</tr>
<tr>
<td>Name: <strong>getSystimestamp</strong></td>
<td>Returns the system date and time.</td>
<td>${AlertUtils.getSystimestamp()}</td>
<td>TimeStamp: 2016-04-25 23:44:52.0</td>
</tr>
<tr>
<td>Name: <strong>formatNumber</strong></td>
<td>Formats the number to the specified Java number format. Supported formats are available at <a href="https://docs.oracle.com/javase/7/docs/api/java/text/NumberFormat.html">https://docs.oracle.com/javase/7/docs/api/java/text/NumberFormat.html</a>.</td>
<td>Salary is <code>${AlertUtils.formatNumber(assignments[0].SalaryAmount '9999,999')}</code></td>
<td>Salary is 46,064</td>
</tr>
<tr>
<td>Name: <strong>formatDate</strong></td>
<td>Formats the date to the specified Java date format. Supported formats are available at <a href="https://docs.oracle.com/javase/7/docs/api/java/text/SimpleDateFormat.html">https://docs.oracle.com/javase/7/docs/api/java/text/SimpleDateFormat.html</a>.</td>
<td>Date is : <code>${AlertUtils.formatDate(emps.HireDate 'dd-MMM-yyyy')}</code></td>
<td>Date is : 21-Apr-2007</td>
</tr>
<tr>
<td>Name: <strong>formatJSON</strong></td>
<td>Returns formatted JSON (in a hierarchy, if it exists) for a given set of attributes provided in the AttributeList parameter.</td>
<td>Format Jsonnull${AlertUtils.formatJSON('emps.PersonId''emps.DisplayName''assignments.AssignmentName''assignments.AssignmentId''visas.VisaType'')}</td>
<td>Format Jsonnull{ &quot;emps&quot; : { &quot;PersonId&quot; : &quot;300100016699983&quot;, &quot;DisplayName&quot; : &quot;ANC_Manager_Vision1_Absence&quot; }, &quot;assignments&quot; : [{ &quot;AssignmentName&quot; : &quot;Manager_Vision1_Absence&quot; }], &quot;visas&quot; : [] }</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
<td>Usage</td>
<td>Example</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>formatXML</td>
<td>Returns formatted XML (in a hierarchy, if it exists) for a given set of attributes provided in the {{AttributeList}} parameter.</td>
<td>Format XML $(AlertUtils.formatXML('emps.PersonId' , 'emps.DisplayName' , 'assignments.AssignmentName' , 'assignments.AssignmentId' , 'visas.VisaPermitNumber' , 'visas.VisaPermitExpiration'))</td>
<td>Format XML</td>
</tr>
<tr>
<td>showDisplayValue</td>
<td>Returns the display value for the LOV attribute.</td>
<td>Gender is $(AlertUtils.showDisplayValue('Gender'))</td>
<td>Gender is Male</td>
</tr>
<tr>
<td>getURI</td>
<td>Constructs the URI for the application name and context provided.</td>
<td>Uri is $(AlertUtils.getURI('HcmCoreApp' , 'hcmRestApi' , 'resources' , 'latest' , 'emps'))</td>
<td>Uri is <a href="http://slc07dsnus.abc.com:7011/hcmRestApi/resources/latest/emps">http://slc07dsnus.abc.com:7011/hcmRestApi/resources/latest/emps</a></td>
</tr>
<tr>
<td>loop</td>
<td>Loops through a collection. This function can be used to construct tables in the message content as follows:</td>
<td>Sample 1: Hello ${FirstName},</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sample 1: Hello John,</td>
<td></td>
</tr>
</tbody>
</table>
Functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
<th>Usage</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>${AlertUtils.loop('ResourcesName1', 'ResourcesName2', 'Content1', 'Content2')}</code></td>
<td>Visas of these employees expire in the next 30 days:</td>
<td><code>&lt;table&gt;</code></td>
<td>Visas of these employees expire in the next 30 days:</td>
</tr>
<tr>
<td></td>
<td></td>
<td><code>$alertUtils.loop('visas', '&lt;tr&gt;', '${VisaPermitCountry}')&lt;/td&gt;', '&lt;td&gt;', '${VisaPermitNumber}&lt;/td&gt;', '&lt;/tr&gt;')</code></td>
<td>Thank you.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><code>&lt;table&gt;</code></td>
<td>Hello John,</td>
</tr>
</tbody>
</table>

Rules

- The list of resource names must be in hierarchical order. Every child resource must be preceded with the parent resource (unless it is a root-level child resource).

  For example, consider a hierarchy with root as `emps`, child as `assignments`, and grandchild as `empreps`. To create a loop on `empreps`, you must also include the `assignments` resource in the API:

  ```
  ${AlertUtils.loop('emps,assignments,empreps', '','<tr><td>${emps.LastName}</td><td>${VisaPermitCountry}</td><td>${VisaPermitExpiration}</td></tr>')} 
  ```

- An attribute at each level can be referenced directly. A parent attribute can be accessed in the child content using the expression `$parentResourceName.AttributeName`.

  For example, `$emps.PersonId`.

- For Event alerts, you can use the root keyword to access the top-level parent.

- The content can be empty for any resource. Insert an empty string as the content. (See sample 2 where the `emps` resource content is empty.)

- For Event alerts, you can use the root keyword to access the top-level parent.

  ```
  Hello ${FirstName}, 
  Visas of these employees expire in the next 30 days: 
  <table border=1> 
  ${AlertUtils.loop('emps,visas','','<tr><td>${emps.LastName}</td><td>${VisaPermitCountry}</td><td>${VisaPermitExpiration}</td></tr>')} 
  </table> 
  Thank you. 
  ```
Groovy Expressions

Alerts Composer supports Groovy expressions to substitute variables and add conditions based on the values provided at runtime. The following table shows some examples.

<table>
<thead>
<tr>
<th>Groovy Expression</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hello ${FirstName}.</td>
<td>Hello John,</td>
</tr>
<tr>
<td>Your visa issued in ${visas[0]. Country} expires on ${visas[0]. ExpirationDate}.</td>
<td>Your visa issued in GB expires on 2018-09-28.</td>
</tr>
<tr>
<td>Hi ${FirstName} &lt;asgStr =&quot;&quot;; for(visa in visas) {</td>
<td>Hi John,</td>
</tr>
<tr>
<td>asgStr = asgStr + visa. VisaPermitCountry+&quot; &quot;; } print(&quot;Multiple visas are issued for employee: &quot;+asgStr);</td>
<td>Regards,</td>
</tr>
<tr>
<td>%&gt;</td>
<td>Administrator</td>
</tr>
</tbody>
</table>

Set up Alert Notifications

Using the Alerts Composer tool, you can set up notifications for Event alerts and Resource alerts. The access level of an alert determines the extent of configuration that can be done for the alert.

Define Templates

Use the Templates tab on the Edit Alert page for defining templates. A template is the format for an alert notification. It includes the message text and Groovy expressions defined for the variables in the message. For alerts with access levels Extensible and User, you can define multiple templates and modify and disable the templates. You can delete templates for alerts with access level User.

Alerts Composer supports multiple language templates. You can set the default language when creating the template. When you save the template, language-specific templates are created in the application based on the installed languages. During runtime, worklist notifications are sent based on the recipient’s user language preference. If the corresponding language template is not found, then Alerts Composer uses the default language template.
You can define Groovy expressions in the templates and add conditions to substitute variables with runtime data.

You can set alert notifications to be delivered to recipients by email and worklist. If you provide an expression for email, the notification is delivered by email. If you provide an expression for user name, the notification is delivered by both email and worklist.

Define Filters

Use the Filters tab for defining filters on Resource alerts. If you have the required privileges to access the REST resources, you can define filters on specific resources and set the triggering criteria for notifications. You can define multiple filters on a resource by adding filter expressions for specific attributes. For example, you can define filters on the `emps` resource and its child resources for location, organization, legal entity, and so on.

Set Run Options

Use the Run Options tab for specifying the runtime settings of an alert such as the start date and frequency. You can also enable the activity log for an alert to view the activity on the Alerts History page.

Configure Resource Alerts

This topic explains the procedure for configuring Resource alerts.

To configure resource alerts, you must have:

- The required functional privileges and access levels to create and modify user-defined and predefined alerts.
- The required functional privileges to access REST API resources.

Create a Resource Alert

Creating a Resource alert is a three-step process:

1. Defining Filters
2. Defining Templates
3. Setting Run Options

Follow these steps to create a Resource alert:

1. Click Navigator > Alerts Composer.
2. On the Alerts page, select Add > Resource Alert.
3. On the Add Resource Alert page, enter the name and description for the alert.
   The character limit for name is 80 and description is 2000.
4. In the Resource field, select the REST resource for which you want to create the alert. For example, to create an alert for the Employees resource, select emps.

Define Filters

Filters enable you to specify the triggering criteria for alert notifications. To define filters:

1. On the Filters tab, click Add Filter.
2. On the Add Filter page, in the Resource field, select the specific parent or child resource such as emps/assignments.
3. Click **Add Expression** to define filter expressions on specific attributes of the resource.

4. In the Edit Expression dialog box, select the parameters to build the filter expression.
   
   a. Enter a name for the expression.
   
   b. Use the **Prefix With** option to specify any prefix operators on the expression.
   
   c. In the **Attribute** field, select the resource name and the attribute that you want to specify the filter condition on.
   
   d. In the **Operator** field, select the logical operator.
   
   e. In the **Value** field, specify the value for the condition.
   
   f. Click **Insert into Expression**.
   
   g. Click **Apply**. The expression appears on the Add Filter page.
   
   h. Repeat steps 3 and 4 to add more filter expressions.

5. Click **Apply** to return to the Add Resource Alert page.

6. Repeat steps 1 to 4 to define more filters on the Resource alert.

**Define Templates**

Templates enable you to define the format for alert notifications. To define templates:

1. On the Add Resource Alert page, click the Templates tab and then click **Add Template**.

2. Enter a name for the template and select the default language. The character limit for template name is 80.
   
   By default, the template is enabled.

3. Click **Edit** and select **Manage Recipients and Message**.

4. On the Edit Template page, click **Add Recipient**.

5. In the **Communication Method** column, select **email** or **worklist** from the list of values.

6. In the **Expression** field:
   
   i. Add the expression for the email address or user name of the recipient.
   
   ii. Add comma-delimited expressions for email addresses or user names of multiple recipients.
   
   or
   
   iii. Click the **Expression** icon to build the expression.
   
   iv. In the **Literal** field, enter the expression directly, for example, john.smith@oracle.com.
   
   v. Select the parameters to build the expression, for example, $\{emps.WorkEmail\}$. See Alerts Composer Functions and Groovy Expressions: Explained for more examples.

7. In the Message section, set up the notification format.

   a. Select the HTML or Text format for the message text.
   
   b. Enter the message subject. You can also insert expressions in the subject using the **Expression** icon.
   
   c. In the **Group By** field, specify an expression for the attribute that the message should be grouped by.
   
   d. Use the rich text editor to format the message text. You can select options such as font, size, style, and so on.
   
   e. Enter the message text. You can also include expressions in the text.
   
   Use the **Insert Expression** option to build expressions and insert them into the message text.

8. Click **Apply** to save the changes and return to the Add Resource Alert page.

**Set Run Options**
Run Options enable you to specify the runtime settings for an alert. To set the run options:

1. On the Add Resource Alert page, click the Run Options tab.
2. In the **Automatically Run** field, select one of these options:
   - **On demand** to run the alert notification immediately.
   - **Schedule** to run the notification at a specified time. Specify the notification frequency and the start date and time.
3. Set the **Log Activity History** field to **Yes** to enable activity logging for the alert on the Alerts History page.
4. Specify the settings for the **Stop Duplicate Messages** option.
5. Set the **Simulate Run** option to **Yes** to do a test run of the alert. Notifications are not triggered in a nonproduction environment. However, you can review the notification content on the Alerts History page.
6. Click **Schedule** to return to the Alerts page.
7. Select the resource alert and click **Action Run** to run the alert.

**Related Topics**
- Alerts Composer

### Configure Event Alerts

This topic explains the procedure for configuring Event alerts. To configure Event alerts, you must have the required functional privileges and access levels to modify predefined and user-defined alerts.

Event alerts are based on predefined triggering criteria. You can’t modify these criteria or create new alerts. However, you can edit the notification templates and add new templates for a predefined alert.

### Modify an Event Alert

Follow these steps to modify an Event alert:

1. Click **Navigator > Alerts Composer**.
2. On the Alerts page, search for the Event alert.
3. Select **Action > Edit** to view the Edit Event Alert page.

**Modify Templates**

Templates enable you to define the format for alert notifications. To modify an existing template:

1. On the Templates tab, click **Edit** and select the **Manage Recipients and Message** for the template.
2. On the Edit Template page, click **Add Recipient** to add a new recipient.
3. In the **Communication Method** column, select **email** or **worklist** from the list of values.
4. In the **Expression** field:
   - Edit or add the expression for the email address or user name of the recipient.
   - Edit or add the expressions for comma-delimited email addresses or user names of multiple recipients.
5. In the Message section, set up the notification format.
   - Select the HTML or Text format for the message text.
   - Edit the message subject. You can also include expressions in the subject.
c. Use the rich text editor to format the message text. You can select options such as font, size, style, and so on.

d. Edit the message text. You can also include expressions in the text.

Use the **Insert Expression** option to build expressions and insert them into the message text.

6. Click **Apply** to save the changes and return to the Edit Event Alert page.

### Set Run Options

Run Options enable you to specify the runtime settings for an alert. To set the run options for the alert:

1. On the Edit Event Alert page, click the Run Options tab.
2. Specify the settings for **Stop Duplicate Messages** option.
3. Set the **Log Activity History** field to **Yes** to enable activity logging for the alert on the Alerts History page.
4. Set the **Simulate Run** option to **Yes** to do a test run of the alert. Notifications are not triggered in a nonproduction environment. However, you can review the notification content on the Alerts History page.
5. Click **Save and Close** to return to the Alerts page.

### Related Topics

- Alerts Composer

### View Alerts History

You can view the history of alerts that are enabled for activity logging on the Alerts History page. You can view statistics such as alert status, start date, duration, messages, and processing errors. Click the alert name to view detailed information about an alert.

Alerts on the Alerts History page are classified into three categories.

- Processed: Displays the alerts that are processed.
- Running: Displays the alerts that are currently being processed.
- Scheduled: Displays the alerts that are scheduled to run on a future date.

### Resolve Alert Run Errors

This topic explains how to identify and resolve errors that may occur when running alerts.

Follow these steps:

1. Enable the **Log Activity History** option on the Run Options tab when setting up an alert.
2. Use the Alerts History page to review the success, warning, and error messages for the alert.
3. Review the alert log to identify any processing errors of templates and filters.
4. Verify the application logs for event alerts if required and take necessary action.
5. Verify the diagnostic logs on the Scheduled Processes page for resource alerts if required and take necessary action.
15 Application Toolkit Configuration

Overview of Application Toolkit Configuration

Oracle Fusion Application Toolkit (ATK) provides many components that are available to users of all product families. These components include Applications Help, the Reports and Analytics pane, and the Watchlist. In the Setup and Maintenance work area, use the Application Toolkit tasks in the Application Extensions functional area to set up some of these components.

\[\textbf{Note:} \quad \text{The tasks are available only if the Application Toolkit Component Maintenance feature is enabled.}\]

Tasks

Use these tasks in the Application Extensions functional area:

- **Map Reports to Work Areas:** Determine what’s available in the Reports and Analytics pane for specific work areas.
- **Set Watchlist Options:** Define settings that affect what’s displayed in the Watchlist and how often items are refreshed.
- **Manage Application Toolkit Administrator Profile Values:** Set profile options to affect how some Application Toolkit components work.
- Use other Application Toolkit tasks in this functional area to set up help:
  - Set Help Options
  - Assign Help Text Administration Duty
  - Manage Help Security Groups

Related Topics

- Set Up the Worklist Region on My Dashboard
- Overview of Setting Up Help

Map Reports to Work Areas

Set Up the Reports and Analytics Panel Tab

You can find the Reports and Analytics panel tab in many work areas, and the analytics and reports you see in it depend on the work area. You can define what’s available for a specific work area, by mapping reports from the business intelligence (BI) catalog to that work area. In this mapping context, reports refer to both analytics and reports. Your changes apply to all users who have access to the work area you’re mapping.
Mapping Reports from Your Work Area

To map reports to the work area that you’re in:

1. Expand the Reports and Analytics panel tab.
2. Click the **Edit Settings** icon in the panel tab.
   You see all the reports that are currently mapped to your work area.
3. Click **Select and Add**.
4. Find the report in the catalog and select it.
5. Click **OK**.
6. To remove any mapping, select the report and click **Remove**.
7. Save your work.

Mapping Reports to Any Work Area

To map reports to any work area that you have access to:

1. In the Setup and Maintenance work area use the Map Reports to Work Areas task.
2. Select the application of the work area you want to map to.
3. Select the work area.
4. Click **Search** and see all the reports that are currently mapped to that work area.
5. Click **Select and Add**.
6. Find the report in the catalog and select it.
7. Click **OK**.
8. To remove any mapping, select the report and click **Remove**.

   **Tip:** Click **Synchronize** to remove all mappings to any reports that are no longer in the catalog. You synchronize all work areas, not just the one you’re mapping.
9. Save your work.

Related Topics

- Reports and Analytics Work Area and Panel Tab

Set Up Reports for Scheduling

You can set up reports as scheduled processes, which means users can submit them from the Scheduled Processes and other work areas. If you want users to also submit these scheduled processes from the Reports and Analytics work area and panel tab, then you must configure properties for the corresponding reports.

Enabling a Report for Scheduling

To enable scheduling in the Reports and Analytics work area and panel tab:

1. In the Reports and Analytics work area or panel tab, edit the report in the business intelligence catalog.
2. Click **Properties**.
3. On the General tab in the Properties dialog box, enter the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Scheduler Job Package Name</td>
<td>The path for the job definition, for example: / oracle/ apps/ ess/&lt;product family&gt;/ &lt;product&gt;/ &lt;business area&gt;/ Jobs</td>
</tr>
<tr>
<td>Field</td>
<td>Value</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Enterprise Scheduler Job Definition Name</td>
<td>The job definition name (not display name), for example: ABCDEFG</td>
</tr>
</tbody>
</table>

**Related Topics**

- How You Set Up Reports to Run as Scheduled Processes
- How You Access and Modify Report Components

**FAQs for Map Reports to Work Areas**

**Why can't I see reports when mapping reports to work areas for the Reports and Analytics panel tab?**

Either no reports are currently mapped to the work area you select on the Map Reports to Work Areas page, or you don’t have access to the reports that are mapped.

Similarly, when you’re selecting a report to map, you can see only the reports that you have access to. Ask your administrator to either:

- Assign you roles that have access to the reports you want to map to work areas.
- Grant the Reports and Analytics Region Administration Duty to someone who already has access to those reports.

**Why can't I see reports when I edit settings for the Reports and Analytics panel tab?**

In the Edit Settings window, you might not see a currently mapped report because you don’t have access to it.

Similarly, when you’re selecting a report to map, you can see only the reports that you have access to. Ask your administrator to either:

- Assign you roles that have access to the reports you want to map to work areas.
- Grant the Reports and Analytics Region Administration Duty to someone who already has access to those reports.

**Set Watchlist Options**

**Disable or Enable Watchlist Categories and Items**

To disable or enable predefined Watchlist categories and items for all users, use the following in the Setup and Maintenance work area:

- Functional Area: Application Extensions
- Task: Set Watchlist Options
Ultimately, what users see in their own Watchlist would be the categories and predefined items that you enable in the Set Watchlist Options page:

- Plus any saved searches that the user is using as Watchlist items
- Minus any categories or items that the user decides to hide using Watchlist preferences
- Minus any items with no results found, if the user decides to hide such items using Watchlist preferences

**Any Category or Item**

When you disable any category or item, you also disable the processes that calculate the Watchlist item counts. These processes include creating data caches, performing security checks, calling services across domains, running queries, and so on.

**Predefined Watchlist Items**

An item with the Predefined type represents the actual predefined Watchlist item that appears in the Watchlist. If you disable this type of Watchlist item, then:

- The item isn't available for users to display in their Watchlist.
- The item is removed from any Watchlist where it's currently displayed.

If you disable a Watchlist category, then the category isn't available for users to include in their Watchlist. All Watchlist items within the category are also disabled.

**User-Created Saved Search Watchlist Items**

A Watchlist item with the User-Created Saved Search type doesn't appear in the Watchlist. It controls the display of the Manage Watchlist button on pages with saved searches. If you disable this type of Watchlist item, then:

- The Manage Watchlist option isn't available on the corresponding page, so users can't use their own saved searches as Watchlist items.
- Any user-defined saved searches (from that page) already used as Watchlist items are removed from the users' Watchlist. The saved searches are still available for searching, but not for the Watchlist.

**Watchlist Category**

If you disable a Watchlist category, then:

- The category isn't available for users to include in their Watchlist.
- All Watchlist items within the category are also disabled.

*Note:* You can see the Watchlist icon in the global header only if your default home page layout is Panel or Banner.

**Related Topics**

- Create Watchlist Items
- Show or Hide Watchlist Items
- Why can't I see some icons in the global header
Refresh Intervals for Watchlist Items

All Watchlist items have a predefined refresh interval, which controls how often the query that calculates the count for a Watchlist item can run. You can use the Set Watchlist Options page to edit the interval values. In the Setup and Maintenance work area, use the following:

- Functional Area: Application Extensions
- Task: Set Watchlist Options

How the Refresh Works

The count for any Watchlist item gets refreshed as follows.

- When users open the Watchlist in the global header for the first time after signing in, the item is refreshed if five minutes have passed since its last refresh in an earlier session.
- When users open the Watchlist again, the item is refreshed only if the time since its last refresh is equal to or greater than the refresh interval.

User-Created Saved Search Watchlist Items

What you enter as the refresh interval for a Watchlist item of type User-Created Saved Search applies to all Watchlist items based on saved searches that users create for that item. For example, you set the refresh interval for the Corporate Card Transactions item to five minutes. Multiple users create saved searches for corporate card transactions and use those saved searches as Watchlist items in their own Watchlist. All of these Watchlist items would have a refresh interval of five minutes.

Related Topics

- Create Watchlist Items

FAQs for Set Watchlist Options

How can I change predefined Watchlist category and item names?

Edit the standard lookup type that stores the predefined Watchlist category and item names.

1. Click Navigator > Setup and Maintenance.
2. In the Setup and Maintenance work area, go to the following:
   - Functional Area: Application Extensions or a product-specific functional area
   - Task: Manage Standard Lookups
3. On the Manage Standard Lookups page, find the lookup type for the Watchlist category you want to edit. The lookup types for predefined categories end with WATCHLIST, for example EXM_EXPENSES_WATCHLIST.
4. Edit the lookup type meaning to change the category name.
5. To change item names, edit lookup code meanings.
6. Save your work.

Related Topics

- Overview of Lookups
Manage Application Toolkit Administrator Profile Values

Set Up the Mapping Service for Contextual Addresses

A contextual address is marked with an orange triangle, the More icon. When users hover over the triangle, an icon appears that they can click to display the address on a map. The Mapping Service for Contextual Addresses profile option determines the mapping service which you must use to display the map. In the Setup and Maintenance work area, use the following:

- Functional Area: Application Extensions or a product-specific functional area
- Task: Manage Application Toolkit Administrator Profile Values

Profile Option Default

By default, the Mapping Service for Contextual Addresses profile option has no value.

⚠️ Caution: Until you enter a valid value for this profile option, users continue to get an error when they try to open a map for any contextual address.

Profile Option Value

After you find and select the Mapping Service for Contextual Addresses profile option, enter a mapping service URL in the Profile Value column, for example:

- http://bing.com/maps/?v=2&encType=1&where1=

You can include parameters in the URL. For example, to avoid a locator box in Google Maps, add &iwloc=& to the URL. So, you would enter http://maps.google.com/maps?iwloc=&amp;&output=embed&q= as the profile value.

Related Topics

- Set Profile Option Values
- Why can't I see the map for contextual addresses

Set Up the Worklist Region on My Dashboard

You can add the Worklist: Notifications and Approvals region to My Dashboard, which is a blank dashboard by default. This region displays the workflow tasks assigned to the person using My Dashboard. After you add the Worklist region, select a value for the Welcome Dashboard Worklist Timeout Interval (ATK_HOME_PAGE_WORKLIST_TIMEOUT) profile option.

Adding the Region

To add the Worklist: Notifications and Approvals region to My Dashboard:

1. Click Navigator > My Dashboard.
2. Click your user image or name in the global header, and select Edit Pages in the Administration menu group.
3. Click the Add Content button where you want to place the region.
4. Open the Application Content folder in the Add Content dialog box.
5. Click Add for the Worklist: Notifications and Approvals item.
6. Click Close.
7. Save your work, and then click the Close button.

Defining the Timeout Interval

When users open My Dashboard and it contains the Worklist: Notifications and Approvals region, data for the region is retrieved. The Welcome Dashboard Worklist Timeout Interval profile option determines how long to continue retrieving before timing out and displaying no data. In the Setup and Maintenance work area, use the following:

- Functional Area: Application Extensions
- Task: Manage Application Toolkit Administrator Profile Values

>Note: If you don’t see this task, then make sure that the Application Toolkit Component Maintenance feature is enabled at the offering level in the Offerings work area.

On the Manage Application Toolkit Administrator Profile Values page, set the Welcome Dashboard Worklist Timeout Interval profile option.

- If you don’t set a value for this profile option, which is blank by default, then the region doesn’t time out.
- Retrieving data for the Worklist region affects the performance of My Dashboard as a whole. So, select a value for this profile option if your users have the Worklist region on My Dashboard and notice performance issues.

After the timeout, users can refresh the region to try retrieving the data again.

Related Topics

- Set Profile Option Values
- Configuring Offerings: Procedure
- Update Existing Setup Data
16 Help Configuration

Overview of Setting Up Help

Applications Help and help windows work without you having to set anything up. You can do the optional setup, mainly if you want to create and edit help. Enable the help features you want, perform tasks in the Application Extensions functional area, and create and edit help content.

Help Features

In the Offerings work area, enable help features at the offering level. The features determine:

- What’s available in Applications Help
- What you can configure to set up help

The first feature for help is Local Installation of Help, and you must leave it selected. Other features are:

- Access to Internet-Based Help Features
- Help Content Management
- Security for Added Help

Help Configuration Tasks

In the Setup and Maintenance work area, use these tasks in the Application Extensions functional area to set up help for all users:

- **Set Help Options:**
  - Determine if certain aspects of Applications Help are available to users.
  - Control how aspects of Applications Help work.
  - Determine if icons for help windows are shown by default on the pages where they’re available.

- **Assign Help Text Administration Duty:** Contact your security administrator to determine who can create and edit help.

- **Manage Help Security Groups:** Set up security to limit access to certain help files.

Help Content

After you set up help, you can review the predefined help and see if you want to add or edit any content. You can also modify help text that appears on the page, for example hints.
Set Help Options

Set Up Access to Websites from Applications Help

You can determine the websites that users can access from Applications Help. Enable the features that make this access possible, and select the websites to make available to users.

Enabling Features
In the Offerings work area:

- Leave the Local Installation of Help feature enabled at the offering level.
- Enable the Access to Internet-Based Help Features feature at the offering level to allow access to websites from Applications Help. For example, some help files link to guides on the Oracle Help Center; this access is necessary for those links to work.

Selecting Websites
In the Setup and Maintenance work area, use the following:

- Functional Area: Application Extensions
- Task: Set Help Options

In the Web Sites Available from Help Site section on the Set Help Options page, select the sites to link to. These links would appear in the Navigator menu in Applications Help.

Set Up for Creating and Editing Help

Users with the appropriate roles can edit predefined help or add their own files to help. To enable and set up for creating and editing help, do the following in the specified order.

Enabling Features
In the Offerings work area, configure the following features at the offering level.

- Leave the Local Installation of Help feature enabled.
- Enable the Help Content Management feature.
- Enable the Security for Added Help feature if you want certain help files to be available only to a restricted set of users.
Caution: Don’t enable this feature if you don’t have this requirement, because the feature can affect performance.

Setting Help Options
Optionally set any of the following help options according to your requirements:

1. In the Setup and Maintenance work area, go to the following:
   - Functional Area: Application Extensions
   - Task: Set Help Options

2. On the Set Help Options page, in the Help Site Appearance section, provide a source name and image used to identify files in Applications Help that were added or edited.

3. In the Oracle User Productivity Kit section, add a link from the Navigator in Applications Help to your User Productivity Kit library.

4. In the Privacy Statement section, add a link to your own privacy statement. To see this link, users click their user name in the global header of Applications Help.

Providing Users Access to Create and Edit Help
Only users with job roles containing the Manage Help Content (ATK_CUSTOMIZE_HELP_TOPICS_PRIV) privilege can create and edit help. The Assign Help Text Administration Duty task is a reminder for you to follow up with your security administrator. Make sure that users who want to create and edit help have the access to do so.

Setting Up Help File Security
If you enabled the Security for Added Help feature, then use the Manage Help Security Groups task in the Setup and Maintenance work area. Select job roles to include in help security groups. When you or other users then create or edit a help file, they can select a group to determine which job roles have access to the file.

Related Topics
- Configuring Offerings: Procedure
- Update Existing Setup Data

FAQs for Set Help Options

How can I show icons for help windows by default?
In the Setup and Maintenance work area, use the following:

- Functional Area: Application Extensions
- Task: Set Help Options

On the Set Help Options page, select the Show help icons by default check box in the Show Help section. You just need to do this setup for one offering, and the setting applies to all users.

Every time users sign in, they can see help icons wherever available on the pages they use. To hide the icons, users can still click their user image or name in the global header and select Hide Help Icons, as well as select Show Help Icons to display the icons again.
Related Topics

- Update Existing Setup Data

Why can't I see certain sections on the Set Help Options page?
What's available on the page depends on the help features that you enable in the Offerings work area. This table describes the correlation between features and specific sections on the Set Help Options page.

<table>
<thead>
<tr>
<th>Help Feature</th>
<th>Section on Set Help Options Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Installation of Help</td>
<td>None, but without enabling this feature, you can't enable the other help features</td>
</tr>
<tr>
<td>Access to Internet-Based Help Features</td>
<td>Web Sites Available from Help Site</td>
</tr>
<tr>
<td>Help Content Management</td>
<td>Help Site Appearance</td>
</tr>
<tr>
<td></td>
<td>Oracle User Productivity Kit</td>
</tr>
<tr>
<td></td>
<td>Privacy Statement</td>
</tr>
<tr>
<td>Security for Added Help</td>
<td>None</td>
</tr>
</tbody>
</table>

When do I link to the Oracle User Productivity Kit library from Applications Help?
If you license Oracle User Productivity Kit and have your own User Productivity Kit content to share with your users. Topics that you add as help files in Applications Help are available only in the See It mode. However, in the library, users can see the same topic in other modes. If you have User Productivity Kit versions earlier than 3.6.1, then you can't add User Productivity Kit topics as help files. So the link to the library is the only way users can get your User Productivity Kit content from Applications Help.

What's the URL for my Oracle User Productivity Kit library?
The full path from the Web server where you're hosting your Oracle User Productivity Kit content to the index.html file that opens the table of contents for the library. For example, http://<your domain>.com/MyContent/PlayerPackage/index.html.
In this example, you or your administrator published one player package that contains all the content to be linked to from Applications Help, including the index.html file, and placed the PlayerPackage folder in a folder called MyContent on the Web server.

FAQs for Assign Help Text Administration Duty

Who can create, edit, and manage help?
Users with the Manage Help Content (ATK_CUSTOMIZE_HELP_TOPICS_PRIV) privilege can create and edit:

- Help in Applications Help and help windows
- Pages in the Getting Started work area
This privilege is assigned by default to the administrators for product families. Your security administrator can define which users have job roles with this privilege.

Manage Help Security Groups

Create Groups to Limit Access to Specific Help Files

This example shows how to create a help security group, which contains a set of job roles. You can later assign the help security group to particular help files so that only users with any of the included job roles have access to the help.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What type of users do you need to limit help access to?</td>
<td>Human resources (HR) specialists</td>
</tr>
<tr>
<td>Is there a specific time period for which this access is needed?</td>
<td>No, the help files should always be viewed only by the HR specialists</td>
</tr>
<tr>
<td>Where do you want this group to appear in the list of values for help security groups?</td>
<td>First</td>
</tr>
</tbody>
</table>

Define a help security group and assign a job role to the group.

Prerequisites

1. In the Offerings work area, make sure that the Local Installation of Help feature is enabled at the offering level.

Creating the Help Security Group

1. In the Setup and Maintenance work area, go to the following:
   - Functional Area: Application Extensions
   - Task: Manage Help Security Groups
3. Complete the fields, as shown in this table. Leave the start and end dates blank.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help Security Group</td>
<td>HR</td>
</tr>
<tr>
<td>Meaning</td>
<td>HR Only</td>
</tr>
<tr>
<td>Description</td>
<td>Viewing by HR specialists only</td>
</tr>
<tr>
<td>Display Sequence</td>
<td>1</td>
</tr>
</tbody>
</table>

4. Click **Save**.
5. With your new help security group selected, go to the Associated Roles section and add a new row.
6. Select `PER_HUMANRESOURCE_SPECIALIST` as the role name.
7. Click `Save and Close`.
   To assign your new help security group to help files, you must create or edit help using the Manage Help Content page, not help windows.

Related Topics

- How can I limit access to specific help files
- Configuring Offerings: Procedure
- Update Existing Setup Data
17 Common Reference Objects

Overview

The Maintain Common Reference Objects task list contains tasks that support implementation of common functionality, such as data security, reference data sets, or general preferences.

Use this task list to manage common reference objects that are defined centrally and shared across applications. You can search for and access this task list in the Setup and Maintenance work area.

To make the Maintain Common Reference Objects task list available in your implementation project, go to the Offerings work area and enable the Maintain Common Reference Objects feature.

Related Topics

- Overview of Moving Common Reference Objects

Why can't I edit setup data?

The configuration of your setup data may be protected. Application developers mark some configurations as protected, indicating that you can't edit them.

Some examples of configurations that may be protected are:

- Descriptive flexfields
- Extensible flexfield contexts
- Extensible flexfield pages
- Value sets
- Tree structures

How can I set general preferences for all users?

Use the Global Admin Preferences page to set general preferences such as language, currency, and time zone that affect all users. In the Setup and Maintenance work area, use the following:

- Functional Area: Application Extensions
- Task: Set User General Preferences

⚠️ Caution: Use this task only if you want to update preferences for all users. To update preferences for a specific user, use the General Preferences page.

If you want to set the preferences for new users whose preferences haven't been set at all, select the Reset preferences for new users only check box. Selecting this option excludes all users whose preferences were set at some point in time.
Related Topics

- How can I set general preferences for myself

Define Application Taxonomy

Overview of Application Taxonomy

Oracle application components and functions are organized in a hierarchy, ranging from product lines to logical business areas. The hierarchy represents a breakdown of products into units based on how applications are installed and supported.

In the Application Extensions functional area within your offering, search for the Manage Taxonomy Hierarchy task and view the hierarchy on the Manage Taxonomy Hierarchy page.

A detailed introduction to application taxonomy is provided in the Oracle Fusion Applications Developer’s Guide.

Hierarchy

- The application taxonomy hierarchy contains various levels and types of nodes, or modules.

  See: Characteristics of the Level Categories

  See: Benefits of a Logical Hierarchy

Usage

- Use application taxonomy to understand relationships among applications and between an application and its files. This information is helpful in managing various phases of the product life cycle.

  See: How to Manage the Life cycle

Modules in Application Taxonomy

The highest level of the hierarchy is product line, followed by the product family, application, and logical business area. There can be multiple levels of logical business areas, with one or more nested within a parent logical business area. A module is a node at any of these levels. Each level is briefly described here.

- Product Line: A collection of products associated with a single brand name, for example, Oracle Fusion.

- Product Family: A collection of products associated with a functional area that may or may not be licensed together as a single unit, for example Oracle Fusion Financials.

- Application: A single product within a product family, containing closely related features for a specific business solution, for example General Ledger.

- Logical Business Area: A collection of business object definitions organized into a logical grouping. It contains the model objects, services, and UI components for those business objects. Logical business areas have their own hierarchy levels and in some cases can be up to two or three levels deep.
Guidelines for Managing Modules in Application Taxonomy

In the application taxonomy hierarchy, when you create a module, it becomes a child of the currently selected node. Once created, you can’t delete the module or move it elsewhere in the hierarchy.

From the Manage Taxonomy Hierarchy page, navigate to the Create Child Module or Edit Module page to manage the modules. As you create or edit modules, consider the following points regarding specific fields.

Identifiers
Module ID is the unique primary key for nodes in the taxonomy table. When you create a module, a unique read-only ID is automatically generated. The module contains two other identifiers: Module key and alternative ID. The module key is a string identifier, for example AP for the Oracle Fusion Payables application. The alternative ID is a numeric identifier, for example 1 for the Oracle Fusion product line. These additional identifiers are provided for the product line, product family, and application modules. However, you can optionally add them for logical business areas and new modules.

Note: Don’t change the module key or alternative ID for predefined modules.

The product code is relevant only to application and logical business area modules. You can leave the field blank for other module types. The product code for applications is the short name that can be displayed in lists of application values. For example, FND for Oracle Fusion Middleware Extensions for Oracle Application.

Names
Module name is the logical name for the module. The name must be unique among nodes within the hierarchy level with the same parent, but Oracle recommends keeping it unique in the entire hierarchy. The user name and description can appear to users in other parts of Oracle Applications Cloud.

Usage Types
Though you can update the usage type to reflect the current state of the module, just doing so doesn’t affect the actual state. For example, setting a module as installed doesn’t mean the module is actually installed if the installation itself didn’t take place. Installation refers to operations related to laying down all the components required to create an Oracle Applications Cloud environment. Deployment is the process that starts the managed servers and clusters and facilitates the actual use of product offerings. A licensed module is available for installation and deployment, and a deployed module is considered actively used when actually used by users.

Seed Data
If seed data is allowed, then data residing in flexfields and lookups can be extracted for the module using seed data loaders. By default, extract is allowed for all predefined modules of type application and logical business area.

Associations
You can associate a logical domain to modules of the type Product Family, as well as one or more enterprise applications to modules of type Application. This association represents the relationship between the taxonomy modules and the corresponding domain and enterprise applications stored in the Oracle Applications Cloud Functional Core (ASK) tables.

Define Reference Data Sharing
Reference Data Sharing

Reference data sharing facilitates sharing of configuration data such as jobs and payment terms, across organizational divisions or business units. You define reference data sets and determine how common data is shared or partitioned across business entities to avoid duplication and reduce maintenance effort. Depending on the requirement (specific or common), each business unit can maintain its data at a central location, using a set of values either specific to it or shared by other business units.

A common reference data set is available as the default set, which can be assigned to several business units sharing the same reference data. For commonly used data such as currencies, you can use the common reference data set and assign it to multiple business units in various countries that use the same currency. In cases where the default set can't be assigned to an entity, you can create specific sets. The data set visible on the transactional page depends on the sharing method used to share reference data.

For example, XYZ Corporation uses the same grades throughout the entire organization. Instead of different business units setting up and using the same grades, XYZ Corporation decides to create a set called Grades, which contains the grades. All business units in the organization have the Grades set so that the grades can be shared and used.

Note: For specific information about configuring reference data sharing for a particular object or product, refer to the relevant product documentation.

Related Topics
- Reference Data Sets and Sharing Methods
- Assignment of Reference Data Sets to Reference Objects

Reference Data Sets

Reference data sets are logical groups of reference data that various transactional entities can use depending on the business context. You can get started using either the common reference data set or the enterprise set depending on your implementation requirement. You can also create and maintain additional reference data sets, while continuing to use the common reference data set.

Consider the following scenario. Your enterprise can decide that only some aspects of corporate policy should affect all business units. The remaining aspects are at the discretion of the business unit manager to implement. This enables your enterprise to balance autonomy and control for each business unit. For example, your enterprise holds business unit managers accountable for their profit and loss, but manages working capital requirements at a corporate level. Then, you can let managers define their own sales methods, but define payment terms centrally. As a result, each business unit has its own reference data set for sales methods and one central reference data set for payment terms assigned to all business units.

Partitioning

Partitioning reference data and creating data sets provide you the flexibility to handle the reference data to fulfill your business requirements. You can share modular information and data processing options among business units with ease. You can create separate sets and subsets for each business unit. Alternatively, you can create common sets or subsets to enable sharing reference data between several business units, without duplicating the reference data.
The following figure illustrates the reference data sharing method. The user can access the data assigned to a specific set in a particular business unit, as well as access the data assigned to the common set.

Related Topics

- Reference Data Sets and Sharing Methods
- Define Default Reference Data Sets
- Assignment of Reference Data Sets to Reference Objects

Reference Data Sets and Sharing Methods

Oracle Fusion Applications reference data sharing feature is also known as SetID. The reference data sharing functionality supports operations in multiple ledgers, business units, and warehouses. As a result, there is a reduction in the administrative burden and the time to implement new business units. For example, you can share sales methods, or transaction types across business units. You may also share certain other data across asset books, cost organizations, or project units.

The reference data sharing features use reference data sets to which reference data is assigned. The reference data sets group assigned reference data. The sets can be understood as buckets of reference data assigned to multiple business units or other application components.

Reference Data Sets

You begin this part of your implementation by creating and assigning reference data to sets. Make changes carefully as changes to a particular set affect all business units or application components using that set. You can assign a separate
set to each business unit for the type of object that’s being shared. For example, assign separate sets for payment terms, transaction types, and sales methods to your business units.

Your enterprise can determine that certain aspects of your corporate policy can affect all business units. The remaining aspects are at the discretion of the business unit manager to implement. This allows your enterprise to balance autonomy and control for each business unit. For example, your enterprise holds business unit managers accountable for their profit and loss, but manages working capital requirements at a corporate level. In such a case, you can let managers define their own sales methods, but define payment terms centrally. In this example:

- Each business unit has its own reference data set for sales methods.
- One central reference data set for payment terms is assigned to all business units.

The reference data sharing is especially valuable for lowering the cost of setting up new business units. For example, your enterprise operates in the hospitality industry. You are adding a new business unit to track your new spa services. The hospitality divisional reference data set can be assigned to the new business unit to quickly set up data for this entity component. You can establish other business unit reference data in a business unit-specific reference data set as needed.

Reference Data Sharing Methods

Variations exist in the methods used to share data in reference data sets across different types of objects. The following list identifies the methods:

- Assignment to one set only, no common values allowed. This method is the simplest form of sharing reference data that allows assigning a reference data object instance to one and only one set. For example, Asset Prorate Conventions are defined and assigned to only one reference data set. This set can be shared across multiple asset books, but all the values are contained only in this one set.
- Assignment to one set only, with common values. This method is the most commonly used method of sharing reference data that allows defining reference data object instance across all sets. For example, Receivables Transaction Types are assigned to a common set that’s available to all the business units. You need not explicitly assign the transaction types to each business unit. In addition, you can assign a business unit-specific set of transaction types. At transaction entry, the list of values for transaction types includes the following:
  - Transaction types from the set assigned to the business unit.
  - Transaction types assigned to the common set that’s shared across all business units.
- Assignment to multiple sets, no common values allowed. The method of sharing reference data that allows a reference data object instance to be assigned to multiple sets. For instance, Payables Payment Terms use this method. It means that each payment term can be assigned to one or more than one set. For example, you assign the payment term Net 30 to several sets, but assign Net 15 to a set specific only to your business unit. At transaction entry, the list of values for payment terms consists of only the set that’s assigned to the transaction’s business unit.

**Note:** Oracle Fusion Applications contains a reference data set called Enterprise. Define any reference data that affects your entire enterprise in this set. Also update the data set going forward as you create new reference data items.

Related Topics

- Items and Supplier Site Reference Data Sharing
- What reference data objects can be shared across cost organizations
- What reference data objects can be shared across project units
- What reference data objects can be shared across business units
• What reference data objects can be shared across asset books

Assignment of Reference Data Sets to Reference Objects

You can assign the reference data sets to reference objects using the Manage Reference Data Set Assignments page. For multiple assignments, you can classify different types of reference data sets into groups and assign them to the reference entity objects. The assignment takes into consideration the determinant type, determinant, and reference group, if any.

Determinant Types

The partitioned reference data is shared using a business context setting called the determinant type. A determinant type is the point of reference used in the data assignment process. The following table lists the determinant types used in the reference data assignment.

<table>
<thead>
<tr>
<th>Determinant Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Book</td>
<td>Information about the acquisition, depreciation, and retirement of an asset that belongs to a ledger or a business unit.</td>
</tr>
<tr>
<td>Business Unit</td>
<td>The departments or organizations within an enterprise.</td>
</tr>
<tr>
<td>Cost Organization</td>
<td>The organization used for cost accounting and reporting on various inventory and cost centers within an enterprise.</td>
</tr>
<tr>
<td>Project Unit</td>
<td>A logical organization within an enterprise that is responsible for enforcing consistent project management practices.</td>
</tr>
<tr>
<td>Reference Data Set</td>
<td>References to other shared reference data sets.</td>
</tr>
</tbody>
</table>

Determinant

The determinant (also called determinant value) is a value that corresponds to the selected determinant type. The determinant is one of the criteria for selecting the appropriate reference data set.

Reference Groups

A transactional entity may have multiple reference entities (generally considered to be setup data). However, all reference entities are treated alike because of similarity in implementing business policies and legal rules. Such reference entities in your application are grouped into logical units called reference groups. For example, all tables and views that define Sales Order Type details might be a part of the same reference group. Reference groups are predefined in the reference groups table.

Define ISO Reference Data
Considerations for Defining Currencies

When creating or editing currencies, consider these points relevant to entering the currency code, date range, or symbol for the currency.

**Currency Codes**
You can’t change a currency code after you enable the currency, even if you later disable that currency.

**Date Ranges**
You can enter transactions denominated in the currency only for the dates within the specified range. If you don’t enter a start date, then the currency is valid immediately. If you don’t enter an end date, then the currency is valid indefinitely.

**Symbols**
Some applications support displaying currency symbols. You may enter the symbol associated with a currency so that it appears along with the amount.

**Related Topics**
- What’s the difference between precision, extended precision, and minimum accountable unit for a currency
- What’s a statistical unit currency type
- Euro Currency Derivation

Euro Currency Derivation

Use the Derivation Type, Derivation Factor, and Derivation Effective Date fields to define the relationship between the official currency (Euro) of the European Monetary Union (EMU) and the national currencies of EMU member states. For each EMU currency, you define its Euro-to-EMU fixed conversion rate and the effective starting date. If you have to use a different currency for Euro, you can disable the predefined currency and create a new one.

**Derivation Type**
The Euro currency derivation type is used only for the Euro, and the Euro derived derivation type identifies national currencies of EMU member states. All other currencies don’t have derivation types.

**Derivation Factor**
The derivation factor is the fixed conversion rate by which you multiply one Euro to derive the equivalent EMU currency amount. The Euro currency itself must not have a derivation factor.

**Derivation Effective Date**
The derivation effective date is the date on which the relationship between the EMU currency and the Euro begins.

Considerations for Natural Languages

Natural languages are all the languages that humans use, written and spoken. If a language is enabled, then users can associate it with entities, for example as languages spoken by sales representatives. When managing natural languages, consider tasks to perform and best practices for entering particular values.
Tasks
Once you add a language, it can't be deleted, but just disabled. You can optionally associate natural languages with International Organization for Standardization (ISO) languages and territories, just for reference.

Values
When you create a natural language, use the alpha-2 ISO code as the language code, or, if not available, then alpha-3. If the language is not an ISO language, then use x- as a prefix for the code, for example x-ja for a Japanese dialect. Use the sgn code of ISO-639-2 for sign languages, followed by territory code, for example sgn-US for American Sign Language. You can also use Internet Assigned Numbers Authority (IANA) language tags.

The natural language description must be the language name with territory name in parenthesis where needed, for example English (Australia) and English (Canada).

FAQs for Define ISO Reference Data

When do I create or edit territories?

The predefined territories are countries from the International Organization for Standardization (ISO) 3166 standard. Edit territory descriptions to determine how they are displayed in lists of country values in an application. You don’t have to edit territory names or codes unless there is a specific requirement. Create territories if new countries emerge and the application isn’t yet patched with the latest ISO country values.

> **Note:** The National Language Support (NLS) territory codes are territory identifiers used in the application. Don’t edit the codes unless you must change the association between ISO and the application territory.

When do I create or edit industries?

To meet a specific business need, you may edit industry names or descriptions of industries except for those belonging to the North American Industry Classification System (NAICS). Edit the industry descriptions also to determine how they appear in an application.

You may also create industries with specifications not included in the NAICS standards.

When do I associate industries with territories?

To meet specific business needs, you can associate industries with territories. For example, administrators can configure a page in different ways for different sets of users of the same industry, but residing in different countries.
When do I create or enable currencies?

Create or enable any currency for displaying monetary amounts, assigning currency to ledgers, entering transactions, recording balances, or for any reporting purpose. All currencies listed in the International Organization for Standardization (ISO) 4217 standard are supported.

The default currency is set to United States Dollar (USD).

**Related Topics**
- Considerations for Defining Currencies

What's the difference between precision, extended precision, and minimum accountable unit for a currency?

Precision refers to the number of digits placed after the decimal point used in regular currency transactions. For example, USD would have 2 as the precision value for transactional amounts, such as $1.00.

Extended precision is the number of digits placed after the decimal point and must be greater than or equal to the precision value. For calculations requiring greater precision, you can enter an extended precision value such as 3 or 4. That would result in the currency appearing as $1.279 or $1.2793.

Minimum accountable unit is the smallest denomination for the currency. For example, for USD that would be .01 for a cent.

In Setup and Maintenance work area, search for the Manage Currencies task to set these values for a currency.

What's a statistical unit currency type?

The statistical unit currency type denotes the Statistical (STAT) currency used to record financial statistics in the financial reports, allocation formulas, and other calculations.

When do I create or edit ISO languages?

Edit the names and descriptions of International Organization for Standardization (ISO) languages to determine how they appear in the application. The ISO languages are a part of the ISO 639 standard. If any change to the ISO standard doesn't reflect in the application, you can update the ISO alpha-2 code or add languages to provide up-to-date information.

When do I edit languages?

Installed languages automatically appear on the Manage Languages page. This page also displays all languages that are available for installation and translation. Each dialect is treated as a separate language.

Generally, you don't need to edit any of the detailed fields unless absolutely necessary.
Can I add or edit time zones?

You usually don’t add or edit time zones because all standard time zones are provided. However, you may create time zones if new zones become standard and the application isn’t yet updated with the latest values. You can rename existing time zones and enable them. Only the enabled time zones are available for all users to select while setting their regional general preferences.

To add or edit time zones, use the following in the Setup Maintenance work area:

- Functional Area: Application Extensions
- Task: Manage Time Zones

Manage Audit Policies

Audit Policies

Auditing is used to monitor user activity and all configuration, security, and data changes that have been made to an application. Auditing involves recording and retrieving information pertaining to the creation, modification, and removal of business objects. All actions performed on the business objects and the modified values are also recorded. The audit information is stored without any intervention of the user or any explicit user action.

Use audit policies to select specific business objects and attributes to be audited. The decision to create policies usually depends on the type of information to be audited and to the level of detail required for reporting.

Enabling Audit Functionality

For Oracle Applications Cloud, you must configure the business objects and select the attributes before enabling audit. If you enable audit without configuring the business objects, auditing remains inactive. By default, auditing is disabled for all applications. To enable and manage audit, ensure that you have a role with the assigned privilege Manage Audit Policies (FND_MANAGE_AUDIT_POLICIES_PRIV). For appropriate assignment of roles and privileges, check with your security administrator.

To enable auditing for Oracle Fusion Middleware products, select one of the levels at which auditing is required for that product. The audit levels are predefined and contain the metadata and events to be audited. For more information, see Audit Events for Oracle Applications Cloud Middleware (Doc ID 2114143.1) on My Oracle Support at https://support.oracle.com.

If you don’t want an application to be audited, you can stop the audit process by setting the Audit Level option to None.

Related Topics

- Audit Events for Oracle Applications Cloud Middleware

Audit Configuration for Business Object Attributes

Audit enables tracking the change history of particular attributes of a business object. However, those objects and their attributes must be selected for audit and auditing must be enabled for that application. Your configuration settings determine which attributes to audit for a given object, and when the audit starts and ends. Auditing takes into account all the operations...
performed on an object and its attributes, such as create, update, and delete. To configure audit business object attributes, use the Manage Audit Policies task in the Setup and Maintenance work area.

Selecting an Application
To set up auditing, you must select a web application that contains the required business objects that can be audited. From the list of business objects, select those business objects that you want to audit. Selecting a business object also displays its attributes that are enabled for auditing.

Selecting Attributes
For each selected business object to be audited, select the corresponding attributes to include in the audit. All attributes that belong to that object are by default selected for audit and appear on the user interface. However, you can add or remove attributes from the list. When you remove an attribute from the list, you stop auditing it even when the parent object is selected for audit. So, if you want an attribute to be audited, you must add it to the list. If the object selected in an audit hierarchy is also a part of several other audit hierarchies, the attribute configuration for that object is applicable to all the hierarchies in that application.

Tip: For business objects based on flexfields, select the Flexfields (Additional Attributes) check box to view and add or remove flexfield attributes, to include or exclude them from the audit.

Starting and Stopping Audit
The business object is ready for audit after you select its attributes and save the configuration changes. However, to start auditing, the audit level for Oracle Applications Cloud must be set to Auditing on the Manage Audit Policies page.

To stop auditing an object, you can deselect the entire object and save the configuration. As a result, all its selected attributes are automatically deselected and aren’t audited. To continue to audit the business object with select attributes, deselect those attributes that aren’t to be audited. When users view the audit history for an application, they can specify the period for which they want the results. Therefore, make a note of when you start and stop auditing an application.

For example, users intend to view the audit history of an object for the previous week, but auditing for that object was stopped last month. They wouldn’t get any audit results for that week, because during the entire month that object wasn’t audited. Even if you enable audit for that object today, users can’t get the wanted results because audit data until today isn’t available.

Overview of Audit Configuration
To set up auditing for Oracle Applications Cloud, select the Manage Audit Policies task from the Setup and Maintenance work area within your offering. To set up auditing for Oracle Fusion Middleware products, select the level of auditing mapped to a predefined set of metadata and the events that have to be audited. Information about configuring audit for Oracle Fusion Middleware products is provided in Oracle Fusion Middleware guides.

You can also create a configuration file and deploy it to audit a specific Oracle Fusion Middleware product. The configuration details for Oracle Fusion Middleware products are available as audit-specific assets that you can use to create the config.xml configuration file. To get a list of audit-specific assets, see Audit Events for Oracle Applications Cloud Middleware (Doc ID 2114143.1) on My Oracle Support at https://support.oracle.com.

Oracle Fusion Middleware Products

See: Auditing Web Services
Oracle Fusion Security Products

- Configure business objects to enable auditing in Oracle Fusion security products. Refer to Oracle Fusion Middleware Application Security Guide.

See: Oracle Fusion Middleware Audit Framework Reference

Related Topics

- Audit Events for Oracle Applications Cloud Middleware

Impersonation Audit

Users can temporarily designate other users to impersonate their profiles and perform application tasks on their behalf. Impersonation auditing is active even when auditing is disabled for an application. At run time, the audit setup tracks and stores information about attributes, even when auditing isn’t enabled for the attributes. Impersonation auditing is enabled by default so that all actions performed by the impersonator are audited. Therefore, while viewing audit history, users can retrieve the audited information, filtered by an impersonated user.

However, impersonation auditing is limited in scope and applies only to the business objects in the Manage Audit Policies task. While impersonation auditing is enabled, updates are permitted only to the business objects in the Manage Audit Policies task. The impersonator can’t update business objects in other tasks. If updates to business objects in other tasks are required, the impersonation auditing must be disabled.

⚠️ Caution: If impersonation auditing is disabled, impersonation information won’t be audited. The activities are audited as if the actual user performed them.

Impersonation auditing is controlled through the Audit Impersonation Transaction Enabled profile option. By default it’s enabled. To disable it, set the profile value to No.

Related Topics

- Designate Proxies

How You Audit Talent Management Business Objects

Set up auditing policies to maintain a history of changes to your important data: what changed, who changed it, and when. The audit tracks changes to attributes of Oracle Fusion Talent Management business objects made using the application pages, web services, or talent management processes, which use Oracle Enterprise Scheduler.

You can view the audit history to determine how a business object obtained its current value and to compare old and new values. To set up auditing, you must have the Application Implementation Consultant job role to access the Manage Audit Policies task. To view audit data, you must have the Internal Auditor job role.

Talent Management Business Objects

When you set up auditing for business objects in talent management, you configure Oracle Fusion Applications business objects on the Manage Audit Policies page in the Setup and Maintenance work area:

1. Select the HCM Talent application on the Configure Business Object Attributes page.
2. Specify the attributes to audit for the objects. For example, you may audit the rating level and numeric rating attributes for rating levels.

The following table lists the talent management business objects to audit.

<table>
<thead>
<tr>
<th>Talent Management Business Object</th>
<th>Audited Attributes</th>
</tr>
</thead>
</table>
| Talent content library, including rating models, rating levels, and content items | • From and to dates, code, name, distribution threshold, and description for rating models  
  • From and to points, maximum and minimum distributions, numeric and star ratings, name, rating level, short description, review points, and description details for rating levels  
  • Item code, from and to dates, item description, name, rating model details for content items |
| Talent pools | Status details of talent pool members |
| Talent profiles, including person and model profiles | Keywords and from and to dates for person and model profiles |
| Talent profiles setup, including content section properties | Label, column name, default value, display, source, required, searchable, value set name, and view attribute for profile type section properties (also called content section properties) |
| Performance evaluations, including evaluation sections, evaluation section ratings, evaluation items, evaluation item ratings, participant details, and performance task. | • Manager ID, status, start and end dates, performance document name, and evaluation context (descriptive flexfields for additional attributes) for performance evaluations  
  • Comments and performance rating for evaluation section ratings  
  • Item name, minimum weight, and weight for evaluation item  
  • Comments, performance rating, and proficiency level for evaluation item ratings  
  • Participant ID and role, status of the task, optional overall comments, and notified by data to indicate which person requested the participant to participate in the evaluation  
  • Status of performance task, and action performed by data to indicate which person performed the task |
| Succession plans | Status details of succession plan candidates |

**Audit Reports**

Talent management enables users with the Internal Auditor job role to view audit reports for audit-enabled talent management business objects. You can view the changes that the application data underwent. The report provides you with details of the talent management business objects that were created, updated, and deleted. You can select among several search parameters to decide the type of audit history report that you require. To access the Audit Reports work area, select Navigator > Tools > Audit Reports.

**Related Topics**
- Audit History

**Audit Payroll Business Objects**

Set up auditing policies to maintain a history of changes to your important data: what changed, who changed it, and when. The audit tracks changes to attributes of payroll business objects made using the application pages, web services, or payroll processes, which use Oracle Enterprise Scheduler.

You can view the audit history to determine how a business object obtained its current value and to compare old and new values. To view the history or to create an audit report from the Audit History work area, you require appropriate duty roles.
and privileges. Enterprises typically assign the following two audit duty roles to the application implementation consultant and master data management application roles:

- Audit trail management, which determines the objects audited
- Audit trail report viewing to view the audit history

**Payroll Business Objects**

When you set up auditing for payroll, you configure Oracle Fusion Applications business objects on the Manage Audit Policies page in the Setup and Maintenance work area:

1. Select the HCM Payroll application on the Configure Business Object Attributes page.
2. Specify the attributes to audit for the objects.

For example, you might audit the start and end date attributes for the calculation card component details.

The following table lists the payroll business objects you can set up for auditing payroll. You track changes to attributes specified for these objects.

<table>
<thead>
<tr>
<th>Payroll Business Object</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigned Payroll</td>
<td>Holds date-effective attributes about payrolls assigned to a worker.</td>
</tr>
<tr>
<td>Assigned Payroll More Details</td>
<td>Holds details that aren’t date-effective about the payroll assigned to a worker.</td>
</tr>
<tr>
<td>Calculation Card</td>
<td>Holds values required for calculating payroll components.</td>
</tr>
<tr>
<td>Calculation Card Component</td>
<td>Holds the definition of a component that represents one or more logically related payroll components.</td>
</tr>
<tr>
<td>Calculation Card Component Detail</td>
<td>Holds the input values of a person’s calculation card.</td>
</tr>
<tr>
<td>Calculation Reporting Card</td>
<td>Defines the tax reporting units that report the calculation.</td>
</tr>
<tr>
<td>Calculation Reporting Card Usage</td>
<td>Attaches a reporting card to a person record.</td>
</tr>
<tr>
<td>Element Entry</td>
<td>Holds earning and deductions details for a person.</td>
</tr>
<tr>
<td>Element Entry Value</td>
<td>Holds the values of the compensation and benefits granted to a person.</td>
</tr>
<tr>
<td>Payroll Calculation Range Value</td>
<td>Defines the values or sets of values used in the calculation of a value definition.</td>
</tr>
<tr>
<td>Payroll Calculation Value Definition</td>
<td>Defines how a value is calculated in payroll processing.</td>
</tr>
<tr>
<td>Personal Payment Method</td>
<td>Holds the payment method details for a person.</td>
</tr>
</tbody>
</table>
Manage Oracle Social Network Objects

Management of Oracle Social Network Objects

Use the Manage Oracle Social Network Objects task for managing the Oracle Social Network Objects. The integration of Oracle Social Network with applications and business processes brings key attributes from the applications to share, socialize, and update information. This helps in making better business decisions based on additional information that you obtain and analyze within your social network environment.

Use the Manage Oracle Social Network Objects page to set up and define:

- The business objects and attributes to enable
- The enablement method for social network integration with Oracle Applications Cloud

To open the Manage Oracle Social Network Objects page, use the following in the Set and Maintenance work area:

- Functional Area: Application Extensions
- Task: Manage Oracle Social Network Objects

Use Oracle Social Network to:

- Discuss projects and plans in public forums
- Maintain:
  - Membership groups
  - Activity feeds of the people you select
- Facilitate:
  - One-on-one Conversations
  - Reviews
  - Document sharing

An important aspect of managing Oracle Social Network objects is enabling business objects for integration.

Enabling Business Objects for Integration

A business object can’t be shared within social network until a functional administrator or implementor:

- Accesses the Manage Oracle Social Network Objects page in Oracle Applications Cloud
- Enables the business object for social network integration
Considerations for Enabling Social Networking on Objects

You can determine whether information about a business object, such as benefit plans or sales accounts, displays in Oracle Social Network. If you enable an object for sharing, you allow users to collaborate on the object through social networking. You can choose whether all instances of an object are shared, or only at the user's discretion. You can also choose which attributes are shared, such as names, details, and who made the last update.

In addition to a wide range of predefined objects, you can share:

- Objects and attributes that you created in Application Composer
- Fields that you created in descriptive flexfields

In the Setup and Maintenance work area, use the following:

- Functional Area: Application Extensions
- Task: Manage Oracle Social Network Objects

After you click Enable Object, select one of the following enablement options:

- Manual
- Automatic
- No

**Manual**

If you select this option, which is recommended, you let users decide whether to share each instance of the object with the social network. Once shared, all updates to the enabled attributes of the instance appear on the social network. If the instance is deleted, that information is also shared.

Click Enable All to enable all objects for all applications. Enable All automatically applies the Manual option, which means that the user can choose whether to share an object instance.

**Automatic**

With this option, news about all instances of the object appears on the social network, including:

- Every newly created instance
- All subsequent updates to the enabled attributes
- Deletion of any instances

**No**

With this option, which is the default value, no news about the object appears on the social network.

**Note:** When you click Disable Object, the enabled setting of the selected business object is automatically changed to No.

After you enable a business object, you must enable one or more attributes of the object. Only the enabled attributes are shared. The Status column in the Business Objects table indicates which enabled business objects don’t yet have an enabled attribute. For these objects, only the following information appear on the social network:

- Internal bookkeeping information, when creating or updating an instance of the object.
• News that an instance is deleted.

Update Translations

The Update Translations process sends attribute labels and business object names to Oracle Social Network for use in the user interface.

In social network, attributes or business object labels appear in the language of your locale. If you change the locale in social network, then the attribute or business object labels appear in the updated language. However, the data appears in the language in which it was originally sent to social network. If you have previously sent an instance of the business object to social network, then the instance data isn’t updated. Clicking Update Translations on the Manage Oracle Social Network Objects page sends translations for business objects with the option to enable as Manual or Automatic.

Synchronization of Business Objects

Use Synchronize on the Manage Oracle Social Network Objects page to synchronize business objects. This resends the definitions of business objects having the enablement option as Manual or Automatic to Oracle Social Network.

Use the Synchronize button at the:

• Business Objects table level: To resend the definitions of a selected business object to social network. This button is enabled only when you select a row for a business object with the enablement option as Manual or Automatic.

• Manage Oracle Social Network Objects page level: To resend the definitions of all business objects with the enablement option as Manual or Automatic to social network.

Note: If you had modified any business object enabled for social network and not saved your changes, then on clicking Synchronize, a warning message appears. This message informs you that you have not saved your changes, and you can select one of the following options:

• Save and Synchronize: To save the modified business objects, and synchronize the unmodified business objects.

• Synchronize: To ignore any unsaved business objects, and only synchronize the unmodified business objects.

• Cancel: To cancel the synchronization task.

FAQs for Manage Oracle Social Network Objects

What happens if I update translations?

When you update translations, you send translations for business objects with the enablement option as Manual or Automatic to Oracle Social Network.
On updating translations, you also:

- Synchronize the newly translated text from Oracle Applications Cloud so that it can be used within social network. This means you can:
  - Install and enable a new language.
  - Take a language patch at any time.
- Send attribute labels and business object names to social network for use in its user interface.

How can I update translations?

Use **Update Translations** on the Manage Oracle Social Network Objects page for subsequent updates to labels and attributes.

Use the **Update Translations** button at the:

- **Business Objects table level**: To send translations for a selected business object to Oracle Social Network. This button is enabled only when you select a row for a business object with the enablement option as Manual or Automatic.
- **Manage Oracle Social Network Objects page level**: To send translations for all business objects with the enablement option as **Manual** or **Automatic** to social network.

**Note**: When you save the enablement of a business object to social network, it sends the translations as well. Hence, you need not click **Update Translations** after saving the enablement.

When do I update translations?

Run the **Update Translations** process only after you install a new language pack of Oracle Applications Cloud.

Updating translations synchronizes the newly translated text to Oracle Social Network for integration with Oracle Applications Cloud.

**Note**: When you save the enablement of a business object to social network, it sends the translations as well. Hence, you need not click **Update Translations** after saving the enablement.

What happens if I synchronize business objects?

When you synchronize business objects, you resend the definitions of business objects having the enablement option as **Manual** or **Automatic** to Oracle Social Network.

When do I synchronize business objects?

Run the Synchronize process after you use configuration sets to import the setup from the Manage Oracle Social Network Objects page in another environment.
You can also run the process whenever you want to synchronize the settings of business objects with social network without making changes in the Manage Oracle Social Network Objects page.

Related Topics
- Contents of the Configuration Set

Messages Setup

Common Messages
Message names that begin with FND_CMN are common messages. Each common message can appear in multiple places in any product family across Oracle Applications Cloud. For example, the FND_CMN_NEW_SRCH message can be used for any search to indicate that no results were found. Common messages of type error or warning are part of the message dictionary.

Creating and Editing Common Messages
You can create common messages for use in multiple places. However, ensure that you follow the predefined naming convention and numbering series associated with the application or module.

Note: Don’t use FND_CMN as the prefix for the messages you create because all the predefined common messages begin with it.

Common messages can be used in any application. Therefore, consider the ramifications if you edit any aspect of the message, including incident and logging settings. Changes would be reflected in all instances where the message is used. For example, if you change the message text, ensure that the text is generic and applies to the entire site of Oracle Applications Cloud implementation.

Manage Administrator Profile Values

How Profile Options and Related General Preferences Work Together
The general preferences such as Language, Territory, or Date Format that you access from the global header have corresponding predefined profile options.

General Preferences
When users define their preferred Date Format, Language, or Currency, they are setting the value of a profile option at the user level.

Profile Options
When users don't specify anything as their preferences, the Site level profile option takes effect.
FAQs for Manage Administrator Profile Values

How do I define whether the user image, name, or initials display in the global header?

Set the User Image Display Enabled (FND_USER_PHOTO_ENABLED) profile option. If you select:

- Yes, then the user image is displayed in the global header only if the user uploaded a photo. Otherwise, the user’s initials are displayed. By default, this profile option is set to Yes.
- No, then only the user name is displayed in the global header.

Related Topics

- Change Your Photo

Define Global Search

Overview of Global Search Setup

You have many options for setting up the global search, from enabling or disabling it completely to controlling what appears in the autosuggest. For most of the steps, use setup tasks in the Setup and Maintenance work area.

Enable Global Search

A predefined set of business objects, for example help files in Applications Help, are available for global search. These objects are grouped into categories. The search gives you results from indexed data, for example the help files with text that matches your search term.

Enabling global search includes setting up the predefined objects and categories, and starting a schedule to refresh the index so that users get the latest results.

1. Check with your help desk to make sure that objects, categories, and schedules are already set up.
2. Set the Global Search Enabled (FUSION_APPS_SEARCH_ENABLED) profile option to Yes at the Site level.
   - Otherwise, the Search field isn’t available in the global header for any user.
   - After you set the profile option, users must sign out and sign back in to see the global search.

Note: Enabling global search is the only mandatory setup. You can skip the following setup steps, and just use the default configuration for the global search.
Define Global Search

Use the following tasks in the Application Extensions functional area to control how the global search works:

- **Manage Applications Core Global Search Configurations**: Define configurations that capture a collection of settings, and determine which configurations are enabled or used as default. Each configuration applies to the global search on all or specific applications or pages.

- **Manage Applications Core Suggestion Groups**: Define suggestion groups, which represent categories of suggestions in the autosuggest.

- **Manage Applications Core Alternate Words**: Define alternates for search terms that users enter, so that the search can also find matches based on the alternate terms.

Retain Recent Items

You can set the Recent Items Retention (FND_PURGE_RECENT_ITEMS) profile option to determine how long to retain recent items for the global search autosuggest. A page that the user opened can appear in the user’s autosuggest until the specified number of days passes. Aside from the autosuggest, this profile option also applies to the recent items tracked in **Favorites and Recent Items** in the global header. The **Favorites and Recent Items** icon is available in the global header only if your default home page layout is panel or banner.

Related Topics

- Set Profile Option Values
- Examples of Global Search Configurations Set as Enabled or Default
- Create Global Search Configurations
- Suggestion Groups for Global Search
- Considerations for Managing Alternate Words for Global Search
18 Applications Core Configuration

Overview

The Define Applications Core Configurations task list contains the Oracle Middleware Extensions for Oracle Application (Applications Core) tasks that support implementation of common functionality such as lookups, profile options, document sequences, and so on. Some of the tasks are also available in the Application Extensions functional area. You may also find specific versions of this task list depending upon the product family or the offering that uptakes those tasks.

Use this task list to manage configuration objects that are defined centrally and shared across applications, in addition to tasks classified in the Maintain Common Reference Objects task list. You can search for this task list in the Setup and Maintenance work area.

Related Topics

• Overview of Common Reference Objects

Import Flexfields, Lookups, or Profile Values Using Web Services

You can import lookups, profile option values, and extensible flexfields into an application using the import function on the application page. Alternatively, you can use the web service FndManageImportExportFilesService for the import task. The web service uses the following methods:

<table>
<thead>
<tr>
<th>Loader Name</th>
<th>Asynchronous Method</th>
<th>Synchronous Methods</th>
<th>Supported methods for backward compatibility (without UUID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flex data uploader</td>
<td>processFlexDataAsync(List&lt;String&gt; inputFileIdTypeList, String UUID)</td>
<td>processFlexData(List&lt;String&gt; inputFileIdTypeList, String UUID)</td>
<td></td>
</tr>
<tr>
<td>Lookups data uploader</td>
<td>processLookupsDataAsync(long lookupTypesFileID, long lookupCodesFileID, long viewApplicationID, String UUID)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User profile values uploader</td>
<td>processUserProfileValuesAsync(long userProfileFileID, String UUID)</td>
<td>processUserProfileValues(long userProfileFileID, String UUID)</td>
<td></td>
</tr>
<tr>
<td>Valueset Values data uploader</td>
<td>processValueSetValuesAsync(Long fileIdAtRepository, String UUID)</td>
<td>processValueSetValues(Long fileIdAtRepository, String UUID)</td>
<td></td>
</tr>
<tr>
<td>Generic method</td>
<td>downloadProcessLogFile(String UUID)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Example

The following example is about importing the profile values using the web service. To import lookups or extensible flexfields, initiate the web service in the same way as shown here, after replacing the methods and other relevant values in the code.

To import profile values:

1. Perform the following substeps to generate keystore for the security policy "oracle/wss11_saml_or_username_token_with_message_protection_service_policy":
   b. Open the WSDL using the URL `http://<host>:<port>/fndAppCoreServices/FndManageImportExportFilesService?wsdl` through a web browser, and get the public key `<wsdl:service>/<wsdl:port>/<wsa:EndpointReference>/<wsid:Identity>/<dsig:keyInfo>/<dsig:X509Data>/<dsig:X509Certificate>`. Then, enclose it with `BEGIN CERTIFICATE` and `END CERTIFICATE` and save it to a file by name cdrmpk.cer.
   c. Store the key information in the truststore using the command `keytool -importcert -alias cdrmkey -file cdrmpk.cer -keystore mycompclient-keystore.jks -storepass password`.
2. Open the WSDL page using the browser of your choice.
3. Export and save the associated security certificates Verisign Class 3 Public Primary Certification Authority - G5 and Verisign Secure Server CA - G3.
4. Use the following command to import the saved certificates into the trust store of the client computer.
   `keytool -importcert -keystore <truststore> -storepass <truststorepassword> -file <file location where the mentioned certificate is stored> -alias <alias for certificate>`
5. Run the following command to generate the JAX-WS proxy for the FndManageImportExportFilesService web service.
   `C:\Program Files\Java\jdk1.7.0_04\bin>wsimport -s "d:\wsimport\FndManageImportExport" -d "d:\wsimport\FndManageImportExport" http://<host>:<port>/fndAppCoreServices/FndManageImportExportFilesService?wsdl`
6. Save the generated code as a JAR file and name it FndManageImportExportProxy.jar.
7. Use the following code to create another JAR file to initiate the web service:
   ```java
   package com.oracle.xmlns.oracle.apps.fnd.applcore.webservices;

   import com.sun.xml.ws.developer.WSBindingProvider;

   import java.io.File;
   import java.io.IOException;

   import java.util.List;
   import java.util.Map;

   import javax.xml.ws.BindingProvider;
   import javax.xml.ws.WebServiceRef;

   import javax.xml.ws.handler.Handler;

   import oracle.webservices.ClientConstants;

   import weblogic.wsee.jws.jaxws.owsm.SecurityPoliciesFeature;
   // !THE CHANGES MADE TO THIS FILE WILL BE DESTROYED IF REGENERATED!
   // This source file is generated by Oracle tools
   ```
public class FndManageImportExportFilesServiceSoapHttpPortClient
{
    @WebServiceRef
    private static FndManageImportExportFilesService_Service fndManageImportExportFilesService_Service;

    public static void main(String[] args)
    {
        System.setProperty("javax.net.ssl.trustStore","<location of truststore which is used in II to import the certificates>");
        System.setProperty("javax.net.ssl.trustStorePassword","<truststore password>");

        fndManageImportExportFilesService_Service = new FndManageImportExportFilesService_Service();
        FndManageImportExportFilesService fndManageImportExportFilesService = fndManageImportExportFilesService_Service.getFndManageImportExportFilesServiceSoapHttpPort (securityFeatures);
        // Add your code to call the required methods.

        WSBindingProvider wsbp = (WSBindingProvider) fndManageImportExportFilesService;
        Map<String, Object> requestContext = wsbp.getRequestContext();

        requestContext.put(ClientConstants.WSSEC_KEYSTORE_TYPE,"jks");
        // Provide location of 'mycompclient-keystore.jks' which was created during Step I)
        requestContext.put(ClientConstants.WSSEC_KEYSTORE_LOCATION,"/home/user1/mycompclient-keystore.jks");
        requestContext.put(ClientConstants.WSSEC_KEYSTORE_PASSWORD,"password");
        requestContext.put(ClientConstants.WSSEC_RECIPIENT_KEY_ALIAS,"cdrmkey");

        //Provide user who is having permission to initiate the service
        requestContext.put(WSBindingProvider.USERNAME_PROPERTY,"<username>");
        requestContext.put(WSBindingProvider.PASSWORD_PROPERTY,"<password>");

        String id = invokeUploadFiletoUCMMethod(fndManageImportExportFilesService);
        if (id != null) {
            invokeUserProfileValuesDataLoader(fndManageImportExportFilesService, new Long(id));
        }
    }

    static String invokeUploadFiletoUCMMethod(FndManageImportExportFilesService fndManageImportExportFilesService)
    {
        String response = null;
        DocumentDetails document = new DocumentDetails();
        ObjectFactory objfactory = new ObjectFactory();
        document.setFileName(objfactory.createDocumentDetailsFileName("import_data.txt"));
        // Provide UCM repository - if repository is fin/tax/import then suffix each value with $ as mentioned here
        document.setDocumentTitle(objfactory.createDocumentDetailsDocumentTitle("VS"));
        document.setContentType(objfactory.createDocumentDetailsContentType("plain/text"));

        try {
            // Provide location of bulk import data file in prescribed format
```java
byte[] content = org.apache.commons.io.FileUtils.readFileToByteArray(new File("/home/user1/import_data.txt"));

//System.out.println("File content:" + new String(content, "UTF-8"));
document.setContent(objfactory.createDocumentDetailsContent(content));
}

try {
    response = fndManageImportExportFilesService.uploadFiletoUCM(document);
    System.out.println("Response:" + response);
}

return response;
}

static void invokeUserProfileValuesDataLoader(FndManageImportExportFilesService fndManageImportExportFilesService, Long id) {
    String response;
    try {
        response = fndManageImportExportFilesService.processUserProfileValuesFile(id);
        System.out.println("Response:" + response);
    }
    catch (ServiceException e) {
        System.out.println(e.getMessage());
    }
}

 └Note: Wherever applicable, replace the values referring to the profile values with those of the lookups or flexfields value sets.

 8. Save the generated output as a JAVA file and name it FndManageImportExportFilesServiceSoapHttpPortClient.java.
 9. Use the JAVA file to build a JAR file, and name it FndManageImportExportClient.jar.
10. Use the following command to run the web service:

```
java -cp ./FndManageImportExportProxy.jar:./ws.api_1.1.0.0.jar:./FndManageImportExportClient.jar
   FndManageImportExportFilesServiceSoapHttpPortClient
```

Here is a sample program that is a web service client for the asynchronous method `deployFlexAsync()`. This client program starts callback client and does the asynchronous call. The required callback web service starts at the line no 58.

```
Endpoint e = Endpoint.publish(callbackServiceAddress, new ApplicationsCoreSetupServiceResponseImpl());
```

The callback web service will still be in Running state after the client program execution completes and you need to close it manually. Alternatively, you can also comment the above line here and run it in a separate client program.

```
package com.ws.client;

import com.sun.xml.ws.api.addressing.AddressingVersion;
import com.sun.xml.ws.api.addressing.WSEndpointReference;
import com.sun.xml.ws.developer.WSBindingProvider;
import com.sun.xml.ws.message.StringHeader;
import com.ws.client.callback.ApplicationsCoreSetupServiceResponseImpl;
```
import com.ws.client.types.DeployFlexAsyncResponse;
import java.util.Map;
import java.util.UUID;
import javax.xml.ws.Endpoint;
import javax.xml.ws.Response;
import javax.xml.ws.WebServiceRef;
import oracle.webservices.ClientConstants;

import weblogic.wsee.jws.jaxws.owsm.SecurityPolicyFeature;
// !THE CHANGES MADE TO THIS FILE WILL BE DESTROYED IF REGENERATED!
// This source file is generated by Oracle tools
// Contents may be subject to change
// For reporting problems, use the following
// Version = Oracle WebServices (11.1.1.0.0, build 150302.2135.1.30348)

public class ApplicationsCoreSetupServiceSoapHttpPortClient
{
    @WebServiceRef
    private static ApplicationsCoreSetupService_Service applicationsCoreSetupService_Service;

    private static final AddressingVersion WS_ADDR_VER = AddressingVersion.W3C;

    public static void main(String [] args) throws InterruptedException {
        applicationsCoreSetupService_Service = new ApplicationsCoreSetupService_Service();
        SecurityPolicyFeature[] features = new SecurityPolicyFeature[] {
            new SecurityPolicyFeature("policy:oracle/wss_username_token_client_policy")
        };
        ApplicationsCoreSetupService applicationsCoreSetupService =
            applicationsCoreSetupService_Service.getApplicationsCoreSetupServiceSoapHttpPort(features);

        // Get the request context to set the outgoing addressing properties
        WSBindingProvider wsbp = (WSBindingProvider)applicationsCoreSetupService;
        Map<String, Object> requestContext = wsbp.getRequestContext();
        requestContext.put(ClientConstants.WSSEC_KEYSTORE_TYPE, "jks");
        requestContext.put(ClientConstants.WSSEC_KEYSTORE_LOCATION,
            "/scratch/vgarikip/view_storage/work/keys/mycompclient-keystore.jks");
        requestContext.put(ClientConstants.WSSEC_KEYSTORE_PASSWORD, "mypassword1");
        requestContext.put(ClientConstants.WSSEC_RECIPIENT_KEY_ALIAS, "cdrmkey");
        requestContext.put(WSBindingProvider.USERNAME_PROPERTY, "app_impl_consultant");
        requestContext.put(WSBindingProvider.PASSWORD_PROPERTY, "mypassword1");

        String callbackServiceAddress = "http://:<server>:<port>/TestAsyncMani-Project1-context-root/
                ApplicationsCoreSetupServiceResponseImplPort";
        Endpoint e = Endpoint.publish(callbackServiceAddress, new ApplicationsCoreSetupServiceResponseImpl());
        WSEndpointReference replyTo = new WSEndpointReference(callbackServiceAddress, WS_ADDR_VER);
        String uuid = "uuid:" + UUID.randomUUID();

        wsbp.setOutboundHeaders(new StringHeader(WS_ADDR_VER.messageIDTag, uuid),
            replyTo.createHeader(WS_ADDR_VER.replyToTag));

        applicationsCoreSetupService.deployFlexAsync("PER_CITIZENSHIPS_DFF", "DFF", false); // .deployPatchedFlexAsync(mode, pCustomizationId, pCustomizationSetLoc);
Define Lookups

Overview of Lookups

Lookups are lists of values in applications. You define a list of values as a lookup type consisting of a set of lookup codes, each code’s translated meaning, and optionally a tag. End users see the list of translated meanings as the available values for an object.

Lookups provide a means of validation and lists of values where valid values appear on a list with no duplicate values. For example, an application might store the values Y and N in a column in a table, but when displaying those values in the user interface, Yes or No (or their translated equivalents) should be available for end users to select. For example, the two lookup codes Y and N are defined in the REQUIRED_INDICATOR lookup type.

The following table contains an example of a lookup type for marital status (MAR_STATUS) that has lookup codes for users to specify married, single, or available legal partnerships.
<table>
<thead>
<tr>
<th>Lookup Code</th>
<th>Meaning</th>
<th>Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Married</td>
<td>Not applicable</td>
</tr>
<tr>
<td>S</td>
<td>Single</td>
<td>Not applicable</td>
</tr>
<tr>
<td>R</td>
<td>Registered Partner</td>
<td>+NL</td>
</tr>
<tr>
<td>DP</td>
<td>Domestic Partner</td>
<td>-FR, AU</td>
</tr>
</tbody>
</table>

In this case, tags are used for localizing the codes. All legislations list Married and Single. Only the Dutch legislation lists Registered Partner. And all legislations except France and Australia also list Domestic Partner.

When managing lookups, you need to understand the following.

- Using lookups in applications
- Configuration levels
- Accessing lookups
- Enabling lookups
- The three kinds of lookups: standard, common, and set-enabled

### Using Lookups in Applications

Use lookups to provide validation or a list of values for a user input field in a user interface.

An example of a lookup used for validation is a flexfield segment using a table-validated value set with values from a lookup type. An example of a lookup in a list of values is a profile option’s available values from which users select one to set the profile option. Invoice Approval Status gives the option of including payables invoices of different approval statuses in a report. The lookup code values include All, so that users can report by all statuses: Approved, Resubmitted for approval, Pending or rejected, and Rejected.

### Configuration Level

The configuration level of a lookup type determines whether the lookups in that lookup type can be edited. This applies data security to lookups.

Some lookup types are locked so no new codes and other changes can be added during implementation or later, as needed. Depending on the configuration level of a lookup type, you may be able to change the codes or their meanings. Some lookups are designated as extensible, so new lookup codes can be created during implementation, but the predefined lookup codes can’t be modified. Some predefined lookup codes can be changed during implementation or later, as needed.

The configuration levels are user, extensible, and system. The following table shows the lookup management tasks permitted at each configuration level.

<table>
<thead>
<tr>
<th>Permitted Task</th>
<th>User</th>
<th>Extensible</th>
<th>System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deleting a lookup type</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Inserting new codes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Updating start date, end date, and enabling the lookup code</td>
<td>Yes</td>
<td>Yes, only if the code isn’t predefined data</td>
<td>No</td>
</tr>
</tbody>
</table>
Permitted Task | User | Extensible | System
--- | --- | --- | ---
Deleting codes | Yes | Yes, only if the code isn’t predefined data | No
Updating tags | Yes | No | No
Updating module | Yes | No | No

Predefined data means LAST_UPDATED_BY = SEED_DATA_FROM_APPLICATION.

If a product depends on a lookup, the configuration level must be system or extensible to prevent deletion.

Once the configuration level is set for a lookup type, it can’t be modified. The configuration level for newly created lookup types is by default set at the User level.

Standard, Common, and Set-Enabled Lookups

The following table shows the available types of lookups.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Lists the available codes and translated meanings.</td>
</tr>
<tr>
<td>Set-enabled</td>
<td>Associates a reference data set with the lookup codes.</td>
</tr>
<tr>
<td>Common</td>
<td>Legacy lookups or lookups that have attributes.</td>
</tr>
</tbody>
</table>

Standard lookups are the simplest form of lookup types consisting only of codes and their translated meaning. They differ from common lookups only in being defined in the standard lookup view. Common lookups exist for reasons of backward compatibility and differ from standard lookups only in being defined in the common lookup view. These can also be lookups having attribute columns. Set-enabled lookup types store lookup codes that are enabled for reference data sharing. At runtime, a set-enabled lookup code is visible because the value of the determinant identifies a reference data set in which the lookup code is present.

Accessing Lookups

Standard, set-enabled, and common lookups are defined in the Standard, Set-enabled, and Common views, respectively. Applications development may define lookups in an application view to restrict the UI pages where they may appear.

In lookups management tasks, lookups may be associated with a module in the application taxonomy to provide criteria for narrowing a search or limiting the number of lookups accessed by a product specific task such as Manage Purchasing Lookups.

Enabling Lookups

A lookup type is reusable for attributes stored in multiple tables.

Enable lookups based on the following.

- Selecting an Enabled check box
- Specifying an enabled start date, end date, or both
• Specifying a reference data set
determinant

If you make changes to a lookup, users must sign out and back in before the changes take effect. When defining a list of values for display rather than validation, limit the number of enabled lookup codes to a usable length.

To view the predefined lookups and their lookup codes, use the following tasks in the Setup and Maintenance work area:

• Manage Standard Lookups
• Manage Common Lookups
• Manage Set-Enabled Lookups

Translating Lookups

You can translate the lookups that you defined to the preferred language(s) without changing the language session of the application. Use the translation option available on the lookup code table. By default, for each lookup, all the permitted language rows in the translator dialog box appear in the source language (the current session language). When you edit a particular language entry, you can modify the translated meaning and description to the language in which you want the lookup to appear. Once the updates are made, the end-users can view the lookup in the translated text.

**Note:** You can add the translation for only as many languages as are permitted by the administrator. The functionality to limit the number of languages displayed on the dialog box is controlled through the Translation Editor Languages profile option. It can be set at the SITE or USER level. If nothing is specified, all active languages are displayed.

Related Topics

• How can I access predefined lookups
• Enter or Edit Translated Text

Example of a Standard Lookup

Creating a new standard lookup involves creating or selecting a lookup type containing the lookup code. The task also involves determining appropriate values for the lookup codes and their meanings. You can only create or edit lookup codes for a particular lookup type if its configuration level supports it.

Creating a Lookup Type Called COLORS

Your enterprise needs a list of values to be used as different statuses on a process. Each status is indicated using a color. Therefore, you create a lookup type called COLORS. The following table lists a mapping between the lookup type parameters and the actual values assigned to those parameters to create the required list of values.

<table>
<thead>
<tr>
<th>Lookup type parameters</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lookup type name</td>
<td>COLORS</td>
</tr>
<tr>
<td>Meaning</td>
<td>Status</td>
</tr>
<tr>
<td>Description</td>
<td>Status by color</td>
</tr>
<tr>
<td>Module</td>
<td>Oracle Fusion Middleware Extensions for Oracle Application</td>
</tr>
</tbody>
</table>
After you define the lookup type, you need to define the lookup codes and their related details. The following table lists the lookup codes you define for the COLORS lookup type.

<table>
<thead>
<tr>
<th>Lookup Code</th>
<th>Meaning</th>
<th>Enabled</th>
<th>Display Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLUE</td>
<td>Urgent</td>
<td>No</td>
<td>4</td>
</tr>
<tr>
<td>RED</td>
<td>Stop</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>GREEN</td>
<td>Proceed</td>
<td>Yes</td>
<td>3</td>
</tr>
<tr>
<td>YELLOW</td>
<td>Check</td>
<td>Yes</td>
<td>2</td>
</tr>
</tbody>
</table>

The Resulting Data Entry List of Values

Only the enabled lookup codes appear in the list of values for the COLORS lookup type. You must select one of them to complete the activity.

The following table lists the meanings and the codes that were enabled. They appear in the order of the defined display sequence.

<table>
<thead>
<tr>
<th>Meaning</th>
<th>Lookup Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>RED</td>
</tr>
<tr>
<td>Check</td>
<td>YELLOW</td>
</tr>
<tr>
<td>Proceed</td>
<td>GREEN</td>
</tr>
</tbody>
</table>

Analysis

The BLUE lookup code wasn’t enabled and doesn’t appear in the list of values. The display sequence of values in the list of values is alphabetic, unless you enter a number manually to determine the order of appearance. Number 1 indicates the first value that appears in the list. Only lookups that are enabled and active between start and end dates are visible.

The Transaction Table

When users enter one of the values from the list of values for the lookup type COLORS, the transaction table records the lookup code. The following table contains an example, where the lookup code is stored in the Status column of the transaction table.

<table>
<thead>
<tr>
<th>Transaction number</th>
<th>User name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jane</td>
<td>RED</td>
</tr>
</tbody>
</table>
The status for one user is BLUE because at the time they entered a value, BLUE was enabled. Disabling a lookup code doesn’t affect transaction records in which that code is stored. Data querying and reporting have access to disabled lookup codes in transaction tables.

### Example of a Set-Enabled Lookup

Creating a new set-enabled lookup is similar to creating a standard lookup with the addition of specifying a reference data set determinant for the lookup codes. You can only create or edit lookup codes for a particular lookup type if its configuration level supports it.

The reference data set for a set-enabled lookup code is part of its foreign key. This is unlike other set-enabled entities. Use the Manage Set Assignments task to define and manage reference data set assignments.

#### Selecting a Reference Group for a Set-Enabled Lookup Type

Specify a reference group for a set-enabled lookup type to indicate which reference data set assignments are available for its lookup codes. For example a COLORS lookup type might be set-enabled for a Countries reference group that includes the US and EU reference data set assignments.

#### Selecting a Reference Data Set for a Set-Enabled Lookup

The reference data set determines which lookup code is included in the list of values. For example, there are two references data sets - one for the US and the other for EU. If a COLORS lookup type contains RED, YELLOW, ORANGE, and GREEN lookup codes, you can enable one RED lookup code from the US reference data set and another RED lookup from the EU reference data, each lookup code having different meanings.

The following table elaborates the example, how these two reference data sets (US and EU) contain one lookup code that is common, but each differing in its lookup meaning.

<table>
<thead>
<tr>
<th>Reference Data Set</th>
<th>Lookup Code</th>
<th>Lookup Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>RED</td>
<td>Red</td>
</tr>
<tr>
<td>US</td>
<td>YELLOW</td>
<td>Yellow</td>
</tr>
<tr>
<td>US</td>
<td>GREEN</td>
<td>Green</td>
</tr>
<tr>
<td>EU</td>
<td>RED</td>
<td>Rouge</td>
</tr>
<tr>
<td>EU</td>
<td>ORANGE</td>
<td>Orange</td>
</tr>
</tbody>
</table>
Some lookup codes may be unique to one or another reference data set as the ORANGE lookup is to the EU reference data set in the example.

In another example in the following table, a lookup type called HOLD_REASON provides a list of reasons for putting a contract renewal on hold. Reference data sets determine which codes are included in the Hold Reason list of values.

<table>
<thead>
<tr>
<th>Reference Data Set</th>
<th>Lookup Code</th>
<th>Lookup Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>SEC</td>
<td>SEC Compliance Review</td>
</tr>
<tr>
<td>US</td>
<td>DIR</td>
<td>Needs Director’s Approval</td>
</tr>
<tr>
<td>US</td>
<td>VP</td>
<td>Needs Vice President’s Approval</td>
</tr>
<tr>
<td>CHINA</td>
<td>CSRC</td>
<td>Pending China Securities Regulatory Commission Review</td>
</tr>
<tr>
<td>CHINA</td>
<td>PR</td>
<td>Needs President’s Approval</td>
</tr>
<tr>
<td>COMMON</td>
<td>REQUESTED</td>
<td>Customer Request</td>
</tr>
</tbody>
</table>

Referring to the example in the table, when end-users place a contract on hold in the US business unit, the three reason codes in the US set are available. When placing a contract on hold in the China business unit, the two codes in the China set are available.

Import Lookups

On each page pertaining to the tasks of managing the Standard, Common, and Set Enabled lookups, use the Import option to import the lookup type and lookup code information.

Prerequisite

The separate files containing the lookup types and lookup codes are already available in the document repository of Oracle WebCenter Content.

Importing Lookups

To import lookups:

1. In the Setup and Maintenance work area, go to the Manage Standard Lookups task. Depending on the lookup you want to import, you may select the other lookup tasks.
2. In Search Results, from the Actions menu, select Import.
   
   The Import Lookups dialog box appears.
3. Select the WebCenter Content account to which the files were uploaded.
4. Enter the names of the separate files containing the lookup type and lookup code information. The names here must match with the names of the files uploaded to the selected account.
5. Click Upload. The lookup details are imported.
File Format for Importing Lookups

To import lookups into an application, you create separate text files containing the lookup types and lookup codes and upload them to the Oracle WebCenter Content document repository. The files must follow a specific format, as described here. After the files are in the document repository, you can then import the lookup types and lookup codes into the application following the instructions in the Importing Lookups: Procedure topic.

While creating the file, adhere to the following guidelines:

- Use a vertical bar or pipe (|) as a delimiter between fields for both header and value rows.
- Set the file encoding to UTF-8 without the Byte Order Mark (BOM), as per the Oracle WebCenter Content specification.

The following sections contain details about the specific lookup types and codes.

Prerequisite

You must have worked with lookups in Oracle Cloud applications.

Standard and Common Lookups

The lookup types and codes are similar for standard and common lookups. To create a file containing the lookup types, include the following headers:

- **LookupType**: The lookup type.
- **Meaning**: The display name of the lookup type.
- **Description**: The description of the lookup type. This header is optional.
- **ModuleType**: The module with which the lookup type is associated.
- **ModuleKey**: The module code.

Here's a sample file that contains the header values at the beginning of the file, followed by line entries of the two lookup types that are to be imported. For importing several lookup types, add more line entries in a similar format.

```
LookuType|Meaning|Description|ModuleType|ModuleKey
AFLOG_22APR_1|Log1|AFLOG_desc_1|APPLICATION|FND
PROD_22APR_2|Product1|PROD_desc_2|APPLICATION|FND
```

To create a file containing the lookup codes, include the following headers.

- **Required headers**:
  - **LookupType**: The lookup type.
  - **LookupCode**: The lookup code associated with the lookup type.
  - **DisplaySequence**: The sequence position at which the lookup code appears in the list of values.
  - **EnabledFlag**: Indicates the status of the lookup code, whether it’s enabled for display or not.
  - **Meaning**: The display name of the lookup code.
### Optional headers:

- **StartTimeActive**: Beginning of the date range during which the lookup code is active and visible on the page. The format is dd/M/yyyy.
- **EndTimeActive**: End of the date range during which the lookup code is active and visible on the page. The format is dd/M/yyyy.
- **Description**: Description of the lookup code.
- **Tag**: Any tag associated with the lookup code that may be used for a quick reference or retrieval of information.
- **Seg**: The name of the API used for a global segment defined for the descriptive flexfield associated with the lookup.
- **CONTEXT_ATTRIBUTE**: The context value specified in the CSV file for a particular descriptive flexfield.
- **ctxSeg**: The name of the API for a context sensitive segment defined for a context attribute.

Here’s a sample file that contains two lookup codes:

<table>
<thead>
<tr>
<th>LookupType</th>
<th>LookupCode</th>
<th>DisplaySequence</th>
<th>EnabledFlag</th>
<th>StartTimeActive</th>
<th>EndTimeActive</th>
<th>Meaning</th>
<th>Description</th>
<th>Tag</th>
<th>Seg</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASK_22APR_1</td>
<td>Code1_1</td>
<td>1</td>
<td>Y</td>
<td>25/12/2014</td>
<td>25/5/2015</td>
<td>TASK_22apr_1</td>
<td>Task_desc_1</td>
<td>Tag1_1</td>
<td>testSeg1</td>
</tr>
<tr>
<td>TASK_22APR_1</td>
<td>Code1_2</td>
<td>2</td>
<td>N</td>
<td>25/1/2014</td>
<td>25/11/2015</td>
<td>TASK_22apr_2</td>
<td>Task_desc_2</td>
<td>Tag2_1</td>
<td>testSeg2</td>
</tr>
<tr>
<td>TASK_22APR_2</td>
<td>code2_1</td>
<td>3</td>
<td>N</td>
<td>25/12/2012</td>
<td>25/7/2015</td>
<td>TASK_22apr_2</td>
<td>Task_desc_2</td>
<td>tag2_1</td>
<td>testSeg2</td>
</tr>
<tr>
<td>TASK_22APR_2</td>
<td>code2_2</td>
<td>3</td>
<td>Y</td>
<td>25/12/2012</td>
<td>25/7/2015</td>
<td>TASK_22apr_2</td>
<td>Task_desc_2</td>
<td>tag2_2</td>
<td>testSeg2</td>
</tr>
</tbody>
</table>

### Set Enabled Lookups

To create a file containing the set enabled lookup types, include the following headers:

- **LookupType**: The lookup type.
- **Description**: The display name of the lookup type.
- **Description**: The description of the lookup type. This header is optional.
- **ModuleType**: The module with which the lookup type is associated.
- **ModuleKey**: The module code.
- **ReferenceGroupName**: Name of the reference group that contains the reference data set.

Here’s a sample that contains two set enabled lookup types:

<table>
<thead>
<tr>
<th>LookupType</th>
<th>LookupCode</th>
<th>Description</th>
<th>ModuleType</th>
<th>ModuleKey</th>
<th>ReferenceGroupName</th>
</tr>
</thead>
<tbody>
<tr>
<td>CODE_22APR_1</td>
<td>CODE_22apr_1</td>
<td>CODE_22apr_1</td>
<td>APPLICATION</td>
<td>FND</td>
<td>BU_APAC</td>
</tr>
<tr>
<td>CODE_22APR_2</td>
<td>CODE_22apr_2</td>
<td>CODE_22apr_2</td>
<td>APPLICATION</td>
<td>FND</td>
<td>BU_APAC</td>
</tr>
</tbody>
</table>

To create a file containing the set enabled lookup codes, include the following headers:

- **Required headers**:
  - **LookupType**: The lookup type.
  - **LookupCode**: The lookup code associated with the lookup type.
  - **DisplaySequence**: The sequence position at which the lookup code appears in the list of values.
  - **EnabledFlag**: Indicates the status of the lookup code, whether it’s enabled for display or not.
  - **Meaning**: The display name of the lookup code.
  - **SetName**: Name of the reference data set.
Optional headers:

- **StartDateActive**: Beginning of the date range during which the lookup code is active and visible on the page. The format is dd/M/yyyy.
- **EndDateActive**: End of the date range during which the lookup code is active and visible on the page. The format is dd/M/yyyy.
- **Description**: Description of the lookup code.
- **Tag**: Any tag associated with the lookup code that may be used for a quick reference or retrieval of information.

Here's a sample file that contains the header values at the beginning and lists four set enabled lookup codes to be imported. For importing several lookup codes, add more entries in the same format.

<table>
<thead>
<tr>
<th>LookupType</th>
<th>LookupCode</th>
<th>DisplaySequence</th>
<th>EnabledFlag</th>
<th>StartDateActive</th>
<th>EndDateActive</th>
<th>Meaning</th>
<th>Description</th>
<th>Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATA_22APR_1</td>
<td>Code1_1</td>
<td>1</td>
<td>Y</td>
<td>25/12/2014</td>
<td>25/5/2015</td>
<td>DATA_22apr_1</td>
<td>Data_desc_1</td>
<td>Tag1_1</td>
</tr>
<tr>
<td>DATA_22APR_1</td>
<td>Code1_2</td>
<td>2</td>
<td>N</td>
<td>25/1/2014</td>
<td>25/11/2015</td>
<td>DATA_22apr_2</td>
<td>Data_desc_2</td>
<td>Tag1_2</td>
</tr>
<tr>
<td>DATA_22APR_2</td>
<td>code2_1</td>
<td>3</td>
<td>N</td>
<td>25/12/2012</td>
<td>25/7/2015</td>
<td>DATA_22qpr_2_1</td>
<td>Data_desc_2</td>
<td>tag2_1</td>
</tr>
<tr>
<td>DATA_22APR_2</td>
<td>code2_2</td>
<td>3</td>
<td>Y</td>
<td>25/12/2012</td>
<td>25/7/2015</td>
<td>DATA_22qpr_2_2</td>
<td>Data_desc_2</td>
<td>tag2_2</td>
</tr>
</tbody>
</table>

**Related Topics**

- Overview of Files for Import and Export
- Guidelines for File Import and Export
- Upload Files to WebCenter Content Server

**FAQs for Define Lookups**

**How can I edit lookups?**

On any of the Manage Lookups pages, you can edit the existing lookup codes of a lookup type or add new lookup codes. You can edit lookups using the following tasks in the Setup and Maintenance work area:

- Manage Standard Lookups
- Manage Common Lookups
- Manage Set-enabled Lookups

Each task contains a predefined set of lookup types that are classified and stored. Open a task to search and edit the required lookup. However, you may not be able to edit a lookup if its configuration level doesn’t support editing.

**Why can't I see my lookup types?**

Lookup types are classified using tasks that involve a group of related lookups, such as Manage Geography Lookups. Each task gives you access only to certain lookup types. However, the generic tasks provide access to all lookup types of a kind, such as common lookups associated with the Manage Common Lookups task.
If the lookup types in an application are available in the standard, common, or set-enabled lookups view, they’re are central to an application. However, lookup types defined for a specific application are managed using the task or task list for that application.

**What's the difference between a lookup type and a value set?**

A lookup type consists of lookups that are static values in a list of values. Lookup code validation is a one to one match. A table-validated value set may consist of values that are validated through a SQL statement, which allows the list of values to be dynamic. The following table brings out the differences between a lookup type and a value set.

<table>
<thead>
<tr>
<th>Area of Difference</th>
<th>Lookup Type</th>
<th>Value Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of values</td>
<td>Static</td>
<td>Dynamic if the list is table-validated</td>
</tr>
<tr>
<td>Validation of values</td>
<td>One to one match of meaning to code included in a lookup view, or through the determinant of a reference data set</td>
<td>Validation by format or inclusion in a table</td>
</tr>
<tr>
<td>Format type of values</td>
<td>char</td>
<td>varchar2, number, and so on</td>
</tr>
<tr>
<td>Length of value</td>
<td>Text string up to 30 characters</td>
<td>Any type of variable length from 1 to 4000</td>
</tr>
<tr>
<td>Duplication of values</td>
<td>Never. Values are unique.</td>
<td>Duplicate values allowed</td>
</tr>
<tr>
<td>Management</td>
<td>Both administrators and end-users manage these, except system lookups or predefined lookups at the system configuration level, which can’t be modified.</td>
<td>Usually administrators maintain these, except some product flexfield codes, such as GL for Oracle Fusion General Ledger that the end-users maintain.</td>
</tr>
</tbody>
</table>

Both lookup types and value sets are used to create lists of values from which users select values. A lookup type can’t use a value from a value set. However, value sets can use standard, common, or set-enabled lookups.

**What's a lookup tag used for?**

A tag is an additional label attached to the lookup. Tags are user defined and can be grouped depending on the user’s requirement to make search convenient and effective.

The same tag may be used across lookup categories. In such cases, tags are used as a refined search criterion to filter information across several groups and get the search result.
How can I search for a specific lookup code?

Use the Query By Example functionality to sort through hundreds of lookup codes for a lookup type, and display a specific lookup code. Enter the first few characters of the lookup code value in any of the relevant fields to filter the records.

Note: The search functionality is case sensitive.

Manage Messages

Messages

Messages provide users with information about business or application errors or warnings.

Typically, messages inform the users about the following:

- Missing or incorrect data
- Status of an application, page, or a business object
- Status of an ongoing process
- Result of a user action

Besides notifying users about the problem, messages provide guidance to users on taking corrective action. Messages also warn users about the consequences of a certain action.

Oracle provides a set of predefined messages that are stored in a message dictionary. You can create additional messages or modify the existing ones using the Manage Messages task in the Setup and Maintenance work area.

Note: Don’t delete predefined messages unless you’re sure that they aren’t used anywhere.

Message Dictionary

The message dictionary stores messages that the application requires at run time. Messages are predefined for specific applications and modules, but a few are common messages that can be used in any application or module.

When you create messages, use the message text and the following components to cover additional details addressing users and help desk personnel:

- User Details: A detailed explanation of the message short text meant for users.
- Administrator Details: Details of the identified problem meant for the help desk personnel. The end users don’t see this text.
- Cause: An end-user version of the cause of error.
- User Action: Instructions to users for addressing the identified problem. Where there is no guidance for end users, they must approach the help desk.
- Administrator Action: Corrective action that help desk personnel must take to correct the problem. This information isn’t available to the end users.
Message Types

All messages must be associated with a message type. You can select the message type based on the message severity. The available message types are:

- Error
- Warning
- Information
- UI String

Error Messages

Use the Error message to inform users about, for example, entering incorrect data or performing actions that trigger validation. Error messages also inform users how to correct the situation so that they can continue with their task.

For example: You cannot specify a task without specifying the project.

Error messages also tell users about any serious problem with the application or process, and when they must seek assistance from the help desk. Some error messages trigger incidents or logs and have a mechanism to notify the help desk automatically.

Warning Messages

Use the Warning message type to inform users about an application condition or a situation that might require their decision before they can continue.

Warning messages:

- Describe the reason for the warning and potential consequence of the selected or intended user action.
- Can be either a question or a statement.

For example: You delete the primary user. Do you want to continue?

The message is usually followed by Yes and No buttons.

Information Messages

The Information message type tells users about changes in the application, a page, or a business object. These messages aren’t triggered by users, and they don’t have to take any immediate action in response.

For example: No events have been started or processed for this employee.

Use the Information message type to communicate information that is neither an error nor a warning.

UI String Messages

Use the UI string message type to store shorter messages such as UI prompts, titles, or translated text, in the message dictionary.
Message Groups

You can group messages by severity to internally define logging and classifying incident policies. You can group by category based on the functionality or program.

Category and severity values don’t appear in logging entries, incidents, or on the UI.

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You can group messages by severity to internally define logging and classifying incident policies. You can group by category based on the functionality or program.

Category and severity values don’t appear in logging entries, incidents, or on the UI.

Note: The values in both options are predefined lookups but you can modify them. However, the maximum size of this field is 30 characters.

To group the messages, in the Setup and Maintenance work area, use the Manage Messages task.

Group by Category

Use this option to group messages that relate to one functionality, such as a scheduled process, together into one category. Select one of the predefined categories to enable automatic incident creation when the error message activates. By default, the following categories are available:

- **Product**: Issues related to product functionality, setup, and maintenance. Such messages are typically intended for functional administrators or product super users.
- **System**: Issues concerning the application, database, technology stack, and so on. Such messages are typically intended for technical users such as application administrators or database administrators.
- **Security**: Issues concerning permissions, access, compliance, passwords, and so on. Such messages are typically intended for security administrators.

Group by Severity

This grouping attribute is very specific and indicates the severity of the message. You must set the severity to High to enable automatic incident creation for the message. The following are predefined values, but you can add more if required.

- **High**: Used for serious messages that completely stop the progress of an important business process or affect a large user community, and require help desk’s attention. Use this option to enable implicit incident creation for the message.
- **Medium**: Used for less severe and more isolated messages.
- **Low**: Used when you can’t determine whether the message has a negative impact on end users or business processes.

Logging and Incidents

Select the Logging Enabled check box to include the UI message in the stored log file. To enable automatic incident creation when the error message appears on the UI, set the severity to High.

Incidents collect information about the application errors for which users may require assistance from help desk. An incident contains information about the state of the application at the time the problem occurred. Help desk can use the information in the incidents to resolve the problems.

Related Topics

- What’s an incident
- Run Diagnostic Tests
Create and Edit Messages

You can create messages or edit the predefined messages stored in the message dictionary.

Creating a Message

To create a message, perform the following steps:

1. In the Setup and Maintenance work area, go to the Manage Messages task.
2. On the Manage Messages page, click the New icon.
3. On the Create Message page, enter details in each section.
4. In the Message Properties section:
   a. Enter a unique message name that helps you find the messages you create and avoid name conflicts with predefined messages. Use underscore as a separator if the name contains multiple parts.
   b. Select the application and module to associate the message with.
   c. Enter a unique number that can be used as an identifier for the message. Users can quote this number when they contact the help desk for assistance.
   Note: You can use any number between 10,000,000 and 10,999,999. This number range is allocated for the messages you create. At runtime, this number appears along with the application code after the message text, for example FND-2774.
   d. In the Translation Notes field, enter a description of the message indicating its use.
   e. Select the relevant message type, category, and severity.
   f. Select the Logging Enabled check box to create incidents or logs when messages appear on the UI.
5. In the Message Text section:
   a. In the Short Text field, provide the actual message text that appears on the page at runtime.
      The short text can include tokens that are placeholders for displaying dynamic values at runtime. However, to support easy translation, keep the message length (including values of tokens) within 160 characters in American English.
   b. In the User Details field, enter information for the users to know why the message appeared. You can also include information for the users to resolve the issue themselves.
      If your Short Text component has tokens that expand the text beyond the 160-character limit, move that portion of text here.
   c. In the Administrator Details field, provide a detailed technical explanation of the message. This field is only visible to the help desk.
   d. In the Cause field, provide a concise explanation of why the message appears. This text is visible to the users.
      This information is optional and is only applicable to messages of type Error and Warning. However, if you mention the cause, you must mention in the User Action field the action that users must take.
   e. In the User Action field, enter the user action to guide the users with steps to respond to the message and complete the task.
   f. In the Administrator Action field, provide information that the help desk can use to resolve the problem.
6. In the Message Tokens section, define tokens that you want to use in this message.
7. Click **Save and Close**.

### Editing a Message

You can edit a predefined message or a message that you created.

To edit a message, search for a message on the Manage Messages page and perform the following steps:

1. Select the existing message and click the **Edit** icon.
2. On the Edit Message page, modify the existing details according to the instructions provided in the Creating a Message procedure.

> **Note:** Don’t edit the message number for predefined messages.

3. Click **Save and Close**.

While creating and editing messages, you can translate the message details to the preferred languages without changing the language session of the application. To specify the translations in all the enabled language rows, use the Translation Editor option. Once the updates are made, users can view the translated text for the specific details.

#### Related Topics
- Enter or Edit Translated Text

### Use of Tokens in Messages

Certain messages must display variable information at run time to help users clearly relate to the actual data and perform the required action. You can use tokens to contain variable values at run time, instead of writing a unique message for every possible situation.

Tokens are programmatic parts of message text that are placed within curly brackets when creating the message. Tokens serve as placeholders for the actual data. At run time, tokens dynamically display the actual text or value in the message, making a message specific to the situation. For example, the message "Enter an effective date that is the same as or later than *(Maturity_Date)*" contains the token *(Maturity_Date)*. At run time, instead of the token, the represented value (the actual date) appears. Thus, users see the message "Enter an effective date that is the same as or later than 25-APR-2015".

Use the Manage Messages task in the Setup and Maintenance work area to create and manage tokens. You must edit a message to define tokens for it. You can create tokens for a message and also delete them. However, you can’t edit or delete the predefined tokens.

#### Token Definition

To define a token, you must provide the following information:
- A unique name for the token.
- The type of data that the token replaces at run time. Available types are Date, Number, or Text.
- A description about what the token represents at run time.

#### Guidelines

Follow these general guidelines while defining tokens:
- Use curly brackets and all uppercase letters for the token names.
- Use underscore as a separator for a name containing two words or more.
• Don’t use a space between words.

The following table contains specific guidelines for each token data type.

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>Use tokens for substituting any variable text element that qualifies as a noun.</td>
</tr>
<tr>
<td>Number</td>
<td>Plan carefully while using tokens for numbers especially, where a token could refer to either a singular or a plural number. You can use tokens for numbers representing an order, customer, or any other business object bearing a numeric value.</td>
</tr>
<tr>
<td>Date</td>
<td>Clearly define the context of the date, such as the start date, or end date, or a date range.</td>
</tr>
</tbody>
</table>

Common Messages

Message names that begin with FND_CMN are common messages. Each common message can appear in multiple places in any product family across Oracle Applications Cloud. For example, the FND_CMN.NEW_SRCH message can be used for any search to indicate that no results were found. Common messages of type error or warning are part of the message dictionary.

Creating and Editing Common Messages

You can create common messages for use in multiple places. However, ensure that you follow the predefined naming convention and numbering series associated with the application or module.

❗ Note: Don’t use FND_CMN as the prefix for the messages you create because all the predefined common messages begin with it.

Common messages can be used in any application. Therefore, consider the ramifications if you edit any aspect of the message, including incident and logging settings. Changes would be reflected in all instances where the message is used. For example, if you change the message text, ensure that the text is generic and applies to the entire site of Oracle Applications Cloud implementation.

How can I make message components visible only to specific users?

Use the Manage Administrator Profile Values task to determine the visibility of the message components. For the Message Mode profile option, set the profile value to either User or Administrator. Based on the set value, the administrator or user actions and details appear for the intended audience.

However, the message components are visible to the audience based on their predefined access rights. Anyone having a user level access can’t view the Administrator message components. If you set the profile value to the administrators of a specific product, the message components are visible only to that specific audience.

❗ Note: If you don’t set any value to the profile option, the visibility of the message component is determined by the default profile option settings.
Define Document Sequences

Document Sequences

You can assign a document sequence number to each business document or business event to uniquely identify it. For example, you can assign a document sequence number to an invoice that gets generated in response to a purchase order. However, you must enable the document sequencing option for that business document or event to start assigning the number. A document sequence number is useful in tracking completed or failed transactions.

You can set up document sequencing in three different modes:

- Automatic
- Manual
- Gapless

**Note:** Plan your document sequencing carefully before you start applying sequence numbers. Avoid switching to a different mode after you saved your work on the Manage Document Sequences and Manage Document Sequence Categories pages.

Automatic Sequencing

Automatic document sequencing assigns a unique number to each document automatically when the document is generated. That unique number is stored in the database. You can set an initial value for the numbering sequence. Thereafter, the numbering is sequential by date and time of creation. If you don't provide an initial value, the application sets the default initial value as 1.

Manual Sequencing

Use the manual sequencing mode to assign a unique number to each document before the document is generated. In manual sequencing, the numeric ordering and completeness of a transaction isn't automatically enforced. As a result, users can skip or omit numbers when entering the sequence value. However, each time a user assigns a number, the application validates its uniqueness.

Gapless Sequencing

Gapless sequencing is similar to automatic sequencing. It automatically generates a unique number for each document, but does that only for successfully generated documents. Sequence numbers aren't assigned to incomplete or failed documents. As a result, the sequence is maintained for all the successfully generated documents.

Additionally, you can control the gapless document sequencing by enforcing the Transaction Date Validation option. When enabled, this option checks for the transaction date of a particular document and assigns the sequence number accordingly, to chronologically maintain the documents. The sequence numbers and the transaction dates are chronologically correlated to prevent any mismatch of a new document sequence assigned to an older document or an older document sequence assigned to a new document.

**Note:** Use this type of sequencing only if necessary because it may affect the performance of the application and slow down transaction processing.
Document Sequence Categories

A document sequence category is a set of documents that share similar characteristics and that are formed into a logical group. Document sequence categories simplify the task of assigning number sequences to specific documents. Instead of assigning a number to each document, you assign a document sequence to one or more document sequence categories. The document sequence category automatically takes care of numbering the documents.

A document sequence category identifies the database table that stores documents resulting from transactions that your users enter. When you assign a sequence to a category, the sequence numbers the documents that are stored in a particular table. You must create document sequence categories to be able to manage the task of assigning document sequences.

⚠️ Note: Once a document sequence category is created, you can’t change the application, the category code, or the table name. Therefore, carefully consider these details and plan your document sequencing requirement before you begin working with the application.

Once you create a document sequence category, it’s available for use in the Document Sequences: Assignments section on the Manage Document Sequences page. The Category field contains the name of the document sequence category. After you create a document sequence, you can assign it to a document sequence category.

Guidelines for Managing Document Sequences

Sequencing documents is an important business and legal requirement. Therefore, you must first decide the appropriate document sequence to use for a set of documents. Before you begin, here are a few prerequisites:

- Determine beforehand the mode of document sequencing, because you can’t switch to other types once a sequence is in use.
- Note details such as the document sequence and document sequence category, for later reference.
- Identify if there are any restrictions or configuration prerequisites.

⚠️ Note: Products that implement document sequencing have specifications about its usage. Refer to the corresponding product documentation for specific details and also to determine if there are any restrictions or configuration prerequisites.

Creating and Editing Document Sequences

You can create document sequences that are automatic, manual, or gapless, depending on the business or legal requirement. By default, the current date is considered as the start date. The sequence definition never expires if you don’t provide an end date. Among the several options used in creating and editing document sequences, the following options are functionally more important and therefore must be carefully determined:

- Determinant Type: Select to limit the document sequencing activity to certain documents that belong to a specific business entity, such as Ledger, Tax Registration, and so on.
- Initial Value: Enter a value for the first document in your sequence. This field applies only to sequences with automatic or gapless numbering types. Sequence numbers must not be greater than eight digits. If you leave this
field blank, the first document is automatically assigned a value of 1. Once a document sequence is defined, you can’t change this initial value.

Creating and Editing Document Sequence Categories

Document sequence categories are defined to make it easy to assign document sequence definitions to a group of documents instead of to individual documents. Each document sequence category is mapped to a specific table, where the documents belonging to that category are stored. When specifying the table, you must consider the following points:

- When the sequential numbering feature checks for completeness or generates a report, it locates the category’s documents in the table.
- Select only those tables that belong to the application associated with the category.
- Once a category is defined, you can’t switch to another table.

Assigning Document Sequences

Identify the documents to be numbered before assigning them a document sequence. For each document sequence, there can be only one active assignment to a document sequence category, and a determinant value (if applicable). As part of the assignment, specify whether the document is created automatically (for example, due to a batch process, or manually through a form). If you don’t specify an end date, the assignment continues to remain active throughout the process cycle. If a determinant type was specified for the document sequence, then enter a specific determinant value related to the determinant type.

At run time, when users create documents, the document sequence to be assigned is determined based on the following:

- An active assignment that matches the correct combination of category
- The numbering method
- The date range containing the transaction date

Auditing Document Sequences

You can audit document sequences, if required, to provide an audit trail of the document sequences used in a specific product. However, before enabling the audit functionality for a document sequence, you must have created an audit table for the specific document sequence, using appropriate details. Enabling the audit functionality is permitted only for newly created document sequences. You can’t audit document sequences that are already in use by a specific product.

For more information about defining a document sequence audit table, see the Oracle Fusion Applications Developer's Guide.

Related Topics

- Guidelines for Managing Modules in Application Taxonomy

Define Profile Options

Overview of Profile Options

Profile options are a set of preferences that you use to centrally manage the user interface settings and application behavior.

You can use the profile options to manage, for example:

- User preferences to specify language or currency.
• Configuration choices to change the user interface skin or appearance of fonts.
• Processing options to determine how much of an activity needs to be logged and at which level.

In the Setup and Maintenance work area, use any of the following tasks:

• Manage Profile Options
• Manage Profile Categories
• Manage Administrator Profile Values

The following table contains a functional description of each task.

<table>
<thead>
<tr>
<th>Task Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Profile Options</td>
<td>Create new profile options or modify existing profile options, except some which are predefined and restricted to prevent any modifications.</td>
</tr>
<tr>
<td>Manage Profile Categories</td>
<td>Group the profile options based on their functional similarities.</td>
</tr>
<tr>
<td>Manage Administrator Profile Values</td>
<td>Set the profile values for the enabled profile options to control application behavior.</td>
</tr>
</tbody>
</table>

Hierarchy in Profile Levels

The hierarchy in profile levels determines the context for making a profile option effective.

You can enable a profile option at the following levels:

• Site level (lowest): The entire site of deployment
• User level (highest): A specific user

After you create or edit a profile option on the Manage Profile Options page, you must enable it. You can enable it at multiple levels. The setting at the highest enabled level takes precedence over the lower levels. User level is the highest in the hierarchy and always takes precedence over the settings at the site level.

On the Manage Administrative Profile Values page, set the profile value at any of the enabled levels of the profile option.

Example of Profile Option Hierarchy

The following table shows an example of setting the currency profile option at different levels.

<table>
<thead>
<tr>
<th>Profile Level</th>
<th>Hierarchy</th>
<th>Currency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site</td>
<td>Lowest</td>
<td>Euro</td>
</tr>
<tr>
<td>User</td>
<td>Highest</td>
<td>US Dollar</td>
</tr>
</tbody>
</table>

For this example, there are two users, John and Lisa. For John, the user-level profile value currency is set to US Dollar. If the Currency profile option is enabled only at the site level, both John and Lisa would see Euro as the default currency. If the profile option is enabled at the user level, users having a different currency set as their currency profile value would see only that currency. In this case, John would see US Dollar as the default currency. If the Currency profile option is enabled at the
user level and there is no user level currency defined, the site level setting takes effect. When both site and user levels are enabled, the value for the user level takes precedence over the site level value.

Set Profile Option Values

Each profile option contains specific values that determine how it affects the application. You can add or modify the values for each profile option. Select or enter the value for one or more of the available levels (site, product, and user) so that each setting takes effect at the intended level.

Setting the Profile Value

1. In the Setup and Maintenance work area, go to the Manage Administrator Profile Values task.
2. On the Manage Administrator Profile Values page, search for and select the profile option.
3. In the Profile Values section, click Add. A new row is added for you to specify the following conditions:
   - Profile Level: Specify the level at which the profile value is to be set. If the profile value applies to the entire site, select Site.
   - Product Name: If you select Product as the profile level, select a product and specify the associated profile value.
   - User Name: If you select User as the profile level, select the user name and specify the associated profile value.
   - Profile Value: Select or enter the value corresponding to the selected profile level.

   **Note:** For an existing entry, you can modify only the profile value.

4. Repeat step 3 to add more rows and set the profile values.
5. Click Save and Close.

   **Note:** Changes in the profile values take effect for a user on the next sign in.

Import Profile Values

Use the Import option on the Manage Administrator Profile Values page to import profile values in bulk and associate them with a profile option.

Prerequisite

The file containing the profile values is available in the document repository of Oracle WebCenter Content.

Importing Profile Values

To import profile values:

1. In the Setup and Maintenance work area, go to the Manage Administrator Profile Values task.
2. In the Profile Option: Profile Values section, from the Actions menu, select Import.
3. On the Import User Profile Values dialog box, select the WebCenter Content account to which the file was uploaded.
4. Enter the name of the file containing the profile values. The name here must match with the name of the file uploaded to the selected account.
5. Click Upload. The profile values are imported.
Note: If the import fails, click the link to the log file on the confirmation dialog box and examine the cause of failure.

File Format for Importing Profile Values

To import profile option values into the application, you create a text file with the values and upload the file to the Oracle WebCenter Content document repository. The file must follow a specific format, as described here. After the file is in the document repository, you can then import the profile values into the application following the instructions in the Importing Profile Option Values: Procedure topic.

To create a file containing the profile values, include the following headers:

- **ProfileOptionCode**: The profile option code.
- **LevelName**: Must contain the value (Site, Product, or User).
- **UserName**: Must correspond to the registered user name in the application. Don’t provide any other shortened or coded name of the user.
- **ProfileOptionValue**: The profile value to be imported.

While creating the file, adhere to the following guidelines:

- Use a vertical bar or pipe (|) as a delimiter between fields for both header and value rows.
- Set the file encoding to UTF-8 without the Byte Order Mark (BOM), as per the Oracle WebCenter Content specification.

Here’s a sample file that contains the header values at the beginning of the file, followed by line entries of the two profile values that are to be imported. For importing several profile values, add more line entries in a similar format.

```
ProfileOptionCode|LevelName|UserName|ProfileOptionValue
AFLOG_BUFFER_MODE|USER|APP_IMPL_CONSULTANT|TEST
AFLOG_LEVEL|USER|APPLICATION_DEVELOPER|FINEST
```

**Related Topics**

- Overview of Files for Import and Export
- Guidelines for File Import and Export
- Upload Files to WebCenter Content Server

Create and Edit Profile Options

Use profile options to manage user preferences and control the general function of applications. For example, you can control user preferences involving language, date, time, currency, and other similar general settings.

You can create a profile option and also determine the level at which that profile option takes effect. You can also define the profile values for the profile option. The profile values appear on the Manage Administrator Profile Values page when you select the profile option.
Creating a Profile Option

1. In the Setup and Maintenance work area, go to the Manage Profile Options task.
2. On the page, click Actions > New.
3. On the Create Profile Option page, fill all the fields with relevant details with specific attention to the following:
   - Use the SQL Validation field to provide an SQL statement that displays the permissible profile values to be used. Using an SQL statement, you can select the values from another table and display them as a list of values.
     
     For example, to display the values Yes and No from a lookup table, you can use the following SQL statement:

     ```sql
     select MEANING, LOOKUP_CODE from FND_LOOKUPS where LOOKUP_TYPE='YES_NO'
     ```

     As a result, on the Manage Administrator Profile Values page, the profile values Yes and No are available for selection for that profile option.

   - You can specify a date range to keep the profile option active during that period. Beyond the specified duration, the profile option automatically becomes inactive. If you no longer require the profile option, you must manually delete it from the Manage Profile Options page.
4. Click Save and Close.
5. On the Manage Profile Options page, search for the newly created profile option and from the results, select it.
6. In the Profile Option Levels section, do the following:
   - In Enabled, select the levels at which you want to enable the profile option.
     
     **Note:** You can enable a profile option at multiple levels, but a higher-level profile value overrides a lower-level value. Therefore, enable them only at the required levels.
   - In Updatable, select the profile level at which you want implementors to have update privileges. Leave the check box deselected if you don't want the implementors to modify the profile values (they appear in read-only mode).

7. Click Save and Close.

To edit a profile option that you created, search for it and edit the necessary details.

**Note:** While creating and editing profile options and profile categories, you can translate the details to the preferred languages without changing the language session of the application. To specify the translations in all the enabled language rows, use the Translation Editor option. Once the updates are made, users can view the translated text for the specific details.

**Related Topics**
- Enter or Edit Translated Text

Profile Categories

You can create profile categories to group profile options based on their functional similarities and their use. In the Setup and Maintenance work area, use the Manage Profile Categories task.
Profile categories help administrators or implementors in retrieving profile options using a search criterion on the Manage Administrator Profile Values page.

Managing Profile Categories

Consider the following options while managing profile categories:

- Create profile categories and add existing profile options to them
- Add newly created profile options to existing user-defined profile categories

Note: While you can add a profile option to more than one category, some profile categories are predefined and restricted from any modifications. So, you can't edit them or add profile options to them.

Setting Display Sequence for the Profile Options

You must set the display sequence for each profile option that you add to a profile category. Display sequence determines the order in which the profile options appear in a search result, based on the profile category. You can set the sequence beginning with zero or one for the first profile option to display, and proceed sequentially to assign the values to the remaining profile options.

The following table demonstrates the effect of the display sequence on the profile options when they're retrieved as search results.

<table>
<thead>
<tr>
<th>Profile Category</th>
<th>Included Profile Option - Assigned Display Sequence</th>
<th>Display Sequence of Profile Options in the Search Results</th>
</tr>
</thead>
</table>
| Attachments      | • Attachment File Directory - 2  
                   • Indicate Attachments - 1 | 1. Indicate Attachments  
                                              2. Attachment File Directory |

How can I access predefined profile options?

Search for predefined profile options using the Manage Profile Options task.

1. In the Setup and Maintenance work area, go to the Manage Profile Options task.
2. On the page, enter any of the search parameters and click Search.

Tip: If you don’t know the profile option code or the display name, use the Application or Module fields to filter search results.

3. Click a profile option to view its details.

Define Attachments

Attachments

You can use attachments to provide supplementary information to specific business objects. Attachments can be URLs, desktop files, text, or repository folders. For a business object you may view, create, delete, or edit attachments, depending...
on your role and granted privileges. For more information on attachments, see the Oracle Fusion Applications Developer’s Guide.

**Repository**
Attachments are stored in a content management repository provided by Oracle WebCenter Content Server. Users managing attachments can’t interact with the repository unless the repository mode is enabled. When enabled, users can share attachments among objects, update attachments, and perform other tasks. Access to the attachment files is controlled by a digital signing mechanism.

**Security**
Data security applicable to a specific business object also applies to its attachments. For example, if a user has no access to a specific expense report, then that user can’t access its attachments. You can also use attachment categories to control access and actions on attachments, based on roles associated with that category. For more information on securing attachments, see the Oracle Fusion Applications Developer’s Guide.

**Attachment Entities**
An attachment entity is usually a database entity, for example a table or view, that represents a business object with which attachments can be associated. Each attachment UI must be defined with a corresponding attachment entity. Attachment entities are used only in the context of attachments and exist separately from the database entities that they’re based on.

In the Setup and Maintenance work area, use the Manage Attachment Entities task to edit and create attachment entities. You can either use the predefined attachment entities with attachment UIs or create entities, for example when developing your own UIs.

The entity name should match the name of the table or view that represents the business object used for attachment. The name is also used in the repository folder that is automatically created to store attachments for the entity.

The data security policies associated with the database resource defined for the attachment entity apply to attachments for that entity. However, the security setting must be enabled for that entity. The database resource value must match the value in the OBJ_NAME column in the FND_OBJECTS table for the business object that the entity represents.

**Related Topics**
- Modules in Application Taxonomy
- How Database Resources and Data Security Policies Work Together

**How Attachment Entities and Attachment Categories Work Together**
The association between attachment entities and categories determines the use of categories for an entity. For example, categories associated with the expense report attachment entity are available in the attachment UIs for expense reports. You can configure the associations when managing either entities or categories. Between the Manage Attachment Entities and Manage Attachment Categories pages, any change in association on one page automatically reflects on the other page. You can open either page by starting in the Setup and Maintenance work area and searching for the attachment tasks.

**Managing Entities**
On the Manage Attachment Entities page, you determine which attachment categories are relevant to a particular entity. Each entity must have at least one category. For a particular expense report page with attachments functionality, you can
specify which category to use for the attachment. Accordingly, the data security defined for each category is applied to the attachments on that page if security is enabled.

Managing Categories

If you create an attachment category and must assign it to multiple attachment entities, use the Manage Attachment Categories page. The association is the same as that on the Manage Attachment Entities page.

Attachments Troubleshooting

Attachments UIs are very user-friendly and easy to work with. You may encounter issues in certain cases such as you modify the attachments, for example create additional attachment categories, or implement data security on them.

Issue: Can't View, Add, Update, or Delete Attachments

You may encounter the following issues when trying to view attachments or perform actions such as adding attachments.

- You can no longer see specific attachments that were earlier visible.
- You can no longer update or delete attachments.
- You get an error stating that you don’t have permission to add attachments.

Resolution

Use the Manage Attachment Entities page to ensure that attachment categories are associated to the relevant attachment entity. You might need to check with your system administrator or help desk to determine the exact entity used on the page with the expenses attachments or what categories to assign.

If data security is implemented on the categories for the attachment entity, verify that the Enable Security check box is selected in the Manage Attachment Entities page for that entity. Also, make sure that users have a role that has the necessary privileges. The following table lists the privileges required to view, add, update, or delete attachments with a specific attachment category.

<table>
<thead>
<tr>
<th>Action</th>
<th>Privilege</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Read Application Attachment (FND_READ_APPLICATION_ATTACHMENT_DATA)</td>
</tr>
<tr>
<td>Add or Update</td>
<td>Update Application Attachment (FND_UPDATE_APPLICATION_ATTACHMENT_DATA)</td>
</tr>
<tr>
<td>Delete</td>
<td>Delete Application Attachment (FND_DELETE_APPLICATION_ATTACHMENT_DATA)</td>
</tr>
</tbody>
</table>

For example, if users have the Read Application Attachment privilege for all categories associated with the expense report attachment entity, except the Receipts attachment category, then they can view all expense report attachments except those created with the Receipts category. Likewise, if users don’t have the Update Application Attachment privilege for any attachment categories tied to the expense report attachment entity, then they can’t create any attachments for the expense reports.

For more information on attachment category data security, see the Oracle Fusion Applications Developer’s Guide.

Certain attachments UI have predefined restrictions for users on categories. Your developers can also introduce additional filters to determine which document categories are available for a specific page. Check with your developers or help desk.
Issue: Missing Attachment Category

You can view existing attachments but the attachments no longer have an attachment category associated with them.

Resolution

When the attachment was added, at least one category existed for the corresponding attachment entity. Since then, the entity was edited so that it no longer has any assigned categories, so the user can’t see the category associated with that attachment.

Use the Manage Attachment Entities page to reassign attachment categories to the relevant attachment entity. For example, if users can no longer see the Receipts attachment category for an attachment to an expense report, then search for the expense report attachment entity and assign to it the Receipts category. You may need to check with your system administrator or help desk to determine the exact entity used on the page with the expenses attachments or any additional categories to assign.

Certain attachments UI have predefined restrictions for users on categories. Your developers can also introduce additional filters to determine which document categories are available for a specific page. Check with your developers or help desk.

FAQs for Define Attachments

What’s an attachment category?

You must use an attachment category to classify and secure an attachment. While adding attachments, you can view the available attachment categories and add the attachment to one of them. For example, attachments for an expense report can be categorized as receipts, scanned invoice images, and so on.

In the Setup and Maintenance work area, use the Manage Attachment Categories task. You can associate roles with categories to restrict user access and actions for an attachment entity. You can also create and manage categories for your own purpose, involving specific attachments with specific security requirements. For more information on attachment category data security, see the Oracle Fusion Applications Developer’s Guide.

Related Topics

- Modules in Application Taxonomy
Trees Setup

Overview

Trees are hierarchical data models that you can use to organize data, apply business rules, control data access, and improve performance while querying. For example, an application maintains data of an organization called Vision Corporation that has two departments: Marketing and Finance. The Finance department has two functional divisions: Receivables and Payables. You can define a tree for Vision Corporation to establish a hierarchy across its departments, and their respective functional divisions. You can use the hierarchy to manage data at various levels of the organization.

To work with trees, in the Setup and Maintenance work area, use any of the following tasks:

- Manage Tree Structures: To create and update tree structures. You must first define a tree structure to create a tree.
- Manage Trees and Tree Versions: To create and update trees and their versions.
- Manage Tree Labels: To create and update tree labels.

Tree Structures

As the name suggests, tree structures provide you the framework to organize data such that you can establish a hierarchy for use by the tree. So, similar to a template, a tree structure guides the creation of a tree.

Tree

A tree is an instance of the tree structure. The root node is the highest nodal point of a tree. Child nodes branch off from the root node. Child nodes at the same level, branching off from a common parent node, are called siblings. Leaves are details branching off from a node but not extending further down the tree hierarchy. You can create trees for multiple data sources and share them across applications.

Tree Versions

A tree by default has only one version. If required, you can create and maintain more than one editable tree version. At any point, only one tree version must be active. If you edit an existing version, it changes from active to draft. To use it again, you must set it to active. Similar to any other version control system, versions of trees are maintained to track all the changes that a tree undergoes in its life cycle.

Tree Labels

Tree labels are short names given to trees and tree structures. You can label the tree versions for better accessibility and information retrieval. When nodes are created in a tree, the existing tree labels are automatically assigned to the new tree nodes. You can use any table to store the labels and register the label data source with the tree structure.
Manage Tree Structures

Tree Structures
A tree structure defines the hierarchy for creating trees and prescribes rules based on which trees are created, versioned, and accessed. You can associate multiple data sources with a tree structure. A tree is an instance of this hierarchy. Every tree structure can contain one or more trees.

You can create tree structures specific to an application but you can share tree structures across applications. If you apply version control to the tree structure, it’s carried over to the trees that are based on the tree structure. Each tree version contains at least one root node. Occasionally, a tree version may have more than one root node.

An administrator controls the access to tree structures through a set of rules that are periodically audited for validity.

Guidelines for Defining the Tree Structure
While creating a tree structure, you must specify important details on the Create Tree Structure: Specify Definition page. As the source of the tree structure, you may either select the predefined tree structures and proceed with the definition or create tree structures.

Tree Node Selection
The data in Tree Node table maps to the data in nodes of the tree structure. You must select the correct and most appropriate tree node table to define the tree structure, based on which you establish the tree hierarchy. This selection also affects the level of security that is set on a tree node and its child entities.

Tree Sharing Mode
Use the following options to determine the mode of sharing a tree structure across the applications.

- Open: Indicates that the tree is associated with all reference data sets.
- Set ID: Indicates that the tree is associated with a specific reference data set.

Modification
You can modify the predefined tree structures as well as those you create. However, modifying a predefined tree structure is restricted and permitted through additional privileges. Modification is limited to specific tree nodes and lower in the tree hierarchy.

Multiple Tree Versions
Although multiple tree versions can exist together, Oracle recommends only one version be active at any given time. However, if required, you can have more tree versions to be in the active state for the same date range. You can use this flexibility to select the tree version you want to implement.

Guidelines for Managing Tree Structures
You can create, edit, and delete tree structures. You can also change the status of a tree structure and audit the changes.
Creating and Editing Tree Structures

When you edit an active tree structure, the status of the tree structure and all associated trees and their versions changes to draft. To reuse a tree structure, create a copy of the tree without copying the associated trees and tree versions. After making changes, set the status again to active. If you delete a tree structure, all the associated trees and tree versions are automatically deleted.

For information about working with the offering-specific predefined tree structures, refer to the relevant product documentation.

Status

When you change the status of a tree structure, the status of the trees and tree versions associated with that tree structure also changes.

The following table lists the different statuses of a tree structure.

<table>
<thead>
<tr>
<th>Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft</td>
<td>In a modified state, or not yet in use.</td>
</tr>
<tr>
<td>Active</td>
<td>In use, indicating that one or more trees or tree versions are created from the tree structure.</td>
</tr>
<tr>
<td>Inactive</td>
<td>Not in use.</td>
</tr>
</tbody>
</table>

Tree Structure Audit Results

Use the tree structure audit results to verify the tree structure's correctness and data integrity. The audit results include the following details:

- The name of the validator, which is a specific validation check
- The result of the validation, including a detailed message
- Corrective actions to take if there are any validation errors

Running an Audit

Setting the status of a tree structure to active automatically triggers an audit of that tree structure. To manually trigger an audit, select Audit from the Actions menu on the Manage Tree Structures page. The Tree Structure Audit Result table shows a list of validations that ran against the selected tree structure.

Audit Validators

The following table lists the validators used in the audit process and describes what each validator checks for. It also lists possible causes for validation errors and suggests corrective actions.

<table>
<thead>
<tr>
<th>Validator</th>
<th>Page</th>
<th>Description (what's validated)</th>
<th>Possible Cause for Validation Failure</th>
<th>Suggested Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrict By Set ID</td>
<td>Manage Tree Structures: Specify Data Sources</td>
<td>If you select the Reference Data Set</td>
<td>Even when the checkbox is selected, one or more data source view</td>
<td>If reference data set restriction is required for this tree structure,</td>
</tr>
<tr>
<td>Validator</td>
<td>Page</td>
<td>Description (what’s validated)</td>
<td>Possible Cause for Validation Failure</td>
<td>Suggested Corrective Action</td>
</tr>
<tr>
<td>-----------</td>
<td>------</td>
<td>---------------------------------</td>
<td>--------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>check box for the <strong>Restrict Tree Node List of Values Based on</strong> option, each of its data source view objects must have a reference data set attribute.</td>
<td></td>
<td></td>
<td>objects doesn’t contain a reference data set attribute.</td>
<td>include a reference data set attribute on all data sources. Otherwise, deselect the check box.</td>
</tr>
</tbody>
</table>

**Available Label Data Sources**

Manage Tree Structures: Specify Data Sources

If you select a list item from **Labeling Scheme** to specify a labeling scheme, the label data source view object specified for each data source must be accessible. Also, the primary keys must be valid. This restriction doesn’t apply if you select **None** from the list.

- Any of the specified label data source view objects doesn’t exist.
- Any of the specified label data source view objects doesn’t have primary keys.
- When a label data source view object is initially defined, the database registers the primary keys for the view object. If the view object is later modified such that its primary keys no longer match the primary keys that were registered earlier, this validation fails.

- Correct the specified label data source view object.
- Correct the primary keys of the specified label data source view object.
- Do one of the following:
  - Correct the primary keys in the label data source view object to match the primary keys that were earlier registered in **FND_TS_DATA_SOURCE**.
  - Correct the primary keys registered in that table to match the new view object definition.

**Row Flattened Table Name**

Manage Tree Structures: Specify Performance Options

You must specify a valid row flattened table for the tree structure. It can either be the standard row flattened table **FND_TREE_NODE_RF** or another table.

- The specified table doesn’t exist in the database.
- The specified table doesn’t contain the same columns as the **FND_TREE_NODE_RF** table.

- Correct the row flattened table definition.

**Available Data Sources**

Add Data Source

Each data source view object specified for the tree structure must be accessible, and all its primary key attributes must be valid.

- Any of the specified data source view objects doesn’t exist.
- When you define a data source view object, keep the **Use non-defined** option selected.

- Correct the specified data source view object.
- Correct the duplicate column in the registered primary keys.
### Validator

<table>
<thead>
<tr>
<th>Description (what’s validated)</th>
<th>Possible Cause for Validation Failure</th>
<th>Suggested Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>primary key columns</strong> check box deselected.</td>
<td>The database automatically registers the primary keys for the view object. Select this check box if you want the database to register the primary keys you specify. However, if the registered primary keys contain any duplicates, this validation fails.</td>
<td>• Correct the primary keys of the specified data source view object. • Correct any mismatch in data types.</td>
</tr>
<tr>
<td><strong>Use non-defined primary key columns</strong> check box is selected in a data source, but the list of specified primary key columns doesn’t match the primary keys defined in the corresponding data source view object.</td>
<td>Any common attribute that exists in both the data source view object and the tree node view object isn’t of the same data type in both view objects.</td>
<td></td>
</tr>
<tr>
<td>The specified table doesn’t exist in the database.</td>
<td>The specified table doesn’t contain the same columns as the <code>FND_TREE_NODE_CF</code> table.</td>
<td>Correct the column flattened table definition.</td>
</tr>
<tr>
<td>The specified table doesn’t exist in the database.</td>
<td>The specified table doesn’t contain the same columns as the <code>FND_TREE_NODE_CF</code> table.</td>
<td></td>
</tr>
</tbody>
</table>
Tree Nodes

Tree nodes are points of data convergence where a tree branches into levels. Nodes are the building blocks of a tree structure and are attached to tree versions. Whenever you create or edit a tree version, you need to specify its tree node.

In the Setup and Maintenance work area, open the panel tab and click Search to search for the Manage Trees and Tree Versions task.

Managing Tree Nodes

You can create, modify, or delete tree nodes on the Tree Version: Specify Nodes page. To add a tree node, ensure that the tree structure with which the tree version is associated is mapped to a valid data source. You can also duplicate a tree node if the multiple root node feature is enabled.

Node Levels

Usually, the nodes at a particular level represent similar information. For example, in a tree that reflects the organizational hierarchy, all nodes representing divisions appear at one level and all the department nodes on another. Similarly, in a tree that organizes a user's product catalog, the nodes representing individual products might appear at one level and the nodes representing product lines on the immediate higher level.

The following node levels are in use:

- Root node: The highest node in the tree structure
- Parent node: The node that branches off into other nodes
- Child node: The node that is connected to a node higher in hierarchy (parent node)
- Sibling node: Nodes that are at the same level and belong to the same parent node
- Leaf node: Entities branching off from a node but not extending further down the tree hierarchy

Node Types

A tree node has the following node types.

- Single: Indicates that the node is a value by itself.

<table>
<thead>
<tr>
<th>Validator</th>
<th>Page Description (what’s validated)</th>
<th>Possible Cause for Validation Failure</th>
<th>Suggested Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Node Table Name</td>
<td>Manage Tree Structures: Specify Definition</td>
<td>You must specify a valid tree node table for the tree structure. It can either be the standard row flattened table FND_TREE_NODE or another table.</td>
<td>• No table is specified in the Tree Node Table field. • The specified table doesn’t exist in the database. • The specified table doesn’t contain the same columns as the FND_TREE_NODE table.</td>
</tr>
</tbody>
</table>
• Range: Indicates that the node represents a range of values and possibly could have many children. For example, a tree node representing account numbers 10000 to 99999.
• Referenced Tree: Indicates that the tree node is actually another version for the tree based on the same tree structure, which isn’t physically stored in the same tree. For example, a geographic hierarchy for the United States can be referenced in a World geographic hierarchy.

How Trees and Data Sources Work Together

Data sources are the foundation of tree management. Tree structures, trees, and tree versions establish direct and real-time connectivity with the data sources. Changes to the data sources immediately reflect on the Manage Trees and Tree Versions page and wherever the trees are being used.

Metadata and Data Storage

Tree structures contain the metadata of the actual data and the core business rules that manifest in trees and tree versions. You can select and enable a subset of trees to fulfill a specific purpose in that application.

Access Control

Source data is mapped to tree nodes at different levels in the database. Therefore, the changes you make to the tree nodes affect the source data. Access control set on trees prevents unwanted data modifications in the database. Access control can be applied to the tree nodes or anywhere in the tree hierarchy.

Guidelines for Specifying Data Sources for Tree Structures

The data sources provide the items for establishing hierarchy in a tree structure. In the tree management infrastructure, these data sources are Oracle ADF business components view objects, which are defined by application development.

Labeling Schemes

Selecting a labeling scheme determines how the tree nodes are labeled. You may select a labeling scheme to assign at the data source level, at the parent node level, or keep it open for customers assignment. You may also choose not to have any labeling scheme. However, if you decide to use any of the labeling schemes, select the following additional options, to restrict the list of values that appear in the selected tree node.

• Allow Ragged Nodes: To include nodes that have no child nodes, and are shorter than the remaining nodes in the entire hierarchy.
• Allow Skip Level Nodes: To include nodes that are at the same level but have parent nodes at different levels.

Restriction of Tree Node Values

You can decide the depth of the tree structure by selecting an appropriate value from the list. Keeping the depth limit open renders an infinite list of values.

Using the following options, you can restrict the list of values that appear for selection in a specific tree node.

• Date Range: Specifies whether a selection of nodes should be restricted to the same date range as the tree version.
• Allow Multiple Root Nodes: Allows you to add multiple root nodes when creating a tree version.
• Reference Data Set: Specifies whether a selection of nodes should be restricted to the same set as the tree.
Data Source Values and Parameters

Tree data sources have optional data source parameters with defined view criteria and associated bind variables. You can specify view criteria as a data source parameter when creating a tree structure, and edit the parameters when creating a tree. Multiple data sources can be associated with a tree structure and can have well-defined relationships among them.

**Note:** Parameter values modified at the tree level override the default values specified at the tree-structure level.

The data source parameters are applied to any tree version belonging to that data source, when performing node operations on the tree nodes. Data source parameters also provide an additional level of filtering for different tree structures. The tree structure definition supports three data source parameter types.

- **Bound Value:** Captures any fixed value, which is used as part of the view criteria condition.
- **Variable:** Captures and binds a dynamic value that is being used by the data source view object. This value is used by the WHERE condition of the data flow.
- **View Criteria:** Captures the view criteria name, which is applied to the data source view object.

You can also specify which of the data source parameters are mandatory while creating or editing the tree structure.

View objects from the Oracle ADF business components are used as data sources. To associate the view object with the tree structure, you can pick the code from Oracle ADF business component view objects and provide the fully qualified name of the view object, for example, `oracle.apps.fnd.appcore.trees.model.view.FndLabelVO`.

Guidelines for Improving the Performance of a Tree Structure

Tree structures are heavily loaded with data. As a tree management guideline, use the following settings to improve performance of data rendering and retrieval.

- **Row Flattening**
- **Column Flattening**
- **Column Flattened Entity Objects**
- **BI View Objects**

**Row Flattening**

Row flattening optimizes parent-child information for run-time performance by storing additional rows in a table for instantly finding all descendants of a parent without initiating a CONNECT BY query. Row flattening eliminates recursive queries, which allows operations to perform across an entire subtree more efficiently.

To store row flattened data for the specific tree structure, users can either use the central `FND_TREE_NODE_RF` table or they can register their own row flattened table. For example, in a table, if Corporation is the parent of Sales Division (Corporation-Sales Division), and Sales Division is the parent of Region (Sales Division-Region), a row-flattened table contains an additional row with Corporation directly being the parent of Region (Corporation-Region).

**Column Flattening**

Column flattening optimizes parent-child information for runtime performance by storing an additional column in a table for all parents of a child.

To store column flattened data for the specific tree structure, users can either use the central `FND_TREE_NODE_CF` table or they can register their own column flattened table. For example, in a table, if Corporation is the parent of Sales Division (Corporation-Sales Division), and Sales Division is the parent of Region (Sales Division-Region), a flattened table in addition
to these columns, contains three new columns: Region, Sales Division, and Corporation. Although positioned next to each other, the column Region functions at the lower level and Corporation at the higher level, retaining the data hierarchy.

**Column Flattened Entity Object**

In the absence of a column-flattened table, if you need to generate the business component view objects for your tree structure for the flattened table, use the tree management infrastructure to correctly provide the fully qualified name of the entity object for the column flattened table.

**BI View Object**

View objects from Business Intelligence can be used as data sources, eliminating the need to create new types of data sources. This field is to store the fully qualified name for the BI view object generated by the tree management for business intelligence reporting and usage. The BI view object is a combination of the tree data source and column flattened entity. Using this option prevents data redundancy and promotes greater reuse of existing data, thereby improving the performance of the tree structure.

**Search View Object**

Specify the full name of the view object for the tree node to ensure that search operations performed on the tree node are efficient.

## Manage Tree Labels

### Tree Labels

Tree labels are tags that are stored on tree nodes. You can store labels in any table and register the label data source with the tree structure. When a labeling scheme is used for trees, the selected labels are stored in the tree label entity, and each tree node contains a reference to a tree label in the labeling scheme.

The following table lists the three ways in which tree labels are assigned to the tree nodes.

<table>
<thead>
<tr>
<th>Labeling Scheme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level</strong></td>
<td>Labels that are automatically assigned based on the data source to which the tree node belongs. A level label points to a specific data source. For example, in a tree that reflects the organizational hierarchy of an enterprise, all division nodes appear on one level and all department nodes on another.</td>
</tr>
<tr>
<td><strong>Group</strong></td>
<td>Labels that you can arbitrarily assign to tree nodes.</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>Labels that are automatically assigned based on the depth of the tree node within the tree. No manual assignment is performed.</td>
</tr>
</tbody>
</table>

*Note:* In an unbalanced hierarchy, a level may not be equal to depth.
Manage Trees and Tree Versions

Guidelines for Managing Trees and Tree Versions

You can create and edit trees and tree versions depending upon the requirement. A tree can have one or more tree versions. When changes are made to an existing tree, a new version is created and published.

Creating and Editing Trees

Trees are created based on the structure defined in the tree structure. You can create trees, modify existing trees, and delete trees. If you want to copy an existing tree, you can duplicate it. You can also select and copy the associated tree versions.

Creating a tree involves specifying the tree definition and specifying the labels that are used on its nodes. If the selected tree structure has data sources and parameters defined for it, they appear on the page allowing you to edit the parameter values at the tree node level.

Note: Parameter values modified at the tree level will override the default values specified at the tree-structure level.

Creating and Editing Tree Versions

Tree versions are created at the time of creating trees. Each tree must contain a version.

Editing an existing tree provides you with the option of updating the existing version. You can also edit the existing version that lies nested in the tree in the search results.

When you edit a tree version bearing Active status, the status changes to Draft until the modifications are saved or canceled. To edit a tree version while keeping the status active select the Update tree nodes while keeping the tree version active Check Box.

Tree Version Audit Results

Use the tree version audit results to verify the tree version’s correctness and data integrity. The audit results include the following details:

- The name of the validator, which is a specific validation check
- The result of the validation, including a detailed message
- Corrective actions to take if there are any validation errors

Running an Audit

An audit automatically runs whenever a tree version is set to active. You can also manually trigger an audit on the Manage Trees and Tree Versions page, using Actions > Audit. If you run an audit on a tree version, which is in Draft status, and want to change the status to Active after the audit is complete then select the Set tree version status to active after audit is successfully complete Check Box.

The Tree Version Audit Result table shows a list of validations that ran against the selected tree version.
Validation Details

The following table lists the validators used in the audit process and describes what each validator checks for. It also lists possible causes for validation errors and suggests corrective actions.

<table>
<thead>
<tr>
<th>Validator</th>
<th>Description (what’s checked)</th>
<th>Possible Cause for Validation Failure</th>
<th>Suggested Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Date</td>
<td>The effective start and end dates of the tree version must be valid.</td>
<td>The effective end date is set to a value that isn’t greater than the effective start date.</td>
<td>Modify the effective start and end dates such that the effective start date is earlier than the effective end date.</td>
</tr>
<tr>
<td>Root Node</td>
<td>On the Manage Tree Structures: Specify Data Sources page, if the ** Allow Multiple Root Nodes ** check box for the Restrict Tree Node List of Values Based on option isn’t selected, and if the tree structure isn’t empty, the tree version must contain exactly one root node. This validation doesn’t take place if the check box is selected.</td>
<td>Even if the check box is deselected, the tree version has multiple root nodes.</td>
<td>Modify the tree version such that there is exactly one root node.</td>
</tr>
<tr>
<td>Data Source Maximum Depth</td>
<td>For each data source in the tree structure, on the Data Source dialog box, if the data source is depth-limited, the data in the tree version must adhere to the specified depth limit. This validation doesn’t apply to data sources for which the ** Maximum Depth ** field is set to ** Unlimited **.</td>
<td>The tree version has data at a depth greater than the specified depth limit on one or more data sources.</td>
<td>Modify the tree version such that all nodes are at a depth that complies with the data source depth limit.</td>
</tr>
<tr>
<td>Duplicate Node</td>
<td>On the Data Source dialog box, if the ** Allow Duplicates ** check box isn’t selected, the tree version must not contain more than one node with the same primary key from the data source. If the check box is selected, duplicate nodes are permitted.</td>
<td>Even when the check box is deselected, the tree version contains duplicate nodes.</td>
<td>Remove any duplicate nodes from the tree version.</td>
</tr>
<tr>
<td>Available Node</td>
<td>All nodes in the tree version must be valid and available in the underlying data source.</td>
<td>• A node in the tree version doesn’t exist in the data source. Deleting data items from the data source without removing the corresponding nodes from the tree version can result in orphaned nodes in the tree version. For example, if you added node A into your tree version, and subsequently deleted node A from the data source without removing it from the tree</td>
<td>Remove any orphaned nodes from the tree version. Update tree reference nodes so that they reference existing tree versions.</td>
</tr>
<tr>
<td>Validator</td>
<td>Description (what's checked)</td>
<td>Possible Cause for Validation Failure</td>
<td>Suggested Corrective Action</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Node Relationship</td>
<td>All nodes must adhere to the relationships mandated by the data sources registered in the tree structure.</td>
<td>The tree structure has data sources arranged in a parent-child relationship, but the nodes in the tree don’t adhere to the same parent-child relationship. For example, if the tree structure has a Project data source with a Task data source as its child, Task nodes must always be within Project nodes in the tree version. This validation fails if there are instances where a Project node is added as the child of a Task node.</td>
<td>Modify the tree version such that the nodes adhere to the same parent-child relationships as the data sources.</td>
</tr>
<tr>
<td>SetID Restricted Node</td>
<td>On the Manage Tree Structures: Specify Data sources page, if the Set ID check box is selected to enable the Restrict Tree Node List of Values Based on option for each tree node, the underlying node in the data source must belong to the same reference data set as the tree itself. This restriction doesn’t apply when the check box isn’t selected.</td>
<td>Even when the check box is selected, the tree version has nodes whose data source values belong to a different reference data set than the tree.</td>
<td>Modify the tree version such that all nodes in the tree have data sources with reference data set matching that of the tree.</td>
</tr>
<tr>
<td>Label Enabled Node</td>
<td>On the Manage Tree Structures: Specify Data Sources page, if a labeling scheme is specified for the tree structure by selecting a list item from the Labeling Scheme list, all nodes must have labels. This restriction doesn’t apply when you select None from the Labeling Scheme list.</td>
<td>The tree structure has a labeling scheme but the tree version has nodes without labels.</td>
<td>Assign a label to any node that doesn’t have a label.</td>
</tr>
<tr>
<td>Date Restricted Node</td>
<td>On the Manage Tree Structures: Specify Data Sources page, if the Date Range check box is selected to enable the Restrict Tree Node List of Values Based on option for a tree structure, each node in the underlying data source must have an effective date range same as the effective date range of the tree version.</td>
<td>Even when the check box is selected, there are data source nodes that have a date range beyond the tree version’s effective date range. For example, if the tree version is effective from Jan-01-2012 to Dec-31-2012, all nodes in the tree version must be effective from Jan-01-2012 to Dec-31-2012 at a minimum. It is acceptable for the nodes to be effective for a date range that</td>
<td>Ensure that all nodes in the tree version have effective date range for the effective date range for the tree version.</td>
</tr>
<tr>
<td>Validator</td>
<td>Description (what's checked)</td>
<td>Possible Cause for Validation Failure</td>
<td>Suggested Corrective Action</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Multiple Active Tree Version</td>
<td>On the Manage Tree Structures: Specify Definition page, if the <strong>Allow Multiple Active Tree Versions</strong> check box isn't selected for the tree structure, there must not be more than one active tree version for a tree at any time. This restriction doesn't apply if the check box is selected.</td>
<td>Even when the check box isn't selected, there is more than one active tree version in the tree for the same date range.</td>
<td>Set no more than one tree version to Active within the same date range and set the others to inactive or draft status.</td>
</tr>
<tr>
<td>Range Based Node</td>
<td>On the Data Source dialog box, if the <strong>Allow Range Children</strong> check box isn't selected, range-based nodes aren't permitted from that data source. This restriction doesn't apply if the check box is selected.</td>
<td>Even when the check box isn't selected, there are range-based nodes from a data source.</td>
<td>Ensure that any range nodes in your tree version are from a data source that allows range children.</td>
</tr>
<tr>
<td>Terminal Node</td>
<td>On the Data Source dialog box, if the <strong>Allow Use as Leaves</strong> check box isn't selected, values from that data source can't be added as leaves (terminal nodes) to the tree version. This restriction doesn't apply if the check box is selected.</td>
<td>Even when the check box isn't selected, values from a data source are added as leaf nodes (terminal nodes).</td>
<td>Modify the tree version such that all terminal nodes are from data sources for which this check box is selected.</td>
</tr>
<tr>
<td>Usage Limit</td>
<td>On the Data Source dialog box, if the <strong>Use All Values</strong> option is selected to set the <strong>Usage Limit</strong> for the data source, every value in the data source must appear as a node in the tree. This restriction doesn't apply if the <strong>None</strong> option is selected.</td>
<td>Even if the <strong>Use All Values</strong> option is selected, there are values in the data source that aren't in the tree version.</td>
<td>For each data source value that isn't yet available, add nodes to the tree version.</td>
</tr>
</tbody>
</table>

Restriction doesn’t apply if the check box isn’t selected.

extends partly beyond the tree version's effective date range (for example, the node data source value is effective from Dec-01-2011 to Mar-31-2013). It isn’t acceptable if the nodes are effective for none or only a part of the tree version’s effective date range (for example, the node data source value are effective only from Jan-01-2012 to June-30-2012).

Even if the **Use All Values** option is selected, there are values in the data source that aren't in the tree version.
20 Flexfields Setup

Overview

A flexfield is a set of placeholder fields associated with business objects and placed on the application pages to contain additional data. You can use flexfields to modify the business objects and meet enterprise data management requirements without changing the data model or performing any database programming. Flexfields help you to capture different data on the same database table and provide a means to modify the applications features.

For example, an airline manufacturer may require specific attributes for its orders that aren’t predefined. Using a flexfield for the order business object, you can create and configure the required attribute.

Types of Flexfields

Flexfields that you see on the application pages are predefined. However, you can configure the flexfields or modify their properties. Users see these flexfields as field or information attributes on the UI pages. To manage flexfields, use any of the following tasks in the Setup and Maintenance work area:

- **Manage Descriptive Flexfields**: Expand the forms on the application page to accommodate additional information that is important and unique to your business. You can use a descriptive flexfield to collect invoice details on a page displaying invoices.
- **Manage Extensible Flexfields**: Establish one-to-many data relationships and make application data context-sensitive. The flexfields appear only when the contextual data conditions are fulfilled. Thus, extensible flexfields provide more flexibility than the descriptive flexfields.
- **Manage Key Flexfields**: Store information combining several values, such as a number combination. The key flexfields represent objects such as accounting codes and asset categories.
- **Manage Value Sets**: Use a group of values to validate the data entered in the flexfields.

⚠️ **Note**: You can manage value sets within the Manage Descriptive Flexfields or Manage Extensible Flexfields tasks.

Related Topics

- Overview of Descriptive Flexfields
- Overview of Extensible Flexfields
- Overview of Key Flexfields
- Modules in Application Taxonomy

Flexfield Components

A flexfield is made up of several data entities that store and render information pertaining to flexfield configuration.
Flexfields are made up of the following components:

- Segments
- Value Sets
- Contexts
- Structures

Segments
A segment is a field within a flexfield and represents a single table column of your database. When configuring a flexfield, define the appearance and meaning of individual segments. Segments represent attributes of information. Segments can appear globally wherever the flexfield is implemented, or based on a structure or context. Each segment captures a single atomic value and represents an attribute of information.

The characteristics of a segment vary based on the type of flexfield in which it’s used.

- In key flexfields, a segment describes a characteristic of the entity. For example, a part number that contains details about the type, color, and size of an item.
- In a descriptive or extensible flexfield, a segment represents an information attribute on the application page. For example, details about a device containing components, some of which are global while the remaining are contextually dependent on the category of the device.

Value Sets
Users enter values into segments while using an application. A value set is a named group of values that validate the content of a flexfield segment. You configure a flexfield segment with a value set to enforce entries of only valid values for that segment.

The configuration involves the following tasks:

- Defining the values in a value set, including characteristics such as the length and format of the values.
- Specifying formatting rules or values from an application table or predefined list.

Multiple segments within a flexfield, or multiple flexfields, can share a single value set.

Contexts
Context-sensitive flexfield segments are available to an application based on a context value. You define contexts as part of configuring a flexfield. Users see global segments as well as any context-sensitive segments that apply to the selected context value.

In descriptive flexfields and extensible flexfields, you can reuse the context-sensitive segments that are based on the database columns, in multiple contexts.

Structures
Key flexfields have structures. Each key flexfield structure is a specific configuration of segments. Adding or removing segments, or rearranging their order, produces a different structure. You can reuse the segments that are based on the database columns, in multiple structures.
**Note:** You can translate all these flexfield components to the preferred languages without changing the language session of the application. To specify the translations in all the enabled language rows, use the Translation Editor option on the respective edit pages. Once the updates are made, users can view the translated text for the specific flexfield components at runtime.

**Related Topics**
- Enter or Edit Translated Text

## Overview of Flexfield Configuration

Configuring a flexfield involves identifying the need for enhancing a business object with user-defined attributes and then integrating the attributes into deployment. In the case of key flexfields, configuring the flexfield involves identifying value set assignments and determining segment structures.

## Overall Process for Configuring User-Defined Attributes

Before using flexfields to create attributes, familiarize yourself with the context layers and the configuration life cycle of the application. You can add attributes to a business object using a flexfield, if developers have registered that object to a flexfield. For descriptive and extensible flexfields, the overall configuration process involves the following:

1. Use the Highlight Flexfields feature from the Administration menu to find flexfields on pages associated with business objects.
2. Plan the flexfield configuration.
3. Plan flexfield validation.
4. Define the attributes by configuring the flexfield segments.
   a. Use the Manage Extensible Flexfields or Manage Descriptive Flexfields tasks, or use the **Configure Flexfield** icon button directly on the page where the flexfield is highlighted. For simple configurations, use the **Add Segment**, **Add Context Value**, and **Edit Segment** icon buttons directly on the page where the flexfield is highlighted.
   b. Optionally, validate the flexfield configuration.
   c. Optionally, deploy the flexfield to a sandbox for initial testing.
5. Deploy the flexfield to the mainline metadata to display the attributes on the application pages and to make them available for integration with other tools such as Oracle Business Intelligence.
6. Perform the necessary steps to integrate the attributes into the technology stack.

A simple configuration is limited to such actions as adding a format-only field or adding a field with a basic list of values.

## Overall Process for Configuring User-Defined Keys

Using key flexfields, you can configure intelligent key codes containing meaningful parts according to your business practices. You configure the key flexfield to have one segment for each part that makes up your key code.

For key flexfields, the overall configuration process involves the following:

1. Use the Highlight Flexfields feature from the Administration menu to find flexfields on pages associated with business objects.
2. Plan the flexfield configuration.
3. Plan the flexfield validation.
4. Define the value sets before configuring the key flexfield segments by going to the Manage Value Sets task.
5. Define the key flexfield structures and their segments, and define structure instances for each structure.
   a. Use the Manage Key Flexfields task or the Configure Flexfield icon button directly on the page where the flexfield is highlighted.
   b. Optionally, validate the flexfield configuration.
   c. Optionally, deploy the flexfield to a sandbox for initial testing.
6. Deploy the flexfield to the mainline metadata to display it on the application pages and to make it available for integration with other tools such as Oracle Business Intelligence.
7. Perform the necessary steps to integrate the flexfield into the technology stack.

**Related Topics**
- Overview of Extensible Flexfields
- Overview of Key Flexfields
- Overview of Context Layers
- Overview of Configuration Life Cycle

**Flexfields at Runtime**

Business objects have an associated descriptive or extensible flexfield. Using these, you can create attributes for the business object at run time. Some business objects have an associated key flexfield for configuring flexible multiple part keys.

**Finding Flexfields on a Page**

At run time, the attributes you define as flexfield segments appear in the application page just like any other attribute. However, each type of flexfield appears in a different way.

The following characteristics help you determine the type of flexfield on the application page:

- Descriptive flexfield segments appear as label and field pairs or as a table of fields that correspond to the column headers. The fields represent the flexfield segments and accept values that derive from the segment’s assigned value set.
- Extensible flexfield segments appear grouped within labeled regions, where each grouping is a context and the region labels are the context names.
- Key flexfields appear in the application page as a field with a key flexfield icon, where the field’s value is a collection of segments.

To locate flexfields on a page, in the global header, select your user name and in the Settings and Actions menu, select **Highlight Flexfields**. The page renders in a special mode, displaying the location of flexfields, if any, on the page. Do the following:

- Hover over the Information icon to view flexfield details.
- Click the Configure Flexfield icon to manage the flexfield using the Manage Flexfields task.
- Click the Add Context Value, Add Segment, or Edit Segment icons to add a context value or edit a global or context-sensitive flexfield segment. This applies to both descriptive and extensible flexfields.
Note: You can’t create attributes on all flexfields. For example, some flexfields are protected, and you either can’t edit their configurations at all, or can do only limited changes to them. Consult the product-specific documentation to verify whether there are any restrictions on using the flexfield.

All segments of a single flexfield are grouped together by default. The layout and positions of the flexfield segments depend on where the application developer places the flexfield on the page. Flexfields may also be presented in a separate section of the page, in a table, or on their own page or a dialog box. You can use Oracle Composer to edit the layout, position, or other display features of the flexfield segments.

When you no longer want to view the flexfields on a page, select Unhighlight Flexfields from the Administration menu.

Flexfield Modification Using Page Composer

You can use Page Composer to modify flexfields specific to a page.

Extensible Flexfield Modification

In Page Composer, open the page with the flexfield you want to modify. Switch to Source view, and look for a region that is bound to an EffContextsPageContainer task flow. This is the container for the extensible flexfield attributes and contexts. To view the flexfield code and identifying information, open the properties panel for the region. To modify any component within the region, select the desired tag and click Edit.

Descriptive Flexfield Modification

In Page Composer, open the page with the flexfield you want to modify. Switch to Source view, and look for the <descriptiveFlexfield> element of that flexfield. Open the properties panel for this element to view the flexfield code and identifying information. Within the properties panel, you may modify properties for the global and context-sensitive segments or re-order the segments on the page.

Note: Flexfield segments can’t be edited using their individual component elements. They can only be edited from the properties panel of the <descriptiveFlexfield> element they belong to. To find these components, open the properties panel of the descriptive flexfield, switch to the relevant tab, and search using the unique identifying information. For instance, if you need to find a context sensitive segment, open the properties panel for the flexfield, go to the Flexfield Context Segments tab, and search for the segment using its Context Value and Segment Code.

How Flexfields Work with Oracle Application Cloud Architecture

To capture additional data, administrators or implementors configure flexfield segments that represent attributes of business objects. Business objects are enabled for both descriptive flexfields and extensible flexfields.

The following figure shows the layers involved in configuring a flexfield:

- The business entity table and metadata in the database.
- The ADF business component objects. These are derived from the metadata and stored in Oracle Metadata Services (MDS) repository.
- The user interface where fields defined by the flexfield segments are rendered.

The following figure illustrates that the flexfield definition consists of all the metadata defined during configuration and stored in the database.

Application developers create a flexfield and register it so that it’s available for configuration. Administrators and implementation consultants configure segments and other properties of the available flexfields. This information is stored as additional flexfield metadata in the database. Deploying the flexfield generates ADF business components based on the flexfield metadata in the database.
The following aspects are important in understanding how flexfields and Oracle Applications Cloud architecture work together:

- Integration
- Deployment
- Import and export
- Run time
- Patching

**Integration**

The attributes that you add by configuring flexfields are available throughout the Oracle Fusion Middleware technology stack. You can use the flexfield segment’s Application Programming Interface (API) to identify segments and integrate the flexfields in the following:

- User interface pages
- Service-oriented Architecture (SOA) infrastructure
- Oracle Business Intelligence
- Extended Spread Sheet Database (ESSbase)

Flexfield configurations are preserved across application updates.

**Deployment**

The metadata for the flexfield is stored in the application database as soon as you save your configuration changes. Deploying the flexfield generates the ADF business components so that the run time user interface reflects the latest flexfield definition in the metadata.

**Importing and Exporting**

Using the Setup and Maintenance work area, you can import and export flexfields across the implementation site. The deployment status must be either Deployed or Deployed to sandbox. Therefore, before you attempt migration, verify and ensure that a flexfield is successfully deployed.

**Run Time**

The latest definitions of a flexfield reflect on the user interface at run time only if the flexfield is deployed. When the user interface accesses a business object, the deployed flexfield definition identifies the attributes associated with the captured values. On a page, if you add display configurations for a flexfield using Oracle Composer, the same flexfield segments can appear differently on different pages.

**Patching**

Flexfield configurations are preserved during patching and upgrading.
Flexfield Management

Considerations for Managing Flexfields

Managing flexfields involves registering, planning, and configuring flexfields.

You plan and configure the registered flexfields provided in your applications by applications developers. How you configure flexfield segments determines how the flexfield segments appear to users. Optionally, you can modify the UI page to change how the flexfield segments appear to users on that page.
The following figure shows the processes involved in making flexfields available to users. The tasks in the Define Flexfields activity let administrators configure and deploy flexfields. After you configure and deploy a flexfield to a sandbox, deploy it again to the mainline metadata so that it’s available to the users.

Consider the following aspects of managing flexfields:

- Registering flexfields
- Planning flexfields
- Configuring flexfields
- Enabling a flexfields segment for business intelligence
- Deploying flexfields
- Optionally changing a flexfield segment’s appearance in a user interface page
Identifying flexfields on a run time page and troubleshooting

Registering Flexfields
A flexfield must be registered before it can be configured. Therefore, application development registers flexfields so that they are available to administrators and implementation consultants for configuration. The registration involves reserving columns of entity tables for use in flexfields. For more information about registering flexfields, see Oracle Fusion Applications Developer’s Guide.

Planning Flexfields
Before you begin planning flexfields, determine what type is appropriate to your needs, and which business objects are available for modifying flexfields. All flexfields consist of segments which represent attributes of an entity. The value a user enters for an attribute is stored in a column of the entity table. Carefully plan flexfields before configuring them. Before configuring new segments for your flexfields, be sure to plan their implementation carefully.

If you have determined that a business object supports flexfields, and those flexfields have been registered, you can begin planning their configuration. Note the code name of the flexfield you intend to configure so that you can find it easily in the Define Flexfield activity. In some cases you can determine and configure how the flexfield appears on the page. See Oracle Applications Cloud Help for specific products to determine any restrictions on using product-specific flexfields.

Configuring Flexfields
Administrators or implementors configure flexfields so they meet the needs of the enterprise. Some flexfields require configuration to make an application operate correctly. You can configure flexfields using the following methods:

- Go to the manage flexfield tasks in the Setup and Maintenance work area.
- Use the Highlight Flexfields command in the Administration menu while viewing a run time page.
  - Use the Configure Flexfield icon button to manage all aspects of a flexfield, such as change a segment’s sequence number or configure a flexfield segment’s business intelligence label.
  - Use the Add Segment and Edit Segment icon buttons to add and edit descriptive or extensible flexfield segments with simple configurations.
  - Use the Add Context icon button to add descriptive or extensible flexfield context values.

Configuring a flexfield includes the following:

- Defining value sets against which the values entered by users are validated
- Defining the structure or context of the segments in the flexfield
- Specifying the identifying information for each segment
- Specifying the display properties such as prompt, length and data type of each flexfield segment
- Specifying valid values for each segment, and the meaning of each value within the application

Tip: You can create value sets while creating descriptive and extensible flexfield segments. However, define value sets before configuring key flexfield segments that use them, because you assign existing value sets while configuring key flexfield segments.

When creating table-validated, independent, dependent, or subset value sets while creating descriptive and extensible flexfield segments, you can optionally specify to display the description of the selected value next to the segment at run time. You can assign sequence order numbers to global segments and to context-sensitive segments in each context. Segment display is always in a fixed order based on the segments’ sequence numbers. You cannot enter a number for one segment that is already in use for a different segment. Therefore, you may consider numbering the segments in multiples, such as 4, 5, or 10, to make it easy to insert new attributes.
A flexfield column is assigned to a new segment automatically, but you can change the assignment before saving the segment. If you must set a specific column assignment for a segment, create that segment first to ensure that the intended column isn’t automatically assigned to a different segment.

**Enabling a Flexfield Segment for Business Intelligence**

You can enable flexfield segments for business intelligence if the flexfield is registered in the database as an Oracle Business Intelligence-enabled flexfield. For more information about enabling segments for business intelligence, see points to consider when enabling descriptive, extensible, and key flexfield segments for business intelligence. For extensible flexfield segments, you can’t assign labels to equalize segments across contexts that are semantically equivalent.

**Deploying Flexfields**

Once you have configured a flexfield, you must deploy it to make the latest definition available to run time users. In the Define Flexfields tasks, you can deploy a flexfield using either of the following commands:

- The Deploy Flexfield command deploys a flexfield to the mainline metadata. This command is for general use in a test or production environment.
- The Deploy to Sandbox command deploys a flexfield to sandbox. This command is for confirming that the flexfield is correctly configured before deploying it to the mainline metadata.

In Highlight Flexfields mode, when using the:

- **Add Context, Add Segment**, and **Edit Segment** tools for extensible flexfields, use the Save command to save your changes. Then use the Deploy command to deploy the flexfield to the mainline metadata.
- **Add Segment** and **Edit Segment** tools for descriptive flexfields, use the Save and Deploy command to save your changes. Then deploy the flexfield to the mainline metadata.

Once deployed, the deployment status indicates the state of the currently configured flexfield relative to the last deployed definition.

**Optionally Changing a Flexfield Segment Appearance**

The flexfield attributes that you define integrate with the user interface pages where users access the attributes’ business object. Application development determines the UI pages where business objects appear and the display patterns used by default to render flexfield segments.

After a flexfield has been deployed to the mainline MDS repository so that it appears on application pages, you can modify it on a per-page basis using Page Composer. For example, you can hide a segment, change its prompt or other properties, or reorder the user-defined global attributes so that they are interspersed with the core attributes in the same parent layout. You can modify the appearance of descriptive and extensible flexfield segments in the UI page using Page Composer, once the flexfield is deployed to the mainline metadata.

If the applications are running in different locales, you can provide different translations for translatable text, such as prompts and descriptions. Enter translations using the locale that requires the translated text. In the global header, click your user name and from the **Settings and Actions** menu, select **Set Preferences**. Then change the text to the translated text for that locale.

**Identifying Flexfields on a Run Time Page**

The **Highlight Flexfields** command in the Administration menu of the Setup and Maintenance work area identifies the location of flexfields on the run time page by displaying an **Information** icon button for accessing details about each flexfield.

Even if a descriptive or extensible flexfield isn’t yet deployed and no segments appear on the run time page in normal view, the flexfield appears in the Highlight Flexfield view for that page. For descriptive flexfields, the segments as of the last deployment appear. For extensible flexfields, any segments and contexts that have been saved but not yet deployed also appear as disabled.
**Highlight Flexfields** accesses the current flexfield metadata definition. Use the highlighted flexfield’s **Configure Flexfield** icon button to manage flexfields directly. Alternatively, note a highlighted flexfield’s name to search for it in the tasks for managing flexfields.

For more information about creating flexfields and adding them to a UI page, see the Oracle Fusion Applications Developer’s Guide. For more information about modifying flexfield segment appearance with Page Composer, see guidance on modifying existing pages in the Oracle Applications Cloud Configuring and Extending Applications guide.

**Related Topics**
- Considerations for Managing Descriptive Flexfields
- Considerations for Managing Extensible Flexfields
- Considerations for Managing Key Flexfields

**Flexfield Segment Properties**

Independent of the value set assigned to a segment, segments may have properties that affect how they are displayed and how they function.

The following aspects are important in understanding

- Display properties
- Properties related to segment values
- Properties related to search
- Range validation segments
- Rule validation of segment values
- Naming conventions

**Display Properties**

The following table summarizes display properties.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabled</td>
<td>Whether the segment can be used.</td>
</tr>
<tr>
<td>Sequence</td>
<td>The order the segment appears in relation to the other configured segments.</td>
</tr>
<tr>
<td>Prompt</td>
<td>The string to be used for the segment’s label in the user interface.</td>
</tr>
<tr>
<td>Display type</td>
<td>The type of field in which to display the segment.</td>
</tr>
<tr>
<td>Selected and deselected values</td>
<td>If the display type is check box, the actual values to save. For example, Y and N or 0 and 1.</td>
</tr>
<tr>
<td>Display size</td>
<td>The character width of the field.</td>
</tr>
<tr>
<td>Display height</td>
<td>The height of the field as measured in visible number of lines when the display type is a text area.</td>
</tr>
</tbody>
</table>
Properties Related to Search
Extensible flexfield segments can be marked as selectively required in search using the indexed property. The indexed property requires users to enter a value before conducting a search on the attribute represented by the indexed segment. A database administrator must create an index on the segment column representing the indexed attribute.

Range Validation of Segments
Range validation enables you to enforce an arithmetic inequality between two segments of a flexfield. For example, a product must be ordered before it can be shipped. Therefore, the order date must be on or before the ship date. Also, the order date segment value must be less than or equal to the ship date segment value. You can use range validation to ensure this relationship.

The conditions for range validation are as follows:

- Segments must be configured for range validation in pairs, one with the low value and one with the high value.
- Both segments must be of the same data type.
- Both segments must be parts of the same structure in a key flexfield or parts of the same context in a descriptive flexfield or extensible flexfield.
- The low value segment must have a sequence number that is lesser than that of the high value segment.
- Non-range validated segments can exist between a range validated pair, but range validated pairs cannot overlap or be nested.

You can configure as many range validated pairs as you want within the same flexfield. Your application automatically detects and applies range validation to the segment pairs that you define, in sequence order. It must detect a low value segment first, and the next range validated segment that it detects must be a high value segment. These two segments are assumed to be a matching pair. The low value and the high value can be equal.

Rule Validation of Segment Values
Validation rules on descriptive and extensible flexfield segments determine how an attribute is validated. The value entered for an attribute on a business object may must match a specified format or be restricted to a list of values. Use a value set to specify the validation rules.

Value set validation is required for global segments and context-sensitive segments, and optional for context segments. In the case of context segments, the application may validate a value instead of the value set validating the value against the context segment. However the application entered values must match exactly the valid context segment values. If the context segment values are a superset or subset of the input values, you must assign a table-validated value set or independent value set to validate context values.
When you configure a descriptive flexfield segment, you can specify a constant to use for setting the initial value. The initial value can be an available parameter. For every planned segment, list the constant value or parameter, if any, to use for the initial value.

### Naming Conventions

Enter a unique code, name, and description for the segment. These properties are for internal use and not displayed to end users. You can’t change the code after the segment is created.

The Application Programming Interface (API) name is a name for the segment that isn’t exposed to users. The API name is used to identify the segment in various integration points including web services, rules, and business intelligence. Use alphanumeric characters only with a leading character. For example, enter a code consisting of the characters A-Z, a-z, 0-9 with a non-numeric leading character. The use of spaces, underscores, multi-byte characters, and leading numeric characters isn’t permitted. You can’t change the API name after the segment has been created.

### Related Topics

- Considerations for Managing Extensible Flexfields

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### Naming Conventions for Flexfield APIs

Application Programming Interface (API) name is a name for your flexfield component, which isn’t exposed to users. These names are used to identify flexfield components in various integration points, including web services, rules, and business intelligence.

### How to Frame API Names

You must use only alphanumeric characters for API names. For example, enter a name with the characters A-Z, a-z, or 0-9, with a non-numeric leading character. Don’t use spaces, underscores, multi-byte characters, or leading numeric characters in your API names.

**Caution:** Do not change API names after they’re created. Doing so could break integration points.

### Words You Can’t Use for API Names

You can’t use certain words for API names when configuring flexfields because they’re reserved words in ADF, SQL, PL/SQL, Java, Groovy, and so on.

This table lists some of the reserved words that can’t be used as API names. This list isn’t exhaustive.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Reserved Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>ABORT, ABSTRACT, ACCEPT, ACCESS, ACTIONENABLED, ADD, ALL, ALLROWSINRANGE,</td>
</tr>
<tr>
<td></td>
<td>ALTER, AND, ANY, ARRAY, ARRAYLEN, AS, ASC, ASSERT, ASSIGN, AT, ATTRIBUTEDEF,</td>
</tr>
<tr>
<td></td>
<td>ATTRIBUTEDEFS, ATTRIBUTEVALUE, ATTRIBUTEVALUES, AUDIT, AUTHORIZATION, AVG</td>
</tr>
<tr>
<td>B</td>
<td>BEGIN, BETWEEN, BINDINGS, BODY, BOOLEAN, BREAK, BY, BYTE, BYVALUE</td>
</tr>
<tr>
<td>C</td>
<td>CASCADE, CASE, CAST, CATCH, CATEGORY, CHAR, CHECK, CHILDREN, CLASS, CLONE,</td>
</tr>
<tr>
<td></td>
<td>CLOSE, CLUSTER, CLUSTERS, COALESCE, COLAUTH, COLUMN, COLUMNS, COMMENT,</td>
</tr>
<tr>
<td></td>
<td>COMMIT, COMPRESS, CONNECT, CONST, CONSTANT, CONSTRIANT, CONTAINS, CONTINUE,</td>
</tr>
<tr>
<td></td>
<td>COUNT, CRASH, CREATE, CURRENT, CURRENTROW, CURRVAL, CURSOR</td>
</tr>
<tr>
<td>Letter</td>
<td>Reserved Words</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>D</td>
<td>DATABASE, DATACONTROL, DATE, DBA, DEBUGOFF, DEBUGON, DECIMAL, DECLARE, DEFAULT,</td>
</tr>
<tr>
<td></td>
<td>DEFINITION, DELAY, DELETE, DELTA, DESC, DESCRIPTION, DIGITS, DISPLAY, DISPLAYDATA,</td>
</tr>
<tr>
<td></td>
<td>DISPLAYHINT, DISPLAYHINTS, DISPOSE, DISTINCT, DIV, DO, DOUBLE, DROP</td>
</tr>
<tr>
<td>E</td>
<td>ELSE, ELSIF, EMPTY, ENABLED, ENABLEDSTRING, END, ENTRY, EQ, EQUALS, ERROR,</td>
</tr>
<tr>
<td></td>
<td>ESTIMATEDROWCOUNT, EXCEPTION, EXCLUSIVE, EXITS, EXIT, EXTENDS</td>
</tr>
<tr>
<td>F</td>
<td>FALSE, FETCH, FILE, FINAL, FINALIZE, FINALLY, FINDMODE, FLOAT, FOR, FORM, FROM,</td>
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<tr>
<td></td>
<td>FULLNAME, FUNCTION, FUTURE</td>
</tr>
<tr>
<td>G</td>
<td>GE, GENERIC, GETCLASS, GOTO, GRANT, GROUP, GROUPBY, GT</td>
</tr>
<tr>
<td>H</td>
<td>HASHCODE, HAVING, HINTS</td>
</tr>
<tr>
<td>I</td>
<td>IDENTIFIED, IF, IMMEDIATE, IMPLEMENTS, IMPORT, IN, INCREMENT, INDEX, INDEXES,</td>
</tr>
<tr>
<td></td>
<td>INDICATOR, INITIAL, INNER, INPUTVALUE, INSERT, INSTANCEOF, INT, INTEGER, INTERFACE,</td>
</tr>
<tr>
<td></td>
<td>INTERSECT, INTO, IS, ITERATORBINDING</td>
</tr>
<tr>
<td>J</td>
<td>JAVA</td>
</tr>
<tr>
<td>K</td>
<td>KEY</td>
</tr>
<tr>
<td>L</td>
<td>LABEL, LABELS, LABELSET, LE, LEVEL, LIKE, LIMITED, LOCK, LONG, LOOP, LT</td>
</tr>
<tr>
<td>M</td>
<td>MANDATORY, MAX, MAXEXTENTS, MIN, MINUS, MLSLABEL, MOD, MODE, MODIFY</td>
</tr>
<tr>
<td>N</td>
<td>NAME, NATIVE, NATURAL, NE, NEW, NEXTVAL, NOAUDIT, NOCOMPRESS, NOT, NOTFOUND,</td>
</tr>
<tr>
<td></td>
<td>NOTIFY, NOTIFYALL, NOWAIT, NULL, NULLIF, NUMBER</td>
</tr>
<tr>
<td>O</td>
<td>OF, OFFLINE, ON, ONLINE, OPEN, OPERATIONENABLED, OPERATOR, OPTION, OR, ORDER,</td>
</tr>
<tr>
<td></td>
<td>ORDERBY, OTHERS, OUT, OUTER, OVERLAPS</td>
</tr>
<tr>
<td>P</td>
<td>PACKAGE, PARTITION, PCTFREE, POSITIVE, PRAGMA, PRIMARY, PRIOR, PRIVATE, PRIVILEGES,</td>
</tr>
<tr>
<td></td>
<td>PROCEDURE, PROTECTED, PUBLIC</td>
</tr>
<tr>
<td>R</td>
<td>RAISE, RANGE, RANGESET, RANGESIZE, RANGESTART, RAW, REAL, RECORD, REFERENCES,</td>
</tr>
<tr>
<td></td>
<td>RELEASE, REMR, RENAME, RESOURCE, REST, RESULT, RETURN, REVERSE, REVOKE,</td>
</tr>
<tr>
<td></td>
<td>ROLLBACK, ROOTNODEBINDING, ROW, ROWID, ROWLABEL, ROWNUM, ROWS, ROWTYPE, RUN</td>
</tr>
<tr>
<td>S</td>
<td>SAVEPOINT, SCHEMA, SELECT, SELECTEDVALUE, SEPARATE, SESSION, SET, SHARE, SHORT,</td>
</tr>
<tr>
<td></td>
<td>SIZE, SMALLINT, SPACE, SOL, SOLBUF, SOLCODE, SOLERRM, START, STATEMENT, STATIC,</td>
</tr>
<tr>
<td></td>
<td>STDDEV, SUBTYPE, SUCCESSFUL, SUM, SUPER, SWITCH, SYNCHRONIZED, SYNONYM, SYSDATE</td>
</tr>
<tr>
<td>T</td>
<td>TABAUTH, TABLE, TABLES, TASK, TERMINATE, THEN, THIS, THROW, THROWS, TO, TOOLTIP,</td>
</tr>
<tr>
<td></td>
<td>TOSTRING, TRANSIENT, TRIGGER, TRUE, TRY, TYPE</td>
</tr>
<tr>
<td>U</td>
<td>UID, UNION, UNIQUE, UPDATE, UPDATEABLE, USE, USER</td>
</tr>
</tbody>
</table>
How Flexfields Segments are Rendered

Flexfield segments appear on pages as attributes of business objects.

Settings That Affect Flexfield Segment Display

When you configure flexfield segments, the value you enter for the segment’s display type determines how the segment appears at run time.

How Display Type Values Appear

The following series of figures (A to K) represent how the display types render on the UI at run time. Each display type screenshot is assigned an alphabet that maps to the display type and its description in the table.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Reserved Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>INVALIDATE, VALUES, VAR, VARCHAR, VARCHAR2, VARIANCE, VIEW, VIEWS, VOID, VOLATILE</td>
</tr>
<tr>
<td>W</td>
<td>WAIT, WHEN, WHENEVER, WHERE, WHILE, WITH, WORK</td>
</tr>
<tr>
<td>X</td>
<td>XOR</td>
</tr>
</tbody>
</table>

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</tr>
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<tr>
<td>V</td>
<td>INVALIDATE, VALUES, VAR, VARCHAR, VARCHAR2, VARIANCE, VIEW, VIEWS, VOID, VOLATILE</td>
</tr>
<tr>
<td>W</td>
<td>WAIT, WHEN, WHENEVER, WHERE, WHILE, WITH, WORK</td>
</tr>
<tr>
<td>X</td>
<td>XOR</td>
</tr>
</tbody>
</table>
The following figure contains the representation of a check box, a drop-down list, a list of values, and a search enabled list of values.

A. Check Box

B. Drop-down List

C. List of Values

D. Search Enabled List of Values

The following figure contains the representation of a radio button group, text area, text box, date and time, and rich text editor.
E. Radio Button Group

F. Text Area

G. Text Box

H. Date/Time

I. Rich Text Editor

This figure contains the representation of a color palette and a static URL field.
The following table describes each display type.

<table>
<thead>
<tr>
<th>Figure Reference</th>
<th>Display Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Check Box</td>
<td>The field appears as a check box. If the user selects the check box, the checked value is used. Otherwise, the deselected value is used.</td>
</tr>
<tr>
<td>B</td>
<td>Drop-down List</td>
<td>The field appears as a list of values available to the user for selection.</td>
</tr>
<tr>
<td>C</td>
<td>List of Values</td>
<td>The field appears as a list of values available to the user for selection. The user can also click Search to find more values.</td>
</tr>
<tr>
<td>D</td>
<td>Search Enabled List of Values</td>
<td>The field appears as a text field with a Search icon button. The users can type a value in the text field or they can click the Search icon button to open another window for searching.</td>
</tr>
<tr>
<td>Figure Reference</td>
<td>Display Type</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>E</td>
<td>Radio Button Group</td>
<td>The field appears as a set of radio buttons. The user can select one button. Selecting a button deselects any previously selected button in the set.</td>
</tr>
<tr>
<td>F</td>
<td>Text Area</td>
<td>The field appears as a text area in which the user can type multiple lines of text. The display width and height specify the visible width and number of lines in the text area, respectively.</td>
</tr>
<tr>
<td>G</td>
<td>Text Box</td>
<td>The field appears as a text field in which the user can type a single line of text. The display width controls the width of the text box.</td>
</tr>
<tr>
<td>H</td>
<td>Date Time</td>
<td>The field enables the user to enter a date if the data type is Date, or a date and time if the data type is Date Time. The user can select the date in a calendar. If the data type is Date Time, the field also displays fields for specifying the hour, minutes, seconds, AM or PM, and time zone.</td>
</tr>
<tr>
<td>I</td>
<td>Rich Text Editor</td>
<td>The field appears as a text area in which the user can enter and edit multiple lines of formatted text. The display width and height specify the visible width and number of lines in the rich text editor, respectively.</td>
</tr>
</tbody>
</table>
| J                | Color                   | The field displays a color palette for the user to select a color at run time and assign it to the segment. During setup, this display type appears in the list for selection only if:  
  - You are working on an extensible flexfield segment.  
  - The value set for the segment is set to ORA_FND_COLOR_#RRGGBB. |
| K                | Static URL              | The field appears as a text field in which users can enter a fixed URL that opens the web page when clicked.  
  - Note: The length of the URL must not exceed 255 characters. |
| hidden           |                         | The field isn’t displayed.                                                                                                                  |
How Flexfields and Value Sets Work Together

Value sets are specific to your enterprise. When gathering information using flexfields, your enterprise’s value sets validate the values that your users enter based on how you defined the value set.

You can assign a value set to any number of flexfield segments in the same or different flexfields. Value set usage information indicates which flexfields use the value set.

The following aspects are important in understanding how flexfields and value sets work together:

- Defining value sets
- Shared value sets
- Deployment

Defining Value Sets

As a key flexfield guideline, define value sets before configuring the flexfield, because you assign value sets to each segment as you configure a flexfield. With descriptive and extensible flexfields, you can define value sets when adding or editing a segment.

> **Note:** Ensure that changes to a shared value set are compatible with all flexfield segments that use the value set.

Shared Value Sets

When you change a value in a shared value set, the change affects the value set for all flexfields that use that value set. The advantage of a shared value set is that a single change propagates to all usages. The drawback is that the change shared across usages may not be appropriate in every case.

Value Set Values

To configure user-defined attributes to be captured on the value set values screen in the Manage Value Sets task, configure the Value Set Values descriptive flexfield. The object’s code is FND_VS_VALUES_B. This flexfield expects the context code to correspond to the value set code. For each value set, you can define a context whose code is the value set code, and whose context-sensitive segments are shown for the values of that value set. By default, the context segment is hidden since it maps to the value set code and is not expected to be changed.

You can also define global segments that are shown for all value sets. However, this would be quite unusual since it would mean that you want to capture that attribute for all values for all value sets.

Deployment

When you deploy a flexfield, the value sets assigned to the segments of the flexfield provide users with the valid values for the attributes represented by the segments.

Default Segment Values

To populate a flexfield segment with a default value when a row is created, specify a default type of constant or parameter, and a default value.
To synchronize a segment’s value with another field’s value whenever it changes, specify the derivation value to be the flexfield parameter from which to derive the attribute’s value. Whenever the parameter value changes, the attribute’s value is changed to match. If you derive an attribute from a parameter, consider making the attribute read-only, as values entered by users are lost whenever the parameter value changes. When setting a default value or deriving a default value from a parameter, only those attributes designated by development as parameters are available for selection. Different combinations of making the segments read only or editable in combination with the default or derivation value or both, have different effects.

The following table maps these different combinations. Initial runtime action corresponds to the row for the attribute value being created in the entity table. If the default value is read only, it can’t subsequently be changed through the user interface. If the default value isn’t read only, users can modify it. However, if the segment value is a derived value, a user-modified segment value is overwritten when the derivation value changes.

<table>
<thead>
<tr>
<th>Default Type</th>
<th>Default value specified?</th>
<th>Derivation value specified?</th>
<th>Initial runtime action</th>
<th>Runtime action after parameter changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>No</td>
<td>Yes</td>
<td>No initial segment value</td>
<td>The changed parameter derivation value updates segment value</td>
</tr>
<tr>
<td>Constant</td>
<td>Yes</td>
<td>No</td>
<td>Default segment value</td>
<td>N/A</td>
</tr>
<tr>
<td>Constant</td>
<td>Yes</td>
<td>Yes</td>
<td>Default segment value</td>
<td>The changed parameter derivation value updates segment value</td>
</tr>
<tr>
<td>Parameter</td>
<td>Yes</td>
<td>No</td>
<td>The default segment value is the parameter's default value</td>
<td>N/A</td>
</tr>
<tr>
<td>Parameter</td>
<td>Yes</td>
<td>Yes, and same as default value</td>
<td>The default segment value is the parameter's default and derivation value</td>
<td>The changed parameter derivation value updates segment value</td>
</tr>
<tr>
<td>Parameter</td>
<td>Yes</td>
<td>Yes, and different from default value</td>
<td>The default segment value is the parameter's default value</td>
<td>The changed parameter default value doesn't update segment value. Only the changed derivation value updates the segment value</td>
</tr>
</tbody>
</table>

**Flexfield Usages**

The flexfield usage specifies the table with which the flexfield and its segments are associated. A flexfield can have multiple usages. However, the first table registered for a flexfield indicates the master usage. Segments are based on the master usage. Other usages of the same table for the same flexfield use the same segment setup, though the column names may have a differentiating prefix.

On the Manage Descriptive Flexfields and Manage Extensible Flexfields pages, click the **Show Entity Usages** icon for a specific flexfield to view its entity usage. On the Manage Value Sets page, you can view the flexfield usages for a selected value set.
Extensible Flexfields
For extensible flexfield contexts, you can configure a different usage. The use of an extensible flexfield context determines the scenarios or user interfaces in which the segments of a context appear to users. For example, the Supplier page displays an extensible flexfield’s supplier usage and the Buyer page for the same flexfield displays the buyer usage. Then, a context that is associated only with the supplier usage appears only on the Supplier page and not on the Buyer page.

Value Sets
The use of value sets specifies the flexfields having segments where the identified value set is assigned.

FAQs for Flexfield Management
How can I access predefined flexfields?
Search for predefined flexfields using the manage flexfields tasks.

1. In the Setup and Maintenance work area, go to any of the following tasks:
   - Manage Descriptive Flexfields
   - Manage Extensible Flexfields
   - Manage Key Flexfields

2. On the page for the type of flexfield you’re looking for, enter any of the search parameters and click Search.

   Tip: If you don’t know the flexfield name or the code, use the Module field to filter search results.

3. Click a flexfield to view its details.

For configuration that’s not available through the manage flexfields tasks and the UI, contact My Oracle Support at https://support.oracle.com.

Related Topics
- Update Existing Setup Data

Why can't I edit my flexfield or value set configuration?
Your flexfield or value set configuration may be protected. Application developers mark some configurations as protected, indicating that you can’t edit them.

Some examples of configurations that may be protected are:
- Descriptive flexfields
- Extensible flexfield contexts
- Extensible flexfield pages
- Value sets
Why did my page not display any flexfield?

For a flexfield to be available on the page, it must be registered by developers and also deployed. The segments appear on the page only after you have successfully deployed the flexfield.

A flexfield’s deployment status indicates whether the flexfield segments are available to users. The flexfield segments that users see at run time correspond to the flexfield definition last deployed successfully.

For information about registering flexfields, see the Oracle Fusion Applications Developer’s Guide. Some business objects aren’t designed to support flexfields. For information about how to enable business objects with flexfield capability, see Getting Started with Flexfields in the Oracle Fusion Applications Developer’s Guide.

Note: Oracle Engagement Cloud doesn’t support flexfields.

To add attributes to these applications, you may use Application Composer. For more information, see the product-specific documentation.

Why did my flexfield changes not appear in the runtime UI?

The ADF business components or artifacts of a flexfield, which are generated into an Oracle Metadata Services (MDS) Repository when the flexfield is deployed, are cached within a user session. You must sign out and sign back in again to view flexfield definition changes reflected in the runtime application user interface page.

How can I enable flexfield segments for Oracle Social Network Cloud Service?

When you manage Oracle Social Network Objects during setup and maintenance, search for the business object that includes descriptive flexfields. Select the attributes that are defined as flexfield segments and enable them.

Flexfield Deployment

Overview of Flexfield Deployment

Deployment generates or refreshes the Application Development Framework (ADF) business component objects that render the flexfield in a user interface. The deployment process adds user-defined attributes to the Web Services Description Language (WSDL) schemas exposed by Oracle ADF services and used by SOA composites. Flexfields are deployed for the first time during the application provisioning process. After you configure or change a flexfield, you must deploy it to make the latest definition available to users.

If a descriptive flexfield is enabled for business intelligence, the deployment process redeployes the flexfield’s business intelligence artifacts.
You can deploy a flexfield to a sandbox for testing or to the mainline metadata for use in a test or production run time environment. You can deploy extensible flexfields as a background process.

After deployment, the user-defined attributes are available for incorporating into the SOA infrastructure, such as business process and business rule integration. For example, you can now write business rules that depend on the user-defined attributes. You must sign out and sign back in to Oracle Applications Cloud to see the changes you deployed at run time.

The following aspects are important in understanding flexfield deployment:

- Deployment Status
- Initial Deployment Status
- Metadata Validations
- Metadata Synchronization
- Deployment as a Background Process
- Export of Artifacts from Flexfield MDS

### Deployment Status

Every flexfield has a deployment status. Check the deployment status of your flexfield after patching. The following table lists the different deployment statuses a flexfield can have.

<table>
<thead>
<tr>
<th>Deployment Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edited</td>
<td>The flexfield metadata definition hasn’t been deployed yet. Updates of the metadata definition aren’t applied in the run time environment.</td>
</tr>
<tr>
<td>Patched</td>
<td>The flexfield metadata definition has been modified through a patch or a data migration action, but the flexfield hasn’t yet been deployed. So, the updated definition isn’t reflected in the run time environment.</td>
</tr>
<tr>
<td>Deployed to Sandbox</td>
<td>The current metadata for the flexfield is deployed in ADF artifacts and available as a flexfield-enabled sandbox. The status of the sandbox is managed by the Manage Sandboxes dialog box available in the Settings and Actions menu.</td>
</tr>
<tr>
<td>Deployed</td>
<td>The current metadata for the flexfield is deployed in ADF artifacts and available to users. No changes have been made to the flexfield after being deployed to the mainline metadata.</td>
</tr>
<tr>
<td>Error</td>
<td>The deployment attempt in the mainline metadata failed.</td>
</tr>
</tbody>
</table>

> **Note:** Whenever a value set definition changes, the deployment status of a flexfield that uses that value set changes to edited. If the change results from a patch, the deployment status of the flexfield changes to patched.

### Initial Deployment Status of Flexfields

The Oracle Applications Cloud implementation loads flexfield metadata into the database. This initial load sets the flexfield status to Edited. During installation, the application provisioning process deploys the flexfields of the provisioned applications, setting their status to Deployed if no errors occur.

In a provisioned application, deployed flexfields are ready to use. In some cases, flexfield availability at run time requires setup, such as defining key flexfields.
Metadata Validation

Use the Validate Metadata command to view possible metadata errors before attempting to deploy the flexfield. Metadata validation is the initial phase of all flexfield deployment commands. By successfully validating metadata before running the deployment commands, you can avoid failures in the metadata validation phase of a deployment attempt. The deployment process ends if an error occurs during the metadata validation phase. Metadata validation results don’t affect the deployment status of a flexfield.

Metadata Synchronization

When an extensible or descriptive flexfield is deployed, the deployment process regenerates the XML schema definition (XSD). As a result, the user-defined attributes are available to web services and the SOA infrastructure.

After deploying a flexfield configuration, you must synchronize the updated XML schema definition (XSD) files in the MDS repositories for each SOA application.

Note: To synchronize the updated XSD files in the MDS repositories in Oracle Cloud implementations, log a service request using My Oracle Support at http://support.com/.

Deployment as a Background Process

You can deploy extensible flexfields offline as a background process and continue working in the session without having to wait for the deployment to complete. You can queue up several extensible flexfields and deploy as a background process. The flexfields are deployed, one at a time, in the order that you deploy them to the queue. You must deploy extensible flexfields with more than 30 categories as a background process.

You can remove an extensible flexfield from the deployment queue with the Cancel Background Deployment command. When an extensible flexfield is deployed in a background process, its offline status indicates that the flexfield is in a background deployment process. A flexfield’s offline status is cleared and its deployment status updated when the background deployment process has completed.

Export of Artifacts from Flexfield MDS

You can export business components from MDS for descriptive, extensible, or key flexfields, mainly for use in troubleshooting issues with flexfields. Use Download Flexfield Archive on the Manage Flexfields page to export MDS artifacts of the selected flexfield, and import them to an archive on your local computer. You can use these archived business components of flexfields for troubleshooting purposes.

Alternatively, export the deployed artifacts using exportMetadata WLST.

How Flexfield Deployment Status is Calculated

Flexfield deployment status indicates how the flexfield metadata definition in the Oracle Applications Cloud database relates to the Application Development Framework (ADF) business components residing in an Oracle Metadata Services (MDS) Repository.

The following aspects are important in understanding how flexfield deployment status is calculated:

- Settings that affect flexfield deployment status
- How deployment status is calculated
Settings That Affect Flexfield Deployment Status

If you have made a change to a flexfield and expect a changed deployment status, ensure that you have saved your changes. No settings affect flexfield deployment status.

How Deployment Status Is Calculated

If the flexfield definition has been edited through the Define Flexfields activity task flows, the status is Edited. The latest flexfield metadata definition diverges from the latest deployed flexfield definition. Any change, including if a value set used in a flexfield changes, changes the deployment status to Edited. If a flexfield has never been deployed, its status is Edited.

Note: When an application is provisioned, the provisioning framework attempts to deploy all flexfields in that application.

If you deploy the flexfield to a sandbox successfully, the status is Deployed to Sandbox. The latest flexfield metadata definition in the application matches with the metadata definition that generated ADF business components in a sandbox MDS Repository. Whether the sandbox is active or not doesn't affect the deployment status. If the flexfield was deployed to a sandbox and hasn't been edited or redeployed to the mainline metadata since then, the status remains Deployed to Sandbox independent of whether the sandbox is active, or who is viewing the status.

If you deploy the flexfield successfully to the mainline metadata, the status is Deployed. The latest flexfield metadata definition in the application matches the metadata definition that generated ADF business components in a mainline MDS Repository. Change notifications are sent when a flexfield is deployed successfully to the mainline metadata. If either type of deployment fails and that the current flexfield definition isn’t deployed, the status is Error. The deployment error message gives details about the error. The latest flexfield metadata definition in the application likely diverges from the latest successfully deployed flexfield definition.

If the flexfield definition has been modified by a patch, the status is Patched. The latest flexfield metadata definition in the application diverges from the latest deployed flexfield definition. If the flexfield definition was Deployed before the patch and then a patch was applied, the status changes to Patched. If the flexfield definition was Edited before the patch and then a patch was applied, the status remains at Edited to reflect that there are still changes (outside of the patch) that aren’t yet in effect.

When a deployment attempt fails, you can access the Deployment Error Message for details.

Related Topics

- Considerations for Managing Extensible Flexfields

How Deploying a Flexfield-Enabled Sandbox Works with Mainline Metadata

The flexfield definition in a sandbox corresponds to the flexfield metadata definition in the Oracle Applications Cloud database at the time the flexfield was deployed to the sandbox. When the flexfield is ready for end users, the flexfield must be deployed to the mainline metadata.

A flexfield-enabled sandbox uses the following components.

- Flexfield metadata in the Oracle Applications Cloud database
- Flexfield business components in a sandbox Oracle Metadata Services (MDS) repository
- User interface modifications for the flexfield in the mainline MDS repository
The following figure shows the two types of deployment available in the Manage Flexfield tasks of the Define Flexfields activity. Deploying a flexfield to a sandbox creates a sandbox MDS Repository for the sole purpose of testing flexfield behavior. The sandbox is only accessible to the administrator who activates and accesses it, not to users generally. Deploying a flexfield to the mainline metadata applies the flexfield definition to the mainline MDS Repository where it is available to end users. After deploying the flexfield to the mainline metadata, modify the page where the flexfield segments appear. Modifications done to the page in the sandbox MDS Repository cannot be published to the mainline MDS Repository.

Sandbox Metadata Services Repository Data
Deploying the flexfield to a sandbox generates the Application Development Framework (ADF) business components of a flexfield in a sandbox MDS Repository for testing in isolation.
Caution: Don’t modify flexfield segment display properties using Page Composer in a flexfield-enabled sandbox as these changes will be lost when deploying the flexfield to the mainline metadata.

Mainline Metadata Services Repository Data
The Oracle Fusion Applications database stores the single source of truth about a flexfield. When the flexfield is deployed, the ADF business component objects that implement the flexfield in the run time user interface are generated in the mainline MDS Repository from this source.

Related Topics
- How You Manage Configurations in Classic Sandboxes

Considerations for Deploying a Flexfield to a Sandbox
Deploying a flexfield to a sandbox creates a flexfield-enabled sandbox. Each flexfield-enabled sandbox contains only one flexfield.

You can test the run time behavior of a flexfield in the flexfield-enabled sandbox. If changes are needed, you return to the Define Flexfield tasks to change the flexfield definition.

When you deploy a flexfield to sandbox, the process reads the metadata about the segments from the database, generates flexfield Application Development Framework (ADF) business component artifacts based on that definition, and stores in the sandbox only the generated artifacts derived from the definition.

When you deploy a flexfield sandbox, the process generates the name of the flexfield sandbox, and that flexfield sandbox is set as your current active sandbox. When you next sign in to the application, you can see the updated flexfield configurations. The Oracle Applications Cloud global header displays your current session sandbox.

Note: Unlike a standalone sandbox created using the Manage Sandboxes dialog box, the sandbox deployed for a flexfield contains only the single flexfield. You can manage flexfield sandboxes, such as setting an existing flexfield sandbox as active or deleting it, using the Manage Sandboxes dialog box.

When you deploy a flexfield to the mainline metadata after having deployed it to the sandbox, the sandbox-enabled flexfield is automatically deleted.

Sandbox MDS Repository Data
The sandbox data lets you test the flexfield in isolation without first deploying it in the mainline metadata where it could be accessed by users.

Caution: Don’t modify flexfield segment display properties using Page Composer in a flexfield-enabled sandbox as these changes will be lost when deploying the flexfield to the mainline metadata.

Managing a Flexfield-Enabled Sandbox
When you deploy a flexfield as a sandbox, that flexfield-enabled sandbox automatically gets activated in your user session. When you sign back in to see the changes, the sandbox is active in your session.

You can only deploy a flexfield to a sandbox using the Define Flexfields task flow pages.
You also can use the Manage Sandboxes dialog box in the Administrator menu of the Setup and Maintenance work area to activate and access a flexfield-enabled sandbox.

> **Note:** Whether you use the Define Flexfields or Manage Sandboxes task flows to access a flexfield-enabled sandbox, you must sign out and sign back in before you can see the changes you deployed in the run time.

You cannot publish the flexfield from the sandbox to the mainline metadata. You must use the Define Flexfields task flow pages to deploy the flexfield for access by users of the mainline metadata because the flexfield configuration in the mainline metadata is the single source of truth.

**Related Topics**
- How You Manage Configurations in Classic Sandboxes

## Manage Value Sets

### Overview of Value Sets

A value set is a group of valid values that you assign to a flexfield segment to control the values that are stored for business object attributes.

A user enters a value for an attribute of a business object while using the application. The flexfield validates the value against the set of valid values that you configured as a value set and assigned to the segment.

For example, you can define a required format, such as a five-digit number, or a list of valid values, such as green, red, and blue.

Flexfield segments are usually validated, and typically each segment in a given flexfield uses a different value set. You can assign a single value set to more than one segment, and you can share value sets among different flexfields.

> **Note:** Ensure that changes to a shared value set are compatible with all flexfields segments using the value set.

The following aspects are important in understanding value sets:

- Managing value sets
- Validation
- Security
- Precision and scale
- Usage and deployment
- Protected value set data

### Managing Value Sets

To open the Manage Value Sets page, use the Manage Value Sets task. You can also use the Manage Descriptive Flexfields and Manage Extensible Flexfields tasks for configuring a segment, including its value set. To open the Manage Values page, select the value set from the Manage Value Sets page, and click **Manage Values**. Alternatively, click **Manage Values** from the Edit Value Set page.
Validation

The following types of validation are available for value sets:

- Format only, where users enter data instead of selecting values from a list
- Independent, a list of values consisting of valid values you specify
- Dependent, a list of values where a valid value derives from the independent value of another segment
- Subset, where the list of values is a subset of the values in an existing independent value set
- Table, where the values derive from a column in an application table and the list of values is limited by a WHERE clause

A segment that uses a format only value set doesn’t present a list of valid values to users. If required, you may add table validated value sets to the list of available value sets available for configuration.

Note: For the Accounting Key Flexfield value sets, you must use independent validation only. If you use other validations, you can’t use the full chart of accounts functionality, such as data security, reporting, and account hierarchy integration.

Security

Value set security only works in conjunction with usage within flexfield segments. You can specify that data security be applied to the values in flexfield segments that use a value set. Based on the roles provisioned to users, data security policies determine which values of the flexfield segment users can view or modify.

The application of value set security has the following conditions:

- At the value set level: The value set is the resource secured by data security policies. If a value set is secured, every usage of it in any flexfield is secured. Disabling security for individual usages of the same value set isn’t possible.
- Applies to independent, dependent, or table-validated value sets.
- Applies mainly when data is being created or updated, and to key flexfield combinations tables for query purposes. Value set security doesn’t determine which descriptive flexfield data is shown upon querying.
- Security conditions defined on value sets always use table aliases. When filters are used, table aliases are always used by default. When predicates are defined for data security conditions, make sure that the predicates also use table aliases.

For key flexfields, the attributes in the view object corresponding to the account combination ID, structure instance number (SIN), and data set number (DSN) can’t be transient. They must exist in the database table. For key flexfields, the SIN segment is the discriminator attribute, and the account combination segment is the common attribute.

Precision and Scale

If the data type of a value set is Number, you can specify the precision (maximum number of digits user can enter) or scale (maximum number of digits following the decimal point).

Usage and Deployment

The usage of a value set is the flexfields where that value set is used. The deployment status of flexfields in which the value set is used indicates the deployment status of the value set instance.
The following figure shows a value set used by a segment in a key flexfield and the context segment of a descriptive flexfield.

For most value sets, when you enter values into a flexfield segment, you can enter only values that already exist in the value set assigned to that segment.

Global and context-sensitive segment require a value set. You can assign a value set to a descriptive flexfield context segment. If you specify only context values, not value sets for contexts, the set of valid values is equal to the set of context values.

**Protected Value Set Data**

Application developers may mark some value sets as protected, indicating that you can’t edit them.

You can edit only value sets that are not marked as protected. You can’t edit or delete protected value sets. If the value set type supports values (such as independent, dependent or subset value sets), then you can’t add, edit, or delete values.
Note: References to protected value sets aren’t restricted. Value sets, protected or not, may be assigned to any flexfield segment. Likewise, other value sets may reference protected value sets; for example, an unprotected dependent value set may reference a protected independent value set.

Related Topics

- Chart of Accounts Components
- What’s the difference between a lookup type and a value set

Validation Type Options for Value Sets

Validation and usage of value sets determine where and how users access valid values for attributes represented by flexfield segments.

Tip: As a flexfield guideline, define value sets before configuring the flexfield, because you can assign value sets to each segment as you configure a flexfield. With descriptive and extensible flexfield segments, you can create value sets when adding or editing a segment on the run time page where the flexfield appears.

The following aspects are important in defining value sets:

- Value sets for context segments
- Format-only validation
- Interdependent value sets
- Table validation
- Range
- Security
- Testing and maintenance

Value Sets for Context Segments

When assigning a value set to a context segment, you can only use table-validated or independent value sets.

You can use only table and independent value sets to validate context values. The data type must be character and the maximum length of the values being stored must not be larger than the context’s column length. If you use a table value set, the value set can’t reference flexfield segments in the value set’s WHERE clause, other than the flexfield segment to which the value set is assigned.

Format Only Validation

The format only validation type enables users to enter any value, as long as it meets your specified formatting rules. The value must not exceed the maximum length you define for your value set, and it must meet any format requirements for that value set.

For example, if the value set permits only numeric characters, users can enter the value 456 (for a value set with maximum length of three or more), but can’t enter the value ABC. A format only value set doesn’t otherwise restrict the range of different values that users can enter. For numeric values, you can also specify if a numeric value should be zero filled or how may digits should follow the radix separator.
Interdependent Value Sets

Use an independent value set to validate data against a list that isn’t stored in an application table, and not dependent on a subset of another independent value set. You can’t specify a dependent value set for a given segment without having first defined an independent value set that you apply to another segment in the same flexfield. Use a dependent value set to limit the list of values for a given segment based on the value that the user has defined for a related independent segment. The available values in a dependent list and the meaning of a given value depend on which value was selected for the independently validated segment.

For example, you could define an independent value set of the states in the USA with values such as CA, NY, and so on. Then you define a dependent value set of cities in the USA with values such as San Francisco and Los Angeles that are valid for the independent value CA. Similarly, New York City and Albany are valid for the independent value NY. In the UI, only the valid cities can be selected for a given state.

Because you define a subset value set from an existing independent value set, you must define the independent value set first. Users don’t have to select a value for another segment first to have access to the subset value set.

Independent, dependent, and subset value sets require a user-defined list of valid values. Use the Manage Values page to create and manage a value set’s valid values and the order in which they appear.

⚠️ Tip: You can configure the Manage Value Sets page to capture additional attributes for each valid value by adding context-sensitive segments in a new context for FND_VS_VALUES_B descriptive field.

Table Validation

Typically, you use a table-validated set when the values you want to use are already maintained in an application table, such as a table of supplier names. Specify the table column that contains the valid value. You can optionally specify the description and ID columns, a WHERE clause to limit the values to use for your set, and an ORDER BY clause.

If you specify an ID column, then the flexfield saves the ID value, instead of the value from the value column, in the associated flexfield segment. If the underlying table supports translations, you can enable the display of translated text by basing the value set’s value column on a translated attribute of the underlying table. You should also define an ID column that’s based on an attribute that isn’t language-dependent so that the value’s invariant ID (an ID that doesn’t change) is saved in the transaction table. The run time displays the corresponding translated text from the value column for the run time session’s locale.

Table validation lets you enable a segment to depend on multiple prior segments in the same context structure. You can’t reference other flexfield segments in the table-validated value set’s WHERE clause. Which means, the WHERE clause can’t reference SEGMENT.segment_code or VALUESET.value_set_code.

Table-validated value sets have unique values across the table, irrespective of bind variables. The WHERE clause fragment of the value set is considered if it doesn’t have bind variables. If it has bind variables, the assumption is that the values are unique in the value set. If you use table validated value sets for key flexfields, then you can’t use all integration options supported for key flexfields, such as:

- Data security
- Oracle Transactional Business Intelligence (OTBI)
- Extended Spread Sheet Database (ESSbase)
- Tree or hierarchy integration

To use these integration options for key flexfields, you must use independent value sets only.
Range
In the case of format, independent, or dependent value sets, you can specify a range to limit which values are valid. You can specify a range of values that are valid within a value set. You can also specify a range validated pair of segments where one segment represents the low end of the range and another segment represents the high end of the range.

For example, you might specify a range for a format-only value set with format type Number where the user can enter only values between 0 and 100.

Security
In the case of independent and dependent values, you can specify that data security be applied to the values in segments that use a value set. Based on the roles provisioned to users, data security policies determine which values of the flexfield segment users can view or modify.

To enable security on a value set, specify a database resource, typically the code value for the value set. Using the Manage Database Security Policies task, specify conditions, such as filters or SQL predicates, and policies that associate roles with conditions. You can use a filter for simple conditions. For more complex conditions, use a SQL predicate.

Value set data security policies and conditions differ from data security conditions and policies for business objects in the following ways:

- You can grant only read access to users. You can’t specify any other action.
- When defining a condition that’s based on a SQL predicate, use VALUE, VALUE_NUMBER, VALUE_DATE, VALUE_TIMESTAMP, or VALUE_ID to reference the value from a dependent, independent, or subset value set. For table value sets, use a table alias to define the table, such as &TABLE_ALIAS category=70.

When you enable security on table-validated value sets, the security rule that’s defined is absolute and not contingent upon the bind variables (if any) that may be used by the WHERE clause of the value set. For example, suppose a table-validated value set has a bind variable to further filter the value list to x, y and z from a list of x, y, z, xx, yy, zz. The data security rule or filter written against the value set must not assume anything about the bind variables. Instead the whole list of values must be available and you write the rule, for example, to permit x, or to permit y and z. By default in data security, all values are denied and show only rows to which access has been provided.

Testing and Maintenance
You don’t have to define or maintain values for a table-validated value set, as the values are managed as part of the referenced table or independent value set, respectively.

You can’t manage value sets in a sandbox.

When you change an existing value set, the deployment status for all affected flexfields changes to Edited. You must redeploy all flexfields that use that value set to make the flexfields reflect the changes. In the UI pages for managing value sets, the value set’s usages show which flexfields are affected by the value set changes.

If your application has more than one language installed, or there is any possibility that you might install one or more additional languages for your application in the future, select Translatable. This doesn’t require you to provide translated values now, but you can’t change this option if you decide to provide them later.

Considerations for Planning Value Sets
The value sets you create and configure depend on the valid values on the business object attributes that will use the value set. When creating value sets, you first give the value set a name and description, and then define the valid values of the set.
The following aspects are important in planning value sets:

- List of values
- Plain text
- Value ranges
- Value format specification
- Security

**List of Values**

You can use one of the following types of lists to specify the valid values for a segment:

- Table column
- User-defined list. Also include a sub list.
- Dependent user-defined list

If the valid values exist in a table column, use a table value set to specify the list of values. To limit the valid values to a subset of the values in the table, use a SQL WHERE clause. Table value sets also provide some advanced features, such as enabling validation depending on other segments in the same structure.

Use an independent value set to specify a user-defined set of valid values. For example, you can use an independent value set of Mon, Tue, Wed, and so forth to validate the day of the week. You can also specify a subset of an existing independent value set as the valid values for a segment. For example, if you have an independent value set for the days of the week, then a weekend subset can comprise entries for Saturday and Sunday.

Use a dependent value set when the available values in the list and the meaning of a given value depend on which independent value was selected for a previously selected segment value. For example, the valid holidays depend on which country you are in. A dependent value set is a collection of value subsets, with one subset for each value in a corresponding independent value set.

For lists of values type value sets, you can additionally limit the valid values that an end user can select or enter by specifying format, minimum value, and maximum value. For list of values type value sets, you can optionally implement value set data security. If the applications are running in different locales, you might need to provide different translations for the values and descriptions.

**Plain Text**

Use a format-only value set when you want to allow users to enter any value, as long as that value conforms to formatting rules. For example, if you specify a maximum length of 3 and numeric-only, then end users can enter 456, but not 4567 or 45A. You can also specify the minimum and maximum values, whether to align the text to either side, and whether to zero-fill. With a format-only value set, no other types of validation are applied.

**Value Ranges**

You can use either a format-only, independent, or dependent value set to specify a range of values. For example, you might create a format-only value set with Number as the format type where the end user can enter only the values between 0 and 100. Or, you might create a format-only value set with Date as the format type where the end user can enter only dates for a specific year, such as a range of 01-JAN-93 to 31-DEC-93. Because the minimum and maximum values enforce these limits, you need not define a value set that contains each of these individual numbers or dates.

**Value Format**

Flexfield segments commonly require some kind of format specification, regardless of validation type. Before creating a value set, consider how you will specify the required format.
The following table shows options for validation type and value data type.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value data type</td>
<td>Character, Number, Date, Date Time.</td>
</tr>
<tr>
<td>Value subtype</td>
<td>Text, Translated text, Numeric digits only, Time (20:08), Time (20:08:08).</td>
</tr>
<tr>
<td></td>
<td>An additional data type specification for the Character data type for the</td>
</tr>
<tr>
<td></td>
<td>Dependent, Independent, and Format validation types.</td>
</tr>
<tr>
<td>Maximum length</td>
<td>Maximum number of characters or digits for Character data type.</td>
</tr>
<tr>
<td>Precision</td>
<td>Maximum number of digits the user can enter.</td>
</tr>
<tr>
<td>Scale</td>
<td>Maximum number of digits that can follow the decimal point.</td>
</tr>
<tr>
<td>Uppercase only</td>
<td>Lowercase characters automatically changed to uppercase.</td>
</tr>
<tr>
<td>Zero fill</td>
<td>Automatic text alignment and zero-filling of entered numbers (affects</td>
</tr>
<tr>
<td></td>
<td>values that include only the digits 0-9).</td>
</tr>
</tbody>
</table>

⚠️ **Note:** You cannot change the text value data type to a translated text value subtype after creating a value set. If there is any chance you may need to translate displayed values into other languages, choose Translated text. Selecting the Translated text subtype doesn't require you to provide translated values.

### Value Sets for Context Segments

You can use only table and independent value sets to validate context values. The data type must be character and the maximum length of the values being stored must not be larger than the context’s column length. If you use a table value set, the value set cannot reference flexfield segments in the value set’s WHERE clause other than the flexfield segment to which the value set is assigned.

### Security

When enabling security on a value set, the data security resource name is an existing value set or one that you want to create. The name typically matches the code value for the value set. You cannot edit the data security resource name after you save your changes.

### Related Topics

- What’s the difference between a lookup type and a value set

### Considerations for Bind Variables in Table-Validated Value Sets

After you assign a value set to a flexfield, you can use bind variables in the WHERE clause. The following bind variables refer to flexfield elements:

- `:SEGMENT.<segment_code>`
• :{CONTEXT.<context_code>;SEGMENT.<segment_code>}
• :{VALUESET.<value_set_code>}
• :{FLEXFIELD.<internal_code>}
• :{PARAMETER.<parameter_code>}

Segment Code

: {SEGMENT.<segment_code>}

This bind variable refers to the ID or value of a segment where <segment_code> identifies the segment. Where referring to the ID, the value set is ID-validated. Where referring to the value, the value set isn’t ID-validated. The data type of the bind value is the same as the data type of the segment’s column.

For both descriptive and extensible flexfields, the segment must be in the same context as the source segment. The source segment contains the WHERE clause. For descriptive flexfields, if the segment is global, then the source segment must be global.

The segment must have a sequence number that’s less than the sequence number of the target segment with this bind variable. A matching segment must exist in the current flexfield context.

This bind variable is useful when the set of valid values depends on the value in another segment. For example, the values to select from a CITIES table might depend upon the selected country. If SEGMENT1 contains the country value, then the WHERE clause for the CITIES table might be <country_code> = :{SEGMENT.SEGMENT1}.

Context Code

: {CONTEXT.<context_code>;SEGMENT.<segment_code>}

This bind variable, which is valid only for extensible flexfields, refers to the ID (if the value set is ID-validated) or value (if not ID-validated) of a segment that’s in a different context than the target segment (the segment with the WHERE clause).

• The <context_code> identifies the context and must be in the same category or in an ancestor category. It can’t be a multiple-row context.
• The <segment_code> identifies the segment. The data type of the bind value is the same as the data type of the segment’s column.

Note: The target segment should appear in the UI after the source segment to ensure the source segment has a value. If the target segment’s context is a single-row context, the source and target segments must be on separate pages and the target page must follow the source page.

The framework of extensible flexfields doesn’t perform any additional validation related to mismatched values for segments defined with cross context bind parameters. Administrators must populate the correct pair of segment values.

This bind variable is useful when the set of valid values depends on the value of a segment in another context. For example, the values to select from a CERTIFICATION table for a segment in the Compliance and Certification context might depend on the value of the country segment in the Manufacturing context.

Value Set Code

:{VALUESET.<value_set_code>}

This bind variable refers to the ID (if the value set is ID-validated) or value (if not ID-validated) of the segment that’s assigned to the value set that’s identified by the value_set_code. The data type of the bind value is the same as the data type of the segment’s column.
The segment must have a sequence number that’s less than the sequence number of the segment with this bind variable. If more than one segment is assigned to the value set, the closest prior matching segment will be used to resolve the bind expression. A matching segment must exist in the current flexfield context.

This bind variable is useful when the set of valid values depends on the value in another segment and that segment code can vary, such as when the value set is used for more than one context or flexfield. For example, the values to select from a CITIES table might depend upon the selected country. If the value set for the segment that contains the country value is COUNTRIES, then the WHERE clause for the CITIES table might be `<country_code> = :{VALUESET.COUNTRIES}`.

### Flexfield Internal Code

`:FLEXFIELD.<internal_code>`

This bind variable refers to an internal code of the flexfield in which the value set is used, or to a validation date. The `internal_code` must be one of the following:

- `APPLICATION_ID` - the application ID of the flexfield in which this value set is used. The data type of `APPLICATION_ID` and its resulting bind value is `NUMBER`.
- `DESCRIPTIVE_FLEXFIELD_CODE` - the identifying code of the flexfield in which this value set is used. The data type of `DESCRIPTIVE_FLEXFIELD_CODE` and its resulting bind value is `VARCHAR2`. Note that you use this string for both descriptive and extensible flexfields.
- `CONTEXT_CODE` - the context code of the flexfield context in which this value set is used. The data type of `CONTEXT_CODE` and its resulting bind value is `VARCHAR2`.
- `SEGMENT_CODE` - the identifying code of the flexfield segment in which this value set is used. The data type of `SEGMENT_CODE` and its resulting bind value is `VARCHAR2`.
- `VALIDATION_DATE` - the current database date. The data type of `VALIDATION_DATE` and its resulting bind value is `DATE`.

### Flexfield Parameters

`:PARAMETER.<parameter_code>`

This bind variable refers to the value of a flexfield parameter where `parameter_code` identifies the parameter. The data type of the resulting bind value is the same as the parameter's data type.

⚠️ **Note:** You can’t assign a table value set to a context segment if the WHERE clause uses `VALUESET.value_set_code` or `SEGMENT.segment_code` bind variables.

### Create Table-Validated Value Sets Based on Lookups

In an application user interface, you want to display a list of values that customers use to enter satisfaction scores. The value column name is 1, 2, 3, 4, 5 and the value column description is Extremely Satisfied, Satisfied, and so on. Users can select the appropriate value or description which stores the corresponding name so the name value can be used in a calculation expression.

In this case, you can use the FND_LOOKUPS table as the basis for a table-validated value set. The lookup meaning corresponds to the Value Column Name and the lookup description corresponds to the Description Column Name. The following table lists the properties of the value set.
After completing this task, you should have created your customer satisfaction value set for the Incentive Compensation page of your implementation project.

**Creating a Value Set Based on a Lookup**

1. From the Setup and Maintenance work area, find the Manage Value Sets task and click the **Go to Task** icon button.
2. On the Manage Value Sets page, click the **Create** icon button.
3. On the Create Value Set page, enter the following values:
   a. In the Value Set Code field, enter **CN_XX_CUSTOMER_SATISFACTION_SCORES**
   b. In the Description field, enter Customer satisfaction score.
   c. In the Module field, select **Search**
   d. In the Search and Select: Module subwindow, enter **Incent** in the User Module Name field
   e. Select Incentive Compensation.
   f. Click **OK**.
4. On the Create Value Set page, enter the following values:
   a. In the Validation Type field, select Table.
   b. In the Value Data Type field, select Character.
   c. In the Definition section FROM Clause field, enter FND_LOOKUPS.
   d. In the Value Column Name field, enter DESCRIPTION.
   e. In the Description Column Name field, enter MEANING.
   f. In the ID Column Name field, enter LOOKUP_CODE.
   g. In the Enabled Column Name field, enter ‘Y’.
   h. In the Start Date Column Name field, enter START_DATE_ACTIVE.
   i. In the End Date Column Name field, enter END_DATE_ACTIVE.
   j. In the WHERE Clause field, enter LOOKUP_TYPE = ‘CN_XX_CUST_SATISFACT_SCORE’.
5. Click **Save and Close**.
6. In the Manage Value Sets page, click **Done**.
Add Attributes to the Manage Value Sets Page

You can add attributes to independent, dependent, and subset value sets. The attributes appear on the Manage Value Sets page where you can store additional information about each valid value. To display attributes on an application page, you must programmatically modify the application.

To add attributes and subsequently view them on the Manage Value Sets page, perform the following steps:

1. Using the Manage Descriptive Flexfields task, find the FND_VS_VALUES_B flexfield and open it for editing.
2. Click Manage Contexts.
3. Create a new context and use the value set code for the context code.
4. Add new attributes as context-sensitive segments and save the changes.
5. Deploy FND_VS_VALUES_B to run time.
6. Sign out and sign back in.
7. Open the Manage Value Sets page to view the new attributes.

Import Value Set Values

You can import a file containing values that you want to edit or add to a given independent or dependent value set. For example, uploading a hundred values may be more efficient than creating them individually using the Manage Value Sets task. However, for just a few values, it may be quicker to perform the relevant tasks.

Importing Value Set Values

To import value set values:

1. Create a flat file containing the values in the value set that you want to add or update.

   Note:
   - When creating the file, you must specify an existing value set code to which you want to add values or edit existing values. If the value set does not exist, add the value set using the appropriate Manage Value Sets setup task in the Setup and Maintenance work area.
   - The file that you create must adhere to the formatting and content requirements for creating flat files containing value set values.

2. Upload the flat file to the content repository using the File Import and Export page.
3. Import the file using the appropriate Manage Value Sets setup task in the Setup and Maintenance work area. To import the file:
   a. Click Actions > Import in the Manage Value Sets page.
   b. In the File Name field, enter the name of the flat file you uploaded using the File Import and Export page.
   c. In the Account field, select the user account containing the flat file.
   d. Click Upload.

   Note: Alternatively, you can import the file using either of the following methods:
   - Run the Upload Value Set Values scheduled process.
   - Use the Applications Core Metadata Import web service. For more information on the Applications Core Metadata Import web service, see the SOAP Web Services guide for your cloud services.
Related Topics

- Overview of Files for Import and Export

Import Value Set Values Using Web Services

As an alternative to using the import option on the Manage Value Sets page, you can use the `FndManageImportExportFilesService` web service to import value set values into an application. The web service uses the `valueSetValuesDataLoader` method.

Prerequisite

Ensure that the web service `FndManageImportExportFilesService` is added to the Manage Application Flexfield Value Set entitlement. Use the Security Console to perform this configuration on Oracle Entitlements Server. While configuring the web service, provide the following details:

- Resource type: WebserviceResourceType
- Display name: ImportExport
- Name: http://xmlns.oracle.com/oracle/apps/fnd/appcore/webservices/FndManageImportExportFilesService#
- Entitlement (In Default Policy Domain): Manage Application Flexfield Value Set
- Security policy: oracle/wss11_saml_or_username_token_with_message_protection_service_policy

Importing Value Set Values

To import value set values:

1. Perform the following substeps to generate keystore for the security policy "oracle/wss11_saml_or_username_token_with_message_protection_service_policy":
   b. Access the WSDL using the URL `http://<host>:<port>/fndAppCoreServices/FndManageImportExportFilesService?wsdl` through a web browser, and get the public key `<wsdl:service>/<wsdl:port>/<wsa:EndpointReference>/<wsid:Identity>/<dsig:keyInfo>/<dsig:X509Data>/<dsig:X509Certificate>`. Then, enclose it with `---- BEGIN CERTIFICATE ----` and `---- END CERTIFICATE ----` and save it to a file by name cdrmpk.cer.
   c. Store the key information in the truststore using the command `keytool -importcert -alias cdrmkey -file cdrmpk.cer -keystore mycompclient-keystore.jks -storepass <password>`.

2. Access the WSDL page using the browser of your choice.

3. Export and save the associated security certificates Verisign Class 3 Public Primary Certification Authority - G5 and Verisign Secure Server CA - G3.

4. Use the following command to import the saved certificates into the trust store of the client computer.
   `keytool -importcert -keystore <truststore> -storepass <truststorepassword> -file <file location where the mentioned certificate is stored> -alias <alias for certificate>`

5. Run the following command to generate the JAX-WS proxy for the `FndManageImportExportFilesService` web service.
   `C:\Program Files\Java\jdk1.7.0_04\bin>wsimport -s "d:\wsimport\FndManageImportExport"`
parsing WSDL...

Generating code...

Compiling code...

6. Save the generated code as a JAR file and name it FndManageImportExportProxy.jar.

7. Use the following code to create another JAR file to initiate the web service:

```java
package com.oracle.xmlns.oracle.apps.fnd.applcore.webservices;

import com.sun.xml.ws.developer.WSBindingProvider;
import java.io.File;
import java.io.IOException;
import java.util.List;
import java.util.Map;
import javax.xml.ws.BindingProvider;
import javax.xml.ws.WebServiceRef;
import java.util.List;
import javax.xml.ws.handler.Handler;
import oracle.webservices.ClientConstants;

import weblogic.wsee.jws.jaxws.owsm.SecurityPoliciesFeature;
// !THE CHANGES MADE TO THIS FILE WILL BE DESTROYED IF REGENERATED!
// This source file is generated by Oracle tools
// Contents may be subject to change
// For reporting problems, use the following
// Version = Oracle WebServices (11.1.1.0.0, build 130224.1947.04102)

public class FndManageImportExportFilesServiceSoapHttpPortClient
{
  @WebServiceRef
  private static FndManageImportExportFilesService_Service fndManageImportExportFilesService_Service;

  public static void main(String [] args)
  {
    System.setProperty("javax.net.ssl.trustStore","<location of truststore which is used in II to import the certificates>");
    System.setProperty("javax.net.ssl.trustStorePassword", "<truststore password>");

    FndManageImportExportFilesService fndManageImportExportFilesService = fndManageImportExportFilesService_Service.getFndManageImportExportFilesServiceSoapHttpPort(
      new SecurityPoliciesFeature(new String[] { "oracle/wss11_username_token_with_message_protection_client_policy", }));
    FndManageImportExportFilesService fndManageImportExportFilesService = fndManageImportExportFilesService_Service.getFndManageImportExportFilesServiceSoapHttpPort(
      FndManageImportExportFilesService
    fndManageImportExportFilesService
    fndManageImportExportFilesService = fndManageImportExportFilesService_Service.getFndManageImportExportFilesServiceSoapHttpPort
      (securityFeatures);
    // Add your code to call the desired methods.

    WSBindingProvider wbsp = (WSBindingProvider) fndManageImportExportFilesService;
    Map<String, Object> requestContext = wbsp.getRequestContext();

    requestContext.put(ClientConstants.WSSEC_KEYSTORE_TYPE,"jks");
```
// Provide location of 'mycompclient-keystore.jks' which was created during Step I)
requestContext.put(ClientConstants.WSSEC_KEYSTORE_LOCATION, "/home/user1/mycompclient-keystore.jks");
requestContext.put(ClientConstants.WSSEC_KEYSTORE_PASSWORD, "<password>");
requestContext.put(ClientConstants.WSSEC_RECIPIENT_KEY_ALIAS, "cdrmkey");

// Provide user who is having permission to initiate the service
requestContext.put(WSBindingProvider.USERNAME_PROPERTY, "<username>");
requestContext.put(WSBindingProvider.PASSWORD_PROPERTY, "<password>");

String id = invokeUploadFiletoUCMMethod(fndManageImportExportFilesService);
if (id != null) {
    invokevalueSetValuesDataLoader(fndManageImportExportFilesService, new Long(id));
}

static String invokeUploadFiletoUCMMethod(FndManageImportExportFilesService fndManageImportExportFilesService) {
    String response = null;
    DocumentDetails document = new DocumentDetails();
    ObjectFactory objfactory = new ObjectFactory();
    document.setFileName(objfactory.createDocumentDetailsFileName("import_data.txt"));
    // Provide UCM repository - if repository is fin/tax/import then suffix each value with $ as mentioned here
    document.setDocumentTitle(objfactory.createDocumentDetailsDocumentTitle("VS"));
    document.setContentType(objfactory.createDocumentDetailsContentType("plain/text"));
    try {
        // Provide location of 'VS.txt' which contains ValueSet values data in prescribed format
        byte[] content = org.apache.commons.io.FileUtils.readFileToByteArray(new File("/home/user1/VS.txt"));
        document.setContent(objfactory.createDocumentDetailsContent(content));
    } catch (IOException e) {
        System.out.println(e.getMessage());
    } catch(Exception e) {
        System.out.println("Exception: "+e.getMessage());
    }
    try {
        response = fndManageImportExportFilesService.uploadFiletoUCM(document);
        System.out.println("Response: " + response);
    } catch (ServiceException e) {
        System.out.println(e.getMessage());
    }
    return response;
}

static void invokevalueSetValuesDataLoader(FndManageImportExportFilesService fndManageImportExportFilesService, Long id) {
    String response;
    try {
        response = fndManageImportExportFilesService.valueSetValuesDataLoader(id);
        System.out.println("Response: " + response);
    } catch (ServiceException e) {
        System.out.println(e.getMessage());
    }
}

// Provide location of 'mycompclient-keystore.jks' which was created during Step I)
8. Save the generated output as a JAVA file and name it FndManageImportExportFilesServiceSoapHttpPortClient.java.

9. Use the JAVA file to build a JAR file, and name it FndManageImportExportClient.jar.

10. Use the following command to run the web service:

```
java -cp ./FndManageImportExportProxy.jar:./ws.api_1.1.0.0.jar:./FndManageImportExportClient.jar
     FndManageImportExportFilesServiceSoapHttpPortClient
```

### Import Value Set Values Using Web Services

As an alternative to using the import option on the Manage Value Sets page, you can use the FndManageImportExportFilesService web service to import value set values into an application. The web service uses the valueSetValuesDataLoader method.

#### Prerequisite

Ensure that the web service FndManageImportExportFilesService is added to the Manage Application Flexfield Value Set entitlement. Use the Security Console to perform this configuration on Oracle Entitlements Server. While configuring the web service, provide the following details:

- Resource type: WebserviceResourceType
- Display name: ImportExport
- Name: http://xmlns.oracle.com/oracle/apps/fnd/applcore/webservices/FndManageImportExportFilesService#*
- Entitlement (In Default Policy Domain): Manage Application Flexfield Value Set
- Security policy: oracle/wss11_saml_or_username_token_with_message_protection_service_policy

#### Importing Value Set Values

To import value set values:

1. Perform the following substeps to generate keystore for the security policy "oracle/wss11_saml_or_username_token_with_message_protection_service_policy":


   b. Access the WSDL using the URL `http://<host>:<port>/fndAppCoreServices/FndManageImportExportFilesService?wsdl` through a web browser, and get the public key `<wsdl:service>/<wsdl:port>/<wsa:EndpointReference>/<wsid:Identity>/<dsig:keyInfo>/<dsig:X509Data>/<dsig:X509Certificate>`. Then, enclose it with ---- BEGIN CERTIFICATE ---- and ---- END CERTIFICATE ---- and save it to a file by name cdrmpk.cer.

   c. Store the key information in the truststore using the command `keytool -importcert -alias cdrmkey -file cdrmpk.cer -keystore mycompclient-keystore.jks -storepass <password>`.

2. Access the WSDL page using the browser of your choice.

3. Export and save the associated security certificates Verisign Class 3 Public Primary Certification Authority - G5 and Verisign Secure Server CA - G3.

4. Use the following command to import the saved certificates into the trust store of the client computer.
keytool -importcert -keystore <truststore> -storepass <truststorepassword> -file <file location where the mentioned certificate is stored> -alias <alias for certificate>

5. Run the following command to generate the JAX-WS proxy for the `FndManageImportExportFilesService` web service.

```
C:\Program Files\Java\jdk1.7.0_04\bin>wsimport
-s "d:\wsimport\FndManageImportExport"
-d "d:\wsimport\FndManageImportExport" http://<host>:<port>/fndAppCoreServices/FndManageImportExportFilesService?wsdl
```

6. Save the generated code as a JAR file and name it `FndManageImportExportProxy.jar`.

7. Use the following code to create another JAR file to initiate the web service:

```java
package com.oracle.xmlns.oracle.apps.fnd.applcore.webservices;
import com.sun.xml.ws.developer.WSBindingProvider;
import java.io.File;
import java.io.IOException;
import java.util.List;
import java.util.Map;
import javax.xml.ws.BindingProvider;
import javax.xml.ws.WebServiceRef;
import javax.xml.ws.handler.Handler;
import oracle.webservices.ClientConstants;
import weblogic.wsee.jws.jaxws.owsm.SecurityPoliciesFeature;
// !THE CHANGES MADE TO THIS FILE WILL BE DESTROYED IF REGENERATED!
// This source file is generated by Oracle tools
// Contents may be subject to change
// For reporting problems, use the following
// Version = Oracle WebServices (11.1.1.0.0, build 130224.1947.04102)
public class FndManageImportExportFilesServiceSoapHttpPortClient {
    @WebServiceRef
    private static FndManageImportExportFilesServiceService fndManageImportExportFilesService_Service;

    public static void main(String [] args) {
        System.setProperty("javax.net.ssl.trustStore","<location of truststore which is used in II to import the certificates>");
        System.setProperty("javax.net.ssl.trustStorePassword","<truststore password>");

        FndManageImportExportFilesServiceService = new FndManageImportExportFilesServiceService();
        FndManageImportExportFilesService
    }
```
(securityFeatures);
// Add your code to call the desired methods.

WSBindingProvider wsbp = (WSBindingProvider) fndManageImportExportFilesService;
Map<String, Object> requestContext = wsbp.getRequestContext();

requestContext.put(ClientConstants.WSSEC_KEYSTORE_TYPE, "jks");
// Provide location of 'mycompclient-keystore.jks' which was created during Step I)
requestContext.put(ClientConstants.WSSEC_KEYSTORE_LOCATION, "/home/user1/mycompclient-keystore.jks");
requestContext.put(ClientConstants.WSSEC_KEYSTORE_PASSWORD, "<password>");
requestContext.put(ClientConstants.WSSEC_RECIPIENT_KEY_ALIAS, "cdrmkey");

// Provide user who is having permission to initiate the service
requestContext.put(WSBindingProvider.USERNAME_PROPERTY, "<username>");
requestContext.put(WSBindingProvider.PASSWORD_PROPERTY, "<password>");

String id = invokeUploadFiletoUCMMethod(fndManageImportExportFilesService);

if (id != null) {
invokevalueSetValuesDataLoader(fndManageImportExportFilesService, new Long(id));
}

static String invokeUploadFiletoUCMMethod(FndManageImportExportFilesService fndManageImportExportFilesService) {
String response = null;
DocumentDetails document = new DocumentDetails();
ObjectFactory objfactory = new ObjectFactory();
document.setFileName(objfactory.createDocumentDetailsFileName("import_data.txt"));
// Provide UCM repository - if repository is fin/tax/import then suffix each value with $ as mentioned here
document.setDocumentTitle(objfactory.createDocumentDetailsDocumentTitle("VS"));
document.setContentType(objfactory.createDocumentDetailsContentType("plain/text"));

try {
// Provide location of 'VS.txt' which contains ValueSet values data in prescribed format
byte[] content = org.apache.commons.io.FileUtils.readFileToByteArray(new File("/home/user1/VS.txt"));

//System.out.println("File content:" + new String(content, "UTF-8");
document.setContent(objfactory.createDocumentDetailsContent(content));

} catch (IOException e) {
System.out.println(e.getMessage());
}

catch(Exception e) {
System.out.println("Exception: "+e.getMessage());
}

try {
response = fndManageImportExportFilesService.uploadFiletoUCM(document);
System.out.println("Response:" + response);
}
catch (ServiceException e) {
System.out.println(e.getMessage());
}

return response;
}
static void invokevalueSetValuesDataLoader(FndManageImportExportFilesService fndManageImportExportFilesService, Long id) {
    String response;
    try {
        response = fndManageImportExportFilesService.valueSetValuesDataLoader(id);
        System.out.println("Response: " + response);
    } catch (ServiceException e) {
        System.out.println(e.getMessage());
    }
}

8. Save the generated output as a JAVA file and name it FndManageImportExportFilesServiceSoapHttpPortClient.java.
9. Use the JAVA file to build a JAR file, and name it FndManageImportExportClient.jar.
10. Use the following command to run the web service:

    java -cp ./FndManageImportExportProxy.jar:/ws.api_1.1.0.0.jar:/FndManageImportExportClient.jar FndManageImportExportFilesServiceSoapHttpPortClient

Requirements for Flat Files to Upload Value Set Values

You can import large volumes of value set value data from the content repository. To upload value set values to the content repository, create a flat file containing the values in the value set that you want to add or update. You upload these flat files to the content repository using the File Import and Export page.

General Requirements

The first line of the flat file must contain the column names for the value set value data, including all mandatory columns, and separated by the '|' (pipe) character. Each subsequent line should contain a row of data specified in the same order as the column names, also separated by the '|' character.

The requirements for creating flat files vary with the type of value sets:

- Independent value sets
- Dependent value sets

Independent Value Set

A flat file for uploading values for independent value sets must contain the mandatory columns. The following table lists the three mandatory columns and their data types.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Data Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ValueSetCode</td>
<td>VARCHAR2(60)</td>
</tr>
<tr>
<td>Value</td>
<td>VARCHAR2(150)</td>
</tr>
<tr>
<td>Enabled Flag</td>
<td>VARCHAR2(1), Y or N</td>
</tr>
</tbody>
</table>

*Note: You can also specify optional columns.*
Examples:

- To upload values to a COLORS independent value set with the minimum columns, you can use the following flat file:

```
ValueSetCode | Value | EnabledFlag
COLORS | Red | Y
COLORS | Orange | Y
COLORS | Yellow | Y
```

- To upload values to a STATES independent value set with more (optional) columns, you can use the following flat file:

```
ValueSetCode | Value | Description | EnabledFlag
STATES | AK | Alaska | Y
STATES | CA | California | Y
STATES | WA | Washington | Y
```

## Dependent Value Sets

A flat file for uploading values for dependent value sets must contain the mandatory columns. The following table lists the four mandatory columns and their data types.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Data Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Set Code</td>
<td>VARCHAR2(60)</td>
</tr>
<tr>
<td>Independent Value</td>
<td>VARCHAR2(150)</td>
</tr>
<tr>
<td>Value</td>
<td>VARCHAR2(150)</td>
</tr>
<tr>
<td>Enabled Flag</td>
<td>VARCHAR2(1), Y or N</td>
</tr>
</tbody>
</table>

**Note:** You can also specify optional columns.

Example:

To upload values to a CITIES dependent value set (dependent on the STATES independent value set), you can use the following flat file:

```
ValueSetCode | IndependentValue | Value | EnabledFlag
CITIES | AK | Juneau | Y
CITIES | AK | Anchorage | Y
CITIES | CA | San Francisco | Y
CITIES | CA | Sacramento | Y
CITIES | CA | Los Angeles | Y
CITIES | CA | Oakland | Y
```

## Additional Optional Columns

In addition to the mandatory columns, you can add optional columns. The following table lists the optional columns for both dependent and independent value sets.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Translated Value</td>
<td>VARCHAR2(150), for use in value sets that are translatable</td>
</tr>
</tbody>
</table>
### Upload Value Set Values Process

This process uploads a flat file containing value set values for flexfields. You can use the scheduled process to upload a file containing values you want to edit or add to an existing independent or dependent value set. This process is useful for adding or updating large volumes of value set value data in an automated or recurring fashion. For example, you can upload a hundred values on a recurring basis when scheduled as a recurring process. This method could be more efficient than using the Import action in the Manage Value Sets tasks in the Setup and Maintenance work area. However, for a task of uploading a hundred values, it may be quicker to use the Import action in the relevant tasks.

Run this process from the Scheduled Processes Overview page. You can run it on a recurring basis whenever the flat file in the content repository account is updated.

You must create the flat file containing the values data, and upload the flat file to the content repository using the File Import and Export page.

### Parameters

**Flat File Name**

Enter the name of the flat file you uploaded using the File Import and Export page.

**Account**

Select the user account containing the flat file in the content repository to upload.

---

### Related Topics

- [Overview of Files for Import and Export](#)
Translation of Flexfield and Value Set Configurations

When you first configure a flexfield or segment, the translatable text that you enter, such as prompts and descriptions, is stored as the text for all installed locales. You may then provide a translation for a particular locale. If you don’t provide a translation for a given locale, then the value that was first entered is used for that locale.

To translate the text for a particular locale, sign in with that locale, or in the global header, select Settings and Actions > Personalization > Set Preferences and specify the locale. Then, update the translatable text in the flexfield using the Manage Descriptive Flexfields task, Manage Key Flexfields task, or Manage Extensible Flexfields task. Your modifications change the translated values only for the current session’s locale.

After you complete the translations, deploy the flexfield.

You can define translations for a dependent value set or an independent value set, if the value set is of type Character with a subtype Translated text. You define the translations by setting the current session to the locale for which you want to define the translation. Then use the Manage Value Sets task to enter the translated values and descriptions for that locale.

You can define translated values for a table value set for which multiple languages are supported and that the value set’s value column is based on a translated attribute of the underlying table. For more information about using multilanguage support features, see the Oracle Fusion Applications Developer’s Guide.

FAQs for Manage Value Sets

What happens if a value set is security enabled?

Value set security is a feature that enables you to secure access to value set values based on the role of the user in the application.

As an example, suppose you have a value set of US state names. When this value set is used to validate a flexfield segment, and users can select a value for the segment, you can use value set security to restrict them to selecting only a certain state or subset of states based on their assigned roles in the application.

For example, Western-region employees may choose only California, Nevada, Oregon, and so on as valid values. They cannot select non-Western-region states. Eastern-region employees may choose only New York, New Jersey, Virginia, and so on as valid values, but cannot select non-Eastern-region states. Value set security is implemented using Oracle Applications Cloud data security.

How can I set a default value for a flexfield segment?

When you define or edit a flexfield segment, you pick a value from the assigned value set and set it as default.
You can set the default value for a descriptive flexfield segment to be a parameter. The mapped entity object attribute provides the initial default value for the segment.

You can set the default value to be a constant, if appropriate to the data type of the value set assigned to the segment.

In addition to an initial default value, you can set a derivation value for updating the attribute’s value every time the parameter value changes. The parameter you select identifies the entity object source attribute. Any changes in the value of the source attribute during run time are reflected in the value of the segment.

If the display type of the segment is a check box, you can set whether the default value of the segment is checked or unchecked.
21 Flexfields Maintenance

Manage Descriptive Flexfields

Overview of Descriptive Flexfields

Use descriptive flexfields to add attributes to business object entities, and define validation for them. All the business object entities that you can use in the application are enabled for descriptive flexfields. However, configuring descriptive flexfields is an optional task.

Context
A descriptive flexfield can have only one context segment to provide context sensitivity. The same underlying database column can be used by different segments in different contexts.

For example, you can define a Dimensions context that uses the following attributes:

- ATTRIBUTE1 column for height
- ATTRIBUTE2 column for width
- ATTRIBUTE3 column for depth

You can also define a Measurements context that uses the same columns for other attributes:

- ATTRIBUTE1 column for weight
- ATTRIBUTE2 column for volume
- ATTRIBUTE3 column for density

Segments and Contexts
The following table lists the different types of descriptive flexfield segments.

<table>
<thead>
<tr>
<th>Segment Type</th>
<th>Run Time Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global segment</td>
<td>Always available</td>
</tr>
<tr>
<td>Context segment</td>
<td>Determines which context-sensitive segments are displayed</td>
</tr>
<tr>
<td>Context-sensitive segment</td>
<td>Displayed depending on the value of the context segment</td>
</tr>
</tbody>
</table>
The following figure displays a descriptive flexfield having one context segment called Category for which there are three values: Resistor, Battery, and Capacitor. Additionally, the descriptive flexfield comprises two global segments that appear in each context, and three context-sensitive segments that only appear in the specific context.

Application development determines the number of segments available for configuring. During implementation, configure the flexfield by determining the following:

- Attributes to add using the available segments
- Context values
- The combination of attributes in each context

**Value Sets**

For each global and context-sensitive segment, you configure the values permitted for the segment. Based on it, the values that end users enter are validated, including interdependent validation among the segments.

**Protected Descriptive Flexfield Data**

Application developers may mark some data configurations in a descriptive flexfield as protected, indicating that you can’t edit them.
Considerations for Planning Descriptive Flexfields

Once you have identified a flexfield to configure, plan the configuration in advance. Compile a list of the UI pages and other artifacts in your deployment that are affected by the configuration. Verify that you are provisioned with the roles needed to view and configure the flexfield. View the flexfield using the Highlight Flexfields command in the Administration menu while viewing the run time page where the flexfield appears. Plan how you will deploy the flexfield for test and production users.

Planning a descriptive flexfield can involve the following tasks:

1. Identify existing parameters.
2. Identify existing context values and whether the context value is derived.
3. Identify user-defined attributes and plan the descriptive flexfield segments, segment properties, and structure.
5. Plan initial values.
6. Plan attribute mapping to Oracle Business Intelligence objects.

Identify Existing Descriptive Flexfield Parameters

Some descriptive flexfields provide parameters that can be used to specify the initial value of a descriptive flexfield segment. The parameter is external reference data, such as a column value or a session variable. For example, if a flexfield has a user email parameter, you can configure the initial value for a customer email attribute to be derived from that parameter.

Review the list of available parameters in the Derivation Value field in the Create Segment page for a descriptive flexfield. If you decide to use one of the parameters to set an initial value, select that parameter from the Derivation Value drop-down list when you add the descriptive flexfield segment.

Evaluate Whether the Context Value Is Derived

The context value for a descriptive flexfield might have been preconfigured to be derived from an external reference. For example, if the context is Marriage Status, then the value might be derived from an attribute in the employee business object. When the context value is derived, you might need to take the derived values and their source into consideration in your plan.

To determine whether the context value is derived, access the Edit Descriptive Flexfield task to view the list of configured context values for the flexfield. The Derivation Value field in the Context Segment region displays a list of available parameters. If context values have been preconfigured, see Oracle Applications Cloud Help for product-specific information about the use of those values.

Plan the Segments, Segment Properties, and Structure

Identify the user-defined attributes you need for a business object to determine the segments of the descriptive flexfield. Determine the segment properties such as the prompt, display type, or initial value.

The structure of the descriptive flexfield is determined by its global, context, and context-sensitive segments. Plan a global segment that captures an attribute for every instance of the business object. Plan a context for segments that depend on
a condition of situation applying to a particular instance of the business object. Plan context-sensitive segments to capture attributes that are relevant in the context.

There is only one context segment available for descriptive flexfields. If you have more than one group of user-defined attributes where you could use the context segment, you will have to pick one group over the others, based on your company’s needs and priorities, and add the other user-defined attributes as global segments.

Plan Validation Rules
Define each segment’s validation rules and check if value sets exist for those rules or you must create new ones. If you must create a value set, you can create it either before configuring the flexfield or while creating or editing a segment.

When determining a segment’s validation rules, consider the following questions:

- What is the data type - character, date, date and time, or number?
- Does the segment require any validation beyond data type and maximum length?
- Should a character type value be restricted to digits, or are alphabetic characters allowed?
- Should alphabetic characters automatically be changed to uppercase?
- Should numeric values be zero-filled?
- How many digits can follow the radix separator of a numeric value? In base ten numeric systems, the radix separator is decimal point.
- Does the value need to fall within a range?
- Should the value be selected from a list of valid values? If so, consider the following questions:
  - Can you use an existing application table from which to obtain the list of valid values, or do you need to create a list?
  - If you are using an existing table, do you need to limit the list of values using a WHERE clause?
  - Does the list of valid values depend on the value in another flexfield segment?
  - Is the list of valid values a subset of another flexfield segment’s list of values?

Plan Initial Values
For every segment, list the constant value or SQL statement, if any, to use for the initial value of the user-defined attribute.

Plan How Segments Map to Oracle Business Intelligence Objects
You can extend descriptive flexfields into Oracle Transactional Business Intelligence (OTBI) for ad hoc reporting purposes. Determine the descriptive flexfield segments to be made available for reporting, and select the **BI Enabled** check box accordingly on the Manage Descriptive Flexfields page. You must run a process to extend the BI enabled segments into OTBI. For more information about extending the BI enabled segments into OTBI, see the Flexfields chapter in the Oracle Applications Cloud Creating and Administering Analytics and Reports guide.

Depending on the reporting needs, you may map similar context-sensitive attributes from different contexts to the same attribute in OTBI. For example, there may be a segment tracking the Product Color attribute in different contexts of a context sensitive descriptive flexfield. You can use segment labels to map these context-sensitive attributes together by defining a segment label and updating the BI Label list accordingly.

Related Topics
- Flexfield Segment Properties
- Overview of Value Sets
Considerations for Managing Descriptive Flexfields

Configuring descriptive flexfields involves managing the available flexfields registered with your Oracle Applications Cloud database and configuring their flexfield-level properties, defining and managing descriptive flexfield contexts, and configuring global and context-sensitive segments.

Every descriptive flexfield is registered to include a context segment, which you may choose to use or not.

In general, configuring descriptive flexfields involves:

1. Creating segment labels for business intelligence enabled flexfields.
2. Configuring global segments by providing identity information, the initial default value, and the display properties.
3. Configuring the context segment by specifying the prompt, whether the context segment should be displayed, and whether a value is required.
4. Configuring contexts by specifying a context code, description, and name for each context value, and adding its context-sensitive segments, each of which is configured to include identifying information, the column assignment, the initial default value, and the display properties.

The following aspects are important in understanding descriptive flexfield management:

- Segments
- Adding segments to highlighted descriptive flexfields
- Usages
- Parameters
- Delimiters
- Initial Values
- Business Intelligence

Segments

You can assign sequence order numbers to global segments and to context-sensitive segments in each context. Segment display is always in a fixed order. You can’t enter a number for a segment if that number is already in use for a different segment.

Value sets are optional for context segments and follow specific guidelines:

- The value set that you specify for a context segment consists of a set of context codes.
- Each context code corresponds to a context that’s appropriate for the descriptive flexfield.
- The value set must be independent or table-validated.
- If table-validated, the WHERE clause must not use the VALUESET.value_set_code or SEGMENT.segment_code bind variables.
- The value set must be of data type Character with the maximum length of values being stored no larger than the context’s column length.
- If you don’t specify a value set for a context segment, the valid values for that context segment are derived from the context codes. The definition of each context segment specifies the set of context-sensitive segments that can be presented when that context code is selected by the end user.
• For reasons of data integrity, you can’t delete an existing context. Instead, you can disable the associated context value in its own value set by setting its end date to a date in the past.

• You can configure the individual global segments and context-sensitive segments in a descriptive flexfield. These segment types are differentiated by their usage, but they’re configured on application pages that use most of the same properties.

Adding Segments to Highlighted Descriptive Flexfields

When you highlight flexfields on a run time page and use an **Add Segment** icon button to create a segment, the segment code, name, description, table column, and sequence number are set automatically. If you use an **Add Segment** icon button to configure descriptive flexfield segments, you can’t use an existing value set. Value sets are created automatically when you add the segments. You can enter the valid values, their descriptions, and the default value or specify the formatting constraints for the value set, such as minimum and maximum values.

Depending on display type, the value set you create using the **Add Segment** icon button is either an independent value set or a format-only value set. The following table shows which type of value set is created depending on the segment display component you select.

<table>
<thead>
<tr>
<th>Display Component</th>
<th>Value Set Created Using Add Segment</th>
</tr>
</thead>
<tbody>
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<td>Drop-down List</td>
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<td>Radio Button Group</td>
<td>Independent</td>
</tr>
<tr>
<td>Text Field With Search</td>
<td>Independent</td>
</tr>
<tr>
<td>Text box</td>
<td>Format Only</td>
</tr>
<tr>
<td>Text area</td>
<td>Format Only</td>
</tr>
<tr>
<td>Date/Time</td>
<td>Format Only</td>
</tr>
</tbody>
</table>

**Tip:** After you add a context value, refresh the page to see the new value.

Usages

Descriptive flexfield usages allow for the same definition to be applied to multiple entities or application tables, such as a USER table and a USER_HISTORY table. Descriptive flexfield tables define the placeholder entity where the flexfield segment values are stored once you have configured the descriptive flexfield. When you configure a flexfield, the configuration applies to all its usages.

Parameters

Some descriptive flexfields provide parameters, which are attributes of the same or related entity objects. Parameters are public arguments to a descriptive flexfield. Parameters provide outside values in descriptive flexfield validation. You use parameters to set the initial value or derivation value of an attribute from external reference data, such as a column value or
a session variable, rather than from user input. Parameters can be referenced by the logic that derives the default segment value, and by table-validated value set WHERE clauses.

**Delimiters**
A segment delimiter or separator visually separates segment values when the flexfield is displayed as a string of concatenated segments.

**Initial Values**
The SQL statement defining an initial value must be a valid statement that returns only one row and a value of the correct type.

You can use two types of SQL statements:
- SQL statement with no binding. For example, select MIN(SALARY) from EMPLOYEES.
- SQL statement with bind variables. You can use the following bind variables in the WHERE clause of the SQL statement.
  - `: {SEGMENT. <segment_code> }`: Identifies a segment in the same context.
  - `: {CONTEXT. <context_code>; SEGMENT. <segment_code> }`: Identifies a segment in a different context. The context must be in the same category or in an ancestor category, and it can't be a multiple-row context.
  - `: {VALUESET. <value_set_code> }`: Identifies the closest prior segment in the same context that's assigned to the specified value set.
  - `: {FLEXFIELD. <internal_code> }`: Identifies a flexfield.

For more information about using bind variables, see the help for value sets.

**Business Intelligence**
Selecting a global, context, or context-sensitive segment’s BI Enabled check box specifies that the segment is available for use in Oracle Business Intelligence.

When the flexfield is imported into Oracle Business Intelligence, the label you selected from the BI Label drop-down list equalizes the segment with segments in other contexts, and maps the segment to the logical object represented by the label.

**Related Topics**
- Validation Type Options for Value Sets
- Default Segment Values
- Flexfield Segment Properties
- Why can’t I edit my flexfield or value set configuration

**Considerations for Enabling Descriptive Flexfield Segments for Business Intelligence**
A descriptive flexfield that is registered in the database as enabled for Oracle Business Intelligence (BI) includes a BI Enabled setting for each of its segments. When a global, context, or context-sensitive segment is BI-enabled, it is available for use in Oracle Business Intelligence.
The following aspects are important in understanding BI-enabled flexfield segments:

- Flattening business components to use BI-enabled segments in Oracle BI
- Equalizing segments to prevent duplication and complexity in the flattened component
- Mapping attributes of flattened business components to logical objects in Oracle BI
- Managing the labels that map segments to logical objects in Oracle BI

After you deploy a business intelligence-enabled flexfield, use the Import Oracle Fusion Data Extensions for Transactional Business Intelligence process to import the flexfield changes into the Oracle Business Intelligence repository. Users can make use of the newly-generated attributes in business intelligence applications. For example, a user can generate a report that includes attributes added by the descriptive flexfield. For additional information about logical objects and import, refer to the Oracle Transactional Business Intelligence Administrator’s Guide.

Flattening

When you deploy a business intelligence-enabled descriptive flexfield, the deployment process generates an additional set of flattened Application Development Framework (ADF) business components in addition to the usual ADF business components and ADF faces run time artifacts that are generated during deployment. The flattened business components include attributes for business intelligence-enabled segments only. Flattening means each user-defined column in each context shows up as an attribute in an Oracle Business Intelligence folder.

Flattened components include one attribute for the BI-enabled context-segment, and one attribute for each business intelligence-enabled global segment. For BI-enabled context-sensitive segments, consider the following:

- If you assigned a label to the segment, the flattened components include an additional single attribute representing segments with that label.
- If you didn’t assign a label, the flattened components include a discrete attribute for each BI-enabled context-sensitive segment in each context.

Mapping to Logical Objects in Business Intelligence

You can simplify reporting by representing similar segments as a single logical object in Business Intelligence.

If you assign a label to any set of context-sensitive segments that serve the same purpose in different contexts, you can consolidate or equalize the segments into a single attribute. This prevents duplication and the extra workload and complexity that result from the flattening process. For example, a United States context might have a Passport segment and a Canada context might have Visa segment. If you assign the NationalID segment label to both the Passport and Visa segments, they are equalized into the same NationalID attribute in the flattened business component.

Non-labeled context-sensitive segments aren’t equalized across context values, so the flattened components include a separate attribute for each context-sensitive segment for each context value. It may not be possible to equalize similarly labeled segments if they have incompatible data types or value set types.

Assign a label to a global segment, context segment, or context-sensitive segment to map the corresponding attribute in the flattened components to a logical object in Oracle Business Intelligence. Using labels to map segments to BI logical objects minimizes the steps for importing the flexfield into Oracle Business Intelligence.

> **Note:** Assigning a label to a context-sensitive segment serves to equalize the attribute across contexts, as well as map the equalized attribute to business intelligence.

Managing Labels

You may assign a predefined label (if available) to segments or create new labels for assignment, as needed. Specify a code, name, and description to identify each label. In the BI Object Name field, enter the name of the logical object in Oracle
Business Intelligence to which the segment label should map during import. Specifying the BI logical object minimizes the steps for importing the flexfield into Oracle Business Intelligence and helps to equalize context-sensitive segments across contexts.

If no labels are assigned to a BI-enabled segment, or the BI Object Name on the assigned label doesn’t exist in business intelligence, you must manually map the segment to the desired logical object when importing into Oracle Business Intelligence.

In addition, context-sensitive segments without labels cannot be equalized across context values. The flattened components include a separate attribute for each non-labeled context-sensitive segment in each context.

**Importing to Oracle Business Intelligence Repository**

After you deploy a business intelligence-enabled flexfield, import the flexfield changes into the Oracle Business Intelligence repository to make use of the newly flattened business components in business intelligence and then propagate the flexfield object changes. When you import the metadata into the Oracle Business Intelligence repository, you must do so as the FUSION_APPS_BI_APPID user.

To import flexfield changes into the Oracle Business Intelligence repository in Oracle Cloud implementations, run the Import Oracle Fusion Data Extensions for Transactional Business Intelligence process. For additional information about import, refer to the Oracle Transactional Business Intelligence Administrator's Guide.

**Note:** When you import a flexfield into the Oracle Business Intelligence repository, you see both `<name>` and `<name>_c` attributes for each segment, along with some other optional attributes. The `<name>` attribute contains the value. The `<name>_c` attribute contains the code of the value set that the value comes from, and is used for linking to the value dimension. You must import both attributes.

**Manage Extensible Flexfields**

**Overview of Extensible Flexfields**

Extensible flexfields are like descriptive flexfields, with some additional features.

- You can add as many context-sensitive segments to the flexfield as you need. You aren’t restricted by the number of columns predefined and registered for the flexfield.
- You can configure a one-to-many relationship between the entity and its extended attribute rows.
  - A row of data can have multiple contexts associated with it.
  - A row of data can have multiple occurrences of the same context.
- You can configure attributes in groups to form a context so that the attributes in the context always appear together in the user interface.
- You can use existing hierarchical categories so that entities inherit the contexts that are configured for their parents. Contexts are reusable throughout categories.
- Application development has registered some extensible flexfields to support view and edit privileges. For such flexfields, you can specify view and edit privileges at the context level to control who sees the attributes and who can change the attributes' values.
When you configure a context for multiple rows per entity, the segments are displayed as a table.

Unlike descriptive flexfields, the extension columns corresponding to extensible flexfields segments are part of extension tables, separate from the base application table. Unlike descriptive flexfield contexts, the set of attributes in an extensible flexfield context remains constant and doesn’t differ by context value. An extensible flexfield describes an application entity, with the run time ability to expand the database that implementation consultants can use to define the data structure that appears in the application. Extensible flexfields support one-to-many relationships between the entity and the extended attribute rows. To get a list of predefined extensible flexfields, use the Manage Extensible Flexfields task in the Setup and Maintenance work area.

The following aspects are important in understanding extensible flexfields:

- Usages
- Categories
- Pages
- Security
- Protected Extensible Flexfield Data

**Usages**

Similar to the descriptive flexfields, you can define multiple usages for an extensible flexfield, which enables several application tables to share the same flexfield.

For example, a flexfield for shipping options can be used by both a Supplier table and a Buyer table. In addition, you can associate a context with one, some, or all of the flexfield’s usages. Thus, with the shipping information example, you can associate a warehouse context with the Supplier usage, a delivery location context with the Buyer usage, and a ship-via context with all usages.

Usages include security information for applying no security to user access or enforcing view and edit privileges. Some product-specific extensible flexfields have specialized usage fields beyond those for security.

**Categories**

You can configure multiple extensible flexfield contexts and group the contexts into categories. All extensible flexfields have at least one category. For some extensible flexfields, you can configure a hierarchy of categories. A child category in the hierarchy can inherit contexts from its parent category.

You can define categories for extensible flexfields, and you can associate any combination of contexts with a given category.

For example, the Electronics and Computers category hierarchy might include a Home Entertainment category, which in turn might include an Audio category and a TV category, and so on. The Home Entertainment product might have contexts that specify voltage, dimensions, inputs and outputs. Contexts are reusable within a given extensible flexfield. For example, the dimensions context could be assigned to any category that needs to include dimensional information.

**Pages**

Extensible flexfields let you combine contexts into groups known as pages, which serve to connect the contexts so they will always be presented together in the application user interface.

Each application page corresponds to one extensible flexfield category, with a separate region of the page for each associated context.

**Security**

When you configure a flexfield, you set the privileges for a context at the usage level by selecting actions for the view and edit privileges of a context usage.
When an end user performs a search, the user interface displays only the attribute values of the contexts for which the user has view privileges. The user can perform a search using all attributes for all contexts, regardless of view privileges.

If end users access a context through a web service, an exception is thrown if they perform an action for which they don’t have privileges.

All extensible flexfields have a base data security resource. Some data security resources for extensible flexfields are preconfigured with actions that you can use to specify access privileges. If no action is preconfigured, a security administrator can create actions and policies to support access control on the extensible flexfield attributes.

Some extensible flexfields have a translatable option; these flexfields also have a translation data security resource.

Protected Extensible Flexfield Data
Application developers may mark some data configurations in an extensible flexfield as protected, indicating that you can’t edit them.

If an extensible flexfield is partially protected, then you can’t edit the protected portions of the flexfield’s configuration. For example:

- If an extensible flexfield context is protected, you can’t edit its:
  - Context details
  - Context segments
  - Context usages
- If an extensible flexfield page is protected, you can’t:
  - Edit the page details or delete the page
  - Edit the contexts associated with the page

**Note:**
- There is no restriction on page references to protected contexts. The pages you create may contain any context, whether protected or not.
- There is a restriction on category references to protected contexts. If a context is protected, you can’t add it to or delete it from any category.

**Related Topics**
- Overview of Flexfield Deployment
- Considerations for Managing Flexfields
- How can I access predefined flexfields
- Update Existing Setup Data

Considerations for Planning Extensible Flexfields
Once you have identified a flexfield, plan its configuration in advance. Compile a list of the UI pages and other artifacts in your deployment that are affected by the configuration. Verify that you are provisioned with the roles required to view and configure the flexfield. View the flexfield using the Highlight Flexfields option in the Administration menu while viewing the run
time page where the flexfield appears. Plan how to deploy the flexfield for test and production users. Review the tools and tasks available for managing flexfields for adding and editing flexfield segments.

Planning an extensible flexfield involves:

1. Identifying the following:
   - A hierarchical structure of categories
   - Existing context values
   - User-defined attributes, the relevant extensible flexfield segments, segment properties, and the structure

2. Planning the following:
   - Validation rules
   - Initial values
   - Security
   - Attribute mapping to Oracle Business Intelligence objects.

Category Hierarchy Structure

Existing category hierarchy structures provide the framework for planning what segments to add to an extensible flexfield as user-defined attributes of an entity. Some applications provide user interfaces to create and manage an extensible flexfield’s category hierarchy.

Contexts and Existing Context Values

If related attributes can be grouped together, plan adding the attributes as a context of segments, and plan the order in which the attributes should appear. Some extensible flexfields have preconfigured context values. Region headers displayed in the user interface page or pages that contain the flexfield segments identify existing contexts. Using the Manage Extensible Flexfields task, find and open the flexfield for editing to view the list of configured context values.

See product-specific information for guidance in using preconfigured context values.

Plan the Segments and Segment Properties

List all the user-defined attributes that you want to add as extensible flexfield segments. For each segment, define properties, including the indexed property.

Plan Validation Rules

Define each segment’s validation rules and check if value sets exist for those rules or you must create. If you must create a value set, you can create it either before you configure the flexfield or at the same time that you create or edit a segment.

When determining a segment’s validation rules, consider the following questions:

- What is the data type: character, date, date and time, or number?
- Does the segment require any validation beyond data type and maximum length?
- Should a character type value be restricted to digits, or are alphabetic characters permitted?
- Should alphabetic characters automatically be changed to uppercase?
- Should numeric values be zero-filled?
- How many digits can follow the radix separator of a numeric value? In base ten numeric systems, the radix separator is a decimal point.
- Should the value be within a range?
• Should the value be selected from a list of valid values? If yes, consider the following questions:
  o Can you use an existing application table from which to obtain the list of valid values, or do you have to create a list?
  o If you are using an existing table, do you have to limit the list of values using a WHERE clause?
  o Does the list of valid values depend on the value in another flexfield segment?
  o Is the list of valid values a subset of another flexfield segment’s list of values?

Plan Initial Values
For every segment, list the constant value or SQL statement, if any, to use for the initial value of the user-defined attribute.

Plan Security
Determine what privileges to set for view and edit access to context attributes, such as providing all users with view access but only managers with edit access.

If your security restrictions apply to several contexts, you can create generic actions. At a minimum, create the generic actions for the base data security resource. If the flexfield has a translatable option and you plan to use translatable contexts, then also create the generic actions for the translation data security resource. For example, the Item flexfield supports the translatable option and has a data security resource ITEM_EFF_VL in addition to the base data security resource ITEM_EFF_B. Then, create actions for both data security resources, such as EDIT_NONTRANS_ATTRS for ITEM_EFF_B and EDIT_TRANS_ATTRS for ITEM_EFF_VL.

If your security restrictions are more fine-grained, such as having to secure each context with a different privilege, then you can create more fine-grained actions.

Plan Which Segments Map to Oracle Business Intelligence Objects
If an extensible flexfield has been enabled for Oracle Business Intelligence, you can make the attributes available for use in Oracle Business Intelligence Applications.

Related Topics
  • Flexfield Segment Properties

Considerations for Managing Extensible Flexfields
Configuring extensible flexfields involves managing the available flexfields registered with your application database.

The following sequence describes how to configure extensible flexfields:

1. Configuring contexts by creating each context segment and the context-sensitive segments for each context segment, and providing the following for each segments:
   a. Identifying information
   b. Column assignment
   c. Initial default value
   d. Display properties
2. Configuring context usages and usage security by selecting actions to which users should have access:
   o View
   o Edit
None, if no special privileges should be enforced.

3. Configuring categories and category details.
4. Associating contexts with a category.
5. Creating logical pages for a category.

The following aspects are important in understanding extensible flexfield management:

- Contexts and pages
- Categories
- Initial values
- Adding segments to highlighted extensible flexfields
- Indexed segments
- Security
- Deployment

Contexts and Pages

Each context is displayed to end users as a region containing its context-sensitive segments. You can specify instruction help text to display instructions that explain how to use the region and its attributes to end users. Instruction help text is displayed at the beginning of the context region. A context can be defined as single row or multi-row. Single row contexts are the same as descriptive flexfields contexts. A single row context has only one set of context-sensitive segments. A multi-row context enables you to associate multiple sets of values with the same object instance.

For example, for a BOOK table, you could create a multi-row context named chapters that contains a segment for chapter and a segment for number of pages. Multiple chapters can then be associated with each book in the BOOK table.

For contexts that store multiple rows, you can uniquely identify each row by having the values in each row form a unique key.

If flexfield has a category hierarchy, then you can leverage the hierarchy to reuse contexts for similar entities, such as similar items in a product catalog.

Set the context to translatable so that free-form text entered by end users is stored in the language of the user’s locale, and different translations of that text can be stored in other languages. Segments in the translated contexts should use format-only value sets for storing free-form, user-entered text.

Set the context security to give an end user view or edit access to a context. The context’s task flow and region appear in the user interface only for users with view access. With edit access, an end user can edit the context’s attribute values. With no action specified for a usage, no special privileges are enforced through the context’s configuration.

Define logical pages to group contexts together in the user interface. For a given category, you may create one or more logical pages. You may add one or more of the category’s associated contexts to each of the category’s logical pages.

You can specify:

- The sequence of the contexts within each page.
- The sequence in which the logical pages appear.
- Instruction help text to display instructions that explain how to use the page to end users. Instruction help text is displayed at the beginning of the logical page, preceding all of its context regions.

Categories

A category is a grouping of related data items that can be considered to belong together. You can associate any combination of contexts with a given category. Extensible flexfields with more than 30 categories must be deployed as a background process.
A category hierarchy logically organizes a set of categories. For example, the Electronics and Computers category hierarchy might include a Computer category and a Home Entertainment category, which in turn might include an Audio category and a TV category, and so on.

A category can be a child or sibling of an existing category. The hierarchy can be as simple or as complex as desired, with any combination of zero or more sibling categories and zero or more child categories. If no category is defined, the data items are grouped in a single predefined default category.

Each category has associated contexts that store relevant information about a data item in that category. For example, a Home Entertainment product has contexts that specify Voltage, Dimensions, Inputs and Outputs. Contexts are reusable within a given extensible flexfield. Then, the Dimensions context could be assigned to any category that needs to include dimensional information.

If a hierarchy includes child categories, each child category inherits the contexts from its parent category; for example, the Home Entertainment category inherits Voltage and Dimensions from the Electronics and Computers category.

Each extensible flexfield is associated with a particular category hierarchy. Consider category hierarchies to be defining framework for extensible flexfields and their contexts. A category hierarchy specifies which contexts are valid for each category.

An extensible flexfield can include multiple contexts which you define to support a given category. These contexts can be suitable for various purposes, but within a particular category, some contexts might be considered to be related to, or dependent on, each other. You can combine these contexts into groups known as logical pages, and determine the sequence in which the pages appear. This serves to connect the contexts so they will always be presented together and in a particular order in the application user interface.

For example, the Home Entertainment category might have an Electrical Specifications page that contains the Voltage, Inputs and Outputs contexts, and a Physical Specifications page that contains the Dimensions and Form Factor contexts.

Initial Values
The SQL statement defining an initial value must be a valid statement that returns only one row and a value of the correct type.

You can use two types of SQL statements:

- SQL statement with no binding. For example, select MIN(SALARY) from EMPLOYEES.
- SQL statement with bind variables. You can use the following bind variables in the WHERE clause of the SQL statement:
  - :{SEGMENT.<segment_code>}: Identifies a segment in the same context.
  - :{CONTEXT.<context_code>;SEGMENT.<segment_code>}: Identifies a segment in a different context. The context must be in the same category or in an ancestor category, and it can't be a multiple-row context.
  - :{VALUESET.<value_set_code>}: Identifies the closest prior segment in the same context that's assigned to the specified value set.
  - :{FLEXFIELD.<internal_code>}: Identifies a flexfield.

For more information about using bind variables, see the help for value sets.

Adding Segments to Highlighted Extensible Flexfields
When you highlight flexfields on a run time page and use an Add Segment icon button to create a segment, the segment code, name, description, table column, and sequence number are set automatically. If you use an Add Segment icon button to configure extensible flexfield segments, you can't use an existing value set. Value sets are created automatically when you
add segments. You can enter the valid values, their descriptions, and the default value or specify the formatting constraints for the value set, such as minimum and maximum values.

Depending on display type, the value set you create with the Add Segment icon button is either an independent value set or a format-only value set. The following table shows which type of value set is created depending on the segment display component you select.

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Tip: After you add a context value, refresh the page to see the new value.

Indexed Segments
You can designate an extensible flexfield segment as indexed so that it's one of the selectively required attributes a user can use in an attribute search. If you indicate in the Manage Extensible Flexfield UI page that a segment should be indexed, the column representing the segment must be added to the database index. Commonly, a database administrator (DBA) adds columns to the database index.

When an extensible flexfield with indexed segments is deployed, search task flows are generated along with the other flexfield artifacts and specify the indexed attributes as selectively required. In the deployed extensible flexfield's search task flow, an end user must specify at least one of the indexed attributes in the search criteria. This prevents non-selective searches, which could cause performance issues.

For example, if you index the memory and processor attributes and ensure that the corresponding columns in the database are indexed, a user can search an item catalog for computers by entering processor or memory or both as a search criteria. No search is performed if an end user enters an attribute that isn’t indexed as a search criterion.

Security
An extensible flexfield’s base data security resource typically has a name with an _B suffix. The translation data security resource is a view of a translation table that typically has a name with an _VL suffix.
If a flexfield supports the translatable option and has a translation data security resource, make sure that you create the action for the appropriate data security resource.

- If you create a context-specific action for a nontranslatable context, add it to the base data security resource.
- If you create a context-specific action for a translatable context, add it to the translation data security resource.

**Deployment**

You can only deploy extensible flexfields using the Manage Extensible Flexfields task. You can deploy extensible flexfields offline as a background process and continue working in the session without having to wait for the deployment to complete. You can queue up several extensible flexfields and deploy as a background process. The flexfields are deployed, one at a time, in the order that you deploy them to the queue. You must deploy extensible flexfields with more than 30 categories as a background process.

You can remove an extensible flexfield from the deployment queue with the Cancel Background Deployment command. When an extensible flexfield is deployed in a background process, its offline status indicates that the flexfield is in a background deployment process. A flexfield’s offline status is cleared and its deployment status updated when the background deployment process has completed.

*Note:* The Offline Status column refreshes when you perform a new search in the Manage Extensible Flexfields task.

**Related Topics**

- Why did my flexfield changes not appear in the runtime UI
- Flexfield Usages
- Why can’t I edit my flexfield or value set configuration

**Considerations for Enabling Extensible Flexfield Segments for Business Intelligence**

An extensible flexfield that is registered in the database as enabled for Oracle Business Intelligence (BI) includes a BI Enabled setting for each of its segment instances. When a segment instance is BI-enabled, it’s available for use in Oracle Business Intelligence.

The following aspects are important in understanding BI-enabled extensible flexfield segments.

- Flattening business components to use BI-enabled segments in Oracle BI
- Mapping attributes of flattened business components to logical objects in Oracle BI

After you deploy a business intelligence-enabled flexfield, use the Import Oracle Fusion Data Extensions for Transactional Business Intelligence process to import the flexfield changes into the Oracle Business Intelligence repository. Users can make use of the newly-generated attributes in business intelligence applications. For additional information about logical objects and import, refer to the Oracle Transactional Business Intelligence Administrator’s Guide.

**Flattening**

When you deploy a business intelligence-enabled extensible flexfield, the deployment process generates an additional set of flattened business components for use in business intelligence. The flattened business components include attributes for business intelligence-enabled segment instances only.
If you assigned a label to a segment, the flattened components include a single attribute representing all segment instances with that label. If you didn’t assign a label, the flattened components include a discrete attribute for each BI-enabled segment instance in each structure.

**Importing to Oracle Business Intelligence Repository**

After you deploy a business intelligence-enabled flexfield, import the flexfield changes into the Oracle Business Intelligence repository to make use of the newly flattened business components in business intelligence and then propagate the flexfield object changes. When you import the metadata into the Oracle Business Intelligence repository, you must do so as the FUSION_APPS_BI_APPID user. To import flexfield changes into the Oracle Business Intelligence repository in Oracle Cloud implementations, run the Import Oracle Fusion Data Extensions for Transactional Business Intelligence process. For additional information about import, refer to the Oracle Transactional Business Intelligence Administrator’s Guide.

**Tip:** When you import a flexfield into the Oracle Business Intelligence repository, you see both `<name>` and `<name>_c` attributes for each segment, along with some other optional attributes. The `<name>` attribute contains the value. The `<name>_c` attribute contains the code of the value set that the value comes from, and is used for linking to the value dimension. You must import both attributes.

**Considerations for Managing Extensible Flexfield Categories**

Categories are a way of extending the number of context-sensitive segments for a flexfield beyond the columns reserved for flexfield segments.

For example, an Items extensible flexfield has a category for each item and each category can have one or more contexts. The laptop item belongs to the Computers category. Since extensible flexfields are mapped to separate extension tables, not just to columns as with descriptive flexfields, the thirty reserved columns on the extensible flexfield table let you define up to thirty context-sensitive segments for each context.

If you add a Dimensions context to the Computers category, thirty segments are available. But if you need to add more than thirty attributes, create another context and associate it to the same category. You could now add an Electronics Attributes context to the same Computers category in which you create another thirty segments. You can continue creating more contexts and adding them to the Computers category. In this way your laptop computer item can be extended with as many attributes as you need, because it is mapped to a category and you can keep adding contexts to that category.

A descriptive flexfield on an items table with thirty columns reserved for segments can only have a single context. Once you configure the columns for that one context, you cannot create any more segments.

**Predefined and Preconfigured Categories**

How you structure the flexfield configuration depends on how categories are defined for the flexfield. If the extensible flexfield is preconfigured with one category, associate all your contexts and pages with that category. If a product-specific extensible flexfield is preconfigured with several categories, associate your contexts and pages with those categories. If the extensible flexfields provide user interfaces for configuring multiple categories, associate a context with more than one category using inheritance.

Some products provide an activity or task for creating and maintaining categories for an extensible flexfield. See product-specific information to determine if you can create categories for the flexfield.

You can view a flexfield’s category hierarchies by using either the Highlight Flexfields feature or the Manage Extensible Flexfields task to find and open the flexfield for editing.
Disabling Categories

While configuring an extensible flexfield, you can disable a category. The Enabled column in the Category table of the Edit Extensible Flexfield page, indicates which categories are enabled.

*Note:* When you deploy an extensible flexfield that has a disabled category, that category and its descendant categories aren’t deployed. Contexts and their segments are deployed only if they belong to at least one enabled category.

Contexts

Group similar attributes into contexts. The group is displayed together in a region. The region’s header is the context value.

If a category hierarchy exists for the flexfield, then you can leverage the hierarchy to reuse contexts for similar entities, such as similar items in a product catalog.

The following figure shows the Item Extended Attributes flexfield, which uses the category hierarchy feature to reuse contexts. The flexfield’s Electronics and Computers category contains contexts for compliance and certification, voltage, and materials and substances. The TV and Video subcategory and the Computer Products subcategory inherit the Electronics and Computer contexts in addition to having their own contexts. The Materials and Substances context belongs to both the Electronics and Computer Products category and the Tools, Auto, and Industrial Products category.

The following table shows an example of category hierarchy for an extensible flexfield. To store voltage information for all electronic and computer items, associate a Voltage context with the Electronics and Computers category. Both the TV and Video subcategory and the Computers subcategory then inherit the Voltage context from the parent Electronics and Computers category.

<table>
<thead>
<tr>
<th>Display Name</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics and Computers</td>
<td>PROD_ELECTRONICS</td>
<td>Electronics and Computers</td>
</tr>
</tbody>
</table>
Example of Configuring an Item Extended Attributes Flexfield

The Item Extended Attributes flexfield provides segments for extending the Item business object. In the Manage Extensible Flexfields task, configure your product business object to include a technical specifications logical page on the user interface for the Electronics and Computers category of items.

In this example, your configuration of this flexfield groups attributes into the following contexts:

- Materials and Substances
- Compliance and Certification
- Voltage

Scenario

The following list shows an example plan for computer attributes for the Item Extended Attributes flexfield. In this example, the Electronics Information page is inherited from the parent Electronics and Computers category.

- Page: Electronics Information
  - Context: Compliance and Certification, single row
    - ISO 14001 (International Organization for Standardization for an Environmental Management System)
    - ENERGY STAR (energy efficiency guidelines)
    - ROHS (Restriction of the use of certain hazardous substances in electrical and electronic equipment)
  - Context: Voltage, single row
    - Minimum voltage
    - Maximum voltage
    - Current type
  - Context: Materials and Substances, multiple rows
    - Material
    - Contain recyclate
    - Percent unit mass
• Page: Computer Information
  o Context: Processor Specifications, single row
    • Manufacturer
    • CPU type
    • Processor interface
    • Processor class
    • Processor speed
    • Cores

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which extensible flexfield is available for configuring a hierarchy of categories?</td>
<td>Item Extended Attributes flexfield</td>
</tr>
</tbody>
</table>

**Collecting Technical Specifications**

Your product inventory pages for electronics and computers require a technical specifications page. Your product inventory pages for furniture require a furniture specifications page and an assembly instructions page. Items in both the electronics and computer category, and in the furniture category, share attributes for specifying materials and substances.

The following figure shows a technical specifications logical page in the user interface for the Electronics and Computers category. It contains attributes in the context of Recovery and Recycling, Compliance and Certification, Operating Conditions, and Materials and Substances. The Materials and Substances context is configured for multiple rows. Your users can select all the materials and substances required to make a single product.
Analysis

Use logical pages to determine how the contexts appear on the user interface. Use a context to store all the materials and substances required to make a single product. You can configure a context to store multiple rows per entity. The multiple rows are displayed in a table, like the Materials and Substances context.

The Technical Specifications logical page contains the attributes for the four contexts.

- Recovery and Recycling
- Compliance and Certification
- Operating Conditions
- Materials and Substances

The following figure is an example, where the Furniture category is configured to include a Furniture Specifications logical page and an Assembly Instructions logical page. The two categories (Electronics and Computers and Furniture) share the Materials and Substances context.

Configure Security for the Item Flexfield Configuration

The following table shows an example of data security policies for the Item flexfield.

<table>
<thead>
<tr>
<th>Data Security Resource</th>
<th>Policy</th>
<th>Role</th>
<th>Action</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM_EFF_B</td>
<td>A</td>
<td>VOLTAGE_SPEC</td>
<td>edit_nontrans_voltage_ctx</td>
<td>All values</td>
</tr>
<tr>
<td>ITEM_EFF_VL</td>
<td>B</td>
<td>COMPLIANCE_SPEC</td>
<td>edit_trans_compliance_ctx</td>
<td>All values</td>
</tr>
</tbody>
</table>
The following table shows the privileges for the three flexfield contexts.

<table>
<thead>
<tr>
<th>Context</th>
<th>Edit Privilege</th>
<th>View Privilege</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>edit_nontrans_voltage_ctx</td>
<td>NONE</td>
</tr>
<tr>
<td>Compliance and Certification</td>
<td>edit_trans_compliance_ctx</td>
<td>NONE</td>
</tr>
<tr>
<td>Materials and Substances</td>
<td>edit_trans_attrs</td>
<td>NONE</td>
</tr>
</tbody>
</table>

In this example, anyone can view the contexts' attributes, but the edit privileges are restricted as follows:

- Voltage: Only voltage specialists can edit this value.
- Compliance and Certification: Only compliance specialists can edit this value.
- Materials and Substances: Only computer specialists can edit these attributes for items in the computer category. Only television specialists can edit these attributes for items in the TV category.

To sum up, in this entire example, the Materials and Substances context is secured by a generic action with a condition applied to restrict access by category. Voltage and Compliance and Certification are secured by actions specific to each context.

FAQs for Manage Extensible Flexfields

Why did the extensible flexfield context not appear at run time?

If a deployed extensible flexfield context doesn’t appear in the user interface, verify that the context is associated with one of the category’s pages defined for the extensible flexfield.

Related Topics
- Why did my flexfield changes not appear in the runtime UI

Manage Key Flexfields
Overview of Key Flexfields

Key flexfields provide a means to capture a key such as a part number, a job code, or an account code. A key flexfield consists of one or more segments, where each segment can have a meaning.

For example, a part number 10-PEN-BLA-450 might correspond to a black pen from supplier #450 sold by division #10 (office supplies). Behind the scenes, the application uses a unique number, 13452, for this part, but the user always sees the 10-PEN-BLA-450 part number.

The following aspects are important to understanding key flexfields:

- Architecture
- Segments and segment labels
- Structures
- Segment and structure instances
- Combinations
- Dynamic combination creation
- Security

Key flexfields aren't optional. You must configure key flexfields to ensure that your applications operate correctly. You configure and maintain key flexfield definitions with the Manage Key Flexfields task. To get a list of predefined key flexfields, use the Manage Key Flexfields task in the Setup and Maintenance work area. For information about specific key flexfields, see the help for the product where the associated business component is implemented.

Architecture

Flexfield metadata is stored in the flexfield metadata tables. When you configure a key flexfield, you define metadata about the key flexfield covering aspects such as:

- Segments are in a structure
- Structures in the flexfield
- Value sets in each segment

Based on the flexfield metadata, actual part numbers are captured at run time as a combination of segment values and stored in a combinations table. A combinations table contains all the segment columns for a flexfield, a unique ID column, and a structure instance number column. The structure instance number column differentiates multiple arrangements of the segment columns. For example, a part number containing multiple segments can be represented by a key flexfield. A part number key flexfield has a corresponding combinations table. In that table, the flexfield stores a list of the complete codes, with each segment of the code in a column, with the corresponding unique ID and structure instance number for the code. When users define a new part number or maintain existing part numbers in the parts catalog, they directly maintain rows in the combinations table.

The foreign key table contains a different business entity than the combinations table. For example, the business entity in the foreign key table is order lines or invoice lines that contain foreign key references to parts for ordering. Any number of foreign key tables can reference a particular entity represented by a key flexfield.

Segments and Segment Labels

A key flexfield contains segments and a segment label identifies a particular segment within a key flexfield. Segment labels are defined and made available by the product development. A segment contains the following details:

- A prompt
Applications identify a particular segment for some purpose such as security or computations. Segment name or segment order cannot reliably identify a segment because key flexfield segments can be configured to appear in any order with any prompts. A segment label functions as a tag for a segment.

For example, the requirement is to identify which segment in the accounting flexfield contains balancing information and which segment contains natural account information. A segment label determines which segment you are using for natural account information. When you define your accounting flexfield, you must specify which segment labels apply to which segments. Some labels must be unique, and cannot be applied to more than one segment in each structure. Other labels are required, and must be applied to at least one segment in each structure.

A segment label helps a user searching for segments, such as the Cost Center label for all segments across key flexfields that store a value for the cost center.

Structures
A key flexfield structure definition includes the number of segments and their order.

In some applications, different users like to see different segment structures for the same flexfield. A key flexfield can have multiple structures if registered to support more than one structure.

The flexfield can display different fields for different users based on a data condition in your application data, such as the value of another field entered by the user or the user’s role. For example, the correctly formatted local postal address for customer service inquiries differs based on locale. A postal address key flexfield could display different segments and prompts for different users based on a location condition in your application data, such as the user’s role or a value entered by the user.

Each structure can have one or more segments. Thus a segment is a child of a structure. To store a particular segment, such as Cost Center, in two different structures, you must define the segment separately in each structure. Each structure may have one or more structure instances. Each instance of a structure shares the same number and order of segments, but differs in the values or value sets used in validating the segments.

Structure and Segment Instances
You can define multiple configurations of a key flexfield structure. These structure instances have the same segment structure, in the same sequence order. They differ primarily in how each segment is validated. You define a structure instance for each key flexfield and each key flexfield structure instance.

The segments in a key flexfield structure instance are segment instances. A segment instance is a segment with a specific value set assigned to it. If a key flexfield is registered with a tree structure, you can specify a tree code for a segment instance.

Combinations
A combination is a complete code, or combination of segment values that makes up the code, that uniquely identifies an object.

For example, each part number is a single combination, such as PAD-YEL-11x14 or 01-COM-876-7BG-LTN. In these combinations, the hyphen is the segment separator. If you have ten parts, define ten combinations. A valid combination is an existing or new combination that can be used because it’s currently active and doesn’t violate cross-validation or...
security rules. A combination has different segments depending on the flexfield structure being used for that combination. Any combination is associated with only one particular flexfield structure.

Many applications refer to a key flexfield combination by using the name of the entity or the key flexfield itself. For example, Assets uses the asset key flexfield and refers to one of its combinations as an asset key or asset key flexfield. In another example, Oracle Fusion General Ledger refers to combinations of the accounting flexfield as account or GL account.

Each key flexfield has one corresponding table, known as the combinations table, where the flexfield stores a list of the complete codes, with one column for each segment of the code, together with the corresponding unique ID number (an account combination ID) for that code. Then, other tables in the application have a column that stores just the unique ID for the code. For example, you may have a part number code, such as PAD-YEL-11x14. The Parts combinations table stores that code along with its ID, 57494. If your application lets you take orders for parts, you might then have an Orders table that stores orders for parts. That Orders table would contain a single column that contains the part ID, 57494, instead of several columns for the complete code PAD-YEL-11x14. Typically, one combinations page maintains the key flexfield, where the key flexfield is the representation of an entity in your application. Maintain individual combinations, such as part numbers in the combinations page.

### Dynamic Combination Creation

Dynamic combination creation is the insertion of a new valid combination into a combinations table from a page other than the combinations page. The following table lists the levels at which dynamic combination creation may be enabled.

<table>
<thead>
<tr>
<th>Level Of Dynamic Combination Creation</th>
<th>Controlled By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexfield</td>
<td>Application development</td>
</tr>
<tr>
<td>Each usage or reference to the key flexfield</td>
<td>Application development</td>
</tr>
<tr>
<td>Structure instance</td>
<td>Administrators and implementation consultants</td>
</tr>
<tr>
<td>Other</td>
<td>Administrators and implementation consultants</td>
</tr>
</tbody>
</table>

If your key flexfield or certain usages or references of the key flexfield don't permit dynamic combination creation, you may control whether dynamic combination creation is enabled for each structure instance. If enabled, a user can enter a new combination of segment values using the flexfield window from a foreign key page. For example, when entering a transaction, a GL user can enter a new expense account combination for an account that doesn't yet exist. Your application creates the new account by inserting the new combination into the combinations table behind the scenes. Assuming that the new combination satisfies any existing cross-validation rules, the flexfield inserts the new combination into the combinations table, even though the combinations table isn't the underlying table for the foreign key page.

**Related Topics**

- Overview of Flexfield Deployment
- Considerations for Managing Flexfields
- How can I access predefined flexfields
- Update Existing Setup Data
Considerations for Planning Key Flexfields

Your first step in planning your key flexfields is to determine which key flexfields your application requires. Your plan should include:

- The purpose of the key flexfield
- The number and length of its available segment columns
- Whether your key flexfield permits more than one structure
- Whether more than one structure must be defined
- The number, order and length of your segments for each structure

Before You Begin

Once you have identified a flexfield, plan its configuration in advance. Compile a list of the UI pages and other artifacts in your deployment that are affected by the configuration. Verify that you are provisioned with the roles required to view and configure the flexfield. Use the Highlight Flexfields command in the Administration menu to view the run time page where the flexfield appears. Plan how you deploy the flexfield for test and production users and review the tools and tasks available for managing flexfields.

If you plan to use value sets, create them before configuring the key flexfield. You cannot create value sets for key flexfields at the time that you add and configure key flexfield segments.

Access to Flexfield-Related Tasks

To configure flexfields and value sets, you must have access to the tasks for managing flexfields. Contact your security administrator for details. For information about product-specific flexfield tasks, such as Manage Fixed Assets Key Flexfields, refer to the product-specific documentation.

Restrictions

If you plan to use value sets, create them before configuring the flexfield. Plan your key flexfield configuration to scale to your enterprise needs. For example, if you expect to disable old cost centers and enable new ones frequently, plan a larger maximum size for your cost center value set so that you can have more available values. A 3-character value set with one thousand available values provides more room for changes than a 2-character value set with 100 available values.

Note the code name of the flexfield you intend to configure so that you find it easily in the tasks for managing key flexfields. In some cases you can configure how the flexfield appears on the page. See product-specific documentation to determine any restrictions on using product-specific key flexfields.

Reporting

To report on your data by certain criteria or sub-entities, such as account number or project or region, consider making that sub-entity a distinct segment, rather than combining it with another sub-entity. You can categorize and report on smaller discrete units of information.

Related Topics

- Considerations for Planning Value Sets
Considerations for Managing Key Flexfields

Consider the plans for a key flexfield, security, and resulting run time pages when configuring key flexfields.

Planning

Plan structures carefully and enable them for future needs. Don't change the number, order, and maximum length of segments once you have acquired flexfield data.

Structure Delimiters

A delimiter separates the segments when they appear to users. The delimiter value of a structure specifies the character used to visually separate segment values when the key flexfield is displayed as a string of concatenated segments in the UI.

Identify the delimiter value of your key flexfield carefully so that it doesn’t conflict with the flexfield data. For example, if your data frequently contains periods, such as in monetary or numeric values, don’t use a period as your segment separator. Any character you expect to appear frequently in your segment values or descriptions isn’t a good choice for the delimiter. If you change the configuration of a key flexfield, such as the delimiter, the change affects the previously stored key flexfields with that structure.

Security

Oracle Fusion data security enforces value set security.

Within key flexfields, value set security applies to the selection of the individual segment values in the segment list of values. When selecting a key flexfield segment value from the combinations table, data security permits display of only the combinations whose segment values you have access to. Applications development controls whether or not value set security rules propagate to the foreign key table. By default they do.

Run Time Pages

Application development determines the user interface (UI) pages used to render flexfields. The types of key flexfield UI pages are as follows:

- Combinations pages where the underlying entity objects use the combinations table itself
- Foreign key pages where the underlying entity objects contain a foreign key reference to the combinations table
- Partial usage pages where some or all of the key flexfield's segment columns are in a product table

The same key flexfield can be used in different ways on different pages.

A page with a foreign key reference has a base table or view that contains a foreign key reference to a combinations table with the actual flexfield segment columns. This lets you manipulate rows containing account combination IDs (account combination).

A page with partial usage of a key flexfield presents segments that are defined on a product’s transactional table in addition to being defined on a combinations table. In the case of a partial usage page, only a part of the configuration is likely to be visible. This enables the key flexfield to act more like a descriptive flexfield.

An account combination maintenance page or combinations page presents the combinations table. This enables directly creating and maintaining account combinations. The combinations table contains all key flexfield segment columns and a unique ID column.
A typical application has only one combinations page. An application might not have a combinations page if it doesn’t support maintenance by administrators.

A page containing a search region enables users to select which attributes of the key flexfield view object to use as criteria to search for flexfield metadata.

For example, you can configure seven segments for the Account key flexfield. In a foreign key reference page, users see the typical key flexfield picker with all seven segments where they can search for combinations. In a partial usage page using the same key flexfield, users potentially could see only a single segment such as the Cost Center labeled segment, or they might see multiple segments but displayed as individual segments rather than options for selecting combinations.

For more information about key flexfield pages, see the Oracle Fusion Applications Developer’s Guide.

Related Topics

- Flexfield Usages

Key Flexfield Structures

A key flexfield structure arranges the segments of a key so that you can reuse a single key flexfield in multiple combinations of the same segments or a subset of those segments. Multiple instances of a single structure can accommodate differences in the value sets assigned to the structure’s segments.

The structure determines the following aspects of a key flexfield:

- The segments to include
- The order of the segments
- Segment labels on the included segments
- Properties for each segment applied to the instances of the segments in an instance of the structure

Managing Key Flexfield Structures

All the segments defined for a key flexfield are available to be included in a key flexfield structure.

You can define as many segments as there are defined segment columns in your key flexfield combinations table. Ensure that you add segments in the order that your key requires. Once deployed, the order cannot be changed.

Enable segments to indicate that they are in use. A flexfield doesn’t display disabled segments in run time. To protect the integrity of your data, disable a segment if you have already used it to enter data.

Key Flexfield Structure Instances and Segment Instances

A key flexfield structure can have one or more alternate structure instances. The instances of a key flexfield structure share the following aspects of the structure:

- The same set of segments
- The same arrangement of segments
- The same properties at the segment and structure levels

The differences among structure instances include whether dynamic combination creation is permitted. Likewise, at the structure instance level, differences among segment instances are based on the following:

- Value set
- Default type and default value
- Tree code
- Whether the segment is any of the following:
  - Required
  - Displayed
  - Enabled for business intelligence
  - Optional or required as a query criterion

For example, you can use one group of value sets for the US and another for France.
The following figure shows two structures instances for a part number structure.

The structures differ in the number of segments and the segment separators used. The structure instances share all the properties defined for that structure. However, the structure instances may vary if the properties are defined at the structure instance or segment instance level. For example, the value set assigned to the segment instances.

**Query Required Segment Instances**

You can designate a key flexfield segment instance as a query for making it a selectively required attribute. A user can use it as a key flexfield combination search. On the Manage Key Flexfields UI page, if you indicate that a segment instance requires indexing, add the column representing the segment to the database index. Commonly, a database administrator (DBA) adds columns to the database index.
Following deployment, the combination picker of the key flexfield displays the query required attributes as selectively required. A user must specify at least one of the query required attributes in the search criteria. This prevents unnecessary searches that could cause performance issues.

For example, you mark the cost center and account attributes as query required and ensure that the corresponding columns in the database are indexed. A user can search for combinations by entering cost center or account or both as search criteria. No search is performed if a user doesn’t enter at least one query required attribute as search criteria.

**Tip:** Index the Structure Instance Number column on your combinations table to improve run time performance.

## Dynamic Combinations

If a key flexfield supports dynamic combination creation, you can select to enable this feature by selecting **Dynamic Combination Creation Allowed**. As a result, users enter values at run time that produce new account combinations for the flexfield. If **Dynamic Combination Creation Allowed** isn’t enabled, new valid combinations can only be entered using the combinations table for the flexfield.

## Trees

You may define a tree code for the value set assigned to the segment instance. When you assign the tree code to the segment instance, tree hierarchy search operations are available on the segment values.

For a segment instance to be based on a tree, the following must be true:

- Application development registered the key flexfield with a tree structure. The tree structure may be fixed across all segments in the flexfield, or may vary across segments.
- A tree code for that tree structure exists.
- The tree code includes tree versions containing the values of the value set assigned to the segment instance.
- You assign the required tree code directly to the segment instance.

If these conditions are satisfied, you can assign the same or different tree codes to the different segment instances that use the same value set.

### Related Topics

- Flexfield Segment Properties

## Cross-Validation Rules

You can control the creation of new key flexfield code combinations by defining cross-validation rules. A cross-validation rule defines validation across segments and enforces whether a value of a particular segment can be combined with specific values of other segments to form a new combination.

The following table compares segment validation to cross-segment validation:

<table>
<thead>
<tr>
<th>Type of validation</th>
<th>Type of control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment validation</td>
<td>Controls the values you can enter for a particular segment</td>
</tr>
<tr>
<td>Cross-segment validation</td>
<td>Controls the combinations of values that administrators and end users can create for key flexfields</td>
</tr>
</tbody>
</table>
Note: You can use cross-validation rules for any key flexfield that has cross-validation enabled. See the documentation for your key flexfield to determine if it supports cross validation.

Cross-validation rules prevent the creation of combinations with values that can't coexist in the same combination. For example, your company requires that all revenue accounts must have a specific department. Therefore, account combinations that have revenue account values, such as all values between 4000 and 5999, must have a corresponding department value other than 000, which indicates no department is specified. You can define cross-validation rules that disallow creation of combinations with incompatible segments, such as 4100-000 or 5000-000.

Alternatively, suppose your accounting key flexfield has an Organization segment with two possible values, 01 and 02. You also have a Natural Account segment with many possible values, but company policy requires that Organization 01 uses the natural account values 001 to 499 and Organization 02 uses the natural account values 500 to 999. You can create cross-validation rules to ensure that users cannot create a general ledger account with combinations of values such as 02-342 or 01-750.

The following aspects are important to understanding cross-validation rules:

- Rule Definitions
- Enforcement
- Timing

Rule Definitions

The following table contains definitions used in cross-validation rules:

<table>
<thead>
<tr>
<th>Rule Definition</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Uniquely identifies cross-validation rules in a deployment.</td>
</tr>
<tr>
<td>Description</td>
<td>Helps administrators identify the purpose of the rule.</td>
</tr>
<tr>
<td>Error message</td>
<td>Explains why the attempted combination violates the rule.</td>
</tr>
<tr>
<td>Start Date, End Date</td>
<td>Indicates the period of time when the rule is in effect.</td>
</tr>
<tr>
<td>Enabled</td>
<td>Determines whether the rule is enforced.</td>
</tr>
<tr>
<td>Condition filter</td>
<td>Determines the conditions in which an enabled cross-validation rule should be evaluated.</td>
</tr>
<tr>
<td>Validation filter</td>
<td>Determines the validation that the rule enforces when that condition is met.</td>
</tr>
</tbody>
</table>

When the event specified in the condition filter is applicable, the validation filter condition must be satisfied before the combination can be created. If the event specified in the condition filter isn't applicable, then the combination is considered to pass the rule and the rule won't be evaluated even if it is enabled.

Note: If you don't specify any statement in the condition filter, then the condition is always true and the rule is always evaluated.
Enforcement
Cross-validation prevents creation of invalid combinations by administrators using maintenance pages and end users using dynamic insertion in foreign key pages.

Enabled rules are enforced when there is an attempt to create a new combination of segment values. Disabled rules are ignored. Deleting the rule has the same effect, but you can re-enable a disabled rule.

Timing
When users attempt to create a new combination, the key flexfield evaluates any cross-validation rules that are enabled and in effect.

Note: Cross-validation rules have no effect on combinations that already exist. The flexfield treats any existing invalid combinations that pre-date the rule as valid.

If you want to prevent users from using previously existing combinations that are no longer valid according to your cross-validation rules, manually disable those combinations using the combinations page for that key flexfield.

When defining a cross-validation rule, specify a start and end date to limit the time when the rule is in effect. The rule is valid for the time including the From and To dates.

Considerations for Cross-Validation Rules
To validate the key flexfield combinations of segment values across segments, optimize your cross-validation rules to improve the experience of administrators and users.

Consider the following when defining cross-validation rules:

- Filters
- Rule Complexity
- Maintenance

Filters
A cross-validation rule includes a condition filter and a validation filter. The rule is evaluated using the following logical order: If the condition filter is satisfied, then apply the validation filter.

The condition filter describes the event when the rule is evaluated. If the event specified in the condition filter isn’t applicable, then the rule isn’t evaluated, even if enabled. When the event specified in the condition filter is applicable, the validation filter condition must be satisfied before the combination can be created.

For example, your organization has determined that a certain company value called Operations can’t use a specific cost center called Marketing. You can define a cross-validation rule to validate your combinations.

1. The rule evaluates the company condition filter.
2. When company is equal to Operations, the rule evaluates the cost center validation filter.
3. When cost center is equal to Marketing, the rule prevents a combination from being created.
4. The error message you defined for the rule displays to inform the user that the attempted combination violates the rule.

Such a rule doesn’t affect the creation of combinations with Marketing cost center and company values other than Operations.
Rule Complexity
For optimal performance and ease of understanding, define several simple validation rules instead of using one complex rule. Simple validation rules let you provide a more specific error message and are easier to maintain over time.

Avoid rules that control validation across more than two segments, where possible. While you can define cross-validation rules that span two or more segments, it becomes difficult to interpret cross-validation error messages and rectify invalid key flexfield combinations.

Maintenance
To maintain consistent validation, review existing key flexfields when you update your cross-validation rules. Regardless of your current validation rules, you can use an existing key flexfield combination if it’s enabled. Therefore, to ensure accurate validation, you must review your existing combinations and disable any combinations that don't match the criteria of your new rules.

Tip: To keep this type of key flexfield maintenance to a minimum, decide upon your cross-validation rules when you first set up your key flexfield structure. Define cross-validation rules before creating combinations and before combinations are used in transactions.

To prevent users from using existing combinations that are no longer valid according to your cross-validation rules, disable them using the combinations page.

Edit a Cross-Validation Rule
Cross-validation rules prevent specific combinations of segment values in account combinations. You can use the Manage Cross-Validation Rules task to edit existing rules or to create one-off rules.

Scenario
Your organization has a cross-validation rule called Companies 131 and 151, which restricts account combinations for those companies to department 40 and product 211. Account combinations for both companies should now include department 30. To edit the cross-validation rule, perform these steps.

1. In the Setup and Maintenance work area, go to the following:
   - Offering: Financials
   - Functional Area: Financial Reporting Structures
   - Task: Manage Cross-Validation Rules

2. Select the chart of accounts for your organization and select the Companies 131 and 151 cross-validation rule.
The following figure shows the section of the Edit Cross-Validation Rules page with the condition and validation filter details for companies 131 and 151. A condition is defined for company values equal to 131 or 151, and the validation specifies the department value equals 40 and the product value equals 211.

3. Click the Validation Filter icon.
4. Click Add Fields and select the Department segment.
5. Accept the default operator, which is Equals, and select department 30.

The following figure shows the Validation Filter window with three validations: department equals 40, department equals 30, and product equals 211.

6. Click OK.
7. Click Save.
The following figure shows the details for the updated validation on the Edit Cross-Validation Rules page. The validation specifies departments equal to 30 or 40, and the product equal to 211.

![Validation Filter 3 Filter Conditions Defined](image)

8. To update the error message, search for and select the Manage Messages for General Ledger task. Query the error message name for the cross-validation rule and edit the message to include department 30.

Related Topics
- Update Existing Setup Data

Considerations for Enabling Key Flexfield Segments for Business Intelligence

A key flexfield registered in the database as enabled for Oracle Business Intelligence (BI) includes a BI Enabled setting for each of its segment instances. When a segment instance is BI-enabled, it’s available for use in Oracle Business Intelligence.

The following aspects are important in understanding BI-enabled key flexfield segments.

- Flattening business components to use BI-enabled segments in Oracle BI
- Equalizing segments to prevent duplication and complexity in the flattened component
- Mapping attributes of flattened business components to logical objects in Oracle BI
- Managing the labels that map segments to logical objects in Oracle BI

After you deploy a business intelligence-enabled flexfield, use the Import Oracle Fusion Data Extensions for Transactional Business Intelligence process to import the flexfield changes into the Oracle Business Intelligence repository. Users can make use of the newly-generated attributes in business intelligence applications. For additional information about logical objects and import, refer to the Oracle Transactional Business Intelligence Administrator’s Guide.

Flattening

When you deploy a business intelligence-enabled key flexfield, the deployment process generates an additional set of flattened business components for use in business intelligence. The flattened business components include attributes for business intelligence-enabled segment instances only.

If you assigned a label to a segment, the flattened components include a single attribute representing all segment instances with that label. If you didn’t assign a label, the flattened components include a discrete attribute for each BI-enabled segment instance in each structure.
Mapping to Logical Objects in Business Intelligence

You can simplify reporting by representing similar segments as a single logical object in Business Intelligence. If you assign a label to segments that serve the same purpose in different structures, you can consolidate the segments into a single attribute. This prevents duplication and the extra workload and complexity that result from the flattening process. For example, an organization may have more than one definition of its key accounting flexfield to support different requirements for accounting reporting. A US Accounting Flexfield structure may have a segment called Subaccount to track project expenditures. The same type of information may be tracked in a UK accounting flexfield structure with a segment called Project. Equalize these two segments to create a single list of values for reporting.

Non-labeled segments aren’t equalized across context values, so the flattened components include a separate attribute for each segment for each structure. It may not be possible to equalize similarly labeled segments if they have incompatible data types or value set types.

Assign a label to a segment to map the corresponding attribute in the flattened components to a logical object in Oracle Business Intelligence. Using labels to map segments to BI logical objects minimizes the steps for importing the flexfield into Oracle Business Intelligence. Assigning a label to a segment serves to equalize the attribute across structures, as well as map the equalized attribute to business intelligence.

Managing Labels

You may assign a predefined label (if available) to segments or create labels for assignment, as needed. Specify a code, name, and description to identify each label. In the BI Object Name field, enter the name of the logical object in Oracle Business Intelligence to which the segment label should map during import. Specifying the BI logical object minimizes the steps for importing the flexfield into Oracle Business Intelligence and helps to equalize context-sensitive segments across structures.

If no labels are assigned to a BI-enabled segment, or the BI Object Name on the assigned label doesn’t exist in business intelligence, you must manually map the segment to the required logical object when importing into Oracle Business Intelligence. In addition, segments without labels cannot be equalized across structures. The flattened components include a separate attribute for each non-labeled segment in each structure.

Importing to Oracle Business Intelligence Repository

After you deploy a business intelligence-enabled flexfield, import the flexfield changes into the Oracle Business Intelligence repository to make use of the newly flattened business components in business intelligence. Then propagate the flexfield object changes. When you import the metadata into the Oracle Business Intelligence repository, you must do so as the FUSION_APPS_BI_APPID user.

To import flexfield changes into the Oracle Business Intelligence repository in Oracle Cloud implementations, run the Import Oracle Fusion Data Extensions for Transactional Business Intelligence process. For additional information about import, refer to the Oracle Transactional Business Intelligence Administrator’s Guide.

⚠️ Note: When you import a flexfield into the Oracle Business Intelligence repository, you see both `<name>_` and `<name>_c` attributes for each segment, along with some other optional attributes. The `<name>_` attribute contains the value. The `<name>_c` attribute contains the code of the value set that the value comes from, and is used for linking to the value dimension. You must import both attributes.
Example of a Key Flexfields

A key flexfield can capture expense account information.

**Scenario**

When entering details for each expense, the user specifies an account to which the expense is charged.

**Entering Expense Accounts**

A user interface for entering expenses helps the user select an expense account that identifies the cost center and other details needed for processing the expense.

**Analysis**

The expense account field is a foreign key reference to a account combination (EXPENSE_LINES.EXPENSE_ACCOUNT = ACCOUNT.COMBINATION).

**Account combinations Table for Entering Accounts and Employees**

The account combinations table supports entering account information, such as for expense accounts.
The following figure shows the origin in the account combinations table of the account specified by the user. The account combination ID record stores the information of the key flexfield segments used to assemble the expense account based on the key flexfield configuration.

The combinations page, which is the maintenance page for the key flexfield, is for managing rows in the combinations table. In this example, managing the combinations means adding or editing account numbers that adhere to the key flexfield metadata rules.

The following figure shows the account combination details for the example expense account reflected in the flexfield configuration and the account combinations table.
If dynamic combination creation isn’t enabled, then when entering an expense line, the user can only select an account that already exists in the ACCOUNTS (combinations) table. If they require an account that doesn’t exist, they must consult with the appropriate application administrator who can add the account to the combinations table.

If dynamic combination creation is enabled, then when entering an expense line, the user can either select a preexisting account, or type in a new account that is created dynamically on the fly in the ACCOUNTS (combinations) table. Once the new combination is created, the same user can refer to it on the expense line.

When managing employee information, the user specifies the cost center that the employee belongs to. The cost center field corresponds to a single, labeled segment of the Account Key Flexfield and has metadata defined such as the allowable value set for that segment.

In the following figure, instead of specifying a cost center ID reference to an account, only the cost center segment is used and the value is stored directly on the employee table.
Combination Details

<table>
<thead>
<tr>
<th>Segment</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Center</td>
<td>400</td>
<td>Cost Center 400 â€” US</td>
</tr>
</tbody>
</table>

Employee Details User Interface

<table>
<thead>
<tr>
<th>Employee Number</th>
<th>10000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee ID</td>
<td>gbrown</td>
</tr>
<tr>
<td>Hire Data</td>
<td>1/1/2011</td>
</tr>
<tr>
<td>Structure</td>
<td>US</td>
</tr>
<tr>
<td>Cost Center</td>
<td>400</td>
</tr>
</tbody>
</table>

Related Topics

- Example of One Chart of Accounts Structure with Many Instances
22 Eligibility Profiles

How Eligibility Works With Other Objects

You add eligibility criteria to an eligibility profile, and then associate the profile with an object that restricts eligibility. The following figure shows the relationships between eligibility components.

Eligibility Criteria

You can add different types of eligibility criteria to an eligibility profile. For many common criteria, such as gender or employment status, you can select from a list of predefined criteria values. However, you must create user-defined criteria and derived factors before you can add them to an eligibility profile.

Eligibility Profile

When you add an eligibility criterion to a profile, you define how to use it to determine eligibility. For example, when you add gender as a criterion, you must specify a gender value (male or female) and whether to include or exclude persons who match that value.
Associating the Profile with Objects

This table describes associating eligibility profiles with different kinds of objects and whether you can attach more than one profile.

<table>
<thead>
<tr>
<th>Object that Uses an Eligibility Profile</th>
<th>Purpose</th>
<th>Whether You Can Attach More Than One Profile?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable rate or variable coverage profile</td>
<td>Establish the criteria required to qualify for that rate or coverage</td>
<td>No</td>
</tr>
<tr>
<td>Checklist task</td>
<td>Control whether that task appears in an allocated checklist</td>
<td>No</td>
</tr>
<tr>
<td>Total compensation statement</td>
<td>Apply additional eligibility criteria after statement generation population parameters</td>
<td>No</td>
</tr>
<tr>
<td>Benefits object</td>
<td>Establish the eligibility criteria for specific programs, plans, and options</td>
<td>Yes</td>
</tr>
<tr>
<td>Compensation object</td>
<td>Establish the eligibility for specific plans and options</td>
<td>Yes</td>
</tr>
<tr>
<td>Performance documents</td>
<td>Establish the eligibility for performance documents</td>
<td>Yes</td>
</tr>
<tr>
<td>Goal plans or goal mass assignments</td>
<td>Establish eligibility for the goal</td>
<td>Yes</td>
</tr>
<tr>
<td>Absence plan</td>
<td>Determine the workers who are eligible to record an absence that belongs to that plan</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Derived Factors

Derived factors define how to calculate certain eligibility criteria that change over time, such as a person's age or length of service. You add derived factors to eligibility profiles and then associate the profiles with objects that restrict eligibility.

Derived Factor Types

Using the **Manage Derived Factors** task, you can create six different types of derived factors:

- Age
- Length of service
- A combination of age and length of service
- Compensation
- Hours worked
• Full-time equivalent

Determination Rules and Other Settings
For each factor that you create, you specify one or more rules about how eligibility is determined. The following table provides example settings for two factors.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Example Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age derived</td>
<td>Select a determination rule to specify the day on which to evaluate the person’s calculated age for eligibility. Example: If the determination rule is set to the first of the year, then the person’s age as of the first of the year is used to determine eligibility.</td>
</tr>
<tr>
<td>Full-time equivalent</td>
<td>Specify the minimum and maximum full-time equivalent percentage and whether to use the primary assignment or the sum of all assignments when evaluating eligibility. Example: If 90 to 100 percent is the percentage range for the sum of all assignments, then a person who works 50 percent full-time on two different assignments is considered eligible.</td>
</tr>
</tbody>
</table>

For derived factors pertaining to time and monetary amounts, you can also set the following rules:
• Unit of measure
• Rounding rule
• Minimum and maximum time or amount

Examples of Derived Factors
The following scenarios illustrate how to define different types of derived factors:

Age
Benefits administrators frequently use age factors to determine:
• Dependent eligibility
• Life insurance rates

Age factors typically define a range of ages, referred to as age bands, and rules for evaluating the person’s age. The following table illustrates a set of age bands that could be used to determine eligibility for life insurance rates that vary based on age.

<table>
<thead>
<tr>
<th>Derived Factor Name</th>
<th>Greater Than or Equal To Age Value</th>
<th>Less Than Age Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Under 25</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Age 25 to 34</td>
<td>25</td>
<td>35</td>
</tr>
</tbody>
</table>
Eligibility Profiles

The determination rule and other settings for each age band can use the same values, as shown in the following table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination Rule</td>
<td>First of calendar year</td>
</tr>
<tr>
<td>Age to Use</td>
<td>Person's</td>
</tr>
<tr>
<td>Units</td>
<td>Year</td>
</tr>
<tr>
<td>Rounding</td>
<td>None</td>
</tr>
</tbody>
</table>

Length of Service

You use the length of service derived factor to determine eligibility based on an employee’s length of service. For example, you can create a derived factor to determine if an employee has completed 10 years of service. You can specify the start date of the length of service period using any rule in the Period Start Date Rule list:

- Adjusted service date
- Date of hire
- Original hire date
- Seniority date

If you select Seniority Date, you use the Seniority Date list to select the specific configuration rule, such as the grade seniority date, to determine the date. If you have other special requirements to calculate the length of service, you can use a formula. You indicate the end of the length of service period by using a determination rule, such as end of month, first of month, as of event date, or end of pay period. The following table shows an example of a set of length-of-service bands.

A derived factor for length of service defines a range of values and rules for calculating an employee's length of service. The following table shows an example of a set of length-of-service bands. You can use the length-of-service bands to determine eligibility for compensation objects such as bonuses or severance pay.

<table>
<thead>
<tr>
<th>Derived Factor Name</th>
<th>Greater Than or Equal To Length of Service Value</th>
<th>Less Than Length of Service Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derived Factor Name</td>
<td>Greater Than or Equal To Length of Service Value</td>
<td>Less Than Length of Service Value</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Service 1 to 4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Service 5 to 9</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Service 10 to 14</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Service 15 to 19</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Service 20 to 24</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Service 25 to 29</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Service 30 Plus</td>
<td>30</td>
<td>999</td>
</tr>
</tbody>
</table>

The determination rule and other settings for each length-of-service band are the same:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period Start Date Rule</td>
<td>Date of hire</td>
</tr>
<tr>
<td></td>
<td>This sets the beginning of the period being measured.</td>
</tr>
<tr>
<td>Determination Rule</td>
<td>End of year</td>
</tr>
<tr>
<td></td>
<td>This sets the end of the period being measured.</td>
</tr>
<tr>
<td>Age to Use</td>
<td>Person's</td>
</tr>
<tr>
<td>Units</td>
<td>Year</td>
</tr>
<tr>
<td>Rounding</td>
<td>None</td>
</tr>
</tbody>
</table>

### Compensation

A derived factor for compensation defines a range of values and rules for calculating an employee's compensation amount. The following table shows an example of a set of compensation bands. You can use the compensation bands to determine eligibility for compensation objects such as bonuses or stock options.

<table>
<thead>
<tr>
<th>Derived Factor Name</th>
<th>Greater Than or Equal To Compensation Value</th>
<th>Less Than Compensation Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 20000</td>
<td>0</td>
<td>20,000</td>
</tr>
<tr>
<td>Derived Factor Name</td>
<td>Greater Than or Equal To Compensation Value</td>
<td>Less Than Compensation Value</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Salary 20 to 34000</td>
<td>20,000</td>
<td>35,000</td>
</tr>
<tr>
<td>Salary 35 to 49000</td>
<td>35,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Salary 50 to 75000</td>
<td>50,000</td>
<td>75,000</td>
</tr>
<tr>
<td>Salary 75 to 99000</td>
<td>75,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Salary 100 to 200000</td>
<td>100,000</td>
<td>200,000</td>
</tr>
<tr>
<td>Salary 200000 Plus</td>
<td>200,000</td>
<td>999,999,999</td>
</tr>
</tbody>
</table>

The determination rule and other settings for each compensation band are the same:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination Rule</td>
<td>First of year</td>
</tr>
<tr>
<td>Unit of Measure</td>
<td>US Dollar</td>
</tr>
<tr>
<td>Source</td>
<td>Stated compensation</td>
</tr>
<tr>
<td>Rounding</td>
<td>Rounds to nearest hundred</td>
</tr>
</tbody>
</table>

Options for Using Age to Determine Eligibility

The **Age to Use** value that you select for an age derived factor determines whose birth date is used to calculate the derived age. The most common value is Person’s.

Use the **Manage Derived Factors** task to configure age derived factors.

Person’s Age

You usually use **Person’s** as the **Age to Use** setting. With this setting, each person’s own birth date is used to calculate age for eligibility evaluation, as shown in the following table.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>You select <strong>Person’s</strong> as the <strong>Age to Use</strong> value, and associate the age derived factor with a dependent eligibility profile.</td>
<td>Each dependent’s eligibility is evaluated based on the age calculated from his or her own birth date.</td>
</tr>
</tbody>
</table>
Other Age to Use

To evaluate participant or dependent eligibility or rates based on another person’s age, such as a spouse or child, select a value other than Person’s.

The following table provides examples.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>You select <strong>Person’s oldest child</strong> as the <strong>Age to Use</strong> value, and associate this derived factor with a dependent eligibility profile.</td>
<td>Eligibility for all dependents is based on the age of the participant’s oldest child. For example, all dependents become ineligible when the oldest child reaches the maximum age of eligibility.</td>
</tr>
<tr>
<td>You select <strong>Inherited Age</strong> as the <strong>Age to Use</strong> value, and associate this derived factor with a dependent eligibility profile.</td>
<td>Eligibility for all dependents is based on the date of birth as defined in the person extra information flexfield.</td>
</tr>
</tbody>
</table>

User-Defined Criteria

You can define your own eligibility criteria that meet any special requirements of your organization. Associate your criteria with eligibility profiles.

This topic provides an example and discusses creating and using a user-defined criteria.

Example

Your organization wants to use work-at-home assignment as the eligibility criteria for a monthly telecommunications allowance. The table and column already exist, but the data is not available from existing eligibility criteria tabs on the Create Eligibility Profile page. Therefore, you must first create the work-at-home criteria so that you can then use it with an eligibility profile.

Creating the Criteria

Use the **Manage User-Defined Criteria** task in the Plan Configuration work area. The data for the eligibility criterion that you create must be stored in a table that is accessible to the application. The procedure varies depending on the table.

<table>
<thead>
<tr>
<th>Data Table</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person Attributes or Assignments table</td>
<td>1. Select the table and table column from lists. You must understand the basic structure of these tables.&lt;br&gt;2. Select the lookup type to use to validate input values, including user-defined lookup types that you created for either table.&lt;br&gt;For details, see the Setting Up Lookup-Based User-Defined Criteria: Worked Example topic.&lt;br&gt;3. If the field stores a numeric value or a date, specify a range of valid values.</td>
</tr>
<tr>
<td>Other tables</td>
<td>1. Use the <strong>Manage Fast Formulas</strong> task in the Setup and Maintenance work area.&lt;br&gt;2. Select your formula on the Create User-Defined Criteria page.</td>
</tr>
</tbody>
</table>
Using the Criteria
You can define one or two sets of criteria on the Create User-Defined Criteria page. The participant must meet the criteria defined in either set to be considered eligible or ineligible.

After you create your user-defined criteria, you can add it to an eligibility profile on the User-Defined Criteria tab in the Other category.

Related Topics
- Configure Your Own Criteria Based on Lookups

Examples of User-Defined Criteria

The following scenarios illustrate how you can create different types of user-defined criteria for use in eligibility profiles associated with benefits and compensation objects. In each example, you must:

1. Create the user-defined criteria using the Manage User-Defined Criteria task in the Plan Configuration work area.
2. Add the user-defined criteria to an eligibility profile using the Manage Eligibility Profile task.
3. Set the criteria values to use in the eligibility profile.
4. Associate the eligibility profile with the relevant benefits or compensation object.

Base Eligibility on a User-Defined Attribute

Your commercial diving company wants to offer different benefit rates to employees who dive to depths greater than 330 feet.

1. On either the create or edit page for user-defined criteria, set the following values.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table</td>
<td>Person Attributes</td>
</tr>
<tr>
<td>Column</td>
<td>BEN_DIVE_DEPTH</td>
</tr>
<tr>
<td>Lookup</td>
<td>BEN_DIVE_DEPTH</td>
</tr>
<tr>
<td>Enable range validation one</td>
<td>Selected</td>
</tr>
</tbody>
</table>

2. On either the create or edit page for the eligibility profile, add the user-defined criteria to an eligibility profile.
3. On the Other tab, User-Defined Criteria subtab, set the following values.

You might have to refresh the Meaning list before you see the choice that you want. To do so, click another subtab, such as Formula, and then click the User-Defined Criteria tab again.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set 1 Meaning</td>
<td>330</td>
</tr>
</tbody>
</table>
4. Associate the eligibility profile with a benefit variable rate profile.

### Base Eligibility on a Formula

Your company wants to offer a spot incentive bonus to hourly employees who worked 100 percent of their scheduled shift hours in a three-month period. In the Setup and Maintenance work area, you used the Manage Fast Formula task to create the formula that calculates Scheduled Hours minus Worked Hours for each week in the previous three months. If the result of successive calculations is less than or equal to zero, then the formula returns a result of Yes.

1. On the create or edit page for user-defined criteria, enter the following values.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access One Formula</td>
<td>Worked_Sched_Hours_Percent</td>
</tr>
<tr>
<td>Enable range validation one</td>
<td>Clear</td>
</tr>
</tbody>
</table>

2. On either the create or edit page for the eligibility profile, add the user-defined criteria to an eligibility profile.

3. On the Other tab, User-Defined Criteria subtab, set the following values.

   You might have to refresh the Meaning list before you see the choice that you want. To do so, click another subtab, such as Formula, and then click the User-Defined Criteria tab again.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set 1 Meaning</td>
<td>Yes</td>
</tr>
<tr>
<td>Exclude</td>
<td>Clear</td>
</tr>
</tbody>
</table>

4. Associate the eligibility profile with the bonus compensation object.

**Tip:** For very complex scenarios, your organization or implementation team can write a company-defined program to evaluate eligibility.

### Use Eligibility to Exclude

Your organization wants to exclude workers with a work-at-home assignment from a transportation allowance.

1. On the create or edit page for user-defined criteria, set the following values.
2. On either the create or edit page for the eligibility profile, add the user-defined criteria to an eligibility profile.

3. On the Other tab, User-Defined Criteria subtab, set the following values.

   You might have to refresh the Meaning list before you see the choice that you want. To do so, click another subtab, such as Formula, and then click the User-Defined Criteria tab again.

4. Associate the eligibility profile with the transportation allowance compensation object.

**Related Topics**

- Configure Your Own Criteria Based on Lookups

---

### Example of Using Range of Scheduled Hours

This example illustrates how to define eligibility criteria based on the number of hours a worker is scheduled to work within a specified period.

#### Weekly and Monthly Ranges

You want to limit eligibility for a benefits offering to workers who were scheduled to work either of the following ranges. Both ranges are as of the end of the previous quarter:

- Between 30 and 40 hours each week
- Between 130 and 160 hours each month

To do this, add two different ranges on the Range of Scheduled Hours subtab under the Employment tab of the create or edit eligibility profile pages. Set the values for the weekly range as shown in the following table:
Oracle Talent Management Cloud
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Eligibility Profiles

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td>1</td>
</tr>
<tr>
<td>Minimum Hours</td>
<td>30</td>
</tr>
<tr>
<td>Maximum Hours</td>
<td>40</td>
</tr>
<tr>
<td>Scheduled Enrollment Periods</td>
<td>Weekly</td>
</tr>
<tr>
<td>Determination Rule</td>
<td>End of previous quarter</td>
</tr>
</tbody>
</table>

Set the values for the monthly range as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td>2</td>
</tr>
<tr>
<td>Minimum Hours</td>
<td>130</td>
</tr>
<tr>
<td>Maximum Hours</td>
<td>160</td>
</tr>
<tr>
<td>Scheduled Enrollment Periods</td>
<td>Monthly</td>
</tr>
<tr>
<td>Determination Rule</td>
<td>End of previous quarter</td>
</tr>
</tbody>
</table>

Eligibility Profiles

Create eligibility profiles to define criteria that determine whether a person qualifies for objects that you associate the profile with. You can associate eligibility profiles with objects in a variety of business processes.

The following are key aspects of working with eligibility profiles:

- Planning and prerequisites
- Specifying the profile type, usage, and assignment usage
- Defining eligibility criteria
- Excluding from eligibility
- Assigning sequence numbers
- Adding multiple criteria
- Viewing the criteria hierarchy
Planning and Prerequisites

Before you create an eligibility profile, consider the following:

- If an eligibility profile uses any of the following to establish eligibility, you must create them before you create the eligibility profile:
  - Derived factors
  - User-defined formulas
  - User-defined criteria

- Consider whether to combine criteria into one profile or create separate profiles depending on:
  - Whether the object for which you're creating eligibility accepts only one eligibility profile or more than one
  - Performance considerations

- Use names that identify the criteria being defined rather than the object with which the profile is associated, because eligibility profiles are reusable.

  Example: Use Age20-25+NonSmoker rather than Supplemental Life-Minimum Rate.

Specifying Profile Type, Usage, and Assignment Usage

This table describes the basic profile attributes that you specify when you create an eligibility profile:

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profile Type</strong></td>
<td>Use only dependent profiles for Benefits plans or plan types when determining eligibility of participants’ spouses, family members, or other individuals who qualify as dependents. All other profiles are participant profiles.</td>
</tr>
<tr>
<td><strong>Usage</strong></td>
<td>Determines the type of objects the participant profile can be associated with, such as benefits offerings and rates, compensation plans, checklist tasks, goal plans or mass goal assignments, or performance documents. Selecting <strong>Global</strong> makes the profile available to multiple business process usages.</td>
</tr>
<tr>
<td><strong>Assignment to Use</strong></td>
<td>Determines the assignment that the eligibility process evaluates for the person</td>
</tr>
<tr>
<td></td>
<td>• Select <strong>Specific assignment</strong> when the usage is Compensation or Performance.</td>
</tr>
<tr>
<td></td>
<td>• Select a value that includes <strong>benefit relationship</strong> when the usage is Benefits. You select this value to restrict eligibility evaluation to active assignments that are associated with the benefits relationship of the person on a given date. If you select other values, then you might need to include eligibility criteria to exclude inactive assignments.</td>
</tr>
<tr>
<td></td>
<td>• Select one of the following values for all other usages, such as total compensation statements:</td>
</tr>
<tr>
<td></td>
<td>- Any assignment - enterprise</td>
</tr>
<tr>
<td></td>
<td>- Employee assignment only - enterprise</td>
</tr>
<tr>
<td></td>
<td>- Primary employee assignment only - enterprise</td>
</tr>
</tbody>
</table>
Defining Eligibility Criteria

Criteria defined in an eligibility profile are divided into categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal</td>
<td>Includes gender, person type, postal code ranges, and other person-specific criteria.</td>
</tr>
<tr>
<td>Employment</td>
<td>Includes assignment status, hourly or salaried, job, grade, and other employment-specific criteria.</td>
</tr>
<tr>
<td>Derived factors</td>
<td>Includes age, compensation, length of service, hours worked, full-time equivalent, and a combination of age and length of service.</td>
</tr>
<tr>
<td>Other</td>
<td>Other: Includes miscellaneous and user-defined criteria.</td>
</tr>
<tr>
<td>Related coverage</td>
<td>Includes criteria based on whether a person is covered by, eligible for, or enrolled in other benefits offerings.</td>
</tr>
</tbody>
</table>

Some criteria, such as gender, provide a fixed set of choices. The choices for other criteria, such as person type, are based on values defined in tables. You can define multiple criteria for a given criteria type.

Excluding from Eligibility

For each eligibility criterion that you add to a profile, you can indicate whether persons who meet the criterion are considered eligible or are excluded from eligibility. For example, an age factor can include persons between 20 and 25 years old or exclude persons over 65.

If you:

• Exclude certain age bands, then all age bands not explicitly excluded are automatically included.
• Include certain age bands, then all age bands not explicitly included are automatically excluded.

Assigning Sequence Numbers

You must assign a sequence number to each criterion. The sequence determines the order in which the criterion is evaluated relative to other criteria of the same type.

Adding Multiple Criteria

If you define multiple values for the same criteria type, such as two postal code ranges, a person must satisfy at least one of the criteria to be considered eligible. For example, a person who resides in either postal range is eligible.

If you include multiple criteria of different types, such as gender and age, a person must meet at least one criterion defined for each criteria type.

Viewing the Criteria Hierarchy

Select the View Hierarchy tab to see a list of all criteria that you have saved for this profile. The list is arranged by criteria type.
Single or Multiple Eligibility Profiles

You can define multiple criteria in an eligibility profile or create separate profiles for individual criterion. To determine the best approach, consider the following:

- Does the object for which you are defining eligibility allow multiple eligibility profiles?
- What is the best approach in terms of efficiency and performance?
- Are your criteria both inclusive and exclusive?

Allowable Number of Eligibility Profiles

If an object permits only one eligibility profile, you must include all criteria in a single profile.

The following table shows which objects permit only one profile and which permit more.

<table>
<thead>
<tr>
<th>Only One Profile</th>
<th>One or More Profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checklist tasks</td>
<td>Benefits offerings</td>
</tr>
<tr>
<td>Variable rate profiles</td>
<td>Individual and workforce compensation plans</td>
</tr>
<tr>
<td>Variable coverage profiles</td>
<td>Performance documents</td>
</tr>
<tr>
<td>Total compensation statements</td>
<td>Goal plans or mass goal assignments</td>
</tr>
<tr>
<td>Absence types</td>
<td>Absence plans</td>
</tr>
</tbody>
</table>

Efficiency and Performance in the Benefits Hierarchy

For optimum performance and efficiency, attach profiles at the highest possible level in the benefits object hierarchy and avoid duplicating criteria at lower levels. For example, to be eligible for a plan type, a person must satisfy eligibility profiles defined at the program and plan type in program levels.

The following objects inherit the eligibility criteria associated with the program:

- Plan types in program
- Plans in program
- Plans
- Options in plans that are in programs

However, it’s sometimes more efficient to create more than one profile and attach the profiles at various levels in the hierarchy. The following table illustrates applying successively restrictive exclusion criteria at different levels in the hierarchy:

<table>
<thead>
<tr>
<th>Level</th>
<th>Eligibility Profile Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
<td>Exclude employees who do not have an active assignment.</td>
</tr>
<tr>
<td>Plan type in program</td>
<td>Exclude employees who do not have a full-time assignment.</td>
</tr>
<tr>
<td>Plan</td>
<td>Exclude employees whose primary address is not within a defined service area.</td>
</tr>
</tbody>
</table>
Using Both Inclusive and Exclusive Criteria

Eligibility criteria can be used to include or exclude persons from eligibility. Sequencing of criteria is more complicated when you mix included and excluded criteria in the same profile. For ease of implementation, keep excluded criteria in a separate eligibility profile.

**Related Topics**
- What happens if I include multiple criteria in an eligibility profile
- Best Practices for Setting Up Eligibility in a Benefits Hierarchy

Examples of Eligibility Profiles

The following examples show how to use eligibility profiles to determine which workers are eligible for a plan, compensation object, and checklist task.

In each case, you:

1. Create the eligibility profile using the Manage Eligibility Profiles task, which is available in several work areas, including the Setup and Maintenance work area and the Plan Configuration work area.
2. Associate the eligibility profile with the relevant object, such as a benefit plan.

Savings Plan Eligibility

A savings plan, such as a 401k plan, is restricted to full-time employees under 65 years of age. Create an eligibility profile to associate with your plan.

The following table provides the values for the eligibility profile definition.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile Usage</td>
<td>Benefits</td>
</tr>
<tr>
<td>Profile Type</td>
<td>Participant</td>
</tr>
<tr>
<td>Criteria Type</td>
<td>Name</td>
</tr>
<tr>
<td>Employment</td>
<td>Assignment Category</td>
</tr>
<tr>
<td>Derived Factor</td>
<td>Age</td>
</tr>
</tbody>
</table>
**Bonus Eligibility**

You offer a bonus to all employees who received the highest possible performance rating in all rating categories. Create an eligibility profile to associate with your Bonus compensation object.

The following table provides the values for the eligibility profile definition.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile Usage</td>
<td>Compensation, or Global</td>
</tr>
<tr>
<td>Profile Type</td>
<td>Participant</td>
</tr>
<tr>
<td>Assignment to Use</td>
<td>Specific Assignment</td>
</tr>
</tbody>
</table>

The following table provides the values for the eligibility criteria for each rating category.

<table>
<thead>
<tr>
<th>Criteria Type</th>
<th>Name</th>
<th>Values</th>
<th>Select Exclude Check Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Performance Rating</td>
<td>Select the performance template and rating name, and then select the highest rating value</td>
<td>No</td>
</tr>
</tbody>
</table>

**Checklist Task Eligibility**

A new hire checklist contains tasks that don’t apply to employees who work in India. Create an eligibility profile to associate with each checklist task that doesn’t apply to workers in India.

The following table provides the values for the eligibility profile definition.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile Usage</td>
<td>Checklist</td>
</tr>
<tr>
<td>Profile Type</td>
<td>Participant</td>
</tr>
</tbody>
</table>

The following table provides the values for the eligibility criteria.

<table>
<thead>
<tr>
<th>Criteria Type</th>
<th>Name</th>
<th>Values</th>
<th>Select Exclude Check Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Work Location</td>
<td>India</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Create a Participant Eligibility Profile

This example demonstrates how to create a participant eligibility profile used to determine eligibility for variable life insurance rates. Use the Plan Configuration work area to complete these tasks. The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In this Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the profile type?</td>
<td>Participant</td>
</tr>
<tr>
<td>What type of object is associated with this profile?</td>
<td>Variable rate for benefits offering</td>
</tr>
<tr>
<td>What types of eligibility criteria are defined in this profile?</td>
<td>Age derived factor (must have been previously defined)</td>
</tr>
<tr>
<td>Uses Tobacco criteria</td>
<td></td>
</tr>
<tr>
<td>Should persons meeting these criteria be included or excluded from eligibility?</td>
<td>Included</td>
</tr>
</tbody>
</table>

The following figure shows the tasks to complete in this example:

In this example, you create one eligibility profile that defines the requirements for a single variable rate.

- Typically, you create a set of eligibility profiles, one for each variable rate.
• Create a separate profile for each additional rate by repeating the steps in this example, varying the age and tobacco use criteria.

Prerequisites

1. Create an age derived factor for ages less than 30.

Creating the Eligibility Profile

Use default values for fields unless the steps specify other values.

1. In the Tasks panel drawer, click Manage Eligibility Profiles to open the Manage Eligibility Profiles page.
2. On the Create menu, select Create Participant Profile.
3. In the Eligibility Profile Definition section, complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Age Under 30+ Non-Smoking</td>
</tr>
<tr>
<td>Profile Usage</td>
<td>Benefits</td>
</tr>
<tr>
<td>Status</td>
<td>Active</td>
</tr>
<tr>
<td>Assignment to Use</td>
<td>Any assignment - benefit relationship</td>
</tr>
</tbody>
</table>

Adding the Derived Factor for Age

Use default values for fields unless the steps specify other values.

1. In the Eligibility Criteria section, select the Derived Factors tab.
2. On the Age tab, click Create.
3. Complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td>1</td>
</tr>
<tr>
<td>Age</td>
<td>Select the derived factor that you previously defined for ages under 30</td>
</tr>
<tr>
<td>Exclude</td>
<td>Make sure that it is not selected</td>
</tr>
</tbody>
</table>
Adding the Criteria for Tobacco Use

Use default values for fields unless the steps specify other values.

1. Select the Personal tab.
2. On the Uses Tobacco tab, click Create.
3. Complete the fields as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td>1</td>
</tr>
<tr>
<td>Tobacco Use</td>
<td>None</td>
</tr>
<tr>
<td>Exclude</td>
<td>Make sure that it is not selected</td>
</tr>
</tbody>
</table>

4. Click Save and Close.

Associating the Eligibility Profile with a Variable Rate Profile

Use default values for fields unless the steps specify other values.

1. In the Tasks panel drawer, click Manage Benefits Rates to open the Manage Benefits Rates page.
2. Select the Variable Rates tab.
3. Click Create.
4. In the Eligibility Profile field, select the eligibility profile you just created.
5. Complete other fields as appropriate for the rate.
6. Click Save and Close.

Related Topics

- Create a Benefit Variable Rate
Predictive Models for HCM

Guidelines for Managing Predictive Models

Oracle Fusion Workforce Predictions provides predefined models for the prediction of worker performance and voluntary termination. Each predictive model is based on multiple attributes.

You can:

- Run predictive models to provide up-to-date predictions.
- Remove individual predictive models from the predictions process.
- Remove individual attributes from the predictive models or what-if analyses.
- Create predictive attributes to include in the predefined predictive models or what-if analyses.

Running Predictive Models

When you run a predictive model, the process Collect Data and Perform Data Mining for Predictive Analytics is invoked immediately to:

- Rebuild the selected predictive models.
- Make predictions based on scores derived during the build process.

If the volume of relevant transactions (such as transfers, hires, terminations, and promotions) is high in your enterprise, then you can schedule the process to run weekly. At a minimum, you’re recommended to run the process monthly to take account of latest data trends. When scheduled, the process rebuilds and runs all predictive models.

If you add attributes to or remove attributes from a predictive model, and you want to include those changes in predictions immediately, then you need to run the predictive model immediately. Don’t wait for the next scheduled run of Collect Data and Perform Data Mining for Predictive Analytics.

Removing Predictive Models

To remove a predictive model from the predictions process, you deselect the Include in Predictions option for the model. In this case, the model is excluded when you run Collect Data and Perform Data Mining for Predictive Analytics, whether you run it immediately or as a scheduled process. Consequently, related analytics in transactional flows, such as Promote Worker, are empty.

Creating and Editing Predictive Attributes

You can create predictive attributes to include in the predefined predictive models. To derive the value of the new attribute, you create a fast formula database item (DBI) group and select it in the Formula Function field. You can also control which predefined and locally created predictive attributes appear in what-if analyses.

In Oracle Cloud environments, you can’t create formula functions. Therefore, you may not be able to create predictive attributes.
You can edit or delete any predictive attribute that you create. You can’t edit or delete predefined predictive attributes. For any attribute, you can edit how the attribute appears in what-if analyses. For example, you can change the minimum and maximum values on a slider scale.

Related Topics

- How Voluntary Termination Is Predicted
- How High Performance is Predicted
Chapter 24
Other Setup and Maintenance Tasks

Contextual Addresses

Set Up the Mapping Service for Contextual Addresses

A contextual address is marked with an orange triangle, the More icon. When users hover over the triangle, an icon appears that they can click to display the address on a map. The Mapping Service for Contextual Addresses profile option determines the mapping service which you must use to display the map. In the Setup and Maintenance work area, use the following:

- Functional Area: Application Extensions or a product-specific functional area
- Task: Manage Application Toolkit Administrator Profile Values

Profile Option Default

By default, the Mapping Service for Contextual Addresses profile option has no value.

⚠️ Caution: Until you enter a valid value for this profile option, users continue to get an error when they try to open a map for any contextual address.

Profile Option Value

After you find and select the Mapping Service for Contextual Addresses profile option, enter a mapping service URL in the Profile Value column, for example:

- http://bing.com/maps/?v=2&encType=1&where1=

You can include parameters in the URL. For example, to avoid a locator box in Google Maps, add &iwloc=&amp; to the URL. So, you would enter http://maps.google.com/maps?iwloc=&amp;&output=embed&q= as the profile value.

Related Topics

- Set Profile Option Values
- Why can't I see the map for contextual addresses

Home Page Setup

Configure Home Page Navigation

Use the Home Configuration page to configure the icons for infolet pages or other configurable pages in the page control on the home page.
Before You Start

Following are the prerequisites:

1. From the Navigator menu, select Configuration > Structure.
2. Click the Home Configuration tab.
3. Activate a sandbox. If you’re not in an active sandbox, click Edit in the Structure work area. You’re prompted to activate a sandbox.

⚠️ Tip: If you’re already in an active sandbox, then the Edit button doesn’t appear in the Structure work area.

If prompted, select a context layer to determine the scope of users that your changes affect. After you complete your changes, you can preview and test the changes, and then publish the sandbox to make your changes available to users.

Define Settings

You can rename icons for infolet pages and other configurable pages in the page control, change their visibility settings, and reorder them. On the Home Configuration page, you can:

- Click the infolet name or any other configurable page name to rename it.
- Click the Visible field for an infolet or any other configurable page to change its visibility setting. You can show or hide the icon for these pages in the page control on the home page. You can select one of the following options:
  - Yes: The icon appears in the page control.
  - No: The icon doesn’t appear in the page control.
  - EL expression: The evaluation of the EL expression decides whether the icon appears in the page control.
- Click the Default View field for an available configurable page to specify whether the page should be set as the default home view. You can select one of the following options:
  - Yes: The page is set as the default home view.
  - No: The page isn’t set as the default home view.
  - EL expression: The evaluation of the EL expression decides whether the page is set as the default home view.

⚠️ Note: Only specific configurable pages, such as Quick Actions, are available for you to set as the default home view. When you click the Default View field for such pages, you get the options to select Yes, No, or EL Expression. These options aren’t available for other pages that you can’t set as the default home view.

- Use the Move Up and Move Down icons to adjust the relative positions of the icons for the infolet pages or other configurable pages in the page control on the home page.

You can use profile options to define settings for the filmstrip, which you can find above all pages:

- To enable users to use the filmstrip, set the Springboard Strip Enabled profile option (FND_USE_FILMSTRIP) to Yes.
- If the FND_USE_FILMSTRIP profile option is set to Yes, then you can display the filmstrip as expanded by default. To do so, set the Springboard Strip Expanded profile option (FND_EXPAND_FILMSTRIP) to Yes. A user can
still collapse or expand the strip on any page, and when done, this profile option is set by default for subsequent sessions of that user.

**Related Topics**

- Examples of EL Expressions for Configuring Navigation
- Set Profile Option Values
- Create and Activate Classic Sandboxes
- Overview of Sandboxes

**Define Home Page Appearance**

Use the Appearance work area to first select your home page layout and then define its display settings. Use the Themes tab to select your default home page layout as panel, banner, or news feed. And then use the Home Page Display tab to define the display settings of your home page. Based on the home page layout you set using the Themes tab, the options available on the Home Page Display page may vary.

Let's see how to define the home page appearance. But before you start, activate a sandbox.

**Define Home Page Layout**

1. Click **Navigator > Configuration > Appearance**.
2. Click the Themes tab.
3. From the **Themes** list, select a predefined or saved theme.
4. From the **Default Home Page Layout** list, select **Panel**, **Banner**, or **News Feed**.
5. Click **Apply**.

If you selected a predefined theme, enter a theme name, and click **OK** to create another theme with your changes. If you selected a saved theme, your theme changes are directly applied to your application.

**Define Display Settings for Home Page with Panel or Banner Layout**

If you selected the panel or banner layout on the Themes page, follow these steps to configure the display of information in the various sections of your home page:

1. Click the Home Page Display tab.
2. Select one of these options to display on the home page:
   - **Social**: Displays social networking content, such as the number of followers.
   - **Announcements**: Displays employee announcements.
   - **Cover image**: Displays the image for the main panel or banner, which you specify on the Themes page.
   - **None**
3. Specify whether to display the photo in the main panel or banner of the home page from the social network profile or from HCM.
4. Click **Apply**.
Define Display Settings for Home Page with News Feed Layout

If you selected the news feed layout on the Themes page, follow these steps to configure the display of information in the various sections of your home page:

1. Click the Home Page Display tab.
2. In the Name column of the table, click any section name to rename it.
3. Click the Visible field for a section to change its visibility setting. You can show or hide the section on the home page:
   - Yes: The section appears on the home page.
   - No: The section doesn’t appear on the home page.
   - EL expression: The evaluation of the EL expression decides whether the section appears on the home page.
4. In the Order column, use the Move Up and Move Down icons to adjust the relative positions of the sections on the home page.
5. Click Apply.

Related Topics

- Manage Themes
- Overview of Configuring Themes and Home Page Settings
- Create Themes
- Overview of Sandboxes

Configure Quick Actions

Quick actions enable you to initiate actions quickly on yourself, your team, or your client groups. When using the news feed Home page layout, you can configure quick actions using the Structure menu.

You can:

- Enable or disable actions.
- Change the display order of the action groupings.
- Rename actions or change the icons.
- Designate actions as frequently used so they appear as quick links on the Home page tab.
- Duplicate actions.

If you configure an action, the changes will apply only to the configured tab. For example, if an action appears on both My Team and My Client Groups tabs, and you modify the action on the My Team tab, the changes will be applied only to the action on the My Team tab.

To configure an action:

1. In the Navigator, click the Structure task in the Configuration work area.
2. On the Navigation Configuration page, click the group (Me, My Team, or My Client Groups) that includes the action you want to configure.
3. On the Edit Group <Group Name> page, click the Quick Actions tab.
4. From the list of quick actions, expand the required page name and click the action that you want to configure.
5. Change the name or the visibility of the action.
6. Click **Save and Close**.

To configure a quick action grouping:

1. In the Navigator, click the **Structure** task in the Configuration work area.
2. On the Navigation Configuration page, click the group (Me, My Team, or My Client Groups) that you want to configure.
3. On the Edit Group <Group Name> page, click the **Quick Actions** tab.
4. Click the name of the group you want to edit.
5. On the Edit Group: <Group Name> page, change the name of the group.
6. Click **Save and Close**.
7. On the Navigation Configuration page, under the Order column, click the Move Up or Move Down arrows to change the sequence of the menu groups.

To configure frequently used actions:

1. In the Navigator, click the **Structure** task in the Configuration work area.
2. On the Navigation Configuration page, click the group (Me, My Team, or My Client Groups) that includes the quick action you want to configure.
3. On the Edit Group <Group Name> page, click the Quick Action tab.
4. Select the action that you want to add as a quick link.
5. From the list of quick actions, expand the required page name and click the action that you want to configure as a frequently used action.
6. On the Edit Quick actions page, select the **Add as a quick action link on home page** check box.
7. Click **Save and Close**.
8. On the Edit Group: <Group Name> page, under the Order column, click the Move Up or Move Down arrows to change the sequence of the action.

**Note:** You must be in a sandbox to add or edit actions. Once you are done with your changes, publish the sandbox. You need to assign the privilege PER_ACCESS_QUICK_ACTIONS_PRIV to access the quick actions. The predefined employee and contingent worker roles already have this privilege granted to them.

# Create and Enable an Announcement

You can create, edit, or delete company announcements. After you create an announcement, you can enable it to display on your home page.

## Create an Announcement

1. From the Navigator, select **Tools > Announcements**.
2. Click **Create**.
3. Specify the details, such as subject, start date, and end date.
4. Select a category. If you select User-Defined, a text box appears, where you can provide additional details.
5. Select any of these options:
   - **Predefined**: Select an image from the list.
   - **File**: Browse and select a file from your local computer.
URL: Enter a full URL for the image

**Note:** Make sure your image size is 776x437 px or larger to avoid image distortion.

6. Add the content in the text box. Add the content in the text box. You can format your text using the formatting options.
7. Click **Save and Close**.

Your changes on the Announcements page apply immediately to all users, even if you saved your changes while a sandbox is active and not yet published.

### Edit or Delete an Announcement

1. From the Navigator, select **Tools > Announcements**.
2. Select the announcement that you want to edit or delete.
3. Edit the announcement details or click **Delete**.

### Enable an Announcement on the Home Page

After you create or edit an announcement, you can determine whether to display the announcement on your home page.

1. From the Navigator, select **Configuration > Appearance**.
2. Click the **Home Page Display** tab.
3. Based on your home page layout, use any of these options:
   - **Panel** or **Banner**: Select Announcements from the home panel options, and then click **Apply**.
   - **News feed**: Select **Yes** for News and Announcements, and then click **Apply**.

Your default home page layout also determines how the home page displays the announcement.

- **Panel** or **Banner**: The home page displays only the announcement content, not the subject or image.
- **News feed**: The home page displays the entire announcement along with the subject and image in the News and Announcements section.

**Related Topics**
- Overview of Configuring Themes and Home Page Settings
- Why can’t I see announcements on the Home page

### FAQs for Home Page Setup

**How can I rename an icon for an infolet page in the page control on the home page?**

You can rename an icon for an infolet page using the Home Configuration page of the Structure work area. To open this page, select **Configuration > Structure** from the Navigator menu, and then click the **Home Configuration** tab.

### Global Header
How do I define whether the user image, name, or initials display in the global header?

Set the User Image Display Enabled (FND_USER_PHOTO_ENABLED) profile option. If you select:

- Yes, then the user image is displayed in the global header only if the user uploaded a photo. Otherwise, the user’s initials are displayed. By default, this profile option is set to Yes.
- No, then only the user name is displayed in the global header.

Related Topics
- Change Your Photo

Privacy Statement

Set Privacy Statement URL

A privacy statement is legal content that tells you how a company collects and manages user data. You can add a link to your company’s statement in the About This Application dialog box.

1. In the Setup and Maintenance work area, go to the Manage Applications Core Administrator Profile Values task in the Application Extensions functional area.
2. Search for the Privacy Statement URL (PRIVACY_PAGE) profile option.
3. In the Profile Values section, update the Profile Value field with the full URL of the web page that has the privacy content. By default, this profile value is N.

⚠️ Caution: Don’t enter any other value, such as Y, because that causes a broken link.

4. Click Save and Close.

And that’s it! Your users can now view the Privacy Statement link by clicking their user image or name in the global header and selecting About This Application.

Guidelines for Setting Up General Troubleshooting

To help the help desk troubleshoot issues that users encounter in the application, users can record the issue while they reproduce it. Some advanced users might also need detailed information in the About This Page dialog box. Setting up for troubleshooting involves making sure that users have the right access, and determining how many users can record at the same time.

Access

Check with your security administrator that the appropriate users are assigned roles that inherit the following privileges:

- Record and View Issue (FND_RECORD_AND_VIEW_ISSUE_PRIV): To create a basic recording
• **Set Issue Recording Advanced Options (FND_SET_ISSUE_RECORDING_ADVANCED_OPTIONS_PRIV):** To set advanced options before starting the recording

• **View Version Information (FND_VIEW_VERSION_INFORMATION_PRIV):** To see the versions that technical components of the application are on

### Number of Users
Recordings are stored on servers, and by default, up to five users can record at the same time on each server. For performance reasons, you can set the Maximum Number of Users Allowed to Record Issues (ORA_FND_RECORD_ISSUE_MAX_USERS) profile option to a number lower than five.

**Related Topics**
- Record Issues to Troubleshoot
- How can I view the version information of an application
- Set Profile Option Values

### Set Up the Worklist Region on My Dashboard
You can add the Worklist: Notifications and Approvals region to My Dashboard, which is a blank dashboard by default. This region displays the workflow tasks assigned to the person using My Dashboard. After you add the Worklist region, select a value for the Welcome Dashboard Worklist Timeout Interval (ATK_HOME_PAGE_WORKLIST_TIMEOUT) profile option.

#### Adding the Region
To add the Worklist: Notifications and Approvals region to My Dashboard:

1. Click **Navigator > My Dashboard**.
2. Click your user image or name in the global header, and select **Edit Pages** in the Administration menu group.
3. Click the **Add Content** button where you want to place the region.
4. Open the Application Content folder in the Add Content dialog box.
5. Click **Add** for the Worklist: Notifications and Approvals item.
6. Click **Close**.
7. Save your work, and then click the **Close** button.

#### Defining the Timeout Interval
When users open My Dashboard and it contains the Worklist: Notifications and Approvals region, data for the region is retrieved. The Welcome Dashboard Worklist Timeout Interval profile option determines how long to continue retrieving before timing out and displaying no data. In the Setup and Maintenance work area, use the following:

- **Functional Area:** Application Extensions
- **Task:** Manage Application Toolkit Administrator Profile Values

> **Note:** If you don’t see this task, then make sure that the Application Toolkit Component Maintenance feature is enabled at the offering level in the Offerings work area.
On the Manage Application Toolkit Administrator Profile Values page, set the Welcome Dashboard Worklist Timeout Interval profile option.

- If you don't set a value for this profile option, which is blank by default, then the region doesn't time out.
- Retrieving data for the Worklist region affects the performance of My Dashboard as a whole. So, select a value for this profile option if your users have the Worklist region on My Dashboard and notice performance issues.

After the timeout, users can refresh the region to try retrieving the data again.

**Related Topics**

- Set Profile Option Values
- Configuring Offerings: Procedure
- Update Existing Setup Data

**Deep Links**

You can use deep links to open pages without navigating through the menu structure. Deep links come in handy if you have corporate internal portals and you want to enable direct navigation from the portals into the Oracle Fusion Applications. For example, you can enable direct navigation to the My Team page. Use the Deep Links work area to view a complete list of the available deep links.

You can simply copy a URL from the Deep Links page and paste it in your external portals as is. You don’t even need to know the URL format.

**Login and Security**

Users with the View Administration Link (FND_VIEW_ADMIN_LINK_PRIV) privilege can view the Deep Link menu item in the Navigator. If you click a deep link URL from an external application and have not yet signed in, you’re automatically redirected to the Sign In page.

**HCM Experience Design Studio**

Use the HCM Experience Design Studio to do the following:

- Configure HCM actions
- Configure person spotlight
- Add background images for landing pages for redesigned HCM actions.

**How to Configure HCM Actions**

Use the Transaction Design Studio to do the following:

- Create rules to configure pages to include sections and fields applicable to your business.
- Change the required status of optional attributes.
Control the availability of the questionnaire page for actions that use the guided process design.
Enable flexfields and the segments you want to make visible.

You can specify these common criteria for a rule:

- **Legal Employers**: Select the legal employers covered by the rule.
- **Business Unit**: Select the business unit covered by the rule.
- **Roles**: Select the applicable roles. This is the role of the user performing the action not the person being acted on.

You can hide unused or optional sections and fields on the redesigned actions and pages. For example, for the promote action for the India legal employer, you can show the salary section if salary is adjusted when a worker is promoted, or you can hide the position section and the position fields if you don’t use position management.

You can create multiple rules for an action. The criteria help determine which rule applies to which employees. If an employee meets multiple criteria for a page or action, then the rules are applied in the order displayed in the transaction design studio.
You can set a rule to be active or inactive. You can have only one active rule for any action at any time. You can also

**How is it Different from the Page Composer**

The Transaction Design Studio doesn’t replace the ADF Page Composer completely but reduces the need to create EL expression to vary pages for different roles or legal employers. You can use either of the tools depending on your requirement. Use the ADF Page Composer advanced configuration options to configure changes not supported by the Transaction Design Studio.

**How to Configure the Person Spotlight**

You configure the person spotlight using the person spotlight page in the HCM Experience Design Studio. You can rename the tabs and pages, and change the sequence in which they appear on a person’s spotlight. In addition, you can hide a tab completely or use an EL expression to make the tab available to a select group of employees.

**Create Rule to Configure Promote Action**

In this example, you create a rule to configure the Promote action. You must hide the Compensation region in the Promote flow for all UK legal employers. This rule is applicable for line manager performed promotions only.

**Prerequisites**

1. You must activate a sandbox before defining a rule.
2. Enable page-level configuration at the Site level.

**Select the Action**

1. On your Home page, select **My Client Groups > Employment > HCM Experience Design Studio**.
2. Select the **Transaction Design Studio** tab.
3. Select **Promote** from the **Action** list.
Add Rule

1. Click **Add** to add a new rule.
2. Enter these rule details:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>UK Promotion</td>
</tr>
<tr>
<td>Description</td>
<td>Hide Compensation region for UK LE only</td>
</tr>
<tr>
<td>Legal Employers</td>
<td>Vision Corporation UK</td>
</tr>
<tr>
<td>Action</td>
<td>Promotion</td>
</tr>
<tr>
<td>Business Unit</td>
<td>Vision Operations</td>
</tr>
<tr>
<td>Worker Type</td>
<td>Employee, Contingent worker</td>
</tr>
<tr>
<td>Roles</td>
<td>Line Manager (ORA_PER_LINE_MANAGER_ABSTRACT)</td>
</tr>
<tr>
<td>Active</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Configure Rule

1. In the Show or Hide Regions section, scroll down to the Compensation row and select **Not visible**.
2. Scroll down to the Page Attributes region and select **Promotion** from the **Region** list.
3. In the Grade attribute row, select **Not visible** from the list.
4. Click **Save**.

FAQs

**Does the Transaction Design Studio replace the Page Composer?**

No. The Transaction Design Studio doesn't replace the Page Composer completely but reduces the need to create EL (Expression Language) expression to vary pages for different roles or legal employers. You can use either of the tools depending on your requirement.
Overview

The common reference objects are used by several setup tasks in the Setup and Maintenance work area. The common reference objects become a part of the configuration package that is created for an implementation project. While moving the application content, for example, moving from test to the production phase of an implementation, attend to the nuances of these common reference objects.

Parameters

The common reference objects are represented as business objects. A single object can be referenced in multiple setup tasks with different parameters. In the configuration package created for the implementation project, parameters passed to a setup task are also passed to the business objects being moved. As a result, the scope of the setup tasks is maintained intact during the movement.

Dependencies

Common reference objects may have internal references or dependencies among other common reference objects. Therefore, you must note all the dependencies before moving the objects so that there are no broken references among them.

Related Topics

- Overview of Setup Data Export and Import
- Setup Data Export and Import Using an Offering or a Functional Area

Business Objects for Moving Common Reference Objects

Common reference objects in Oracle Fusion Functional Setup Manager are used to move application setup content from one environment to another. For example, from a test environment to a production environment.

Choice of Parameters

The following table lists the business objects, the movement details, and the effect of the setup task parameter on the scope of the movement.
**Note:**
- You can move only the translations in the current user language.
- You can move the Oracle Social Network business objects and the changes to the Navigator using the configuration sets on the Configuration Set Migration page.

<table>
<thead>
<tr>
<th>Business Object Name</th>
<th>Moved Functional Item</th>
<th>Effect on the Scope of Movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Message</td>
<td>Messages and associated tokens</td>
<td>No parameters: All messages are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only messages belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter messageName/ applicationId Only the specified message is moved.</td>
</tr>
<tr>
<td>Application Taxonomy</td>
<td>Application taxonomy modules and components</td>
<td>No parameters: All taxonomy modules and components are moved.</td>
</tr>
<tr>
<td>Application Attachment Entity</td>
<td>Attachment entities</td>
<td>No parameters: All attachment entities are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only attachment entities belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td>Application Attachment Category</td>
<td>Attachment categories and category-to-entity mappings</td>
<td>No parameters: All attachment categories and category-to-entity mappings are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only attachment categories belonging to the specified module and its descendant modules in the taxonomy hierarchy along with the respective category-to-entity mappings are moved.</td>
</tr>
<tr>
<td>Application Document Sequence Category</td>
<td>Document sequence categories</td>
<td>No parameters: All categories are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only categories belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter code/ applicationId Only the specified document sequence category code is moved.</td>
</tr>
<tr>
<td>Application Document Sequence</td>
<td>Document sequences and their assignments</td>
<td>No parameters: All sequences are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only document sequences belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
</tbody>
</table>
### Business Object Name

<table>
<thead>
<tr>
<th>Business Object Name</th>
<th>Moved Functional Item</th>
<th>Effect on the Scope of Movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Descriptive Flexfield</td>
<td>Descriptive flexfield registration data and setup data</td>
<td>No parameters: All descriptive flexfields are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only descriptive flexfields belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter descriptiveFlexfieldCode/applicationId Only the specified descriptive flexfield is moved. Importing the metadata of a flexfield can change its deployment status and therefore, you must redeploy if there are any affected flexfields. The import process automatically submits affected flexfields for redeployment. Also only flexfields with a deployment status of Deployed or Deployed to Sandbox are eligible to be moved.</td>
</tr>
<tr>
<td>Application Extensible Flexfield</td>
<td>Extensible flexfield registration data and setup data, including categories</td>
<td>No parameters: All extensible flexfields are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only extensible flexfields belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter extensibleFlexfieldCode/applicationId Only the specified extensible flexfield is moved. Importing the metadata of a flexfield can change its deployment status and therefore, the affected flexfields must be redeployed. The import process automatically submits affected flexfields for redeployment. Also only flexfields with a deployment status of Deployed or Deployed to Sandbox are eligible to be moved.</td>
</tr>
<tr>
<td>Application Key Flexfield</td>
<td>Key flexfield registration data and setup data</td>
<td>No parameters: All key flexfields are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only key flexfields belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter keyFlexfieldCode/applicationId Only the specified key flexfield is moved. Importing the metadata of a flexfield can change its deployment status and therefore, the affected flexfields must be redeployed. The import process automatically submits affected flexfields for redeployment. Only flexfields with a deployment status of Deployed or Deployed to Sandbox are eligible to be moved.</td>
</tr>
<tr>
<td>Business Object Name</td>
<td>Moved Functional Item</td>
<td>Effect on the Scope of Movement</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Application Flexfield Value Set</td>
<td>Value set setup data</td>
<td>No parameters: All value sets are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only value sets belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter valueSetCode: Only the specified value set is moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Importing the metadata of a value set can change the deployment status of flexfields that use the value set. Therefore, you must redeploy if there are any affected flexfields. The import process automatically submits affected flexfields for redeployment.</td>
</tr>
<tr>
<td>Application Reference Currency</td>
<td>Currency data</td>
<td>No parameters: All currencies are moved.</td>
</tr>
<tr>
<td>Application Reference ISO Language</td>
<td>ISO language data</td>
<td>No parameters: All ISO languages are moved.</td>
</tr>
<tr>
<td>Application Reference Industry</td>
<td>Industry data including industries in territories data</td>
<td>No parameters: All industries are moved.</td>
</tr>
<tr>
<td>Application Reference Language</td>
<td>Language data</td>
<td>No parameters: All languages are moved.</td>
</tr>
<tr>
<td>Application Reference Natural Language</td>
<td>Natural language data</td>
<td>No parameters: All natural languages are moved.</td>
</tr>
<tr>
<td>Application Reference Territory</td>
<td>Territory data</td>
<td>No parameters: All territories are moved.</td>
</tr>
<tr>
<td>Application Reference Time zone</td>
<td>Time zone data</td>
<td>No parameters: All time zones are moved.</td>
</tr>
<tr>
<td>Application Standard Lookup</td>
<td>Standard lookup types and their lookup codes</td>
<td>No parameters: All standard lookups are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only standard lookups belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter lookupType: Only the specified common lookup is moved.</td>
</tr>
<tr>
<td>Application Common Lookup</td>
<td>Common lookup types and their lookup codes</td>
<td>No parameters: All common lookups are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only common lookups belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td>Business Object Name</td>
<td>Moved Functional Item</td>
<td>Effect on the Scope of Movement</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Application Set-Enabled Lookup</td>
<td>Set-enabled lookup types and their lookup codes</td>
<td>No parameters: All set-enabled lookups are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only set-enabled lookups belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter lookupType: Only the specified set-enabled lookup is moved.</td>
</tr>
<tr>
<td>Application Profile Category</td>
<td>Profile categories</td>
<td>No parameters: All profile categories are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only categories belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>name/ applicationId Only the specified category is moved.</td>
</tr>
<tr>
<td>Application Profile Option</td>
<td>Profile options and their values</td>
<td>No parameters: All profile options and their values are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only profile options and their values belonging to the specified module are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter profileOptionName: Only the specified profile option and its values are moved.</td>
</tr>
<tr>
<td>Application Profile Value</td>
<td>Profile options and their values</td>
<td>No parameters: All profiles and their values are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only profiles and their values belonging to the specified module are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter categoryName/ categoryApplicationId Only profiles and their values belonging to the specified category are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter profileOptionName: Only the specified profile and its values are moved.</td>
</tr>
<tr>
<td>Application Reference Data Set</td>
<td>Reference data sets</td>
<td>No parameters: All sets are moved.</td>
</tr>
<tr>
<td>Application Reference Data Set Assignment</td>
<td>Reference data set assignments</td>
<td>Parameter determinantType: Only assignments for the specified determinant type are moved.</td>
</tr>
<tr>
<td>Business Object Name</td>
<td>Moved Functional Item</td>
<td>Effect on the Scope of Movement</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Oracle Talent Management Cloud</td>
<td>Implementing Talent Management Base</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chapter 25</td>
<td></td>
</tr>
<tr>
<td>Application Tree Structure</td>
<td>Tree structures and any labels assigned to the tree structure</td>
<td>Parameter determinantType/referenceGroupName Only assignments for the specified determinant type and reference group are moved.</td>
</tr>
<tr>
<td></td>
<td>No parameters: All tree structures (and their labels) are moved.</td>
<td>Parameter moduleType/ moduleKey Only tree structures (and their labels) belonging to the specified module are moved.</td>
</tr>
<tr>
<td></td>
<td>Parameter treeStructureCode: Only the specified tree structure (with its labels) is</td>
<td>Parameter treeStructureCode: Only trees belonging to the specified tree structure are moved.</td>
</tr>
<tr>
<td></td>
<td>moved.</td>
<td>Parameter TreeStructureCode/ TreeCode Only trees belonging to the specified tree structure and tree code are moved.</td>
</tr>
<tr>
<td>Application Tree</td>
<td>Tree codes and versions</td>
<td>Parameter moduleType/ moduleKey Only trees belonging to the specified module are moved.</td>
</tr>
<tr>
<td></td>
<td>No parameters: All trees are moved.</td>
<td>Parameter treeStructureCode: Only trees belonging to the specified tree structure are moved.</td>
</tr>
<tr>
<td></td>
<td>Parameter treeStructureCode: Only the specified tree structure (with its labels) is</td>
<td>Parameter TreeStructureCode/ TreeCode Only trees belonging to the specified tree structure and tree code are moved.</td>
</tr>
<tr>
<td></td>
<td>moved.</td>
<td></td>
</tr>
<tr>
<td>Application Tree Label</td>
<td>Tree structures and any labels assigned to the tree structure</td>
<td>Parameter moduleType/ moduleKey Only tree structures (and their labels) belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td>No parameters: All tree structures (and their labels) are moved.</td>
<td>Parameter treeStructureCode: Only the specified tree structure (with its labels) is moved.</td>
</tr>
<tr>
<td></td>
<td>Parameter moduleType/ moduleKey Only tree structures (and their labels) belonging to</td>
<td>Parameter treeStructureCode: Only trees belonging to the specified tree structure are moved.</td>
</tr>
<tr>
<td></td>
<td>the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
<td>Parameter TreeStructureCode/ TreeCode Only trees belonging to the specified tree structure and tree code are moved.</td>
</tr>
<tr>
<td>Application Data Security Policy</td>
<td>Database resources, actions, conditions, and data security policies</td>
<td>Parameter moduleType/ moduleKey Only database resources/ actions/ conditions/ policies belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td>No parameters: All database resources/ actions/ conditions/ policies are moved.</td>
<td>Parameter moduleName: Only the specified database resource along with its actions/ conditions/ policies is moved.</td>
</tr>
<tr>
<td></td>
<td>Parameter moduleName: Only the specified database resource along with its actions/</td>
<td>If the policies being moved contain reference to newly created roles, move the roles before moving the policies. If the source and target systems use different LDAPs, manually</td>
</tr>
<tr>
<td></td>
<td>conditions/ policies is moved.</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The content above is a representation of the text found in the image. It has been formatted into a clear, readable table and text.
Guidelines for Moving Related Common Reference Objects

Certain common reference objects may use other common reference objects creating dependencies among the objects. During the movement of common reference objects, ensure that these dependencies or references aren’t broken or lost.

Dependencies

The dependencies among the common reference objects may be caused by any of the following conditions.

• Flexfield segments use value sets
• Value sets may make use of standard, common, or set-enabled lookups
• Key flexfields may have an associated tree structure and key flexfield segments may have an associated tree code
• Tree codes and versions may be defined over values of a value set
• Data security policies may be defined for value sets that have been enabled for data security

You may decide to move one, some, or all of the business objects by including the ones you want to move in your configuration package. For example, you may decide to move only value sets, or move both value sets and their lookups as part of the same package. Whatever be the combination, Oracle recommends that during the movement of objects, you follow an order that maintains the dependencies among the objects.

While moving the business objects, adhere to the following order:

1. Move created taxonomy modules before moving any objects that reference them, such as flexfields, lookups, profiles, messages, and so on.
2. Move created currencies before moving any objects that reference them, such as territories.
3. Move created territories before moving any objects that reference them, such as languages and natural languages.
4. Move created ISO languages before moving any objects that reference them, such as languages, natural languages, and industries.
5. Move created tree structures before moving any objects that reference them, such as trees or tree labels.
6. Move created profile options before moving any objects that reference them, such as profile categories or profile values.
7. Move created attachment entities before moving any objects that reference them, such as attachment categories that reference them.

*Note:* In scenarios where there may be dependencies on other objects, you must move the dependencies before moving the referencing object. For example, if data security policies have dependencies on newly created security roles, you must move the security roles before moving the security policies.
Guidelines for Moving Common Reference Objects Using the Seed Data Framework

To move the common reference objects, you can use the Seed Data Framework. You can also use the command line interface of the Seed Data Framework to move the object setup data. For more information about seed data loaders including common reference object loaders, see Oracle Fusion Applications Developer’s Guide.

Movement Dependencies

The seed data interface moves only the setup metadata. For example, if you use Seed Data Framework to import flexfield metadata, the flexfield setup metadata is imported into your database. However, you must initiate the flexfield deployment process separately after seed data import to regenerate the runtime flexfield artifacts in the target environment. Similarly, if you use Seed Data Framework to import data security metadata, you must first move any new referenced roles and then manually run the GUID reconciliation where required.

To ensure that the reference data isn’t lost during the movement, certain guidelines are prescribed. It’s recommended that you perform the movement of object data exactly in the following order:

- **Note:** Only the translation in the current user language is moved.

1. Move created taxonomy modules before moving any objects that reference them, such as flexfields, lookups, profiles, attachments, reference data sets, document sequences, messages, and data security.
2. Move created currencies before moving any objects that reference them, such as territories.
3. Move created territories before moving any objects that reference them, such as languages and natural languages.
4. Move created ISO languages before moving any objects that reference them, such as languages, natural languages, and industries.
5. Move created tree structures before moving any objects that reference them, such as trees or tree labels.
6. Move created profile options before moving any objects that reference them, such as profile categories or profile values.
7. Move created attachment entities before moving any objects that reference them, such as attachment categories that reference them.
8. Move created reference data sets before moving any objects that reference them, such as reference data set assignments and set-enabled lookups.
9. Move created document sequence categories before moving any objects that reference them, such as document sequences.
10. Move created tree labels before moving any objects that reference them, such as trees.
11. Move created data security objects and policies before moving any objects that reference them, such as value sets.
12. Move created value sets before moving any objects that reference them, such as flexfields.
13. Move created trees before moving any objects that reference them, such as key flexfields.
Glossary

**accounting flexfield**
The structure that determines the chart of accounts, including the number and order of the individual segments, as well as assigning the value sets to the segments.

**action**
The kind of access, such as view or edit, named in a security policy.

**ADF**
Application Developer Framework. A set of programming principles and rules for developing software applications.

**analytics**
Business intelligence objects such as analyses and dashboards that provide meaningful data to help with decision making.

**assignment**
A set of information, including job, position, pay, compensation, managers, working hours, and work location, that defines a worker’s or nonworker’s role in a legal employer.

**autosuggest**
Suggestions that automatically appear for a search field, even before you finish typing your search term. You can select any of the suggestions to run your search.

**balancing segment**
A chart of accounts segment used to automatically balance all journal entries for each value of this segment.

**band**
A specified range of values. Example: An age band defines a range of ages, such as 25 to 30, used to determine a person’s eligibility.

**behaviors**
The actions exhibited by employees to demonstrate a competency. Behaviors are also referred to as subcompetencies.

**benefits object hierarchy**
A structure that enables efficient management of benefits that share similar attributes. The four object types used to structure benefits offerings are programs, plan types, plans, and options.

**benefits offering**
Any of an organization’s nonsalary components of employee benefits packages, such as health, savings, life insurance, recreation, goods, or services.
business function
A business process or an activity that can be performed by people working within a business unit. Describes how a business unit is used.

business intelligence catalog
The repository where all business intelligence objects, including analyses, reports, briefing books, and agents, are stored. The catalog contains separate folders for personal, shared, and modified objects.

business object
A resource in an enterprise database, such as an invoice or purchase order.

business unit
A unit of an enterprise that performs one or many business functions that can be rolled up in a management hierarchy.

calculation card
Captures values required for payroll calculations for some earnings and deductions, such as absence payments and involuntary deductions. For some countries, you can also create various types of cards to hold default values for tax reporting units or payroll statutory units.

calculation value definition
The rates, amounts, or rules that payroll runs use to calculate the components listed on a calculation card.

calendar event
A period that signifies an event, such as a public holiday or a training course, that impacts worker availability.

chart of accounts
The account structure your organization uses to record transactions and maintain account balances.

competency
Any measurable behavior required by an organization, job, or position that a person may demonstrate in the work context. A competency can be a piece of knowledge, a skill, an attitude, or an attribute.

condition
The part of a data security policy that specifies what portions of a database resource are secured.

content item
An individual quality, skill, or qualification within a content type that you track in profiles.

content library
A repository of the content types and individual content items that can be associated with person profiles and profiles for workforce structures such as jobs and positions.
**content type**  
An attribute such as a skill, quality, or qualification that is added to a profile.

**context**  
A grouping of flexfield segments to store related information.

**context segment**  
The flexfield segment used to store the context value. Each context value can be associated with a different set of context-sensitive segments.

**context-sensitive segment**  
A flexfield segment that may or may not appear depending upon a context. Context-sensitive segments are attributes that apply to certain entity rows based on the value of the context segment.

**contingent worker**  
A self-employed or agency-supplied worker. Contingent worker work relationships with legal employers are typically of a specified duration. Any person who has a contingent worker work relationship with a legal employer is a contingent worker.

**corporate rate type**  
Rate you define to standardize rates used in conversion of one currency to another over a period of time. This rate is generally a standard market rate determined by senior financial management for use throughout the organization.

**cost center**  
A unit of activity or a group of employees used to assign costs for accounting purposes.

**cost organization**  
A grouping of inventory organizations that indicates legal and financial ownership of inventory, and which establishes common costing and accounting policies.

**country holding company**  
A legal entity that acts on behalf of several divisions within an enterprise, and is the legal employer in a country.

**dashboard**  
A page that provides quick access to key tasks and summary information for various objects within a functional area of interest.
data model
The metadata that determines where data for a report comes from and how that data is retrieved.

data security
The control of access and action a user can take against which data.

data security policy
A grant of entitlement to a role on an object or attribute group for a given condition.

database resource
An applications data object at the instance, instance set, or global level, which is secured by data security policies.

department
A division of a business enterprise dealing with a particular area of activity.

derived factor
Calculated eligibility criterion that changes over time, such as age or length of service.

descriptive flexfield
Expandable fields used for capturing additional descriptive information or attributes about an entity, such as a customer case. You may configure information collection and storage based on the context.

determinant
A value that specifies the use of a reference data set in a particular business context.

determinant type
The value that affects sharing of reference data in a transaction across organizations, such as a business unit or a cost organization.

determinant type
An optional value that affects document sequencing in a transaction. The available determinant types are Business Unit, Ledger, Legal Entity, and Tax Registration.

determinant value
A value specific to the selected determinant type of a document sequence. If Ledger is the determinant type for a document sequence, the determinant value is the specific ledger number whose documents are numbered by the document sequence. It is relevant in a document sequence assignment only if the document sequence has a determinant type.

development goal
A goal that is geared toward facilitating the career growth of individuals so that they can perform better in their current job or prepare themselves for advancement.
**disability organization**
An organization with which employee disabilities are registered.

**division**
A business-oriented subdivision within an enterprise. Each division is organized to deliver products and services or address different markets.

**document sequence**
A unique number that is automatically or manually assigned to a created and saved document.

**educational establishment**
A school, college, university, or other learning institution.

**effective start date**
For a date-effective object, the start date of a physical record in the object’s history. A physical record is available to transactions between its effective start and end dates.

**elapsed schedule**
Elapsed schedules define the number of hours to be worked on a day, but not the precise start and end times. For example, all resources work eight hours on Monday, but some resources may start at 8 AM, while others start at 1 PM.

**eligibility profile**
A user-defined set of criteria used to determine whether a person qualifies for a benefits offering, variable rate or coverage, compensation plan, checklist task, or other object for which eligibility must be established.

**enterprise**
An organization having common control over one or more legal entities.

**entitlement**
Grant of access to functions and data. Oracle Fusion Middleware term for privilege.

**extensible flexfield**
Expandable fields that you can use to capture multiple sets of information in a context or in multiple contexts. Some extensible flexfields let you group contexts into categories.

**fast formula**
A simple way to write formulas using English words and basic mathematical functions. Formulas are generic expressions of calculations or comparisons that repeat with different input values.

**feature**
Business practices or methods applicable to the functional areas that enable the fine-tuning of business functionality.
**filmstrip**
The single strip of icons that you can use to open other pages. The strip appears between the global header and the page title.

**fixed rate type**
Rate you set between two currencies that remains constant. For example, a rate set between the euro currency and each Economic and Monetary Union (EMU) currency during the conversion to the euro currency.

**flexfield**
A flexible data field that you can configure such that it contains one or more segments or stores additional information. Each segment has a value and a meaning.

**flexfield segment**
An extensible data field that represents an attribute and captures a value corresponding to a predefined, single extension column in the database. A segment appears globally or based on a context of other captured information.

**free-form content type**
A content type that contains a code, name, and description only, and does not contain any properties until you add it to a profile type.

**FTE**
Abbreviation for full-time equivalent, such as .5 for half-time work.

**global header**
The uppermost region in the user interface that remains the same no matter which page you’re on.

**global name**
A person’s name in a format and language that can be understood throughout a multinational enterprise.

**global search**
The search in the global header that lets you search across many business objects.

**grade**
A component of the employment model that defines the level of compensation for a worker.

**grade rate**
Used to define pay values for grades in a legislative data group.

**Groovy**
An object-oriented programming language for the Java Platform used as an alternative to the Java programming language. Groovy can also be used dynamically as a scripting language.
HCM
Abbreviation for Human Capital Management.

headcount
A work measure recorded on an assignment. By default, the headcount of an organization is the total of primary assignments in primary work relationships.

HR
Abbreviation for human resource.

HR status
Tracks worker's progress through the assignment, whether the assignment is active, suspended, or inactive.

incident
A collection of diagnostic information about a critical error, providing details about the state of the application when the issue occurred.

infolet
A small, interactive widget on the home page that provides key information and actions for a specific area, for example social networking or your personal profile. Each infolet can have multiple views.

instance qualifier set
A set of values that uniquely identifies multiple instances of the same profile item.

interface table
A database table that stores data during data transfer between applications or between databases that reside inside and outside of an Oracle Fusion application.

inventory organization
A logical or physical entity in the enterprise that tracks inventory transactions and balances, stores definitions of items, and manufactures or distributes products.

item master
A collection of data that describes items and their attributes recorded in a database file.

job
A generic role that is independent of any single department or location. For example, the jobs Manager and Consultant can occur in many departments.

job definition
The metadata that determines what a job does and what options are available to users when they submit the scheduled process. A job is the executable for a scheduled process.
job role
A role, such as an accounts payable manager or application implementation consultant, that usually identifies and aggregates the duties or responsibilities that make up the job.

key flexfield
Configurable flexfield comprising multiple parts or segments, each of which has a meaning either individually or in combination with other segments. Examples of key flexfields are part numbers, asset category, and accounts in the chart of accounts.

key flexfield segment instance
A single occurrence of a key flexfield segment in a key flexfield structure instance.

key flexfield structure
The arrangement of segments in a key flexfield. In some cases, you can define multiple structures for a single key flexfield.

key flexfield structure instance
An occurrence of a key flexfield structure that shares the same order of segments as other instances of the key flexfield structure. However, each instance uses different value sets to validate the segments.

legal authority
A government or legal body that is charged with powers such as the power to make laws, levy and collect fees and taxes, and remit financial appropriations for a given jurisdiction.

legal employer
A legal entity that employs people.

legal entity
An entity identified and given rights and responsibilities by commercial law through the registration with country’s appropriate authority.

legal jurisdiction
A physical territory, such as a group of countries, single country, state, county, parish, or city, which comes in the purview of a legal authority.

legal reporting unit
The lowest level component of a legal structure that requires registrations. Used to group workers for the purpose of tax and social insurance reporting or represent a part of your enterprise with a specific statutory or tax reporting obligation.

legislative data group
A means of partitioning payroll and related data. At least one legislative data group is required for each country where the enterprise operates. Each legislative data group is associated with one or more payroll statutory units.
**line of business**
Set of one or more highly related products which service a particular customer transaction or business need. Refers to an internal corporate business unit.

**local name**
A person’s name in a format and language that are readily understood by users in a single country but that may not be understood throughout a multinational enterprise.

**lookup code**
An option available within a lookup type, such as the lookup code BLUE within the lookup type COLORS.

**lookup type**
The label for a static list that has lookup codes as its values.

**mainline metadata**
The primary branch of metadata that a sandbox is published to. Once published, changes made in the sandbox become available to all users.

**model profile**
A collection of the work requirements and required skills and qualifications of a workforce structure, such as a job or position.

**Navigator**
The menu in the global header that you can use to open the work areas and dashboards that you have access to.

**node**
A logical term that refers to the data in a specific data source such as a product-specific table or a storage entity. A tree management solution must have established the data source.

**party**
A physical entity, such as a person, organization or group, that the deploying company has an interest in tracking.

**payroll status**
Indicates whether payroll runs process the assignment. Valid values are Process, Do not process, Process when earning, and Process nonrecurring element entry.

**payroll statutory unit**
A legal entity registered to report payroll tax and social insurance. A legal employer can also be a payroll statutory unit, but a payroll statutory unit can represent multiple legal employers.

**performance document**
Online document used to evaluate a worker for a specific time period. The document contains the content on which the worker is evaluated, which could include goals, competencies, and questionnaires.
**performance goal**
A results-oriented goal, often using specific targets, to assess the level of a worker’s achievement.

**person number**
A person ID that is unique in the enterprise, allocated automatically or manually, and valid throughout the enterprise for all of a person’s work and person-to-person relationships.

**person profile**
A collection of skills, experience, qualifications, work preferences, and career planning information for a worker.

**position**
A specific occurrence of one job that is fixed within one department. It is also often restricted to one location. For example, the position Finance Manager is an instance of the job Manager in the Finance Department.

**primary ledger**
Main record-keeping ledger.

**privilege**
A grant of access to functions and data; a single, real world action on a single business object.

**profile option**
User preferences and system configuration options that users can configure to control application behavior at different levels of an enterprise.

**profile option level**
The category or layer that defines a profile option. Site, Product, and User are the predefined levels.

**profile option value**
The setting mapped to the level of a profile option. A profile option may have multiple values set at different levels, such as Site or User.

**profile type**
A template that defines the content sections of a profile, role access for each section, and whether the profile is for a person, or for a workforce structure such as a job or position.
project expenditure organization
An organization that can incur expenditures and hold financial plans for projects.

question library
A central repository of reusable questions to include in questionnaires.

questionnaire
A set of questions presented in a specific order and format.

questionnaire library
A central repository of reusable questionnaires.

rating model
A scale used to measure the performance and proficiency of workers.

reference data
Data in application tables that is not transactional or high-volume, which an enterprise can share across multiple organizations. For example, sales methods, transaction types, or payment terms.

reference data set
Contains reference data that can be shared across a number of business units or other determinant types. A set supports common administration of that reference data.

reference group
A logical collection of reference data sets that correspond to logical entities, such as payment terms defined across multiple tables or views. Based on the common partitioning requirements across entities, the reference data sets are grouped to facilitate data sharing among them.

registration
The record of a party’s identity related details with the appropriate government or legal authorities for the purpose of claiming and ensuring legal and or commercial rights and responsibilities.
**report**
An output of select data in a predefined format that’s optimized for printing.

**role**
Controls access to application functions and data.

**role provisioning**
The automatic or manual allocation of a role to a user.

**sandbox**
A testing environment that isolates untested code changes from the mainline environment so that these changes don’t affect the mainline metadata or other sandboxes.

**scheduled process**
A program that you run to process data and, in some cases, generate output as a report.

**segment**
A segment is a single field within a flexfield and maps to a single table column in your database. When configuring a flexfield, you define the appearance and meaning of individual segments.

**set**
Classified and grouped reference data that organizational entities share.

**set enabled**
A property that describes entities that an organization shares as reference data. For example, you can indicate a lookup, customer, location, or document attachment as set enabled.

**spot rate type**
Rate you enter to perform conversion based on this rate as of a specific date. This rate applies to the immediate delivery of a currency.

**Style template**
An .rtf template containing style information that's applied to report layout templates to achieve a consistent look and feel across reports.

**Subtemplate**
An .rtf or .xsl format that is defined once and used multiple times within a single report layout template or across multiple layout template files.

**talent review**
A series of meetings where organization managers evaluate trends, assess strengths, and address areas of risk for the organization.
territory
A legally distinct region used in the country field of an address.

transfer
The movement of a person within the same legal employer.

tree
Information or data organized into a hierarchy with one or more root nodes connected to branches of nodes. A tree must have a structure where each node corresponds to data from one or more data sources.

tree node
One of the branching points in a tree structure. It corresponds to a primary key in the view object of data.

tree structure
A set of guidelines or a framework applied to create a tree, include data, version a tree, or access a tree.

tree version
An instance of a tree that includes life cycle elements such as start and end dates, and indicates whether the tree is active. If a tree is associated with a reference data set, all tree versions belong to one set.

user rate type
Rate you enter at journal entry time to convert foreign currency transactions to your ledger currency.

user-defined criteria
Factors used to determine eligibility for objects such as benefits offerings and rates.

value set
A predefined set to validate the values that a user enters in the application. The set may be hierarchical.

work area
A set of pages containing the tasks, searches, and other content you need to accomplish a business goal.

work relationship
An association between a person and a legal employer, where the worker type determines whether the relationship is a nonworker, contingent worker, or employee work relationship.

workflow
An automated process that passes a task from one user (or group of users) to another to view or act on. The task is routed in a logical sequence to achieve an end result.