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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.

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

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 Introduction to Project Execution Management Implementation

Overview of Project Execution Management Implementation

To start an implementation of Project Execution Management, a user with the Application Implementation Consultant role (ORA_ASM_APPLICATION_IMPLEMENTATION_CONSULTANT_JOB) must opt into the offerings applicable to your business requirements. Refer to the Oracle Applications Cloud Using Functional Setup Manager guide to manage the opt-in and setup of your offerings.

Project Execution Management Offering

Use this offering to manage how you execute projects, track requirements, schedule and collaborate on tasks, staff resources, maximize utilization, resolve issues, and complete deliverables.

The following tables specify the primary functional areas of this offering. For the full lists of functional areas and features in this offering, use the Associated Features report that you review when you plan the implementation of your offering.

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users and Security</td>
<td>Enable users to perform functions related to their job roles. Configure user access to HCM data and functions.</td>
</tr>
<tr>
<td>Project Execution</td>
<td>Configure how you execute projects, manage requirements, schedule and collaborate on tasks, staff resources, maximize utilization, resolve issues, and complete deliverables. Define and manage project users, project roles, and calendars.</td>
</tr>
<tr>
<td>Project Resource Management</td>
<td>Indicate whether Oracle Fusion Project Resource Management will be deployed.</td>
</tr>
</tbody>
</table>

You can also configure applications using other tools. For more information, see the Oracle Applications Cloud Configuring and Extending Applications guide.

See the following guides for more details on project management implementation configuration.

- Securing ERP
- Using Functional Setup Manager
- Using Common Features
- Implementing Common Features
- Configuring and Extending Applications

Related Topics

- Securing ERP guide
Overview of Common Applications Configuration for Project Execution Management

In the Define Common Applications Configuration for Project Execution Management activity, you perform common setup steps such as populating the product tables containing user and role information and defining security for Project Execution Management applications. This activity contains advanced setup tasks that aren't required for a typical implementation of Project Execution Management applications.

The following table lists the task lists that the setup tasks in the Define Common Applications Configuration for Project Execution Management activity are grouped into.

<table>
<thead>
<tr>
<th>Task List</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define Synchronization of Users and Roles from LDAP</td>
<td>Run a process to populate the product tables containing user and role information with the users and roles held in LDAP. This process is typically the first implementation task but can also run periodically to keep the product tables synchronized with subsequent updates to LDAP.</td>
</tr>
<tr>
<td>Define Security Synchronization Processes and Preferences</td>
<td>Enable users to set up applications security synchronization processes and preferences.</td>
</tr>
<tr>
<td>Define Security for Project Execution Management</td>
<td>Enable users to perform functions related to their job roles.</td>
</tr>
</tbody>
</table>

See the following guide for more information on security.

- Oracle ERP Cloud Securing ERP

Related Topics

- Securing ERP guide
2 Define Common Project Execution Management Options

Overview of Common Project Execution Options

In the Define Common Project Execution Options activity, you perform setup steps such as creating the project application administrator, project users, and roles, defining calendars, and creating project enterprise resources. This table lists the tasks and task lists that the setup tasks in the Define Common Project Execution Options activity are grouped into.

<table>
<thead>
<tr>
<th>Task or Task List</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Project Implementation Administrator</td>
<td>Create or identify a project application administrator to manage and control access to Oracle Fusion Project Management applications.</td>
</tr>
<tr>
<td>Manage Project User Provisioning</td>
<td>Create and update project users and assign enterprise roles, such as Project Execution and Team Collaborator, to provide access to Oracle Fusion Project Portfolio Management applications.</td>
</tr>
<tr>
<td>Manage Project Roles</td>
<td>Create and update roles that are used to control access to project-level information and for defining project resource requests.</td>
</tr>
<tr>
<td>Define Project and Resource Calendars</td>
<td>Define calendars to assign to projects and resources to establish work schedules.</td>
</tr>
<tr>
<td>Manage Project Enterprise Resources</td>
<td>Create and update enterprise resources to assign to projects, tasks, issues, and deliverables.</td>
</tr>
</tbody>
</table>

Project User Provisioning

Overview of Provisioning Access to Project Execution Management Applications

Use the Manage Project User Provisioning page to request user accounts and assign job or abstract roles for project enterprise labor resources. This action enables resources to sign into Project Execution Management applications to plan projects, manage resources, review, track, and collaborate on work.

You can also request user accounts and assign job or abstract roles when you create or edit resources on the Manage Project Enterprise Resources page.

During implementation you can provision a set of users and assign the Project Application Administrator role so that these administrators can initiate the provisioning process for the rest of the project enterprise labor resources.
Resources to Provision

A resource that you provision typically falls into one of these categories:

- Resource is an employee or contingent worker in Oracle Fusion HCM and is a project enterprise labor resource in Oracle Fusion Project Management.

User accounts for these resources are typically created in Oracle Fusion HCM. You can associate the employee or contingent worker with a project enterprise labor resource and assign project-related roles when you create the resource in Oracle Fusion Project Management.

**Note:** You can’t create a user account in Oracle Fusion Project Management for an existing HCM employee or contingent worker. HCM persons are registered in Oracle Fusion HCM.

- Resource is a project enterprise labor resource in Oracle Fusion Project Management, but isn’t an HCM employee or contingent worker.

You can maintain resource details and add resources to projects even if the resources aren’t HCM employees or contingent workers. Create user accounts to register the resources in the identity management system, and assign project-related job or abstract roles to the resources.

- Resource is an HCM employee or contingent worker, but isn’t a project enterprise labor resource in Oracle Fusion Project Management.

You can assign project-related job or abstract roles to resources who have user accounts that were created in Oracle Fusion HCM. However, you must create the resources in Oracle Fusion Project Management before you can assign them to projects, or before the resources can open project or resource management pages in the application.

Job or Abstract Roles

You can provision the following predefined job or abstract roles to resources:

- **Project Application Administrator:** Collaborates with project application users to maintain consistent project application configuration, rules, and access.

- **Project Execution:** Manages projects in Project Execution Management applications. Manages issues, deliverables, changes, and the calendar.

- **Resource Manager:** Manages a group of project enterprise labor resources. Monitors the utilization of resources and manages the assignment of resources to work on projects. Collaborates with project managers to find suitable resources to fulfill project resources requests.

- **Team Collaborator:** Performs, tracks, and reports progress on project and nonproject work. Collaborates with other team members or project managers to perform project tasks and to-do tasks. Manages issues, deliverables, changes, and the calendar.

- **Project Executive:** Establishes key performance indicators and other project performance criteria for a business area or organization. Manages business area performance. Owns profit and loss results for an organization, service line, or region.

In addition, you can provision custom job roles for resources. For example, you can provision a Custom Team Member role that contains a different set of security permissions than the Team Member role.
Default Role Assignments
You can select project-related predefined and custom roles to provision by default. The application assigns the default roles to project enterprise labor resources that you create using any of the following methods:

- Import Project Enterprise Resource process for Oracle Cloud
- Project Enterprise Resource External Service
- Import HCM Persons as Project Enterprise Resources process
- Export Resources and Rates process that moves resources from the planning resource breakdown structure in Project Financial Management applications to Project Management
- Maintain Project Enterprise Labor Resources process in Project Resource Management

Go to the Manage Project User Provisioning page > Default Provisioning Attributes tab > Default Role Assignments section to select the default roles. Then select the option to **Automatically provision roles when mass creating project enterprise labor resources**.

Project User Account and Role Provisioning Statuses
This topic describes project user account and role provisioning statuses in Project Execution Management applications.

**Project User Account Statuses**
The user account status indicates whether a project enterprise labor resource can access Project Execution Management applications based on assigned roles. The following table lists the project user account statuses.

<table>
<thead>
<tr>
<th>User Account Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>The user is active and can access the application.</td>
</tr>
<tr>
<td></td>
<td>A project user account is active for a resource in either of these scenarios:</td>
</tr>
<tr>
<td></td>
<td>- You create a user account for the resource in Oracle Fusion Project Management.</td>
</tr>
<tr>
<td></td>
<td>- The resource is an employee or contingent worker with an active account in Oracle Fusion Human Capital Management (HCM).</td>
</tr>
<tr>
<td>Inactive</td>
<td>The user is inactive and cannot access the application.</td>
</tr>
<tr>
<td></td>
<td>A project user account is inactive for a resource in either of these scenarios:</td>
</tr>
<tr>
<td></td>
<td>- The resource is an employee or contingent worker who is no longer active in HCM, such as when the employee is terminated.</td>
</tr>
<tr>
<td></td>
<td>- The resource isn’t an employee or contingent worker and you disable the resource in the identity management system.</td>
</tr>
</tbody>
</table>

**Role Provisioning Statuses**
When you create a user account in Oracle Fusion Project Management and assign project job or abstract roles to the resource, the application sends a provisioning request to the identity management system. The role provisioning status indicates the processing status of the request. The following table lists the role provisioning statuses.
Role Provisioning Status | Description
--- | ---
Requested | Role provisioning is requested for a resource.
Completed | Role provisioning completed without errors or warnings.
Failed | Role provisioning failed because of errors or warnings.
Partially completed | Role provisioning is partially complete.
Pending | Role provisioning is in progress.
Provisioned | The role is provisioned in the identity management system.
Rejected | The role provisioning request is rejected by the identity management system.
Suppressed | Status used in HCM for user accounts aren’t created automatically.

You can view project user account and role provisioning statuses on the Manage Project User Provisioning page and Manage Project Enterprise Resources page.

Provision Project Resources from the Manage Project User Provisioning Page

Use the Manage Project User Provisioning page to create and update project users, request user accounts, and assign job or abstract roles to resources. This action enables resources to sign into Project Execution Management applications to plan projects, manage resources, and review, track, and collaborate on work.

Creating and Provisioning a User

Perform these steps to create a project user, request a user account, and provision roles on the Manage Project User Provisioning page.

1. Navigate to the Setup and Maintenance work area and search for the Manage Project User Provisioning task.
2. On the Search page, click the Manage Project User Provisioning link to open the Manage Project User Provisioning page > User Provisioning tab.
3. Click the Create icon to open the Create Project User window.
4. Enter the required fields and click the Request user account option.

When you select the Request user account option, the roles that you specified to provision by default appear in the Role Details table for the resource.

5. Select the Assign administrator role option to assign the Project Application Administrator role to the resource.

This action adds the Project Application Administrator role to the Role Details table.

6. Add predefined or custom roles to the Role Details table, as needed. The following table lists the predefined roles.
### Define Common Project Execution Management Options

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Application Administrator</td>
<td>Collaborates with project application users to maintain consistent project application configuration, rules, and access.</td>
</tr>
<tr>
<td>Project Execution</td>
<td>Manages projects in project management applications and is not assigned the project manager job role. Manages issues, deliverables, changes, and the calendar.</td>
</tr>
<tr>
<td>Team Collaborator</td>
<td>Performs, tracks, and reports progress on project and nonproject work. Manages issues, deliverables, changes, and the calendar.</td>
</tr>
<tr>
<td>Project Executive</td>
<td>Establishes key performance indicators and other project performance criteria for a business area or organization. Manages business area performance. Owns profit and loss results for an organization, service line, or region.</td>
</tr>
</tbody>
</table>

**Tip:** The Team Collaborator and Project Execution roles appear in the Role Details table by default. You can change the default roles on the Manage Project User Provisioning page > Default Provisioning Attributes tab.

7. Click **Save and Create Another** or **Save and Close**.

This action:

- Sends a request for a user account to the identity management system
- Sends the resource an e-mail notification when the provisioning process is successful

Additional points to consider:

- You can add or remove roles for a resource with an existing user account. Use the **Edit** feature to add roles. Use the **Actions** menu to remove roles.

  **Note:** You must wait until the previous provisioning request is complete for a resource before you add or remove roles for the resource.

- Use the **Assign Resource as Project Manager** action in the Search Results region to add a resource to a project as a project manager. When you add a project manager with the **Assign Resource as Project Manager** action, the application provisions the Project Execution role for the resource.

- Click the link in the **Last Request Status** column to view the details of the most recent provisioning action for a resource.

- On the Manage Project User Provisioning page > Default Provisioning Attributes tab, you can:
  - Select project-related predefined and custom roles to provision by default when you create project users.
  - Select the **Automatically provision roles when mass creating project enterprise labor resources** option to assign the default roles when creating users with import processes and services for employees and contingent workers.
Provision Project Resources from the Manage Project Enterprise Resources Page

You can provision a resource on the Manage Project Enterprise Resources page when you create or edit a resource who is not an employee or contingent worker in Oracle Fusion Human Capital Management.

Provisioning a Resource

You can request a user account from the Create Project Enterprise Resource window or Edit Project Enterprise Resource window.

- On the Create Project Enterprise Resource window, select the **Request user account** option.
- On the Edit Project Enterprise Resource window, click **Activate User Account**.

When you request a user account from the Create or Edit Project Enterprise Resource window, the application:

- Provisions the default role assignments for the resource
- Sends a request for a user account to Oracle Identity Management
- Sends the resource an e-mail notification when the provisioning process is successful

Click the link in the **User Account Status** column to view the role provisioning status of the most recent provisioning action for a resource.

Assign a Resource as a Project Manager from the Manage Project User Provisioning Page

A project application administrator can use the **Assign Resource as Project Manager** action in the Manage Project User Provisioning page > Search Results region to add a resource to a project as a project manager. For example, assume that a project team member takes over the project manager responsibilities while the manager is away on leave. The administrator can add the team member as a project manager and provision the Project Execution role for the team member.

When the administrator adds the resource as a project manager:

- If the resource is an existing project user, doesn’t have a pending provisioning request, and doesn’t have the Project Execution role, then role provisioning is requested to assign the Project Execution role to the resource. The resource is added to the project as a project manager with a Planned assignment status.
- If the resource is an existing project user with the Project Execution role, then the resource is added to the project as a project manager and no provisioning occurs.
- If a resource isn’t an existing project user, or if a resource has a pending provisioning request, then you can’t assign the resource as a project manager from the Manage Project User Provisioning page.
FAQs for Project User Provisioning

Why can't I view project management or resource management pages?
To view project management or resource management pages, you must be a project enterprise labor resource with an active user account. In addition, you must have a job or abstract role with the security privilege to access specific pages in Project Execution Management applications.

For more information, refer to the Securing Project Execution Management Applications section in the Implementing Project Portfolio Management Security: Overview topic.

Related Topics

- Overview of Project Portfolio Management Security

Project Management Roles

Project Roles in Project Execution Management Applications

A project role is a classification of the relationship that a person has to a project, such as project manager, functional consultant, or technical lead.

Following are examples of predefined project roles that you can't edit or delete:

- Project manager
- Team member
- Staffing owner

You can create additional project roles to meet the needs of your organization. However, you can't delete a project role that's designated as a resource's primary project role, specified on a project resource request, or assigned to a resource on a project.

Use project roles for the following purposes:

- To identify the type of work that a person performs on project assignments
- To set up default resource qualifications
- As criteria when searching for resources to fulfill project resource requests
- As a resource’s primary project role
- To allow access to project management information for project managers
- To identify the default staffing owner of project resource requests for a project

Project Assignments

You select a project role when you add a resource to a project. The primary project role for a project enterprise resource is the default project role when you add the resource to the Manage Project Resources page.
When you fulfill a project resource request in the Project Resources work area and create an assignment for the resource, the project role specified on the request is the default project role on the assignment. You can change the project role on assignment before you submit the assignment for approval.

**Default Resource Qualifications**

On the Manage Project Roles page, select a set of default qualifications, proficiency, and keywords for each project role. Default qualifications, proficiency, and keywords that you associate with a project role automatically appear as requirements on a project resource request when you select the project role for the request.

**Project Resource Requests**

When searching for resources to fulfill a project resource request on the Search and Evaluate Resources page, you can filter the resource search results by the resource’s primary project role to focus the results.

**Primary Project Roles**

You can designate a primary project role for a resource that represents the work that the resource typically performs on project assignments.

You can use the resource’s primary project role in the following areas:

- As a resource search option filter when viewing resources on the Search and Evaluate Resources page
- When viewing resource information on the Resource Details page
- When comparing the attributes of multiple resources against the requirements specified in the project resource request on the Compare Resources page
- As an attribute value to assign to new resources that the Maintain Project Enterprise Labor Resources process creates
- As search criteria when searching for a project enterprise labor resource to designate as a resource pool owner on the Manage Resource Pools page
- As advanced search criteria when searching for resource pool members on the Manage Resource Pools page
- When sorting open project resource requests on the Resource Manager Dashboard

**Project Roles with Limited Actions for Managing Resources on a Project**

To limit the actions that are available when managing project resources, project application administrators can create custom project roles with different privileges. For example, you want a project manager to have full access for creating and editing project resource requests. But you might not want a junior project manager to have all these capabilities.

Before you can create custom project roles with limited resource management capabilities, you must opt in for the Define Project Roles with Limited Actions for Managing Resources on a Project feature.

Users can be assigned different roles for different projects and therefore have different access across their projects. For example, a user can be the senior project manager, with complete access, for one project and be an assistant project manager, with limited resource management capability, for a different project.

To create roles with different resource management capabilities, create various custom project manager roles with the Manage Project Resource Assignment functional privilege and one of the following data privileges:

- View Project Team Members for Project Data: Provides view-only access.
• Edit Project Team Members for Project: Provides the ability to add, update, replace, and delete resources.
• Manage Project Resource Assignment Data: Provides the ability to add, update, replace, delete resources, create resource requests, view resource request details, view assignment details, request extensions, cancel assignments, and manage project resource requests. It also provides the ability to search in case of placeholder resources.

You might be wondering what happens to existing roles. When you opt into the feature:

• Manage Project Work Plan Resource Assignments Data is automatically rolled up to the predefined Project Manager role and the Project Execution abstract role.
• By default, users with custom roles will see only a view-only version of the Manage Project Resources page. You can update the role definitions of custom manager roles to include additional functional and data privileges. For example, you can add the Manage Project Resource Assignment Data privilege to a custom role.

**Note:** The ability of a project manager to directly confirm a resource or edit a confirmed resource is available only to users with a role that includes the Assign Project Resource to Project and Assign Project Resource to Project Data privileges.

**Related Topics**
- Security Reference for PPM
- Can a project manager directly assign a resource to a project

## Project Plan Calendars

### Project and Resource Calendars

Project and resource calendars define the standard working and nonworking time for projects and resources. Working times are the days and total hours in a calendar during which work can occur. Nonworking times in a calendar are days and total hours for which work isn’t scheduled, such as weekends and holidays.

**Note:** When you set up calendars for Project Management and Project Resource Management, you can select only the Elapsed schedule type to use in project and resource calendars.

Features of project and resource calendars include:

• Default calendars
• Project calendars
• Resource calendars
• Standard calendar

### Default Calendars

Your implementation team selects a default project calendar and resource calendar on the **Define Project Management Implementation Options** page. The default project calendar is automatically assigned to new projects, and the default resource calendar is automatically assigned to new project enterprise labor resources.

If the default project calendar doesn’t meet the schedule requirements for a specific project, a project manager can select another calendar during project creation. Similarly, if the default resource calendar doesn’t meet the scheduling requirements...
for a specific project enterprise labor resource, the project application administrator can assign another calendar to the resource.

**Project Calendars**

A project manager can select the calendar for a project during project creation or when managing the project plan. The working days and total hours in the calendar are used to schedule the project plan. The calendar also works with the project start and finish dates to determine the project duration.

If required, associate a schedule exception with the selected calendar for the project plan. If you create an off period exception, then the exception overrides any nonworking days and makes them working days. If you create a work period exception, then the exception overrides any working days and makes them nonworking days. The project plan uses the schedule exceptions for calculating dates or duration.

Create a schedule exception using the Manage Project Schedule Exceptions task and associate the exception to the project calendar using the Manage Project Schedules task in the Setup and Maintenance work area.

**Resource Calendars**

The project application administrator can select a resource calendar when creating or editing a project enterprise resource. The working days and total working hours in a resource calendar are used to determine resource availability.

The Project Resources work area uses the resource calendar to determine a resource's available hours for a project. The Update Resource Utilization Data process calculates the resource's projected utilization with the available hours.

**Standard Calendar**

Project Execution Management provides a standard calendar of 8 hours per day, 5 days per week that you can assign to projects and resources.

**Related Topics**

- What's the difference between project calendars and resource calendars
- Create Calendars for Projects and Resources

**FAQs for Project Plan Calendars**

What happens if project resource request dates are outside the resource calendar effective dates?

The application can't calculate a resource's available capacity if the project resource request dates are outside of the resource calendar effective dates. The resource will have no Available Capacity score.

**Project Enterprise Resources**
Project Enterprise Labor Resource Components

A project enterprise labor resource is a resource that you can assign to multiple projects. If you manage resource availability and staffing in Project Resource Management, use project enterprise labor resources to fulfill project resource requests.

Consider the following attributes and options when creating a resource in the Create Project Enterprise Resources window.

- Resource details
- Personal details
- Resource Management details
- Rate details

Resource Details

Resource details include the following attributes:

- **Type**
  
  You can create both labor and expense type resources to add to a project.

  Select the *Create from expenditure type* option to create an expense resource from an expenditure type in Project Financial Management.

- **Create From HCM Person**
  
  Select this option to create a project enterprise labor resource from an employee or contingent worker in Oracle Fusion HCM.

  Note: The employee or contingent worker must have a unique e-mail in a valid format and an active primary assignment in HCM.

- **From Date** and **To Date**
  
  The resource’s *From Date* is the date from which you can assign the resource to a project. The *To Date* is the last date that you can assign the resource to a project.

- **Request User Account** and **Provision Project Roles**
  
  Select these options to request a user account for a new resource and provision the resource with default role assignments. You can request a user account only for a resource who isn’t associated with an employee or contingent worker in HCM.

  Click *Activate User Account* to request a user account for an existing resource. This action provisions the default role assignments for the resource and sends the resource an e-mail notification.

Personal Details

Personal details include the following attributes:

- **Calendar**
  
  Resource calendars are used to:
  
  - Determine resource availability
Schedule tasks
Assign resources to tasks
Calculate cost and bill amounts based on hourly rates

Daily work on a resource’s calendar is measured in hours per day. Task duration is measured in days.

You set up calendars to assign to projects and resources, or use the predefined calendar with eight hours per day and five days per week with no holidays. You select the default calendar on the Define Project Management Implementation Options page.

- **Primary Project Role**
  The primary project role is the role that a resource most often fulfills on a project. The default value is Team Member.

- **Resume Attachments**
  The application searches the text in a resource resume to find matches for keywords that are entered as requirements on a project resource request. The keyword occurrences are used in the resource qualification score calculation that indicates how well a resource meets the requested qualifications.

## Resource Management Details

Resource Management details consist of the following attributes:

- **Manage Resource Availability and Staffing**
  Select this option for the resource to be eligible to fulfill project resource requests in Oracle Fusion Project Resource Management.

- **Resource Pool**
  You must select a resource pool if you select the **Manage resource availability and staffing** option. The default resource pool value is Resources with No Pool Membership.

- **Membership From Date**
  A resource’s first pool membership from date must be equal to or later than the resource from date.

  **Tip:** Manage pool memberships for a resource on the Manage Resource Pool Memberships window.

### Rate Details

The rate types on a resource definition are:

- **Cost Rate:** The rate for a unit of work that determines the cost for a resource on a project. To calculate the resource cost amount, the application multiplies the resource’s labor effort in hours on the project by the resource’s cost rate.

- **Bill Rate:** The rate for a unit of work that determines the invoice or revenue recognized amount for a resource on a project. To calculate the bill amount for a resource on a project, the application multiplies the labor effort by the project resource bill rate.

When you add a planning resource to a project, the application copies the resource cost and bill rates to the project if the resource rate currency is the same as the project currency.

You can edit planning resource rates directly on the project. You can edit rates for assigned resources, or resources who have pending assignment adjustments, directly on the assignment. The new rates are reflected in the labor cost and bill
amounts on the resource's tasks. Rate changes that you make on the project or assignment don't affect the rates on the resource definition.

Related Topics

- Resource Pools
- How can I attach a resume to my resource profile

Import Project Enterprise Resources

The Import Project Enterprise Resources process creates resources based on data from third-party applications that you load into the Project Enterprise Resource Interface table (PJT_PRJ_ENT_RES_INTERFACE).

The Import Project Enterprise Resources process:

- Validates and creates project enterprise labor or expense resources in Oracle Fusion Project Management based on the data that you load into the interface table
- Creates user accounts for labor resources
- Assigns default project roles to labor resources
- Reports process exceptions for invalid resources in an output report

To import resources:

1. Prepare data for loading and importing by using the Project Enterprise Resources Import Template or Project Enterprise Expense Resources Import Template macro-enabled Excel workbooks.
2. Click Generate CSV File in the templates to create worksheets to load to the interface table.
   Optionally bypass the Excel templates and manually create CSV files.
3. From the Scheduled Processes page, run the Load Interface File for Import process followed by the Import Project Enterprise Resources process.

For more information about file-based data import, see the File Based Data Import for Oracle Project Portfolio Management Cloud guide.

Import Project Enterprise Resources Execution Report

The Import Project Enterprise Resources Execution Report summarizes the number of successful transactions and errors encountered when you imported the resources. If the report has error messages, then:

1. Review the error message details for each resource and fix the issues.
2. Load the data that you fixed in the CSV file into the interface table again.
3. Resubmit the Import Project Enterprise Resources process.

Related Topics

- Overview of External Data Integration Services for Oracle Cloud
- File Based Data Import for Oracle Project Portfolio Management Cloud
Import HCM Resources to Create Project Enterprise Resources

Use either of these methods to import resources from HCM:

**Importing in Oracle Fusion Project Management**

In Oracle Fusion Project Management:

1. Select the **Import HCM Persons as Project Enterprise Resources** action on the Manage Project User Provisioning page.
2. The process:
   - Creates project enterprise resources based on specified criteria for business unit, organization, and HCM manager
   - Provisions the default project-related enterprise roles to each resource
   - Assigns default attribute values such as resource calendar and project role
   - Assigns the employee hire date, or contingent worker placement date, as the resource from date
   - Assigns the termination date in HCM as the resource to date
   - Imports only active HCM employees and contingent workers

**Importing in Oracle Fusion Project Resource Management**

In Oracle Fusion Project Resource Management:

2. Click **Maintain Project Enterprise Labor Resources** and enable the option to create and update project enterprise labor resources.
3. The process imports employees and contingent workers based on your specified criteria and HCM hire and termination dates.

**Update HCM Information for a Project Enterprise Resources**

To update project enterprise resource information in Oracle Fusion Project Management from HCM:

1. Select the resources on the Manage Project Enterprise Resources page that you want to update.
2. Select the **Update Information from HCM** action.
3. The process updates the following resource information from information in HCM:
   - Name
   - E-mail
   - Manager
   - Phone
   - Image
Project Enterprise Expense Resources

Use project enterprise expense resources to manage expense resources that can be assigned to projects or tasks in the Project Execution Management applications in Oracle Fusion Project Portfolio Management. You can use predefined project enterprise resource expense type options, create your own expense resource type, or create from expenditure type resources existing in project financial management in Oracle Fusion Project Foundation.

Consider the following attributes when creating a project enterprise expense resource:

- Type attribute
- Expenditure type option
- Expenditure type
- Expenditure type resource
- Unit of measure

Selecting the Type Attribute

You can add an expense type resource to a project. Project enterprise expenditure type resources are the Expense resource type.

Creating from Expenditure Type Option

Use the Create from expenditure type option to create expense type resources from expenditure type planning resources created in Oracle Fusion Project Foundation.

Selecting the Expenditure Type

Expenditure types can track various expenses on projects or tasks. You can link to existing expenditure types for expenses that are used regularly including hotel, airfare, and meals.

You can’t edit predefined expenditure types.

Creating an Expenditure Type Resource

Identify unique expense requirements for your organization. For example, you may want to track cell phone expenses separately from home phone expenses on a specific project.

Managing Unit of Measure

You can’t edit the unit of measure for expense resources on a project because the default value is currency.

Related Topics

- Project and Resource Calendars
- Project Enterprise Labor Resource Components

Cost and Bill Rates for a Project Enterprise Labor Resource

During the search and evaluation of resources to fulfill a project resource request, a resource manager can view resource cost and bill rates and select a resource that meets the financial requirements of a project. Project assignment rates provide the
data to calculate labor resource cost and bill amounts for analyzing margins and revenue forecasts. Resource and project managers can adjust the rates on project assignments to provide the most current reporting information.

Aspects of project enterprise labor resource cost and bill rates include:

- Defining resource rates
- Comparing rates when evaluating resources
- Populating project assignment cost and bill rates
- Adjusting project assignment rates
- Calculating project labor cost and bill amounts

**Defining Resource Rates**

Project application administrators can define cost and bill rates for a resource in the Manage Project Enterprise Resources page > Create Project Enterprise Resource window. Administrators can also define rates when importing resources from external sources such as third-party applications.

Resource rates are optional.

The resource rate types are:

- Cost Rate: The rate for a unit of work that determines the cost for a resource on a project.
- Bill Rate: The rate for a unit of work that determines the invoice or revenue recognized amount for a resource on a project.

Units of work are stated in hours.

**Comparing Rates when Evaluating Resources**

A project resource request can contain the following resource rates:

- Target cost and bill rates: Project managers can specify target cost and bill rates on a project resource request. Rates are optional on the request.
- Resource cost and bill rates: When you specify a resource for a request, the application copies the resource’s cost and bill rates to the request.

When a resource manager searches for resources to fulfill a request, the resource’s cost and bill rates appear on the Search and Evaluate Resources page for all resources in the search results. The resource manager uses the Compare Resources page to compare the target rates to the rates for selected resources.

**Tip:** Project and resource managers can also view the resource rates on the Resource Details page. This is especially useful if the resource manager doesn’t perform a search for resources, but instead is considering only one resource to fulfill a request.

**Populating Project Assignment Cost and Bill Rates**

Assignment rate currency is based on the project currency. The application doesn’t copy rates from the resource or project resource request to the assignment if the rate currency is different than the project currency. If rates aren’t specified for the resource or project resource request, or if all available rates are in a currency other than the project currency, then the assignment is created without bill or cost rates.
The following table describes the methods of populating cost and bill rates on project assignments.

<table>
<thead>
<tr>
<th>Method of Creating Assignment</th>
<th>Method of Populating Assignment Cost Rate</th>
<th>Method of Populating Assignment Bill Rate</th>
</tr>
</thead>
</table>
| Resource fulfills a project resource request | Assignment uses the resource cost rate | - Assignment uses the target bill rate from the project resource request  
|                                |                                          | - If a target bill rate isn’t specified on the request, then the assignment uses the resource bill rate |
| Resource is assigned directly to a project | Assignment uses the resource cost rate | Assignment uses the resource bill rate |

### Adjusting Project Assignment Rates

Project managers can adjust resource rates on the Manage Project Resources page for resources who are directly assigned to the project. Project managers can adjust the rates for any project resource on the Edit Project Resource Assignment page. Rate changes that you make in Oracle Fusion Project Management for confirmed resources are reflected on the assignment in Oracle Fusion Project Resource Management.

Resource managers can adjust resource rates on the Edit Project Resource Assignment page. Rate changes are reflected on the assignment in Oracle Fusion Project Management.

You can’t adjust the assignment rate currency.

Adjusted rates are reflected in the labor cost and bill amounts on the resource’s tasks.

> **Note:** Cost and bill rate changes on the project or assignment don’t affect the resource’s cost and bill rates on the Manage Project Enterprise Resources page.

### Calculating Project Labor Cost and Bill Amounts

To calculate the cost or bill amount of project labor resources, the application multiplies each resource’s labor effort in hours by the resource’s cost or bill rate.

### Adjust Cost and Bill Rates for a Project Enterprise Resource

Project application administrators can adjust resource cost and bill rates for project enterprise labor resources.

#### Adjusting Rates for One Resource

To adjust cost and bill rates for one resource:

1. Select the resource and on the Manage Project Enterprise Resources page.
2. Click **Edit** to open the Edit Project Enterprise Resource window.

#### Adjusting Rates for Multiple Resources

To adjust cost and bill rates for multiple resources:

1. Select the resources and click **Adjust Resources** on the Manage Project Enterprise Resources page.
2. In the Adjust Resources window, select one or both rate types in the **Resource Attribute** drop-down list.
3. Enter new rates in the **Cost Rate** and **Bill Rate** fields and click **Save and Close**.
The new rates apply to all resources listed in the Adjust Resources window.

Note: You can’t change currency in the Adjust Resources window.

Adjusting Cost Rates for All Resources in a Business Unit

If you use Project Financial Management applications, you can adjust cost rates for all resources in a business unit as follows:

1. Select the resources on the Manage Project Enterprise Resources page.
2. In the Actions menu, select Update Resource Cost Rates.
3. Select the business unit, resource class rate schedule, and effective rate date.
4. Click Update Resource Cost Rates to run a process to update the cost rates for all project enterprise resources within a business unit, using the selected rate schedule.

Note: The Update Resource Rates for Project Enterprise Resources process updates cost rates only for employees and contingent workers.

FAQs for Project Enterprise Resources

How can I remove a role from a resource?
To revoke a project-related role from a project user, select the role in the Manage Project User Provisioning page > Edit Project User window > Role Details table, and click the Remove icon.

How can I assign project roles by default when I import project enterprise labor resources?
Go to the Manage Project User Provisioning page, Default Provisioning Attributes tab, Default Project Role Provisioning for Project Execution Management Labor Resources section. Select the option to Automatically provision roles when mass creating project enterprise labor resources. The application automatically assigns the predefined and custom roles that you selected on the Define Role Assignments table to each resource when you create project users using any of these methods:

- Import HCM Persons as Project Enterprise Resources process
- Import Project Enterprise Resource process for Oracle Cloud
- Project Enterprise Resource External Service
- Maintain Project Enterprise Labor Resources
- Export Resources and Rates process from the planning resource breakdown structure in Oracle Project Financial Management to Oracle Fusion Project Management

Can I edit the name and email for a project enterprise labor resource?
You can edit a resource name and email if the resource was created in Oracle Fusion Project Management, doesn’t have a user account, and isn’t an employee or contingent worker.

You can’t edit the name and e-mail once you start the process to create a user account and provision roles for the resource.

How can I diagnose issues with project resources?
Run the Project Resource Validation diagnostic test from the Settings and Actions > Troubleshooting > Run Diagnostic Tests menu to determine whether a specific project or all projects have valid project resources and resource allocations,
project roles exist, placeholder resources are associated with project resource requests, and expense resources are valid. The test generates a report showing the results of five eligibility parameters.

- Project Enterprise Resource Test: Validates that project resources are valid project enterprise resources.
- Project Role Setup Test: Validates that project roles exist.
- Labor Resource Allocation Test: Validates that project resources have a valid allocation percentage. The resource assignment from and to date are within the project date range. All of the project resource allocation percentages are greater than zero and result in assigning the resource for less than or equal to 24 hours a day. All project resources are assigned valid project roles.
- Project Resource Requests for Placeholder Resources Test: Validates that placeholder resources that are associated with a resource request are in a Requested status. None of the placeholder resources that are in a Planned status are associated with resource requests.
- Expense Resource Test: Validates that project expense resources have no value for percentage allocation, effort, bill rate, cost rate, project role, e-mail, from date, and to date.

What’s the difference between a project enterprise labor resource and a managed project enterprise labor resource?

A project enterprise labor resource is a resource that you can assign to multiple projects.

A managed project enterprise labor resource is a project enterprise labor resource whose availability and staffing are managed in Oracle Fusion Project Resource Management. You use managed project enterprise labor resources to fulfill project resource requests and directly assign to one or more projects.

What’s the difference between a project enterprise labor resource and a project-specific resource?

You can assign a project enterprise labor resource to multiple projects. If you manage the availability and staffing of a project enterprise labor resource in Oracle Fusion Project Resource Management, then the resource is eligible to fulfill project resource requests. You can select the Manage Resource Availability and Staffing option for a project enterprise labor resource, and subsequently deselect the option. However, you can’t change a managed project enterprise labor resource to a project-specific resource.

You can assign a project-specific resource to only one project, and subsequently change the project reference to a different project. You can’t select the Manage Resource Availability and Staffing option for a project-specific resource. However, if you remove the project reference to change the resource to a project enterprise labor resource, then you can select the Manage Resource Availability and Staffing option.

Application Composer

Configure Project Execution Management Applications

A project application administrator can add additional attributes to standard objects or create new custom objects to meet specific business needs using Application Composer. In Project Execution Management applications, you can configure project resource requests, deliverables, issues, and backlog items. For example, you can add an issue category attribute to drive additional information that you need to collect for a particular type of issue in the standard Issues object. You can also create a custom Risk object to capture and track risks.

After you create a custom object, you can:

- Use the REST service to create, view, and update the custom object.
• Create a new subject area to report on the custom object.

Since your organization can view the changes you make at runtime immediately, you must first create or select a sandbox and isolate your changes. A sandbox provides an independent development environment so that you can fully test your changes before publishing the sandbox and making the changes available to your organization.

Navigate to Application Composer from Tools and select ERP and SCM Cloud in the Application field. You can view the objects for Project Execution Management applications under Standard Objects menu.

**Standard Objects Available for Configuration**

The following table summarizes the objects, pages, and regions that you can configure. The objects listed here are available in Application Composer for configuration.

<table>
<thead>
<tr>
<th>Standard Object</th>
<th>Corresponding Page or Region</th>
<th>Maximum Custom Attributes Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Resource Requests</td>
<td>• Manage Project Resource Request page in Project Management work area&lt;br&gt;• Manage Project Resource Request page in Project Resources work area&lt;br&gt;• Create and Edit Project Resource Request page in Project Management work area&lt;br&gt;• Create and Edit Project Resource Request page in Project Resources work area</td>
<td>50 number fields (Any combination of Number, Percentage, Currency, Dynamic Choice List)&lt;br&gt;100 Variable character fields (Any combination of Text, Check box, Fixed Choice List)&lt;br&gt;20 Time stamp (Any combination of Date, Date Time)</td>
</tr>
<tr>
<td>Project Issues</td>
<td>• Create and Edit Issue page in My Work work area&lt;br&gt;• Create and Edit Issue windows in Team Member Dashboard Issues section</td>
<td>50 number fields (Any combination of Number, Percentage, Currency, Dynamic Choice List)&lt;br&gt;100 Variable character fields (Any combination of Text, Check box, Fixed Choice List)&lt;br&gt;20 Time stamp (Any combination of Date, Date Time)</td>
</tr>
<tr>
<td>Project Deliverables</td>
<td>Create and Edit Deliverables page in My Work work area</td>
<td>50 number fields (Any combination of Number, Percentage, Currency, Dynamic Choice List)&lt;br&gt;100 Variable character fields (Any combination of Text, Check box, Fixed Choice List)&lt;br&gt;20 Time stamp (Any combination of Date, Date Time)</td>
</tr>
<tr>
<td>Backlog Items</td>
<td>Manage Backlog Items page</td>
<td>50 number fields (Any combination of Number, Percentage, Currency, Dynamic Choice List)&lt;br&gt;100 Variable character fields (Any combination of Text, Check box, Fixed Choice List)&lt;br&gt;20 Time stamp (Any combination of Date, Date Time)</td>
</tr>
</tbody>
</table>
Create a Text Field

Use Application Composer to add a text field to an existing Projects object as per your business requirement.

Note: Once you create a field, you can’t change the field’s Name and API Name. Even if the Display Label changes, the name used to refer to this field in Groovy expressions doesn’t change.

Adding a Text Field

Use the following steps to create a text field.

1. Ensure that you’re working in a sandbox.
2. Click Navigator > Tools > Application Composer.
3. Select ERP and SCM Cloud from the Application list, enable PPM as the Object Tags and expand Standard Objects.
4. Expand any of the following objects and click Fields to add a text field:
   - Backlog Item
   - Project Deliverable
   - Project Issue
   - Project Resource Request

We will explain the following steps to show how a text field is added to the Project Resource Request object for Project Management work area.

5. Click the Fields link under the Project Resource Request object.
6. In the Custom tab, click the Create a custom field icon.
7. In the Select Field Type window, select Text and click OK.
8. In the Create Text Field page, enter the information for the field. You must enter values for the Display Label and Name fields. The attributes for the text field are described in the following table.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Label</td>
<td>Display label for the field. For example, create a text field named Travel Location.</td>
</tr>
<tr>
<td>Help Text</td>
<td>Information displayed in the tool tip.</td>
</tr>
<tr>
<td>Display Width</td>
<td>Character width for the text field.</td>
</tr>
<tr>
<td>Display Type</td>
<td>Determines the type of text field displayed to the users. You can choose Simple Text Box that’s a single-line text field, or Multiline Text Area, a larger text area that spans multiple lines.</td>
</tr>
</tbody>
</table>
### Property | Description
--- | ---
**Name** | Unique identifier for the field. This field is used for internal purposes and not displayed to the users. The Display Label is the default value for this field but you can change the name. The application programming interface (API) name that you use to identify the field in Groovy expressions is derived from this name.

**Description** | Optional description of the object. This field is used for internal purposes.

**Required** | Indicates if the field is required. Optionally, use the expression builder to write an expression that specifies when the field must be required.

**Updatable** | Indicates if the field is updatable. Optionally, use the expression builder to write an expression that specifies when the field can be updated.

**Searchable** | Indicates whether to make the field available for selection as additional search criteria in the Add Fields list in Advanced Search mode.

**Depends On** | Indicates the fields whose data changes will cause the field's constraint expressions to be re-evaluated.

**Minimum Length** | Indicates the minimum number of characters allowed in the text field.

**Maximum Length** | Indicates the maximum number of characters allowed in the text field.

**Fixed Value** | Literal default value for the field. Do not enter a fixed value if the field is both required and intended to be unique because that causes runtime errors.

**Expression** | Expression that dynamically sets the default value.

---

9. Click **Save and Close**. You can view the new text field (Travel Location) under the Custom tab on the Fields page.

10. Expand the Project Resource Request object and click the **Pages** link.

11. On the Project Resource Requests: Pages page, click the **Duplicate** icon in the Landing Page Layouts section of the Project Management work area.

12. In the Duplicate Layout window, enter the new layout and source layout name. For now, keep the new layout name and the source layout to the default value.

13. Click **Save and Close**. You can now see the Default custom layout link under the Landing Page Layouts section of the Project Management work area.

14. Click the Default custom layout link from the Landing Page Layouts section of the Project Management work area.

15. On the Landing Page Layout: Default custom layout page, click the **Edit** icon next to the Project Resource Requests Table in Project Management work area heading.

16. In the Configure Summary Table section, select the new text field (Travel Location) from the Available Fields table and move it to the Selected Fields table.

17. Click **Save and Close**. You can now see the new text field (Travel Location) on the Project Resource Requests page in the Project Management work area.

**Note:** After you make your changes in a sandbox, work with your applications administrator to either delete or publish the sandbox. Deleting the sandbox reverts your changes. Publishing the sandbox applies the changes you made across your organization.
Create a Fixed Choice List Field

Use Application Composer to add a fixed choice list field for an existing Projects object as per your business requirements.

Note: The Name and API Name of a field can’t be changed after it’s created. Even if the Display Label changes, the name used to refer to this field in Groovy expressions doesn’t change.

Creating and Describing the Fixed Choice List Field

Use the following steps to create and describe a fixed choice list field.

1. Ensure that you’re working in a sandbox.
2. Click Navigator > Tools > Application Composer.
3. Select ERP and SCM Cloud from the Application list, enable PPM as the Object Tags and expand Standard Objects.
4. Expand any of the following objects and click Fields to add a fixed choice list:
   - Backlog Item
   - Project Deliverable
   - Project Issue
   - Project Resource Request

   We will explain the following steps to show how a fixed choice list field is added to the Project Resource Request object for Project Management work area.
5. Click the Fields link under the Project Resource Request object.
6. In the Custom tab, click the Create a custom field icon.
7. In the Select Field Type window, select Choice List (Fixed), and click OK.
8. In the Create Fixed Choice List page, enter the basic information for the field, such as Display Label, Name, and the Constraints.
9. Select the display type:
   - If the users can select only one value, then select Single Select Choice List.
   - If the users can select multiple values, then select Multiple Select Choice List.
   For example, create a single select choice list named Travel Required for Project Resource Request in Project Management work area with values Yes and No.
10. If the lookup type was previously defined, click the Search and Select Lookup Type icon next to the Lookup Type field, search for the lookup type, select it, and click OK. Otherwise, create the lookup type as described in the next section.
11. Click Save and Close. You can view the new fixed choice list field (Travel Required) under the Custom tab on the Fields page.
12. Expand the Project Resource Request object and click the Pages link.
13. On the Project Resource Requests: Pages page, click the Duplicate icon in the Landing Page Layouts section of the Project Management work area.
14. In the Duplicate Layout window, enter the new layout and source layout name. For now, keep the new layout name and the source layout to the default value.
15. Click Save and Close. You can now see the Default custom layout link under the Landing Page Layouts section of the Project Management work area.
16. Click the Default custom layout link from the Landing Page Layouts section of the Project Management work area.
17. On the Landing Page Layout: Default custom layout page, click the Edit icon next to the Project Resource Requests Table in Project Management work area heading.

18. In the Configure Summary Table section, select the new fixed choice list field (Travel Required) from the Available Fields table and move it to the Selected Fields table.

19. Click Save and Close. You can now see the new fixed choice list field (Travel Required) on the Project Resource Requests page in the Project Management work area.

Creating the Lookup Type

If the lookup type isn’t defined, then use the Create Lookup Type window to add lookups and to specify the list of values. Note that you can reuse lookup types for other fields.

[Note: Although you’re working in a sandbox, lookup types are created outside of a sandbox and become part of the mainline metadata.]

1. Click the Create a New Lookup Type icon that’s displayed next to the Lookup Type field.
2. Enter the lookup type properties listed in the following table.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning</td>
<td>Unique name for the lookup type. Use a name that enables others to search for a lookup type that meets their needs for other fixed choice fields.</td>
</tr>
<tr>
<td>Description</td>
<td>Optional description that enables others to determine if the lookup type meets their needs for other fixed choice fields.</td>
</tr>
<tr>
<td>Lookup Type</td>
<td>Unique internal identifier for this lookup.</td>
</tr>
<tr>
<td>Lookup Code</td>
<td>Value for the lookup type.</td>
</tr>
</tbody>
</table>

3. In the Lookup Codes table, from the Action menu, click Create to add an item to the list of valid values. For the fixed choice list field (Travel Required) you need to create the values, Yes and No.

4. In the Meaning column, enter the value to display in the list of valid values. The value must be unique to the list.

5. In the Lookup Code column, enter the internal code for the item. The value must be unique to the list. Use headline case without spaces to make it obvious in Groovy scripts that the lookup code isn’t a string displayed in the interface.

6. Enter the Display Sequence and Description for the lookup code.

7. Create additional items to complete the list.

8. Click Save.

9. Click Save and Close. The fixed choice list field (Travel Required) is displayed on the Project Resource Request page in the Project Management work area.

[Note: After you make your changes in a sandbox, work with your applications administrator to either delete or publish the sandbox. Deleting the sandbox reverts your changes. Publishing the sandbox applies the changes you made across your organization.]
Create a Projects Custom Object

This example shows how to create a projects custom object using Application Composer. You can create:

- An entirely new object (work area) to capture additional business requirements for your organization.
- A child object under an existing standard object or the newly created custom object.

This table contains a summary of key decisions.

<table>
<thead>
<tr>
<th>Decision to Consider</th>
<th>In this Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why you need a custom object?</td>
<td>• To track data for an object that isn’t delivered with Oracle Project Portfolio Management Cloud.</td>
</tr>
<tr>
<td></td>
<td>• To capture and track risks using the new Project Risk object.</td>
</tr>
<tr>
<td>Which users will have access to the</td>
<td>• Decide which users should have access to custom object and whether it maps to existing roles the users have or if you need to create a new custom role.</td>
</tr>
<tr>
<td>custom object?</td>
<td>• In this example, the implementor will get access to the new object to illustrate the capabilities.</td>
</tr>
</tbody>
</table>

Prerequisites

- You must be a project application administrator (ORA_PJF_PROJECTS_APPLICATION_ADMINISTRATOR_JOB) with the ZCX_MANAGE_EXTENSIBLE_OBJECT_PRIV privilege.
- You must create or select a sandbox and create custom object within it.

Custom Project Risk Object

Creating custom Project Risk object involves:

1. Creating the custom Risk object.
2. Adding pages to the custom Risk object.
3. Adding fields to the pages within the custom Risk object.
4. Adding action links to the pages.
5. Adding child objects and linking them to the custom Risk object.
6. Adding the custom Risk object to the Project Portfolio Management work area.

Creating a Custom Object

The following steps explains how to create a custom object named Project Risks.

1. Navigate to **Tools > Configuration > Application Composer**.
2. From the Application drop down, select **ERP and SCM Cloud**.
3. Under Objects menu, click the **Create** icon next to Custom Objects.
4. Enter the information for your new object.

<table>
<thead>
<tr>
<th>Field</th>
<th>Field Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Label</td>
<td>Project Risk</td>
</tr>
<tr>
<td>Plural Name</td>
<td>Project Risks</td>
</tr>
</tbody>
</table>
Field | Field Value
--- | ---
Record Label Name | Project Risk Name
Record Name Data Type | Text
Prevent Duplicate Values | Enable
Treat “ABC” and “Abc” as distinct values | Disable
Object Name | ProjectRisk<yourinitials>. For example, ProjectRiskMP
Description | As required

5. Click **OK**. The application creates the object. Note the Name as it is required to identify privileges and the API.
6. Select the **Change Icon** link to select an icon that will appear in the Navigator.
7. Select a display icon of your choice for the object.

**Adding Fields to the Project Risk Custom Object**

The following steps explains how to add fields to the Project Risks custom object.

1. **Under Objects > Custom Objects > Project Risk**, click Fields.
2. Click the **Create a custom field** icon.
3. Create the following fields. See the procedures in related links for creating fields.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Field Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Number</td>
<td>Number</td>
</tr>
<tr>
<td>Mitigate Date</td>
<td>Date</td>
</tr>
<tr>
<td>Risk Description</td>
<td>Long Text</td>
</tr>
<tr>
<td>Severity Values: Low, High, and Medium</td>
<td>Fixed Choice List</td>
</tr>
<tr>
<td>Risk Percentage</td>
<td>Percentage</td>
</tr>
<tr>
<td>Project Name</td>
<td>Text</td>
</tr>
<tr>
<td>Escalated to Management</td>
<td>Check box</td>
</tr>
<tr>
<td>Status Values: New, Working, and Resolved</td>
<td>Fixed Choice List</td>
</tr>
</tbody>
</table>
Creating an Action for the Project Risk Custom Object

1. Under **Objects > Custom Objects > Project Risk > Actions and Links**, select **Pages**.
2. Click the **Create** icon.
3. Enter the action information as mentioned in the following table.

<table>
<thead>
<tr>
<th>Field Type</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Label</td>
<td>Review Risk Policies</td>
</tr>
<tr>
<td>Name</td>
<td>Review_Risk_Policies</td>
</tr>
<tr>
<td>Type</td>
<td>Link</td>
</tr>
<tr>
<td>Description</td>
<td>Description for the Action Link.</td>
</tr>
<tr>
<td>Source</td>
<td>URL</td>
</tr>
<tr>
<td>Display Mode</td>
<td>New Window</td>
</tr>
<tr>
<td>URL Definition</td>
<td><a href="https://en.wikipedia.org/wiki/Projectrisk_management">https://en.wikipedia.org/wiki/Projectrisk_management</a></td>
</tr>
</tbody>
</table>

4. Click **Save**.

Creating Pages for the Project Risk Custom Object

1. Under **Objects > Custom Objects > Project Risk**, click **Pages**.
2. Click **Create Default Pages**.
3. In the Landing Page Layouts section, click the **Default custom layout** link.
4. Click the **Edit** icon next to the summary table.
5. Configure the summary table. Select the following fields and enable them to display in the summary table. Do not display the Risk Description by default.
   - Project Risk Name
   - Risk Number
   - Project Name
   - Status
   - Severity
   - Risk Percentage
   - Creation Date
   - Mitigate by Date
   - Risk Description (Hidden)
6. Configure the buttons and actions.
   - Toolbar
     - Create
   - Actions menu
     - Export
     - Update

7. Configure Mass Edit Fields
   - Mitigate by Date
   - Risk Percentage
   - Severity
   - Status

8. Click Save and Close.

9. Click Done.

10. In the Creation Page Layouts section, click the Default custom layout link.

11. Click the Edit icon.

12. Select the creation page fields:
   - Review Risk Policies- Link
   - Project Risk Name
   - Project Name
   - Risk Number
   - Status
   - Severity
   - Risk Percentage
   - Escalated to Management
   - Mitigate by Date
   - Risk Description
   - Risk Mitigation Strategy

13. Click Save and Close.

14. Click Done.

15. In the Details Page Layouts section, click the Default custom layout link.

16. Select the Edit icon for the main subtab and again select the creation page fields.

17. Click Save and Close.

18. Click Done.

Creating a Child Object for the Project Risk Custom Object

1. Under Objects > Custom Objects, click the Default custom layout link.

2. Click Create Child Object.

3. Enter the information for your new object.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Label</td>
<td>Risk Log</td>
</tr>
</tbody>
</table>
### Adding Fields to the Risk Log Child Object

1. Under **Objects > Custom Objects > Project Risk > Risk Log**, click **Fields**.
2. Click the **Create a custom field** icon.
3. Create the following fields. See the procedures in related links to create fields.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Field Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Date</td>
<td>Datetime</td>
</tr>
<tr>
<td>Log Entry</td>
<td>Text</td>
</tr>
</tbody>
</table>

### Creating Pages for the Risk Log Child Object

1. Under **Objects > Custom Objects > Project Risk > Risk Log**, click **Pages**.
2. Click **Create Default Pages**.
3. In the Creation Page Layouts section, click the **Default custom layout** link.
4. Click the **Edit** icon and select the creation page fields.
   - Log Date
   - Risk Log Name
   - Log Entry
5. Click **Save and Close**.
6. Click **Done**.
7. In the Details Page Layouts section, click the **Default custom layout** link.
8. Click the **Edit** icon and select the creation page fields
   - Log Date
   - Created By
   - Last Update Date
   - Last Updated By
   - Risk Log Name
   - Log Entry
9. Click **Save and Close**.
10. Click **Done**.

Adding Child Object to Project Risk Custom Object Page

1. Under **Objects > Custom Objects > Project Risk**, select **Pages**.
2. In the Details Page Layouts section, click the **Default custom layout** link.
3. Click the **Add** subtab icon.
4. Select the **Child object** option.
5. Click **Next**.
6. Enter the subtab information.

<table>
<thead>
<tr>
<th>Field Type</th>
<th>Field Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Object</td>
<td>Risk Log</td>
</tr>
<tr>
<td>Direct Label</td>
<td>Risk Log</td>
</tr>
<tr>
<td>Display Icon</td>
<td>Select the previously selected icon.</td>
</tr>
</tbody>
</table>

Summary Table

- Log Date
- Risk Log Name
- Log Entry
- Last Update date

Summary Table Search Region

- Log Date

Summary Table Buttons and Actions

- Show Create = Yes (Checked)
- Show Edit = Yes (Checked)
- Show Remove = Yes (Checked)

7. Click **Save and Close**.
8. Click **Done**.
Adding the Page to the Projects Navigator and Springboard

1. Navigate to **Tools > Configuration > Application Composer**.
2. Scroll to the bottom of the table and select the **Project Risks** link.
3. Change the **Group** to **Projects**.
4. Click **Save and Close**.

Next, you must test your sandbox configurations. When you are satisfied with the results, you can publish the sandbox to make the custom object available to users with the appropriate access.

Testing Your Pages

1. From the springboard, select **Projects** and then **Project Risks**.
2. Scroll to the bottom of the table and select the **Project Risks** link.
3. Click **Create**.
4. Test the page, for example, check default values, click the link, and enter data.
5. Click **Save and Continue**.
6. Review and edit the information. Add an attachment.
7. Select the Risk Logs subtab and review the fields.
8. Click **Create** and enter a log entry.
9. Click **Save and Close**.
10. Review the results.
11. Add additional risks. Test search and deletion of risks.
12. Add multiple logs for a risk and test the filter and deleting.

Related Topics

- How You Manage Configurations in Sandboxes

Create a Dynamic Choice List

You can create a custom dynamic choice list field by referencing the objects such as, project, task, deliverable, issue, requirement, backlog, resource, or resource request. Then add it to a custom object or to an existing standard object. Imagine that you add an issue auditor based on the project enterprise resource to the Project Issue standard object.

1. Ensure that you’re working in a sandbox.
2. Click **Navigator > Configuration > Application Composer**.
3. Select **ERP and SCM Cloud** from the Application list and enable **PPM** as the Object Tags.
4. Expand the standard object or custom object to which you want to add a dynamic choice list. For example, expand Project Issue.
5. Click the **Fields** link under the object.
6. In the Custom tab, click the **Create a custom field** icon.
7. In the Select Field Type window, select **Choice List (Dynamic)**, and click **OK**.
8. In the Create Dynamic Choice List page, enter the basic information for the field, such as **Display Label**, **Name**, and the **Constraints**. For example, enter Issue Auditor in the Display Label field.
9. Click **Next** to navigate to the page where you create a dynamic choice list for the field.
10. From the Related Object list, select the object based on which you want to create the dynamic choice list. For example, select Project Enterprise Resource.
11. From the List Selection Display Value list, select the option that should appear on the UI as values for the dynamic choice list field. For example, Name.
12. Click **Submit**. You can now see the dynamic choice list field under the Custom tab on the Fields page.
13. Click the **Pages** link under the object.
14. On the Pages page, click the **Duplicate Creation Page Layout** icon under the work area where you want to add the dynamic choice list.
15. In the Duplicate Layout window, enter the new layout name and click **Save and Close**. You can now see the **Default custom layout** link under the Landing Page Layouts section of the selected work area. You can also click **Save and Edit** instead and go directly to step 17.

16. Click the **Default custom layout** link from the Landing Page Layouts section of the Project Management work area.

17. On the Landing Page Layout: Default custom layout page, click the **Edit** icon next to the work area name.

18. In the Configure Summary Table section, select the dynamic choice list field you just created from the Available Fields table and move it to the Selected Fields table.

19. Click **Save and Close**.

20. Click **Done**. The dynamic choice list field now appears in the selected work area.

21. Go to the work area, test your changes, and publish the sandbox.

---

### Create a Dependent Dynamic Choice List

You can create a dependent dynamic choice list where the value of one dynamic choice list is dependent on another dynamic choice list. As a prerequisite you must create two dynamic choice lists. Suppose you:

- Create Tracking Project field based on Related Object Project under the Project Issue standard object.
- Create Tracking Task field based on Related Object Project Task under the Project Issue standard object.

1. Open a dynamic choice list field in edit mode. For example, Tracking Task.
2. In the **Basic Information > Constraints > Depends On**, select the first dynamic choice list. For example, Tracking Project.
3. Click **Next**.
4. On the List of Values page, in the Data Filter section, enable **Advanced Filter**.
5. Click **Add Bind Variable** and select **Create new bind variable** option.
6. Enter a variable name and click **OK**. For example, enter Project_Name.
7. Click **Add Search Field** and select a value from the list. For example, select the value Project_Name. The value displays in the text box below the Add Search Field.
8. Append equal to (=) sign to the value in the text box below the Add Search Field. For example, Project_Name=.
9. Click **Add Bind Variable** and select the value created in step 6. The text box below the Add Search field now shows an expression. For example, Project_Name=:Project_Name.
10. Once you create the expression, you can view a table with the Variable Name and the Expression field.
11. Click the xyz icon below the Expression text box that opens the Expression Builder window.
12. In the Expression Builder window, click **Show/Hide Expression Palette** icon.
13. Open Fields tab.
14. Expand the object under which you created the dynamic choice lists and select a dynamic choice list. For example, expand Project Issue and select Tracking Project.
15. In the Fields table, select the field and click **Insert** to provide a value to the bind variable. For example, select Project Name field. An expression displays in the left pane.
16. Click **OK**.
17. Click **Submit**.
18. Add both the dynamic choice list to the appropriate pages. If you are adding fields to a standard object, then you will have to duplicate the predefined layout and edit the duplicate layout. For example, add the Tracking Project and Tracking Task field to the Manage Project Issues work area. You can now track an issue against a task within a specific project.
19. Go to the work area, test your changes, and publish the sandbox.

---

### Public Business Events
Overview of Public Business Events

A public event, also known as business event, is a definable logical occurrence in a business scenario. It can be a high-level occurrence such as project creation or a specialized event such as status change.

If you want to perform operations in other systems based on public events in Oracle Project Portfolio Management cloud, then you can use public event features. Project application administrators must enable public event features if they aren’t enabled by default.

After you enable these features, Oracle PPM Cloud sends a signal, along with a payload containing information about the public event, whenever an event occurs. The public event signal is also known as public event.

**Note:** Oracle PPM Cloud sends signals irrespective of the source or cause of the event. For example, the application sends a project creation signal when a project is created using file-based data import, REST service, SOAP service, or user interface.

Integration developers and administrators can subscribe to public events from the Oracle Integration Cloud using the Oracle ERP Cloud Adapter. Then, they can use the information in the payload to configure event handlers that perform business operations. For more information, refer to Oracle ERP Cloud Adapter Capabilities and Developing Integrations with Oracle Integration Cloud Service.

Public event payload contains specific information pertaining to the event. You can use callback services to retrieve additional information from Oracle PPM cloud.

**Related Topics**
- Getting Started with Oracle Integration Cloud Service
- Oracle ERP Cloud Adapter Capabilities

Public Events for Project Execution Management

This table describes the public events supported by Project Execution Management.

<table>
<thead>
<tr>
<th>Cloud Product</th>
<th>Supported Public Event</th>
<th>Description</th>
<th>Enabled by Default</th>
<th>First Release Available</th>
<th>Callback Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td>Project Deliverable Status Changes</td>
<td>Signals whenever project deliverables’ status or priority changes. Creating or deleting deliverables doesn’t generate signals.</td>
<td>No</td>
<td>19A</td>
<td>REST Service: Deliverables Method: Get a deliverable</td>
</tr>
<tr>
<td>Task Management</td>
<td>Project Task Progress Status Changes</td>
<td>Signals whenever project task progress status changes. Creating or deleting tasks doesn’t generate signals.</td>
<td>No</td>
<td>19A</td>
<td>REST Service: Project Plans Resource: Tasks Operation: Get a task of a project</td>
</tr>
</tbody>
</table>
Public Events for Project Deliverable Status Changes

If you want Oracle Project Portfolio Management Cloud to signal whenever project deliverables’ status or priority changes, then enable the Generate Public Events on Project Deliverable Status Changes feature. You can enable it from the Edit Features: Project Execution Management page. Keep in mind that creating or deleting deliverables doesn’t generate signals.

For example, if you want to send an email notification whenever the status of a deliverable changes to completed, then:

1. You, as a project application administrator, must enable this feature. Oracle PPM Cloud signals when a project deliverable’s status or priority changes.
2. Integration developers must create event handlers that subscribe to these signals and send an email notification whenever the status of a deliverable changes to completed.

Attributes in the Payload for Project Deliverable Status Change Event

This table lists and describes the attributes in the payload.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DeliverableId</td>
<td>Identifier of the deliverable.</td>
</tr>
<tr>
<td>ShortName</td>
<td>Short name of the deliverable.</td>
</tr>
<tr>
<td>OwnerName</td>
<td>Name of the person who owns the deliverable.</td>
</tr>
<tr>
<td>CreatedBy</td>
<td>Name of the person who created the deliverable.</td>
</tr>
<tr>
<td>CreationDate</td>
<td>Date when the deliverable was created. The format is MM-DD-YYYY.</td>
</tr>
<tr>
<td>NeedByDate</td>
<td>Due date of the deliverable. The format is MM-DD-YYYY.</td>
</tr>
<tr>
<td>PriorityCode</td>
<td>Internal code of the priority assigned to the deliverable.</td>
</tr>
<tr>
<td>StatusCode</td>
<td>Internal code of the status for the deliverable.</td>
</tr>
<tr>
<td>AssociationsCount</td>
<td>Total number of associations of the deliverable with project tasks and backlog items.</td>
</tr>
</tbody>
</table>
### Attribute Table

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LastUpdatedBy</td>
<td>Name of the person who last updated the attachment.</td>
</tr>
<tr>
<td>LastUpdateDate</td>
<td>Date when the attachment was last updated.</td>
</tr>
</tbody>
</table>

### Sample Payload for Project Deliverable Status Changes Event

Let's look at a sample payload that’s generated when the status of a deliverable, Deliverable 1, changes from NEW to WORKING.

```xml
<content>
  <ProjectDeliverableStatusChangedInfo xmlns="http://oracle/apps/projects/projectManagementControl/deliverables/publicModel/entity/events/schema/DeliverableEO">
    <DeliverableId>
      <oldValue value="300100023181201"/>
      <newValue value="300100023181201"/>
    </DeliverableId>
    <ShortName>
      <oldValue value="Deliverable 1"/>
      <newValue value="Deliverable 1"/>
    </ShortName>
    <OwnerName>
      <oldValue value="Connor.Horton"/>
      <newValue value="Connor.Horton"/>
    </OwnerName>
    <CreatedBy>
      <oldValue value="Connor.Horton"/>
      <newValue value="Connor.Horton"/>
    </CreatedBy>
    <CreationDate>
      <oldValue value="01-12-2018"/>
      <newValue value="01-12-2018"/>
    </CreationDate>
    <NeedByDate>
      <oldValue value="02-12-2018"/>
      <newValue value="02-12-2018"/>
    </NeedByDate>
    <PriorityCode>
      <oldValue value="MEDIUM"/>
      <newValue value="MEDIUM"/>
    </PriorityCode>
    <StatusCode>
      <oldValue value="NEW"/>
      <newValue value="WORKING"/>
    </StatusCode>
    <AssociationsCount>
      <oldValue value="1"/>
      <newValue value="1"/>
    </AssociationsCount>
    <LastUpdatedBy>
      <oldValue value="Connor.Horton"/>
      <newValue value="Connor.Horton"/>
    </LastUpdatedBy>
    <LastUpdateDate>
      <oldValue value="01-12-2018"/>
      <newValue value="01-12-2018"/>
    </LastUpdateDate>
  </ProjectDeliverableStatusChangedInfo>
</content>
```
Public Events for Project Task Progress Status Changes

If you want Oracle PPM Cloud to signal whenever project task progress status changes, enable the Generate Public Events for Project Task Progress Status Changes feature. You can enable it from the Edit Features: Project Execution Management page. Keep in mind that creating or deleting tasks doesn’t generate signals.

For example, if you want to initiate an activity in another application whenever task status changes to In Progress, then:

1. You, as a project application administrator, must enable this feature. Oracle PPM Cloud signals when project task progress status changes.
2. Integration developers must create event handlers that subscribe to these signals and initiate an activity whenever the project task progress status changes to In Progress.

Attributes in the Payload for Project Task Progress Status Changes Event

This table lists and describes the attributes in the payload.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProjElementId</td>
<td>Unique identifier of the task. This value is the same as Task ID.</td>
</tr>
<tr>
<td>ProjectId</td>
<td>Unique identifier of the project.</td>
</tr>
<tr>
<td>ElementType</td>
<td>Indicates if the task is financially tracked or tracked for execution only. Valid values are EXECUTION and FINANCIAL.</td>
</tr>
<tr>
<td>ProgressStatusCode</td>
<td>The code for the status of work completed on the task. Valid values are NOT_STARTED, IN_PROGRESS, and COMPLETED.</td>
</tr>
<tr>
<td>OldProgressStatusCode</td>
<td>The previous code for the status of work completed on the task. Valid values are NOT_STARTED, IN_PROGRESS, and COMPLETE.</td>
</tr>
<tr>
<td>BillableFlag</td>
<td>Indicates that transactions charged to the task can be billed to customers. Valid values are Y, N, and null. The value is Y when the transactions are billable. The value is N or null when the transactions aren’t billable.</td>
</tr>
<tr>
<td>ChargeableFlag</td>
<td>Indicates that something is eligible to be charged to a task. Valid values are Y, N, and null. The value is Y when the transactions are chargeable. The value is N when the transactions aren’t chargeable.</td>
</tr>
<tr>
<td>ActualStartDate</td>
<td>The date that work commenced on a task as opposed to the planned start date for the task.</td>
</tr>
<tr>
<td>ActualFinishDate</td>
<td>The actual finish date for the task as opposed to a planned finish date for the task.</td>
</tr>
<tr>
<td>StartDate</td>
<td>The date that work or information tracking begins on a project. The format is DD-MM-YYYY.</td>
</tr>
<tr>
<td>FinishDate</td>
<td>The date that work or information tracking completes for a project. The format is DD-MM-YYYY.</td>
</tr>
<tr>
<td>PercentComplete</td>
<td>Indicates the percentage of work completed for the task.</td>
</tr>
</tbody>
</table>
Sample Payload for Project Task Progress Status Changes Event

Let’s look at a sample payload that’s generated when the status of a Project Task changes from Not Started to In Progress.

```
<content>
  <ProjectTaskProgressStatusChangedInfo xmlns="http://oracle/apps/projects/projectManagement/common/publicModel/entity/events/schema/ProjPlanLineEO">
    <ProjElementId>
      <oldValue value="300100111675917"/>
      <newValue value="300100111675917"/>
    </ProjElementId>
    <ProjectId>
      <oldValue value="300100082280694"/>
      <newValue value="300100082280694"/>
    </ProjectId>
    <ElementType>
      <oldValue value="EXECUTION"/>
      <newValue value="EXECUTION"/>
    </ElementType>
    <ProgressStatusCode>
      <oldValue value="NOT_STARTED"/>
      <newValue value="IN_PROGRESS"/>
    </ProgressStatusCode>
    <OldProgressStatusCode>
      <oldValue value="NOT_STARTED"/>
      <newValue value="NOT_STARTED"/>
    </OldProgressStatusCode>
    <BillableFlag>
      <oldValue value="N"/>
      <newValue value="N"/>
    </BillableFlag>
    <ChargeableFlag>
      <oldValue value="N"/>
      <newValue value="N"/>
    </ChargeableFlag>
    <ActualStartDate>
      <oldValue value="False"/>
      <newValue value="01-01-2019"/>
    </ActualStartDate>
    <ActualFinishDate>
      <oldValue value=""/>
      <newValue value=""/>
    </ActualFinishDate>
    <StartDate>
      <oldValue value="01-01-2019"/>
      <newValue value="01-01-2019"/>
    </StartDate>
    <FinishDate>
      <oldValue value="05-01-2019"/>
      <newValue value="05-01-2019"/>
    </FinishDate>
    <PercentComplete>
      <oldValue value="0"/>
      <newValue value="25"/>
    </PercentComplete>
    <LastUpdatedBy>
      <oldValue value="Connor.Horton"/>
      <newValue value="Connor.Horton"/>
    </LastUpdatedBy>
  </ProjectTaskProgressStatusChangedInfo>
</content>
```
Public Events for Project Milestone Completion

If you want Oracle PPM Cloud to signal whenever a project milestone is completed, enable the Generate Public Events on Project Milestone Completion feature. You can enable it from the Edit Features: Project Execution Management page. Keep in mind that completing financial tasks that are flagged as milestones doesn’t generate signals.

For example, if you want to create a billing event whenever a project milestone is completed, then:

1. You, as a project application administrator, must enable this feature. Oracle PPM Cloud signals when a project milestone is completed.
2. Integration developers must create event handlers that subscribe to these signals and create a billing event whenever a project milestone is completed.

Attributes in the Payload for Project Milestone Completion Event

This table lists and describes the attributes in the payload.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProjElementId</td>
<td>Unique identifier of the task. This value is the same as Task ID.</td>
</tr>
<tr>
<td>Description</td>
<td>Text description of the project milestone.</td>
</tr>
<tr>
<td>ProjectId</td>
<td>Unique identifier of the project.</td>
</tr>
<tr>
<td>FinishDate</td>
<td>The date when work is scheduled to end for a project milestone. The format is DD-MM-YYYY.</td>
</tr>
<tr>
<td>ActualFinishDate</td>
<td>The actual finish date for the project milestone as opposed to a planned finish date for the project milestone. The format is DD-MM-YYYY.</td>
</tr>
<tr>
<td>LastUpdatedBy</td>
<td>Name of the person who last updated the record.</td>
</tr>
</tbody>
</table>

Sample Payload for Project Milestone Completion Event

Let’s look at a sample payload that’s generated when a project milestone is completed.

```
<content>
  <ProjectMilestoneCompletionInfo xmlns="http://oracle/apps/projects/projectManagement/common/publicModel/entity/events/schema/ProjPlanLineEO">
    <ProjElementId>
      <oldValue value="300100111675917"/>
      <newValue value="300100111675917"/>
    </ProjElementId>
    <Description>
      <oldValue value="300100111675917"/>
      <newValue value="300100111675917"/>
    </Description>
    <ProjectId>
      <oldValue value="300100082280694"/>
      <newValue value="300100082280694"/>
    </ProjectId>
    <oldValue value="Milestone: Customer Sign Off of Tested Software"/>
    <newValue value="Milestone: Customer Sign Off of Tested Software"/>
  </ProjectMilestoneCompletionInfo>
</content>
```
<ProjectId>
<FinishDate>
<oldValue value="31-01-2019"/>
<newValue value="31-01-2019"/>
</FinishDate>
<ActualFinishDate>
<oldValue value=""/>
<newValue value="31-01-2019"/>
</ActualFinishDate>
<LastUpdatedBy>
<oldValue value="Connor.Horton"/>
<newValue value="Connor.Horton"/>
</LastUpdatedBy>
</ProjectMilestoneCompletionInfo>
</content>
3 Project Management Configuration

Overview of Project Management Configuration

In the Define Project Management Configuration activity, you configure Oracle Fusion Project Management to manage projects, tasks, requirements, deliverables, and resources, and to track and resolve issues. This activity contains advanced setup tasks that aren’t required for a typical implementation of Project Execution Management applications.

This table lists the setup tasks in the Define Project Management Configuration task list.

<table>
<thead>
<tr>
<th>Task or Task List</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Project Management Implementation Options</td>
<td>Specify default attributes for the project enterprise such as calendars, progress exception thresholds, currency, FTE hours, and the email banner.</td>
</tr>
<tr>
<td>Manage Enterprise Project Codes</td>
<td>Create and update enterprise project codes to capture additional details on a project using a predefined value set, free text, or numeric data type.</td>
</tr>
<tr>
<td>Manage Enterprise Task Codes</td>
<td>Create and update enterprise task codes to capture additional details on a project task using a predefined value set, free text, or numeric data type.</td>
</tr>
<tr>
<td>Manage Issue Types</td>
<td>Create and update issue types such as the General issue type.</td>
</tr>
<tr>
<td>Manage Deliverable Types</td>
<td>Create and update deliverable types such as the General deliverable type.</td>
</tr>
<tr>
<td>Manage Attributes for Issues and Deliverables</td>
<td>Create and update attributes to capture additional details for issues and deliverables using a predefined value set, free text, or numeric data type.</td>
</tr>
<tr>
<td>Define Project Requirement Configuration</td>
<td>Configure Oracle Fusion Project Management to track requirements, such as features and backlog items, for products and product families.</td>
</tr>
<tr>
<td>Manage Project Management Messages</td>
<td>Review and manage messages for Oracle Fusion Project Management.</td>
</tr>
<tr>
<td>Manage Project Management Attachment Categories</td>
<td>Review and manage attachment categories for Oracle Fusion Project Management.</td>
</tr>
<tr>
<td>Manage Oracle Social Network Objects for Project Execution Management</td>
<td>Enable the display of information in Oracle Social Network about changes to Project Execution Management business objects, and select which attributes to include for each object.</td>
</tr>
<tr>
<td>Manage Enterprise Project Structure</td>
<td>Create and edit enterprise project structure nodes and manage the hierarchy of the nodes.</td>
</tr>
</tbody>
</table>
Considerations for Project Creation

Project managers can create projects for planning and scheduling work on the Manage Project Plan page using the Create Project link from the Actions panel tab.

However, if you can’t see the links related to project planning in the Actions panel tab, then the project application administrator can resolve the issue in the following ways:

- If all the links related to project planning are unavailable, update the implementation status of the offering.
- If only the Create Project link is unavailable, add a privilege to the project manager.

Update the Implementation Status of the Offering

If you don’t see multiple links related to the project planning or change orders, then the project application administrator must change the implementation status of the Project Execution Management offering to In Progress or Implemented. To change the implementation status of the offering to Implemented or In Progress, navigate to Setup and Maintenance > Setup: Project Execution Management > Actions > Edit Implementation Status > Implemented or In Progress

Add a Privilege to the Project Manager

If you don’t see just the Create Project link, the project application administrator must assign the Create Project Work Plan privilege to the project manager. The Create Project Work Plan privilege by default rolls up to the Project Execution job role.

How Project Status Components Work Together

Use project statuses to track the project as it flows through the project lifecycle. The project application administrator can define additional statuses to meet business needs using the Manage Project Statuses task. Define additional features for a project status like workflow approvals, next allowable statuses, status controls, and progress statuses through the Manage Project Statuses task. The following project statuses are available for the execution and financial management of the project:

- Draft
- Submitted
- Active
- Rejected
- Pending Close
- Closed

The default project statuses while creating the project are:

- For financial projects, the status entered in the project template if using template for project creation.
- For nonfinancial projects, the status entered in the setup implementation options.

Note: When you enable a nonfinancial project for financial management, the application doesn’t change the status of the project.
The progress status type specifies overall progress of a project, task, or resource. Progress statuses are used for reporting and don’t control what you can do with a project. The following are the predefined progress statuses.

- On track
- At risk
- In trouble

### Status Attributes
Each status is associated with a status type and a system status. Optionally you can specify status attributes for initial project status and workflow.

- **Status Type**: Types are Project or Progress.
- **System Status**: Predefined system statuses that the application uses for internal processing. Every status must map to a predefined system status.
- **Initial Project Status**: Controls whether you can select the status as an initial status on a project template. Initial project status doesn’t apply to progress statuses.
- **Workflow Attributes**: An approval workflow enables you to separate project creation from project approval. Workflow attributes don’t apply to progress statuses.

  Project status approval workflow includes these attributes:
  
  - **Status After Change Accepted**: The status assigned after approving a project status change.
  - **Status After Change Rejected**: The status assigned after rejecting a project status change.

  The project status after rejecting the workflow can be the same as the current status.

### Status Controls
Status Controls determine the actions allowed for a project in a given project status. By default, a project in an Active application status allows all actions. Status controls don’t apply to progress statuses.

Status Controls control the following actions:

- Adjust transactions
- Capitalize assets
- Capitalized interest
- Create burden transactions
- Create new transactions
- Summarize project data
- Updating task progress by Project Team Members

### Next Allowable Statuses
Next allowable statuses specify which statuses you can use as the new status when you manually change a system status. All is the default next allowable status, which you can change. Next allowable statuses don’t apply to progress statuses.
Defining the next allowable statuses determines the project process flow. For example, you can specify that a project with a Requested status can have the status changed to either Active or Rejected. This example shows two possible process flows for the project: Requested to Active status, or Requested to Rejected status.

The following four options are available when you specify the next allowable statuses:

- **All**: The current status can change to any status. All is the default value.
- **None**: The current status can’t change.
- **System Status**: System statuses control the next allowable statuses. Specify which system statuses are next allowable statuses.
- **Status Name**: Project statuses control the next allowable statuses. Specify which project statuses are next allowable statuses.

**Project Status Change Workflow**

Project application administrators can enable workflow for a project status. When the approval workflow begins, on change of the project status, the application sends notifications to all the participants configured to receive notifications. The default workflow process sends a request for approval of the project status change to the primary project manager. For nonfinancial projects, if you define the EPS owner then, the workflow notification is sent to the EPS owner. You can also update the project status using REST and SOAP services and the application initiates the status change workflow. Workflow attributes don’t apply to progress statuses.

Use the Manage Project Roles task in the Setup and Maintenance work area to configure the project roles and individual participants that receive project status creation and withdrawal notifications. Such notifications can include various descriptive flexfields.

When the project administrator or project manager:

- Creates or changes a project status and submits them for approval, the application sends notifications to all the participants that are configured to receive notifications.
- Withdraws the notifications or the workflow results in errors, the application reverts the status of the project to the previous status.

If you previously used workflow for the status changes for financially-enabled projects and you want to extend the workflow to nonfinancial projects, then first review and update the workflow configuration as needed.
The following graphic shows the process of changing a project status.

Project Status Change Workflow Settings
During implementation, you specify the project statuses that require approval before a project changes to that status.

For each project status with workflow enabled, you can also specify the following parameters:

- The status the application assigns to the project after accepting a project status change.
- The status the application assigns to the project after rejecting a project status change.

For example, assume that during implementation, you enable workflow for the Submitted status, and configure the following workflow attributes:

- In the **Status After Change Accepted** field for the Submitted project status, you specify the Active status as the status that the application assigns to the project when the status change is accepted.
- In the **Status After Change Rejected** field for the Submitted project status, you specify the Rejected status as the status that the application assigns to the project when the status change is rejected.

In this example, when a requester changes the project status to Submitted, the workflow process routes the status change request to the project manager’s worklist. If the project manager accepts the status change, the workflow process assigns the Active status to the project. If the project manager rejects the status change, the workflow process assigns the Rejected status to the project.
The following graphic shows an example project status flow when using the Project Status Change workflow for status changes during the lifecycle of a project. In this example, a requester changes the project status to Submitted. The workflow sends a notification to the project manager, who accepts the status change. The workflow changes the project status to Active after you accept a request to change the status to Submitted. After project completion, the requester changes the project status to Pending Close. The workflow sends a notification to the project manager, who accepts the status change. The workflow changes the project status to Close after you accept a request to change the status to Pending Close.

**Related Topics**

- Use Your Worklist to Manage Workflow Tasks
Considerations for Integrating Work Items and Project Execution Management

If you want to use Project Execution Management to create projects to track product development progress on concepts, proposals, requirements specifications, items and product change orders, or manage negotiations, you must enable these functional areas in the Product Management and Sourcing offerings to be able to:

- Create projects for product requirements and innovation management
- Create negotiation projects

You must be a project manager to access work items in the Project Management work area.

Use Product Development and Innovation Management

To create projects to track concepts, proposals, requirements specifications, items and product change orders, the application implementation consultant must enable the following functional areas in the Setup and Maintenance > Product Management offering:

- Product Requirements and Ideation Management
- Concept Design Management

Use Sourcing

To create projects to track negotiations, the application implementation consultant must enable the Setup and Maintenance > Procurement Sourcing functional area.

In the Sourcing > Manage Negotiation Styles task, ensure the Project Task option for the Two-Stage and Standard negotiation styles is enabled to view project details for a negotiation.

Related Topics

- Negotiation Styles

FAQs for Project Management Configuration

What's the difference between project calendars and resource calendars?

Project calendars determine standard working and nonworking times for resources working on projects. For example, a project calendar can designate the total number of working hours per day and any holidays that occur during the project dates. A project calendar is used to schedule project tasks, and to estimate project duration.
Resource calendars determine the total available working hours for resources. Your implementation team defines the default project and resource calendars that are automatically assigned to new projects and resources. However, a project manager can assign another calendar to a project. Similarly, a project application administrator can assign a different calendar to a resource.

**Can I change the default value for the resource calendar that appears when I create a project enterprise labor resource?**

Yes. On the Define Project Management Implementation Options page, you select a default resource calendar that the application automatically assigns to new project enterprise labor resources. If the default resource calendar does not meet the requirements for a specific project enterprise labor resource, then you can assign a different calendar to the resource.

**How can I capture current and planned expense amounts separately?**

Project application administrators can enable the **Capture actual and remaining expense amounts above or below planned expense amounts** option from the Define Project Management Implementation Options task in the Setup and Maintenance work area to capture actual and remaining expense amounts separately from planned expense amounts. The application displays the sum of the actual and remaining expense amounts as the current expense amount that can be greater or less than the planned expense amounts. You can’t disable the feature after it’s enabled.

**Can I change the full time equivalent hours for resources in my organization?**

Yes, the project application administrator can update the quarterly FTE hours on the Define Project Management Implementation Options page.

**Why do some tasks have exceptions for progress entries?**

A team member entered a proposed start date, proposed finish date, or an increase to the planned hours for the task that exceeds the progress thresholds defined in the project management implementation options.

**Related Topics**
- Task Exceptions and How to Manage Them

**How can I restrict team member progress reporting for certain project statuses?**

Project application administrators can specify the project statuses in which team members can report progress against the project tasks that they are assigned. Navigate to the Manage Project Statuses setup task to specify the project statuses.
against which team members can report progress. Once you disable progress reporting for a project status, team members can’t view tasks from projects in that status in the Quick Progress region of the Team Member Dashboard or the Manage Tasks page to report progress.

Enterprise Project and Task Codes

Project and Task Codes

Project and task codes enable project managers and team members to capture information using custom attributes that are specific to an organization. You can use project and task codes to analyze your projects by including them in the Oracle Transactional Business Intelligence (OTBI) reports.

Managing Project and Task Codes

You can create project and task codes with three different data types. The attributes that you create using project and task codes are available on all your project plans.

This table lists the data types available for project and task codes.

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Set</td>
<td>40 project or task codes based on value sets.</td>
</tr>
<tr>
<td></td>
<td>Use to define attributes that capture list of values. Define values for the project or task code in the Value column.</td>
</tr>
<tr>
<td>Numeric</td>
<td>10 project or task codes with numeric entry.</td>
</tr>
<tr>
<td></td>
<td>Use to define attributes that capture numeric values.</td>
</tr>
<tr>
<td>Free Form Text</td>
<td>20 project or task codes with text fields.</td>
</tr>
<tr>
<td></td>
<td>Use to define attributes that capture free-form text values. The maximum length for text is 200 characters.</td>
</tr>
</tbody>
</table>

Note: You can’t assign the same code to both project and task codes because they share the same definition. As a result, you have a total of 70 codes available to use as project or task codes.

Using Project and Task Codes

You can view and update:

- Project codes from the Edit Project Details page. Click the project name link on the Manage Project plan page to access Edit Project Details page.
- Task codes as columns on the Manage Project Plan page. Use the Manage Columns action to show columns you want to see.
- Tasks codes using the link for each task from the Manage Tasks page.
Examples of Project and Task Codes

Use project and task codes to capture additional attributes on your project plan based on your organization needs. The application lets you create custom attributes for your project using the following setup tasks.

- **Manage Enterprise Project Codes**: Captures additional information for your project.
- **Manage Enterprise Task Codes**: Captures additional information about a task that can be viewed as additional columns in your project plan.

### Creating Project Codes

In this example, you will create project codes to capture the negotiation savings details.

Your business requires you to define the savings that you must achieve on each negotiation made with a supplier and your actual savings. When you create a project for your negotiation, you set the saving goals and your actual savings in your project plan. Custom attributes such as project codes, enable you to capture this information in your project plan. The following table lists the custom attributes that you need to create using the Manage Enterprise Project Codes task.

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Project Code</th>
<th>Column Name</th>
<th>Column Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numeric</td>
<td>Number 01</td>
<td>Sourcing Savings Goal</td>
<td>The savings goal for your negotiation.</td>
</tr>
<tr>
<td>Numeric</td>
<td>Number 02</td>
<td>Sourcing Savings Goal (%)</td>
<td>The savings goal for your negotiation in percentage.</td>
</tr>
<tr>
<td>Numeric</td>
<td>Number 03</td>
<td>Negotiated Savings</td>
<td>The actual savings achieved for your negotiation.</td>
</tr>
<tr>
<td>Numeric</td>
<td>Number 04</td>
<td>Negotiated Savings (%)</td>
<td>The actual savings achieved for your negotiation in percentage.</td>
</tr>
</tbody>
</table>

### Creating Task Codes

In this example, you will create task codes to capture the roles for the resources working on your project.

You want to specify the roles required for your project before you assign resources to your tasks. You must create a column named Role in your project plan. Create the custom column using the Manage Enterprise Task Codes task.

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Task Code</th>
<th>Column Name</th>
<th>Column Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Set</td>
<td>List of Values 01</td>
<td>Role</td>
<td>The role of the resource.</td>
</tr>
</tbody>
</table>

The following table contains the values that you need to enter for roles:

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Software Developer</td>
</tr>
<tr>
<td>Sequence</td>
<td>Value</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------</td>
</tr>
<tr>
<td>2</td>
<td>Project Manager</td>
</tr>
<tr>
<td>3</td>
<td>Strategist</td>
</tr>
<tr>
<td>4</td>
<td>Quality Analyst</td>
</tr>
<tr>
<td>5</td>
<td>Information Developer</td>
</tr>
</tbody>
</table>

*Note:* The sequence defines the order in which the task code values appear in the column list on the Manage Project Plan page.

### Oracle Social Network Objects for Project Execution Management

#### Manage Oracle Social Network Objects for Project Execution Management

Use Oracle Social Network objects to share and collaborate on key attribute information from the application with stakeholders. This helps in making better business decisions based on the information that you obtain and analyze within your social network.

#### Managing the Oracle Social Network Objects

Follow these steps to manage Oracle Social Network objects:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Oracle Social Network Objects for Project Execution Management** task.
2. Click the **Manage Oracle Social Network Objects for Project Execution Management** link.
3. In the Business Objects section, expand the **Oracle Social Network Objects**.
4. Expand Project Management and select an object from the list. The attributes for the selected object are displayed in the Attributes section.
5. In the Attributes section, click **Add**. The Select Attributes window opens.
6. Enable or disable an attribute and click **OK**. The changes are reflected in the Attributes section.
7. Select the object and click **Enable Object**. The Enable Object window opens.
8. The following table lists the options that decide how the business object integrates with Oracle Social Network. Select an option.

<table>
<thead>
<tr>
<th>Option</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual</td>
<td>User decides whether to share the object instance in the social network. This is the recommended option.</td>
</tr>
</tbody>
</table>

---

---
<table>
<thead>
<tr>
<th>Option</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic</td>
<td>Shares all instances of the object in the social network.</td>
</tr>
<tr>
<td>No</td>
<td>Doesn’t share any of the object instance in the social network.</td>
</tr>
</tbody>
</table>

9. Click **OK**.
10. Click **Save**.

Enterprise Project Structure

Enterprise Project Structures

Project application administrators can group projects in the enterprise for purposes of reporting to project executives. Project managers with the due privilege can navigate to the Edit Project Details page and use the Project Hierarchy Element field to associate the project with a project hierarchy element. Element owners can use the Project Hierarchy Dashboard or project application administrators can use the Manage Enterprise Project Structures page to assign project executives three types of access to project hierarchy elements, such as owners, delegates, and viewers.

The **PJT_ASSOCIATE_PROJECT_TO_EPS_ELEMENT** privilege is associated with the Project Execution job role by default. Project managers can associate a project to a project hierarchy element by using the Project Hierarchy Element field on the Edit Project Details page for an existing project.

⚠️ **Note:** Project managers with the required privilege can assign a project to a project hierarchy element, but they can’t perform actions, such as creating a project hierarchy element, adding or deleting elements, and assigning resources to different roles within the project hierarchy element.

The following table lists the method to assign participants to an EPS element using the Manage Enterprise Project Structure task in the Setup and Maintenance work area.

<table>
<thead>
<tr>
<th>Project Role</th>
<th>EPS Participant Role</th>
<th>Add, Delete, or Edit Elements</th>
<th>Assign or Remove Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project application administrator</td>
<td>Not available</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Project executive</td>
<td>Owner</td>
<td>No access to page</td>
<td>No access to page</td>
</tr>
<tr>
<td>Project executive</td>
<td>Delegate</td>
<td>No access to page</td>
<td>No access to page</td>
</tr>
<tr>
<td>Project executive</td>
<td>Viewer</td>
<td>No access to page</td>
<td>No access to page</td>
</tr>
</tbody>
</table>

The following table lists how project executives can use the Project Hierarchy Dashboard page to view data and assign owners, delegates, and participants.

<table>
<thead>
<tr>
<th>Project Role</th>
<th>EPS Participant Role</th>
<th>Add, Delete, or Edit Elements</th>
<th>Assign or Remove Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project application administrator</td>
<td>Not available</td>
<td>No access to page</td>
<td>No access to page</td>
</tr>
</tbody>
</table>
Each EPS element can have one directly assigned owner, one directly assigned delegate, and as many directly assigned viewers as needed. When you directly assign a person as an owner, delegate, or viewer to a parent EPS element, the person automatically inherits the same role for each child EPS element.

The following figure represents the project structure of Vision Corporation. Project executives of Vision Corporation want to view the labor demand for application implementation projects and technology projects. They may want to further view labor demand by project category. They can:

- Group application implementation projects by Oracle Fusion Project Management and PeopleSoft.
- Group technology projects by network and server installation.

Related Topics
- How Project Labor Demand Is Calculated
Microsoft Project and Project Execution Management Integration

How Microsoft Project Works with Project Management

Use Oracle Project Management Cloud integration with Microsoft Project to complete initial scheduling and what-if analysis in Microsoft Project before exporting the project plan to Oracle Project Management Cloud.


Following is an overview of installing Microsoft Project Integration, importing task codes into Microsoft Project, importing projects, and exporting project plans.

Installing Microsoft Project Integration Client

A project manager or project administrator can download and install the integration clients available for different versions of Microsoft Project to integrate with Project Management or Project Financial Management applications.

Before downloading the client, ensure that you have .NET Framework 4.5.2 or later versions installed on your computer. The following table provides the list of available clients and their features.

<table>
<thead>
<tr>
<th>Client for Project Management Applications</th>
<th>Supported Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Project 2007</td>
<td>Scheduling only.</td>
</tr>
<tr>
<td>Microsoft Project 2010, 2013, or 2016 for desktop</td>
<td>Scheduling along with support of manual tasks, inactive tasks, free text, primary baseline, and so on.</td>
</tr>
</tbody>
</table>

**Note:** You can only have one integration client, either for Project Management or Project Financial Management applications, on your desktop. To switch between different clients, you must uninstall the existing client and install the other client.

To install Microsoft Project Integration client for Oracle Project Management Cloud:

1. From the Navigator, open Project Management.
2. From the Manage Project Plan page, open the Actions panel tab and select Install Microsoft Project Integration to download the client.
3. Save the client, extract the installation files to a local folder, and run setup from that folder.
4. From the Oracle Fusion Projects menu, select **Change Environment** and enter the URL for Oracle Fusion Applications.

You can change the environment URL at any time to support subsequent server changes.
Importing Task Codes into Microsoft Project

Use the **Import List of Values** menu option on the Oracle Fusion Projects menu to import values defined for task codes. Ensure that the task codes that you import don’t match with any of the Microsoft Project column names. The following table lists the three task codes and the associated Microsoft Project fields.

<table>
<thead>
<tr>
<th>Task Code</th>
<th>Associated Microsoft Project Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASK_EXT_TEXT01</td>
<td>Text1</td>
</tr>
<tr>
<td>TASK_EXT_CODE01</td>
<td>OutlineCode1</td>
</tr>
<tr>
<td>TASK_EXT_NUM01</td>
<td>Number1</td>
</tr>
</tbody>
</table>

Use the **View Attribute Mapping** menu option to review how Oracle Project Management Cloud attributes map to Microsoft Project fields.

Importing Projects

Import projects (but not work plan templates) from Project Management work area to create new project files in Microsoft Project.

The following table describes how some important task-level attributes are imported or set. The project-level attributes such as status and project customer aren’t imported into Microsoft Project.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task attributes</td>
<td>Key imported attributes are:</td>
</tr>
<tr>
<td></td>
<td>• Task numbers (from the WBS column in Microsoft Project)</td>
</tr>
<tr>
<td></td>
<td>• Planned dates</td>
</tr>
<tr>
<td></td>
<td>• Percent complete and physical percent complete</td>
</tr>
<tr>
<td></td>
<td>• Total planned quantity. If calendar or scheduling settings differ, Microsoft Project recalculates effort or units to retain imported dates.</td>
</tr>
<tr>
<td></td>
<td>Enterprise task codes are imported but project codes aren’t imported.</td>
</tr>
<tr>
<td></td>
<td>The task type for all imported tasks is set to Fixed Units in Microsoft Project 2010 or later.</td>
</tr>
<tr>
<td>Task constraints and dependencies</td>
<td>Project Management application doesn’t support the constraint types As Late As Possible and As Soon As Possible. Other constraints are imported using the mapping described in the section on exporting project plan and scheduling information in this topic. If you assign start and finish dates to a task, then a Must Start On constraint is created for the task when you import the project into Microsoft Project.</td>
</tr>
<tr>
<td>Milestones</td>
<td>Tasks designated as milestone tasks are imported as milestones in Microsoft Project.</td>
</tr>
<tr>
<td>Schedule Type</td>
<td>When importing projects from the Project Management work area into Microsoft Project 2010 or later, the tasks will be created with the schedule type set in the Project Management work area, irrespective of the default task type set in Microsoft Project. So, a fixed duration project is imported as fixed duration tasks and fixed effort project is imported as fixed work tasks.</td>
</tr>
</tbody>
</table>
Implementing Project Execution Management

Chapter 3

Project Management Configuration

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The application always imports the summary tasks as fixed duration because</td>
</tr>
<tr>
<td></td>
<td>they can’t be imported as fixed work.</td>
</tr>
</tbody>
</table>

The following table describes how some important resource and resource assignment attributes are imported or set.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources</td>
<td>All labor and expense resources defined as project resources are imported.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resource assignments</th>
<th>The following attributes are imported for resource assignments:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Planned dates</td>
</tr>
<tr>
<td></td>
<td>• Planned, and remaining effort. The resources (task managers) that you</td>
</tr>
<tr>
<td></td>
<td>assign to summary tasks are imported into Microsoft Project with zero</td>
</tr>
<tr>
<td></td>
<td>allocation.</td>
</tr>
<tr>
<td></td>
<td>• Actual costs for labor resources and actual and planned costs for expense</td>
</tr>
<tr>
<td></td>
<td>resources. The cost amounts are imported using the project currency. Import</td>
</tr>
<tr>
<td></td>
<td>processing reports an error if Microsoft Project doesn’t support the project</td>
</tr>
<tr>
<td></td>
<td>currency.</td>
</tr>
</tbody>
</table>

**Note:** While importing or exporting projects, if you use a screen reader application, ensure that the focus is on the Transfer Report to read the details of your project transfer.

Exporting Project Plan and Scheduling Information

Export your project plan to Project Management work area after initial scheduling is complete in Microsoft Project and you have fixed all errors identified during prevalidation.

The WBS column values from Microsoft Project are exported as task numbers to Project Management work area. You can enter alpha numeric characters or use the auto-generated values for WBS in Microsoft Project.

Important attributes exported or recreated at the task level include task number (WBS), task name and dates, task codes, dependencies, constraints, and milestone indicators. A Microsoft Project task should have a contiguous assignment as Oracle Project Management Cloud application doesn’t support split tasks; subsequently scheduling in Oracle Project Management Cloud application will use the original duration to calculate the dates. The following table describes the constraints and dependencies that are supported in Oracle Project Management Cloud.

<table>
<thead>
<tr>
<th>Predecessor</th>
<th>Successor</th>
<th>Dependencies Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>Task</td>
<td>Finish-to-start, Finish-to-finish, Start-to-start, and Start-to-finish</td>
</tr>
<tr>
<td>Task</td>
<td>Milestone</td>
<td>Finish-to-finish and Start-to-finish</td>
</tr>
<tr>
<td>Milestone</td>
<td>Task</td>
<td>Finish-to-start and Finish-to-finish</td>
</tr>
<tr>
<td>Milestone</td>
<td>Milestone</td>
<td>Finish-to-finish</td>
</tr>
</tbody>
</table>
The task date constraints are recreated in Oracle Project Management Cloud based on the mappings as listed in the following table.

<table>
<thead>
<tr>
<th>Microsoft Project Constraint Type</th>
<th>Oracle Project Management Cloud Constraint Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Late As Possible</td>
<td>No constraint created in Oracle Project Management Cloud</td>
</tr>
<tr>
<td>As Soon As Possible</td>
<td>No constraint created in Oracle Project Management Cloud</td>
</tr>
<tr>
<td>Finish No Earlier Than</td>
<td>Finish On or After</td>
</tr>
<tr>
<td>Finish No Later Than</td>
<td>Finish By</td>
</tr>
<tr>
<td>Must Finish On</td>
<td>Finish On</td>
</tr>
<tr>
<td>Must Start On</td>
<td>Start On</td>
</tr>
<tr>
<td>Start No Earlier Than</td>
<td>Start On or After</td>
</tr>
<tr>
<td>Start No Later Than</td>
<td>Start By</td>
</tr>
</tbody>
</table>

When exporting milestone tasks, ensure that the tasks:

- Are lowest-levels task with zero duration, that's, the same start and finish dates.
- Have only one labor resource assignment with zero effort.
- Have percent work complete values of 0 or 100 percent. Any other values are set to zero before export.

When exporting projects to Project Management work area, Microsoft Project 2010 or later versions export the tasks based on various conditions as given in the following table.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive tasks</td>
<td>Doesn’t export.</td>
</tr>
<tr>
<td>Manual tasks</td>
<td>Exports. If the manual task has invalid dates, such as text entries, Microsoft Project exports the dates and duration as blank.</td>
</tr>
<tr>
<td>Manual tasks with predecessor dependencies</td>
<td>Exports tasks without predecessor dependencies.</td>
</tr>
<tr>
<td>Summary tasks</td>
<td>Exports as automatic scheduled tasks. If the dates are missing, Project Management automatically populates them. You must roll up the tasks in Project Management because of the change in the schedule mode of summary tasks</td>
</tr>
</tbody>
</table>
### Exporting Resource Assignments

Important attributes transferred or recreated at the resource assignment level when you export projects include the resource name, planned dates, and total planned work and remaining work. The task type of all exported tasks is set to Fixed Effort in Project Management work area, which corresponds to the Microsoft Project task type of Fixed Work. However, resource assignment dates aren’t revised based on task type in Project Management work area until you explicitly roll up data or schedule tasks.

Resources, such as task managers, that you assign to summary tasks must have zero allocation. Otherwise, the prevalidation check reports an error.

*Note:* The Peak value of a task resource assignment is exported when exporting the resource assignment from Microsoft Project to Project Management work area.

### Exporting Resource Information

When exporting, only resources with task assignments are exported. The following table describes how resources are exported.

<table>
<thead>
<tr>
<th>Oracle Project Management Cloud Resource Type</th>
<th>Microsoft Project Resource Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor</td>
<td>Work</td>
<td>Resources associated with resource assignments are linked to existing project enterprise labor resources if the e-mail address provided in Microsoft Project and Oracle Project Management Cloud match. Otherwise, a new planned resource is created at the project level in Oracle Project Management Cloud.</td>
</tr>
<tr>
<td>Expense</td>
<td>Cost</td>
<td>Resources are linked to existing project enterprise resources if the names match. Otherwise, a new project enterprise resource is created in Oracle Project Management Cloud.</td>
</tr>
</tbody>
</table>
Microsoft Project Prevalidation Messages

Use prevalidation messages to identify errors that prevent export of your project plan from Microsoft Project to Oracle Fusion Project Management. You must fix all errors before exporting a project.

Identify tasks with prevalidation errors using the indicators in the Exception column in the Gantt Chart view of Microsoft Project.

Following is a brief description of the prevalidation checks.

**Tip:** After export, review the transfer report to determine if errors or warnings occurred for checks other than those performed during prevalidation.

### Prevalidation Checks

The following table describes prevalidation rules for tasks and resource assignments.

<table>
<thead>
<tr>
<th>Level</th>
<th>Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest-level tasks</td>
<td>One labor and multiple expense resources are allowed for a lowest-level task. Remove other resources.</td>
</tr>
<tr>
<td>Summary tasks</td>
<td>Only one labor resource with zero allocation is allowed for a summary task. Remove all other resources.</td>
</tr>
<tr>
<td>Milestone tasks</td>
<td>No subtasks are allowed under milestone tasks. Milestones must be lowest-level tasks.</td>
</tr>
<tr>
<td>Milestone tasks</td>
<td>Milestone tasks must have zero duration.</td>
</tr>
<tr>
<td>Milestone tasks</td>
<td>Only one labor resource, with zero effort, is allowed for a milestone task. Remove all other resources.</td>
</tr>
</tbody>
</table>

How Project Execution Management Works with Oracle E-Business Suite

Project managers can use the coexistence of Project Execution Management applications and Oracle E-Business Suite Projects to:

- Create a project plan in the Project Management work area.
- Import the financial tasks to Oracle E-Business Suite Projects.
- Plan for project resources in the Project Resources work area and import them to Oracle E-Business Suite Projects.
- Create project-level budgets in Oracle Project Planning and Control.
- Execute the project in the Project Execution Management applications and update or add financial tasks.
• Capture actual costs and perform costing in Oracle E-Business Suite Projects.
• Export actual hours to Project Resource Management for reporting on resource utilization.

The following figure shows how you can use the Project Execution Management applications to create projects, assign resources, and calculate their utilization. You can use Oracle E-Business Suite Projects to import financial tasks, create budgets, and capture the actual hours that resources work on projects.

Creating a Project Plan
Create your project in the Project Management work area and specify the start and end dates. You can:

• Create a project plan including financial tasks
• Create detailed tasks and assign resources to tasks
• Schedule the project plan to ensure task dates roll up to the project level

You can also use work plan templates to create projects with tasks containing effort, resources, and dependencies.

Importing Financial Tasks
After you import financial tasks to Oracle E-Business Suite Projects, the tasks are marked as **Integrated** in the Project Management work area. Integrated tasks in the Project Management work area follow these rules:

• You can't delete an integrated financial task.
• You can't change the summary task or the task number of an integrated financial task.
• You can change task attributes, such as task name, description, dates, effort, resource, chargeable, and billable for an integrated financial task.
Planning for Project-Level Resource Assignments

Project managers can plan for labor and expense resources and submit requests for labor resources to resource managers in the Project Resources work area. Resource managers can:

- Track and approve resource requests.
- Find the most suitable resources using resource scores based on the skills and availability of resources.

Importing Project-Level Resource Assignments and Creating a Project-Level Budget

After you complete resource planning, Oracle Project Planning and Control imports the resources in the following manner to create a project-level budget:

- Project-level assignments of named-person resources are identified by their e-mail IDs, and imported as labor resource assignments.
- Project-level assignments of labor resources for planning purposes are grouped by their role, and imported as project role assignments.
- Project-level expense resources are grouped by expenditure types.

You can choose to retain the resource rates available in the Project Execution Management applications or replace them with rate schedules in Oracle Project Planning and Control.

Note: Ensure that the financial plan type is enabled for project-level budgeting before importing project-level resource assignments.

After you import expense and labor resources to Oracle Project Planning and Control, the application does the following:

- Adds the imported resources in the planning resource list if they aren’t already available.
- Creates a project-level budget in Draft status in Oracle Project Planning and Control. You can select any budget version as Current.
- Spreads the resource assignment amounts between the start and end dates of the resource assignment.
- Creates a new budget version every time you import expense and labor resources.

Executing the Project

Project managers execute the project in the Project Management work area and create detailed tasks for assigning work to team members. Team members can:

- Collaborate on tasks with project managers and other team members.
- Enter task progress.

Project managers track the progress of tasks and deliverables.

To ensure that the project information is updated in Oracle E-Business Suite Projects, you must schedule to run the Import Project from Oracle Fusion Projects process periodically. The process also imports any new financial tasks that are added in the Project Execution Management applications.
Capturing Actual Costs
Team members submit time cards for approval in Oracle E-Business Suite Projects. The application captures all project-related costs and accounts for cost of labor and expenses.

Exporting Actual Hours for Reporting Resource Utilization
Project managers can additionally export the actual hours for reporting on resource utilization using the Resource Management dashboard and Oracle Transactional Business Intelligence. The Resource Management dashboard uses the available project-level resource assignment information and the exported actual hours from Oracle E-Business Suite Projects to calculate actual utilization of the shared labor resources.

Related Topics
- Manage Project Resources Business Process
- How Resource Actual Utilization Is Calculated
4 Project Resource Management Configuration

Overview of Define Project Resource Management Configuration

In the Define Project Resource Management Configuration activity, you configure Oracle Fusion Project Resource Management to manage the availability and staffing of resources, fulfill project resource requests, and monitor resource utilization. This activity contains advanced setup tasks that aren’t required for a typical implementation of Project Execution Management applications.

The following table describes the tasks and task lists within the Define Project Resource Management Configuration activity.

<table>
<thead>
<tr>
<th>Task or Task List</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Project Resource Management Implementation Options</td>
<td>Specify options used to control workflow notifications.</td>
</tr>
<tr>
<td>Define Attributes for Employees and Contingent Workers in Human Capital Management</td>
<td>Define the attributes that are required to manage employees and contingent workers in Oracle Fusion Human Capital Management, such as legislative data groups, business units, legal addresses, legal entities, legal entity HCM information, departments, and jobs.</td>
</tr>
<tr>
<td>Define Project Enterprise Labor Resources</td>
<td>Define project enterprise labor resources to use in Oracle Fusion Project Resource Management.</td>
</tr>
<tr>
<td>Manage Target Utilization Percentages</td>
<td>Configure the enterprise target utilization percentage and job-level percentage overrides.</td>
</tr>
<tr>
<td>Manage Standard Lookups</td>
<td>Create and update the project assignment reservation reasons.</td>
</tr>
<tr>
<td>Manage Project Resource Management Descriptive Flexfields</td>
<td>Define validation and display properties of descriptive flexfields, which are used to add attributes to project resource requests.</td>
</tr>
<tr>
<td>Manage Attributes for Project Resource Requests</td>
<td>Create and update attributes to capture additional details for project resource requests using free text, date, or numeric data type.</td>
</tr>
</tbody>
</table>

Note: This task is outside of the Project Resource Management functional area of the Setup and Maintenance work area.
**Oracle Project Portfolio Management Cloud**

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**Project Resource Management Configuration**

<table>
<thead>
<tr>
<th>Task or Task List</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Project Resource Management Attachment Categories</td>
<td>Review and manage attachment categories for Oracle Fusion Project Resource Management.</td>
</tr>
<tr>
<td>Manage Resource Staffing Statuses</td>
<td>Create and update staffing statuses for project manager or resource manager to add to a nominated resource for a resource request to communicate the evaluation progress of resource request.</td>
</tr>
</tbody>
</table>

**Related Topics**

- How can I edit the list of valid assignment reservation reasons

### Project Resource Management Implementation Options

#### Workflow Notifications in Project Resource Management

Send notifications when you submit project resource requests, propose, approve, or adjust resource assignments, or change resource staffing options.

The aspects of resource management notifications include:

- Actions that trigger notifications
- Notification settings
- Workflow notification example

#### Actions That Trigger Notifications

The following table lists the actions that trigger notifications, the notification recipient, and the next step for the recipient.

<table>
<thead>
<tr>
<th>Action Performed By</th>
<th>Action</th>
<th>Recipient</th>
<th>Required Action for Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project resource requester</td>
<td>Submit project resource request for fulfillment</td>
<td>Staffing owner and other recipients specified in the workflow configuration</td>
<td>Information only</td>
</tr>
<tr>
<td></td>
<td>Approve or reject proposed resource for assignment</td>
<td></td>
<td>Approve or reject assignment schedule change (for submitted assignment schedule changes)</td>
</tr>
<tr>
<td></td>
<td>Submit assignment schedule change</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cancel assignment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project resource requester</td>
<td>Approve resource for assignment</td>
<td>Resource</td>
<td>Information only</td>
</tr>
<tr>
<td></td>
<td>Adjust assignment schedule or cancel assignment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**ORACLE**

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### Project Resource Management Configuration

<table>
<thead>
<tr>
<th>Action Performed By</th>
<th>Action</th>
<th>Recipient</th>
<th>Required Action for Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing owner</td>
<td>Propose resource to fulfill assignment</td>
<td>Project resource requester and other recipients specified in the workflow configuration</td>
<td>Approve or reject the proposed resource, assignment schedule change, and assignment cancellation</td>
</tr>
<tr>
<td></td>
<td>Submit assignment schedule change</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submit assignment cancellation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrator</td>
<td>Deselect the Manage Resource Availability and Staffing option in the resource definition</td>
<td>Resource pool owner</td>
<td>Information only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project managers for projects where the resource is a team member</td>
<td></td>
</tr>
<tr>
<td>Administrator</td>
<td>Enter a To Date in the resource definition to set a date when the resource is no longer available for staffing</td>
<td>Project managers for projects where the resource is a team member</td>
<td>Information only</td>
</tr>
<tr>
<td>Staffing owner</td>
<td>Submit and approve project resource assignment</td>
<td>Project resource requester</td>
<td>Information only</td>
</tr>
<tr>
<td>Staffing owner</td>
<td>Submit assignment adjustment or cancellation</td>
<td>Project resource requester</td>
<td>Approve or reject the assignment adjustment or cancellation</td>
</tr>
</tbody>
</table>

### Notification Settings

Enable notifications by selecting the following options on the Manage Project Resource Management Implementation Options page:

- Notify staffing owner when a project resource request is submitted
- Notify requester when a resource is proposed to fulfill a project resource request

**Tip:** If you don’t enable this workflow implementation option, the requester can still approve or reject the resource on the project resource request.

- Notify resource when a project resource assignment is created or adjusted

Workflow notifications are automatically enabled to notify a resource pool owner and project managers when a resource is no longer eligible to fulfill project resource requests. No implementation setup is required for this type of workflow.

### Workflow Notification Example

This example describes a project resource request flow that uses workflow notifications. The example describes the activities of a requester, the application, and a staffing owner, and the associated workflow notifications.

In the following figure:

1. A project manager submits a request for a new project resource.
2. The resource manager searches for qualified, available candidates and finds a resource that is a good match for the project.
3. The resource manager proposes the resource for a confirmed assignment and submits the request for the project manager to approve the proposed resource.

4. The project manager receives an email notification requesting approval of the resource, and approves the resource. This action fulfills the project resource request, confirms the resource on a project assignment, and launches an email notification to inform the resource and resource manager that the resource is approved.

Example Project Resource Request Flow with Workflow

Requester
- Submits project resource request for fulfillment
- Receives the e-mail notification for the proposed resource
- Approves the resource assignment directly from the e-mail

Application
- Changes request status to Open
- Changes request status to Proposed for Confirmed Assignment
- Sends a workflow notification to the requester

Staffing Owner
- Evaluates resources and finds a suitable candidate
- Proposes resource for a confirmed assignment and submits for approval
- Receives the e-mail notification for the confirmed resource

Requester
- Approves the resource assignment directly from the e-mail
- Receives the e-mail notification for the confirmed resource
Configurable Resource Management Approval Workflow Rules: Explained

When approval requirements for proposed resource assignments or assignment adjustments are beyond the project resource requester or staffing owner approval, you can edit the approval flow and configure rules that determine your approvers. Project application administrators can configure additional business routing rules for the Proposed Resource Approval workflow so that resource assignments are routed to the appropriate persons for approval.

The aspects of resource management approval workflow rules that are discussed in this topic include:

- Use cases and examples
- Request Proposed Resource Approval composite
- Approve a Proposed Resource task
- Notify Participant of Rejection or Approval of Proposed Resource task
- Structured definitions
- Workflow participants

Use Cases and Examples

Use the Oracle BPM Worklist application > Task Configuration task flow to review and modify approval workflow to support these use cases:

- Route proposed resource or assignment adjustment approval notifications sequentially to a hierarchy of users with approval authorization, such as line managers and the managers to whom they report.
- Route proposed resource or assignment adjustment approval notifications in parallel to users with different roles, such as resource pool owners and staffing owners.
- Route proposed resource or assignment adjustment approval notifications to a single or list of approvers for situations when no one else is identified through other rules.

These are examples of scenarios that are made possible with business routing rules:

- If a proposed resource has a line manager, then the line manager must approve all confirmed and reserved assignments, as well as assignment adjustments, for the resource.
- If the target bill rate on the request is lower than the proposed resource's cost rate, then the resource's line manager must approve the assignment.
- If the requested hours exceed a specified amount, for example 400 hours, then notify the resource's pool owner when a resource is confirmed for the assignment.

Request Proposed Resource Approval Composite

The Request Proposed Resource Approval workflow composite contains two tasks that you can view or modify in Oracle BPM Worklist:

- Approve a proposed resource (ApproveProposeResource task)
- Notify a participant of a rejection or approval of the proposed resource (NotificationProposeResource task)

Both tasks in this workflow composite include assignment adjustments.

The following two sections list information about each participant that's delivered for the tasks in this composite.
Approve a Proposed Resource Task
Stage 1 participants are delivered for the task to approve a proposed resource.

The following table includes the rule type, rule set, sample rules, and indicates if the participants are delivered active by the application for Stage 1 participants.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Rule Type</th>
<th>Delivered Active or Inactive</th>
<th>Rule Set</th>
<th>Sample Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requester Participant (RequesterParticipant)</td>
<td>Single</td>
<td>Active</td>
<td>Requester Participant</td>
<td>RequesterParticipantRuleSet</td>
</tr>
<tr>
<td>Resource Approval Parallel Participant (ResourceApprovalParallelParticipant)</td>
<td>Parallel</td>
<td>Inactive</td>
<td>Resource Proposal Parallel Approval</td>
<td>ResourceProposalParallelApprovalRuleSet</td>
</tr>
<tr>
<td>Adjusted Assignment Requester Participant (AdjustedAssignmentRequest)</td>
<td>Single</td>
<td>Active</td>
<td>Adjusted Assignment Requester Participant</td>
<td>AdjustedAssignmentRequesterRuleSet</td>
</tr>
</tbody>
</table>

- Proposed Resource Requester Approval Rule (SoaOLabel.ProposedResourceRequesterApprovalRule)
- Proposed Resource Without Requester Approval Rule (SoaOLabel.ProposedResourceWithoutRequesterApproval)
- Proposed Resource Line Manager Parallel Approval Rule (SoaOLabel.ProposedResourceLineManagerParallelApprovalRule)
- Proposed Resource Without Manager Parallel Approval Rule (SoaOLabel.ProposedResourceWithoutManagerParallelApproval)
- Proposed Resource FYI Rule (SoaOLabel.ProposedResourceFYIRule)
- Adjusted Assignment Schedule Primary Project Manager Approval Rule (SoaOLabel.AdjustedAssignmentSchedulePrimaryProjectManagerApprovalRule)
- Adjusted Assignment Schedule Staffing Owner

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Project Resource Management Configuration
<table>
<thead>
<tr>
<th>Participant</th>
<th>Rule Type</th>
<th>Delivered Active or Inactive</th>
<th>Rule Set</th>
<th>Sample Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Assignment Approval Parallel Participant</td>
<td>Parallel</td>
<td>Inactive</td>
<td>Adjusted Assignment Approval Parallel Participant</td>
<td>Adjusted Assignment Schedule Without Manager Approval Rule (SoaOLabel.AdjustedAssignmentScheduleWithoutManager)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Canceled Assignment Project Enterprise Resource Manager Approval Rule (SoaOLabel.CanceledAssignmentProjectEnterpriseResource)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Canceled Assignment Without Manager Approval Rule (SoaOLabel.CanceledAssignmentWithoutManager)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skip Participants for Proposed Resource Approval Rule (SoaOLabel.SkipParticipantsforProposedResourceApproval)</td>
</tr>
</tbody>
</table>
The following table lists the Stage 2 participants that are delivered for the task to approve a proposed resource. The table includes the rule type, rule set, sample rules, and indicates if the participants are delivered active by default in the application.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Rule Type</th>
<th>Delivered Active or Inactive</th>
<th>Rule Set</th>
<th>Sample Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Assignment Serial Approval Stage 2 Participant</td>
<td>Serial</td>
<td>Active</td>
<td>Adjusted Assignment Serial Approval Stage 2 Participant rule set</td>
<td>(AdjustedAssignmentSerialApprovalStage2ParticipantRuleSet)</td>
</tr>
</tbody>
</table>

**Notify Participant of Rejection or Approval of Proposed Resource Task**

Participants are delivered for the task to notify the participant of a rejection or approval of a proposed resource.

The following table lists the participant, rule type, rule set, sample rule, and indicates if the participants are delivered active by default in the application.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Rule Type</th>
<th>Delivered Active or Inactive</th>
<th>Rule Set</th>
<th>Sample Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing Owner Participant</td>
<td>FYI</td>
<td>Active</td>
<td>Notification Participant rule set</td>
<td>(NotificationParticipantRuleSet)</td>
</tr>
</tbody>
</table>

- Skip Participants for Proposed Resource Notification Rule (SoaOLabel.SkipParticipantsForProposedResourceNotificationRule)
- Proposed Resources for Multiple Resource Request Requester Notification Rule (SoaOLabel.ProposedResourcesForMultipleResourceRequesterNotificationRule)
- Proposed Resources for Multiple Resource Request Requester Notification Rule (SoaOLabel.ProposedResourcesForMultipleResourceRequesterNotificationRule)
<table>
<thead>
<tr>
<th>Participant</th>
<th>Rule Type</th>
<th>Delivered Active or Inactive</th>
<th>Rule Set</th>
<th>Sample Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Assignment Notification Participant</td>
<td>FYI</td>
<td>Active</td>
<td>Adjusted Assignment Notification Participant rule set</td>
<td>Adjusted Assignment Schedule Resource Management Requester Notification Rule (SoaOLabel.AdjustedAssignmentNotification)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Adjusted Assignment Schedule Project Management Requester Notification Rule</td>
<td>Adjusted Assignment Schedule Primary Project Manager Notification Rule (SoaOLabel.AdjustedAssignmentSchedulePrimaryProjectManager)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Canceled Assignment Requester Notification Rule</td>
<td>Canceled Assignment Requester Notification Rule (SoaOLabel.CancelAssignmentRequesterNotification)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Canceled Assignment Staffing Owner Notification Rule</td>
<td>Skip Participants for Adjusted Assignment Notification Rule (SoaOLabel.SkipParticipantsforAdjustedAssignment)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Resource Manager Adjusted Assignment Notification to Primary Project Manager</td>
<td>Resource Manager Adjusted Assignment Notification to Primary Project Manager Rule (SoaOLabel.ResourceManagerAdjustedAssignmentPrimaryProjectManager)</td>
</tr>
</tbody>
</table>
Structured Definitions

To configure the business routing rules, access the payload path: `Task.payload.process.processRequest`.

In this payload you have access to the following structured definitions that contain data that you can use to configure business routing rules. The list includes the structured definition payload location.

- **Request Details (`requestDetails`)**
  - `Task.payload.process.processRequest.requestDetails`

- **Resource Information (`resourceInformation`)**
  - `Task.payload.process.processRequest.resourceInformation`

- **Qualifications (`qualifications`)**
  - `Task.payload.process.processRequest.qualifications`

- **Keywords (`keywords`)**
  - `Task.payload.process.processRequest.keywords`

This list contains examples of data contained in the structured definitions that you can use to configure business routing rules.

- Assignment duration
- Assignment total hours
- Project name
- Project number
- Project organization for the project
- Project status
- Proposed resource
- Request location
- Requested project role
- Requested qualification
- Requested resource
- Requested target cost rate, bill rate, and currency
- Resource cost rate, bill rate, and currency
Workflow Participants
This list contains the participants and corresponding payload locations that you can use to configure business routing rules.

- **Line manager**
  - Task.payload.process.processRequest.resourceInformation.lineManagerInformation.userName

- **Manager from project enterprise resource definition**
  - Task.payload.process.processRequest.resourceInformation.personManagerInformation.userName

- **Pool owner for proposed resource**
  - Task.payload.process.processRequest.resourceInformation.poolOwnerInformation.userName

- **Primary project manager on the project**
  - Task.payload.process.processRequest.resourceInformation.primaryProjectManagerInformation.userName

- **Requester**
  - Task.payload.process.processRequest.requestDetails.requestorInformation.userName

- **Resource**
  - Task.payload.process.processRequest.resourceInformation.resourceInformation.userName

- **Staffing owner**
  - Task.payload.process.processRequest.requestDetails.staffingOwnerInformation.userName

- **Primary staffing owner on the project**
  - Task.payload.process.processRequest.requestDetails.primaryStaffingOwnerInformation.userName

Related Topics
- Oracle Fusion Middleware Developing SOA Applications with Oracle SOA Suite

Attributes for Employees and Contingent Workers in Human Capital Management

Overview of Attributes for Employees and Contingent Workers in Human Capital Management

Using the workforce deployment business process area, your enterprise can align resources and people with business objectives, and enter and maintain information related to people, employment, and work structures.

The first implementation step is to configure the offering in the Setup and Maintenance work area by selecting the offering, functional areas, and features that you want to make available to implement.
This table describes the project-related functional areas for the Workforce Deployment offerings:

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Legislative Data Groups</td>
<td>Create and manage the legislative data groups in which you separate payroll information within a legal entity.</td>
</tr>
<tr>
<td>Manage Business Unit</td>
<td>Create and maintain information on units of an enterprise to allow for flexible implementation, to provide a consistent entity for controlling and reporting on transactions, and to be an anchor for the sharing of reference data sets across applications.</td>
</tr>
<tr>
<td>Manage Legal Addresses</td>
<td>Create the address a legal entity uses to register with a legal authority. Legal entities can use different addresses for different authorities and hence, may have more than one registered address. The legal address must be located within the territory entered.</td>
</tr>
<tr>
<td>Manage Legal Entity</td>
<td>Create and maintain information for legal entities and legal reporting units to achieve legal compliance for business activities handled by the Oracle Fusion applications.</td>
</tr>
<tr>
<td>Manage Legal Entity HCM Information</td>
<td>Manage legal reporting units, also known as tax reporting units, to group employee records for tax and social reporting.</td>
</tr>
<tr>
<td>Manage Departments</td>
<td>Create and manage the organizations to which workers can be assigned.</td>
</tr>
<tr>
<td>Manage Job</td>
<td>Create and manage jobs.</td>
</tr>
</tbody>
</table>

See the following guides for more details.

- Implementing Global Human Resources
- Implementing Common Features

**Related Topics**

- Overview
- Legislative Data Groups

**Project Enterprise Labor Resources**

**Project Enterprise Labor Resource Components**

A project enterprise labor resource is a resource that you can assign to multiple projects. If you manage resource availability and staffing in Project Resource Management, use project enterprise labor resources to fulfill project resource requests.

Consider the following attributes and options when creating a resource in the Create Project Enterprise Resources window:

- Resource details
- Personal details
- Resource Management details
• Rate details

Resource Details
Resource details include the following attributes:

• **Type**
  You can create both labor and expense type resources to add to a project.

  Select the **Create from expenditure type** option to create an expense resource from an expenditure type in Project Financial Management.

• **Create From HCM Person**
  Select this option to create a project enterprise labor resource from an employee or contingent worker in Oracle Fusion HCM.

  **Note:** The employee or contingent worker must have a unique e-mail in a valid format and an active primary assignment in HCM.

• **From Date** and **To Date**
  The resource’s **From Date** is the date from which you can assign the resource to a project. The **To Date** is the last date that you can assign the resource to a project.

• **Request User Account** and **Provision Project Roles**
  Select these options to request a user account for a new resource and provision the resource with default role assignments. You can request a user account only for a resource who isn’t associated with an employee or contingent worker in HCM.

  Click **Activate User Account** to request a user account for an existing resource. This action provisions the default role assignments for the resource and sends the resource an e-mail notification.

Personal Details
Personal details include the following attributes:

• **Calendar**
  Resource calendars are used to:
  
  o Determine resource availability
  o Schedule tasks
  o Assign resources to tasks
  o Calculate cost and bill amounts based on hourly rates

  Daily work on a resource’s calendar is measured in hours per day. Task duration is measured in days.

  You set up calendars to assign to projects and resources, or use the predefined calendar with eight hours per day and five days per week with no holidays. You select the default calendar on the Define Project Management Implementation Options page.

• **Primary Project Role**
The primary project role is the role that a resource most often fulfills on a project. The default value is Team Member.

- **Resume Attachments**

  The application searches the text in a resource resume to find matches for keywords that are entered as requirements on a project resource request. The keyword occurrences are used in the resource qualification score calculation that indicates how well a resource meets the requested qualifications.

**Resource Management Details**

Resource Management details consist of the following attributes:

- **Manage Resource Availability and Staffing**

  Select this option for the resource to be eligible to fulfill project resource requests in Oracle Fusion Project Resource Management.

- **Resource Pool**

  You must select a resource pool if you select the **Manage resource availability and staffing** option. The default resource pool value is Resources with No Pool Membership.

- **Membership From Date**

  A resource's first pool membership from date must be equal to or later than the resource from date.

  **Tip:** Manage pool memberships for a resource on the Manage Resource Pool Memberships window.

**Rate Details**

The rate types on a resource definition are:

- **Cost Rate**: The rate for a unit of work that determines the cost for a resource on a project. To calculate the resource cost amount, the application multiplies the resource's labor effort in hours on the project by the resource's cost rate.

- **Bill Rate**: The rate for a unit of work that determines the invoice or revenue recognized amount for a resource on a project. To calculate the bill amount for a resource on a project, the application multiplies the labor effort by the project resource bill rate.

When you add a planning resource to a project, the application copies the resource cost and bill rates to the project if the resource rate currency is the same as the project currency.

You can edit planning resource rates directly on the project. You can edit rates for assigned resources, or resources who have pending assignment adjustments, directly on the assignment. The new rates are reflected in the labor cost and bill amounts on the resource's tasks. Rate changes that you make on the project or assignment don't affect the rates on the resource definition.

**Related Topics**

- Project and Resource Calendars

- How can I attach a resume to my resource profile
Project Enterprise Labor Resource Maintenance Conditions

How Project Enterprise Labor Resources are Maintained
Run the Maintain Project Enterprise Labor Resources process to:

• Create or update resources from employees or contingent workers
• Remove resource availability for staffing from employees or contingent workers
• Update the resource To Date for terminated employees or contingent workers
• Maintain the resource search index

Settings That Affect the Maintain Project Enterprise Labor Resources Process
Create and maintain project enterprise labor resources by defining:

• Conditions that specify the employees and contingent workers in Oracle Fusion Human Capital Management (HCM) to create as resources in Oracle Fusion Project Portfolio Management
• Resource attribute values for each condition, such as the resource calendar and primary project role, to assign to the new resources
• The process order for each condition to determine the order in which the Maintain Project Enterprise Labor Resources process creates resources

The following table lists the criteria that the process uses to select employees and contingent workers to create as project enterprise labor resources. You define the criteria when you create a condition.

<table>
<thead>
<tr>
<th>Selection Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person Type</td>
<td>Create resources for people with the selected person types. Available person types are employees, contingent workers, or both employees and contingent workers.</td>
</tr>
<tr>
<td>Business Unit</td>
<td>Creates resources for people who are assigned to the selected business unit.</td>
</tr>
<tr>
<td>Organization</td>
<td>Creates resources for people who are assigned to the selected organization.</td>
</tr>
<tr>
<td>Jobs</td>
<td>The jobs that the process uses as selection criteria if you’re creating resources for people with specific jobs.</td>
</tr>
</tbody>
</table>

The following table lists the values that the process assigns to resources that it creates.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage resource availability and staffing</td>
<td>If you select Manage resource availability and staffing:</td>
</tr>
<tr>
<td></td>
<td>• The resource is eligible to fulfill project resource requests.</td>
</tr>
<tr>
<td></td>
<td>• The process adds the resource to the resource pool specified in the Resource Pool Name field. The project application administrator can move the resource to a different pool on the Manage Resource Pools page or Manage Project Enterprise Resources page.</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Resource Pool Name</td>
<td>Assign resources to a specific resource pool. The default resource pool value is Resources with No Pool Membership.</td>
</tr>
<tr>
<td>• Calendar</td>
<td>Specify a value for each attribute.</td>
</tr>
<tr>
<td>• Primary Project Role</td>
<td></td>
</tr>
<tr>
<td>• Cost Rate and currency</td>
<td></td>
</tr>
<tr>
<td>• Bill Rate and currency</td>
<td></td>
</tr>
<tr>
<td>• From Date</td>
<td>The process assigns dates in the following circumstances to indicate when a resource is active:</td>
</tr>
<tr>
<td>• To Date</td>
<td>• New resources:</td>
</tr>
<tr>
<td></td>
<td>◦ For the resource <strong>From Date</strong>, the process uses the hire date for an employee and placement date for a contingent worker.</td>
</tr>
<tr>
<td></td>
<td>◦ The process doesn’t assign a <strong>To Date</strong> to new resources.</td>
</tr>
<tr>
<td></td>
<td>• Existing resources if a termination date exists in HCM, and the termination date is on or before the system date:</td>
</tr>
<tr>
<td></td>
<td>◦ If the resource doesn’t have a <strong>To Date</strong>, the process uses the termination date as the resource <strong>To Date</strong>.</td>
</tr>
<tr>
<td></td>
<td>◦ If the resource has a <strong>To Date</strong>, the process updates the <strong>To Date</strong> only if the termination date is earlier than the <strong>To Date</strong>.</td>
</tr>
</tbody>
</table>

How Resources are Created

Click **Maintain Project Enterprise Labor Resources** on the Manage Project Enterprise Labor Resource Maintenance Conditions page in the Setup and Maintenance work area to run the process. Select one or all of the following process options in the Maintain Project Enterprise Labor Resources window:

- **Create Resources**: Creates project enterprise labor resources from employees or contingent workers who meet the selection criteria for a condition.

  When you select the **Create Resources** option, the process:
  
  - Includes all conditions on the Maintain Project Enterprise Labor Resources Process Conditions page each time the process runs.
  - Processes conditions in ascending order of the process order value. Multiple conditions with the same process order value are processed in ascending alphabetic order of the condition name.
  - Lists the process exceptions in the Last Process Details section of the Manage Project Enterprise Labor Resource Maintenance Conditions page.

- **Update Resources**: Updates existing project enterprise labor resource with changes to the following resource attributes that occurred in HCM:
  
  - Image (photograph)
  - Name
  - Email address

- **Remove Resource Availability**: Disables the option to manage resource availability and staffing for all project enterprise labor resources who are employees or contingent workers and have no active primary assignment in HCM.
When you select the **Remove Resource Availability** option, the process:

- Disregards resources who aren’t employees or contingent workers when determining if a resource has an active primary assignment in HCM.
- Sends resource pool owners a notification when resources in their pools are no longer eligible to fulfill project resource requests.

The Maintain Project Enterprise Labor Resources process launches the Maintain Project Resource Search Index Job Set process to update the search index that enables resources to appear on the Search and Evaluate Resources page when searching for resources to fulfill project resource requests.

*Note:* You aren’t required to run the Maintain Project Enterprise Labor Resources process before you update the search index. You can run the Maintain Project Resource Search Index Job Set separately from the Scheduled Processes page.

**Related Topics**
- Manage Maintenance Conditions for Project Enterprise Labor Resource

**Maintain Project Enterprise Labor Resources Report**

Use the Maintain Project Enterprise Labor Resources Report to review the imported and updated project enterprise labor resources that were processed during the Maintain Project Enterprise Labor Resources job. The report provides a summarized view for items that were processed successfully, with warnings, and with errors.

The report also provides detailed descriptions along with error messages for ineligible resources that weren’t processed. Review and take action on any errors that occurred while running the Maintain Project Enterprise Labor Resources job.

Open the report from either the Scheduled Processes page or the Reports and Analytic work area.

To obtain results for this report, you must:

- Have a project enterprise labor resource maintenance condition already created in the Setup and Maintenance work area.
- Submit the Maintain Project Enterprise Labor Resources job.

You can submit the Maintain Project Enterprise Labor Resources job from any of these locations:

- The Scheduled Processes page.
- The Manage Project Enterprise Labor Resources Maintenance Conditions page in the Setup and Maintenance work area.
- The **Submit Process to Maintain Project Enterprise Labor Resources** task in the Setup and Maintenance work area. This task is part of the Project Resource Management functional area within the Project Execution Management offering.

**Report Results**

The following sections are included in the Maintain Project Enterprise Labor Resources report:

- Error Report
- Message Details
- Success Report for Imported Project Enterprise Labor Resources
- Success Report for Updated Project Enterprise Labor Resources
Error Report
The Error Report section describes all HCM persons in the project enterprise labor resource maintenance condition who received an error during the job. To understand the reason for each error, review the message name and message details.

Message Details
The Message Details section describes the details of error messages associated with each ineligible HCM person who wasn’t processed during the job. Use this information to research and resolve the conditions that prevented the creation or update of project enterprise labor resources.

Success Report for Imported Project Enterprise Labor Resources
The Success Report for Imported Project Enterprise Labor Resources section contains a list of each new project enterprise labor resource that was created from an HCM person during the job. To obtain results in this section, you must select the option to create resources when you submit the Maintain Project Enterprise Labor Resources job.

Success Report for Updated Project Enterprise Labor Resources
The Success Report for Updated Project Enterprise Labor Resources section contains a list of each project enterprise labor resource that was successfully updated due to a change in the person’s HCM attributes. To obtain results in this region, you must select the option to update resources when you submit the Maintain Project Enterprise Labor Resources job.

Related Topics
- Process Output Reports
- Business Intelligence Catalog

Resource Pools

Resource Pools
A resource pool is a logical group of resources organized in a hierarchy for purposes of staffing and managing resources, and reporting on utilization.

Resource managers use resource pools to:
- Search for resources to fulfill project resource requests.
- Review projected utilization on the Resource Manager Dashboard.

Aspects of resource pools explained here include:
- Predefined resource pools
- Resource pool memberships
- Resource pool hierarchies
- Resource pool owners
- Resource pool managers
- Secured resource pools
Predefined Resource Pools
The following pools are predefined:

- **All Resources**
  This pool is always at the top of the resource pool hierarchy.

- **Resources with No Pool Memberships**
  This is the default pool for new resources. This pool is always unsecured, and all resource managers can take action on resources who are in the pool.

- **Inactive Resource Pool Memberships**
  This pool contains resources for the time period that the resources aren’t eligible to fulfill project resource requests. For example, a resource who is on a vacation or leave of absence can be a member of this pool. Resources in this pool aren’t available for staffing.

You can’t move or delete the predefined resource pools.

Resource Pool Memberships
All managed project enterprise labor resources are members of a resource pool. Resources can belong to only one pool on any given date.

The pool membership **From Date** and **To Date** indicate the time period that a resource is a member of a resource pool. Pool membership dates for a resource must be within the **From Date** and **To Date** on the resource definition.

⚠️ **Caution:** Pool membership dates for a resource must be contiguous and can’t overlap.

If a resource becomes ineligible for staffing, then the application:

- Sets the **To Date** of the resource’s current pool membership as of the day the resource becomes ineligible for staffing.
- Sets the **From Date** as of the following day for the resource’s membership in the **Inactive Resource Pool Memberships** pool.

Resource Pool Hierarchies
Use the Manage Resource Pools page to build a resource pool hierarchy that reflects how the organization manages and reports on resources. For example, resource pools can group resources in a hierarchy by geographic locations, cost centers, skill sets, or primary project roles.

You can revise the resource pool hierarchy, such as moving a child pool from a parent pool in one hierarchy to a parent pool in a different hierarchy.

To delete a resource pool, you must first move all of its resource pool memberships to a different pool. To delete a parent pool, all child resource pools must have no resource pool memberships.

⚠️ **Caution:** Deleting a parent pool also deletes the child pools.

Resource Pool Owners
You can assign any project enterprise labor resource as a resource pool owner. Typically resource managers own the resource pools.
When a resource manager searches for resources to fulfill a request, by default the application searches for resources who are members of:

- Resource pools that the resource manager owns.
- Resource pools that are children of resource pools that the resource manager owns.

However, if the resource pools are secured, then resource managers can search for qualified resources only in the pools that they have access to.

Resource Pool Managers

The resource pool owner is a resource pool manager by default. You can also add other resources as resource pool managers, a resource pool can have multiple resource managers. If security is enabled, resource managers have access to only those resources that belong to the resource pools that they are resource pool managers for. If security is not enabled, resource managers can access any resources across all resource pools.

Secured Resource Pools

If you secure resource pools using the Manage Project Resource Management Implementation Options page of the Setup and Maintenance work area, then you must be a manager of a resource pool to:

- Create assignments or events
- Cancel adjustments or assignments
- Confirm assignments
- Change assignments or events
- Delete events
- Propose, reserve, or confirm resources for a project resource request
- Approve adjustments to project resource request
- Search and evaluate resources for project resource requests and assignments

Import Resource Pools and Memberships Process

The Import Resource Pools and Memberships process creates resource pools and resource pool memberships based on data from third-party applications that you load into the resource pools and resource pool memberships interface tables (PJR_RESOURCE_POOLS_INT and PJR_RESOURCE_POOL_MEMBERS_INT).

Once in the interface tables, the resource pool and resource pool membership details are validated and processed by the Import Resource Pools and Memberships process and any exceptions are reported in the output of that process.

Use the Resource Pools Interface macro-enabled Excel workbook template to prepare data for loading and importing, and ensure that your data conforms to the structure and format of the target application database tables. The workbook contains the following worksheets:

- Instructions and CSV Generation: Table-specific instructions, guidelines, formatted spreadsheets, and recommendations for preparing the data file for upload.
- PJR_RES_POOL_CREATE: Worksheet columns that represent table fields for the resource pool names, owners, parent resource pools, and additional remarks.
- PJR_RES_POOL_MEMBERS_CREATE: Worksheet columns that represent table fields for resource pool names, resources to add the resource pools, and the dates that the resources will be members of their assigned pools.

Note: Resource pools that you add members to on the PJR_RES_POOL_MEMBERS_CREATE worksheet must already exist.
After you prepare the data in the Resource Pools Interface Excel template, click the **Generate CSV File** button in the template to create worksheets to load to the interface tables. Optionally you can bypass the Excel template and manually create CSV files.

Load data into the interface tables and application database tables using one of these two methods:

- Run the Load Interface File and Import Resource Pools and Memberships job set to transfer the data file from your specified location to the interface table and import resource pool data from the interface into the database tables.
- Run the Load Interface File for Import process followed by the Import Resource Pools and Memberships process to separate the load and import steps.

For more information about file-based data import, see the File Based Data Import for Oracle Project Portfolio Management Cloud guide.

Run the load and import processes from the Scheduled Processes Overview page.

**Parameters - Load Interface File for Import**

**Import Process**

Select Import Resource Pools and Memberships.

**Data File**

Select the CSV file that contains resource pool and resource pool membership data to load.

**Import Resource Pools and Memberships Execution Report**

The Import Resource Pools and Memberships Execution report summarizes the number of processed, accepted, and rejected items encountered when you imported the resource pools and resource pool memberships. The report contains details for all requests that generated errors during the import process.

Review the error message details for each resource pool and fix the issues. Load the data that you fixed in the CSV file into the interface table again and resubmit the Import Resource Pools and Resource Pool Memberships process.

**Related Topics**

- Overview of External Data Integration Services for Oracle Cloud

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**Maintain Project Resource Search Index Job Set**

**How You Maintain the Project Resource Search Index**

The Maintain Project Resource Search Index job set consists of processes that facilitate efficient and rapid searching for qualified resources to fulfill project resource requests. The application uses the index to calculate Resource Qualification scores and filter counts during the search for resources, and to display resource details.

If a project resource request contains qualifications or keywords, then these actions depend on indexed resource data:

- Initiating a search for resources for a project resource request
- Modifying search criteria on the Search and Evaluate Resources page and conducting a new search
- Modifying the resource pools that the search uses
• Increasing the resource match thresholds for the Qualification or Available Capacity scores
• Selecting new search filters, such as competencies, languages, locations, project roles, and travel preferences
• Displaying resource details

\textbf{Note:} If a project resource request contains qualifications or keywords, then resource managers can’t search for resources or view resource details if the search index isn’t available. The search index isn’t available if the Maintain Project Resource Search Index process fails, or when the process is running. However, if a project resource request doesn’t contain qualifications or keywords, then the resource manager can search for and evaluate resources to fulfill the request based on resource availability, even if the search index isn’t current or available.

How the Project Resource Search Index Is Maintained
You can run or schedule the Maintain Project Resource Search Index job set on the Scheduled Processes page. In addition, the Maintain Project Resource Search Index job set starts automatically after you run the Maintain Project Enterprise Labor Resources process.

The Maintain Project Resource Search Index job set starts the following processes to update the search index:

• Maintain Project Resource Qualification Index process
  Maintains the index of active qualifications, qualification proficiency, and resume contents for project resources. A qualification is indexed if you run the process within the effective dates of the qualification.
• Maintain Project Resource Qualification Filters process
  Maintains the qualification filters and count of resources that have each qualification.
• Maintain Project Resource Single Attribute Filters process
  Maintains the filters for attributes for which a resource can have only one value, such as location and project role. Maintains the count of resources that have each attribute.

Indexing Resumes
The Maintain Project Resource Qualification Index process creates an index of the text in the latest resume in a resource’s profile. The application compares the resume text to the keywords entered on a project resource request when calculating the Resource Qualification score.

\textbf{Note:} The process creates an index of resume text in a File attachment type only.

Frequency of Search Index Updates
Run the Maintain Project Resource Search Index job set often enough to account for the following changes:

• Changes in resumes, qualifications, and proficiency for a managed project enterprise labor resource.
• A change to a resource’s eligibility to fulfill project resource requests, which is indicated on the resource profile with the option to manage the resource availability and project staffing.
• New or terminated resources.

For example, assume that you require resources to update their qualifications when they complete a project, and the average project duration is two weeks. You can schedule the Maintain Project Resource Search Index job set to run once every two weeks to update the index with the latest resource qualification changes.
Oracle Text Retrieval Technology

The Maintain Project Resource Search Index job set uses the Oracle Text retrieval technology. Common resume file types are indexed, such as .doc, .txt, and .pdf.

The application counts indexed text as a keyword if the text starts with the requested keyword. For example, if a requested keyword is SQL:

- SQLPLUS is a match because it starts with SQL
- PL/SQL is a match because PL and SQL are indexed separately
- MySQL isn’t a match because it doesn’t start with SQL

For more information about Oracle Text, see the Oracle documentation library or My Oracle Support.

Related Topics

- How Resource Qualification Score Is Calculated

FAQs for Project Enterprise Labor Resources

What’s the difference between a project enterprise labor resource and a managed project enterprise labor resource?

A project enterprise labor resource is a resource that you can assign to multiple projects.

A managed project enterprise labor resource is a project enterprise labor resource whose availability and staffing are managed in Oracle Fusion Project Resource Management. You use managed project enterprise labor resources to fulfill project resource requests and directly assign to one or more projects.

Who can be a member of a resource pool?

To be a member of a resource pool, a resource must be a project enterprise labor resource whose availability and staffing are managed in Oracle Fusion Project Resource Management.

If a resource becomes ineligible for staffing, then the application:

- Sets the end date of the resource’s current pool membership as of the day the resource becomes ineligible for staffing.
- Sets the start date as of the following day for the resource’s membership in the Inactive Resource Pool Memberships pool.

Can I delete a resource from a resource pool?

No. Instead, you can set an end date for the resource pool membership. You can also move the resource to another resource pool.

How can I change the resource pool for resources?

Use any of the following methods to change the resource pool membership for a resource:

- Open the Manage Resource Pool Memberships window from the Manage Project Enterprise Resources page or Manage Resource Pools page. In the Manage Resource Pool Memberships window you can edit, create, and delete memberships for a resource. You can also view the resource’s past, current, and future memberships.
• On the Manage Resource Pools page, select the source pool on the resource pool hierarchy. Then select, drag, and drop pool members onto the target pool in the resource pool hierarchy.

• On the Manage Resource Pools page, select pool members and click the **Move Resources** button to open a window to select the target resource pool.

**Note:** You can't delete a resource from a resource pool.

### What happens to the search index if I revise a resource resume?

You must run the Maintain Project Resource Qualification Index process often enough to accommodate new and revised resumes. If you revise a resume attachment, and don't run the index process, then the UI will display the new resume even though the search index still contains the old resume. Run the process to add the new resume to the search index and remove the old resume.

### What's the processing order of project enterprise labor resource maintenance conditions?

Records are processed by the Maintain Project Enterprise Labor Resources process in ascending order based on the process order value that you specify on the Create Condition page. For example, assume that an HCM person is included in a condition with a process order value of 1. If a resource doesn't already exist for that person, then the process creates a resource for the condition with the process order value of 1. The process doesn't create more than one resource for the same person even if subsequent conditions apply to the person.

If multiple conditions have the same process order value, then records are processed in ascending alphabetic order based on the condition name.

### How can I diagnose issues with resource eligibility when creating project enterprise labor resources from employees and contingent workers?

Run the Project Enterprise Labor Resource Eligibility diagnostic test from the **Settings and Actions > Troubleshooting > Run Diagnostic Tests** menu to determine whether a person in Oracle Fusion HCM is eligible to become a project enterprise labor resource. The test generates a report showing the results of three eligibility parameters.

- **Project Enterprise Labor Resource**: Validates that a project enterprise labor resource doesn't exist for the person.
- **Work E-Mail**: Validates that the person has a valid work e-mail, and the e-mail isn't associated with an existing project enterprise labor resource or a terminated HCM person.
- **Primary Assignment**: Validates that the person has an active primary assignment for a person type of Employee or Contingent Worker.

### Target Utilization Percentages

#### How the Resource Target Utilization Percentage is Determined

Target utilization is the percentage of hours that project enterprise labor resources are expected to work on project assignments compared to their available hours. The project administrator specifies the default target utilization for the enterprise, and then specifies target utilization overrides for individual jobs.
Factors That Affect Resource Target Utilization

The following factors affect the Resource Target Utilization Percentage.

- **Enterprise Target Utilization Percentage**: Target utilization percentage that applies to all managed project enterprise labor resources unless specific override percentages exist for a resource’s job.

- **Target Utilization Percentage Overrides**: Target utilization percentages that override the enterprise target utilization percentage for resources with specific jobs.

  **Note**: The override percentage applies to resources with a job title in Oracle Fusion HCM, namely resources who are employees or contingent workers.

- The Update Resource Utilization Data process calculates target utilization for all resources who are current members of a resource pool except for the Inactive Resource Pool Memberships pool.

How the Resource Target Utilization Percentage Is Determined

The application uses the enterprise target utilization percentage for a resource if no override percentage exists for the resource’s job. The default target utilization is 100%. The project application administrator can enter a new value in the Enterprise Target Utilization Percentage field on the Manage Target Utilization Percentages page.

The administrator can also enter a target utilization percentage override on the Manage Target Utilization Percentages page for a job. The application uses the percentage override for all resources with that job title as their active primary HCM assignment.

Target utilization percentages can be whole numbers from 0 - 100. You can enter one override percentage for each job.

**Example**

Assume that the target utilization for the enterprise is 80%. To set up the target utilization, change the default enterprise target utilization percentage from 100% to 80% on the Manage Target Utilization Percentages page.

Also assume that Senior Architects spend half their time on internal activities. To set up the target utilization for Senior Architects, enter 50% as the target utilization override for the job of Senior Architect.

The application uses 50% as the target utilization for all resources with the job of Senior Architect, and 80% utilization for all other resources.

**Related Topics**

- How Resource Target Hours Are Calculated
- How Resource Projected Utilization Is Calculated

FAQs for Target Utilization Percentages

**Can I set the target utilization percentage for individual resources?**

No. The target utilization comes from either the enterprise target utilization percentage or a target utilization percentage override for resources with specific jobs. You enter the enterprise target utilization percentage and the target utilization percentage overrides on the Manage Target Utilization Percentages page in the Setup and Maintenance work area.
The override percentage applies to resources with a job title in Oracle Fusion HCM, namely resources who are employees or contingent workers.

Project Resource Descriptive Flexfields

Considerations for Configuring Project Resource Request Descriptive Flexfields

Descriptive flexfields for project resource requests allow you to capture unique attributes for your project resource requests. The descriptive flexfields are displayed in the Additional Information section of the Create and Edit Project Resource Request pages.

Configure the project resource request descriptive flexfields from the Manage Project Resource Management Descriptive Flexfields page in the Setup and Maintenance work area.

Configuring the Text Only Segments

If you select the Character data type for a table column, then any text component flexfield segments that use `ATTRIBUTE_CHAR1` through `ATTRIBUTE_CHAR30` have a 150 character limit. The text component flexfield segments that you create from `ATTRIBUTE_CHAR31` through `ATTRIBUTE_CHAR35` have a 1000 character limit.

Related Topics

- Overview of Descriptive Flexfields
- File-Based Data Import for Oracle PPM Cloud
- Overview of Flexfields

FAQs for Project Resource Management Descriptive Flexfields

How can I update descriptive flexfields for project resource requests with a web service?

Use the Project Resource Request service to create a project resource request and then update the descriptive flexfields. Create a project resource request with the `createResourceRequest` operation. Then use the `updateResourceRequestDescriptiveFlexfields` operation to update the Project Resource Request Descriptive Flexfields service data object.

Related Topics

- SOAP Web Services for Oracle Project Portfolio Management Cloud
Absence Management and Project Execution Management Integration Options

Time and labor administrators can set up integration between Oracle Fusion Absence Management and Project Execution Management applications for transferring absence records. Team members, project managers, and resource managers can use the integration to:

- Enter, review, and cancel absences in Oracle Fusion Absence Management.
- View the available capacity score of project resources on the Resource Schedule page.
- View the recorded absences on the resource schedule, project calendar, and Team Member Dashboard.

You can set up the integration by using one of the following setup criteria:

- Predefined setup criteria
- Custom setup criteria

Predefined Setup Criteria

Setup tasks for the integration are available in the Workforce Deployment offering. Use the predefined time consumer set Project Execution Management Only and worker time processing profile Project Execution Management Time Processing Profile to set up this feature.

Custom Setup Criteria

Perform the following setup tasks to define your own setup criteria for specific business needs:

1. Manage Time Layout Sets
2. Manage HCM Groups
3. Manage Worker Time Entry Profiles
4. Manage Time Consumer Sets
5. Manage Worker Time Processing Profiles

Manage Time Layout Sets

Define a group of layouts that determine the availability and order of fields on the Time work area. You can:

- Use a predefined layout set or create a new layout set.
- Include the time type field or absence management fields in the layout to store time entries that you want to transfer to the Project Execution Management applications.

Manage HCM Groups

Create groups of people with similar characteristics. You can:

- Use a predefined HCM group, such as Projects Usage or Projects and Payroll Usage.
- Create a new group. Include users in new groups by selecting the Refresh Group Membership action from the home page.
• Assign the groups to time entry profiles to associate time layout sets with appropriate workers.

Manage Worker Time Entry Profiles
Associate people from an HCM group with a time entry profile. You can:

• Use the predefined Projects and Payroll Time Entry Profile to help your workers enter time for Oracle Fusion Project Costing, Project Execution Management applications, and Oracle Fusion Global Payroll.

• Create your own profiles to use different groups or layout sets. These profiles enable you to configure the actions, such as create, view, edit, and delete that workers can perform on time cards.

Manage Time Consumer Sets
Specify the consumers of reported time, such as Oracle Fusion Project Costing, Project Execution Management Applications, or Oracle Fusion Global Payroll. You can:

• Use a predefined time consumer set.

• Create a new set to specify the appropriate consumers.

Note: For Project Execution Management applications the time category is set to All Absence Entries.

Manage Worker Time Processing Profiles
Associate layout sets with workers. The task also identifies the time entry and calculation rules to run for time that the workers report. You can:

• Use a predefined worker time processing profile or create new profiles.

• For a new profile, select a time consumer set and then select the appropriate HCM group.

• Set the lowest profile number for your new profile to override other time processing profiles.

Related Topics
• Create a Payroll Layout Set That Includes Absence and Override Fields

• Considerations for Creating Time Consumer Sets

• Define HCM Groups
5 Common Reference Objects for Extensions

Overview of Common Reference Objects

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

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
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 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

Applications Core Common Reference Objects

Overview of Applications Core Configuration

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.

Applications Core Standard 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>
<tr>
<td>Deleting codes</td>
<td>Yes</td>
<td>Yes, only if the code isn’t predefined data</td>
<td>No</td>
</tr>
<tr>
<td>Updating tags</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Updating module</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

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**

- 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>
</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>
<tr>
<td>2</td>
<td>Bob</td>
<td>YELLOW</td>
</tr>
<tr>
<td>3</td>
<td>Alice</td>
<td>BLUE</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>
</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.

### FAQs for Applications Core Standard Lookups

#### How can I access predefined lookups?

Search for predefined lookups using any of the manage lookups tasks.

1. In the Setup and Maintenance work area, go to any of the following tasks that contains the lookups you’re looking for:
   - Manage Standard Lookups
   - Manage Common Lookups
   - Manage Set-enabled Lookups

2. Enter any of the search parameters and click **Search**. If you don’t know the lookup type or the meaning, use the **Module** field to filter search results.

3. Click a lookup type to view its lookup codes.

   **Tip:** Click the Query By Example icon to filter the lookup codes.

**Related Topics**

- Use Query By Example

#### 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 lookups 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.

![Tip: You can define a table-validated value set on any table, including the lookups table. Thus, you can change a lookup type into a table-validated value set that can be used in flexfields.](image)

<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.
6 Import and Export Setup Data

Offering Based Export and Import: Explained

Oracle recommends that you use this method for data export and import to ensure migration of all relevant setup data to the offering or functional area. This method is especially useful when doing your initial implementation or moving your implementation or configuration across instances for the first time.

Oracle recommends that you export the setup data for the entire offering at least once before exporting setup data for individual functional areas. This ensures that all the basic implementation setup data is migrated.

This method is advantageous over others because you don’t need to choose the tasks or understand data relationships to ensure only setup data relevant to the selected offering or functional area is exported. At the same time, it gives you flexibility to filter the setup data for the offering or functional area, where applicable.

Export and import offering setup data processes are initiated from the Setup and Maintenance work area.

Export

During export, appropriate setup data is identified as follows:

- When you export setup data for an offering, the export definition includes setup data for all enabled functional areas and relevant features in the offering.
- When you export setup data for a single functional area within an offering, the export definition only includes setup data for that functional area and relevant features.

Import

During import, a configuration package created by the export process is uploaded. All setup data contained in the configuration package is imported into the environment you initiate the setup data import from.

Similarly to the export process, you can import setup data for an entire offering or a specific functional area. The offering and functional area must already be enabled for implementation before you can import setup data for it. However, the feature selection may or may not be selected. To ensure enabling of all the same functionality that existed in the environment where the setup data was exported from for the corresponding offering or functional area, use the option to Import the Feature Selection at the time of importing the setup data. You must use a configuration package file that contains the setup data for the appropriate offering or functional area. You also have the option to compare the setup data prior to import to identify what setup data modifications happen if the setup data is imported. You can also compare the setup data after it has been imported (rather than prior to import) to ensure that no differences exist. Once you initiate the import process, you can monitor its progress and check its status from the Export Offering page. Once the process is complete you can review the reports. Similarly, use the Import Offering Setup Data page to upload and import previously exported setup data.

Related Topics

- Overview of Setup Data Export and Import
Implementation Project Based Export and Import: Explained

Export and import setup data for an implementation projects using the Setup and Maintenance work area.

You must explicitly create a configuration package from the Setup and Maintenance work area to export setup data for an implementation project. You generate the setup export and import definition by selecting an implementation project and creating a configuration package. The tasks and their associated business objects in the selected implementation project define the setup export and import definition for the configuration package. Depending on your needs, when you create a configuration package based on an implementation project, you can also modify some additional aspects, as explained here.

- Exclude some of the business objects from the configuration you selected to export setup data for.
  
  If you limit this action to setup data already available in the target instance, no data dependencies occur.

- Change the default import sequence of the business objects
  
  Oracle recommends that you limit using this option when you must correct a data dependency issue and you fully understand the data relationships between the business objects of your configuration.

- Filter the setup data to export
  
  Oracle recommends that you migrate the implementation using the Offering based export and import functionality. Limit the use of implementation projects as the source for exporting setup when you are required to modify the list of tasks or of objects you want export setup data for.

Export

During export, appropriate setup data is identified based on the tasks in the implementation project used as source for the configuration package. The setup data in the configuration package is a snapshot of the data in the source application instance at the time of export. Once export completes, you can download the configuration package file as a zipped archive of multiple XML files, move it to the target application instance, and upload and import it. After exporting the setup data you may continue entering new or modifying existing setup data for your configuration. Since the configuration package is a snapshot of the setup data taken at the time export is initiated, you may need to take another snapshot of the same configuration or set of data later. Although you can always create a different configuration package, Functional Setup Manager provides you the ability to take another snapshot of the setup data using the same modified export and import definition by exporting the configuration package multiple times and creating multiple versions. While the export definition remains the same in each version, the setup data can be different if you modified the data in the time period between the different runs of the export process. Since each version of the configuration package has a snapshot of the data in the source instance, you can compare and analyze various versions of the configuration package to see how the setup data changed.

Import

During import, you first upload a configuration package created by the export process and then import the setup data. All setup data contained in the configuration package is imported into the environment you initiate the setup data import from. In the target application instance, the setup import process inserts all new data from the source configuration package that does not already exist, and update any existing data with changes from the source. Setup data that exists in the target instance but not in source remains unchanged.
Configuration Packages: Explained

A configuration package contains the setup import and export definition. The setup import and export definition is the list of setup tasks and their associated business objects that identifies the setup data for export as well as the data itself. When you create a configuration package only the setup export and import definition exists. Once you submit export, a snapshot of the appropriate setup data is added to the configuration package using the definition. You can continue making modifications to the setup data in the environment and create a new configuration package any time you need it.

You can generate the setup export and import definition implicitly or explicitly:

- A configuration package is created implicitly when you export setup data for an entire offering or any functional area.
- A configuration package is created explicitly when you export setup data based on an implementation project. This method enables further modification of the configuration packages.

You generate the setup export and import definition by selecting an implementation project and creating a configuration package. The tasks and their associated business objects in the selected implementation project define the setup export and import definition for the configuration package. In addition, the sequence of the tasks in the implementation project determines the export and import sequence.

The tasks and their associated business objects in the selected configuration (offering, functional area or implementation project) define the setup export and import definition for the configuration package. In addition, the sequence of the tasks in the implementation project determines the export and import sequence.

Once a configuration package is exported, the setup export and import definition is locked and cannot be changed. You cannot add or remove tasks and their associated business objects, change their export and import sequence, or change the scope value selection. However, you can create a new configuration package with such modifications at any time.

Move Common Reference Objects

Overview of Moving Common Reference Objects

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>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>Document Sequence Category</td>
<td>Document sequence categories</td>
<td>No parameters: All categories are 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>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>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>
</tbody>
</table>

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.

Parameter `moduleType/moduleKey` Only categories belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.

Parameter `code/applicationId` Only the specified document sequence category code is moved.

Parameter `moduleType/moduleKey` Only document sequences belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.

Parameter `name` Only the specified document sequence is moved.

Parameter `moduleType/moduleKey` Only descriptive flexfields belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.

Parameter `descriptiveFlexfieldCode/applicationId` Only the specified descriptive flexfield is moved. Importing the metadata of a flexfield can change its deployment status. 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.

Parameter `moduleType/moduleKey` Only extensible flexfields belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.

Parameter `extensibleFlexfieldCode/applicationId` Only the specified extensible
### Import and Export Setup Data

<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 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.</td>
</tr>
<tr>
<td></td>
<td>Key flexfield registration data and setup data</td>
<td>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></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>Value set setup data</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>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 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></td>
<td></td>
<td>Parameter lookupType: Only the specified common lookup is moved.</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>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><strong>Application Profile Value</strong></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 option and its values are moved.</td>
</tr>
<tr>
<td><strong>Application Reference Data Set</strong></td>
<td>Reference data sets</td>
<td>No parameters: All sets are moved.</td>
</tr>
<tr>
<td><strong>Application Reference Data Set Assignment</strong></td>
<td>Reference data set assignments</td>
<td>Parameter determinantType: Only assignments for the specified determinant type are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter determinantType/ referenceGroupName Only assignments for the specified determinant type and reference group are moved.</td>
</tr>
<tr>
<td><strong>Application Tree Structure</strong></td>
<td>Tree structures and any labels assigned to the tree structure</td>
<td>No parameters: All tree structures (and their labels) are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only tree structures (and their labels) belonging to the specified module are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter treeStructureCode: Only the specified tree structure (with its labels) is moved.</td>
</tr>
<tr>
<td><strong>Application Tree</strong></td>
<td>Tree codes and versions</td>
<td>No parameters: All trees are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only trees belonging to the specified module are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter treeStructureCode: Only trees belonging to the specified tree structure are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter TreeStructureCode/ TreeCode Only trees belonging to the specified tree structure and tree code are moved.</td>
</tr>
<tr>
<td><strong>Application Tree Label</strong></td>
<td>Tree structures and any labels assigned to the tree structure</td>
<td>No parameters: All tree structures (and their labels) are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameter moduleType/ moduleKey Only tree structures (and their labels) belonging to the specified module are moved.</td>
</tr>
</tbody>
</table>
### 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

**action**
The kind of access, such as view or edit, named in a security policy.

**available hours**
Hours on the resource’s calendar that are, or can be, consumed with project assignments and nonproject events.

**competency**
A type of qualification that represents a piece of knowledge, a skill, an aptitude, or an attribute that is measurable and demonstrated by a resource in the work context.

**data security**
The control of access and action a user can take against which data.

**delegate**
A participant who can view project labor demand on the Project Hierarchy Dashboard and acts on behalf of the owner. Delegates can add or delete delegates, viewers, and other owners of an EPS element.

**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.

**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.

**EPS**
Abbreviation for enterprise project structure. A hierarchical representation of projects based on a user-defined classification for accumulation and roll up of project data for reporting purposes. For example, project executives want to see the demand for resources in all construction projects in an organization.

**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.

**FTE**
Abbreviation for full-time equivalent, such as .5 for half-time work.

**keyword**
A word or phrase, entered as free-form, unstructured text on a project resource request, that does not exist as a predefined qualification content item. Keywords are matched against the resource’s qualifications and the results are included in the qualification score calculation.

**layout set**
A set of layout configurations that determine the appearance of the time card and calendar when reporting, reviewing, or viewing time.

**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.

**managed project enterprise labor resource**
A project enterprise labor resource whose availability and staffing are managed in Oracle Fusion Project Resource Management. You use managed project enterprise labor resources to fulfill project resource requests and directly assign to one or more projects.

**milestone**
A reference point marking the completion of a significant event in a project. Use milestone tasks to track the completion work on a significant set of tasks or payments for deliverables.

**owner**
A participant who can view project labor demand on the Project Hierarchy Dashboard and is directly responsible for the projects assigned to the EPS element. Owners can add or delete delegates, viewers, and other owners of an EPS element.

**profile option**
User preferences and system configuration options that users can configure to control application behavior at different levels of an enterprise.

**project calendar**
Defines the work schedule for project assignments. The project calendar includes working days and hours, such as Monday through Friday for 8 hours a day, and any exceptions, such as holidays.
**project enterprise labor resource**
A labor resource that you can assign to multiple projects.

**project resource request**
List of criteria used to find a qualified resource to fulfill an open resource demand on a project. Project resource requests include qualifications, keywords, requested date range, and other assignment information, such as project role and work location.

**project task code**
Enables the capture of organization-specific information for tasks. Implementors can decide whether users must select a value from a predefined value set, enter numeric values, or enter free form text.

**projected utilization**
Percentage of hours that a resource or resources are confirmed or reserved to work on project assignments compared to the available hours.

**qualification**
Items in structured content types such as competencies, degrees, and language skills that have specific values and proficiency ratings.

**Query By Example**
The icon for filtering data in a table.

**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.

**resource calendar**
A schedule of a resource's available work days and hours, such as Monday through Friday, 8 hours a day.

**resource pool**
A logical group of resources organized in a hierarchy for purposes of staffing, management, and reporting on utilization.

**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.
**task date constraint**
A restriction that you place on a task to control the task start or end date. For example, you can specify that a task must start on or finish on a particular date.

**task dependency**
A relationship between two tasks in which the start or end date of one task depends on the start or end date of another task. The task that depends on the other task is the successor, and the task that it depends on is the predecessor. The four types of task dependencies are Finish-to-Start, Start-to-Start, Finish-to-Finish, and Start-to-Finish.

**time category**
A defined classification of the types of time entries, such as worked time or scheduled time, that can be referenced in rules, time summaries, and analytics. Time categories can contain other time categories. For example, the Absence time category contains Sickness and Vacation time categories.

**time consumer set**
Specifies approval periods, time category and validation actions, and time transfer rules for each time consumer. A consumer set might be for either a payroll or project costing time consumer, or both.

**value set**
A predefined set to validate the values that a user enters in the application. The set may be hierarchical.

**viewer**
A participant who can only view the labor demand of an EPS element on the Project Hierarchy Dashboard. Viewers can’t add or remove other participants.

**work plan template**
A standard set of project tasks and resource assignments available for use across project teams.

**worker time entry profile**
A collection of layout rules and specifications that determine the time card appearance and control when employees can take action on their time cards.

**worker time processing profile**
A collection of the time card period and the time entry and time calculation rule sets for both the employee and the time consumer.