

# Oracle Fusion Cloud Project Management

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**Getting Started with Your Project  
Management Implementation**

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## Get Help

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# 1 Introduction

## Overview of Oracle Project Portfolio Management Cloud Services

Oracle Project Portfolio Management Cloud is a complete and integrated solution which dramatically improves the way project-driven organizations work, enabling efficient and effective project management while ensuring smarter business decisions based on a single source of project truth.

Oracle Project Portfolio Management Cloud Services include the following applications.

- Project Financial Management Offering
  - Oracle Fusion Project Control Cloud Service
  - Oracle Fusion Project Costing Cloud Service
  - Oracle Fusion Project Billing Cloud Service
  - Oracle Fusion Project Contracts Cloud Service
  - Oracle Fusion Project Performance Reporting Cloud Service
- Project Execution Management Offering
  - Oracle Fusion Project Management Cloud Service
  - Oracle Fusion Task Management Cloud Service
  - Oracle Fusion Project Resource Management Cloud Service

### Applications in the Project Financial Management Offering

Project Financial Management applications in the Oracle Project Portfolio Management Cloud Service enable you to plan, organize, and manage activities, resources, cost, billing, and revenue to bring about the successful completion of specific project goals and objectives.

This table lists the Project Financial Management applications available on cloud.

Application	Description
Project Foundation	Includes common components that are shared across Oracle Fusion Project Portfolio Management.  Includes the basic project plan structure and components such as resource breakdown structures, rate schedules, pricing, burdening, and cross-charge processing.
Project Control	Provides full-function project planning, progress management, as well as budgeting and forecasting.
Project Costing	Captures and processes commitments and costs from Oracle Fusion Applications and third-party applications.

Application	Description
Project Billing	Accelerates invoice processing while reducing billing errors through a functionally rich work area offering visibility into formatted invoices with estimated taxes. Embedded analytics for contract revenue, invoice, profitability and margin give insight into potential contract and payment problems.
Project Performance Reporting	Helps project-driven organizations keep pace through project performance insight. It allows project stakeholders to receive answers to critical business questions and take action in real time, utilizing a multidimensional model to deliver the right information at the right time.

Enhance contract management and reporting capabilities by subscribing to the following services:

- Oracle Fusion Enterprise Contracts Management Base Cloud Service
- Oracle Fusion Transactional Business Intelligence for Projects Cloud Service

## Applications in the Project Execution Management Offering

Project Execution Management applications in the Oracle Project Portfolio Management Cloud Service enable you to work together to plan and deliver projects, collaborate on project and non-project tasks all in one place, and find best-fit project resources to staff projects.

This table lists the Project Execution Management applications available on cloud.

Application	Description
Project Management	Extends project planning, management, and scheduling capabilities to all individuals within the enterprise who are required to manage project-based work. Project managers can engage with team members to develop tasks, resolve issues, report progress, and monitor the status of the project to ensure that objectives are met.
Task Management	Lets organizations manage all work and related interactions in a consolidated place. Team members, challenged by the quantity of tasks they own, no longer have to track administrative and project work in different places since all tasks are managed in a single view.
Resource Management	Enables organizations to optimize the allocation and utilization of their most precious resource: their people. Innovative and intuitive tools let resource managers and project managers ensure that the best-fit resource is identified and placed on each and every project assignment, to the benefit of the organization, the project resource, and the end customer, for either internal or external billable projects.

## Project Portfolio Management Implementation Documentation

This guide contains procedures that enable you to quickly and efficiently configure Project Financial Management and Project Execution Management applications to meet your business requirements.

For additional information before implementing the Project Portfolio Management applications, see the following guides:

- Oracle ERP Cloud Securing ERP
- Oracle Applications Cloud Using Common Features

- Oracle Applications Cloud Using Functional Setup Manager

For additional information on implementing Project Portfolio Management applications, see the following guides:

- Oracle Project Portfolio Management Cloud Implementing Project Financial Management
- Oracle Project Portfolio Management Cloud Implementing Project Execution Management

## Workflows in Oracle Project Management

This topic introduces workflows and explains how you can implement workflows in Oracle Project Portfolio Management Cloud to simplify and optimize complex processes.

### What's a workflow?

One of the chief goals of software is to simplify workflows. Coupled with automation and intelligent routing, software becomes a powerful tool for simplifying lives.

But what's a workflow?

- A workflow is a sequence of tasks, designed to accomplish a specific result.
- Workflows simplify complex processes, breaking them down into smaller, simpler tasks that can be accomplished with relative ease.
- Some workflow tasks are one-person activities; others may require multiple persons working together, or in parallel.
- If team members in a workflow complete their assigned tasks at the right time, the workflow should reliably deliver the expected result.

Workflows can be implemented as processes and procedures in teams, where they help streamline operation. Implemented as software, however, workflows move faster, become more reliable, and handle a sizeable percentage of tasks without human intervention.

For example:

- If the user requesting a cost adjustment has the privilege required to approve cost adjustments, the application can be configured to skip the entire workflow and automatically approve the adjustment.
- On the other hand, if your organization mandates some oversight to cost adjustments, the same workflow can be configured to skip all intermediate approval tasks and directly route the adjustment request to someone who leads financial management for that project.

## Project Portfolio Management Cloud Workflows

The following tables list out some of the key workflows in Oracle Project Portfolio Management Cloud.

- The first table lists out those workflows that are available in Project Financial Management.
- The second table lists out those workflows that are available in Project Execution Management.
- The third table lists out those workflows that are available in both Project Financial Management and Project Execution Management.

You can access all of these workflows using the Task Configuration page in BPM Worklist. For information on how to access BPM Worklist and search for workflows, see Search for Workflow Tasks to Configure in the Implementing Applications guide.

**Note:** Apart from the PPM workflows in the table below, there are project-related approval workflows, such as approval of project-related AP invoices, project contracts (for billing), project time cards, and so on, in other subledger applications. You can find guidance on these workflows in documentation associated with the application to which they belong. The section below the table lists out these workflows and tells you where you can find them.

### Workflows Available in Project Financial Management

Workflow Name - BPM Task Name	Workflow Trigger and Description	Supported in Transaction Console?	Dependent on Configuration?	Workflow Modifications and Notification Customizations Supported	View History Available?
Project Contract Invoice Approval - InvoiceApprovalHuman	When an invoice is submitted for approval, this workflow notifies the administrator of the contract associated with the invoice, who must approve or reject the submitted invoice.	<ul style="list-style-type: none"> <li>Troubleshooting: Yes</li> <li>Configure Rules: No</li> <li>Bypass Approvals: No</li> </ul>	No	Workflow Modifications <ul style="list-style-type: none"> <li>Modify Rules and Rulesets: Yes</li> <li>Modify Participants and Stages: Yes</li> </ul> Notification Customizations: None	Yes
Generate Financial Plan Amounts Notification - HumantaskNotification	When the Generate Financial Plan Amounts process is run, this workflow sends a non-action notification to the person who submitted the process.	No	No	Workflow Modifications: None  Notification Customizations: None	N/A
Project Financial Plan Approval (Budgets and Forecasts) - ApprovePlanVersion	When a financial plan version is submitted for approval, this workflow notifies the configured approvers, who must approve or reject the financial plan version. It also sends a non-action notification to the project manager of the plan version and the user who initiated the workflow.	<ul style="list-style-type: none"> <li>Troubleshooting: Yes</li> <li>Configure Rules: No</li> <li>Bypass Approvals: No</li> </ul>	Yes. Use the Manage Financial Plan Types task in Setup and Maintenance to enable/disable a plan type for workflow approval.	Workflow Modifications <ul style="list-style-type: none"> <li>Modify Rules and Rulesets: Yes</li> <li>Modify Participants and Stages: Yes</li> </ul> Notification Customizations: / Shared Folders/ Projects/Workflow Notifications/ Project Control/ FinancialPlanVersionAp	Yes  For workflows that are in process, you can use the Spectacles icon on the Manage Budget Version and Manage Forecast Versions pages. The Approval History popup shows you to whom a workflow has previously been assigned, to whom it is currently assigned, and to whom it will be assigned in the future.
Project Financial Plan Approval (Budgets and Forecasts) - NotifyFinancialPlanApp	When a financial plan version is approved by the configured approver, this workflow sends a non-	No	Yes. Use the Manage Financial Plan Types task in Setup and Maintenance to enable/disable a plan	Workflow Modifications <ul style="list-style-type: none"> <li>Modify Rules and Rulesets: Yes</li> </ul>	Yes

Workflow Name - BPM Task Name	Workflow Trigger and Description	Supported in Transaction Console?	Dependent on Configuration?	Workflow Modifications and Notification Customizations Supported	View History Available?
	action notification to the configured recipients indicating that a plan version has been approved by the configured approver.		type for workflow approval.	<ul style="list-style-type: none"> <li>Modify Participants and Stages: Yes</li> </ul> Notification Customizations: None.	
Project Financial Plan Approval (Budgets and Forecasts) - NotifyFinancialPlanReje	When a financial plan version is rejected by the configured approver, this workflow sends a non-action notification to the configured recipients indicating that a plan version has been rejected by the configured approver.	No	Yes. Use the Manage Financial Plan Types task in Setup and Maintenance to enable/disable a plan type for workflow approval.	Workflow Modifications <ul style="list-style-type: none"> <li>Modify Rules and Rulesets: Yes</li> <li>Modify Participants and Stages: Yes</li> </ul> Notification Customizations: None.	Yes
Project Financial Plan Approval (Budgets and Forecasts) - NotifyFinancialPlanRew	When a financial plan version is reworked and submitted for approval, this workflow notifies the configured approvers, who must approve or reject the financial plan version. It also sends a non-action notification to the project manager of the plan version and the user who initiated the workflow.	No	Yes. Use the Manage Financial Plan Types task in Setup and Maintenance to enable/disable a plan type for workflow approval.	Workflow Modifications <ul style="list-style-type: none"> <li>Modify Rules and Rulesets: Yes</li> <li>Modify Participants and Stages: Yes</li> </ul> Notification Customizations: None.	Yes
Project Cost Adjustment Approval - ApproveAdjustment	When any of the following project cost adjustments is attempted by a user, this workflow notifies the configured approver, who must approve or reject the project cost adjustment. <ul style="list-style-type: none"> <li>Transfer</li> <li>Split</li> <li>Split and transfer</li> <li>Set to billable</li> <li>Set to nonbillable</li> <li>Set to capitalizable</li> <li>Set to noncapitalizable</li> </ul>	<ul style="list-style-type: none"> <li>Troubleshooting: Yes</li> <li>Configure Rules: No</li> <li>Bypass Approvals: No</li> </ul>	Yes. The workflow is only initiated if the user performing the adjustment has not been assigned the duty role Project Cost Adjustments Approval, or one or more of the privileges within it.	Workflow Modifications <ul style="list-style-type: none"> <li>Modify Rules and Rulesets: Yes</li> <li>Modify Participants and Stages: Yes</li> </ul> Notification Customizations Yes  /Shared Folders/ Projects/Workflow Notifications/ Project Cost/Project Cost Transactions Adjustment Approval Report	Yes. For workflows that are in process, you can use the Spectacles icon on the Adjustment History tab of the Manage Project Costs > Project Cost Transaction page.

Workflow Name - BPM Task Name	Workflow Trigger and Description	Supported in Transaction Console?	Dependent on Configuration?	Workflow Modifications and Notification Customizations Supported	View History Available?
	<ul style="list-style-type: none"> <li>Hold invoice until released</li> <li>Hold invoice once</li> <li>Release invoice hold</li> <li>Hold revenue until released</li> <li>Release revenue hold</li> <li>Change work type</li> </ul>				
Project Cost Adjustment Approval - NotifyAdjustmentApprov	When a project cost adjustment is approved or rejected by the configured approver, this workflow sends a non-action notification to the requestor and approver of the project cost adjustment approval.	No	Yes. The workflow is only initiated if the user performing the adjustment has not been assigned the duty role Project Cost Adjustments Approval, or one or more of the privileges within it.	Workflow Modifications <ul style="list-style-type: none"> <li>Modify Rules and Rulesets: Yes</li> <li>Modify Participants and Stages: Yes</li> </ul> Notification Customizations: None.	No
Project Expenditure Batch Approval - ProjectExpenditureBatch	When a project expenditure batch is submitted for approval, this workflow notifies the configured approver, who must approve or reject the project expenditure batch.	<ul style="list-style-type: none"> <li>Troubleshooting: Yes</li> <li>Configure Rules: No</li> <li>Bypass Approvals: No</li> </ul>	Yes. Use the Manage Project Transaction Sources task in Setup and Maintenance to enable/disable Requires expenditure batch approval at the document level.	Workflow Modifications <ul style="list-style-type: none"> <li>Modify Rules and Rulesets: Yes</li> <li>Modify Participants and Stages: Yes</li> </ul> Notification Customizations: Yes  /Shared Folders/ Projects/Workflow Notifications/ Project Cost/ ProjectExpenditureBatch	Yes. For workflows that are in process, use the Spectacles icon on the Manage Expenditure Batches page to access the Approval History popup.
Project Expenditure Batch Approval - ProjectExpenditureBatch	When a project expenditure batch is approved or rejected by the configured approver, this workflow sends a non-action notification to the configured recipients of the outcome of the project expenditure batch approval.	No	Yes. Use the Manage Project Transaction Sources task in Setup and Maintenance to enable/disable Requires expenditure batch approval at the document level.	Workflow Modifications <ul style="list-style-type: none"> <li>Modify Rules and Rulesets: Yes</li> <li>Modify Participants and Stages: Yes</li> </ul> Notification Customizations: None.	Yes. For workflows that are in process, you can use the spectacles icon on the Manage Expenditure Batches page. The Approval History popup shows you to whom a workflow has previously been assigned, to whom it is currently assigned, and to whom it will be assigned in the future.

Workflow Name - BPM Task Name	Workflow Trigger and Description	Supported in Transaction Console?	Dependent on Configuration?	Workflow Modifications and Notification Customizations Supported	View History Available?
Project Labor Schedule Version Status Change Approval - LaborScheduleVersionS	When a labor schedule version is set Active status from New or Inactive, this workflow notifies configured users that the labor schedule version is being set to active and that costs will start to be distributed through it once it is approved via this workflow.	<ul style="list-style-type: none"> <li>• Troubleshooting: Yes</li> <li>• Configure Rules: No</li> <li>• Bypass Approvals: No</li> </ul>	The workflow is only invoked if the customer has created the profile defined here and set to Yes. This is to only fire the workflow when set, to reduce the amount of technologies involved if customer does not want it at all. Auto-approval workflows still sometimes have issues. This is to be replaced with the upcoming revamped Projects Process Configurator.	<p>Workflow Modifications</p> <ul style="list-style-type: none"> <li>• Modify Rules and Rulesets: Yes</li> <li>• Modify Participants and Stages: Yes</li> </ul> <p>Notification Customizations Yes</p> <p>/Shared Folders/ Projects/Workflow Notifications/Project Cost/Labor Schedule Version Status Approval Execution Report</p>	Yes, but only for the user who created the project labor schedule version, and the approver, in the Notifications page.

### Workflows Available in Project Execution Management

Workflow Name - BPM Task Name	Workflow Trigger and Description	Supported in Transaction Console?	Dependent on Configuration?	Workflow Modifications and Notification Customizations Supported	View History Available?
Task and Action Item Notification - TaskEmailNotificationH	<p>When any of the following is true, this workflow sends notifications to the task owner and follower.</p> <ul style="list-style-type: none"> <li>• A follower is added.</li> <li>• A followed task is completed.</li> <li>• A task, action item, to-do task or milestone is assigned.</li> </ul>	<ul style="list-style-type: none"> <li>• Troubleshooting: Yes</li> <li>• Configure Rules: No</li> <li>• Bypass Approvals: No</li> </ul>	No	<p>Workflow Modifications: None</p> <p>Notification Customizations: Yes</p> <p>/Shared Folders/ Projects/Workflow Notifications/ Project Management Control/Task Details Notifications</p>	No
Project Manager Daily Digest - emailDigestHumantask	When it is time to send regular notifications containing status of tasks, issues, action items, deliverables, change orders, and task exceptions, this workflow sends non-action notifications to project managers	No	Yes. The Generate Project Updates E-Mail process can be scheduled to pick any new events that occurred since the last time the process was run.	<p>Workflow Modifications: None</p> <p>Notification Customizations: None</p>	No

Workflow Name - BPM Task Name	Workflow Trigger and Description	Supported in Transaction Console?	Dependent on Configuration?	Workflow Modifications and Notification Customizations Supported	View History Available?
	about important status changes for tasks, issues, action items, deliverables, change orders, and task exceptions.		The process sends notifications to anyone who's designated as a project manager and who has set their email notification preferences to receive these notifications.		
Change Orders Notification - ChangeManagementEv	<p>When any of the following events occurs, this workflow sends a notification to the change order creator, impact assessors, reviewers, approvers, and implementers.</p> <ul style="list-style-type: none"> <li>Change order is created or reassigned to a different resource.</li> <li>Change order is closed.</li> <li>Change order is canceled.</li> <li>Change order is approved or rejected.</li> <li>Work on change order is completed.</li> <li>Participant is removed from change order.</li> <li>Participant is added to change order</li> </ul> <p>Note that approvers only receive notifications that they need to approve; they must go to the application and approve the change order manually.</p>	No	No	<p>Workflow Modifications: None</p> <p>Notification Customizations: Yes</p> <p>/Shared Folders/ Projects/Workflow Notifications/ Project Management Control/Change Order Participant Notifications (Notification that's sent when participants are assigned or removed from a change order)</p> <p>/Shared Folders/ Projects/Workflow Notifications/ Project Management Control/Change Order Stage Completion Notifications (Notification that's sent when a participant completes a stage, approves a change order, or rejects a change order)</p> <p>/Shared Folders/ Projects/Workflow Notifications/Project Management Control/Change Order Stage Change Notifications (Notification that's sent when a change order is assigned, closed, or canceled.)</p>	No
Deliverable Notification - DeliverablesNotification	When a deliverable is completed, this workflow sends a non-action notification to	No	No	Workflow Modifications: None	No

Workflow Name - BPM Task Name	Workflow Trigger and Description	Supported in Transaction Console?	Dependent on Configuration?	Workflow Modifications and Notification Customizations Supported	View History Available?
	the creator, owner, and project manager.			Notification Customizations: None	

### Workflows Available in Both Project Financial Management and Project Execution Management

Workflow Name - BPM Task Name	Workflow Trigger and Description	Supported in Transaction Console?	Dependent on Configuration?	Workflow Modifications and Notification Customizations Supported	View History Available?
Project Status Change Approval - ProjectStatusNotification	When a user updates and saves a project status, this workflow notifies the project manager named on the project, who must approve or reject the changes made to the project status.	Troubleshooting: Yes Configure Rules: No Bypass Approvals: No	Yes. Use the Manage Project Statuses task in Setup and Maintenance to enable or disable project statuses for workflow approval. Simply use the Enable Workflow checkbox for each project status.	Workflow Modifications <ul style="list-style-type: none"> <li>Modify Rules and Rulesets: Yes</li> <li>Modify Participants and Stages: Yes</li> </ul> Notification Customizations: Yes /Shared Folders/ Projects/Workflow Notifications/ Project Foundation/ ProjectStatusChangeAp	Yes. You can use the View History button on the Manage Financial Project Settings page to review historic project status changes.  For workflows that are in process, you can use the spectacles icon on the Manage Financial Project Settings page. The Approval History popup shows you to whom a workflow has previously been assigned, to whom it is currently assigned, and to whom it will be assigned in the future.

## Project-Related Workflows in Other Oracle Cloud Applications

Here's a table listing out some of the key project-related workflows in the other Oracle Cloud applications. Review the associated docs for more information.

Business Object(s)	Parent Application
Timecard	HCM
Supplier Invoice	Payables
Requisitions, Purchase Order	Procurement
Project Billing Contract	Enterprise Contracts
Expense Report	Expenses

### Related Topics

- [Overview of Notifications and Approval Workflows](#)
- [Actions and Statuses for Workflow Tasks](#)
- [Overview of Configurable Workflow Notifications in Project Management](#)

## The Project Contract Invoice Approval Workflow

Every time someone submits a project contract invoice for approval, the application triggers the Project Contract Invoice Approval workflow. This workflow notifies configured assignees, who must approve or reject the submitted invoice, or seek more information if required.

In the BPM Worklist tool, this workflow is called **InvoiceApprovalHumantask**, and the default recipient of this workflow is the administrator of the contract for which the invoice was raised.

**Note:** To instruct the application to skip the approval workflow when someone submits a project contract invoice using the UI or a REST call, create a profile option named `PJB_NO_INV_APPR_WF` and set its value to Y.

## The Contract Invoice Approval Process

### The Contract Approval Process

Agent	Description	Additional Information
Billing Specialist	Uses the Manage Invoices, Invoice Overview, or Edit Invoice page to submit an invoice for approval.	For information on working with invoices, see the Using Project Revenue and Billing guide.
The Contract Invoice Approval Workflow	As soon as someone submits a project contract invoice, the workflow sends notifications to all configured assignees via email or in-app notifications, as configured.	For detailed information on how you can customize approval workflow notifications, see Workflow Notifications in the Implementing Common Applications guide.
Workflow Assignees	Assignees review and approve or reject the invoice, or seek more information.	<p>If the workflow uses parallel approvers, then the Voting Percentage rule is used to determine final approval.</p> <p>For detailed information on using BPM Worklist to update approval workflows, see Workflow Approvals and Notifications in the Implementing Common Applications guide.</p>
The Contract Invoice Approval Workflow	The workflow updates the invoice status to Approved or Rejected.	NA
The Contract Invoice Approval Workflow	<p>The workflow performs the following tasks once the invoice status is updated.</p> <ul style="list-style-type: none"> <li>• If the invoice is approved, the workflow sends notifications to configured</li> </ul>	<p>If the invoice is approved, the Billing Specialist can release the invoice.</p> <p>If the invoice is rejected, the submitter (Billing Specialist) moves the invoice back to Draft status, updates it as appropriate, and resubmits it for approval if required. This action retriggers</p>

Agent	Description	Additional Information
	<p>recipients if configured. Otherwise, the workflow exits.</p> <ul style="list-style-type: none"> <li>If the invoice is rejected, the application sends a notification indicating the result to the submitter (Billing Specialist).</li> </ul>	the workflow, and designated approvers receive new notifications, as configured.

## Configuring the Project Contract Invoice Approval Workflow

For information on how you can configure the Project Contract Invoice Approval workflow, review the following topics in the Creating Analytics and Reports for Financials guide:

- Configuring Payables Workflow Notifications
- Example of Modifying Invoice Approval Workflow Notifications Using Oracle Business Intelligence (BI) Publisher

For generic guidance on customizing workflows and notifications, see the Workflow Approvals and Notifications section in the Implementing Applications guide.

## Configurable Attributes in the Project Contract Invoice Approval workflow

There are many attributes that you can use to configure the Project Contract Invoice Approval workflow's behavior. These attributes are associated with:

- The invoice that is being processed (See Invoice Attributes, below)
- The project with which the invoice is associated (See Project Attributes, below)
- The contract with which the project is associated (See Contract Attributes, below)

## Invoice Attributes

Here's a table that lists out key project contract invoice attributes that you can use to customize the behavior of the Project Contract Invoice Approval workflow.

### **Key Invoice Attributes Used to Modify the Project Contract Invoice Approval workflow**

Attribute	Description
InvoiceId	The unique identifier of the invoice.
InvoiceNum	The sequential number that identifies the draft invoice within a project.
ContractId	The identifier of the contract that funds the invoice.
BillToCustAcctId	The identifier of the customer id to which invoices are sent.
BillToDate	The date through which to invoice the project. Expenditure items with the expenditure item date on or before the bill to date and events with completion dates on or before the bill through date may be included on an invoice.

Attribute	Description
InvoiceDate	The invoice date passed to Oracle Receivables, which is used to calculate the invoice due date. Upon release of the invoice, this date is defaulted from the released date. The user can override the invoice date at the time of release.
InvoiceStatusCode	The code associated with the invoice's payment status. Possible values are Y, N, or P.
InvoiceTypeCode	The code associated with the type of Invoice, such as Standard, Credit Memo, Write-Off, Net Invoice, Canceled.
ApprovedDate	The date on which the draft invoice is approved.
ApprovedByPersonId	The unique identifier of the employee who approved the invoice.
OrgId	The unique identifier of the business unit associated with the invoice.
ContractNumber	The contract number associated with the invoice.
MajorVersion	The major version number of the contract for which the invoice is created.
InvCurrInvAmt	Amount for which the invoice is created.
ContractAdminEmail	The email address of the administrator of the contract.
BillToCustName	The name of the customer to whom the invoice is sent.
InvoiceCurrencyCode	The currency code associated with the amount for which the invoice is generated.
ContractAdminName	The name of the administrator of the contract.
InvoiceTypeName	The invoice type, such as Standard, Credit Memo, Write-Off, Net Invoice, Canceled, used for the invoice.
BillFromDate	The date through which to invoice the project.
CustPoNumber	The purchase order against which the invoice is issued.
ContractTypeId	The unique ID of the contract type to which the contract associated with the invoice belongs.
InvoiceComment	Free text comments that can be printed on an invoice. The invoice comment is defaulted from the invoice comment defined for the project. This value can be overridden by a user for each draft invoice.
CreditMemoReasonCode	The reason code for releasing credit invoices.
InvoiceInstructions	Invoice instructions.
ContractStatusCode	The code associated with the contract's fulfillment status.
CreditedInvoiceId	The identifier of the invoice that can be fully reversed by a credit or debit memo.
BillingTypeCode	The code associated with the billing type used in the project.
ContractType	This is a temporary table used internally by Oracle.
BillingType	The billing type used in the project. This can either be External, Inter-Company, or Inter-Project.

Attribute	Description
CreditedInvoiceNumber	The number of the invoice that must be fully reversed by a Credit or Debit Memo.
BUName	The name of the business unit associated with the invoice.
CreditMemoReason	Codes provided by the government or central bank of a country. These codes provide the payment system or bank with additional details about the reason for the payment and are used for regulatory reporting purposes.
ContractStatus	The status of the contract, such as Draft, Canceled, Pending Approval, and so on.
ProjMgrsUserNames	The names of the project managers associated with the project associated with the invoice.
ParallelVotingPercentage	The percentage of votes that an invoice must receive to be approved.
Invoice Header Flexfields	General information, such as supplier, supplier site, invoice number, invoice date, as well as default information, used to create invoice lines.

## Key Project Attributes Used by the Project Contract Invoice Approval Workflow

Here's a table that lists out key project attributes that you can use to customize the behavior of the Project Contract Invoice Approval workflow.

**Note:** You can find some of the attributes listed here in folders in the Condition Explorer in the Task Configuration tab in BPM Worklist. The name of the folder is added to every such attribute in this table. Thus, for example, the attribute **ProjectTeamMember > ProjectPartyId** can be found in the **ProjectTeamMember** folder.

### *Key Project Attributes Used to Modify the Project Contract Invoice Approval workflow*

Attribute	Description
ProjectId	The unique identifier of the project.
ProjectName	The name of the project.
ProjectNumber	The project number.
CarryingOutOrganizationId	The unique identifier of the organization that is executing the project.
ProjectOrganizationName	The name of the organization that is implementing the project.
ProjectUnitId	The unique identifier of the project unit that is implementing the project associated with the invoice.
ProjectUnitName	The name of the project unit that is implementing the project associated with the invoice.
ProjectTypeId	The unique identifier of the project type.
ProjectTypeName	The name of the project type.
BusinessUnitId	The unique identifier of the business unit.

Attribute	Description
BusinessUnitName	The name of the business unit.
LegalEntityId	The unique identifier of the legal entity that is implementing the project.
LegalEntityName	The name of the legal entity that is implementing the project.
WorkTypeId	The unique identifier of the work type associated with task for which the invoice is created.
WorkTypeName	The name of the work type associated with the task for which the invoice is created.
ProjectCurrencyCode	The currency code used by default with amounts in the project.
ProjectLedgerCurrencyCode	The currency code used by default with amounts in the project ledger.
SponsoredFlag	A flag indicating whether the project is sponsored.
ProjectTeamMember > ProjectPartyId	The unique identifier of a party assignment to the project for a project team member associated with the task for which the invoice is created.
ProjectTeamMember > TeamMemberRoleId	The unique identifier of the role assigned to a project team member associated with the task for which the invoice is created.
ProjectTeamMember > TeamMemberRoleName	The name of the role assigned to a project team member associated with the task for which the invoice is created.
ProjectTeamMember > TeamMemberPersonId	The unique ID of a project team member associated with the task for which the invoice is created.
ProjectTeamMember > TeamMemberEmailAddress	The email address of a project team member associated with the task for which the invoice is created
ProjectTeamMember > TeamMemberUserName	The name of a project team member associated with the task for which the invoice is created
ProjectTeamMember > StartDateActive	The start date of a project team member associated with the task for which the invoice is created.
ProjectTeamMember > EndDateActive	The end date of a project team member associated with the task for which the invoice is created.
Project Flexfields	Custom project-related flexfields created for use in your organization.
ProjectClassification > ProjectClassCategory	The project class category to which the project associated with the invoice belongs.
ProjectClassification > ProjectClassCode	The project class code that belongs to the project class category, to which the project associated with the invoice belongs.

## Contract Attributes

Here's a table that lists out key contract attributes that you can use to customize the behavior of the Project Contract Invoice Approval workflow.

### **Key Contract Attributes Used to Modify the Project Contract Invoice Approval workflow**

Attribute	Description
ContractId	The unique identifier of the contract associated with the invoice.

Attribute	Description
Contract Header Flexfields	Custom contract-related flexfields created for use in your organization.

## Project Contract Invoice Approval Workflow Notifications

The Project Contract Invoice Approval workflow sends notifications when:

- An invoice requires approval.
- An invoice is approved or rejected.
- An invoice requires more information.

## Contents of a Project Contract Invoice Approval Workflow Notification

A Project Contract Invoice Approval Workflow notification contains the following details:

- Header
  - Invoice Approval for <Contract Number>
  - Task Number: <Task number associated with the invoice.>
- Approval options (if sent to an approver)
  - Approve
  - Reject
  - Request Info
- Contents Section
  - Invoice Number
  - Contract Number
  - Bill-to Customer
  - Invoice Type
  - Date
  - Invoice Amount in Invoice Currency
  - Tax Amount in Invoice Currency
  - Bill from Date
  - Bill-Through Date
- Invoice Lines
  - Line Number
  - Description
  - Amount in Invoice Currency
- Approval options (if sent to an approver)
  - Approve
  - Reject

- Request Info
- Approval History: One row per approver.
  - Approvers
    - Assigned to / Approved by / Rejected by <Name of Approver>
    - Date and Time of Assignment / Approval / Rejection
  - Submitter
    - Submitted by <Name of Submitter>
    - Date and Time of Submission
  - Link to invoice

## Customizing Project Contract Invoice Approval Workflow Notifications

For details on customizing Project Contract Invoice Approval Workflow notifications, see *Example of Editing Invoice Approval Workflow Notifications Using Oracle Analytics Publisher*.

For guidance on how you can work with workflow notifications in BPM Worklist tool, see Workflow Notifications in the Common Implementing Applications guide.

## Customizing Notification Templates

You can find the templates and data models used in the Project Contract Invoice Approval workflow in the **Shared Folders > Projects > Workflow Notifications > Project Billing** folder in the Oracle BI Publisher catalog. In this folder, the **ProjectContractInvoiceApprovalReport** file contains the template used in the notification report. Expand the **Project Billing > Data Model** folder to access the **ProjectContractInvoiceApprovalDM** file, which contains the data model used in the notification report.

For information on how you can customize notification templates, see Configurable Notifications in the Common Implementation guide. For detailed instructions on how to customize Project Contract Invoice Approval workflow notifications, see *Example of Editing Invoice Approval Workflow Notifications Using Oracle Analytics Publisher*.

## How-to: Setting up Auto-Approval for Project Contract Invoices

In this use case, you set up auto-approval for project contract invoices. This means that instead of routing all invoices to the default participants who must review and approve new invoices, you will configure the **InvoiceApprovalHumantask** such that all new invoices will be automatically approved and forwarded for processing.

To set up auto-approval for project contract invoices:

1. Navigate to **Setup and Maintenance > Manage Task Configurations for Project Financial Management**. The BPM Worklist tool appears.
2. Search and open **InvoiceApprovalHumantask**.
3. Click the **Edit Task** icon to open the task in Edit mode.
4. Click the **Assignees** tab in the Task Configuration page.

This tab displays the participants of the workflow. These are the users who must approve project invoices before they can be processed. Click on each of these participants to review the workflow rules that apply to their approval choices.
5. Click on **Contract Invoice Single Approver Participant** in the workflow, then click on the **Go to Rule** icon, and then on the **Go to Rule** option that appears.

The list of rules associated with the participant you selected appears.

By default, the workflow sends project contract invoices to the contract administrator for approval. You want to remove this requirement, so the approval request will not be routed.

6. Select the check box adjacent to the **Top Participant** field in the **THEN** section of the rule. This enables the **Delete Action** icon above the rule. Click this icon to delete the action. You have now removed the default approver for your project invoices and must configure the rule such that it automatically approves all new invoices.
7. Click the **Insert Action** icon above the now empty rule and, from the drop-down options that appear, select **Add Approver > Supervisory**.
8. Enter **1** in the **Number of Levels** field.
9. Perform the following steps to add the **Starting Participant**. This is the first participant—typically a manager—in the approval process.
  - a. Click the **Search** icon adjacent to the **Starting Participant**.

The Add Hierarchy Participant dialog box appears.
  - b. Select the **Get User** radio button to indicate that you want to specify a user who must approve invoices.
  - c. Click the **Expression Builder** icon adjacent to the **Reference User** field.

The Expression Builder dialog box appears.
  - d. Click the **Task > creator** option in the expression builder and click **Insert into Expression**.

The value in the **Expression** field now reads **Task.creator**.
  - e. Click **OK** to exit the expression builder and add **task.creator** as the reference user for the approver. This instructs the workflow to make the creator of the task the approver.
  - f. Enter **""** in the **Hierarchy Type** field to indicate that the task creator can belong to any hierarchy type.
  - g. Click **OK** to populate these details into the **Starting Participant** field.

The value in this field must now read **HierarchyBuilder.getPrincipal(Task.creator,-1,"","")**.
10. Populate the **Top Participant** field with the same value. The top participant is the last approver of a request.
11. Set **Auto Action Enabled** to **True**.
12. Specify the **Auto Action** as **"APPROVE"** (including the quotation marks) to instruct the application to automatically approve all project contract invoice approval requests.
13. **Save** and **Commit** your updates, and enter **Comments** as appropriate. Click **OK**.

You have now configured the **InvoiceApprovalHumantask** workflow to automatically approve all new project contract invoice approval requests using the name of the task creator as the approver.

## The Financial Plan Version Approval Workflow

Every time someone submits a budget version for baseline or a forecast version for approval, the application triggers the Financial Plan Version Approval workflow. This workflow notifies the configured approvers, who must approve or reject the financial plan version. It also sends a non-action notification to the project manager of the plan version and the user who initiated the workflow.

In the BPM Worklist tool, this workflow is named **ApprovePlanVersion**. The project manager is the default approver for this workflow.

## How to Enable the Financial Plan Version Approval Workflow

In the Setup and Maintenance work area, go to the **Manage Financial Plan Types** task and select the **Use workflow for status changes** check box for the financial plan type to which the budget or forecast versions belong.

## Key Components of Approval Workflow

Using approval workflow, you can define complex and multistage routing rules. The key components of approval workflow are:

Component	Description
Oracle SOA Suite Approval Management Extensions	<p>Approval management extensions of the human workflow services from Oracle SOA Suite are the core of approval functionality in Oracle Cloud. With these components, you can perform many key integrated tasks for the approval functionality. Here are the key functions of approval management extensions:</p> <ul style="list-style-type: none"><li>Integrates with Oracle HCM Cloud to derive approvers based on the supervisory, job role, and position-based hierarchies defined in Oracle HCM Cloud.</li><li>Provides the framework for defining approval rules for various business documents like financial plan version and invoice approvals.</li><li>Provides the ability to select complex routing patterns based on your business processes, such as whether to route documents to approvers in sequential or in parallel.</li></ul>
Oracle Business Process Management (BPM)	<p>Provides an interface named BPM Worklist for business users to perform the following key activities related to approval management:</p> <ul style="list-style-type: none"><li>Provides an interface to work with various notifications tasks assigned to them. The BPM Worklist is a web-based application that displays all worklist tasks that're assigned to business users and they can perform various approval-related actions on the tasks assigned to them. Using this application, users can drill down to the task assigned to them, for example, an approver can drill down to the Financial Plan Approval Notification task to see the budget version details like version amounts and a requester can perform the necessary approval action.</li><li>Provides an interface to set up and manage approval rules.</li></ul>
Oracle Human Capital Management Cloud (Oracle HCM Cloud)	<p>Used for defining various employee hierarchies like supervisory, job-based, or position-based. Approval management extensions integrate with Oracle HCM Cloud to derive the required approvers if approval rules are configured based on Oracle HCM Cloud hierarchies.</p>

## Human Task Workflow Concepts

To set up an approval hierarchy, you must define these as part of your workflow rules.

Concept	Description
List Builders	<p>Approval management determines the nature of the approvers required for a workflow approval using list builders. Each approval rule is associated with a list builder for generating the list of approvers. The Financial Plan Version Approval workflow supports the following list builders:</p> <ul style="list-style-type: none"><li>Supervisory</li></ul>

Concept	Description
	<ul style="list-style-type: none"> <li>• Job Level</li> <li>• Position</li> <li>• Approval Group</li> <li>• Resource</li> </ul> <p><b>Note:</b> For more information about List Builders and how to define them, see Workflow Approval and Notifications in the Implementing Applications guide.</p>
Participants	<p>A participant is a user or set of users who participate in the approval process. Each participant is associated with a rule set. Approval rules are defined in the context of a rule set and you can create many rules under one rule set. Based on your approval requirements, you must configure the approval rules in the context of a participant. The different types of participants that can be configured are:</p> <ul style="list-style-type: none"> <li>• Serial</li> <li>• Parallel</li> <li>• Single</li> <li>• For Your Information (FYI)</li> </ul> <p><b>Note:</b> For more information about participants, see Workflow Approval and Notifications in the Implementing Applications guide.</p>

## Participant Model Implemented in Financial Plan Version Approval Workflow

The Financial Plan Version Approval workflow uses the **ApprovePlanVersion** human task. You must configure this task for financial plan version approvals. This task is shared by the budget and forecast approval requests and includes the same participants for both the budget and forecast requests.

For financial plan approvals, a total of 13 participants are predefined. Out of these 13, the two key participants are the Approver and Requester. The Approver is an active participant to send approval notifications to the project manager (default approver). The Requester is an FYI participant to send FYI notifications to the requester who submits the budget for baseline or the forecast for approval.

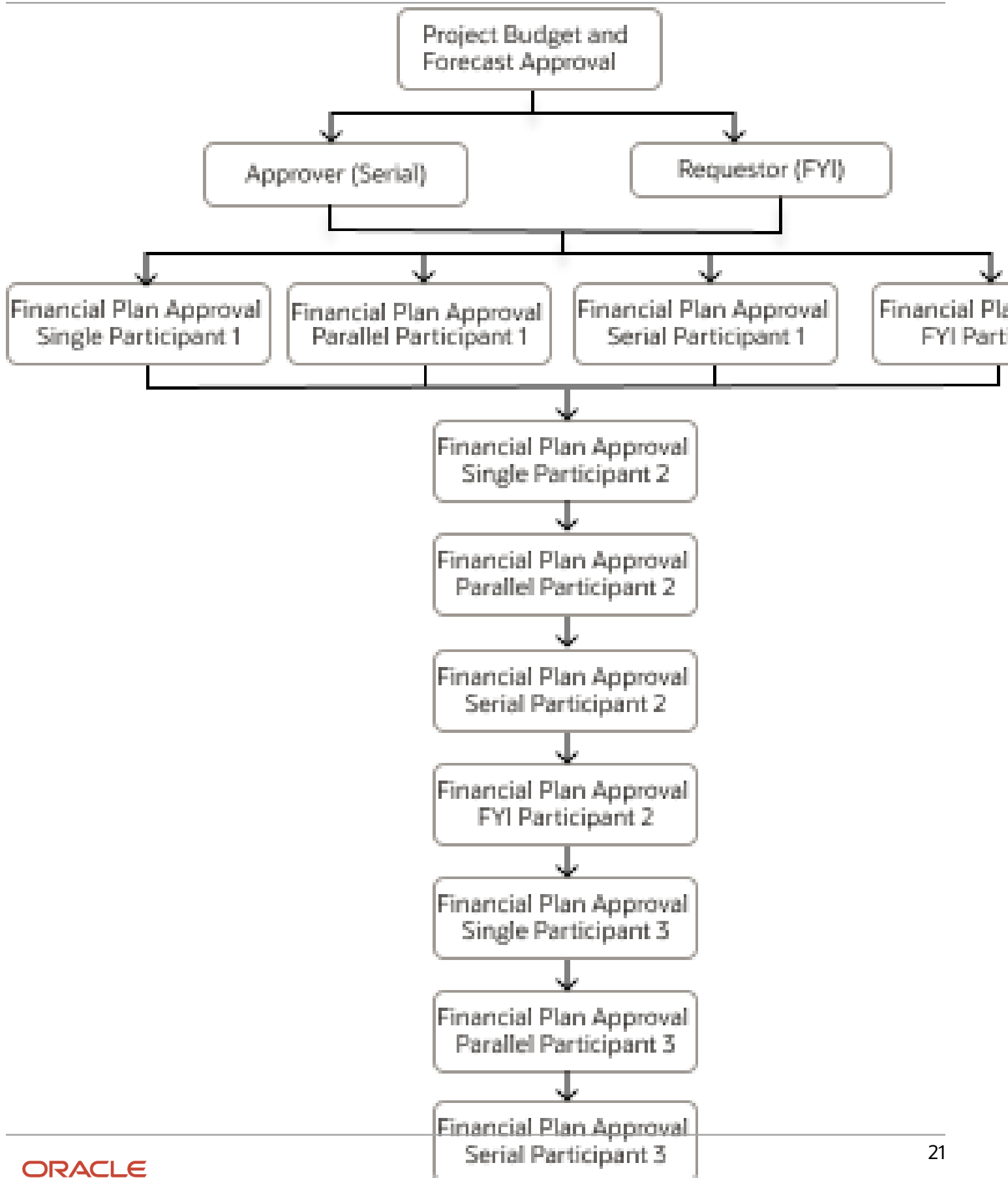
The participant model that's implemented for the financial plan version approval supports both the parallel and sequential mode of approvals:

- **Parallel Mode:** The task is assigned and notifications go to all participants at once in parallel. For example, participants 3 to 6 in the below figure are defined as parallel participants.
- **Sequential Mode:** The task is assigned and notifications go in sequential mode, meaning one after another, to each participant. All participants have to approve sequentially for the task to be approved. For example, participants 7 to 13 in the below figure are defined as sequential participants.

Some points to consider:

- Only Approver and Requester participants are enabled by default. You must enable the other participants as required.
- The default approval rules in all the predefined rule sets are configured to send notifications to the project manager for approvals. Review the predefined rules and modify them as required.
- You can disable participants that you don't want to use by enabling the Ignore Participant option or by defining a rule to ignore the participant.
- You can't change the order of the predefined participants.
- You can't add participants.

The following figure indicates the predefined participant model for the ApprovePlanVersion task.



Here are the details of the participants defined in the financial plan version approval workflow. Each participant is associated with a predefined rule set.

Number	Participant Name	Rule Set	Participant Type
1	Approver	BudgetForecastAMXRuleSet	Serial
2	Requester	NA	FYI
3	Financial Plan Approval Single Participant 1	ProjectBudgetsandForecastsApprov	Single
4	Financial Plan Approval Parallel Participant 1	ProjectBudgetsandForecastsApprov	Parallel
5	Financial Plan Approval Serial Participant 1	ProjectBudgetsandForecastsApprov	Serial
6	Financial Plan Approval FYI Participant 1	ProjectBudgetsandForecastsApprov	FYI
7	Financial Plan Approval Single Participant 2	ProjectBudgetsandForecastsApprov	Single
8	Financial Plan Approval Parallel Participant 2	ProjectBudgetsandForecastsApprov	Parallel
9	Financial Plan Approval Serial Participant 2	ProjectBudgetsandForecastsApprov	Serial
10	Financial Plan Approval FYI Participant 2	ProjectBudgetsandForecastsApprov	FYI
11	Financial Plan Approval Single Participant 3	ProjectBudgetsandForecastsApprov	Single
12	Financial Plan Approval Parallel Participant 3	ProjectBudgetsandForecastsApprov	Parallel
13	Financial Plan Approval Serial Participant 3	ProjectBudgetsandForecastsApprov	Serial

## The Financial Plan Version Approval Process

Here's how the Financial Plan Version Approval process works.

Task Number	Agent	Description	Comments
1	Project Administrator	Uses the Manage Budget Versions, Edit Budget Version, Manage Forecast Versions, or Edit Forecast Version page to submit a budget or a forecast for approval.	For information on working with budgets or forecasts, see Considerations for Creating Budgets and Forecasts in the Defining and Managing Financial Projects guide.
2	ApprovePlanVersion	As soon as someone submits a financial plan for approval, the workflow sends notifications to all configured assignees using email or in-app notifications, as configured.	When a budget or forecast version for a project template is submitted, the application skips the workflow and the version is set to Baseline or Approved status respectively.  For information on how you can customize approval workflow notifications, see Workflow Notifications in the Implementing Applications guide.
3	Workflow Assignees	Assignees review and approve or reject the financial plan.	If the workflow uses parallel approvers, then the Voting Percentage rule is used to determine the final approval.  For information on using BPM Worklist to update approval workflows, see Workflow Approvals and Notifications in the Implementing Applications guide. Also, see the Use Cases section in this topic.
4	ApprovePlanVersion	If the assignee rejects the financial plan, then the workflow updates the budget or forecast status to Current Working. If the assignee approves the financial plan, then the budget status is set to Current Baseline and the forecast status is set to Approved.	NA
5	ApprovePlanVersion	The workflow performs the following tasks once the financial plan is submitted. <ul style="list-style-type: none"> <li>If the financial plan is approved, the workflow sends notifications to configured recipients if configured. Otherwise, the workflow exits.</li> <li>If the financial plan is rejected, the application sends a notification indicating the result to the submitter (Project Administrator).</li> </ul>	NA

You can withdraw the submitted budget while it's still under approval. However, in the following error scenarios, you can withdraw budget approvals only after two hours from the time the budget is submitted for approval:

- - Approval history doesn't exist.
  - Approvals are done but the budget is still in the Submitted status.

If the workflow is stuck due to an error, for example during rule evaluation, its indicated on the Approval History dialog box and you can't withdraw the budget approval. The application administrator can review the status of the workflow in the Transaction Console and either recover or withdraw the workflow.

## Configure Financial Plan Version Approval Workflow

You can configure approval rules in the context of a rule set using BPM Worklist. To configure rules for this workflow, you must have the Projects Application Administrator job role.

1. In the Setup and Maintenance work area, go to the **Define Approval Management for Project Financial Management** task.
2. Click **Manage Task Configurations for Project Financial Management**.
3. In the **Tasks to be configured** pane, search for your human task workflow. Enter the name of your human task workflow in the **Search** field and click **Search task types**. For example, to search for the Financial Plan Version Approval workflow, enter **ApprovePlanVersion** and click **Search task types**.
4. Verify that the human task workflow appears underneath the **Search**.
5. Select the task and click **Edit task** on the panel header.
6. Click the **Assignees** tab on the right to view the predefined participants for the human task workflow.
7. Select the appropriate participant and click **Go to rule** to navigate to the relevant rule set.

The structure of a workflow approval rule is as follows:

1. Each rule consists of an IF and THEN component.
2. In the IF section of the rule, define the condition that determines if the rule should be applied. If needed, you can define multiple conditions.
3. In the THEN section of the rule, define how approvals will be generated if the conditions are met. The THEN component consists of a:
  - List builder and related attributes.
  - Response type that indicates if the assignees are required to respond or if they will receive an FYI notification.
  - Automatic action setting that lets you set an automatic response. For example, automatically approve or reject.

Some points to consider:

- The default approval rules in all the predefined rule sets are configured to send notifications to the Project application administrator for approvals. Review the predefined rules and modify them as required.
- You can disable participants that you don't want to use by enabling the **Ignore Participant** option or by defining a rule to ignore the participant.
- For generic guidance on customizing workflows and notifications, see Workflow Approval and Notifications in the Implementing Applications guide.

## Supported Attributes

The attributes that can be used to modify the behavior of this workflow are as follows:

- Plan Version Payload attributes - These attributes are associated with the version that's being processed.
- Project Attributes - These attributes are associated with the project that's associated with the budget or forecast.
- Budget Attributes - These attributes are associated with the budget that's being processed.
- Forecast Attributes - These attributes are associated with the forecast that's being processed.

### Plan Version Payload Attributes

Attribute	Description
projectName	The name of the project.
projectNumber	The unique identifier of the project.
awardNumber	The award number.
awardId	The unique identifier of the award.
businessUnit	The unique identifier of the business unit.
projectUnit	The name of the project unit that's implementing the project that's associated with the budget or forecast.
planVersionName	The name of the budget or forecast version.
planVersionNumber	The unique identifier of the budget or forecast version.
requestorName	The name of the person requesting approval of the budget or forecast version.
approverName	The name of the person approving the budget or forecast version.
principalInvestigator	The name of the person acting as the principal investigator of the award budget.
SummaryAmounts --> peopleEffort	The labor effort amount of the budget or forecast version.
SummaryAmounts --> equipmentEffort	The equipment effort amount of the budget or forecast version.
SummaryAmounts --> pcRawCost	The raw cost amount of the budget or forecast version in project currency.
SummaryAmounts --> pcBurdenedCost	The burdened cost amount of the budget or forecast version in project currency.

Attribute	Description
SummaryAmounts --> pcRevenue	The revenue amount of the budget or forecast version in project currency.
SummaryAmounts --> pfcRawCost	The raw cost amount of the budget or forecast version in project ledger currency.
SummaryAmounts --> pfcBurdenedCost	The burdened cost amount of the budget or forecast version in project ledger currency.
SummaryAmounts --> pfcRevenue	The revenue amount of the budget or forecast version in project ledger currency.
SummaryAmounts --> margin	The margin amount of the budget or forecast version in project ledger currency.
SummaryAmounts --> marginPercent	The margin percentage of the budget or forecast version in project ledger currency.
planTypeName	The name of the financial plan type that's associated with the budget or forecast version.
planningAmount	The presence of cost amounts, revenue amounts, or both in a budget or forecast version.
projectNumAct	The system generated number of the project which starts at one and keeps incrementing.
versionNumAct	The system generated number of the budget or forecast version which starts at one and keeps incrementing.

## Project Attributes

**Note:** Some of the attributes listed here can be found in folders in the Condition Explorer. The name of the folder is added to every such attribute in this table. Thus, for example, the attribute ProjectTeamMember > ProjectPartyId can be found in the ProjectTeamMember folder.

Attribute	Description
ProjectId	The unique identifier of the project.
ProjectName	The name of the project.
ProjectNumber	The project number.
CarryingOutOrganizationId	The unique identifier of the organization that's executing the project.
ProjectOrganizationName	The name of the organization that's implementing the project.

Attribute	Description
ProjectUnitId	The unique identifier of the project unit that's implementing the project that's associated with the budget or forecast.
ProjectUnitName	The name of the project unit that's implementing the project that's associated with the budget or forecast.
ProjectTypeId	The unique identifier of the project type.
ProjectTypeName	The name of the project type.
BusinessUnitId	The unique identifier of the business unit.
BusinessUnitName	The name of the business unit.
LegalEntityId	The unique identifier of the legal entity that's implementing the project.
LegalEntityName	The name of the legal entity that's implementing the project.
WorkTypeId	The unique identifier of the work type that's associated with task for which the budget or forecast is created.
WorkTypeName	The name of the work type that's associated with the task for which the budget or forecast is created.
ProjectCurrencyCode	The currency code used by default with amounts in the project.
ProjectLedgerCurrencyCode	The currency code used by default with amounts in the project ledger.
SponsoredFlag	Indicates whether the project is sponsored or not.
ProjectClassification	The classification of the project. The node comprises of ProjectClassCategory, ProjectClassCode, and ClassCodePercentage attributes that help in classifying a project.
ProjectDff	Custom project-related flexfields created for use in your organization.
ProjectTeamMember --> projectPartyId	The unique identifier of a party assignment to the project for a project team member associated with the budget or forecast version.

Attribute	Description
ProjectTeamMember --> TeamMemberRoleId	The unique identifier of the role that's assigned to a project team member associated with the budget or forecast version.
ProjectTeamMember --> TeamMemberRoleName	The name of the role that's assigned to a project team member associated with the budget or forecast version.
ProjectTeamMember --> TeamMemberPersonId	The unique identifier of a project team member associated with the budget or forecast version.
ProjectTeamMember --> TeamMemberEmailAddress	The email address of a project team member associated with the budget or forecast version.
ProjectTeamMember --> TeamMemberUserName	The name of a project team member associated with the budget or forecast version.
ProjectTeamMember --> startDateActive	The start date of a project team member associated with the budget or forecast version.
ProjectTeamMember --> endDateActive	The end date of a project team member associated with the budget or forecast version.

## Budget Attributes

Attribute	Description
VersionName	The name of the budget version.
VersionNumber	The number of the budget version.
InternalVersionId	The unique identifier of the budget version.
ProjectName	The name of the project that's associated with the budget version.
ProjectNumber	The number of the project that's associated with the budget version.
InternalProjectId	The unique identifier of the project that's associated with the budget version.
FinancialPlanType	The name of the financial plan type that's associated with the budget version.
Status	The status of the budget version.

Attribute	Description
PlanningAmounts	The presence of cost amounts, revenue amounts, or both in a budget version.
BaselinedBy	The name of the person who set the budget version to baseline.
BaselinedDate	The date when the budget version is set to baseline.
ProjectCurrency	The currency in which the project that's associated with the budget is implemented.
TotalRevenue	The total revenue amounts taken into account the planning amounts from the previous budget version plus any adjusted amounts.
TotalRawCost	The total raw cost amounts taken into account the planning amounts from the previous budget version plus any adjusted amounts.
TotalBurdenedCost	The total burdened cost amounts taken into account the planning amounts from the previous budget version plus any adjusted amounts.
Margin	The difference between the budgeted cost and revenue amounts.
MarginPercentage	The difference between the budgeted cost and revenue amounts, expressed as a percentage.
TotalEffortAtCompletion	The projected amount of work, in hours, for labor and equipment resource classes from the budget version.
EquipmentEffortAtCompletion	The projected amount of work, in hours, for equipment resource class from the budget version.
PeopleEffortAtCompletion	The projected amount of work, in hours, for labor resource class from the budget version.
PlanningOptionDff	Custom budget planning options related flexfields created for use in your organization.
projectBudgetCurrentBaselinedVersions --> ProjectId	The unique identifier of the project that's associated with the current baseline budget version.
projectBudgetCurrentBaselinedVersions --> PlanVersionId	The unique identifier of the current baseline budget version.
projectBudgetCurrentBaselinedVersions --> PlanTypeId	The unique identifier of the financial plan type that's associated with the current baseline budget version.
projectBudgetCurrentBaselinedVersions --> PlanningOptionId	The unique identifier of the financial planning options setup that's associated with the current baseline budget version.
projectBudgetCurrentBaselinedVersions --> ProjectNumber	The project number of the project that's associated with the current baseline budget version.

Attribute	Description
projectBudgetCurrentBaselinedVersions -- > ProjectName	The name of the project that's associated with the current baseline budget version.
projectBudgetCurrentBaselinedVersions -- > PlanVersionNumber	The version number of the project that's associated with the current baseline budget version.
projectBudgetCurrentBaselinedVersions -- > PlanVersionName	The name of the current baseline budget version.
projectBudgetCurrentBaselinedVersions -- > PlanTypeName	The name of the financial plan type that's associated with the current baseline budget version.
projectBudgetCurrentBaselinedVersions -- > BaselinedDate	The date when the current baseline budget version was set to baseline.
projectBudgetCurrentBaselinedVersions -- > PeopleQuantity	The amount of work, in hours, for labor resource class from the current baseline budget version.
projectBudgetCurrentBaselinedVersions -- > EquipmentQuantity	The amount of work, in hours, for equipment resource class from the current baseline budget version.
projectBudgetCurrentBaselinedVersions -- > TotalPcBrndCost	The total of burdened cost amounts of the current baseline budget in project currency.
projectBudgetCurrentBaselinedVersions -- > TotalPcRawCost	The total of raw cost amounts of the current baseline budget in project currency.
projectBudgetCurrentBaselinedVersions -- > TotalPcRevenue	The total of revenue amounts of the current baseline budget in project currency.
projectBudgetCurrentBaselinedVersions -- > TotalPfcBrndCost	The total of burdened cost amounts of the current baseline budget in project ledger currency.
projectBudgetCurrentBaselinedVersions -- > TotalPfcRawCost	The total of raw cost amounts of the current baseline budget in project ledger currency.
projectBudgetCurrentBaselinedVersions -- > TotalPfcRevenue	The total of revenue amounts of the current baseline budget in project ledger currency.
projectBudgetCurrentBaselinedVersions -- > ApprovedCostPlanTypeFlag	Indicates if the current baseline budget is of approved cost plan type or not.
projectBudgetCurrentBaselinedVersions -- > ApprovedRevPlanTypeFlag	Indicates if the current baseline budget is of approved revenue plan type or not.
projectBudgetCurrentBaselinedVersions -- > BudgetSourceReference	The reference of the source that's used for creating the current baseline budget version.

Attribute	Description

## Forecast Attributes

Attributes	Description
InternalVersionId	The unique identifier of the forecast version.
VersionName	The name of the forecast version.
VersionNumber	The number of the forecast version.
ProjectName	The name of the project that's associated with the forecast version.
ProjectNumber	The number of the project that's associated with the forecast version.
InternalProjectId	The unique identifier of the project that's associated with the forecast version.
Status	The status of the forecast version.
PlanningAmounts	The presence of cost amounts, revenue amounts, or both in a forecast version.
ProjectCurrency	The currency in which the project that's associated with the forecast is implemented.
FinancialPlanType	The name of the financial plan type that's associated with the forecast version.
EtcStartDate	The date when the estimate-to-complete is intended to begin.
EACBurdenedCost	The estimated burdened cost amount at the completion of the project.
EACRawCost	The estimated raw cost amount at the completion of the project.
EACRevenue	The estimated revenue amount that will be recognized at the completion of the project.
Margin	The difference between the estimate-at-completion cost and revenue amounts.
MarginPercentage	The difference between estimate-at-completion cost and revenue amounts, expressed as a percentage.
EACPeopleEffortAtCompletion	The projected amount of work, in hours, for labor resource class from the forecast version.
EACEquipmentEffortAtCompletion	The projected amount of work, in hours, for equipment resource class from the forecast version.

Attributes	Description
EACTotalEffortAtCompletion	The projected amount of work, in hours, for labor and equipment resource classes from the forecast version.
ETCBurdenedCost	The estimated burdened cost amount to complete the project.
ETCRawCost	The estimated raw cost amount to complete the project.
ETCRevenue	The estimated revenue amount to be recognized to complete the project.
ActualBurdenedCost	The actual burdened cost amount incurred on the project.
ActualRawCost	The actual raw cost amount incurred on the project.
PhysicalPercentComplete	The amount of physical work achieved, expressed as percentage.
TotalCommitments	The total planned quantity or amounts of commitments required to complete a project.
PlanningOptionDff	Custom forecast planning options related flexfields created for use in your organization.
projectForecastCurrentApprovedVersions --> ProjectId	The unique identifier of the project that's associated with the current approved forecast version.
projectForecastCurrentApprovedVersions --> PlanVersionId	The unique identifier of the current approved forecast version.
projectForecastCurrentApprovedVersions --> PlanTypeId	The unique identifier of the financial plan type that's associated with the current approved forecast version.
projectForecastCurrentApprovedVersions --> ProjectNumber	The number of the project that's associated with the current approved forecast version.
projectForecastCurrentApprovedVersions --> ProjectName	The name of the project that's associated with the current approved forecast version.
projectForecastCurrentApprovedVersions --> PlanVersionNumber	The version number of the project that's associated with the current approved forecast version.
projectForecastCurrentApprovedVersions --> PlanVersionName	The name of the current approved forecast version.
projectForecastCurrentApprovedVersions --> PlanTypeName	The name of the financial plan type that's associated with the current approved forecast version.
projectForecastCurrentApprovedVersions --> PlanningOptionId	The unique identifier of the financial planning options setup that's associated to the current approved forecast version.

Attributes	Description
projectForecastCurrentApprovedVersions --> BaselinedDate	The date when the current approved forecast version was set to baseline.
projectForecastCurrentApprovedVersions --> EtcStartDate	The date when the estimate-to-complete is intended to begin in the current approved forecast version.
projectForecastCurrentApprovedVersions --> PeopleQuantity	The amount of work, in hours, for labor resource class from the current approved forecast version.
projectForecastCurrentApprovedVersions --> EquipmentQuantity	The amount of work, in hours, for equipment resource class from the current approved forecast version.
projectForecastCurrentApprovedVersions --> TotalPcBrndndCost	The total of burdened cost amounts of the current approved forecast in project currency.
projectForecastCurrentApprovedVersions --> TotalPcRawCost	The total of raw cost amounts of the current approved forecast in project currency.
projectForecastCurrentApprovedVersions --> TotalPcRevenue	The total of revenue amounts of the current approved forecast in project currency.
projectForecastCurrentApprovedVersions --> TotalPfcBrndndCost	The total of burdened cost amounts of the current approved forecast in project ledger currency.
projectForecastCurrentApprovedVersions --> TotalPfcRawCost	The total of raw cost amounts of the current approved forecast in project ledger currency.
projectForecastCurrentApprovedVersions --> TotalPfcRevenue	The total of revenue amounts of the current approved forecast in project ledger currency.
projectForecastCurrentApprovedVersions --> PrimaryCostForecastFlag	Indicates if the current approved forecast is of approved cost plan type or not.
projectForecastCurrentApprovedVersions --> PrimaryRevForecastFlag	Indicates if the current approved forecast is of approved revenue plan type or not.
projectForecastCurrentApprovedVersions --> ForecastSourceReference	The reference of the source that's used for creating the current approved forecast.

## Financial Plan Version Approval Workflow Notifications

The Financial Plan Version Approval workflow sends notifications when:

- A budget or forecast version requires approval.
- A budget or forecast version is approved or rejected.

- A budget or forecast version requires more information.

**Note:** For guidance on how you can work with workflow notifications in BPM Worklist, see Workflow Notifications in the Common Implementing Applications guide.

### Contents of a Financial Plan Version Approval Workflow Notification

A Financial Plan Version Approval Workflow notification contains the following details:

**Note:** Below are the details of a budget notification.

- Header
  - Budget Version
  - Created On
  - Created By
  - Version Number
  - Version Description
  - Financial Plan Type
- Summary Section
  - Project
  - Labor Effort (Hours)
  - Equipment Effort (Hours)
  - Burdened Cost in Project Currency
  - Raw Cost in Project Currency
  - Burdened Cost in Project Ledger Currency
  - Raw Cost in Project Ledger Currency
- Approval History: One row per approver
  - Approvers
    - Assigned to / Approved by / Rejected by <Name of Approver>
    - Date and Time of Assignment / Approval / Rejection
  - Submitter
    - Submitted by <Name of Submitter>
    - Date and Time of Submission
  - Link to budget version
- Approval options (if sent to an approver)
  - Approve
  - Reject
  - Request Info

### Customizing Notification Templates

You can find the templates and data models used in the Financial Plan Version Approval workflow in the **Shared Folders > Projects > Workflow Notifications > Project Control** folder in the Oracle BI Publisher catalog. In this folder, the **FinancialPlanVersionApprovalTemplate** file contains the template used in the notification report. Expand the **Project Control > Data Model** folder to access the **FinancialPlanVersionApprovalDM** file, which contains the data model used in the notification report.

**Note:** For information on how you can customize notification templates, see *Configure Workflow Approvals and Notifications* in the *Implementing Applications* guide.

## Use Cases

### Automatically Approve the Budget Version for Baseline in All Cases

To set up autoapproval for project budgets:

1. In the Setup and Maintenance work area, go to the **Manage Task Configurations for Project Financial Management** task.  
The BPM Worklist application is displayed.
2. In the Tasks to be configured pane, search for the **ApprovePlanVersion** task, and click the **ApprovePlanVersion** link.
3. Click the **Edit** icon in the Tasks to be configured pane to modify the workflow.
4. Click the Assignees tab.  
The participants who must approve project budgets or forecasts are displayed. Click on each of these participants to review the workflow rules that apply to their approval choices.
5. Click the **Approver** participant in the workflow, click the **Go to Rule** (the diamond shaped) icon within the Approver box, and then click the **Go to Rule** option that appears.  
The list of rules associated with the Approver participant are displayed. Ensure that the **BudgetForecastAMXRuleSet** rule is selected in the drop-down list.
6. Change the IF condition of the predefined rules from 1 is 1 to 1 is 2 to disable the predefined workflow from sending project budget or forecast approvals to the project manager for approval.
7. Add the AutoApproval rule, as follows:
  - a. In the Rules pane, click the **Advanced Add or Modify Options** (the + icon) drop-down list and select **General Rule**.
  - b. Click the **Properties** link, enter **AutoApproval** in the **Name** field, add the description, verify that the **Active** check box is selected, and click **OK**.
  - c. In the IF part of the rule, click the **Advanced Add or Modify Options** drop-down list and select **simple test**, and add the IF conditions as follows:

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
ApprovePlanVersionPayloadType is  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting	is	"BUDGET"  This value is case-sensitive. Include the quotation marks. Don't copy and paste this value.	To specify that the rule is applicable only for budget versions.

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
ApprovePlanVersionPayloadType in the Condition Browser dialog box.		To meet similar requirements for forecasts, enter "FORECAST".	

- d. In the THEN part of the rule, click the **Advanced Add or Modify Options** drop-down list and select the Supervisory list builder by clicking **Add Approver > Supervisory**. Then, enter the values as follows:
- **Response Type:** Required
  - **Number of levels:** 1
  - **Starting Participant:**  
HierarchyBuilder.getPrincipal(ApprovePlanVersionPayloadType.approvePlanPayload.approverName,-1,"","")
  - **Top Participant:**  
HierarchyBuilder.getPrincipal(ApprovePlanVersionPayloadType.approvePlanPayload.approverName,-1,"","")
  - **Auto Action Enabled:** True
  - **Auto Action:** "APPROVE" (Type this value including the quotation marks. Don't copy and paste this value.)
  - **Rule Name:** "AutoApproval"
- | **Note:** The rule name is auto-populated, its the name that you entered in Step 7.
- **Dimension Id:** null
- | **Note:** The dimension id is auto-populated as null.
8. Click **Validate** on the top right corner to validate the newly defined rules.
  9. Click the **Save** icon in the Tasks to be configured pane to save the rules.
  10. Click the **Commit task** icon in the Tasks to be configured pane to complete the rule configuration.
  11. Click **OK** to close the confirmation message window.

### Simple Approval Rule Using Resource and Supervisory List Builders

Suppose that you want to approve the budget version for baseline based on the budget amount. Let's say, if the budget burdened cost is less than or equal to \$1000, then it should be auto-approved. Else, it should go to the project manager for approvals. In such case, edit the predefined rule set to define two approval rules as follows:

- Autoapproval rule for budget cost less than or equal to \$1000 using the Supervisory list builder.
- Project manager approval for budget cost greater than \$1000 using the Resource list builder.

Follow these steps:

1. In the Setup and Maintenance work area, go to the **Manage Task Configurations for Project Financial Management** task.  
The BPM Worklist application is displayed.
2. In the Tasks to be configured pane, search for the **ApprovePlanVersion** task, and click the **ApprovePlanVersion** link.
3. Click the **Edit** icon in the Tasks to be configured pane to modify the workflow.
4. Click the Assignees tab.

The participants who must approve project budgets or forecasts are displayed. Click on each of these participants to review the workflow rules that apply to their approval choices.

5. Click the **Approver** participant in the workflow, click the **Go to Rule** (the diamond shaped) icon within the Approver box, and then click the **Go to Rule** option that appears.

The list of rules associated with the Approver participant are displayed. Ensure that the **BudgetForecastAMXRuleSet** rule is selected in the drop-down list.

6. Change the IF condition of the predefined rules from 1 is 1 to 1 is 2 to disable the predefined workflow from sending project budget or forecast approvals to the project manager for approval.
7. Add the AutoApproval rule, as follows:
  - a. In the Rules pane, click the **Advanced Add or Modify Options** (the + icon) drop-down list and select **General Rule**.
  - b. Click the **Properties** link, enter **AutoApproval** in the **Name** field, add the description, verify that the **Active** check box is selected, and click **OK**.
  - c. In the IF part of the rule, click the **Advanced Add or Modify Options** drop-down list and select **simple test**, and add the IF conditions as follows:

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
ApprovePlanVersionPayloadType is  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting ApprovePlanVersionPayloadType in the Condition Browser dialog box.		"BUDGET"  This value is case-sensitive. Include the quotation marks. Don't copy and paste this value.  To meet similar requirements for forecasts, enter "FORECAST".	To specify that the rule is applicable only for budget versions.
ApprovePlanVersionPayloadType isn't		null	To check if the burdened cost amounts are available.
new BigDecimal(ApprovePlanVersion	same or less than	1000.00	To check if the burdened cost is within the threshold limit.

- d. In the THEN part of the rule, click the **Advanced Add or Modify Options** drop-down list and select the Supervisory list builder by clicking **Add Approver > Supervisory**. Then, enter the values as follows:
  - **Response Type:** Required
  - **Number of levels:** 1
  - **Starting Participant:**  
HierarchyBuilder.getPrincipal(ApprovePlanVersionPayloadType.approvePlanPayload.approverName,-1,"","")
  - **Top Participant:**  
HierarchyBuilder.getPrincipal(ApprovePlanVersionPayloadType.approvePlanPayload.approverName,-1,"","")
  - **Auto Action Enabled:** True

- **Auto Action:** "APPROVE" (Type this value including the quotation marks. Don't copy and paste this value.)
- **Rule Name:** "AutoApproval"

**Note:** The rule name is auto-populated, its the name that you entered in Step 7.

- **Dimension Id:** null

**Note:** The dimension id is auto-populated as null.

8. Add the Project manager approval rule, as follows:

- a. In the Rules pane, click the **Advanced Add or Modify Options** drop-down list and select **General Rule**.
- b. Click the **Properties** link, enter **ProjectManagerApproval** in the **Name** field, add the description, verify that the **Active** check box is selected, and click **OK**.
- c. In the IF part of the rule, click the **Advanced Add or Modify Options** drop-down list and select **simple test**, and add the IF conditions as follows:

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
ApprovePlanVersionPayloadType  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting ApprovePlanVersionPayloadType in the Condition Browser dialog box.	is	"BUDGET"  This value is case-sensitive. Include the quotation marks. Don't copy and paste this value.  To meet similar requirements for forecasts, enter "FORECAST".	To specify that the rule is applicable only for budget versions.
ApprovePlanVersionPayloadType	isn't	null	To check if the burdened cost amounts are available.
new BigDecimal(ApprovePlanVersion	more than	1000.00	To check if the burdened cost is within the threshold limit.

- d. In the THEN part of the rule, click the **Advanced Add or Modify Options** drop-down list and select the the Resource list builder by clicking **Add Approver > Resource**. Then, enter the values as follows: :
  - **Response Type:** Required
  - **Users:** ApprovePlanVersionPayloadType.approvePlanPayload.approverName
  - **Groups:** null
  - **Application Role:** null
  - **Rule Name:** "ProjectManagerApproval"

| **Note:** The rule name is auto-populated, its the name that you entered in Step 8.

  - **Dimension Id:** null

| **Note:** The dimension id is auto-populated as null.
9. Click **Validate** on the top right corner to validate the newly defined rules.
10. Click the **Save** icon in the Tasks to be configured pane to save the rules.
11. Click the **Commit task** icon in the Tasks to be configured pane to complete the rule configuration.
12. Click **OK** to close the confirmation message window.

### Multilevel Approval Rule Using Supervisory List Builder

Suppose that you want to approve the budget version for baseline based on the budget cost. The higher the budget cost, the more levels of approval needed for the budget. Let's say, if the budget cost is same or less than \$5000, then it should be approved only by the project manager. If the budget cost is between \$5000 and \$20000, then it should go till the second level of approval to the manager of the project manager. If the budget cost is higher than \$20000, then it should go till the third level of approval to the manager of the manager of the project manager.

Budget Cost Greater Than	Budget Cost Same or Less Than	Levels of Approvals Required
0	5000	1
5000	20000	2
20000	No upper limit	3

In such case, edit the predefined rule set to route the budget version to a hierarchy using the Supervisory list builder based on the budget cost.

- First level approval rule to route approval to project manager for budget cost that's same or less than \$5000.
- Second level approval rule to route approval to the project manager and the manager of project manager for budget cost that's between \$5000 and \$20000.
- Third level approval rule to route approval till the manager of the manager of the project manager for budget cost that's greater than \$20000.

You must also find out the highest position in the job hierarchy so that you can implement this approval for any number of levels till the highest position in your hierarchy. In this example, we'll consider the highest position in the hierarchy to be CEO. See the implementation steps to define jobs in Oracle Fusion Cloud HCM documentation.

**Pre-requisite:** Define jobs in Oracle Fusion Cloud HCM.

Follow these steps:

1. In the Setup and Maintenance work area, go to the **Manage Task Configurations for Project Financial Management** task.

The BPM Worklist application is displayed.

2. In the Tasks to be configured pane, search for the **ApprovePlanVersion** task, and click the **ApprovePlanVersion** link.

3. Click the **Edit** icon in the Tasks to be configured pane to modify the workflow.

4. Click the Assignees tab.

The participants who must approve project budgets or forecasts are displayed. Click on each of these participants to review the workflow rules that apply to their approval choices.

5. Click the **Approver** participant in the workflow, click the **Go to Rule** (the diamond shaped) icon within the Approver box, and then click the **Go to Rule** option that appears.

The list of rules associated with the Approver participant are displayed. Ensure that the **BudgetForecastAMXRuleSet** rule is selected in the drop-down list.

6. Change the IF condition of the predefined rules from 1 is 1 to 1 is 2 to disable the predefined workflow from sending project budget or forecast approvals to the project manager for approval.

7. Add the first level rule, as follows:

- a. In the Rules pane, click the **Advanced Add or Modify Options** (the + icon) drop-down list and select **General Rule**.
- b. Click the **Properties** link, enter **FirstLevel** in the **Name** field, add the description, verify that the **Active** check box is selected, and click **OK**.
- c. In the IF part of the rule, click the **Advanced Add or Modify Options** drop-down list and select **simple test**, and add the IF conditions as follows:

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
ApprovePlanVersionPayloadType is  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting ApprovePlanVersionPayloadType in the Condition Browser dialog box.		"BUDGET"  This value is case-sensitive. Include the quotation marks. Don't copy and paste this value.  To meet similar requirements for forecasts, enter "FORECAST".	To specify that the rule is applicable only for budget versions.
ApprovePlanVersionPayloadType isn't		null	To check if the burdened cost amounts are available.
new BigDecimal(ApprovePlanVersion	same or less than	5000.00	To check if the burdened cost is within the threshold limit.

- d. In the THEN part of the rule, click the **Advanced Add or Modify Options** drop-down list and select the Supervisory list builder by clicking **Add Approver > Supervisory**. Then, enter the values as follows:
  - **Response Type:** Required
  - **Number of levels:** 1
  - **Starting Participant:**  
HierarchyBuilder.getPrincipal(ApprovePlanVersionPayloadType.approvePlanPayload.approverName,-1,"","")
  - **Top Participant:** HierarchyBuilder.getPrincipal("john.doe",-1,"","")
    - | **Note:** john.doe is the username of the CEO.
  - **Auto Action Enabled:** False
  - **Auto Action:** null
  - **Rule Name:** "FirstLevel"
    - | **Note:** The rule name is auto-populated, its the name that you entered in Step 7.
  - **Dimension Id:** null
    - | **Note:** The dimension id is auto-populated as null.
8. Repeat Step 7 and make the following changes for the second and third levels of approval:
  - o Enter the rule names as **SecondLevel** and **ThirdLevel**.
  - o Enter the value in the IF condition as follows:
    - Second level: new  
BigDecimal(ApprovePlanVersionPayloadType.approvePlanPayload.summaryAmounts.pcBurdenedCost)  
between 5000.00 and 20000.00
    - Third level: new  
BigDecimal(ApprovePlanVersionPayloadType.approvePlanPayload.summaryAmounts.pcBurdenedCost)  
more than 20000.00
  - o Enter the value in the THEN condition as follows:
    - 2 for second level and 3 for third level in the **Number of levels** field.
9. Click **Validate** on the top right corner to validate the newly defined rules.
10. Click the **Save** icon in the Tasks to be configured pane to save the rules.
11. Click the **Commit task** icon in the Tasks to be configured pane to complete the rule configuration.
12. Click **OK** to close the confirmation message window.

### Skip a Level Using Supervisory List Builder and Rule Priority

Suppose that you want to approve the budget version for baseline by following alternate level approvals. Let's say we have the following hierarchy defined in Oracle Fusion Cloud HCM.

Person	Position	Manager	Approval Required
David	Project Manager	Henry	Yes
Henry	Senior Manager	Nick	No
Nick	Group Manager	Abraham	Yes

The budget version must first be approved by David. After David approves, the workflow should then skip Henry and route the budget version approval to Nick. After Nick approves, the workflow should move into the approved state.

In such case, edit the predefined rule set to define an additional rule that uses rule priority and a try-catch action.

Follow these steps:

1. In the Setup and Maintenance work area, go to the **Manage Task Configurations for Project Financial Management** task.  
The BPM Worklist application is displayed.
2. In the Tasks to be configured pane, search for the **ApprovePlanVersion** task, and click the **ApprovePlanVersion** link.
3. Click the **Edit** icon in the Tasks to be configured pane to modify the workflow.
4. Click the Assignees tab.  
The participants who must approve project budgets or forecasts are displayed. Click on each of these participants to review the workflow rules that apply to their approval choices.
5. Click the **Approver** participant in the workflow, click the **Go to Rule** (the diamond shaped) icon within the Approver box, and then click the **Go to Rule** option that appears.  
The list of rules associated with the Approver participant are displayed. Ensure that the **BudgetForecastAMXRuleSet** rule is selected in the drop-down list.
6. Change the rule priority to ensure that the workflow notification is sent to the project manager and only after this approver approves, notifications are sent to the next approver.
  - a. Select the **SoaOLabel.FinancialPlanApprovalRule.BudgetorForecastApprovalRule** predefined rule.
  - b. Click the **Properties** link.
  - c. Select **Highest** from the **Priority** drop-down list, select the **Advanced Mode** check box, verify that the **Active** check box is selected, and click **OK**.
7. Change the IF condition of the predefined rules from 1 is 1 to 1 is 2 to disable the predefined workflow from sending project budget or forecast approvals to the project manager for approval.
8. Add the skip level rule, as follows:
  - a. In the Rules pane, click the **Advanced Add or Modify Options** (the + icon) drop-down list and select **General Rule**.
  - b. Click the **Properties** link, enter **SkipLevel** in the **Name** field, add the description, select **Medium** from the **Priority** drop-down list, verify that the **Active** check box is selected, select the **Advanced Mode** check box, and click **OK**.
  - c. Click the **Insert Pattern** link.
  - d. In the IF part of the rule, add the Task is a Task pattern by entering **Task** in both the text boxes. Then, click the **Advanced Add or Modify Options** drop-down list and select **simple test**, and add the IF condition, as follows:

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
Task.payload.planClassCode  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting	is	"BUDGET"  This value is case-sensitive. Include the quotation marks. Don't copy and paste this value.	To specify that the rule is applicable only for budget versions.

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
Task.payload.planClassCode in the Condition Browser dialog box.		To meet similar requirements for forecasts, enter "FORECAST".	

- e. In the THEN part of the rule, click the **Insert Action** drop-down list and select **try**. Then, perform these actions in the following order:

Where to Perform the Action	Action to Perform	Result
Under the <b>try</b> action	Click the <b>Insert Action</b> drop-down list and select <b>catch</b> .	The <b>catch</b> action is added.
Under the <b>catch</b> action	Click the <b>Insert Action</b> drop-down list and select <b>Add Approver &gt; Supervisory</b> .	The Supervisory list builder is added.
Under the <b>catch</b> action	Select the check box against <b>catch</b> and click the <b>Move down</b> icon.	The Supervisory list builder moves directly under the <b>try</b> action.
Under the <b>try</b> action	<p>Enter the values as follows:</p> <ul style="list-style-type: none"> <li>- <b>Response Type:</b> Required</li> <li>- <b>Number of levels:</b> 1</li> <li>- <b>Starting Participant:</b> HierarchyBuilder.getManager("supervisory",HierarchyBuilder.g</li> <li>- <b>Top Participant:</b> HierarchyBuilder.getManager("supervisory",HierarchyBuilder.g</li> </ul> <p><b>Note:</b> Replace "LINE_MANAGER" with the hierarchy type that you define in Oracle HCM Cloud.</p> <ul style="list-style-type: none"> <li>- <b>Auto Action Enabled:</b> False</li> <li>- <b>Auto Action:</b> null</li> <li>- <b>Rule Name:</b> "SkipLevel"</li> </ul> <p><b>Note:</b> The rule name is autopopulated, its the name that you entered in Step 8.</p> <ul style="list-style-type: none"> <li>- <b>Dimension Id:</b> null</li> </ul> <p><b>Note:</b> The dimension id is autopopulated as null.</p>	NA

Where to Perform the Action	Action to Perform	Result
In the <b>catch</b> action	Select the check box against <b>catch</b> and click the <b>Delete Action</b> icon.  <b>Note:</b> Before you perform this action, ensure that only the check box against <b>catch</b> is selected.	The <b>catch</b> action is deleted.
In the <b>try</b> action	Select the check box against <b>try</b> and click the <b>Insert Action</b> drop-down list and select <b>catch</b> .	The <b>catch</b> action is added.
In the <b>catch</b> action	Enter <b>Object</b> as the target and <b>e</b> as the identifier value in the text boxes.	NA
Under the <b>catch</b> action	Click the <b>Insert Action</b> drop-down list and select <b>return</b> .	NA

**Note:** If the **try** and **catch** actions are indented at the same level, it indicates that the rule is configured correctly.

9. Click **Validate** on the top right corner to validate the newly defined rules.
10. Click the **Save** icon in the Tasks to be configured pane to save the rules.
11. Click the **Commit task** icon in the Tasks to be configured pane to complete the rule configuration.
12. Click **OK** to close the confirmation message window.

### Approval Rule for Parallel Budget and Forecast Approval

Suppose that you want to define an approval rule to approve budgets and forecasts simultaneously using approval groups. An approval group includes the people you want to designate as approvers. For example, you can create an approval group named **FinancialPlanApprovalGroup** comprised of people from the finance department who need to participate in the approving of a task.

In a parallel approval process, all members of the approval group must give their approval, but the order doesn't matter as long as everyone approves. Alternatively, you can configure a voting percentage rule to determine the final approval. For instance, if you set the voting percentage to 50%, then half of the members in the approval group must approve for the process to be considered approved.

Follow these steps:

1. In the Setup and Maintenance work area, go to the **Manage Task Configurations for Project Financial Management** task.  
The BPM Worklist application is displayed.
2. Click the **Approval Groups** tab and create a group of approvers as follows:
  - a. In the Groups pane, click the **Create Approval Group** icon and select the option to create a static group.
  - b. Enter **FinancialPlanApprovalGroup** in the **Name** field and click the **Add Member** icon and add the group members (the people you want to designate as approvers).
  - c. Click **Save**.

3. Click the Task Configuration tab, and in the Tasks to be configured pane, search for the **ApprovePlanVersion** task, and click the **ApprovePlanVersion** link.
4. Click the **Edit** icon in the Tasks to be configured pane to modify the workflow.
5. Click the Assignees tab.

The participants who must approve project budgets or forecasts are displayed.

6. Perform these steps:
  - a. Click the **Approver** participant in the workflow. Then, click **Advanced** and select the **Ignore Participant** check box.
  - b. Click the **Financial Plan Approval Single Participant1** participant in the workflow. Then, click **Advanced** and select the **Ignore Participant** check box.
7. Click the **Financial Plan Approval Parallel Participant 1** participant in the workflow. Then, click **Advanced** and ensure that the **Ignore Participant** check box isn't selected. Note that the **Ignore Participant** check box is selected for all participants except the parallel participant.
8. Verify that all other rules and participants are disabled.
9. Add the approval rule to approve budgets and forecasts simultaneously, as follows:
  - a. Click the **Financial Plan Approval Parallel Participant 1** participant in the workflow, click the **Go to Rule** (the diamond shaped) icon within the box, and then click the **Go to Rule** option that appears. Ensure that the **ProjectBudgetsandForecastsApprovalParallelRuleSetOne** rule is selected in the drop-down list.
  - b. In the Rules pane, click the **Advanced Add or Modify Options** (the + icon) drop-down list and select **General Rule**.
  - c. Click the **Properties** link, enter **FinancialPlanApproval** in the **Name** field and add the description.
  - d. Select **Medium** from the **Priority** drop-down list, ensure that the **Advanced Mode** check box isn't selected, verify that the **Active** check box is selected, and click **OK**.
  - e. In the IF part of the rule, click the **Advanced Add or Modify Options** drop-down list and select **simple test**, and add the IF conditions as follows:

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
1	is	1	The default condition to ensure that the rule is always executed. It can be modified to execute the rule only for budgets, for example, by checking for the plan type.

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition

- f. In the THEN part of the rule, click the **Insert Action** drop-down list, select **Add Approver > Approval Group**. Then, enter the values as follows:

- **Response Type:** Required
- **Approval Group:** FinancialPlanApprovalGroup
- **Allow empty groups:** false
- **Rule Name:** "FinancialPlanApproval"

**Note:** The rule name is auto-populated, its the name that you entered in Step 9.

- **Dimension Id:** null

**Note:** The dimension id is auto-populated as null.

10. Click the Configuration tab, select the **Complete task immediately when participant chooses** check box under the **Early completion settings** section, and then select **Reject** from the **Task Outcome Options** drop-down list.
11. Click the **Save** icon in the Tasks to be configured pane to save the rules.
12. Click the **Commit task** icon in the Tasks to be configured pane to complete the rule configuration.
13. Click **OK** to close the confirmation message window.

### Multiple Approval Rules Based on Project Roles

Suppose that you want to define multiple approval rules based on project roles, as follows:

- If the submitter has the project manager role on the project, then the budget version must be auto-approved.
- If the submitter has the project administrator role (not project manger role) on the project, then the budget version must be routed to the project manager for approval.

In such case, edit the predefined rule set to define a couple of additional rules that use advanced mode with pattern matching.

Follow these steps:

1. In the Setup and Maintenance work area, go to the **Manage Task Configurations for Project Financial Management** task.

The BPM Worklist application is displayed.

2. In the Tasks to be configured pane, search for the **ApprovePlanVersion** task, and click the **ApprovePlanVersion** link.
3. Click the **Edit** icon in the Tasks to be configured pane to modify the workflow.
4. Click the Assignees tab.

The participants who must approve project budgets or forecasts are displayed. Click on each of these participants to review the workflow rules that apply to their approval choices.

5. Click the **Approver** participant in the workflow, click the **Go to Rule** (the diamond shaped) icon within the Approver box, and then click the **Go to Rule** option that appears.

The list of rules associated with the Approver participant are displayed. Ensure that the **BudgetForecastAMXRuleSet** rule is selected in the drop-down list.

6. Change the IF condition of the predefined rules from 1 is 1 to 1 is 2 to disable the predefined workflow from sending project budget or forecast approvals to the project manager for approval.
7. Add the approval rule, as follows:
  - a. In the Rules pane, click the **Advanced Add or Modify Options** (the + icon) drop-down list and select **General Rule**.
  - b. Click the **Properties** link, enter **ProjectRoleBasedApproval** in the **Name** field and add the description.
  - c. Select **Medium** from the **Priority** drop-down list, select the **Advanced Mode** check box, verify that the **Active** check box is selected, and click **OK**.
  - d. In the IF part of the rule:
    - i. Click **Insert Pattern**, then enter **Lists** in the left box and select **Lists** from the drop-down list.
    - ii. Click the **Add Pattern** icon, then enter **Task1** in the left box and select **Task** from the drop-down list.
    - iii. Click the **Add Pattern** icon and select **Surround from the Surround selected tests with parenthesis** drop-down list that's adjacent to the **Add Pattern** icon you just clicked.
    - iv. Select **None** from the drop-down list below **and**.
    - v. Enter **ProjectTeamMember1** in the left box and choose **ProjectTeamMember** from the drop-down list in the pattern.
    - vi. Click the **Advanced Add or Modify Options** drop-down list and select **simple test**, and add the IF conditions within the same pattern as follows:

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
Task1.payload.approvePlanPa  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting Task1.payload.approvePlanPa in the Condition Browser dialog box.	is	ProjectTeamMember1.teamM  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting ProjectTeamMember1.teamM in the Condition Browser dialog box.	To specify that the requester is a project team member.
ProjectTeamMember1.teamM	is	"Project Manager"	To check whether the requester plays the Project Manager role in the project.

- e. In the THEN part of the rule, add a list builder of resource type by clicking **Insert Action > Add Approver > Resource**. Then, enter the values as follows:
  - **Response Type:** Required
  - **Users:** Task1.payload.approvePlanPayload.approverName
  - **Groups:** null

- **Application Role:** null
- **Rule Name:** "ProjectRoleBasedApproval"
- | **Note:** The rule name is auto-populated, its the name that you entered in Step 7.
- **Dimension Id:** null
- | **Note:** The dimension id is auto-populated as null.

8. Add the auto-approval rule for project manager role, as follows:
- a. In the Rules pane, click the **Advanced Add or Modify Options** drop-down list and select **General Rule**.
  - b. Click the **Properties** link, enter **AutoApproveForProjectManagerRole** in the **Name** field, and add the description.
  - c. Select **Medium** from the **Priority** drop-down list, select the **Advanced Mode** check box, verify that the **Active** check box is selected, and click **OK**.
  - d. In the IF part of the rule:
    - i. Click **Insert Pattern**, then enter **Lists** in the left box, and select **Lists** from the drop-down list.
    - ii. Click the **Add Pattern** icon, then enter **Task1** in the left box, and select **Task** from the drop-down list.
    - iii. Click the **Add Pattern** icon and select **Surround** from the **Surround selected tests with parenthesis** drop-down list that's adjacent to the **Add Pattern** icon you just clicked.
    - iv. Select **None** from the drop-down list below **and**.
    - v. Type **ProjectTeamMember1** in the left box and choose **ProjectTeamMember** from the drop-down list in the pattern.
    - vi. Click the **Advanced Add or Modify Options** drop-down list and select **simple test**, and add the IF conditions within the same pattern as follows:

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
Task1.payload.approvePlanPa  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting Task1.payload.approvePlanPa in the Condition Browser dialog box.	is	ProjectTeamMember1.teamM  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting ProjectTeamMember1.teamM in the Condition Browser dialog box.	To specify that the requester is a project team member.
ProjectTeamMember1.teamM	is	"Project Manager"	To check whether the requester plays the Project Manager role in the project.

- e. In the THEN part of the rule, add a list builder of supervisory type by clicking **Insert Action > Add Approver > Supervisory**. Then, enter the values as follows:
  - **Response Type:** Required
  - **Number of levels:** 1

- **Starting Participant:**  
HierarchyBuilder.getPrincipal(Task1.payload.approvePlanPayload.approverName,-1,"","")
- **Top Participant:**  
HierarchyBuilder.getPrincipal(Task1.payload.approvePlanPayload.approverName,-1,"","")
- **Auto Action Enabled:** True
- **Auto Action:** "APPROVE" (Type this value including the quotation marks. Don't copy and paste this value.)
- **Rule Name:** "AutoApproveForProjectManagerRole"
- | **Note:** The rule name is auto-populated, its the name that you entered in Step 8.
- **Dimension Id:** null
- | **Note:** The dimension id is auto-populated as null.

9. Click **Validate** on the top right corner to validate the newly defined rules.
10. Click the **Save** icon in the Tasks to be configured pane to save the rules.
11. Click the **Commit task** icon in the Tasks to be configured pane to complete the rule configuration.
12. Click **OK** to close the confirmation message window.

### Approval Rule Comparing the Strategic Budget from EPM

Suppose that you want to approve the budget version for baseline based on the comparison with the strategic budget. Let's say, if the detailed project budget created has a difference of amount that's less than or equal to 5000 USD than that of the strategic budget, then it's approved by the project manager. If the detailed project budget created has a difference of amount that's greater than 5000 USD than that of the strategic budget, then it's auto-rejected.

Follow these steps:

1. In the Setup and Maintenance work area, go to the **Manage Task Configurations for Project Financial Management** task.  
The BPM Worklist application is displayed.
2. In the Tasks to be configured pane, search for the **ApprovePlanVersion** task, and click the **ApprovePlanVersion** link.
3. Click the **Edit** icon in the Tasks to be configured pane to modify the workflow.
4. Click the Assignees tab.  
The participants who must approve project budgets or forecasts are displayed. Click on each of these participants to review the workflow rules that apply to their approval choices.
5. Click the **Approver** participant in the workflow, click the **Go to Rule** (the diamond shaped) icon within the Approver box, and then click the **Go to Rule** option that appears.  
The list of rules associated with the Approver participant are displayed. Ensure that the **BudgetForecastAMXRuleSet** rule is selected in the drop-down list.
6. Change the IF condition of the predefined rules from 1 is 1 to 1 is 2 to disable the predefined workflow from sending project budget or forecast approvals to the project manager for approval.
7. Add the auto-approval rule, as follows:
  - a. In the Rules pane, click the **Advanced Add or Modify Options** (the + icon) drop-down list and select **General Rule**.
  - b. Click the **Properties** link, enter **AutoApprovalLessThanStrategicBudgetBy5000** in the **Name** field and add the description, verify that the **Active** check box is selected, and click **OK**.
  - c. In the IF part of the rule, click the **Advanced Add or Modify Options** drop-down list and select **simple test**, and add the IF conditions within the same pattern as follows:

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
ApprovePlanVersionPayloadType	is	"Detailed Budget"  Replace this with the appropriate FPT name that's used for the detailed budget.	NA
ApprovePlanVersionPayloadType  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting ApprovePlanVersionPayloadType in the Condition Browser dialog box.	is	"BUDGET"  This value is case-sensitive. Include the quotation marks. Don't copy and paste this value. <ul style="list-style-type: none"> <li>To meet similar requirements for forecasts, enter "FORECAST".</li> </ul>	To specify that the rule is applicable only for budget versions.
new BigDecimal(ApprovePlanVersion	Same or less than	5000.00	NA
ProjectBudgetCurrentBaselined	is	"Strategic Budget"  Replace this with the appropriate FPT name that's used in EPM.	NA
ProjectBudgetCurrentBaselined  Note that you can also select this value by clicking the Left Value search icon and selecting ProjectBudgetCurrentBaselined in the Condition Browser dialog box.	isn't	null	NA

ProjectBudgetCurrentBaselined

- d. In the THEN part of the rule, add a list builder of supervisory type by clicking **Insert Action > Add Approver > Supervisory**. Then, enter the values as follows:
- **Response Type:** Required
  - **Number of levels:** 1
  - **Starting Participant:**  
HierarchyBuilder.getPrincipal(ApprovePlanVersionPayloadType.approvePlanPayload.approverName,-1,"","")
  - **Top Participant:**  
HierarchyBuilder.getPrincipal(ApprovePlanVersionPayloadType.approvePlanPayload.approverName,-1,"","")
  - **Auto Action Enabled:** True
  - **Auto Action:** "APPROVE" (Type this value including the quotation marks. Don't copy and paste this value.)
  - **Rule Name:** "AutoApprovalLessThanStrategicBudgetBy5000"
- Note:** The rule name is auto-populated, its the name that you entered in Step 7.
- **Dimension Id:** null
- Note:** The dimension id is auto-populated as null.

8. Add the auto-reject rule, as follows:

- a. In the Rules pane, click the **Advanced Add or Modify Options** drop-down list and select **General Rule**.
- b. Click the **Properties** link, enter **AutoRejectMoreThanStrategicBudgetBy5000** in the **Name** field, add the description, verify that the **Active** check box is selected, and click **OK**.
- c. In the IF part of the rule, click the **Advanced Add or Modify Options** drop-down list and select **simple test**, and add the IF conditions within the same pattern as follows:

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
ApprovePlanVersionPayloadType is  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting ApprovePlanVersionPayloadType in the Condition Browser dialog box.		"BUDGET"  This value is case-sensitive. Include the quotation marks. Don't copy and paste this value.  To meet similar requirements for forecasts, enter "FORECAST".	To specify that the rule is applicable only for budget versions.
ProjectBudgetCurrentBaselined isn't  Note that you can also select this value by clicking the <b>Left Value</b> search icon and selecting ProjectBudgetCurrentBaselined in the Condition Browser dialog box.		null	NA

Value to Enter in the Left Text Box	Value to Select in the Number Comparison Drop-down List	Value to Enter in the Right Text Box	Why to Add the IF Condition
ProjectBudgetCurrentBaselined	is	"Strategic Budget"	NA
ApprovePlanVersionPayloadType	is	"Detailed Budget"	NA
new BigDecimal(ApprovePlanVersion	more than	5000.00	NA

- d. In the THEN part of the rule, add a list builder of supervisory type by clicking **Insert Action > Add Approver > Supervisory**. Then, enter the values as follows:

- **Response Type:** Required
  - **Number of levels:** 1
  - **Starting Participant:**  
HierarchyBuilder.getPrincipal(ApprovePlanVersionPayloadType.approvePlanPayload.approverName,-1,"","")
  - **Top Participant:**  
HierarchyBuilder.getPrincipal(ApprovePlanVersionPayloadType.approvePlanPayload.approverName,-1,"","")
  - **Auto Action Enabled:** True
  - **Auto Action:** "APPROVE" (Type this value including the quotation marks. Don't copy and paste this value.)
  - **Rule Name:** "AutoRejectMoreThanStrategicBudgetBy5000"
- Note:** The rule name is auto-populated, its the name that you entered in Step 8.
- **Dimension Id:** null
- Note:** The dimension id is auto-populated as null.

9. Click **Validate** on the top right corner to validate the newly defined rules.
10. Click the **Save** icon in the Tasks to be configured pane to save the rules.
11. Click the **Commit task** icon in the Tasks to be configured pane to complete the rule configuration.
12. Click **OK** to close the confirmation message window.

# Oracle Fusion Cloud Project Management Profile Options

Project application administrators can use profile options to centrally manage UI settings and application behavior. You can find the available profile options for your offering using the Manage Profile Options setup task from the Setup and Maintenance work area.

You can use the Manage Administrator Profile Values setup task to view and update the values for the profile options. Set profile options to configure certain features in the following Oracle Project Portfolio Management Cloud applications:

- Project Foundation
- Project Billing
- Project Costing
- Project Control
- Project Performance Reporting

## Project Foundation Profile Options

The following table lists the name, description, and available values of the profile options that configure features in Project Foundation, and the corresponding setup task name in Functional Setup Manager.

Profile Option Name	Description	Available Values	Setup Task Name
Number of Days to Display People with Terminated Assignments	Specify the number of days to display an employee in assigned projects after the employee termination date.	0 (default) Enter number of days	Specify Number of Days to Display People with Terminated Assignments
People with Future Effective Start Dates as Project Members Allowed	Specify whether to assign people with a future effective start dates as project members.	Yes (default) No	Allow People with Future Effective Start Dates as Project Members
Task Managers Must Be Project Team Members	Specify whether task managers must be project team members.	No (default) Yes	Require Task Managers to be Project Team Members

## Project Billing Profile Options

The following table lists the name, description, and available values of the profile option that configures a feature in Project Billing, and the corresponding setup task name in Functional Setup Manager.

Profile Option Name	Description	Available Values	Setup Task Name
Unit of Measure for Invoice Lines Sent to Receivables	Specify the unit of measure to use when sending invoice lines to Receivables.	Select a unit of measure defined in Receivables	Specify Unit of Measure for Invoice Lines Sent to Receivables
Credit Hold Prevents Revenue Recognition	Specify whether customer credit hold should prevent revenue recognition.	No (default) Yes	Manage Administrator Profile Values
Net Credit Invoicing	Specify whether net credit invoicing is enabled.	No (default) Yes	Manage Administrator Profile Values
Require Projects for Events Based on Project Contract Lines	Specify whether project lines on contracts require associated projects and if related events require the selection of a project.	Yes (default) No	Manage Administrator Profile Values
Number of Parallel Invoice Generation Programs	Specify a value between 2 and 5 to create the number of instances of the process that would run in parallel to generate invoices more quickly.	1 (default) 1 to 5	Manage Administrator Profile Values
Allow Invoice Processing in any Sequence	Specify whether invoices can be processed in any sequence.	Yes or No	Manage Administrator Profile Values

## Project Costing Profile Options

The following table lists the name, description, and available values of the profile options that configure features in Project Costing, and the corresponding setup task name in Functional Setup Manager.

Profile Option Name	Description	Available Values	Setup Task Name
Account Updates Allowed on Project-Related Distributions	Specify whether to update project-related accounts when purchase orders and invoice distributions occur.	No (default) Yes	Allow Account Updates on Project-Related Distributions
Allocation Method for Zero-Basis Amounts	Specify the allocations method if the basis amount is zero.	Report as exception (default) Spread evenly	Specify Allocation Method for Zero-Basis Amounts
Default Expenditure Item Date for Supplier Cost Transactions	Specify the expenditure item date for the supplier cost transactions that are matched to purchase orders. This date is used on purchase receipts, payments, and discounts transferred to projects and invoices.	Source document expenditure item date (default) Transaction accounting date Transaction creation date Transaction date	Specify Default Expenditure Item Date for Supplier Cost Transactions

Profile Option Name	Description	Available Values	Setup Task Name
Number of Parallel Import Costs Programs	Specify the maximum number, between 1 and 10, of Import Costs programs that are allowed to run at the same time.	1 (default) Enter a number between 1 and 10	Specify Number of Parallel Import and Process Cost Programs
Work Type Derived for Expenditure Item	Specify whether work types should be derived for expenditure items.	No (default) Yes	Derive Work Type for Project Expenditure Items
Work Type Determines Billable Status of Expenditure Item	Specify whether an expenditure item is billable based on the associated work type definition.	No (default) Yes	Derive Billable Status of Expenditure Items from Work Type
Burden Transactions Assigned with Source Resources	Specify whether to assign both burden costs and source raw costs to the same resource class for reporting purposes.	No (default) Yes	Manage Project Types: Burdening Options
Cost Transactions with 0 Quantity Set as Nonbillable	Specify if cost transactions with 0 quantity are nonbillable.	No (default) Yes	Allow Cost Transactions with Zero Quantity as Nonbillable

## Project Control Profile Options

The following table lists the name, description, and available values of the profile option that configures a feature in Project Control, and the corresponding setup task name in Functional Setup Manager.

Profile Option Name	Description	Available Values	Setup Task Name
PJO_GEN_ALLAMOUNTS	Specify whether amounts from all periods should be considered during financial plan creation.	Yes (default) No	Amounts from all periods during financial plan creation

## Project Performance Reporting Profile Options

The following table lists the name, description, and available values of the profile options that configure features in Project Performance Reporting, and the corresponding setup task name in Functional Setup Manager.

Profile Option Name	Description	Available Values	Setup Task Name
Number of Parallel Summarization Extraction Programs	Data summarization programs can start helper programs to manage the load on system resources. Specify the maximum number of helper programs that can exist at one time.	3 (default) Enter a number	Specify Number of Parallel Summarization Extraction Programs

Profile Option Name	Description	Available Values	Setup Task Name
Enable Project Performance Data Process	Enable or disable Maintain Project Performance Data process.	No (default) Yes	NA
Display Format for Tasks in Smart View	Specify the format in which tasks appear in smart view.  Enable this profile option to view task names, numbers, or a combination of task number and name in Oracle Smart View for Office. You can then identify tasks that have the same name distinctly also by viewing the task number along with the name.	Name (default) Number Number and Name	NA
Enable automatic pushing actual to project plan after every online cost summarization	Enable automatic updating of actual in the project plan after every online Update Project Performance Data process for cost processing.	No (default) Yes	NA
Enable online summarization for costing events	Enable automatic summarization after every Import Costs process.	No (default) Yes	NA
Enable automatic summarization after every approved cost budget baseline	Enable automatic summarization after every approved cost budget baseline event.	No (default) Yes	NA
Enable online summarization for revenue and invoice events	Enable automatic summarization after every Generate Revenue and Update Invoice Details from Receivables process.	No (default) Yes	NA
Display all Projects dashboards or display project performance and Project Management Dashboards.	Controls the listing of Project Performance and Project Manager Dashboards in the Navigator and Home Page.	Yes (default) No	NA
Number of projects summarized in one batch by each parallel worker	Specify the number of projects summarized in one batch by each parallel worker.	50 (default)	NA
Threshold value for maximum number of projects to enable batch processing	Specify the threshold of the number of projects after which all projects in the helper processes will be processed in a batch.	200 (default)	Specify Number of Parallel Summarization Extraction Programs

#### Related Topics

- [Hierarchy in Profile Levels](#)

# Where to Find Information About Scheduled Processes in Projects

Here are some scheduled processes that are available as part of Oracle Project Management Cloud.

## Planning, Scheduling, and Forecasting

- Maintain Project Organizations  
See: *Set Up Organizations*
- Change Project and Task Organizations  
See: *Options to Change Project and Task Organizations*
- Import Projects  
See: *Import Projects*
- Import Resource Breakdown Structures  
See: *Import Resource Breakdown Structures Process*
- Build New Organization Burden Multipliers  
See: *Burden Multipliers for New Organizations: How They Are Added to Burden Schedules*  
See: *How Burden Schedule Components Work Together*
- Import Project Budgets  
See: *Import Project Budgets*
- Import Financial Project Plan  
See: *Import Financial Project Plans*
- Import Project Forecasts  
See: *Import Project Forecasts*
- Import Project Progress  
See: *Import Project Progress*

## Grant Management

- Import Awards  
See: *Import Awards*

## Cost Management and Control

- Open Project Accounting Period  
See: *Options to Maintain Accounting Periods and Project Accounting Periods*
- Import Costs  
See: *Import Costs Process*
- Generate Burden Costs  
See: *How Burden Costs Are Calculated*
- Recalculate Burden Cost Amounts  
See: *Recalculate Burden Costs*
- Generate Capitalized Interest Transactions  
See: *Considerations for Managing Capitalized Interest*
- Identify Cross-Charge Transactions  
See: *Cross-Charge Options for Project Business Units*
- Import Unassigned Asset Lines  
See: *Import Unassigned Asset Lines*
- Release Allocation Transactions  
See: *Allocation Statuses*
- Reverse Allocation Transactions  
See: *When do I reverse an allocation?*

## Project Billing and Revenue

- Import Project Billing Events  
See: *Import Project Billing Events*

## Performance Management

- Generate KPI Values  
See: *How KPI Values Are Generated*
- Maintain Project Performance Data  
See: *Project Performance Data Summarization*
- Update Project Performance Data; Update Project Plan Data  
See: *Project Performance Data Summarization*

- Import Project Key Performance Indicators

See: *Import Project Key Performance Indicators*

## Resource Management

- Initiate Absence Records Transfer to Oracle Fusion Project Execution

See: *Absence Management Integration*

- Project Enterprise Labor Resources

See: *Project Enterprise Labor Resources Report*

- Import Project Enterprise Resources

See: *Import Project Enterprise Resources*

- Import Project Resource Assignments

See: *Import Project Resource Assignments Process*

- Import Project Resource Requests

See: *Import Project Resource Requests Process*

- Import Resource Actual Hours

See: *Import Resource Actual Hours*

- Import Resource Pools and Membership

See: *Import Resource Pools and Memberships Process*

- Project Resource Search Index

See: *Project Resource Search Index*

- Maintain Project Enterprise Labor Resources

See: *Set up Conditions and Import HCM Person*



# 2 Implement Project Financial Management Applications

## Overview of Project Financial Management and Grants Management Offerings

In the Project Financial Management and Grants Management business process areas, your enterprise can configure how you manage projects, including how to plan, budget, or forecast, manage awards, collect costs, bill customers, manage project templates and flexfields, and report performance.

Before you begin, use the Setup and Maintenance work area to access reports for each offering, including full lists of setup tasks, the functional areas and features that you can select when you configure the offering, and business objects and enterprise applications that are associated with the offering.

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 Project Financial Management and Grants Management offerings.

Functional Area	Description
Project Organizations	Configure how you manage project units, project classifications, organization hierarchies, and business unit options.
Project Foundation	Configure how you manage project organizations, create projects, plan project tasks, and review project details. This common foundation is shared across the Project Financial Management applications.
Burdening	Configure options used to calculate, group, and apply indirect costs to project expenditure items to report and account for the total cost of a project.
Grants Management Foundation	Configure how you create and maintain awards, award funding, and award projects.
Project Control	Configure how you monitor project execution, progress, budgeting, and forecasting.
Project Billing	Configure how you invoice customers and recognize revenue for project contracts, including contract management, intercompany billing, and the calculation of estimated taxes on invoices.
Project Costing	Configure how you collect, monitor and influence the costs associated with the delivery of the project and management of capital assets.
Project Costing - Project Costing Base	Configure how you collect, monitor, and influence the costs associated with the delivery of the project.

Functional Area	Description
Project Costing - Capital Projects	Configure how you record asset costs, calculate capitalized interest, and create events to group costs and assets.
Project Billing - Project Contracts	Configure the funding and billing relationships between the external parties who require the project and the parties who deliver the project.
Project Billing - Project Billing Base	Configure how you invoice customers and recognize revenue for project contracts.
Project Billing - Internal Project Billing	Configure how you use internal invoices to share costs and revenue across projects and organizations.
Project Performance Reporting	Configure how you collect and review project performance data against defined performance areas.
Budgetary Control and Encumbrance Accounting	This enterprise-level functional area option is typically used by public sector customers. Enable this functional area if you plan to use budgetary control with or without encumbrance accounting in any part of your organization.
Project Business Intelligence Analytics	Enable business intelligence reporting and analytics capabilities for project management data.
Project Revenue and Billing Business Intelligence Analytics	Enable business intelligence reporting and analytics capabilities for project revenue and billing data.
Project Performance Business Intelligence Analytics	Enable business intelligence reporting and analytics capabilities for project performance data.
Project Control and Costing Business Intelligence Analytics	Enable business intelligence reporting and analytics capabilities for project control and costing data.
Project Accounting	Configure subledger accounting and set up subledger accounting rules for Project Financial Management.

The following functional areas are also in the Project Financial Management and Grants Management offerings, but aren't unique to these offerings:

- Initial Users
- Enterprise Profile
- Legal Structures
- Financial Reporting Structures
- Organization Structures
- Workforce Structures
- Users and Security
- Transaction Tax
- Transactional Business Intelligence

Optionally, create one or more implementation projects for the offerings, functional areas, and features that you want to implement first, which generates task lists for each project. The application implementation manager can configure the task list and assign and track each task.

This table lists the group of tasks that are available to you when you enable all functional areas and features.

Task List	Description
Define Initial Users for Project Financial Management	Populate the product tables with the users and roles held in LDAP and then create and provision job and data roles for the initial users.
Verify Grants Management Offering Implementation Status	Verify that the implementation status of the Grants Management offering is set to In Progress or Implemented. The implementation status enables the grants functionality throughout Oracle Fusion Project Portfolio Management applications.
Define Enterprise Profile for Project Financial Management	Access your enterprise organization, such as legal entities, legal jurisdictions and authorities, and business units, and specify their use in Project Financial Management applications.
Define Financial Reporting Structures for Project Financial Management	Define the accounting configuration and chart of accounts that serve as a framework for how financial records are maintained for an organization.
Define Organization Structures for Project Financial Management	Configure business units for controlling transactions and workforce structures for managing the enterprise.
Define Project Organizations	Manage the organizations that own, control, or contribute to projects, including the project units and the project and business unit implementation options used by Project Financial Management.
Define Users and Security for Project Financial Management	Define and assign security policies and data roles to enable users to perform functions related to their job roles.
Define Project Foundation Configuration	Configure all foundation components for creating and maintaining projects in Oracle Fusion Project Portfolio Management.
Define Project Control Configuration	Configure Oracle Fusion Project Control to monitor project execution, progress, budgeting, and forecasting.
Define Project Costing Configuration	Configure Oracle Fusion Project Costing to collect, monitor, and influence the costs associated with the delivery of the project.
Define Project Billing Configuration	Configure Oracle Fusion Project Billing to invoice customers and recognize revenue for project contracts.
Define Project Performance Reporting Configuration	Configure Oracle Fusion Project Performance Reporting to collect and review project data against defined performance areas.
Manage Project Templates	Manage templates to quickly create projects that share common features, attributes, and options.
Define Budgetary Controls for Project Financial Management	Configure the applicability of budgetary control on various business process flows, and set up the business rules to enforce budgetary control.

Task List	Description
Define Subledger Accounting Rules for Project Financial Management	Configure subledger accounting and set up subledger accounting rules for Project Financial Management.
Define Transactional Business Intelligence Configuration	Define the configuration for Oracle Transactional Business Intelligence to enable business intelligence reporting with the Oracle Fusion Applications.

Alternatively, you can use the rapid implementation feature to set up the Project Financial Management or Grants Management offerings by populating and loading the Rapid Implementation for Project Financial Management Applications macro-enabled Excel spreadsheet. This spreadsheet has a worksheet for key setup object or group of setup objects. The setup includes key business objects and tasks such as, resources, burdening, and subledger accounting. The Setup and Maintenance work area has a specific task list for rapid implementation. The **Define Project Financial Management Configuration for Rapid Implementation** task list includes tasks to download a new spreadsheet and to load the setup data. For more information on the rapid implementation feature, see the chapter Rapid Implementation of Project Financial Management Applications in the Oracle Project Portfolio Management Cloud Implementing Project Financial Management guide.

This table lists the Rapid Implementation tasks included in the Define Project Financial Management Configuration for Rapid Implementation task list.

Task	Description
Create Project Financial Management Setup Data	Use this task to download the rapid implementation spreadsheet. After downloading the rapid implementation spreadsheet you can start entering your setup data.
Load Project Financial Management Setup Data	Use this task to load the setup data into the application.

After uploading the spreadsheet, the Project Financial Management or Grants Management application is fully configured and ready for you to create project templates and to enter transactions. You can upload the spreadsheet multiple times during the initial implementation until your setup is finalized.

Refer the following guides for more information:

- Securing ERP
- Implementing Common Features
- Using Functional Setup Manager

*Related Topics*

# Organization Structures for Project Financial Management

## Overview of Organization Structures for Project Financial Management

In the Define Organization Structures for Project Financial Management activity, you configure business units for controlling transactions and workforce structures for managing the enterprise.

For business units, you perform setup steps such as creating and managing business units, generating data roles, provisioning users with data roles, and assigning reference data to business units. For workforce structures, you perform setup steps such as creating and managing organizations, assigning workers to organizations, creating and managing hierarchies for the departments, and creating jobs.

This table lists the tasks and task lists that the setup tasks in the Define Organization Structures for Project Financial Management activity are grouped into.

Task or Task List	Description
Define Business Units for Project Financial Management	Access your business units, and specify units and attributes relevant to Project Financial Management applications. 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 sets of reference data across applications.
Manage Business Unit	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.
Verify Data Role Generation for Business Unit	Generate data roles or verify the data roles if already generated.
Provision Roles to Implementation Users for Business Unit	Provision implementation users with job or data roles, such as Application Implementation Consultant, IT Security Manager, or Application Administrator for a product family.
Assign Business Unit Business Function	Assign business functions to be performed by a business unit, such as customer invoicing and order capture.
Verify Data Role Generation for Business Unit Business Function	Generate data roles or verify the data roles if already generated.
Provision Roles to Implementation Users for Business Unit Business Function	Provision implementation users with job or data roles, such as Application Implementation Consultant, IT Security Manager, or Application Administrator for a product family.

Task or Task List	Description
Manage Business Unit Set Assignment	Assign reference data, which represents business rules and policies, to business units.
Define Workforce Structures for Project Financial Management	Configure structures to represent the management and operating requirements of the enterprise. Define the structures to support and represent workers using jobs, positions, and grades.
Manage Divisions	Create and manage the organizations that represent lines of business in the enterprise.
Manage Departments	Create and manage the organizations to which workers can be assigned.
Manage Department Trees	Create and manage hierarchies for departments to view the internal structures of the workforce.
Manage Job	Create and manage jobs.
Manage Organization Trees	Create and manage hierarchies of organizations to view the structures of the enterprise.

## Create and Manage a Business Unit

A business unit is a unit of an enterprise that performs one or many business functions that can be rolled up in a management hierarchy. A business unit can process transactions on behalf of many legal entities.

Verify that the implementation team set up the following in Oracle Human Capital Management:

- Organizations
- Organization hierarchies
- Organization classifications

### Creating a Business Unit

Follow these steps to create a business unit:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Business Unit** task.
2. Click the **Manage Business Unit** link.
3. On the Manage Business Units page, click the **Create** icon.
4. In the Name field, enter the name for the business unit.
5. In the Default Set field, select a reference data set code.

**Note:** Click **Create** on the list to create a new reference data set.

6. Click **Save and Close**.

### Assign Business Function to a Business Unit

Follow these steps to assign business functions to a business unit:

1. Click **Navigator > Setup and Maintenance**, and search for the **Assign Business Unit Business Function** task.

2. Click the **Assign Business Unit Business Function** link.
3. Enable the Billing and Revenue Management, Customer Contract Management, Expense Management, Payables Invoicing, and Project Accounting business unit functions.
4. In the Select and Add: Business Unit page, search and select your business unit and click **Save**. The Assign Business Functions page opens.
5. In the Financial Reporting section, enter primary ledger and default legal entity details.
6. Enable the Billing and Revenue Management, Customer Contract Management, Expense Management, Payables Invoicing, and Project Accounting business unit functions.
7. Click **Save and Close**. The enabled business functions are now assigned to your business unit.

## Managing Business Unit Data Access for Users

Follow these steps to manage business unit data access for users.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Business Unit Data Access for Users** task.
2. Click the **Manage Business Unit Data Access for Users** link.
3. Select the Users without Data Access option.
4. In the Search Results section, click the **Create** icon. Select user name , role, security context and security context value.
5. Click **Save and Close**.
6. To search for Users with data access, select Users with Data Access option.
7. Select User name and role in the search region.
8. Click **Search**.  
**Note:** To create a saved search click **Save...** In the Create Saved Search Window, type a name for your search. You can also enable **Set as Default** to set the saved search as default and **Run automatically** to run the search automatically later. You can get these values from **Saved Search** list later.
9. Click **Save and Close**.
10. Click **Done**.

## Managing Business Unit Set Assignments

Follow these steps to manage business unit set assignments:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Business Unit Set Assignment** task.
2. Click the **Manage Business Unit Set Assignment** link.
3. On the Manage Set Assignments page, change the assignment for each object as required.  
**Note:** The default set of the business unit is assigned to each reference data object. You must perform the Manage Business Unit Set Assignment task. Even if you don't change any of the sets assigned, the assignment isn't complete until the record is saved.
4. Click **Save and Close**.

### Related Topics

- [Classify Organizations to Own Projects and Tasks or Incur Costs on a Project](#)
- [Options for Business Units to Work with Projects](#)
- [Business Units](#)
- [Reference Data Sets and Sharing Methods](#)
- [Business Functions](#)

## Create and Manage a Project Unit

To create a project unit, either enable an existing organization as a project unit or create a new organization as a project unit in Oracle Human Capital Management.

After an organization is defined as a project unit, the project unit appears in searches on the Manage Project Units page.

**Note:** You must set up at least one project unit for your organization.

### Creating Project Units

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Unit Organizations** task.
2. Click the **Manage Project Unit Organizations** link.
3. On the Manage Project Unit Organizations page, click the **Create** icon.
4. Enable **Create new** and enter code and name for the project unit.

**Note:** You can select an existing organization to define as a project unit. Enable **Select an existing organization to define as a project unit** and search for an existing organization. Select the organization and enter a code.

5. Click **Save and Close**.
6. Click **Done**.

### Manage Project Unit Options

Use the Manage Project Unit Options task to set up the general and reporting options for your project unit.

1. Click **Navigator > Setup and Maintenance**, and search for the Manage Project Unit Options task.
2. Click the **Manage Project Unit Options** link.
3. Click the project unit you want to edit.
4. On the Manage Project Units: General Properties page, in the **Default Set** section, select the default reference data set that you want to use for the reference data objects within the project unit.
5. In the **Project Numbering** section, select the project numbering method and type.
6. Click **Next**.
7. On the Manage Project Units: Related Business Units page, associate the business units with the project unit. Select the business units that are accountable for financial transactions of projects in each project unit.
8. Click **Next**.
9. On the Manage Project Units: Reporting Setup page, complete the reporting options as appropriate.
10. Click **Save and Close**.
11. Click **Done**.

### Managing Project Unit Set Assignments

Determine how reference data is shared or partitioned across the different lines of business in your company.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Unit Set Assignments** task.
2. Click the **Manage Project Unit Set Assignments** link.

3. On the Manage Project Unit: Set Assignments page, change the assignment for each object as required.
4. Click **Save and Close**.
5. Click **Done**.

#### *Related Topics*

- [Manage Project Unit Options](#)
- [Project Unit Components](#)
- [How can I associate a business unit with a project unit?](#)

## Create an Organization

A department is an organization to which you assign workers. It is an organization with one or more operational objectives or responsibilities that exist independently of its manager. You track the department's financial performance through one or more cost centers.

Examples of departments can be Sales, Human Resources, and Research and Development. You can report and keep track of headcount by creating a department hierarchy.

### Creating a Department

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Departments** task.
2. Click the **Manage Departments** link.
3. On the Manage Departments page, click **Create**.
4. On the Create Department Description page, enable **Create new** and enter the department description details.
5. Click **Next**.
6. On the Create Department: Department Details page, enter the department details as applicable.
7. Click **Submit**.
8. Confirm whether you want to submit the request. The application generates a request ID when you confirm.
9. Click **Done**.

#### *Related Topics*

- [Set Up Organizations](#)
- [Department Classifications](#)

## Classify Organizations to Own Projects and Tasks or Incur Costs on a Project

Specify organizations that can own projects and tasks, and incur project expenses. If an organizations can be a project and task owning organization, then you also specify whether the organization allows indirect, capital, and contract projects.

### Classifying an Organization as Project Owning and Project Expenditure Organization

Follow these steps to classify an organization as a project owning and project expenditure organization:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Organization Classifications** task.
2. Click the **Manage Project Organization Classifications** link.
3. In the Search section, enter a name and effective date and click **Search**.
4. In the Search Results section, select an organization and click the **Edit** icon.
5. On the Edit Project Organization Classifications page, in the Change All Selected section, select the applicable options.
6. Click **Save and Close**.
7. Click **Done**.

## Selecting the Organization Hierarchy Type and Classifications

Select the organization hierarchy type that enables you to assign organization hierarchies, such as the project and task owning organization hierarchy and project expenditure organization hierarchy, to project business units.

Follow these steps to selecting organization hierarchy type and classification:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Organization Hierarchies and Classifications** task.
2. Click the **Manage Organization Hierarchies and Classifications** link.
3. In the Organization Hierarchy Type list, select an organization hierarchy type, for example, HCM Organization Hierarchy Tree Structure.  
  
**Note:** A hierarchy must be set up in Oracle Human Capital Management for the selected hierarchy type.
4. In the Organization Classifications section, from the Available column, select Asset Organization, Business Unit, Partner Organization, Project Expenditure Organization, Project Task Owning Organization, Project Unit Classification.  
  
**Note:** Generally the project expenditure organizations will also be departments.
5. Click the **Move selected items to other list** icon marked with a right arrow to move the items from the Available column to the Selected column.
6. Click **Save and Close**.

## Selecting Organization Hierarchies for the Business Unit

Associate project and task owning organizations to the business unit to restrict the project owning organizations in the project creation flow.

The following conditions are required for an organization to be eligible to be a project and task owning organization:

- You must assign the Project and Task Owning Organization classification to the organization.
- The organization must belong to the hierarchy that you specify in the project implementation options for the business unit.

The following conditions are required for an organization to be eligible to be a project expenditure organization:

- You must assign the Project Expenditure Organization classification to the organization.
- The organization must belong to the hierarchy that you specify in the project implementation options for the business unit.

Follow these steps to select organization hierarchies for a business unit:

1. Click **Navigator > Setup and Maintenance**, and search for the **Configure Project Accounting Business Function** task.
2. Click the **Configure Project Accounting Business Function** link.
3. On the Configure Project Accounting Business Function page, in the Project Option section, enter the mandatory information in the following tabs:
  - Project Setup
  - Expenditures
  - Costing
  - Project Units
  - Cross-Charge Options
4. Click **Save and Close**.

## Associating Project Units with Business Units

Associate project units to business units to share a common approach to financial management across a set of project units while maintaining independent setup data.

Follow these steps to associate a project unit with a business unit:

1. Click **Navigator > Setup and Maintenance**, and search for the **Configure Project Accounting Business Function** task.
2. Click the **Configure Project Accounting Business Function** link.
3. On the Configure Project Accounting Business Function page, in the Project Options section, click the Project Units tab and select the project units to associate with this business unit.
4. Click **Save and Close**.

### Related Topics

- [Set Up Organizations](#)

# Project Foundation

## Overview of Project Foundation Configuration

This table lists the setup task lists for Oracle Fusion Project Foundation.

Task or Task List Name	Description
Define Project Calendars and Periods	Manage calendars, accounting period statuses, and project accounting period statuses used for costing, budgeting, forecasting, billing, and project performance reporting.
Define Types and Categorizations	Manage various classifications used to describe and group projects, tasks, and transactions.

Task or Task List Name	Description
Define Project Roles	Define project roles and the business rules that control how the roles are assigned.
Define Project Resources	Define job mapping, attributes, and rate schedules for project resources.
Define Rate Schedules and Costing Rules	Define rate schedules and costing rules used for costing, billing, work planning, and financial planning purposes.
Define Project Resource Breakdown Structures	Define resource breakdown structures used for project planning, billing, and reporting.
Define Burdening	Configure options used to calculate, group, and apply indirect costs to project expenditure items to report and account the total cost of a project.
Manage Project Types	Create classifications for projects and configure basic options that are inherited by each project associated with that project type.
Define Transfer Pricing	Define rules and schedules to determine the transfer price amount of cross-charge transactions that require borrowed and lent or intercompany billing processing.
Define Action Controls	Define source products and configure action controls to determine which actions cannot be performed in Oracle Fusion Projects on data imported from a particular third-party source.
Define System Administration and Maintenance Options	Perform system administration functions including the definition of descriptive flexfields, distribution of desktop integrator, and configuration of system options.

This chapter provides detailed setup steps for the following required tasks:

- Manage Expenditure Types
- Manage Nonlabor Resources
- Manage Rate Schedules
- Manage Planning and Billing Resource Breakdown Structures
- Manage Project Types

## Create Expenditure Types

Create expenditure types to classify the cost of each expenditure item.

Use expenditure types for processing requirements, such as calculating raw costs, to classify costs, and to plan, budget, forecast, and report on projects.

The following sections describe how to create expenditure types.

**Note:** After you save an expenditure type, you can't subsequently update the following attributes:

- Expenditure and revenue categories
- Unit of measure
- Rate required option
- Expenditure type class

If a change is required, you must enter a To Date to make the expenditure type unavailable and create another one.

## Entering Basic Expenditure Type Information

To create an expenditure type:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Expenditure Types** task.
2. Click the **Manage Expenditure Types** link.

Use the Manage Expenditure Types page to define expenditure types and to review or edit existing expenditure types and the associated expenditure type classes, assigned sets, and tax classification codes.

3. Click the **Add Row** icon to create an expenditure type.
4. Enter a name in the **Expenditure Type** column. Optionally, enter a description.
5. The following table lists the decisions you need to take.

Option Name	Decision
Expenditure Category	<p>Determine the kind of costs, for example, labor or overhead, that you plan to capture using this expenditure type.</p> <p><b>Note:</b> Create expenditure categories using the Manage Expenditure Categories page before creating expenditure types.</p>
Revenue Category	<p>Determine the source of revenue, for example, fees or other payments, you plan to capture using this expenditure type.</p> <p><b>Note:</b> Create revenue categories using the standard lookup <b>PJF_REVENUE_CATEGORY</b> before creating expenditure types. You can update the lookup from the Manage Revenue Categories page or the Manage Standard Lookups page.</p>
Unit of Measure	<p>Determine the default UOM for costing and planning transactions associated with this expenditure type.</p>

Option Name	Decision
	<p><b>Note:</b> Use <b>Hours</b> as the UOM for labor expenditure types.</p>
Rate Required	Determine whether cost rates must be provided for expenditure items associated with this expenditure type.
Proceeds of Sale	Determine whether cost rates must be provided for expenditure items associated with this expenditure type. Indicate whether the expenditure type is used to track the proceeds of sale for a capital project.

6. Select a date from which the expenditure type is available for use. Optionally, select a date to which the expenditure type is available.

## Selecting Expenditure Type Classes

Assign the expenditure type to one or more predefined expenditure type classes to determine how related expenditure items are processed.

For example, an expenditure item with the expenditure type **Materials** can have the expenditure type class **Supplier Invoice** if it originated in Oracle Fusion Payables or it can have the expenditure type class **Inventory** if it originated in Oracle Fusion Inventory.

In other words, you can use the same expenditure type for expenditures with different origins that must be grouped for costing, budgeting, or summarization purposes.

1. In the Expenditure Type Classes section, select an expenditure type class in the **Name** column.
2. Enter a date from which the expenditure type class is associated with the expenditure type. Optionally, specify a date to which the expenditure type class is associated with the expenditure type.
3. Repeat the process for each expenditure type class that you want to associate with the expenditure type.

## Assigning Sets

Use the Assigned Sets section to assign the expenditure type to one or more reference data sets so that only expenditure types that are relevant to the project unit are available for the project.

To assign sets:

1. Click **Add Row** in the Assigned Sets section.
2. Select the **Code** of the desired set.
3. Repeat the process for each set to which the expenditure type is assigned.

For additional information about set assignments, see the Create Financial Plan Types section of this document.

## Selecting Tax Classification Codes

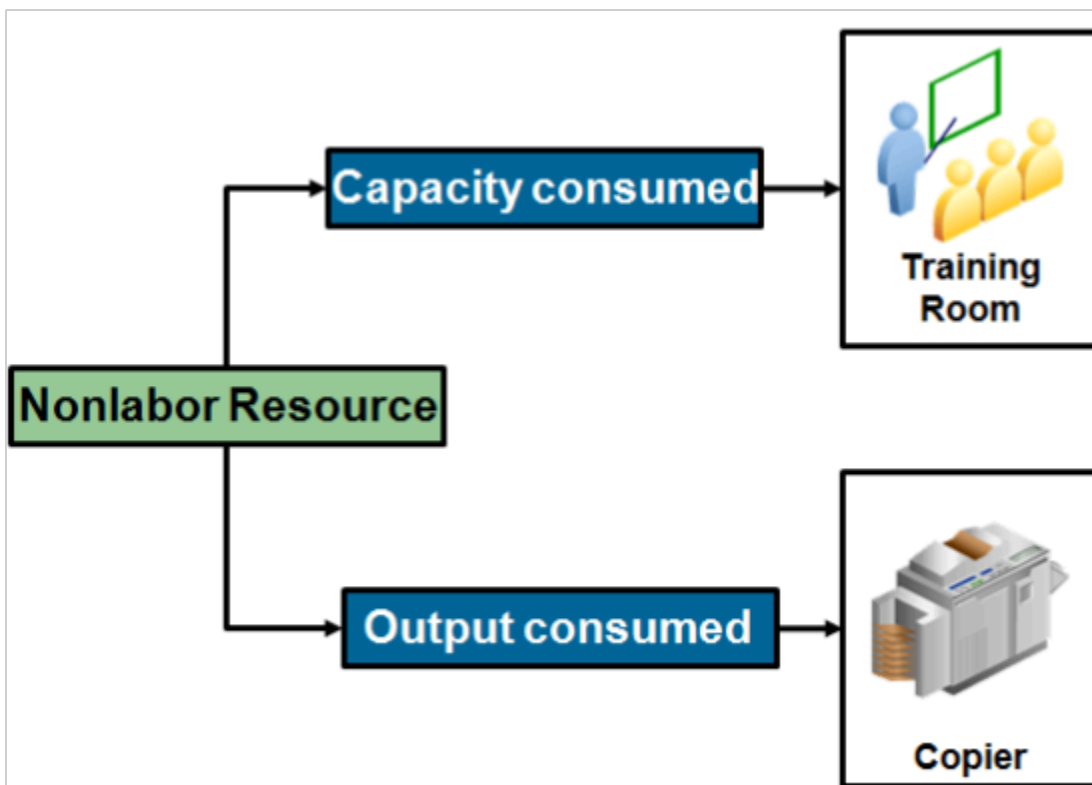
Optionally, select a default tax classification code to use for customer invoice lines for an expenditure type and business unit. To select a tax classification code:

1. Click **Add Row** in the Tax Classification Codes section.
2. Select a business unit.
3. Select a tax classification code.
4. Repeat the process for each tax classification code and business unit combination you want to associate with the expenditure type.
5. Click **Save**.

## Create Nonlabor Resources

Create nonlabor resources to represent assets or pools of assets that project managers can use on projects.

As illustrated in the following figure, a nonlabor resource may be an equipment or resource with capacity that is consumed, such as a training room, or equipment with physical output that is consumed, such as a copier.



To create a nonlabor resource:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Nonlabor Resources** task.
2. Click the **Manage Nonlabor Resources** link.  
Use the Manage Nonlabor Resources page to create, review, edit, or delete nonlabor resources.
3. Click the **Add Row** icon to create a nonlabor resource.

4. Enter a unique name, and optionally, a description for the nonlabor resource.
5. Select an **Expenditure Type** to determine the rates used to calculate cost and revenue for the nonlabor resource.

**Note:** You can only select an expenditure type of Usage expenditure type class.

6. If you are creating a resource, such as a training room, whose capacity is consumed, then select the **Equipment Resource Class** check box.

To indicate that the resource is equipment, the expenditure type you selected must use a UOM in Hours.

7. Enter a **From Date** to indicate the date from which the nonlabor resource is available for use. Optionally, specify a **To Date**.
8. Specify the organizations to which a nonlabor resource is assigned. Click the **Add Row** icon in the Nonlabor Resource Organizations section.

You can assign nonlabor resources to any organization from the organization hierarchy, regardless of whether the organization has the Project Expenditure Organization classification, and regardless of the start and end dates for the organization.

9. In the **Name** field, select an organization.
10. Enter a **From Date** to indicate the date from which the nonlabor resource is assigned to the organization. Optionally, specify a **To Date**.
11. Repeat the process for each organization to which the nonlabor resource is assigned.

You can't assign a nonlabor resource to an organization multiple times, even for different date ranges.

12. Click **Save**.

## Create Rate Schedules

Create rate schedules as a source for cost or bill rates for costing, billing, or planning purposes.

You can create schedules for the following types of rates:

- Job
- Person
- Nonlabor
- Resource class

The following sections describe how you create the different types of rate schedules.

### Entering Basic Rate Schedule Information

To create a rate schedule:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Rate Schedules** task.
2. Click the **Manage Rate Schedules** link.

Use the Manage Rate Schedules page to create, delete, and maintain rate schedules.

3. Click the **Add Row** icon to create a rate schedule.
4. Enter a unique name, and optionally, a description for the rate schedule.
5. Select a **Project Rates Set**.

6. Select a **Schedule Type** depending on whether you want to create a rate schedule for jobs, persons, nonlabor resources, or resource classes.
7. Select the Currency in which you plan to enter rates.

## Creating Nonlabor Rate Schedules

Define rates or percentage markups by nonlabor expenditure type or by a combination of nonlabor expenditure type, nonlabor resource, and nonlabor resource organization.

The application uses the most detailed information available to determine the rate. For example, if a rate exists for the expenditure type, nonlabor resource, and nonlabor resource organization combination, that rate is used. If that rate does not exist, it uses the rate for the expenditure type and nonlabor resource combination. Otherwise, the rate for the expenditure type is used.

Complete the following steps to create a nonlabor rate schedule:

1. Click **Add Row** in the Nonlabor Rates section.
2. Select the **Expenditure Type** for which you are entering rates.
3. Depending on the detail at which you want to enter rates, optionally select a **Nonlabor Resource** and a **Nonlabor Resource Organization**.
4. Select the **Rate Required** check box if you want to enter a rate or a markup percentage for the expenditure type. If you don't select this option, you must provide a markup percentage.
5. Enter either a **Rate** or a **Markup Percentage** that is used to calculate amounts for the resource.
6. Enter a **From Date** to indicate the date from which the rate is available for use. Optionally, select a **To Date**.
7. Repeat this process for each expenditure type or expenditure type, nonlabor resource, and nonlabor resource organization for which you want to enter rates.
8. Click **Save**.

## Creating Job Rate Schedules

Define rates for jobs included in a job set created in Oracle Fusion Human Capital Management.

Complete the following steps to create a job rate schedule:

1. In the Job Rates section, select a **Job Set** as a source for the jobs you are entering rates for.
2. Click **Add Row**.
3. Select the **Job** for which you are entering rates. Note that the **Unit of Measure** is always Hours.
4. Enter a rate for the job.
5. Enter a **From Date** to indicate the date from which the rate is available for use. Optionally, select a **To Date**.
6. Repeat this process for each job for which you want to enter rates.
7. Click **Save**.

## Creating Person Rate Schedules

Define rates or percentage markups for person or for a combination of person, job, and organization.

The application uses the most detailed information available to determine the rate. For example, if there is a rate for Person, Person Assignment Job, and Person Assignment Organization, that rate is used. Otherwise, the rate for the person is used.

Complete the following steps to create a person rate schedule:

1. Click **Add Row** in the Person Rates section.
2. Select the person for whom you are entering rates. Note that the **Unit of Measure** is always Hours.

3. Depending on the detail at which you want to enter rates, optionally select a **Person Assignment Job** and a **Person Assignment Organization**.

**Note:** A default value is provided for the assignment organization when you select an assignment job. You can select another organization if required.

4. Enter either a rate or a markup percentage.
5. Enter a **From Date** to indicate the date from which the rate is available for use. Optionally, select a **To Date**.
6. Repeat this process for each person or person, assignment, and organization combination for which you want to enter rates.
7. Click **Save**.

## Creating Resource Class Rate Schedules

Define rates or percentage markups by resource class or a combination of resource class and organization.

You can assign resource class rate schedules to project plan types or financial plan types. The selected resource class rate schedule functions as a source of rates if the rates can't be determined elsewhere.

Complete the following steps to create a resource rate schedule:

1. Click **Add Row** in the Resource Class Rates section.
2. Select the resource class for which you are entering rates.
3. Depending on the detail at which you want to enter rates, optionally select an **Organization**.
4. Enter either a rate or a markup percentage.
5. Enter a **From Date** to indicate the date from which the rate is available for use. Optionally, select a **To Date**.
6. Repeat this process for each resource class, or resource class and organization combination for which you want to enter rates.
7. Click **Save**.

When you manage your project's financial setup and haven't configured costing rules to labor transactions, you may see the following error message: "Cannot find a costing rule for the labor transaction." To resolve this issue:

1. Use the **Setup and Maintenance > Manage Rate Schedules** task to create a rate schedule of the type Resource Class.
2. Enter a rate schedule line for the resource **Labor**, provide a rate, and click **Save and Close**.
3. Use the **Manage Project Plan Types > Rate Settings** section to select this new rate schedule for the **Resource Class Raw Cost Rate** field, and click **Save and Close**.
4. Refresh rates for the project plan again, and you shouldn't see this error.

## Create Planning Resource Breakdown Structures

Create planning resource breakdown structures as a source for planning resources that are used for project planning, budgeting, and forecasting.

A default planning resource breakdown structure with planning resources is created automatically for the Labor, Equipment, Material Items, and Financial Resources resource classes for each project unit.

**Note:** When you create a project template, it's selected as the primary planning resource breakdown structure. You can designate another planning resource breakdown structure as primary if required, but you can't remove the default planning resource breakdown structure from the project or template.

Here's the three-step guided process for setting up planning resource breakdown structure.

1. Enter planning resource breakdown structure details.
2. Select resource formats.
3. Add planning resources.

## Enter Planning Resource Breakdown Structure Details

To create a planning resource breakdown structure:

1. In the Setup and Maintenance work area, go to the **Manage Planning and Billing Resource Breakdown Structures** task.
2. Use the Manage Planning and Billing Resource Breakdown Structures page to create planning resource breakdown structures and to review existing planning and billing resource breakdown structures.
3. Click the **Create** icon in the Planning Resource Breakdown Structures section.
4. Use the Create Planning Resource Breakdown Structure: Basic Information page to provide the following details:
  - The name of the planning resource breakdown structure.
  - The date from which the planning resource breakdown structure is available for use.
  - Optionally, provide a description and a date to which the planning resource breakdown structure is available for use.
  - The project unit. Only projects created for the selected project unit can use this planning resource breakdown structure.
  - If you want to allow project managers to add planning resources at the project level, then select the **Allow resource changes at project level** check box.

**Tip:** Changes at the project level don't move back to the parent planning resource breakdown structure. Deselect this option to ensure that all projects using the planning resource breakdown structure use the same resources.

- As actual amounts are incurred for a project, if you want resources to be automatically added to the primary planning resource breakdown structure when it allows changes at the project level, then select the **Automatically add resources on incurring actual amounts** check box.

**Tip:** The **Automatically add resources on incurring actual amounts** option isn't applicable for projects that are enabled for budgetary controls. Projects enabled for budgetary control need a stringent control on resources incurring project costs.

**Note:** The resource is added to the planning resource breakdown structure as follows:

- If the resource format for the resource exists on the planning resource breakdown structure, then the resource is directly added to the planning resource breakdown structure.
- If the resource format for the resource doesn't exist on the planning resource breakdown structure, then the application verifies if a higher level resource format exists and then adds the resource directly to the planning resource breakdown structure. If a higher level resource format doesn't exist, then the resource is mapped to one of the generic resource classes.

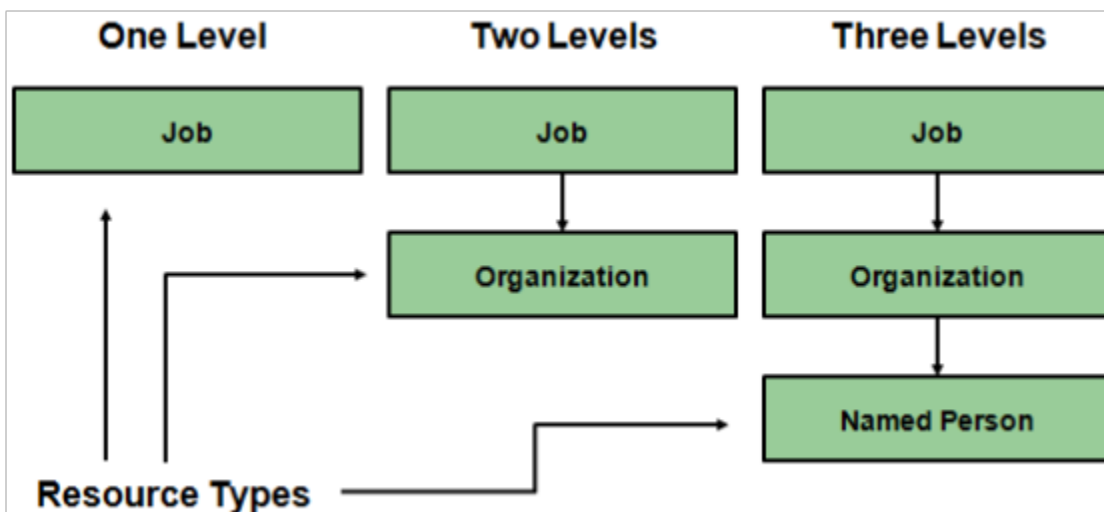
- Optionally, select a **Job Set** as a source of jobs for creating planning resources on your planning resource breakdown structure.
- 5. Optionally, you can disable the Labor, Equipment, and Material Items resource class. When you disable a resource class, any transactions incurred on that resource class gets associated with the Financial Resources class.

**Note:**

- You can't disable the Financial Resources resource class.
  - You can't disable a resource class after a planning resource breakdown structure is assigned to a project or project template.
  - After you disable a resource class, you can't enable it again. However, if there are no resources with the same resource class exist in the RBS and it isn't assigned to a project or project template, you can enable it again.
  - For a resource breakdown structure that allows changes at the project level disabling, the resource class is allowed at the project level.
  - When you disable the Labor resource class, the Named Person, Job, Project Role, and System Person Type resource formats are disabled.
  - When you disable the Equipment resource class, the Project Nonlabor Resource resource format is disabled.
  - When you disable the Material Items resource class, the Inventory Item and Item Category resource formats are disabled.
  - The ability to disable a resource class is not currently available in FBDI.
6. Click **Save**.

## Selecting Resource Formats

Resource formats are predefined resource types or hierarchies of resource types of up to three levels. The following figure provides examples of resource format hierarchies up to three levels.



You create resources for planning or billing resource breakdown structures based on resource formats. For example, if you want to plan for project-related expenses such as airfare, then you must select resource format hierarchies created using the resource type Expenditure Type.

1. Click **Next** on the Create Planning Resource Breakdown Structure: Edit Details page to open the Create Planning Resource Breakdown Structure: Select Resource Formats page.

Use the Create Planning Resource Breakdown Structure: Select Resource Formats page to select the resource formats and resource format hierarchies to use for creating planning resources.

2. Click the **Include** check box for each resource format that you want to create planning resources for.

**Tip:** Click the **Expand** icon to expand the resource format hierarchy. You must select lower levels of a hierarchy individually even if you have selected a format at a higher level.

3. Click **Save**.

## Adding Planning Resources

Create planning resources based on the resource formats you selected for the planning resource breakdown structure.

1. Click **Next** on the Create Planning Resource Breakdown Structure: Select Resource Formats page to open the Create Planning Resource Breakdown Structure: Add Planning Resources page.

Use the Create Planning Resource Breakdown Structure: Add Planning Resources page to create planning resources based on the selected resource format hierarchies.

2. In the Resource Formats table, select a resource format for which you want to create planning resources.

**Tip:** Click the **Expand** icon to expand the resource format hierarchy if you want to create planning resources at a more detailed level.

3. Click **Add** in the Planning Resources section.
4. Enter a name for the planning resource.
5. In the **Resource Combination** column, select values for each resource element that's part of the selected resource format hierarchy. For example, if the selected resource format is **Job: Supplier**, then you must select values for Job and Supplier.
6. Review the resource class and change if required.

**Note:** For each resource format, you can create planning resources based on certain resource classes. For example, if the resource format contains Job, then the only available resource class is Labor. However, if the resource format is Expenditure Category, then you can select any of the resource classes (Labor, Material Items, Equipment, and Financial Resources) when you create a resource.

7. Review the spread curve and make changes if required.

Use predefined spread curves or create spread curves based on your requirements on the Manage Spread Curves page. Spread curves determine how quantity, cost, and revenue amounts for planning resources are distributed across periods in financial or project plans. The resource class associated with the planning resource determines the default spread curve.

8. Repeat this step for each planning resource you want to create for each resource format.
9. Click **Save**.

## Create Project Types

Create project types to control basic project configuration options for burdening, billing, capitalization, and project categorization.

Project types are the primary classification for the projects your business manages. You must set up at least one project type to create projects.

**Note:** After you create a project using a project type, you can't edit the project type.

The following sections describe how you create project types.

### Entering Basic Project Type Information

To create a project type:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Types** task.
2. Click the **Manage Project Types** link.

Use the Manage Project Types page to view, create, and edit project types.

3. Click the **Create** icon to create a project type.

Use the Create Project Type page to specify basic project configuration options, such as burdening, billing, and capitalization options, and class categories, that are inherited by each project associated with the project type.

4. Enter a project type name and select a date from which the project type is available for use. Optionally, select a date to which the project type is available for use and enter a description.
5. Select the **Set** to which the project type is assigned.

**Note:** Project managers can use this project type only on project templates and projects created in business units associated with the set you select here. For additional information about set assignments, see also the Create Financial Plan Types section of this document.

6. Select a **Work Type**.

Create work types on the Manage Work Types page. Work types classify actual and scheduled work. Use work types to determine whether expenditure items are billable, classify cross-charge amounts into cost and revenue for cross-charge work, and calculate transfer price amounts.

7. To record burden costs on projects, select the **Enable burdening** check box.
8. To bill customers for project work, select the **Enable billing** check box.
9. To assign assets to projects, select the **Enable capitalization** check box.

### Selecting Burdening Options

Control how burden transactions are created and accounted. If you enable burdening for a project type, you can choose to account for the individual burden cost components or the total burdened cost amount.

1. Navigate to the Burdening Options tab.
2. Select the **Default Cost Burden Schedule** for projects that are defined with this project type. Project managers can change this value at the project or task level.

3. Select the **Allow cost burden schedule change for projects and tasks** check box to allow a change of the default cost burden schedule when creating and maintaining projects and tasks. Don't enable this option if you want all projects of a project type to use the same schedule for internal costing.
4. The following table lists the decisions that you need to take for burden cost accounting.

Option Name	Decision
Include burden cost on same expenditure item	Decide if you want to include burden cost and raw cost amounts on the same expenditure item. You can store the total burdened cost amount as a value with the raw cost on each expenditure item.
Create expenditure items for burden cost components	Decide if you want to include burden cost amounts on the same expenditure item, but want to see the burden cost details. Expenditure items are created for each burden cost amount on an indirect project and task.
Project Name and Task Name	Determine the project, and optionally the task, that receives the burden cost expenditure items.
Create separate expenditure item for burden cost	Decide if you want to account for burden cost amounts as separate expenditure items on the same project and task as the raw cost.
Create burden cost accounting journal entries	<p>Decide whether to create accounting entries for the burden costs.</p> <p><b>Note:</b> If you select this setting, a separate journal line is created for the burden amount rather than for the total burdened amount, which is the raw cost plus the burden cost. This journal line is created independent of the raw cost journal line.</p> <p>Deselect this check box if burden costs are calculated for reporting purposes only and you don't want to export burdened costs to the general ledger.</p>
Create burdened cost accounting journal entries	<p>Decide whether you want to create a separate journal line for the total burdened cost.</p> <p><b>CAUTION:</b> The raw cost may be accounted twice if separate journal lines are created for the raw cost and for the total burdened cost.</p> <p>You can use this option to track the total burdened cost amount in a cost asset or cost work-in-progress account.</p>

5. Click **Save**.

## Selecting Capitalization Options

Configure capitalization options to determine the options that are inherited by each project associated with that project type.

1. Navigate to the Capitalization Options tab.
2. The following table lists the decisions you need to take in the Construction in Progress section.

Option Name	Decision
Cost Type	Decide whether to capitalize costs at the burdened or raw cost amount for projects with this project type.
Asset Line Grouping Method	Decide how asset lines must be summarized. You can select <b>All</b> , which is the highest level of summarization, or summarize by expenditure category or expenditure type.
Asset Cost Allocation Method	Decide if you want to automatically distribute indirect and common costs across multiple assets.
Event Processing Method	Decide how assets and costs are grouped over time. You can choose to use either periodic or manual events, or no events.
Require complete asset definition	<p>Decide if a complete asset definition is required before sending costs to Oracle Fusion Assets.</p> <p>You won't need to enter information for the imported asset line in Oracle Fusion Assets. The Transfer Assets to Oracle Fusion Assets process places asset lines with complete definitions directly into the Post queue in Oracle Fusion Assets.</p>
Group supplier invoices	Decide if you want to consolidate the expenditure items on a supplier invoice into one asset line according to the asset line grouping method.

3. If you aren't grouping supplier invoices, select one of the following options in the Supplier Invoices section.
  - **As new additions:** Sends each expenditure item on a supplier invoice line to Oracle Fusion Assets as a separate addition line with a status of New.
  - **As merged additions:** Sends each supplier invoice line to Oracle Fusion Assets as a separate addition line with the status of Merged.
4. In the Capitalized Interest section, optionally specify a **Default Capitalized Interest Rate Schedule** that is inherited by projects using this project type.
5. Select the **Allow override** check box if project managers can change the capitalized interest rate schedule at the project level.
6. Click **Save**.

## Selecting Classifications

Assign project classifications to group your projects according to categories and codes that you define on the Manage Class Categories page.

1. Navigate to the Classifications tab.
2. Click the **Add Row** icon.
3. Select a **Class Category**.
4. Select the **Assign to all projects** check box to automatically add the classification to the project definition for all new projects using this project type.
5. Repeat the process for each class category you want to add to the project type.
6. Click **Save**.

## Project Control

### Overview of Oracle Project Control Configuration

The Oracle Project Control functional area lets you manage the financial and budgeting aspects of projects.

Using Project Control, you can configure your enterprise on how you monitor project execution, budget, forecast, and track progress. You can configure period profiles, spread curves, project plan types, and financial plan types and use Business Process Engineering Language (BPEL) workflows to manage budget and forecast approvals.

The preliminary step is to use the Setup and Maintenance work area to select the features and settings that you want to implement for your enterprise.

This table describes the setup tasks for Project Control.

Task Name	Description
Manage Period Profiles	Specify how time periods are grouped and displayed when editing budgets, forecasts, and project plan costs.
Manage Spread Curves	Specify how quantity, cost, and revenue amounts are automatically distributed across a range of accounting or project accounting periods.
Manage Resource Classes: Spread Curves	Review and update resource classes to specify the spread curve to be used.
Manage Financial Plan Types	Specify options used to control planning scenarios for budget and forecast versions.
Manage Project Plan Types	Specify default planning options that cascade down to the template and project levels.

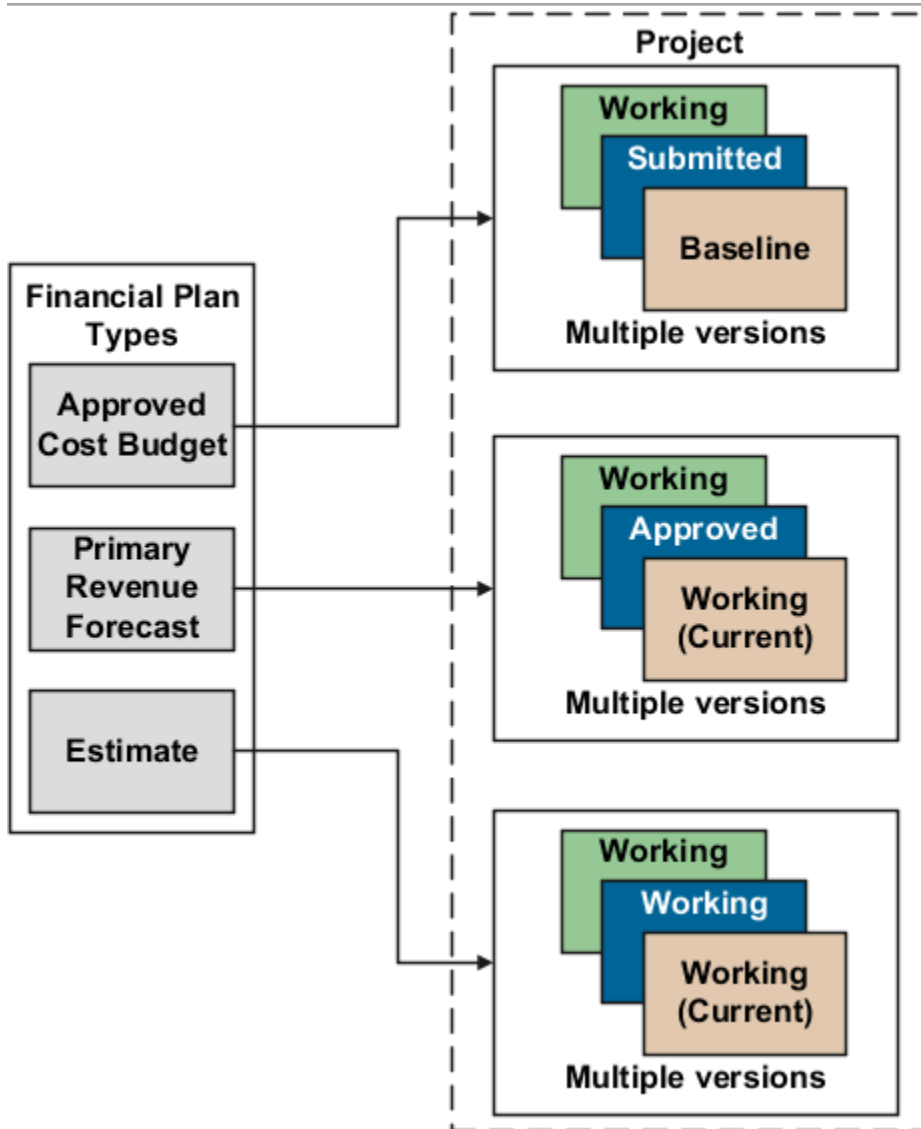
## Create Financial Plan Types

Create financial plan types to define default information and planning options for creating different types of budgets or forecasts.

While creating a financial plan type, you can associate one or more sets, specify plan, currency, rate, and budgetary control settings, and select generation, export, and reporting options.

Create any number of financial plan types based on company requirements as illustrated in the following figure. For example, if your organization has stringent financial planning and oversight requirements, you can create separate financial plan types for each planning scenario. Alternatively, you may create only a few financial plan types, for example, for approved budgets and primary forecasts.

The following graphic illustrates how you can have multiple financial plan types for your projects. The financial plan types can be approved cost budget, primary revenue forecast, estimate, and so on. The versions can be working, submitted, approved, baseline and so on.



Here's how you create financial plan types.

## Enter Basic Information and Setup Options

To create a financial plan type:

1. In the Setup and Maintenance work area, go to the **Manage Financial Plan Types** task.
2. Use the Manage Financial Plan Types page to create, review, edit, or delete existing financial plan types.
3. Click the **Create** icon to open the Create Financial Plan Type page.  
Use the Create Financial Plan Type page to enter basic financial plan type information, and setup and planning options that determine how associated financial plan versions are created.
4. Enter a unique financial plan type name and select a date from which the financial plan type is available for use.
5. Optionally, provide a description and a date to which the financial plan type is available for use.
6. Use the **Plan Class** list to determine whether project managers will use the financial plan type to create budget versions or forecast versions.
7. Use the **Planning Amounts** list to determine whether associated financial plan versions will contain cost amounts, revenue amounts, or both.

If you want to create a financial plan type to plan for both cost and revenue, indicate whether one version will contain both amounts, or if project managers must select to include either cost or revenue amounts when creating a budget or forecast version.

8. Select setup options depending on whether you're creating a financial plan type of the **Budget** or **Forecast** plan class.

If you're creating a financial plan type of the **Budget** plan class, make decisions as listed in the following table.

Option Name	Decision	Notes
Designate as approved cost budget  Designate as approved revenue budget	Is the financial plan type an approved budget?	Decide whether the financial plan type will create cost and revenue versions used for plan comparison or project performance reporting.
Designate as award budget	Will you use the financial plan type to create budgets for sponsored projects?	Select this option if the financial plan type will create control budgets for sponsored projects.
Use workflow for status changes	Will you use an approval workflow?	Use workflow to trigger notifications when project managers change the version status or submit a request to change the version status.
Set as default financial plan type  Set as default award financial plan type	Do you want the financial plan type to be the default selection?	Set the financial plan type as the default, if for example, you anticipate it to be the most commonly used for creating budget versions.
Enable planning in multiple transaction currencies	Will project managers enter amounts in multiple currencies?	<p>Decide whether project managers can enter amounts in currencies other than the project currency.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>○ To use transaction currencies, you must define currency attributes on the Currency Settings tab.</li> <li>○ When the financial plan type allows transactions in multiple currencies, the <b>Assign Resource in Single Currency for a Task</b> check box is displayed under the Currency Settings tab. Select this check box to assign resources in a single currency for a task to create a budget or forecast line. Project costs that are incurred in another currency are mapped to the existing budget or forecast line. For example, this check</li> </ul>

Option Name	Decision	Notes
		box is selected on a forecast version with a forecast line in USD. If project costs are incurred in EUR for the same forecast line, then the project cost is mapped to the existing forecast line in USD instead of creating a new forecast line in EUR.
Enable budgetary controls	Will you create control budgets with the financial plan type?	<p>Decide whether the financial plan type will create cost budget versions that create control budgets in Oracle Budgetary Control.</p> <p><b>Note:</b> In the Manage Budgetary Control and Encumbrance Accounting setup page, if the <b>Control Budget Filter</b> option is set to <b>Ledger only</b>, then you can't create a budget using a financial plan type that's enabled for budgetary controls.</p>

If you're creating a financial plan type of the **Forecast** plan class, make parallel decisions for the following attributes:

- Designate as primary cost forecast
- Designate as primary revenue forecast
- Use workflow for status changes
- Set as default financial plan type

The following table lists a few more decisions that you need to take when creating a financial plan type of the **Forecast** plan class.

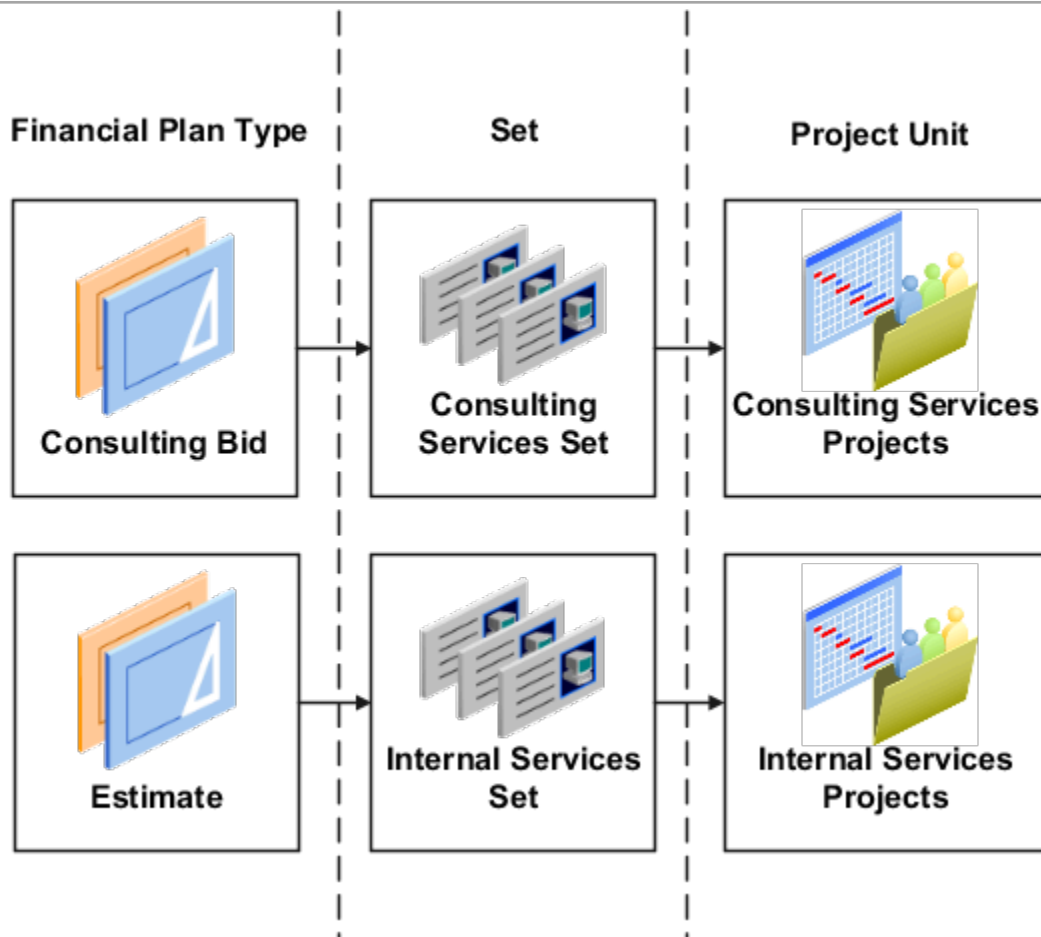
Option Name	Decision	Notes
Automatically submit forecasts for approval	Can forecasts be automatically submitted for approval?	Automatic submission for approval applies only to primary forecasts. When the project manager creates the first baseline version for the approved budget, the application creates the primary forecast version and submits it for approval.
Automatically approve forecasts	Can project managers directly approve forecasts?	If you don't use workflow for forecast approvals, decide if project managers can approve forecast versions directly (without first submitting them to an approver).

Option Name	Decision	Notes
		<b>Tip:</b> The automatically approve forecasts option applies even if project managers aren't entitled to approve forecasts. So, use it to enable automatic approval for certain financial plan types while controlling the forecast approval entitlement for others.

Assign Sets

You associate one or more sets with financial or project plan types so that project managers can use them to create financial plans (budget or forecast versions) for projects or project templates. Financial plan types are available for selection only when projects or project templates are created for project units linked to selected sets.

The following figure illustrates an example of set assignments. The Consulting Services set is associated only with the Consulting Services project unit. You associate the Consulting Bid financial plan type only with the Consulting Services set. In this case, only project managers who create projects for Consulting Services can create versions of the Consulting Bid financial plan type.



If you associate the Internal Services Set to the Consulting Bid financial plan type, then project managers from the Internal Services project unit can also access that financial plan type.

**Tip:** To make financial plan types available more widely across your organization, you can assign them to a common set.

To assign sets:

1. Navigate to the Set Assignments tab.
2. Click the **Add Row** icon to add a set assignment.
3. Select the **Code** of the desired set.
4. Repeat the process for each set to which the financial plan type is assigned.
5. Click **Save**.

## Specify Plan Settings

Use the Plan Settings tab to specify the cost and revenue amounts to include in budget or forecast versions, level of detail for planning, calendar and period options, and rate derivation options.

Navigate to the Plan Settings tab and make the following decisions related to the amount types that are available for editing on budget and forecast versions and how they're edited and displayed.

Option Name	Decision	Notes
Amount Types	What measures can project managers plan for on a budget or forecast?	<p>Decide whether to plan for quantities, amounts, and rates.</p> <p>When selected, corresponding fields are editable on the Edit Budget and Edit Forecast pages. For example, when creating a financial plan type for internal projects that don't track cost amounts, project managers can select quantity and deselect cost and rates.</p> <p><b>Tip:</b> If you're planning for cost and revenue, select the <b>Use cost plan options for revenue</b> check box to replicate your cost selections to revenue. Note that this check box applies to current changes only. If you update cost options later, you must select the check box again to copy.</p>
Planning Level	<p>What measures can project managers plan for on a budget or forecast?</p> <p>At what level of the task hierarchy will project managers plan?</p>	<p>Determine the level of the task structure at which project managers will enter budget or forecast amounts.</p> <p>For example, create one financial plan type for capturing detail cost amounts at the lowest task level, another to capture summary cost amounts at the top task level, and a third to capture total revenue amounts at the project level.</p>
Calendar Type	Will project managers plan by period or for duration of plan lines?	Decide whether to plan for the duration of budget or forecast lines or to plan for specific periods in the accounting calendar or project accounting calendar.
Calendar Type	Will you use the financial plan type to create control budgets for sponsored projects?	<p>Select the <b>Award Calendar</b> calendar type if you will use the financial plan type to create control budgets for sponsored projects.</p> <p>This calendar type creates the calendar for control budgets based on the budget periods defined for the award.</p>
Calendar Type	Will you use the financial plan type to create control budgets for nonsponsored projects?	<p>Select either the <b>Accounting Calendar</b> or <b>Project Accounting Calendar</b>, or <b>None</b> as the calendar type if you will use the financial plan type to create control budgets for nonsponsored projects.</p> <p>These calendar types create calendars for control budgets by using the accounting period or project accounting period.</p> <p>If you select <b>None</b> as the calendar type, then either the project duration or the maximum</p>

Option Name	Decision	Notes
		task assignment duration is used to create calendars for control budgets.
Cost Rate Derivation Date Type	How will cost rates be determined?	<p>If project managers won't plan based on a calendar, determine whether cost rates are derived based on the start or end date of plan lines, system date, a fixed date, or on effective resource rate dates.</p> <p>If project managers plan based on the accounting calendar or project accounting calendar, then determine whether cost rates are derived based on the start date of plan lines or on effective resource rate dates.</p>
Period Profile	How will period amounts be displayed?	<p>If project managers enter planning amounts by period, select how the periods are grouped for display when editing budget or forecast versions.</p> <p>Use predefined period profiles or create period profiles based on your requirements on the Manage Period Profiles page.</p>
Maintain manual spread on date changes	Do you want to retain manual periodic spread on date changes?	<p>Decide whether to retain manual periodic spread even if the duration changes due to a scope change.</p> <p>The period-level adjustments previously made to the forecast or budget line aren't lost when you modify the line dates in the user interface.</p> <p><b>Note:</b> The <b>Maintain manual spread on date changes</b> option doesn't apply to non-periodic calendar versions.</p>
<p>Associate project costs or revenue to summary tasks (if you're planning in both cost and revenue planning amounts)</p> <p>Associate project costs to summary tasks (if you're planning in cost only planning amounts)</p> <p>Associate project revenue to summary tasks (if you're planning in revenue only planning amounts)</p>	Do you want to associate cost and revenue to planned resource assignments in the task hierarchy?	<p>Decide whether to associate the incurred costs or revenue for resources on the task hierarchy at the level planned.</p> <p><b>Note:</b> This check box is available for selection only when the <b>Plan Class</b> is set to <b>Forecast</b> and the <b>Planning Level</b> is set to <b>Project and all tasks</b>.</p>

## Select Currency Settings and Rate Settings

Use the Currency Settings tab to select transaction currencies in which to enter financial plan amounts, and the rates for converting those amounts to project currency, project ledger currency, or planning currency.

### 1. Navigate to the Currency Settings tab.

If you selected the **Enable planning in multiple transaction currencies** check box, then the following options are displayed:

- **Assign Resource in Single Currency for a Task** check box - Select this check box to assign resources in a single currency for a task to create a budget or forecast line. Project costs that are incurred in another currency are mapped to the existing budget or forecast line. For example, this check box is selected on a forecast version with a forecast line in USD. If project costs are incurred in EUR for the same forecast line, then the project cost is mapped to the existing forecast line in USD instead of creating a new forecast line in EUR.
  - **Edit** icon - Click this icon and set the planning currency.
- ### 2. Select the following currency conversion attributes to define how the application must convert transaction currency amounts to project currency, project ledger currency, and planning currency. If the financial plan type supports planning for cost and revenue, then you must provide currency conversion attributes separately for cost and revenue.
- **Rate Type** as a source of conversion rates.
  - **Date Type** to determine whether conversion rates are derived based on the start or end date of plan lines, or a fixed date.
  - If you selected **Fixed date** as the **Date Type**, then enter the date from which conversion rates will be used in the **Fixed Date** field.

#### Note:

- When the **Use same conversion attribute for all currency conversions** check box is selected the same currency conversion attributes are used for all currencies. If you clear this check box, then you must repeat this step for each transaction currency that project managers can use.
- If the **Enable planning in multiple transaction currencies** check box is selected and you clear the **Use same conversion attribute for all currency conversions** check box, then you must select the **Rate Type**, **Date Type**, and **Fixed Date** for the project currency, project ledger currency, and planning currency.

### 3. Click **Save and Close**.

Use the Rate Settings tab to specify the actual or planning rates used to calculate cost and revenue amounts on associated budget or forecast versions.

**Note:** If the financial plan type supports planning for cost and revenue, you specify rate settings separately for cost and revenue.

Add required project roles to the project and directly create work plan or financial plan by project roles and perform high-level planning. In either of these cases, the application derives cost rates for these project role resources from the project role rate schedules associated with the project, and bill rates from the project role overrides setup at the contract

level. Further, create project budget and forecast from the financial project plan containing the project role assignments or directly from project resources, thus accurately determining projections for cost and revenue.

1. Navigate to the Rate Settings tab.
2. Click **Add Row** in the Rate Schedules section to specify rate settings for a business unit. You must specify rate settings separately for each business unit.
3. Determine if project managers will use the same rate schedules defined for the project to calculate actual costs, or use separate rate schedules for planning purposes.
4. To use actual rates, deselect the **Use planning rates** check box. In the Details section, optionally select rate schedules for **Resource Class Raw Cost Rate** and **Resource Class Bill Rate**.

If the application is unable to determine cost or bill rates for a planning resource, then it uses the resource class rates schedules you specify here.

5. To use planning rates, select the **Use planning rates** check box. In the **Details** section, select separate rates for Person, Job, Project Role, Nonlabor Resource, and Resource Class, as required. You can also select a burden schedule to use for calculating burdened costs for all planning resources (including those that aren't rate-based).
6. Repeat the process for each business unit for which you want to select rates.
7. Click **Save**.

## Select Budgetary Control Settings

Use the Budgetary Control Settings tab to define the control budgets that you can create. Control budgets are automatically created in Oracle Budgetary Control when you create the baseline version of a project budget that's enabled for budgetary control.

**CAUTION:** The financial plan type must be enabled for budgetary controls for the Budgetary Control Settings tab to be available.

Navigate to the Budgetary Control Settings tab and make the following decisions related to the project and top resource control budgets.

Option Name	Decision	Notes
Control Budget	How will you define the control budget, using which project-related segments?	Decide whether to control amounts in the budget version at the project or top resource level for non sponsored projects or at the project, award, top resource, or funding source level for sponsored projects. These amounts are passed to the control budget, and Oracle Budgetary Control uses the project and top resource level budget data to create control budget account segments.
Control Level	How strictly do you want to control the funds that are reserved for expenditures that impact the control budget?	Select a control level for the project and top resource control budgets. The options are: <ul style="list-style-type: none"> <li>• Absolute</li> <li>• Advisory</li> <li>• Track</li> <li>• Do Not Create Control Budget</li> </ul>

Option Name	Decision	Notes
Default Rate Type	Which rate type will convert the transaction amount to the control budget currency prior to the funds check?	<p>Select a default rate type to use on control budgets that are created from this financial plan type. You can change the rate type on individual budget versions.</p> <p>If transactions fail processing due to missing currency conversion attributes, then ensure that you specify this rate type and that the conversion rate is setup using this rate type for the currency in the Manage Conversion Rate Types page.</p>
Tolerance Percentage	By what percentage can transactions exceed the budgeted amount without generating a warning or exception?	Transactions that impact the control budget can exceed the budgeted amount by the percentage that you enter. After transactions meet or exceed the tolerance level, a notification is issued or the funds reservation process fails.

## Select Generation Options

Use the Generation Options tab to indicate how cost and revenue are calculated when you generate a budget or forecast version from another financial plan or from the project plan.

Perform the following actions if you're creating a financial plan type of the **Budget** plan class.

1. Navigate to the Generation Options tab.
2. Select a **Generation Source** to determine whether budget versions must be generated from another financial plan or from the project plan.
3. If you selected **Financial plan type** as the generation source, select a **Source Plan Type** to indicate which financial plan type the source plan must belong to.
4. Select a **Source Plan Version**.
  - o If your generation source is **Project plan type**, then you can select either **Working** or **Baseline**.
  - o If your generation source is **Financial plan type** and your source plan type is a budget financial plan type, then you can select **Current baseline**, **Original baseline**, or **Current working**.
  - o If your generation source is **Financial plan type** and your source plan type is a forecast financial plan type, then you can select **Current approved**, **Original approved**, or **Current working**.
5. If the financial plan type supports planning for revenue, select a **Revenue Generation Method**. The following table describes the options.

Option Name	Description
Manual entry	<p>Revenue amounts aren't generated. Project managers can enter amounts manually. Manually entered revenue amounts are retained even if any changes are made to quantity, raw cost, or burdened cost of an individual plan line; at the periodic level or version level.</p> <p>Also, when you refresh rates, the revenue isn't recalculated based on the rate derivation logic to fetch rates from the rate schedules defined in plan settings.</p>

Option Name	Description
Planning rate based	Revenue amounts are generated based on the planning rates you specify in the Rate Settings tab of the financial plan type.
Contract revenue classification method	<p>Revenue is generated line by line, using the revenue method classification on the revenue plan that's associated with the contract line. The contract line revenue method classifications determines if revenue rates, bill rates, or contract line funding amounts are used to derive revenue.</p> <p>If you're using the <b>Contract revenue classification</b> method for determining revenue amounts for financial plans, then the expected revenue for the project is reflected based on the parameters known at that time.</p> <ul style="list-style-type: none"> <li>For projects or tasks that are associated to contract lines with Amount Based revenue plans, the best estimate is the funding amount that's assigned to that project or task on the contract line.</li> <li>For projects or tasks that are associated to contract lines with Rate Based revenue plans, for example, As Incurred, the best estimate is based on the planned resources and the rates that they will eventually use when billing and recognizing revenue.</li> <li>For financial resources, the rate is determined using the Resource Class Bill Rate schedule that's assigned to the financial plan. If the assigned Resource Class Cost and Bill Rate schedules are the same, then the planned cost and revenue are also the same.</li> </ul>

- Select the **Retain manually added budget lines** check box if plan lines added by project managers must be retained when an existing version is generated again.
- Select the **Retain override rates from source** check box if override rates entered in the source plan version must be used to generate amounts in the new budget version.
- Click **Save**.

If you're creating a financial plan type of the Forecast plan class, in addition to the decisions listed for budget financial plan types, you must also determine the following:

- The following table lists the **Forecast ETC Method** that you can use to determine how ETC amounts are calculated. Select one of the options.

Option Name	Resulting Calculation
Remaining plan	ETC = Plan - Actual
Plan to complete	ETC = Plan - Actual ETC = Plan * (1 - Physical Percent Complete from latest Published Progress)
Cost performance index based	<p>ETC = (1 - Physical Percent Complete) / Physical Percent Complete * Actual</p> <p>Actual amounts are from summarized project plan data and physical percent complete from latest published progress.</p>

Option Name	Resulting Calculation
	<b>Note:</b> If either the physical percent complete or actual amounts are zero, then the <b>Plan to complete method</b> is used.
Manual entry	ETC amounts not calculated

- If you're using the **Remaining plan** ETC method, then select the **Carry forward unused amounts from past periods** check box to carry over unused source plan amounts from periods prior to the actual amounts through period.
- Select one of the following options for the **Actual Amounts Through Period** field to determine the period through which to obtain actual amounts when generating forecast amounts:
  - Current period**
  - Prior period**
  - Last closed period**
- Select the **Allow negative ETC calculation** check box if you don't want negative results of ETC calculation to be set to zero.
- Select the **Open commitments** check box to include commitments such as purchase orders and supplier invoices in the project forecast.
- Click **Save**.

## Select Reporting Options, Export Options, and Additional Information

Use the Reporting Options tab to indicate how to roll up amounts for planning resources, report quantity when planning for cost and revenue in separate financial plan versions, calculate margins, and display amounts.

The following table lists the decisions you need to take while setting up reporting options for your project.

Option Name	Decision	Notes
Report Quantity	What quantity will be used for reporting?	If the financial plan type supports planning for cost and revenue in separate plan versions, decide whether cost or revenue quantity is used for reporting.
Report Cost	How will margin be calculated?	Decide whether to calculate margins based on raw cost or burdened cost.
Amount Scale	How will large amounts be displayed?	Decide how you want whole number amounts to display when project managers view quantities and amounts when reviewing and finalizing budgets or forecast versions. For example, select a rounding factor of 100 and a value of 25,000 is displayed as 250.

Option Name	Decision	Notes
Currency Type	What currency will cost and revenue be displayed in?	Decide whether you want amounts to be displayed in project currency or project ledger currency.

Use the Export Options tab to determine the amounts, rates, and quantities that you can export to Excel. The following table lists the decisions you need to take:

Option Name	Decision
Use task planned dates as task assignment dates	<p>Select the check box to display currency conversion attributes and costs and revenue in project currency and project ledger currency when you edit financial plan versions in Excel.</p> <p><b>Note:</b> This option is enabled if you select the <b>Enable planning in multiple transaction currencies</b> check box in the Budget or Forecast Options section.</p>
Display commitments	Select the check box to display commitment amounts in Excel.
Selected Measures	Use the <b>Available Measures-Selected Measures</b> select shuttle to determine what financial plan information you can review and edit in Excel.

Use the Additional Information tab to capture information specific to your organization. To enable data entry, configure the PJO\_PLANNING\_OPTIONS\_DFF descriptive flexfield.

#### Related Topics

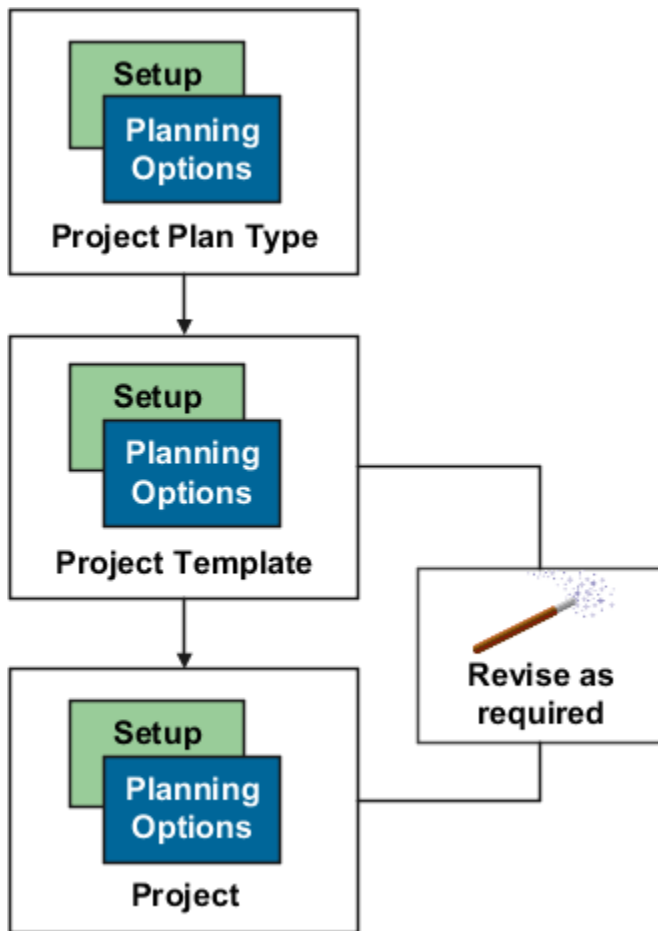
- [Example of Set Association with Financial Plan Types](#)
- [How Financial Plan Types and Project Budget Versions Work With Budgetary Control](#)
- [How do I define the financial plan type to create an award project budget?](#)
- [Considerations for Selecting Rate Schedules for Project and Financial Planning](#)
- [Invoice and Revenue Method Components](#)
- [Invoice and Revenue Method Classifications](#)
- [Considerations for Changing a Revenue Method](#)

## Create Project Plan Types

Create project plan types to define default information used for creating a project plan and capturing progress.

While creating a project plan type, you can associate one or more sets, specify plan, task, currency, rate, and progress settings, and select budget generation options.

Associate one project plan type to a project template. Projects created using the template inherit setup and planning option values. You can revise setup or planning options at each level to match specific planning requirements. The following figure shows how you can edit the setup or planning options at the project template or project level.



The following sections describe how to create project plan types.

## Enter Basic Information and Setup Options

To create a project plan type:

1. In the Setup and Maintenance work area, go to the **Manage Project Plan Types** task.
2. Use the Manage Project Plan Types page to create, review, edit, or delete existing project plan types.
3. Click the **Create** icon to open the Create Project Plan Type page.

Use the Create Project Plan Type page to provide basic project plan type information and specify setup and planning options that determine how associated project plans and progress are created.

4. Enter a unique project plan type name and select a date from which the project plan type is available for use.
5. Optionally, provide a description and a date to which the project plan type is available for use.

6. Use the options in the Setup Options section to indicate whether:
  - Project managers can use Microsoft Project for scheduling.
  - Project managers can enter amounts in currencies other than the project currency.

**Note:** When you select this option, you must provide currency conversion attributes in the Currency Settings tab.

## Assign Sets and Specify Plan Settings

To assign sets and specify plan settings:

1. Navigate to the Set Assignments tab.  
Use the Set Assignments tab to associate sets with project plan types so that project managers can use them to create project plans for projects or project templates. For more information, see the Create Financial Plan Types section of this document.
2. Navigate to the Plan Settings tab.  
Use the Plan Settings tab to indicate whether you will track costs in the project plan and whether you will plan for the project duration or by periods.
3. The following table lists the decisions you need to take when assigning sets to your project.

Option Name	Decision	Notes
Enable project plan costs	Will project managers plan for costs on the project?	<p>Enable project plan costs if project managers must plan for costs on tasks and task assignments and monitor actual costs through the project lifecycle.</p> <p><b>Note:</b> If you don't enable planning for costs, then physical percent complete values are calculated based only on effort.</p>
Set unplanned assignments as planned assignments	Can a resource with actuals get added directly as a planned resource to the financial project plan?	<p>When this option is selected, as project costs are incurred, the resource is added as a planned resource to the financial project plan instead of being marked as unplanned. When assigning a resource as a planned resource, the application:</p> <ul style="list-style-type: none"> <li>◦ Defaults the dates from the task dates. You can edit these dates unless the <b>Use task planned dates as task assignment dates</b> check box is selected at project plan type level.</li> <li>◦ Defaults the currency to the actual currency if the project plan type allows planning in multiple currencies, else it always assigns in the project currency.</li> </ul>

Option Name	Decision	Notes
		<ul style="list-style-type: none"> <li>Periodic spread for planned resource happens from the planned start date of the task or the actual period.</li> </ul>
Associate project costs to summary task assignments	Do you want to associate cost to planned resource assignments in the task hierarchy?	<p>Decide whether to associate the incurred costs for resources on the task hierarchy at the level planned.</p> <p><b>Note:</b> This check isn't available for selection if the <b>Set unplanned assignments as planned assignments</b> or <b>Use third-party software for scheduling</b> check box is selected.</p>
Calendar Type	Will project managers plan by period or for duration of plan lines?	Decide whether project managers will plan for the task assignment duration or if they can plan for specific periods in the accounting calendar or project accounting calendar.
Rate Derivation Date Type	How will cost rates be determined?	<p>If project managers won't plan based on a calendar, then determine whether cost rates are derived based on the start or end date of plan lines, system date, a fixed date, or on effective resource rate dates.</p> <p>If project managers plan based on the accounting calendar or project accounting calendar, then determine whether cost rates are derived based on the start date of plan lines or on effective resource rate dates.</p>
Fixed Date	How will cost rates be determined?	If the rate derivation date type is <b>Fixed Date</b> , then select the date from which rates will be used for calculating costs.
Period Profile	How will period amounts be displayed?	If project managers will enter planning amounts by period, then select how periods will be grouped for display when project managers view amounts for task assignments.
Maintain manual spread on date changes	Do you want to retain manual periodic spread on date changes?	Decide whether to retain manual periodic spread even if the duration changes due to a scope change.

Option Name	Decision	Notes
		<p>The period-level adjustments previously made to the forecast or budget line aren't lost when you modify the line dates in the user interface.</p> <p><b>Note:</b> The <b>Maintain manual spread on date changes</b> option doesn't apply to non-periodic calendar versions.</p>

## Specify Task Settings

Use the Task Settings tab to specify task and task assignment date settings.

1. Navigate to the Task Settings tab.
2. The following table lists the ways in which you can enter and calculate the planned dates for tasks and task assignments.

Option Name	Decision
Use task planned dates as task assignment dates	<p>Must task assignment dates match corresponding task planned dates?</p> <p>If yes, then project managers can't edit task assignment dates.</p>
Automatically roll up task planned dates	<p>Must planned dates for lowest-level tasks roll up to summary tasks?</p> <p>If yes, then project managers can't edit summary task dates.</p>

**CAUTION:** The **Use task planned dates as task assignment dates** check box and the **Automatically roll up task planned dates** check box are disabled if you enable use of Microsoft Project as the scheduling application.

3. The following table lists the options that you can use to enter transaction dates.

Option Name	Decision
Synchronize task transaction dates with planned dates	<p>Decide whether transaction dates must match the planned dates for tasks, plus or minus the date adjustment buffer.</p> <p>If you don't select this check box, then transaction dates for summary tasks are blank by default. Transaction dates for subtasks are set to summary task transaction dates.</p>
Date Adjustment Buffer in Days	<p>Optionally, specify a date adjustment buffer to determine the maximum lag (positive) or lead (negative) time between task planned dates and task transaction dates.</p>

Option Name	Decision

4. Click **Save**.

## Specify Currency Settings and Rate Settings

Use the Currency Settings tab to select transaction currencies in which to enter project plan amounts, and the rates for converting those amounts to project currency or project ledger currency.

Use the Rate Settings tab to specify the actual or planning rates used to calculate cost and revenue amounts on the project plan.

For more information on both tabs, see the Create Financial Plan Types section of this document.

## Specify Progress Settings

Use the Progress Settings tab to define how progress values are calculated and roll up the task hierarchy. These options indicate default values that you can modify at the project level.

1. Navigate to the Progress Settings tab.
2. The following table lists the decisions you need to take on how the application should calculate physical percent complete values and rolls up task hierarchy.

Option Name	Decision	Notes
Physical Percent Complete Calculation Method	How is physical percent complete calculated for lowest-level tasks?	Decide whether project managers must enter physical percent complete or if the application calculates the value based on either cost or effort.  Calculation is based on the following formula, where amount can be cost or effort, as appropriate:  $\text{Actual Amount} / \text{Estimate at Completion (EAC) Amount} * 100$
Primary Physical Percent Complete Method	How does physical percent complete roll up the task hierarchy?	Decide whether the rolled-up physical percent complete for summary tasks is based on cost or effort.  Calculation is based on the following formula, where amount can be cost or effort, as appropriate:  $\text{Sum of Earned Value Amount from Subtasks} / \text{Sum of Baseline Project Plan Amount} * 100$

Option Name	Decision	Notes
		<b>Note:</b> The rolled up physical percent complete value is used in project forecasting, reporting, and revenue generation.

3. Decide how ETC amounts are calculated as listed in the following table. The following table lists the ways in which you can calculate ETC amounts.

Option Name	Decision	Notes
ETC Method	How are ETC amounts calculated?	Use one of the following methods to calculation ETC values: <ul style="list-style-type: none"> <li>Remaining plan: For all progress calculations (initial and subsequent) ETC cost is calculated as:  Current Planned Cost - Actual Cost</li> <li>Manual entry: For first progress as-of date, ETC cost is calculated as:  Current Planned Cost - Actual Cost</li> </ul> For all subsequent progress as-of dates, ETC cost equals ETC cost from the previous published progress.
Allow negative ETC calculation	Can ETC values be negative or should they be set to zero?	If you're using the Remaining plan ETC method and actual amounts are greater than the plan, then you can select to display negative ETC amounts that result.

4. The following table lists the ways in which you can update the project plan information and generate a forecast version when publishing progress.

Option Name	Decision
Update planned quantity with EAC quantity	Decide whether planned quantity in the project plan is updated with EAC quantity from progress.
Automatically generate forecast version	Decide whether a forecast version is created when the project manager publishes progress.
Financial Plan Type	Select the financial plan type for use in forecast creation.

5. Click **Save**.

## Select Budget Generation Options

Use the Budget Generation Options tab to decide whether a budget version is generated when you set a baseline for your project plan and to specify how the budget version is generated. These options indicate default values that you can modify at the project level.

1. Navigate to the Budget Generation Options tab.
2. The following table lists the decisions you need to take when choosing to generate a budget version while setting a baseline for a project plan.

Option Name	Decision
Generate budget version	Decide whether a budget version is created when the project managers sets a baseline for the project plan.
Financial Plan Type	Select the financial plan type for use in budget creation.
Automatically designate budget version as baseline	<p>Decide whether the budget version must be set as the current baseline version.</p> <p><b>Note:</b> If an existing current baseline budget version exists, then the existing version becomes a standard baseline version and the newly created baseline version becomes the current baseline version.</p>

3. Click **Save**.

## Provide Additional Information

Capture information specific to your organization using the descriptive flexfield PJO\_PLANNING\_OPTIONS\_DFF.

# Project Costing

## Overview of Project Costing Configuration

This table lists setup tasks for Oracle Fusion Project Costing, grouping them into task lists. These tasks include setup configurations for descriptive PPM flexfields and profile options, project cost capitalization options, project cost distribution across organizations, and options to integrate Costing with other Oracle applications.

Task List Name	Description
Define General Costing Setup	Configure transaction sources, documents, profile options, and descriptive flexfields related to Oracle Fusion Project Costing functionality.

Task List Name	Description
	For more information, see <i>Define an Additional Segment in the Cost Collection Flexfield</i> in the Getting Started with Your Project Management Implementation guide.
Define Capital Projects	Configure options used to capitalize project costs and place assets in service.
Define Borrowed and Lent Accounting	Configure borrowed and lent accounting to distribute project costs across organizations.
Define Project Costing Integrations	Configure options used to integrate Oracle Fusion Project Costing with other Oracle Fusion applications.

This chapter provides detailed setup steps for defining an additional segment for the cost collection flexfield.

See the Implementing Subledger Accounting guide for more details.

### Related Topics

## Set Up Default Budget Account

As a project application administrator, you must set up a default budget account for cost transactions before you enable an account based control budget for budgetary control.

You can create a default budget account for transactions from various sources by:

1. Creating a transaction account definition
2. Associating the transaction account definition to your ledger

### Create a Transaction Account Definition

When you import costs for a project that's enabled for budgetary control, the application derives the budget account using the account rule assignments that you define for the Project Costing Budget Account transaction type in the transaction account definition.

1. In the Setup and Maintenance work area, go to the **Define Transaction Accounting for Project Financial Management** task.
2. Click the **Manage Transaction Account Definitions** link. Set the scope to **Project Costing** if not already set.

The application provides the **PPM Default Account Generation Definition** predefined transaction account definition, which is selected by default. You can create a copy of this transaction account definition and configure it. To copy the definition, select **Duplicate** from the **Actions** menu.

3. Enter a name and short name for your transaction account definition. You can optionally select a chart of accounts.
4. Edit the account combination and segment rules according to your business needs. You can create an account combination rule and segment rules or segment rules and then associate them with the Project Costing Budget Account transaction account type.
5. Click **Activate** to activate your transaction account definition. Verify that the status changes from Incomplete to Active.
6. Click **OK** to close the confirmation message window.

7. Click **Done**.

## Associate a Transaction Account Definition to a Ledger

Budgetary control uses the budget account to derive the budget amount for validating the transaction cost for your ledger.

1. In the Setup and Maintenance work area, go to the **Define Transaction Accounting for Project Financial Management** task.
2. Click the **Manage Subledger Accounting Options** link. Set the scope to **Project Costing** if not already set.
3. Search for your ledger.
4. In the search results, select the row that corresponds to the **Project Costing** application name for the selected ledger.
5. Click **Edit Accounting Options** for Project Costing.
6. Select your transaction account definition from the list of values in the **Transaction Account Definition** field.
7. Click **Save**.

**Note:** If a transaction fails indicating that the account derived by account rules can't be created or accessed, then identify if the failure is in the project control budget or the General Ledger control budget. If the failure is in the General Ledger control budget and the account generated for the budget transaction is incorrect, then review the Transaction Account Definition to verify if the rules were defined correctly to derive an account and update the rules accordingly.

### Related Topics

- [Account Rules](#)
- [Transaction Account Builder](#)

## Define an Additional Segment in the Cost Collection Flexfield

The Cost Collection flexfield helps you to capture product-specific attributes on actual cost and commitment transactions.

The Project Costing descriptive flexfield captures a complete set of transaction attributes in source applications and displays them in Oracle Fusion Project Costing. The Cost Collection flexfield is available for use on pages such as the **Manage Unprocessed Costs** page from where you can create transactions, and on the various Create Costs ADFdi Excel spreadsheets. It is also displayed on purchase orders, supplier invoice distributions, and expense reports in source applications.

To define an additional segment in the Cost Collection flexfield:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Standard Cost Collection Flexfield** task.
2. Click the **Manage Project Standard Cost Collection Flexfield** link.
3. Use the Manage Project Standard Cost Collection Flexfield page to manage context sensitive segments. Select the **Project Costing Details** flexfield row.
4. Click the **Edit** icon.
5. In the Context Sensitive Segments section, expand the **Context** list.
6. Select the context for which you want to add the additional segment in the flexfield and view the context sensitive segments. To view this newly added segment in Project Costing you must also add this segment to the **PJC: All** context.

7. Select a user-defined attribute row, such as USER\_DEF\_ATTRIBUTE1, to define the context sensitive segment.

**Note:**

- You must not define global segments, instead you can define additional context-sensitive segments.
- Define context-sensitive segments using only user-defined attributes.

8. Click **Edit**.
9. Use the Edit Segment page to specify the segment name, and define how it must be displayed and validated.

**Note:** User-defined attributes for this flexfield support only character data type, which includes alphabets and numbers. However, you cannot use negative numbers or numbers with decimal values.

10. Optionally specify a description.
11. Select the **Enabled** check box to enable this segment.
12. Depending on how the segment must appear, for example as a list, associate an existing value set or create a value set for Oracle Fusion Project Costing and associate the value set to the segment.
13. In the Validation section select a value set.
14. Optionally make this a required field by selecting the **Required** check box.

**Note:** To ensure that project attributes are entered for your transactions, you can mark the Project Number segment as a required field. This automatically makes the Task Number, Expenditure Type, Expenditure Organization, and Expenditure Item Date segments required for the context.

15. In the Initial Default section, specify the format of the default value for the segment, and the entity attribute from which the segment is derived.
16. In the Display Properties section, enter a value for **Prompt** which appears as the field label.
17. The Display Type field specifies how the segment appears. For example, you can specify the expense locations in a drop-down list.

Select a value for **Display Type** such as **Check Box**, **List of Values**, or **Text Area**.

18. On the Edit Segment page, click **Save and Close**.
19. On the Edit Context page, note the created segment name so you can identify it in the transactional pages.
20. Repeat steps 7 through 19 for every additional context in which the new segment must appear.
21. After you define all the flexfields, click **Save and Close**.
22. You must deploy the Cost Collection flexfield to make it available for users while entering transactions. Click the **Deploy Flexfield** button on the **Manage Project Standard Cost Collection Flexfield** page.
23. You can now verify the segment you defined using the Cost Collection flexfield by creating a transaction from either the **Manage Unprocessed Costs** page or the various Create Costs ADFdi Excel spreadsheets.

## Configure the Project Costing Details Flexfield

You can configure the Project Costing Details flexfield by using the Manage Project Standard Cost Collection Flexfield setup task to cater to your business needs.

For example, you can restrict expenditure types for specific expenditure organizations, derive project expenditure type based on purchase category, make the project-owning organization as your default expenditure organization, and so on.

## Creating New Value Sets

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Value Sets** task.
2. Click the **Manage Value Sets** link.
3. Click **Create** in the Search Results section to create a new value set.
4. On the Create Value Set page, enter the Value Set Code, select Cost Collection as the Module, select Table as the Validation Type, and select Value Data Type as required.
5. In the Definition section, enter the table or view name in the **FROM Clause** field.
6. Enter the column you want to add in the **Value Column Name** field.
7. Enter your query criteria in the **WHERE Clause** field. To refer to an existing segment value, use the format : {SEGMENT.<segment column>}. For example, : {SEGMENT.EXPENDITURE\_ITEM\_DATE}. To refer to a parameter value, use the format : {PARAMETER.<parameter name>}. For example, : {PARAMETER.PurchaseCategory}.
8. Click **Save and Close**.

## Using Value Sets in Existing Segments

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Standard Cost Collection Flexfield** task.
2. Click the **Manage Project Standard Cost Collection Flexfield** link.
3. On the Manage Project Standard Cost Collection Flexfield page, verify that the Project Costing Details flexfield row is selected in the Search Results table, and click **Edit**.
4. On the Manage Project Standard Cost Collection Flexfield page, click **Manage Contexts**.
5. On the Manage Contexts page, select your context code in the Context Code field and click Search. For example, EXM: Expense Report Line, POR: Requisition, and so on.
6. Select your context in the Search Results table and click **Edit**.
7. On the Edit Context page, select the segment row in the Context Sensitive Segments section for which you want to use the new value set and click **Edit**.
8. On the Edit Segment page, select the new value set for the Value Set field in the Validation section.
9. If your value set returns only a single value then that value is used as the default value for that segment. If your value set returns multiple values then you must explicitly set a default value using the Initial Default section.
10. Click **Save and Close**.
11. Click **Save and Close**.
12. Click **Save and Close**.
13. Click **Save and Close**.
14. On the Manage Project Standard Cost Collection Flexfield page, select the Project Costing Details row in the Search Results section.
15. Click **Deploy Flexfield**.
16. Monitor the deployment and click **OK** to dismiss the confirmation window after the deployment is complete.
17. Verify that the Deployment Status changes to Deployed.
18. Sign out of the application and sign in to activate the changes.

## Configuring Segments to Limit List of Values

To conditionally control the list of values returned by a field based on the value selected for a previous field, you can change the order of the segments in the flexfield to create a master-child relationship between two segments. For example, if you want the tasks list of values to be controlled by the expenditure item date, then move the EXPENDITURE\_ITEM\_DATE segment immediately before the TASK\_ID segment, edit the query criteria for the value set of the TASK\_ID segment, and redeploy the flexfield.

## Set Project-Owning Organization as the Default Expenditure Organization on Payables Invoices

This example demonstrates how project application administrators can set the project-owning organization of a project to be the default expenditure organization on an invoice line.

The following table summarizes key decisions for this scenario.

Decisions to Consider	In This Example
For which expenditure organizations can I create invoice lines?	Only those expenditure organizations that are also project-owning organizations.
Can I set a default value for the expenditure organization of my cost transaction?	Yes, by using the project-owning organization to be the default expenditure organization.

### Summary of Tasks

To set the project-owning organization as the default expenditure organization on invoices, project application administrators must:

1. Create a value set.
2. Use the value set in the invoice line.
3. Use the value set in the invoice distribution.
4. Deploy the updated Project Costing Details flexfield.

### Creating a Value Set

1. Click **Navigator** > **Setup and Maintenance**, and search for the **Manage Value Sets** task.
2. Click the **Manage Value Sets** link.
3. On the Manage Value Sets page, click **Create** in the Search Results section to create a new value set.
4. On the Create Value Set page, enter the following values. The following table lists the values that you need to enter on the Create Value Set page.

Field	Value
Value Set Code	PJC_DEFAULT_EXP_ORGANIZATION
Description	Project-owning organizations that are the default expenditure organizations.
Module	Cost Collection
Validation Type	Table

Field	Value
Value Data Type	Character

5. In the Definition section, enter the following values.

Field	Value
FROM Clause	PJF_ORGANIZATIONS_EXPEND_V
Value Column Name	NAME
ID Column Name	ORGANIZATION_ID
WHERE Clause	<pre>org_id = :{PARAMETER.BusinessUnit} and nvl(:{SEGMENT.EXPENDITURE_ ITEM_DATE}, trunc(sysdate)) between nvl(EFFECTIVE_START_DATE, nvl(: {SEGMENT.EXPENDITURE_ITEM_DATE}, trunc(sysdate))) and nvl(EFFECTIVE_ END_DATE, nvl(:{SEGMENT.EXPENDITURE_ITEM_DATE}, trunc(sysdate))) and organization_id = (select carrying_out_organization_id from pjf_ projects_all_b where project_id = :{SEGMENT.PROJECT_ID})</pre>

6. Click **Save and Close**.

## Using the Value Set in the Invoice Line

1. Click **Navigator** > **Setup and Maintenance**, and search for the **Manage Project Standard Cost Collection Flexfield** task.
2. Click the **Manage Project Standard Cost Collection Flexfield** link.
3. On the Manage Project Standard Cost Collection Flexfield page, verify that the Project Costing Details flexfield row is selected in the Search Results table, and click **Edit**.
4. On the Manage Project Standard Cost Collection Flexfield page, in the Context Sensitive Segments section select AP: Invoice Line as the context.
5. Select the ORGANIZATION\_ID row and click Edit.
6. On the Edit Segment page, select PJC\_DEFAULT\_EXP\_ORGANIZATION as the value set in the Validation section.
7. Since the value set PJC\_DEFAULT\_EXP\_ORGANIZATION returns a single value, that value is used as the default value of the expenditure organization. You don't have to specify a default value using the Initial Default section on the Edit Segment page.
8. Click **Save and Close**.

## Allow Employees to Enter Expenses for Active Tasks Only

This example demonstrates how project application administrators can limit the list of values for Task Number field on an expense item to allow employees to enter expenses for only those project tasks which are currently active.

That is, the expenditure item date is within the task start and finish dates.

The following table summarizes key decisions for this scenario.

Decisions to Consider	In This Example
For which project tasks can I enter time?	Only those project tasks for which the expenditure item date lies within the task start and finish dates.
How can I select the project tasks for which I want to enter time?	Using the Task Number list of values field on the Create Expense Item page.

## Summary of Tasks

To limit the number of tasks in the Task Number list of values on an expense item, project application administrators must:

1. Create a value set.
2. Use the value set in the expense report line.
3. Deploy the updated Project Costing Details flexfield.

## Creating a Value Set

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Value Sets** task.
2. Click the **Manage Value Sets** link.
3. Click **Create** in the Search Results section to create a new value set.
4. The following table lists the values you need to enter on the Create Value Set page.

Field	Value
Value Set Code	MY_PROJECT_TASK_EXPENSE
Description	Value set to display only active tasks.
Module	Cost Collection
Validation Type	Table
Value Data Type	Character

5. The following table lists the values you need to enter in the Definition section.

Field	Value
FROM Clause	PJC_TASKS_CCW_V

Field	Value
Value Column Name	TASK_NUMBER
Description Column Name	TASK_NAME
ID Column Name	TASK_ID
WHERE Clause	<code>expenditure_org_id = :{PARAMETER.BusinessUnit} and project_id = : {SEGMENT.PROJECT_ID} AND NVL(START_DATE, (:{PARAMETER.EIDate})) &lt;= (: {PARAMETER.EIDate}) AND NVL(COMPLETION_DATE, (:{PARAMETER.EIDate})) &gt;= (: {PARAMETER.EIDate})</code>
ORDER BY Clause	TASK_NUMBER

6. Click **Save and Close**.

## Enable Team Members to Enter Project Time

Use delivered objects to enable the team members of financial projects to enter project time. Alternatively, you can create your own objects.

Your Time and Labor manager or administrator must set up the following to enable the project team members to enter time:

- User group
- Time entry profile
- Time processing profile

### Creating a User Group

You can either use the delivered **Projects Usage** user group or use the following process to create your own group:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage HCM Groups** task.
2. Click the **Manage HCM Groups** link.
3. Click the **Create** icon on the toolbar of the **Search Results** table.
4. On the **Create Group** page, enter the group name and other details.
5. Click **Save and Close**.

### Updating a User Group

Update an existing user group so that new project team members can enter time for their assigned projects.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage HCM Groups** task.

2. Click the **Manage HCM Groups** link
3. Search for the user group that you want to update.
4. Select the user group in the **Search Results** table and click **Refresh Group Membership** on the table toolbar.
5. Click **Submit** on the **Refresh Group Membership** process page.
6. Note the process ID in the confirmation message and click **OK** to close the confirmation window.
7. On the **Manage HCM Groups** page, select your user group and click **View Evaluation Status**.
8. Search for the process ID of the process you submitted and verify that the **Processing Status** of your process is **Completed Successfully**. If the processing status is different, then click **Search** again to refresh the **Search Results** table.

## Creating a Time Entry Profile

You create a time entry profile for project team members so that they can enter time only for the projects to which they're assigned.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Worker Time Entry Profiles** task.
2. Click the **Manage Worker Time Entry Profiles** link.
3. Click the **Create** icon on the toolbar of the **Search Results** table.
4. On the **Create Worker Time Entry Setup Profile: Profile Values** page, enter the profile name, description, and effective start date.
5. Select the layout set **Projects Layout Set Filtered by Project Team Members**.
6. Enable the entry actions as required in the **Time Entry Actions Allowed** table and enter appropriate values for the **Days Before** and **Days After** fields for these actions.
7. Click **Next**.
8. Click the **Add** icon on the toolbar of the **Group Assignments** section on the **Create Worker Time Entry Setup Profile: Group Assignments** page.
9. Select the user group for which you want to use this time entry profile in the **Group Name** field.
10. Click **Next**.
11. Click **Move to Top** in the **Priority Order** section on the **Create Worker Time Entry Setup Profile: Profile Priority** page to move your user group to the top.
12. Click **Next**.
13. Click **Save and Close**.

## Creating a Time Processing Profile

You create a time processing profile for project team members so that they can enter time for only the projects to which they're assigned.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Worker Time Entry Profiles** task.
2. Click the **Manage Worker Time Entry Profiles** link.
3. Open the **Setup and Maintenance** work area, and go to the **Manage Worker Time Processing Profiles** task.
4. Click **Create** on the toolbar of the **Search Results** table.
5. On the **Create Worker Time Processing Setup Profile: Profile Values** page, enter the profile name, description, and effective start date.
6. In the **Time Card Period** field, select the value **Projects and Payroll Weekly Starting Monday** from the list.
7. In the **Time Consumer Set** field, select the value **Projects and Payroll** from the list.
8. Click **Next**.
9. Click **Add** on the toolbar of the **Group Assignments** section on the **Create Worker Time Processing Setup Profile: Group Assignments** page.
10. Select the user group for which you want to use this time processing profile in the **Group Name** field.
11. Click **Next**.

12. Click **Move to Top** in the **Priority Order** section on the **Create Worker Time Processing Setup Profile: Profile Priority** page to move your user group to the top.
13. Click **Next**.
14. Click **Save and Close**.

## Managing Project Expenditure Organization and Department Related Errors During Time Card Submission

To ensure a smooth time card submission process via the user interface or FBDI, verify that the department associated with the assignment is set up as a project expenditure organization. This can be done by cross-checking the expenditure organization hierarchy of the business unit, ensuring it is configured correctly for the entry date.

If issues persist, review the support document titled "The department for the reported assignment is not set up as a project expenditure organization, error during Time Card Entry" (Doc ID 2231474.1). This document provides further guidance on resolving common problems related to time card submissions, including steps to identify and rectify the specific issue you're facing.

# Project Billing

## Overview of Project Billing Configuration

This table lists the setup task lists and tasks for Oracle Fusion Project Billing.

Task or Task List Name	Description
Define Contracts Configuration for Project Billing	Define and manage setup related to project contracts including contract types and content that can be used consistently across contracts.
Define General Project Billing Setup	Enable project billing, manage the general project billing setup, and configure the project billing business unit options.
Define Internal Project Billing	Manage the project billing general setup, options, processing rules, transfer pricing, and extensions used for interproject and intercompany project billing.
Define Customer Billing Configuration for Project Billing	Define the configuration for processing transactions and related billing functions.
Define Transaction Taxes for Rapid Implementation	Configure tax setup according to local and international tax requirements.

This chapter provides detailed setup steps for the following required tasks:

- Manage Event Types
- Manage Revenue Methods
- Manage Invoice Methods

- Manage Invoice Formats

## Create Event Types

Create event types to control whether events are used to invoice, recognize revenue, or perform both functions for contract lines. For example, you can create event types for invoice fees or to recognize revenue associated with milestones.

Event types can be used to derive the accounting in Oracle Fusion Subledger Accounting for event-based invoice and revenue accounting entries.

Optionally, you can add a tax classification code to an event type. Oracle Fusion Project Billing calculates the approximate tax amounts for events of this type on contract invoice lines.

The following section describes how you create event types.

### Entering Basic Event Type Information

To create an event type:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Event Types** task.
2. Click the **Manage Event Types** link.

Use the Manage Event Types page to create event types and to review, edit, or delete existing event types.

3. Click **Add Row** to create an event type.
4. Enter a unique name in the **Event Type** column. Optionally, provide a meaningful description.
5. Select a **Revenue Category** for reporting event-related revenue.

**Note:** Create revenue categories using the standard lookup **PJF\_REVENUE\_CATEGORY** before creating event types. You can update the lookup from the Manage Revenue Categories page or the Manage Standard Lookups page.

6. Select the **Revenue** check box if the current event type will be used for recognizing revenue.
7. Select the **Invoice** check box if the current event type will be used for invoicing.
8. Click **Save**.

### Specifying Tax Classification Codes

Associate tax classification codes with event types to enable calculation and display of approximate tax amounts in Oracle Fusion Project Billing before final tax figures are available in Oracle Fusion Receivables.

1. Click **Add Row** in the Tax Classification Code section.
2. Select a **Business Unit**.
3. Select a **Tax Classification Code**.
4. Click **Save**.

## Create Revenue Methods

Create revenue methods to determine how revenue amounts are calculated for contracts.

The following sections describe how you create revenue methods.

## Entering Basic Revenue Method Information

To create a revenue method:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Revenue Methods** task.
2. Click the **Manage Revenue Methods** link.

Use the Manage Revenue Methods page to create revenue methods and to review, edit, or delete revenue methods.

3. Click the **Create** icon to create a revenue method.
4. On the Create Revenue Method page, enter a revenue method name.
5. Specify a status. Select **Active** to make the revenue method available for use.
6. The following table lists the revenue method classifications from which you can select one to determine the basis for calculating revenue amounts for transactions on contracts or contract lines.

Revenue Method Classification	Description
Amount Based	Recognize revenue as billing events are completed.
As Billed	Recognize revenue as customers are invoiced, using a common set of bill rates, a burden schedule, or transfer pricing for both invoicing and revenue.
As Incurred	Recognize revenue as costs are incurred, using a revenue-specific set of bill rates, a burden schedule, or transfer pricing for both invoicing and revenue.
Percent Complete	Recognize revenue based on project progress of a contract line or associated project.  When you select the Percent Complete revenue method classification, the Percent Complete billing extension is automatically added to the revenue method. The extension automatically creates a billing event with the percent spent revenue amount for a contract line, or for the project associated to the contract line.
Percent Spent	Recognize revenue as progress is calculated, based on actual cost to date over budget cost.  When you select the Percent Spent revenue method classification, the Percent Spent billing extension is automatically assigned to the revenue method. The extension automatically creates a billing event with the percent spent revenue amount for a contract line.
Rate Based	Recognize revenue as costs are incurred, using a revenue-specific set of bill rates, a burden schedule, or transfer price rates.  Use this revenue method classification if you are using a fixed price for invoices, or if you require different burden schedules for invoices and revenue. You can also use this revenue method classification if the invoice method classification for a bill plan on the same contract line is percent complete or percent spent.

Revenue Method Classification	Description

**Note:** You can use a revenue method with the **As Billed** or **As Incurred** revenue method classification only when combined with an invoice method that has the **Rate Based** invoice method classification. In this situation, the bill rate, burden, or transfer price schedule type selected for that invoice method is used for both invoicing and revenue recognition.

7. To enable a revenue method for intercompany billing only, select the **Use Revenue Method for Intercompany Billing** check box. Use revenue methods with this option to track internal business activity between legal entities within your enterprise. Deselect the check box if the revenue method is used for billing external parties.

## Defining Rate Sources

If the revenue method classification is **Rate Based**, then you must select one of the following schedule types on the revenue method for both labor and nonlabor rates.

- Bill rate
- Burden rate
- Cost reimbursable
- Transfer price (available if you are using the revenue method for intercompany billing)

## Assigning Billing Extensions

Use the Billing Extension Assignment section to add a billing extension to a revenue method. In such a situation, contract lines that use revenue plans associated with the revenue method use the billing extension to calculate revenue amounts.

**Note:** You can't assign client extensions to revenue or invoice methods when using the Oracle Fusion Project Billing Cloud Service.

# Create Invoice Methods

Create invoice methods to determine how invoice amounts are calculated on contracts.

The following sections describe how you create invoice methods.

## Entering Basic Invoice Method Information

To create an invoice method:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Invoice Methods** task.
2. Click the **Manage Invoice Methods** link.  
Use the Manage Invoice Methods page to create invoice methods and to review, edit, or delete invoice methods.
3. Click **Create** to create an invoice method.
4. On the Create Invoice Method page, enter an invoice method name.

5. Specify a status. Select **Active** to make the invoice method available for use.
6. The following table lists the invoice method classification from which you can choose one to determine the sources for invoice amount calculations on contracts or contract lines.

Invoice Method Classification	Description
Amount Based	Generate invoices as billing events are completed.
Percent Complete	Generate invoices based on project progress of a contract line or associated project.
Percent Spent	Generate invoices as progress is calculated, based on actual cost to date over budget cost.
Rate Based	Generate invoices as costs are incurred, using an invoice-specific set of bill rates, a burden schedule, or transfer price rates.

7. To enable an invoice method for intercompany billing only, select the **Use Invoice Method for Intercompany Billing** check box. Use invoice methods with this option to track internal business activity between legal entities within your enterprise. Deselect the check box if the invoice method is used for billing external parties.

## Defining Rate Sources

If the invoice method classification is Rate Based, then you must select one of the following schedule types on the invoice method for the source of both labor and nonlabor rates.

- Bill rate
- Burden rate
- Cost reimbursable
- Transfer price (available if you are using the invoice method for intercompany billing)

## Create Invoice Formats

Create invoice formats to determine how Oracle Fusion Project Billing creates invoice lines.

Configure different invoice formats for labor, nonlabor, and event invoice line items, and specify if you want to use the format for customer invoices, internal invoices, or both.

Specify how to summarize expenditure items, and the fields you want an invoice line to display. You can configure the invoice formats to include free-form text on invoice lines.

The following sections describe how you create invoice formats.

## Entering Invoice Format Header Information

To create an invoice format:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Invoice Formats** task.

2. Click the **Manage Invoice Formats** link.

Use the Manage Invoice Formats page to create new invoice formats and to review, edit, or delete existing invoice formats.

3. In the Invoice Format Header section, click the **Add Row** icon.

4. Enter a unique name for the invoice format.

5. Select a **Format Type** to determine whether the invoice format is used for labor, nonlabor, or events.

6. Select a date from which the information format is available for use. Optionally, select a date to which the invoice format is available.

7. Select a grouping option to determine the fields displayed on the invoice line and how they are grouped.

8. Select the **Customer Invoice** check box to use an invoice format for regular contract invoices. Similarly, select the **Internal Invoice** check box to use an invoice format for invoices generated by intercompany and interproject contracts.

**Tip:** Select both check boxes if you want to use an invoice format for both customer and internal invoices. However, the list of values for the Field Name field in the Invoice Format Details section only includes values that are valid for both options.

9. Select the Fixed Format check box to prohibit distributions from being moved to other invoices lines.

**Note:** You must select this check box if you select the **Internal Invoice** check box.

## Entering Invoice Format Details

Use the Invoice Format Details section to select the fields you want to display.

1. In the Invoice Format Details section, click the **Add Row** icon.

2. Enter numeric values in the **Start Position** and **End Position** columns to specify where the text in the Field Name appears on an invoice line.

3. Select the Field Name that will appear on the invoice line.

**Note:** The fields available for selection are determined by your selection of the **Customer Invoice** and **Internal Invoice** check boxes in the Invoice Format Header section.

4. If you want to replace the default field name for a selected field, enter the name you want to display on the invoice line in the **Text** column.

5. Select the **Right Justify** check box to justify the value of a field to the right, for example in the case of numeric values.

6. Click **Save**.

7. Repeat this process for each field you want to include on invoice lines.

# Project Performance Reporting

## Overview of Oracle Project Performance Reporting Setup

In the Define Project Performance Reporting Configuration activity, you configure reporting components for monitoring project performance.

The following table lists the setup tasks for Oracle Project Performance Reporting:

Task List or Task Name	Description
Define Project Performance Reporting Configuration	Configure Project Performance Reporting to collect and review project data against defined performance areas.
Manage Project Unit Options: Performance Reporting Options	Specify settings and default values for project performance reporting and analytics within a project unit.
Define Key Performance Indicators	Manage project performance measures, key performance indicators, KPI categories, and status and trend indicators to track and view project performance.
Manage Status Indicators	Create indicators to convey the status and severity of performance for a measure and a performance category.
Manage Trend Indicators	Update the description and sort order of the status trend indicators.
Manage KPI Categories	Create additional categories to group key performance indicators and to track and view the overall performance of a project.
Manage Performance Measures	Enable predefined performance measures for summarization. Create custom measures to evaluate project performance using base measures or retrieve from third-party or legacy sources. Specify the related measures that are displayed with the performance measure in the KPI analysis region.
Manage Key Performance Indicators	Specify thresholds of possible values for a measure and associate them to status indicators.
Define Region Personalization	Configure region layouts and graph types on the project performance reporting dashboard.
Manage Region Layouts	Configure rows and measures within the region layouts.
Manage Cross Project Comparison Graph Types	Create and update graph types to control the display name, sort order, and contents of the cross-project comparison graph region.
Define Summarization Options	Configure options for the summarization process.
Specify Number of Parallel Summarization Extraction Programs	Specify the maximum number of helper programs that can exist at one time. Data summarization programs can launch helper programs to manage the load on system resources.
Specify Global Start Date for Summarization	Specify the date that periodic analysis of summarized data starts. You can't analyze project performance data by period before this date.
Define Project Performance Reporting Configuration	Configure Project Performance Reporting to collect and review project data against defined performance areas.
Manage Project Performance Reporting Messages	Review and manage messages for Project Performance Reporting.

This chapter provides detailed setup steps for the task Manage Key Performance Indicators.

## Create Key Performance Indicators

Create key performance indicators (KPI) to measure how well your organization performs an operational, tactical, or strategic activity that's critical for the current and future success of the organization.

**Note:** To create KPIs you must enable a project unit to track key performance indicators.

The following sections describe how to create key performance indicators.

### Set Up KPI Categories

Create KPI categories for the project unit to use based on organizational requirements. KPIs are grouped into KPI categories based on performance areas. Examples are, cost, profitability, financial, and schedule. To create a KPI category:

1. In the Setup and Maintenance work area, go to the **Manage KPI Categories** task.
2. Use the Manage KPI Categories page to define KPI categories that group KPIs belonging to a specific performance area.
3. Decide on what KPI categories your organization uses, such as cost, profitability, and financial.
4. Replace the **User-defined KPI category 4** KPI Category field with a KPI category name. Optionally add a description.
5. Select the KPI categories you want to **Enable for Use**.
6. Enter a **Start Date** to indicate the date from which the KPI category will be available for use. Optionally specify a **End Date**.
7. Click **Save and Close**.

### Entering Basic KPI Information

To create a KPI:

1. In the Setup and Maintenance work area, go to the **Manage Key Performance Indicators** task.
2. Use the Manage Key Performance Indicators page to search for, create, or edit KPIs.
3. Click the **Create** icon.
4. Use the Create Key Performance Indicator page to specify KPI details, trending information, and threshold levels.
5. The following table lists the information you need to provide in the General Information section.

Option Name	Decision	Notes
KPI Name	What should the KPI name be?	<p>Choose a name for the KPI based on the measure name you select and the name of the group or project this KPI will be used.</p> <p>For example, your organization may use the same measure to create KPIs for different groups or projects. In such cases it's recommended to give a specific meaningful name to the KPI. If you select the measure</p>

Option Name	Decision	Notes
		ITD budget margin (%), you can name the KPI Group 1 ITD Budget margin (%).
Measure	Which performance measure should you use?	You're creating a KPI to calculate the Inception-to-Date margin percentage for a project.
Measure Format	None	Populated automatically by the application based on the selected measure, such as percentage, hours, currency. The measure format determines how you enter threshold values for the KPI.
KPI Category	What category does the KPI you selected fall into?	You create and enable up to five KPI categories such as cost, profitability, and effort on the Manage KPI Categories page.
Currency Type	Which currency type must the KPI use?	<p>You can select either the project currency or the project ledger currency depending on what's enabled for the project unit you selected.</p> <p><b>Note:</b> You can't change the currency type once a KPI is in use.</p>
Calendar Type	Which calendar type must the KPI use?	<p>You can select either the accounting calendar or project accounting calendar depending on what's enabled for the project unit you selected.</p> <p><b>Note:</b> You can't change the calendar type once a KPI is in use.</p>
Project Unit	For which project unit would you want this KPI to be available?	If you don't select a project unit, then you can attach the KPI to any project irrespective of which project unit the project belongs to.

Option Name	Decision	Notes
		<p>If you select a project unit, then you can attach the KPI to any project that belongs to the same project unit.</p> <p>You can't change the value of the project unit after the KPI is attached to a project.</p>

6. Optionally enter a description.
7. Enter a **From Date** to indicate the date from which the KPI to be available for use. Optionally specify a **To Date**.
8. Use the Trending section to specify if the current KPI values, project progress, and overall project health are better, worse, or the same as previous values.
9. The following table lists the information you need to provide:

Option Name	Decision	Notes
Trend Indicator	Does an increase in the KPI value mean the trend is positive?	<p>Specify if an increase or decrease in the value of the KPI you're creating is a positive or a negative thing for the performance of a project.</p> <p>For example, an increase in the ITD budget margin percentage is a positive trend in the project.</p>
Tolerance Percentage	Should the application tolerate minor decrease in performance of a KPI when displaying the trend indicator?	<p>Set a tolerance percentage to define how much of a change from the previous KPI value will be tolerated before the trend indicator changes to indicate worse performance.</p> <p>For example, you can specify that the application can tolerate up to 1 % deviation for a decrease in ITD Budget Margin (%) from the previous value, before the trend indicator changes to depict that performance of the KPI is decreasing.</p>

10. Use the Threshold Levels section to specify thresholds to indicate the health status of a KPI. Select one of the following options:
  - Multiple threshold levels
  - Single threshold level value
  - Single threshold level range

**Note:** Information you enter in the following sections will vary based on whether the measure format of the KPI you're creating is percentage, currency, or hours. This procedure is based on a KPI with a currency measure format.

## Specifying Multiple Threshold Level Rules

The **Multiple threshold levels** option is selected by default. To add or modify multiple threshold levels:

1. Click **Add Row**.
2. Select a **Currency** and specify a **Decimal Display** in the Add Currency and Decimal Display secondary window.
3. Click **Save and Close**.
4. Click **Edit Threshold Levels**.
5. Enter the **Threshold Start** and **Threshold End** range relevant to the possible KPI values in the Edit Threshold Levels dialog box.
6. Select a **Status Indicator** which must be displayed when the KPI value falls in the range you specify.
7. Click **Save and Close**.
8. Add as many rows as required to set multiple thresholds with different currencies for the KPI.
9. Click **Save and Close** on the Create Key Performance Indicator page.

## Specifying Single Threshold Level Value Rule

To specify a single threshold:

1. Select the **Single threshold level value** option.
2. Click **Add Row**.
3. Select a **Currency** and specify a **Decimal Display** in the Add Currency and Decimal Display secondary window.
4. Click **Save and Close**.
5. Click **Edit Threshold Levels**.
6. Enter the **Threshold** value.
7. Optionally change the **Status Indicator** to be displayed for the **Greater than or equal to threshold** and **Less than threshold** rows as relevant to the KPI value.
8. Click **Save and Close**.
9. Add as many rows as required to set multiple thresholds with different currencies for the KPI.
10. Click **Save and Close** on the Create Key Performance Indicator page.

## Specifying Single Threshold Level Range Rule

To specify a single threshold level range rule:

1. Select the **Single threshold level range** option.
2. Click **Add Row**.
3. Select a **Currency** and specify a **Decimal Display** in the Add Currency and Decimal Display secondary window.
4. Click **Save and Close**.
5. Click **Edit Threshold Levels**.

6. Enter the **Threshold Start** and **Threshold End** range relevant to the possible KPI values in the Edit Threshold Levels dialog box.
7. Optionally change the **Status Indicator** to be displayed for the **Within threshold range** and **Outside threshold range** rows as relevant to the KPI value.
8. Click **Save and Close**.
9. Add as many rows as required to set multiple thresholds with different currencies for the KPI.
10. Click **Save and Close** on the Create Key Performance Indicator page.

## Project Templates

### Overview of Project Templates

A project template is a reusable model that serves as a blueprint for new projects. You must use project templates to create projects that share common features, attributes, and options.

**Note:** Only project application administrators and project integration specialists can create project templates.

### Create Project Templates

Project templates enable you to quickly create projects that share common features, attributes, and options.

To create a project template:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Templates** task.
2. Click the **Manage Project Templates** link.

Use the Manage Project Templates page to create project templates and to review or edit existing project templates. Create a project template based on an existing project template or project, or manually create a template.

3. To manually create a template, click **Create Template**.

Use the Create Project Template page to provide basic project template information including the business unit, project unit, and organization, and to select a project type.

4. Enter a **Name** and **Number** for the project template.
5. The following table lists the information you need to provide when creating project templates.

Option Name	Decision	Notes
Business Unit	What reference data do I want projects to access?	Selecting a business unit determines which rate schedules, project types, and invoice formats projects can use. It also determines the legal entity and which project and task owning organizations are available for projects.

Option Name	Decision	Notes
Legal Entity	None	Populates automatically based on the business unit you selected. Change this if required.
Project Unit	What reference data do I want projects to access?	Selecting a project unit determines which class codes, financial and project plan types, project roles, and statuses projects can use. It also determines which transaction types are available for projects.
Organization	Which project and task owning organization to select?	Selecting a project and task owning organization are used for reporting, security, and accounting. It determines the default organization for the project, quick entry values, and allows transactions.
Project Type	What is the project type of the project?	<p>Selecting a project type enables you to control basic project configuration options for burdening, billing, capitalization, and project categorization.</p> <p><b>Note:</b> You can't change the project type after you create a project.</p>

6. Select an **Initial Project Status** such as **Requested**.
7. Enter a meaningful **Description** and click **Save and Continue** to navigate to the Edit Project Template page. Use the Edit Project Template page to review basic template information, access project, financial, and reporting options, and select quick entry fields.
8. In the Edit Project Template page, scroll down to the Quick Entries section. Use the Quick Entries section to specify the information that users enter when they create a project using this project template. Quick entry fields allow users to enter certain project information quickly.
9. Click **Add Row**.
10. Select a value in the Field Name column.
11. If you have selected **Classification** or **Team member** as the field name, then select a value in the Specification column.
  - o Classification: Select the class category to use when creating the classification.
  - o Team Member: Select the project role to use when creating the team member.
12. Enter a field label in the **Prompt** column.
13. Optionally make this a required field.

14. Scroll up to the Setup Options section.

Use the Setup Options section to select which sections, such as basic information, financial options, and reporting options, are displayed in the project definition after the project is created.

15. Click **Save**.



# 3 Implement Project Execution Management Applications

## Overview of Project Execution Management Offering Implementation

Implement this offering to configure how project managers, resource managers, and team members execute projects, track requirements, schedule and collaborate on tasks, and so on.

To implement Project Execution Management offering, you must have the Application Implementation Consultant role (ORA\_ASM\_APPLICATION\_IMPLEMENTATION\_CONSULTANT\_JOB) and must have opted in to the offerings applicable to your business requirements. To manage the opt-in and setup of your offerings, refer to the Oracle Applications Cloud Using Functional Setup Manager guide.

Here's the list of primary functional areas available in this offering.

Functional Area	It Enables You To
Initial Users	Set up users and data roles, import users and roles into application security, import user login history, and manage applications security preferences.
Users and Security	Set up your initial implementation setup users, hierarchy, and enable users to perform functions related to their roles.
Project Execution	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.
Project Resource Management	Define attributes required to manage employees and contingent workers. Create and manage legislative data groups, business units, legal entities, organizations, jobs, resource pools, pool owners, and pool hierarchies.
Applications Extensions	Manage the common functions that help in maintaining the core application data, establishing security, maintaining transactional and shared data, and setting the user general preferences.

# Common Project Execution Options

## Overview of Common Project Execution Options

Tasks that are common across Project Execution Management functional areas are grouped into the Define Common Project Execution Options task list. You can perform these tasks once and they're applicable in all relevant functional areas.

Here's the list of tasks in the Define Common Project Execution Options task list along with a brief description.

Task	Is This Required?	It Enabled You To
Manage Project Implementation Administrator	Yes	Create or identify a project application administrator to manage and control access to Project Portfolio Management applications.
Manage Project User Provisioning	Yes	Create and update users and assign enterprise roles.
Manage Project Roles	No	Create and update roles that are used to control access to project-level information and for defining project resource requests.
Manage Project Enterprise Resources	No	Create and update enterprise resources to assign to projects, tasks, issues, and deliverables.
Manage Project Shifts	No	Configure shifts to represent a time period that determines how many hours you work on a day.
Manage Project Workday Patterns	No	Configure workday patterns to represent a collection of one or more shifts over a number of days. A pattern repeats for a specific date range to define the complete schedule.
Manage Project Schedules	No	Configure schedules to define the actual calendar dates worked, and the pattern shifts to apply to those dates worked. The date range in a schedule is defined by a schedule start date and a schedule end date.
Manage Project Schedule Exceptions	No	Configure schedule exceptions to define deviations in availability from a schedule.

## Create Project Roles

You can set up specific roles and associate qualifications and keywords with each role. When a project manager requests a resource to fulfill this role on a project, the qualifications and keywords appear on the project resource request.

**Note:** Project Manager and Project Team Member are two predefined project roles that you can't edit or delete as they have specific functions in a project.

### Creating a Role

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Roles** task.
2. Click the **Manage Project Roles** link.
3. On the Manage Project Roles page, click the **Add Row** icon.
4. Enter a **Name** for the role.
5. Select an **Enterprise Role** that you want to associate with the role.

**Note:** When you assign an enterprise role to a user, you also assign all its associated child roles and privileges. To create a role that's not associated with any enterprise role, leave the **Enterprise Role** field blank.

6. Click the **Show More** link.
7. In the Default Qualifications and Keywords section, click the **New** icon to add qualification and keywords for the role created.
8. Click **Save and Close**.

## Create Calendars for Projects and Resources

You can create the elements that represent project schedules, which are used to define the 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 should not be scheduled, such as weekends and holidays.

Calendar definition is shared across Oracle Fusion Applications. Project Execution Management provides a predefined calendar with 8 hours per day, 5 days per week that you can assign to projects and resources. In the predefined calendar, working days are from Monday to Friday

**Note:** The standard calendar is predefined and you can't modify it.

In Oracle Fusion Project Execution Management and Oracle Fusion Project Resource Management, only calendars with the Elapsed schedule type with one workday pattern of 7 days, and one project shift are supported. For example, available capacity is calculated only for active project and resource calendars with a schedule type of Elapsed. 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.

Schedules are used as a base for project and resource calendars in Project Execution Management applications. The smallest scheduling unit is a day. For example, you can define the number of hours in a day but, you can't schedule work for a specific time of the day. The following are the elements of a schedule:

- Shifts
- Workday patterns
- Exceptions

## Managing Shifts

A shift is a period of time, typically expressed in hours, that can be defined by a start and end time, or duration. Multiple shifts per day are not supported in Project Execution Management.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Shifts** task.
2. Click the **Manage Project Shifts** link.
3. On the Manage Shifts page, click the **Create Shift** list.
4. Select **Create Elapsed Shift** from the list.
5. Enter name and duration for the selected shift and click **Save and Close**.
6. Click **Done**.

## Managing Workday Patterns

A workday pattern is a collection of one or more shifts for a specific number of days. A pattern repeats itself for a date range to define the complete schedule.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Workday Patterns** task.
2. Click the **Manage Project Workday Patterns** link.
3. On the Manage Workday Patterns page, click the **Create Workday Pattern** list.
4. Select **Create Elapsed Workday Pattern** from the list.
5. Enter name and days for the pattern. For example, if a workday pattern is a week, define the work pattern as 7 days.
6. In the Workday Pattern Details section, click the **Add Row** icon and enter the shift details. Note that if work is carried out on certain days of the week, for instance Monday to Friday, then work day pattern details will only be from day 1 through day 5.
7. Click **Save and Close**.
8. Click **Done**.

## Managing Schedule Exceptions

Exceptions are deviations from a schedule. There are two types of exceptions: off period exceptions and work period exceptions. Off period exceptions convert working days to nonworking days. And, work period exceptions convert nonworking days to working days. Only full day exceptions are supported.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Schedule Exceptions** task.
2. Click the **Manage Project Schedule Exceptions** link.
3. On the Manage Schedule Exceptions page, click the **Create Schedule Exception** icon.
4. Enter the details for the exception and click **Save and Close**.
5. Click **Done**.

## Managing Schedules

Schedules contain workday patterns and exceptions.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Schedules** task.
2. Click the **Manage Project Schedules** link.

3. On the Manage Schedules page, click the **Create Schedule** list.
4. Select **Create Elapsed Schedule** from the list.
5. Enter the name and date range for the schedule. The start date of the schedule determines day 1 of the work pattern. For example, if you pick Monday, December 28, 2015 as the effective from date, then day 1 is a Monday. If you pick Friday, January 1, 2016 as the effective from date, then day 1 is a Friday.
6. In the Schedule Details section, enter details in each tab as applicable.
7. Click **Save and Close**.
8. Click **Done**.

## Set Up Project Management Implementation Options

Specify the default calendar, currency, and full-time equivalent hours. Also, specify the progress exception thresholds for the project enterprise.

### Setting Up the Default Calendars

Calendars determine the standard working and nonworking time, such as weekends and holidays, for resources and projects. Select the default calendars to assign to resources and new projects.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Management Implementation Options** task.
2. Click the **Manage Project Management Implementation Options** link.
3. On the Define Project Management Implementation Options page, in the Default Calendars section, select a value for default project and resource calendars.
4. Click **Save and Close**.

### Entering Progress Exception Thresholds

Progress exceptions are generated when team members enter progress amounts for a proposed start date, finish date, or planned hours that exceed the defined thresholds. Define the threshold values for task progress in days and hours.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Management Implementation Options** task.
2. Click the **Manage Project Management Implementation Options** link.
3. On the Define Project Management Implementation Options page, in the Progress Exceptions section, enter the days and hours.
4. Click **Save and Close**.

### Setting Up a Default Currency

The currency defined is used when a project is created.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Management Implementation Options** task.
2. Click the **Manage Project Management Implementation Options** link.
3. On the Define Project Management Implementation Options page, in the Default Currency section, select a currency.
4. Click **Save and Close**.

### Setting Up Common Financial Task Dates

Setting up common financial task dates between work plans and financial plans:

To ensure that task dates are the same across work planning and financial planning, regardless of in which of the two plans the dates are updated, complete the following steps:

1. Click **Navigator > My Enterprise > Setup and Maintenance**.
2. On the top of the page from the **Setup** list, select Project Execution Management and then search for the **Manage Project Management Implementation Options** task.
3. Click the **Manage Project Management Implementation Options** link.
4. On the Define Project Management Implementation Options page, in the Define Common Financial Task Dates section, select **Define Common Financial Task Dates Across Work and Financial Planning**.
5. Click **Save and Close**.

**Note:** For the plans existing at the time of enabling the **Define Common Financial Task Dates Across Work and Financial Planning** option, the project manager needs to once sync the dates manually between the two plans. For more information, see *Automatically Sync Dates Between Financial Project Plans and Work Plans* in the *Using Project Execution Management* guide.

## Setting Up Default Full Time Equivalent Hours

Enter the full-time equivalent (FTE) hours for resources that are used to calculate the labor demand FTE hours for reporting in the Project Hierarchy Dashboard and enterprise project structure. The default value is 520 hours.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Management Implementation Options** task.
2. Click the **Manage Project Management Implementation Options** link.
3. On the Define Project Management Implementation Options page, in the Default Full Time Equivalent Hours section, enter hours.
4. Click **Save and Close**.

### *Related Topics*

## Create Project Enterprise Resources

Create project enterprise resources to assign to projects, tasks, issues, or deliverables. You can create labor and expense type resources to add to projects. You must be a project enterprise resource to access Project Execution Management applications.

If you manage resource availability and staffing in Oracle Fusion Project Resource Management, you must create managed project enterprise labor resources to fulfill project resource requests.

This topic describes the manual procedure to create one project enterprise resource. However, you can create multiple project enterprise resources with Cloud interfaces, processes, or services. Follow this navigation path to open the Create Project Enterprise Resource window.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Enterprise Resources** task.
2. Click the **Manage Project Enterprise Resources** link.

## Creating a 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.

To create a labor resource:

1. Click **Create** to open the Create Project Enterprise Resource window.
2. Select **Labor** in the **Type** field.
3. Select the **Create from HCM Person** option and select the person name to create the resource from an employee or contingent worker in Oracle Fusion HCM.

If you create a project enterprise labor resource from an employee in Oracle Fusion HCM, the employee or contingent worker must have a unique email address in a valid format and an active primary assignment in HCM.

4. Select the **Provision Project Roles** option to provision the default role assignments for a resource that you create from HCM. If you don't create the resource from an employee or contingent worker, then enter the resource name and a unique e-mail address. Enable the **Request User Account** option to request a user account and provision the default role assignments for the user.

**Note:** If you're implementing Project Resource Management, you don't have to create managed project enterprise labor resources from HCM persons. The application maintains resource available capacity for resources that are not HCM employees or contingent workers.

5. Enter the resource's personal details.
  - The default calendar is from the Define Project Management Implementation Options page.
  - The default primary project role is Team Member.
6. Upload a resume attachment to include text from the resource's resume in searches for keywords that are entered on project resource requests.
7. To create a managed project enterprise labor resource, select the **Manage resource availability and staffing** option.

**Note:** Only managed project enterprise labor resources are eligible to fulfill project resource requests in Project Resource Management.

8. Select a resource pool if you enable this option. The default resource pool is the **Resources with No Pool Membership** pool.
9. Enter the cost rate and bill rate for the resource.

The cost rate and bill rate that you enter here are used as the default rates for new resource requests, and for resources that the project manager or project resource manager adds to the Manage Project Plan page and the Manage Project Resources page.
10. Click **Save and Close**.

## Creating an Expense Resource

A project enterprise expense resource is a resource that you can assign to projects or tasks to track expenses in Project Execution Management applications.

To create an expense resource:

1. Click **Create** to open the Create Project Enterprise Resource window.
2. Select **Expense** in the **Type** field.
3. Select the **Create from Expenditure Type** option and select the expenditure type to create the resource based on an expenditure type that is defined in Oracle Fusion Project Foundation.

If you don't create the resource from an existing expenditure type, enter the expense resource name and description.

4. Click **Save and Close**.

#### *Related Topics*

- [Project Enterprise Labor Resource](#)
- [Project Enterprise Expense Resources](#)
- [Import Project Enterprise Resources](#)
- [Set up Conditions and Import HCM Person](#)

## 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.

Task or Task List	Description
Manage Project Management Implementation Options	Specify default attributes for the project enterprise such as calendars, progress exception thresholds, currency, FTE hours, and the email banner.
Manage Enterprise Project Codes	Create and update enterprise project codes to capture additional details on a project using a predefined value set, free text, or numeric data type.
Manage Enterprise Task Codes	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.
Manage Issue Types	Create and update issue types such as the General issue type.
Manage Deliverable Types	Create and update deliverable types such as the General deliverable type.
Manage Attributes for Issues and Deliverables	Create and update attributes to capture additional details for issues and deliverables using a predefined value set, free text, or numeric data type.
Define Project Requirement Configuration	Configure Oracle Fusion Project Management to track requirements, such as features and backlog items, for products and product families.
Manage Project Management Messages	Review and manage messages for Oracle Fusion Project Management.

Task or Task List	Description
Manage Project Management Attachment Categories	Review and manage attachment categories for Oracle Fusion Project Management.

## Set Up the Enterprise Project Structure

Use the enterprise project structure (EPS) to allow summarization of project data to a higher level of categorization. Project application administrators can group projects in the enterprise, add owners and delegates, for purposes of reporting to project executives.

To set up the EPS, project application administrators must do the following:

- Create elements and arrange them in a hierarchy.
- Add participants as owners, delegates, and viewers to each element as appropriate. Participants at parent elements receive the same role automatically for child elements.

**Note:** A participant must also be assigned the Project Executive role to access the Project Hierarchy Dashboard.

- Submit the **Update EPS Data** process.

## Creating an Enterprise Project Structure

You can create up to 10 levels in the project structure.

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Enterprise Project Structure** task.
2. Click the **Manage Enterprise Project Structure** link.
3. In the **Enterprise Project Structure** section, select a project element.
4. Click the **Add Child Element** icon.
5. In the Add Child Element window, enter a name and description for the EPS element.
6. Do the following to add participants to an EPS element in the Participants section:
  - a. Enter a direct owner in the name column.
  - b. Enter a direct delegate in the name column.
  - c. Click **Add Direct Viewer** to add additional viewers for the EPS element.
  - d. Click **Save and Close**.
7. To organize projects into your EPS elements, select the Unassigned Projects element to view all unassigned projects. Newly created projects are automatically assigned to Unassigned Projects element.
8. Perform the following steps to move unassigned projects to the relevant elements:
  - a. Select an unassigned project.
  - b. Click the **Move Project** button.
  - c. In the Move Projects window select the element to which you want to move the project.
  - d. Click **Save and Close**. Alternatively, you can also drag and drop projects from the Unassigned Project element to move the unassigned projects to relevant element.
9. Click **Done**.

## Updating EPS Data

1. Navigate to the **Scheduled Processes** page.
2. On the Scheduled Processes page, click **Schedule New Process**.
3. In the Schedule New Process window, search and select the **Update EPS Data** process.
4. Click **OK**.
5. In the **Process Details** window, click **Submit**.
6. Click **OK** on the confirmation message.
7. Alternatively, a participant can use the **Update EPS Data** action on the Project Hierarchy Dashboard to update EPS data.

# Project Resource Management Configuration

## Project Resource Management Set Up

In the Define Project Resource Management Configuration task list, you configure Oracle 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. Here are the tasks and task lists within the Define Project Resource Management Configuration activity.

Here's a table that lists the task that help you set up tasks for creating and managing resources

These tasks help you create and manage resources. You will also find these tasks in the Define Project Enterprise Labor Resources task list.

Task or Task List	Description
Define Attributes for Employees and Contingent Workers in Human Capital Management	Use this Oracle Fusion HCM task list to define attributes that are required for setting up employees and contingent workers in HCM.
Manage Resource Pools	Configure resource pools to which the resources are assigned.
Manage Project Enterprise Labor Resource Maintenance Conditions	Configure conditions and import employees and contingent workers from HCM as project enterprise resources in Project Execution Management.
Manage Target Utilization Percentages	Set up the percentage of hours that the resources are expected to work on project assignments.
Update Resource Utilization Data process	Run the Update Resource Utilization Data process to evaluate the resource utilization.
Submit Process to Maintain Project Resource Search Index process	Maintain Project Resource Search Index process

Here's a table that lists the task that help you set up tasks for a resource request.

Task or Task List	Description
Manage Project Resource Management Value Sets	Review and manage value sets for Oracle Fusion Project Resource Management.
Manage Project Resource Management Descriptive Flexfields	Define validation and display properties of descriptive flexfields, which are used to add attributes to project resource requests.
Manage Resource Staffing Statuses	Create additional staffing statuses to communicate the evaluation of nominated resource.

Here's a table that lists the general tasks resource management.

Task or Task List	Description
Manage Project Resource Management Implementation Options	Specify options used to control workflow notifications.
Manage Standard Lookups	Create and update the project assignment reservation reasons.  <b>Note:</b> This task is outside of the Project Resource Management functional area of the Setup and Maintenance work area.
Manage Project Resource Management Messages	Review and manage messages for Oracle Fusion Project Resource Management.
Manage Project Resource Management Attachment Categories	Review and manage attachment categories for Oracle Fusion Project Resource Management.

#### Related Topics

- [How can I edit the list of valid assignment reservation reasons?](#)

## Manage Employees and Contingent Workers

You can create employees or contingent workers as users, update their talent profiles, then enable them as managed project enterprise labor resources to use in Oracle Fusion Project Resource Management.

**Note:** If you are using a full implementation of Oracle Fusion Human Capital Management, employees and contingent workers are already set up and you can skip these steps.

To create an employee, contingent worker, or both as a user:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manager Users** task.
2. Click the **Manager Users** link.
3. On the Search Person page, click the **Create** icon.
4. On the Create User page, enter the last name, e-mail, and hire date of the employee or contingent worker.
5. Enter the personal details of the employee or contingent worker.
6. Optionally enter user name.

If you select the option to send the user name and password, the user name and password are sent to the user's primary e-mail. You can send this information only once.

If you deselect this option, you can send the user name and password to the user later by running the Send User Name and Password E-Mail Notification process. If the user's e-mail account isn't configured, then the user name and password are sent to the user's manager.

7. In the **Person Type** field, select Employee, Contingent Worker, or Employee and Contingent Worker. Enter the remaining details in the Employment Information section.
8. Select the resource role, reporting manager, and organization.
9. Search for a role, then click **Add Role** to provision the role manually. Users keep the manually added roles until all their assignments are terminated or you deprovision the role.

If you autoprovision roles, then users inherit roles that match their assignments and the assignments appear in the Role Requests table. Similarly, they are removed from roles that don't match their assignments.

10. Click **Save and Close**. The application immediately sends Oracle Identity Management the request to create the user account and provision the roles.

## Manage Maintenance Conditions for Project Enterprise Labor Resource

You can create and update project enterprise labor resources from HCM persons by defining a project enterprise labor resource maintenance condition and submitting the Maintain Project Enterprise Labor Resources process.

The process creates and updates project enterprise labor resources from the employees and contingent workers who match the maintenance condition. The records are processed in ascending order based on the process order value. If multiple conditions have the same process order value, then records are processed in ascending alphabetic order based on the condition name.

The maintenance condition includes:

- The person type and optionally, specified jobs.
- Attributes that the project enterprise resources are assigned on creation.

To define a project enterprise labor resource maintenance condition:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Project Enterprise Labor Resource Maintenance Conditions** task.
2. Click the **Manage Project Enterprise Labor Resource Maintenance Conditions** link.
3. Click the **Create** icon.
4. On the Create Condition page, enter a name for the condition in the **Name** field.
5. Enter a value in the **Process Order** field.

**Note:** If a project enterprise labor resource doesn't already exist for that person, then the process creates a resource for the condition with the process order value of one. The process doesn't create more than one resource for the same person even if subsequent conditions apply to the person.

6. Optionally enter a description.
7. Select a person type from the **Person Type** choice list. The person type can be employee, contingent worker, or both types.
8. Optionally, select a business unit and an organization.
9. To create resources from HCM persons with specific jobs, select a job from the Jobs choice list. Click Add to add another job.
10. Select the **Manage resource availability and staffing** check box to create managed project enterprise resources.
  - o Managed project enterprise labor resources are managed in Oracle Fusion Project Resource Management.
  - o If you select this option, then by default the resources are added to the **Resources with No Pool Membership** resource pool. You can change this selection to move the resources to another resource pool.
11. Select the resource calendar from the **Calendar** choice list. A resource calendar defines the work schedule for project enterprise labor resources, and includes working days and hours, exceptions, and holidays. This calendar will be assigned to all resources that match the project enterprise labor resource maintenance condition.
12. Select the primary project role to assign resources from **Primary Project Role**. For example, by selecting Oracle Database Administrator, you can create project enterprise labor resources who are Oracle Database Administrators.
13. Select the currency and enter the cost rate in the **Cost Rate** fields.
14. Select the currency and enter the bill rate in the **Bill Rate** fields.
15. Click **Save and Close** on the Create Condition page.
16. On the Manage Project Enterprise Labor Resource Maintenance Conditions page, click **Maintain Project Enterprise Labor Resources** to submit the process of the same name. Run the process to:
  - o Create resources.
  - o Update resources with HCM changes.
  - o Remove resource availability for staffing.
  - o Maintain the resource search index.

The following table describes the process options that you can select.

Option	Description
Create resources	Create project enterprise labor resources from employees or contingent workers based on selection criteria and attributes defined in maintenance conditions.
Update resources	Apply any of the following changes that were made to HCM resources to existing project enterprise labor resources: <ul style="list-style-type: none"> <li>o Name</li> <li>o Image</li> </ul>

Option	Description
	<ul style="list-style-type: none"> <li>Email address</li> </ul>
<b>Remove resource availability</b>	<p>Disable the manage resource availability and staffing option for resources who are employees or contingent workers with no active HCM primary assignment.</p> <ul style="list-style-type: none"> <li>Resources who aren't employees or contingent workers are ignored when determining if a resource has an active primary assignment in Oracle Fusion HCM.</li> <li>Resource pool owners receive a notification when resources in their pools are no longer eligible to fulfill project resource requests.</li> </ul>

**Note:** If you select **Remove Resource Availability**, then the resources won't be able to fulfill project resource requests.

- Click **Submit**. You can run the Maintain Project Enterprise Labor Resources process from either the Manage Project Enterprise Labor Resource Maintenance Conditions page or Scheduled Processes page.

#### Related Topics

- [Set up Conditions and Import HCM Person](#)
- [Project Enterprise Labor Resources Report](#)

## Manage Resource Pools

Build resource pools to organize managed project enterprise labor resources in hierarchical relationships. You group resources logically for the purposes of staffing and managing resources, and reporting on utilization.

You can review the resource pool details, change the resource pool hierarchy, and move resources from one resource pool to another.

- Click **Navigator** > **Setup and Maintenance**, and search for the **Manage Resource Pools** task.
- Click the **Manage Resource Pools** link.
- On the Manage Resource Pools page, click **Expand** next to the **All Resources** folder.
  - The pools named **All Resources** and **Resources with No Pool Memberships** are predefined. The **All Resources** pool is always at the top of the resource pool hierarchy.
  - The **Resources with No Pool Memberships** pool is the default pool for new resources.
- To view the details of a resource pool:
  - Place your cursor over a resource pool to view the name of the pool owner.
  - Select the resource pool to view the members of the resource pool in the Resource Pool Members section.
- Resource pool hierarchies represent 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. To change the resource pool hierarchy by moving a pool to another hierarchy:
  - Select the resource pool.
  - Click **Move Resource Pool**. You can also drag and drop a pool from one hierarchy to another.
  - In the Move Resource Pool secondary window, select from the **Target Parent Resource Pool** choice list.

- d. Click **Save and Close**.
6. To move a resource to another resource pool:
  - a. Select the resource pool in the Resource Pool section.
  - b. In the Resource Pool Members section, select the member.
  - c. Click **Move Resources**. You can also drag and drop a member from one pool to another.
  - d. In the Move Resources secondary window, select the target pool from the **Target Resource Pool** choice list.
  - e. Click **Save and Close**.

#### Related Topics

- [Resource Pools](#)
- [Who can be a member of a resource pool?](#)
- [Can I delete a resource from a resource pool?](#)

## Update Skills and Qualifications for Project Enterprise Labor Resources

Resource managers consider resources' skills and qualifications when searching for resources to fulfill open project resource requests.

Content types are the skills, qualities, and qualifications that you track in talent profiles. Oracle Fusion Project Resource Management supports the following predefined HCM content types:

- Licenses and Certifications
- Competencies
- Degrees
- Honors and Awards
- Memberships
- Languages

Project enterprise labor resources can update their own skills and qualifications from the My Portrait page. After completing work on a project or after completing training or receiving certifications, resources may want to update their competencies and other qualifications to reflect their updated skills.

To update your skills and qualifications:

1. Navigate to My Portrait.
2. Click the **Next** icon until **Experience and Qualifications** appears.
3. Click the **Experience and Qualifications** icon.
4. Click **Edit Skills and Qualifications** in the Skills and Qualifications section.
5. Select a content type that is supported by Oracle Fusion Project Resource Management from the **Content Type** choice list. For example, select **Competencies**.
6. Click **Add**.
7. On the Select and Add secondary window, search for and select a competency.
8. Click **OK**.

9. In the Competencies section, select a proficiency.
10. Click **Expand** to enter the details.

**Note:** The attributes for each content type vary. Enter the values required for the content type that you selected.

11. Click **Submit**.
12. Click **Yes** in the warning message window.
13. Click **OK** in the confirmation message window.

## Submit the Maintain Project Resource Search Index Job Set

Submit the Maintain Project Resource Search Index job set to update the resources that appear on the Search and Evaluate Resources page when a resource manager searches for resources to fulfill project resource requests.

The job set consists of a set of processes that facilitate efficient and rapid searches for qualified resources.

Resource managers can't search for resources or view resource details if the search index isn't available for a project resource request with qualifications or keywords. For project resource requests without qualifications and keywords, resource managers can search for and evaluate resources based on resource availability even if the search index isn't current or available.

**CAUTION:** The search index isn't available if the Maintain Project Resource Search Index job set process fails, or while the process is running.

To submit the job set:

1. Click **Navigator > Setup and Maintenance**, and search for the **Submit Process to Maintain Project Resource Search Index** task.
2. Click the **Submit Process to Maintain Project Resource Search Index** link.
3. Optionally schedule the job set to run at specific times. Setting up a schedule ensures that the index is updated on a regular basis, and has the current qualifications and proficiency information for your resources. To define a schedule:
  - a. Click the **Schedule** tab.
  - b. Select the **Using a Schedule** option.
  - c. Select the date and time.
4. Optionally define a notification.
  - a. Click the **Notification** tab.
  - b. Click the **Create** icon.
  - c. In the Create Notification secondary window, enter the e-mail address of the recipient.
  - d. Select a condition from the list. The recipient receives a notification when the condition is true. For example, you can choose to send an e-mail to the recipient when the job set is executed successfully.
5. Optionally enter submission notes in the **Submission Notes** field.
6. Click **Submit**.
7. Click **OK** in the confirmation message window. The job set runs immediately unless you specified a schedule.
8. Navigate to the Scheduled Processes work area.
9. Review the status of each process in the job set on the Scheduled Processes page.
10. Verify that the status of the following processes is **Succeeded** on the Scheduled Processes page.

- Maintain Project Resource Single Attribute Filters
- Maintain Project Resource Qualification Index
- Maintain Project Resource Qualification Filters
- Maintain Project Resource Search Index Job Set

**Note:** When you submit the Maintain Project Enterprise Labor Resources process, you also automatically submit the Maintain Project Resource Search Index job set.

## Manage Target Utilization Percentages

Target utilization is the percentage of hours that project enterprise labor resources are expected to work on project assignments compared to their available hours. Oracle Fusion Project Resource Management compares the target utilization percentages with projected and actual utilization for project resources in the

You can define a target utilization percentage for your enterprise and define target utilization percentage overrides for specific jobs. The override percentage applies to resources with a job title in Oracle Fusion HCM, namely resources who are employees or contingent workers.

To define target utilization percentage and job specific overrides:

1. Click **Navigator > Setup and Maintenance**, and search for the **Manage Target Utilization Percentages** task.
2. Click the **Manage Target Utilization Percentages** link.
3. Enter the enterprise target utilization percentage in the range of 0 through 100. The default enterprise target utilization percentage is 100.
4. Click the **Add row** icon on the Manage Target Utilization Percentages page.
5. Select a job from the **Job** choice list.
6. Enter a percentage in the range of 0 through 100 in the **Target Utilization** field. The default target utilization percentage is 100. If a resource's job doesn't have a target utilization percentage, then the application uses the enterprise target utilization percentage for that resource. This percentage:
  - Applies to all project enterprise labor resources with the specified job.
  - Overrides the enterprise target utilization percentage.
7. Click **Save and Close**.

