

Oracle

Project Portfolio Management Cloud Using Project Execution Management

Release 12

This guide also applies to on-premises
implementations

Authors: Umamaheshwar Ramadugu, Marilyn Crawford, Soham Chakraborty, Sreya Dutta, John Hays, Amrit Mishra, Abhishek Majumder, Mohna Parate, Tanya Poindexter

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Preface

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

Oracle Applications Help

Use the help icon  to access Oracle Applications Help in the application. If you don't see any help icons on your page, click the Show Help icon  in the global header. Not all pages have help icons. You can also access Oracle Applications Help at <https://fusionhelp.oracle.com>.

Using Applications Help

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

Additional Resources

- **Community:** Use [Oracle Applications Customer Connect](#) to get information from experts at Oracle, the partner community, and other users.
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1 Manage Project Requirements

Project Requirements: Explained

Requirements enable you to capture your business needs. If you manage projects using the Agile development methodology, you start by identifying the high-level requirements and decomposing them further to manage the completion of work on the requirement.

You use the Project Requirements work area to:

- Organize backlog items by requirements
- Manage your list of backlog items
- Create project tasks for backlog items

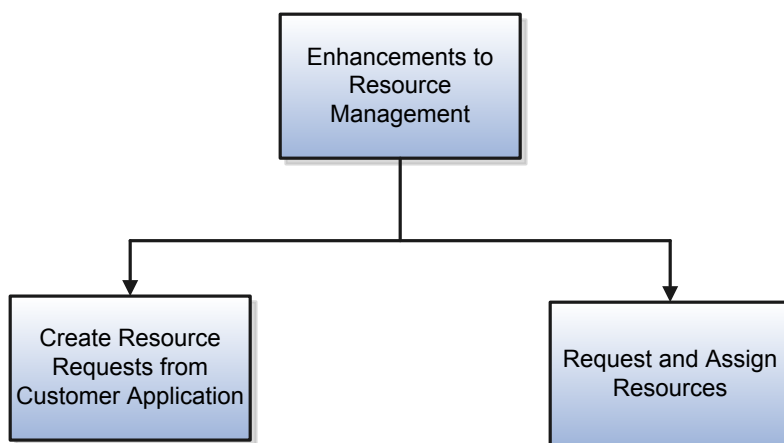
Decompose Requirements to Achieve Business Needs

You can use the requirement hierarchy to manage the work that must be completed to fulfill the requirement. You can organize requirements into a hierarchy and decompose them into lower-level requirements. You can finally break them down into backlog items.

You can view and create backlog items at any level of the hierarchy and also search for requirements and backlog items.

The following example shows a simple two-level requirement hierarchy. You can break down the top-level requirement, enhancements to resource management into:

- Create resource requests
- Request and assign resources




Manage Backlog Items

You can decompose requirements into backlog items and associate them to the lowest-level of the hierarchy. Backlog items represent a list of incremental work that must be done to meet a requirement.

Do the following to use backlog items to track product development:


- Assign ownership of backlog items to scrum masters and product owners.
- Rank and prioritize backlog items.
- Capture user stories and acceptance criteria for a backlog item.
- Create tasks and capture task details such as resource, task dates, and effort.
- Associate deliverables with backlog items.

 **Tip:** In addition to manually creating backlog items, you can also download a spreadsheet from the application, enter backlog items in Microsoft Excel, and upload the new backlog items.

Associate Projects and Tasks to Track Work

You can associate your projects with backlog items to track the completion of work on a requirement. Associate projects to backlog items by selecting a project from the list in the **Project Name** column. If the project doesn't exist, you can also create a project using the **Create** link in the **Project Name** column on the Manage Backlog Items page.

After you associate a backlog item to a project, you can use the **Tasks** tab in the **Backlog Item Details** region to create project tasks for each backlog item.

 **Note:** Only project managers of a project can associate the backlog item with a project or task.

Sprint Velocity: How It's Calculated

The sprint velocity helps you predict how many story points your team can achieve on an average in sprints in Agile projects. Scrum teams are expected to assign story points to backlog items in the current sprint. The line representing the average story points achieved on the Sprint Velocity graph shows the sprint velocity trend of a project team over sprints in a product release cycle.

Settings That Affect Sprint Velocity

Product owners and scrum masters must ensure that product backlogs, sprints, and story points are available to the scrum team members on the Manage Backlog Items page of the Project Requirements work area. The following information must be available:

- Sprint when the backlog items will be worked on.
- Story point estimate for all backlog items in the current sprint.
- Current status of backlog items.

How Sprint Velocity Is Calculated

The Sprint Velocity graph calculates sprint velocity using the total story points achieved in a completed sprint, divided by the total number of completed sprints.

Sprint velocity = total story points achieved in completed sprints / total number of completed sprints

Example of Sprint Velocity Calculation

The following is an example of how sprint velocity is calculated based on story points achieved during sprints.

Sprint	Story Points Achieved	Sprint Status
Sprint 1	6	Completed
Sprint 2	25	Completed
Sprint 3	16	Completed
Sprint 4	40	Ready

Sprint velocity = 47/3 = 15

This means the product team is able to complete 15 story points on an average in a sprint, so their sprint velocity is 15.

Related Topics

- [Why can't I see certain sprints on the Sprint Velocity graph?](#)
- [What's sprint velocity?](#)

FAQs for Manage Project Requirements

How can I change the status of a backlog item with the Requirement Storyboard?

Drag and drop the backlog item from one status column to another.

How can I create requirements at any level from a project plan?

You can only create backlog items, the lowest-level requirements, for the project plan.

How can I update multiple requirements at the same time?


Select multiple requirements and click the Mass Update button. Use seeded requirements from the list to make changes to the backlog item selected.

2 Define Project

Import Project Plan Process

The Import Project Plans process imports project plans from third-party applications in the interface table to Oracle Fusion Project Management. The process creates project plans based on the data loaded into the open interface table.

You must load the import data to the PJT_PROJECT_PLAN_XFACE interface table and run this process.

 **Note:** You can load data to interface tables using predefined templates and the Load Interface File for Import scheduled process, which are both part of the External Data Integration Services for Oracle Cloud. For more information about file-based data import, see the File Based Data Import guide for your cloud services.

From the navigator, select the Scheduled Processes menu and specify the process name, date and time to run the Import Project Plans process.

The process validates the project plan data and creates project plans in Oracle Fusion Project Management. The errors and warnings for the invalid project plan data are tracked in a report for the Import Project Plan process. Review the errors and fix the issues. Load the data from CSV file into the interface table again and resubmit the process.

Importing Project Plan Process Report

After the Import Project Plan process completes, review the output report to view the successful transactions and the errors and warnings. If errors exist, review and resolve the issues before submitting the process again. If warnings exist, take note of the details, and make corresponding corrections directly in Oracle Fusion Project Management in the Manage Project Plan page. You can broadly classify the errors into the following types:

- Basic data validation errors such as some mandatory attribute missing, or invalid values.
- Data consistency between records, such as task with the same identifier having different names in different records.
- Data referential issues, such as a specified parent task identifier does not exist.
- Data integrity issues with the current application data, such as import of a project fails because a project with the same name already exists in the target database.

Related Topics

- [External Data Integration Services for Oracle Cloud: Overview](#)

Microsoft Project and Oracle Fusion Project Management: How They Work Together

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

The integration of Microsoft Project versions 2007, 2010, 2013, and 2016 with Project Management application lets you schedule project plans, manage resource assignments, and track progress.


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

Installing Microsoft Project Integration Client

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

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

Client for Project Financial Management Applications	Supported Features
Microsoft Project 2007	Scheduling only.
Microsoft Project 2010, 2013, and 2016	Scheduling along with support of manual tasks, inactive tasks, free text, primary baseline, and so on.

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

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

1. From the Navigator, open Project Management.
2. From the Manage Project Plan page, open the Actions panel tab and select Install Microsoft Project Integration to download the client.
3. Save the client, extract the installation files to a local folder, and run setup from that folder.
4. From the Oracle Fusion Projects menu, select **Change Environment** and enter the Project Management environment details. The URL must contain the string projectsManagement. For example, <https://msp-prj.vision.com/projectsManagement>.

You can change the environment URL at any time to support subsequent server changes.

Importing Task Codes into Microsoft Project

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

Task Code	Associated Microsoft Project Fields
TASK_EXT_TEXT01	Text1
TASK_EXT_CODE01	OutlineCode1

Task Code	Associated Microsoft Project Fields
TASK_EXT_NUM01	Number1

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

Importing Projects

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

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

Attribute	Description
Task attributes	<p>Key imported attributes are:</p> <ul style="list-style-type: none">Planned datesPercent complete and physical percent completeTotal planned quantity. If calendar or scheduling settings differ, Microsoft Project recalculates effort or units to retain imported dates. <p>Enterprise task codes are imported but project codes aren't imported.</p> <p>The task type for all imported tasks is set to Fixed Units.</p>
Task constraints and dependencies	<p>Project Management application doesn't support the constraint types As Late As Possible and As Soon As Possible. Other constraints are imported using the mapping described in the section on exporting project plan and scheduling information in this topic. If you assign start and finish dates to a task, then a Must Start On constraint is created for the task when you import the project into Microsoft Project.</p>
Milestones	<p>Tasks designated as milestone tasks are imported as milestones in Microsoft Project.</p>

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

Attribute	Description
Resources	<p>All labor and expense resources defined as project resources are imported.</p>
Resource assignments	<p>The following attributes are imported for resource assignments:</p> <ul style="list-style-type: none">Planned datesPlanned, and remaining effort. The resources (task managers) that you assign to summary tasks are imported into Microsoft Project with zero allocation.Actual costs for labor resources and actual and planned costs for expense resources. The cost amounts are imported using the project currency. Import processing reports an error if Microsoft Project doesn't support the project currency.

Exporting Project Plan and Scheduling Information

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

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

Predecessor	Successor	Dependencies Allowed
Task	Task	Finish-to-start, Finish-to-finish, Start-to-start, and Start-to-finish
Task	Milestone	Finish-to-finish and Start-to-finish
Milestone	Task	Finish-to-start and Finish-to-finish
Milestone	Milestone	Finish-to-finish

Task date constraints are recreated in Oracle Fusion Project Management based on the following mapping:


Microsoft Project Constraint Type	Oracle Fusion Project Management Constraint Type
As Late As Possible	No constraint created in Oracle Fusion Project Management
As Soon As Possible	No constraint created in Oracle Fusion Project Management
Finish No Earlier Than	Finish On or After
Finish No Later Than	Finish By
Must Finish On	Finish On
Must Start On	Start On
Start No Earlier Than	Start On or After
Start No Later Than	Start By

When exporting milestone tasks, ensure that the tasks:

- Are lowest-levels task with zero duration, that is, the same start and finish dates.
- Have only one labor resource assignment with zero effort.

- Have percent work complete values of 0 or 100 percent. Any other values are set to zero before export.


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

Tasks	Condition
Inactive tasks	Doesn't export.
Manual tasks	Exports. If the manual task has invalid dates, Microsoft Project exports the dates and duration as blank.
Manual tasks with predecessor dependencies	Exports tasks without predecessor dependencies.
Summary tasks	Exports as automatic scheduled tasks. If the dates are missing, Project Management automatically populates them.
 Note: You must roll up the tasks in Project Management because of the change in the schedule mode of summary tasks	
Summary tasks with dependencies on successor task	Doesn't export. You must remove dependencies on summary tasks after viewing the prevalidation messages.
Baseline	Exports the primary baseline, if available. If not available, Microsoft Project exports the baselines that are created using Start, Finish, Effort, or Duration values in Microsoft Project.

Exporting Resource Assignments

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

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

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

Exporting Resource Information

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


Oracle Fusion Project Management Resource Type	Microsoft Project Resource Type	Description
Labor	Work	Resources associated with resource assignments are linked to existing project enterprise labor resources if the e-mail address provided in Microsoft Project and Oracle Fusion Project Management match. Otherwise, a new planned resource is created at the project level in Oracle Fusion Project Management.
Expense	Cost	Resources are linked to existing project enterprise resources if the names match. Otherwise, a new project enterprise resource is created in Oracle Fusion Project Management.

Microsoft Project Prevalidation: Explained

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

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

Following is a brief description of the prevalidation checks.

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

Prevalidation Checks

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

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

Creating a Project Plan

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

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

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

Importing Financial Tasks

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

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

Planning for Project-Level Resource Assignments

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

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

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

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

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

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



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

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

- Adds the imported resources in the planning resource list if they aren't already available.

- Creates a project-level budget in Draft status in Oracle Project Planning and Control. You can select any budget version as Current.
- Spreads the resource assignment amounts between the start and end dates of the resource assignment.
- Creates a new budget version every time you import expense and labor resources.

Executing the Project

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

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

Project managers track the progress of tasks and deliverables.

To ensure that the project information is updated in Oracle E-Business Suite Projects, you must schedule to run the **Import Project from Oracle Fusion Projects** process periodically. The process also imports any new financial tasks that are added in the Project Execution Management applications.

Capturing Actual Costs

Team members submit time cards for approval in Oracle E-Business Suite Projects. The application captures all project-related costs and accounts for cost of labor and expenses.

Exporting Actual Hours for Reporting Resource Utilization

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

Related Topics

- [Manage Project Resources: Overview](#)
- [Resource Actual Utilization: How It's Calculated](#)

Manage Project Spaces

Updating Project Resources and Space Roles: Points to Consider

Space membership is determined by the members of the primary project associated with the space. If you modify the project roles, the application automatically updates the space member roles.

Space member roles are impacted if a project manager makes any of the following changes to a project that has a primary relationship with a space:

- Adds a project resource

- Removes a project resource
- Changes the role of an existing project resource

Adding a Project Resource

The following table describes the impact of adding a project resource to a project with a primary space relationship.

Action	Impact to Project Space
Add a project manager to the project.	The project manager becomes a space moderator.
Add another project resource to the project.	The project resource becomes a space participant. If the project resource is also a project manager, the space moderator role is assigned to the user.

Removing a Project Resource

The following table describes the impact of removing a project manager or project team member from a project with a primary space relationship.

Action	Impact to Project Space
Remove a project manager from the project.	The former project manager retains the space moderator role.
Remove a project resource from the project.	The former project resource is removed from the space.

Changing a Project Role

The following table describes the impact of changing project roles on a project with a primary space relationship.

Action	Impact to Project Space
Change a project manager to a project team member.	The space moderator becomes a space participant.
Change a project resource to a project manager.	The space participant becomes a space moderator.


FAQs for Manage Project Spaces

How are project space roles mapped to project resources?

The application automatically assigns each project resource to a project space role on the associated project space. The project manager is assigned the role of project space moderator. All other project resources are project space participants. Project space moderators can manually add additional participants or modify participant access, if required.

3 Define Project Plan Tasks and Schedule

Managing Your Projects

 **Watch:** This video shows you how to master the planning of your project work by using work plan templates, collaborating with the project team, and quickly scheduling tasks.

Project Lifecycle: Points to Consider

As a project manager, you can use the Project Management work area to manage the complete project lifecycle. First create projects for work planning, then work with the project administrator to enable the project for financial management. Alternatively, the project administrator can create the project with financial management enabled in the Project Financial Management work area. Use one of the following methods to create a project for financial management:

- Create projects in the Project Management work area, create financial tasks, and enable attributes, such as chargeable and billable. Later when you are ready for financial planning, a project administrator can enable the project for financial management from the Project Financial Management work area, Tasks panel tab.
- Create projects in the Project Financial Management work area. After the project administrator creates the project, then the project manager can manage the complete project lifecycle in the Project Management work area.

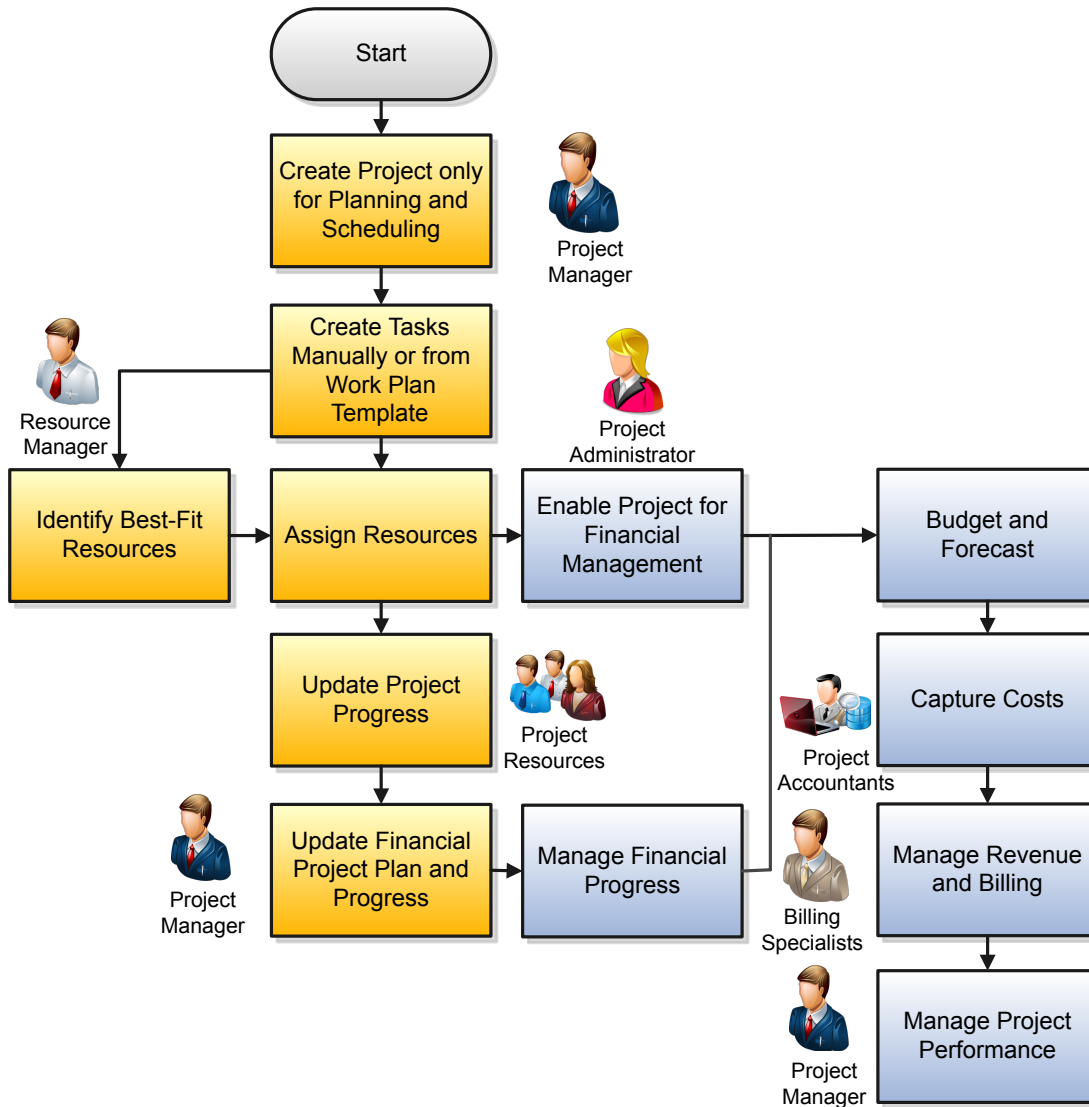
 **Note:** The project administrator must assign a project manager to the project in the Project Financial Management work area.

Work Planning Before Financial Management

In many circumstances, project managers may need to create a project for planning, scheduling, or proposal purposes, without the need for financial management. The project manager can quickly create a project, add tasks, and plan resources. For example, you have a project related to a sales opportunity and the project manager must assess the schedule and

staffing needs. The project can then continue indefinitely without financial management, or the project administrator can enable financial management for the project.

Create Project for Work Planning



You can create a project for planning and scheduling in one of the following ways:

- From either the Manage Project Plan page, My Projects infolet on the Project Management Dashboard, a requirement backlog, or from Oracle Fusion Sourcing.
- Import Project Plan file-based data import feature
- Project Work Plan Version 2 SOAP web service
- Projects REST service

 **Tip:** Create a project without using a project template.

- Microsoft Project integration with Oracle Fusion Project Management

When you create a project for planning and scheduling, you can optionally select a work plan template to provide the initial set of financial tasks, nonfinancial tasks, milestones, and resources. Later, you add more tasks individually or from work plan templates. You can use work plan templates to create your project from the Project Management work area. Then you can:

- Schedule project work
- Request and assign resources
- Assign work to team members
- Have team members report progress

Enabling Project for Financial Management

Project administrators must select the action to enable the project for financial management using the Tasks panel tab in the Project Financial Management work area. Specify the organization, project number, and a project template. You can then perform activities such as creating budgets and forecasts, capturing project costs, and monitoring overall project profitability and financial performance. This approach enables you to manage your work and resources, calculate project costs, and generate invoices. The application then performs the following actions:

- Makes the financial tasks available for financial planning activities.
- Updates the financial project plan with task start and finish dates.
- Copies the legal entity from the project template. The project administrator can change the legal entity anytime until transactions are entered for the project.
- Rolls up the labor resource effort and expense amounts, obtains the summarized resource planning information for each lowest-level financial task, and maps each resource against the primary planning resource breakdown structure.
- Rolls up effort for all labor resources and expense resource amounts to the lowest-level financial tasks.

Project administrators can manually enter the remaining attributes such as team members, project classifications, descriptive flexfields, budgets and forecasts, and assets.

Deriving Dates for Financial Tasks

Start and finish dates are mandatory on financial project plan tasks. If a financial task doesn't have start and finish dates in the work plan and you enable a project for financial management, then the application derives the task dates as follows:

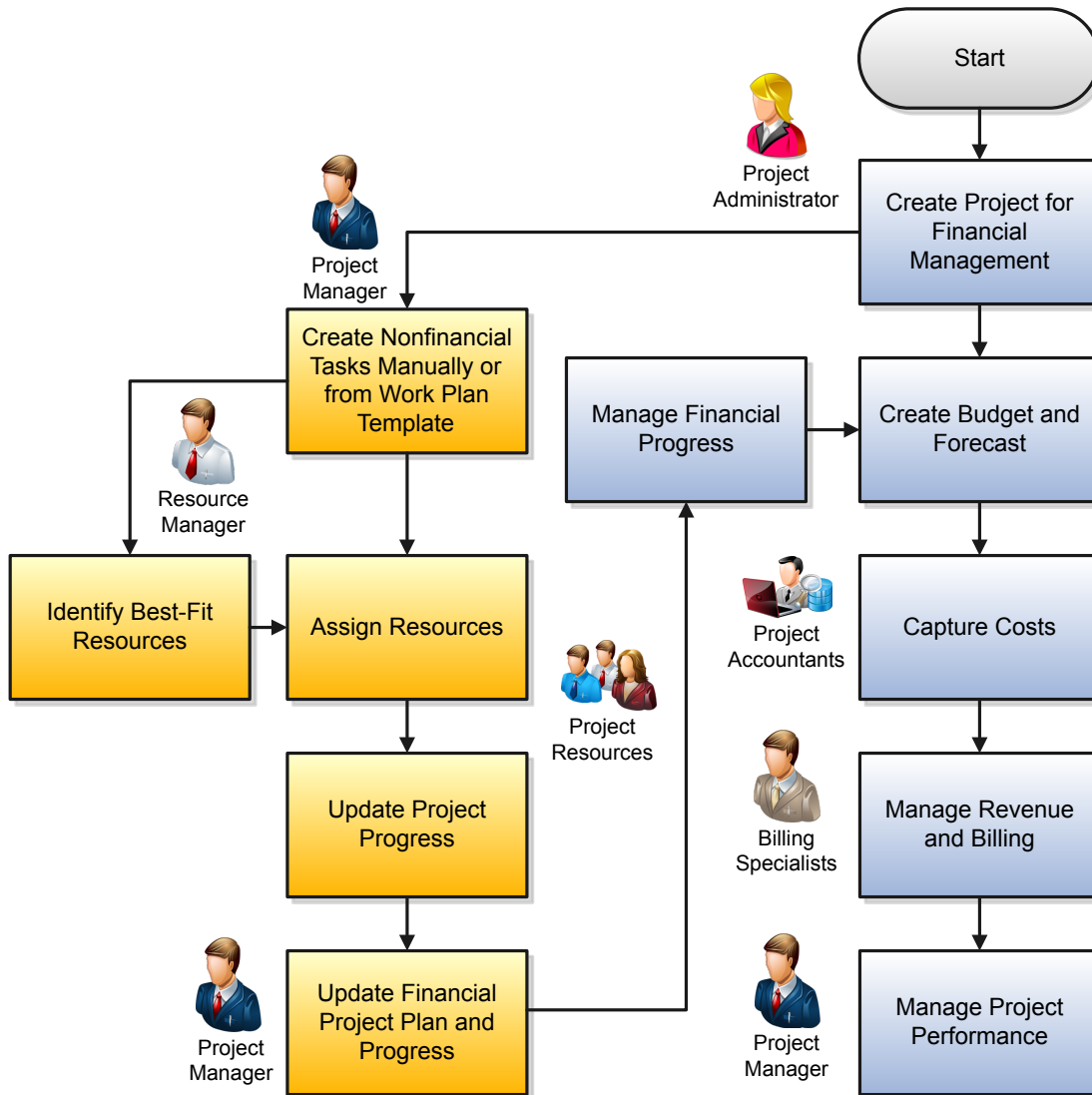
- If the parent task has dates, then subtasks use the same dates.
- If the parent tasks don't have dates, then subtasks use the project dates.
- If the project doesn't have a finish date, then the project start date is used as the task finish date.

Work Planning and Financial Management Together

If you know at the beginning that you need to manage the financial aspects of a project, then the project administrator can create the project directly in the Project Financial Management work area so that financial management is already enabled. For example, the project is approved and resources need to report time and expenses against the project immediately.

You can do so by creating the project using a project template or another project. Create any new work planning tasks as subtasks of the financial tasks.

Create Project for Financial Management



You can alternatively create a financial project plan with financial tasks in one of the following ways:

- Import Projects file-based data import feature
- Project Plan SOAP web service
- Projects REST service
- Microsoft Project integration with Oracle Fusion Project Foundation


The project manager then can add nonfinancial tasks and assign resources to the project and tasks on the Manage Project Plan page in the Project Management work area.


Updating the Financial Project Plan and Progress

As you continue to add tasks, staff the project, schedule tasks, and update projects, you must also update the financial project plan with the latest information. Use the **Update Financial Project Plan and Progress** action on the Manage Project Plan page of the Project Management work area to transfer the updated project plan and progress information to the Manage Financial Project Plan page. To update progress, you can take any of the following approaches:

- Update physical percent complete on the project plan and then choose to automatically capture and publish financial progress as part of the update flow.
- Update physical percent complete on the project plan and then choose capture financial progress as part of the update flow. Then, review, update, and publish financial progress as a separate step from the Progress tab on the Manage Financial Project Plan page.
- Perform all financial progress activities from the Progress tab on the Manage Financial Project Plan page. In this approach, financial progress updates are completely separate.

The application automatically summarizes resources, effort, and task dates to the lowest-level financial task.


 **Note:** If you can only access the Manage Financial Project Plan page for a project in the Project Management work area, then you may need to be added as a project manager on the Manage Project Resources page for the project. To do this, either ask someone who already has access to add you, or alternatively the application administrator can add you from the Manage Project User Provisioning page (query the resource and select the action to Add Resource as Project Manager, then select the project).

 **Caution:** When you use Project Execution Management, the Manage Project Plan page is the master project plan for planning and scheduling. Don't do any planning directly on the Manage Financial Project Plan page. Each time you choose the action to update financial project plan and progress, the process replaces all planning information in the financial project plan, including any planning done directly on the Manage Financial Project Plan page, with the latest plan from the Manage Project Plan page.

Summarizing Planning to Lowest-Level Financial Tasks

The action rolls up the labor resource effort and expense amounts, obtains the summarized resource planning information for each lowest-level financial task, and maps each resource against the primary planning resource breakdown structure for the project as follows:

- Named-person labor resources: If the resource breakdown structure uses the named-person resource format and the same named HCM person exists on the planning resource breakdown structure, then the application adds that resource to the financial plan. Otherwise, the application maps the plan for the resource to the Labor resource class.
- Expense resources created from expenditure types: If the resource breakdown structure uses the resource format of Expenditure Type and the same expenditure type exists as a resource, then the application adds that resource to the financial plan. Otherwise, the application maps the plan for the resource to the Financial Resources resource class.

 **Tip:** You must add each named person and expenditure type to the primary planning resource breakdown structure for a project if you want the summarized project plan to map to those specific resources on the financial plan.

When you use the action to send actual values to the Manage Financial Project Plan page, you can optionally:

- Generate a budget when setting a baseline for your financial plan.
- Generate a forecast when publishing financial progress.

Tracking Project Performance

Project managers can use the Project Management Dashboard to monitor the progress on work and financial performance of the project. To see the latest information on the dashboard, you must first run the **Update Project Performance Data** and **Generate KPI Values** processes from the Scheduled Processes page. The Health, Cost Budget, Milestones, Assignments, Time Cards, and Uninvoiced Costs infolets enable you to quickly review overall health, progress, and financial status of projects and take action to resolve issues.

Related Topics

- [Planning Resource Breakdown Structures: Explained](#)
- [File-Based Data Import for Oracle Project Portfolio Management Cloud Guide](#)
- [SOAP Web Services for Oracle Project Portfolio Management Cloud Guide](#)
- [REST API for Oracle Project Portfolio Management Cloud Guide](#)

Enabling a Project for Financial Management: Procedure

After a project manager creates a project in the Project Management work area, project administrators can enable the project for financial management to perform financial activities, such as collecting costs, budgeting, forecasting, generating revenue, and billing.

Complete the following steps to enable your project for financial management:

1. Navigate to the Project Financial Management work area.
2. On the My Projects page, click the **Enable Project for Financial Management** link in the **Tasks** panel tab.
3. In the **Enable Project for Financial Management** window, complete the following steps:
 - a. Select the project name from the Project Name list. The application automatically populates the Project Number field based on the project you select.
 - b. Select the project template from the Project Template list.
 - c. Select the project organization from the Organization list.
4. Click **OK**.

Project Plan Baselines: Points to Consider

Project managers can set a primary baseline for their project plan in the project management work area to compare the baseline and current progress. You can create multiple baselines during the project lifecycle, and set any as the primary baseline. Set baselines for your project plan to:

- Track incremental project progress and performance.
- Compare the current schedule and the primary baseline schedule on the Gantt chart.
- Identify slippages in the project plan for future estimation for similar projects.
- Use Oracle Transactional Business Intelligence for reporting on the baseline values.


Consider the following options when creating and setting baselines for your project plan:

- Creating a baseline

- Setting a primary baseline
- Managing baselines

Creating a Baseline

Users with the Manage Project Work Plan Baselines privilege can create and manage baselines. You can create a baseline for the project plan on the Manage Project Plan page. Click the **Set Baseline** action from the Actions menu. Provide a name and description for the baseline in the Set Baseline window. All baseline names must be unique. Select the **Set as Primary** check box to set the new baseline as the primary baseline.

 **Note:** The application assigns the first baseline you create for the project plan as the primary baseline by default. You can have one primary baseline at a time.

Setting a Primary Baseline

The application sets a baseline for all tasks in the project plan when you set a baseline and populates baseline columns with the data from the primary baseline.

Managing Baselines

Project managers with the specified privilege can manage the existing baselines for a project. Click the **Manage Baselines** action item from the Actions menu on the Manage Project Plan page to view all the available baselines. You can use the Manage Baselines window to set a new primary baseline or delete a baseline. You can't delete the primary baseline.

You can see the primary baseline data on the Gantt chart on the Manage Project Plan page. You can also use Oracle Transactional Business Intelligence reports to track the variances between actual values and baseline values. See the Baseline Variance Analysis sample report to understand how you can create your own customized reports using baseline data. You can use the Project Management - Planning Real Time subject area to create analyses.

Scheduling a Project Plan: Explained

You use scheduling when you change task dependencies or constraints in the project plan. Manually scheduled tasks are not updated in this process.

Dates for automatically scheduled tasks are updated as follows:

- Dependent tasks are scheduled based on the changes you make to predecessor task dates.
- Tasks with constraints are scheduled based on the type of constraint. If the constraint type is **Start on or after** or **Finish on or after**, the constraint date takes priority over the calculated start or finish date of the task.

The application schedules the project plan using the latest date between the project start date and the current date. You may have scenarios where tasks have only dependencies, only constraints, or both dependencies and constraints. The example shows tasks in a project plan with task start and finish dates, and constraints and dependencies assigned. You can understand how the application schedules task dates when you make changes.

Task Name	Start Date	Finish Date	Predecessor	Constraint	Schedule Mode
Task 1	19-Nov-2012	21-Nov-2012	None	None	Manual

Task Name	Start Date	Finish Date	Predecessor	Constraint	Schedule Mode
Task 2	22-Nov-2012	23-Nov-2012	Task 1 (Finish-to-Start dependency)	Finish by 23-Nov-2012	Automatic

You can also provide a number of days of time lag when you create a dependency. The lag allows you to have a gap of a few additional days between two dependent tasks. In the example, if you assign a lag time of one day in the Finish-to-Start dependency between Task 1 and Task 2, then the start date of Task 2 moves to November 23, and the finish date moves to November 26.

Tasks with Dependencies

If you manually change the task dates of a predecessor task, the successor task dates are not changed automatically. The task dates of all automatically scheduled tasks are adjusted during scheduling. If a task has more than one predecessor task, the task date of the predecessor task with the latest date is assigned.

The example shows that Task 1 has a new finish date of November 22. Due to the dependency you assigned to Task 2, this change causes the start date of Task 2 to move to November 23.

Task Name	Start Date	Finish Date	Predecessor	Constraint	Schedule Mode
Task 1	19-Nov-2012	22-Nov-2012	None	None	Manual
Task 2	23-Nov-2012	26-Nov-2012	Task 1 (Finish-to-Start dependency)	None	Automatic

Tasks with Constraints

If you assigned a constraint to a task such as **Start on** or **Finish by**, and you assign new task dates, the new task dates override the constraint dates. An icon at the row header of a task indicates that the task has a constraint assigned. If the constraint is violated an exclamation mark appears next to the icon. You can hover on the icon to know the constraint type and date.

The example shows Task 2 has a **Finish by** constraint on November 23. The calculated task finish date is November 26. The application assigns November 26 as the finish date of the task.

Task Name	Start Date	Finish Date	Predecessor	Constraint	Schedule Mode
Task 1	19-Nov-2012	22-Nov-2012	None	None	Manual
Task 2	23-Nov-2012	26-Nov-2012	Task 1 (Finish-to-Start dependency)	Finish by 23-Nov-2012	Automatic

Tasks with Dependency and Start on or after Constraint

If you manually change the predecessor task date of a task that has a dependency, and a **Start on or after** constraint, and the calculated task date exceeds the constraint date, the constraint date overrides the task start date.

The example shows Task 2 has a **Start on or after** constraint on November 26. The finish date of Task 1 is moved to November 20. The start date of Task 2, which is dependent on Task 1, is November 22. However, the start date assigned by the constraint is retained so the start date is November 26.

Task Name	Start Date	Finish Date	Predecessor	Constraint	Schedule Mode
Task 1	19-Nov-2012	20-Nov-2012	None	None	Manual
Task 2	26-Nov-2012	27-Nov-2012	Task 1 (Finish-to-Start dependency)	Start on or after 26-Nov-2012	Automatic

Tasks with Dependency and Finish on or after Constraint


If you manually change the predecessor task date of a task that has a dependency, and a **Finish on or after** constraint, and the calculated task date is before the constraint date, the constraint date overrides the task finish date.

The example shows Task 2 has a **Finish on or after** constraint on November 30. The finish date of Task 1 is moved to November 22. The calculated finish date of Task 2, which is dependent on Task 1, is November 26. However, the date assigned by the constraint is retained so the finish date is November 30.

Task Name	Start Date	Finish Date	Predecessor	Constraint	Schedule Mode
Task 1	19-Nov-2012	22-Nov-2012	None	None	Manual
Task 2	29-Nov-2012	30-Nov-2012	Task 1 (Finish-to-Start dependency)	Finish on or after 30-Nov-2012	Automatic

Project and Resource Calendars: Explained

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 shouldn't be scheduled, such as weekends and holidays.

 **Note:** In Oracle Fusion Project Management and Oracle Fusion Project Resource Management, you can select only the Elapsed schedule type to use in project and resource calendars.

Features of project and resource calendars include:

- Default calendars
- Project calendars
- Resource calendars
- Standard calendar

Default Calendars

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

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

Project Calendars

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

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

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

Resource Calendars

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

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

Standard Calendar

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

Project Statuses: Points to Consider

The project status is set to Active when you create a project from the Manage Project Plan page. You can analyze projects using the project statuses.

Impact of Project Statuses

The following table lists the project statuses and what you can do with projects in that status.


Project Status	What you can do?
Draft	<ul style="list-style-type: none">• Project managers can view draft projects in the Project Manager Dashboard and use the projects for requirements planning.• Team members can't see the tasks from draft projects on the Team Member Dashboard or the My Work work area.
Active	<ul style="list-style-type: none">• Project managers can view active projects in the Project Manager Dashboard and use the projects for requirements planning, project execution, and reporting.• Team members can view task assignments on active projects on the Team Member Dashboard and My Work work area.
Pending Close	<ul style="list-style-type: none">• Project managers can view pending projects in the Project Manager Dashboard and use the projects for project tracking, and reporting.• Team members can view task assignments on pending projects on the Team Member Dashboard and My Work work area.
Submitted	<ul style="list-style-type: none">• Project managers can view submitted projects in the Project Manager Dashboard and use the projects for project tracking, and reporting.• Team members can view task assignments on submitted projects on the Team Member Dashboard and My Work work area.
Closed	<ul style="list-style-type: none">• Project managers can't view closed projects in the Project Manager Dashboard or use the projects for requirements planning, project execution, and reporting.• Team members can't view tasks of closed projects on the Team Member Dashboard or in the My Work work area.

Work Items: Explained

Use work items to manage projects for Oracle Fusion Innovation Management, Oracle Fusion Product Development, and Oracle Fusion Sourcing. You can associate work items to project tasks using the:

- Manage Work Items page, or the Manage Work Items window on the Manage Project Plan page.
- Corresponding Negotiation or Product Management pages for existing projects.

Create rules that determine the completion of project tasks based on the task completion event. The task completion event determines whether a project task is complete.

 **Caution:** You must be a project manager of a project to access the Manage Work Items page, and the Manage Work Items window on the Manage Project Plan page.

Managing Work Items

To create work items to track task completion, you must:

- Associate work items to project tasks and determine task completion based on task completion events.

- Edit your task completion events if the task isn't complete. Even if an existing event is completed, the status of the task changes to pending when you edit it.
- Review existing work items to see how the work items impact project progress.
- Search for work items that need attention.

When a work item event matches the task completion event, the task is marked as complete.

Removing Work Items

You can remove the work item only if you are the project manager of the project and:

- The task isn't completed.
- A completion event isn't set for the task.

 **Note:** When you delete a task, Oracle Fusion Project Management removes associated work items.

Managing Negotiation Projects: Worked Example

This example demonstrates how to create a project to manage negotiation through the various stages of a negotiation lifecycle.

 **Note:** This topic is applicable only if you use Oracle Fusion Sourcing.

The following table summarizes key decisions for this scenario.

Decisions to Consider	In This Example
Which team members will work on this project?	Amy Marlin is the project manager. Anton James is the project team member.
What access must team members have?	Project team members must be project enterprise resources. To access negotiations, from the Manage Work Items page or the Work Items window, the user must be either a owner, collaboration team member, or an active agent for the negotiation.
What tasks must be completed and how much time will each task take?	Create a project plan with the tasks to track various negotiations.

Summary of Tasks

To complete a negotiation integrated with projects, you must complete the following tasks:

- In Oracle Fusion Project Management, create a project, summary tasks, and subtasks that will be associated with the work items.
- In Oracle Fusion Sourcing, create a negotiation.
- In Oracle Fusion Project Management:
 - Associate the work item to the appropriate tasks in the project.
 - Specify task completion events to ensure that tasks are marked as complete based on work item events.
 - Verify that tasks are mark complete when task completion events are met.

Prerequisites

1. Have access to Oracle Fusion Sourcing.
2. In Oracle Fusion Project Management, assign project enterprise resources as collaboration team members to a negotiation.

Creating a Project

1. On the Project Management work area, click **Create Project** to create a project named Laptop Procurement.
2. On the Manage Project Plan page, click **Create** and select **Create Multiple Tasks** from the submenu.
3. Enter **8** in the **Number of Tasks** field and click **OK**. Complete the fields as shown in this table and then click **Save**.

Task Name	Resource
Laptop Procurement	Leave blank
1.1 Research Market Conditions	Anton James
1.2 Develop Strategy	Anton James
1.3 Conduct Negotiation	Leave blank
1.3.1 Publish RFQ	Anton James
1.3.2 Hold Supplier Conference	Anton James
1.3.3 Close RFQ for Bidding	Anton James
1.4 Evaluate Quotes	Anton James

Task Name	Resource
1.5 Award RFQ	Anton James

Creating a Negotiation

In Oracle Fusion Sourcing:

1. On the Negotiation work area, in the **Tasks** panel tab, click the **Create Negotiation** link.
2. In the Create Negotiation window, complete the fields, and click **Create**.

Field	Value
Negotiation Type	RFQ

Procurement BU and **Negotiation Currency** fields have default values. You can change them if required. Also, the Negotiation Style must have projects task enabled.

3. On the Edit Negotiation tab, in the Overview train stop, complete the required fields.

Field	Value
Title	Laptop Procurement
Close Date	Future date

4. On the Edit Negotiation tab, in the Lines train stop, you must add at least one line. Complete the required fields and click **Save and Close**.

Field	Value
Description	Goods for inventory

Other mandatory fields in the Lines section have default values. You can change them as required.

Creating Work Items to Track Task Completion Events

In Oracle Fusion Project Management, on the Manage Project Plan page:

1. Click the **Manage Work Items** icon in the Publish RFQ task.

Verify that the **Work Items** column is visible. If the column is not visible, click **Manage Columns** and choose to display the column.

2. Complete the following fields and click **Save and Close**.

Type	Name	Task Completion Event
Negotiation	Laptop Procurement	Negotiation Published

Similarly, you can create work items for all the other tasks mentioned above and specify task completion events for each work item.

Progressing the Negotiation and Driving Task Completion


You must now verify that Project Management tracks the negotiation life cycle effectively.

In Oracle Fusion Sourcing, do the following:

1. In the Negotiation work area, from the **Tasks** panel tab, click **Manage Negotiations**.
2. On the Manage Negotiations tab, search for the Laptop Procurement negotiation.
3. In the Search Results region, click the Laptop Procurement link to view the negotiation details.
4. On the Edit Negotiation tab, Click **Publish**.
5. Click **Save**. On publishing the negotiation the Publish RFQ task is marked as complete as the task completion event is met.

Managing Product Development Projects: Worked Example

This example demonstrates how to create a project to manage product development through the various stages of the product development lifecycle. In this example, the scope of the project is limited to the feasibility stage.

 **Note:** This topic is applicable only if you use Oracle Fusion Innovation Management or Oracle Fusion Product Development.

The following table summarizes key decisions for this scenario.

Decisions to Consider	In This Example
Which team members will work on this project?	Amy Marlin is the project manager. Anton James is the project team member.
What access must team members have?	Project team members must be project enterprise resources.
Which types of work items of the product lifecycle will this project have?	Concept, Proposal, and Requirements Specification for Oracle Fusion Innovation Management. Item and Product Change Order for Oracle Fusion Product Development.
What tasks must be completed and how much time will each task take?	Create a project plan with the tasks to track the submission and approval of the concept, proposal, and requirements specification.

Summary of Tasks

In this example, we are restricting the scope to Innovation Management.

To complete the feasibility stage of the solar powered car, you must complete the following tasks:

- In Oracle Fusion Innovation Management, create concept, proposal, and requirements specification.
- In Oracle Fusion Project Management, create a project with a summary task called Feasibility, and create subtasks that will be associated with the work items.
- In Oracle Fusion Project Management:
 - Associate each work item to the appropriate tasks in the Solar Powered Car project.
 - Specify task completion events to ensure that tasks are marked as complete based on work item events.
 - Verify that tasks are mark complete when task completion events are met.

Prerequisites

1. Have access to Oracle Fusion Innovation Management or Oracle Fusion Product Development.
2. In Oracle Fusion Project Management, assign team members of the product development team as project enterprise resources.

Creating a Project

1. In the Project Management work area, click **Create Project** on the **Actions** panel tab to create a project named Solar Powered Car.
2. On the Manage Project Plan page, click **Create** and select **Create Multiple Tasks** from the submenu.
3. Enter **10** in the **Number of Tasks** field and click **OK**. Complete the fields as shown in this table and then click **Save**.

Task Name	Resource
Solar Powered Car	Leave blank
1.1 Feasibility	Leave blank
1.1.1 Concept	Leave blank
1.1.1.1 Submit Concept	Anton James
1.1.1.2 Approve Concept	Amy Marlin
1.1.2 Proposal	Leave blank
1.1.2.1 Submit Proposal	Anton James

Task Name	Resource
1.1.2.2 Approve Proposal	Amy Marlin
1.1.3 Requirements Specification	Leave blank
1.1.3.1 Submit Requirements Specification	Anton James
1.1.3.2 Approve Requirements Specification	Amy Marlin

Creating Concept, Proposal, and Requirement Specification

In Oracle Fusion Innovation Management:

1. In the Concepts work area, from the **Tasks** panel tab, click the **Create Concept** link.
2. In the Create Concept window, complete the fields, and click **Save and Close**.

Field	Value
Name	Solar Powered Car
Description	Concept for the feasibility stage of the solar powered car.

Once you create a concept, a proposal with the same name is automatically created.

3. In the Concepts work area, from the **Tasks** panel tab, click the **Create Requirements Specification** link.
4. In the Create Requirements Specification window, complete the fields, and click **Save and Close**.

Field	Value
Requirements Specification	Solar Powered Car
Description	Requirements specifications to define requirements for the feasibility stage of the solar powered car.

Creating Work Items to Track Task Completion Events

In Oracle Fusion Project Management, on the Manage Project Plan page:

1. Click the **Manage Work Items** icon in the Submit Concept task.

Verify that the **Work Items** column is visible. If the column is not visible, click the **Manage Columns** icon and choose to display the column.

2. In the **Manage Work Items** window, click **Add Row**.
3. Complete the following fields.

Type	Name	Task Completion Event
Concept	Solar Powered Car	Submitted

Similarly, create task completion events for submitting proposal and requirement specification.

4. Click the **Manage Work Items** icon in the Approve Concept task.
5. In the **Manage Work Items** window, click **Add Row** and complete the following fields.

Type	Name	Task Completion Event
Concept	Solar Powered Car	Approved

Similarly, create task completion events for approving proposal and requirement specification.

Progressing the Product Development Lifecycle and Driving Task Completion

You must now verify that Project Management tracks the Product Development life cycle effectively.

In Oracle Fusion Innovation Management, do the following:

1. In the Concepts work area, from the **Tasks** panel tab, click **Manage Concepts**.
2. On the Manage Concepts tab, search for the Solar Powered Car concept.
3. In the **Search Results** region, click the Solar Powered Car link to view the concept details.
4. Review the concept, and then from the **Actions** menu click **Submit for Approval**. Notice that the status changes from Draft to Submitted.
5. In the Submit for Approval window, click **Select and Add**.
6. In the Select and Add: Reviewers window, search for and select a reviewer, and click **OK**.
7. In the Submit for Approval window, click **Submit**.
8. Click **Done**. On submitting the concept for approval the Submit Concept task in Project Management is marked as complete as the task completion event is met.

Project Expenses: Examples

You can plan for expenses on a task and keep track of actual and remaining amounts. While planning the project, you can view and update planned and actual project expenses for expense and labor resources. Later during project execution, you can then review the remaining costs.

Planning Expenses on Projects

Dave Brown is traveling to conduct product training to consultants. The following is an example of expenses planned for a task for Dave to travel to a different location and conduct product training.

Expense	Planned (USD)	Actual (USD)	Remaining (USD)
Airfare	2000	2200	-200
Accommodation	10000	9990	10
Meals	500	450	50

Amounts are rolled up and displayed against the task associated with the expenses. The following are the total expenses incurred on the task.

Expense	Total Amounts (USD)
Expense Amount	12500
Actual Expense Amount	12640
Remaining Expense Amount	-140

Dave's cost rate is USD 150 per hour. The effort to complete the task is 72 hours. Therefore, costs are calculated as follows.

Total actual labor cost = 72 x USD 150 = USD 10800

Total actual cost = total actual labor cost + total actual expense amount = USD 23440

Dave's assignment cost the project a total of USD 23440.

Work Plan Templates: Explained

Use work plan templates to standardize project creation across teams. Work plan templates provide you with an efficient starting point when you build the task structure of your project.

Use work plan templates to:

- Quickly build task structures by using standard task structures
- Save time in assigning resources by using generic resources and later replacing these resources with actual named-persons
- Save standard task structures and share them with other project managers

 **Note:** You can't use work plan templates when using Microsoft Project Integration.

Creating a Work Plan Template from a Project Plan

You can create work plan templates from a standard project plan if you have the appropriate privileges. To save your project as a work plan template, select **Save as Work Plan Template** from the Actions menu on the Manage Project Plan page.

The application copies the following values when you create a work plan template from a project:


- Nonfinancial and financial tasks with attributes, such as billable and chargeable
- Task attributes such as duration, efforts, milestones and dependencies

 **Note:** Duration is calculated based on effort, allocation, and calendar.

- All resources except project-specific resources
- Expense resources on tasks with the actual amount reset to zero
- Deliverable types associated with tasks

The application sets the progress of the tasks to zero percent and sets the following values to blank:

- Start and finish dates
- Progress information
- Constraint type and date
- Sprint and requirement

 **Note:** The application doesn't copy project information, such as project codes, project dates, project status, and project hierarchy elements to the work plan template.

Editing Work Plan Templates

To update a work plan template:

Navigate to the Project Management work area. Click the Manage Work Plan Templates link from the Tasks panel tab on the Manage Project Plan page. On the Edit Work Plan Template page, you can select a work plan template you want to update and make the changes.

 **Note:** New projects you create using the updated work plan template will include your updates.

Creating Project Tasks from a Work Plan Template

You can create project tasks from a work plan template when you build the project plan structure. When you create tasks using a work plan template, the application adds the highest-level tasks from the work plan template as peer to the selected task. If the selected task is a project level task, the application creates subtasks for the tasks copied from the work plan template.

You can create financial tasks as summary tasks and create nonfinancial tasks under financial tasks.

Copying Resources to a Work Plan Template

When you create a work plan template from a project, the work plan template copies project resources as planned resources. The work plan template doesn't copy project-specific resources. If a project enterprise resource exists in multiple roles, the work plan template copies the resource for each role. If you create a work plan template from a project plan that has resources in various statuses, the application:

- Copies all project resources with Planned status, except project-specific resources
- Copies resource assignments for the tasks to the new work plan template

After you create a work plan template, replace all resources with generic resources. When a project manager creates a project plan from this work plan template, they can then replace these generic resources with actual resources.

Sharing a Work Plan Template

Users with the appropriate privileges can share work plan templates with other project managers. You can share work plan templates in the following ways:

- Enable the **Public** check box when you use the action to **Save as Work Plan Template** in your project plan.
- Enable the **Public** check box for a work plan template in the Manage Work Plan Templates window.

FAQs for Define Project Plan Tasks and Schedule

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

Project calendars determine standard working and nonworking times for resources working on projects. For example, a project calendar can designate the total number of working hours per day and any holidays that occur during the project dates. A project calendar is used to schedule project tasks, and to estimate project duration.

Resource calendars determine the total available working hours for resources.

Your implementation team defines the default project and resource calendars that are automatically assigned to new projects and resources. However, a project manager can assign another calendar to a project. Similarly, a project application administrator can assign a different calendar to a resource.

How can I change the project calendar after the project is created?

Select the top-level task of a project, and change the calendar from the **Project Details** region on the **Manage Project Plan** page.

What happens if project team members don't have allocation dates?

The project calendar uses the project start and end dates as allocation dates to create events for team members without project allocation dates.

Can I create, edit, or delete events for team members on my project calendar?

Yes. You can create events such as PTO, training, and other. Other events can include events such as team building. However, you can only edit or delete the events that you create. You can't edit or delete events that other team members create on the resource calendar.

Why can't I view all the event types on the project calendar?

The project calendar displays the events from the standard calendar, and project and team member events.

You can enable additional event types including deliverables, milestones, and project tasks using the **Manage Event Display** action on the **Manage Project Calendar** page.

What are unscheduled events?

Events without key dates to specify when an event will take place in the project schedule. For example, deliverables without need-by dates, milestones without finish dates, or project tasks without start or finish dates.

What's a milestone task?

An event in a project plan that receives special attention. A milestone task can track events such as the completion of a project stage or a major project deliverable, a key decision point, or an approval point. You can use milestone tasks to monitor progress and determine whether a project is on schedule.

What's the difference between scheduling tasks and rolling up task data?

You schedule a project in Oracle Fusion Project Management to update the top-level task dates based on revised dates, dependencies, and constraints.

You roll up project plan data to the top-level task after team members have reported their actual hours of work on tasks.

Why didn't task dates change when predecessor task dates changed?

Task dates of dependent tasks do not change automatically if the tasks are manually scheduled tasks. Manually scheduled tasks are tasks whose dates you have modified. Task dates of manually scheduled tasks do not change automatically when dates of predecessor or successor tasks change.

Why did the task dates change after I assigned a resource to the task?

Task dates are updated based on the resource calendar. For example, a task that takes four days to complete starts on Monday and finishes on Thursday. If you assign a resource who is going on vacation on Wednesday, the task finish date moves to Friday.

What's a planned resource assignment status?

Resource assignments in a **Planned** status aren't included in projected utilization calculations. Use planned resources as placeholders during project planning. Then when it's time to begin work you can request a confirmed or reserved assignment for the resource.

What happens if a planned resource is assigned to a project?

You can directly add resources to a project for planning purposes without involving a resource manager. These resources have an assignment status of Planned. You can assign the resources directly to tasks and the application automatically adds them to the project. Alternatively, you can add the resources to the project and then assign them to tasks.

If you manage the availability and staffing for a resource, project managers with the Assign Project Resource to Project privilege can change the resource's assignment status from Planned to Confirmed directly on the project. Alternatively, you can submit a project resource request to find qualified resources to fulfill the assignment.

Why does the allocation for a resource assigned to a task show as less than 100 percent?

The allocation percentage of an assigned resource is determined by their available capacity based on allocation to other projects. The resource allocation percentage value comes from the assigned allocation on the **Manage Project Resources** page.

Can I change the project currency for a project?


Yes, you can change the project currency from the **Project Details** region in the **Basic Information** tab by selecting the top-level task.

Can I copy and paste tasks to create new tasks?

Yes. You can copy and paste a task to reuse attributes of an existing task in a new task. You can't copy project-level tasks.


After you copy a task, select another task and paste the copied task. The pasted task is a peer task to the selected task.

After you paste the tasks, you can modify the effort, start, and finish dates of the new task. The application calculates the duration and rolls up the values to the summary task and project-level task.

 **Note:** If you use Oracle Fusion Transactional Business Intelligence for reporting on projects, you must schedule the Denormalize Task Structure Hierarchies for Business Intelligence process from the Scheduled Processes page to run periodically. For projects that you created in Oracle Fusion Project Foundation, you can synchronize project updates from the **Actions** menu on the Manage Project Plan page.

Can I cut and paste tasks to another position in the task hierarchy?

Yes. You can use cut and paste to move tasks to another position in the task hierarchy. Pasting tasks adds a row immediately below the selected task. The moved task is a peer task to the selected task. Attributes of the original task are retained, including constraints and dependencies. The application calculates the duration and rolls up the values to the summary task and project-level task.

 **Note:** If you use Oracle Fusion Transactional Business Intelligence for reporting on projects, you must schedule the Denormalize Task Structure Hierarchies for Business Intelligence process from the Scheduled Processes page to run periodically. For projects that you created in Oracle Fusion Project Foundation, you can synchronize project updates from the **Actions** menu on the Manage Project Plan page.

Related Topics

- [Task Structure Hierarchies: How They're Denormalized](#)
- [What happens if I synchronize project updates?](#)

How can I view tasks that violated a constraint?

Tasks having constraints assigned to them are indicated with an icon in the row header. You can hover on the icon to see the constraint type and date. When a task violates a constraint, a red exclamation mark appears next to the constraint icon. Alternatively, you can filter for tasks having constraint violations.

Can a task have more than one predecessor or successor task?

Yes, a single task can have more than one predecessor or successor task. However, there can be only one dependency between two tasks. For example, two tasks cannot have both finish-to-finish and start-to-start dependencies.




4 Define Project Staffing Plan

Project Resource Assignment Statuses: Explained

Assignment statuses indicate the status of the resource's relationship to a project.

This table describes assignment statuses that can appear in the **Assignment Status** column on the Manage Project Resources page.

Assignment Statuses	Description
Planned	<p>The assignment status is Planned when the project manager adds a resource to the project using any of these methods:</p> <ul style="list-style-type: none"> • Allocate resources directly to the project on the Manage Project Resources page. • Add resources to a project task on the Manage Project Plan page. • Import a project plan in Microsoft Project into Oracle Fusion Project Management. • Create a project plan with a work plan template. • Import a project plan from a third-party application with the Import Project Plan process for Oracle Cloud. • Import a project plan with the Project Work Plan External Service. • Replace a resource on a confirmed assignment with a resource whose availability and staffing aren't managed in Oracle Fusion Project Resource Management. <p>If the project manager creates a project resource request to replace the Planned resource, and then cancels the request, the assignment status reverts to Planned.</p>
Requested	<p>The assignment status is Requested if the project manager creates a project resource request on the Manage Project Resources page to replace a planned resource.</p> <p>If the resource manager proposes a resource to fulfill the request, and the project manager rejects the proposed resource, then the assignment status reverts to Requested.</p>
Proposed	<p>The assignment status is Proposed when a resource manager proposes a resource for an assignment that is awaiting approval by the project manager.</p> <p>Assignments with a Proposed status appear on the Manage Project Resources page only for project resource requests that are created on that page. However, assignments that fulfill project resource requests that are created on the Manage Project Resource Requests page don't appear on the Manage Project Resources page until the resource is approved.</p>
Confirmed	<p>The assignment status is Confirmed in any of these circumstances:</p> <ul style="list-style-type: none"> • The project manager approves a resource for a confirmed assignment to fulfill a project resource request. • The project manager confirms a reserved assignment directly on the project. • The project manager approves, rejects, or cancels a pending assignment adjustment for a confirmed assignment. • The project manager directly assigns a resource in a Confirmed status or replaces a resource on a confirmed assignment with another managed project enterprise labor resource.

Assignment Statuses	Description
	<p> Note: You must have the Assign Project Resource to Project privilege to perform this action.</p> <ul style="list-style-type: none"> The resource manager assigns a resource in a Confirmed status without project manager approval. <p> Note: You must have the Approve Project Resource for Project Assignment privilege to perform this action.</p>
Reserved	<p>The assignment status is Reserved in any of these circumstances:</p> <ul style="list-style-type: none"> The project manager approves a resource for a reserved assignment to fulfill a project resource request. The project manager approves, rejects, or cancels a pending assignment adjustment for a reserved assignment. The resource manager assigns a resource in a Reserved status without project manager approval. <p> Note: You must have the Approve Project Resource for Project Assignment privilege to perform this action.</p>
Pending Adjustment	<p>The assignment status is Pending Adjustment in either of these circumstances:</p> <ul style="list-style-type: none"> After a resource manager cancels an existing assignment or changes the assignment schedule and before the project manager approves or rejects the adjustment. After the project manager changes the assignment schedule and before the resource manager approves or rejects the adjustment. <p>A resource assignment that is pending adjustment approval has a value of Change Assignment Schedule or Cancel Assignment in the Adjustment Type field. When the project manager approves or rejects the adjustment action, then the application clears the adjustment type value for the assignment.</p>
Canceled	<p>The assignment status is Canceled in any of these circumstances:</p> <ul style="list-style-type: none"> After the project manager cancels the adjustment. After a resource manager cancels an assignment and the project manager approves the cancellation. <p>Approval isn't required if the resource manager has the Approve Project Resource for Project Assignment privilege and cancels the assignment by using the Submit and Approve action.</p>

Related Topics

- [Project Resource Request Statuses: Explained](#)

Import Project Enterprise Resources Process

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

The Import Project Enterprise Resources process:

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

To import resources:

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

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

Import Project Enterprise Resources Execution Report

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

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

Related Topics

- [External Data Integration Services for Oracle Cloud: Overview](#)
- [File Based Data Import for Oracle Project Portfolio Management Cloud](#)

Adjusting Project Enterprise Resource Cost and Bill Rates: Procedure

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

Adjusting Rates for One Resource

To adjust cost and bill rates for one resource:

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

Adjusting Rates for Multiple Resources

To adjust cost and bill rates for multiple resources:

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

The new rates apply to all resources listed in the Adjust Resources window.

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

Adjusting Cost Rates for All Resources in a Business Unit

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

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

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

FAQs for Define Project Staffing Plan


Can a project manager directly assign a resource to a project?

Yes. Project managers with the Assign Project Resource to Project privilege can:

- Create confirmed assignments for planned resources
- Update schedules for confirmed resource assignments

Can I replace an expense resource on a project?

Yes. You can replace an expense resource with another expense resource on the Manage Project Resources page. This action also replaces the original resource with the new resource on all task assignments in the project.

 **Note:** Replacing an expense resource on a project doesn't change the expense amount.

Can I request a resource directly from a project?

Yes. You can create a project resource request directly from the Manage Project Resources page for planned resources. For example, you can add an engineer resource as a planned resource during project planning. Then when it's time to begin work you can create a request to assign an engineer to your project.

You can perform the **Create Resource Request** action for a resource if the following conditions are true:

- Resource type is Labor
- Assignment status is Planned
- Assignment has a From Date and To Date

You can create multiple project resource requests from the Manage Project Resources page. When you select multiple planned resources and click **Create Resource Request**, the application creates a request for each selected resource.

How can I diagnose issues with project resource validations?

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

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

How can I look up start and finish dates for a project or task to use on a project resource request?

View project start and finish dates in the My Projects region of the Project Manager Dashboard. View task start and finish dates on the Manage Project Plan page.

How can I create a resource that is restricted to just one project?

Add a new resource to the Manage Project Resources page and select the Project-Specific Resource check box in the Create Project Enterprise Resource window. For example, if you want to add a private contractor to your project, but the contractor isn't available for other projects, then create the resource as a project-specific resource.

What happens if a resource is allocated multiple times to a project with different rates?

The highest rate is used to calculate the cost and bill amounts of the resource.

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

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

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

Why can't I see the cost and bill rates for a resource?

For a resource rate to appear on the project, the rate must be defined for the resource on the Manage Project Enterprise Resources setup page and the resource rate currency must match the project currency. For resources in a Planned status, you can edit rates directly on the project that apply to this project only. For resources in a Confirmed or Reserved status, or who have pending assignment adjustments, you can edit rates directly on the assignment. Rate changes on the project or assignment don't affect the rates on the resource definition.

Related Topics

- [Project Enterprise Labor Resource Cost and Bill Rates: Explained](#)

5 Define Project Deliverables

Project Deliverables: Explained

Project deliverables are the output produced for completing a project or task. A deliverable can result from the need to satisfy an external contractual obligation, or the need to fulfill an internally-planned activity.

 **Note:** You must be a project enterprise labor resource to create, update, or own deliverables.

The following sections describe how you create and manage deliverables, and how to associate them with requirements, projects, and tasks.

Creating and Managing Deliverables

The following table describes the important attributes that you enter and update when managing deliverables.

Attribute	Description
Deliverable type	Classify and report the deliverables. You can create custom deliverable types or use predefined values.
Priority	Assign a high, medium, or low priority depending on the anticipated impact on work.
Status	Specify the status of the deliverable. Valid statuses are New, Working, and Closed.
Attachments	Optionally, add one or more attachments to a deliverable. Attachments can be the actual output where the deliverable is a document or other associated information.

Associating Deliverable with Tasks and Requirements

Associate deliverables with one or many tasks or requirements at any level. Associate existing deliverables to tasks or requirements or create deliverables directly for tasks or requirements. You can delete a deliverable in New status if it is not associated with tasks or requirements.

FAQs for Define Project Deliverables

What's the difference between the name and short name of a deliverable?

Use the deliverable name to provide a general description, up to 150 characters long, for the deliverable.
Provide a short name, a maximum of 30 characters long, to identify the deliverable for reporting purposes.

Can deliverables for projects and tasks be inherited from associated requirements?

No. A deliverable associated with a requirement is not automatically associated with the tasks created for that requirement. You associate a deliverable with a task independent of associating a requirement with a task.

Can I delete a deliverable?

Yes. You can delete a deliverable in the New status if it is not associated with a task, backlog item, or requirement.

Can I delete a deliverable associated with a task?

No. You can only delete deliverables that are in New status and are not associated with tasks. You can disassociate deliverables from tasks.

Can I view deliverables created by another project team member?

No. As a project team member, you can only view deliverables that you own or create. Project managers can view all deliverables associated with their projects.

What happens when I duplicate a deliverable?

All information including associations with tasks and requirements is duplicated. However, attachments are not duplicated. The status of the duplicated deliverable is set to New.

6 Execute Project Tasks and Deliverables

Task Management: Explained

Collaborate with team members in the Team Member Dashboard and My Work work area on tasks that you created, on which you're a resource, and tasks that you follow. Review and edit action items, to-do tasks, milestone tasks, and project tasks.

Depending on the task type, you can view and edit the following task attributes:

- Task list
- Task details and progress
- Followers
- Task dependencies and deliverables
- Recent task activities and task-related conversations in Oracle Social Network

Task List



The task list on the Manage Tasks page displays tasks that you're assigned to work on and tasks that you follow. Filter tasks by project, priority, date, task type, tags, and exceptions.

Create tasks from the task list. New tasks are to-do tasks by default. You can edit the task on the Manage Tasks page, and add the task to an existing project if you're a team member on the project.

Task Details and Progress

Review task details and enter progress for the task. The following table describes each attribute.

Task Type	Task Attribute	Description
Project, To-do Task	Start Date	The proposed start date for the task.
Project, To-do Task, Action Item	Finish Date	The proposed finish date for the task.
Project	Project	Name of the project associated with the task.
All	Creator	Name of the team member who created the task.
Project, To-do Task, Milestone	Priority	The priority assigned to the task.
All	Resource	Team members who are responsible for the overall management of the task.

Task Type	Task Attribute	Description
 Note: If a task has multiple resources, then only the primary resource can edit the task and enter progress. Only the project manager can edit the resource list.		
Project	Total Planned Hours	The total number of hours planned for you to complete the task.
Project	Proposed Effort	The revised total number of hours needed to complete the task, as suggested by a resource.
 Note: If the proposed effort exceed the value defined for Planned Hours Increased in the Progress Exceptions section of the Define Project Management Implementation Options page, the project manager must review the proposal.		
Project	Actual Hours Worked	The total number of hours that you worked on the task.
Project	Remaining Hours	The estimated total number of hours required for a person to complete the task.
Project	Percent Complete	<p>The percentage of total planned hours that you worked on the task.</p> <p>The following formula calculates percentage of work complete on a task:</p> <p>Percent Complete = Actual Hours Worked / Total Planned Hours</p>
Project	Allocation	The percentage of total time that you're planned to work on the task.

Followers

Followers are persons who aren't working on the task, but have an interest in reviewing the task progress. Only the resources and other followers can add followers to a task. If a resource assigns the task to another team member, the application automatically changes the original resource to a follower.

Task Dependencies and Deliverables

Project tasks can have peer tasks, task dependencies, and deliverables.

- Peer tasks exist in the same project task hierarchy as your task.

- Dependencies are relationships between tasks. When tasks are linked on the project plan, the predecessor task must be finished before you begin work on any successor tasks.
- View the existing deliverables or add deliverables to the task. A deliverable can result from the need to satisfy an external contractual obligation, or the need to fulfill an internal planned activity.

Integration with Oracle Social Network

Access Oracle Social Network from the Manage Tasks page, and review the task-related conversations and activities.

You can view the following events for tasks that are shared in Oracle Social Network:

- Task creation date
- Deliverable changes
- Status updates
- Changes to resources
- Changes to the start date and finish date
- Changes to the proposed start date and proposed finish date
- Changes to dependencies
- Changes to followers

Related Topics

- [Project Deliverables: Explained](#)
- [Can deliverables for projects and tasks be inherited from associated requirements?](#)
- [Entering Task Progress: Examples](#)

Deliverable Notifications: Explained

Deliverable notifications inform you about deliverables assigned to you, completed deliverables, changes in deliverable ownership, and deliverables assigned to a new task. Notifications also inform deliverable creators, project managers, and deliverable assignees about the completed deliverables of the projects or tasks that they manage daily. If the deliverable is reassigned, both the old and the new owner are notified.

Deliverable notifications are sent using the e-mail of the person who updated the deliverable.



Note: You will receive a single notification even if you have multiple roles on the project. You will not receive a notification for changes that you make.

Set Up Deliverable Notification

On the Project Manager or Team Member Dashboard, in the My Profile region, click **Edit E-Mail Notification Settings**, and navigate to the **Projects I Manage** or **Projects I Work On** tabs to select notifications preferences.

Managing Your Work

 **Watch:** This video highlights the methods for managing all of your work with a single record of reference.

FAQs for Execute Project Tasks and Deliverables

What's the difference between my tasks and tasks that I follow?

You can edit task details and enter progress for your tasks on the Manage Tasks page. If a task has multiple resources, only the primary resource can edit the task.

When you follow a task, you can view the task details and see the task activity stream. You receive e-mail notifications of changes that team members make to the task.

If a resource reassigns the task to another team member, then the previous resource automatically becomes a follower.

How can I add followers to a task?

Any resource assigned to the task can add followers. Enter a follower's name on the Manage Tasks page.

If a resource assigns the task to another team member, then the previous resource automatically becomes a follower.

What happens if I create a new task from my task list?

Tasks that you create on the **Manage Tasks** page are to-do tasks, and aren't associated with a project.

You can edit a to-do task and assign it to a project if you're a project team member. The task will be a top-level task in the project.

Why can't I edit a task?

You're a follower on the task. Only the primary resource can edit a task.

Why can't I view the dependencies and deliverables for a task?

The task is a to-do task. Only a project task can have peer tasks, dependencies, and deliverables.

What are the available tasks on the Manage Tasks page?

If you're either a resource or follower on a task, then the task is available in the task list on the Manage Tasks page.

How can I view activities for all of my tasks?

Open the **Manage Tasks** tab on the **My Work** page. The **My Tasks** subtab contains a list of all your tasks that you can filter by various attributes such as project, task type, and tasks that you are scheduled to work on today or in the future.

How can I collaborate with my project team to complete tasks assigned to me?

Use the Social link in the Manage Tasks page to have conversations with team members about task-related matters. The Social link is available if you enabled integration with Oracle Social Network Cloud Service.

Consider the following example. You're a consultant and a team member on a project to implement software for a customer. The project manager assigns you a task to migrate the customer's legacy data into the new application. You're new to the legacy application and have questions about available services. You can collaborate with team members in the following manner:

1. Create a conversation and invite the project manager and other consultants on the project to a discussion.
2. Invite other consultants in your company with experience on the legacy application.

The conversation participants give their opinion, provide information, and upload documents. Information is shared as if everyone was working together in the same room.

Related Topics

- [What does social networking have to do with my job?](#)

7 Track Project Progress

Entering Task Progress: Examples

You can use several methods to enter progress for your tasks in Oracle Fusion Task Management. Use these scenarios to understand the differences between entering progress from the following locations:

- Quick Progress region of the Team Member Dashboard
- Manage Tasks page of the My Work work area

Team Member Dashboard


Use the Quick Progress region on the Team Member Dashboard to mark your tasks and actions items as started or finished. You can't edit other progress attributes from this region.

If you aren't the primary resource on a project task, then the task doesn't appear in your Quick Progress region. Only the primary resource can enter progress for project tasks.

My Work Work Area

Enter your progress for a task in the Manage Tasks page of the My Work work area. The following table describes the progress-related attributes that you can edit.

Task Type	Attribute	Description
Project	Mark as Started	Click to automatically update the percent complete value for the task to 25%.
Action Item, Milestone, Project, To-do Task	Mark as Finished	Click to automatically update the percent complete value for the task to 100%. You can mark milestone tasks as finished only.
Project	Proposed Effort	Click the Enter Progress button, Revise Effort option to enter the number of proposed effort hours.


 **Note:** Enter the proposed effort only if you need more or less time than shown in the Total Effort field. If the proposed effort exceeds the value defined for the Planned Hours Increased implementation option, the

Task Type	Attribute	Description
		project manager must review the proposal.
Project	Actual Hours Worked	Enter the total number of hours you worked on the task.
Project	Percent Complete	Enter the percentage of the total planned hours you worked on the task.

Proposed Task Changes: Points to Consider

Project managers need to review certain changes to tasks that team members proposed when they entered progress. To see the effects of a proposed task change, a project manager can preview the impact the change would have on the project plan before deciding whether or not to accept the change.

After previewing the impact to the project plan, a project manager can accept, save, decline, or cancel the proposed task change.

 **Tip:** Project managers can also accept or decline task changes from the **Manage Task Exceptions** page after previewing the impact.

Accept

Accept the proposed change if you agree with the impact. When you accept the change, the proposed dates for the task replace the current dates. The application recalculates the progress and duration for the task and project. You must also save any changes to apply the updates to the project plan.

Alternatively, you can change the proposed dates to different dates than the team member proposed.

Decline

Decline the proposed change if you want to retain the original planned dates and reject the proposed changes. When you decline the change, the proposed dates are replaced with the original dates, and changes to the task are disregarded. The application recalculates the progress and duration for the project plan using the original values.

Cancel

Cancel the proposed change to return to the project plan without accepting any changes. When you cancel the change, the values for the proposed and planned dates don't change.

Save

Save the proposed change to replace the planned dates with the proposed dates, and commit the change to the project plan.

Related Topics

- Managing Task Exceptions: Explained

Project Milestones: Explained

A milestone is a reference point marking the completion of a significant event in a project. Use milestone tasks to track the completion of a project stage or a major project deliverable, a key decision point, or an approval point.

User Responsibilities

User	Responsibilities
Project Manager	<ul style="list-style-type: none"> Creates the milestone in the project plan. Assigns dependencies to the milestone. Marks a milestone as finished. Views milestones in various statuses.
Team member	Marks a milestone as finished.

Statuses



The following are the various statuses in milestone.

- Past Due: Milestones that are past the finish date.
- At Risk: Milestones that can't be completed on time because a predecessor task has an exception.
- Upcoming: Milestones that are due for completion in next 12 months.
- Complete: Milestones that are finished.
- Unscheduled: Milestones without a finish date.

Actions on Milestones

The following table lists the various actions, users who can perform the actions, and the location where you perform the actions.

Action	User Role	Location
Create Milestone	Project Manager	Manage Project Plan page
Assign finish date to a milestone	Project Manager	Manage Project Plan page

Action	User Role	Location
<p> Note: The task creator can assign a finish date to a milestone task. However, a team member can't edit the start date or finish date for milestones. If the task creator enters a finish date for a milestone task, the start date is automatically updated with the same date.</p>		
Mark a milestone as finished	Project Manager	<ul style="list-style-type: none"> • Manage Tasks page of My Work work area • Quick Progress and New Activity regions of the Team Member Dashboard • Percent Complete column in the Manage Project Plan page <p> Tip: Enter 100 in the Percent Complete column</p> <ul style="list-style-type: none"> • Project Milestones page
	Team Member	<ul style="list-style-type: none"> • Manage Tasks page of My Work work area • Quick Progress and New Activity regions of the Team Member Dashboard
Filter milestones by statuses	Project Manager	Project Milestones page

FAQs for Track Project Progress

How can I report progress on a project task that is not in the project plan?

Create a new task for your project while you are entering progress. Enter your actual hours for the new task.

You can only add one task at a time with this method. The task hierarchy isn't available for selection when you create tasks while entering progress.

Why can't I create a task for a project?

Only the resources who are assigned to a project can create new tasks. If you're assigned to a project, then you can create tasks for yourself while you enter progress for the project. You can't assign tasks to other team members.

Why can't I view progress for all tasks on a project?

Project managers can access progress review from the task exceptions for a project. Only the lowest-level tasks that have exceptions on the project are displayed.

Why can't I view my task in the Quick Progress region?

You must be the primary resource assigned to a task for the task to appear in the Quick Progress region of your Team Member Dashboard. If you aren't the primary resource, then you can view and open the task from the Manage Tasks page.

Why do some tasks have exceptions for progress entries?

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

How can I mark a task as finished?

Select **Mark as Finished** in the Quick Progress region of the Team Member Dashboard or in the Manage Tasks tab of the My Work work area. When you mark a task as finished, progress for the task is automatically updated to 100% in the project plan.

Alternatively, select the task in the Manage Tasks tab of the My Work work area, and enter a value of 100 in the Percent Complete field.

Another method is to select the task in the project plan, and enter a value of 100 in the Percent Complete column.

8 Manage Project Changes

Change Orders: Explained

Use change orders to create, manage, resolve, implement, and communicate the impact of proposed project or nonproject changes.

User Responsibilities

Project managers and team members can have the following user responsibilities.

User	Responsibilities
Creator	Creates the change order and designates the owner
Owner	<ul style="list-style-type: none"> Monitors the progress, resolution, implementation, and closure of a change order Adds and assigns roles to participants at any stage until the change order is either approved, closed, or canceled. This includes adding a participant for stages that have either been completed in the past or not yet visited. Moves the change order to next or previous logical stage Removes participants on assigned tasks, if required
Participant	Performs the assigned tasks

Stages and Statuses

You can control the progress of a change throughout the change order lifecycle. At any point, the owner can skip any stage, and submit the change order for the next available action. However, the owner cannot submit the change order for implementation by skipping the Approval stage if an approver is added.

The following table describes the key owner and participant responsibilities, and next available action for each stage and status of a change order.

Change Order Stage	Change Order Status	Description	Available Action
Create	Draft	<ul style="list-style-type: none"> Stage and status after the creator initiates the change order. Owner enters change order details and assigns participants to assess, review, approve, and implement the change order. 	<ul style="list-style-type: none"> Edit change order Cancel change order Close change order Delete change order Submit for impact assessment Submit for review Submit for approval Submit for implementation
Impact Analysis	In Progress	<ul style="list-style-type: none"> Stage and status after the owner submits the 	<ul style="list-style-type: none"> Edit change order Cancel change order

Change Order Stage	Change Order Status	Description	Available Action
		<ul style="list-style-type: none"> change order for impact assessment. Owner who adds an impact is added as an Assessor by default. Assessors are added as Implementors by default. However, owner can remove them from this role. Assessor adds, edits, or deletes impacts added by self while owner can update impacts of other participants too. 	<ul style="list-style-type: none"> Close change order Submit for review Submit for approval Submit for implementation Mark complete (participants only)
Review	In Progress	<ul style="list-style-type: none"> Stage and status after the owner submits the change order for review. Reviewer adds review comments and uploads attachments. 	<ul style="list-style-type: none"> Edit change order Cancel change order Submit for impact assessment Submit for approval Submit for implementation Mark complete (participants only)
Approval	In Progress	<ul style="list-style-type: none"> Stage and status after the owner submits the change order for approval. Approver updates the progress and provides approval comments. All Approvers must approve the order before the owner can submit the order for implementation or close the order. The owner cannot skip an Approver. However, the owner can delete Approvers who do not respond. 	<ul style="list-style-type: none"> Edit change order Cancel change order Close change order Submit for impact assessment Approve (participants only) Reject (participants only)
Approval	Approved	Stage and status after all Approvers approve the change order.	<ul style="list-style-type: none"> Submit for impact assessment Submit for review Submit for implementation Close change order Cancel change order
Approval	Rejected	Stage and status after an Approver rejects the change order.	<ul style="list-style-type: none"> Submit for impact assessment Submit for review Cancel change order
Implementation	Approved	<ul style="list-style-type: none"> Stage and status after the owner submits 	<ul style="list-style-type: none"> Submit for impact assessment

Change Order Stage	Change Order Status	Description	Available Action
		the change order for implementation. <ul style="list-style-type: none"> Implementor updates the comments and attachments. 	<ul style="list-style-type: none"> Submit for review Submit for approval Close change order Cancel change order Mark complete (participants only)
Close	Completed	Stage and status after the owner closes the change order.	Close change order
Cancel	Canceled	Stage and status after the owner cancels the change order.	Cancel change order

Managing E-mail Notifications: Procedure

You can receive notifications for new, open, and closed or completed tasks, deliverables, issues, action items, and change orders depending on the settings you select. The notifications displays the key data, for example, project name, priority, dates, creator, for the object added, reassigned, or completed.


The aspects of e-mail notifications described here are:

- Enabling notification settings
- Receiving notifications

Enabling Notification Settings

Use the e-mail notification settings to determine the notifications you receive. Set notifications separately for projects you work on and projects you manage.

- Navigate to the **Project Manager Dashboard** or **Team Member Dashboard**.
- In the My Profile region, click **Edit E-mail Notification Settings**. The Edit E-mail Notification Settings window opens.
- In the Work I Manage tab, expand each category and set the e-mail delivery frequency to **Daily** or **None** for the objects you manage.

 **Note:** The Daily option is the default setting for all the projects.


- In the Work I Own tab, set the e-mail delivery frequency to **Daily** or **None** for the objects you work on.

Receiving Notifications

The application automatically sends e-mail notifications when you perform the related action. The following table lists the recipients of the notifications based on action.


Action	Receiver of the Notification
Create, reassign, or complete tasks	Owner

Action	Receiver of the Notification
	Project manager
	Creator, on reassignment
	Previous owner, if ownership is changed
Create, reassign, or complete issues	Owner
	Project manager
	Creator, on reassignment
	Previous owner, if ownership is changed
Create or close action items	Project manager
Create, reassign, or complete deliverables	Owner
	Project manager
	Creator, on reassignment
	Previous owner, if ownership is changed
Create or reassign change orders	Owner
	Creator, on reassignment
	Previous owner, if ownership is changed
Close or cancel change orders	Creator
	Participants
Approve, reject, or complete change orders	Owner
Assign or remove participant	Participant

 **Note:** Project managers also receive a daily summary of the projects they manage. Use the Generate Project Updates E-Mail process to create the daily digest.

Customizing Page Headers and Task Labels for Change Orders: Explained

Use Page Composer to customize page headers and task labels for pages related to creating and managing change orders.

 **Note:** Project managers and team members can override your page header customizations using user personalization.

Aspects of customization explained here include:

- Customizing page headers and task labels
- Navigating to customization work area
- Using sandboxes

Customizing Page Headers and Task Labels

Modify page headers and task labels at the following locations to ensure consistency in customization.

UI Element Type	UI Element Name	Location
Task on task pane	Manage Change Orders task	My Work work area, Tasks pane
Task on task pane	Manage Change Orders task	Project Management work area, Tasks pane
Tab name	Manage Change Orders tab	My Work work area
Page header title	Manage Change Orders header, search page Manage Change Orders header, Create Change Orders page Manage Change Orders header, Edit Change Orders page	<ul style="list-style-type: none"> • My Work work area • Project Management work area
Browser title	Manage Change Orders - My Work - Oracle Applications Manage Change Orders - Project Management - Oracle Applications	My Work work area, Manage Change Orders page My Work work area, Manage Change Orders page
Subheader	Create Change Order region	Manage Change Orders page
Subheader	Edit Change Order region	Manage Change Orders page

 **Note:** You cannot customize menu items in the following locations:

- Actions menu on the Project Management work area
- Actions menu on the Create or Edit Change Order Pages in the My Work work area

Navigating to Customization Work Area

Open Page Composer from the **Customize Pages** submenu under the **Administration** menu in the global area. For more information about customizing page titles using Page Composer, see Oracle Fusion Applications Extensibility Guide for Business Analysts.

Using Sandboxes

Create or select an appropriate sandbox, and set it as active to capture your customizations using Page Composer. When ready, publish the sandbox to make your changes available to users.

Related Topics

- [Sandboxes: Explained](#)
- [Using Sandboxes: Explained](#)

9 Manage Project Performance

Sprint Burndown: Explained

Project managers can use the sprint burndown graph to predict if the scrum team will complete all planned backlog items in a sprint in Agile projects. The sprint burndown graph evenly distributes the hours assigned to tasks in the project plan across the sprint duration to calculate the ideal remaining hours. The scrum team consumes a certain number of hours to complete a certain number of backlog items. The graph shows how efficiently a project team consumes the available hours in a sprint.

You can measure how hours are ideally consumed during the sprint and compare it to how the project team is actually consuming hours. If the actual hours remaining deviates from the ideal hours remaining, it means that you must assess how many backlog items can realistically be achieved in a sprint. Consider why progress was less or more than anticipated during the sprint retrospective.

Sprint Burndown: How It's Calculated

Use sprint burndown to monitor the hours the scrum team needs to complete work in a sprint and adjust the planned sprint hours for future sprints, to ensure that the ideal hours remaining is close to the actual hours remaining.

Settings That Affect Sprint Burndown

The sprint burndown graph captures planned hours from the project plan and actual hours from the progress reported by team members. The following information must be available:

- Project plan with tasks associated with backlog items.
- Sprint when the backlog items will be worked on.
- Planned hours for project tasks.
- Actual hours reported by team members on tasks.

How Sprint Burndown Is Calculated

The graph shows sprint burndown by calculating the ideal and actual hours remaining. The following formulas are used to calculate ideal and actual hours remaining.

actual hours remaining = planned hours - actual reported hours

ideal hours remaining = planned hours - ideal hours consumed

To ensure that the sprint burndown data is accurate:

1. Product owners and scrum masters must ensure that product backlogs, sprints, and story points are available to the scrum team members on the Manage Backlog Items page of the Project Requirements work area.
2. Project managers must create a project plan in the Project Management work area.

3. Team members must regularly report progress on the My Work work area.

Data on the sprint burndown graph must be current during product development. You can ensure sprint burndown graph data is current in the following ways:

- Schedule the Capture Progress Data process to run daily after team members enter daily progress.
- As required, use the action to capture progress data and refresh the region to see the latest data.

Analyzing Sprint Burndown: Examples

Analyze the sprint burndown to improve the planning of future sprints in Agile product development. The sprint burndown graph captures planned hours from the project plan and actual hours from the progress reported by team members. The following information must be available before you can analyze sprint burndown for your Agile scrum team:

- Project plan with tasks created from backlog items.
- Sprint when the backlog items will be worked on.
- Planned hours for project tasks.
- Actual hours reported by team members on tasks.
- Updated sprint burndown graph with latest data.

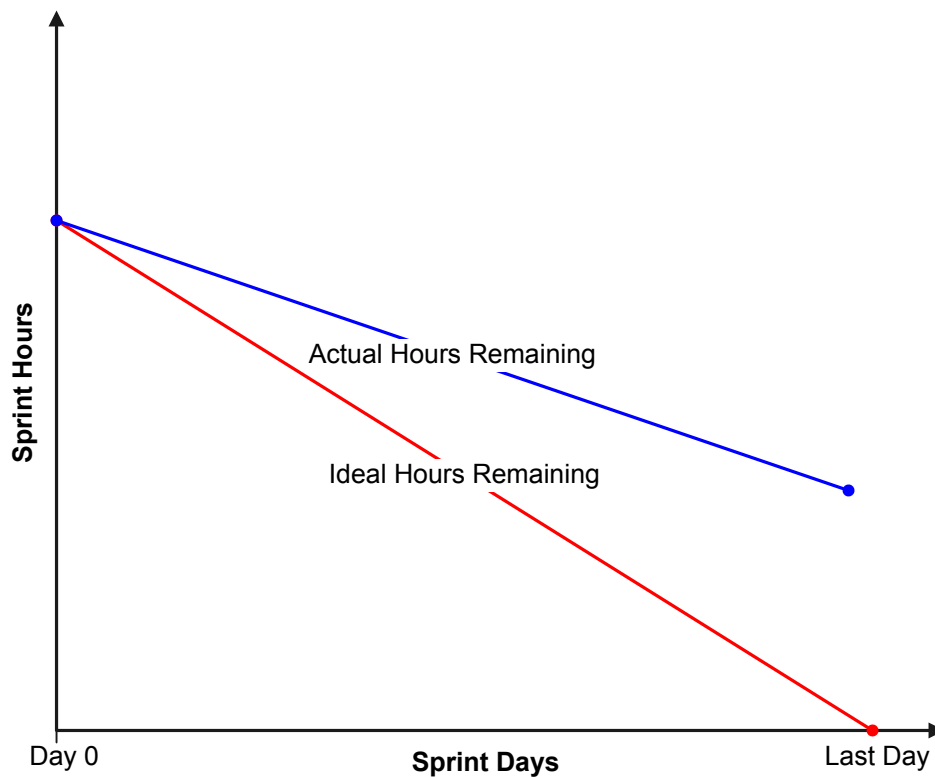
The following example scenarios are based on the story points assigned to backlog items at the start of the sprint.

Actual Hours are Greater Than Ideal Hours

The team consumes more hours on tasks in the sprint than originally planned.

This figure shows that the actual hours remaining line is above the ideal hours remaining line, and the distance between the two lines is increasing. This can indicate that you over estimated the backlog items the team can achieve in a sprint, and some of the backlog items planned for the sprint will not be completed. Based on this, scrum masters and product owners

must move any incomplete backlog items in the current sprint to the next sprint and reprioritize the backlog items at the start of the next sprint.



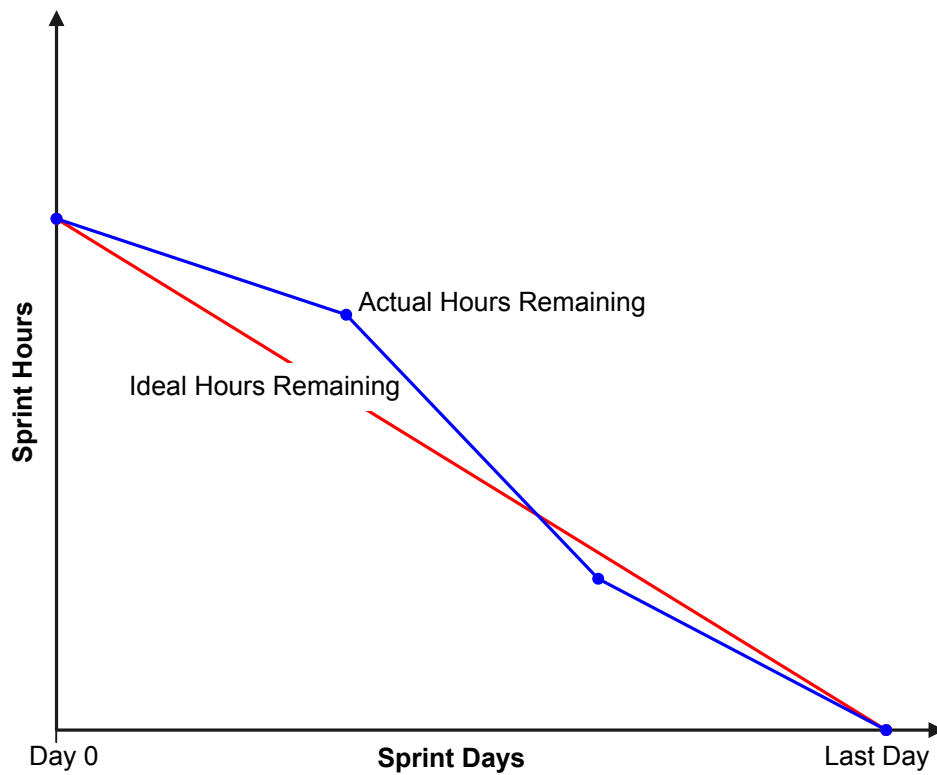
Some possible reasons why the hours consumed is greater than the ideal hours:

- Over estimation of planned backlog items for the sprint based on complexity.
- Unknown issues that took time to resolve.
- Dependencies on deliverables of other teams.

Actual Hours are Ideal

The team consumes the expected number of hours on tasks in the sprint.

This figure shows that the actual hours remaining line overlaps the ideal hours remaining line. This indicates that your planned hours are accurate, so the team is able to complete the planned backlog items in a sprint, and consume the planned hours by the end of the sprint.

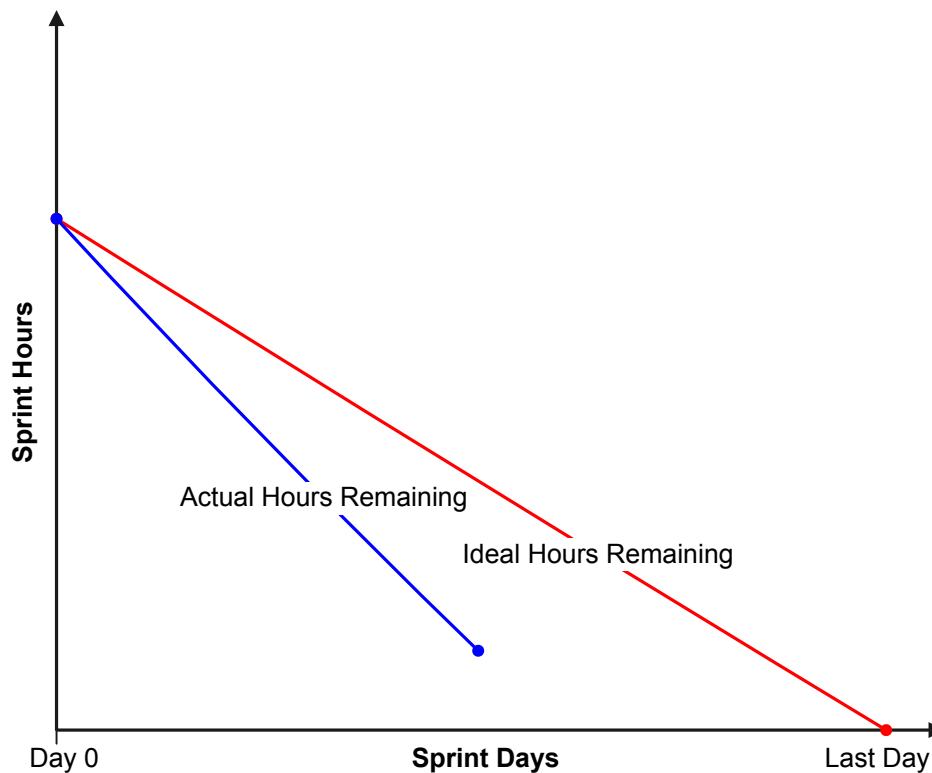


Less variation between and ideal and actual remaining hours indicates that the scrum team is able to accurately assess backlog item complexity and arrive at the number of hours required to complete work in a sprint.

Actual Hours are Less Than Ideal Hours

The team consumes less hours on tasks in the sprint than originally planned.

This figure shows that the actual hours remaining line is below the ideal hours remaining line, and the distance between the two lines is increasing. This helps you predict that the team will complete the planned backlog items for the sprint early and they can work with the product owner to identify the next most important backlog item from the product backlog.



A possible reason why hours consumed are less than ideal is that you under estimated backlog item complexity and planned more time than required to complete work in the sprint.

Sprint Velocity: How It's Calculated

The sprint velocity helps you predict how many story points your team can achieve on an average in sprints in Agile projects. Scrum teams are expected to assign story points to backlog items in the current sprint. The line representing the average story points achieved on the Sprint Velocity graph shows the sprint velocity trend of a project team over sprints in a product release cycle.

Settings That Affect Sprint Velocity

Product owners and scrum masters must ensure that product backlogs, sprints, and story points are available to the scrum team members on the Manage Backlog Items page of the Project Requirements work area. The following information must be available:

- Sprint when the backlog items will be worked on.

- Story point estimate for all backlog items in the current sprint.
- Current status of backlog items.

How Sprint Velocity Is Calculated

The Sprint Velocity graph calculates sprint velocity using the total story points achieved in a completed sprint, divided by the total number of completed sprints.

Sprint velocity = total story points achieved in completed sprints / total number of completed sprints

Example of Sprint Velocity Calculation

The following is an example of how sprint velocity is calculated based on story points achieved during sprints.

Sprint	Story Points Achieved	Sprint Status
Sprint 1	6	Completed
Sprint 2	25	Completed
Sprint 3	16	Completed
Sprint 4	40	Ready

Sprint velocity = 47/3 = 15

This means the product team is able to complete 15 story points on an average in a sprint, so their sprint velocity is 15.

Project Resource Allocation: How It's Calculated

You can monitor resource capacity and work allocated to resources on your projects for the next 13 weeks. Compare the work allocation of your resources with their allocation on other projects to understand why certain resources are overallocated or underallocated. Drill down to modify the allocation percentage for your resources and plan the distribution of work on your projects. Gain visibility into the weekly work allocation of resources compared to their capacity. View resource manager name, project role, allocation hours, allocation percentage, and capacity hours of your project resources.

Settings That Affect Resource Allocation

Values for project assignments and allocation percentage for resources come from the Manage Project Resources page.

You can also set the acceptable threshold percentage range for the workweek thresholds that determine which values are indicated as overallocated, underallocated, or normally allocated. Optionally, select the colors the application uses to indicate allocation.

How Resource Allocation Is Calculated

The application calculates the resource allocation hours based on the capacity hours and allocation percentage.

Calculating Resource Allocation

Calculate resource allocation using the following formula.

$$\text{project allocation hours} = \text{allocation percentage} \times \text{capacity hours}$$

The following example shows the how project allocation for a week is calculated.

Capacity Hours	Allocation Percentage	Project Allocation Hours
40	80	32
40	50	20

Task Assignment Hours: How It's Calculated

Review task assignments and compare task assignment hours to allocated and capacity hours for project resources. Identify the tasks that contribute to over or underallocation of resources assigned to projects. Drill down to identify the tasks on your projects causing resources to be over or underallocated. After identifying the tasks, adjust the resource assignment hours to ensure resources are assigned tasks according to their capacity. View tasks assigned to your resources on other projects and track the other projects resources are assigned.

Settings That Affect Task Assignments Hours

The Project Resources region in the Project Manager Dashboard displays task assignments to resources from the Manage Project Plan page in the Project Management work area.

Use the Manage Workweek Threshold action in the **Project Resources** region in the Project Manager Dashboard to set the acceptable threshold range for resources that are overallocated, underallocated, or allocated according to their capacity. Optionally, select the colors you want to use for indicating allocation of resources.

How Task Assignment Hours Are Calculated

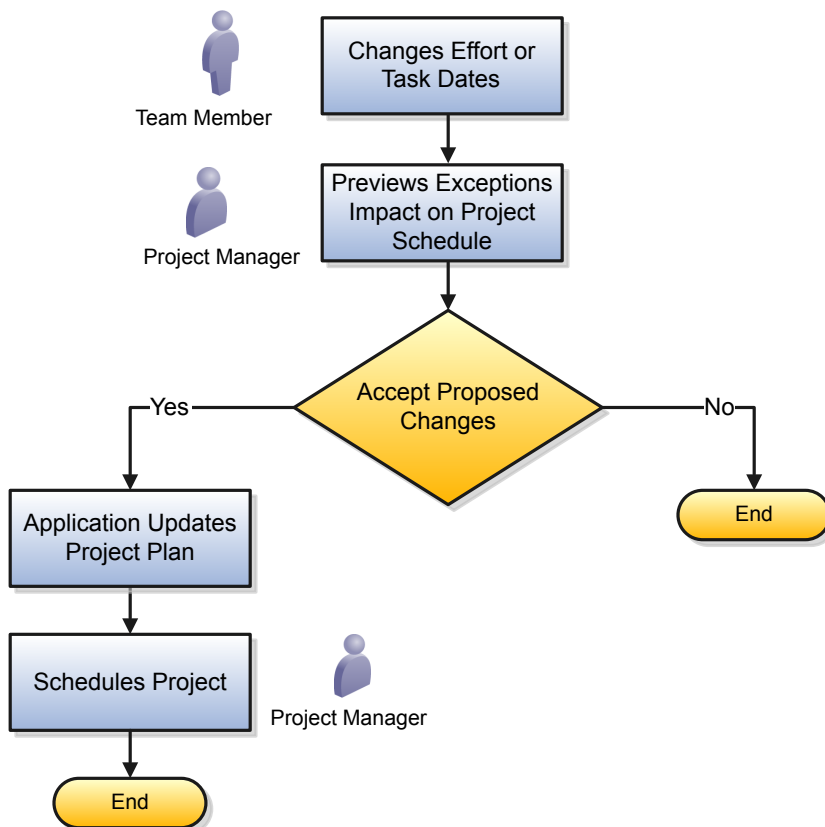
The application rolls up the task assigned hours in the project plan for a resource and displays the weekly tasks assignment hours for a resource. Task assignment hours are the sum of all task hours of a resource in each project. The following example shows the task assignment hours for quality assurance resource George White on the projects Maxwell Software Upgrade and Rudy Corp. Implementation.

Project	Task Assignment	Task Assignment Hours
Maxwell Software Upgrade	Create Test Plan for Upgraded Features	7
	Test Flows	20
	Certify Features	1
Rudy Corp. Implementation	Create Plan to Test Implementation	12
	Prepare Test Scripts	24
	Conduct Implementation Testing	72

The task assignment hours for George White for the Maxwell Software Upgrade project is 28 hours, and for Rudy Corp. Implementation is 108 hours. The Project Resources region in the Project Manager Dashboard calculates George White's weekly task assignment hours based on his capacity, 35 hours a week, and the dates of the project tasks and displays whether he is overallocated or underallocated.


Managing Task Exceptions: Explained

Task exceptions occur when the team member changes the task dates or effort outside the threshold values set during implementation or when the tasks are overdue. The following figure illustrates the life cycle for an exception.



As a project manager, you can view and manage the task exceptions and overdue tasks in your project from the Manage Task Exceptions page. You can:

- View the tasks modified by team members that caused exceptions
- View overdue tasks that caused exceptions
- Accept or decline the proposed changes for individual tasks


 **Note:** The Accept and Decline action icons are enabled only for tasks containing start date delayed, finish date delayed or effort increased exceptions. For the Start date overdue and finish date overdue exceptions, the icons are disabled.

- Preview the impact of accepting exceptions for a single task on the project schedule.
- Preview the total impact of accepting the exceptions for all tasks at once on the project schedule.
- Quickly accept or decline all the exceptions using Accept All or Decline All respectively.

- Filter by exception types or resources.

After accepting the changes, the new task dates or effort appears in the project plan and project manager must schedule the project to view the latest schedule.

Drawing Insight on Project Health and Progress

 **Watch:** This video shows you how to use the Project Management Dashboard to monitor the overall health, progress, and status of your project finances so you can take action to resolve issues.

FAQs for Manage Project Performance

What's the difference between target percent complete and actual percent complete?

Percentage of work that your project team is expected to complete as-of a certain date is the target percent complete.
Percentage of work that your team actually completes as-of a certain date is the actual percent complete.

Why can't I view the project amounts graph?

You can only view the data in table mode when projects you manage use multiple currencies.

How can I view a team member's allocation to my projects?

Use the **Project Resources** region on the Project Manager Dashboard to view the resources allocated to your projects. You can also view the other project allocations of your team members.

What happens if resource rates are missing?

The information that appears on the project allocation and assignment bars is inaccurate. The application does not calculate amounts for tasks that are assigned to resources with no labor cost and bill rates. You must go to the **Manage Project Resources** page and add cost and bill rates for resources in your project.

Where do the project allocation and task assigned amounts come from?

The application calculates project amounts using cost and bill rates that are assigned to project labor resources and expense amounts that are allocated to expense resources. Rolled up task assigned amounts in the Manage Project Plan page appear

in the **Project Amounts** region. You can filter the graph to compare allocated and assigned amounts for labor cost, labor bill amount, expense amount, and the total cost.

Why are resources with 40 hours of allocated work shown as overallocated?

The acceptable threshold you set is less than 100 percent. The application indicates overallocated and underallocated resources based on the acceptable threshold range you set. Verify the acceptable threshold range outside which resources are overallocated or underallocated.

FAQs for Agile Graphs

Why did the ideal remaining hours change in the middle of the sprint?

You or your team member modified, added, or deleted task planned hours due to scope changes.

What happens if I capture progress data?

Use the **Capture Progress Data** action to update the data in the sprint burndown graph. The action captures the latest planned hours and actual hours reported by team members, and calculate the remaining hours. Project managers use this action to capture critical progress data entered after the scheduled process completes. The graph recalculates the ideal and actual hours remaining. You must refresh the region to see the updates.

When's the Capture Progress Data process triggered?

You can schedule the process to run daily. If a team member wants to report progress after the daily capture is taken, you can also run it from the actions menu in the **Sprint Burndown** region.

What's sprint velocity?

Rate at which story points are achieved in sprints. Use sprint velocity to predict how many story points you can achieve in coming sprints.

For example, you observe that your product development team is able to complete on average 20 story points in a sprint. That makes the sprint velocity of your team 20. Assuming that the total backlog story points of your product is 200, you can predict that all product backlog items will be completed in 10 sprints.

Related Topics

- [Sprint Velocity: How It's Calculated](#)

Why can't I see certain sprints on the Sprint Velocity graph?

Sprints that do not have any story points associated with them do not appear on the sprint velocity graph. Such sprints are excluded from sprint velocity calculations.

What's a story point?

Indicates the relative size of a user story based on its complexity. Use story points to measure the effort required to implement a story in an Agile development process.

You consider story points to be achieved when backlog items for your product are complete. Story points are assigned using a number series that reflect the relative size of one backlog item as compared to another. Relative sizing and increasing numbers are used to indicate complexity of a backlog item. A commonly used number series in the Agile development process is 0, 1/2, 1, 2, 3, 5, 8, 13, 20, 40, 100. You must assign a lower story point number to a relatively simple backlog item when compared to a complex backlog item. For example, you create two product development backlog items and estimate the number of story points needed to complete each item. The table shows two product development backlog items and the story points assigned to each backlog item. Backlog Item 1 is simpler and requires only 2 story points, but backlog item 2 is complex and requires 13 story points.

Requirement Number	Requirement Name	Story Points
1	Change default sort order of project list table	2
2	Create Project Expenses region	13

Backlog items with lower story point numbers assigned are expected to be completed faster than backlog items with greater number of story points.

Related Topics

- [Sprint Velocity: How It's Calculated](#)

What's total backlog story point?

The total number of story points that must be completed for the completion of product development.

For example, your product has 10 backlog items. You assign story points to each backlog item based on the complexity. The sum of all the story points on your product backlog gives you the total number of story points that your team must achieve to complete the development of the product.

10 Analyze Project Management Performance

Enterprise Project Structures: Explained

Project application administrators can group projects in the enterprise for purposes of reporting to project executives. They can assign project executives three types of access to project hierarchy elements, such as owners, delegates, and viewers. Use the Manage Enterprise Project Structure task in the Setup and Maintenance work area to assign participants to an EPS element.

Project Role	EPS Participant Role	Add, Delete, or Edit Elements	Assign or Remove Participants
Project application administrator	Not available	Yes	Yes
Project executive	Owner	No access to page	No access to page
Project executive	Delegate	No access to page	No access to page
Project executive	Viewer	No access to page	No access to page

Project executives can use the Project Hierarchy Dashboard page to view data and assign owners, delegates, and participants.

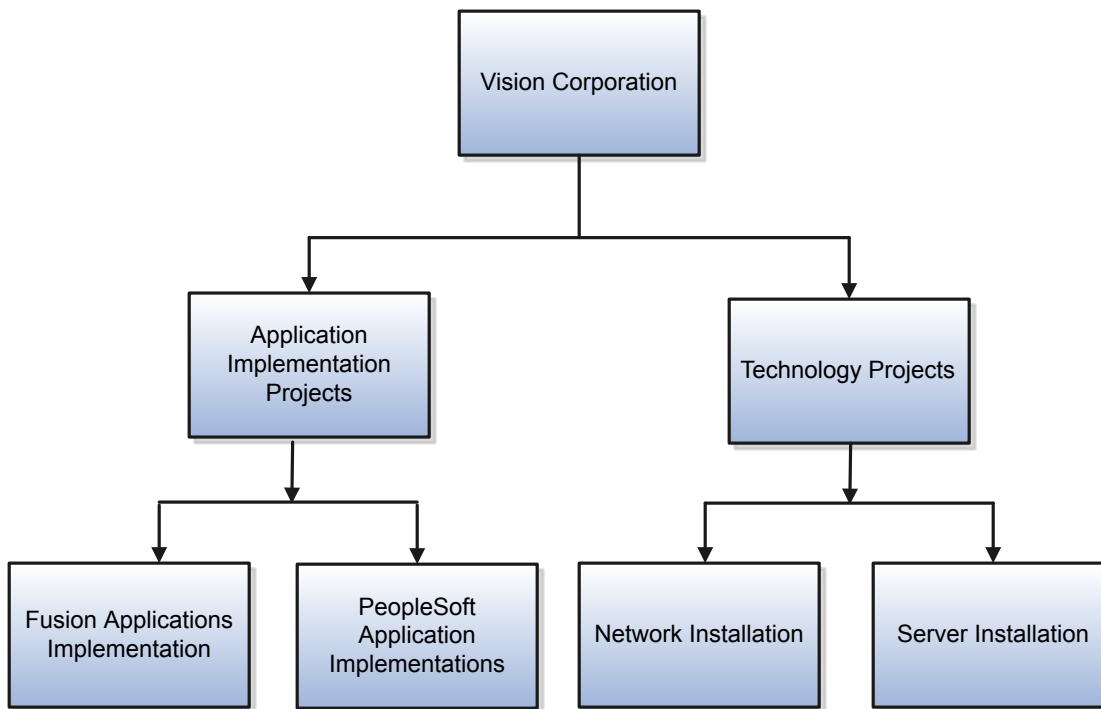
Project Role	EPS Participant Role	Add, Delete, or Edit Elements	Assign or Remove Participants
Project application administrator	Not available	No access to page	No access to page
Project executive	Owner	No	Yes
Project executive	Delegate	No	Yes
Project executive	Viewer	No	No

Each EPS element can have one directly assigned owner, one directly assigned delegate, and as many directly assigned viewers as needed. When you directly assign a person as an owner, delegate, or viewer to a parent EPS element, the person automatically inherits the same role for each child EPS element.

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

- Group application implementation projects by Oracle Fusion and PeopleSoft.

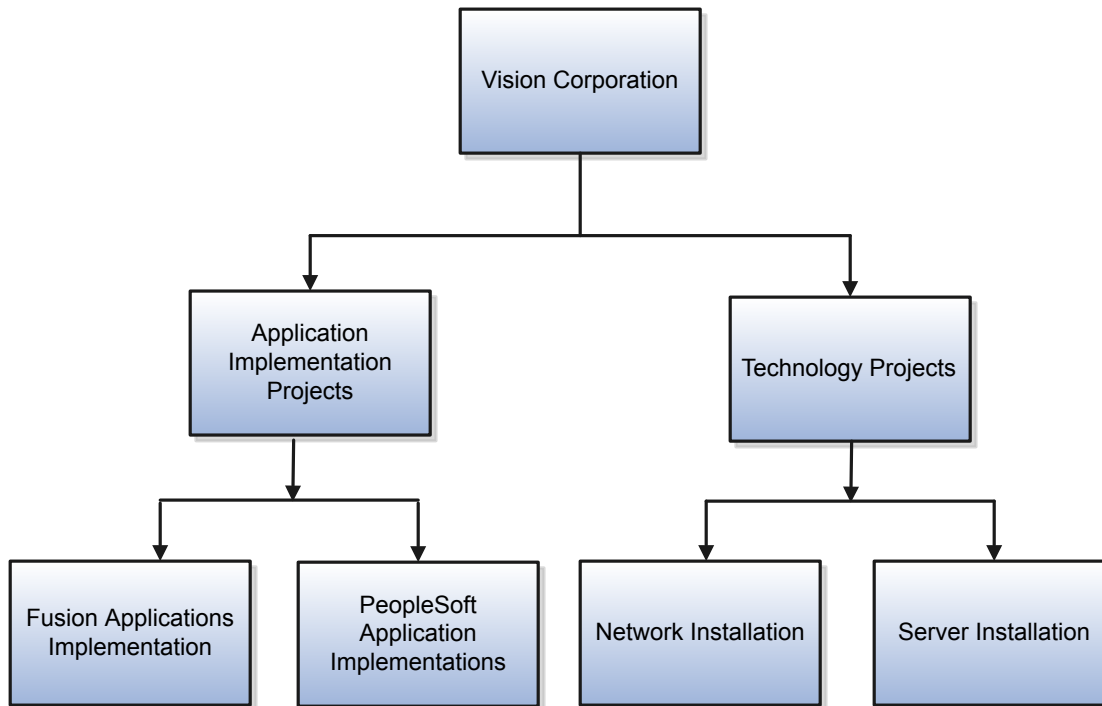
- Group technology projects by network and server installation.



Project Labor Demand: How It's Calculated

Project executives want to track the labor demand in projects in their organization. The Project Hierarchy Viewer provides project executives a hierarchical view of the enterprise project structure (EPS) along with the labor demand in terms of full-time equivalent (FTE). You can view labor demand if you only have the Project Execution Management offering enabled.


The following figure represents an example of the project hierarchy of Vision Corporation. Project executives of Vision Corporation want to view the labor demand for application implementation projects and technology projects.



Settings That Affect Project Labor Demand

Project application administrators must do the following to set up how project labor demand is calculated:

1. Organize projects into hierarchical groups on the Manage Enterprise Project Structure page.
2. Change the quarterly FTE hours for the organization on the Define Project Management Implementation Options page, if different from 520 hours.

 **Note:** You can choose to view labor demand annually instead of quarterly. The Project Hierarchy Viewer uses the current date to determine which year or quarter to display.

How Project Labor Demand Is Calculated

The Project Hierarchy Viewer calculates project labor demand in the following manner:

- Spreads the allocation hours from the Manage Project Resources page evenly over the days that the resources are allocated to the project.
- Divides the quarterly project allocation hours by the quarterly FTE hours to get the labor demand.
- Rolls up the quarterly and annual labor demand up the hierarchy.

Example of How Quarterly Project Labor Demand Is Calculated

A project manager working for the entire quarter is 1 FTE. If the project manager works half-time for the quarter, or full-time for half of the quarter, the FTE is 0.5 FTE. This example assumes the quarterly FTE hours is 520. The application uses the following formula to calculate labor demand by project role:

$$\text{Labor Demand FTE} = \text{quarterly allocation hours} / \text{quarterly FTE hours}$$

Role	Quantity	Allocation Percentage	Allocation Range	Quarterly Allocation Hours	Labor Demand (FTE)
Project manager (half-time)	1	50	Apr 1 to Jun 30	260	0.5
Quality analyst	2	100	Apr 1 to Jun 30	1040	2.00
Database administrator	1	100	Apr 1 to May 15	260	0.5
All Roles	4	-	-	1560	3.0

Related Topics

- [Can I change the full time equivalent hours for resources in my organization?](#)

FAQs for Analyze Project Management Performance

How can I update labor demand information for projects on the Project Hierarchy Viewer?

Use the **Update EPS Data** action from the Actions panel tab on the Enterprise Project Structures dashboard or the **Scheduled Processes** page.

11 Manage Project Issues

Project Issues: Explained

Use project issues to record, manage, and resolve concerns related to your work. For example, log an issue for incomplete customer requirements data to start a project. An action item could be to schedule a meeting with the customer and list missing data requirements.

To manage issues, project managers and team members can do the following:

- Create issues and assign actions required to resolve them.
- Search for issues on the **Manage Issues** page. As a team member or issue owner, search for and view issue details.
- As a project manager, view issue analytics.
- Close issues after resolving action items.

 **Note:** You must be a project enterprise labor resource to create, update, or own issues or action items.

Creating and Managing Issues

The following table describes the important attributes that you enter and update when managing issues.

Attribute	Description
Issue type	Classify and report the issues. You can create custom issue types or use predefined values.
Priority	Assign a high, medium, or low priority depending on the anticipated impact on work.
Status	Specify the status of an issue. Valid issue statuses are New, Working, and Closed.
Action items	<ul style="list-style-type: none"> • Create action items for issues in New or In progress statuses and assign those to project team members or other interested parties. • All action items associated with an issue must be complete before closing the issue.

Viewing Issues

The following table lists the issues that you can view on the Project Manager and Team Member dashboards.

Dashboard	Issues Available
Project Manager	<ul style="list-style-type: none"> • All issues in projects managed by the project manager. • Issues owned or created by the project manager.

Dashboard	Issues Available
	<ul style="list-style-type: none"> Issues the project manager has action items on.
Team Member	Issues that are owned or created by the team member, on which the team member has action items.

Project Issue Notifications: Explained

Send notifications when creating, updating, closing, or reopening issues and issue action items.

The aspects of project issue notifications described here are:

- Notification options
- Actions requiring notification


Notification Options

Use the e-mail notification settings that are available on the My Profile region on the Team Member and Project Manager dashboards to determine the notifications you receive. Set notifications separately for projects you work on and projects you manage.

Actions Requiring Notification

The following table lists the recipients of the notifications based on action.


Action	Who Receives the Notification
Creating or updating issues	<ul style="list-style-type: none"> Issue owner Project manager, if the issue is associated with a project Issue creator, if the issue is reassigned Previous owner, if ownership for the issue is changed
Closing issues	<ul style="list-style-type: none"> Issue owner Project manager, if the issue is associated with a project Issue creator, if the issue is reassigned
Reopening issues	<ul style="list-style-type: none"> Issue owner Project manager, if the issue is associated with a project Issue creator, if the issue is reassigned
Creating or updating action items	<ul style="list-style-type: none"> Action item owner Project manager, if the issue is associated with a project
Closing action items	<ul style="list-style-type: none"> Action item owner Issue owner Project manager, if the issue is associated with a project

 **Note:** The project manager receives a daily digest of all the issues for the projects he manages depending on the notification settings.

FAQs for Manage Project Issues

How can I set up Oracle Social Network integration for project issues?

Use the Manage Oracle Social Network Objects for Project Execution Management setup task in the Setup and Maintenance work area.

 **Tip:** Do not select **Issue ID** and **UI Summary** because they are internal attributes. The **Summary** attribute displays the issue summary information.

What happens if I filter issues by other projects?

The filter displays issues for projects, to which users do not have direct access but has a role in the issue. The user either is the issue owner or has an action item for the issue.

Can I reopen a closed issue?

Yes. The default status of reopened issues is In Progress. Optionally, change the status and enter the reason for reopening the issue.

What's an issue action item?

A task assigned to a person that must be performed in a given time frame to resolve an issue.

What's the difference between an action item, task, issue, and deliverable?

Tasks are activities that are assigned to a resource for project completion.

Action items are tasks that are defined for issues that facilitates issue resolution.

Issues are concerns, problems, or outstanding questions that prevents a user from completing a task.

Deliverables are the output that must be produced to complete a task or project.

How do I close an issue?

You must close all related action items before you close an issue. Also, you must enter date and reason for closing an issue.

What happens when I duplicate an issue?

All information including action items is duplicated. The status of the issue is set to New. The status of associated action items is set to Not Started.

Who can I assign issues or action items to?

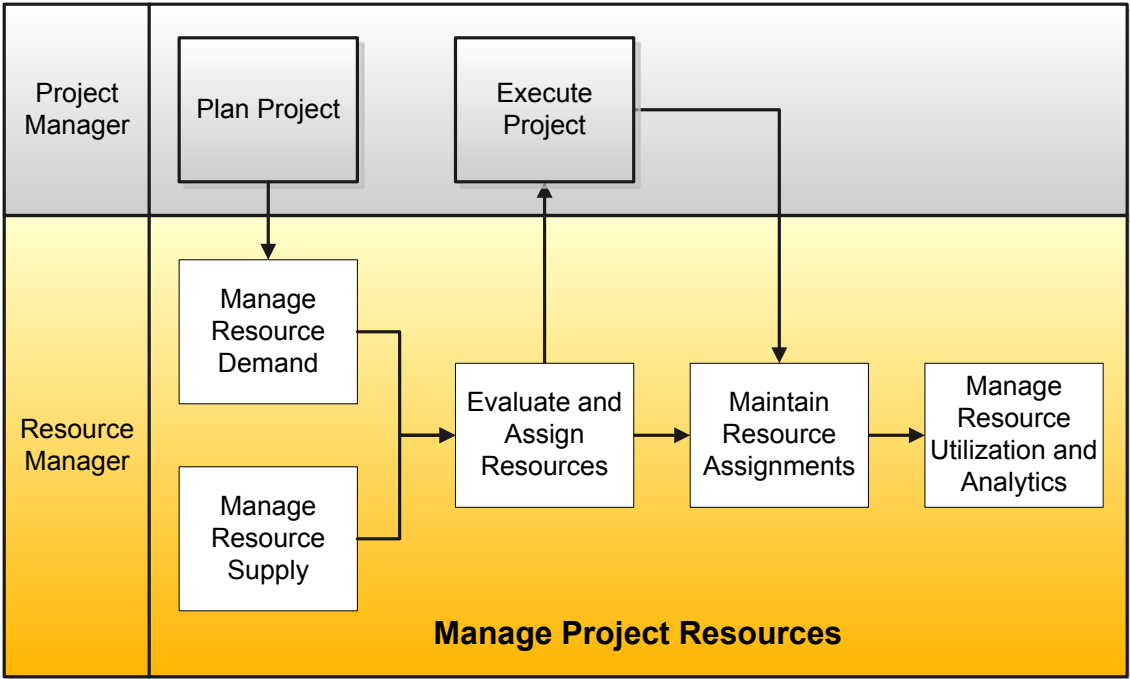
You can assign issues or action items to any project enterprise labor resource.

12 Manage Resource Supply

Manage Project Resources: Overview

Resource managers use the Manage Project Resources business process to manage the availability and staffing of project enterprise labor resources in a global environment, fulfill project resource requests, and monitor resource utilization. The Manage Project Resources business process in Oracle Fusion Project Resource Management is used in conjunction with the Plan Project and Execute Project business processes in Oracle Fusion Project Management.

The following diagram illustrates the flow of business activities in the Manage Project Resources business process.



The following table provides a high-level summary of the tasks in each activity in the Manage Project Resources business process.

Activity	Summary of Tasks
Manage Resource Demand	Submit requests for resources to work on project assignments. Specify request details including the requested dates, hours per day, qualifications and proficiencies, keywords, and the project role. Enter target cost and bill rates to compare to the rates of resources that you evaluate for a project resource request. Specify a resource for the resource manager to consider for an assignment. Track the dates when a request is submitted, a resource is proposed to fulfill the request, and the resource is approved. Automatically notify the resource manager of open project resource requests. Cancel and withdraw project resource requests. Monitor open project resource requests to ensure that the requests are fulfilled in a timely manner. Create project resource requests from external applications.

Activity	Summary of Tasks
Manage Resource Supply	Establish a supply of project enterprise labor resources and manage the availability and staffing of the resources. Maintain key resource information for each resource, including the resource calendar, cost and bill rates, resume, and resource pool membership.
Evaluate and Assign Resources	Receive open project resource requests and find resources to assign to projects. Search for resources from resource pools to fulfill the requests. Evaluate the suitability of resources to fulfill a request based on how each resource meets the requested qualifications and proficiencies. Evaluate the available capacity of resources to fulfill a request over the requested date range. Filter the results based on qualifications, available capacity, location, project role, and travel preferences. Compare a selected subset of resources in detail. Review project assignments and nonproject events for resources. Add prospective candidates to a shortlist. Modify search criteria and review results. Propose a resource to fulfill a request and automatically notify the project manager to review the resource for approval. Directly assign a resource to a project without evaluating other resources.
Maintain Resource Assignments	Review assignments for resources and projects. Add descriptive assignment information. Cancel project assignments. Change project assignment dates. Submit project assignment cancellations and date changes for review and approval to the project manager.
Manage Resource Utilization and Analytics	Navigate the resource pool hierarchy to view summarized utilization information by resource pool. Drill down to review detailed utilization information for a resource pool and pool members. Compare projected and target utilization percentages over a selected display range. Analyze the details about resource project assignments and nonproject events. Import resource actual hours and compare actual and target utilization percentages over a selected display range. Track resources who are currently unassigned or have assignments that end soon. Review open project resource requests. Create reports to analyze resource supply, demand, and assignments.


Navigate to the **Project Resources** work area to manage resource supply and demand, evaluate and assign resources, and maintain resource assignments. Navigate to the **Resource Manager Dashboard** to manage resource utilization and analytics.

Project Resource Search Index: How It's Maintained

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

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

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

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

How the Project Resource Search Index Is Maintained


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

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

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

Indexing Resumes

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

 **Note:** The process creates an index of resume text in a File attachment type only.

Frequency of Search Index Updates

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

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

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

Oracle Text Retrieval Technology

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

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

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

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

Related Topics

- Resource Qualification Score: How It's Calculated

FAQs for Manage Resource Supply

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

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

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

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

Who can be a member of a resource pool?

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

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

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

How can I update my profile photo?

Team members can click **Edit My Profile** in the My Profile region on the Team Member Dashboard in Oracle Fusion Project Management. Then click the current profile photo to open the Upload Photo window and browse for a new photo.

Project application administrators can update any profile photo when they create or edit a labor resource on the Manage Project Enterprise Resources page.

How can I attach a resume to my resource profile?

Team members can click **Edit My Profile** in the My Profile region on the Team Member Dashboard in Oracle Fusion Project Management. Then click the **Manage Attachments** icon to open the Attachments window to add or update a resume.

Project application administrators can add a resume when they create or edit a labor resource on the Manage Project Enterprise Resources page.

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

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

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

13 Manage Resource Demand


Import Project Resource Requests Process

The Import Project Resource Requests process creates project resource requests based on data from third-party applications that you load into the Project Resource Requests Interface tables (PJR_RES_REQ_INTERFACE and PJR_RES_REQ_DETAILS_INTERFACE).

Once in the interface tables, the request details are validated and processed by the Import Project Resource Requests process and any exceptions are reported in the output of that process.

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

- Instructions and CSV Generation: Table-specific instructions, guidelines, formatted spreadsheets, and recommendations for preparing the data file for upload.
- PJR_RES_REQ_INTERFACE: Worksheet columns that represent table fields for requested dates, project, calendar, project role, and rates, details about the resource, requester, and staffing owner, and additional remarks.
- PJR_RES_REQ_DETAILS_INTERFACE: Worksheet columns that represent table fields for project resource request qualification and proficiency data.

 **Note:** The qualifications and proficiencies can be in addition to, or instead of, the project role default qualifications.

After you prepare the data in the Project Resource Request Interface Excel template, click the **Generate CSV File** button in the template to create worksheets to load to the interface tables. Optionally you can bypass the Excel template and manually create CSV files.

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

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

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

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

Parameters - Load Interface File for Import

Import Process

Select Import Project Resource Requests.

Data File

Select the file that contains project resource request data to load.

Parameters - Import Project Resource Requests Process

Project Resource Requests to Import

Specify whether the import process imports all requests, requests with projects, or requests without projects. The default value is All Requests.

Project

Select the project for which a resource is requested.

Request Staffing Owner

Select the project enterprise labor resource who is responsible for finding a resource to fulfill the request.

Import Project Resource Requests Execution Report

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

Review the error message details for each project resource request and fix the issues. Load the data that you fixed in the CSV file into the interface table again and resubmit the Import Project Resource Requests process.

Related Topics

- [External Data Integration Services for Oracle Cloud: Overview](#)
- [File Based Data Import for Oracle Project Portfolio Management Cloud](#)

FAQs for Manage Resource Demand

Can a project manager specify a resource for a project resource request?

Yes. You can specify a resource for consideration by the resource manager when you create a project resource request on the Manage Project Resources page or Manage Project Resource Requests page.

Can I withdraw a project resource request to submit at a later date?

A project manager can withdraw project resource requests that are in Open status. When you withdraw a request, the application changes the request status to Draft. You can enter comments about the withdrawal in the Special Instructions field on the project resource request.

Project resource requests that you withdraw aren't included in projected utilization calculations.

Are project resource request dates affected if I change the project on a request?

No. When you change the project on an open project resource request, the application doesn't automatically update the request start and finish dates. You can adjust the request dates to match the new project dates.

What happens if I cancel a project resource request?

When a project manager or resource manager cancels a project resource request, the application:

- Prompts for a cancellation reason
- Records the user name with the cancellation date and reason
- Changes the request status to Canceled
- Retains the request for viewing

If you select more than one project resource request to cancel, the cancellation applies to all selected requests. You can't reopen a canceled request.

What happens if I duplicate a project resource request?

The application copies the source project resource request information to a new request except for the:

- Request name
- Assigned or named resource
- Resources on the shortlist
- Staffing remarks
- Attachments

The new request is created in Draft status.

When are project resource requests that project managers create visible to resource managers?

A project manager must submit a project resource request for the request to be visible in the Project Resources work area. Requests that you create in the Project Management work area that are in Draft status aren't visible in the Project Resources work area.

Can I edit, cancel, or withdraw a resource request that I created for a planned resource?

Yes. Click **View Resource Request Details** on the Manage Project Resources page to open the request, or select the request from the Manage Project Resource Requests page.

What happens to a resource on a task if I replace the resource on the project with a different resource?

If the existing resource has only one assignment for the project on the Manage Project Resources page, then the new assigned resource replaces the existing resource on all task assignments for the project.

If the existing resource has multiple assignments on a project, and on one of the assignments the resource is replaced by a different resource, then the new resource doesn't replace the existing resource on any tasks.

What happens if a resource is no longer eligible to fulfill project resource requests?

Resource pool owners receive a notification when resources in their pools are no longer eligible to fulfill project resource requests. The pool owner, who is typically the resource manager, may need to take further action after reviewing the notification.

For example, if a resource is currently on a project assignment, but is no longer eligible for future assignments, then the resource manager may need to adjust the finish date of the resource's current assignment. The resource may agree to complete the assignment as scheduled, or the assignment might end immediately if the resource left the company. The resource manager and project manager typically work together in these circumstances to determine the best course of action for the duration of the assignment.

14 Evaluate and Assign Resources

Prerequisites for Searching for Suitable Resources: Explained

The application uses the following objects to evaluate the suitability of resources to fulfill project resource requests:

- Project and Resource Calendars
- Managed Project Enterprise Labor Resources
- Resource Qualifications
- Resource Pool Memberships
- Resource Search Index

Project and Resource Calendars

The application uses the project calendar and resource calendar to calculate the available capacity of a resource for a new project assignment.

Administrators can set up calendars that include:

- Project shifts
- Workday patterns
- Schedules
- Schedule exceptions

Alternatively, the application provides a predefined calendar with eight hours per day and five days per week with no holidays.

The application uses project calendars to determine:

- Standard working days
- Total number of working hours per day
- Schedule exceptions

The application uses resource calendars to determine the number of available working hours, after assignments and nonproject events.

Managed Project Enterprise Labor Resources

Only active managed project enterprise labor resources are eligible to fulfill project resource requests. To create a managed project enterprise labor resource, administrators enable the option to manage the resource's availability and staffing in Oracle Fusion Project Resource Management. Administrators can create resources individually on the Manage Project Enterprise Resources page or in a batch by using an import or maintenance process or service.

Resource Qualifications

One measure of a resource's suitability for a project assignment is whether the resource has the qualifications and proficiency levels that are specified on a project resource request. Administrators set up qualifications and proficiency levels when they set up the workforce in Oracle Fusion HCM.

Resource Pool Memberships

All managed project enterprise labor resources are members of a resource pool. Resource managers select one or more resource pools to focus a search for resources to fulfill a project resource request. Administrators set up resource pools based on logical groups of resources, such as by location, operation, or functional area.

The predefined resource pools are:

- **All Resources:** Contains all resource pools and resources.
- **Resources with No Pool Membership:** Contains resources that don't belong to a resource pool.
- **Inactive Resource Pool Memberships:** Contains time periods for schedulable resources when a resource isn't available for staffing.

Resource Search Index


The Maintain Project Resource Search Index job set maintains these search index objects:

- Project resource qualifications
- Qualification proficiencies
- Resume content
- Search filters

The application uses the index to calculate qualification scores and filter counts during the search for resources, and to display resource details.

Administrators must run the Maintain Project Resource Search Index job set often enough to account for:

- Changes in resource qualifications, proficiencies, and resumes
- Changes in a resource's eligibility to fulfill project resource requests
- New or terminated resources

 **Tip:** If a project resource request doesn't contain qualifications or keywords, then resource managers can search for and evaluate resources to fulfill the request based on resource availability, even if the search index isn't current or available.

Related Topics

- [Project and Resource Calendars: Explained](#)
- [Project Resource Search Index: How It's Maintained](#)

Resource Schedule: Explained

Oracle Fusion Project Resource Management provides a schedule to manage the project and nonproject commitments for each managed project enterprise labor resource. Project assignments are added to the schedule when a resource is assigned to a project in a Confirmed or Reserved status. Nonproject events are added to the schedule when you create training, paid time off, or other team member events in Oracle Fusion Project Management.

The resource schedule contains:

- Confirmed and reserved resource assignments
- Nonproject events such as training, paid time off, and other team member events

Resource managers use the resource schedule to determine if the resource has scheduling conflicts during the date range of a project resource request. The resource schedule is used to determine the available capacity score when you search and evaluate resources to fulfill project resource requests.

You can view the resource schedule on these pages:

- Search and Evaluate Resources page, Available Capacity view
- Search and Evaluate Resources page, Top Resources view
- Compare Resources page, Resource Schedule section
- Resource Details page, Resource Schedule section

You can adjust the calendar time scale and scroll to 1 month prior to the requested start date and 3 months after the requested finish date. This helps you determine whether a resource is available in the expanded time frame.

Weeks in the resource schedule begin on Sunday and end on Saturday.

Resource Card

Another view of a resource's schedule is on the resource card. The resource card shows a resource's weekly available capacity for 5 weeks beginning with the first week of a project resource request. Weekly available capacity is the total number of hours that the resource is available for the week divided by the number of hours requested for that week.

The weekly available capacity is color-coded on the resource card as follows:

- Green indicates that the resource has a total available capacity for 80% or more for the week.
- Yellow indicates that the resource is available between 50% and 79% of the week.
- Red indicates that the resource is available less than 50% of the week.

You can view the resource card on the Search and Evaluate Resources page, Resource Cards view.

Project Resource Request Statuses: Explained

Statuses track the lifecycle of a project resource request and restrict available actions.

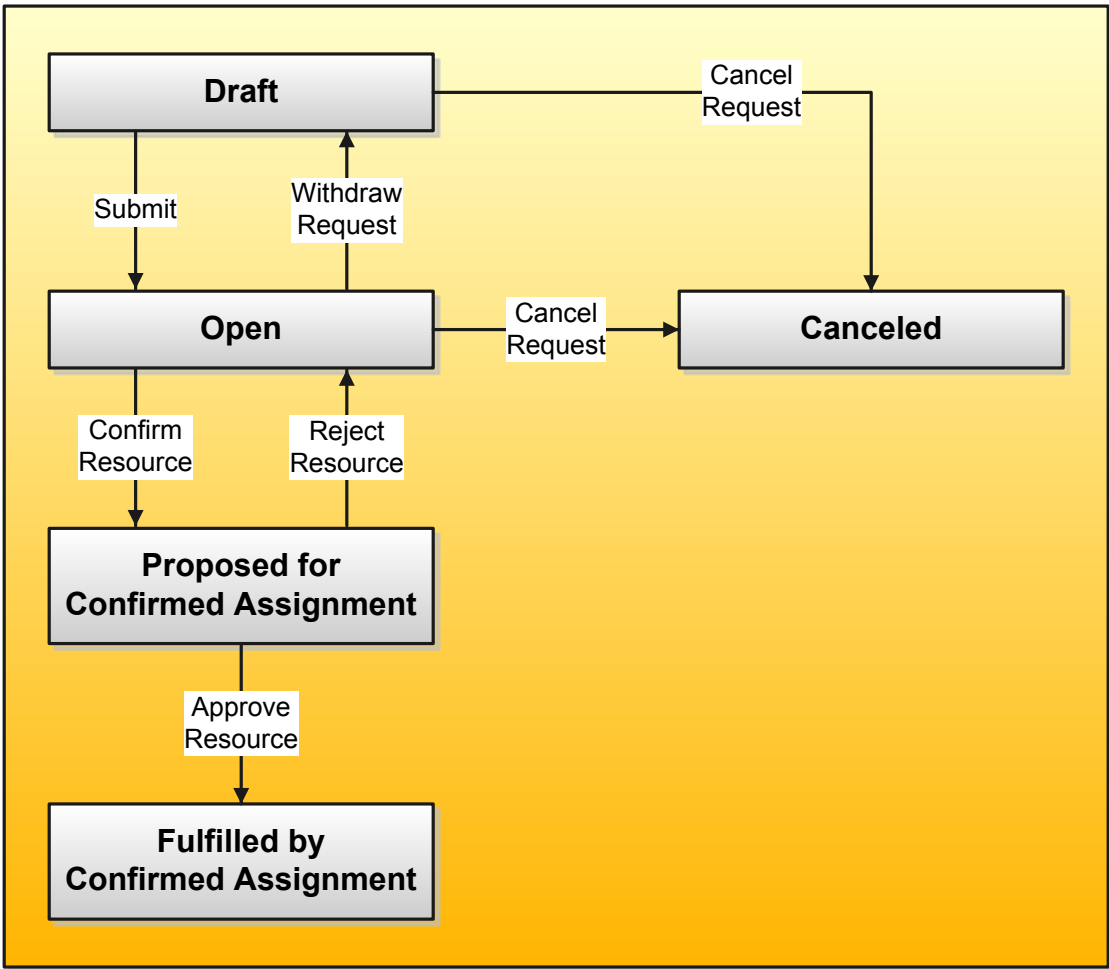
The project resource request type determines the available statuses for a request. The project resource request types are:

- New Resource

- Assignment Schedule Change
- Assignment Cancellation


New Resource

The following figure shows an example of a project resource request status progress for a confirmed assignment of a New Resource request type.




This table describes the statuses for a project resource request with a **New Resource** request type, and lists the permitted actions for each status.

Request Status	Description	Available Actions
Draft	The request status is Draft when a requester: <ul style="list-style-type: none">• Creates a project resource request with an initial status of Draft	<ul style="list-style-type: none">• Edit request• Submit request• Duplicate request• Delete request• Cancel request

Request Status	Description	Available Actions
	<ul style="list-style-type: none"> Withdraws the request 	
Open	<p>The request status is Open when a requester:</p> <ul style="list-style-type: none"> Submits the request for fulfillment Rejects a proposed resource for the request <p>An Open status indicates that the request is ready for the resource manager to search and evaluate resources to fulfill the request.</p>	<ul style="list-style-type: none"> Edit request Request a specific resource Search and evaluate resources Propose resource for a confirmed or reserved assignment Submit and approve a resource for a confirmed or reserved assignment <p> Note: A resource manager must have the Approve Project Resource for Project Assignment privilege to perform this action.</p> <ul style="list-style-type: none"> Delete request Cancel request Withdraw request Duplicate request
<ul style="list-style-type: none"> Proposed for Confirmed Assignment Proposed for Reserved Assignment 	<p>The request status is Proposed for Confirmed Assignment or Proposed for Reserved Assignment when the resource manager submits a resource for approval to fulfill the request.</p>	<ul style="list-style-type: none"> Approve resource Reject resource Duplicate request
<ul style="list-style-type: none"> Fulfilled by Confirmed Assignment Fulfilled by Reserved Assignment 	<p>The request status is Fulfilled by Confirmed Assignment or Fulfilled by Reserved Assignment when:</p> <ul style="list-style-type: none"> The project manager approves a resource for the assignment The resource manager submits and approves a resource for the assignment 	<p>Duplicate request</p>
Canceled	<p>The request status is Canceled when the project manager or resource manager cancels the request.</p>	<ul style="list-style-type: none"> Duplicate request Delete request

Assignment Schedule Change or Assignment Cancellation

When you initiate an assignment schedule change or cancellation, the application creates a project resource request to track the change. The following table describes the statuses for a project resource request with a request type of either **Assignment Schedule Change** or **Assignment Cancellation**, and lists the permitted actions for each status.

Request Status	Description	Available Actions
Pending Adjustment	<p>The request status is Pending Adjustment when:</p> <ul style="list-style-type: none"> The resource manager initiates an assignment schedule change or cancellation in Oracle Fusion Project Resource Management The project manager initiates an assignment date change in Oracle Fusion Project Management 	<ul style="list-style-type: none"> Approve adjustment Reject adjustment Edit adjustment comments <p> Note: The action to cancel an adjustment is on the assignment.</p>
Approved Adjustment	<p>The request status is Approved Adjustment when:</p> <ul style="list-style-type: none"> The project manager approves a request that's in a Pending Adjustment status The project manager initiates the assignment cancellation in Oracle Fusion Project Management The resource manager approves an assignment schedule change that a project manager initiated 	None
Canceled Adjustment	<p>The request status is Canceled Adjustment when the project manager or resource manager cancels the assignment adjustment.</p>	None
Rejected Adjustment	<p>The request status is Rejected Adjustment when the project manager or resource manager rejects the assignment adjustment.</p>	None

You can't delete, duplicate, or cancel project resource requests with a request type of **Assignment Schedule Change** or **Assignment Cancellation**.

Project Resource Management Workflow Notifications: Explained

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

The aspects of project resource management notifications include:

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

Actions That Prompt Notifications


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

Action Performed By	Action	Recipient	Required Action for Recipient
Project resource requester	Submit project resource request for fulfillment	Staffing owner	Information only
	Approve or reject proposed resource for assignment		Approve or reject assignment schedule change (for submitted assignment schedule changes)
	Submit assignment schedule change		
Project resource requester	Approve resource for assignment	Resource	Information only
	Adjust assignment schedule or cancel assignment		
Staffing owner	Propose resource to fulfill assignment	Project resource requester	Approve or reject the proposed resource, assignment schedule change, and assignment cancellation, by using any of these methods: <ul style="list-style-type: none"> • Approve or Reject buttons in the notification in the Worklist: Notifications and Approvals section • Approve or Reject links in the e-mail notification • Actions menu on the project resource request
	Submit assignment schedule change		
	Submit assignment cancellation		
Administrator	Deselect the Manage Resource Availability and Staffing option in the resource definition	Resource pool owner	Information only
Maintain Project Enterprise Labor Resource process		Project managers for projects where the resource is a team member	
Administrator	Enter a To Date in the resource definition to set a date when the resource is no longer available for staffing	Project managers for projects where the resource is a team member	Information only
Maintain Project Enterprise Labor Resource process			

Notification Settings

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

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

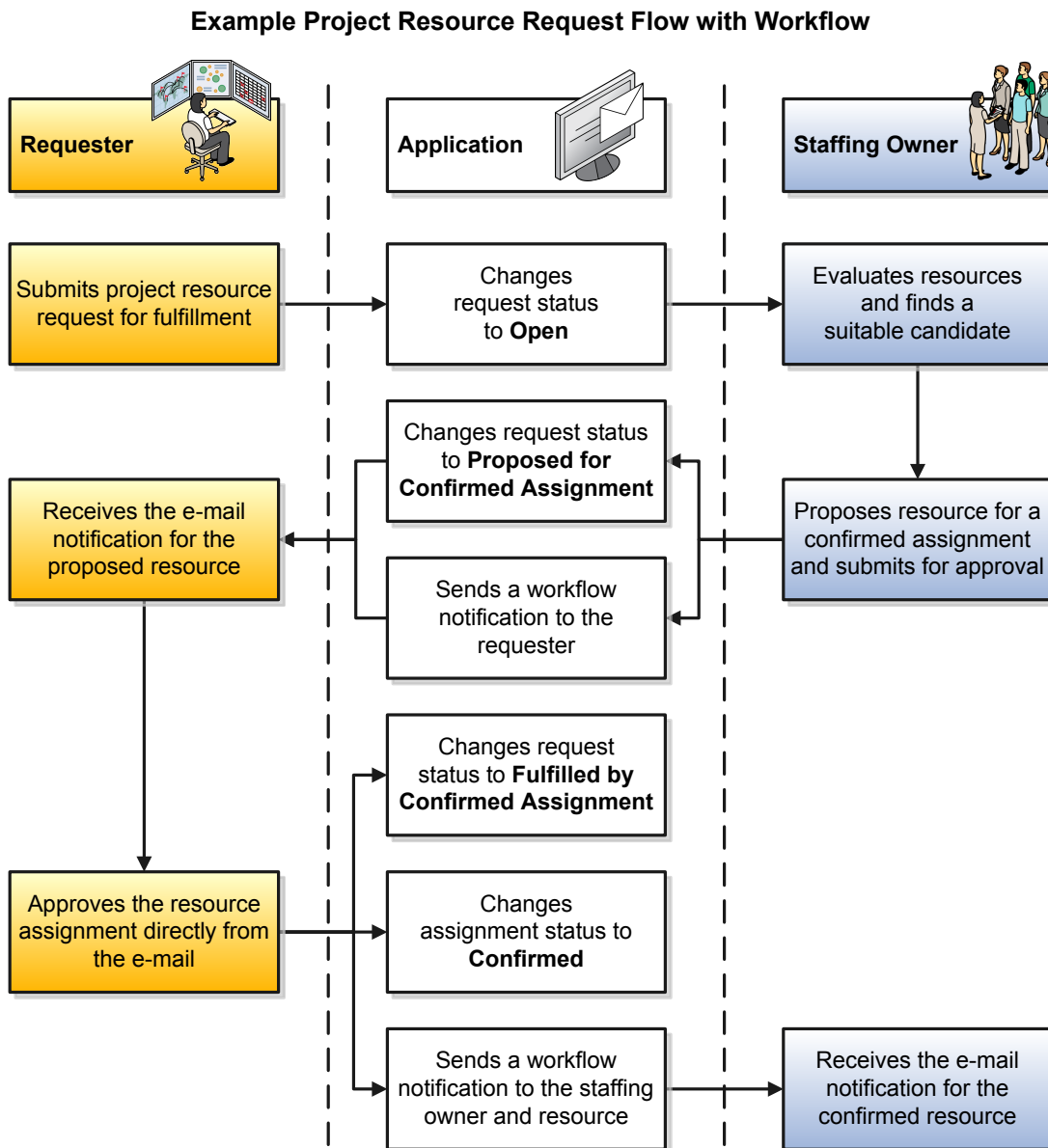
 **Tip:** If you don't enable this workflow implementation option, the requester can still approve or reject the resource on the project resource request.

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

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

Workflow Notification Example

The following figure shows an example project resource request flow that uses workflow notifications.



In this example:

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

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

Related Topics

- [Configurable Resource Management Approval Workflow Rules: Explained](#)

Project Enterprise Labor Resource Cost and Bill Rates: Explained

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

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

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

Defining Resource Rates

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

Resource rates are optional.

The resource rate types are:

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


Units of work are stated in hours.

Comparing Rates when Evaluating Resources

A project resource request can contain the following resource rates:

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

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

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

Populating Project Assignment Cost and Bill Rates

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

The following table describes the methods of populating cost and bill rates on project assignments.

Method of Creating Assignment	Method of Populating Assignment Cost Rate	Method of Populating Assignment Bill Rate
Resource fulfills a project resource request	Assignment uses the resource cost rate	<ul style="list-style-type: none">• Assignment uses the target bill rate from the project resource request• If a target bill rate isn't specified on the request, then the assignment uses the resource bill rate
Resource is assigned directly to a project	Assignment uses the resource cost rate	Assignment uses the resource bill rate


Adjusting Project Assignment Rates

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

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

You can't adjust the assignment rate currency.

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

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

Calculating Project Labor Cost and Bill Amounts

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

Review Resource Suitability for Position

Resource Available Capacity Score: How It's Calculated

The Resource Available Capacity score is a measure of a resource's suitability to fulfill a project resource request. The score is the percentage of time that a resource is available to work on a project assignment during the requested time period.

Calendars Used to Calculate Resource Available Capacity Scores

The application uses the resource calendar, and either the project calendar or the hours per day specified on the project resource request, to calculate the available capacity of a resource for a new project assignment. On the project resource request you can select the project calendar to determine the requested hours per day, or specify the number of hours per day if they're different from the project calendar. The resource calendar determines the hours that a resource is available to work each day.

The resource calendar is a schedule of a resource's daily working hours. The number of hours that a resource is available to fulfill a project resource request is the working hours for the day minus the number of hours that the resource is committed to project assignments and nonproject events for that day. Examples of nonproject events are paid time off and training.

Available capacity is calculated only for active project and resource calendars with a schedule type of Elapsed, one workday pattern for 7 days, and one project shift. Alternatively, a predefined standard calendar is available for use as a resource or project calendar.


Note:

- The available capacity calculation considers schedule exceptions only from the project calendar.
- The effective dates of the project and resource calendars must span the date range of the project resource request for the application to calculate available capacity scores.

How the Resource Available Capacity Score Is Calculated

The application calculates a Resource Available Capacity score as follows.

1. For the requested time period on a project resource request, determine the working days and number of hours for each day based on either the project calendar or the number of hours per day specified on the project resource request.
2. Determine the days and number of hours during the requested time period that the resource is committed to project assignments or nonproject events. These are hours that the resource isn't available to fulfill the request.
3. For each work day in the requested time period, divide the number of available hours for the resource by the number of requested hours in the day, and multiply the result by 100. This determines the resource available capacity for each day, expressed as a percentage.

 **Note:** The maximum available capacity is 100%, even if the number of available hours for a resource exceeds the number of requested hours for the day. For example, if a resource is available to work 10 hours a day and the request is for 8 hours a day, the available capacity for the resource is 100%.

4. Divide the sum of the available capacity for each day by the number of days in the requested time period. The result is the Resource Available Capacity score for the project resource request.

Resource Available Capacity Score: Examples

The Resource Available Capacity Score is the percentage of time that a resource is available to work during the requested time period on a project resource request. The application uses the resource calendar, and either the project calendar or the hours per day specified on the project resource request, to calculate the available capacity of a resource.

Following are examples of Resource Availability Score calculations.

Example 1: Resource Available Capacity Score is 100%

In this example:

- The project resource request dates are from Thursday, August 22 to Wednesday, August 28 for the hours per day based on the project calendar.
- The standard working days on the project and resource calendars are 8 hours a day from Monday through Friday, with nonwork days on Saturday and Sunday.
- The resource has no project assignments or nonproject events scheduled during the requested time period.

	Aug 22	Aug 23	Aug 24	Aug 25	Aug 26	Aug 27	Aug 28
Resource available hours	8	8	Nonwork day	Nonwork day	8	8	8
Requested hours	8	8	Nonwork day	Nonwork day	8	8	8
Resource available capacity	100%	100%			100%	100%	100%

The sum of the daily available capacity is 500%. The Resource Available Capacity Score calculation is: 500% available capacity / 5 working days on the request = 100%.

Example 2: Resource Available Capacity Score is 70%

In this example:

- The resource is requested to work from Thursday, August 22 to Wednesday, August 28, for 4 hours per day as specified on the project resource request.
- The standard working days on the project and resource calendars are 8 hours a day from Monday through Friday, with nonwork days on Saturday and Sunday.
- The resource has an 8-hour project assignment previously scheduled for August 22, and a 6-hour training class on August 23.

	Aug 22	Aug 23	Aug 24	Aug 25	Aug 26	Aug 27	Aug 28
Resource available hours	0	2	Nonwork day	Nonwork day	8	8	8

	Aug 22	Aug 23	Aug 24	Aug 25	Aug 26	Aug 27	Aug 28
Requested hours	4	4	Nonwork day	Nonwork day	4	4	4
Resource available capacity	0%	50%			100%	100%	100%

The sum of the daily available capacity is 350%. The Resource Available Capacity Score calculation is: 350% available capacity / 5 working days on the request = 70%.

Example 3: Resource Available Capacity Score is 65%

In this example:

- The project resource request dates are from Monday, December 2 to Friday, December 13 for the hours per day based on the project calendar.
- The project calendar is 8 hours a day from Monday through Friday, with nonwork days on Saturday and Sunday.
- The resource calendar is 10 hours a day from Monday through Thursday, with nonwork days for the resource on Friday, Saturday, and Sunday.
- For the first week in December the resource is working only half days (5 hours a day). The resource has a 2-hour training class scheduled for December 9.

	Dec 2	Dec 3	Dec 4	Dec 5	Dec 6	Dec 7	Dec 8	Dec 9	Dec 10	Dec 11	Dec 12	Dec 13
Resource available hours	5	5	5	5	Nonwork day	Nonwork day	Nonwork day	8	10	10	10	Nonwork day
Requested hours	8	8	8	8	8	Nonwork day	Nonwork day	8	8	8	8	8
Resource available capacity	62.5%	62.5%	62.5%	62.5%	0%			100%	100%	100%	100%	0%

The sum of the daily available capacity is 650%. The Resource Available Capacity Score calculation is: 650% available capacity / 10 working days on the request = 65%.

Resource Qualification Score: How It's Calculated

The Resource Qualification score is a measure of a resource's suitability to fulfill a project resource request. The application calculates a score by comparing the requested qualifications and keywords to a resource's qualifications on the resource profile and resume.

Objects that Impact the Resource Qualification Score

Following are the key objects that impact the Resource Qualification score calculation.

- Qualifications

Qualifications are attributes of a resource, such as competencies, languages, degrees, honors and awards, licenses and certifications, and memberships. You set up qualifications when you set up the workforce in Oracle Fusion Human Capital Management (HCM).

- Proficiencies

A proficiency can be associated with a competency or language to indicate the level of expertise that a resource has, or that a project assignment requires for the particular qualification.

Proficiency levels for languages are separate for reading, speaking, and writing skills. For example, you can request a resource with a High proficiency level for speaking Spanish and a Moderate proficiency level for reading or writing the language.

- Keywords

Keywords are words or phrases on a project resource request that represent general qualification requirements.

- Project resource request

The project resource request contains qualifications and keywords that identify the attributes that a resource needs for the project assignment.

- Resource profile

Resources maintain a resource profile of their qualifications, proficiencies, and resume. A profile represents a resource's knowledge, skill, and expertise, and is used in the Resource Qualification calculation to determine if the resource has the requested qualifications and proficiencies. The score calculation also takes into account the number of occurrences of a keyword in the resource's profile.

- Resource resume attachment

The application counts the number of occurrences of keywords in a resource's resume when calculating the Resource Qualification score for a project resource request.

How the Resource Qualification Score Is Calculated

A Resource Qualification score is made up of two scores: a score for qualifications, such as competencies and language, and a score for keywords.

If the qualifications on a project resource request consist only of structured content types, then the Resource Qualification score is the sum of the resource's individual structured content scores divided by the total number of qualifications.

If the qualifications on a project resource request consist only of unstructured keywords, then the Resource Qualification score is the sum of the resource's individual keyword scores divided by the total number of qualifications.

If the qualifications on a project resource request consist of both structured content types and unstructured keywords, then the Resource Qualification score is the average of the structured content score and keyword score. For example, if a resource has a structured content score of 100% and a keyword score of 80%, then the Resource Qualification score is 90% for the project resource request.

There is no Resource Qualification score for project resource requests that have no qualifications.

The following table lists the rules that determine a resource's score for an individual qualification on a project resource request.

Project Resource Request	Resource Profile	Individual Qualification Score
Request contains a qualification with a specified proficiency	Resource has the requested qualification with a proficiency that meets the requested proficiency	100%
Request contains a qualification with a specified proficiency	Resource has the requested qualification with a proficiency that is lower or higher than the requested proficiency	50%
Request contains a qualification with or without a specified proficiency	Resource does not have the requested qualification	0%
Request contains a qualification; no proficiency is specified	Resource has the requested qualification	100%

The following table lists the rules that determine a resource's score for a language qualification.

Project Resource Request	Resource Profile	Language Qualification Score
Request contains a language qualification with specified proficiencies for reading, speaking, and writing	Resource has the requested language with proficiencies that meet the requested proficiencies for reading, speaking, and writing	Reading 100% Speaking 100% Writing 100% Separate scores for reading, speaking, and writing skills are calculated for a language qualification if you specify proficiency levels for those skills.
Request contains a language qualification with specified proficiencies for reading and speaking; no proficiency is specified for writing	Resource has the requested language with proficiencies that meet the requested proficiencies for reading and speaking	Reading 100% Speaking 100% In this scenario, proficiencies are specified for reading and speaking, but not for writing. Therefore, no score is calculated for the writing skill.
Request contains a language qualification with specified proficiencies for reading and speaking	Resource has the requested language with a reading proficiency that is lower or higher than the requested reading proficiency, and a speaking proficiency that meets the requested speaking proficiency	Reading 50% Speaking 100%
Request contains a language qualification with a specified proficiency	Resource doesn't have the requested qualification	0%

Project Resource Request	Resource Profile	Language Qualification Score
Request contains a language qualification; no proficiency is specified	Resource has the requested qualification; the resource's proficiencies aren't considered in the score calculation	100%

To determine a resource's score for all qualifications on a request, the application divides the sum of individual qualification scores by the total number of requested qualifications.

Relative Keyword Scores

The application searches the resource's profile and resume attachment for requested keywords in the resource's competencies, languages, degrees, honors and awards, licenses and certifications, memberships, and resume text. For example, if you enter the keyword Financial on a project resource request, and a resource profile contains a competency of Financial Industry, the application counts it as a keyword occurrence for the resource.

When you search for resources on the Search and Evaluate Resources page, the application derives a relative keyword score for each requested keyword as follows:


- Compares the number of occurrences for a keyword in a resource's profile and resume to the number of occurrences for that keyword in the profiles and resumes of all resources in the search results.
- Calculates a resource's score for an individual keyword by dividing the number of keyword occurrences for the resource by the highest number of keyword occurrences for any resource in the search results.

This relative keyword score is combined with the qualification score to make up the Resource Qualification score. This Resource Qualification score is visible on the Search and Evaluate Resources page, Compare Resources page, and on the Resource Details page that you drill down to from either of these pages.

The following table shows examples of resource scores for the keyword Java. Resource A has 10 occurrences of the word Java, which is the highest number of occurrences for all resources in the search results. Therefore, the scores for all resources in the search results are calculated by dividing the number of keyword occurrences in each resource profile and resume by 10.

	Resource A	Resource B	Resource C
Occurrences of Java in Resource Profile and Resume	10	5	0
Keyword Score Calculation for Java	$10 / 10 = 100\%$	$5 / 10 = 50\%$	$0 / 10 = 0\%$


To determine a resource's score for all keywords on a request, the application divides the sum of individual keyword scores by the total number of keywords on the request.

 **Note:** If you change the resource pools that you search on the Search and Evaluate Resources page, the resource with highest number of keyword occurrences may change in the search results. This change may impact resource keyword scores because the denominator changes in the relative calculation.

Simple Keyword Scores

If you are considering only one resource to fulfill a project resource request, the keyword score is based on whether the resource profile or resume has at least one occurrence of each requested keyword. This is a simple calculation, for example:

- If a resource has one or more occurrences of a requested keyword, then the individual keyword score is 100% for the resource.
- If a project resource request contains two keywords, and a resource has one occurrence of the first keyword and zero occurrences of the second keyword, then the individual keyword score for the resource is 50%.

 **Note:** Because of the difference in relative and simple keyword score calculations, a Resource Qualification score might be different on the Resource Details page that you open directly from the project resource request than the score for the same resource on the Search and Evaluate Resources page. The score on the Resource Details page that you open from the request is based on the simple calculation because you aren't comparing resources. The score on the Search and Evaluate Resources page is based on the relative calculation for all resources in the search results.

Resource Qualification Score Example

In this example, a project resource request contains qualifications for a competency, degree, and language. The request also contains one keyword. The resource manager is evaluating the suitability of three resources to fulfill the request based on the Resource Qualification scores. The following table lists the individual qualification and keyword scores that make up each Resource Qualification score.

	Resource A	Resource B	Resource C
Competency: Java	Java, Expert: 100%	0%	Java, Intermediate: 50%
Proficiency: Expert			
Degree: Master of Business Administration	Master of Business Administration: 100%	0%	Master of Business Administration: 100%
Language: French	French, Speaking Proficiency Intermediate: 100%	French, Speaking Proficiency Beginner: 50%	French, Speaking Proficiency Intermediate: 100%
Speaking Proficiency: Intermediate			
Keyword: Financial Resource	10 keyword occurrences / 10 maximum occurrences = 100%	5 / 10 = 50%	0 / 10 = 0%
Qualification Score Calculation	<ul style="list-style-type: none"> • Qualification score: 300% / 3 = 100% • Keyword score: 100% / 1 = 100% • Resource Qualification score: (100% + 100%) / 2 = 100% 	<ul style="list-style-type: none"> • Qualification score: 50% / 3 = 17% • Keyword score: 50% / 1 = 50% • Resource Qualification score: (17% + 50%) / 2 = 33.5% 	<ul style="list-style-type: none"> • Qualification score: 250% / 3 = 83% • Keyword score: 0% / 1 = 0% • Resource Qualification score: (83% + 0%) / 2 = 41.5%
In this example, Resource A is the most qualified person to fulfill the project resource request.			

How can I enter a keyword on a project resource request?

When you enter qualifications for a project resource request, you can either select a predefined qualification or enter a free form keyword. The search process attempts to match keywords against each resource's resume. As you enter a qualification, if you select an item from the list of suggestions that appear, then it will become a structured qualification to match against the resources' talent profiles.

If you enter a free form word or phrase, then it becomes a keyword. To see this classification, select the **Show More** option in the Qualifications and Keywords section of the Create or Edit Project Resource Request pages.

Resource Overall Match Score: How It's Calculated

The Resource Overall Match score is a measure of a resource's suitability to fulfill a project resource request.

How the Resource Overall Match Score Is Calculated

The Resource Overall Match score is the average of the Resource Available Capacity score and Resource Qualification score. For example:

- If a resource has an Available Capacity score of 50% and a Qualification score of 80%, the Resource Overall Match score is $(50\% + 80\%) / 2 = 65\%$.
- If a resource has an Available Capacity score of 0% and a Qualification score of 80%, the Resource Overall Match score is $(0\% + 80\%) / 2 = 40\%$.

If no Resource Qualification score exists, then the Resource Overall Match score is equal to the Available Capacity score.

If a resource doesn't have a valid calendar to calculate the Available Capacity score, then the Resource Overall Match score is the average of the Resource Qualification score and 0% for the Available Capacity score.

Matching Resource to Resource Request: Example

This example illustrates how a resource manager can search and evaluate qualified resources to fulfill a project resource request.

The search for resources is an iterative process. If you don't find qualified resources to fulfill a project resource request with your initial search on the Search and Evaluate Resources page, then you can change the search attributes and search again.

Scenario

A project manager created and submitted a project resource request for a project engineer on an assignment for a strategic client project. You are a resource manager who must find the right resource for the assignment.

The project application administrator for your organization previously set up the project engineer role with default qualifications, proficiency levels, and keywords. These attributes populated the request when the project manager selected the project engineer role.

You search and evaluate resources to determine who is qualified and available to work on the assignment.

Search for Resources

You begin by navigating to the Manage Project Resource Requests page and clicking the **Evaluate Resources** icon for the project resource request. Oracle Fusion Project Resource Management evaluates the resources in the resource pools that you own to find a match between the resource skill profiles in Oracle Fusion HCM and the requested qualifications, proficiency levels, and keywords. The application uses the resource and project calendars to calculate the available capacity of resources for the assignment.

On the Search and Evaluate Resources page, you review the resource cards in the initial search results. Each card shows the qualification, availability, and overall scores for a resource. The calendar bar on the resource card shows the resource's availability for the first five weeks of the requested date range.

Analysis

To evaluate more resources, expand the list of resource pools from which you want to search for qualified resources. Expand the resource match thresholds to include a wider range of qualification and available capacity scores to bring more resources into the view. To focus the resources in the view, select filters for specific competencies, languages, locations, project roles, and travel preferences. Only resources with the selected attributes appear in the view.

You determine that one of the default qualifications for the project engineer role is not a requirement for this particular assignment. You click the **Edit Requested Criteria** button to remove the unnecessary qualification. While in this window, you also change the requested start date. Review the resources on the Search and Evaluate Resources page based on the revised requested criteria.

During the evaluation, you find some resources that may be a good fit for the assignment. You want to evaluate more resources before making a decision, so you add the potential candidates to the resource shortlist. The shortlist enables you to keep a list of candidates that are a potential fit without having to search for them again. You continue to search for resources by changing the list of resource pools and score thresholds.

To view a side-by-side comparison of the potential candidates, you select the resources in the shortlist and click the **Compare** icon. Compare the qualification and availability scores, how well the resources match each requested qualification and keyword, and the project and nonproject commitments for each resource during the requested date range.

Select a Resource

You determine which resource is the best fit for the assignment, and propose the resource for project manager approval.

FAQs for Review Resource Suitability for Position

Why is there no Availability score for a resource?

Any of the following circumstances causes a resource to have no Available Capacity score.


- Project resource request dates are outside of the project or resource calendar effective dates.
- Number of working days on the project or resource calendar is zero.
- Project or resource calendar was deleted from the application or is no longer available.
- Project or resource calendar is complex. For example, the calendar doesn't contain seven days, or it contains more than one pattern and shift.

When are resume attachments included in a search for resource qualifications?

If a resource resume is a **File** attachment type, then the resume text is indexed during the Maintain Project Resource Qualification Index process. Indexed keywords are included in the Resource Qualification score calculation for a project resource request.

A resume attachment is included in the search index in the following circumstances:

- The resume has a **File** attachment type.

 **Note:** Attachment types such as **URL** and **Text** aren't indexed.

- You attach the resume to the resource profile before the index process runs.

The process indexes only the most recent version of a resume with a **File** attachment type.

What are the indicators for the qualification, available capacity, and overall scores for a project resource request?

You can assess the qualification, available capacity, and overall scores for resources on the Search and Evaluate Resources page. The scores indicate how well a resource matches a project resource request. Additionally, a colored indicator is present for each score, and the color is dependent on the score.

- If a score is 80% to 100%, the indicator is green.
- If a score is 50% to 79%, the indicator is yellow.
- If a score is below 50%, the indicator is red.

FAQs for Evaluate and Assign Resources

Can a resource manager approve a resource assignment to fulfill a project resource request?

Yes. Resource managers with the security privilege to approve a resource assignment can use the **Submit and Approve** button on the Confirm Resource for Assignment or Reserve Resource for Assignment page.

Can I search for resources in resource pools that I don't own?

Yes. There is no restriction to the resource pools that you can search to find qualified resources to fulfill project resource requests.

Can I change the search criteria on a project resource request while reviewing search results?

Yes. You can temporarily change the start and end dates, qualifications, keywords, and proficiencies while you are searching for resources to fulfill a project resource request. Changes that you make to the requested criteria on the Search and Evaluate Resources page are not saved to the project resource request. The changed criteria reverts to the original search criteria when you click the **Reset** button on the Search and Evaluate Resources page or leave the page to return to the request.

How can I filter by resource travel preferences when searching for resources?

You can filter resource search results on the Search and Evaluate Resources page to find resources who are available to travel domestically or internationally. The **Travel Domestically** and **Travel Internationally** filter options apply to resources who select travel preferences in the Work Requirements area of their profile in Oracle Fusion HCM.

To focus your search on resources who don't select travel preferences in their profile or who aren't in HCM, select the **Unspecified** filter option.

Clear the options to disregard travel preferences when viewing to search results.

Can I search for qualified resources without a project?

Yes. You can submit a project resource request and evaluate resources against requested qualifications and keywords before you associate the request with a project. You can add a project to the request at any time, or associate a project with the assignment when you fulfill the request.

However, the application doesn't calculate available capacity scores for a project resource request without a project.

Why can't I view project management or resource management pages?

To view project management or resource management pages, you must be a project enterprise labor resource with an active user account. In addition, you must have a job or abstract role with the security privilege to access specific pages in Project Execution Management applications.

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

Related Topics

- [Implementing Project Portfolio Management Security: Overview](#)




15 Maintain Resource Assignments

Project Resource Assignment Statuses: Explained

Assignment statuses indicate the status of the resource's relationship to a project.

This table describes assignment statuses that can appear in the **Assignment Status** column on the Manage Project Resources page.

Assignment Statuses	Description
Planned	<p>The assignment status is Planned when the project manager adds a resource to the project using any of these methods:</p> <ul style="list-style-type: none"> • Allocate resources directly to the project on the Manage Project Resources page. • Add resources to a project task on the Manage Project Plan page. • Import a project plan in Microsoft Project into Oracle Fusion Project Management. • Create a project plan with a work plan template. • Import a project plan from a third-party application with the Import Project Plan process for Oracle Cloud. • Import a project plan with the Project Work Plan External Service. • Replace a resource on a confirmed assignment with a resource whose availability and staffing aren't managed in Oracle Fusion Project Resource Management. <p>If the project manager creates a project resource request to replace the Planned resource, and then cancels the request, the assignment status reverts to Planned.</p>
Requested	<p>The assignment status is Requested if the project manager creates a project resource request on the Manage Project Resources page to replace a planned resource.</p> <p>If the resource manager proposes a resource to fulfill the request, and the project manager rejects the proposed resource, then the assignment status reverts to Requested.</p>
Proposed	<p>The assignment status is Proposed when a resource manager proposes a resource for an assignment that is awaiting approval by the project manager.</p> <p>Assignments with a Proposed status appear on the Manage Project Resources page only for project resource requests that are created on that page. However, assignments that fulfill project resource requests that are created on the Manage Project Resource Requests page don't appear on the Manage Project Resources page until the resource is approved.</p>
Confirmed	<p>The assignment status is Confirmed in any of these circumstances:</p> <ul style="list-style-type: none"> • The project manager approves a resource for a confirmed assignment to fulfill a project resource request. • The project manager confirms a reserved assignment directly on the project. • The project manager approves, rejects, or cancels a pending assignment adjustment for a confirmed assignment. • The project manager directly assigns a resource in a Confirmed status or replaces a resource on a confirmed assignment with another managed project enterprise labor resource.

Assignment Statuses	Description
	<p> Note: You must have the Assign Project Resource to Project privilege to perform this action.</p> <ul style="list-style-type: none"> The resource manager assigns a resource in a Confirmed status without project manager approval. <p> Note: You must have the Approve Project Resource for Project Assignment privilege to perform this action.</p>
Reserved	<p>The assignment status is Reserved in any of these circumstances:</p> <ul style="list-style-type: none"> The project manager approves a resource for a reserved assignment to fulfill a project resource request. The project manager approves, rejects, or cancels a pending assignment adjustment for a reserved assignment. The resource manager assigns a resource in a Reserved status without project manager approval. <p> Note: You must have the Approve Project Resource for Project Assignment privilege to perform this action.</p>
Pending Adjustment	<p>The assignment status is Pending Adjustment in either of these circumstances:</p> <ul style="list-style-type: none"> After a resource manager cancels an existing assignment or changes the assignment schedule and before the project manager approves or rejects the adjustment. After the project manager changes the assignment schedule and before the resource manager approves or rejects the adjustment. <p>A resource assignment that is pending adjustment approval has a value of Change Assignment Schedule or Cancel Assignment in the Adjustment Type field. When the project manager approves or rejects the adjustment action, then the application clears the adjustment type value for the assignment.</p>
Canceled	<p>The assignment status is Canceled in any of these circumstances:</p> <ul style="list-style-type: none"> After the project manager cancels the adjustment. After a resource manager cancels an assignment and the project manager approves the cancellation. <p>Approval isn't required if the resource manager has the Approve Project Resource for Project Assignment privilege and cancels the assignment by using the Submit and Approve action.</p>

Related Topics

- [Project Resource Request Statuses: Explained](#)

Project Resource Assignment Adjustments: Explained

A resource manager or project manager can change the start date, finish date, and hours per day for project resource assignments that are in a Confirmed status, and cancel assignments that are in a Confirmed or Reserved status.

Aspects of assignment adjustments include:

- Assignment adjustment types
- Adjusting a single assignment
- Adjusting multiple assignments
- Approving and rejecting assignment adjustments

Assignment Adjustment Types

The project resource assignment adjustment types are:

- Change Assignment Schedule
- Cancel Assignment

Adjusting a Single Assignment

The methods to initiate an assignment adjustment are:

- On the Edit Project Resource Assignment page, in the **Actions** menu, click **Adjust** and select an adjustment type.
- On the Manage Project Resource Assignments page, select an assignment, click the **Adjustment Type** drop-down list and select a type, and click the **Adjust** button.
- On the Project Resource Assignments Ending Soon region of the Project Resources work area, Overview page, select an assignment and click the **Change Assignment Schedule** button.
- On the Manage Project Resources page, select a confirmed assignment and click the **Request Extension** action.

When you initiate an assignment adjustment:

- The application creates a project resource request to communicate and track the adjustment approval.
- The request name is a combination of the resource name and the requested start date.
- The request type is either Assignment Schedule Change or Assignment Cancellation.
- You can access adjustment requests from the Manage Project Resource Requests page.
- The application updates the assignment when the request is approved. For example, when a request to adjust an assignment start date is approved, the new start date appears on the assignment.

Adjusting Multiple Assignments

Resource managers can perform adjustments on multiple assignments together on the Manage Project Resource Assignments page. The selected assignments must be in a Confirmed status.



When you select multiple assignments to adjust, and submit and approve the adjustments, the application creates a project resource request in an Approved Adjustment status for each assignment.

Approving and Rejecting Assignment Adjustments

The methods to approve or reject assignment adjustments are:

- Directly on the project resource request that is associated with the adjustment, click the **Actions** menu and click **Approve Adjustment** or **Reject Adjustment**.
- On the Manage Project Resource Requests page, search for project resource requests that are in the Pending Adjustment status. Select a request and click **Approve Adjustment** or **Reject Adjustment**.

The following table lists the approval requirements for assignment adjustments.

Action	Approver
Project manager initiates an assignment schedule change.	Resource manager (required)
Project manager initiates an assignment cancellation.	No approval required
Project manager cancels an adjustment that was initiated in Oracle Fusion Project Management.	No approval required
 Note: Only project managers can cancel an adjustment that was made by a project manager.	
Resource manager initiates a schedule change or cancellation to one or more assignments.	Project manager (optional)
Resource manager cancels an adjustment that was initiated in Oracle Fusion Project Resource Management.	No approval required
 Note: Only resource managers can cancel an adjustment that was made by a resource manager.	

No approval is required to add comments to an assignment.

Related Topics

- [Project Resource Assignment Statuses: Explained](#)
- [Resource Pools: Explained](#)

Import Project Resource Assignments Process

The Import Project Resource Assignments process creates and updates project resource assignments based on data from third-party applications that you load into the Project Resource Assignments Interface table (PJR_RES_ASMT_INTERFACE).

Once in the interface table, the assignment details are validated and processed by the Import Project Resource Assignments process.

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

- Instructions and CSV Generation: Table-specific instructions, guidelines, and recommendations for preparing the data file for upload.
- PJR_RES_ASMT_CREATE: Worksheet used to create assignments. Contains columns that represent table fields for the assignment details such as resource, project, role, dates, rates, hours per day, requester, and staffing owner.
- PJR_RES_ASMT_UPDATE: Worksheet used to update assignment dates, hours per day, location, and rates.

After you prepare the data in the Project Resource Assignment Import Excel template, click the **Generate CSV File** button in the template to create worksheets to load to the interface tables. Optionally you can bypass the Excel template and manually create CSV files.

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

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

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

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

Parameters - Load Interface File for Import

Import Process

Select Import Project Resource Assignments.

Data File

Select the file that contains project resource assignment data to load.

Parameters - Import Project Resource Assignments Process

Project Resource Assignments to Import

Specify whether the import process imports all assignments or assignments for a project. The default value is All assignments.

Project

Select the project for the assignments.

Import Project Resource Assignments Execution Report

The Import Project Resource Assignments Execution report summarizes the number of processed, accepted, and rejected items encountered when you imported the project resource assignments. The report contains details for all assignments that generated errors during the import process.

Review the error message details for each project resource assignment and fix the issues. Load the data that you fixed in the CSV file into the interface table again and resubmit the Import Project Resource Assignments process.

Related Topics

- [External Data Integration Services for Oracle Cloud: Overview](#)
- [File Based Data Import for Oracle Project Portfolio Management Cloud](#)

FAQs for Maintain Resource Assignments

Can a resource manager directly assign a resource to a project without creating a project resource request?

Yes. Resource managers with the security privilege to directly assign a resource can click the **Create** action on the Manage Project Resource Assignments page in Oracle Fusion Project Resource Management, enter the assignment details, and submit and approve the assignment.

The application creates project resource requests as described in the following table.

Type of Assignment	Project Resource Request Status	Assignment Status
Confirmed assignment	Fulfilled by Confirmed Assignment	Confirmed
Resource reservation	Fulfilled by Reserved Assignment	Reserved

The name of both the assignment and request is a combination of the resource name and the assignment start date.

The assignment appears on the Manage Project Resources page in Oracle Fusion Project Management and on the resource's schedule.

Can I change a resource reservation to a confirmed assignment on a project?

Yes. Resource managers and project managers can change the status from Reserved to Confirmed directly on an assignment. In addition, resource managers can make this change on the Manage Project Resource Assignments page, and project managers can make the change on the Manage Project Resources page.

How can a resource manager adjust multiple resource assignments at the same time?

Select more than one assignment in a Confirmed status on the Manage Project Resource Assignments page, select the adjustment type, and click **Adjust**.

- To adjust the assignment schedule, enter a new start date, finish date, or hours per day and the adjustment reason in the Change Assignment Schedule window. Then submit and approve the adjustments. The new values apply to all selected assignments.
- To cancel assignments, enter the adjustment reason in the Cancel Assignments window, and then submit and approve the adjustments.

The application creates a project resource request for each adjusted assignment to communicate and track the adjustment approval.

When does a resource appear in the list of resources to request for an assignment?

A resource is available to select for a project resource request or project assignment if these conditions exist:

- The resource's **Manage resource availability and staffing** option is enabled on the project enterprise resource definition.
- The resource's to date on the project enterprise resource definition is the current date, a future date, or blank.

What's a project resource request type?

An attribute that's assigned by the application to track the progress and purpose of a project resource request.

For example:

- The New Resource request type identifies requests that you create to find resources for a project.
- The Assignment Schedule Change request type identifies requests that the application creates to track assignment schedule change adjustments.
- The Assignment Cancellation request type identifies requests that the application creates to track assignment cancellation adjustments.

Why can't I cancel a resource assignment?

You can't cancel a resource assignment in any of these circumstances:

- The resource assignment status is Confirmed and a task assignment exists for this resource
- The resource assignment status is Confirmed and the resource is the primary project manager
- The resource assignment status is Planned or Pending Adjustment

You can cancel an assignment with a status of Reserved.

16 Manage Resource Utilization and Analytics

Import Resource Actual Hours Process

The Import Resource Actual Hours process imports actual hours based on data from third-party applications that you load into the Resource Actual Hours Interface table (PJR_ACTUAL_HOURS_INTERFACE).

Once in the interface table, the actual hours are validated and processed by the Import Resource Actual Hours process and any exceptions are reported in the output report for the process.

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

- Instructions and CSV Generation: Table-specific instructions, guidelines, formatted spreadsheets, and recommendations for preparing the data file for upload.
- PJR_ACTUAL_HOURS_INTERFACE: Worksheet columns that represent table fields for:
 - Work and utilization dates
 - Details about the resource, project, and task
 - Actual hours worked category
 - Eligibility indicators for utilization and billing
 - Indicator for adjustment entry
 - Transaction references
 - Comments

After you prepare the data in the Resource Actual Hours Interface Excel template, click the **Generate CSV File** button in the template to create worksheets to load to the interface table. Optionally you can bypass the Excel template and manually create the CSV file.

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

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

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

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

Parameters - Load Interface File for Import

Import Process

Select Import Resource Actual Hours.

Data File

Select the file that contains resource actual hours data to load.

Parameters - Import Resource Actual Hours Process

Actual Hours Worked Category

Select the type of activity that is represented by the actual hours worked. Examples are Project Work, Paid Time Off, Training, and Other. The default value is All Categories.

Resource

Select the project enterprise labor resource who reported the actual hours worked.

Project

Select the project for which the project enterprise labor resource reported actual hours worked.


Actual Hours Worked Through Date

Enter the date through which the project enterprise labor resource worked.

Import Resource Actual Hours Execution Report

The Import Resource Actual Hours Execution report summarizes the number of processed, accepted, and rejected items encountered when you imported resource actual hours. The report contains details for all actual hours that generated errors during the import process.

Review the error message details for the actual hours and fix the issues. Load the data that you fixed in the CSV file into the interface table again and resubmit the Import Resource Actual Hours process.

 **Note:** After importing actual hours, the process automatically launches the Update Resource Utilization Data process to summarize actual utilization that appears on the Resource Manager Dashboard.

Related Topics

- [External Data Integration Services for Oracle Cloud: Overview](#)
- [File Based Data Import for Oracle Project Portfolio Management Cloud](#)

Resource Actual Utilization: How It's Calculated

Resource actual utilization is the percentage of hours worked or projected to work compared to available hours. The Update Resource Utilization Data process calculates actual utilization for individual resources and resource pools.

Run the Update Resource Utilization Data process often enough to account for:

- New resources or assignments

- Changes to resource pool membership dates
- Changes to resource calendars
- Updated actual hours

Settings That Affect Resource Actual Utilization

The following factors affect Resource Actual Utilization.


- The Import Resource Actual Hours process imports actual hours based on data from third-party applications. Ensure that the most recent resource actual hours are imported into the application before you run the Update Resource Utilization Data process.
- During import processing you indicate which actual hours are eligible to be included in utilization calculations for the resource. Eligible actual hours can include time spent on project assignments, or nonproject events such as training and paid time off.
- The application determines the current quarter by the Utilization Data Updated date shown on the Resource Manager dashboard, which is the last date that the Update Resource Utilization Data process ran.
- A resource's available hours are based on the resource calendar. An example of a resource calendar is Monday through Friday, 8 hours a day. The application doesn't consider company holidays when determining a resource's available hours.
- The number of hours that a resource is assigned to work on project assignments includes assignments that are in a status of Confirmed, Reserved, or Pending Adjustment.
- The Update Resource Utilization Data process calculates actual utilization for all resources who are current members of a resource pool except for the Inactive Resource Pool Memberships pool.

How Resource Actual Utilization Is Calculated

The Update Resource Utilization Data process calculates actual utilization using actual hours that are designated as eligible for utilization.

For the current quarter, the calculation first uses actual hours worked through the day before the Utilization Data Updated date shown on the Resource Manager dashboard. For the remainder of the quarter, the process uses the hours that resources are projected to work on project assignments.

For previous quarters, resource actual utilization is the percentage of actual hours worked compared to the available hours.

 **Note:** The calculation includes the resource's actual, assigned, and available hours only for the days that are within the resource's date range in the resource pool.

Resource Actual Utilization Calculation: Example

Actual utilization for the current quarter is the percentage of actual hours worked at the beginning of the quarter, plus projected project assignment hours from the date the process ran through the end of the current quarter, compared to the available hours.

Scenario

Following is an example of an actual utilization calculation for the current quarter.

Example scenario:

- Resource name: Abraham Mason
- Current quarter date range: January 1 - March 31, 2016
- Today's date: February 15, 2016
- Latest run date of the Update Resource Utilization Data process: February 15, 2016
- Work category that is eligible for utilization: Project Work
- Work categories that aren't eligible for utilization: Training and Paid Time Off

Abraham Mason is available to work for 8 hours a day, 5 days a week. Weekends are nonworking days.

The following table lists the actual, projected, and available hours in the current quarter for Abraham Mason. The table doesn't include weekend nonworking days.

Work Dates by Week	Work Category	Eligible for Utilization	Project Name	Worked Hours	Projected Hours	Available Hours
January 1 (holiday)				0		8
January 4-6	Project Work	Yes	Electrical	24		24
January 7-8	Training	No		16		16
January 11-15	Project Work	Yes	Electrical	24 (worked partial days)		40
January 18-22	Project Work	Yes	Hardware	40		40
January 25-28	Paid Time Off	No		32		32
January 29	Training	No		8		8
February 1-5	Project Work	Yes	Hardware	40		40
February 8-11	Project Work	Yes	Hardware	32		32
February 12	Project Work	Yes	Hardware	8		8
February 15-19	Project Work	Yes	Hardware		40	40
February 22-26	Project Work	Yes	Hardware		40	40

Work Dates by Week	Work Category	Eligible for Utilization	Project Name	Worked Hours	Projected Hours	Available Hours
February 29-March 4					0 (no projected work)	40
March 7-11	Project Work	Yes	Install		40	40
March 14-18	Project Work	Yes	Install		40	40
March 21-25					0	40
March 28-31	Project Work	Yes	Launch		32	32

Results for the current quarter example:

- Actual worked hours that are eligible for utilization: 168
- Projected hours for project work: 192
- Available hours: 520
- Resource actual utilization: $(168 + 192) / 520 = 69.23\%$

Resource Projected Utilization: How It's Calculated

The Update Resource Utilization Data process updates projected utilization for individual resources and resource pools for the current week and cumulative intervals for the next 2 weeks, 4 weeks, 8 weeks, and 13 weeks.

Run the Update Resource Utilization Data process often enough to account for:

- New resources or assignments
- Changes to resource pool membership dates
- Changes to resource calendars

Factors That Affect Resource Projected Utilization

The following factors affect Resource Projected Utilization.

- The Update Resource Utilization Data process defines a week as Sunday through Saturday. The current week includes all 7 days from Sunday through Saturday, regardless of the day that you run the process.
 - If you run the Update Resource Utilization Data process after Sunday, the first day of the current week is the preceding Sunday.
 - If you run the process on Sunday, the current week begins that day.
- A resource's available hours are based on the resource calendar. An example of a resource calendar is Monday through Friday, 8 hours a day. The application doesn't consider company holidays when determining a resource's available hours.

- The number of hours that a resource is assigned to work on project assignments includes assignments that are in a status of Confirmed, Reserved, or Pending Adjustment.
- The Update Resource Utilization Data process calculates projected utilization for all resources who are current members of a resource pool except for the Inactive Resource Pool Memberships pool.


How Resource Projected Utilization Is Calculated

Projected utilization is calculated for individual resources in a resource pool and rolled up to a projected utilization for the pool.

To calculate a resource's projected utilization for the current week and the next 12 weekly intervals, the Update Resource Utilization Data process divides the number of hours that a resource is assigned to work on project assignments each week by the number of available hours for the resource that week.

The process also calculates cumulative projected utilization for the 13 week period. For example, the process calculates projected utilization for a 4 week interval by dividing the sum of hours that a resource is assigned to work on project assignments by the number of available hours for the resource for the current week and the next 3 weeks.

On the Resource Manager Dashboard you can view projected utilization for resources or resource pools for the current week and cumulative intervals for the next 2 weeks, 4 weeks, 8 weeks, and 13 weeks.

 **Note:** The process includes the resource's assigned and available hours only for the days that are within the resource's date range on the resource pool.

Resource Projected Utilization Calculation: Example

Resource projected utilization is the percentage of hours that project enterprise labor resources are confirmed or reserved to work on project assignments compared to their available hours.

Scenario

The following tables show the projected utilization components for three resources, and the resource pool to which they belong, over two weekly intervals.

Resource and Resource Pool	Week 1 - Hours on Project Assignments	Week 1 - Available Hours on Resource Calendar	Week 1 - Projected Utilization Calculation
Resource A	40	40	100%
Resource B	20	40	50%
Resource C	10	20	50%
Resource Pool	70	100	70%

Resource and Resource Pool	Week 2 - Hours on Project Assignments	Week 2 - Available Hours on Resource Calendar	Week 2 - Projected Utilization Calculation
Resource A	40	40	100%
Resource B	48	40	120%
Resource C	20	20	100%
Resource Pool	108	100	108%


Resource Target Utilization Percentage: How It's Determined

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

Factors That Affect Resource Target Utilization

The following factors affect the Resource Target Utilization Percentage.

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

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

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

How the Resource Target Utilization Percentage Is Determined

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

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

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

Example

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

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

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

Resource Target Hours: How They're Calculated

Resource target hours are the available hours multiplied by the target utilization percentage for the resource. Target hours for a resource pool include the target hours of all current resources in the pool. The Update Resource Utilization Data process updates target hours for individual resources and resource pools for the current week and cumulative intervals for the next 2 weeks, 4 weeks, 8 weeks, and 13 weeks.

Run the Update Resource Utilization Data process often enough to account for:

- New resources or assignments
- Changes to resource pool membership dates
- Changes to resource calendars

Factors That Affect Resource Target Hours


The following factors affect Resource Target Hours.

- A resource's available hours are based on the resource calendar. An example of a resource calendar is Monday through Friday, 8 hours a day. The application doesn't consider company holidays when determining a resource's available hours.
- The Update Resource Utilization Data process defines a week as Sunday through Saturday. The current week includes all 7 days from Sunday through Saturday, regardless of the day that you run the process.
 - If you run the Update Resource Utilization Data process after Sunday, the first day of the current week is the preceding Sunday.
 - If you run the process on Sunday, the current week begins that day.

How Resource Target Hours Are Calculated

To calculate a resource's target hours for the current week and the next 12 weekly intervals, the Update Resource Utilization Data process multiplies the target utilization percentage for the resource by the number of available hours on the resource calendar for the week.

To calculate the target hours for a resource pool, the process adds together the weighted average of target hours of all resources in the resource pool.

 **Note:** The process includes the resource's available hours only for the days that are within the resource's date range on the resource pool.

Example

The following example shows the calculation of target hours for three resources, and the resource pool to which they belong, for a 1 week period.

Resource and Resource Pool	Resource Target Utilization	Available Hours on Resource Calendar	Resource Target Hours Calculation	Target Utilization Percentage for Pool
Resource A	75%	40	30	
Resource B	80%	40	32	
Resource C	80%	30	24	
Resource Pool		$40 + 40 + 30 = 110$	$30 + 32 + 24 = 84$	$84 / 110 = 76\%$

FAQs for Manage Resource Utilization and Analytics

Can I change the colors that appear on the Resource Manager Dashboard?

Yes. Use the **Actions** menu in the Projected Utilization, Unassigned Resources, and Actual Utilization regions to open a window to edit the display colors. Select colors to alert you to resource and resource pool metrics that are greater or less than expectations. The selected colors are specific to each application user. You can return to the default colors at any time.

How can I update utilization data for resources and resource pools on the Resource Manager Dashboard?

Use the Scheduled Processes page to run or schedule the Update Resource Utilization Data process to summarize the target, projected, and actual utilization for resources and resource pools.

What's the order of resource pools and resources in the Projected Utilization and Actual Utilization regions?

The selected resource pool appears at the top of the list in the region, followed by child resource pools that belong to the selected pool. Child resource pools are listed in order of the most unfavorable variance first to the most favorable variance last. In the Projected Utilization region, an unfavorable variance occurs when projected utilization is less than target utilization in the formula **projected utilization - target utilization**. In the Actual Utilization region, an unfavorable variance occurs when actual utilization is less than target utilization in the formula **actual utilization - target utilization**. Resource pools with the same variance are listed in alphabetic order by resource pool name.

Following the resource pools is the list of resources that are members of the selected pool. The resources are also sorted with the most unfavorable variance between the projected and target utilization (or actual and target utilization) at the top of the resource list. Resources with the same variance are listed in alphabetic order by resource name.

What's a work week in Oracle Fusion Project Resource Management?

Work weeks are based on a Sunday to Saturday schedule.

Glossary

acceptable threshold

Percentage range outside which resources are considered overallocated or underallocated in a project. For example, you set the acceptable threshold range to 80 to 85 percent. If you allocate less than 32 hours of work in a week they are underallocated. If you allocate more than 34 hours of work in a week they are overallocated.

action item

A task assigned to a person that must be performed in a given time frame to resolve an issue.

actual hours

Hours worked on a task during the reporting cycle.

actual hours remaining

Hours remaining after the hours worked on a task during the reporting cycle are deducted from the task planned hours.

actual utilization

For previous quarters, it's the percentage of actual hours compared to available hours. For the current quarter, it's the percentage of actual hours through the day before utilization data was updated, plus projected assignment hours through the remainder of the quarter, compared to available hours.

allocation hours

Number of hours in a week that a resource is allocated to the project. For example, a resource has a weekly capacity of 40 hours and 20 of those hours are allocated to one project.

allocation percentage

Percentage of work hours that a resource is allocated to the project. For example, a resource is available to work 50 percent on a project based on existing allocation to other projects.

available capacity score

The amount of requested time in a project resource request, expressed as a percentage, that a resource is available to fulfill.

available hours

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

baseline financial project plan

Key planned information for tasks and task assignments, including dates, costs, quantity, effort, and rates, that you can save from current financial project plan values. Setting a baseline for a project plan doesn't create a new plan version. Rather, current plan information is saved in baseline columns of the current project plan.

capacity hours

Number of hours that a resource is available for work. For example, a resource's capacity for work in a week is 40 hours.

competency

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

delegate

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

deliverable

Output that must be produced to complete a requirement, project, or task.

elapsed schedule

Elapsed schedules define the number of hours to be worked on a day, but not the precise start and end times. For example, all resources work eight hours on Monday, but some resources may start at 8 AM, while others start at 1 PM.

EPS

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

follower

In Oracle Fusion Task Management, a person who can view the details and activity stream of a task. Followers can collaborate on a task with the task owner and other followers using Oracle Social Network. Also, followers receive e-mail notifications when someone makes changes to the task.

FTE

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

ideal hours remaining

Calculated based on the planned hours with the assumption that work is evenly distributed throughout a sprint. If you update the planned hours the ideal remaining hours are recalculated.

keyword

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

labor demand

Total number of resources required to complete work on projects based on their actual allocation to projects.

managed project enterprise labor resource

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

milestone

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

owner

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

primary resource

Resource who can enter progress for a task and edit the task name, description, and priority. A primary resource exists on a task that has multiple resources.

project calendar

Defines the work schedule for project assignments. The project calendar includes working days and hours, such as Monday through Friday for 8 hours a day, and any exceptions, such as holidays.

project enterprise labor resource

A labor resource that you can assign to multiple projects.

project resource request

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

project task code

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

projected utilization

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

proposed finish date

Suggested date by a resource to complete work on a task.

proposed hours

Number of hours needed to complete a task, as suggested by a team member. Proposed hours differ from the original planned hours only if a team member suggests the change.

proposed start date

Suggested date by a resource to begin work on a task.

qualification

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

resource breakdown structure

One or more hierarchies of resources, resource types, resource formats, or other resource groupings that are used for financial and project planning and for viewing planned and actual amounts for a project.

resource calendar

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

resource pool

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

sprint velocity

Rate at which story points are achieved in sprints. Use sprint velocity to predict how many story points you can achieve in coming sprints.

story point

Indicates the relative size of a user story based on its complexity. Use story points to measure the effort required to implement a story in an Agile development process.

target utilization

Percentage of hours that a resource or resources are expected to work on project assignments compared to the available hours.

task date constraint

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

task dependency

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

to-do task

Task used by team members to manage collaborative work, for example Attend Training. A to-do task isn't associated with a project.

total backlog story points

The total number of story points that must be completed for the completion of product development.

viewer

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

work item

An item that represents a unit of work that team members are performing on a project task. The status of the work item can determine if a task is complete.

work plan template

A standard set of project tasks and resource assignments available for use across project teams.

workweek hours percentage

Percentage of hours a resource is available to work in a week.

