HP Project and Portfolio Management Center

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HP Project Management User's Guide

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1 Getting Started with HP Project Management

Introduction to HP Project Management

HP Project Management enables organizations to streamline and standardize the management of project activities using a template-based, collaborative approach.

HP Project Management defines the step-by-step processes required to complete specific tasks and deliverables, guiding users through a dynamic, self-documenting process to support activities such as the execution of standardized checklists or the collection of deliverables using document attachments. For more information on setting up project processes and related items, see Chapter 2, *General Setup Considerations,* on page 19.

Using project types, the business rules that govern a project or set of projects can be formalized. Policies can be set governing various aspects of a project, including schedule health, task auditing, and project security. At least one project type must be created before you can create and manage projects. For more information on setting up project types, see Chapter 3, *Configuring Project Types,* on page 33.

When creating a project, you may be able to adjust policies handed down by the project type, as well as decide whether to include a work plan or staffing profile. Project security can also be defined. See Chapter 4, *Creating a Project,* on page 67, for more details on creating a project.

Work plans can be defined as hierarchical structures of summary tasks that logically group and organize tasks or activities. See Chapter 5, *Creating a Work Plan,* on page 77, for details on creating a work plan. Once the work plan structure is in place, task details can be configured in batches or one at a time, depending on the nature of the changes. See Chapter 6, *Configuring Tasks,* on page 113, for more details on task-to-task navigation.

Work plan templates can also be used to create preset work plan structures that are ready to use. See Chapter 9, *Using Work Plan Templates,* on page 217, for more details on the use of work plan templates, including converting existing work plans into templates.

As the project executes, managers can make use of the Project Overview page to view important project metrics such as health indicators, milestones, and issues. See Chapter 7, *Managing a Project,* on page 137, for details on the use of the Project Overview page as well as project management activities such as taking baselines and revising the work plan.

Project teams can easily manage work plan activities within and across the technology chain because all team members, whether internal or external, collaborate and interact through an intuitive interface. Chapter 8, *Updating Tasks: Resource Activities,* on page 195, explains how resources on a project locate, update, modify, and report on tasks to which they are assigned.

For example, when creating a new and updated version of a business system, a company could classify its efforts into summary tasks for each major functional area.

- Each of these functional summary tasks could be further broken down into tasks directed to areas such as web content, application and database tasks.
- These tasks can be linked to requests and packages from HP Demand Management and HP Deployment Management, giving instant visibility to more detailed activities supporting an overall work plan. Tasks can also have constraints and notifications configured on an individual basis. See Chapter 6, *Configuring Tasks,* on page 113, for more information.

- In conjunction with HP Resource Management, role and skill assignments can be tracked against resource availability. Resource utilization can also be measured, visualized, and optimized.

To make use of their full range of features, resources and resource-related configurations should be set up in HP Resource Management prior to using HP Project Management. For more detailed information, see Chapter 2, *General Setup Considerations,* on page 19, or the *HP Resource Management User's Guide.*

- In conjunction with HP Time Management, time sheets can be used for actuals reporting on project-related work. See Chapter 11, *Integration with HP Time Management,* on page 275, for more details.
- As the project executes, risks, issues, and proposed scope changes can be submitted along preconfigured project control processes and tracked at the Project Overview level.
- As the project executes, different sets of users may be called upon to evaluate and move the project along its pre-defined lifecycle.
- Baselines of the work plan can be taken at any time, providing a basis for work plan performance comparisons.
- Work plan cost data is tracked at the task level, and can be used to analyze trends and patterns via earned value analysis. Costs can be automatically calculated or manually specified, and actual costs can be automatically rolled up into the project financial summary.
- HP Project Management also supports standard integration with Microsoft® Project so that functions such as task scheduling and resource management can be utilized at any point during a work plan's execution. See Chapter 10, *Integrating HP Project Management with Microsoft Project,* on page 223, for more detailed information.

Related Documents

Related documents for this book are:

- *HP Demand Management User's Guide*
- *HP Deployment Management User's Guide*
- *HP Project Management Configuration Guide*
- *HP Resource Management User's Guide*
- *HP Time Management User's Guide*
- *HP Time Management Configuration Guide*
- *Security Model Guide and Reference*

2 General Setup Considerations

Overview of General Setup Considerations

There are several configuration steps that should be completed before you start to make use of HP Project Management. Some of these steps are required in order for you to take full advantage of HP Project Management functionality; others are optional depending on how much you want HP Project Management to fit your business processes.

In general, the configuration and setup work is as follows:

1. Set up resources and resource pools.

   HP Resource Management allows you to create resource information for each user of HP Project and Portfolio Management Center, including details such as:

   - Role
   - Skill profile
   - Organization unit
   - Individual resource calendar

   In order to assign a resource to a project's staffing profile or work plan, the resource must belong to a resource pool you manage. Resources that belong to other resource pools can be requested using standard staffing profile functionality.

   See *Setting Up Resources* on page 22 for more details on this step.

2. Set up regions.

   Regions are associated with each project and resource. They define attributes such as:

   - Calendar
   - Holidays
   - Normal working days and hours
   - Default currency

   See *Setting Up Regions* on page 24 for more details on this step.

3. (Optional) Configure HP Project Management validations.

   Lists of values for certain fields can be tailored to suit your business needs through validations, which can be edited in the PPM Workbench.

   See *Configuring HP Project Management Validations* on page 24 for more details on this step.

4. (Optional) Configure fields displayed in the **Project Details** tab in the Project Overview page.

   The fields in the **Project Details** tab are preconfigured content, but they can be modified to suit your business needs. At a minimum, the security settings for these fields should be reviewed.

   See *Configuring the Project Details Tab* on page 27 for more details on this step.

5. (Optional) Configure the project process in the PPM Workbench.

   The project process is modeled in a preconfigured workflow that can be configured in the PPM Workbench to suit your business needs. At a minimum, the security settings for the workflow and its steps should be reviewed.

   See *Configuring the Project Process* on page 28 for more details on this step.

6. (Optional) Configure project control processes.

   Project issues can be submitted against a particular project to raise issues that require attention. Once submitted, project issues follow their own workflow to resolution. Project issue fields and behavior, as well as the underlying workflow, can be configured in the PPM Workbench to suit your business needs. Similar management tools are provided for project risks and scope changes.

   See *Configuring Project Control Processes* on page 28 for more details on this step.

7. Set up project types.

   Every project is created from a project type, which contains project policies that you can preconfigure for ease of use, or even lock down when appropriate. In order to create a project, you must first configure at least one project type. The Enterprise project type comes preconfigured, but should be reviewed to ensure that it suits your business needs.

   See *Setting Up Project Types* on page 30 for more details on this step.

8. (Optional) Set up activities.

   Tasks in the project work plan can be associated with activities, which can be used for Statement of Position (SOP) 98-1 tracking, classifying tasks as capital or operating expenses when they are actualized. If you choose not to activate SOP 98-1 tracking, activities can still be associated with tasks as a categorization tool.

   See *Setting Up Activities* on page 31 for more details on this step.

9. (Optional) Set up integration with HP Time Management.

   Setup for HP Time Management integration is mostly done on the project type level. But, before using HP Time Management for reporting on project-related work activities, you should ensure that each resource has the proper permissions and delegations set up in HP Time Management. See the *HP Time Management User's Guide* and *HP Time Management Configuration Guide* for more information.

10. (Optional) Set up integration with Microsoft Project.

    HP Project Management can integrate with Microsoft Project. In order to take advantage of this integration, there are a few server settings that must be configured.

    See *Setting Up Microsoft Project Integration* on page 32 for more details on this step.

11. (Optional) Set up task user data.

    Task user data are custom fields that can be associated with every task in HP Project Management.

    See *Setting Up HP Time Management Integration* on page 31 for more details on this step.

Setting Up Resources

Resources in HP Project Management can be tracked to optimize their time and capabilities with HP Resource Management. HP Resource Management allows a project manager to:

- Set a calendar for each resource, determining total availability as well as specifying vacation days
- (Optional) Assign a primary skill and role to a resource
- View resource load by time period, work plan, or individual
- Analyze and search resource availability

Resource pools can be used to track the supply of resources and are also necessary for work plan assignments. Each resource expected to be assigned to a project staffing profile or directly to a work plan must belong to a resource pool managed by the project manager. Either of the following project resource management strategies can be employed:

- If your resources are not being actively managed, you can place all possible project resources into a single resource pool and designate all possible project managers as the resource pool's managers. This allows you to select any resource for your project staffing profile or work plan.

  This strategy is not recommended if you have a large number of resources. Managing a large number of resources from a single resource pool affects performance and server stability.

- If your resources are being actively managed in such a way that their time must be requested from their managers, a staffing profile should be used. This allows you to request resources from a resource pool you do not manage using HP Resource Management functionality. The resource's manager will approve or reject the request.

Resources (including calendar information) and resource pools should be set up in HP Resource Management before creating a project in HP Project Management. Roles and skills should also be set up even if you do not intend to associate them with resources.

See the *HP Resource Management User's Guide* for detailed information on how to perform these tasks.

Cost rates for individual resources are set using cost rate rules, which are controlled through HP Financial Management. See the *HP Financial Management User's Guide* for detailed information on cost rate rules and their setup.

The following tasks can also be performed using HP Resource Management:

- Mapping of resources into an organization model and tying organization units to security groups
- Projecting the allocation of resources over time using staffing profiles

See the *HP Resource Management User's Guide* for additional details.

Setting Up Regions

Regions are set up in HP Resource Management and contain their own calendars. These regional calendars specify the following:

- Number of hours in a working day
- Working days for each week
- Holidays

A project can then be associated with a region for accurate project and resource scheduling.

See the *HP Resource Management User's Guide* for detailed information on setting up regions and regional calendars.

Configuring HP Project Management Validations

Values for certain fields in PPM Center are controlled by validations that are configurable or extensible. To change the list of possible values in a field, you must open its validation in the PPM Workbench and edit it from there.

Configurable or extensible validations only exist for fields associated with the **Project Details** tab of the Project Overview page and the project control processes. Values for work plan fields cannot be changed.

The Business Unit field on the **Project Details** tab of the Project Overview page is an example of a static list validation, which provides a static list of options to the user. A static list validation can be a drop-down or an auto-complete list component.

If your PPM Center instance supports multiple languages, any validation you create is defined in the language you selected at logon (your session language). After the validation is created, it can be modified only in its definition language. For more information, see *Multilingual User Interface Guide*.

To add values to the validation list:

1. Log on to PPM Center and open the PPM Workbench.
2. From the shortcut bar, click **Configuration > Validations.**
3. On the **Query** tab of the Validation Workbench window, click **List.**

   The **Results** tab opens, displaying the results of the search.
4. Select **PFM - Business Units** and click **Open.**

   The Validation window opens with the Business Unit field's validation loaded.
5. Click **New.**

   The Add Validation Value window opens.
6. Provide information for the validation value as described in the following table.

Field	Definition
Code	The underlying code for the validation value. The code is the value stored in the database or passed to any internal functions, and is rarely displayed.
Meaning	The displayed meaning for the validation value in the drop-down list or auto-complete.
Desc	A description for the validation value.
Enable?	Determines whether the validation value is enabled. This should be checked if you want the value to appear in the field.
Default	Determines whether the value is the default value for the list. This value is initially displayed in drop-down lists (this is not used for auto-complete lists). There can be only one default value per list.

7. (Optional) Set the validation value as the default by selecting the **Default** field.

   The default option is only available for drop-down lists.

8. Click **OK** to close the window and add the value to the validation. Click **Add** to add the value and keep the Add Validation Value window open.

   Validation values can be re-ordered using the up and down arrow icons. The sequence of the validation values determines the order that the values are displayed in the list.

9. When you are done adding values to the validation, click **Save** or **OK** in the Validation window to save the new values.

You can copy existing values defined in other validations using the **Copy From** button. Click **Copy From** and query an existing list-validated validation and choose any of the validation values. Click **Add** or **OK** in the Copy From window and the selected value or values are added to the list.

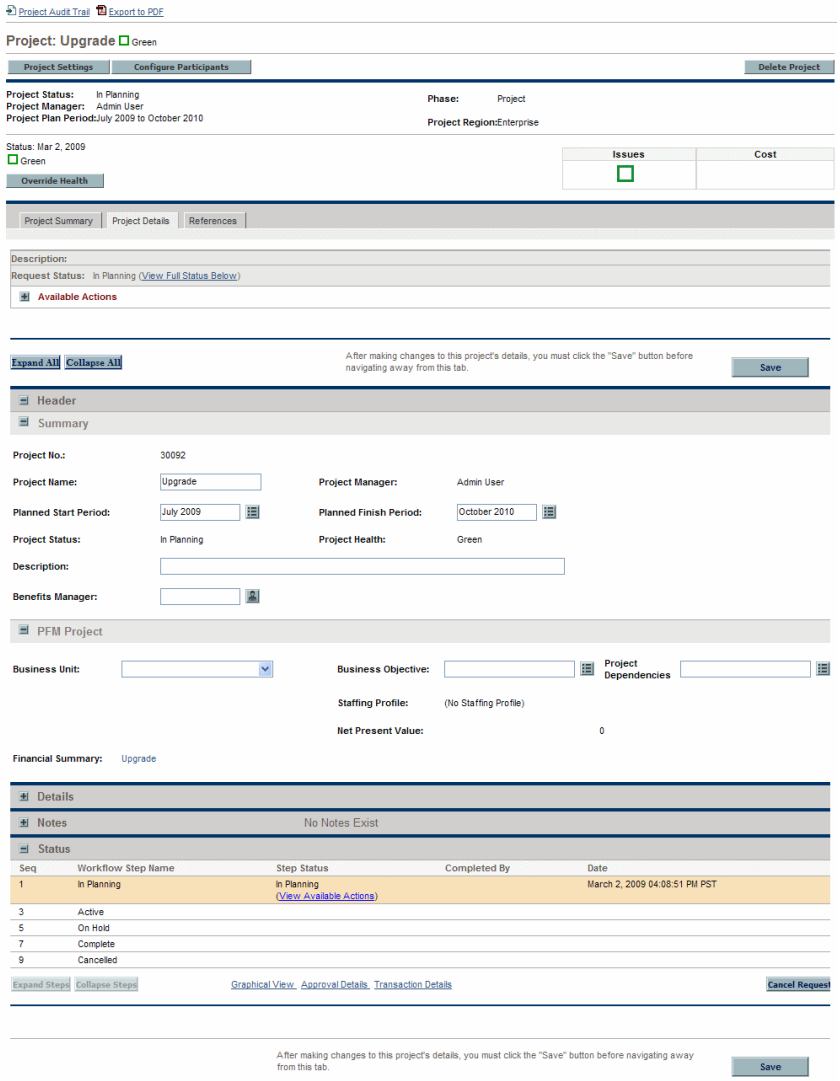
Be careful when creating validations (drop-down lists and auto-complete lists) that are validated by lists. Each time the set of values changes, you will be forced to update the validation. Consider, instead, validating using a SQL query or PL/SQL function to obtain the values from a database table.

For more information on editing and creating validations of various types, see the *Commands, Tokens, and Validations Guide and Reference.*

Configuring the Project Details Tab

The **Project Details** tab of the Project Overview page contains fields delivered as preconfigured content for projects.

Figure 2-1. Project Overview page: Project Details tab



These fields do not need to be set up or altered in any way before you start using HP Project Management, but if you want to change them, they can be customized to suit your business needs in the following ways:

- Individual field names and values can be changed.
- Fields themselves can be configured to be hidden, visible, or read-only depending on what stage has been reached in the project process, which is driven by the workflow discussed in *Configuring the Project Process*.

These fields and their workflow interactions are contained and defined by a request type that can be altered in the PPM Workbench.

For detailed discussion of this request type and workflow configuration, see the *HP Project Management Configuration Guide.*

Configuring the Project Process

The project process is determined by a workflow in PPM Center. This workflow is delivered as best-practice content ready for you to use in HP Project Management, but if you want to change it, it can be customized to match your organization's project execution process. Steps in the workflow can also be configured to integrate with fields on the **Project Details** tab in the Project Overview page, determining whether they are visible or editable.

For detailed discussion of this request type and workflow configuration, see the *HP Project Management Configuration Guide.*

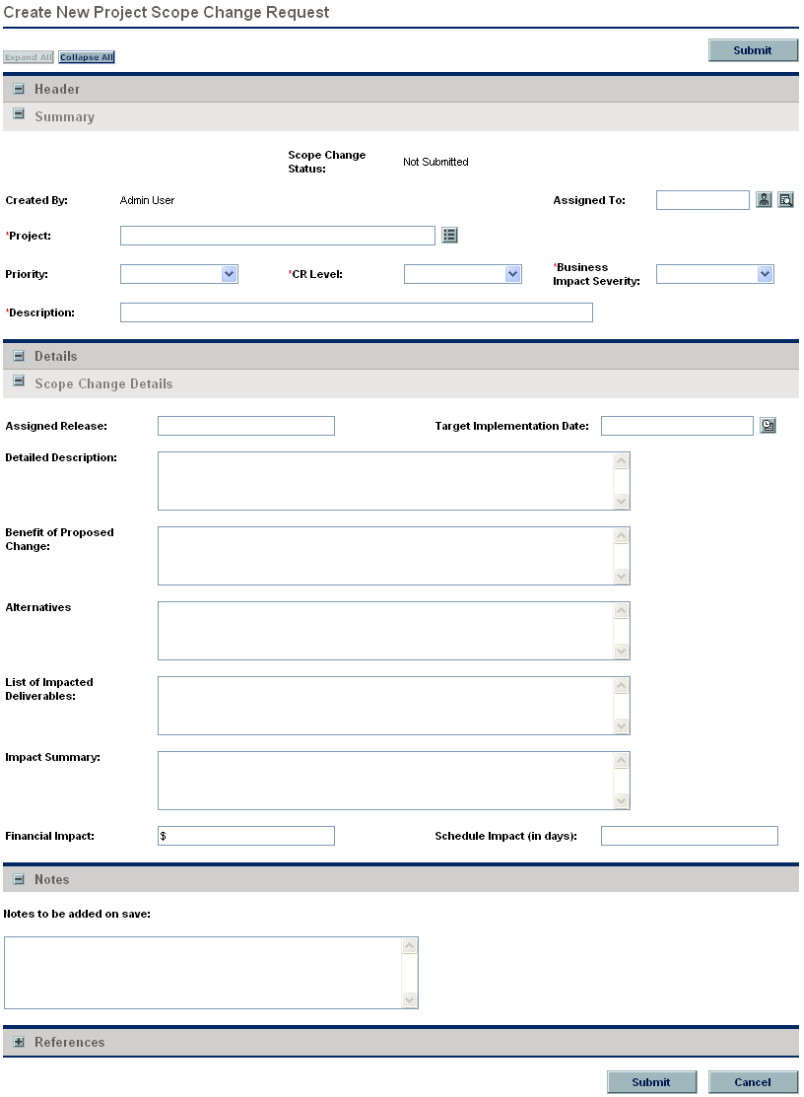
Configuring Project Control Processes

HP Project Management includes specialized project control items that can be submitted and managed during project execution as HP Demand Management requests:

- Issues can be filed against a particular project to raise issues that require attention.

- Risks can be brought up to highlight risks that may endanger project execution.
- Scope changes can be requested to adjust the scope of the project.

Figure 2-2. Project scope change



Once submitted, these requests follow their own workflows to resolution. Each request type and its workflow are delivered as best-practice content ready for you to use, but if you want to change them, they can be customized to match your project control processes. The following project control request aspects can be changed to suit your business needs:

- Individual fields and possible values can be changed.
- Fields themselves can be configured to be hidden, visible, or read-only depending on what stage has been reached in the workflow.
- The workflows can be changed.

For detailed discussion of these project control request types and workflow configuration, see the *HP Project Management Configuration Guide.*

Setting Up Project Types

All projects are created from project types. A project type is used to default or impose the business rules that will be used to manage a new project. Project types include policies for different aspects of managing the project, including:

- What types of actuals are collected
- Whether built-in project costing or HP Time Management are used for the project
- Whether the project will include a work plan

Project types and their policies must be set up before you can begin creating projects. For detailed discussion of configuring project types, see Chapter 3, *Configuring Project Types,* on page 33.

Setting Up Activities

Activities are simple configuration entities that can be associated with tasks in the project work plan. Activities marked as capitalized are used in this capacity for Statement of Position (SOP) 98-1 tracking, and will categorize the costs of associated tasks as capital if the project supports capitalization. If you choose not to activate SOP 98-1 tracking, activities can still be associated with tasks as a categorization tool, and any associated costs will be considered operating expenses.

You do not need to configure activities nor associate them with tasks if you are not interested in SOP 98-1 tracking, or if you do not wish to track task categories to this level of granularity. HP Project Management comes with a pre-defined set of activities reflecting common SOP 98-1 categories that can be configured for use with tasks.

For detailed discussion of configuring activities and activity behavior, see the *HP Financial Management User's Guide.*

Setting Up HP Time Management Integration

HP Time Management can be used in conjunction with HP Project Management for detailed entry of time and effort actuals using time sheets. Time sheets have their own sets of approvers and approval processes, and can be used for more granular cost reporting.

Setup for HP Time Management integration is mostly done on the project type level, but before using HP Time Management for reporting on project-related work activities, you should ensure that each resource has the proper permissions and delegations set up in HP Time Management. See the *HP Time Management User's Guide* and *HP Time Management Configuration Guide* for more information.

A few configuration tasks must be completed before using HP Time Management with HP Project Management. They are as follows:

- Ensure that users who will be updating project actuals through HP Time Management have the proper licenses and access grants
- Ensure that project managers have the proper access grants to approve time sheets submitted by users
- For each project, ensure that the proper project settings have been configured for HP Time Management integration

For detailed discussion of HP Time Management integration, see Chapter 11, *Integration with HP Time Management,* on page 275.

Setting Up Microsoft Project Integration

HP Project Management integrates with Microsoft Project, allowing you to create a work plan in either application and synchronize scheduling and actuals information between the two. For example, if you are more comfortable creating work plans in Microsoft Project, but want to take advantage of HP Project Management's project participant functionality (such as the My Tasks portlet), you can create a work plan in Microsoft Project and send it to HP Project Management.

There are a few tasks that must be completed before using HP Project Management with Microsoft Project. See the *HP Project Management Configuration Guide* for more details.

For more detailed discussion of Microsoft Project integration, see Chapter 3, *Configuring Project Types,* on page 33.

Setting Up Task User Data

Task user data are custom fields that can be associated with every task on a work plan. If you have no need of custom fields for tasks on your work plans, then you do not need to configure task user data.

For detailed discussion of task user data setup, see the *HP Project Management Configuration Guide.*

3 Configuring Project Types

Overview of Configuring Project Types

This chapter discusses project types and project policies, and gives instructions on how to create and modify them.

Project Types

Each project is associated with a project type on creation. A project type is used to default or impose the business rules, or *project policies*, that will be used to manage a new project. At least one project type must be created in order for you to be able to create projects in HP Project Management, though an Enterprise project type is included with HP Project Management upon installation.

You can define ownership of each project type, allowing you to control which users can make changes to that project type. This can be useful when multiple organizations within a business maintain their own project types. You can also define limits on who can use a given project type to create projects. Project types can be copied. Project types can also be disabled, but any project currently using that project type will be unaffected.

Project Policies

A project type includes policies for a project concerning:

- Which health metrics will be tracked for the project, as well as threshold levels for each health color
- Security and audit controls for the project
- The request type that will define the fields on the **Project Details** tab and drive the project process
- Costing exception rules that will be used to calculate indicators showing costing and earned value violations
- Whether the project will include a work plan
- What types of actuals are collected
- Rules that govern work plan scheduling
- Scheduling exception rules that will be used to calculate indicators showing a scheduling problem
- Whether built-in project costing or HP Time Management are used for the project
- Settings for Microsoft Project integration
- Settings dictating the items that count as workload for resources for the project

The project type and its policies determine a project's settings.

Enforcing Project Policies

For each policy, the project type determines whether projects using the project type will be allowed to modify the associated settings. When you create a project using a project type with overridable policies, you can change the corresponding settings on that project as needed.

For example: A project type called “Alpha Project” is created for Company A. “Alpha Project” has an overridable **Cost and Effort** policy. A manager creates a project using the “Alpha Project” type, and changes the **Cost and Effort** settings to suit the needs of the project at hand. The manager cannot change any other settings, as they are non-overridable.

For projects that are already in progress, changing a project type policy or its override status has the following effects:

- Changing an overridable policy to non-overridable will change that policy for projects in progress, switching their settings to match the new policy if settings were altered previously.
- Changing a non-overridable policy to an overridable policy has no effect on projects in progress.
- Making a change to a non-overridable policy changes the settings on projects in progress to match the new policy.
- Making a change to an overridable policy has no effect on projects in progress.

In cases where changes to a project type will cause recalculation of data (such as changes to exception thresholds), these calculations are deferred.

Making Changes to Policies that Do Not Propagate

Certain policies do not propagate changes to existing projects, even if they are set to be non-overridable. These policies are:

- Cost and Effort
- Microsoft Project Integration
- Work Plan Template (changes do propagate, but do not alter existing work plans)

If you want to make changes to a project type policy that does not propagate, following the general procedure outlined below:

1. Identify a time when system activity is low.
2. On the project type, unlock the project policy.
3. Open existing projects and change the settings on each where allowed.
4. On the project type, lock the project policy.

Working with Project Types

To create a project type:

1. Log on to PPM Center.
2. From the menu bar, select **Create > Administrative > Project Type.**

   The Create Project Type page opens.
3. Type a **Project Type Name** and, optionally, a **Description.**
4. Set the desired project policies as described in *Setting Project Policies*.
5. Click **Create.**

Setting Project Policies

Project policies are grouped into related areas. These policies become the settings for a project created from the project type they belong to.

To set project policies, click the button corresponding to the policy you want to edit and make the necessary changes before clicking **Save.**

Project Fields

The **Project Fields** policy controls the fields tracked by a work plan. Selecting the checkbox or option next to a field activates it. Some fields contained in the **Project Fields** policy are required in order for you to take full advantage of HP Project Management functionality, and should be left active.

Figure 3-1. Project Fields policy

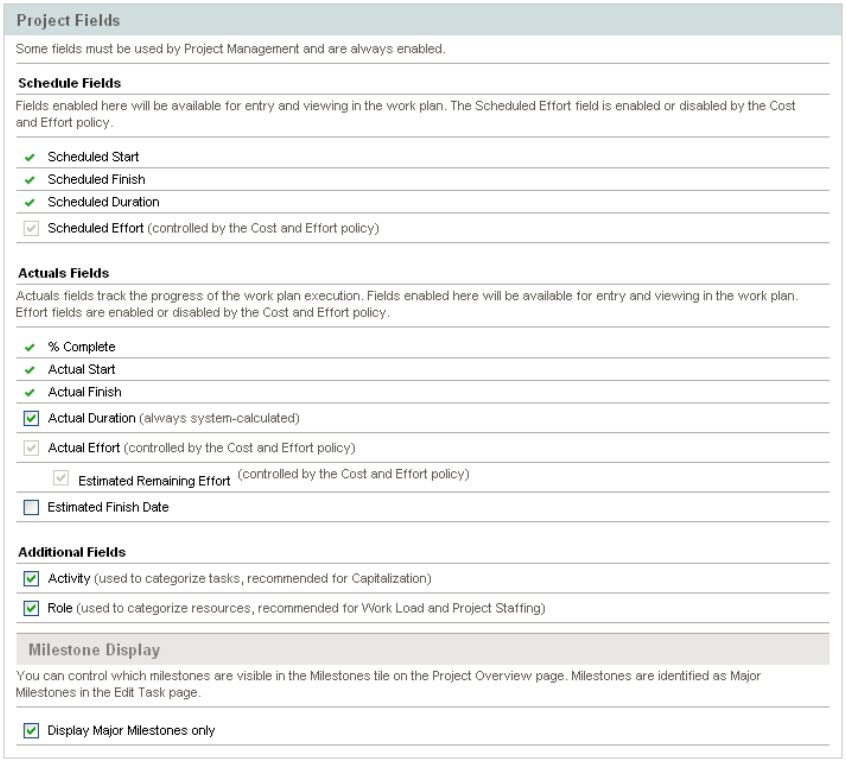


Table 3-1 describes the fields controlled by the **Project Fields** policy.

Table 3-1. Project Fields policy

Field Name	Description
Schedule Fields section	
Scheduled Start	The scheduled start for a task.
Scheduled Finish	The scheduled finish for a task.
Scheduled Duration	The scheduled duration for a task.
Scheduled Effort	Allows you to specify scheduled effort per task. This field is controlled by the **Cost and Effort** policy.
Actuals Fields section	
% Complete	The amount of the task that has been completed.
Actual Start	The date at which work on the task actually begins.
Actual Finish	The date at which work on the task actually ends.
Actual Duration	The actual duration of the task, calculated from the Actual Start and Finish.
Actual Effort	Allows you to specify actual effort values for each task. This field is controlled by the **Cost and Effort** policy.
Estimated Remaining Effort	Allows you to specify an estimated remaining effort value for each task. This field is controlled by the **Cost and Effort** policy.
Estimated Finish Date	Allows you to specify an estimated finish date for each task.
Additional Fields section	
Activity	Allows you to assign an activity to a task; used primarily for SOP 98-1 tracking.
Role	Allows you to specify a role for each task.
Milestone Display section	
Major Milestones	Allows you to identify tasks as “major milestones” that appear on the Project Overview page.

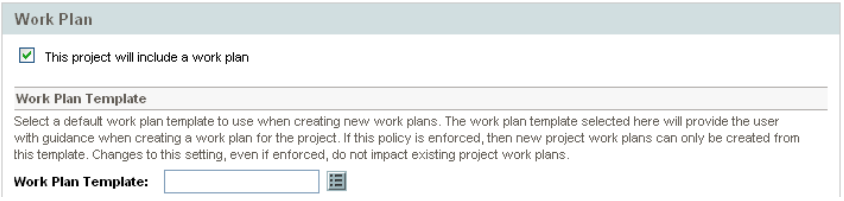
Work Plan

The **Work Plan** policy allows you to specify whether a project will have a work plan, as well as suggest or enforce a specific work plan template to be used with the project type. This policy's override behavior is as follows:

- If you specify a work plan template in the **Work Plan Template** field and set the policy to non-overridable, a project created from this project type can only create a work plan based on this work plan template. Moreover, the default work plan template cannot be changed.
- If you specify a work plan template in the **Work Plan Template** field and set the policy to overridable, the manager for a project created from this project type can choose to create the work plan from the default template, another template, or manually.
- If you do not specify a work plan template, the policy is set to overridable by default. This should be done for project types that do not require a specific work plan template.

For more detailed information on work plan templates, see Chapter 9, *Using Work Plan Templates,* on page 217.

Figure 3-2. Work Plan policy



Request Types

The **Request Types** policy specifies the following items:

- The request type that controls the fields which appear in the **Project Details** tab of the Project Overview page. This request type is also associated with the workflow that drives the overall project process. This item is required.

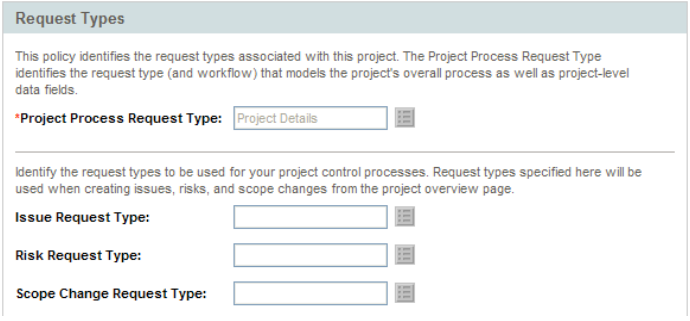
  If you have installed HP Portfolio Management, this request type will also represent the project in your portfolio. See the *HP Portfolio Management Configuration Guide* for more details.

- The request type (and, implicitly, the associated workflow) used to report and resolve project issues.

- The request type (and, implicitly, the associated workflow) used to report and resolve project risks.

- The request type (and, implicitly, the associated workflow) used to report and resolve project scope changes.

Figure 3-3. Request Types policy

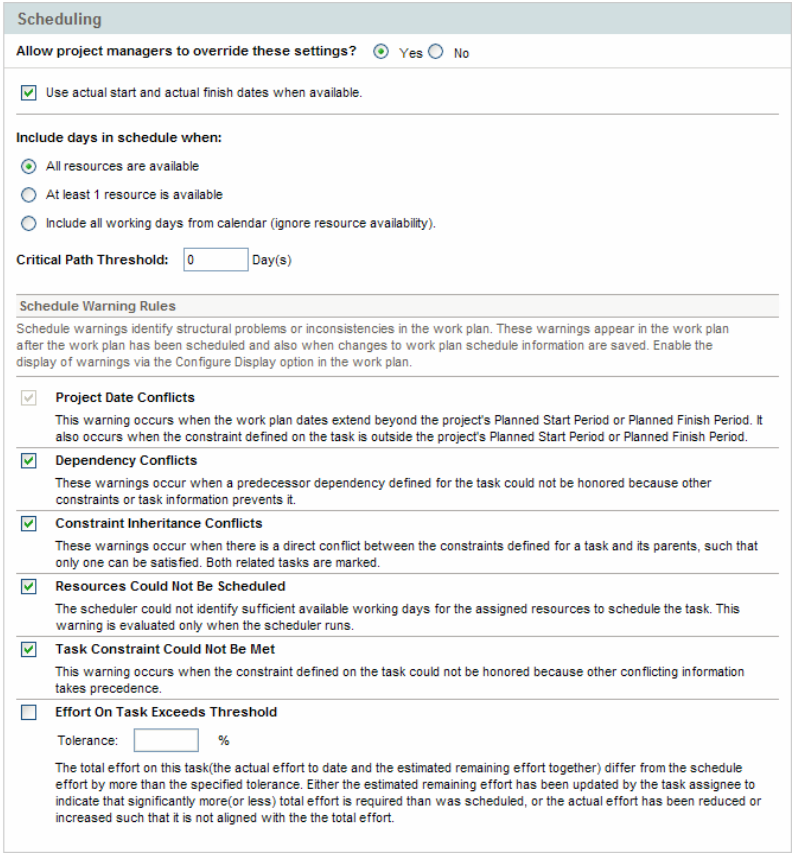


Scheduling

The **Scheduling** policy specifies options that govern how the work plan is scheduled, including:

- Default start date to schedule the work plan from
- Resource dependency
- Critical path threshold
- Scheduling warning rules

Figure 3-4. Scheduling policy



Default Start Date

This part of the **Scheduling** policy controls the default start date from which tasks are scheduled. This is set on each project, regardless of whether the policy is set to non-overridable. This is used to set a consistent date from which to schedule the work plan, no matter what occurs during the planning process.

The policy also determines whether the scheduler considers existing actual start and finish dates for tasks when rescheduling. By default actual dates are considered.

For example, once a work plan becomes Active, its tasks can be marked In Progress. When tasks are marked In Progress, actual start dates are specified for that task. If the project is set to use actual start/finish dates in scheduling, the **In Progress** tasks will move to start on their actual start dates.

Resource Dependency

Every business initiative has some minimum resource requirements, usually in the form of available personnel. HP Project Management checks to ensure that resources are assigned on their working days. The **Include days in schedule when** options can be set to consider resource requirements when creating the work plan schedule. For instance, it is possible for the **Scheduling** policy to set the project to ignore resource availability and schedule accordingly.

The default configuration is set to require all resources to be available on any given day. When creating the work plan schedule, HP Project Management will only consider days when all resources are present.

Critical Path Threshold

A work plan's critical path is the series of tasks that determines the duration of the project. The **Critical Path Threshold** is the amount of slack (the amount of time that a task may be delayed from its start without delaying the project) specified as the threshold for identifying a task as part of the critical path. Tasks with slack less than or equal to this value are on the critical path. Use of a threshold allows the project manager to control the degree of risk tolerated in management of the work plan.

Schedule Warning Rules

You can select which **Schedule Warning Rules** are used to alert the project manager about potential structural problems when scheduling a work plan. Schedule warnings are calculated whenever task data is saved, so they can be used even without using the scheduler.

HP Project Management will only issue warnings based on the schedule warning rules you have selected.

Tolerance

Tolerance is used to determine if a resource has affected the estimated remaining effort (by updating actuals on a task) and results in the total effort differing significantly from the scheduled effort. As a result of this warning, the project manager may need to adjust the schedule or resource allocation.

Tolerance is the difference between scheduled effort and total effort as a percentage of scheduled effort (where total effort is the sum of actual effort and estimated remaining effort): ((SE - (AE + ERE)) / (SE)) * 100. If the scheduled effort differs from the total effort by more than this threshold, a warning indicator is added to the schedule warnings column of the work plan.

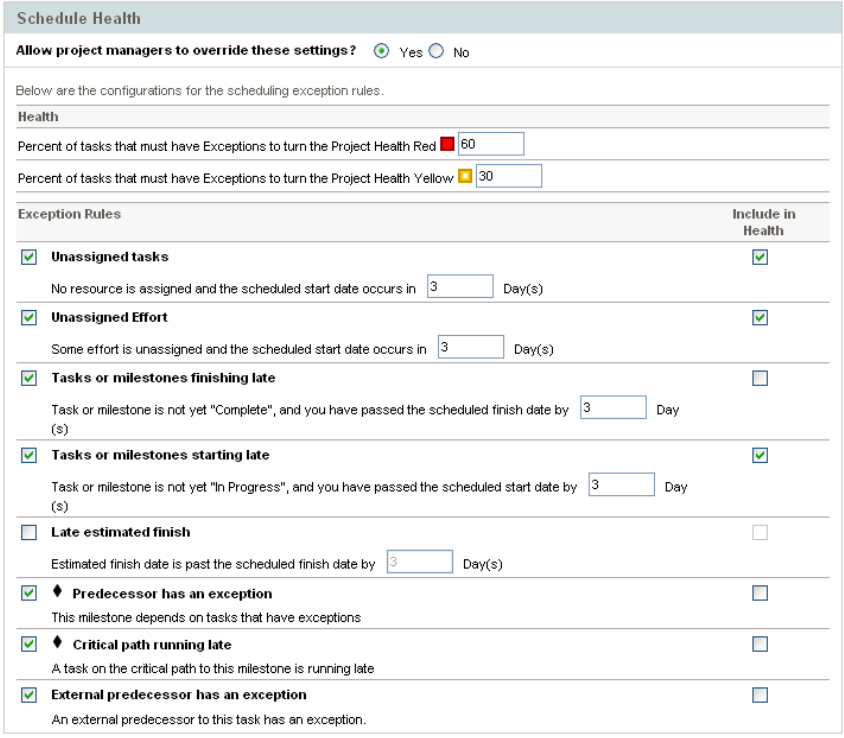
If a value is specified, the warning is cleared when the planned effort does not differ from the total effort by more than the specified tolerance. If a value is not specified, warnings are not calculated and any existing warnings are cleared.

The value specified must be an integer.

Schedule Health

The **Schedule Health** policy controls the project's schedule health indicator, as well as determining the active exception rules for a project.

Figure 3-5. Schedule Health policy



Schedule Health Indicator

The project's schedule health indicator is a simple color-coded indicator of the health of a work plan. A project only has a schedule health indicator when the work plan is **Active;** it disappears when the work plan is completed or put **On Hold.** A project's schedule health indicator color begins green and changes to yellow or red depending on the percentage of tasks identified as contributing to work plan health that have triggered exceptions (completed tasks are ignored). This percentage is configured by this policy. A project's schedule health indicator will not be calculated until the project is saved.

For example: A project is created from a project type whose **Scheduling Exception Rules** policy sets the threshold value for yellow to 30%. Four tasks trigger an exception in a work plan consisting of ten tasks total. The schedule health indicator turns yellow, and will remain yellow until at least two tasks are reworked until they no longer trigger exceptions (this could be accomplished by changing a start date, or modifying resources, or starting the tasks). Once this occurs, the schedule health indicator turns green.

Scheduling Exception Rules

Projects come with a set of predefined exception rules. The **Schedule Health** policy can specify which exception rule(s) are to be enabled, as well as the criteria needed to trigger them. As discussed above, the policy can also set the schedule health indicator, which is a simple color-coded indicator of the schedule health of a project. The schedule health indicator watches for schedule exceptions that have been triggered, and changes color according to the policy.

This can be a good way to keep track of high-risk projects. For example, for a project type with a very low margin for error, the policy can set the percentage of triggered exceptions needed to change the schedule health indicator red to 20, giving clear early warning of problems.

The **Schedule Health** policy controls the exception rules relating to project scheduling and execution.

The following parameters for almost all exception rules are configurable:

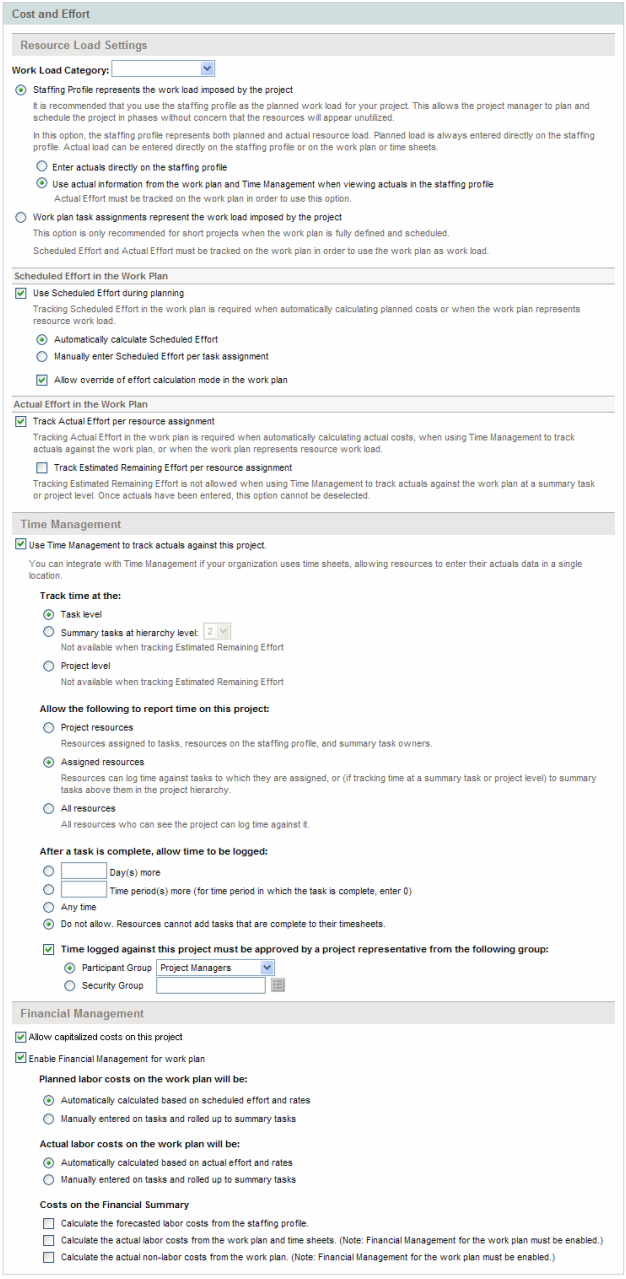
- **Enabled.** Project managers can decide whether or not the particular exception rule is enabled.
- **Rule (number of days).** Specifies the number of days the particular exception rule waits for or monitors.
- **Include in Health.** Decides whether or not the violations of the particular exception rule are included in the schedule health indicator (see *Schedule Health Indicator*).

Each exception rule within the policy can be configured independently.

Cost and Effort

The **Cost and Effort** policy dictates how the costs, effort, and workload for the project will be managed, including how this information flows between project entities such as the work plan, staffing profile, financial summary, and time sheets, if any. The policy determines whether financial information will be tracked for projects, how actuals are captured, and how costs are calculated. If you have installed HP Time Management to capture actuals, this policy controls the HP Time Management settings for a project type. If you do not have HP Time Management or choose not to use it, you can select and configure HP Financial Management options.

Figure 3-6. Cost and Effort policy



Resource Load Settings

HP Resource Management automatically keeps track of resource workload and availability. These settings determine how to track workload for a project type.

HP Resource Management allows you to attach a staffing profile to a project to track resource demand and usage. You can choose between the following options:

- **Staffing Profile represents the work load imposed by the project.** You can then choose whether to enter actuals on the staffing profile manually, or roll actuals from the work plan or HP Time Management up to the staffing profile. In order for roll-up to work, you must enable the tracking of actual effort in this policy, described in *Actual Effort in the Work Plan*. For more information on staffing profiles, see the *HP Resource Management User's Guide.*
- **Work plan task assignments represent the load imposed by the project.** In order for this option to be selected, you must enable the tracking of scheduled and actual effort in the work plan, described below.

Scheduled Effort in the Work Plan

You can decide whether or not to track the scheduled effort needed to accomplish each task in the work plan. This is required if you are setting the project to automatically calculate the planned cost of tasks (set in the **Cost and Effort** policy under Financial Management), or if the work plan task assignments are set to represent resource load (set in the **Cost and Effort** policy under Resource Load Settings).

If you decide to **Use Scheduled Effort during planning,** you can then choose to have the system automatically calculate it, or provide it manually. Additionally, you can choose to allow the calculation method to be changed in the work plan on a task-by-task basis.

Actual Effort in the Work Plan

You can decide whether or not to track actual effort per resource assignment during the execution of a project. This is required when automatically calculating actual costs, when using HP Time Management to track actuals for the work plan, or when work plan task assignments represent resource work load.

If you decide to **Capture Actual Effort per resource assignment,** you can also choose whether to **Capture Estimated Effort per resource assignment.** This setting cannot be used in conjunction with HP Time Management if you are tracking time at anything other than the task level, nor can it be changed once actuals have been captured.

Time Management

If you choose to enable HP Time Management for this policy, there are a range of options to configure, described in *Table 3-2*.

Table 3-2. Cost and Effort policy: Time Management settings (page 1 of 2)

Field Name	Description
Use Time Management to ...	Enables tracking of actuals using HP Time Management time sheets.
Track time at the ...	Specify whether to track time at the task, summary task, or project level. You can specify the summary task hierarchy level to track down to. If you are using HP Time Management to track actuals and are also capturing estimated effort, you can only track time at the task level.

Table 3-2. Cost and Effort policy: Time Management settings (page 2 of 2)

Field Name	Description
Allow the following ...	Specify whether you want **Project resources, All resources,** or only **Assigned resources** to track time. • **Project Resources.** Resources assigned to tasks on the work plan or who appear on the staffing profile can log time on any task. • **Assigned Resources.** Only resources who are assigned to a task can report time on those tasks. • **All resources.** Any resource who can see the project (including stakeholders) can log time for any task.
Allow time to be logged after ...	Specify whether time can be logged after a task completes, and if so, for how long.
Time logged against this project ...	Specify whether time logged against the project needs to be approved by a project representative.
Project Time Approver	Specify who can approve time logged against the project, either by participant group or specific security group.

Financial Management

HP Financial Management can calculate certain costs automatically depending on criteria selected (such as the fields that are enabled):

- In order to automatically calculate planned costs for the work plan, you must first enable the Scheduled Effort field as described in *Scheduled Effort in the Work Plan* on page 48.
- In order to automatically calculate actual costs for the work plan, you must first enable the Actual Effort field as described in *Actual Effort in the Work Plan* on page 49.
- In order to automatically calculate planned labor costs from the staffing profile, a staffing profile must exist.

If you choose to enable HP Financial Management for this policy, there are a range of options to configure, described in *Table 3-3*.

Table 3-3. Cost and Effort policy: Financial Management settings

Field Name	Description
Allow capitalized costs ...	Specify if the project tracks capitalization for costs, identifying all costs as either capital or operating expenses according to the activity assigned to each task. Changes to this setting affect the capitalization tracking for the financial summary associated with the project. Capitalization information is only tracked if capitalization tracking has been enabled on the PPM Server. See the *HP Financial Management User's Guide* for more detailed information.
Enable Financial Management for Work Plan	Enables tracking of work plan costs using HP Financial Management.
Planned costs will be:	Specify if planned costs are automatically calculated based on scheduled effort and rates, or manually entered.
Actual labor costs on the work plan will be:	Specify if actual labor costs are automatically calculated based on actual effort and rates, or manually entered.
Costs on the Financial Summary	Specify if cost values roll up to the financial summary associated with the project. You can choose to roll up forecasted labor, labor and non-labor costs, actual labor costs only (non-labor costs are entered manually), or no cost data at all (actual costs are entered manually). If you want to roll up non-labor costs, you must also roll up labor costs.

For more information about some of these fields, see the *HP Financial Management User's Guide*.

Cost and Earned Value Health

The **Cost and Earned Value Health** policy controls whether or not to track the cost health for a project, and if so, which metrics will be evaluated to determine health. It is used to indicate the health of a project in terms of its cost. Project cost health is calculated in the following areas:

- **If CPI is less than.** CPI, the Cost Performance Index, is the cost efficiency ratio of the project's Earned Value (Baseline Costs * % Complete) to Actual Costs. CPI is calculated as Earned Value / Actual Cost. For a healthy project, CPI should be near 1.
- **If SPI is less than.** SPI, the Schedule Performance Index, is the difference in value between the scheduled completion of a task/project and its actual completion. SPI is calculated as Earned Value / Planned Value. For a healthy project, SPI should be near 1.
- **For prior months, if actual costs exceed the plan of record by.** This is a comparison of project costs with the plan of record. It is a percentage calculated as ((Actual Cost - Plan of Record) /Plan of Record) * 100. Both the actual costs and plan of record are derived from the planned start period to the last day of the previous month. For example, if the planned start period is April 2009, and today's date is June 15, 2009, this calculation is based on actual costs and the plan of record from April and May of 2009.

  If a plan of record does not exist, this calculation is not used in the overall project cost health.

Any one of these factors can be enabled or disabled when calculating work plan cost health, but if more than one factor is enabled, the indicator represents the factor in the worst condition. If one factor out of three turns red, the cost health turns red.

Figure 3-7. Cost and Earned Value Health policy

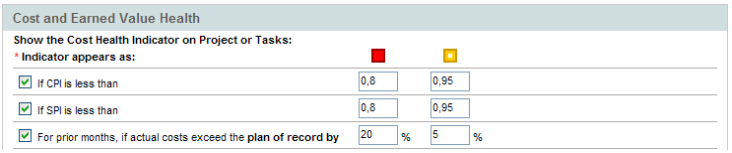


Table 3-4 details the default color change values for each relevant cost health factor.

Table 3-4. Default color change values for cost health indicator

Color changes to	CPI less than	SPI less than	Plan of record exceeded by
Yellow	.95	.95	5
Red	.8	.8	20

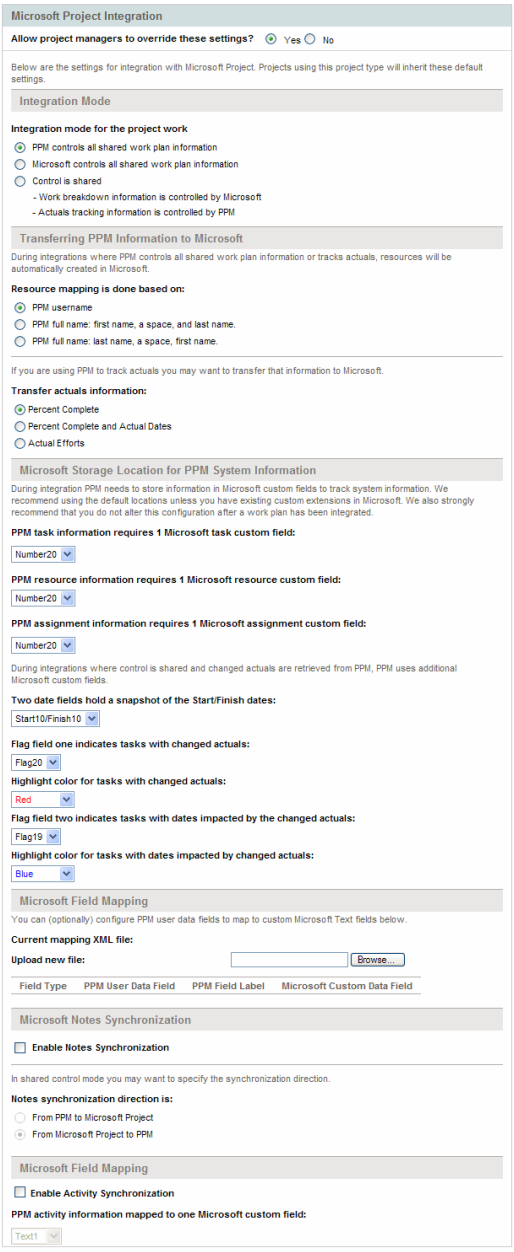
Microsoft Project Integration

HP Project Management and Microsoft Project can be integrated, allowing you to perform tasks such as:

- Opening a Microsoft Project file in HP Project Management
- Sending a HP Project Management work plan to Microsoft Project
- Using Microsoft Project to maintain the work plan while collecting actuals through HP Project Management
- Mapping HP Project Management user data and Microsoft Project custom data

The Microsoft Project Integration policy controls the level of integration between the two applications. For more detailed discussion of these settings, see *Project-Level Settings for Integration* on page 248.

Figure 3-8. Microsoft Project Integration policy



Staffing Profile Assignments

HP Resource Management allows you to attach a staffing profile to a project to track resource demand and usage. The **Staffing Profile Assignments** policy allows you to specify a default resource pool to which all resource requests for the staffing profile will be routed. For more information on staffing profiles, see the *HP Resource Management User's Guide.*

Figure 3-9. Staffing Profile Assignments policy

Project Health

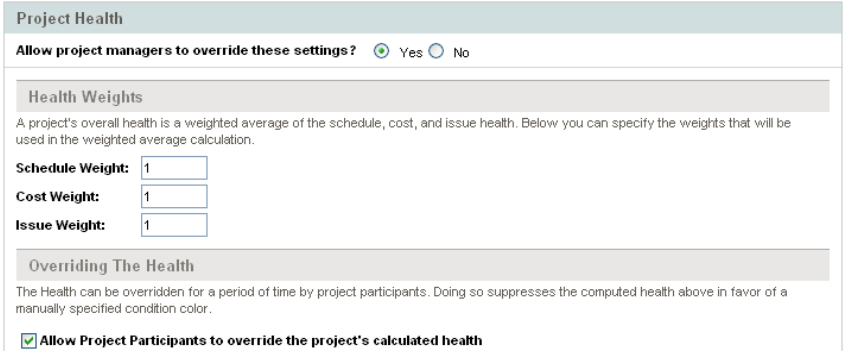
The project summary condition indicator that appears on the Project Overview page next to the project name is an indicator of the project's overall health as a weighted average of the health indicators for scheduling, cost and earned value health, and issue health.

Figure 3-10. Project health indicators

The **Project Health** policy controls the relative weights of these indicators. By default, each indicator is counted equally. To change the weighting for the summary condition calculations, provide a weight value in the appropriate field next to the desired indicator.

The **Project Health** policy also controls whether project managers can override the project's calculated health.

Figure 3-11. Project Health policy



For more information about schedule, issue, or cost health, see the following sections: *Schedule Health* on page 44, *Issue Health* on page 57, and *Cost and Earned Value Health* on page 52.

Issue Health

While a project is in progress, any number of issues may come up that need to be submitted and resolved using the project issue request. The real-time status of a project in terms of the issues submitted against it is represented by the issue health indicator, a colored icon similar to the indicators for scheduling and cost and earned value health.

Figure 3-12. Project health indicators

The **Issue Health** policy determines whether issue health is tracked for a project, and also controls the following factors in issue health indicator calculation:

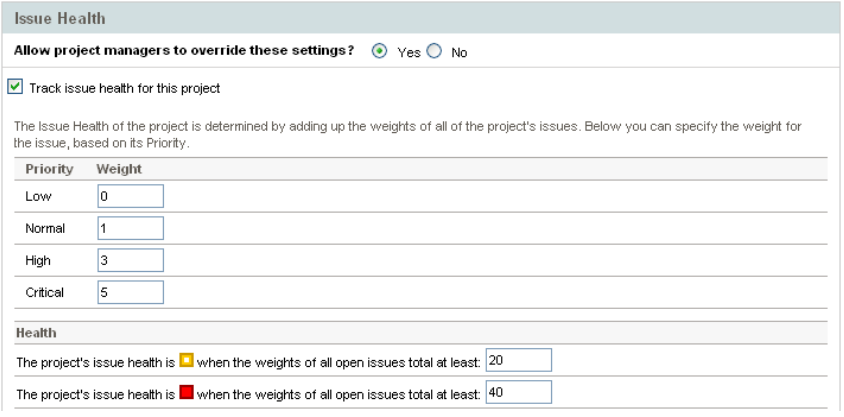
- The weight of each issue priority.

  The issue priorities that appear in this policy are determined by the validation for the Priority field, which is extensible.

- The total weight needed to change issue health indicator color.

As the weight and indicator color change values are pure numerical totals and not relative percentages, you may want to plan accordingly for project types that are expected to generate large numbers of issues.

Figure 3-13. Issue Health policy



You can assign different weights to issues that are assigned different priorities. You can also assign thresholds for the heath status levels signified by yellow and red indicators.

For example, suppose that you have assigned weights to the issue priorities for the project as follows:

- Critical: 8
- High priority: 5
- Medium priority: 3
- Low priority: 1

Suppose your project has the following issues:

- 3 high priority issues
- 2 medium priority issues

The overall health value computed for these project issues is (3 * 5 + 2 * 3), or 21.

If the threshold value for the yellow health indicator is 20, and the threshold value for the red health indicator is 40, then the issue health indicator for this project is yellow.

The default indicator thresholds are:

- Red: 40
- Yellow: 20
- Green: all values less than 20

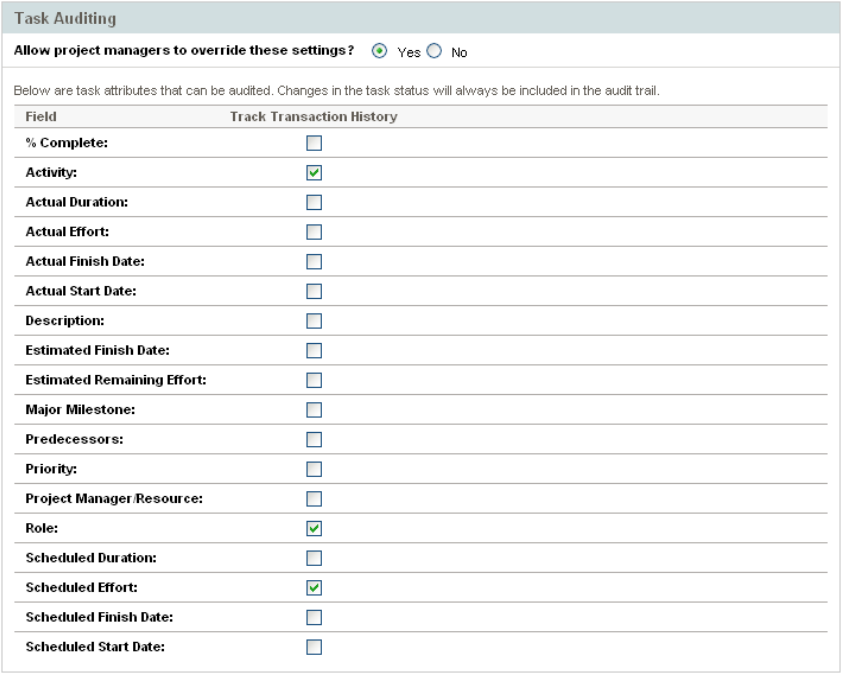
The default weights assigned to project issue priorities are:

- Critical: 5
- High priority weight: 3
- Medium priority weight: 1
- Low priority weight: 0

Task Auditing

HP Project Management can maintain an audit trail of changes to task fields in addition to a history for task status, which is always recorded. The **Task Auditing** policy controls which of these fields will be recorded. You must enable a field through the Project Fields policy in order to maintain a transaction history for it.

Figure 3-14. Task Auditing policy



Project Overview Layout

The Project Overview Layout policy controls the settings used to print and display portlets for a project.

Table 3-5. Project Overview Layout policy settings (page 1 of 3)

Field	Description
Allow project managers to override these settings?	If enabled, a project manager can modify the display and print settings and layout of a project. If disabled, the project manager cannot modify the display and print settings and layout of a project. The policy is inherited from the project type and the fields, for the project manager, are disabled.
Default Tab for display	The default tabbed area displayed in the project overview page. If `Project Exceptions` is selected and there are no exceptions for the project, the `Project Summary` tabbed area is displayed instead.
Print Settings	
Work Plan	Default: 15. The number of tasks to print in the Work Plan portlet.
Milestones	Default: 15. The number of tasks to print in the Milestone Summary portlet.
Issues	Default: 15. The number of issues to print in the Issues portlet.
Show Closed Issues	Select to include closed issues when printing the Issues portlet.
Risks	Default: 15. The number of risks to print in the Risks portlet.
Show Closed Risks	Select to include closed risks when printing the Risks portlet.

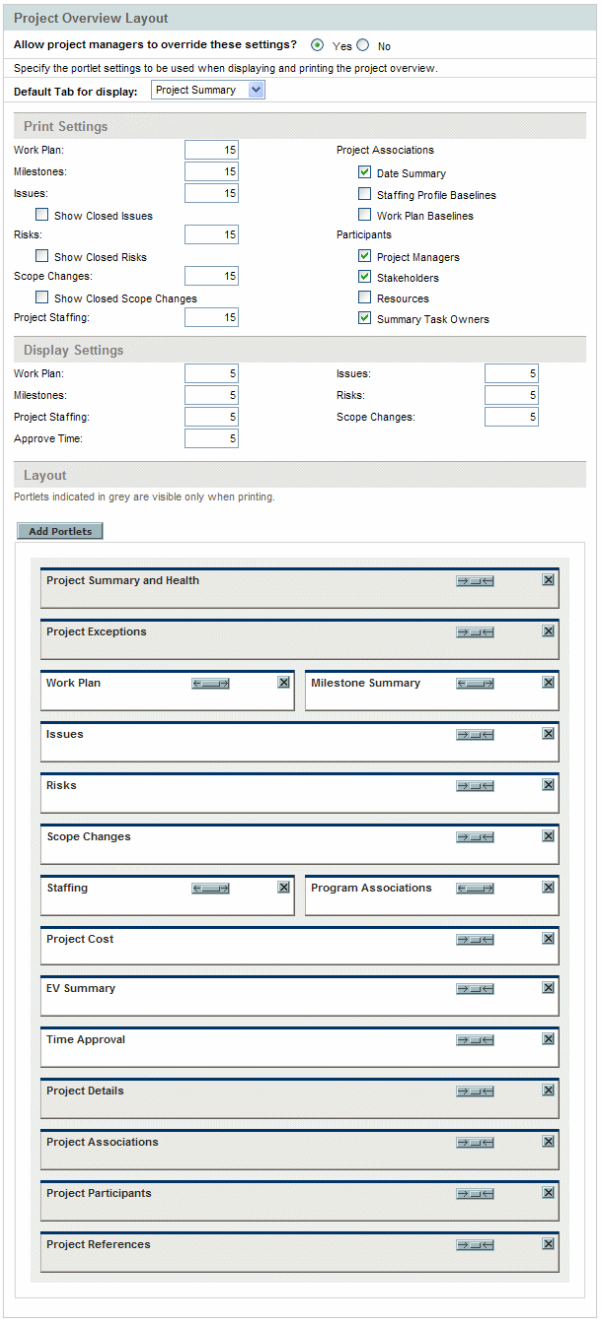
Table 3-5. Project Overview Layout policy settings (page 2 of 3)

Field	Description
Scope Changes	Default: 15. The number of scope changes to print in the Scope Changes portlet.
Show Closed Scope Changes	Select to include closed scope changes when printing the Scope Changes portlet.
Project Staffing	Default: 15. The number of lines to print in the Staffing portlet.
Project Associations	Default: Date Summary. Select the type of information to include when printing the Project Associations portlet.
Participants	Default: Project Managers, Stakeholders, Summary Task Owners. Select the participant information to include when printing the Project Participants portlet.
Display Settings	
Work Plan	Default: 5. The number of tasks to display in the Work Plan portlet.
Milestones	Default: 5. The number of tasks to display in the Milestone Summary portlet.
Project Staffing	Default: 5. The number of lines to display in the Staffing portlet.
Approve Time	Default: 5. The number of time sheet lines to display in the Time Approval portlet.
Issues	Default: 5. The number of issues to display in the Issues portlet.
Risks	Default: 5. The number of risks to display in the Risks portlet.
Scope Changes	Default: 5. The number of scope changes to display in the Scope Changes portlet.

Table 3-5. Project Overview Layout policy settings (page 3 of 3)

Field	Description
Layout	
Add Portlets	Select the portlets to display. Only Project Overview portlets can be selected.
Display area	Rearrange, resize, and/or remove portlets to display and print. Portlets shown in grey can only be printed. Portlets shown in white can be displayed and printed. When printing, the portlets shown are the portlets selected as the defaults to print in the Export Project Overview to PDF dialog. From this dialog, you can also modify the portlets to print.

Figure 3-15. Project Overview Layout policy



Project Security

The **Project Security** policy determines if a summary task owner can edit their summary tasks and the users who are able to view the project and its cost data.

By default, a summary task owner is not allowed to edit the work plan and certain toolbar buttons in the work plan are not enabled. If you select Yes for the Allow summary task owners to manage their own tasks? option, this allows summary task owners to edit, add, and remove subtasks within their summary task. Toolbar buttons are enabled for the summary task owner in the work plan.

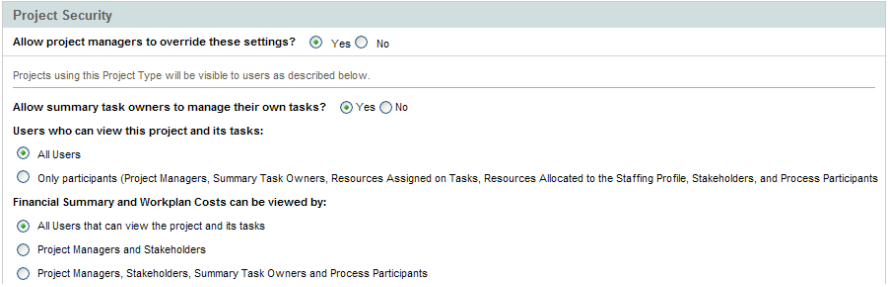
For viewing the project itself, choose between:

- **All Users**
- **Only participants (Project Managers, Summary Task Owners, Resources Assigned on Tasks, Resources Allocated to the Staffing Profile, Stakeholders, and Process Participants)**

For viewing project cost data (financial summary, cost information), choose between:

- **All Users that can view the project and its tasks**
- **Project Managers and Stakeholders**
- **Project Managers, Stakeholders, Summary Task Owners and Process Participants**

Figure 3-16. Project Security policy



Process participants for a project are the users who are included in security groups associated with steps in the workflow that governs the project process. These security groups, as well as the workflow itself, can be configured to suit your business needs. See the *HP Project Management Configuration Guide* for more information.

4 Creating a Project

Overview of Creating a Project

This chapter describes the process of creating a project. Projects allow organizations to define business initiatives with tools including:

- A configurable list of project participants
- A staffing profile that defines and tracks resource usage for a project
- A financial summary that defines and provides a basis of comparison for the amount of money devoted to a project
- A work plan that provides a hierarchical structure of tasks that logically groups and organizes activities and deliverables

Using projects, users can define, browse, edit, and manage key aspects of complex business initiatives.

The general process of creating a project for project managers is as follows:

1. Log on to PPM Center.
2. Create a project.

   When creating a project, you must select a project type. See *Creating a Project* on page 69 for more details.

   If you are using HP Portfolio Management, the project may be created for you automatically from an existing proposal.

3. Once the project is created, you can perform a number of activities from the Project Overview page.

   See *Using the Project Overview Page* on page 70 for more details.

4. Adjust the project's settings.

   Some project settings may be locked down by project policies, which are dictated by the project type. See *Adjusting Project Settings* on page 72 for more details.

5. Configure the project's participants.

   You can add to the project's list of managers and stakeholders. The project's resources and summary task owners are determined by the resources assigned in the work plan and the staffing profile attached to the project. See *Defining Project Participants* on page 72 for more details.

6. Create a staffing profile for the project.

   Staffing profiles are a HP Resource Management tool that can be used in conjunction with projects to track and manage resource demand. See *Creating a Staffing Profile* on page 74 for more details.

7. Create a work plan for the project.

   The work plan is the project's hierarchical structure of tasks that specifies task details such as:

   - Task start and finish dates
   - Task predecessors, if any
   - Assigned resources

   See *Creating a Work Plan* on page 75 for more details.

8. Once initial planning is complete, set the project and work plan status to Active to begin project execution.

Creating a Project

To create a project:

1. Log on to PPM Center.
2. From the menu bar, select **Create > Project.**
3. The Create New Project page opens.
4. Fill in all required fields and any optional fields, including **Project Type.**

   The project type contains project policies, which determine project settings. Some of these policies may be configured to be non-overridable, which lock down their corresponding project settings (see Chapter 3, *Configuring Project Types,* on page 33, for more details on project policies). Make sure you are using the desired project type before creating the project. You can only choose from project types to which you have been granted access.
5. Click **Create.**

   The project is created and the Project Overview page opens.

Using the Project Overview Page

The Project Overview page displays a wide range of information about a particular project, including

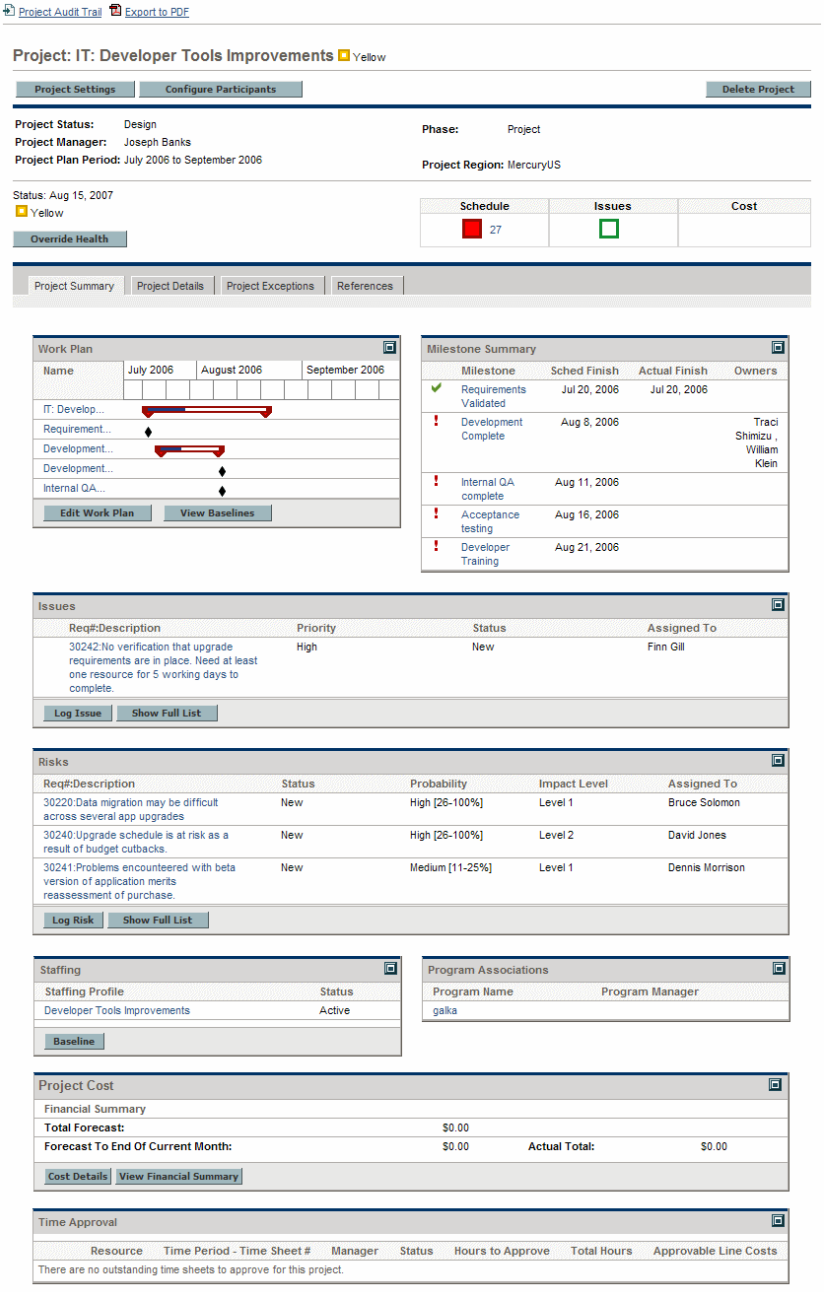
- Status
- Project manager
- Any exceptions the project might have triggered
- Any issues the project has incurred
- Milestones

All of this data and more is presented and arranged through specific sections of the Project Overview page.

When a project is first created, the Project Overview page mostly serves as a convenient central point from which to create and configure project items such as:

- Project settings
- Project participants
- Project details
- Staffing profile
- Financial summary
- Work plan

Figure 4-1. Project Overview page: Summary tab



Adjusting Project Settings

Every project contains a number of settings that can be configured by the project manager to suit that particular project's objectives. These settings are inherited from the project policies, dictated by the chosen project type.

See *Setting Project Policies* on page 36 for detailed discussion of each project policy.

To view or edit project settings, click **Project Settings** in the Project Overview page.

Project policies can be set to non-overridable, effectively locking down their corresponding project settings and preventing you from editing them.

Defining Project Participants

In general, HP Project Management defines participants in a project according to the following groups:

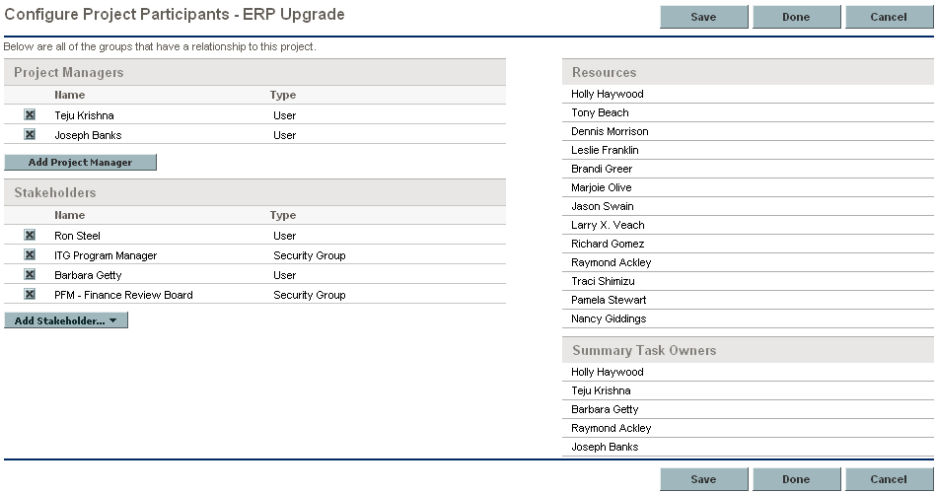
- **Project managers.** Project managers take part in project planning and management, overseeing project execution, issue resolution, and budgetary concerns.
- **Stakeholders.** Stakeholders are users who do not perform any work on a project, but are interested in the project's status and need to view project progress.
- **Resources.** Resources are users who work on tasks as part of a project team, but do not have the administrative responsibilities of a project manager. Resources view and update their tasks in HP Project Management.
- **Summary Task Owners.** Summary task owners are the people named on summary tasks who have oversight over that section of the work plan.

The list of resources for a project is automatically defined by the following sources:

- Resources assigned to tasks in the work plan
- Resources specified in the staffing profile for the project

Project managers can specify additional project managers and stakeholders for a project.

Figure 4-2. Configure Project Participants page



Stakeholders can be added individually or by security groups.

To add additional project managers or stakeholders to a project:

1. Create or open a project.
2. On the Project Overview page, click **Configure Participants.**

   The Configure Project Participants page opens.
3. Add additional project managers or stakeholders.
   - Click **Add Project Manager** to add one or more project managers.
   - Click **Add Stakeholder** and select **Add User** or **Add Security Group** to add new stakeholders.

4. Click **Done.**

   The new project managers or stakeholders have been added.

Entering Project Details

The **Project Details** tab of the Project Overview page contains fields that hold important project information, such as the business unit responsible for the project, or the business objectives the project is designed to fulfill. These fields drive the overall project process, and can be configured by users with the proper level of access, such as a program management office. For more information on configuring the **Project Details** tab fields, as well as the project process itself, see the *HP Project Management Configuration Guide.*

Creating a Staffing Profile

Staffing profiles enable a project manager to track the demand of resources for a project, arranged by role or skill. A staffing profile can be created for a project to tie it to business functions and facilitate meaningful comparison visualizations.

To create a staffing profile for a project, click **Create a Staffing Profile** in the Project Overview page.

For detailed instructions on creating staffing profiles and making use of staffing profile functionality, see the *HP Resource Management User's Guide.*

Working with a Financial Summary

A financial summary can be used to track financial information for a project, with varying levels of data dependency. Once the project is in progress, actual project costs can be rolled up to the financial summary for comparison purposes. Project cost performance as compared to the plan of record can also be taken into account when calculating project cost health. See *Cost and Earned Value Health* on page 52 for details.

For more information about financial summaries, see the *HP Financial Management User's Guide.*

Creating a Work Plan

The work plan is the actual deliverable-oriented grouping of project elements that defines and organizes the total work scope of the project. The work plan describes both the tasks and milestones, and the scheduled dates for completing these items.

You can create a project work plan in any of the following ways:

- Create a work plan from scratch. See Chapter 5, *Creating a Work Plan,* on page 77 for more details on creating a work plan.
- Create a work plan from a work plan template. See Chapter 9, *Using Work Plan Templates,* on page 217 for more details on this method.

The **Work Plan** policy in the project settings, which can be inherited from project policy, determine which of these options are available. See *Work Plan* on page 39 for more detailed discussion.

5 Creating a Work Plan

Overview of Creating a Work Plan

Once you have created a project, you can create its work plan. Project work plans allow you to define a business initiative as a hierarchical structure of tasks and summary tasks that logically groups, organizes, and schedules activities and deliverables.

There are any number of different ways in which you can create a work plan. Two methods are described in this section. Additionally, you can create a work plan from a work plan template. See *Creating a Work Plan from a Work Plan Template* on page 222 for more details on this method.

Creating a Blank Work Plan

To create a new work plan in HP Project Management, do the following:

1. On the Project Overview page, click the **Create blank work plan** link.
2. Add tasks to the blank work plan, filling in the following task aspects first:
   - Name
   - Duration
   - Start or finish date

   You can also add predecessors and structure the work plan hierarchy when initially adding tasks to the work plan. See *Adding Tasks and Creating a Work Plan Hierarchy* on page 80 for more details.

3. Create any desired milestones.

   Major milestones can also be added if the project's settings have been configured properly. See *Creating Milestones* on page 91 for more details.

4. Schedule the project.

   See *Scheduling the Work Plan* on page 92 for more details.

5. Filter the work plan view in different ways to evaluate related information.

   You can use different work plan views and filters to evaluate the work plan and make subsequent changes to tasks. See *Displaying Work Plan Information* on page 98 for more details.

6. Begin configuring individual tasks, if necessary.

   See *Configuring Tasks* on page 112 for more details.

7. View the work plan's critical path.

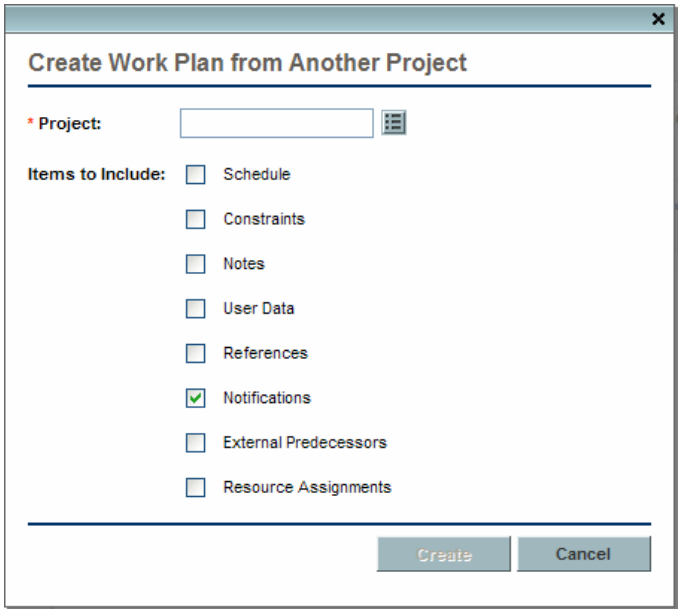
   See *Viewing the Work Plan Critical Path* on page 111 for more details.

Creating a Work Plan from Another Project

To create a work plan from an existing work plan from another project in HP Project Management, do the following:

1. On the Project Overview page, click the **Create work plan from another project** link.

The Create Work Plan from Another Project dialog opens.



2. In the Create Work Plan from Another Project dialog, type the project name from which to copy the work plan (required) and select the information to be copied (by default, Notifications is selected).

If Schedule is not copied, the schedule start date of the new work plan is defaulted to the new project's start date.

If Notes are copied, the original date and timestamp are preserved.

If Resource Assignments are copied, only resources from the existing project that are part of the new project's resource pool are copied.

The following information is automatically processed from the existing project. You cannot change how this information is processed.

Information	How Processed
Actuals	Never copied
Internal predecessors	Always copied
Microsoft Project link	Always removed at the task level
Required task flag	Always copied

Information	How Processed
Roles and activities	Copied if these fields are enabled in the project settings
Schedule duration, effort, and effort mode	Always copied
Skill proficiencies	Always copied
Summary task owner	Copied if the summary task owner from the existing project is a summary task owner in the new project
Tasks (non-root)	Always set to **Ready** or **Pending** (including tasks that were cancelled in the existing work plan)
Work plan status	Always set to **In planning** for the new project

3. Click **Create.**

You can import a work plan from another project into an existing work plan. See *Importing a Work Plan* on page 82 for more details on this method.

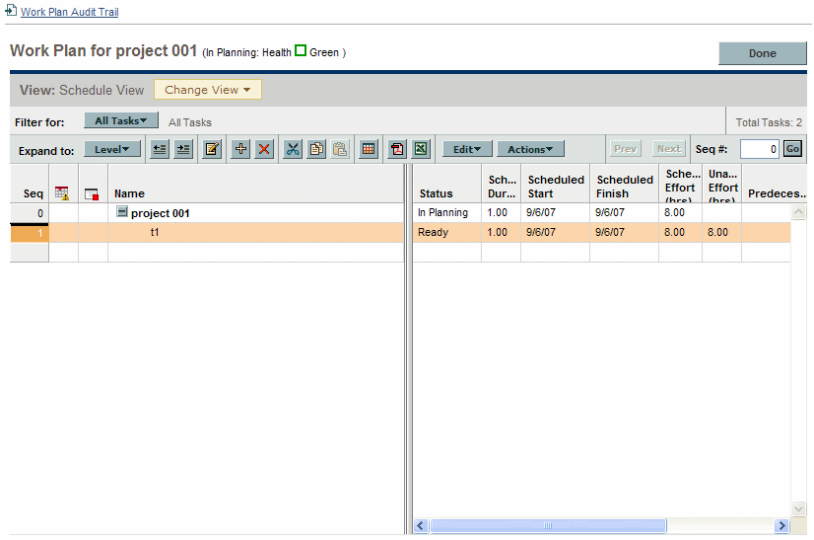
Adding Tasks and Creating a Work Plan Hierarchy

Work plans are created in the Work Plan page.

- For a new project, the Work Plan page is reached by clicking the **Create blank work plan, Create work plan from a template,** or **Create work plan from another project** links.
- For an existing project, the Work Plan page is reached by clicking **Edit Work Plan.**

The Work Plan page opens to the last view you were using when viewing the work plan. If the work plan is new, or you have never opened the Work Plan page for this project before, the **Schedule** view opens by default.

Figure 5-1. Work Plan page: Schedule view



The top-level task is automatically created with the project name.

Adding Tasks to the Work Plan

You can add a new task above any existing task in the work plan by selecting the task and clicking the **Add Task** icon, which opens the Add Tasks page. To add a task to the work plan:

1. Within the **Schedule** view, select the empty row at the bottom of the work plan and click the **Add Task** icon.

   The Add Tasks page opens, with a new task above the current selection.

2. Click the **Add Task Below** icon to add a new task below the current selection.

   - You can also add a new task above the current selection by selecting the last item in the Add Tasks page and pressing **`Insert`** on your keyboard.
   - You can also add a new task below the current section by selecting the last item in the Add Tasks page and pressing **`Enter`** on your keyboard.

3. Edit the new task's information.

   You should fill in each task's **Name,** but in order for HP Project Management to schedule the project, you must also provide scheduling information. This information can be supplied in the Add Tasks page. Click Change at the top of the page to select the combination of scheduling information you want to use.

   Tasks can also be edited through the Task Details page, which displays more detailed information on a task. The Task Details page is accessible from the Work Plan page.

   a. Select the new task and click the **Task Details** icon. The Task Details page opens.

   b. Modify the information under each tab in the Task Details page as necessary (for details, see Chapter 6, *Configuring Tasks,* on page 113).

4. Configure the task hierarchy, if desired.

   You can structure the newly-added tasks into a hierarchy of summary tasks and subordinates using the **Indent** and **Outdent** icons at the top of the Add Tasks page. See *Useful Keyboard Shortcuts in the Schedule View* on page 90 for keyboard shortcuts that can help you save time.

5. Add the new tasks to the work plan.

   To add the tasks to the work plan, click **Done.**

Importing a Work Plan

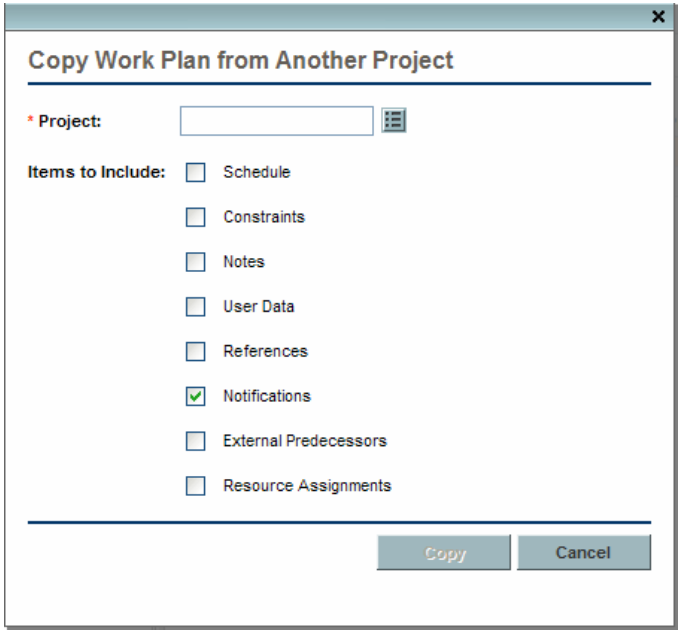
From the Work Plan page, HP Project Management allows users to import a work plan from another project into an existing work plan. To import a work plan:

1. Within the **Schedule** view, select a non-root task in the work plan.

➤ The work plan is imported above the selected task.

2. Click **Actions** and select **Import another Work Plan.**

   The Copy Work Plan from Another Project dialog opens.



3. In the Copy Work Plan from Another Project dialog, type the project name from which to copy the work plan (required) and select the information to be copied (by default, Notifications is selected). See *Creating a Work Plan from Another Project* on page 78 for more details about the information to be copied.

4. Click **Copy.**

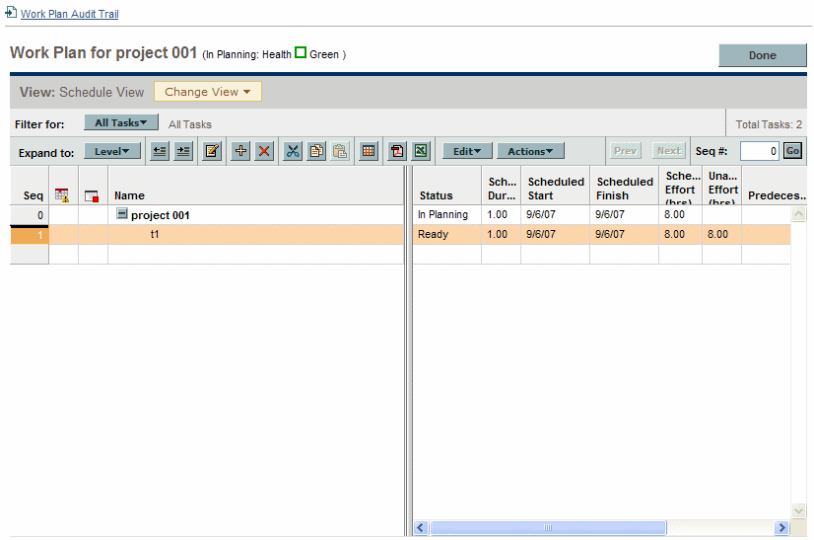
   If the imported work plan is large, the selected task (in step 1) disappears from the Schedule view (you can scroll down to view the selected task).

Creating a Work Plan Hierarchy

HP Project Management allows users to add and structure tasks in any order, from either the Add Tasks page or the Work Plan page. Once tasks have been added, you may find that you need to rearrange them later. The Work Plan page also allows you to arrange and group tasks in a hierarchy.

Changes made to the work plan in the Work Plan page are immediately saved.

Figure 5-2. Work Plan page



To move an item up or down in the hierarchy:

1. Select the task or collapsed summary task.
2. Click the **Cut** icon.

   You can also simply copy a task using the **Copy** icon. Copied tasks can be pasted several times.
3. Select the task below your target area in the work plan hierarchy.

4. Click **Paste** icon.

   The cut item is placed in the work plan above the selected task.

   Large work plans may split up work plan information into pages. You can cut tasks from one page of the work plan and paste them into another. See *Viewing Large Work Plans* on page 107 for more information.

To indent an item:

1. Select the task or collapsed summary task.
2. Click the **Indent** icon.

   The selected task or summary task moves one level deeper in the hierarchy.

   - If the item immediately above the selected item is a task, that task is converted to a summary task.
   - Acting on a summary task acts on its children. Indenting a summary task brings its children one level down in the hierarchy as well.

If the selected item is the first child of a summary task, you will not be able to indent it.

If a task is converted to a summary task, a warning message displays and you must select **Yes** to continue or **No** to cancel the operation.

To outdent an item:

1. Select the task or collapsed summary task.
2. Click the **Outdent** icon.

   The selected task or summary task moves out one level in the hierarchy.

   - Acting on a summary task acts on its children. Outdenting a summary task brings its children one level up in the hierarchy as well.
   - If the selected item was a child of a summary task, it becomes either a task or summary task on the same level as its former parent.

- If the selected item was a summary task's only child, that summary task is converted into a task.
- If the selected item was a task with other tasks of the same level beneath it, those tasks are converted to children of the selected item, which is now a summary task.

Tasks with actuals data cannot become summary tasks. This includes tasks that contain actuals from HP Time Management, or tasks that are referenced by time sheets.

If a task is converted to a summary task or leaf task, a warning message displays and you must select **Yes** to continue or **No** to cancel the operation.

You can act on multiple tasks simultaneously:

- Use **`Shift`** + click to highlight a set of contiguous rows and act on all of them.
- Use **`Ctrl`** + click to make multiple non-contiguous selections and act on all of them.

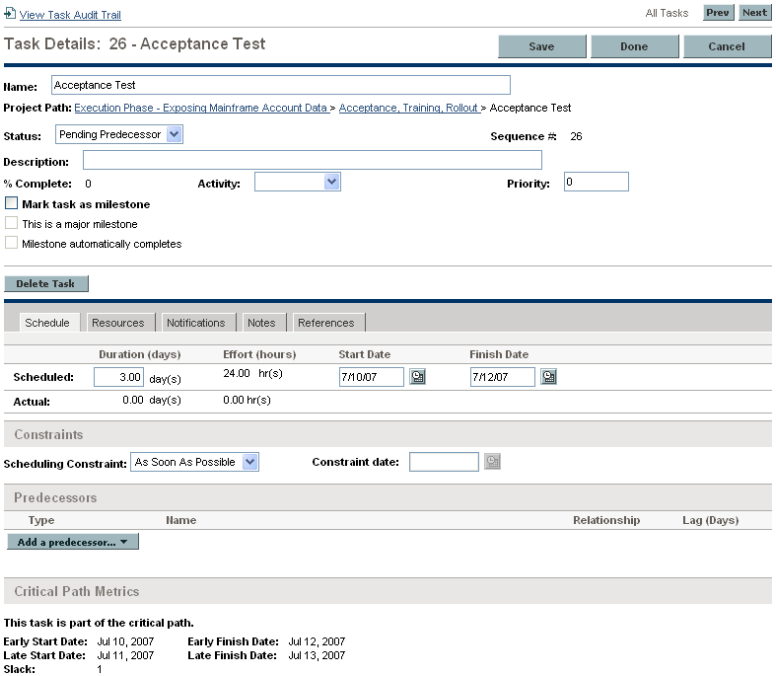
Setting Up Predecessors

HP Project Management allows you to create relationships between a task and other tasks in the current work plan, tasks in other work plans, or requests in HP Demand Management. These predecessor relationships are used by the scheduler to determine when the task will be scheduled.

For example: Manager Bob has a Training work plan for a new software module being installed on his group's computers. In order for his training activities to get started, the Software Upgrade project headed by Manager Steve must be finished first. Bob can create a finish-start predecessor relationship between the most relevant task in the Software Upgrade project and his own Training tasks.

These predecessor relationships are controlled from the **Schedule** tab of the Task Details page.

Figure 5-3. Task Details page: Schedule tab



The types of predecessor relationships available are described in *Table 5-1*.

Table 5-1. Possible predecessor relationships to a project or task

Predecessor Type	Description	Possible Relationships
Summary Task or Task	A task in the current work plan	• **Finish-Start.** The successor can start once its predecessor has completed. • **Start-Finish.** The successor cannot finish until the predecessor starts. Cannot be set for summary tasks. • **Finish-Finish.** The task can start anytime, but the successor will not be marked as complete until its predecessor finishes. Cannot be set for summary tasks. • **Start-Start.** The successor cannot start until the predecessor has started. You can also define lag or lead time for predecessor relationships by typing a positive or negative number in the **Lag (Days)** field, if desired. When adding a summary task as a predecessor, only relationships of the Finish-Start or Finish-Finish type are allowed. When adding a predecessor to a summary task, only relationships of the Finish-Start or Start-Start type are allowed.
External Task	A task from a separate project	Same as internal task.
Request	A request in HP Demand Management	Request relationships are managed from the **References** tab of the Task Details page. • **Related.** Informational relationship only: No actual predecessor relationship exists. This is the only relationship allowed for summary tasks. • **Successor (Blocked).** No action is allowed on the request until the task is completed. • **Predecessor (Blocking).** No action is allowed on the task until the request is completed. • **FF Predecessor (Finish Finish Predecessor).** The task can start anytime, but cannot be marked as finished until the request is completed.

Setting an Internal Predecessor Task

To set an internal predecessor task for a task:

1. Open the Task Details page of the task.
2. Click the **Schedule** tab.
3. Click **Add a predecessor** and select **Add task by name.**

   An auto-complete window opens listing all tasks in alphabetical order. You can filter the list using the **Task starts with** filter field.

   You can also add a predecessor directly by sequence number, if you know the predecessor's sequence number in the work plan.
4. Select a task.

   The predecessor task is now listed in the **Schedule** tab of the Task Details page.
5. Select a relationship from the **Relationship** field.
6. Type a value in the **Lag (Days)** field, if desired.

   This field allows you to specify a number of days to delay starting on a given task based on its predecessor's finish. Negative numbers can be used, which work as lead time.
7. Click **Save.**

Setting an External Predecessor Task

To set an external predecessor task for a task:

1. Open the Task Details page of the task.
2. Click the **Schedule** tab.
3. Click **Add a predecessor** and select **Add External Task.**

   An auto-complete window opens, allowing you to search for external tasks to add. You can filter the list using the **Task starts with** filter field.

4. Select a task.

   The predecessor task is now listed in the **Schedule** tab of the Task Details page.

5. Select a relationship from the **Relationship** field.

6. Type a value in the **Lag (Days)** field, if desired.

   This field allows you to specify a number of days to delay starting on a given task based on its predecessor's finish.

7. Click **Save.**

Setting a Request as a Predecessor

You can add an existing request as a predecessor for a task through the **References** tab in the Task Details page. See *Adding Existing Requests* on page 130 for more detailed information. You can also add a new request as a predecessor for a task. See *Adding New Requests* on page 131 for more detailed information.

Useful Keyboard Shortcuts in the Schedule View

Tasks and summary tasks within the **Schedule** view can be manipulated from the keyboard as well as the icons in the **Schedule** view. *Table 5-2* lists all available keyboard shortcuts.

Table 5-2. Keyboard shortcuts for defining work plans

Keystroke	Action
Shift + Alt + Left Arrow	Outdents a task in the hierarchy.
Shift + Alt + Right Arrow	Indents a task in the hierarchy.
Enter	Opens the Task Details page.
Shift + Ctrl + C	Copies the selected task.
Shift + Ctrl + V	Pastes a task or tasks.

Creating Milestones

Milestones are used to mark significant events in the execution of a project, often the completion of a deliverable or arrival of a deadline.

As markers of other progress, milestones generally do not have duration or effort, although they can be configured to have both. Project managers can indicate that the milestone should automatically complete once its predecessors are complete, providing a means of reporting project progress without project manager intervention. In some cases, however, project managers may want control over whether the milestone has completed, regardless of whether the work leading up to it indicates it should be.

A work plan may contain many milestones that help the project manager gauge execution progress. Often, however, there is a smaller set of standard milestones that are used and reported on all projects within an organization, such as phase-completion milestones. If the project has been configured to allow them, the project manager can identify such milestones as major milestones which will be displayed on the Project Overview page, allowing for uniform high-level visibility while still allowing the project manager to define as many milestones as required to manage the detailed plan. See *Project Fields* on page 37 for information about enabling major milestones.

To create a milestone:

1. Select a task.
2. Click the **Task Details** icon.

   The Task Details page opens.

3. Select the **Mark task as milestone** checkbox.

   If you want the milestone to mark itself as complete automatically when all predecessors are complete, select the **Milestone automatically completes** checkbox. When all predecessors are complete, the actual start and finish dates of the milestone are automatically set to the last predecessor's actual finish date. That is, if the predecessors finish on different dates, the predecessor actual finish date of the predecessor that finished last is used.

   The **Milestone automatically completes** checkbox is only available for milestones whose duration is 0.

4. Modify any other information under each tab in the Task Details page as desired (for details, see *Editing Task Information* on page 118).

5. Click **Save.**

A task will be automatically converted to a milestone if its duration is 0.

Once a milestone has been created, its duration is automatically set to 0, but you can alter its duration if necessary.

Scheduling the Work Plan

HP Project Management generates schedules for work plans, based on the configurations set in the project's **Scheduling** policy and the options provided in the Schedule Work Plan dialog box.

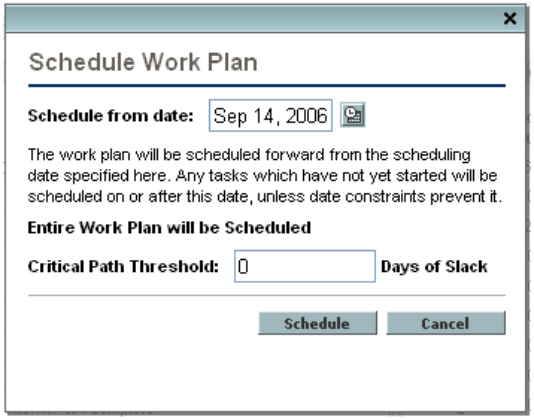
Generating the Schedule

When the work plan is scheduled, the entire work plan is considered, and changes are immediately saved. If you want to reschedule discrete sections of the work plan, you can place constraints on the relevant summary tasks to accomplish the move. See *Setting Scheduling Constraints* on page 123 for more information about constraints.

To generate the schedule for a work plan:

1. Click the **Schedule Work Plan** icon.

The Schedule Work Plan dialog box opens.



2. In **Schedule from date,** specify a date from which to schedule the work plan.

   This is usually set in the **Scheduling** policy individually for each project and generally does not change unless the entire project needs to shift dates. If you are collecting actuals in your work plan, changing the **Schedule from date** field and rescheduling the work plan can push remaining work into the future.

3. If desired, type a **Critical Path Threshold.**

   For more details on the purpose of the critical path threshold, see *Critical Path Threshold* on page 42.

4. Click **Schedule.**

If scheduling errors occur, no schedule will be generated and a list of errors will appear. Take note of each error and its cause, and make the necessary adjustments within the work plan. See *Scheduling Errors* on page 95 for more details.

If scheduling warnings occur, a schedule will be generated and a list of warnings will appear. Take note of each warning, as they can be important to the initiative's success. See *Scheduling Warnings* on page 95 for more details.

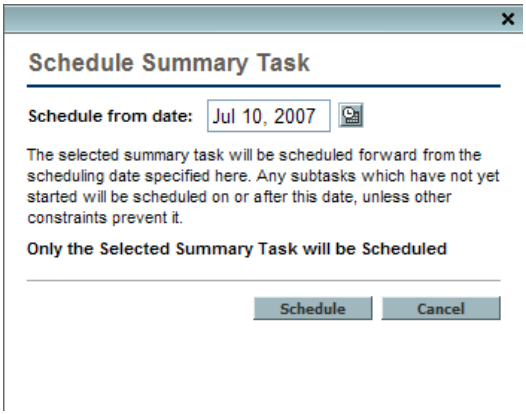
Scheduling a Summary Task

When the summary task is scheduled, the summary task and its subtasks are considered, and changes are immediately saved.

To generate the schedule for a summary task:

1. Click the **Schedule Summary Task** icon.

   The Schedule Summary Task dialog box opens.



2. In **Schedule from date,** specify a date from which to schedule the summary task.

3. Click **Schedule.**

If scheduling errors occur, no schedule will be generated and a list of errors will appear. Take note of each error and its cause, and make the necessary adjustments within the work plan. See *Scheduling Errors* for more details.

If scheduling warnings occur, a schedule will be generated and a list of warnings will appear. Take note of each warning, as they can be important to the initiative's success. See *Scheduling Warnings* for more details.

Scheduling Errors

It is possible for certain combinations of input to cause a schedule to be unworkable. If any of these errors are encountered, the schedule will not be created. *Table 5-3* describes scheduling errors, their causes, and possible solutions.

Table 5-3. Scheduling errors, causes, and possible solutions

Scheduling Error	Cause	Possible Solution
Circular dependency	The predecessors of a set of projects or tasks contains a cycle. This cannot be scheduled. HP Project Management detects circular dependencies while creating or editing the work plan.	Break the cycle by removing or changing a predecessor.
No tasks to be scheduled	The work plan is complete or cancelled, so there are no tasks to be scheduled.	If tasks are missing, add them and then schedule.

Scheduling Warnings

It is possible that because of the specifics of the work plan, the scheduler cannot produce a consistent schedule. A schedule will be produced, but schedule warnings are generated that highlight the structural inconsistencies in the work plan. The Schedule Warning Rules enabled in the **Schedule** policy in the project's settings identify these problems. Warnings appear when the scheduler runs, and are evaluated when the work plan is saved. Warnings are also saved in the **Warnings** tab of each affected task's Task Details page, for later perusal. *Table 5-4* describes scheduling warnings, their causes, and possible solutions.

Table 5-4. Scheduling warnings, causes, and possible solutions (page 1 of 2)

Scheduling Warning	Cause	Possible Solution
Project Date Conflicts	This warning occurs when the work plan dates extend beyond the project's Planned Start Period or Planned Finish Period. It also occurs when the constraint defined on the task is outside the project's Planned Start Period or Planned Finish Period.	Bring the plan within the project's dates by adjusting dependencies, duration, resources, or any combination thereof, and rescheduling. In some cases, resolution may involve expanding project-level dates, which should be coordinated with the project financial summary and staffing profile.
Dependency Conflicts	These warnings occur when a predecessor dependency defined for the task could not be honored because other constraints or task information prevents it. For example, a task may be expected to start on October 10th based on its predecessor relationships, but might have a Start No Later Than constraint defined for October 1st. The task cannot meet both requirements.	Rework the plan to remove the conflicts.

Table 5-4. Scheduling warnings, causes, and possible solutions (page 2 of 2)

Scheduling Warning	Cause	Possible Solution
Constraint Inheritance Conflicts	These warnings occur when there is a direct conflict between the constraints defined for a task and its parents, such that only one can be satisfied. Both related tasks are marked.	Rework the plan to remove the conflicts. If both constraints are valid, you may need to file a project issue. See *Logging Issues* on page 175 for more information.
Resources Could Not Be Scheduled	The scheduler could not identify sufficient available working days for the assigned resources to schedule the task. This warning is evaluated only when the scheduler runs.	This usually occurs when the scheduler attempts to schedule a resource after the resource's end date or before the resource's start date. Check resource information, and if necessary, change the task resource or change task dependencies so that it can occur during the right dates.
Task Constraint Could Not Be Met	This warning occurs when the constraint defined on the task could not be honored because other conflicting information takes precedence.	This usually occurs when using actuals during scheduling and the task's actual start date conflicts with a constraint defined for the task. This may not require explicit resolution.

Displaying Work Plan Information

HP Project Management includes several different ways to view work plan data, allowing you to focus on the specific task at hand.

- *Level Expand/Collapse* allows you to immediately expand or collapse the work plan view to a specific hierarchy level, so you can quickly assess the plan without being overloaded with plan details.
- *Work Plan Views* provide you with different ways of looking at the work plan based on the tasks you need to perform or the information you need from the plan.
- *Filters* allow you to filter data within a particular work plan view for a subset of information, enabling you to efficiently focus on the tasks that need your attention.
- The *Gantt View* allows you to visualize tasks and their dependencies in a graphical format enhanced with color-coding and configurable labeling.

In general, HP Project Management keeps track of column width and position in each work plan view for you, so when you log out and return to a project later, your layout and position is the same as when you left it.

Level Expand/Collapse

Click **Expand to: Level** to expand or collapse your view of the work plan and its summary tasks to a specific hierarchy level from 2 to 7.

- Level 2 displays only tasks and summary tasks directly below the root level of the work plan, collapsing everything below.
- Level 7 displays tasks and summary tasks down to the seventh hierarchy level of the work plan, collapsing everything below.

Work Plan Views

HP Project Management includes several work plan views that give visibility into different categories of work plan information. These views are accessible from the **Change View** button menu at the top of the Work Plan page.

Schedule View

The **Schedule** view is the default view on the Work Plan page. Use this view to adjust task hierarchy in the work plan view schedule-related information.

All values for fields that track duration are in days, while all values for fields that track effort are in hours.

The **Schedule** view displays the following task fields as columns:

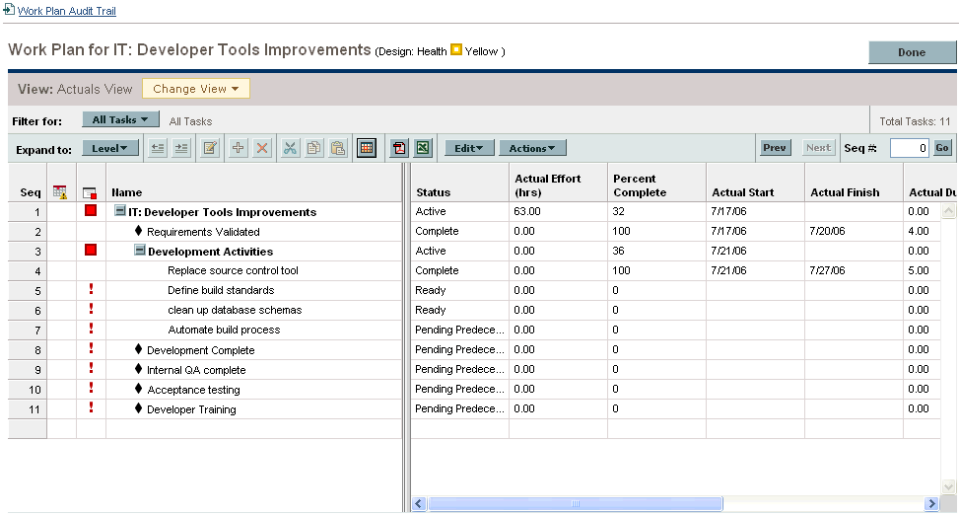
- Task Status
- Scheduled Duration
- Scheduled Start
- Scheduled Finish
- Scheduled Effort
- Predecessors
- Resources
- Role
- Activity
- Unassigned Effort

Actuals View

The **Actuals** view focuses on information collected about the progress of the work plan, and displays the following task fields as columns (some columns only appear if selected in the Project Fields or Cost and Effort policy):

- Task Status
- Actual Effort
- Percent Complete
- Estimated Remaining Effort
- Actual Start
- Actual Finish
- Actual Duration
- Estimated Finish
- Resources
- Predecessors
- Actuals As Of (date actuals were last updated)

Figure 5-4. Work Plan page: Actuals view



Costing View

The **Costing** view displays the costing data for a project, if HP Financial Management has been enabled in the Cost and Effort policy. *Table 5-5* describes the task fields displayed in the **Costing** view as columns. This view is only available to users who have viewing access to project cost data.

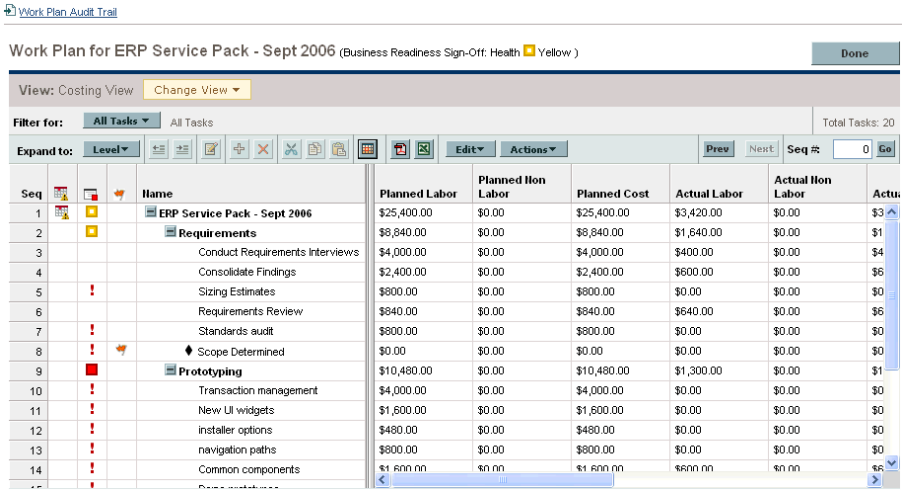
Table 5-5. Available columns in the Costing work plan view (page 1 of 2)

Column Name	Description
Cost Health	The cost health of the task.
Planned Labor	The planned labor cost for the task. Calculated as: Scheduled effort * applicable cost rate Applicable cost rates include: • Resource (if resource has no cost rate, resource region, role, and skill are considered next) • Task role • Task skill set
Planned Non-Labor	The planned non-labor cost for the task. Manually entered.

Table 5-5. Available columns in the Costing work plan view (page 2 of 2)

Column Name	Description
Planned Cost	The sum of planned labor and non-labor costs.
Actual Labor	The actual labor cost for the task. Calculations are the same as for planned labor, except with actual effort substituted for scheduled effort.
Actual Non-Labor	The actual non-labor cost for the task. Manually entered.
Actual Cost	The sum of actual labor and non-labor costs.
Planned Capital Expense	The planned cost for a task associated with an activity marked as capitalized.
Planned Operating Expense	The planned cost for a task associated with an activity marked as operating.
Actual Capital Expense	The actual cost for a task associated with an activity marked as capitalized.
Actual Operating Expense	The actual cost for a task associated with an activity marked as operating.
Activity	The activity associated with a task.

Figure 5-5. Work Plan page: Costing view



You can control the display of certain columns by adjusting the appropriate settings in the project's **Cost and Effort** policy. See *Adjusting Project Settings* on page 72 for details.

Earned Value View

The **Earned Value** view displays earned value (EV) analysis data for the project by displaying the following task fields as columns:

- Planned Value
- Earned Value
- Cost Variance
- Schedule Variance
- CPI
- SPI
- Actual Cost

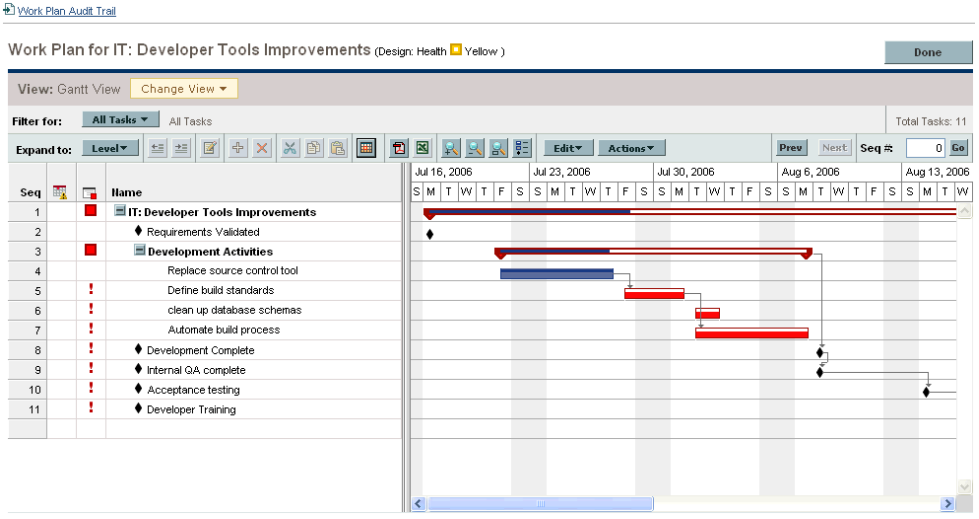
This view is only available to users who have viewing access to project cost data, and is only useful if you have taken at least one baseline of the project. For more details on project baselines, see *Working with Baselines* on page 182.

Gantt View

The **Gantt** view includes a Gantt chart, a convenient graphic display of schedule-related information, including task length and timing. Summary tasks can be color-coded to indicate health. Colors and patterns serve to provide information on completion status. Optional task labels can provide additional details (see *Changing Gantt View Display*).

You can also change the time scale for the chart, as well as fit the entire project into the current Gantt view. *Figure 5-6* shows a typical project Gantt chart.

Figure 5-6. Work Plan page: Gantt view



Changing Gantt View Display

You can make adjustments to the Gantt chart display by clicking **Actions > Configure Gantt** on the Work Plan page. The Configure Gantt dialog box contains settings for the Gantt chart's indicators and text labels.

Printing View

The **Printing** view provides the user with a view in which all of the fields in all the views are combined. The columns are arranged by view in the following order:

- Schedule
- Actuals
- Cost
- Earned Value

Use this view to configure the order and sizing of columns for generating PDF printouts that include columns that cross the different views. For more information on exporting the work plan to a PDF file, see *Exporting to PDF Files* on page 186. For optimal system performance, use the other work plan views for targeted tasks.

Filters

HP Project Management includes filters for each work plan view that allow you to filter the work plan for a certain set of tasks, enabling you to quickly focus on the data most relevant to your activity. Summary tasks that own the tasks selected by the filter are always displayed to provide context. *Table 5-6* lists the filters for each work plan view.

Table 5-6. Work plan view filters (page 1 of 2)

Filter Name	Description
Schedule and Tracking views	
Tasks in progress	Only shows tasks in the work plan that are in progress.
Tasks complete	Only shows tasks in the work plan that are complete.
Tasks overdue	Only shows tasks in the work plan that have passed their scheduled finish date but are not yet complete.

Table 5-6. Work plan view filters (page 2 of 2)

Filter Name	Description
Tasks that are unassigned	Only shows tasks in the work plan that have no resource assigned to them.
Tasks that are milestones	Only shows tasks in the work plan that are milestones.
Tasks on the critical path	Only shows tasks in the work plan that are on the critical path.
Tasks with external predecessors	Only shows tasks in the work plan that have external predecessors.
Tasks with contributions	Only shows tasks in the work plan that have ad time logged against them in HP Time Management by non-assigned resources. This can help you identify unexpected time logged against your project.
Tasks with constraints	Only shows tasks in the work plan that have constraints.
Tasks by resource	Only shows tasks in the work plan that are assigned to a specified resource(s).
Tasks by role	Only shows tasks in the work plan that are assigned to a specified role.
Tasks starting in	Only shows tasks in the work plan scheduled to start within a specified date range.
Tasks completing in	Only shows tasks in the work plan scheduled to complete within a specified date range.
Tasks occurring in	Only shows tasks in the work plan scheduled to occur within a specified date range.
Tasks with actuals since	Only shows tasks that have had actuals updated after a specified date. For example, this is useful for finding tasks updated during the current week.

Viewing and Editing Task Details

Task fields are not editable in the table on the Work Plan page. Instead, individual tasks are edited from the Task Details page, making small, discrete changes possible instead of mass change on a wider scale. For more details on editing tasks, including navigating between tasks, see *Editing Task Information* on page 118.

Viewing Large Work Plans

HP Project Management allows you to control the number of tasks in your work plan that can be displayed at one time, allowing you to efficiently manage your work plan regardless of whether you are working on a fast local LAN or a distributed network. The set of tasks displayed at a time is referred to as a "page." You can navigate between pages in a large work plan in the following ways:

- Click **Prev** and **Next** to navigate between adjacent pages.
- Type the sequence number of a specific task in **Seq #** and click **Go** to navigate to that task. The task displays at the top of the page. This allows you to reorient the page to display the data in which you are interested.
- HP Project Management shows you pages of displayed tasks. The collapsed children of summary tasks are not counted.

Adjusting Personal Page Size Preferences

You can adjust the number of rows per work plan page in the Project Work Plan Preferences section of the Edit My Profile page, accessed by selecting **Open > Administration > Edit My Profile** from the menu bar.

Select an option or type your own value for the number of tasks per page you wish to see and click **Done.** You can change this setting at any time, based on the connection speed at your location.

The preset and maximum page size values are determined by your PPM Center administrator. See the *HP Project Management Configuration Guide* or consult your system administrator for more details on work plan page size controls and their adjustment.

Resource Usage

The Resource Usage page displays assignment-level load data grouped by resource. Open the Resource Usage page by clicking **Actions > Resource Usage** on the Work Plan page. Fields in this page are not directly editable, though tasks can be opened and modified from this page or the Work Plan page. The Resource Usage page is optimized for use with the staffing profile for the project, which determines work plan capacity.

Table 5-7. Available columns in the Resource Usage work plan view

Column Name	Description
(Indicator column)	Indicates whether the resource has been over-allocated on any of the days displayed.
Name	The name of the resource.
Role	Indicates the role intended to be utilized. • The role appearing next to the resource name is specified in the project staffing profile, if one exists. • The role appearing next to the task name is specified in the work plan.
Effort (Load)	The total amount of effort assigned to the resource. This column is broken down into sub-columns that track scheduled effort, actual effort, and the allocation for the resource.
Start	The start date for the assigned task.
Finish	The end date for the assigned task.
Status	The status of the assigned task.

Other features of the Resource Usage page include the following:

- If an over-allocation has taken place, an indicator appears to the left of the resource name.
- The Resource Usage page displays the amount of resource load coming from external sources. Clicking the **External Load** link below a resource name opens their resource load breakdown.
- The Resource Usage page includes a table displaying the resource load details for the project, which highlights over-assignments in red. The table can be set to view a specific range of dates and broken down by different period types. To change the date range and time breakdown of the table, provide the desired values in the **View data from** and **grouped by** fields and click **Apply.**

Add/Remove Columns

The Add/Remove Columns action allows you to customize the columns displayed and their order in the Work Plan page. This action is enabled for the following views: Schedule, Actuals, Printing, and Custom.

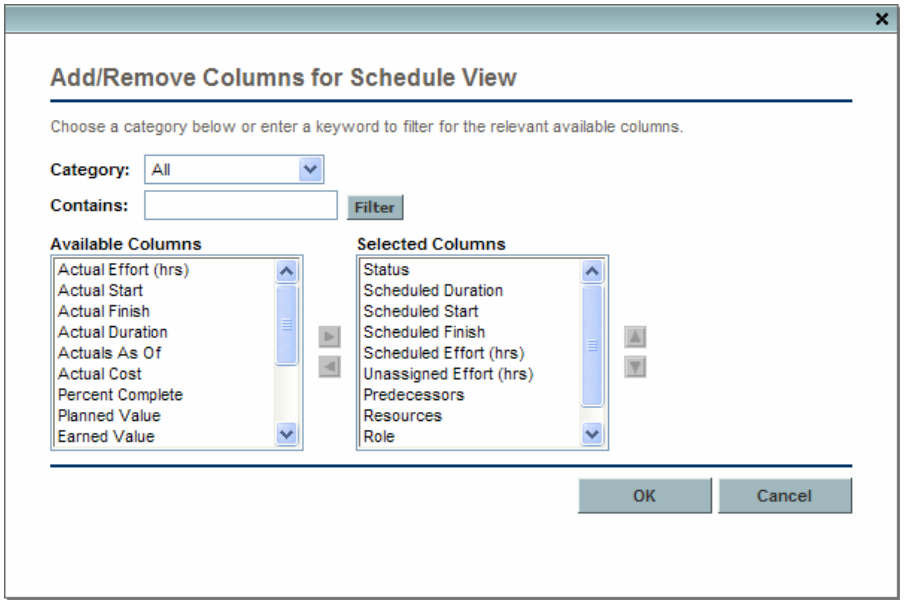
Table 5-8. Field descriptions for Add/Remove Columns dialog

Field	Description
Category	Filters the column names that are displayed in the Available Columns and Selected Columns fields. You can show All, Schedule View, Costing View, Earned Value View, Actuals View, or User Data columns.
Contains	Filters the column names that are displayed in the Available Columns and Selected Columns fields. Specify a string that each column name must contain.
Available Columns	The names of columns that can be displayed in the Work Plan page, but are currently not displayed.
Selected Columns	The names of the columns displayed in the Work Plan page and the order in which they are displayed.

To add or remove columns from a Work Plan page:

1. On the Work Plan page, click **Actions > Add/Remove Columns.**

   The Add/Remove Columns dialog box opens.



2. To add columns to the Work Plan page, move the column names to the Selected Columns field. Within the Selected Columns field, rearrange the column names in the order you want them displayed.

   To remove columns from the Work Plan page, move the column names to the Available Columns field.

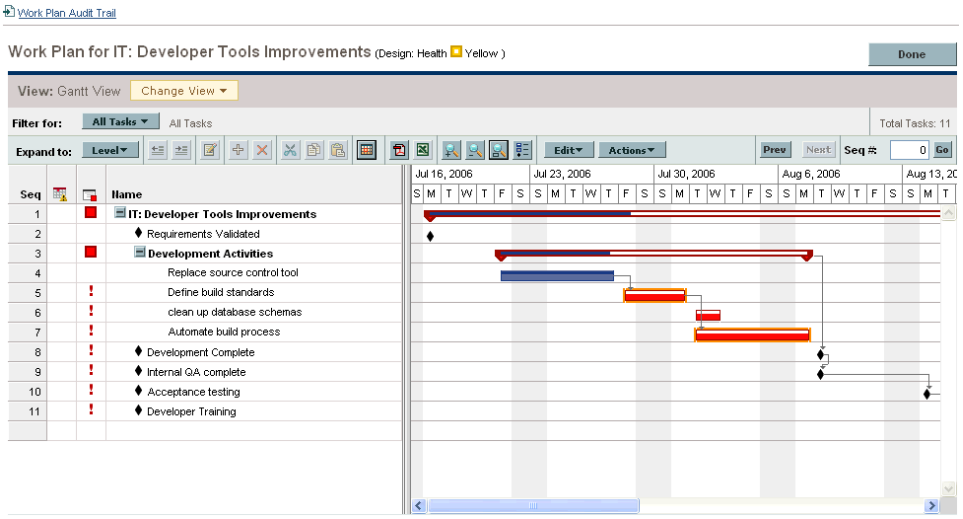
3. Click **OK.**

   The Work Plan page displays the selected columns in the order chosen.

Viewing the Work Plan Critical Path

A work plan's critical path is composed of all of the tasks in a work plan that determine its duration. In HP Project Management, the critical path of a work plan can be highlighted in the **Schedule** view's Gantt chart. Tasks that are part of the critical path are outlined in orange. You can also view the work plan's critical path using one of the filters.

Figure 5-7. Work Plan page: Gantt view displaying critical path



To see a work plan's critical path:

1. On the Work Plan page, click **Actions > Configure Indicator Columns.**

   The Configure Indicator Columns dialog box opens.

2. Select the **Mark Tasks on Critical Path** checkbox.

3. Click **OK.**

   The Gantt chart displays the work plan's critical path in orange.

Configuring Tasks

Once the initial work plan is created, you can configure individual tasks as required to refine your plan. Activities involved in refining your plan might include:

- Finding and assigning resources to tasks
- Adjusting task effort estimates or duration as additional information becomes available
- Configuring email notifications to ensure that tasks needing attention are made known to the right people
- Adjusting task dependencies as more becomes known about task details
- Rescheduling the plan
- Reviewing resource load to ensure resources are utilized within the bounds of their staffing profile assignments
- Exporting work plan view for off-line discussion, printing, or publication

For detailed discussion of these task configuration items, see Chapter 6, *Configuring Tasks,* on page 113, and Chapter 7, *Managing a Project,* on page 137.

6 Configuring Tasks

Task Elements

Work plans are repositories of information consisting of tasks, summary tasks, notes, and references. These elements model the work required to achieve specific business initiatives within an organization. Work plans are not static entities. They gather additional information and are modified as their tasks move through to completion.

Tasks are the components of a work plan that must be completed in order for the work plan to complete successfully. Project managers gather information from tasks and make appropriate changes to the project during the project process. This means that tasks must be configured to deliver the kinds of specific information that project managers need. For example, project managers may need to be notified when tasks are completed or their statuses change.

Tasks also need to be modified during the project execution, such as extending task schedules or assigning additional resources to a task to make a deadline. Team members must update their individual statuses as they complete assigned tasks.

Notifications

Project managers can set up notifications for tasks within a work plan. Project managers and summary task owners can edit these notifications from the Task Details page. Email messages can be sent to appropriate team members whenever a specific event occurs on a task. This would include such events as:

- The completion of a milestone.
- The triggering of an exception rule by a task.
- The approach of a task's start date.

References

Tasks can include additional references to other entities or points of information, allowing easy access and visibility to data related to the current task. Summary information for references is viewed as part of the task.

There are several reference types defined for tasks: requests, packages, projects, releases, attachments, and URLs.

Project managers and summary task owners can edit references from the Task Details page.

Activities

Tasks can be characterized by the type of activity involved in accomplishing the task. For example, certain tasks could be categorized as design activity, while other tasks could be characterized as testing activity. Though they can be used for simple categorization, activities are usually used to identify capitalizable costs for SOP 98-1 compliance. For more information on activities and their use, see the *HP Financial Management User's Guide*.

Task Statuses

On the Work Plan page, the task status is displayed in the **Status** column of the **Schedule** view. The available statuses for a task are defined in *Table 6-1*. *Table 6-2* describes statuses for summary tasks.

Table 6-1. Task status definitions

Task Status	Definition
Pending Predecessor	A task that is holding for one or more predecessors to be completed.
Ready	A task that is ready to be worked on by its resource.
In Progress	A task that is moving through the actions necessary for its completion.
Completed	A task that has been finished.
Cancelled	A task that is not complete and will not be worked on, as it is no longer required for the completion of the project.
Complete (Pending Predecessor)	A task that has been finished but requires its predecessor to be complete before being truly done.
Pending Request	A task that is holding for one or more request predecessors to be completed.
Complete (Pending Request)	A task that has been finished but requires one or more request predecessors to be completed.

Table 6-2. Summary task status definitions

Task Status	Definition
In Planning	This section of the work plan is still being developed and is not ready to execute.
Active	This section of the plan is available to execute. Resources cannot report actuals against a work plan until it becomes **Active.**
On Hold	This section of the plan has been put on hold. This may be because re-planning was needed, a future phase is still being planned, or work has been temporarily suspended.
Completed	This section of the plan has completed execution. All of the tasks in this section are either completed or cancelled.
Cancelled	This section of the plan has been cancelled and will never complete. All of the tasks in this section are cancelled.

Depending on their defined level of responsibility in a project, users may only change tasks between certain statuses.

For example, project managers can change a task from **Ready** to **In Progress** to **Cancelled,** or from **Cancelled** back to **Ready.** Project participants cannot change the task status directly unless they are the summary task owner of the task. The task status is derived based on the actuals reported by resources.

Available task statuses can also depend on the status of the work plan.

Adding Tasks to Work Plans

Tasks can be added to a work plan individually, in a pre-sequenced group, as defined in a work plan template, or imported from an existing work plan (see *Importing a Work Plan* on page 82 for more information).

Tasks can also be quickly and easily organized in a hierarchical fashion. See *Adding Tasks and Creating a Work Plan Hierarchy* on page 80 for more information.

Creating a Milestone

Tasks can be converted into milestones.

To create a milestone from a task:

1. Double-click the task to be edited.

   The Task Details page opens.

2. Select the **Mark task as milestone** checkbox.

   This automatically changes the task's duration to 0, which you can edit manually if you want its duration to be greater.

   If you want the milestone to mark itself as complete automatically when all predecessors are complete, select the **Milestone automatically completes** checkbox. When all predecessors are complete, the actual start and finish dates of the milestone are automatically set to the last predecessor's actual finish date. That is, if the predecessors finish on different dates, the predecessor actual finish date of the predecessor that finished last is used.

   The **Milestone automatically completes** checkbox option is unavailable for milestones with duration other than 0.

3. Modify any other information under each tab in the Task Details page as desired (for details, see *Editing Task Information*).

4. Click **Save.**

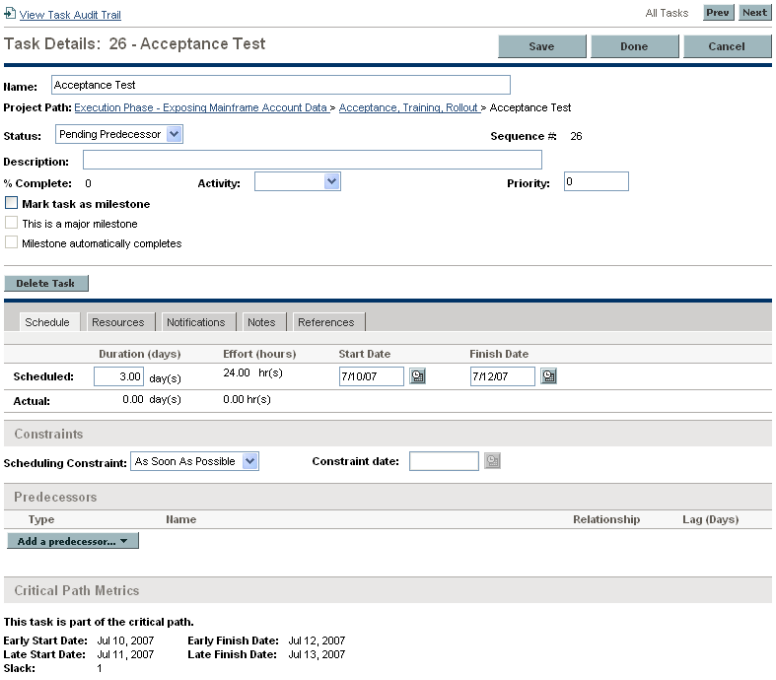
A task will be automatically converted to a milestone if its duration is 0.

Once a milestone has been created, its duration is automatically set to 0, but you can alter its duration if necessary.

Editing Task Information

Task information is edited in the Task Details page, which can be reached from the Work Plan page or the Resource Usage page. HP Project Management allows you to navigate from task to task without needing to return to the Work Plan page.

Figure 6-1. Task Details page



Click **Prev** and **Next** on the Task Details page to navigate from task to task, as they are displayed on the Work Plan page.

- Task-to-task navigation takes into account the expand/collapse state of the Work Plan page. If a summary task is collapsed on the Work Plan page, clicking **Next** will not navigate through the summary task's children.
- Task-to-task navigation also takes into account any filters that have been applied to the Work Plan page. If a filter has been applied to the Work Plan page, clicking **Next** navigates to the next task in the filtered set.

  Summary tasks may be shown on the Work Plan page in grey italics to provide context to a filtered set.

To edit task information in the Task Details page:

1. Open the Work Plan page for the project you are editing.
2. Double-click the task to be edited.

   The Task Details page opens.
3. Make whatever changes are necessary in the Task Details page.
4. Click **Save.**

Assigning Resources

Project managers can assign resources to new tasks being added in the Add Tasks page. Resources can be assigned to existing tasks using the Task Details page. One of the following conditions must be satisfied in order to assign a resource to a task:

- The resource is named on the staffing profile attached to the project
- The resource belongs to a resource pool managed by the project manager
- The `RM_OVERRIDE_ASSIGNMENT_CONTROLS` parameter in the `server.conf` file is set to `TRUE`. See the *HP Resource Management User's Guide* for more information.

Other resources should be requested from other resource pools using standard staffing profile functionality. See the *HP Resource Management User's Guide* for more detailed information on staffing profiles and their interaction with resource pools.

Assigning Resources in the Add Tasks Page

Resources can be assigned for new tasks in the Add Tasks page directly by clicking the **Resource** icon.

To assign resources to a new task:

1. Create a new task in the Add Tasks page.
2. Click the **Resource** icon to assign a resource.
3. Click **Done.**

Assigning Resources in the Task Details Page

Resources can be assigned to existing tasks using the Task Details page.

To assign resources to existing tasks:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.
2. Click the **Resources** tab.
3. Click **Add Resource** to assign a resource, or the **Resource Finder** icon to search for and assign an appropriate resource.

   See the *HP Resource Management User's Guide* for more detailed information on using the Resource Finder.
4. Click **Save.**

   Multiple resources can be assigned to tasks. Once multiple resources have been assigned, their individual effort hours or booked skill can be adjusted at any time.

Managing Scheduled Effort

Scheduled effort for a task can be calculated automatically by HP Project Management or entered manually. By default, the method of scheduled effort calculation is set at the project level by the **Cost and Effort** policy, but depending on those settings, it can be changed on a task-by-task basis.

- If you choose to **Automatically calculate Scheduled Effort,** the system assumes that each resource will work full-time on the task. The scheduled effort is calculated by multiplying the resource's number of work hours per day by the task's duration. Changing the task's duration changes the resource's scheduled effort automatically.

- If you choose to **Manually enter Scheduled Effort per task assignment,** you can manually enter a scheduled effort value for each resource assigned to the task. This could be useful for cases where resources are not expected to work full-time on tasks, and especially for projects where detailed effort estimates are required in the planning stages. Changing the task's duration does not change effort information. Effort for new tasks is set at 0.

  Any remaining unassigned effort for each task is collected by an **Unassigned Effort** field. This allows the remaining effort on a task to be assigned to resources incrementally as they are identified.

Assigning Skills or Roles

When creating a work plan, you can assign a skill set or role to any task without specifying a resource. This allows you to create a work plan that identifies the roles or skills needed to complete its tasks without necessarily pinpointing the specific resources that will ultimately do the work. Additionally, capturing roles or skills required to complete tasks provides a more detailed estimate of the project cost; this helps make sure the forecasted cost is correct and the right resources are allocated.

To assign a role to an existing task:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **Resources** tab.
3. Select an **Assigned Role** for the task.
4. Click **Save.**

If you assign a resource to a task, the Assigned Role field will automatically populate with the resource's primary role, if one has been defined.

To assign a skill to an existing task:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **Resources** tab.
3. Click **Add Skill** to select a skill.
4. When the skill is added, select a proficiency from the **Ideally** column.
5. Click **Save.**

Configuring Task Predecessors

Task predecessors are configured from the Task Details page. A predecessor is a task that has a defined relationship between its start or finish date, and the start or finish dates of the task that is dependent on it.

- See *Setting Up Predecessors* on page 86 for more detailed information on setting task predecessors.
- Although tasks can only have predecessor relationships to other tasks, a task may have references defined that identify relationships to other entities (for example, an informational reference to a package used to roll out code developed as part of a task's completion). See *Adding References to Tasks* on page 129 for more information on how to assign relationships between tasks and references.

Setting Scheduling Constraints

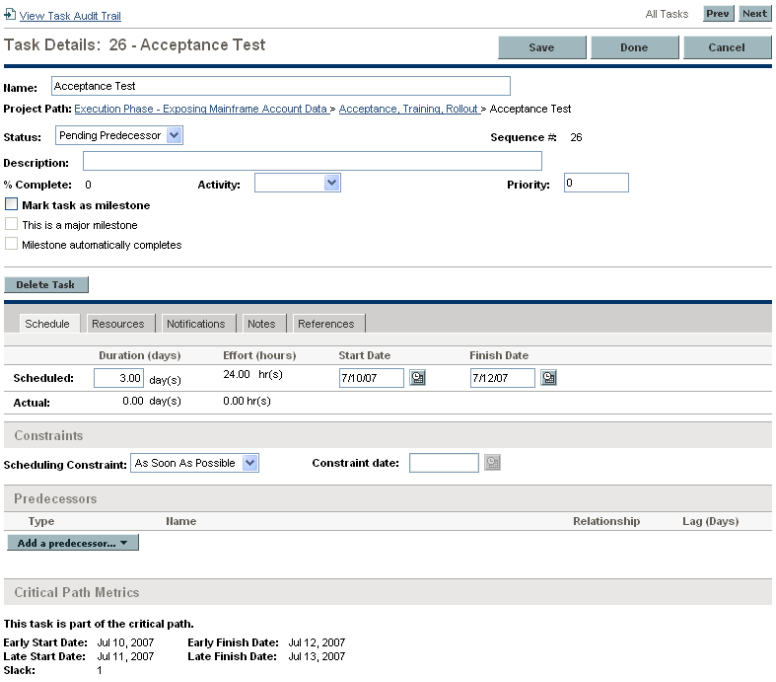
In addition to its relationship with other tasks in the work plan, a task may have other date-related constraints. For example, a project manager may want to specify that a task must start on a particular date, or finish no later than a particular date. These constraints provide valuable information about tasks, and are also used by HP Project Management to generate the work plan schedule.

Scheduling constraints are set in the **Schedule** tab of the Task Details page. Constraints can be defined for summary tasks or their children. If a constraint is defined for a summary task, it also applies to all of its child tasks. *Table 6-3* describes the constraints available for tasks and summary tasks.

Table 6-3. Scheduling constraints for tasks and summary tasks

Constraint	Description	Summary Task Availability
As Soon As Possible	The task will be scheduled as early as the work plan structure and dependencies allow. This is inferred if no constraint is defined.	Y
As Late As Possible	The task will be scheduled as late as the work plan structure and dependencies allow.	N
Start No Earlier Than	The task cannot start before the date specified.	Y
Start No Later Than	The task should start on or before the date specified.	N
Finish No Later Than	The task must finish by the date specified.	Y
Must Start On	The task must start on the date specified.	N
Finish No Earlier Than	The task should not finish before the date specified.	N
Must Finish On	The task must finish on the date specified.	N

Figure 6-2. Task Details page: Schedule tab



To set a task's scheduling constraints:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **Schedule** tab in the Task Details page.

3. Under **Constraints,** select the type of constraint you want to use from the **Scheduling Constraint** field.

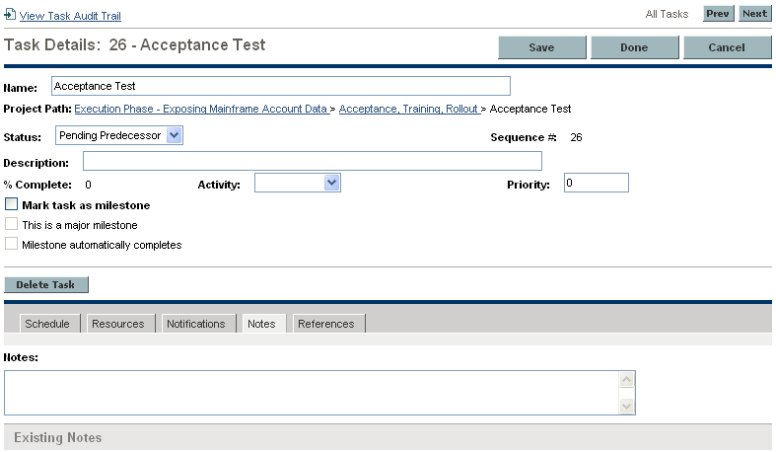
4. Type a date in the **Constraint date** field.

5. Click **Save.**

Adding Notes

Users can type free-form text in the **Notes** tab of the Task Details page. Saved entries are marked with a timestamp.

Figure 6-3. Task Details page: Notes tab



To add notes to a task:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **Notes** tab.
3. Type any notes into the **Notes** field.
4. Click **Save.**

The **Notes** tab can contain up to 32K of information per work plan.

Setting Up Notifications

You can set up email notifications in the Task Details page to be sent to users when certain events occur during project execution. Notifications that are defined for a summary task apply automatically to all of the summary task's children, though notifications that have been defined directly for a child task override any notifications set by the parent. *Table 6-4* describes the possible notifications.

Figure 6-4. Task Details page: Notifications tab

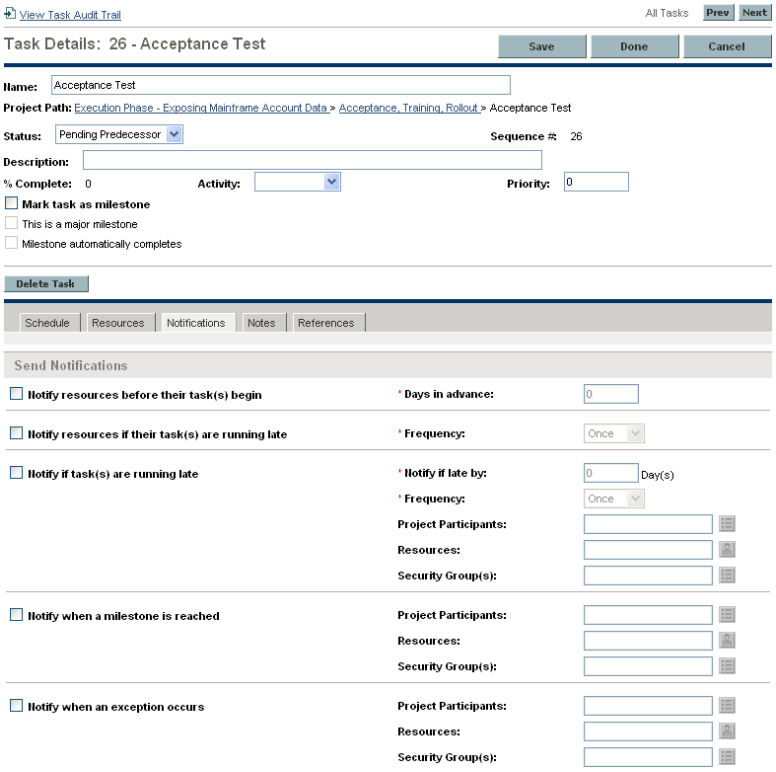


Table 6-4. Possible email notifications for tasks

Notification	Description
Notify resources before their task(s) begin	Notifies a resource before their tasks begin. You can set the number of days in advance of the start date from which to send the notification.
Notify resources if their task(s) are running late	Notifies a resource that their tasks are running late. You can specify the frequency with which this notification is sent.
Notify if task(s) are running late	Notifies a wider range of users of tasks in the work plan that are running late. You can specify: • The number of late days required to trigger the notification • The frequency with which the notification is sent • Sets of users to send the notification to
Notify when a milestone is reached	Notifies a set of users when the task has been reached, if it is a milestone. You can specify sets of users to send the notification to.
Notify when an exception occurs	Notifies a set of users when the task has triggered an exception. You can specify sets of users to send the notification to.

To set up a notification for a task:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **Notifications** tab.
3. Select the checkboxes next to the appropriate notifications.
4. Click **Save.**

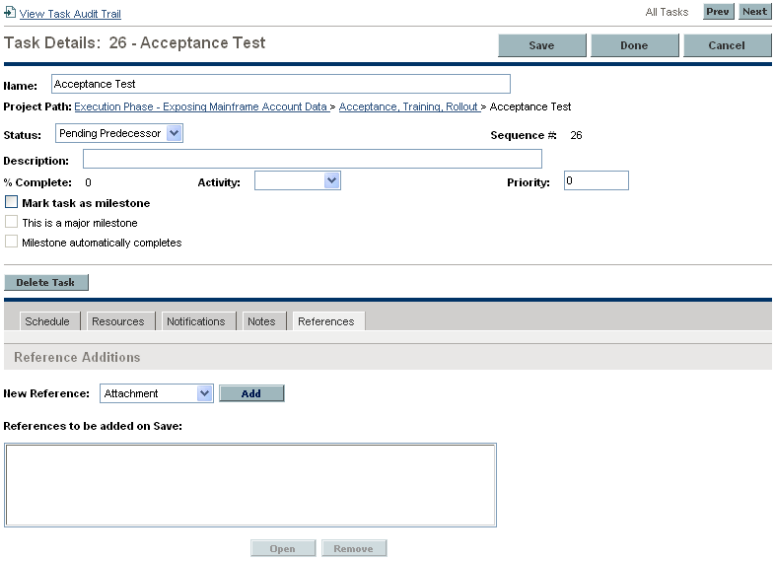
Entering Cost Data

If the Financial Management capability of HP Project Management has been enabled for this project, you can track and enter actual cost data in the **Cost** tab of the Task Details page. See the *HP Financial Management User's Guide* for more detailed information.

Adding References to Tasks

HP Project Management features a number of methods for capturing additional information, or references, related to your projects. References are added from the **References** tab of the Task Details page.

Figure 6-5. Task Details page: References tab



To add references to a task:

1. Locate the task and double-click it.

   The Task Details page opens.

2. Click the **References** tab.
3. Add the reference.
4. Click **Save.**

Adding Existing Requests

To add an existing request to a task:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **References** tab.
3. Select **Request (Existing)** from the **New Reference** field.
4. Click **Add.**

   The Add Reference: Request window opens.

5. Search for the request you want to add to the task.
6. Select the checkbox next to the desired request, the desired relationship to the request, and click **Add.**

   See *Setting Up Predecessors* on page 86 for more detailed information on predecessor relationships between requests and tasks.

   You return to the **References** tab in the Task Details page. The new added request displays as a reference.

7. Click **Save.**

Adding New Requests

A new request can be created from the **References** tab and immediately added to a task. This saves time from having to create a new request in HP Demand Management, searching for it, and adding it to the task.

To add a new request to a task:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **References** tab.

3. Select **Request (New)** from the **New Reference** field.

4. Click **Add.**

   The Create New Request window opens.

5. Select the desired relationship to the new request.

   See *Setting Up Predecessors* on page 86 for more detailed information on predecessor relationships between requests and tasks.

6. Select a request type from the **Request Type** field.

7. Click **Create.**

   The standard interface opens with the request type loaded.

8. Provide any necessary information in the request's fields.

9. Click **Submit.**

   The request is submitted. You return to the **References** tab in the Task Details page. The new added request displays as a reference.

10. Click **Save.**

Adding Existing Packages

To add a package to a task:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **References** tab.
3. Select **Package** from the **New Reference** field.
4. Click **Add.**

   The Add Reference: Package window opens.

5. Search for the package you want to add to the task.
6. Select the checkbox next to the desired package and click **Add.**

   You return to the **References** tab in the Task Details page. The new added package displays as a reference.

7. Click **Save.**

Adding New Packages

A new package can be created from the **References** tab and immediately added to a task. This saves time from having to create a new package in HP Deployment Management, searching for it, and adding it to the task.

To add a new package to a task:

1. Open the Task Details page.
2. Click the **References** tab.
3. Select **Package (New)** from the **New Reference** field.
4. Click **Add.**

   The Create New Package window opens.

5. Click **Create.**

   The Package window opens.

6. Provide any necessary information in the package's fields.

7. Click **Save.**

   The package is submitted. You return to the **References** tab in the Task Details page. The new added package displays as a reference.

8. Click **Save.**

Adding Tasks

To add a task to a task:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **References** tab.

3. Select **Task** from the **New Reference** field.

4. Click **Add.**

   The Search Tasks window opens.

5. Search for the task you want to add to the task.

6. Select the checkbox next to the desired task and click **Add.**

   You return to the **References** tab in the Task Details page. The new added task displays as a reference.

7. Click **Save.**

Adding Releases

To add a release to a task:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **References** tab.
3. Select **Release** from the **New Reference** field.
4. Click **Add.**

   The Add Reference: Release window opens.

5. Select a release to add.
6. Click **Add.**

   You return to the **References** tab in the Task Details page. The new added release displays as a reference.

7. Click **Save.**

Adding Documents

To add a document to a task:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **References** tab.
3. Select **Attachment** from the **New Reference** field.
4. Click **Add.**

   The Add Document window opens.

5. To select a document for an attachment, click the **Browse** icon.

   Open the drive and directory where the file you want to add is located and select it. The name of the document displays in the **Attachment** field.

6. Type a description in the **Description** field.

7. Click **Add.**

   You return to the **References** tab in the Task Details page. The new added document displays as a reference.

8. Click **Save.**

Adding URLs

To add a URL to a task:

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Click the **References** tab.

3. Select **URL** from the **New Reference** field.

4. Click **Add.**

   The Create New Reference URL window opens.

5. Type the name of the URL in the **URL** field.

6. Type a description in the **Description** field.

7. Click **Add.**

   You return to the **References** tab in the Task Details page. The new added URL displays as a reference.

8. Click **Save.**

Changing the Task Status

A task's status can be changed from the Task Details page. See *Task Statuses on page 115* for detailed discussion of task statuses.

To change a task's status from its Task Details page

1. Locate the task to be assigned and double-click it.

   The Task Details page opens.

2. Select the new task status from the **Status** field at the top of the page.

3. Click **Save.**

7 Managing a Project

Overview of Managing a Project

This chapter describes how to oversee a project from inception to completion using HP Project Management.

Business initiatives can be divided into a set of goals that must be met through the completion of measurable tasks by assigned resources. The tasks must be monitored to determine if they are on schedule. In order to provide organization and structure for these activities, a project manager is responsible for managing the project and its work plan.

Some common responsibilities for project managers include:

- Creating and managing the work plan through ongoing adjustments, scope changes, and detailed phase planning.
- Tracking progress to ensure that the project is performing well in terms of its deliverables and costs.
- Communicating project status to participants and stakeholders, including the creation and appropriate escalation of project-related issues.

Project managers can integrate and streamline these responsibilities using the features of HP Project Management. The following sections provide instructions for performing common HP Project Management tasks, such as setting up a project and tracking its status.

In HP Project Management, project managers are those users who have specific HP Project Management–related access grants. See the *Security Model Guide and Reference* for details.

This chapter discusses:

- *Setting Up a Project*

  Every project contains a set of options to configure that are specific to the project, such as what information is tracked and displayed, the rules for the display of indicators and exceptions, scheduling, and who can view the work plan. These settings are defaulted by the project type.

- *Adding Tasks to a Work Plan*

  After the global options have been configured for a project, tasks and summary tasks can be arranged and ordered into a meaningful hierarchy.

- *Taking a Baseline*

  Project managers can take a baseline of their work plans, which can be used to monitor a work plan's changes as it moves through its life cycle.

- *Revising the Work Plan*

  A project manager may also want to make revisions to the work plan. After making revisions, a project manager might find it necessary to then reschedule the work plan. This includes recalculating start and finish dates.

- *Using the Project Overview*

  Managers can search for projects, as well as track a particular project's progress using its project health. Any exceptions that have been triggered can also be displayed.

- *Tracking and Analyzing Project Costs*

  Project cost data can be collected and analyzed by the project manager to track forecasts and actuals, compare project sizes, or spot potential trouble.

- *Tracking Work Plan Audit History*

  The project itself, including fields in the work plan, can have their status changes recorded and viewed for projects and tasks.

- *Exporting and Printing a Work Plan*

  Project managers can print a work plan and Gantt chart, with a wide range of filtering options. The Gantt chart can also be exported to an image file and used in presentations.

When a user creates or edits a work plan or summary task, that user is the only one able to save changes.

In the case of two users wanting to edit two different summary tasks under one project, opening and editing only the desired summary tasks will enable each user to save changes without interfering with each other.

See *Concurrent Work Plan Editing* on page 154 for more detailed information.

When you import a large Microsoft Project (or a large number of projects) into HP Project Management, tables in the PPM Center database are updated to handle this new configuration. Because of the scope of database changes, you should re-run the database statistics on your PPM Center database. Contact your application administrator for help with this procedure.

Setting Up a Project

A project in HP Project Management is made up of the following components:

- Project settings
- Project details
- Work plan
  - Tasks
  - Summary tasks
  - Activities
  - Notes
  - References

These components are used to define and process a specific business initiative. The project also contains a number of global settings that can be configured to suit a particular project's objectives. These settings are defined by project

policies, which are defined by the project type. Depending on the configuration of project policies, some of these settings may not be editable. See the following sections for more information on project policies:

- *Project Fields* on page 37
- *Work Plan* on page 39
- *Request Types* on page 40
- *Scheduling* on page 41
- *Schedule Health* on page 44
- *Cost and Effort* on page 46
- *Cost and Earned Value Health* on page 52
- *Microsoft Project Integration* on page 53
- *Project Health* on page 56
- *Issue Health* on page 57
- *Task Auditing* on page 59
- *Project Security* on page 64

Project Statuses

The **Project Details** tab of the Project Overview page displays the status of the project in its process. These statuses can vary depending on whether the process has been altered (see the *HP Project Management Configuration Guide* for details). The default set of project statuses is as follows:

- **In planning**
- **On Hold**
- **Active**
- **Complete**
- **Cancelled**

Adding Tasks to a Work Plan

Once the project has been configured, the project manager can add tasks to the work plan and specify task details, including assigning resources or resource groups. Tasks can be added individually, or the work plan can be created based on a pre-defined work plan template. Tasks can also be organized in a hierarchical fashion quickly and easily.

See the following chapters and sections for more details on including tasks in a work plan:

- *Adding Tasks to the Work Plan* on page 81
- *Configuring Tasks* on page 113
- *Using Work Plan Templates* on page 217

Taking a Baseline

A baseline is the original approved work plan for a project. As scope changes happen, the baseline is updated to reflect those changes as part of the approved plan. A project manager uses baselines to continuously monitor the health of their work plan in terms of schedule and cost by comparing the current work plan to the baseline.

See *Working with Baselines* on page 182 for more detailed information about taking and using work plan baselines.

Revising the Work Plan

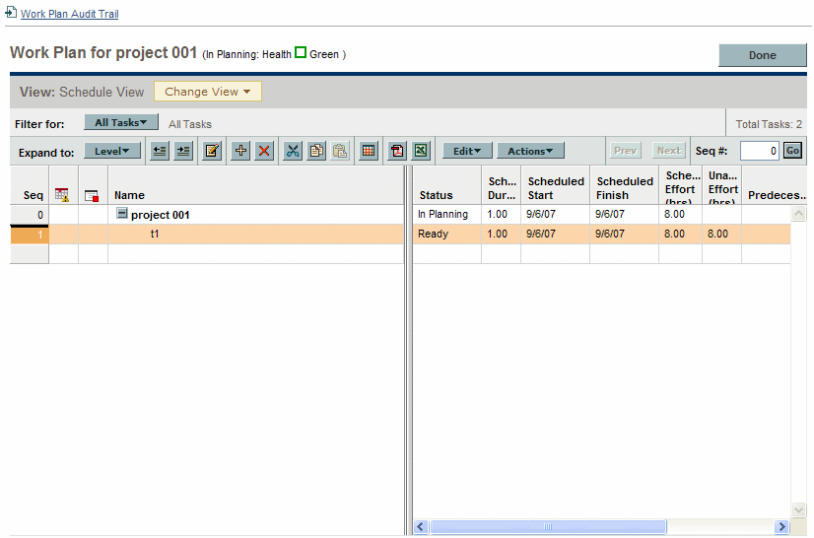
Work plans rarely remain unchanged during a project's life. Revisions are commonly made to accommodate project updates, reorganizations and reassignments. HP Project Management enables project managers to revise their plan quickly.

When a user creates or edits a work plan or summary task, that user is the only one able to save changes. See *Concurrent Work Plan Editing* on page 154 for more detailed information.

Viewing and Modifying Work Plan Hierarchy

The ordering and grouping of tasks and summary tasks is graphically displayed in the Work Plan page.

Figure 7-1. Work Plan page: Schedule view



Tasks can be grouped and ordered into summary tasks, using the indent icon to indent. Summary tasks can have their tasks removed and made into separate tasks using the outdent icon to outdent. Top-to-bottom reordering can be performed on summary tasks and tasks as well, using the **Cut** and **Paste** icons. For step-by-step instructions, see *Creating a Work Plan Hierarchy* on page 84.

Work Plan Statuses

To display the different stages in a work plan's life from planning to completion, a work plan can have various statuses associated with it. These statuses are **In Planning, On Hold, Active, Complete** and **Cancelled.** Project managers can move work plans into different statuses to facilitate the work associated with that stage of the project. *Table 7-1* describes the various work plan statuses, their behaviors, and applications.

Table 7-1. Work plan statuses and descriptions (page 1 of 2)

Work Plan Status	Behavior	Application
In Planning	Work plans and their tasks are not shown in the My Tasks portlet or the PPM Dashboard. Notifications are not sent and exceptions are not triggered. All work plans start in this status.	This status allows a project manager to develop and manipulate the work plan without having to notify participants or stakeholders.
Active	Work plans and their tasks can be seen in My Tasks and in the PPM Dashboard. Notifications are sent and exceptions are triggered. Work plan structure can change.	This is the status of a work plan that is ready to be executed and is being actively managed.
On Hold	Notifications are not sent and exceptions are not triggered. Hierarchy can be modified.	This status is used when a portion of an active plan needs to be withheld from execution, perhaps because it needs replanning or because work is being temporarily suspended while a review takes place. It is possible to put an entire work plan in this status.

Table 7-1. Work plan statuses and descriptions (page 2 of 2)

Work Plan Status	Behavior	Application
Complete	Work plans and their tasks can be seen in the PPM Dashboard but not in My Tasks. Notifications are not sent and exceptions are not triggered.	This is the status of a work plan that has been worked to completion. Tasks cannot be added to a section that is completed.
Cancelled	Work plans and their tasks can be seen in the PPM Dashboard but not in the My Tasks portlet. Notifications are not sent and exceptions are not triggered.	This status is used to indicate that the deliverables in this section of a work plan will not be completed, and are no longer required to be completed in order for the project to finish.

HP Project Management also features a set of task statuses. For a list of task statuses, see *Task Statuses* on page 115.

Changing Statuses

Project managers can change statuses for the entire work plan, summary tasks, or tasks at any time. Summary task owners can change statuses for summary tasks or tasks at any time from the Task Details page for tasks they own.

A work plan in the status Complete or Cancelled cannot be edited. The project must be re-opened in order for the work plan to be edited.

To change the status of the project:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Double-click the row at the top of the hierarchy.

   The Task Details page opens.

4. Select a new **Status** at the top of the page.

5. Click **Save.**

To change the status of a task or summary task:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Double-click the task or summary task whose status you want to change.

   The Task Details page opens.

4. Select a new **Status** at the top of the page.

5. Click **Save.**

Configuring and Editing Multiple Tasks Simultaneously

You can select multiple tasks in the Work Plan page and perform simultaneous updates on them in the following ways:

- Editing certain fields common to all selected tasks
- Updating actuals for selected tasks
- Changing resource assignments for selected tasks
- Changing assigned roles for selected tasks
- Shifting scheduled dates for selected tasks forward or backward
- Linking selected tasks sequentially as predecessors
- Setting status for selected tasks

Use either of the following methods to select multiple tasks simultaneously:

- Use **`Shift`** + click to highlight a set of contiguous rows.
- Use **`Ctrl`** + click to make multiple non-contiguous selections.

Editing Fields on Multiple Tasks Simultaneously

Certain fields common to all tasks can be edited and saved simultaneously for any set of tasks, including but not limited to:

- Name
- Scheduled duration, scheduled start, scheduled finish, scheduled effort
- Resource
- Activity (only if enabled on the project)
- Predecessors
- Role (only if enabled on the project)

To edit common fields for a set of tasks simultaneously in the Quick Edit page:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Select multiple tasks using **`Shift`** + click.

   You must select an uninterrupted range of tasks in order to open them in the Quick Edit page. Collapsed summary tasks can be included.

4. Click **Edit** and select **Quick Edit.**

   The Quick Edit page opens.

5. Make the desired changes to the set of tasks.

6. Click **Save.**

   The changes are saved.

Editing Actuals for Multiple Tasks Simultaneously

Actuals data can be edited simultaneously for any set of tasks.

If HP Time Management has been enabled for a project, you may not be able to provide **Actual Effort** values for resources whose actuals are expected to be provided through HP Time Management time sheets. These tasks are marked with an icon resembling a clock.

To edit actuals for a set of tasks simultaneously:

1. Open the project to modify.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Select multiple tasks using **Shift** + click or **Ctrl** + click.
4. Click **Edit** and select **Actuals.**

   The Enter Actuals page opens.

If the work plan is filtered by resource, the Enter Actuals page only displays the assignments of the filtered resource.

5. Make the desired updates to the set of tasks.
6. Click **Save.**

   The changes are saved.

When actuals are entered into HP Project Management, certain calculations are deferred. See *Calculating Actuals* on page 155 for more details.

Editing Resource Assignments for Multiple Tasks Simultaneously

Resource assignments can be edited simultaneously for any set of tasks in the following ways:

- A particular resource or set of resources can be assigned to all selected tasks.
- A particular resource or set of resources can be removed from all selected tasks.

  Resources whose assignments have actuals cannot be removed from a task.
- A particular resource on all selected tasks can be swapped with another resource.

  Assignments that have already started are not swapped. If task scheduled effort is being managed manually, the new resource inherits the old resource's scheduled effort.

- Resource assignments on all selected tasks can be removed without affecting tasks that have already started.

  Tasks with actuals are not changed.

- All resource assignments on all selected tasks can be replaced with another resource or set of resources.

  Tasks with actuals are not changed. If task scheduled effort is being managed manually, the new resource's scheduled effort is set to zero.

To edit resource assignments for a set of tasks simultaneously:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Select multiple tasks using **`Shift`** + click or **`Ctrl`** + click.

4. Click **Edit** and select **Assignments.**

   The Resource Assignments dialog opens.

5. Make the desired changes to the resource assignments for the selected tasks.

6. Click **OK.**

   The changes are saved immediately.

Editing Assigned Roles for Multiple Tasks Simultaneously

The assigned role can be edited simultaneously for any set of tasks. The new role takes the place of any previous role assignments for all the tasks in the set.

To edit assigned roles for a set of tasks simultaneously:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Select multiple tasks using **`Shift`** + click or **`Ctrl`** + click.

4. Click **Edit** and select **Set Role.**

   The Set Role dialog opens.

5. Select the desired role for the selected tasks.

6. Click **OK.**

   The changes are saved immediately.

Shifting Scheduled Dates for Multiple Tasks Simultaneously

You can shift the scheduled dates for any set of tasks forward or backward by any number of days. All of the selected tasks will shift the same number of days in the same direction.

This feature should only be used if you are not using the HP Project Management scheduler (accessed by clicking the **Schedule Project** icon) as described in *Scheduling the Work Plan* on page 92. If you have been using the scheduler, continuing to do so is the recommended method for scheduling your work plan.

To shift the scheduled dates for a set of tasks simultaneously:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Select multiple tasks using **`Shift`** + click or **`Ctrl`** + click.

4. Click **Edit** and select **Shift Schedule.**

   The Shift Task Schedule dialog opens.

5. Specify the number of days by which to shift the schedule and select **Forward** or **Backward.**

6. Click **OK.**

   The changes are saved immediately.

Quickly Linking Multiple Tasks as Predecessors

You can select a set of tasks and quickly link them sequentially as predecessors. The tasks will be assigned predecessor relationships based on their sequential order as defined by the work plan.

To change resource assignments for a set of tasks simultaneously:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Select multiple tasks using **`Shift`** + click or **`Ctrl`** + click.

4. Click **Edit** and select **Link Tasks.**

   The Link Tasks dialog opens.

5. Click **Link Tasks.**

   The changes are saved immediately.

Setting Status for Multiple Tasks Simultaneously

Task status can be edited simultaneously for any set of tasks.

To change resource assignments for a set of tasks simultaneously:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Select multiple tasks using **`Shift`** + click or **`Ctrl`** + click.

4. Click **Edit** and select **Set Status.**

   The Set Status dialog opens.

5. Select the desired status for the selected tasks.

6. Click **Change Status.**

   The changes are saved immediately.

Updating Schedules and Dependencies

Project managers are able to update aspects of a project at any time to reflect the changing status of a business initiative. Many of these aspects are task details that can be edited in batches as described in *Configuring and Editing Multiple Tasks Simultaneously* on page 146.

Changing Scheduled Duration, Start, Finish, and Effort

Many different task factors influence the work plan schedule, including their duration, start dates, constraints, and predecessor relationships. The **Scheduled Duration, Scheduled Start,** and **Scheduled Finish** fields can be changed in the Task Details page.

To change **Scheduled Duration, Start, Finish,** or **Effort** for a task:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Double-click the task to update.

   The Task Details page opens.

   If you want to update a summary task's Scheduled Duration, Start, Finish, or Effort, you must update its individual tasks' values.

4. Update fields in the **Schedule** tab.

   To update **Scheduled Start** and **Finish** dates, type the desired date in the appropriate date field. To make sure these dates are set explicitly and will not change after the **Schedule Project** icon is clicked, select a **Constraint Type** (such as **Start No Earlier Than)** from the **Constraint Type** field.

   To update **Scheduled Duration,** type the new information into the appropriate text field.

   Scheduled Effort can be updated only if it has been set to be manually entered in the **Cost and Effort** policy of the project's settings. See *Scheduled Effort in the Work Plan* on page 48 for more information.

5. Click **Save.**

Changing Predecessors

You can specify different predecessor relationships between tasks in the work plan; for example, that some tasks must be completed before beginning other tasks. Predecessors can be changed from the Task Details page.

External tasks and requests can also be set as predecessors for tasks. For more information on setting these types of predecessors, see *Setting Up Predecessors* on page 86.

Revising the Schedule

If you have modified any of your work plan's hierarchy, predecessor dependencies, resources or dates, you might want to revise the schedule. Scheduling warnings can help you identify places where tasks are not meeting their dependencies.

When you reschedule the work plan, HP Project Management generates a new schedule for the entire work plan based on the updated dates, working from the default date specified by the project type in the Scheduling policy. Depending on the project type, you may be able to change the default date in the Project Settings page.

Only one user at a time can reschedule the work plan.

For more detailed information on updating a schedule, see *Generating the Schedule* on page 92.

Once you are satisfied with the new schedule, you may want to take a new baseline for the work plan. See *Taking a Baseline* on page 141 for more detailed information.

Concurrent Work Plan Editing

While only project managers should be editing a work plan, a single project may have many project managers who are editing different parts of the work plan. HP Project Management allows you to edit and update separate parts of work plans simultaneously, allowing for more efficient representation of changes to a project.

Avoiding Conflicts

In general, two users cannot make edits to the same task simultaneously.

- If two users are editing a task simultaneously, the only changes saved will be the first set. The second user will not be able to save any changes. This includes instances where a resource logs actuals for a task.

  For example: Yukio is the manager for a project to which Bob is assigned.

  a. Yukio opens a task and begins to make changes.

  b. Bob updates the actuals for that task using the My Tasks portlet and clicks **Save.**

  c. Yukio is unable to save her changes to the task.

- An error message results if a user attempts to schedule the work plan while the work plan is being scheduled by another user.

It is recommended that project managers avoid making changes to the work plan during times when many resources will be entering actuals.

Calculating Actuals

When resources enter actuals through the My Tasks portlet or time sheets, the associated task information is saved, but the following calculations are deferred in order to allow resources to efficiently enter and save actuals:

- Roll-up of cost data to parent summary tasks
- Calculation of exception
- Calculation of health

The schedule health and Work Plan page of a project display messages indicating that outstanding calculations are pending. The interval at which these calculations are made is determined by scheduled services on the PPM Server, which can be configured by a system administrator. A parameter in the `server.conf` file makes it possible for a project manager to configure HP Project Management to perform roll-up calculations upon save. See the *HP Project Management Configuration Guide* for more detailed information on these scheduled services and server parameter.

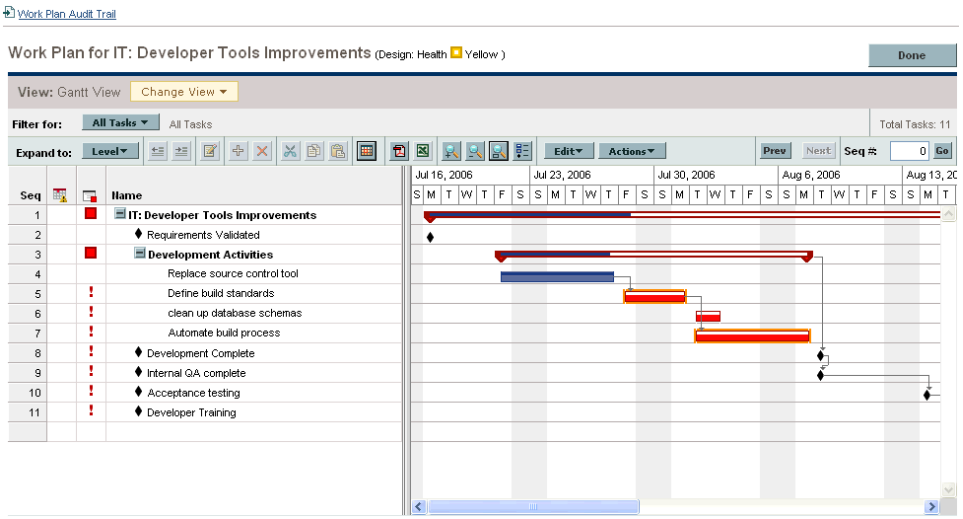
Viewing the Project Critical Path

A work plan's critical path is composed of all of the tasks in a work plan that determine its duration. There are two ways to make the critical path visible:

- The **Highlight Critical Path** checkbox allows you to display the critical path in the project Gantt chart. Tasks that are part of the critical path are outlined in orange.
- The **Mark Tasks on Critical Path** checkbox allows you to mark tasks on the critical path with an orange flag present in all work plan views.

The critical path is calculated after scheduling the work plan. If you have made changes to the work plan, you should reschedule it in order to obtain an accurate critical path.

Figure 7-2. Work Plan page: Gantt view displaying critical path



To see a work plan's critical path on the Gantt chart:

1. Open the project to edit.

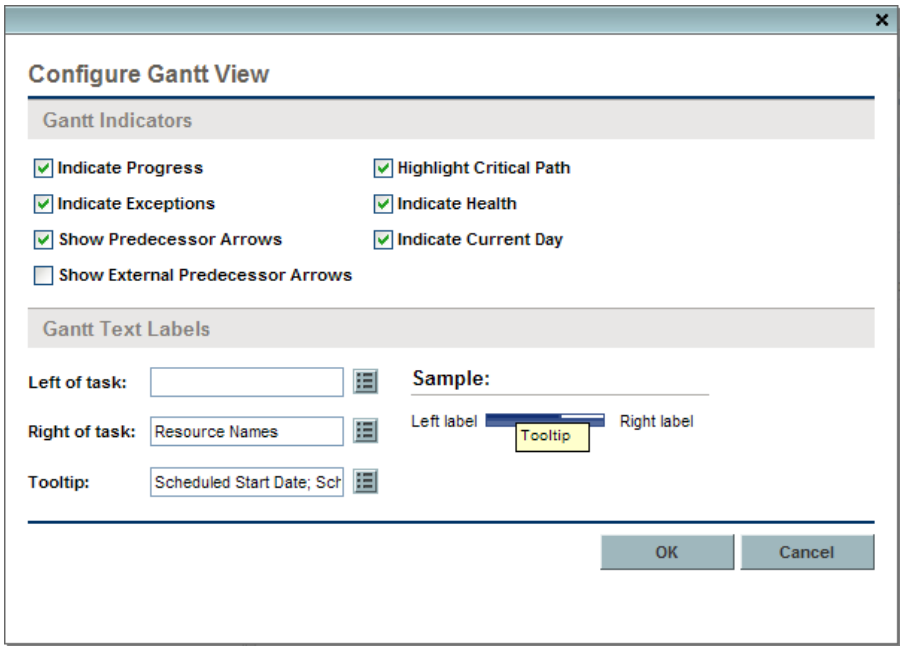
   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Click **Actions** and select **Configure Gantt.**

   The Configure Gantt dialog box opens.



4. Select the **Highlight Critical Path** checkbox.

5. Click **OK.**

   The Gantt chart displays the project's critical path.

To mark tasks on a work plan's critical path on the Gantt chart:

1. Open the project to edit.

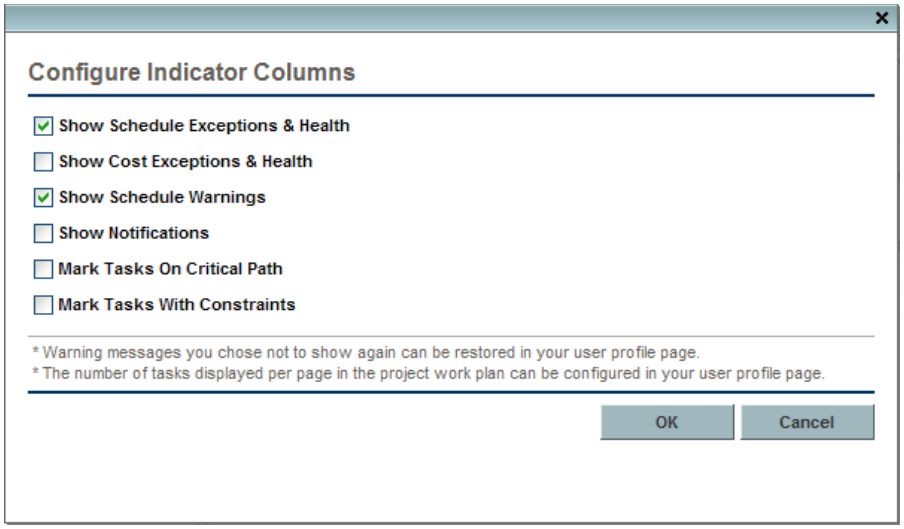
   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Click **Actions** and select **Configure Indicator Columns.**

   The Configure Indicator Columns dialog box opens.



4. Select the **Mark Tasks on Critical Path** checkbox.

5. Click **OK.**

Using the Project Overview

The Project Overview page provides a centralized, consolidated view of the project's statuses in many areas. It also serves as a central navigation point to the entities associated with the project, such as its financial summary and staffing profile, forming a consolidated hub of communication between the project manager and others interested in the project. The sections of the Project Overview page are self-configuring, appearing when they are relevant for the project, and only to users who have the proper level of access, such as cost-related sections. Using the Project Overview page and its sections, project managers can keep track of the items described in *Table 7-2*:

Table 7-2. Project Overview page tabs and sections

Tab	Possible Sections and Uses
Project Summary	• The progress of work plan phases and major milestones • Exceptions that have been triggered • Project issues • Project risks • Project scope changes • Project staffing • Project cost data including financial summaries and earned value (EV) analysis • HP Time Management integration • Programs the project is linked to
Project Details	• Project summary • Business case details • Risk and value ratings
Project Exceptions	Exceptions triggered by work plan tasks
References	References attached to the project

Searching for Projects

You can search for projects in one of two ways:

- **Search box.** Use the search box if you know the name of the project or want to search for one or more projects that use a particular phrase or fragment of text in its name. The search box is located in the upper-right corner.
- **Search Projects page.** Use the Search Projects page if you want to search for a project based on criteria such as project manager, project type, planned start date, planned finish date, finished project, health, associate programs, or region.

Search Box

The search box is used to locate and open projects based on project names that contain the specified text.

To locate and open a project using the search box:

1. Log on to PPM Center.
2. In the search box, located on the right side of the menu bar, type **@** followed by the text to search for in the project name. When you start typing the text, a submenu appears (the search is not case-sensitive).
3. Once you have finished typing your search text, select **Search for projects: *<search_text>*.**

   If the search text matches only one project name, the Project Overview page for that project opens.

   If the search text matches more than one project name, the Search Project page opens, displaying a list of projects with matching names. Click the name of a project to open its Project Overview page.

   See *Viewing Project Overview* on page 200 for more information about the Project Overview page.

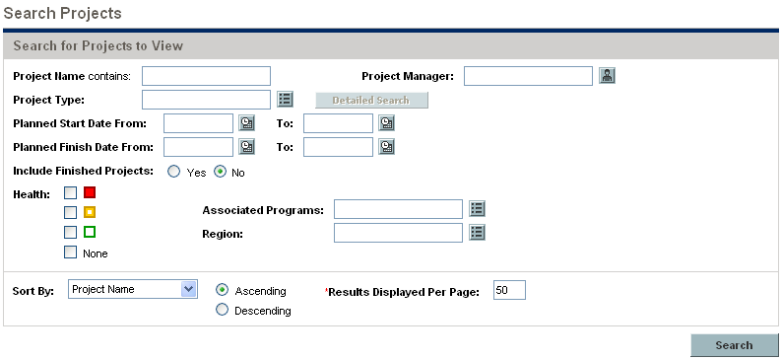
Search Projects Page

The Search Projects page is used to locate and open projects based on the search criteria you select.

To locate and open a project using the Search Projects page:

1. Log on to PPM Center.
2. From the menu bar, select **Search > Projects.**

   The Search Projects page opens.



3. Provide search criteria in the appropriate fields.
4. Click **Search.**

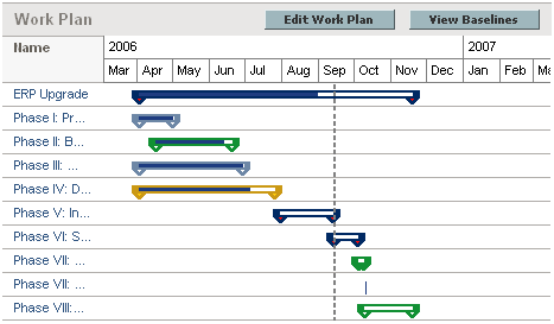
   The Search Projects page reloads, displaying the results of your search.
5. Click the name of a project to open its Project Overview page.

   See *Viewing Project Overview* on page 200 for more information about the Project Overview page.

Viewing the Work Plan

The Work Plan section of the **Project Summary** tab in the Project Overview page displays the top level tasks in the project work plan.

Figure 7-3. Project Summary tab: Work Plan section



You can take the following actions from the **Work Plan** section:

- Click **Edit Work Plan** to open the **Schedule** view and edit the work plan. See *Revising the Work Plan* on page 142 for more details on editing the work plan.
- Click **View Baselines** to open the View Baselines page and manipulate project baselines. See *Working with Baselines* on page 182 for more details on working with baselines.

Viewing the Project Health

The project summary condition is a graphical indicator of the health and percent complete of a project, located on the **Project Summary** tab in the Project Overview page beneath the project name.

Figure 7-4. Project summary condition indicator

The color of the summary condition is a weighted average of the health indicators for scheduling, issue health, and cost and earned value health. These indicators appear on the Project Overview page as well.

Figure 7-5. Project health indicators

For more detailed information on how the project summary condition is calculated and configured, see *Project Health* on page 56.

The project summary condition also appears in its own column next to the names of all projects in the Project Search page.

Overriding Project Health

You may wish to override the health color for any number of reasons, including:

- Project resources have fallen behind in reporting their actuals information, causing HP Project Management to reflect an out-of-date situation.
- An input error by a manager on a summary task has resulted in inaccurate project health calculations.

To override the project summary condition indicator's health color:

1. On the **Project Summary** tab in the Project Overview page, click **Override Health.**

   The Override Health dialog box opens.

2. Select the desired indicator color or choose to use the calculated color.
3. Type the date until which the override will last.
4. If desired, provide a reason for the override in the **Override Description** text box.
5. Click **Done.**

Viewing Milestones

The **Project Summary** tab in the Project Overview page contains two sections that display milestones:

- The **Milestones** section lists the milestones in a work plan.

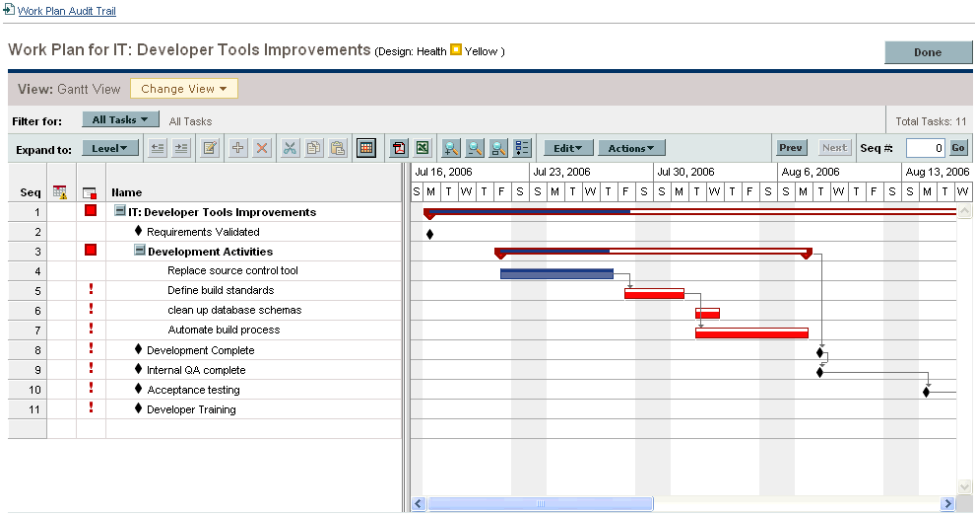
  If the project's **Project Fields** policy has been set to track major milestones, the **Milestones** section will only list major milestones. If major milestones have not been specified, all milestones are displayed.

Figure 7-6. Project Summary tab: Milestones section

- The **Work Plan** section shows part of the work plan's Gantt chart, including top-level tasks and milestones.

Milestones are visible in the Work Plan page **Gantt** view as black diamonds in the Gantt chart.

Figure 7-7. Work Plan page: Gantt view



Viewing Project Earned Value (EV) Analysis

The **EV Analysis Summary** section of the **Project Summary** tab in the Project Overview page provides an earned value (EV) analysis for the project based on the latest data.

Click **Analyze** to open the Analyze Cumulative Cost Metrics page for the project.

For detailed information on analyzing cumulative cost metrics for a project, see the *HP Financial Management User's Guide.*

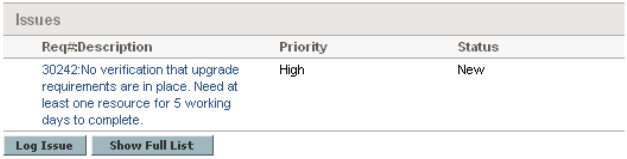
Viewing Project Control Items

The **Project Summary** tab in the Project Overview page can display sections devoted to listing and logging project control items such as issues, risks, or scope changes.

For example, the **Issues** section of the **Project Summary** tab in the Project Overview page summarizes the issues logged for a project. Issues associated with the project appear in the following order:

1. Escalated open issues (ordered by priority)
2. Other open issues (ordered by priority)
3. Closed issues (ordered by priority)

Figure 7-8. Project Summary tab: Issues section



You can take the following actions from the **Issues** section:

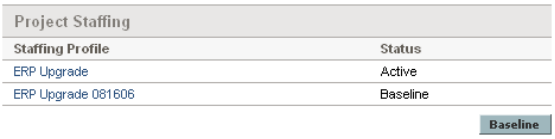
- Click **Log Issue** to log another issue. See *Logging Issues* on page 175 for more detailed information on logging project issues.
- Click **Show Full List** to show the full list of issues logged for the project.

For more detailed information on these sections, see *Submitting Project Control Entities* on page 175.

Viewing Project Staffing

The Project Staffing section of the **Project Summary** tab in the Project Overview page lists the staffing profiles associated with the project and their status.

Figure 7-9. Project Summary tab: Project Staffing section



You can create a new staffing profile from the **Project Staffing** section by clicking **Create a Staffing Profile.**

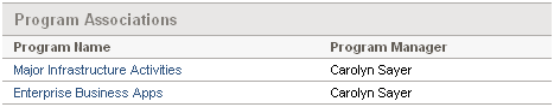
For more detailed information on staffing profiles and their creation and use, see the *HP Resource Management User's Guide.*

Viewing Program Associations

The Program Associations section of the **Project Summary** tab in the Project Overview page lists the programs to which a project is associated.

The Program Associations section only appears if you have purchased and installed HP Program Management.

Figure 7-10. Project Summary tab: Program Associations section



HP Program Management provides a way for managers to link multiple projects together as programs, and to submit and track requests against them.

Organizations implement a Program Management Office in order to:

- Ensure alignment of IT projects with business objectives
- Eliminate duplicate and non-priority efforts
- Improve operational efficiency
- Leverage resources
- Ensure on-time and on-budget delivery

Programs can be tracked and analyzed with the same kind of familiar cost metrics as projects.

For more detailed information on HP Program Management, see the *HP Program Management User's Guide.*

Viewing Project Cost Data

The Project Cost section of the **Project Summary** tab in the Project Overview page displays cost data for the project.

Figure 7-11. Project Summary tab: Project Cost section

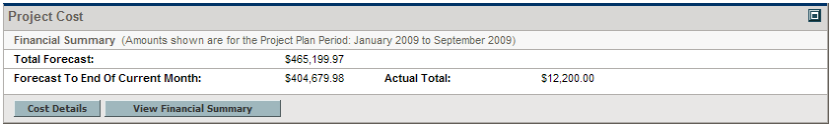


Table 7-3. Data displayed in Project Cost section

Field Name	Description
Total Forecast	Forecast of the project for the project plan period (from the project's planned start period to the planned end period).
Forecast To End Of Current Month	Forecast for the project from the planned start period to the end of the current month (or to the planned end period, whichever comes first).
Actual Total	Actuals for the project for the project plan period.

You can take the following actions from the **Project Cost** section:

- Click **Cost Details** to open the Cost Details page for the project, which shows more detailed project cost information including financial summary information.
- Click **View Financial Summary** to open the Financial Summary page for the project.

Approving Project Time

HP Time Management can be used in conjunction with HP Project Management for detailed entry of time and effort actuals using time sheets. Time sheets have their own sets of approvers and approval processes, and can be used for more granular cost reporting. The **Approve Project Time** section of the **Project Summary** tab in the Project Overview page displays data for time sheets with lines pertaining to the project, and allows you to approve or reject them directly.

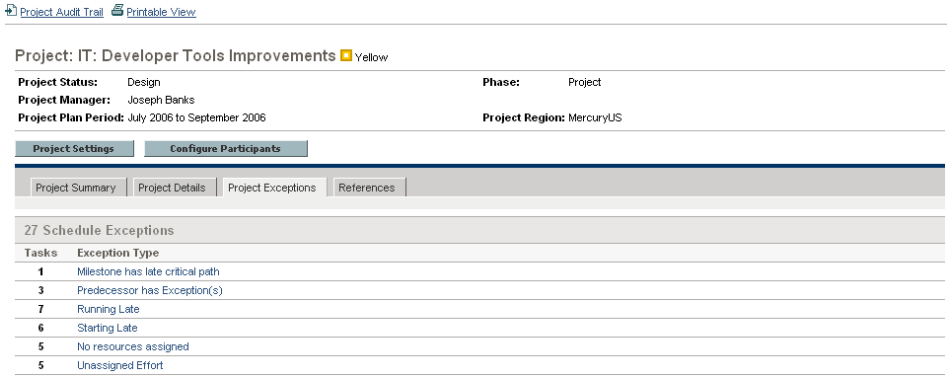
To approve or reject the time sheets listed in the **Approve Project Time** section, select the checkboxes next to the desired time sheets and click **Approve** or **Reject.**

Viewing Exceptions and Warnings

Exceptions and warnings indicate that a rule that has been defined in the project has been violated for a particular task. For example, resources have not been assigned to a task that is due to begin soon, or a task is being completed a certain number of days late. Exception rules are configurable; for more detailed information, see *Schedule Health* on page 44.

Tasks that have triggered exceptions can be viewed from the **Project Exceptions** tab in the Project Overview page or the **Schedule** view in the Work Plan page.

Figure 7-12. Project Overview page: Project Exceptions tab



Viewing Exceptions from the Project Overview Page

The **Project Exceptions** tab lists all the tasks in a particular project that have triggered exceptions.

To get to the **Project Exceptions** tab for a project:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click the **Project Exceptions** tab.

   The **Project Exceptions** tab opens.

3. Drill down to any tasks that merit attention.

Viewing Exceptions in the Schedule View

Exceptions that have been triggered display as a red exclamation mark in the first column on the left in the **Schedule** view on the Work Plan page.

To view a particular triggered exception for a task:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

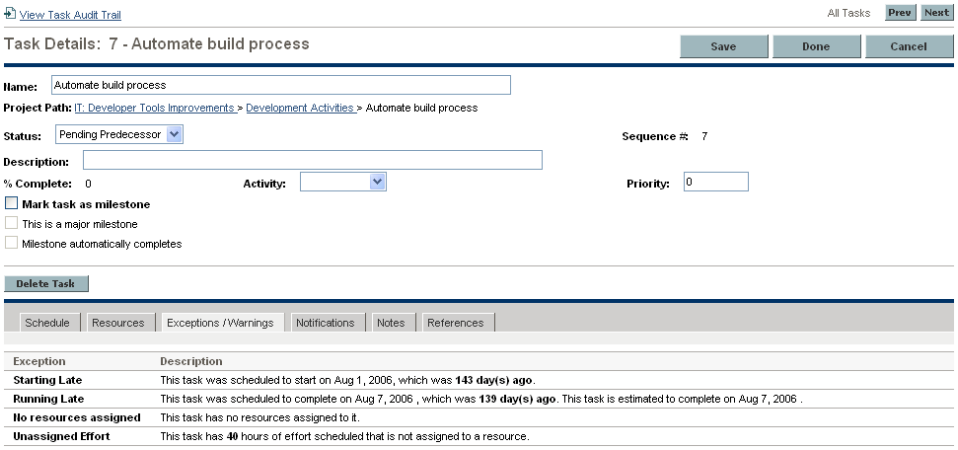
   The Work Plan page opens.

3. Double-click a task in the **Schedule** view.

   The Task Details page opens.

   Depending on whether you have the proper access grant to edit the task, you may not be able to edit the task's fields. Users who can only view a task include project participants who have not been assigned to that particular task, as well as project managers who are not managing the project within which that particular task is contained.

4. Click the **Exceptions/Warnings** tab.



   The **Exceptions/Warnings** tab lists the exception and schedule warning rules for the project that the task is violating.

Clearing Schedule Warning Indicators in the Schedule View

Warning indicators associated with a task are cleared when the task is rescheduled. You can also manually clear specific warnings (partial schedule warnings for dependent tasks and schedule change warnings for parents and ancestors) from the Task Details page.

To clear a warning indicator for a task:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Double-click a task in the **Schedule** view.

   The Task Details page opens.

4. Click the **Exceptions/Warnings** tab.

   The **Exceptions/Warnings** tab lists the exception and schedule warning rules for the project that the task is violating.

5. Click the **Clear Indicator** icon next to the warning that you want to clear.

Exporting the Project Overview Page to PDF

You can create a simple, unified version of the Project Overview page suitable for exporting to a PDF file.

To create an exportable view of the Project Overview page:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click the **Export to PDF** link.

   The PDF Settings window opens.

3. Select the project overview data (portlets) you want to print. The layout of the portlets is configured in the Project Settings, Project Overview Layout (refer to *Project Overview Layout* on page 60 for more information).

4. In the **Paper** section, select the desired options for the display.

5. Click **Export.**

   If the **Open PDF document in browser window** checkbox is selected, the PDF file opens in a separate browser window.

   If the **Open PDF document in browser window** checkbox is not selected, you can choose to open the file in a PDF reader or save the file.

Using the PPM Dashboard to View Progress

Project managers can also view projects using the PPM Dashboard. This interface comes with a configurable set of application windows, known as portlets, through which common HP Project Management queries and actions can be performed.

Submitting Project Control Entities

HP Project Management allows you to log issues, risks, and scope changes against a particular project. These entities can be tracked and logged from their own sections of the **Project Summary** tab in the Project Overview page.

If the **Request Types** policy in the project type does not specify a request type for a project control entity, the **Log <*Project Control Item*>** button in the corresponding section on the Project Overview page does not appear.

Logging Issues

Project issues can be submitted against a particular project to raise issues that require attention. Once submitted, project issues follow their own workflow to resolution.

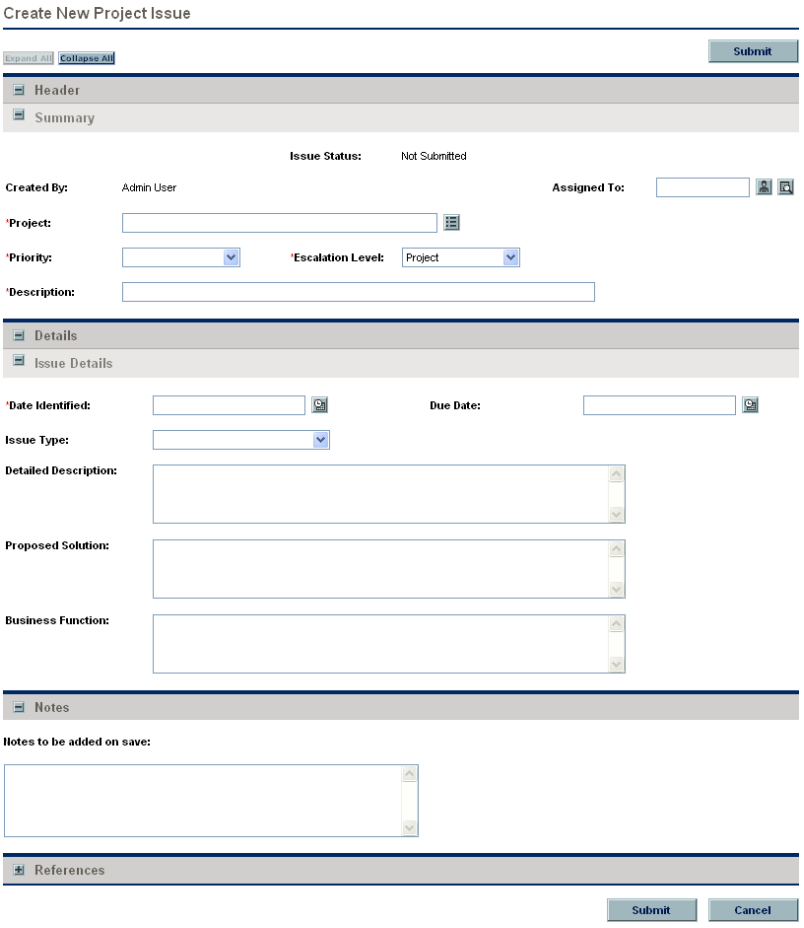
You can log an issue for a project from the following locations:

- The **Log Issue** button in the Issues section of the **Project Summary** tab in the Project Overview page.
- The menu bar option **Open > Project Management > Project Controls > Submit Project Issue.**

To log an issue for a project:

1. Open a project and click **Log Issue** or select **Open > Project Management > Project Controls > Submit Project Issue** at any time.

   The Create New Project Issue page opens.



2. Fill in all required fields and any desired optional fields.
3. Click **Submit.**

   The issue is submitted and begins processing along its workflow.

Logging Risks

Risks can be submitted against a particular project to raise serious issues that require attention. Once submitted, risks follow their own workflow to resolution.

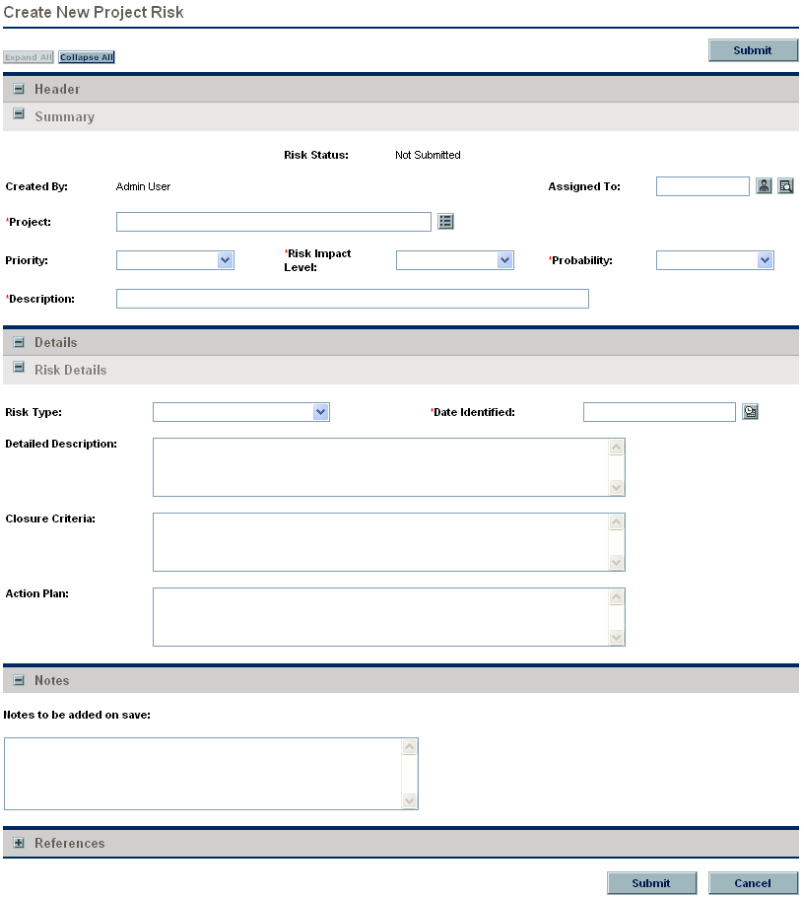
You can log a risk for a project from the following locations:

- The **Log Risk** button in the Risks section of the **Project Summary** tab in the Project Overview page.
- The menu bar option **Open > Project Management > Project Controls > Submit Risk.**

To log a risk for a project:

1. Open a project and click **Log Risk** or select **Open > Project Management > Project Controls > Submit Risk** from the menu bar at any time.

The Create New Project Risk page opens.



2. Fill in all required fields and any desired optional fields.
3. Click **Submit.**

   The risk is submitted and begins processing along its workflow.

Logging Scope Changes

Scope changes can be submitted against a particular project to raise possible changes in project scope that require attention. Once submitted, scope changes follow their own workflow to resolution.

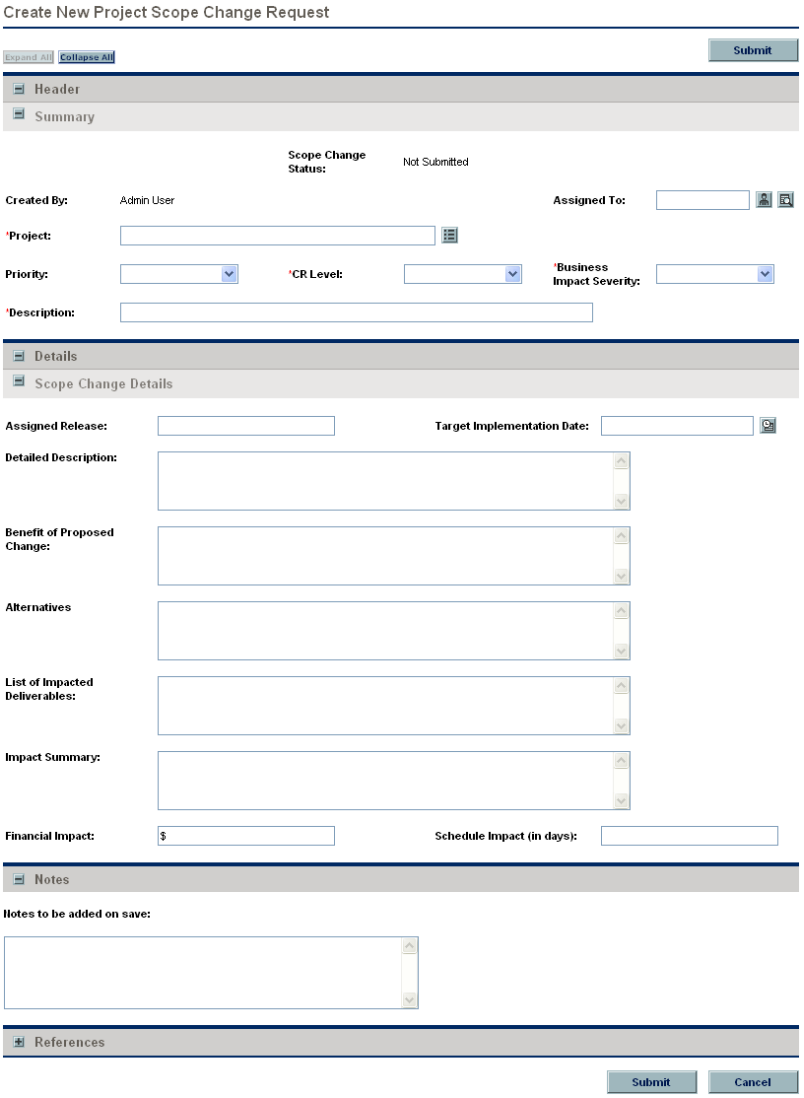
You can log a risk for a project from the following locations:

- The **Log Scope Change** button in the Scope Changes section of the **Project Summary** tab in the Project Overview page.
- The menu bar option **Open > Project Management > Project Controls > Submit Scope Change.**

To log a scope change for a project:

1. Open a project and click **Log Scope Change** or select **Open > Project Management > Project Controls > Submit Scope Change** from the menu bar at any time.

The Create New Project Scope Change Request page opens.



2. Fill in all required fields and any desired optional fields.
3. Click **Submit.**

   The scope change is submitted and begins processing along its workflow.

Viewing Project Settings and Participants

Project settings and participants can be viewed or adjusted at any time during a project's execution.

- For more detailed information on project settings and their interaction with project policies, see *Setting Project Policies* on page 36.
- For more detailed information on project participants and configuring the list thereof, see *Defining Project Participants* on page 72.

Controlling Project Dates

The following entities relevant to projects have effective start and end dates associated with them:

- **Projects.** The **Project Details** tab in the Project Overview page contains the project's **Planned Start** and **Finish Period.**
- **Work plans.** The work plan for a project represents the scheduled start and end dates of major deliverables for the project.
- **Staffing profiles.** The staffing profile for a project has a **Start** and **End Period.**
- **Financial Summaries.** The financial summary for a project has a **Start** and **End Period.**

Note the following when working with dates:

- The **Planned Start** and **Finish Period** for a project take precedence over the other dates.
- **Planned Start** for a project cannot be deleted.
- **Planned Start** for a project can be modified. However, the new **Planned Start** must be later than the original **Planned Start** and no actuals can exist in the financial summary after the original **Planned Start.** When the **Planned Start** is modified:
  - Forecast (planned) costs that are entered manually move from the original start period to the new start period.
  - Forecast effort for the staffing profile move from the original start period to the new start period and then the lines in the financial summary affected by the staffing profile are recalculated.
  - Actuals that exist before the original **Planned Start** are not moved.
- If the work plan's **Scheduled Start** or **Finish Date** falls outside the project's existing date range, a scheduling warning is triggered when the work plan is scheduled.
- **Start Period** values for staffing profiles associated with a project are automatically synchronized with the values specified in the **Project Details** tab. The **Start Period** for the project's financial benefit are also synchronized with the project, but is offset from the actual **Start Period.**

Working with Baselines

A baseline is a snapshot of the approved work plan. As scope changes happen, the baseline is updated to reflect those changes as part of the approved plan. A project manager uses baselines to continuously monitor the health of their project in terms of schedule and cost by comparing the current work plan to the baseline plan. Only users with the appropriate access grants can view and manipulate baselines.

Taking a Baseline

You can take a baseline starting from the Project Overview page or from the Work Plan page.

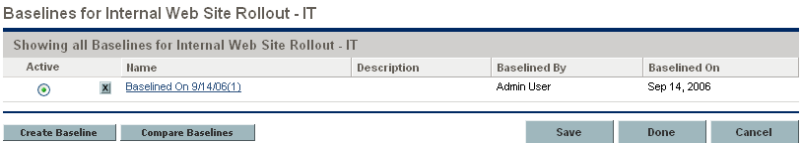
To take a baseline from the Project Overview page:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

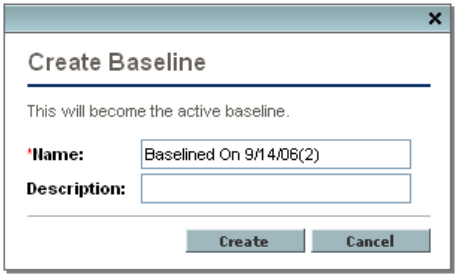
2. On the Project Overview page, click **View Baselines.**

   The View Baselines page opens.



3. Click **Create Baseline.**

   The Create Baseline dialog box opens.



4. Type a **Name** and optional **Description** for the baseline.

   A default name for the baseline is suggested, though you can change it.

5. Click **Create.**

   The baseline has been taken.

To take a baseline from the Work Plan page:

1. Open the work plan.
2. On the Work Plan page, select **Actions > Create a Baseline.**

   The Create Baseline dialog box opens.
3. Type a **Name** and optional **Description** for the baseline.

   A default name for the baseline is suggested, though you can change it.
4. Click **Create.**

   The baseline has been taken.

Managing Baselines

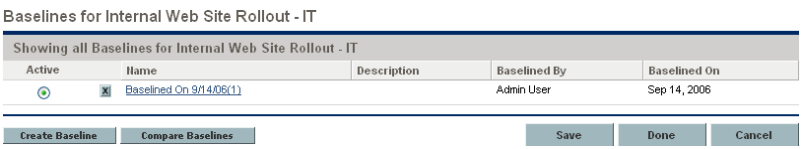
Multiple baselines can be taken for a single work plan. You can update the names and descriptions of baselines, specify which is the active project baseline, or delete baselines at any time.

To take a baseline for a project, you must have a license for HP Project Management, be a manager for the project, and have the Manage Work Plan Baselines access grant. Users with the Manage All Work Plan Baselines access grant can take baselines for any project.

To manage project baselines:

1. Open the project you have taken baselines of.
2. On the Project Overview page, click **View Baselines.**

   The View Baselines page opens.



3. Select the option next to the baseline you want to be active for the project.

4. (Optional) Click the **Delete** icon next to a baseline you wish to delete.
    a. A dialog box will open asking if you are sure you want to delete the baseline.
    b. Click **Delete** to delete the baseline.
5. Click **Done.**

Comparing Baselines

You can compare baselines to each other, or a baseline to the current work plan. On the View Baselines page, click **Compare Baselines** to open and run the report that allows you to compare a baseline to another baseline, or to the current work plan.

Tracking and Analyzing Project Costs

HP Financial Management allows you to track and analyze project costs in ways including the following:

- Capturing and comparing financial data in financial summaries including roll-ups from work plans
- Using HP Time Management to track task costs
- Performing analyses of project cost data in graph and portlet form, including earned value analysis
- Enabling SOP 98-1 compliance at the work plan level with activities
- Enabling the use of different currencies depending on project participants' locations

See the *HP Financial Management User's Guide* for more detailed information on cost data, currencies, exchange rates, and SOP 98-1 compliance.

Exporting and Printing a Work Plan

A work plan can be exported as a PDF file or a Microsoft Excel file for use in presentations.

Exporting to PDF Files

To export a work plan to a PDF file:

1. Open the project to export.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

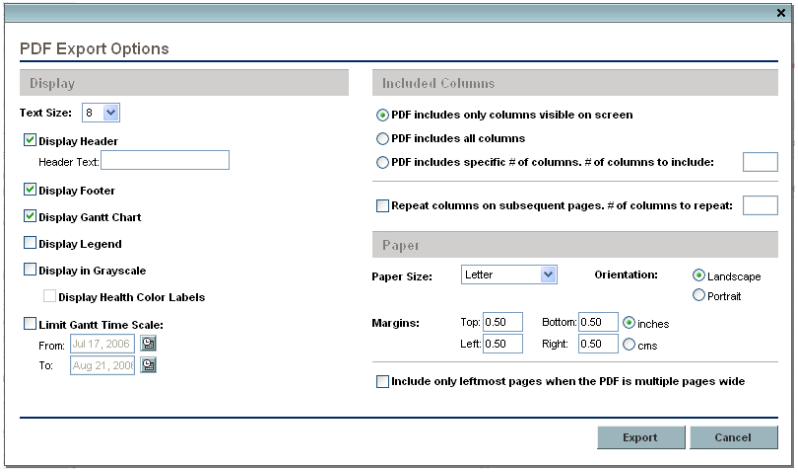
   The Work Plan page opens.

3. Adjust the work plan display.

   You can adjust the set of displayed tasks by reordering or resizing columns, expanding or collapsing summary tasks, or filtering the work plan in order to display the tasks you want.

4. Click the **PDF** icon.

   The PDF Export Options dialog box opens.



5. Select the desired options for the display of the project Gantt chart, the included columns, and paper size.
6. Click **Export.**

   The project PDF file opens in a new window, where it can be viewed and saved.

Exporting to Microsoft Excel Files

To export a work plan to a Microsoft Excel file:

1. If you are using Microsoft Internet Explorer version 7, verify that the Internet options are configured properly. See *Configuring Microsoft Internet Explorer Internet Options*.
2. Open the project to export.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.
3. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.
4. Click the **Microsoft Excel** icon.

   A new window opens, refreshing at a set interval until the system completes the export.
5. Save the exported Excel file.

Configuring Microsoft Internet Explorer Internet Options

If you are using Microsoft Internet Explorer version 7, you must configure the Internet options of your browser to successfully export data to a Microsoft Excel file.

1. From your browser, select **Tools > Internet Options.**

   The Internet Options window opens.

2. Select the **Security** tab.
3. Select the **Trusted sites** Web content zone.
4. Click **Sites.**

   The Trusted sites window opens.

5. Type your PPM Server as a Web site to this zone.
6. Click **Add.**
7. Click **OK.**
8. In the Internet Options window, click **Custom Level.**

   The Security Settings window opens.

9. Set the custom settings to **Medium-low** or lower.
10. Click **Reset.**

    A dialog box opens requesting confirmation of the changes to security.

11. In the dialog box, click **Yes.**
12. In the Security Settings window, click **OK.**
13. In the Internet Options window, click **OK.**

Tracking Work Plan Audit History

HP Project Management maintains an audit trail for projects, work plans, and tasks.

To view the audit trail for a particular project:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Project Audit Trail.**

   The Project Audit Trail dialog box opens.

   Click **Prev** or **Next** to navigate between pages of information. You can also click the **Export to Excel** link to export the dialog box's contents to a Microsoft Excel file.

3. Click the **X** icon in the upper-right corner to close the dialog box.

To view the audit trail for a particular work plan:

1. Open the project to edit.

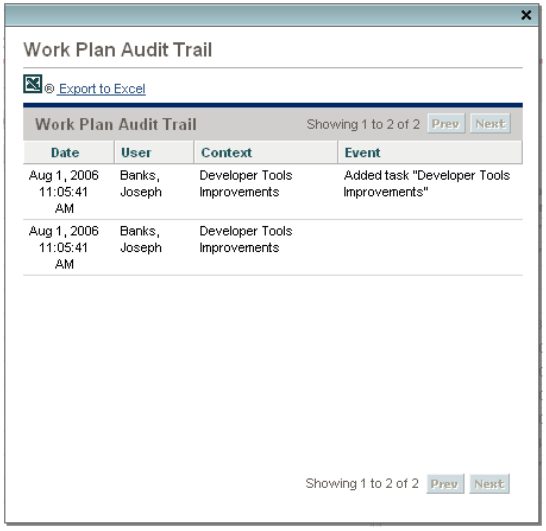
   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. Click the **View Audit Trail** link on the Work Plan page.

   The Work Plan Audit Trail dialog box opens.



   Click **Prev** or **Next** to navigate between pages of information. You can also click the **Export to Excel** link to export the dialog box's contents to a Microsoft Excel file.

4. Click the **X** icon in the upper-right corner to close the dialog box.

To view the audit trail for a task:

1. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.

2. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.

3. In the **Schedule** view, double-click the task to update.

   The Task Details page opens.

4. Click View Task Audit Trail.

   The Task Audit Trail dialog box opens.

   Click **Prev** or **Next** to navigate between pages of information. You can also click the **Export to Excel** link to export the dialog box's contents to a Microsoft Excel file.

5. Click the **X** icon in the upper-right corner to close the dialog box.

Completing, Cancelling, and Deleting Projects

All projects must reach an endpoint. The project can either be brought to completion, or reach a point where no more work can be done. Work plan statuses provide distinct ways of differentiating between work plans that have been Completed or Cancelled. For more detailed information on work plan statuses, see *Work Plan Statuses* on page 143. Projects can also be deleted by users with the proper level of access.

Completing Work Plans

Project managers can set the work plan status to **Completed.** For more information, see *Changing Statuses* on page 144.

If a work plan is manually set to **Completed:**

- Any incomplete tasks are set to **Completed.**
- Any incomplete summary tasks are set to **Completed.**

Cancelling Work Plans

Occasionally, all work on a particular business initiative can be stopped. The endeavor might have been found to be unprofitable, it might not be feasible given current resource limitations or there might be another business reason. Tasks can have their statuses changed to **Cancelled** to reflect this circumstance.

- If a work plan is manually set to **Cancelled,** any incomplete tasks under it are set to **Cancelled.**
- From **Cancelled,** a work plan can be moved back to **On Hold.**
- Once the work plan is moved into an **Active** summary task status:
  - Task statuses will be recalculated.
  - Tasks previously **In Progress** will not regain the task status of **In Progress.**

Deleting a Project

Sometimes projects are created in error. Project managers can delete projects from the Project Overview page. On the **Project Summary** tab of the Project Overview page, click **Delete** to delete a project.

Once deleted, a project cannot be recovered. Use caution when considering projects for deletion.

Table 7-4 describes the conditions that must be met in order for you to be able to delete a project or projects.

Table 7-4. Access requirements for project deletion

Item to Delete	Access Requirements
A single project	• Project manager for the project • Access grant: Delete Projects • Access grant: Edit Projects
A single project with actuals	• Project manager for the project • Access grant: Delete Projects • Access grant: Delete Projects with Actuals • Access grant: Edit Projects

When a project is deleted, its financial summary is also deleted, including snapshots, actuals, and manually entered data. Time sheet data and staffing profiles are not deleted. If the project has more than one parent, you cannot delete the project.

8 Updating Tasks: Resource Activities

Locating Tasks

HP Project Management defines resources as users who work on tasks as part of a project team, but do not have the administrative responsibilities of a project manager.

Resources update their task status in HP Project Management. There are several different ways for participants to locate their tasks:

- *Finding Tasks Using the My Tasks Portlet*

  The My Tasks portlet makes users aware of the tasks they should be working on. It allows users to update actuals for multiple tasks at once, as well as providing links to individual task pages.

- *Searching for Tasks and Projects*

  Resources can update notes or references for tasks by searching for the tasks directly, or by searching for projects in order to get to the tasks they want through the work plans that contain them.

- *Finding Tasks Using Notifications*

  Tasks can be reached from a notification simply by clicking on the link provided in the body of the email, or by copying and pasting it into any Web browser.

Finding Tasks Using the My Tasks Portlet

The My Tasks portlet is available to all users with a HP Project Management or HP Time Management license and the View Projects, Update Tasks, or Edit Projects access grant. This portlet is included on your PPM Dashboard by default. It shows a configurable list of the tasks currently assigned to the user.

Participants can update task actuals and fill in information that the project manager would like to collect for all tasks displayed. Task information that can be updated may differ from project to project, depending on the project type and whether the project is integrated with HP Time Management. In this way, the My Tasks portlet can save valuable time by providing a single point for multiple tasks to be updated at once. See *Using the My Tasks Portlet* on page 209 for detailed information on using the My Tasks portlet to update task information.

The participant can also click on the name of a task in the task list to view the Task page. See *Using the Task Page* on page 211 for more information.

Searching for Tasks and Projects

Participants can search for tasks and projects that match certain criteria using the search box or Task Search and Project Search pages.

Locating Tasks

Project participants with an HP Project Management license and the View or Edit Projects access grant can search for tasks using the search box or Task Search page. Task notes and references can be updated in this manner.

Using the Search Box

The search box is used to locate and open tasks based on task names that begin with the specified text. Use the search box if you know the name of the task or want to search for one or more tasks that start with a particular phrase or fragment of text in its name. The search box is located in the upper-right corner.

To locate and open a task using the search box:

1. Log on to PPM Center.
2. In the search box, located on the right side of the menu bar, type **@** followed by the text for which to search at the beginning of the task name. When you start typing the text, a submenu appears (the search is not case-sensitive).
3. Once you have finished typing your search text, select **Search for tasks: <*search_text*>.**

   If the search text matches only one task name, the Task page for that task opens.

   If the search text matches more than one task name, the Task Search page opens, displaying a list of tasks with matching names. Click the name of a task to open its Task page.

   See *Using the Task Page* on page 211 for more information about the Task page.

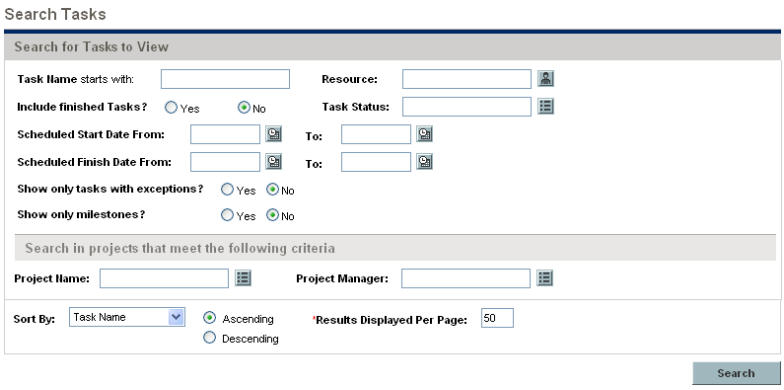
Using the Task Search Page

The Task Search page is used to locate and open tasks based on the search criteria you select. Use the Task Search page if you want to search for a task based on criteria such as resource, finished tasks, task status, scheduled start date, scheduled finish date, tasks with exceptions, milestones, project name, or project manager.

To locate tasks in HP Project Management using the Task Search page:

1. Log on to PPM Center.
2. From the menu bar, select **Search > Tasks.**

   The Task Search page opens.

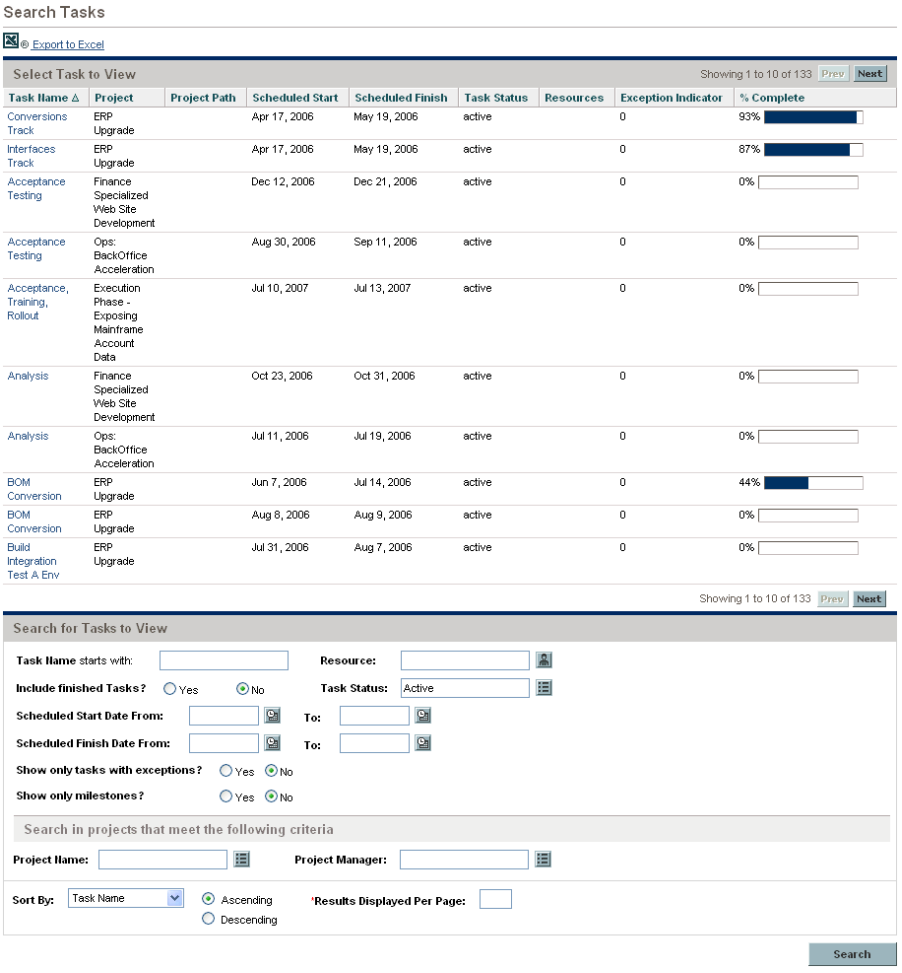


3. Provide the search criteria for the desired task.

   You can search for an existing task based on any of the fields located on the Task Search page. Limiting the maximum number of results in the **Results Displayed Per Page** field can yield quicker results.

4. Click **Search.**

   The Task Search page reloads, displaying the results matching your search criteria.



5. Click on the name of any task in the list to view its Task page.

   See *Using the Task Page* on page 211 for more information.

Locating Projects

While resources can locate and view projects, only participants with the Edit Projects access grant can edit tasks in the work plan. Participants can locate projects using the search box or Project Search page. See *Searching for Projects* on page 160 for more information.

Finding Tasks Using Notifications

Email notifications can be configured by project managers to include hyperlinks to tasks in HP Project Management. If you have received an email containing a link to a task, click on it, and it will open to that task's Details page in your Web browser. If your email client doesn't handle HTML links directly, copy and paste it into your Web browser.

Viewing Project Information

Resources might want to view the projects they are part of in the standard interface, as a way of setting context for their own tasks, checking on other dependent tasks, or keeping track of deadlines.

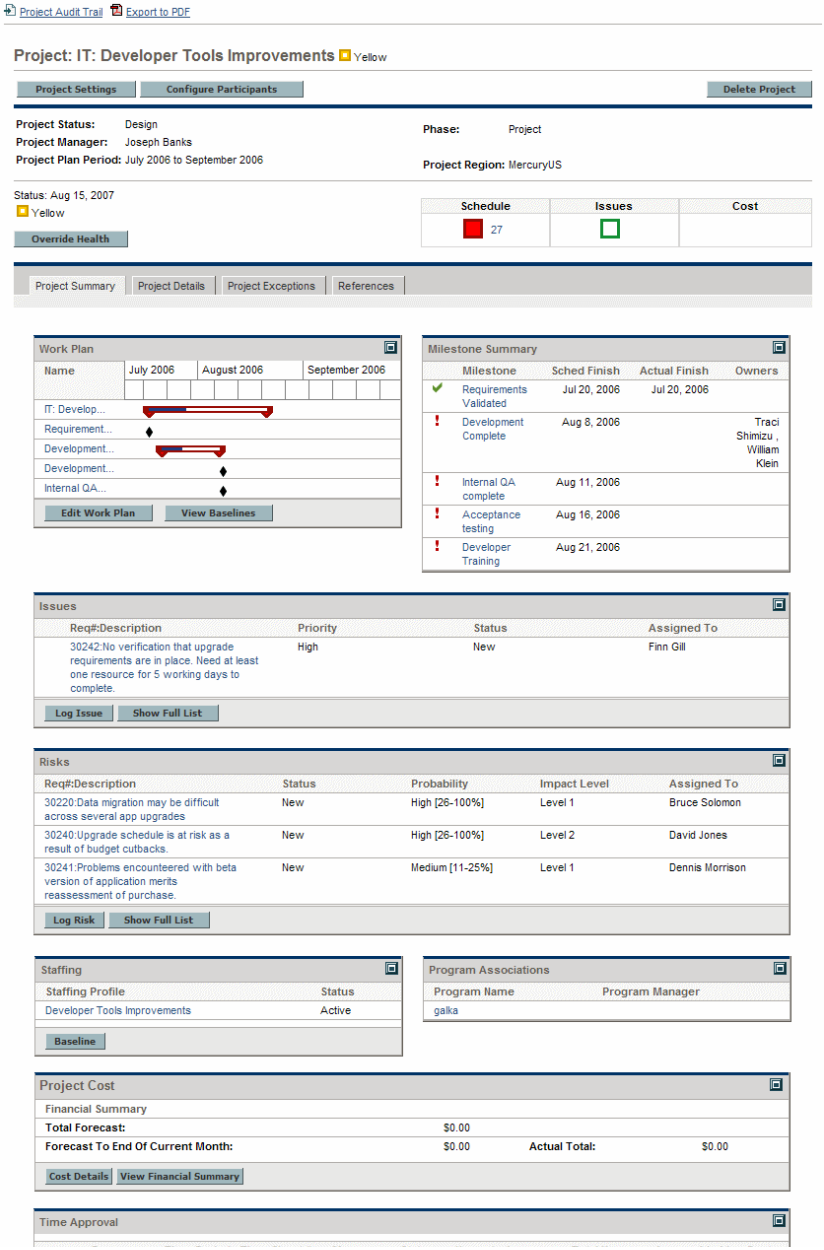
Viewing Project Overview

The Project Overview page displays a wide range of information about a particular project, including the project's name, status, percent complete, manager, and plan period. All of this data and more is presented and arranged through the following sections and tabs of the Project Overview page:

- **Work Plan Section.** This section of the **Project Summary** tab on the Project Overview page displays the top-level tasks of the project work plan Gantt chart. See *Viewing the Project Gantt Chart* on page 203.
- **Milestones Section.** This section of the **Project Summary** tab on the Project Overview page lists the milestones in a work plan. See *Viewing Project Milestones* on page 204.

- **Project Control Item Sections.** These sections of the **Project Summary** tab on the Project Overview page display summaries of issues, risks, or scope changes that have been submitted for the project. See *Viewing Project Control Items* on page 167 for more details.
- **Project Staffing Section.** This section of the **Project Summary** tab on the Project Overview page displays links to a project's staffing profiles. See *Viewing Project Staffing* on page 168 for more details.
- **Project Details Tab.** Displays a defined set of fields for the project. See *Viewing Project Details* on page 204.
- **Project Exceptions Tab.** Shows the number and kinds of exceptions triggered and links to the Exception Details portlet. See *Viewing Exceptions* on page 205.
- **References Tab.** Provides a list of all references linked to the project (requests, packages, tasks, other projects, releases, attachments, URLs) and where in the project they are referenced from. See *Viewing Project References* on page 206.

Figure 8-1. Project Overview page: Summary tab



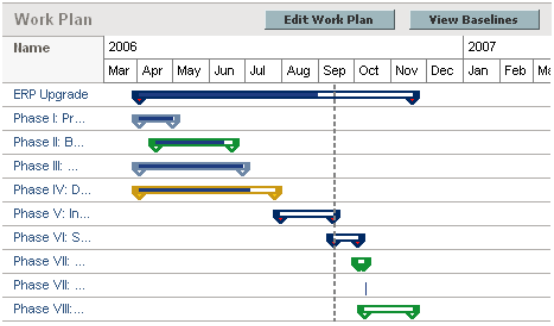
Users can access the Project Overview page through the Project Search page, as well as the Project List portlet, which is available for display on the resource's PPM Dashboard.

Viewing the Project Gantt Chart

The **Work Plan** section of the Project Overview page shows the project work plan Gantt chart's top-level tasks. Click **Edit Work Plan** to view the work plan.

If you do not have the access required to edit the work plan, the button will be labeled **View Work Plan.**

Figure 8-2. Project Summary tab: Work Plan section



Viewing the Critical Path

The critical path of a work plan is made up of the tasks that define its duration. A work plan's critical path can be displayed in the **Schedule** view for a project. See *Viewing the Project Critical Path* on page 156 for more details.

Viewing Project Milestones

Milestones are used to mark significant events in a work plan, often the completion of a deliverable or arrival of a deadline. In the work plan Gantt chart, milestones appear as black diamonds.

Milestones are also listed in the **Milestones** section of the Project Overview page.

Figure 8-3. Project Summary tab: Milestones section

Viewing Project Details

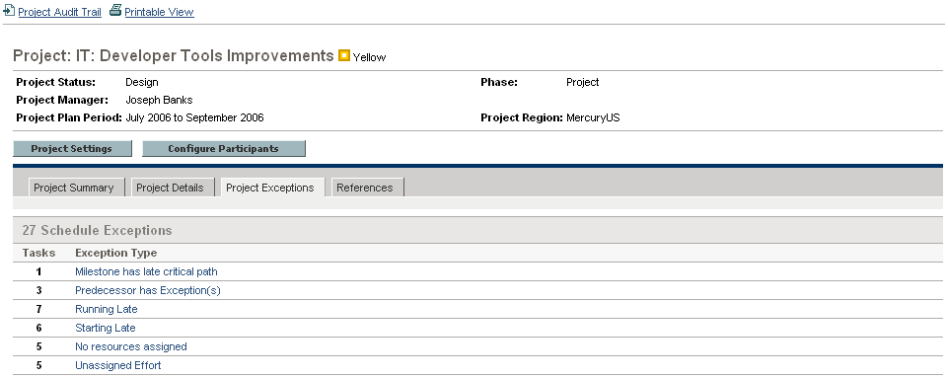
The Project Overview page's **Project Details** tab displays a predefined set of information about the project. What is displayed depends on if HP Portfolio Management is installed or if a customized request type has been configured. See the *HP Project Management Configuration Guide* for more information.

Viewing Exceptions

The Project Overview page's **Project Exceptions** tab displays the exceptions and cost violations that have been triggered for the project being viewed. Each triggering task of an exception is broken down according to:

- Exception type and number of days violated
- Task status, resource, scheduled start and finish
- Work plan path

Figure 8-4. Project Overview page: Project Exceptions tab



This is useful for resources in that it provides specific context for every exception in a project, telling them what task has gone wrong (or what might go wrong, depending on the exception rules enabled), when it went wrong, and where the problem task is located. Additionally, for tasks that have a "No resources assigned" exception, the **Project Exceptions** tab allows you to open the work plan directly by clicking **Assign.**

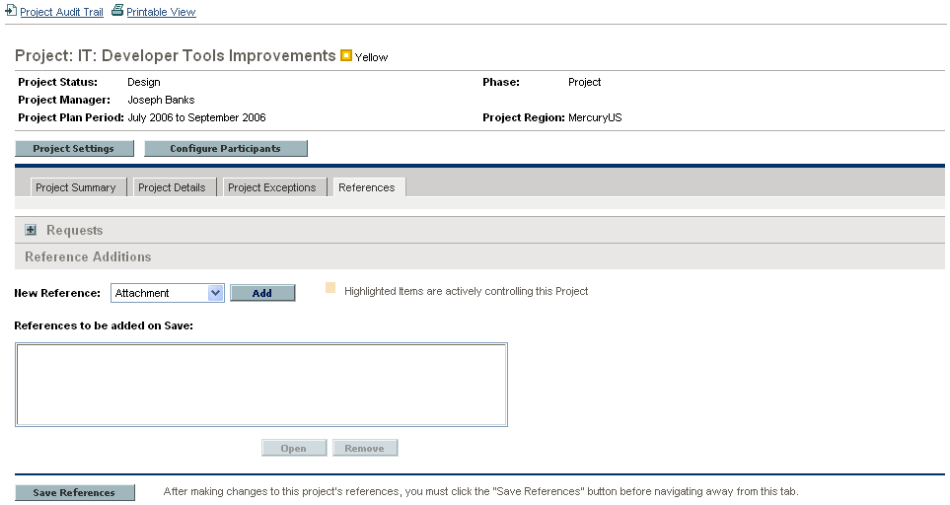
See *Cost and Earned Value Health* on page 52 for more information about cost violations.

Viewing Project References

The Project Overview page's **References** tab displays all entities linked to the project as references. References (requests, packages, tasks, other projects, releases, attachments, and URLs) are listed with details including:

- Reference Type
- Description
- Referenced By

Figure 8-5. Project Overview page: References tab



The **References** tab provides a convenient single point of access for all entities referenced by a project.

Viewing Resource Information

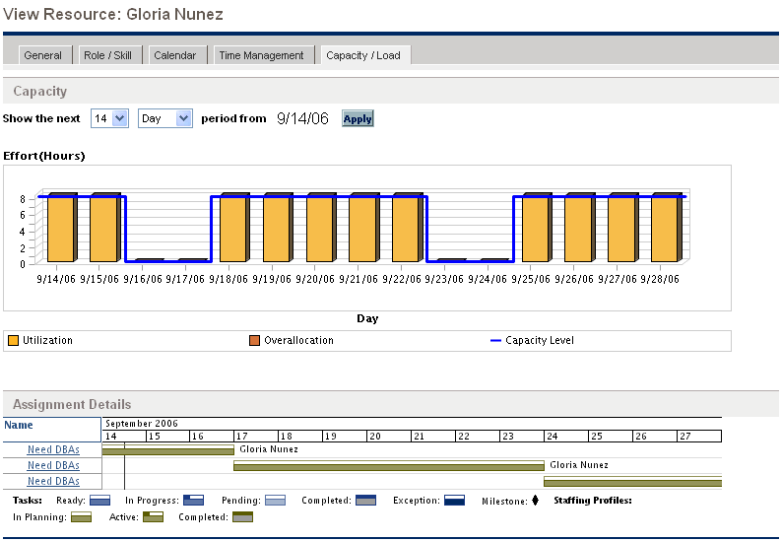
Resources can view information on their current assignments using the View Resource page. The View Resource page includes the **Capacity/Load** tab, which displays a chart of resource capacity and a customized Gantt chart illustrating their assignments for the next two weeks, or a time period of their choosing.

To access your own View Resource page, select **Open > Administration > View My Resource Information** from the menu bar.

Project managers with the proper level of access can also view information on resources including their workload capacity.

Figure 8-6 illustrates the **Capacity/Load** tab of the View Resource page.

Figure 8-6. View Resource page: Capacity/Load tab



To open the View Resource page, select **Search > Administrative > Resources** from the menu bar. Provide any search criteria in the Search Resources page and click **Search.**

Exporting Your Task Schedule

HP Project Management allows you to view and filter the project work plan to display only the tasks assigned to you, which you can then export to a PDF file for your own use. In order to view and filter the work plan, you must have a HP Project Management license, meet the project's participant restrictions as defined in the Project Security policy, and have the View Projects access grant at a minimum. Project managers may want to perform this action for resources that lack the proper level of access.

To obtain a PDF file of project tasks assigned to you:

1. Log on to PPM Center.
2. Open the project to edit.

   For more details on searching for and opening projects, see *Searching for Projects* on page 160.
3. On the Project Overview page, click **Edit Work Plan.**

   The Work Plan page opens.
4. Click the **All Tasks** button next to **Filter for** and select **Tasks by resource.**

   The Filter Options dialog box opens.
5. Select your own name from the resource field and click **OK.**

   The Work Plan page reloads, displaying only tasks assigned to you.
6. Click the **PDF** icon.

   The PDF Export Options dialog box opens.
7. Select the desired options for the display of the project Gantt chart, the included columns, and paper size.
8. Click **Export.**

   The filtered project PDF file opens in a new window, where it can be viewed and saved.

Updating Tasks

HP Project Management makes it easy for resources to report on different aspects of tasks in multiple levels of detail:

- *Using the My Tasks Portlet*

  Actuals for multiple tasks can be updated simultaneously, with information deemed essential by the project manager available to update immediately.

- *Using the Task Page*

  Resources can view their tasks in detail, updating and saving task notes and references.

Updating task actuals can trigger events in the project that move it along its path to completion.

If HP Time Management has been enabled for a project, you may not be able to provide **Actual Effort** values for tasks whose actuals are expected to be provided through HP Time Management time sheets. These tasks are marked with an icon resembling a clock.

Using the My Tasks Portlet

Sometimes it might be necessary for a resource to only update a specific task detail, such as the **% Complete.** The My Tasks portlet is perfectly suited to this need, and has the added advantage of being able to show multiple tasks at once.

The fields collected by the portlet are determined by the fields tracked by the project, which are controlled through different policies in the project settings. See Chapter 3, *Configuring Project Types,* on page 33 for details.

The My Tasks portlet displays information for multiple tasks. The maximum number of tasks displayed can be specified by the user, as well as the portlet title. Most fields in the My Tasks portlet are updateable by resources.

The My Tasks portlet integrates with HP Time Management to allow you to update task actuals using time sheets. See Chapter 11, *Integration with HP Time Management,* on page 275, for more detailed information on HP Time Management integration.

To update fields in the My Tasks portlet:

1. Make the update in the desired field.
2. Click **Save.**

In order for updates to take effect, the participant must click **Save.** Only then will HP Project Management take into account the updates that have been made.

To clear all changes and reset all fields to their previous values, click **Reset.**

Finding the My Tasks Portlet

The My Tasks portlet is defaulted to display on a resource's home page. The home page can be reached at any time by selecting **Dashboard > Front Page** from the menu bar.

Integration with HP Time Management

HP Time Management allows you to enter actual effort values on a more granular level using the My Tasks portlet, which interfaces with time sheets. General considerations when using the HP Time Management integration include:

- The My Tasks portlet creates time sheets or time sheet lines for you as needed.
- Ensure that you have selected the correct period for which to enter time in the **Use Time Sheet** field before entering time.
- Clicking the **Actual Effort** value opens the Effort Breakdown dialog box, which allows you to edit entries for the associated time sheet lines.

- Once you have created a time sheet entry for a task, the time sheet data controls the task's actual start and finish dates.
- Time can be tracked for summary tasks, which are visible in the My Tasks portlet when the project tracks time at this level. Individual tasks are also visible, but without actual effort, allowing you to indicate progress toward specific deliverables, independent of effort.

For more information on this integration, see Chapter 11, *Integration with HP Time Management,* on page 275.

Using the Task Page

The Task page contains detailed information on multiple aspects of a single task. Notes and references for a task are updateable through the Task page by the following sets of users:

- Users with the Edit Projects access grant
- Users with the Update Tasks access grant who have been assigned to the task

To update notes or references in the Task page:

1. Open the task using one of the methods described below:
   - *Searching for Tasks and Projects* on page 196
   - *Finding Tasks Using the My Tasks Portlet* on page 196
   - *Finding Tasks Using Notifications* on page 200

   The Task page opens.
2. Make the desired update to the task's **Notes** or **References.**

   For details on adding references to a task, see *Viewing and Modifying References*.
3. Click **Save.**

Viewing and Modifying References

HP Project Management features a number of methods for capturing additional information, or references, related to your projects. Tasks can include references to other entities or points of information, allowing easy access and visibility to data related to the current project. The following references can be added to a task:

- URLs
- Attachments (anything that can be placed on a server: PDF files, JPEG images, Java™ `.class` files, and so forth)
- Requests
- Packages
- Tasks
- Other projects
- Releases

Task references are added from the Task page. Project managers can add references at the project level through the **References** tab of the Project Overview page.

Adding References to Tasks

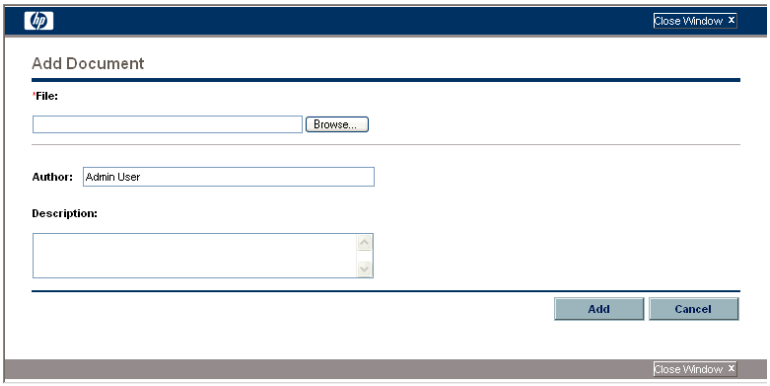
You can reference a Web accessible file or attach a file from your local machine to the current task.

Adding Files

To add a file as a reference:

1. Navigate to the Task page and scroll down to the **References** section.
2. Select **Attachment** from the **New Reference** field.
3. Click **Add.**

The Add Document page opens.



4. Select the desired file from your machine and type a description if desired.
5. Click **Add** to add the selected attachment as a reference.

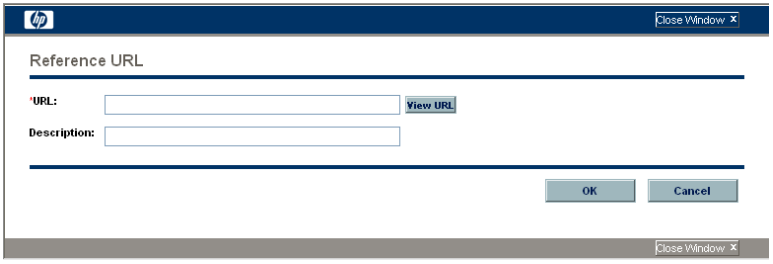
   The referenced attachment appears in the **References to be added on Save** list on the Task page. *The reference has not been added yet*.
6. Click **Save** to add the attachment to the task.

Adding URLs

To add a URL as a reference:

1. Navigate to the Task page and scroll down to the **References** section.
2. Select **URL** from the **New Reference** field.
3. Click **Add.**

   The Reference URL page opens.



4. Type the URL into the **URL** field and type a description if desired.
5. Click **Add** to add the specified URL as a reference.

   The referenced URL appears in the **References to be added on Save** list on the Task page. *The reference has not been added yet*.
6. Click **Save** to add the reference to the task.

Viewing and Editing References

You can view the references that have been linked to a task. The references are listed in the **References** section of the Task page.

To view the references currently linked to the task:

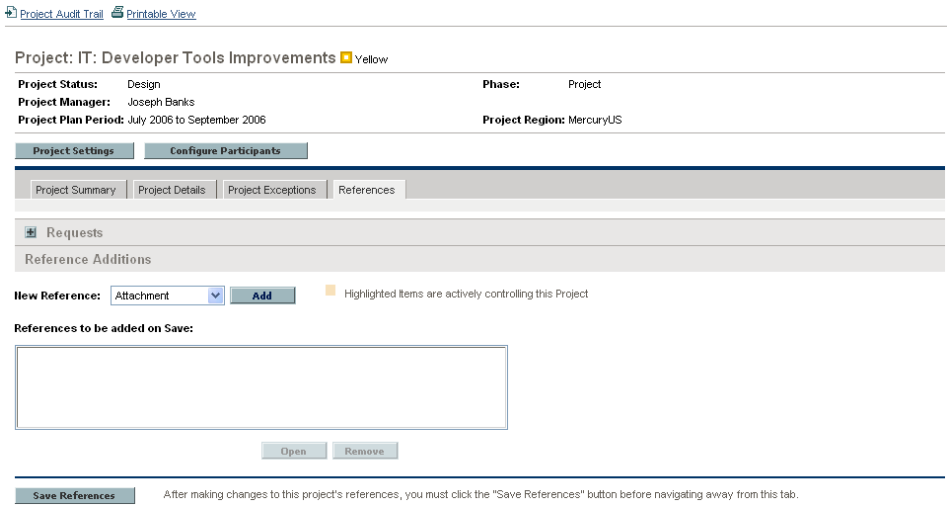
1. Navigate to the Task page and scroll down to the **References** section.
2. Click on the name of the reference you want to view.
   - If the reference is a URL, it opens inside your Web browser.
   - If the reference is a file of any other kind, it is handled by your Web browser in the usual fashion, either opening directly or asking to be saved to your local machine.
   - If the reference is a project, its Project Overview page opens, displaying summary information related to that particular project.
   - If the reference is another PPM Center entity (request, package, or task) it will open the entity's Details page.

If you have licenses for HP Demand Management and HP Deployment Management, you can click the request or package to access their detail pages. You can then update those entities according to normal PPM Center operation.

If you have permission to edit the task, you can modify the task's references. In addition to adding new references, you can delete and change the relationships of existing references.

You can also view references related to your tasks and projects using the **References** tab on the Project Overview page.

Figure 8-7. Project Overview page: References tab



Deleting References

If you have permission to edit the task, you can delete the task's references.

To delete a task reference:

1. Navigate to the Task page and scroll down to the **References** section.
2. Click the **Delete** icon to the left of the reference.

   A message will appear asking you to confirm the deletion.
3. Click **Yes.**

   The reference is removed from the task.

9 Using Work Plan Templates

Setting up a Work Plan Template

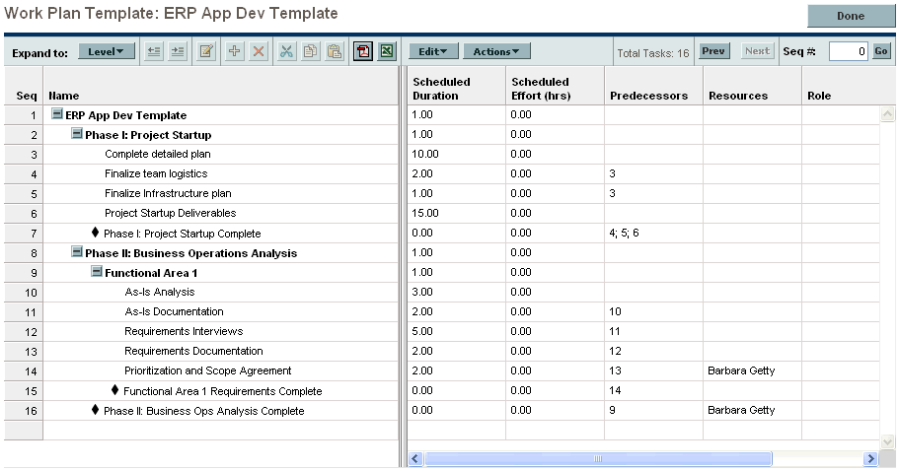
Work plan templates are used in HP Project Management to create repeatable processes to be used as a model and basis for numerous projects.

Work plan templates speed up the process of setting up your work plans. A repeated set of tasks are bundled into a template and used to create a work plan while preserving its notifications, any resource assignments, and predecessors.

For example, a company with several different software products might use the same process for all development efforts. A work plan template could be used to create the work plan for each one, as opposed to creating them all individually every time a project is planned. Information for each individual project can then be modified by a particular project manager as needed.

A work plan template consists of an ordered hierarchy of tasks. The sequence of tasks can be edited in a manner nearly identical to the way work plans are manipulated in the **Schedule** view.

Figure 9-1. Defining a work plan template



Seq	Name	Scheduled Duration	Scheduled Effort (hrs)	Predecessors	Resources	Role
1	**ERP App Dev Template**	1.00	0.00			
2	**Phase I: Project Startup**	1.00	0.00			
3	Complete detailed plan	10.00	0.00			
4	Finalize team logistics	2.00	0.00	3		
5	Finalize Infrastructure plan	1.00	0.00	3		
6	Project Startup Deliverables	15.00	0.00			
7	♦ Phase I: Project Startup Complete	0.00	0.00	4; 5; 6		
8	**Phase II: Business Operations Analysis**	1.00	0.00			
9	**Functional Area 1**	1.00	0.00			
10	As-Is Analysis	3.00	0.00			
11	As-Is Documentation	2.00	0.00	10		
12	Requirements Interviews	5.00	0.00	11		
13	Requirements Documentation	2.00	0.00	12		
14	Prioritization and Scope Agreement	2.00	0.00	13	Barbara Getty	
15	♦ Functional Area 1 Requirements Complete	0.00	0.00	14		
16	♦ Phase II: Business Ops Analysis Complete	0.00	0.00	9	Barbara Getty	

Creating and Managing Work Plan Templates

Work plan templates are created and managed from the menu bar.

- To create a work plan template, click **Create > Administrative > Work Plan Template.** The Create Work Plan Template page opens, allowing you to create a work plan template.
- To manage work plan templates, click **Search > Administrative > Work Plan Templates.** The Manage Work Plan Template page opens, listing all the work plan templates in the system. Click on a work plan template name to open the Template Details page.

Adding Tasks to a Work Plan Template

After you create a work plan template, the Work Plan Template page opens. The process of adding tasks to a work plan template is identical to adding tasks in the **Schedule** view. See *Adding Tasks to the Work Plan* on page 81 for details.

Some fields in work plan template tasks do not exist or cannot be updated.

Configuring Tasks in a Work Plan Template

Tasks and notifications in a work plan template can be configured the same way as they are in the **Schedule** view. See *Editing Task Information* on page 118 for details.

Some fields in work plan template tasks do not exist or cannot be updated.

You can mark a task in a work plan template as required. A required task cannot be renamed or removed from a work plan created using the template. To mark a task as required, select the **Require this task on work plans created from this template** checkbox in the Task Details page.

Configuring Access to a Work Plan Template

You can control who has the ability to use or edit a work plan template through the Configure Access page. Click **Configure Access** in the Template Details page to configure access for a work plan template.

Creating a Work Plan Template from an Existing Work Plan

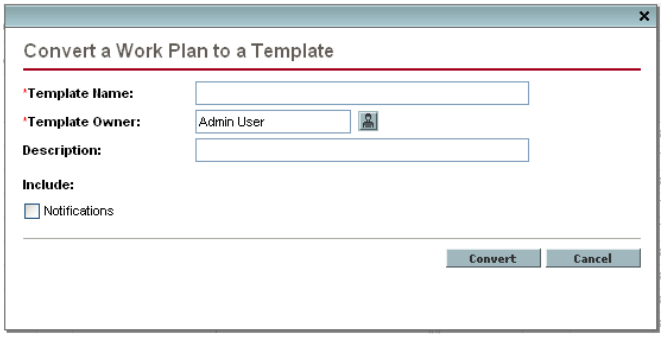
Project managers can create a new work plan template from an existing work plan. Project managers who want to convert their Microsoft Projects into HP Project Management work plan templates can first import their Microsoft Project into a HP Project Management project and then convert it into a template. See *Integrating HP Project Management with Microsoft Project* on page 223 for detailed instructions on converting a Microsoft Project file into a PPM Center project.

Only users with the Edit Work Plan Templates access grant can convert an existing work plan into a work plan template.

To create a work plan template from an existing work plan:

1. Open the project.
2. In the **Schedule** view, click **Actions** and select **Convert Work Plan to Template.**

   The Convert a Work Plan to a Template dialog box opens.



In order to successfully convert a work plan to a template, you must be the only user editing the work plan. If other users are editing the work plan, a message will appear stating that the “Project is being edited by another user” and the conversion stops.

3. Provide a new **Template Name, Template Owner** and **Description** for the new work plan template.
4. Select whether to include **Notifications** by selecting the associated checkbox.

   See *Work Plan to Work Plan Template Conversion Details* for a list of items copied from the work plan to the template.
5. Click **Convert.**

   When the conversion is complete, a dialog box opens.
6. Click **Edit Template** to edit the new work plan template.

In the work plan to template conversion, not all work plan details are copied to the new template. The work plan’s actuals information is discarded during the conversion, such as the actual duration, efforts, start date and end date of the work plan and tasks.

Work Plan to Work Plan Template Conversion Details

When creating a work plan template from a work plan, the following items are copied or dropped:

- Data that work plan templates do not carry is dropped. This includes:
  - External predecessors
  - Schedule dates
  - Constraints
  - Effort and cost actuals
  - Task status
  - Resource assignments and summary task owners
  - References
  - Notes
  - User data
- Scheduled effort is copied as follows:
  - For automatically-calculated tasks, scheduled effort is recalculated.
  - For manually-input tasks, total task effort is retained in the **Unassigned Effort** field.
- Everything else is copied into the work plan template.

Creating a Work Plan from a Work Plan Template

If a company has a business process that is used repeatedly, it will be easier to create and manage if it has its own template containing preconfigured settings.

To create a new work plan from a work plan template:

1. Create a new project.
2. On the Project Overview page, click the **Create work plan from a template** link.

   The Create Work Plan from Template dialog box opens.
3. Select the desired template from the **Work Plan Template** field.
4. Click **Create.**

   A new work plan is created as defined by the work plan template.

The project type may enforce a particular work plan template for a project. See *Work Plan* on page 39 for more details.

You can also create a work plan from an existing work plan from another project or import a work plan from another project into an existing work plan. Refer to *Creating a Work Plan from Another Project* on page 78 or *Importing a Work Plan* on page 82 for more information.

10 Integrating HP Project Management with Microsoft Project

Overview of Integrating HP Project Management with Microsoft Project

HP Project Management integrates with Microsoft Project using the Plug-In for PPM. The integration between Microsoft Project and HP Project Management allows the organization to have visibility into projects even when their schedules are planned in Microsoft Project. The integration allows project managers to import project information from Microsoft Project to a new HP Project Management project. Project information can also be exported from HP Project Management to Microsoft Project, creating a new project in Microsoft Project. Projects that have been imported or exported can be synchronized. Any information that is shared between projects in both applications is updated during synchronization.

Depending on your project management strategy, you can use each application to accomplish different vital tasks; a general outline of the most common way to use the integration follows below.

Step 1: Configure Microsoft Project integration options.

Before you can use the integration, your system administrator needs to verify or adjust some key settings to conform to your organization's business needs. You should not use the Microsoft Project integration until this has been completed.

For more detailed information, see the *HP Project Management Configuration Guide.*

Step 2: Install the Plug-In for PPM.

In order to use the integration, you must download and install the Plug-In for PPM, accessible at any time from the menu bar by selecting **Open > Administration > Download Microsoft Project Plug-in.**

You must be using a supported version of Microsoft Project. See the *System Requirements and Compatibility Matrix* for more information.

Once the Plug-In for PPM is installed, Microsoft Project can be used to work with HP Project Management work plans in any of the ways described below. For detailed instructions on installing the Plug-In for PPM, see *Installing the Plug-In for PPM* on page 230.

If the Plug-In for PPM has not been installed on your system and you cannot see the download option in the menu bar, contact your PPM Center administrator for access.

Step 3: Decide how to manage your plan.

See *Synchronization Modes* for details on the different synchronization modes offered by the integration.

The relevant settings for the project should be configured based on your preferences. See *Project-Level Settings for Integration* on page 248 for more detailed information.

Step 4: Decide how to create the work plan.

See *HP Project Management Strategies* on page 227 for details on different ways to create and maintain a work plan.

Step 5: Create and manage the work plan.

- If your work plan is HP Project Management-controlled, you will create the work plan in HP Project Management and occasionally open it in Microsoft Project. See *Opening an HP Project Management Work Plan in Microsoft Project* on page 236 for more detailed information.
- If your work plan is Microsoft Project-controlled, you will create the work plan in Microsoft Project and occasionally open it in HP Project Management. Mapping of resource information between applications occurs automatically when sending a Microsoft Profile file to HP Project Management, but you can make manual adjustments during the process. See *Sending a Microsoft Project Work Plan to HP Project Management* on page 234 for more detailed information.
- If control is shared, you will manage the work plan in Microsoft Project and collect actuals using HP Project Management. See *Setting a Synchronization Mode for HP Project Management and Microsoft Project* on page 237 for more detailed information.

Synchronization Modes

By synchronizing information between HP Project Management and Microsoft Project, you have the advantage of using the best of both possible worlds. Depending on your project management strategy, you can use one application to perform all planning and tracking activities, and then use the other for publishing project information to managers, participants and stakeholders, or use both to share control of different aspects of the project. See *HP Project Management Strategies* on page 227 for more information about different project management strategies.

The project manager can select from three synchronization modes for updating information between HP Project Management and Microsoft Project. Each mode offers a different strategy for communication between the two applications and has its own set of advantages.

HP Project Management Controlled

The project manager initially creates a work plan in HP Project Management to perform planning and tracking activities. These activities include defining the project, scheduling tasks and tracking actuals. The first time the project is synchronized, HP Project Management creates a new project file on the project manager's desktop computer. For each subsequent synchronization, all of the information in the Microsoft Project file is replaced with the current information in HP Project Management.

Even if you want to manage your work plan using HP Project Management, you can create it initially in Microsoft Project.

After synchronization, the project manager can distribute the Microsoft Project file or use it to run reports for managers and other people in the organization.

Microsoft Project Controlled

The project manager creates a project in Microsoft Project to perform project planning and tracking activities and then publishes it to HP Project Management, where the synchronized project appears on the PPM Dashboard. Information unique to PPM Center can be added within HP Project Management, such as notifications, task notes, or references to related entities within PPM Center. These references can provide information back to the project manager.

For all subsequent synchronizations, information in HP Project Management is updated with current information from Microsoft Project. Information added in HP Project Management, such as notification configurations or activity or role associations, is retained.

Shared Control

The project manager plans and schedules the project in Microsoft Project while using HP Project Management to track actuals. Participants in the project directly report actuals data using the My Tasks portlet or a time sheet. Each subsequent synchronization updates the Microsoft Project file with actuals data from HP Project Management. The HP Project Management work plan is updated with changes to its structure or schedule in Microsoft Project.

See *Setting a Synchronization Mode for HP Project Management and Microsoft Project* on page 237 for more information about synchronization.

HP Project Management Strategies

The following scenarios demonstrate how project managers can use different project management strategies offered by the integration.

Publishing an HP Project Management Work Plan through Microsoft Project

A project manager who uses HP Project Management to manage projects can use the integration to publish the projects. Publishing can simply mean distributing the Microsoft Project file to external audiences (such as a Program Management Office group). Publishing could also mean synchronizing the Microsoft Project file with HP Project Management, and then running Microsoft Project reports for distribution. The projects can be published on a regular basis (weekly or quarterly) or at defined milestones (such as design completion).

To publish an HP Project Management work plan through Microsoft Project:

1. Open a blank file in Microsoft Project.
2. Open the HP Project Management work plan in Microsoft Project. (See *Opening an HP Project Management Work Plan in Microsoft Project* on page 236 for detailed instructions.)
3. Save the project and run reports as usual.

After the first export, you may choose to synchronize the HP Project Management work plan with the Microsoft Project file in HP Project

Management controlled mode. This will effectively regenerate the Microsoft Project file.

This can also be used to recover a lost Microsoft Project file from a previously-synchronized HP Project Management work plan.

Publishing a Microsoft Project File through HP Project Management

A project manager who uses Microsoft Project to manage projects can publish those projects using HP Project Management. You can create a work plan in HP Project Management from a work plan template and subsequently open it in Microsoft Project for further editing. This allows you to take advantage of any standards enforced by a PMO. Publishing means loading the project data into the HP Project Management repository, which has the following benefits:

- The project status appears in the PPM Dashboard. HP Project Management calculates exceptions and health status (red/yellow/green) based on the project's policy settings.
- Project participants and external audiences can see the project in various interfaces such as the My Tasks portlet and search pages. Although these participants cannot use HP Project Management to update project status, this is an effective way to increase visibility of project information.
- HP Project Management users can create references from other PPM Center entities (such as requests and packages) to tasks in the synchronized project. These references could be used to monitor the state of a particular task.

To publish a Microsoft Project file through HP Project Management:

1. Create a project in HP Project Management without a work plan.
2. Ensure that the project's integration mode is set to Microsoft Project control.
3. Send the Microsoft Project file to HP Project Management. (See *Sending a Microsoft Project Work Plan to HP Project Management* on page 234 for detailed instructions.)

The project manager is likely to publish the project to HP Project Management on a regular basis. This can be done by selecting **PPM > Update Associated**

Work Plan in Microsoft Project. Information in HP Project Management is updated based on the information in the Microsoft Project file, and information unique to HP Project Management is retained.

Using Both Applications to Track Different Project Data

A project manager who uses Microsoft Project to plan and manage projects can use HP Project Management to collect actuals from participants. In addition to the benefits described previously in *Publishing a Microsoft Project File through HP Project Management*, this integration shifts some of the effort of collecting and entering actuals information from the project manager to the participants. The project manager will need to synchronize the projects periodically, either to publish a re-planned work plan to HP Project Management or to collect new actuals updates into Microsoft Project.

To use HP Project Management to track actuals from Microsoft Project:

1. Create the work plan.
   - You can create the work plan initially in Microsoft Project and subsequently send it to HP Project Management in order to establish the work plan integration. All work plan editing should still be done in Microsoft Project.
   - You can also create the work plan initially in HP Project Management using a work plan template and subsequently edit it in Microsoft Project. This allows standards to be enforced even when using Microsoft Project for work plan management.
2. From the **PPM** menu in Microsoft Project, select **Update associated work plan.**

   The Update Associated Work Plans dialog box opens.
3. Select **Send work plan information from MSP to PPM** or **Retrieve actuals from PPM to MSP** and click **OK.**

See *Setting a Synchronization Mode for HP Project Management and Microsoft Project* on page 237 for more detailed information.

Installing the Plug-In for PPM

To integrate Microsoft Project and HP Project Management, you must download and install the Plug-In for PPM from the menu bar. This is a one-time action that does not need to be repeated every time you use Microsoft Project or HP Project Management. However, if you upgrade or downgrade Microsoft Project after installing the Plug-In for PPM, you must uninstall and then re-install the Plug-In for PPM that is compatible with the installed version of Microsoft Project. Likewise, if you upgrade PPM Center, you must uninstall and then re-install the Plug-In for PPM. See *Removing the Plug-In for PPM* on page 234 for more information about uninstalling the Plug-In for PPM.

Before installing the Plug-In for PPM, open Microsoft Project. If you see a **PPM** menu at the top of the window, then the Plug-In for PPM has already been downloaded and installed for you. If you are installing a newer version of the Plug-In for PPM, you must uninstall the current version first. See *Removing the Plug-In for PPM* on page 234 for more information about uninstalling the Plug-In for PPM.

If the Plug-In for PPM has not been installed on your system and you cannot see the download option in the menu bar, contact your PPM Center administrator for access.

Requirements for the Plug-In for PPM

The following are the HP Project Management and Microsoft Project requirements that should be met before installing the Plug-In for PPM.

Microsoft Project Requirements

The Microsoft Project requirements for the Plug-In for PPM are:

- You must have access to your local PC that allows you to install software.
- You must be using a supported version of Microsoft Project. See the *System Requirements and Compatibility Matrix* for more information.
- Microsoft Project must be installed on the workstation.
- The saved project file must either be on the workstation, or on a mapped network drive.

Access Grants

In order to install and use the Plug-In for PPM, you need a HP Project Management license and the Synchronize Work Plans access grant. This access grant is included in the PPM Project Manager security group included with HP Project Management.

Installation Instructions

To integrate PPM Center with Microsoft Project, the Plug-In for PPM must be installed. If you have the proper level of access to your workstation, you can install the Plug-In for PPM yourself. Alternatively, your system administrator may install the Plug-In for PPM at the server level, and then use a technology such as Microsoft SMS to push it to client machines. Program managers can also install the Plug-In for PPM on client machines.

This section provides the steps you perform to install the Plug-In for PPM. If you are upgrading the Plug-In for PPM, you must first uninstall the current version before installing the newer version. See *Removing the Plug-In for PPM* on page 234 for more information about uninstalling the Plug-In for PPM.

To install the Plug-In for PPM:

1. If Microsoft Project is open, exit Microsoft Project.
2. After you install and configure PPM Center, log on to PPM Center.

3. From the menu bar, select **Open > Administration > Download Microsoft Project Plugin.**

   The File Download dialog box opens and prompts you to indicate whether you want to open or save the `setup.exe` file.

4. Click **Open.**

   The Plug-In for PPM Install Shield wizard starts up.

5. On the Welcome page, click **Next.**

   The Destination Folder page displays the default directory for the Plug-In for PPM installation.

6. To accept the default directory, click **Next.** Otherwise, change the install directory, as follows:

   a. Click **Change.**

      The Change Current Destination Folder page opens.

   b. Browse to, and then select a destination installation folder.

   c. Click **OK.**

7. Click **Next.**

   The Server URL Default page opens.

8. In the **Project Portfolio Management Server URL** field, type the first part of the URL for the PPM Server.

   Allowed formats include:

   - `<host:port>`
   - `http://<host:port>`
   - `https://<host:port>`

For example, if your URL is:

```
http://myhost:41000/itg/dashboard/app/portal/PageView.jsp
```

Then you can type:

- `http://myhost:41000`

or

- `myhost:41000`

If you do not know the default URL, you can provide this information later, after you install the Plug-In for PPM.

9. Click **Next.**
10. Click **Install.**
11. After installation is completed, on the InstallShield Wizard Completed page, click **Finish.**
12. Restart the system on which the Plug-In for PPM is installed.

    The next time you start Microsoft Project, the menu bar includes the **PPM** menu.

Upgrading the Plug-In for PPM

If you upgrade PPM Center after installing the Plug-In for PPM, you must uninstall and then re-install the Plug-In for PPM.

If you upgrade or downgrade Microsoft Project after installing the Plug-In for PPM, you must uninstall and then re-install the Plug-In for PPM that is compatible with the installed version of Microsoft Project.

See *Removing the Plug-In for PPM* for more information about uninstalling the Plug-In for PPM.

Removing the Plug-In for PPM

You can remove the Plug-In for PPM using your workstation's standard Add/Remove Programs utility. Microsoft Project should be closed during this operation.

Changing the PPM Server URL Setting

If, after installing the Plug-In for PPM, you must change the server URL, you can make the change in the `ITGovernance.ini` file found in the Plug-In for PPM's install directory using a text editor. This file will retain the last server URL you used. You can also clear the server URL setting using the **PPM** menu in Microsoft Project.

To change the server URL setting:

1. From the Microsoft Project menu bar, select **PPM > Clear Server Default.**
2. The next time you attempt to connect to PPM Center, you will be prompted to provide a new server URL.

Sending a Microsoft Project Work Plan to HP Project Management

A project manager who uses Microsoft Project to manage projects can publish those projects using HP Project Management. Use the **Send work plan to PPM** option in the **PPM** menu in Microsoft Project to create a new work plan in HP Project Management based on the current `.mpp` file in Microsoft Project. This option can be used regardless of how the plan will be managed after its creation. Projects using Microsoft Project Server behave somewhat differently; see *Working with Projects Using a Microsoft Project Server* on page 270.

You need to create a project without a work plan in HP Project Management before importing the file from Microsoft Project.

To send a Microsoft Project work plan to HP Project Management:

1. From the Microsoft Project menu bar, select **PPM > Send work plan to PPM.**
2. Type your HP Project Management username and password.
3. Select a project to send the Microsoft Project work plan to.

   You can only select from projects that do not have work plans, and only for projects for which you are the project manager. If no such project exists, you must create one first in HP Project Management.
4. Click **Send.**
5. Specify mapping for unmapped resources, if any.

   The integration automatically performs resource mapping between applications, but you can make changes manually as described in *Mapping Resources Between Applications* on page 245.
6. Click **Done.**

   If full information tracing is enabled in Microsoft Project, you can also click **Show Info** to view the information dialog box to view any informational messages, errors, or warnings that occurred while sending the work plan to HP Project Management. See *Enabling Detailed Synchronization Logs* on page 242 for information on how to enable full information tracing.

   Whenever you send a Microsoft Project file to HP Project Management, a backup copy of the `.mpp` file is automatically saved to the same directory in which the original file is stored, with the extension `.bak`.

Opening an HP Project Management Work Plan in Microsoft Project

A project manager who uses HP Project Management to manage projects can open an HP Project Management work plan in Microsoft Project. However, work plans that are controlled by HP Project Management cannot be directly opened in Microsoft Project from HP Project Management. The manager can then distribute the Microsoft Project file to external audiences (such as a PMO group). The manager could also synchronize the Microsoft Project file with HP Project Management periodically, and run Microsoft Project reports for distribution.

For more information on synchronizing your HP Project Management work plan with its Microsoft Project counterpart, see *Setting a Synchronization Mode for HP Project Management and Microsoft Project* on page 237.

You can only open an HP Project Management work plan in Microsoft Project if you have a new, blank file open in Microsoft Project.

To open an HP Project Management work plan in Microsoft Project:

1. From the Microsoft Project menu bar, select **PPM > Open a PPM work plan.**
2. Type your HP Project Management username and password.
3. Select a work plan to open.

   You can only select from projects that have active work plans. Additionally, the system will indicate whether the work plan you have chosen has already been integrated with Microsoft Project.
4. Click **Done.**

   You can also click **Show Info** to view the information dialog box to view any informational messages, errors, or warnings that occurred while opening the work plan in Microsoft Project.

The task structure and task names for the project in HP Project Management and the project in Microsoft Project will be identical. There will be a 1-to-1 relationship between tasks, and tasks will appear in the same sequence in both

projects. Tasks are marked as fixed duration, which causes resource assignments and efforts to match. Scheduled start and finish dates for tasks without actuals will be identical in HP Project Management and Microsoft Project.

Duration is calculated by Microsoft Project based both on the start and finish dates and the resource calendars in Microsoft Project. Task durations and roll-up durations will sometimes differ slightly between the two applications.

Regional calendar settings applied to the project calendar in Microsoft Project include:

- Number of hours per day
- Working days for each week

Since calendar exceptions are not synchronized, variances in duration may result.

Setting a Synchronization Mode for HP Project Management and Microsoft Project

Control of projects that have been created in one application and opened in the other can be subsequently shared between Microsoft Project and HP Project Management using one of three modes defined by HP Project Management. These control modes are established on the HP Project Management side, in the **Microsoft Project Integration** policy in the project settings. See *Project-Level Settings for Integration* on page 248 for details on its settings.

- **Project Management controlled.** Selecting **PPM > Update associated work plan in Microsoft Project** completely refreshes the plan information in Microsoft Project with the work plan from HP Project Management.
- Microsoft Project controlled. Selecting PPM > Update associated work plan in Microsoft Project completely refreshes the plan information in HP Project Management with the work plan from Microsoft Project. Any additional edits made in HP Project Management are retained (see *Conditional Editing Allowed In HP Project Management* on page 266 for

details). If the Microsoft Project work plan includes resources that cannot be mapped to resources in PPM Center, you will be asked to map these resources. See *Mapping Resources Between Applications* on page 245 for more details.

Whenever you send a Microsoft Project file to HP Project Management, a backup copy of the `.mpp` file is automatically saved to the same directory in which the original file is stored, with the extension `.bak`.

If you originally created the work plan in HP Project Management using a work plan template, tasks marked as required by the template cannot be deleted in Microsoft Project.

- **Shared control.** Selecting **PPM > Update associated work plan in Microsoft Project** allows you to choose between the following options:

  - Sending updated schedule information from Microsoft Project to HP Project Management. If this option is chosen, the integration refreshes the work plan schedule information in the associated work plan in HP Project Management based on the data in Microsoft Project. Any additional edits made in HP Project Management are retained (see *Conditional Editing Allowed In HP Project Management* on page 266 for details). For more details on updating work plan information, see *Sending Work Plan Information from Microsoft Project to HP Project Management*. If the Microsoft Project work plan includes resources that cannot be mapped to resources in PPM Center, you will be asked to map these resources. See *Mapping Resources Between Applications* on page 245 for more details.

    Whenever you send a Microsoft Project file to HP Project Management, a backup copy of the `.mpp` file is automatically saved to the same directory in which the original file is stored, with the extension `.bak`.

    If you originally created the work plan in HP Project Management using a work plan template, tasks marked as required by the template cannot be deleted in Microsoft Project. Tasks that have actuals logged against them in HP Project Management cannot be removed from the Microsoft Project file. You must first remove the actuals if you intend to remove the tasks.

- Retrieving actuals information from HP Project Management based on the settings described in *Project-Level Settings for Integration* on page 248. If this option is chosen, the integration retrieves actuals data from HP Project Management for your review and optional application. For more details on obtaining actuals from HP Project Management, see *Retrieving Actuals from HP Project Management* on page 241.

Changing Synchronization Modes and the Project Calendar

HP Project Management and Microsoft Project use a separate calendaring system for their projects. If the synchronization mode is HP Project Management controlled, the HP Project Management calendar is used. If the synchronization mode is Microsoft Project controlled or shared control, the Microsoft Project calendar is used.

If the synchronization mode of a project is changed from Microsoft Project controlled or shared control to HP Project Management controlled, the HP Project Management calendar is used. However, if the synchronization mode of a project is changed from HP Project Management controlled to Microsoft Project controlled or shared control, the HP Project Management calendar is still used. If you want to use the Microsoft Project calendaring system, you must manually change to the Microsoft Project calendaring system:

Sending Work Plan Information from Microsoft Project to HP Project Management

You can update your HP Project Management work plan to match the work breakdown structure, schedule, assignments, and actuals in the associated Microsoft Project file. For all subsequent synchronizations, information in HP Project Management is updated with current information from Microsoft Project.

To send work plan information from Microsoft Project to HP Project Management:

1. Open the project in Microsoft Project.
2. From the **PPM** menu in Microsoft Project, select **Update associated work plan.**

   The Update Associated Work Plans dialog box opens.
3. Select **Send work plan information from MSP to PPM** and click **OK.**

Automatic Backup of Microsoft Project Information

Every time work plan schedule information is successfully sent from Microsoft Project to HP Project Management, a backup copy of the `.mpp` file is automatically saved to the same directory in which the original file is stored, with the extension `.bak`. The open `.mpp` file is also saved.

If you experience an integration error related to the deletion of a task or resource in Microsoft Project that had actuals, you can use the existing backup copy as a starting point from which to reapply your most recent edits. See *Deleting Required Tasks or Tasks/Resources with Actuals* on page 271 for more information.

Projects using Microsoft Project Server behave somewhat differently. See *Working with Projects Using a Microsoft Project Server* on page 270 for more information.

Retrieving Actuals from HP Project Management

You can update the Microsoft Project file with actuals data retrieved from the associated HP Project Management work plan when HP Project Management and Microsoft Project share control of the plan. The integration will show you the tasks in the Microsoft Project work plan that will be updated with new actuals, and gives you the option of cancelling the update if the changes are not what you expected.

If a resource logs actuals outside of a task's start or end date, change the actuals transfer option in the project settings. See *Transferring PPM Center Information to Microsoft* on page 251 for more information.

To update the Microsoft Project work plan with actuals from HP Project Management for a plan using shared control:

1. Open the project in Microsoft Project.
2. From the **PPM** menu in Microsoft Project, select **Update associated work plan.**

   The Update Associated Work Plans dialog box opens.
3. Select **Retrieve actuals from PPM to MSP** and click **OK.**

   The integration retrieves the actuals specified in the **Transfer actuals information** setting in the **Microsoft Project Integration** policy.

   The Accepting PPM Actuals dialog box opens, displaying the tasks that have changed and the nature of their changes. If the changes are not what you expected, you can click **Cancel** to cancel the update.
4. Click **Continue.**

   The Microsoft Project work plan is updated with new actuals from HP Project Management, and a new table opens in Microsoft Project identifying both tasks whose actuals changed (changed tasks) as well as tasks whose schedule information changed as a result of Microsoft Project's internal field rules (impacted tasks). See *Impact of Microsoft Project Rules on Fields* on page 264 for more detailed information.

By default, changed tasks are displayed in red, while impacted tasks are displayed in blue. These colors can be configured in the **Microsoft Project Integration** policy in the project settings. See *Project-Level Settings for Integration* on page 248 for details on its settings.

You can also use custom filters and data table views provided by the integration for Microsoft Project to view changed actuals. See *Custom Microsoft Project Filters and Tables* on page 265 for more details.

5. To return to the normal Gantt chart view in Microsoft Project, select **View > Table > Entry.**

Enabling Detailed Synchronization Logs

By default, synchronizations between HP Project Management and Microsoft Project use the minimum amount of information tracing in order to optimize performance. You can choose to enable full information tracing for synchronizations, making detailed synchronization logs available from the **Info** tab of the Errors and Warnings window.

To enable full information tracing for a synchronization:

1. Open the project in Microsoft Project.
2. From the **PPM** menu in Microsoft Project, select **Enable all information-level tracing.**
3. Begin the synchronization.

If the user does not have permission to write to the Plug-In for PPM log file, all logging is disabled. See *Synchronization Logs* on page 274 for information on how to enable logging if it has been disabled.

Mapping Fields Between Applications

The following fields are mapped between HP Project Management and Microsoft Project. All fields are task-level fields unless otherwise noted. See *Impact of Microsoft Project Rules on Fields* on page 264 and *Conditional Editing Allowed In HP Project Management* on page 266 for additional considerations about mapping fields.

Table 10-1. Fields mapped between HP Project Management and Microsoft Project (page 1 of 2)

HP Project Management	Microsoft Project	Considerations
Task detail fields		
Task Name	Task Name	
Task Description and Notes	Notes (for tasks)	See *Notes Synchronization* on page 256.
Resources	Resources	See *Mapping Resources Between Applications*.
Activity	Custom	See *HP Project Management Activity Synchronization* on page 260.
Priority	Priority	
Milestone	Milestone	Milestones retrieved from Microsoft Project must be manually set to 100% complete in HP Project Management. Milestones retrieved from HP Project Management do not require updates.
User-defined	Custom	See *Microsoft Field Mapping* on page 253.
Planning fields		
Scheduled Duration	Duration	Microsoft Project recalculates duration so that Start, Finish, and Duration are valid. However, if a task is of a fixed duration, only Start and Finish are recalculated.
Scheduled Effort	Work	Scheduled Effort (measured in days) is converted to Work (measured in hours) using the calendar option Hours per day in Microsoft Project.

Table 10-1. Fields mapped between HP Project Management and Microsoft Project (page 2 of 2)

HP Project Management	Microsoft Project	Considerations
Scheduled Effort (resource-level)	Work (resource-level)	For tasks with more than one assigned resource, the amount of Scheduled Effort/Work assigned to each resource is synchronized.
Scheduled Start Date	Start	Microsoft Project sets Start to Actual Start, if this date is available.
Scheduled Finish Date	Finish	Microsoft Project sets Finish to Actual Finish, if this date is available.
Scheduling Constraint/ Constraint Date	Constraint Type/Date	Valid constraint types are those supported by both applications.
Predecessor	Predecessor	
Actuals fields		
Actual Duration	Actual Duration	Microsoft Project recalculates Actual Duration from the Actual Start and Actual Finish dates.
Actual Effort	Actual Work	If any type of effort is tracked in PPM Center, the link in Microsoft Project between Percent Complete and Percent Work Complete is disabled.
Actual Start	Actual Start	When this date exists, Microsoft Project defaults Start to this date.
Actual Finish	Actual Finish	When this date exists, Microsoft Project defaults Finish to this date.
Estimated Finish Date	Finish	Microsoft Project does not track an estimated finish date. However, you can use the Baseline feature to capture the original Finish date for variance reporting.
Estimated Remaining Effort	Remaining Work	
% Complete	Percent Complete	By default, Microsoft Project links Percent Complete and Percent Work Complete.

Mapping Resources Between Applications

In project planning, the concept of resources can have multiple definitions. A resource can be a team member, time on a mainframe computer, or construction materials. A resource in HP Project Management is an HP Project Management user capable of performing tasks. Resources are chosen from the staffing profile associated with the project or from the resource pools managed by the project manager. Microsoft Project supports tracking and costing of both human and material resources. HP Project Management supports only human resources.

A project can also contain resources that have not been assigned. In Microsoft Project, unassigned resources appear in some resource-centric project views but have little functional significance. In HP Project Management, unassigned resources are HP Project Management users listed in the staffing profile who have no task assignments.

During synchronization, all assigned human resources in Microsoft Project are first mapped automatically to defined users in HP Project Management. Automatic resource mapping is based on the following factors:

- A match between the Microsoft Project resource name and the concatenation of the HP Project Management user's first and last name.
- A match between the Microsoft Project resource name and the concatenation of the HP Project Management user's last and first name.
- A match between the Microsoft Project resource name and the HP Project Management username.

In general, the following should be taken into consideration:

- If there are multiple matches between the Microsoft Project resource name and defined users in HP Project Management, no automatic match is made.
- In HP Project Management, the mapping does not guarantee that all assigned resources are part of the staffing profile. If the staffing profile needs to be maintained, then this must be done manually.
- Material resources are not passed to HP Project Management.

Automatic resource mapping is not always 100% successful. The integration in Microsoft Project allows you to manually map resources across applications, or intentionally unmap resources that are irrelevant or have been erroneously mapped. This manual adjustment occurs as part of the synchronization process automatically.

To manually map resources from Microsoft Project to HP Project Management:

1. Perform synchronization as usual.
2. When the Mapping MSP Resources to PPM Resources window opens:

   - Click **Map to PPM Resource** to locate an HP Project Management resource to map to a selected unmapped Microsoft Project resource.
   - Click **Unmap** to unmap a Microsoft Project resource.

   When mapping or unmapping resources, consider the following:

   - The list of project participants includes resources, the project manager, stakeholders, and summary task owners.
   - HP Project Management resources that are listed are users who are resources in a resource pool that the current user manages or resources in the project's staffing profile.
3. Click **Finish** to proceed with the synchronization.

   - You can leave some resources unmapped. In this case, the effort associated with those resources will appear as unassigned effort on the task in HP Project Management.
   - You can map more than one resource in Microsoft Project to a single resource in HP Project Management. However, these Microsoft Project resources cannot both be assigned to the same task.

Errors and Warnings

During synchronizations, the Errors and Warnings window informs you of errors or warnings, and includes suggestions for resolving issues as they occur.

- Errors are fatal problems that must be resolved for the task to be successful. Errors stop the integration process, allowing you to correct the problem and restart the integration.
- Warnings are for informative purposes. After reviewing a warning, you may choose to respond to the warning or ignore it.

Removing Microsoft Project and HP Project Management Associations

You can remove the association between a Microsoft Project file and an HP Project Management work plan at any time.

You should only remove the association if you are sure you no longer need to link the Microsoft Project file to the HP Project Management project. Removing the link may make it impossible to re-associate the file.

To remove the association:

1. Open the project in Microsoft Project.
2. From the **PPM** menu in Microsoft Project, select **Project Details.**

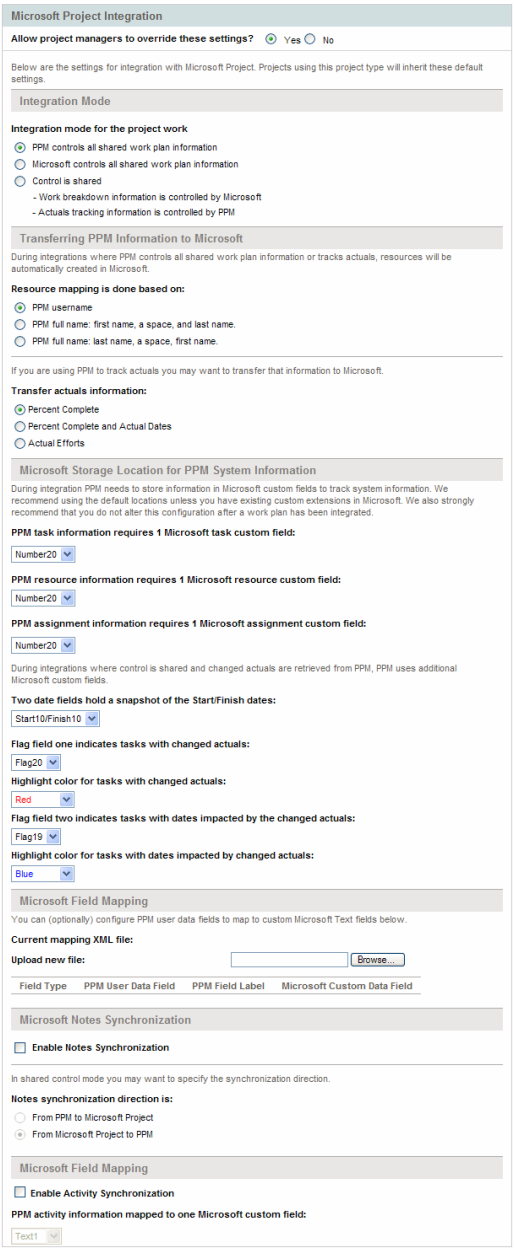
   The HP Project and Portfolio Management Center Integration Details dialog box opens.
3. Click **Remove Association.**

   If you have already removed the association, the button will be labeled **Restore Association,** which allows you to restore the association with the same HP Project Management work plan.

Project-Level Settings for Integration

There are a number of settings for projects in HP Project Management which are determined by project policies. Project policies are inherited from the project type used to create a particular project. For more information on project types and policies, see Chapter 3, *Configuring Project Types,* on page 33. The settings that pertain to Microsoft Project integration are set by the **Microsoft Project Integration** policy.

Figure 10-1. Microsoft Project Integration policy



Changes to the **Microsoft Project Integration** policy at the project type level do not propagate to projects of that type.

To view or modify project settings for a project, do one of the following:

- From HP Project Management, click **Project Settings** from the Project Overview page.
- From Microsoft Project, select **PPM > PPM links > Settings: MSP Integration.** This menu option is only available for projects that have been integrated.

Integration Mode

This setting determines which application has control over project information when synchronizing between HP Project Management and Microsoft Project.

- If HP Project Management controls all shared work plan information, then any changes made in Microsoft Project are automatically discarded when project information is synchronized, as described in *Publishing an HP Project Management Work Plan through Microsoft Project* on page 227.
- If Microsoft Project controls all shared work plan information, then work plan fields in HP Project Management are not editable, as described in *Publishing a Microsoft Project File through HP Project Management* on page 228.
- If control is shared, then work plan information is determined by Microsoft Project, while actuals data is gathered by HP Project Management, as described in *Using Both Applications to Track Different Project Data* on page 229.

While it is possible to switch modes during project execution, it is not recommended unless you are moving to HP Project Management control.

Transferring PPM Center Information to Microsoft

When transferring information from HP Project Management to Microsoft Project, you need to specify how resources are identified in HP Project Management using the **Resource name is done based on** setting, so the Microsoft Project integration can create them correctly in Microsoft Project.

If you wish to track actuals for your project in Microsoft Project, select the **Transfer actuals information** setting to enable the transfer of necessary data. This setting is used in shared control mode, and any time an HP Project Management work plan is used to create a new file in Microsoft Project. Depending on the option selected, the percent complete is applicable either at the task-level or resource-level but not both.

The options for the **Transfer actuals information** setting function as follows:

- **Percent Complete.** Using this option, the only actuals information passed to Microsoft Project is the task-level percent complete. Microsoft Project will imply the actual efforts and dates for each resource.
- **Percent Complete and Actual Dates.** Using this option, the only actuals information passed to Microsoft Project are described below. All values are passed at the task level, and Microsoft Project applies data to assignments using its internal rules.
    - **Actual start.** Applying the actual start date to the task will move the scheduled start of the task in Microsoft Project and can have cascading impacts on the remainder of the schedule in Microsoft Project.
    - **Actual finish (when available).** Applying the actual finish date to the task will cause Microsoft Project to recalculate the task's scheduled finish and duration, which can also cause recalculation of resource efforts and trigger cascading schedule changes throughout the plan.
    - **Estimated finish (potentially).** If the **Estimated Finish** field is being tracked in HP Project Management and no **Actual Finish** value exists, it will be passed to Microsoft Project as the scheduled finish for the task, which may have impacts on task duration, efforts, and schedule for the remainder of the plan.

- **Task-level percent complete.** When the task-level percent complete is applied, Microsoft Project will imply resource level efforts.

Select this option if a resource has logged actuals outside of a task's start or end date.

- **Actual Efforts.** Using this option, the only actuals information passed to Microsoft Project is the resource-level actual effort and estimated remaining effort. Microsoft Project will then infer the percent complete as well as actual start and scheduled finish dates. Since the effort may indicate the task will take more or less effort than intended, this can have cascading impacts throughout the plan, depending on the task setup in Microsoft Project. You should always track actual effort in HP Project Management when using this option. You can also optionally track estimated remaining effort.

Microsoft Storage Location for PPM Center System Information

The integration requires a custom Microsoft Project field for both tasks and resources in order to properly transfer information between applications. The first three settings in this category allow you to specify which field to use.

If you change the custom Microsoft Project field after a work plan has been integrated, data in the original custom Microsoft Project field is not deleted.

When synchronizing projects in shared control mode, several more custom Microsoft Project fields must be specified in this category. These fields hold the following:

- Snapshots of data that will be automatically changed by Microsoft Project once synchronization is complete
- Flags for fields that are changed by the synchronization, and fields that are changed by Microsoft Project based on those synchronized fields

This project-level setting also allows you to change the highlight colors in the custom Microsoft Project table view for synchronized actuals fields and the fields automatically changed by Microsoft Project based on the synchronization. For information on using this custom table view, see *Custom Microsoft Project Filters and Tables* on page 265.

Microsoft Field Mapping

This setting maps HP Project Management user data and Microsoft Project custom fields. The mapping is defined in an XML file that is maintained and edited by the project manager outside of HP Project and Portfolio Management Center.

Currently, only user data and custom fields associated with tasks are supported.

To enable Microsoft field mapping, do the following:

1. Configure HP Project Management user data.

   To configure user data, refer to the chapter "Configuring Task User Data" in the HP Project Management Configuration Guide. Select a text field (for example, **Text Field - 200**) for the Validation field.

   Microsoft custom text fields for tasks support a field length of 255 characters. The HP Project Management user data supports a maximum field length of 200 characters. Data may be truncated when synchronizing these fields.

2. Create an XML mapping file. See *Creating an XML Mapping File* below.
3. Upload the XML mapping file. See *Uploading an XML Mapping File* on page 255 for more details.

Creating an XML Mapping File

The XML mapping file defines the mapping of the HP Project Management user data and Microsoft Project custom fields.

A sample XML mapping file (`SampleMap.xml`) contains the structure needed to create a mapping file and is provided with the Plug-In for PPM.

Example XML Mapping File

```
<MSPCustomFieldsMapping
  <Map>
    <PPMField>1</PPMField>
    <MSPField>5</MSPField>
  </Map>
</MSPCustomFieldsMapping>
```

Only integers are allowed for the PPMField and MSPField elements.

Up to 20 HP Project Management task user data fields can be configured.

The PPMField element refers to the HP Project Management user data and the MSPField element refers to the Microsoft Project custom field. In this example, the file maps USER_DATA1 to Text5 at the task level.

Uploading an XML Mapping File

To upload an XML file that contains mapping definitions, do the following:

1. Click **Browse.**
2. Select the XML file to use for mapping.
3. Click **Save.** The mapping is displayed in the table.

Column Name	Description
Field Type	The custom field and data type to be mapped. Currently, only text fields associated with tasks are supported.
PPM User Data Field	The user data field to which the Microsoft custom field is mapped.
PPM Prompt	The field prompt or prompt name configured for the user data (in PPM Workbench). If the prompt name includes characters that can be interpreted as HTML code, the name may not display in the table as expected. If the user data has not been configured, **[Undefined]** is displayed. If the user data is not enabled, **[Disabled]** is displayed.
Microsoft Custom Data Field	The Microsoft custom field to which the PPM user data is mapped.

If you change data in the mapping file, the file must be reloaded and the project settings must be saved in order to see the changes in the table. If you change user data in the PPM Workbench, the user data must be saved and the project settings must be refreshed in order to see the changes in the table.

Synchronization Modes

Synchronization modes determine how user data fields are controlled:

- If your work plan is HP Project Management-controlled, user data fields are controlled by HP Project Management.
- If your work plan is Microsoft Project controlled, user data fields are controlled by Microsoft Project.
- If control is shared, user data fields are controlled by Microsoft Project.

If an HP Project Management user data field is disabled, when resynchronizing the data, the data for this user field is not updated (even if it is defined in the mapping file).

Disabling Microsoft Field Mapping

If you no longer want to map HP Project Management user data and Microsoft Project custom fields, upload an empty XML mapping file to disable Microsoft field mapping. An empty XML mapping file contains the following entry:

```
<MSPCustomFieldsMapping/>
```

You can also upload the default `SampleMap.xml` file that is installed with the Plug-In for PPM. If you modified the `SampleMap.xml` file, you must create and upload an empty XML file, as described above.

Notes Synchronization

About HP Project Management Notes

Notes are free-form text typed in the Task Details page and can contain up to 32K of information per work plan. Once saved, notes cannot be modified. Saved entries are marked with a timestamp. A user may submit multiple notes. Formatted text, OLE objects, and bitmaps (which are allowed in Microsoft Project notes) are not allowed in HP Project Management notes.

About HP Project Management Controlled Synchronized Notes

If HP Project Management controls the notes for the integration, the description and all notes for a task are grouped together into one synchronized note, up to the synchronized note size limit (see *Configuring Microsoft Project Integration Options: Notes Synchronization* for more information). The description and notes are sorted by date in ascending order (the most current note is at the beginning of the synchronized note) and the timestamp and user who created the note are included with each note.

Configuring Microsoft Project Integration Options: Notes Synchronization

By default, both PPM Center and Microsoft Project limit the size of a synchronized note to 1,500 bytes. This limitation is only applicable for synchronized notes. That is, you can create and store notes larger than 1,500 bytes in PPM Center or in Microsoft Project, but the information that is synchronized between the two applications is limited.

In Microsoft Project, a synchronized note's size is not configurable. That is, the size of a synchronized note sent from Microsoft Project to PPM Center cannot be larger than 1,500 bytes and cannot be modified.

In PPM Center, a synchronized note's size is configurable. That is, the size of a synchronized note sent from PPM Center to Microsoft Project is determined by the MSP_NOTES_SIZE_LIMIT `server.conf` parameter.

To configure a synchronized note's size in PPM Center, edit the MSP_NOTES_SIZE_LIMIT parameter in `server.conf`. By default, a synchronized note's size is 1,500 bytes. Refer to the *Installation and Administration Guide* for more information about editing the `server.conf` file.

Enabling Microsoft Project Integration Options: Notes Synchronization

You need to determine if notes will be used to track task data or actuals details. Once you have made this decision, this should be set as a project policy. Therefore, notes synchronization should be enabled at the project type level. Synchronization of notes in projects of the same project type should always be in the same direction (from PPM Center to Microsoft Project or from Microsoft Project to PPM Center).

To enable notes synchronization, from PPM Center, do the following:

1. Create or open an existing project type.

   To create a project type,

   a. Select **Create > Administrative > Project Type.**

   To open an existing project type,

   b. Select **Search > Administrative > Project Types.**

   c. Click the project type.

2. Click **Microsoft Project Integration.**

3. In the Microsoft Field Mapping section, select **Enable Notes Synchronization.**

4. Select the Notes synchronization direction.

   If control of work plan information is shared, this selection indicates the type of data being stored in notes. For example, if control of work plan information is shared and you select **From PPM to Microsoft Project,** notes are considered to be actuals details. If you select **From Microsoft Project to PPM,** notes are considered to be task data.

5. Click **Create** or **Done.**

HP Project Management and Microsoft Project Notes Synchronization Modes

The synchronization mode of a project determines which application (PPM Center or Microsoft Project) has control over project information when updating information between HP Project Management and Microsoft Project.

If HP Project Management controls all shared work plan information, notes are editable in PPM Center. Notes are also editable in Microsoft Project but, upon synchronization, any changes made to Microsoft Project notes are overwritten. When PPM Center project information is transferred to Microsoft Project, each note along with its task description, user, and timestamp, are consolidated into the Microsoft Project Notes field.

When HP Project Management controls all shared work plan information, even if notes synchronization is disabled, the task description is always copied from PPM Center to the Microsoft Project notes field.

If Microsoft Project controls all shared work plan information, notes are editable in Microsoft Project only. When the Microsoft Project work plan information is transferred to a PPM Center project, the Microsoft Project Notes field is imported into a single PPM Center Notes field. Formatted text, OLE objects, and bitmaps (which are allowed in Microsoft Project notes) are not allowed in HP Project Management notes.

If control is shared, the application that controls and edits notes is determined by the Microsoft Project integration project settings of the project. See step 4 in *Enabling Microsoft Project Integration Options: Notes Synchronization*.

About Notes Synchronization when Sending Work Plan Information from Microsoft Project to HP Project Management

When notes synchronization is enabled and you send work plan information from Microsoft Project to HP Project Management in shared control mode, notes synchronization behaves in the following manner:

Table 10-2. Microsoft Project to HP Project Management Notes Synchronization Behavior

Selected Option	Synchronization Direction	Results
Send work plan information from MSP to PPM	From Microsoft Project to PPM	Notes in Microsoft Project are synchronized in PPM Center.
	From PPM to Microsoft Project	Notes in Microsoft Project are not synchronized.
Retrieve actuals from PPM to MSP	From Microsoft Project to PPM	Notes in PPM Center are not synchronized.
	From PPM to Microsoft Project	Notes in PPM Center are synchronized in Microsoft Project.

About Notes Synchronization when Changing Synchronization Modes

If the synchronization mode of a project is changed from HP Project Management controlled to Microsoft Project controlled, notes initially provided in HP Project Management are deleted when the project is synchronized. To preserve notes initially provided in HP Project Management, synchronize the project to Microsoft Project *before* changing the synchronization mode.

HP Project Management Activity Synchronization

Activities are simple configuration entities that can be associated with tasks in the project work plan. Tasks can be characterized by the type of activity involved in accomplishing the task. For example, certain tasks could be categorized as design activity while other tasks could be characterized as testing activity.

Although they can be used for simple categorization, activities are usually used to identify costs that can be capitalized for Statement of Position (SOP) 98-1 compliance. For example, activities marked as capitalized will categorize the costs of associated tasks as capital if the project supports capitalization. A project or task is identified as capitalized when it is associated with a capitalized activity.

HP Project Management comes with a pre-defined set of activities reflecting common SOP 98-1 categories that can be configured for use with tasks.

If you choose not to activate SOP 98-1 tracking, activities can still be associated with tasks as a categorization tool, and any associated costs will be considered operating expenses. That is, activities can be used even when SOP 98-1 functionality is not enabled, but they cannot be marked as capitalized, nor will projects or tasks associated with any activities track capitalization data.

Activities can also be associated with requests and packages (but cannot be capitalized). However, only activities associated with tasks can be mapped and synchronized between HP Project Management and Microsoft Project.

For detailed discussion of configuring activities and activity behavior, see the *HP Financial Management User's Guide.*

Enabling Microsoft Project Integration Options: Activity Synchronization and Mapping

Activities in HP Project Management are mapped to and from the Text1-29 fields (by default, Text1) of Microsoft Project.

To enable activity mapping, from PPM Center, do the following:

1. Open the project
2. Click **Project Settings** in the Project Overview page.
3. Click **Microsoft Project Integration.**
4. In the Microsoft Field Mapping section, select **Enable Activity Synchronization.**
5. Select the Microsoft Project custom field (Text1-29) to map to HP Project Management activities. By default, Text1 is selected.
6. Click **Done.**

HP Project Management and Microsoft Project Activity Synchronization Modes

The synchronization mode of a project determines which application (PPM Center or Microsoft Project) has control over project information when updating information between HP Project Management and Microsoft Project.

If HP Project Management controls all shared work plan information, activities are editable in PPM Center only. When PPM Center project information is transferred to Microsoft Project, the PPM Center Activity field is exported to Microsoft Project custom field Text1-29 (Text1, by default).

If Microsoft Project controls all shared work plan information, activities are editable in Microsoft Project only. When the Microsoft Project work plan information is transferred to a PPM Center project, the Microsoft Project custom field Text1-29 (Text1, by default) is imported into the PPM Center Activity field.

If control is shared, activities are controlled by and editable in Microsoft Project only. When the Microsoft Project work plan information is transferred to a PPM Center project, the Microsoft Project custom field Text1-29 (Text1, by default) is imported into the PPM Center Activity field.

Activity Synchronization Behavior in Microsoft Project

When synchronizing activities, you should either let the Plug-In for PPM generate the activity column in Microsoft Project or define the activity column in Microsoft Project using the label “Activity” and map the same custom field configured in the PPM Center project settings.

If the activity column is defined incorrectly (either the Microsoft Project column is not labeled “Activity” or the custom field used is not the same custom field configured in the PPM Center project settings), the following occurs:

Table 10-3. Mislabeled Activity Column Behavior

	HP Project Management Controlled	Microsoft Project Controlled or Shared Control
Microsoft Project Column Label is Incorrect, Custom Field is Correct	When a PPM Center work plan is first opened from Microsoft Project, a column labeled “Activity” in Microsoft Project is created. If the “Activity” column is renamed, activities in PPM Center are still synchronized to the same (renamed) column in Microsoft Project.	Mislabeled activities in Microsoft Project are synchronized to activities in PPM Center. A warning message is logged.
Microsoft Project Column Label is Correct, Custom Field is Incorrect	When a PPM Center work plan is first opened from Microsoft Project, a column labeled “Activity” in Microsoft Project is created. If another column labeled “Activity” is added in Microsoft Project that is mapped to a different custom field (not the one configured in the PPM Center project settings), it is ignored during synchronization.	The column labeled “Activity” in Microsoft Project is not synchronized in PPM Center. Instead, another column labeled “Activity” is created that is mapped to the correct custom field. A warning message is logged to rename the initial column labeled “Activity.”

After the first synchronization, do NOT modify the column label or mapped custom field in Microsoft Project.

Activity Inheritance Behavior

Tasks and summary tasks can inherit their activity settings from their parent projects, making it unnecessary to manually set the activity for every task and summary task within a project.

Activity inheritance follows certain rules (also described in the *HP Financial Management User's Guide*):

- When an activity is set on a project, the same activity cascades down to all its children. These children will continue to inherit whatever their parent's activity setting is. If one of these children is moved to a different parent with a different activity setting, the child will acquire the new parent's activity setting.
- When a child with a different activity setting than its parent is found, the activity setting cascade stops and that child's activity setting is preserved. This child's activity setting will be preserved even if the child is indented, outdented, or cut-and-pasted under a different parent.
- In the case of a child with a different activity setting, manually setting that child's activity setting to that of its parent means that its activity setting will no longer be preserved, and will become that of its current parent.
- Manually setting a child's activity to an empty value will keep it empty, but it will not stay empty if the child is moved to a parent with a non empty activity setting.
- If a summary task's parent changes its activity setting, the new activity will be applied to the summary task and all its children as well, unless the summary task's activity setting is different than its parent's, in which case the summary task and its children will remain untouched.

Additional rules regarding activity inheritance behavior:

- In HP Project Management controlled mode, when activities are synchronized, if a child's activity is empty in PPM Center, it will remain empty in Microsoft Project.
- In Microsoft Project controlled mode and shared controlled mode, when activities are synchronized, if a child's activity is empty in Microsoft Project, that child's activity will inherit its parent's activity in PPM Center.

Disabling Save Prompting

The HP Project and Portfolio Management Center Integration Details dialog, opened by selecting **PPM > Project Details** in Microsoft Project, allows you to disable the message that prompts you to send a work plan to HP Project Management whenever you save it in Microsoft Project.

Impact of Microsoft Project Rules on Fields

Microsoft Project maintains internal rules that determine the way field values are calculated in planning and actuals fields. These rules affect the synchronization processes between Microsoft Project and HP Project Management because calculations that work in one application do not necessarily carry over to the other application.

For example, HP Project Management allows you to retain actuals information that is completely separate from your schedule information. In Microsoft Project, this is not allowed, and making updates to one actuals field may trigger automatic revisions to other planning and actuals fields.

The most common Microsoft Project rules for planning and actuals fields are listed below.

Planning Fields

- Start + Duration = **Finish**
- **Effort** = Duration * (sum of resources * units)

Actuals Fields

- **Start** = Actual Start (if known)
- **Finish** = Actual Finish (if known)
- **Duration** = Actual Duration + Remaining Duration
- **% Complete** = Actual Duration / Duration
- **Remaining Duration** is zero when task is 100% Complete

- **Effort** = Actual Effort + Remaining Effort
- **% Work Complete** = Actual Effort / Effort

When HP Project Management information is passed to Microsoft Project, Microsoft Project will always apply its standard rules. This will lead to situations where the data in each application does not match exactly.

Solutions for Project Managers

In order to give consistent behavior during synchronization, PPM Center project managers must:

- Pay attention to fields that have changed. The integration provides a custom Microsoft Project table view that shows the user which fields have changed as a result of a synchronization, whether directly through the synchronization process, or indirectly as a result of Microsoft Project's automatic calculations.
- Synchronize these fields that are most important to your plan management by selecting the appropriate actuals integration option as described in *Transferring PPM Center Information to Microsoft* on page 251.

The integration ignores HP Project Management default values that are not enabled.

Custom Microsoft Project Filters and Tables

After synchronizing project information between applications, you can select from the following custom Microsoft Project items provided by the integration:

- A filter named **PPM: Changed Actuals**
- A filter named **PPM: Dates Impacted by Changed Actuals**
- A data view table named **PPM: Changed Actuals**

These items enable you to quickly view the following:

- Fields that have scheduled date changes as a result of the actual synchronization. These fields appear red by default.
- Fields that have changed as a result of automatic calculations performed by Microsoft Project based on synchronized fields. These fields appear blue by default. This is useful for identifying any cascading impacts of a change in actuals.

Conditional Editing Allowed In HP Project Management

Depending on the synchronization mode that has been selected for a project, the project structure and task information will be controlled by either HP Project Management or Microsoft Project. Depending on the synchronization control mode selected for the project, some editing features in HP Project Management will be disabled. Information controlled by Microsoft Project cannot be edited in HP Project Management.

Summaries of the conditional editing restrictions for each synchronization mode are listed in *Conditional Editing Summary Table* on page 269.

Editing HP Project Management Controlled Projects

When HP Project Management controls the project, the user is allowed to edit all information in HP Project Management. This includes changing the task structure, adding or deleting new subprojects and tasks, and editing task scheduling and actual fields.

Editing Microsoft Project Controlled Projects

When Microsoft Project controls all the project planning and tracking activities, the comparable editing functions in HP Project Management are disabled. The data that is distinct to HP Project Management and not shared with Microsoft Project can still be edited. This includes task activity, role, skill values, description, user data, notifications, notes, and task references.

When working with a project type that enforces a particular work plan template, you can create the work plan initially in HP Project Management from the specified work plan template. You can then open the work plan in Microsoft Project.

Any function that could change the project and task structure is disabled in HP Project Management. This includes the following components:

- **Add Task** icon
- **Delete** icon
- **Indent/Outdent** icons
- **Move up/Move down** icons

Since scheduling can change dates and durations, the **Schedule Project** icon is disabled. The status of the PPM Center project cannot be changed in this synchronization mode; therefore the Change Status is also disabled. The keyboard shortcuts for these icons are disabled as well.

In the standard HP Project Management interface, the My Tasks portlet and the Task Detail page will not allow users to enter task actuals. The My Tasks portlet and the Task Search page still return the current incomplete tasks assigned to a user regardless of the control mode. This provides visibility to the project's participants. The actuals collected in Microsoft Project are visible through the Work Plan page.

Roll-up calculations are disabled through HP Project Management, whether triggered by actions in the PPM Workbench, the standard web pages, or any other method. Therefore, the rolled-up values in HP Project Management will match Microsoft Project even if calculations in HP Project Management would normally produce a different value.

Editing in Shared Control Mode

The shared control mode is more complex than the other two modes when disabling fields. This mode allows users to change the actual fields while keeping the planning fields unchanged.

Only actual fields are editable, through the **Resources** tab on the Task Details page. The planning fields are disabled. In the **Schedule** view, planning fields in the subproject/task table are also not editable.

Similar to the Microsoft Project control mode, any function that could change the project and task structure is disabled. This includes the following components:

- **Add Task** icon
- **Delete** icon
- **Indent/Outdent** icons
- **Move up/Move down** icons

Some roll-up operations are disabled. Roll-up of actuals fields still occurs, but schedule fields will not roll up. The imported values from Microsoft Project are retained.

The functionality allowed in shared control mode is very similar to the functionality allowed to a user who has been given only the Update Tasks access grant.

Conditional Editing Summary Table

Table 10-4 summarizes the allowed or restricted conditional editing in HP Project Management for each of the three synchronization modes.

Table 10-4. Conditional editing allowed in HP Project Management

Fields in HP Project Management	HP Project Management controlled	MSP controlled	Shared Control Mode
Work Plan page			
Add/Delete Task icon	Yes	No	No
Indent/Outdent Task icon	Yes	No	No
Move up/Move down Task icon	Yes	No	No
Schedule Project icon	Yes	No	No
Task Details page			
Planning fields	Yes	No	No
Actual fields	Yes	No	Yes
Structure fields	Yes	No	No
Other non-shared fields	Yes	Yes	Yes
Status field	Yes	No	Yes
Rollup			
Schedule fields	Yes	No	No
Actuals fields	Yes	No	Yes
My Tasks portlet			
Actuals fields	Yes	No	Yes

Working with Projects Using a Microsoft Project Server

When working with a Microsoft Project Server-based project, HP Project Management functions slightly differently, in the following ways:

- Work plans that are controlled by HP Project Management cannot be directly opened in Microsoft Project from HP Project Management.
- If actual effort is supplied by Microsoft Project, PPM Center calculates the percent complete of a task. If actual effort is not supplied, PPM Center uses the percentage completed supplied by Microsoft Project.
- After synchronizing a Microsoft Project Server-based project with a work plan, you will be prompted to check in the project into the Microsoft Project Server.

Troubleshooting

Microsoft Project supports many features that are not duplicated in or synchronized with HP Project Management. When a Microsoft Project file is imported into HP Project Management, this information is not represented. Sending a Microsoft Project file to HP Project Management does not remove this data from Microsoft Project. Opening an HP Project Management work plan in Microsoft Project does not create or default this data.

Other Microsoft Project features deal with the scheduling and tracking information that is synchronized between the two applications. In these cases, the interface converts the Microsoft Project data into information that HP Project Management can represent. The interface attempts to maintain the intent of the original work plan as closely as possible.

Deleting Required Tasks or Tasks/Resources with Actuals

Every time work plan schedule information is successfully sent from Microsoft Project to HP Project Management, a backup copy of the `.mpp` file is automatically saved to the same directory in which the original file is stored, with the extension `.bak`. The open `.mpp` file is also saved.

When a work plan is being shared between Microsoft Project and HP Project Management, deleting one of the following entity types in Microsoft Project results in an error that will halt the next integration process:

- A task marked as required by the work plan template, if the work plan was originally created in HP Project Management from a work plan template.
- A task or resource that has actuals.

If you experience an integration error related to the deletion of a task or resource in Microsoft Project that had actuals, you can use the existing backup copy as a starting point from which to reapply your most recent edits.

Recovering Deleted Tasks Using Microsoft Project Associations

You can also relink the work plan to the Microsoft Project file manually by selecting **PPM > Relink project** in Microsoft Project. After you select the project whose link you want to reestablish, the integration examines the work plan task by task and presents you with a list of work plan tasks whose Microsoft Project counterparts are ambiguous or nonexistent. For each task, you can choose from the following options:

- Select a matching task in the Microsoft Project plan
- Create a new task in the Microsoft Project plan
- Do nothing

Any tasks in the Microsoft Project plan that are not associated with an HP Project Management task are ignored.

Cost Roll-up and Health Calculations

When sending information from Microsoft Project to HP Project Management, roll-up of cost and health calculations is deferred in order to keep the synchronization process as efficient as possible.

Resource Calendars

The project regional calendar is exported to Microsoft Project in HP Project Management controlled mode or any time an HP Project Management work plan is used to create a new plan in Microsoft Project. Calendar hours-per-day and work days per week are exported, but calendar exceptions are not. Additionally, resource calendars are not synchronized between the two applications. Since both duration and effort are a function of both start/finish dates and resource calendars, the duration values in HP Project Management and Microsoft Project might not match. Since tasks in Microsoft Project are created as fixed duration in these cases, the total effort will match HP Project Management data.

Units

Units are also referred to as resource load percentages. In Microsoft Project, each resource can be assigned to a task with a different load percentage (from zero percent to one hundred percent.) For example, the same resource could be assigned to two different tasks and have a resource load percentage of fifty percent for each one.

Since HP Project Management does not track assignment units, the load percentage of any resource imported into HP Project Management will not be recognized.

Microsoft Project's Manual Scheduling Mode

If your Microsoft Project file is in manual scheduling mode and you did not select this option, it could be because:

- The previous synchronization with HP Project Management failed. During synchronization, the scheduling mode is set to manual and then returned to automatic once the synchronization completes. If the synchronization did not complete, the scheduling mode may have been left in manual.
- You opened a project that was in manual mode and then created the new Microsoft Project file. This caused the new project to inherit the manual mode setting as a default.

Disabled Items in Microsoft Project

If PPM Center was unexpectedly halted during operation (for example, the system on which PPM Center is running fails), you may need to re-enable the Plug-In for PPM from Microsoft Project in order to display the Plug-In for PPM menu.

To re-enable the Plug-In for PPM from Microsoft Project:

1. Click **Help > About.**
2. Click **Disabled Items.**
3. If the Plug-In for PPM is listed, remove it from the list to enable it.

Synchronization Logs

By default, information tracing for synchronization is enabled (see *Enabling Detailed Synchronization Logs* on page 242). If the user attempting synchronization does not have permission to write to the Plug-In for PPM log file, a warning message displays and all logging for the Plug-In for PPM is disabled.

To re-enable logging:

1. Allow the user permission to write to the directory in which the Plug-In for PPM is installed.
2. Remove and re-install the Plug-In for PPM. See *Removing the Plug-In for PPM* on page 234 and *Installation Instructions* on page 231.

Launching Microsoft Project

When you start Microsoft Project, if the following error message displays:

```
The Microsoft Project Plug-In for HP Project and Portfolio
Management Center requires that an MPP file be opened from a
disk. Please save this file to disk and open it from that
location.
```

you must restart the system on which the Plug-In for PPM is installed.

Task Priority Field

If the Priority field for a task in HP Project Management is set to greater than 1,000, when the work plan information is sent to Microsoft Project, the priority is set to 1,000. Neither HP Project Management nor Microsoft Project allow a task priority to be greater than 1,000.

11 Integration with HP Time Management

Overview of HP Time Management Integration

This chapter explains how HP Project Management integrates with HP Time Management to offer a more detailed way for resources to report time worked on projects. This chapter is only useful if you have purchased and installed HP Time Management.

In the project settings, you use the **Cost and Effort** policy (primarily its Time Management section) to integrate HP Time Management and HP Project Management for a particular project. There you specify:

- At what level of detail the project's tasks are tracked on time sheets
- Who can log time for the project
- Whether certain project representatives must approve time logged
- Which effort fields are tracked
- Whether time can be logged after a task is complete

In configuring integration, consider the following:

- Any resource who is licensed for HP Time Management must use time sheets or the My Tasks portlet, rather than the project work plan, to enter actuals for integrated projects.
- You can configure which actuals are tracked. For integrated projects, where HP Time Management is used to track project actuals, you must require resources to track Actual Effort.

- You can configure the level of the project (Project, Summary Task level 1 to 6, or Task) against which resources log time. If time is logged at summary task level 2, for example, resources who are assigned to any tasks that are hierarchically under level 2 report time for those tasks only at summary task level 2.
- If Estimated Remaining Effort is to be tracked, time must be logged at the task level.
- After time is logged against an integrated project, you cannot change logging from any summary task level to the task level, nor from project level to the summary task level. However, you can change logging from the task level to the summary task level, or from the summary task level to the project level.
- After time is logged against an integrated project, you cannot disable integration.
- Resources cannot contribute time to the same task from both HP Project Management and HP Time Management. Therefore, if you plan to establish integration for a project having tasks that are partially complete, first ensure that actuals are up to date, then divide each partially completed task into a completed task and a new task.
- Some actuals fields that are updated by HP Time Management assignments are read-only on the Task Details page. Once effort has been provided by the assigned resource, only the assigned resource can delete it.
- Time logged by assigned resources appear as contributions for tasks and summary tasks.
- Managers of an integrated project do not necessarily need to assign all work plan tasks to HP Time Management users; actuals for HP Project Management users and unassigned effort will roll up automatically.

In addition to a Time Management section, the **Cost and Effort** policy also has a Resource Load Settings section and a Financial Management section.

For information about the Resource Load Settings section, see *Resource Load Settings* on page 48.

In the Financial Management section, you can specify whether to use automatic cost calculation so that, whenever a resource updates and saves a time sheet, HP Time Management automatically passes the effort data to HP Project Management, which calculates and updates the Actual Cost for the project. (Then the Actual Cost cannot be edited directly in HP Project Management.) If you do not roll up any values from the work plan (cost data is entered manually into the financial summary), HP Time Management still passes effort data to HP Project Management, but HP Project Management does not calculate Actual Cost. For more information, see *Financial Management* on page 50.

The **Project Fields** policy determines whether Estimated Finish Date and certain other fields are tracked.

Enabling Time Management for Projects

The **Cost and Effort** policy determines whether HP Time Management is active for a given project type. Projects created using a project type with Time Management enabled will be able to use HP Time Management to collect actuals. For details on configuring the **Cost and Effort** policy to enable the use of HP Time Management, see *Cost and Effort* on page 46.

Using the My Tasks Portlet

The My Tasks portlet displays information for multiple tasks. The maximum number of tasks displayed can be specified by the user, as well as the portlet title. Most fields in the My Tasks portlet are updateable by resources.

With Time Management enabled, the My Tasks portlet allows you to enter time using time sheets for projects using HP Time Management. Summary tasks also appear on the My Tasks portlet for integrated projects.

If you are working on a project that uses HP Time Management, the My Tasks portlet displays the Actual Effort field for each task as a calculated roll-up of the effort breakdown, which corresponds to the time sheet indicated in the Use

Time Sheet field, filtered for only the relevant tasks. Clicking the Actual Effort value opens the effort breakdown for direct editing. The effort breakdown displays only the tasks shown in the My Tasks portlet.

Values provided in the effort breakdown are for the time sheet specified in the **Use Time Sheet** field. If you wish to provide values for a different time sheet, select the desired time sheet before editing the effort breakdown for a task or summary task.

To enter actuals information for a project on a time sheet from the My Tasks portlet:

1. Navigate to the My Tasks portlet.
2. Ensure that the correct time sheet appears in the **Use Time Sheet** field.

   If the time period being entered has no time sheet, you are offered the option to use a new time sheet, which will be created when **Save** is clicked.

   Time sheets in the “In Rework” and “Pending Approval” status cannot be edited from the My Tasks portlet. Time sheets in the “Frozen” and “Closed” states do not appear in the list of available time sheets.
3. Click the **Actual Effort** value for the task you wish to enter actuals information for.

   The Effort Breakdown dialog box opens.
4. Provide the information for the desired time sheet lines.

   You can provide time on separate lines for tasks with different activities.
5. Click **Done.**
6. Click **Save.**

You can open the time sheet being affected anytime from the My Tasks portlet by clicking **Go To Time Sheet.**

Data for tasks that appear in the My Tasks portlet that have actuals will be automatically saved to the time sheet when **Go To Time Sheet** is clicked.

Any unsaved changes that have been made to the effort breakdown are discarded when **Go To Time Sheet** is clicked.

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