Mercury IT Governance Center™ Mercury Project Management™ User's Guide

Version: 6.0

MERCURY

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Chapter 1 Introduction

In This Chapter:

- About This Document
- Who Should Read This Document
- Related Documents
- Overview of Mercury Project Management

About This Document

This guide describes how to navigate and use Mercury Project ManagementTM. Each chapter covers a specific topic on navigation or usage:

• Chapter 1, *Introduction*, on page 15

Includes an overview of Mercury Project Management and details the document's intended audience and related guides.

• Chapter 2, Setting Up a Project Plan, on page 21

Describes how to create a project plan and set up its tasks, scheduling, and baselines.

• Chapter 3, Configuring Tasks, on page 79

Explains how to configure tasks within a project plan, including assigning resources, setting up notifications, and creating Milestones.

• Chapter 4, *Managing a Project Plan*, on page 125

Discusses how to manage a project plan from creation to completion, including viewing task progress, updating the schedule, and printing the Gantt chart.

• Chapter 5, *Updating Tasks: Project Plan Participant Activities*, on page 157

Describes how participants in project plans can locate and update tasks, including viewing and updating notes and references.

• Chapter 6, *Using Project Templates*, on page 191

Discusses the creation and use of project templates to speed project plan creation.

• Chapter 7, *Integrating Project Management with Microsoft Project*, on page 215

Discusses how to use Project Management in conjunction with Microsoft Project to various degrees, depending on the level of integration desired.

• Appendix A: *Integrating Requests and Project Plans* on page 257

Explains how to use Project Management in conjunction with Mercury Demand ManagementTM to leverage the capabilities of both systems.

Appendix B: Project Management Portlets on page 267

Lists the portlets delivered as part of Project Management.

• Appendix C: *Reports by Category* on page 269

Lists the reports delivered as part of Mercury IT Governance CenterTM.

Who Should Read This Document

The intended audience for this document includes all end-users of Project Management:

- Project leaders or managers who create and manage project plans and tasks
- Project leaders or managers who create and manage calendars
- Business users responsible for reporting on project plans and tasks

Related Documents

Related documents for this book are:

- General category:
 - Guide to Documentation
 - Key Concepts
 - Getting Started
- Related product areas:
 - Mercury Demand Management User's Guide
 - Mercury Change Management User's Guide
 - Mercury Resource Management User's Guide
 - Mercury Time Management User's Guide
 - Mercury Time Management Configuration Guide

Security Model Guide and Reference

Overview of Mercury Project Management

Mercury Project Management enables organizations to streamline and standardize the management of project activities using a template-based, collaborative approach. Project plans are defined as a hierarchical structure of projects and subprojects that logically group and organize tasks or activities. Project Management defines the step-by-step processes required to complete specific tasks and deliverables. Organizations can easily manage project plan activities within and across the technology chain because all project team members, whether internal or external, collaborate and interact through an intuitive interface. The underlying product framework guides 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 example, when creating a new and updated version of a business system, a company could classify its efforts into subprojects for each major functional area.

- Each of these functional subprojects 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 Mercury Demand Management and Mercury Change ManagementTM, giving instant visibility to more detailed activities supporting an overall project plan.
- In conjunction with Mercury Resource ManagementTM, task 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 Resource Management prior to using Project Management. For more detailed information, see *Before Starting* on page 22 or the *Mercury Resource Management User's Guide*.

 Baselines of the project plan and relevant fields can be taken at any time, giving a basis for project plan performance comparisons.

- Project plan cost data is also tracked on the task level, which can be fed into a project plan budget and analyzed for trends and patterns. Project plan spending can also be monitored.
- 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 project plan's execution.

Chapter 2 Setting Up a Project Plan

In This Chapter:

- Overview of Setting Up a Project Plan
- Before Starting
- Creating a Project
- Setting Up a Master Project
 - Creating the Master Project Entity
 - Selecting Information to Track and Display
 - Setting Up Exception Behavior
 - Setting Up Indicators
 - Setting Scheduling Options
 - Setting Security Restrictions
 - Setting Up the Project Team
 - Setting Up Microsoft Project Integration
 - *Importing Custom Fields from a Project Template*
- Adding Tasks to a Project
 - Adding Tasks to the Project Plan Tab
 - Adding Tasks Using Project Templates
 - Setting Up Project Hierarchy
 - Attaching Additional Information to a Project or Task
 - Creating a Task From a Request
 - Adding Milestones
- Setting Up Project Dependencies
 - Setting Internal Predecessors
 - Setting an External Predecessor Task
 - Setting an External Predecessor Project
 - Setting an External Predecessor Request

- Creating a Master Project Schedule
 - *Generating the Schedule*
 - Scheduling Errors
 - Scheduling Warnings
- Establishing a Project Baseline
 - Selecting Baseline Fields
 - Taking a Baseline
 - Managing Baselines
 - Comparing Baselines

Overview of Setting Up a Project Plan

This chapter describes the process of creating a project plan. Project plans allow organizations to define business initiatives as a hierarchical structure of tasks and subprojects that logically groups and organizes activities and deliverables. Using project plans, users can define, browse, edit, and manage complex business initiatives.



Many project plan activities are performed in the Workbench interface. If you have installed a pop-up blocker in your Web browser, the Workbench will not open unless you disable pop-up blocking behavior for your Mercury IT Governance Center Web site.

Before Starting

Resources in Mercury Project Management can be tracked to optimize their time and capabilities with Mercury IT Governance Center's Resource Management functionality. Together with Mercury Resource Management, a project manager can:

- Configure a regional calendar and set the following:
 - Number of hours in a working day
 - Working days for each week

Holidays

Project plans can then be associated with a region for accurate project and resource scheduling

- Set a calendar for each resource, determining total availability as well as specifying vacation days
- Assign a primary skill and cost rate to a resource
- View resource load by time period, project plan, or individual
- Compare project plan assignments to staffing profiles

For a project manager to take full advantage of these features, resource and calendar information should be set up in Mercury Resource Management before creating a project in Mercury Project Management. See the *Mercury Resource Management User's Guide* for detailed information on how to perform these tasks.

The following useful tasks can also be performed using Mercury Resource Management:

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

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

Creating a Project

Master projects (or project plans) handle, link, and reference all of the variables vital to planning a successful endeavor. Master projects consist of different subsets of information — tasks, subprojects, action items, cost data, notes, packages, requests, and references — that can be linked to each other. In addition, the master project maintains global settings and configurations that are tracked throughout an initiative's life cycle.

There are three main stages in the creation of a project plan:

- Stage One Setting up a Master Project
- Stage Two Adding Tasks to a Project Plan
- Stage Three Creating a Master Project Schedule

Stage One: Setting Up a Master Project

The master project is the overarching entity that keeps track of a particular initiative. The master project can be configured to display useful data about the project plan as it moves toward completion. Project templates can also be used to define an entire master project, and can be subsequently modified.



A master project can also be configured to track information related to SOP 98-1 compliance. See the *Mercury Financial Management User's Guide* for more detailed information.

• Creating the Master Project Entity

Using the Workbench, you will create a master project. When enabled, this project plan will be visible to other users through the Mercury IT Governance Dashboard.

Selecting Information to Track and Display

The master project contains configurable fields that collect information which will be tracked as the project plan progresses. These fields, which include % Complete and Confidence, provide a constant point of reference for project managers and participants throughout an initiative's life cycle.

• Setting Up Exception Behavior

During the course of a project plan's life, some things can go wrong — resources can be missing, tasks can be completed late or not at all, the project plan can go over budget, etc. The master project contains exception rules that can be configured to deliver advance warning of these circumstances or to signal when they have occurred.

For example: A particular task currently has no resource assigned to it, and it is scheduled to begin in two days. The master project can flag this exception for review.

• Setting Up Indicators

The master project also features configurable project plan indicators. Indicators can display exceptions that have occurred, project plans with custom fields, tasks or project plans that might require rescheduling, tasks with defined notifications, and any scheduling constraints that apply to a task.

• Setting Scheduling Options

The master project can be set to schedule its project plan based on different configurations for resource availability and actual start and finish dates.

For example: Andrew, Jered, and Dave are the assigned resources for a project plan, but Jered is going on vacation for a week, and all three people need to be present for the initiative to move forward. The project plan can be set not to include Jered's vacation time as viable for scheduling.

• Setting Security Restrictions

Project managers can set Security Restrictions on a project plan so that only those directly involved in a project plan can view its information.

Stage Two: Adding Tasks to a Project

Projects consist largely of tasks and subprojects. Tasks and groups of tasks (using templates) can be added freely to any project plan. Below are some common procedures used when you add and modify tasks:

- Adding Tasks to the Project Plan Tab
- Adding Tasks Using Project Templates
- Setting Up Project Hierarchy
- Attaching Additional Information to a Project or Task

Stage Three: Creating a Master Project Schedule

Once the tasks have been added and the scheduling options have been set, the project plan can be scheduled. Project Management will calculate scheduled start and finish dates automatically, and inform the user of any errors it encounters in the process.

Setting Up a Master Project

The master project is the entity in Project Management that keeps track of a business initiative. It can be configured to display useful data about a given project plan as it moves toward completion.



When a user creates or edits a project or subproject, that user is the only one able to save changes. All other users will be warned of this before attempting to edit that project or subproject at the same time.

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

Two users can even edit separate tasks in the same project plan without risk.

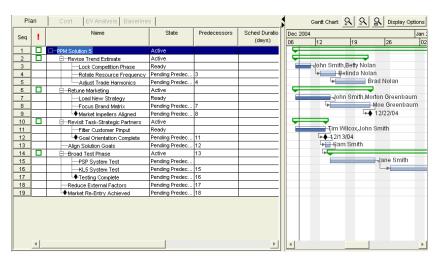


Figure 2-1. Master project

Creating the Master Project Entity

To create a master project:

- 1. Log on to Mercury IT Governance Center and open the Workbench.
- 2. From the shortcut bar, select Project Mgmt > Projects.

The Project Workbench window opens.

3. Click New Project.

The New Project window opens.



4. In Master Project Name, enter the name of the project plan.

You can optionally select to use a project template to define the structure and custom fields for the new project plan. For more detailed information on project templates, see *Using Project Templates* on page 191.

5. Click OK.

The Project window opens.

6. Add tasks according to the project plan schedule.

See *Adding Tasks to a Project* on page 50 for more details. You need to add at least one task to the project plan in order to save the master project.

7. Click Save.

You can now set up your project plan. This includes setting up master project options and adding and configuring tasks to the project plan.

To copy a project plan to create a new master project:

- 1. Open the Project Workbench window.
- 2. Query for the project plan that you would like to copy.
- 3. In the **Results** tab, select the project plan.
- 4. Click Copy.

The Copy Project window opens.

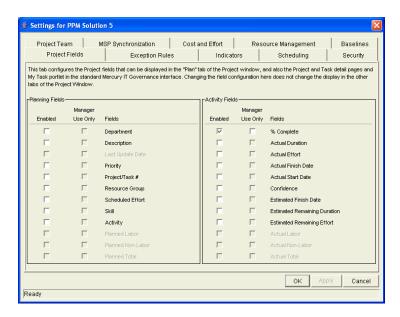
- 5. In the Project Name field, enter the new name of the project plan.
- 6. Select the information that you would like to copy from the original project plan by clicking the associated checkboxes.
- 7. Click Copy.

Selecting Information to Track and Display

The master project allows project managers to choose information they would like to track over the course of the project plan. Fields selected in this window become enabled for all project plan participants.

To select information to track and display:

- From the menu at the top of the Workbench, select Project > Settings.
 The Settings window opens.
- 2. Click the Project Fields tab.



- 3. For each field, select the appropriate checkbox.
 - Selecting the checkbox in the Enabled column makes the field active for the project plan and available in the Update Tasks page in the standard interface

 Selecting the checkbox in the Manager Use Only column enables the field for the project plan, but not in the standard interface

If you do not want the field displayed in either location, do not select a checkbox for that field.

4. Apply the changes.

To apply changes to the project plan and continue to set desired information without closing the window, click **Apply**. To apply changes to the project plan and close the window, click **OK**.

Setting Up Exception Behavior

The master project comes with a set of predefined exception rules. A project manager can specify which exception rule(s) are to be enabled, as well as the criteria needed to trigger them. A project manager can also configure the summary condition, which is a simple color-coded indicator of the health of a project plan. The summary condition watches for exceptions that have been triggered, and changes color according to rules that can be set by the manager. The health of the project plan in terms of its cost can also be represented with the configurable cost health indicator.

For example: For a project plan with a very low margin for error, you can set the percentage of triggered exceptions needed to change the summary condition red to 20, giving clear early warning of problems.

A project plan whose cost needs watching can be configured such that its cost health indicator takes into account violations of the planned budget.

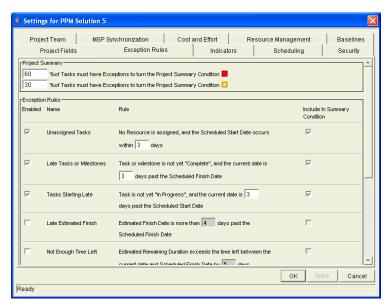


Figure 2-2. Settings window - Exception Rules tab

By default, Unassigned Tasks, Late Tasks, and Tasks Starting Late are enabled and included in the project summary condition.

Setting Exception Rule Behavior

The master project includes the exception rules described in *Table 2-1*:

Table 2-1. Exception rules for master projects

Exception Rule	Description	
Unassigned Tasks	Task has no resource assigned and Scheduled Start Date occurs in X days, where X is a user-configurable number.	
Late Tasks	Task is not yet "Complete," and the Current Day is X days past the Scheduled Finish Date.	
Tasks Starting Late	Task is not yet "In Progress," and the current date is X days past the Scheduled Start Date.	
Late Estimated Finish	Estimated Finish Date is more than X days past the Scheduled Finish Date.	
Not Enough Time Left	Estimated Remaining Duration exceeds the time left between the current date and the Scheduled Finish Date by X days.	

Table 2-1. Exception rules for master projects [continued]

Exception Rule	Description	
Predecessor Has Exception	Task directly preceding a milestone has triggered one of the above exceptions.	
Critical Path Running Late	Task preceding a milestone on the project plan critical path has triggered one of the above exceptions.	

The following parameters for 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 Summary Condition

Decides whether or not the violations of the particular exception rule are included in Project Management's summary condition (see *Summary Condition* on page 33).

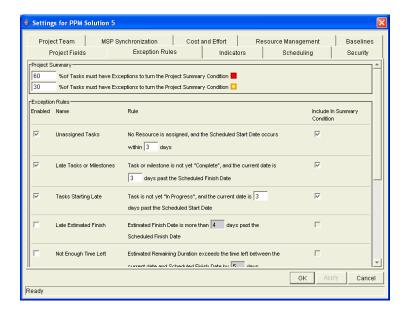
Each exception rule within the **Exception Rules** tab can be configured independently.

To set exception rule behavior:

1. From the menu at the top of the Workbench, select **Project > Settings.**

The Settings window opens.

2. Click the Exception Rules tab.



- 3. To enable a particular exception rule, select the checkbox to its left in the Enabled column.
- 4. To set the number of days that trigger a particular exception rule, enter the desired number into the text field inside that Rule.
- 5. To include a particular exception rule in a project's summary condition View, select the checkbox to its right in the Include in Summary Condition column.
- 6. Apply the changes.

To apply changes to the project plan and continue to set exception rule behavior without closing the window, click **Apply**. To apply changes to the project plan and close the window, click **OK**.



Some exception rules require that certain fields in the **Project Fields** tab be enabled in order to trigger. For example, the Not Enough Time Left rule requires Estimated Remaining Duration to be enabled. See *Selecting Information to Track and Display* on page 28 for more information on enabling fields in the Project Fields tab.

Summary Condition

The summary condition is a graphical indicator of the health of a project plan, located next to the project plan name. A project's summary condition color begins green and changes to yellow or red depending on the percentage of tasks within a project plan that have triggered exceptions. This percentage is configurable in this tab, by any project manager. A project's summary condition will not be calculated until the project plan is saved.

Table 2-2. Default values for triggering color change in summary condition

Green	0%
Yellow	30%
Red	60%

For example: A project manager sets the threshold value for yellow to 30%. Four tasks trigger an exception in a project plan consisting of ten tasks total. The summary condition view 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). Once this occurs, the summary condition indicator turns green.

To set the values for triggering color changes in the summary condition:

- 1. From the menu at the top of the Workbench, select **Project > Settings.**
 - The Settings window opens.
- 2. Click the Exception Rules tab.



3. Enter the desired triggering value into each text field.

Do not include the percent sign (%).

4. Apply the changes.

To apply changes to the project plan and continue to set exceptions without closing the window, click **Apply**. To apply changes to the project plan and close the window, click **OK**.

Cost Health Indicator

The Cost Summary is part of Mercury Financial Management, and can be enabled or disabled on a per-project-plan basis. It appears on the Project window's **Cost** tab, and as an indicator on the Project **Plan** tab if enabled in the Settings window's **Indicators** tab. It is used to indicate the health of a project plan in terms of its cost. Project cost health is calculated in the following areas:

• Cost Performance Index (CPI)

The cost efficiency ratio of the project plan's Earned Value (Baseline Costs * % Complete) to Actual Costs.

Calculated as Earned Value / Actual Cost. CPI for a healthy project plan should be at least 1.

Schedule Performance Index (SPI)

The difference in value between the scheduled completion of a task/project plan and its actual completion.

Calculated as Earned Value / Planned Value. SPI for a healthy project plan should be at least 1.

Prorated Budget

A comparison of project costs to date with the portion of the budget planned to have been spent to date.

Any one of these factors can be enabled or disabled when calculating project plan cost health.

Color	CPI	SPI	Actual Costs > Prorated Budget By
Green	> 1	> 1	< 5%
Yellow	< 1	< 1	> 5%
Red	< 0.7	< 0.7	> 10%

Table 2-3. Default values for triggering color change in cost health indicator

For example: A project manager doesn't care about CPI or SPI, but wants to know when his project plan exceeds its prorated budget by 2%. Exceeding the budget by 5% is the upper limit of tolerance.

He deselects the boxes Include CPI Violation in the Cost Indicator and Include SPI Violation in the Cost Indicator.

He configures the indicator to turn yellow if Actual Costs Exceed Prorated Budget by 2%, and red if Actual Costs Exceed Prorated Budget by 5%.

Setting Up Indicators

Project Management provides project plan indicators to give users a better ata-glance overview of their project plans in progress. The following indicators can be configured to be displayed at the master project level. Indicators appear in the Project **Plan** tab to the left of subproject and task names, where appropriate.

Constraint

Displays for tasks with scheduling constraints.

Custom Fields

Displays for project plans that have custom fields defined.

Exception

Displays for tasks that have triggered exceptions, and also displays the summary condition for project plans.

Notification

Displays for tasks that have notifications defined.

Scheduling

Displays for updated tasks or project plans that might require rescheduling.

Cost Health

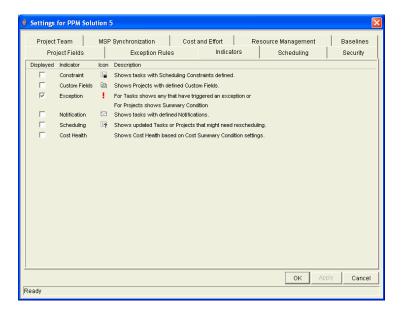
Displays for project plans that have Financial Management enabled.

To set indicators to be displayed:

1. From the menu at the top of the Workbench, select **Project > Settings.**

The Settings window opens.

2. Click the **Indicators** tab.



3. To display a particular indicator, select the checkbox to its left in the Displayed column.

The exception indicator is displayed by default.

4. Apply the changes.

To apply changes to the project plan and continue to set exceptions without closing the window, click **Apply**. To apply changes to the project plan and close the window, click **OK**.

Setting Scheduling Options

Project managers can set different scheduling options, depending on the project plan's level of resource dependency. Project Management's Scheduling Options also allow for the creation of schedules based on actual start and finish dates. The default configuration is set to not use actual dates.

Setting a Default Date From Which to Schedule

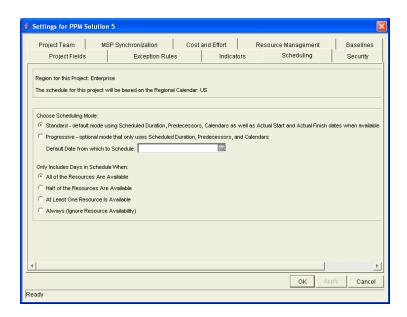
Project managers can set a default date for Project Management to start scheduling from. This is useful for setting a hard date from which to begin an initiative, no matter what occurs during the planning process.

To set a default date from which to schedule the project plan:

1. From the menu at the top of the Workbench, select **Project > Settings.**

The Settings window opens.

2. Click the Scheduling tab.



- 3. Select the **Progressive** scheduling option.
- 4. Select the desired date from the Default Date from which to Schedule field.
- 5. Apply the changes.

To apply changes to the project plan and continue to set Scheduling Options without closing the window, click **Apply**. To apply changes to the project plan and close the window, click **OK**.

Setting Scheduling With or Without Actual Start/Finish Dates

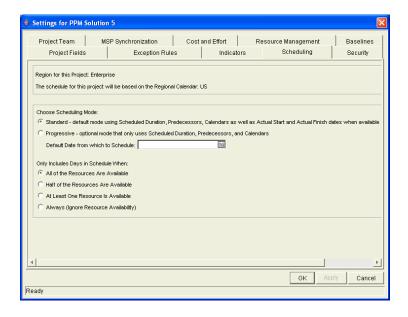
A project manager can choose to determine a project plan's schedule using actual start/finish dates. This is the default scheduling mode.



Once a project 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 master project is set to use actual start/finish dates in scheduling, it will use these dates to determine the schedule.

To determine whether scheduling is based on actual dates or not:

- From the menu at the top of the Workbench, select Project > Settings.
 The Settings window opens.
- 2. Click the **Scheduling** tab.



- 3. Set one of the two scheduling date options:
 - To schedule your project plan using actual start/finish dates, select **Standard**. This is the default setting.
 - To schedule your project plan without using actual start/finish dates, select **Progressive**.

4. Apply the changes.

To apply changes to the project plan and continue to set scheduling options without closing the window, click **Apply**. To apply changes to the project plan and close the window, click **OK**.

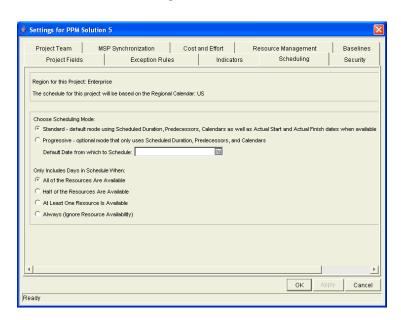
Setting Scheduling Options for Resource Dependency

Every business initiative has some minimum resource requirements, usually in the form of available personnel. The master project can be set to consider resource requirements when creating its schedule. For instance, it is possible to set the master 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 master project's schedule, Project Management will only consider days when all resources are present.

To set the minimum resource requirements for the master project schedule:

From the menu at the top of the Workbench, select Project > Settings.
 The Settings window opens.

2. Click the Scheduling tab.



3. To specify the minimum resource requirement necessary for a day to be considered available, select the condition desired.



Only one condition can be selected at a time.

4. Apply the changes.

To apply changes to the project plan and continue to set scheduling options without closing the window, click **Apply**. To apply changes to the project plan and close the window, click **OK**.

Setting the Region

Not all companies have the same work week or length of working day. Project Management allows you to schedule a project plan based on a particular regional calendar. This is set by choosing the region the project plan uses when you first create the project.

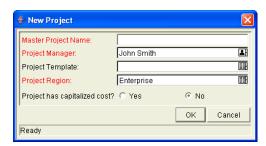


Figure 2-3. Set project region in New Project window



Only one region can be selected.

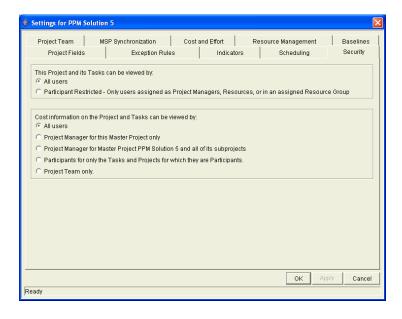
Setting Security Restrictions

Project managers can set security restrictions on a master project such that only those who are involved in the project plan can view it. Someone who is not a manager or participant in a project plan will not be able to open or edit it. Additionally, the project plan will not appear in any searches run by a non-participant or non-manager, both from the Project Workbench and Project Search page. Project Management defines project plan participants as users who are involved in project plans, but lack the administrative responsibilities of a project manager. For more information on project plan participants, see *Updating Tasks: Project Plan Participant Activities* on page 157.

Setting Security for the Master Project

To set security restrictions for a master project:

- From the menu at the top of the Workbench, select Project > Settings.
 The Settings window opens.
- 2. Click the Security tab.



- 3. Select the restriction type desired from the This Project and its Tasks can be viewed by section.
 - To allow any user to view and search for the project plan, select All Users.

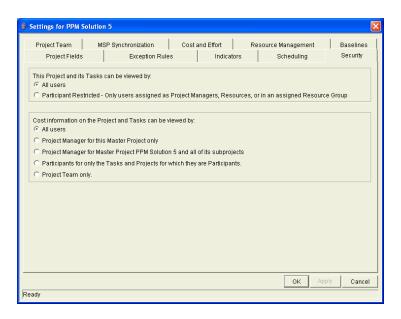
- To restrict project plan visibility to only those involved in the project plan, select **Participant Restricted**.
- 4. Apply the changes.

To apply changes to the project plan and continue to set other options in the Settings window, click **Apply**. To apply changes to the project plan and close the window, click **OK**.

Setting Security for Cost Data

To set security restrictions for a master project's Cost data:

- 1. From the menu at the top of the Workbench, select **Project > Settings.**
 - The Settings window opens.
- 2. Click the Security tab.



- 3. Select the restriction type desired from the Cost information on the Project and its Tasks can be viewed by section.
 - To allow any user to view Cost data for the project plan, select All Users.
 - To restrict Cost data visibility solely to master project and its project managers, select **Project Managers for this Master Project only.**

- To restrict Cost data visibility to the master project, and its subprojects' project managers, select Project Managers for Master Project < Project Name> and all of its subprojects.
- To restrict Cost data visibility to only those involved in the project plan, select Participants for only the Tasks and Projects for which they are Participants.
- To restrict Cost data visibility to only those specified in the Settings window's **Project Team** tab, select **Project Team only**.
- 4. Apply the changes.

To apply changes to the project plan and continue to set other options in the Settings window, click **Apply**. To apply changes to the project plan and close the window, click **OK**.

Setting Up the Project Team

Project managers can specify who will be allowed to act as resources for a project plan. Resources can be users and groups of users. In the **Project Team** tab, the project manager can choose

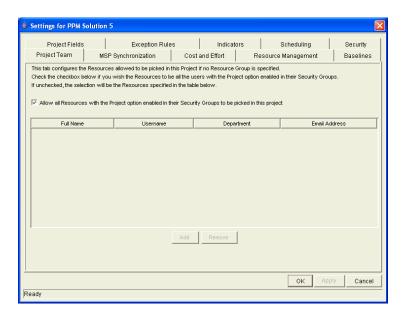
- Allow all users with the **Project** option enabled in their security groups to be resources for a project plan.
- Only allow those resources who are specified in the Project Team tab to be used as resources for a project plan. These resources are listed in the tab's resource table.



Exception: Users with the SysAdmin: Override Key Fields Segmentation access grant can add any users as a resource to the project plan.

To set up the project team for a master project:

- 1. From the menu at the top of the Workbench, select **Project > Settings.**
 - The Settings window opens.
- 2. Click the Project Team tab.

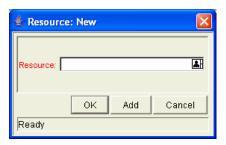


3. To allow all resources with the **Project** option enabled in their security groups to be used as resources for a project plan, click the appropriate checkbox.

Skip the steps shown below and go to the last step of this procedure.

- 4. To specify resources for a project plan, deselect the appropriate checkbox.
- 5. Click Add.

The Resource: New window opens.

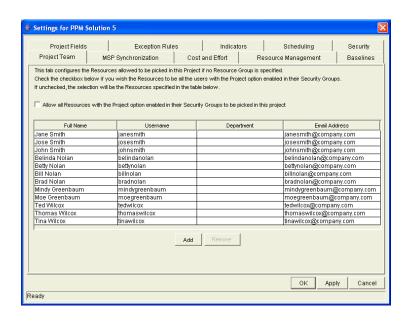


6. Select a resource or group of resources from the Resource auto-complete list.

The name of the selected resource appears in the required Resource field of the Resource: New window.

7. Add the resource.

Click **Add** to add the current resource and continue adding more resources. Click **OK** to add the current resource and close the Resource: New window.



8. Save the selections.

Click **OK** to save the selections and close the window. Click **Save** to save the selections and leave the window open.

Deleting Resources from a Project Team

To delete a specified resource from a project team:

- 1. From the **Project Team** tab, select the resource in the tab's Resource table.
- 2. Click Remove.

The resource is removed from the Resource table.

3. Save the action.

Click **OK** to save the action and close the window. Click **Save** to save the action and leave the window open.

Setting Up Microsoft Project Integration

The Project Management - Microsoft Project interface allows project managers to synchronize project information in a project plan with the project information in a Microsoft Project file. Information can also be imported from Microsoft Project to Project Management and exported from Project Management to Microsoft Project.

Project Management has three different synchronization modes that a project manager can choose from. The various synchronization modes let the project manager use different strategies for importing/exporting information between Project Management and Microsoft Project. See *Control Mode* on page 47 for more information about synchronization modes.

Before exporting or synchronization, the project manager must select a synchronization mode from the **MSP Synchronization** tab in the Settings window. The **MSP Synchronization** tab is shown in *Figure 2-4*.

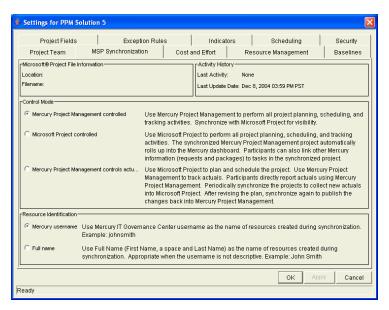


Figure 2-4. MSP Synchronization tab



The **MSP Synchronization** tab is available only for project plans, but not for project templates.



When importing information from Microsoft Project to Project Management, the **MSP Synchronization** tab is not available because the Mercury IT Governance project plan file has not been created yet. The Import Wizard performs the same functions as the **MSP Synchronization** tab sections described below.

Microsoft Project File Information

The Microsoft Project File Information section displays the path and filename information of the Microsoft Project file associated with a Project Management project plan. The Microsoft Project file can be stored on a local machine or a local network.

Activity History

The Activity History section displays information about the last synchronization, export or import that took place for this project plan.

Control Mode

The Control Mode section lets the project manager select a synchronization mode. The available options are:

Mercury Project Management-controlled

The project manager creates a project plan in Project Management to perform planning and tracking activities, such as scheduling tasks and tracking actuals. After exporting, the Microsoft Project file is used for reports and distribution. (This is the default value for new project plans created in Project Management.)

Microsoft Project-controlled

The project manager creates a project in Microsoft Project and synchronizes it in the Workbench. For all subsequent synchronizations, information in Project Management is updated with current information from Microsoft Project.

Mercury Project Management controls actuals

The project manager plans and schedules the project in Microsoft Project while using Project Management to track actuals. Each subsequent synchronization updates the Microsoft Project file with actuals data from Project Management. The Mercury IT Governance Project is updated with changes to the project structure or schedule in Microsoft Project.

Resource Identification

The Resource Identification section lets the project manager choose how missing resources created during an export or synchronization will be named in the Microsoft Project file. (This section is only enabled when the Control Mode is set to Mercury Project Management-controlled.) Select one of the following options:

Mercury username

The username is used as the name of the new Microsoft Project resource created during synchronization.

Full Name

The Full Name is used as the name of the new Microsoft Project resource created during synchronization.

After selecting the Control Mode and Resource Identification options, click **OK** to save your selections.

Importing Custom Fields from a Project Template

Project templates are used in Project Management to create repeatable processes to be used in project plans. They can be used as a model and serve as a basis for master projects or subprojects. Project templates can also contain custom fields that can capture information not normally covered by standard project plan and task fields. These custom fields are unique to their project template.

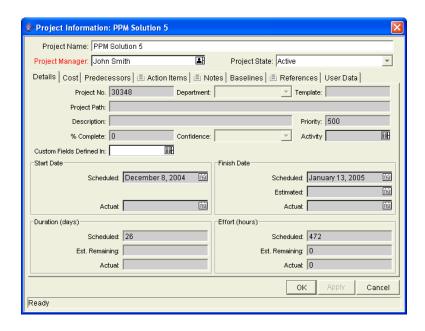
Custom fields can be associated with an existing project plan without importing the project template they come from. This allows you to capture whatever information is needed without having to simultaneously import a superfluous set of project plans or tasks. Custom fields appear in the Project or Task Information window on their own tab.

To associate custom fields from a project template with your own project plan:

- 1. Open the project plan.
- 2. In the Project Plan tab, double-click the project plan name or select it and click Edit.

The Project Information window opens.

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- 3. Select the project template containing the desired custom fields from the Custom Fields Defined In auto-complete list.
- 4. Save the changes in the Project Information window.

Click **Apply** to save changes and continue working in the Project Information window. Click **OK** to save changes and close the Project Information window. Click **Cancel** to close the Project Information window without saving any changes.

5. Save the changes to the project plan.

Click **Save** to save changes and continue working on the project plan. Click **OK** to save changes and close the project plan. Click **Cancel** to close the project plan without saving any changes.

Adding Tasks to a Project

Once the master project has been configured, you can add tasks to the project plan and specify task details, including assigning resources or resource groups. Tasks can be added individually or in a pre-sequenced group with a project template. Tasks can also be organized in a hierarchical fashion quickly and easily.

Adding Tasks to the Project Plan Tab

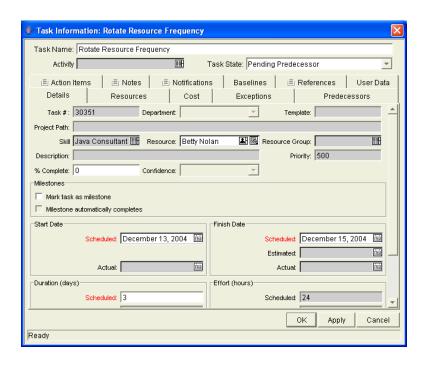
To add a task to the Project Plan tab:

1. Within the Project window, click Add Task.

A new task appears in the Project Plan tab below the current selection.

You can also add a new task by selecting the last item in the Project **Plan** tab and pressing Insert or the down arrow on your keyboard.

- 2. Edit the new task's information.
 - Tasks can be edited directly inside the Project Plan tab. Click on a field to edit its contents.
 - Tasks can also be edited through the Task Information window, which displays more detailed information on a task.
 - i. Double-click on the new task. The Task Information window opens.



- ii. Modify the information under each tab in the Task Information window as necessary (for details, see *Editing Task Information* on page 87).
- 3. Apply the changes.

To apply changes to the project plan without closing the window, click **Apply.** To apply changes to the project plan and close the window, click **OK.** You can also copy and paste tasks using **Ctrl+c** and **Ctrl+v**. Multiple tasks can be copied by holding down the **Shift** key and selecting with the mouse.

Adding Tasks Using Project Templates

Pre-defined bundles of tasks can be added with the use of project templates. The template will be copied into the working Project Plan tab as a subproject, along with its default values for Scheduled Effort, Scheduled Duration, and notifications.

To add a set of tasks using a project template:

1. Within the Project window, select **Project Created From Template** from the Add Task drop-down list.

2. Click Add.

The Add Project Template window opens.

- 3. Select a Project Template from the auto-complete list.
- 4. Click OK.

The Add Project Template window closes. The selected template is added to the project plan as a collapsed subproject.

5. Modify the information for any task inside the subproject by either editing it directly in the Project **Plan** tab, or double-clicking on the task and editing fields.

See Adding Tasks to the Project Plan Tab for more detailed information.



Project templates can be modified to contain custom fields. See *Creating Custom Fields for Project Templates* on page 193 for more detailed information.

Setting Up Project Hierarchy

Project Management allows users to add tasks and subprojects (from templates) in any order. Once the tasks have been added, Project Management users can also arrange and group them in a hierarchy.

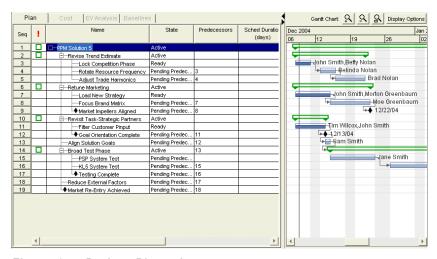


Figure 2-5. Project Plan tab

To move an item up in the hierarchy:

- 1. In the Project Plan tab, select the task or collapsed subproject.
- 2. Click the **Up Arrow** button or press **Ctrl+up arrow** on your keyboard.

The selected task or subproject moves up in the list.

- If the selected item is not at the same level as the item it is switched with, it is indented or out-dented to match the level of the item it is switched with.
- If the switch results in a subproject with no immediate children, that subproject is converted to a task after it moves.

To move an item down in the hierarchy:

- 1. In the Project Plan tab, select the task or collapsed subproject.
- 2. Click the **Down Arrow** button or press **Ctrl+down arrow** on your keyboard.

The selected task or subproject moves down in the list.

- If the item immediately above the selected item is an expanded subproject, the selected item becomes its child.
- If the item immediately above the selected item is a collapsed subproject or task, the selected item is indented or outdented to match the subproject or task's level.
- If the selected item was the only child of a subproject, that subproject is converted to a task after the selected item moves.

To indent an item:

- 1. In the Project Plan tab, select the task or collapsed subproject.
- 2. Click the **Right Arrow** button or press **Ctrl+right arrow** on your keyboard.

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

• If the item immediately above the selected item is a task, that task is converted to a subproject.



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

To outdent an item:

- 1. In the Project Plan tab, select the task or collapsed subproject.
- 2. Click the **Left Arrow** button or press **Ctrl+left arrow** on your keyboard.

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

- If the selected item was a child of a subproject, it becomes either a task or subproject on the same level as its former parent.
- If the selected item was a subproject's only child, that subproject is converted to 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 subproject.

Useful Keyboard Shortcuts in the Project Plan Tab

Tasks and subprojects within the Project Plan tab can be manipulated from the keyboard as well as the buttons in the Project window. *Table 2-4* lists all available keyboard shortcuts.

Table 2-4. Keyboard shortcuts in the Project Plan tab

Keystroke	Action
Insert	Inserts a task into the hierarchy above the current row.
Delete	Deletes the selected task from the project plan.
Ctrl+Up Arrow	Moves a task up in the hierarchy.
Ctrl+Down Arrow	Moves a task down in the hierarchy.
Ctrl+Left Arrow	Outdents a task in the hierarchy.
Ctrl+Right Arrow	Indents a task in the hierarchy.
Down Arrow (on last task in hierarchy)	Adds a new task to the hierarchy below the last row.

Table 2-4. Keyboard shortcuts in the Project Plan tab

Keystroke	Action	
Ctrl+C	Copies the selected task.	
Ctrl+V	Pastes a task or tasks (must be on the project plan's last line).	
F2	Edits the selected cell in the Project Plan tab.	
ESC	Cancels changes to a cell in the Project Plan tab.	
Left or Right Arrow (while editing)	Saves edits and moves cursor to the next cell in the Project Plan tab.	

Attaching Additional Information to a Project or Task

Tasks and subprojects can contain other types of information, such as Demand Management requests, Change Management packages, attachments, and URLs. They can also be configured to send notifications based on certain conditions.

Project managers can create tasks from requests in the Workbench. The newly created task is linked as a reference to the originating request. See *Creating a Task From a Request* for more information.

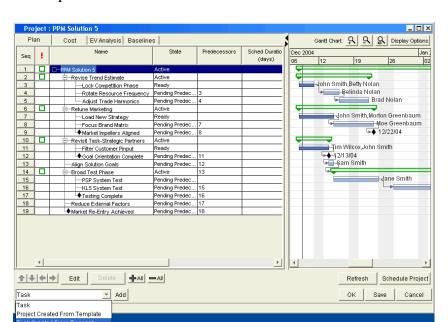
Refer to *Configuring Tasks* on page 79 for detailed instructions on:

- Assigning Resources
- Setting Up Notifications
- Editing Task Information
- Attaching References to Tasks
- Configuring Task Predecessors
- Setting Scheduling Constraints

Creating a Task From a Request

A task can be created from a request and added to the project plan. The new task will have a reference to the originating request.

To create a task from a request:



1. Within the Project window, select **Task Created From Request** from the drop-down list at the bottom left corner of the window.

2. Click Add.

The New Task From Request window opens.

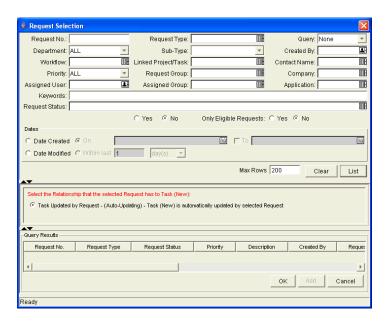


3. Specify the request(s) to use in the Request No auto-complete list, or click **Search** to search for the request(s).

The Request Selection window opens.

4. Search for the request(s) to use by entering search criteria in the appropriate fields and clicking **List**.

The requests that match your search criteria display in the Query Results section of the window.



5. Select the request(s) in the Query Results section that you want turn into tasks.

You can select multiple requests in the Query Results section. When they are added to the project plan, a new task is created for each selected request.

6. Create the new task.

Click **OK** to create the new task and close the window. Click **Add** to create the new task and perform additional searches for more requests.

7. Save the new task.

Click **Save** to save the new task and leave the Project window open. Click **OK** to save the new task and close the Project window. The new task has been created from the selected request and is part of the current project plan. The task is linked to the request. You can change the reference for this task at any time by double-clicking it, opening the Task Information window and editing it in the **References** tab.

Adding Milestones

Milestones are used to mark significant events in a project plan, often the completion of a deliverable or arrival of a deadline. As markers, milestones are typically set by project managers to complete as soon as they are reached and therefore generally do not have effort or duration, though they can be configured to possess duration. Milestones are created the same way as tasks.

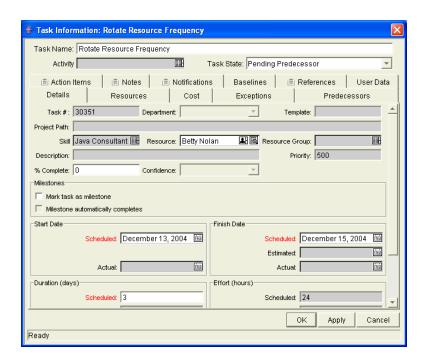
To create a Milestone:

1. Within the Project window, click Add Task.

A new task appears in the Project **Plan** tab below the current selection. You can also add a new task by selecting the last item in the Project **Plan** tab and pressing Insert or the down arrow on your keyboard.

2. Double-click on the new task.

The Task Information window 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.

- 4. Modify the information under each tab in the Task Information window as necessary (for details, see *Editing Task Information* on page 87).
- 5. Apply the changes.

To apply changes to the task without closing the window, click **Apply**. To apply changes to the task and close the Task Information window, click **OK**. To close the Task Information window without saving changes, click **Cancel**.



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

Setting Up Project Dependencies

Project Management allows you to create dependencies between a project plan or task and another, completely separate project plan or task.

For example: Manager Bob has a Training project plan for a new software module being installed on his group's computers. In order for his project plan to get started, the Software Upgrade project plan headed by Manager Steve must be finished first. Bob can create a Finish-Start Dependency relationship between the Software Upgrade project plan and his own Training project plan.

These dependency relationships are controlled from the **Predecessors** tab of the Project or Task Information window.

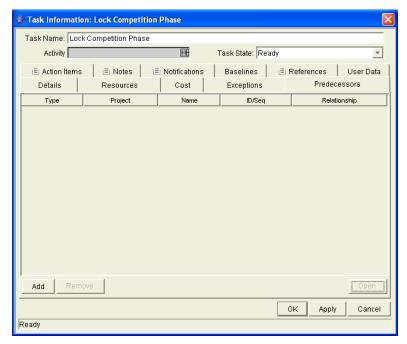


Figure 2-6. Predecessors tab of the Task Information window

The types of predecessor relationships available are described in *Table 2-5*.

Table 2-5. Possible predecessor relationships to a project or task

Predecessor Type	Description	Possible Relationships	
Task/Project	A task or project plan in the current project plan	Finish/Start - The project plan or task can start once its predecessor has completed.	
External Task	A task from a separate project plan	Finish/Start - The project plan or task can start once its predecessor has completed.	
External Project	A separate project plan	Finish/Start - The project plan or task can start once its predecessor has completed.	
Request	A request (possible for tasks only)	Finish/Start - The task can start once its predecessor has completed.	
		Finish/Finish - The task and request can start at the same time, but neither will be marked complete until both are complete.	

Setting Internal Predecessors

Setting a project/task predecessor that is contained in the same project plan can be done directly in the Project **Plan** tab.

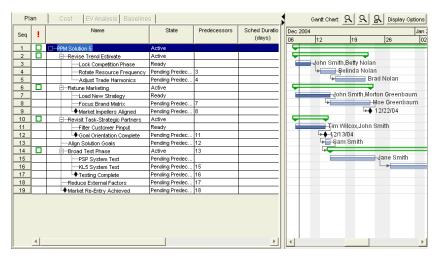


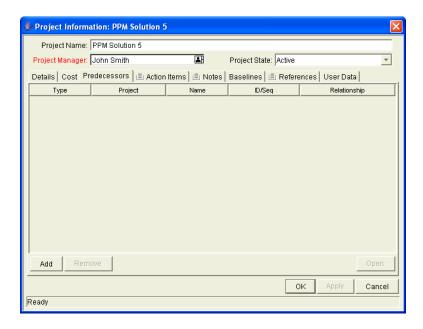
Figure 2-7. Project Plan tab

In the Predecessor column, type the sequence number of the desired predecessor project or task and click **Save** to save changes.

Setting an External Predecessor Task

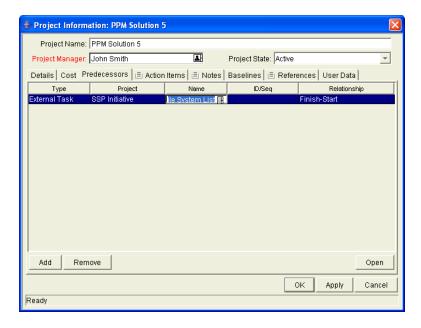
To set an external predecessor task for a task or project plan:

- 1. Open the Project or Task Information window of the project plan or task.
- 2. Click the Predecessors tab.



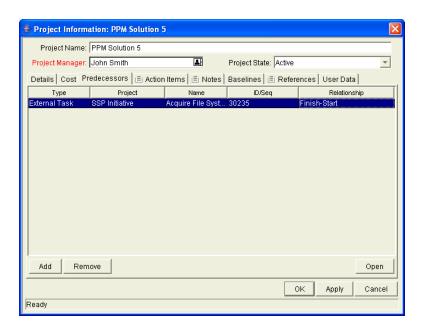
3. Click Add.

A line is added to the **Predecessors** tab table.



- 4. In the Type column, select External Task from the drop-down list.
- 5. In the Project column, select the external project plan from the autocomplete list.

- 6. In the Name column, select the task Name from the auto-complete list.
- 7. Click the field in the ID/Seq column to display the task ID.



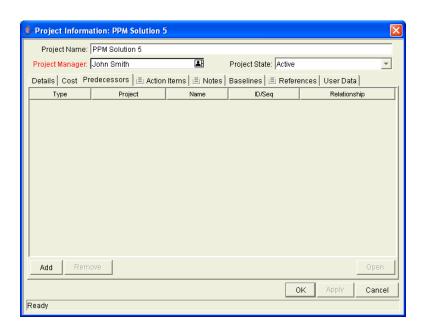
8. Apply the changes.

Click **Apply** to save changes and continue working in the Project or Task Information window. Click **OK** to save changes and close the Project or Task Information window. Click **Cancel** to close the Project or Task Information window without saving any changes.

Setting an External Predecessor Project

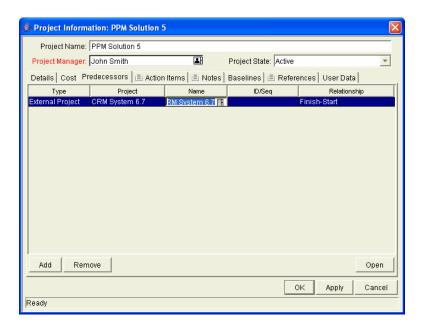
To set an external predecessor project for a task or project plan:

- 1. Open the Project or Task Information window of the project plan or task.
- 2. Click the Predecessors tab.

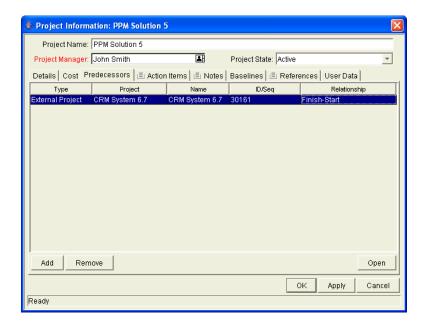


3. Click Add.

A line is added to the **Predecessors** tab table.



- 4. In the Type column, select External Project from the drop-down list.
- 5. In the Project column, select the external project plan from the autocomplete list.
- 6. In the Name column, select the project plan or subproject name from the auto-complete list.
- 7. Click the field in the ID/Seq column to display the project plan or subproject ID.



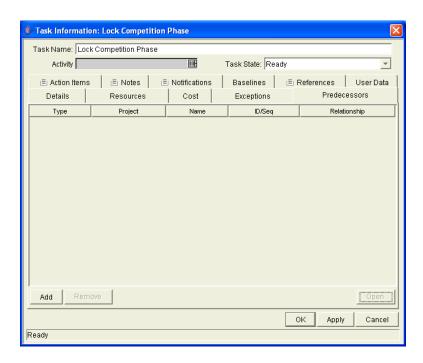
8. Apply the changes.

Click **Apply** to save changes and continue working in the Project or Task Information window. Click **OK** to save changes and close the Project or Task Information window. Click **Cancel** to close the Project or Task Information window without saving any changes.

Setting an External Predecessor Request

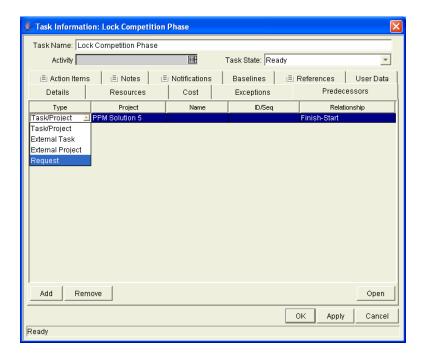
To set an external predecessor request for a task:

- 1. Open the Task Information window of the task.
- 2. Click the Predecessors tab.

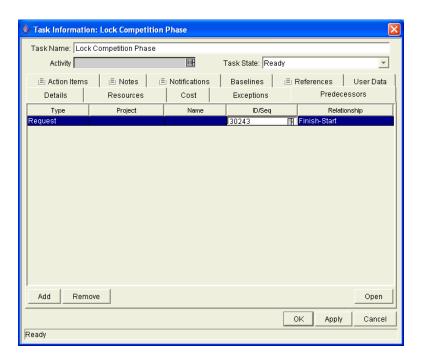


3. Click Add.

A line is added to the **Predecessors** tab table.



- 4. In the Type column, select **Request** from the drop-down list.
- 5. In the ID/Seq column, select the request ID from the auto-complete list.
- 6. In the Relationship column, select **Finish-Start** or **Finish-Finish** from the drop-down list.



7. Apply the changes.

Click **Apply** to save changes and continue working in the Task Information window. Click **OK** to save changes and close the Task Information window. Click **Cancel** to close the Task Information window without saving any changes.

Creating a Master Project Schedule

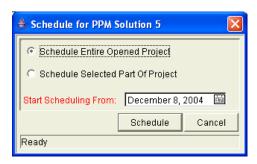
Project Management generates schedules for master projects, based on the configurations set in the **Scheduling** tab of the Settings window.

Generating the Schedule

To generate the schedule for a master project:

1. In the Project window, click Schedule Project.

The Scheduling window opens.



- 2. Specify whether to schedule all or part of the project.
 - a. To schedule the whole project, select Schedule Entire Opened Project.
 - b. To schedule only a specific part of the project, make sure you have selected the part you want to schedule in the Project Plan tab, and select Schedule Selected Part of Project. If a subproject is clicked, all of its children will be scheduled.
- 3. Specify a date to begin scheduling from by clicking on and selecting from the Start Scheduling From field.
- 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 project 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 2-6* describes scheduling errors, their causes, and possible solutions.

Table 2-6. 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.	Break the cycle by removing or changing a predecessor.
Not enough available resources for task	The amount of working days available from the pool of resources assigned to a task is less than the duration of the task. This situation can occur if a resource does not have any available working days, or perhaps for contractors who only have set periods of time to work.	Assign more resources to the task, increase resource availability via resource calendars, or change the Scheduling setting to require less resource availability.
Selected Subproject has dependencies outside of items to be scheduled	There are tasks or projects that are not in the selected sub-tree, but have predecessors in the selected sub-tree.	Select a larger sub-tree that includes all dependents, or remove the dependencies.
No tasks to be scheduled	There are no non-complete, non- cancelled tasks within the selected sub-tree to be scheduled	Add tasks, or select a larger sub-tree that includes non-complete or non-cancelled tasks.

Scheduling Warnings

It is possible for certain combinations of input when using actual-based scheduling or scheduling constraints to cause a schedule to be potentially unworkable. Warnings appear when actual-based scheduling has been specified. The schedule will still be created, however. *Table 2-7* describes scheduling warnings, their causes, and possible solutions.

Possible Solution Scheduling Cause Warning The duration for a task is longer than the number of available Move the actual finish Duration extends working days between the date, change the past finish date for earliest possible start date and duration, or change the task the actual finish date. This number of available assumes there is no actual start working days. date. The duration of a task is longer Duration does not fit Change actual dates. than the number of available within actual dates of duration, or number of working days between the actual task available working days. start and finish dates. Change actual start Actual start date of The actual start date of a task date, predecessors, or task occurs before occurs before its earliest the earliest possible predecessor finishes possible start date. start date.

Table 2-7. Scheduling warnings, causes, and possible solutions

Establishing a Project Baseline

A baseline is the original approved project 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 plan in terms of schedule and cost by comparing the current project plan to the baseline plan.

Selecting Baseline Fields

You can select any of the following project plan fields to display in the baseline view:

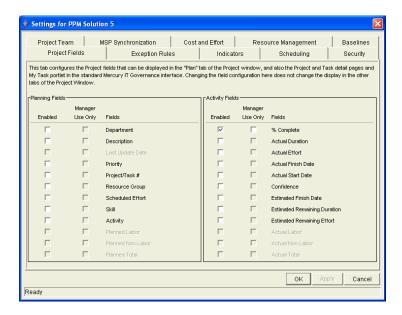
- Activity
- Summary Condition
- Scheduled Start
- Scheduled Duration

- Scheduled Finish
- Scheduled Effort
- Predecessor Information
- Resource/project manager
- Department
- Description
- Priority
- Resource Group
- Task Category
- Planned Labor
- Planned Non-Labor
- Planned CapEx
- Planned OpEx
- Planned Cost
- Skill

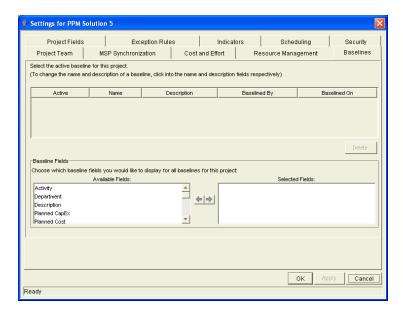
To select fields for a baseline:

- 1. Open the project plan.
- 2. From the menu at the top of the Workbench, select ${f Project} > {f Settings}$.

The Settings window opens.



3. Click the Baselines tab.



- 4. In the Baseline Fields section, double-click the fields or use the arrow buttons to move fields from the Available Fields list to the Selected Fields list.
- 5. Apply the changes.

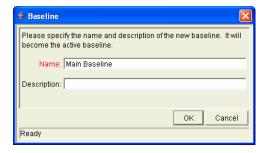
To apply changes to the project plan and continue to set baseline options without closing the window, click **Apply**. To apply changes to the project plan and close the window, click **OK**.

Taking a Baseline

To take a baseline:

- 1. Open the project plan.
- 2. Select **Project > Baseline** from the menu at the top of the Workbench.

The Baseline window opens.



- 3. Enter a Name and optional Description for the baseline.
- 4. Click OK.

The baseline has been taken. It can be viewed from the **Baselines** tab of the Project window.

5. Click **Save** to save the baseline along with the project plan.

Managing Baselines

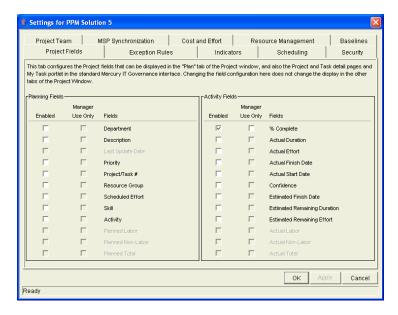
Multiple baselines can be taken for a single project plan. You can specify which is the active project plan baseline, as well as delete baselines at any time.



While any project manager can see the active baseline for a project plan, only the project manager for the master project can manage baselines (take new baselines, delete baselines, specify the active baseline).

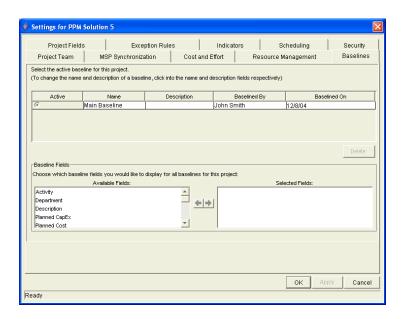
To manage project plan baselines:

- 1. Open the project plan you have taken baselines of.
- 2. From the menu at the top of the Workbench, select **Project > Settings.**



The Settings window opens.

3. Click the Baselines tab.



- 4. Select the radio button next to the baseline you want to be active for the project plan.
- 5. (Optional) Highlight a baseline you want to delete.
- 6. (Optional) Click Delete.

a. A dialog box will open asking if you are sure you want to delete the baseline.



- b. Click **Yes** to delete the baseline.
- 7. Apply the changes.

To apply changes to the project plan and continue to set baseline options without closing the window, click **Apply**. To apply changes to the project plan and close the window, click **OK**.

Comparing Baselines

The Project Schedule Change report can be used to compare baselines to each other, or to the project plan schedule as it currently stands. See *Reports by Category* on page 269 for a full listing of all Project Management reports.

Chapter 3 Configuring Tasks

In This Chapter:

- Overview of Configuring Tasks
- Task Elements
 - Notifications
 - References
 - Activities
 - Task States
- Adding Tasks to Project Plans
 - Creating a Task From a Request
 - Creating a Milestone
- Editing Task Information
- Assigning Resources
 - Assigning Resources in the Project Plan Tab
 - Assigning Resources in the Task Information Window
 - Assigning Multiple Resources in the Task Information Window
 - Assigning Resource Groups
 - Determining Project Resources
- Assigning Skills
- Adding Action Items
- Adding Notes
- Setting Up Notifications
 - Using Smart URLs in Notifications
 - *Nested Tokens in Notifications*
- Entering Cost Data
- Attaching References to Tasks
 - Attaching Existing Requests

- Attaching New Requests
- Attaching Packages
- Attaching New Packages
- Attaching Tasks
- Attaching Releases
- Attaching Documents
- Attaching URLs
- Dependency Relationships
- Configuring Task Predecessors
- Changing the Task State
- Setting Scheduling Constraints
- Configuring User Data
 - Project/Task User Data Roll-Up

Overview of Configuring Tasks

This chapter explains how to configure tasks within a project plan, including assigning resources, setting up notifications, and creating Milestones.

Task Elements

Project plans are repositories of information consisting of tasks, action items, subprojects, notes, and references. These elements define and process specific business initiatives within an organization. Project plans are not static entities. They gather additional information and are modified as they move through their tasks to completion.

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

Tasks also need to be modified as issues arise during the project plan, 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 project plan. 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 task.
- The changing of a task's state designation. For example, the task could progress from 'Ready' to 'In Progress.'
- The triggering of an exception rule by a task.
- The arrival of a task's start or finish date approaches.

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 can create tasks from requests in the Workbench. Once the task is created, it automatically has a reference to the originating request. See *Creating a Task From a Request* on page 83 for additional details.

Activities

Tasks can be grouped by user-defined categories into activities. For example, certain tasks could be grouped within a Design category, while other tasks could be grouped within a Production category. Activities can be marked as capitalized and used to track SOP 98-1 compliance. For more information on activities and their use, see the *Mercury Financial Management User's Guide*.

Task States

In the Workbench, the task state is displayed in the State column of the Project window. The available states for a task are defined in *Table 3-1*.

Table 3-1. Task state definitions

Task State	Definition
New	A newly created task starts in this state.
Pending Predecessor	A task that is holding for one or more predecessors to be completed.
Pending Request	A task that is holding for one or more requests 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 plan.
Bypassed	An incomplete task that is left unfinished after the project plan is completed.



Note

Depending on their defined level of responsibility in a project plan, users can only be able to change tasks between certain states.

For example, project managers can change a task from **Ready** to **In Progress** to **Cancelled**, or from **Bypassed** back to **Ready**. Project participants are only able to change a task from **Ready** to **In Progress** to **Complete**.

Available task states can also depend on the state of the project plan.

Adding Tasks to Project Plans

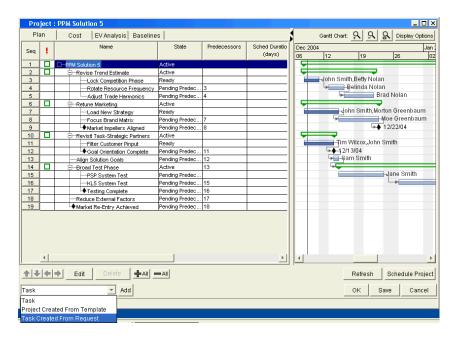
Tasks can be added to a project plan individually or in a pre-sequenced group, as defined in a project template. Tasks can also be quickly and easily organized in a hierarchical fashion. See *Adding Tasks to a Project* on page 50 for more information.

Creating a Task From a Request

A task can be created from a request on the Project window in the Workbench. The new task will have a reference to the originating request.

To create a task from a request:

- 1. Log on to Mercury IT Governance Center and open the Workbench.
- 2. Open a project plan.
- 3. Go to the Project Plan tab.



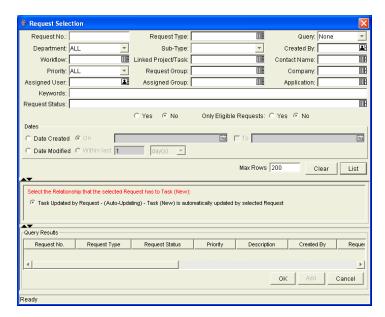
- 4. Select **Task Created From Request** from the drop-down list at the bottom left corner of the window.
- 5. Click Add.

The New Task From Request window opens.



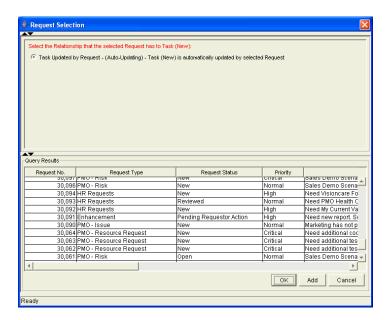
6. Specify the request(s) to use in the Request No. auto-complete list, or click **Search** to search for the request(s).

The Request Selection window opens.



- 7. Search for the request(s) to use by entering search criteria in the appropriate fields.
- 8. Click List.

The requests that match your search criteria display in the Query Results section of the window.



9. Select the request(s) in the Query Results section that you want turn into task(s).

You can select multiple requests in the Query Results section. When they are added to the project plan, a new task is created for each selected request.

- 10. Make sure that **Task Updated by Request** is specified as the Relationship.
- 11. Click **OK** to create the new task and close the window or click **Add** to create the new task and perform additional searches for more requests.

The new task has been created from the selected request and is part of the current project plan. The task is linked to the request. You can change the reference for this task at any time by double-clicking it, opening the Task Information window and editing it in the **References** tab.

12. Click **Save** to save the new task and leave the Project window open or click **OK** to save the new task and close the Project window.

Creating a Milestone

Milestones can be created for a project plan in the same way as tasks.

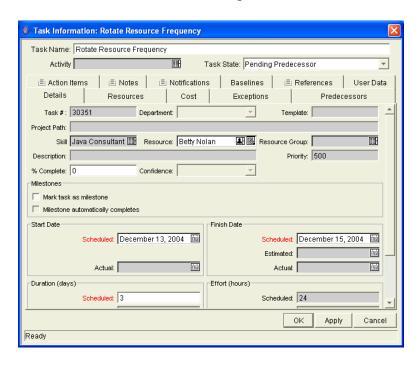
To create a Milestone:

1. Within the Project window, click Add Task.

A new task appears in the Project **Plan** tab below the current selection. You can also add a new task by selecting the last item in the Project **Plan** tab and pressing **Insert** or the down arrow on your keyboard.

2. Double-click on the new task.

The Task Information window 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.

- 4. Modify the information under each tab in the Task Information window as necessary (for details, see *Editing Task Information*).
- 5. Apply the changes.

To apply changes to the task without closing the window, click **Apply**. To apply changes to the task and close the Task Information window, click **OK**. To close the Task Information window without saving changes, click **Cancel**.



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

Editing Task Information

Users with appropriate security permissions can edit information for tasks displayed in the Project **Plan** tab. Task information can be edited directly in the Project **Plan** tab, or in the Task Information window.

To edit task information from the Project Plan tab:

- 1. Locate the task to edit.
 - If you are editing an existing task, query and open an existing project plan.
 - If you are editing a newly created task, you are already in the Project **Plan** tab.
- 2. Click on any desired fields to edit their contents directly.
- 3. Click **OK** or **Save** to save the information.

To edit task information in the Task Information window:

- 1. Locate the task to edit.
- 2. Open the Task Information window and do one of the following:
 - Query and open the task directly from the Task Workbench. The Task Information window opens.
 - Query and open an existing project plan. Double-click the task to edit, or select it and click **Edit**. The Task Information window opens.
- 3. Make whatever changes are necessary in the Task Information window.

4. Click **OK** or **Save** to save the information.



Updating information in the Project **Plan** tab is more direct, while more detailed information can be edited in the Task Information window.

Assigning Resources

Users with appropriate security permissions can assign resources to tasks displayed in the Project **Plan** tab. Resources can be assigned directly in the Project **Plan** tab, or in the Task Information window.

Assigning Resources in the Project Plan Tab

Resources can be assigned for new and existing tasks in the Project **Plan** tab in the following ways:

• You can select a resource directly by clicking the **Resource** icon.

Figure 3-1. Resource icon

 You can search for and then assign a suitable resource by clicking the Resource Finder icon.



Figure 3-2. Resource Finder icon

For more detailed information on using the Resource Finder, see the *Mercury Resource Management User's Guide*.

To assign resources to existing and new tasks in the Project **Plan** tab:

- 1. In the Workbench, open the Project **Plan** tab for the project plan you are editing.
 - If you are assigning resources to an existing task, query and open the project plan containing the task.

- If you are assigning resources to a newly created task, you are already in the Project **Plan** tab.
- 2. Select the task to assign resources.
- 3. Click the **Resource** icon to assign a resource, or the **Resource Finder** icon to search for and assign an appropriate resource.

See the *Mercury Resource Management User's Guide* for more detailed information on using the Resource Finder.

4. Click **OK** or **Save** to save the information.

Assigning Resources in the Task Information Window

Resources can be assigned to existing tasks and new tasks in the Task Information window.

To assign resources to existing or new tasks in the Task Information window:

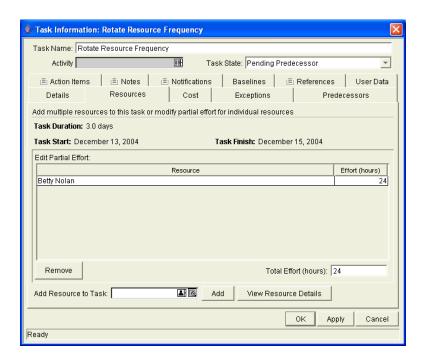
- 1. Open the Task Information window.
- 2. Click the **Details** tab.
- 3. Select a resource from the Resource field.
- 4. Click **OK** or **Apply** to save the information.

Assigning Multiple Resources in the Task Information Window

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

To assign multiple resources to existing or new tasks in the Task Information window:

- 1. Open the Task Information window.
- 2. Click the Resources tab.



- 3. Specify a resource in the Add Resource to Task auto-complete list.
- 4. Click Add.

Repeat as necessary.

- 5. To adjust the number of effort hours for a resource, click the numeric field in the Effort (hours) column and enter a new value.
- 6. Save the information.

Click **Apply** to store the information and continue to work in the Task Information window, or click **OK** to save the information and close the window. The resource assignments will not be saved until you click either.

Assigning Resource Groups

In order to add resource groups, first make sure that the field is enabled in the Project Settings. See *Selecting Information to Track and Display* on page 28 for details.

Determining Project Resources

Project managers can specify users who will be allowed to act as resources for a project plan. In the **Project Team** tab of the Project Settings window, the project manager can choose one of the following:

- Allow all users with the **Project** option enabled in their security groups to be resources for a project plan.
- Allow only those resources who are specified in the Project Team tab to be used as resources for a project plan. These resources are listed in the tab's Resource table.

See *Setting Up the Project Team* on page 43 for more information about setting up the resources in the **Project Team** tab for a master project.

Assigning Skills

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

To assign skills to existing and new tasks in the Project **Plan** tab:

- 1. In the Workbench, open the Project **Plan** tab for the project plan you are editing.
 - If you are assigning a skill to an existing task, query and open the project plan containing the task.
 - If you are assigning a skill to a newly created task, you are already in the Project **Plan** tab.
- 2. Select the task to assign a skill to.
- 3. Select a skill from the task line, in the Skill column.
- 4. Click **OK** or **Save** to save the information.

Adding Action Items

Action items are used to capture important "to do" items that do not require the formal definition, tracking, and hierarchical restrictions of a task. Action items can be added to existing tasks and new tasks. Action items are added in the Task Information window.

To add an action item to a task:

- 1. Open the Task Information window.
- 2. In the Task Information window, click the Action Items tab.
- 3. Click Add.

The Action Item window opens.

4. Enter information in the required fields and drop-down lists.

Select Required = **Yes** if you want the action item to be required. The task will not complete until the action item has been completed.

- 5. Click **Add** to add the action item and continue to create more, or click **OK** to add the action item and close the window.
- 6. Save the action item.

Click **Apply** to store the information and continue to work in the Task Information window, or click **OK** to save the information and close the window. The action item will not be saved until you click **OK**.

7. Save the task information.

If the Task Information window is opened from the Project **Plan** tab, you must click **OK** or **Save** in the Project window to save the task information.

Adding Notes

Users can enter free-form text in the **Notes** tab of the Task Information window. Saved entries are marked with a timestamp.

To add notes to a task:

- 1. Open the Task Information window.
- 2. In the Task Information window, click the **Notes** tab.
- 3. Enter any notes into the New Notes text field.

To increase the viewable area, click **Enlarge**.

- 4. Click **Apply** to store the notes and continue to work inside the Task Information window, or click **OK** to save the notes and close the window. The notes will not be saved until you click **OK**.
- 5. Click **OK** or **Save** in the Project window to save the task information.



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

Setting Up Notifications

Notifications are set up in the Task Information window.

To set up a notification for a task:

- 1. Open the Task Information window for the task.
- 2. In the Task Information window, click the **Notifications** tab.
- 3. Click New.

The Add Notification for Task window opens.

4. In the **Setup** tab, enter information as described in the *Table 3-2* on page 95.

The Event drop-down list allows you to choose to send a notification based on any of the following criteria:

- The task has reached a specific state.
- The task has triggered a particular exception.
- The task's Scheduled Start or Finish date is approaching, has arrived, or has passed.
- 5. To add a new user to the Recipients, click New.

The Add New Recipient window opens.

- 6. Enter information in the required fields.
- 7. Click **Add** to add the new recipient.

Note that the enabled **Multi** capability of the Username auto-complete list enables you to select multiple recipients. Click **OK** to return to the Add Notification for Task window. Click **Cancel** to return to the Add Notification for Task window without saving any changes.

- 8. (Optional) In the Add Notification for Task window you can use the **Edit** and **Delete** buttons to modify the list of recipients. Click **Token** to view the available tokens.
- 9. (Optional) Click the **Message** tab in the Add Notification for Task window if you want to view and edit the message notification template.
- 10. (Optional) Notifications can be configured to include the Web address (URL) for a specific project plan or task. This is referred to as a Smart URL. You can include a Smart URL token for the notification. See the next section, *Using Smart URLs in Notifications*, for more information.
- 11. Click **OK** to close the window.

Using Smart URLs in Notifications

Notifications can be configured to include the Web address (URL) for the specific project plan or task. When users receive a notification email and click the URL, they are taken directly to the project plan or task. The available tokens for project plans and tasks are described in *Table 3-2*.

Table 3-2. Smart URL tokens

Smart URL Token	Description
PROJECT_URL	URL to access the Project Overview page for this project plan.
WORKBENCH_PROJECT_URL	URL to access the Project window for this project plan in the Workbench.
TASK_URL	URL to access the Task Detail page for this task.
WORKBENCH_TASK_URL	URL to access the Task Information window for this task in the Workbench.

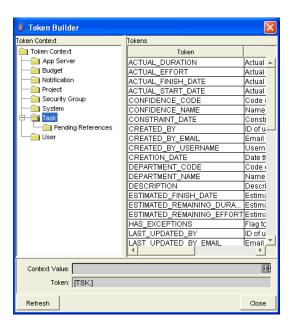
To use a Smart URL:

- 1. Follow the procedure described in *Setting Up Notifications*.
- 2. Open the Task Information window.
- 3. Click the **Notifications** tab.
- 4. Click New.

The Add Notification for Task window opens.

- 5. Click the Message tab.
- 6. Click Tokens.

The Token Builder window opens.



7. Click either the project or task folder to display the list of tokens.

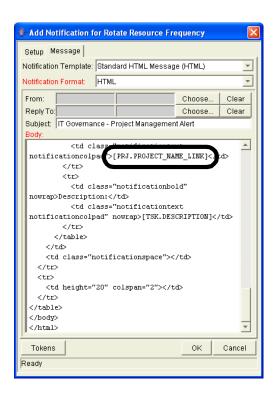
The figure above shows the Smart URLs for tasks.

8. In the Token column of the window, select the appropriate token from the list of tokens, such as CREATED_BY or DEPARTMENT_CODE for project plans.

The token you select displays in the Token field.

- 9. Select the token in the Token field.
- 10. Press **Ctrl+c** to copy the token's name.
- 11. Click **Close** to close the Token Builder window.
- 12. Click in the notification's Body text section at the point where you want to insert the Smart URL.
- 13. Press **Ctrl+v** to paste the token of the Smart URL in the Body section.

The figure below shows the project plan URL in the Body section of an HTML-format notification.



- 14. Click **OK** to close the Add Notification for Task window.
- 15. Click **OK** to close the Task Information window.

The email notification sent from this task will contain a URL to open a specific project plan or task.

Nested Tokens in Notifications

Notifications can be configured to include project plan information using tokens. As project plan hierarchies become more complex, token syntax can become correspondingly involved. For example, consider a project plan with the following structure:

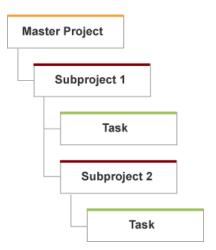


Figure 3-3. Sample project structure

A notification from task 2 can use tokens to refer to project plan information on any level above it. The sample notification below displays the Project Name for the master project and its subprojects.

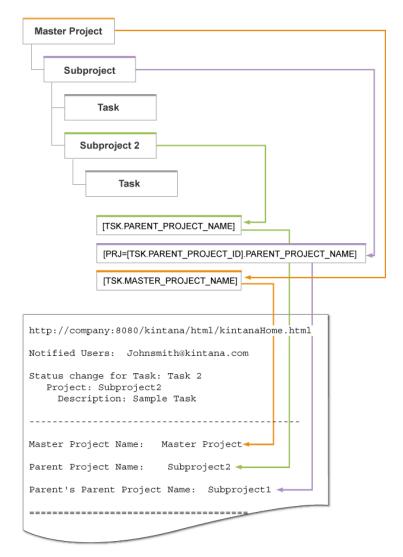


Figure 3-4. Sample notification with nested tokens

Entering Cost Data

If Project Management's Financial Management capability has been enabled for this project plan, you can track and enter Actual Cost data in the Project window. See the *Mercury Financial Management User's Guide* for more detailed information.

Attaching References to Tasks

Project Management features a number of methods for capturing additional information, or references, related to your project plans. References are attached from the Task Information window.

To attach references to a task:

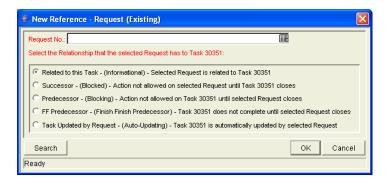
- 1. Open the Task Information window.
- 2. In the Task Information window, click the **References** tab.
- 3. Attach the reference.

Attaching Existing Requests

To attach an existing request to a task:

- 1. Open the Task Information window.
- 2. Click the References tab.
- 3. Select Request (Existing) from the New Reference drop-down list.
- 4. Click Add.

The New Reference - Request (Existing) window opens.



- 5. To select the request to attach, use one of the following methods:
 - Enter the request number in the Request No. field or select a request from the Request No. auto-complete list. (Hold down Ctrl+click or Shift+click to select more than one request.) The selected request

displays in the Request No. field. If you selected multiple requests, they all display in the Request No. field separated by semi-colons.

- Click **Search** to search for requests in a separate query window and follow the procedure in *Searching for Requests to Attach*.
- 6. Select the type of relationship you want to assign between the task and its reference from the list.

See *Dependency Relationships* on page 113 for a description of the various relationships that can be assigned.

7. Click OK.

You return to the **References** tab in the Task Information window. The new attached request displays as a reference.

8. Click **OK** to close the Task Information window.

You return to the Project window.

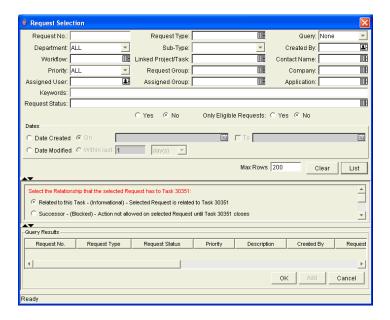
9. Click **Save** to save the attached request as a reference in the project plan.

Searching for Requests to Attach

To search for requests to attach to a task:

1. From the New Reference - Existing Request window, click Search.

A new query window opens.



- 2. Query for the request(s) you want to use by entering search criteria in the appropriate fields.
- 3. Click List.

The requests that match your search criteria display in the Query Results section of the window.

- 4. Select the request(s) in the Query Results section that you want to attach to a task.
- 5. Select the type of relationship you want to assign between the task and its request.

See *Dependency Relationships* on page 113 for a description of the various relationships that can be assigned.

6. Click **OK** to attach the request(s) to the task and close the current window.

You return to the **References** tab in the Task Information window.

- 7. After you return to the Task Information window, the new attached request displays as a reference.
- 8. Click **OK** to close the Task Information window.

You return to the Project window.

9. Click **Save** to save the attached request as a reference in the project plan.

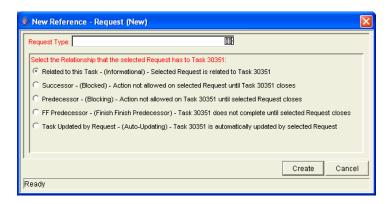
Attaching New Requests

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

To attach a new request to a task:

- 1. Open the Task Information window.
- 2. Click the References tab.
- 3. Select Request (New) from the New Reference drop-down list.
- 4. Click Add.

The New Reference - Request (New) window opens.



- 5. Select a request type from the Request Type auto-complete list.
- 6. Select the type of relationship you want to assign between the task and its reference from the list.

See *Dependency Relationships* on page 113 for a description of the various relationships that can be assigned.

7. Click Create.

The standard interface opens with the request type loaded.

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

9. Click Save.

The request is submitted. You return to the **References** tab in the Task Information window. The new attached request displays as a reference.

10. Click **OK** to close the Task Information window.

You return to the Project window.

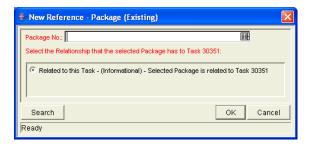
11. Click **Save** to save the attached request as a reference in the project plan.

Attaching Packages

To attach a package to a task:

- 1. Open the Task Information window.
- 2. Click the References tab.
- 3. Select **Package** from the New Reference drop-down list.
- 4. Click Add.

The New Reference - Package (Existing) window opens.



- 5. To select a package for an attachment, use one of the following methods:
 - Enter the package number in the Package No. field or select a package from the Package No. auto-complete list. (Hold down Ctrl+click or Shift+click to select more than one package.) The selected package displays in the Package No. field. If you selected multiple packages, they all display in the Package No. field separated by semi-colons.
 - Click **Search** to search for packages in a separate query window and follow the procedure in *Searching for Packages to Attach*.

6. Select the type of relationship you want to assign between the task and its reference from the list.

See *Dependency Relationships* on page 113 for a description of the various relationships that can be assigned.

7. Click OK.

You return to the **References** tab in the Task Information window. The new attached package displays as a reference.

8. Click **OK** to close the Task Information window.

You return to the Project window.

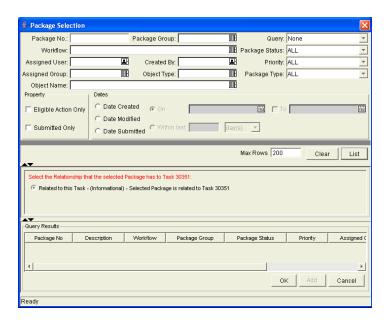
9. Click **Save** to save the attached package as a reference in the project plan.

Searching for Packages to Attach

To search for packages to attach to a task:

1. From the New Reference - Package (Existing) window, click Search.

A new query window opens.



2. Query for the package(s) you want to use by entering search criteria in the appropriate fields.

3. Click List.

The packages that match your search criteria display in the Query Results section of the window.

- 4. Select the package(s) in the Query Results section that you want to attach to a task.
- 5. Select the type of relationship you want to assign between the task and its reference from the list.

See *Dependency Relationships* on page 113 for a description of the various relationships that can be assigned.

6. Click **OK** to attach the package(s) to the task and close the current window.

You return to the **References** tab in the Task Information window. The new attached package displays as a reference.

7. Click **OK** to close the Task Information window.

You return to the Project window.

8. Click **Save** to save the new package as a reference in the project plan.

Attaching New Packages

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

To attach a new package to a task:

- 1. Open the Task Information window.
- 2. Click the References tab.
- 3. Select Package (New) from the New Reference drop-down list.
- 4. Click Add.

The New Reference - Package (New) window opens.



5. Click Create.

The Package window opens.

- 6. Enter any necessary information in the package's fields.
- 7. Click Save.

The package is submitted. You return to the **References** tab in the Task Information window. The new attached package displays as a reference.

8. Click **OK** to close the Task Information window.

You return to the Project window.

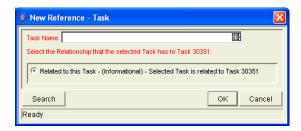
9. Click **Save** to save the attached package as a reference in the project plan.

Attaching Tasks

To attach a task to a task:

- 1. Open the Task Information window.
- 2. Click the References tab.
- 3. Select **Task** from the New Reference drop-down list.
- 4. Click Add.

The New Reference - Task window opens.



- 5. To select a task for attachment, use one of the following methods:
 - Enter the task name in the Task Name field or select a task from the
 Task Name auto-complete list (hold down Ctrl+click or Shift+click to
 select more than one task). The selected task displays in the Task Name
 field. If you selected multiple tasks, they all display in the Task Name
 field separated by semi-colons.
 - Click **Search** to search for tasks in a separate query window and follow the procedure in *Searching for Tasks to Attach*.
- 6. Select the type of relationship you want to assign between the task and its reference from the list.

See *Dependency Relationships* on page 113 for a description of the various relationships that can be assigned.

7. Click OK.

You return to the **References** tab in the Task Information window. The new attached task displays as a reference.

8. Click **OK** to close the Task Information window.

You return to the Project window.

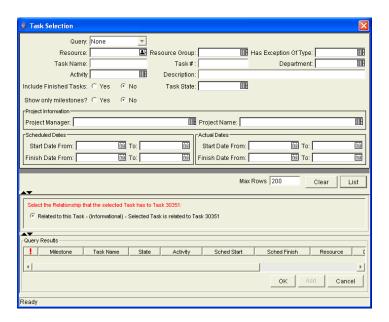
9. Click **Save** to save the attached task as a reference in the project plan.

Searching for Tasks to Attach

To search for tasks to attach to a task:

1. From the New Reference - Task window, click **Search**.

A new query window opens.



- 2. Query for the task(s) you want to use by entering search criteria in the appropriate fields.
- 3. Click List.

The tasks that match your search criteria display in the Query Results section of the window.

- 4. Select the task(s) in the Query Results section that you want to attach to a task.
- 5. Select the type of relationship you want to assign between the task and its attachment from the list.

See *Dependency Relationships* on page 113 for a description of the various relationships that can be assigned.

6. Click **OK** to attach the task(s) to the task and close the current window.

You return to the **References** tab in the Task Information window. The new attached task displays as a reference.

7. Click **OK** to close the Task Information window.

You return to the Project window.

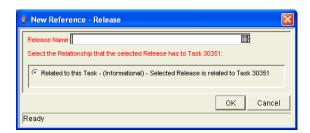
8. Click **Save** to save the attached task as a reference in the project plan.

Attaching Releases

To attach a release to a task:

- 1. Open the Task Information window.
- Click the References tab.
- 3. Select **Release** from the New Reference drop-down list.
- 4. Click Add.

The New Reference - Release window opens.



- 5. To select a release for an attachment, enter the Release Name in the Release Name field or select a release from the Release Name auto-complete list. (Hold down **Ctrl+click** or **Shift+click** to select more than one release.) The selected release displays in the Release Name field. If you selected multiple releases, they all display in the field separated by semi-colons.
- 6. Select the type of relationship you want to assign between the task and its reference from the list.

See *Dependency Relationships* on page 113 for a description of the various relationships that can be assigned.

7. Click OK.

You return to the **References** tab in the Task Information window. The new attached release displays as a reference.

8. Click **OK** to close the Task Information window.

You return to the Project window.

9. Click **Save** to save the attached release as a reference in the project plan.

Attaching Documents

To attach a document to a task:

- 1. Open the Task Information window.
- 2. Click the References tab.
- 3. Select Attachment from the New Reference drop-down list.
- 4. Click Add.

The Add Document window opens.



5. To select a Document for an attachment, click the File Chooser icon.

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

- 6. Enter a description in the Description field.
- 7. Click OK.

You return to the **References** tab in the Task Information window. The new attached Document displays as a reference.

8. Click **OK** to close the Task Information window.

You return to the Project window.

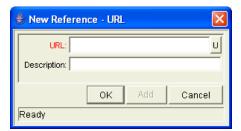
9. Click **Save** to save the attached Document as a reference in the project plan.

Attaching URLs

To attach a URL to a task:

- 1. Open the Task Information window.
- 2. Click the References tab.
- 3. Select **URL** from the New Reference drop-down list.
- 4. Click Add.

The New Reference - URL window opens.



- 5. Enter the name of the URL in the URL field.
- 6. Enter a description in the Description field.
- 7. Click OK.

You return to the **References** tab in the Task Information window. The new attached URL displays as a reference.

8. Click **OK** to close the Task Information window.

You return to the Project window.

9. Click **Save** to save the attached URL as a reference in the project plan.

Dependency Relationships

The dependency relationships available when you attach references of various types to a task are described in *Table 3-3*.

Table 3-3. Dependency relationships

Relationship	Description	
Adding requests to tasks		
FF Predecessor	The task does not complete until the selected request closes.	
Predecessor	Action is not allowed on this task until the selected request closes.	
Related to this Task	The selected request is related to this task.	
Successor	No Action is allowed on the selected request until this task closes.	
Task Updated by Request	This task is automatically updated by the selected request.	
Adding packages to tasks		
Related to this Task	The referenced package is related to this task.	
Adding projects to tasks		
Related to this Task	Referenced project plan is related to this task.	
Adding releases to tasks		
Related to this Task	Referenced release is related to this task.	
Adding tasks to tasks		
Related to this Task	The referenced task is related to this task.	

Configuring Task Predecessors

Task predecessors are configured from the Project Plan tab. A predecessor is a task or project plan 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.

When request references are attached to a task, they can also act as predecessors for the dependency relationship you assign to them. For instance,

if you assign a predecessor relationship between a task and a request that has been attached to the task as a reference, action is not allowed on this task until the request closes.

See *Attaching References to Tasks* on page 100 for more information on how to assign relationships between tasks and references.

See *Dependency Relationships* on page 113 for a list of the dependency relationships and their descriptions.

See *Setting Up Project Dependencies* on page 59 for more detailed information on setting task and project plan predecessors.

Changing the Task State

There are two methods for changing a task's state. A task's state can be changed from inside the Project window, or in its Task Information window.

To change a task's state from the Project window

- 1. States can be changed for existing tasks and new tasks.
 - If you are changing the state of an existing task, query and open an existing project plan.
 - If you are changing the state of a newly created task, you are already in the Project Plan tab.
- 2. In the Project **Plan** tab, select a new state for the task from the drop-down list in the State column.

To change a task's state from its Task Information window

- 1. Open the Task Information window.
- 2. Select the new task state from the Task State drop-down list at the top of the window.
- 3. Click OK.
- 4. Click **Save** to save the task state changes.

Setting Scheduling Constraints

Scheduling constraints prevent certain changes to a schedule. If a project manager attempts to schedule a constrained task outside of its constraint, Project Management will alert the user to the conflict and reset the date to its previous value. Scheduling constraints are set in the Task Information window.

To set a task's scheduling constraints:

- 1. Open the Task Information window.
- 2. Click the **Details** tab in the Task Information window.
- 3. Under Scheduling Constraints, select the type of constraint you want to use from the Constraint Type drop-down list.
- 4. Enter a date in the Constraint Date field.
- 5. Click OK.

Configuring User Data

User data is the set of custom fields that can be defined for various Project Management entities. User data fields can be used to capture data not covered by the default project/task information fields, such as Cost. These fields are accessed through the **User Data** tab in the Task Information window. If no user data has been defined for a particular entity, the tab is disabled.

Project/Task User Data Roll-Up

Values from task user data fields can be configured to "roll up" (combine/process values in a meaningful way) into parent project user data fields. The following types of task user data can roll up into project user data:

- Numeric fields (Text Field component type with Numeric data mask)
- Date fields

For each project plan, a project user data field can show a roll-up of task user data values using one of the following methods:

Average

Shows the average of all values of a specified task user data field for every task under the project (Numeric fields).

Maximum

Shows the largest of all values of a specified task user data field for every task under the project (Numeric and Date fields).

Minimum

Shows the smallest of all values of a specified task user data field for every task under the project (Numeric and Date fields).

Sum

Shows the summation of all values of a specified task user data field for every task under the project (Numeric fields).

Project/task user data roll-up can be used to capture various important aspects of a project plan.

- Using the "Average" roll-up method, the average cost of all a project plan's tasks can be easily determined and automatically recalculated each time a task is updated.
- Using the "Maximum" roll-up method, the latest date out of a project plan's tasks can be captured.
- Using the "Minimum" roll-up method, the earliest date out of a project plan's tasks can be captured.
- Using the "Sum" roll-up method, the total cost of a project plan's tasks can be easily determined and automatically recalculated each time a task is updated.

Creating Project/Task User Data Roll-Up

User data must be configured for projects and tasks before specifying roll-up methods.

- 1. Create and configure project and task user data fields.
- 2. Link project and task user data fields with roll-up method.

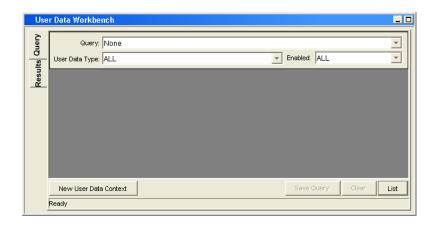
Once project and task user data fields have been configured and saved, the roll-up relationship can be specified.

To specify the roll-up method:

1. Log on to Mercury IT Governance Center and open the Workbench.

2. From the shortcut bar, select Configuration > User Data.

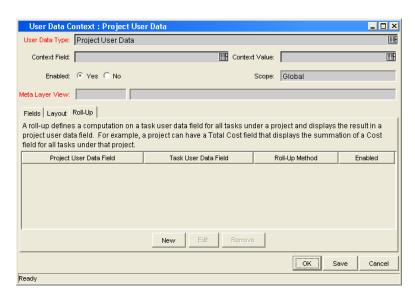
The User Data Workbench opens.



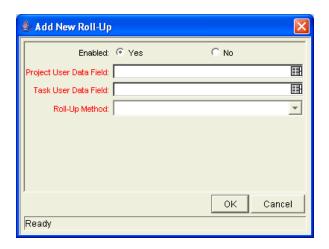
- 3. Select Project User Data from the User Data Type drop-down list.
- 4. Click List.

The **Results** tab opens with the project user data type loaded.

- 5. Select the project user data and click Open.
- 6. Click the Roll-Up tab.



7. Click New.



The Add New Roll-Up window opens.

- 8. Select the Project User Data Field that will contain rolled-up task user data values.
- 9. Select the Task User Data Field whose values will roll up into the chosen Project User Data Field.
- 10. Select the Roll-Up Method from the drop-down list.

The drop-down list will only display valid options for the data types of the Project and Task User Data Fields.

- 11. Select **Yes** to enable the roll-up.
- 12. Click OK.

The roll-up relationship is added to the **Roll-Up** tab.

13. Click Save.



Only two user data fields of the same type can be selected for roll-up (for example, a Numeric field cannot roll up into a Date field, nor vice versa).

While a task user data field can have multiple roll-up relationships associated with it, a Project user data field cannot have more than one roll-up relationship defined.

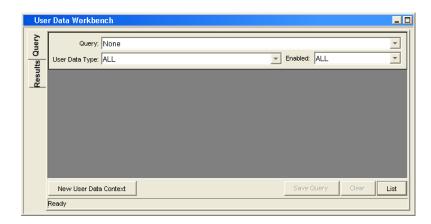
Editing Project/Task User Data Roll-Up

Project/task user data roll-up can be edited from the Workbench once it has been created.

To edit a project/task user data roll-up relationship:

- 1. Log on to Mercury IT Governance Center and open the Workbench.
- 2. From the shortcut bar, select **Configuration > User Data**.

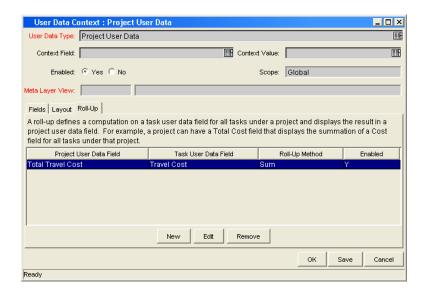
The User Data Workbench opens.



- 3. Select Project User Data from the User Data Type drop-down list.
- 4. Click List.

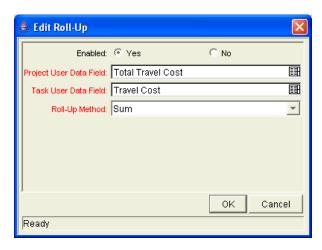
The **Results** tab opens with the project user data type loaded.

- 5. Select the project user data and click Open.
- 6. Click the Roll-Up tab.



- 7. Select the roll-up relationship to edit.
- 8. Click Edit.

The Edit Roll-Up window opens.



- Make any desired changes to the Project/Task User Data Field or Roll-Up Method.
- 10. Click OK.

The roll-up definition is updated in the **Roll-Up** tab.

11. Click Save.

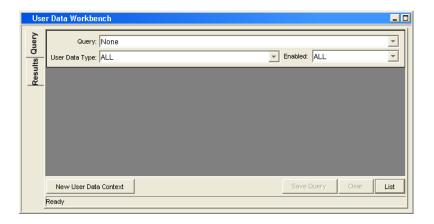
Deleting Project/Task User Data Roll-Up

Project/task user data roll-up can be deleted. This deletion only removes the roll-up relationship; it does not delete the referenced user data fields.

To delete a project/task user data roll-up relationship:

- 1. Log on to Mercury IT Governance Center and open the Workbench.
- 2. From the shortcut bar, select **Configuration > User Data.**

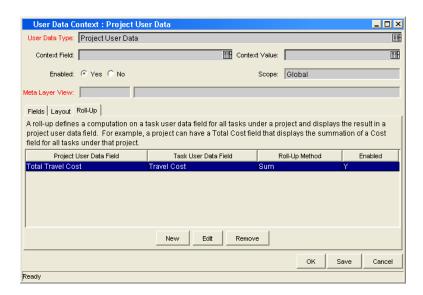
The User Data Workbench opens.



- 3. Select **Project User Data** from the User Data Type drop-down list.
- 4. Click List.

The **Results** tab opens with the project user data type loaded.

- 5. Select the project user data and click **Open.**
- 6. Click the Roll-Up tab.



- 7. Select the roll-up relationship to remove.
- 8. Click Remove.
- 9. Click Save.

Example: Using Project/Task User Data Roll-Up

Company X would like to capture total travel cost for its project plans. Total project plan travel cost in this case is to be calculated by adding the travel costs of individual tasks. User data fields for task travel cost and project plan total travel cost are each defined. The relationship is illustrated below:

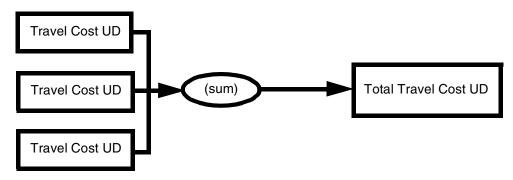


Figure 3-5. User data roll-up

Each task has its own Travel Cost user data field. The values for each task Travel Cost user data field are rolled up using the "Sum" roll-up method into the project Total Travel Cost user data field.

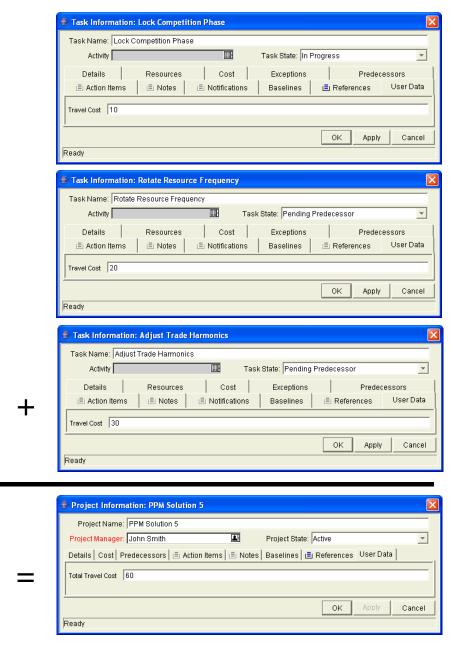


Figure 3-6. User data roll-up example

Chapter

4

Managing a Project Plan

In This Chapter:

- Overview of Managing a Project Plan
- Setting Up a Project Plan
- Adding Tasks to a Project Plan
- Taking a Baseline
- Revising the Project Plan
 - Viewing and Modifying Project Plan Hierarchy
 - Project Plan States
 - Updating Scheduling and Dependencies
 - Updating Tasks from the Standard Interface
 - Concurrent Editing
- Updating the Schedule
- Viewing Project and Task Progress
 - Searching for Projects in the Workbench
 - Searching for Tasks in the Workbench
 - *Viewing the Summary Condition*
 - Viewing Milestones
 - Viewing the Project Plan Critical Path
 - Viewing Exceptions
 - Using the Mercury IT Governance Dashboard to View Progress
 - Project Management Reports
 - Comparing Against the Baseline
- Tracking and Analyzing Project Plan Costs
- Tracking Project Plan History
- Completing, Cancelling, and Deleting Project Plans
 - Completing Project Plans

- Canceling Project Plans
- Deleting Project Plans
- Creating a URL to Open the Project Plan Window
- Printing a Project Plan Gantt Chart
 - Exporting a Gantt Chart to an Image File

Overview of Managing a Project Plan

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

Business initiatives can be divided into a set of goals that must be met through the completion of measurable tasks by an assigned group of people. 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 work group and project plan.

Some common responsibilities for project managers include:

- Organizing and assigning tasks.
- Tracking task and project plan progress, and ensuring that assigned tasks are completed on time.
- Communicating project plan status to participants and stakeholders, including the appropriate escalation of project plan-related issues.

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



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

This chapter discusses:

Setting Up a Project Plan

Every master project contains a set of options to configure that are specific to the project plan, such as what information is tracked and displayed, the rules for the display of indicators and exceptions, scheduling, and who can view tasks and project plans.

• Adding Tasks to a Project Plan

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

• Taking a Baseline

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

• Revising the Project Plan

Project managers can move their project plans into different project plan "states." These states help managers to maintain visibility and control over a project plan.

• *Updating the Schedule*

After making revisions, a project manager might find it necessary to reschedule the project plan. This includes recalculating Start and Finish dates.

• Viewing Project and Task Progress

Managers can search for project plans and tasks, as well as track a particular project plan's progress using its summary condition. Any exceptions that have been triggered can also be displayed.

• Tracking and Analyzing Project Plan Costs

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

• Tracking Project Plan History

Project plan history is maintained and can be viewed for project plans and tasks.

• Creating a URL to Open the Project Plan Window

Project managers can construct a URL that opens their project plan in the Workbench.

• Printing a Project Plan Gantt Chart

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



When a user creates or edits a project plan or subproject, that user is the only one able to save changes.

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

See Concurrent Editing on page 136 for more detailed information.



When you import a large Microsoft Project (or a large number of projects) into Project Management, tables in the Mercury IT Governance 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 Mercury IT Governance Center database. Contact your application administrator for help with this procedure.

Setting Up a Project Plan

Project Management's master project entity is made up of the following components:

- **Tasks**
- Subprojects
- **Activities**
- Notes
- **Packages**
- Requests
- References

These components are used to define and process a specific business initiative. The master project also contains a number of global settings that can be configured to suit a particular project plan's objectives. See the following sections for more information on setting up a project plan:

- Selecting Information to Track and Display on page 28
- Setting Up Exception Behavior on page 29
- Setting Up Indicators on page 35

- Setting Scheduling Options on page 36
- Setting Security Restrictions on page 41
- Setting Up the Project Team on page 43
- Setting Up Microsoft Project Integration on page 46
- Establishing a Project Baseline on page 72

Adding Tasks to a Project Plan

Once the master project has been configured, the project manager can add tasks to the project plan and specify task details, including assigning resources or resource groups. Tasks can be added individually or in a pre-sequenced group with a project 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 project plan:

- Adding Tasks to a Project on page 50
- Creating a Task From a Request on page 83
- Configuring Tasks on page 79
- Using Project Templates on page 191

Taking a Baseline

A baseline is the original approved plan for a project 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 plan in terms of schedule and cost by comparing the current project plan to the baseline.

See *Establishing a Project Baseline* on page 72 for more detailed information about taking and using project plan baselines.

Revising the Project Plan

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



When a user creates or edits a project plan or subproject, that user is the only one able to save changes. All other users will be warned of this before attempting to edit a project plan or subproject that is already open.

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

Viewing and Modifying Project Plan Hierarchy

The ordering and grouping of tasks and subprojects is graphically displayed in the Project **Plan** tab.

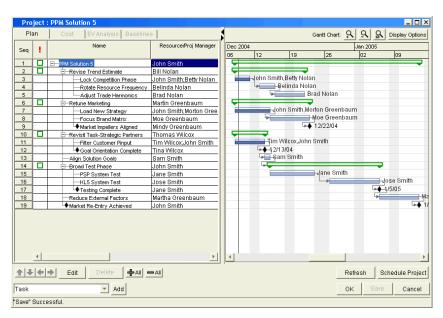


Figure 4-1. Project window with Project Plan tab

Use the directional arrow buttons to reorganize the project plan hierarchy.



Figure 4-2. Directional arrow buttons

Tasks can be grouped and ordered into subprojects, using the right arrow to indent. Subprojects can have their tasks removed and made into separate tasks using the left arrow to outdent. Top-to-bottom reordering can be performed on subprojects and tasks as well, using the up and down arrows. For step-by-step instructions, see *Setting Up Project Hierarchy* on page 52.

Project Plan States

To display the different stages in a project plan's life from planning to completion, a master project can have various states associated with it. These states are New, Plan, Active, Completed and Cancelled. Project managers can move project plans into different states to facilitate the work associated with that stage of the project plan. The following table describes the various project plan states, their behaviors, and applications.

Table 4-1. Project plan states and descriptions

Project Plan State	Behavior	Application
New	Project plans and their tasks are not shown in the My Tasks portlet or the Dashboard. Notifications are not sent and exceptions are not triggered. All project plans start in this state. Once a project plan is moved out of the 'New' state it becomes permanently visible and cannot return to this state.	This state allows a project manager to manipulate the project plan without having to notify participants or stakeholders.
On Hold	Project plans and their tasks are displayed in My Tasks and the Dashboard but cannot be edited. Notifications are not sent and exceptions are not triggered. Hierarchy can be modified.	This state allows a project manager to manipulate the project plan (such as changing project hierarchy and revising predecessors). This state informs participants and other managers that a rework is being done.
Active	Project plans and their tasks can be seen in My Tasks and in the Dashboard. Notifications are sent and exceptions are triggered. Project plan structure can change.	This is the state of a project plan that is actively being managed.

Table 4-1. Project plan states and descriptions [continued]

Project Plan State	Behavior	Application
Completed	Project plans and their tasks can be seen in the Dashboard but not in My Tasks. Notifications are not sent and exceptions are not triggered.	This is the state of a project plan that has been worked to completion. The project plan can be edited but will not show up as a project plan or task that needs attention.
Cancelled	Project plans and their tasks can be seen in the Dashboard but not in the My Tasks portlet. Notifications are not sent and exceptions are not triggered.	This state is used for project plans that are not complete but will not be worked on.

Project Management also features a set of task states. For a list of task states, see *Task States* on page 82.

Modifying States

Project managers can change states at the master project, subproject, or task level at any time.

To change the state of the master project:

1. Open the project plan to edit.

For more details on searching for and opening project plans, see *Searching for Projects in the Workbench* on page 138.

2. In the Project **Plan** tab, select the row at the top of the hierarchy.

This is the master project.

- 3. Select a new state for the master project from the drop-down list in the State column.
- 4. Click Save.

To change the state of a task, subproject, or group of tasks or subprojects:

1. Open the project plan to edit.

For more details on searching for and opening project plans, see *Searching for Projects in the Workbench* on page 138.

2. In the Project **Plan** tab, select the task or subproject whose state you want to change.

When selecting a group of tasks or subprojects, be sure they are all in the same state.

- 3. Select a new state for the task or subproject from the drop-down list in the State column.
- 4. Click Save.

Updating Scheduling and Dependencies

Project managers are able to update aspects of a project plan at any time to reflect the changing state of a business initiative.

Changing Scheduled Duration, Start, Finish, and % Complete

The Scheduled Duration, Scheduled Start, Scheduled Finish, and % Complete fields are viewed in the Project **Plan** tab.

To change Scheduled Duration, Start, Finish, or % Complete for a task:

1. Open the project plan to edit.

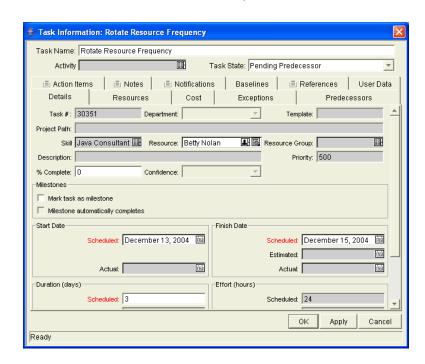
For more details on searching for and opening project plans, see *Searching for Projects in the Workbench* on page 138.

- 2. In the Project Plan tab, select the task to update.
 - Tasks can be edited directly inside the Project Plan tab. Click on a field to edit its contents.
 - Tasks can also be edited through the Task Information window, which displays more detailed information on a task.
- 3. Click Edit.

The Project or Task Information window opens, depending on whether you have selected a project or task.



If you want to update a subproject's Scheduled Duration, Start, Finish, or % Complete, you must update its individual tasks' values. This is accomplished by selecting a task in the Project window and clicking **Edit.** You can then follow the process described below.



4. In the Task Information window, click the **Details** tab.

5. Update fields in the **Details** tab.

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

To update Scheduled Duration and % Complete, enter the new information into the appropriate text field.

6. Apply the changes.

To apply changes to the task and continue to update the task without closing, click **Apply**. To apply changes and close the window, click **OK**.

Changing Predecessors

You can specify which tasks must be completed before beginning another task. The tasks that first need to be completed are predecessors of the dependent task. Predecessors can be changed directly in the Project **Plan** tab.

External tasks, project plans, and requests can also be set as predecessors for tasks. For more information on setting these types of predecessors, see *Setting Up Project Dependencies* on page 59.

To change the predecessors for a particular task:

1. Open the project plan to edit.

For more details on searching for and opening project plans, see *Searching for Projects in the Workbench* on page 138.

- 2. In the Project **Plan** tab, click the row that contains the task or subproject to update.
- 3. To update predecessors, enter the sequence numbers of the new predecessors, separated by semicolons, into the text field of the dependent task.

Updating Tasks from the Standard Interface

Many attributes of project plan tasks can be edited simultaneously from the standard interface using the Update Tasks page. *Table 4-2* lists these attributes.

Table 4-2. Task attributes editable from the Update Tasks page

Task Field
Task State
% Complete
Estimated Finish Date
Estimated Remaining Duration
Estimated Remaining Effort
Actual Start Date
Actual Duration
Actual Effort
Confidence
Resource
Actual Labor Cost
Actual Non Labor Cost

To make changes to many tasks simultaneously:

1. Open the project plan in the standard interface.

For more details on searching for and opening project plans in the standard interface, see *Locating Project Plans Using the Project Search Page* on page 161.

2. In the Project Summary portlet, click **Update Tasks**.

The Update Tasks page opens.

3. Make the desired updates to any tasks and click **Save**.

If a task is being updated by another user, changes to that particular task will fail and an error message will appear listing any tasks that were unable to retain changes.

Concurrent Editing

Project Management allows users to edit and update parts of project plans simultaneously, allowing for more efficient representation of changes to a project plan.

Unrelated Subprojects in a Master Project

Yukio and Bob are project managers with access to the same master project.

- 1. Yukio opens the master project and begins working on one of its subprojects.
- 2. Bob opens the same master project and begins working on a different subproject.
- 3. Yukio and Bob are both able to save their changes.

Simultaneous Edits on a Master Project

Yukio and Bob are project managers with access to the same master project.

1. Yukio opens the master project and begins working on one of its subprojects.

- 2. Bob opens the same master project and tries to edit part of the same subproject Yukio is working on.
- 3. Bob receives a message that another user is currently editing that part of the project plan. Bob cannot make changes.

Simultaneous Editing and Updating of a Task

Yukio is a project manager and Carlos is a resource assigned to one of the tasks in Yukio's master project.

- 1. Yukio opens the master project and begins working on one of its subprojects.
- 2. Carlos would like to update his task, which is part of the subproject Yukio is currently editing.
- 3. Carlos receives a message that another user is currently editing that part of the project plan. Carlos cannot make changes.

Updating an Unrelated Task

Yukio is a project manager and Carlos is a resource assigned to one of the tasks in Yukio's master project.

- 1. Yukio opens the master project and begins working on one of its subprojects.
- 2. Carlos opens his task, which is not part of the subproject Yukio is working on, and makes his changes successfully.
- 3. Yukio opens Carlos's task.
- 4. Yukio receives a message that the task has been updated, and the newest data will be loaded.
- 5. The information for Carlos's task is refreshed in Yukio's Workbench window, while the other changes Yukio made persist.

Updating the Schedule

If you have modified any of your project plan's hierarchy, dependencies, resources or dates, you might want to re-level the schedule. Project Management generates a new schedule based on the updated dates, and whatever preferences have been set in the Settings window.

For more detailed information on updating a schedule, see *Generating the Schedule* on page 69.

You can also want to create a new baseline for the project plan. See *Taking a Baseline* on page 75 for more detailed information.



When a user creates or edits a project or subproject, that user is the only one able to save changes.

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

See Concurrent Editing on page 136 for more detailed information.

Viewing Project and Task Progress

As a project plan moves through its life, managers can keep track of:

- Projects and tasks as they are completed
- Exceptions that have been triggered
- High-level and low-level accounts of progress

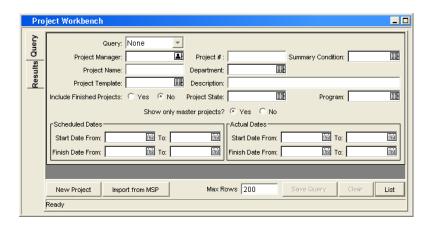
Project Management provides this information through Project Management reports and the summary condition view.

Searching for Projects in the Workbench

The **Query** tab in the Project Workbench window is used to locate and open project plans.

To open project plans in the Workbench:

1. From the shortcut bar, select Project Mgmt > Projects.



The Project Workbench opens.

- 2. Enter search criteria into the appropriate fields in the Query tab.
- 3. To save your query, click Save Query.

You can then perform a quick search using these specified criteria later. To clear all information entered into the Project Query fields, click Clear.

- 4. Click **List** to return the matching results in the **Results** tab.
- 5. From within the Results tab you can:
 - Sort the results based on any field in the table by clicking on the column header.
 - View a project plan by double-clicking on the desired project plan or selecting it and clicking **Open**.
 - Open multiple project plans by selecting a group (using Shift+click or Ctrl+click from your keyboard) and clicking Open.

Searching for Tasks in the Workbench

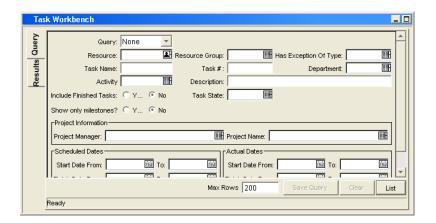
You can locate tasks using the **Query** tab in the Task Workbench window.

To locate specific tasks in the Workbench:

1. From the shortcut bar, select Project Mgmt > Projects.

The Project Workbench opens.

2. Select the Task Workbench, behind the Project Workbench, by either clicking on its title bar or the **Task Workbench** button at the bottom of the Workbench window.



- 3. Enter search criteria into the appropriate fields in the Query tab.
- 4. To save your query, click Save Query.

You can then perform a quick search using these specified criteria later. To clear all information entered into the Task **Query** fields, click **Clear**.

- 5. Click **List** to return the matching results in the **Results** tab.
- 6. From within the **Results** tab you can:
 - Sort the results based on any field in the table by clicking on the column header.
 - View a task by double-clicking on the desired task or selecting it and clicking **Open.**
 - Open multiple tasks by selecting a group (using **Shift+click** or **Ctrl+click** from your keyboard) and clicking **Open**.

Viewing the Summary Condition

The summary condition is a graphical indicator of the health of a project plan, located next to the project plan name. A project plan's summary condition color begins as green and changes to yellow or red depending on the percentage of tasks within a project plan that have triggered exceptions. This

percentage is configurable in this tab by the project manager. A project plan's summary condition is not calculated until the project plan is saved.

The summary condition view appears in its own column next to the names of all project plans in the **Results** tab of the Project Workbench. For more detailed information, see *Summary Condition* on page 33.

Viewing Milestones

In the Workbench, Milestones are visible in the Project window as black diamonds in the Gantt chart.

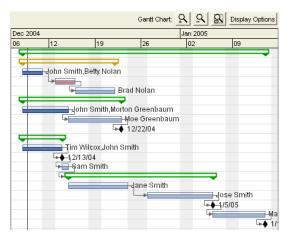


Figure 4-3. Gantt chart with milestones

The Project Overview page in the standard interface contains two sections that display Milestones:

• The Project Milestones section lists the Milestones in a project plan.



Figure 4-4. Project Milestones section

• The Project Overview Gantt section shows the project plan's Gantt chart, including Milestones.

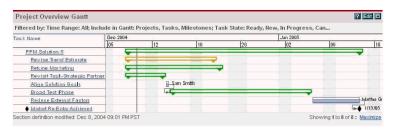


Figure 4-5. Project Overview Gantt section with milestones

Viewing the Project Plan Critical Path

A project plan's critical path is composed of all of the tasks in a project plan that determine its duration. In Project Management, the critical path of a project plan can be displayed in the Project window's Gantt chart. Tasks that are part of the critical path are cross-hatched.

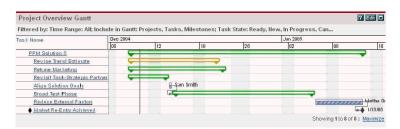


Figure 4-6. Gantt chart with critical path

There are several ways to display or access a project plan's critical path.

Viewing the Critical Path in the Project Window

A project plan's critical path can be displayed in the Project window's Gantt chart.

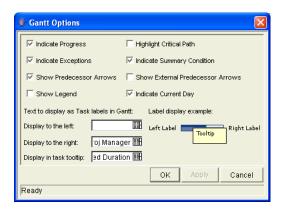
To see a project plan's critical path:

1. In the Workbench, open the project plan.

For more details on searching for and opening project plans, see *Searching for Projects in the Workbench* on page 138.

2. Click **Display Options** in the upper-right corner of the Project window.

The Gantt Options window opens.



- 3. Select the Highlight Critical Path checkbox.
- 4. Click OK.
- 5. The Project window's Gantt chart displays the project plan's critical path.

Viewing the Critical Path from the Project Overview Gantt Portlet

A project plan's critical path can also be viewed from the Project Overview Gantt portlet in the Project Overview page of the standard interface.

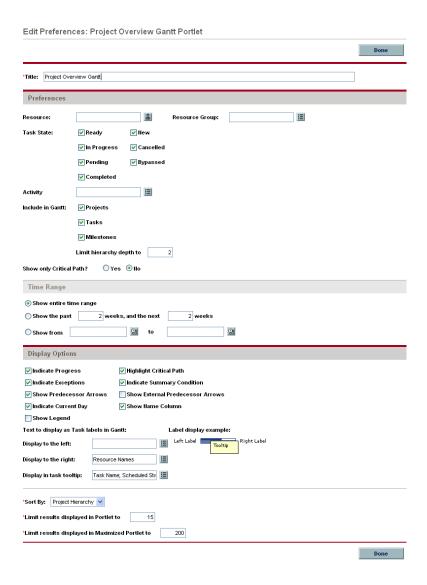
To see a project plan's critical path in the Project Overview Gantt portlet:

1. Navigate to the Project Overview page of the project plan.

For more detailed information, see *Searching for Tasks and Project Plans* on page 159.

2. Scroll down to the Project Overview Gantt section and click Edit.

The filter page for the Project Overview Gantt section opens.



- 3. In the Display Options section of the filter page, select the Highlight Critical Path checkbox.
- 4. Click Done.
- 5. The Project Overview page opens, refreshing all of the portlets including the Project Overview Gantt portlet.

Obtaining a Critical Path Table

The Project Critical Path report generates a list of all the tasks that comprise a Project's critical path in convenient HTML form.

For more information on running reports in Project Management, see the *Reports Guide and Reference*.

Viewing Exceptions

Exceptions indicate that a rule that has been defined in the project plan 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 *Setting Up Exception Behavior* on page 29.

Tasks that have triggered exceptions can be viewed from the Workbench or the standard interface.

Viewing Exceptions in the Standard Interface

The Exception Details page in the standard interface lists all the tasks in a particular project plan that have triggered exceptions. Tasks with an Unassigned Task exception can be assigned a resource directly from the Project Exception Details page.

To get to the Project Exception Details page for a project plan:

1. Open the project plan in the standard interface.

For more details on searching for and opening project plans in the standard interface, see *Locating Project Plans Using the Project Search Page* on page 161.

2. In the Project Exception Summary portlet, click Exception Details.

The Project Exception Details page opens.

3. Drill down to any tasks that merit attention.

Unassigned tasks can be assigned a resource directly from the Project Exception Details page.

Viewing Exceptions in the Workbench

Exceptions that have been triggered display as a red exclamation mark in the first column on the left in the **Results** tab of the Task Workbench.

To view a particular triggered exception for a task:

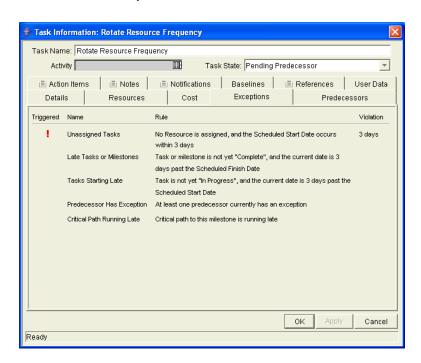
- 1. Select a task in the Project Plan tab.
- 2. Click Edit.

The Task Information window opens.



Depending on whether you have the proper access grant to edit the task, the button in the Project window might read **Edit** or **View**. Users who can only **View** a task include project plan participants who have not been assigned to that particular task, as well as project managers who are not managing the project plan within which that particular task is contained.

3. Click the Exceptions tab.



The **Exceptions** tab lists the exception rules for the project plan containing that particular task.

- The red exclamation point in the Triggered column indicates that the task has triggered an exception.
- The Violation column displays the number of days the task is from the exception.

Using the Mercury IT Governance Dashboard to View Progress

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

This interface can be expanded to include the Mercury IT Governance Dashboard, which offers an expanded set of portlets that feature additional functionality, such as the Project List portlet.

Project Management Reports

Project Management is capable of generating a wide range of reports for project management purposes. For example, a manager could query for the custom fields being used in a project plan. A manager can also generate reports on any tasks that had triggered exceptions, the resources assigned to a project plan or which security groups are associated with a project plan.

For a full list of Mercury IT Governance Center reports, see *Reports by Category* on page 269.

For more detailed information about Project Management reports, see the *Reports Guide and Reference*.

Comparing Against the Baseline

If you have taken a baseline of your project plan, you might want to compare it to your current project plan. This can be done using the Project Schedule Change report, which can compare the current project plan to any baseline, or baselines to each other.

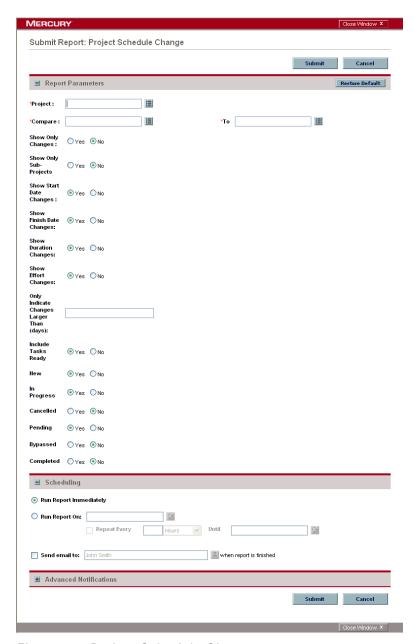


Figure 4-7. Project Schedule Change report

For more information on running reports in Project Management, see the Reports Guide and Reference.

Tracking and Analyzing Project Plan Costs

Mercury IT Governance Center's Financial Management capabilities allow you to track and analyze project plan costs in ways including the following:

- Capturing and comparing financial data in budgets including rollups from project plans
- Using Mercury Time Management to track task costs
- Performing analyses of project cost data in graph and portlet form
- Enforcing SOP 98-1 compliance at the project plan level with project templates
- Enabling the use of different currencies depending on project participants' locations

See the *Mercury Financial Management User's Guide* for more detailed information on cost data, budgets, currencies, exchange rates, and SOP 98-1 compliance.

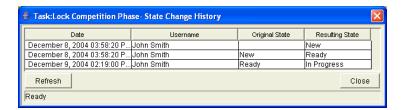
Tracking Project Plan History

Project Management maintains a state change history for both project plans and tasks. The transaction history includes the date, user name, project or task name, and project or task state.

To view the state change history for a particular task:

- 1. In the Project **Plan** tab, select the task whose state change history you want to view.
- 2. Select Project > View > State Change History from the View drop-down list.

The State Change History window opens.

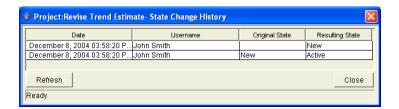


- 3. Click Refresh to update the history list.
- 4. Click **Close** to close the window.

To view the state change history for a particular subproject:

- 1. In the Project **Plan** tab, select the subproject whose state change history you want to view.
- 2. Select **Project > View > State Change History** from the View drop-down list.

The State Change History window opens.



- 3. Click **Refresh** to update the history list.
- 4. Click **Close** to close the window.

Completing, Cancelling, and Deleting Project Plans

All project plans must reach an endpoint. The project plan can either be brought to completion, or reach a point where no more work can be done. Project plan states provide distinct ways of differentiating between project plans that have been Completed or Cancelled. For more detailed information on project plan states, see *Project Plan States* on page 131.



When a user creates or edits a project plan or subproject, that user is the only one able to save changes.

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

See *Concurrent Editing* on page 136 for more detailed information.

Completing Project Plans

Project managers can set the project plan state to **Completed**. For more information, see *Modifying States* on page 132.

If a project plan is manually set to **Completed:**

- Any incomplete tasks under that project plan are set to **Bypassed**.
- Any incomplete projects under that project plan are set to Completed.

Reopening a Completed Project Plan

A project plan that is **Completed** can be moved to **On Hold**.

- Upon moving the project plan from Completed to On Hold:
 - Bypassed tasks will move to a task state of New.
- If the project plan is moved to **Active**:
 - Task states will be recalculated.
 - Tasks previously In Progress will not regain the task state of In Progress.

To change a **Completed** project plan's state:

1. Open the project plan to edit.

For more details on searching for and opening project plans, see *Searching for Projects in the Workbench* on page 138.

2. In the Project Plan tab, select the project plan at the top of the hierarchy.

This will be the master project.

- 3. Select a new state for the master project from the drop-down list in the State column.
- 4. Click Save.

Canceling Project 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. Project plans can have their states changed to **Cancelled** to reflect this circumstance.

- If a project plan is manually set to **Cancelled**, any incomplete tasks or project plans under it are set to **Cancelled**.
- From Cancelled, a project plan can be moved back to On Hold using the same procedure as *Reopening a Completed Project Plan* on page 151.
 Upon moving the project plan from Cancelled to On Hold, bypassed tasks will move to a task state of New.
- Once the project is moved into an **Active** project plan state:
 - Task states will be recalculated.
 - Tasks previously In Progress will not regain the task state of In Progress.

Deleting Project Plans

Once a project plan has been completed, it continues to reside in the Mercury IT Governance database. It might not be necessary to archive completed project plans in the Mercury IT Governance Center system. Project plans can be deleted from the **Results** tab of the Project Workbench.



Subprojects cannot be deleted from the **Results** tab of the Project Workbench.

To delete a project plan:

- 1. Locate the project plan that you want to delete using the **Query** tab of the Project Workbench.
- 2. In the **Results** tab of the Project Workbench, select the project plan you want to delete.
- 3. Click Delete.

Creating a URL to Open the Project Plan Window

Project managers and can construct a Web address (URL) that opens their project plan in the Workbench. They can then use this URL to access the project plan from the World Wide Web or from their Intranet.

Users can construct this URL manually using either of the following formats:

```
http://host:port/mercury/servlet/
SmartURL?screen=PRJ&pkid=PROJECT_ID
http://host:port/mercury/servlet/
SmartURL?screen=PRJ&pkname=PROJECT NAME
```

You can also configure your task notifications to automatically create and send these URLs in an email message. Include the following token in the Message area in the Notification window. When the email is sent, the full URL will be displayed.

```
[PRJ.WORKBENCH PROJECT URL]
```

See *Using Smart URLs in Notifications* on page 94 for more information on setting up task notifications and using Smart URLs.

Printing a Project Plan Gantt Chart

A project plan Gantt chart can be printed or exported to an image file for use in presentations.

Printing a Gantt Chart

To print a project plan Gantt chart, select **File > Print** from the menu at the top of the Workbench. The Print Gantt Chart wizard opens, allowing you to select options for the Gantt chart's project plan display, time range, project plan columns, and generic printer settings.

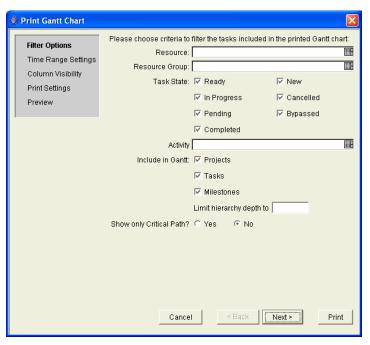


Figure 4-8. Print Gantt Chart wizard

Exporting a Gantt Chart to an Image File

A project plan Gantt chart can also be exported to an image file with the same options as normal printing. The following file formats are supported:

- JPEG
- PNG
- GIF
- BMP

To export a project plan Gantt chart to an image, select **File > Export to Image** from the menu at the top of the Workbench. The Export Gantt Chart wizard opens, allowing you to select options for the Gantt chart's project plan display, time range, project plan columns, and generic image settings.

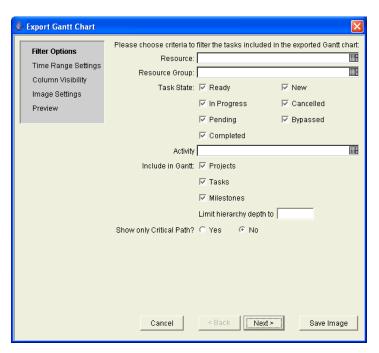


Figure 4-9. Export Gantt Chart wizard

Chapter

5

Updating Tasks: Project Plan Participant Activities

In This Chapter:

- Overview of Updating Tasks
- Locating Tasks
 - Searching for Tasks and Project Plans
 - Finding Tasks Using the My Tasks Portlet
 - Finding Tasks Using Notifications
 - Finding Tasks in the Workbench
- Viewing Project Plan Information
 - Viewing Project Overview
 - Viewing Project Plan Details
 - *Viewing Project Plan Hierarchy*
 - Viewing Exceptions
 - Viewing Project References
 - Viewing the Project Plan Gantt Chart
 - Viewing the Critical Path
 - Viewing Project Plan Milestones
 - Viewing Resource Information
- Updating Tasks
 - Viewing and Updating Task Details
 - Viewing and Updating Multiple Tasks
- Viewing and Adding Notes
- Viewing and Modifying References
 - Adding References to Tasks
 - Viewing and Editing References

- Deleting References
- Visibility Between Project Plans and Programs
- Running Reports

Overview of Updating Tasks

This chapter explains how project plan participants locate, update, modify, and report on tasks to which they are assigned.

Locating Tasks

Project Management defines project plan participants as users who work on tasks as part of a project team, but do not have the administrative responsibilities of a project manager. Project plan participants view and update their tasks using the standard Project Management interface.

Project plan participants update their task status in Project Management. Project Management provides several different ways for participants to locate their tasks:

- Searching for Tasks and Project Plans
 - Project plan participants can search for tasks directly, or they can search for project plans in order to get to the tasks they want through the project plans that contain them.
- Finding Tasks Using the My Tasks Portlet

 The My Tasks portlet allows users to update multiple tasks at once, as well as providing links to individual task details.
- 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 in the Workbench
 Project plan participants can also search for and update tasks in the Workbench.

Searching for Tasks and Project Plans

Participants can search for tasks and project plans that match certain criteria using the Task Search and Project Search pages.

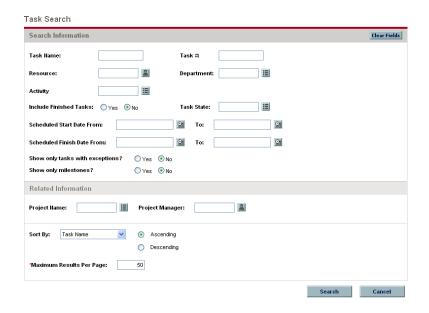
Locating Tasks Using the Task Search Page

Participants can search for tasks using the Task Search page.

To locate tasks in Project Management:

- 1. Log on to Mercury IT Governance Center.
- 2. From the menu bar, select **Search > Tasks**.

The Task Search page opens.



3. Enter 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 Maximum Tasks Displayed field can yield quicker results.

4. Click Search.

The Task Search Results page opens, displaying the results matching your search criteria.



5. Click on the name of any task in the list to view its Details page.

See *Viewing and Updating Task Details* on page 176 for more information. To clear all fields in the Task Search Query page and reset to default values, click **Clear Fields**.

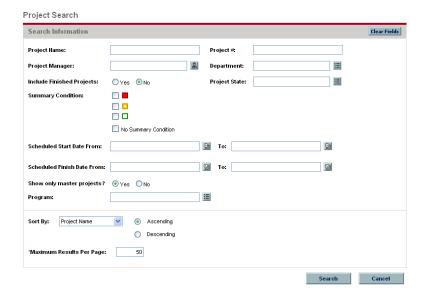
Locating Project Plans Using the Project Search Page

While project plan participants can locate and view project plans, only participants with a Project Manager access grant can edit project plans, through the Workbench interface. Participants can locate project plans using the Project Search page.

To search for project plans in Project Management:

- 1. Log on to Mercury IT Governance Center.
- 2. From the menu bar at left, select Search > Projects.

The Project Search page opens.



3. Enter the search criteria for the desired project plan.

You can search for an existing project plan based on any of the fields located on the Project Search page. Limiting the maximum number of results in the Maximum Projects Displayed field can yield quicker results.

4. Click Search.

The Project Search Results page opens, displaying the results matching your search criteria.



5. Click on the name of a project plan to view its Project Overview page.

See *Viewing Project Overview* on page 166 for more information. To clear all fields in the Project Search page and reset to default values, click **Clear Fields**.

Finding Tasks Using the My Tasks Portlet

The My Tasks portlet is available to all Project Management users. This portlet is included on your Mercury IT Governance Center home page by default. It shows a configurable list of the tasks currently assigned to the user.

Participants can update task states and fill in information that the project manager would like to collect for all tasks displayed. In this way, the My Tasks portlet can save valuable time by providing a single point for multiple tasks to be updated at once.

The participant can also click on the name of a task in the task list to view its Details page. See *Viewing and Updating Task Details* on page 176 for more information.



Figure 5-1. My Tasks portlet

Finding Tasks Using Notifications

Email notifications can be configured by project managers to include hyperlinks to tasks in 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.

Finding Tasks in the Workbench

The Workbench is the Java application that allows for configuration as well as creation and processing of project plans, project templates, and tasks. Project plan participants can also search for and update tasks in the Workbench.

Project plan participants can find tasks by searching for them directly, or by looking for the project plans that contain them.

Searching for Tasks in the Workbench

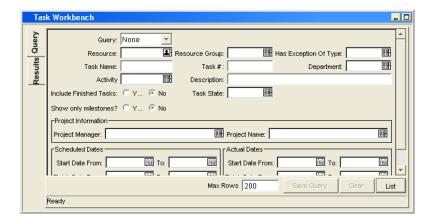
You can locate tasks using the **Query** tab in the Task Workbench window.

To search for tasks from within the Workbench:

- 1. Log on to Mercury IT Governance Center and open the Workbench.
- 2. From the shortcut bar, select **Project Management > Projects.**

The Project Workbench opens.

 Select the Task Workbench, behind the Project Workbench, by either clicking on its title bar or clicking Task Workbench at the bottom of the Workbench window.



4. Enter search criteria into the associated fields.

To save your query, click **Save Query**. You can then perform a quick search using these specified criteria anytime later.

- 5. Click **List** to return the matching results in the **Results** tab.
- 6. From within the **Results** tab:
 - View a task by double-clicking on the desired task or selecting it and clicking **Open**. The Task Information window opens.
 - Open multiple tasks by selecting a group (using Shift+select or Ctrl+select) and clicking Open. Many Task Information windows open, one for each selected task.
- 7. Update task information in the Task Information window.

For details on updateable fields, see *Updating Tasks in the Task Information Window* on page 166.

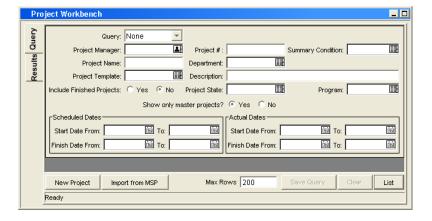
Searching for Project Plans in the Workbench

The **Query** tab in the Project Workbench window is used to locate and open project plans.

To search for project plans from within the Workbench:

- 1. Log on to Mercury IT Governance Center and open the Workbench.
- 2. From the shortcut bar, select **Project Management > Projects**.

The Project Workbench opens, with the **Query** tab defaulted to appear on top.



- 3. Enter search criteria into the associated fields.
- 4. To save your query, click Save Query.

You can then perform a quick search using these specified criteria anytime later.

- 5. Click **List** to return the matching results in the **Results** tab.
- 6. From within the **Results** tab:
 - View a project plan by double-clicking on the desired project plan or selecting it and clicking **Open**. The Project window opens.
 - Open multiple project plans by selecting a group (using Shift+select or Ctrl+select) and clicking Open. Multiple Project windows open, one for each selected project plan.
- 7. From within the Project window, you can edit tasks directly, or edit them in the Task Information window.

See the following sections, *Updating Tasks in the Project Plan Tab* and *Updating Tasks in the Task Information Window*, for more information.

Updating Tasks in the Project Plan Tab

Project plan participants can update tasks displayed in the Project Plan tab.

To update task information from the Project Plan tab:

- 1. Select the task to update.
- 2. Click on the desired field to update its contents directly.

Project plan participants can only update the fields that have been enabled for them to edit by the project manager. This set of fields can vary. Additionally, participants can only update those tasks that have been assigned to them. All other tasks will be view-only. This is also true for project managers viewing tasks and project plans that they are not in charge of.

Updating Tasks in the Task Information Window

Project plan participants can also update tasks inside the Task Information window of each task.

To edit task information in the Task Information window:

- 1. Open the Task Information window by one of the following ways:
 - Query and open the task directly from the Task Workbench. The Task Information window opens.
 - Query and open an existing project plan. Double-click the task to edit, or select it and click **Edit**. The Task Information window opens.
- 2. Make all necessary changes in the Task Information window.
- 3. Click OK.

Project plan participants can only update the fields that have been enabled for them to edit by the project manager. This set of fields can vary. Additionally, participants can only update those tasks that have been assigned to them. All other tasks will be view-only. This is also true for project managers viewing tasks and project plans that they are not in charge of.

Viewing Project Plan Information

Project plan participants might want to view the project plans 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 plan: its subprojects and tasks, its state and project manager, and any exceptions it might have triggered. All of this data and more is presented and arranged through the following sections of the Project Overview page:

Project Summary

Displays the project plan's name, state, % complete, manager, description,

scheduled start, and scheduled finish. It also contains a link to the Project Details page. See *Viewing Project Plan Details* on page 169.

• Project Overview Gantt

Displays the Gantt chart for a project plan. See *Viewing the Project Plan Gantt Chart* on page 173.

Project Milestones

Lists the Milestones in a project plan. See *Viewing Project Plan Milestones* on page 174.

Subprojects and Tasks Summary

Provides a list of all subprojects and tasks included in that project plan, as well as a link to the project plan, located on the Project Hierarchy page. See *Viewing Project Plan Hierarchy* on page 170.

• Exception Summary

Shows the number and kinds of exceptions triggered and links to the Exception Details portlet. See *Viewing Exceptions* on page 171.

• Project References

Provides a list of all references linked to the project plan (requests, packages, tasks, other project plans, releases, attachments, URLs) and where in the project plan they are referenced from. See *Viewing Project References* on page 172.

• Project Related Actions

Displays links to a project plan's assignment visualizations and staffing profiles. See the *Mercury Resource Management User's Guide* for more details.



Figure 5-2. Project Overview page

Users can access the Project Overview page through the Project Search Results page, as well as the Project List portlet, which is available for display on the participant's Mercury IT Governance Center Home page as part of the Mercury IT Governance Dashboard.

Viewing Project Plan Details

The Project Details page contains detailed information on a particular project plan, grouped into the following categories:

Progress

% complete, confidence, start date (scheduled and actual), finish date (scheduled, estimated, and actual), duration (scheduled, estimated remaining, and actual), and effort (scheduled, estimated remaining, and actual).

Details

Project number, project template, department, description, priority, complete and incomplete predecessors.

• Action Items

Action item names, states, and priorities.

Notes

Any notes.

References

Requests, packages, other project plans, URLs, and attachments.

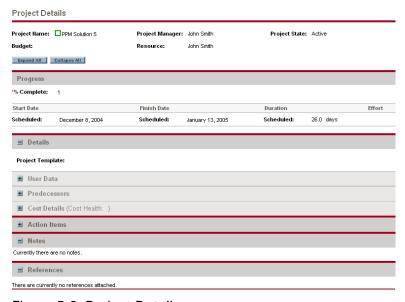


Figure 5-3. Project Details page

The Project Details page can be accessed through the Project Summary section in the Project Overview page, which contains a link to the Project Details page. Click **Project Details** to go to the Project Details page.

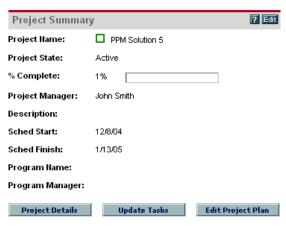


Figure 5-4. Project Summary section

Viewing Project Plan Hierarchy

The Project Hierarchy page displays the project plan's hierarchical organization of tasks and subprojects as well as information such as:

- Task or subproject name
- Task or subproject state
- Task or subproject scheduled duration, start, and finish
- Task or subproject predecessors
- Task or subproject resource or manager
- Task exceptions or subproject summary condition

The Project Hierarchy page is useful for providing context for participants in terms of the location of their tasks in the overall project plan framework, as well as indicating summary conditions and exceptions at a glance.

Clicking on any task within the Project Hierarchy page takes the user to that task's Details page. See *Viewing and Updating Task Details* on page 176 for more detailed information.

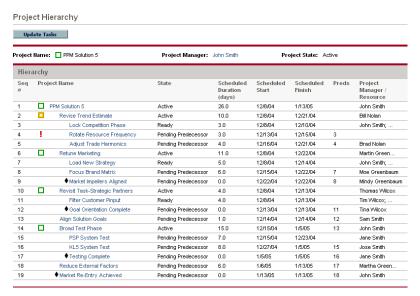


Figure 5-5. Project Hierarchy page

The Project Hierarchy page can be accessed through the Subprojects and Tasks Summary section in the Project Overview page, which contains a link to the Project Hierarchy page. Click **Project Hierarchy** to go to the Project Hierarchy page.

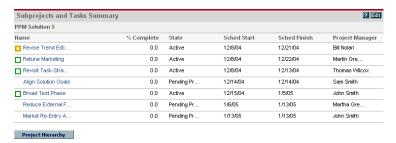


Figure 5-6. Subprojects and Tasks Summary section

Viewing Exceptions

The Project Exception Detail page displays the exceptions that have been triggered for the project plan being viewed, breaking each triggering task down according to:

- Exception type and number of days violated
- Task state, resource, scheduled start and finish
- Project path

This is useful for participants in that it provides specific context for every exception in a project plan, 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, tasks that have not been assigned a resource can be assigned one directly from the Project Exception Detail page.

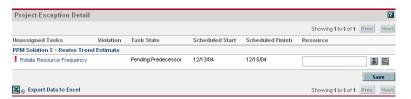


Figure 5-7. Project Exception Detail page

Getting to the Exception Detail Page

The Project Exception Summary section in the Project Overview page contains a link to the Project Exception Detail page. Click **Details** to go to the Project Exception Detail page.



Figure 5-8. Project Exception Summary section

Viewing Project References

The Project References section in the Project Overview page displays all entities linked to the project plan as references. References (requests, packages, tasks, other project plans, releases, attachments, and URLs) are listed with details including:

- Reference Type
- Description
- Referenced By

The Project References section provides a convenient single point of access for all entities referenced by a project plan.

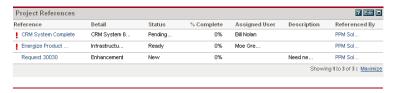


Figure 5-9. Project References section

Viewing the Project Plan Gantt Chart

The Project Overview Gantt section, displayed on the Project Overview page, shows the project plan's Gantt chart including Milestones.

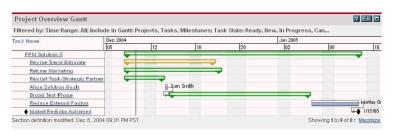


Figure 5-10. Project Overview Gantt section

Display criteria for the Gantt chart can be configured by clicking **Edit**, which opens the portlet's filter page.

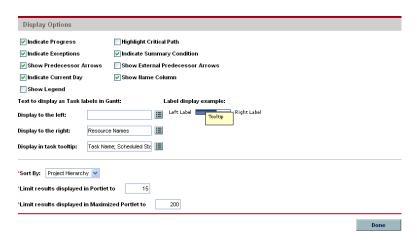


Figure 5-11. Project Overview Gantt section filter page - Display Options section

Viewing the Critical Path

The critical path of a project plan is made up of the tasks that define its duration. A project plan's critical path can be displayed in the Project Overview Gantt section by clicking **Edit** and selecting the Highlight Critical Path checkbox.

Viewing Project Plan Milestones

Milestones are used to mark significant events in a project plan, often the completion of a deliverable or arrival of a deadline. In the Project Overview Gantt portlet, milestones appear as black diamonds.

Milestones are also listed in the Project Milestones section, displayed on the Project Overview page.



Figure 5-12. Project Milestones section

Viewing Resource Information

Resources can view information on their current assignments using the View Resource page. The View Resource page includes a chart of their capacity and a customized Gantt chart illustrating their assignments for the next two weeks, or a time period of their choosing.

Project managers with the proper level of access can also view information on resources including their cost rate and workload capacity. *Figure 5-13* illustrates a View Resource as shown to a manager with access to cost data.

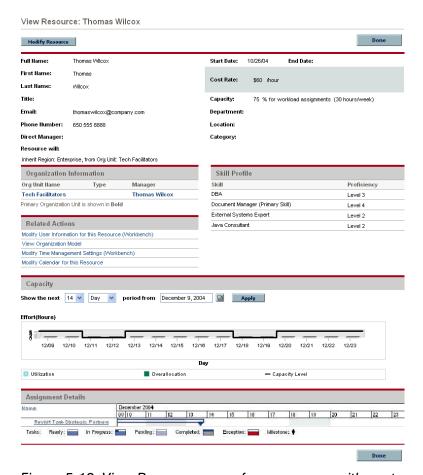


Figure 5-13. View Resource page for a manager with cost access

To open the View Resource page, select **Search > Resources** from the menu bar. Enter any search criteria into the Search Resources page and click **Search**.

Updating Tasks

Project Management makes it easy for project plan participants to report on different aspects of tasks in multiple levels of detail:

- Viewing and Updating Task Details
 Participants can view their tasks in detail, updating and saving information such as task progress, attachments, and action items.
- Viewing and Updating Multiple Tasks
 Multiple tasks can also be updated simultaneously, with information deemed essential by the project manager available to update immediately.

Updating a task can trigger events in the project plan that move it along its path to completion.



A task in a project plan that has predecessor tasks associated with it cannot be marked **Complete** until its predecessors have been completed, unless a project manager attempts it.

Viewing and Updating Task Details

The Task Details page contains detailed information on multiple aspects of a single task. Many fields in the Task Details page are updateable by project plan participants.

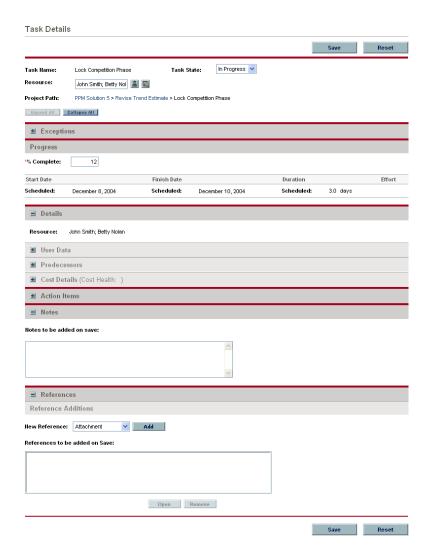
To update fields in the Task Details page:

- 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 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.**



Getting to the Task Details Page

A relevant task must first be located in order to get to its Details page and update its information. There are several ways for participants to locate and view details for any tasks that might require their attention:

- Searching for Tasks and Project Plans on page 159
- Finding Tasks Using the My Tasks Portlet on page 162
- Finding Tasks Using Notifications on page 163

Any task's Details page can also be reached from the Project Hierarchy page. See *Viewing Project Plan Hierarchy* on page 170 for more detailed information.

Viewing and Updating Multiple Tasks

Sometimes it might be necessary for a project plan participant to only update a specific task detail, such as the Task State or % 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 can be configured by project managers. See *Selecting Information to Track and Display* on page 28 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 project plan participants.

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 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.**

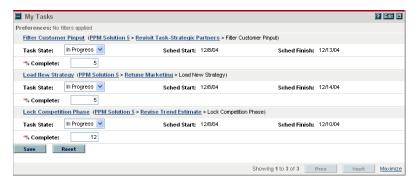


Figure 5-14. My Tasks portlet

Getting to the My Tasks Portlet

The My Tasks portlet is defaulted to display on a project plan participant's home page. The home page can be reached at any time by selecting **Dashboard > My Pages > Front Page** from the menu bar at left.

Viewing and Adding Notes

Notes are available for viewing and editing in the Task Details page. See *Viewing and Updating Task Details* on page 176 for information on the Task Details page.

To create a new note:

- 1. Get to the Details page of the task to update.
- 2. Type the new note into the New Note text field.
- 3. Click Save.

Viewing and Modifying References

Project Management features a number of methods for capturing additional information, or references, related to your project plans. Tasks can include references to other entities or points of information, allowing easy access and visibility to data related to the current project plan. The following references can be attached to a task:

- Requests
- Packages
- URLs
- Attachments (anything that can be placed on a server: PDF files, JPEG images, Java .class files, and so forth)
- Tasks
- Other project plans
- Releases

References are attached from the Task Details page. References can be added and modified using both the standard interface and the Workbench.

Adding References to Tasks

You can reference a Web accessible file or attach a file from your local machine to the current task. You can also reference an existing Mercury IT Governance Center entity (request, package, project plan, or task).

To attach references to a task:

- 1. Open the Task Details page using one of the following methods:
 - Search for and open the task directly using the Search > Tasks menu option.
 - Query and open an existing project plan using the Search > Projects menu option. Locate the task within the project plan and open the Task Details page.
- 2. Scroll down to the **References** section of the page.
- 3. Select a reference type from the New Reference drop-down list.
- 4. Click Add.

A page corresponding to the selected reference type opens. Enter the reference on this page. For certain reference types, you have the option of searching for a reference.

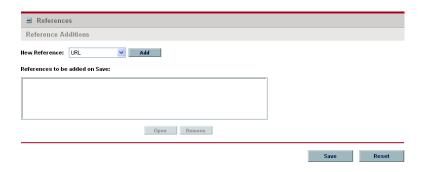
- 5. Attach the reference.
- 6. Click **Save** on the Task Details page.

Attaching Existing Mercury IT Governance Center Entities

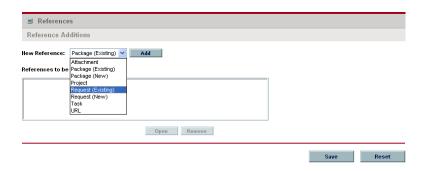
You can attach an existing Mercury IT Governance Center entity (request, package, project plan, or task) to a task.

To attach an existing Mercury IT Governance Center entity to a task:

1. Navigate to the Task Details page and scroll down to the **References** section.



 Select < Entity> (Existing) (< Entity> can be Task, Project Plan, Request (Existing), Request (New), Package (New), or Package) to be added from the New Reference drop-down list.

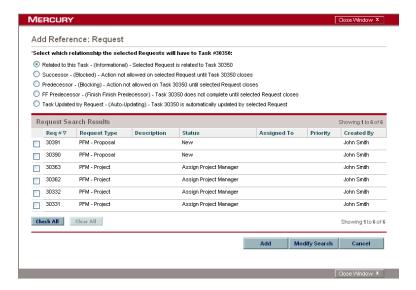


3. Click Add.

A page opens presenting search criteria for the request, package, release, project plan, or task to be referenced.

4. Enter the appropriate information and click **Search**.

A page opens presenting search results.



5. Select the checkbox next to the entity or entities to be referenced.

To check all boxes, click Check All. To deselect all boxes, click Clear All.

6. Select a relationship for the referenced entities from the drop-down list at the top of the page.

For a complete list of all reference relationships, see *Dependency Relationships* on page 113.

7. Click Add.

The referenced entities appear in the References to be added on Save list on the Task Details page. *The references have not been added yet*.

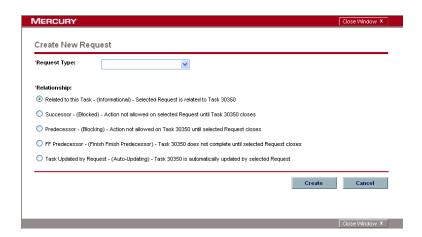
8. Click **Save** to add the references to the task.

Attaching New Requests

A new request can be created from the **References** section of the Task Details page.

To create a new request from the references section of the Task Details page:

- 1. Select **Request (New)** from the New Reference drop-down list.
- 2. Click Add.



The Create New Request page opens.

3. Choose the request type that you want to generate from the Request Type drop-down list in the Create New Request section.

A description of each request type displays below the list. To save time, the most recently created request types will be first on the list.

- 4. Select the relationship for the new request from the Relationship drop-down list.
- 5. Click Create.
- 6. Enter the information related to your new request in the Create New Request page.

Required fields are displayed in red. If you would like to make additional comments on the request, enter them in the Notes field.

7. Save and submit the new request.

The referenced request appears in the References to be added on Save list on the Task Details page. *The reference has not been added yet*.

8. Click **Save** to add the reference to the task.

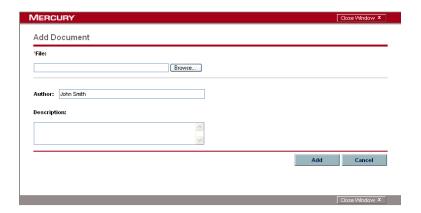
Attaching Files

To add a file as a reference:

1. Navigate to the task's Details page and scroll down to the **References** section.

- 2. Select Attachment from the New Reference drop-down list.
- 3. Click Add.

The Add Document page opens.



- 4. Select the desired file from your local machine and enter 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 Details page. *The reference has not been added yet*.

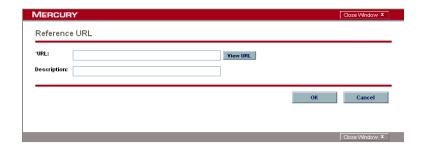
6. Click **Save** to add the attachment to the task.

Attaching URLs

To add a URL as a reference:

- 1. Navigate to the Task Details page and scroll down to the **References** section.
- 2. Select **URL** from the New Reference drop-down list.
- 3. Click Add.

The Reference URL page opens.



- 4. Type the URL into the URL field and enter 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 Details 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 Details page.

To view the references currently linked to the task:

- 1. Open the Task Details page.
- 2. Scroll down to the **References** section.

Expand and collapse sections by clicking the + and - icons to view additional details.

- 3. 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 plan, its Project Overview page opens, displaying summary information related to that particular project plan.

• If the reference is another Mercury IT Governance Center entity (request, package, or task) it will open the entity's Details page.



If you have licenses for Mercury Demand Management and Mercury Change Management, you can click the request or package to access their detail pages. You can then update those entities according to normal Mercury IT Governance 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. The following figure illustrates the functionality related to references.

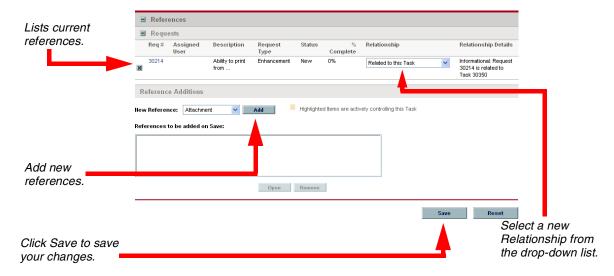


Figure 5-15. Task Detail page References section

You can also view references related to your tasks and project plans using the Project References section on the Project Overview page. Add the section to the Project Overview page and then personalize it to show the references that are relevant to your activities. The section can be personalized to display references based on the following information: Reference types, relationship, time period when they were added, and whether or not they are preventing actions on tasks.

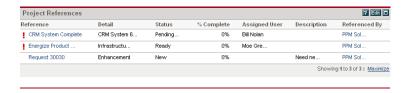


Figure 5-16. Project References section

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 Details page and scroll down to the References section.
- 2. Click the **X** 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.

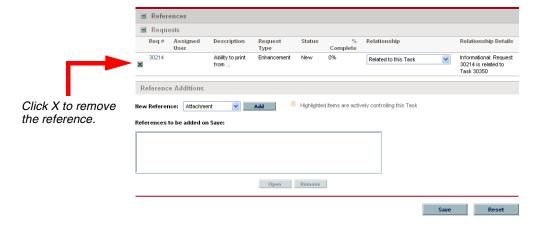


Figure 5-17. Task Detail page References section

Visibility Between Project Plans and Programs

Mercury Program Management provides a way for managers to link multiple project plans 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 project plans.

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

Running Reports

You can run reports on your Project Management information from the **Reports** menu group in the menu bar.

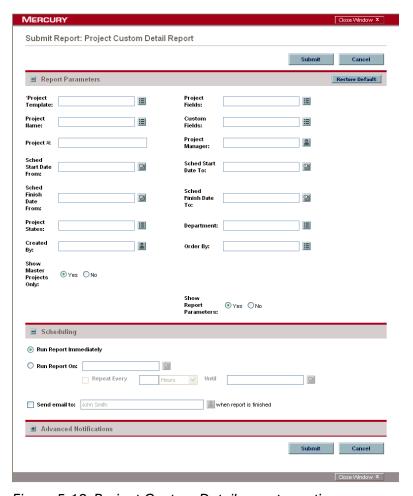


Figure 5-18. Project Custom Detail report creation page

This example of a report creation page shows the required and optional fields for the Project Custom Detail report. Each report type has its own set of required and optional fields. The report creation page always displays a different set of fields depending on which report type is selected. See the *Reports Guide and Reference* for more information.

ng Tasks: Projec		

Chapter Using Project Templates

In This Chapter:

- Overview of Using Project Templates
- Setting up a Project Template
 - Adding Tasks to a Project Template
 - Creating Custom Fields for Project Templates
 - Configuring Tasks in a Project Template
 - Configuring Settings for a Project Template
 - Setting Ownership for a Project Template
- Creating a Project Template from an Existing Project Plan
 - Project Plan to Project Template Conversion Details
- Creating a Master Project from a Project Template
- Creating a Subproject from a Template

Overview of Using Project Templates

This chapter explains how to create and use project templates in Project Management.

Setting up a Project Template

Project templates are used in Project Management to create repeatable processes to be used as a model and basis for numerous master projects. Templates can also be created and then imported as a subproject into a master project.

Project templates speed up the process of setting up your project plans. A repeated set of tasks are bundled into a template and dropped into any project plan while preserving its notifications, project plan, and any custom fields the template can have.

For example, a company with several different software products might use the same process for all development efforts. A project template could be used to create the master project for each one, as opposed to creating them all individually every time a project is planned. Information for each individual project plan can then be modified by a particular project manager as needed.

Project templates consist of three parts:

Project Plan

An ordered list of tasks. The sequence of tasks is identical in form and function to the Project **Plan** tab.

Any custom fields created by the user

Configurable custom fields define and collect any necessary information that is not already covered by standard task or project plan detail fields.

Project Template settings

Settings for a project template work the same way as settings for a master project.

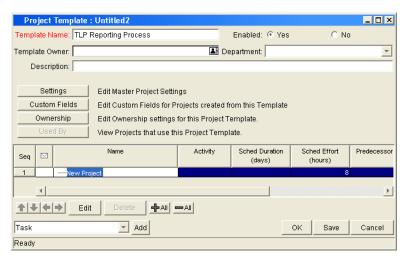


Figure 6-1. Project Template window

Adding Tasks to a Project Template

The process of adding tasks to a project template is identical to adding tasks in the Project Plan tab. See *Adding Tasks to the Project Plan Tab* on page 50 for details.



Project templates do not contain references, action items, or notes. Some fields cannot be updated.

Creating Custom Fields for Project Templates

Project managers can create custom fields that collect information not covered by project plan or task detail fields. Custom fields are unique to each template.

Defining Custom Fields for Project Templates

To add a custom field to a project template:

- 1. Log on to Mercury IT Governance Center and open the Workbench.
- 2. From the shortcut bar, select **Project Management > Project Templates.**

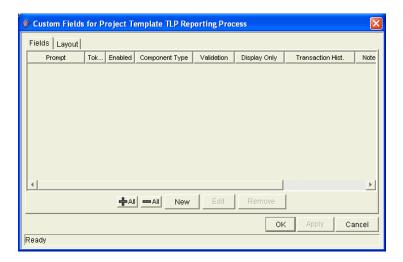
The Project Template Workbench opens.

3. Open an existing template by searching for and double-clicking the template, or create a new template by clicking **New**.

The Project Template window opens.

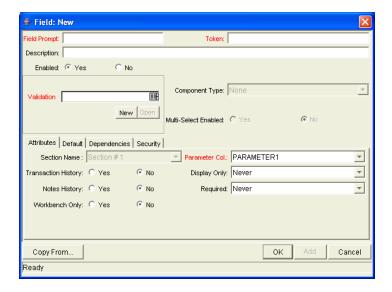
4. Click Custom Fields.

The Custom Fields for Project Template window opens.



5. Click New.

The Field: New window opens.



- 6. Enter the general field information which includes the following:
 - Field Prompt
 - Token
 - Validation
- 7. In the **Attributes** tab, enter information as described in *Table 6-1*.

Table 6-1. Field window Attributes tab fields

Field	Description
Parameter Col.	Used to determine the place in the internal database column where the field value is stored. Fields in a project template cannot use the same column number.
Transaction History	Controls the transaction auditing facility for this field. If set to Yes , whenever this field changes in a project plan, the change is logged in a transaction history table.
Display Only	Determines if the field is only displayed and cannot be updated. To use the logic defined in the Dependencies tab, select Use Dependency Rules .
Notes History	Turns notes auditing on or off for this field. If set to Yes , whenever this field changes in a project plan, the change will be logged in the notes.
Required	Determines if the user is required to specify a value for this field. To use the logic defined in the Dependencies tab, select Use Dependency Rules .
Workbench Only	Determines if the field is visible in the Workbench only and not in the HTML interface.

- 8. Click the **Default** tab.
- 9. Enter information as described in *Table 6-2*.

Table 6-2. Field window Defaults tab fields

Field	Description
Default Type	Defines if the field will have a default value. Either defaults the field with a constant value by selecting Constant , or with a value from another field by selecting Parameter .
Visible Value	If Default Type is set to Constant , enter the constant value in this field. This value should be what the user would normally enter in the field.
Depends On	If the Default Type is set to Parameter , select the token name of that field. At runtime, any value that is entered or updated in the source field will automatically be entered or updated in this destination field.

- 10. Click the **Dependencies** tab.
- 11. Enter information as described in *Table 6-3*.

Table 6-3. Field window Dependencies tab fields

Field	Description
Clear When Changes	Indicates that the current field should be cleared when the specified field changes (the field needs to be on the project template).
Display Only When	Indicates that the current field should only be editable when certain logical criteria are satisfied. This field functions with two adjacent fields: a drop-down list containing logical qualifiers and a text field. To use this functionality, select Use Dependency Rules in the Attributes tab.
Required When	Indicates that the current field should be required when certain logical criteria are satisfied. This field functions with two adjacent fields: a drop-down list containing logical qualifiers and a text field. To use this functionality, select Use Dependency Rules in the Attributes tab.

12. Click the **Security** tab to define the field security.

See Setting Visibility at the Field Level for details.

13. Click **Add** to save the configuration for this custom field and create additional custom fields, or click **OK** to save the configuration for this custom field and close the Field: New window.

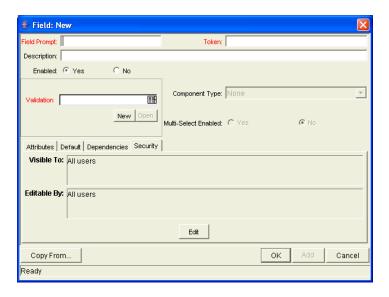
Setting Visibility at the Field Level

By default, all fields are set to be visible to all users and editable by all users. Field visibility and editability can be controlled from the Field window's **Security** tab using the Edit Field Security window. To configure field visibility from the Field window:

- 1. Open the desired project template.
- 2. Click Custom Fields to open the Custom Fields for Project Template window.
- 3. Select the desired field and click Edit.

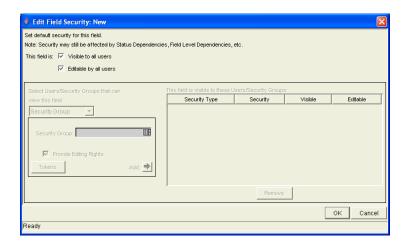
The Field window opens.

4. Click the Security tab.



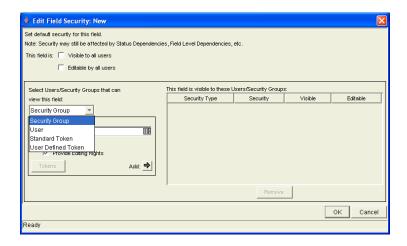
5. Click Edit.

The Edit Field Security window opens.



- 6. Deselect the Visible to all users box to begin fine-tuning field properties.
- 7. Make a choice from the Select Users/Security Groups that can view this field drop-down list.

You can select a User, Security Group, Standard Token, or User Defined Token.



8. Once you have made your choice from the drop-down list, select the user, security group, or token from the auto-complete list.

If you want to assign the selected user, security group, or token editing rights as well as viewing rights to the field, select the Provide Editing Rights checkbox.

9. Click the **Add** arrow button to add the selected user, security group, or token to the This field is visible to these Users/Security Groups area.

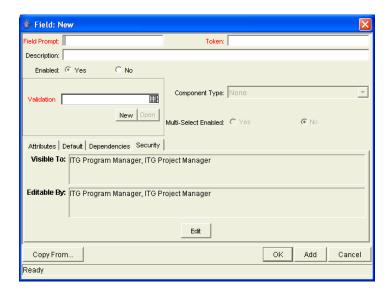
If you change your mind about granting the selected user, security group, or token editing rights, you can deselect the box in the Editable column of the This field is visible to these Users/Security Groups area. The field will then be visible but not editable to the selected user, security group, or token. To remove viewing rights entirely, select the user, security group, or token and click **Remove.**

OK

Cancel

10. When you are finished adding users, security groups, or tokens to the This field is visible to these Users/Security Groups area, click **OK** to save changes and return to the **Security** tab.

The **Security** tab is updated with the list of users, security groups, or tokens with viewing or editing rights to the field.



Modifying the Layout of Custom Fields

You can modify the graphical representation and placement of the custom fields in the project template. These changes are made in the **Layout** tab in the Custom Fields for Project Template window.

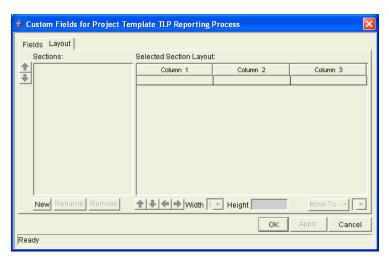


Figure 6-2. Custom Fields for Project Template Layout tab

Modifying Custom Field Widths

To change the column width of a project template's custom field:

1. Open the desired project template.

- 2. Click **Custom Fields** to open the Custom Fields for Project Template window.
- 3. Click the Layout tab.
- 4. Select the custom field.
- 5. Select either the 1, 2, or 3 choice in the Width drop-down list.



The Layout editor will not allow changes to be made if the change conflicts with another field in the layout. For example, a field's width cannot be changed from one to two if another field exists in column two on the same row

For custom fields of component type **Text Area**, the number of lines the text area displays can be specified. Select the field in the **Layout** tab and change the value in the Component Lines attribute. If the selected custom field is not of the type **Text Area**, this attribute is blank and cannot be updated.

Moving Fields

To move a custom field or set of custom fields:

- 1. Open the desired project template.
- 2. Click **Custom Fields** to open the Custom Fields for Project Template window.
- 3. Click the **Layout** tab.
- 4. Select the custom field(s).

To select more than one custom field, press the **Shift** key while selecting the last custom field in a set. Only a group of adjacent fields can be selected.

5. Use the directional arrow buttons to move the custom fields to the desired location.



Custom fields cannot be moved to an area where other fields already exist. The other fields must be moved out of the way first.

Adding Sections

To add a section to a project template:

- 1. Open the desired project template.
- 2. Click **Custom Fields** to open the Custom Fields for Project Template window.
- 3. Click the **Layout** tab.
- 4. Click **New** in the Sections frame.

The Input dialog opens.

- 5. Enter a Section Name.
- 6. Click OK.

The name of the new section appears in the **Layout** tab. When project templates are used to create a master project, the sections with the appropriate custom fields are displayed. To change a section name, click on a field that resides in that section and click **Rename** to enter a new value in the Input dialog. The change is reflected immediately.

Previewing Layouts

Click **Preview** to view the layout. This opens a small window that shows the fields as they will appear.

Remember that:

- If all of the custom fields have a width of one column, all displayed columns will automatically span the entire available area when the template is displayed.
- Any rows with no custom fields are ignored. They do not show up as a blank line.
- Any non-displayed custom fields do not affect the layout. The layout engine considers them the same as blank fields.

Adding Fields to Existing Project Plans

Custom fields can be imported into an existing project plan at any time without simultaneously importing the project template they come from. This allows you to capture whatever information is needed without having to deal with a

superfluous set of project plans or tasks. Custom fields appear in the Project or Task Information window on their own tab.

For information on adding custom fields to existing project plans, see *Importing Custom Fields from a Project Template* on page 48.

Configuring Tasks in a Project Template

Tasks and notifications in a project template can be configured the same way as they are in the Project **Plan** tab. See *Editing Task Information* on page 87 for details.

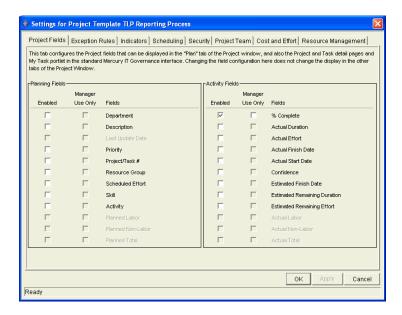


Project templates do not contain references, action items, or notes. Some fields cannot be updated.

Configuring Settings for a Project Template

Project templates contain settings identical to the settings for a master project. The process of configuring these settings is also identical. From the Project Template window, you can access the Settings for Project Template window where you can configure the following:

- Project fields
- Exception rules
- Indicators
- Scheduling
- Security
- Project teams
- Financial Management



See *Setting Up a Master Project* on page 26 for detailed instructions on configuring the project template settings.



If a master project is created from a project template, that master project will have all of the template's settings.

However, if a project template is used to create a subproject inside a master project, then that template's settings will be overridden by the current master project's settings.

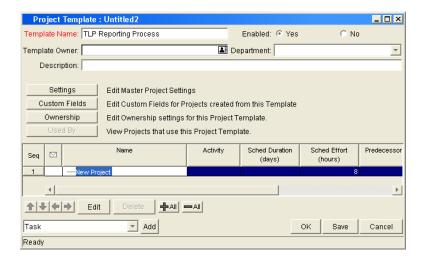
Setting Ownership for a Project Template

Different groups of users can have exclusive control over the project templates used by their group. These groups are referred to as ownership groups. Members of the ownership group are the only users who can edit, delete or copy the project template. Each project template can be assigned multiple ownership groups.

Ownership groups are defined in the Security Group window in the Workbench.

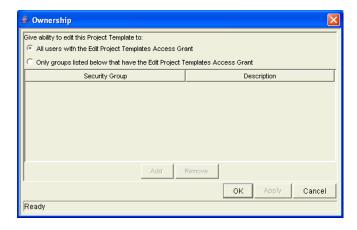
To set the ownership for a project template:

1. Open a project template.



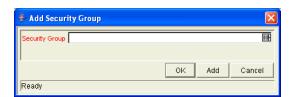
2. Click Ownership.

The Ownership window opens.



- 3. Select the Only groups listed below that have the Edit Project Templates Access Grant option.
- 4. Click Add.

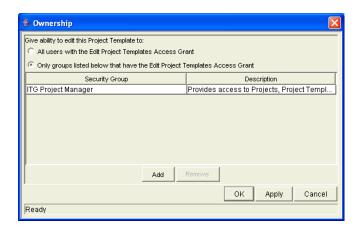
The Add Security Group window opens.



5. Select a security group from the Security Group auto-complete list.

The name of the security group you selected is displayed in the Security Group field.

6. Click **OK** to close the Add Security Group window.



7. Click OK.

The security groups are added to the ownership group and the Ownership window closes. Now only members of the security group(s) specified in the Ownership window can edit, delete, or copy this project template.



If no ownership groups are associated with the entity, the entity is considered global and any user with the Edit access grant for the entity can edit, copy, or delete it.

Application administrators have the Ownership Override access grant and can

Application administrators have the Ownership Override access grant and can access configuration entities even if the application administrator is not a member of one of the ownership groups and does not have the Edit access grant.

If a security group is disabled or loses the Edit access grant, that group will no longer be included in the ownership group.

Creating a Project Template from an Existing Project Plan

Project managers can create a new project template from an existing project plan. Project managers who want to convert their Microsoft Projects into Project Management templates can first import their Microsoft Project into a

Mercury IT Governance project plan and then convert it into a template. See *Integrating Project Management with Microsoft Project* on page 215 for detailed instructions on converting a Microsoft Project file into a Mercury IT Governance project plan.

To create a project template from an existing project plan:

- 1. Log on to Mercury IT Governance Center.
- 2. From the shortcut bar, select **Project Management > Projects**.

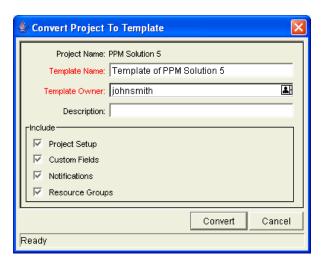
The Project Workbench opens.

- 3. Locate and open the project plan that you would like to convert to a project template.
- 4. Select Project > Convert Project to Template from the menu.

The Convert Project to Template window opens.



In order to successfully convert a project plan to a template, you must be the only user editing the project plan. If other users are editing the project plan, a message will appear stating that the "Project is being edited by another user" and the conversion stops.

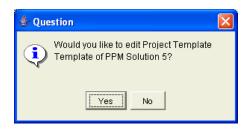


- 5. Enter a new Template Name, Template Owner and Description for the new project template.
- 6. Select whether to include Project Setup, Custom Fields, Notifications and Resource Groups by selecting the associated checkbox.

See *Project Plan to Project Template Conversion Details* for a list of items copied from the project plan to the template.

7. Click Convert.

When the conversion is complete, a dialog window opens.



8. Click **Yes** to edit the new project template.



In the project plan to template conversion, not all project plan details are copied to the new template. The project plan's actuals information is discarded during the conversion, such as the actual duration, efforts, start date and end date of the project plan and tasks. The resource, task notes and all references in the project plan are also discarded because the project template cannot represent these data.

Project Plan to Project Template Conversion Details

Table 6-4 describes the items that are copied or created in the project template when converted from an existing project plan.

Table 6-4. Items copied or created during the project plan to project template conversion

Item in Project Template	Description
The new Template Name	Provided by the user.
Enabled	Initially set to not enabled.
Template Owner	Set to the username of the user performing the conversion.
Description	Provided by the user.

Table 6-4. Items copied or created during the project plan to project template conversion

Item in Project Template	Description
Default Project Settings	Uses the standard default or copies the settings from the project plan, depending on the choice the user makes. Project settings include all of following:
	Project fields (Planning fields and activity fields)
	Exception rules
	Indicators
	Scheduling settings
	Security settings
Custom Fields and Layout	The user can select to copy custom fields and their layout. For custom fields defined at the master project level, the field definitions are copied into the new template. For custom fields defined at the subproject level, only the references to the source project plans are copied.
Notifications	Optional setting in the Convert Project To Template window.
Project Hierarchy	Copied based on the project plan.

Table 6-4. Items copied or created during the project plan to project template conversion

Item in Project Template	Description
	Project Name: copied
	Project Manager: set to blank
	Project State: clear to default value
	Department: copied
	Template: converted (blank for master projects)
	Project Path: converted
	Description: copied
	Priority: copied
	% Complete: set to 0
Project Info	Confidence: set to blank
Fiojectiiilo	Predecessors: converted
	Start Date/Actual: set to blank
	Finish Date/Estimate: set to blank
	Finish Date/Actual: set to blank
	Duration/Scheduled: copied
	Duration/Est. Remaining: set to blank
	Duration/Actual: set to blank
	Effort/Scheduled: copied
	Effort/Est. Remaining: set to blank
	Effort/Actual: set to blank

Table 6-4. Items copied or created during the project plan to project template conversion

Item in Project Template	Description
	Task Name: copied
	Task Category: copied
	Task State: cleared to default value
	Department: copied
	Template: copied
	Project Path: converted
	Resource: set to blank
	Resource group: copied
	Description: copied
	Priority: copied
	% Complete: set to 0
Task Info	Confidence: set to blank
	Predecessors: converted
	Start Date/Actual: set to blank
	Date/Estimate: set to blank
	Finish Date/Actual: set to blank
	Duration/Scheduled: copied
	Duration/Est. Remaining: set to blank
	Duration/Actual: set to blank
	Effort/Scheduled: copied
	Effort/Est. Remaining: set to blank
	Effort/Actual: set to blank
	Scheduling Constraint: all constraints are removed



Task notes and all references are dropped, since the project template cannot represent this data.

Creating a Master Project from a Project Template

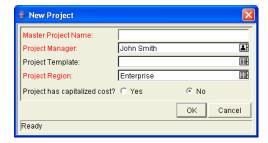
If a company has a business process that is used repeatedly, it will be easier to create and manage if it has its own template containing preconfigured settings.

To create a new master project from a project template:

- 1. Log on to Mercury IT Governance Center.
- 2. From the shortcut bar, select **Project Management > Projects**.

The Project Workbench opens.

3. Click New Project.



- 4. Enter a master project name in the Master Project Name field.
- 5. Select the desired template from the Project Template auto-complete list.
- 6. Click OK.

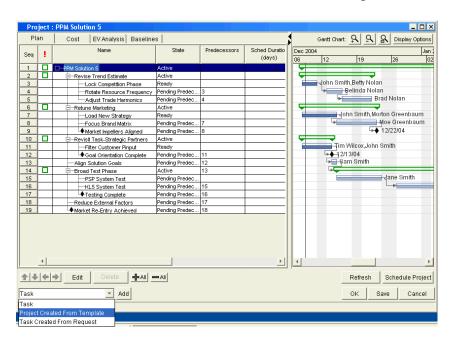
A new master project is created, including the project plan, all of the fields to be collected, indicators, exception rules, custom fields, notifications, Financial Management and scheduling parameters defined in the project template.

Creating a Subproject from a Template

Project templates can be used to add subprojects to a master project, adding tasks in a predefined order and hierarchy. The new subprojects added will include notifications, custom fields, and default values for Scheduled Effort and Duration.

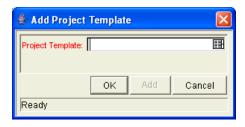
To add a set of tasks to a project plan using a project template:

- 1. Open the Project window for the project plan that you would like to change.
- 2. Select Project Created from Template from the drop-down list.



3. Click Add.

The Add Project Template window opens.



4. Select a Project Template from the auto-complete list and click **OK.**

The selected template is added to the project plan as a collapsed subproject. If the subproject is not in the place you want it to be, you can move it with the arrows in the Project **Plan** tab (See *Setting Up Project Hierarchy* on page 52 for more details).

5. Modify the information in any task inside the subproject by double-clicking on it.

The Task Information window for that task opens.

- 6. Edit the information.
- 7. Click **OK** to save the information and close the Task Information window, or click **Save** to save the changes without closing the window.

Chapter

7

Integrating Project Management with Microsoft Project

In This Chapter:

- Overview of Integrating Project Management with Microsoft Project
- Synchronization Modes
 - Project Management controlled
 - Microsoft Project controlled
 - Project Management controls actuals
- Project Management Strategies
 - Overview of Converting a Microsoft Project File to an IT Governance Project
 - Publishing a Mercury IT Governance Project through Microsoft Project
 - Publishing a Microsoft Project File through Project Management
 - Using Project Management to Track Actuals in Microsoft Project
- Requirements for the Project Management–Microsoft Project Interface
 - Microsoft Project Requirements
 - Access Grants
 - Required Software
- Exporting to Microsoft Project from Project Management
- Importing from Microsoft Project
- Synchronizing Microsoft Project and Project Management
- Synchronization of Resources
- Impact of Microsoft Project Rules on Fields
 - Solutions for Project Managers
- Conditional Editing Allowed In Project Management

- Editing Project Management Controlled Projects
- Editing Microsoft Project Controlled Projects
- Project Management Controls Actuals
- Conditional Editing Summary Table
- Summary of Synchronization Behavior
- Integration with Other Mercury IT Governance Center Products
 - *Limitations on References*
 - Allowed Types of References During a Synchronization
 - References Summary Table
- Available Reports
 - Microsoft Project Synchronization Report
 - Unsuccessful Resource Matches Report
 - Project Detail Report
- Troubleshooting
 - Resource Calendars
 - Units
 - Advanced Predecessors
 - Advanced Constraints
 - Calculation of Roll-up Values
 - Microsoft Project's Manual Scheduling Mode
 - Scheduling Your Project in Microsoft Project

Overview of Integrating Project Management with Microsoft Project

This chapter explains how to integrate Project Management with Microsoft Project. The Project Management—Microsoft Project interface allows project managers to import project information from Microsoft Project to a new Mercury IT Governance project. Project information can also be exported from 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.



The Project Management–Microsoft Project interface is only compatible with Microsoft Project 98, 2000, and 2003, North American localization. It is not compatible with earlier versions of Microsoft Project such as Project Central.

Synchronization Modes

By importing, exporting and synchronizing information between 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. See *Project Management Strategies* for more information about different project management strategies.

The project manager can select from three synchronization modes for importing/exporting information between Project Management and Microsoft Project. Each mode offers a different strategy for communication between the two applications and has its own set of advantages.

Project Management controlled

The project manager initially creates a project in 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, 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 that is also contained in the Mercury IT Governance project is replaced with the current information in Project Management. Other information in the Microsoft Project file (custom fields, resource cost rates, and so forth) is not altered.

After exporting, 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 synchronizes it in the Workbench. The synchronized Mercury IT Governance Project automatically rolls up into the Mercury IT Governance Dashboard. Also, participants can create references from tasks in the synchronized project to other Mercury IT Governance Center information (requests and packages). These references can provide information back to the project manager, or can automatically inform external participants of project events they are monitoring.

For all subsequent synchronizations, information in Project Management is updated with current information from Microsoft Project.

Project Management controls actuals

The project manager plans and schedules the project in Microsoft Project while using Project Management to track actuals. Participants in the project directly report actuals data using the Task Update portlet in the standard interface. Each subsequent synchronization updates the Microsoft Project file with actuals data from Project Management. The Mercury IT Governance Project is updated with changes to the project structure or schedule in Microsoft Project.

See *Synchronizing Microsoft Project and Project Management* on page 234 for more information about synchronization.

Project Management Strategies

The following scenarios demonstrate how project managers can use different project management strategies offered by the Project Management–Microsoft Project interface.

Overview of Converting a Microsoft Project File to an IT Governance Project

A project manager who has previously used Microsoft Project but is adopting Project Management can use the interface to convert a Microsoft Project file to a Mercury IT Governance Project. Conversion is a one-time action, but the project manager might want to keep the Microsoft Project file and the Mercury IT Governance Project synchronized after conversion.

To convert a Microsoft Project file to a Mercury IT Governance Project:

- 1. Save the Microsoft Project file to a local file on your computer.
- 2. Open the Workbench and start an import from the Project window.
- 3. Follow the instructions from the Import from Microsoft Project wizard. (See *Importing from Microsoft Project* on page 228 for detailed instructions.)
 - a. Browse for the Microsoft Project file.
 - b. Enter additional information about the new Project in the wizard as you go through the steps of the import.

When the Import from Microsoft Project wizard completes the procedure, the project manager can see the new project in Project Management and can decide whether or not to save the project. The Microsoft Project file has been updated with hyperlinks to the related pages in the standard interface. The project manager can decide whether to save these changes also. Both projects will have unsaved changes.

Initially, the project manager might want to keep the project under the control of Microsoft Project, and periodically synchronize the Mercury IT Governance Project with Microsoft Project information. (See *Publishing a Microsoft Project File through Project Management* for more information about synchronizing projects.) This allows the project manager to see how the project is presented in Project Management. Later, when the project manager is more comfortable with Project Management, the project manager can change to the

Project Management controlled mode, and can decide to stop synchronizing the project with Microsoft Project entirely.

Publishing a Mercury IT Governance Project through Microsoft Project

A project manager who uses Project Management to manage projects can use the Project Management—Microsoft Project interface to publish the projects. Publishing can simply mean distributing the Microsoft Project file to external audiences (such as a PMO group). Publishing could also mean synchronizing the Microsoft Project file with 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 a Mercury IT Governance project through Microsoft Project:

- 1. Open the project to be exported in Workbench.
- 2. Export the project into a new Microsoft Project file. (See *Exporting to Microsoft Project from Project Management* on page 224 for detailed instructions.)
 - Since a project created in Project Management defaults to the synchronization settings for Project Management controlled mode, the project manager will probably not need to change any project settings.
- 3. In the new Microsoft Project file that created and that opens, save the project and run reports as usual.

After the first export, you will synchronize the Mercury IT Governance project with the Microsoft Project file. This will effectively overwrite shared information, but will not affect additional information in the Microsoft Project file that is added manually after the export has occurred (such as a baseline).



If you want to export a new project each time, the project manager can simply rename the Microsoft Project file on the computer before clicking the **Synch** button, which causes Project Management to export into a new file.

Publishing a Microsoft Project File through Project Management

A project manager who uses Microsoft Project to manage projects can publish those projects using Project Management. Publishing means loading the project data into the Project Management repository, which has the following benefits:

- The project status appears in the Mercury IT Governance Dashboard. Project Management calculates exceptions and stoplight status (red/yellow/green) based on the project settings on the Mercury IT Governance project.
- Project participants and external audiences can see the project in various interfaces such as the My Tasks portlet and the search screens. Although these participants cannot use Project Management to update project status, this is an effective way to increase visibility of project information through the standard interface.
- Project Management users can create references from other Mercury IT
 Governance 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, and block progress on a request or package until the
 predecessor task is complete.

The project manager is likely to publish the project to Project Management on a regular basis. The project manager's actions are identical to the scenario described in the previous section, *Publishing a Mercury IT Governance Project through Microsoft Project*, except that synchronization is left in Microsoft Project—controlled mode for all shared project data.

Using Project Management to Track Actuals in Microsoft Project

A project manager who uses Microsoft Project to plan and manage projects can use Project Management to collect actuals from participants. In addition to the benefits described previously in *Publishing a Microsoft Project File through 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 project to Project Management or to collect new actuals updates into Microsoft Project.

To use Project Management to track actuals from Microsoft Project:

1. Import the Microsoft Project file into Project Management.

2. During the import, select the **Project Management controls actuals** synchronization mode.

Initially, the Mercury IT Governance project is identical to the Microsoft Project file. After the import, participants or the project manager can enter actuals information into Project Management.

3. The project manager synchronizes the two projects, and the Microsoft Project file is updated with the new actuals in Project Management.

This causes some changes to schedule dates in the Microsoft Project file. For example, an actual start date entered into Project Management will overwrite a scheduled start date in Microsoft Project.

The Mercury IT Governance Project is updated to match the project structure and schedule information of the modified Microsoft Project file. Both Projects are shown to the project manager in their respective applications, and the project manager can choose whether to save either or both projects. If necessary, the project manager can adjust the Microsoft Project file. This can mean shifting assignments, changing schedule dates (using the Microsoft Project resource-leveling feature), or other changes. The project manager saves the changed Microsoft Project file and synchronizes it with Project Management a second time to publish these schedule changes to participants.

Requirements for the Project Management–Microsoft Project Interface

The project manager configures the interface behavior and performs synchronizations from the Workbench. The Project Management–Microsoft Project interface is transparent from the Microsoft Project side, with the exception of task hyperlinks added to Project Management Web pages.

Microsoft Project Requirements

The Microsoft Project requirements for the interface are:

- Microsoft Project must be installed on the desktop PC.
- The saved project file must either be on the local PC, or on a mapped network drive.

Access Grants

The project manager needs a Mercury Project Management license and the appropriate access grants. The Project Management–Microsoft Project interface relies on two Project Management access grants: Edit Projects and project manager.

The Edit Projects access grant allows a user to edit planning data for a Mercury IT Governance project, but only if that user is identified as one of the project managers. (Each Mercury IT Governance project has a distinct list of one or more project managers.)

The Project Manager access grant is a skeleton-key grant that allows the user to edit planning data for all Mercury IT Governance projects. Both grants allow the user to create new projects.

In order to use the Project Management–Microsoft Project interface, a user needs to have one of the following:

- Edit Projects access grant and the user must be a project manager for the specific project
- Project Manager access grant

The Security model for the Project Management–Microsoft Project interface is as follows:



- If the user is allowed to edit the planning data for the Project Management master project, then that user can export or synchronize the project. Any user who can create a Mercury IT Governance project in the Project Management application can also create a Mercury IT Governance project by importing an Microsoft Project file.
- The Project Manager access grant is an easy way to give global permissions to the Program Management Office (PMO) staff.

Required Software

In order for the Workbench to communicate with the Microsoft Project installation on the project manager's desktop computer, an additional file must be installed.

A Windows Dynamic Link Library (.dll) file must be installed on the project manager's desktop computer. This .dll file needs to reside somewhere in the path of the Windows operating system.

If using Internet Explorer, the process of installing the .dll file is automatic.

Exporting to Microsoft Project from Project Management

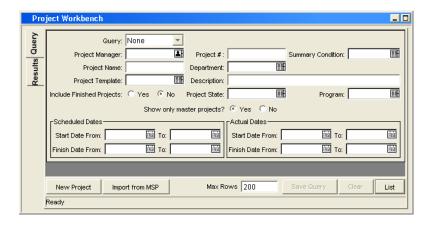
The following procedure describes how to export a Mercury IT Governance project to Microsoft Project. This creates a new project in Microsoft Project using the exported project's information.



Before exporting or synchronization, the project manager can select a synchronization mode from the MSP Synchronization tab in the Settings window or accept the default, Project Management controlled. See Setting Up Microsoft Project Integration on page 46 for more information about selecting a synchronization mode in the Settings window.

- 1. Log on to Mercury IT Governance Center and open the Workbench.
- 2. From the shortcut bar, select Project Mgmt > Projects.

The Project Workbench opens.

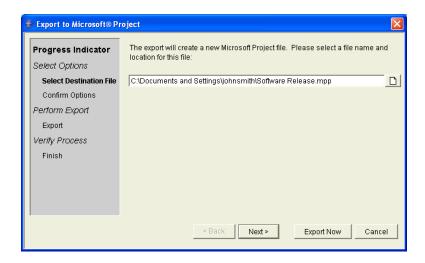


3. Query for and open the project to be exported.

When the Project window opens, a menu option **File > Export to Microsoft Project** is available *if* the project was not originally imported from
Microsoft Project or if it has never been exported to Microsoft Project. If
the project does not meet these criteria, then the option displays as **Synch**with MSP.

4. Select the menu option File > Export to Microsoft Project.

The Export to Microsoft Project wizard opens.



The various steps of the export process are shown in the Progress Indicator column on the left side of the wizard. The current step of the export process always displays in bold. Each step has its own interface that displays within the Export to Microsoft Project wizard. After each step is completed, a check mark appears by the name of the step. At this point, you should be at the Select Destination File step of the process.

You can click **Next** after completing each step of the wizard or click **Export Now.**

- Click **Next** to go to the next interface for selecting options for the export.
- Click Export Now at any step to bypass the remaining steps and begin
 exporting the Mercury IT Governance project file. The wizard uses the
 system default settings the first time you export a project. For each
 subsequent export, the wizard uses the settings from the last time you
 exported a Mercury IT Governance project.

5. Select a drive/directory as a destination for the new Microsoft Project file.

Either enter a new file name or select an existing file name for the Microsoft Project file to be created during the export.

The path and name of the new Microsoft Project file appears in the File Chooser field.

6. Click Next.

The Confirm Options interface displays in the Export to Microsoft Project wizard. It displays the following information:

- The path and name of the Microsoft Project file to be created during the export.
- The properties selected by the user on the MSP Synchronization tab of the Project Settings window.
- 7. If the options presented on this interface are not correct, click the **Back** button, go to the appropriate step in the export process and change the options. (Or close the wizard to access the Microsoft Synchronization Project Settings. These are located on the **MSP Synchronization** tab of the Project Settings window.)

If the options presented on this interface are correct, click **Export Now**.

The Microsoft Project file is created from the Mercury IT Governance project and displays as an icon on the Windows taskbar. The Finish interface displays in the Export from Microsoft Project wizard. This interface informs you whether or not the export was successful and if there are warnings in the Synchronization report.

8. To see the Synchronization report, click Show Synchronization Report.

The report displays in a separate browser window, as shown in the following example.



See *Available Reports* on page 249 for more information about the Synchronization report.

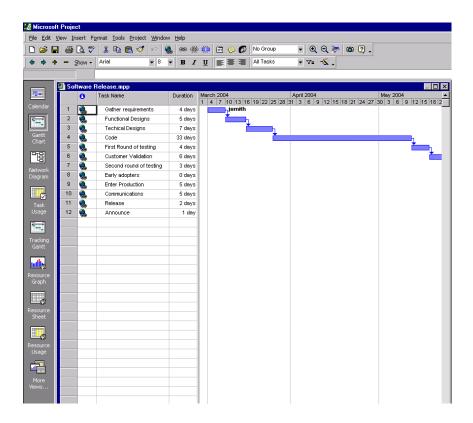
- 9. (Optional) Go to the Messages section of the report to see any warnings created during the export process.
- 10. Click Finish to close the Export from Microsoft Project window.



To see the most recent Synchronization report after the export from Microsoft Project window has been closed, select **View > Latest Synchronization Report** from the **Project** menu.

11. Verify the project data in both Project Management and Microsoft Project and either save or abandon the projects.

An example of a Microsoft Project file created by exporting a Mercury IT Governance project is shown in the following figure.



Importing from Microsoft Project

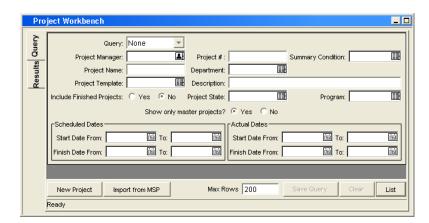
The following procedure describes how to import a Microsoft Project file into Project Management. This creates a new project in Project Management using the imported project's information.



When you import a large Microsoft Project (or a large number of projects) into Project Management, tables in the Mercury IT Governance 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 Mercury IT Governance Center database. Contact your application administrator for help with this procedure.

To import a Microsoft Project file into Project Management:

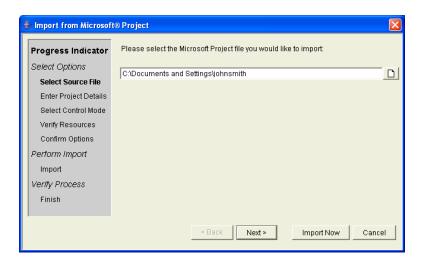
- 1. Log on to Mercury IT Governance Center and open the Workbench.
- 2. From the shortcut bar, select Project Mgmt > Projects.



The Project Workbench opens.

3. Click Import From MSP.

The Import from Microsoft Project wizard opens.



The various steps of the import process are shown in the Progress Indicator column on the left side of the wizard. The current step of the import process always displays in bold. Each step has its own interface that displays within the Import from Microsoft Project wizard. After each step is completed, a check mark appears by the name of the step. At this point, you should be at the Select Source File step of the process.

You can click **Next** after completing each step of the wizard or click **Import Now.**

- Click **Next** to go to the next interface for selecting options for the import.
- Click Import Now at any step to bypass the remaining steps and begin
 importing the Microsoft Project file. The wizard uses the default
 settings the first time you import a project. For each subsequent import,
 the wizard uses the settings from the last time you imported a Microsoft
 Project file.
- 4. Select the appropriate drive/directory and choose the Microsoft Project file to be imported.

The path and name of the Microsoft Project file to be imported appears in the File Chooser field.

5. Click Next.

The Enter Project Details interface displays in the Import from Microsoft Project wizard.

- 6. Enter a unique Project Name for the new Mercury IT Governance project in the Project Name field.
- 7. Select a project manager (or managers) for the new Mercury IT Governance project from the Project Manager auto-complete list.

8. Click Next.

The Select Control Mode interface displays in the Import from Microsoft Project wizard.

9. Select the synchronization control mode for the new project by clicking the appropriate radio button.

Clicking a control mode's radio button displays a description of the control mode in the Description information box. See *Synchronization Modes* on page 217 for more information about synchronization modes.

10. Click Next.

The Verify Resources interface displays if there are Microsoft Project resources that could not be matched to Project Management users. The unmatched resources shown in the wizard and their assignments will not be imported. To display the unmatched resources in a browser window, click **Show Printable Version**. An example of the Unsuccessful Resources Match report is shown below.

Mercury Project Management_® Unsuccessful Resource Matches Report

Synchronization Settings

Run Date: Thu Mar 04 17:05:18 PST 2004
Project Manager: John Smith
Microsoft Project File Location: D:\
Microsoft Project File Name: Software Release 5.mpp
Synchronization control mode: Mercury Project Management controls actuals

Resource Identification: Mercury username

Unsuccessful Resource Matches

dpeterka
hford
bcopernheim
gulrich
edlogic
billywilliams
jjames

11. Click Next.

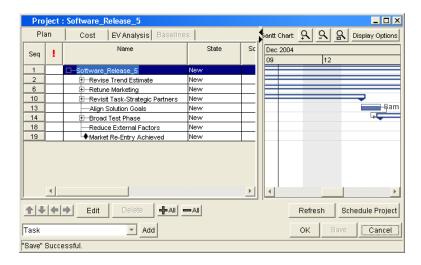
The Confirm Options interface displays the following information:

- The path and name of the Microsoft Project file to be imported.
- The Project Name and project manager of the new Mercury IT Governance project.
- The synchronization control mode selected by the user.
- Whether or not unmatched resources were found.
- 12. If the options presented on this interface are not correct, click the **Back** button, go to the appropriate step in the import process and change the options.

If the options presented on this interface are correct, click **Import Now.**

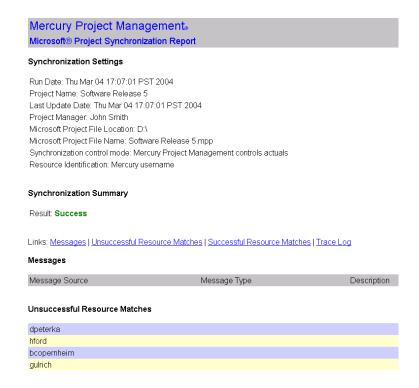
The Microsoft Project file opens and is imported into Project Management. A new Mercury IT Governance project is created.

The newly created Mercury IT Governance project opens. An example of the Mercury IT Governance project created by importing the Microsoft Project file Software Release 5.mpp is shown below. Notice that it has the unique name Software_Release_5.



13. To view the Synchronization report, click Show Synchronization Report.

The report displays in a separate browser window. See *Available Reports* on page 249 for more information about the Synchronization report.



14. Click Finish to close the Import from Microsoft Project window.

Note

To see the most recent Synchronization report after the import from Microsoft Project window has been closed, select **View > Latest Synchronization Report** from the **Project** menu.

15. Verify the project data in both Project Management and Microsoft Project and save the projects.



During the import process, Project Management adds a hyperlink from each Microsoft Project task to the related page in the standard interface (such as a Task Detail, Subproject Summary or Project Summary page). This hyperlink is placed in the standard fields for task hyperlinks, and can overwrite existing hyperlinks.

Existing hyperlinks can be moved to a Microsoft Project custom field of the type "Text."

Synchronizing Microsoft Project and Project Management

The following procedure describes how to synchronize projects in Project Management and Microsoft Project. Any information that is shared between them is updated during the synchronization.

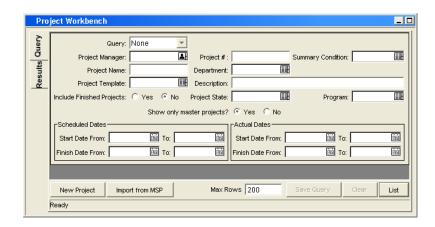


Before exporting or synchronization, the project manager can select a synchronization mode from the MSP Synchronization tab in the Settings window or accept the default, Project Management controlled. See Setting Up Microsoft Project Integration on page 46 for more information about selecting a synchronization mode in the Settings window.

To synchronize projects in Project Management and Microsoft Project:

- 1. Log on to Mercury IT Governance Center and open the Workbench.
- 2. From the shortcut bar, select **Project Mgmt > Projects**.

The Project Workbench opens.

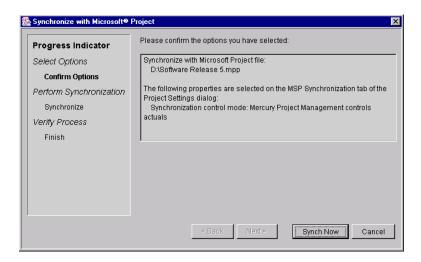


3. Query for and open the project to be exported.

When the Project window opens, a menu option File > Export to Microsoft Project is available *if* the project was not originally imported from Microsoft Project or if it has never been exported to Microsoft Project. If the project does not meet these criteria, then the option displays as Synch with MSP.

4. Select Synch with MSP.

The Synchronize with Microsoft Project wizard opens.



The various steps of the synchronization process are shown in the Progress Indicator column on the left side of the wizard. The current step of the synchronization process always displays in bold. Each step has its own interface that displays within the Synchronize with Microsoft Project wizard. After each step is completed, a checkmark appears by the name of the step.

- 5. The Confirm Options interface displays the following information:
 - The path and name of the Microsoft Project file that the current Mercury IT Governance project will be synchronized with. This will be either a file that was originally imported from Microsoft Project or a file that was exported to Microsoft Project from the current Mercury IT Governance project.
 - The properties selected by the user on the MSP Synchronization tab of the Project Settings window.
- 6. If the options presented on this interface are not correct, click the **Cancel** button and change the properties in the Settings window.

If the options presented on this interface are correct, click **Synch Now**.

The Mercury IT Governance project is synchronized with the Microsoft Project file.

7. To see the synchronization report, click **Show Synchronization Report**.

See *Available Reports* on page 249 for more information about the synchronization report.

8. Click Finish to close the Synchronize with Microsoft Project window.



To see the most recent synchronization report after the Synchronize with Microsoft Project window has been closed, select **View > Latest Synchronization Report** from the **Project** menu.

9. Verify the project data in both Project Management and Microsoft Project and either save the projects or close them without saving.

Synchronization of Resources

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 Project Management is a Project Management user or group of users capable of performing tasks. Resources are chosen from the project team specified by a project manager. Microsoft Project supports tracking and costing of both human and material resources. 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 Project Management, unassigned resources are Project Management users listed in the project team who have no task assignments. During synchronization, all assigned human resources are synchronized. Unassigned human resources and unassigned material resources are not synchronized.

Resource synchronization is based on either of two factors:

- A match between the Microsoft Project resource name and Project Management username.
- A match between the Microsoft Project resource name and the concatenation of Project Management user's first name and last name (or last name and first name).

This match is not case-sensitive. In Microsoft Project, it is possible to have two resources with the same name that vary only by which letters are uppercase or lowercase. The synchronization mapping logic first checks for a match with the same upper/lower case. If no match with exact case is found, the first case-insensitive match is used.

In Project Management, the synchronization does not guarantee that all assigned resources are part of the project team. If the project team needs to be maintained, then this must be done manually.

After synchronization, there will be a Microsoft Project resource matching every Project Management resource. If a Project Management resource is missing from the Microsoft Project file, a matching resource will be created. Each Mercury IT Governance project has a configuration setting (in the MSP Synchronization tab of the Settings window) specifying whether Microsoft Project resources created during synchronization are labeled with the Project Management username or the Project Management first/last name. The default value is by Project Management username.

Because the two applications define resources differently, not every Microsoft Resource will be defined in Project Management. After synchronization, there can be some Microsoft Project resources with no matching Project Management resource, because new Project Management resources (which are always users) are not automatically created. These unmatched Microsoft Project resources are listed in the Microsoft Project Synchronization report. See *Available Reports* on page 249 for more information on reports.

When the Import from Microsoft Project wizard detects unmatched resources, the wizard displays a list of these resources (in the Verify Resources step of the process) and offers the option of opening a printable version of this list in a browser window. This is in addition to listing the unmatched resources in the Microsoft Project Synchronization report. The project manager can cancel the import at this point, create the missing users (or have the application administrator create the users) and run the import again.



Impact of Microsoft Project Rules on Fields

Microsoft Project contains a number of internal rules that determine the way field values are calculated in planning and actuals fields. These rules affect the synchronization process between Microsoft Project and Project Management because calculations that work in one application do not necessarily carry over to the other application.

For example, reporting actuals in Microsoft Project is complicated due to its task reconciliation rules. Entering values into several actuals fields triggers automatic revisions of other planning and actuals fields. If you enter more than two or three actuals values, later entries start revising earlier entries in the Project.

Another difference is the method of defaulting logic between Project Management and Microsoft Project. An example is the calculation of actual start date. Microsoft Project assumes that the task starts on the scheduled start date, unless the project manager specifically enters other data. This is because actuals are usually entered after-the-fact by the project manager. Project Management assumes that work starts when the participant changes the task state from **Ready** to **In Progress**. Project Management assumes that actuals are reported near real-time.

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

Solutions for Project Managers

In order to give consistent behavior during synchronization, Mercury IT Governance project managers must:

- Synchronize only those actuals fields (such as % Complete, Actual Start and Actual Finish) that are enabled. See *Enabling/Disabling Fields* for more information about enabling fields.
- Synchronize these fields according to their defined priority order. See *Priority Order* for more information about the field priority order.

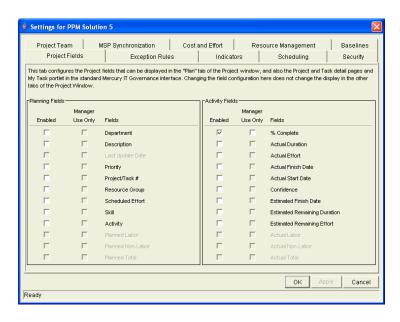
The Project Management–Microsoft Project interface ignores Project Management default values that are not enabled.

Enabling/Disabling Fields

To enable or disable actuals fields:

- 1. In the Project Workbench, search for and open the project to be exported, imported or synchronized.
- 2. From the menu at the top of the Workbench, select **Project > Settings.**

The Settings window opens.



3. Click the **Project Fields** tab.

4. In the Activity Fields pane:

- Enable a field by selecting the appropriate checkbox in the Enabled column.
- Disable a field by deselecting the appropriate checkbox in the Enabled column.

5. Click OK.

Priority Order

The following list of actual fields is ordered from the highest priority to the lowest priority for the purpose of synchronization.

- % Complete
- Actual Start
- Actual Finish
- Actual Duration
- Actual Effort
- Estimated Finish Date
- Remaining Duration
- Remaining Effort

The priority order is the same for all projects. '% Complete' is ranked highest because it is used prominently in the Dashboards and reports of both applications. Thereafter, fields that display actual measures take precedence over estimates, and dates take precedence over durations. Fields with the highest priorities should be enabled in a project more often than those fields with lower priorities.

Setting Up Projects

When setting up Mercury IT Governance projects for synchronization, project managers should:

• Enable as few fields as necessary that will accurately give visibility to the results of a synchronization, export or import.

 Not enable potentially conflicting sets of fields. (See the next section, Avoiding Potential Conflicts When Setting Up Your IT Governance Project, for potential conflicts.)

Avoiding Potential Conflicts When Setting Up Your IT Governance Project

The following guidelines describe strategies for avoiding potential conflicts.

- Enable only two of the three calendar actuals (Start, Finish and Duration) for a Mercury IT Governance project.
- Enable only two of the three calendar estimates (% Complete, Estimated Finish and Remaining Duration) for a Mercury IT Governance project.
- If Actual Duration is enabled, then enable either % Complete or Remaining Duration.
- Do not enable all three duration actuals (% Complete, Duration and Remaining Duration) for a Mercury IT Governance project.

See *Troubleshooting* on page 253 for more information about unsupported fields and features in the Project Management–Microsoft Project interface.

Conditional Editing Allowed In 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 Project Management or Microsoft Project. Depending on the synchronization control mode selected for the project, some editing features in Project Management will be disabled. Information controlled by Microsoft Project cannot be edited in Project Management.

Summaries of the conditional editing restrictions for each synchronization mode are listed in *Conditional Editing Summary Table*.

Editing Project Management Controlled Projects

When Project Management controls the project, the user is allowed to edit all information in 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 Project Management are disabled. The data that is distinct to Project Management and not shared with Microsoft Project can still be edited. This includes user data, custom project fields, and task references.

Workbench Interface

In the Workbench, subprojects and tasks can be edited in the Project **Plan** tab, the Subproject Detail window, and the Task Detail window (when it is opened in the Project window or the Task Workbench). All the shared fields are disabled in these windows.

Any function that could change the project and task structure is disabled. This includes the following components:

- Add Task button
- Delete button
- Indent/Outdent buttons
- Move up/Move down buttons

Since scheduling can change dates and durations, the **Schedule Project** button is disabled. The state of the Mercury IT Governance Project cannot be changed in this synchronization mode; therefore the Change State is also disabled. The key shortcuts for these buttons are disabled as well.

Standard Interface

In the standard Project Management interface, the My Tasks portlet and the Task Detail page will not allow users to enter task actuals. The My Tasks portlets 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 My Tasks portlet.

Roll-up calculations are disabled through Project Management, whether triggered by actions in the Workbench, the standard interface, or any other method.

Project Management Controls Actuals

The **Project Management controls actuals** 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.

In the Project **Plan** tab, Project Detail window, and Task Detail window, only actual fields are editable. The planning fields are disabled. In the Project Detail window, 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 button
- Delete button
- Indent/Outdent buttons
- Move up/Move down buttons

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 the 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 7-1 summarizes the allowed or restricted conditional editing in Project Management for each of the three synchronization modes.

Fields in Project Management	Project Management controlled	MSP controlled	Project Management controls actuals
Project Plan			
Structure fields	Yes	No	No
Planning fields	Yes	No	No
Actual fields	Yes	No	Yes

Table 7-1. Conditional editing allowed in Project Management [continued]

Fields in Project Management	Project Management controlled	MSP controlled	Project Management controls actuals
Subproject Detail window	Subproject Detail window		
Structure fields	Yes	No	No
Planning fields	Yes	No	No
Actual fields	Yes	No	Yes
Other non-shared fields	Yes	Yes	Yes
Task Detail window			
Structure fields	Yes	No	No
Planning fields	Yes	No	No
Actual fields	Yes	No	Yes
Other non-shared fields	Yes	Yes	Yes
Project window			
Add/Delete Task button	Yes	No	No
Indent/Outdent Task button	Yes	No	No
Move up/Move down Task button	Yes	No	No
Schedule Project button	Yes	No	No
Change State button	Yes	No	No
Roll-up			
Schedule fields	Yes	No	No
Actuals fields	Yes	No	Yes
My Tasks portlet			
Actuals fields	Yes	No	Yes
Task Detail page			
Actuals fields	Yes	No	Yes

Summary of Synchronization Behavior

The following sections describe the behavior of a Mercury IT Governance project after a successful export to Microsoft Project.

The task structure and task names for the project in 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. The exception to this rule is that the Microsoft Project file might not have a master project row. The synchronization will not create a master project row.

The resources assigned to each task will be identical. The predecessors and constraints will be identical, for the types of predecessors and constraints supported by Project Management.

If Project Management is collecting actual start and finish dates, then these dates will be exported to Microsoft Project. Actual dates take precedence over Project Management scheduled dates. Time information will also be synchronized.

If Project Management is collecting "estimated actuals" then this information will be exported to Microsoft Project. Estimated actuals fields deal with estimated time to completion and estimated time of completion. Examples are the % Complete, Estimated Finish Date and Remaining Effort fields. These estimates can cause Microsoft Project to revise the task duration or schedule dates.

Scheduled start and finish dates for tasks without actuals will be identical in Project Management and Microsoft Project. Roll-up dates are automatically calculated in Microsoft Project, and can not be identical to those in Project Management. Time information will also be synchronized.

If Project Management is tracking task effort, then this will be exported to Microsoft Project. Microsoft Project will infer resource assignment units based on the task duration, effort and number of resources. Roll-up effort is calculated by Microsoft Project, but will be identical.

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 Microsoft Project standard calendar include:

• Number of hours/day

- Working days for each week
- Regional calendar exceptions

Integration with Other Mercury IT Governance Center Products

Tasks in Mercury IT Governance projects can include additional references to other Mercury IT Governance entities (such as requests and packages) 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. (See *Attaching References to Tasks* on page 100 for more information about attaching references to tasks.)

Limitations on References

The Project Management–Microsoft Project interface supports most of the task-related reference types.

Creating New Tasks while Adding a Reference

Normally, when a user adds a reference to a Mercury IT Governance project, that user can either attach the reference to an existing task, or the user might create a new task. (The user must also have the right security permissions to do so.) However, in the two synchronization modes where Microsoft Project controls the task structure, this is not allowed. References to existing tasks can still be created.

Task Updated by Request/Request Updates Task

A reference can be configured so that the % Complete of the request updates the % Complete of the referenced task. In the synchronization mode where Microsoft Project controls the entire project, a reference of this type cannot be created.

Task-Successor References

References can also be created where a request is the predecessor of a task. This can be either a finish-to-start predecessor or a finish-to-finish predecessor.

In the first case, the task could not start (or could not progress if already started) until the request predecessor is completed. In the second case, this means that the task could be 100% complete but cannot reach the "Completed" state until the request predecessor is completed. Both types of references are allowed, but are not visible in the synchronized Microsoft Project file.

Allowed Types of References During a Synchronization

The reference types that are allowed during a synchronization are described below, along with their limitations.

Microsoft Project control mode

All types of references are allowed in this mode except for Task Updated by Request/Request Updates Task.

If a task that has a reference is marked as 100% complete but the request predecessor is not complete, the potential problem will be flagged as a warning in the Microsoft Project Synchronization report.

Dependent references will not stop Project Management actuals from being updated by synchronization.

References cannot be created during synchronization.

Shared control mode

All types of references are allowed in this mode.

When a task is 100% complete in Project Management but is pending a finish-finish predecessor, it will be synchronized out to Microsoft Project as only 99% complete. This ensures that any milestone successors of the task will not incorrectly be shown as complete. This correction will be noted as an informational message in the Microsoft Project Synchronization report.

References cannot be created during synchronization.

References Summary Table

Table 7-2 lists the allowed references during synchronization for each control mode.

Table 7-2. Allowed references during synchronization

Type of Reference	Project Management controlled	Project Management controls actuals	MSP controlled
Informational	Yes	Yes	Yes
Task is the predecessor of a Request or Package	Yes	Yes	Yes
Task is the finish-to-start successor of a Request or Package	Yes	Yes	Yes, but not enforced in
Task is the finish-to-finish successor of a Request or Package	Yes	Yes, but is sometimes synchronized as 99% complete	Microsoft Project. Detected during synchronization.
Task Updated by Request/ Request Updates Task	Yes	Yes	No

Available Reports

Project Management features three reports that contain information about the Project Management–Microsoft Project interface:

- Microsoft Project Synchronization Report
- Unsuccessful Resource Matches Report
- Project Detail Report

Only the Project Detail report is available from the Project Management Report Submission Workbench interface. The other two reports are created automatically during an import, export or synchronization.

Microsoft Project Synchronization Report

The Microsoft Project Synchronization report is created during an import, export or synchronization. The report displays in a separate browser window when requested by the user.

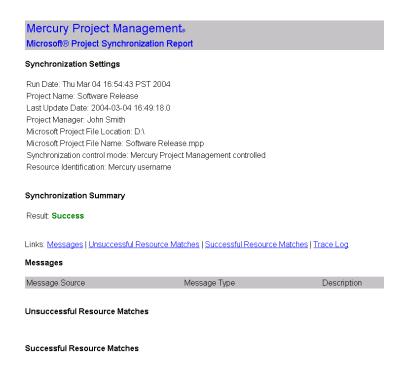


Figure 7-1. Microsoft Project Synchronization report

Table 7-3. Microsoft Project Synchronization report parameters

Sections/Fields	Description	
Synchronization Settings		
Run Date	The date and time the report was run.	
Project Name	The name of the Project.	
Last Update Date	The date and time the Project was last updated.	
Project Manager	The name of the project manager who performed the synchronization.	
Microsoft Project File Location	The drive and path of the Microsoft Project file.	
Microsoft Project File Name	The name of the Microsoft Project file.	
Synchronization control mode	The synchronization behavior selected by the project manager.	
Resource Identification	The type of name (either full name or username) given to new resources created during synchronization.	
Synchronization Summary		
Result	Whether the synchronization was successful or unsuccessful.	
Messages	Information, warning or error about the export, import or synchronization process. Messages include a Message Source, Message Type, and Description.	
Unsuccessful Resource Matches	Resources that were unsuccessfully matched during export, import, or synchronization.	
Successful Resource Matches	Resources that were successfully matched during export, import, or synchronization.	
Trace Log	A log of successful/unsuccessful processes that occurred during the export, import, or synchronization.	

Unsuccessful Resource Matches Report

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The Unsuccessful Resource Matches report is created during an import, export or synchronization. It lists any resources that were not successfully matched between the Project Management and Microsoft Project files. The report displays in a separate browser window when requested by the user.

Mercury Project Management_® Unsuccessful Resource Matches Report Synchronization Settings Run Date: Thu Mar 04 17:05:18 PST 2004 Project Manager: John Smith Microsoft Project File Location: D:\ Microsoft Project File Name: Software Release 5.mpp Synchronization control mode: Mercury Project Management controls actuals Resource Identification: Mercury username Unsuccessful Resource Matches dpeterka hford bcopernheim gulrich edlogic billywilliams

Figure 7-2. Unsuccessful Resource Matches report

Table 7-4. Unsuccessful Resource Matches report parameters

Sections/Fields	Description
Synchronization Settings	
Run Date	The date and time the report was run.
Project Manager	The name of the project manager who performed the synchronization.
Microsoft Project File Location	The drive and path of the Microsoft Project file.
Microsoft Project File Name	The name of the Microsoft Project file.
Synchronization control mode	The synchronization behavior selected by the project manager.

Table 7-4. Unsuccessful Resource Matches report parameters [continued]

Sections/Fields	Description
Resource Identification	The type of name (either full name or username) given to new resources created during synchronization.
Unsuccessful Resource Matches	Resources that were unsuccessfully matched during export, import, or synchronization.

Project Detail Report

This report lets you query projects by their header fields. You can specify whether to include the following aspects of the Project:

- Custom fields
- Status
- Notes
- Activities
- Packages
- Requests
- References
- Transaction history

The Show Project Settings radio button must be set to **Yes** to display synchronization-related information.

The Project Detail report parameters are shown in *Figure 7-3*.

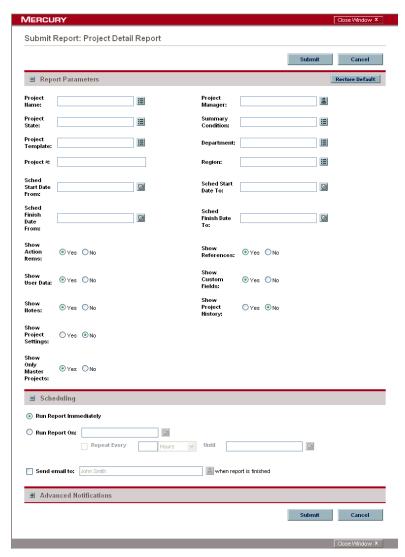


Figure 7-3. Project Detail report

Troubleshooting

Microsoft Project supports many features that are not duplicated in Project Management. Some of these unsupported features relate to information that Project Management does not track or support, such as cost calculation, baseline tracking and earned-value calculations. When a Microsoft Project file is imported into Project Management, this information is not represented.

Information of these types is not affected by the interface. Importing the Microsoft Project file into Project Management does not remove this data from Microsoft Project. Exporting from Project Management 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 Project Management can represent. The interface attempts to maintain the intent of the original Project Plan as closely as possible.

Resource Calendars

The project regional calendar is exported to Microsoft Project in Project Management controlled mode. However, 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 and effort values in Project Management and Microsoft Project might not match.

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 Project Management does not track assignment units, the load percentage of any resource imported into Project Management will not be recognized.

Advanced Predecessors

Microsoft Project has several advanced predecessor types not available in Project Management: start-to-start (SS), start-to-finish (SF) and finish-to-finish (FF).

Project Management cannot represent these advanced predecessors, but it will represent the scheduled start and finish dates resulting from them. During synchronization, these types of predecessors will be omitted from the Mercury IT Governance Project Plan. This can cause successor tasks in Project Management to incorrectly appear in a "Ready" state.

To convert a project from Microsoft Project to Project Management, a project manager needs to replace unsupported predecessor types with a supported alternative - a constraint, for instance.

Advanced Constraints

Microsoft Project supports several advanced constraint types not available in Project Management: as late as possible (ALAP), must finish on (MFO), finish no earlier than (FNE), and task deadlines.

Project Management cannot represent these advanced constraints, but it will represent the scheduled start and finish dates resulting from them. During synchronization, these types of constraints are omitted from the Mercury IT Governance Project Plan.

Calculation of Roll-up Values

Microsoft Project allows you to choose between 'automatic' and 'manual' scheduling modes. The default mode is 'automatic,' and many users can not be aware another mode is available. When Microsoft Project is in manual scheduling mode, the **F9** button must be pressed to recalculate task grouping roll-up values and reschedule tasks.

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:

- You created this project by exporting a Mercury IT Governance project from Project Management. The Export to Microsoft Project wizard turns off automatic scheduling mode in order to have the task dates in Microsoft Project match those in Project Management.
- 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.

Scheduling Your Project in Microsoft Project

The synchronization process can sometimes stop in mid-operation because Microsoft Project displays a warning dialog. Microsoft Project is not completely consistent about when it will respond to a COM call with a warning dialog, so this cannot always be avoided.

When the synchronization process stops and the warning dialog appears, the **Microsoft Project** button in the Windows task bar flashes as a signal that the application needs attention. To continue the synchronization process, go to the Microsoft Project file and dismiss the warning dialog.

The best way to prevent the warning dialog from appearing during synchronization is to resolve all planning problems in Microsoft Project (such as violated constraints) prior to synchronization. You might need to manually recalculate the project's schedule by pressing the **F9** key before you attempt synchronization.

Appendix



Integrating Requests and Project Plans

In This Appendix:

- Overview of Integrating Requests and Project Plans
- Referencing Requests from Project Plans
- Creating Tasks from Requests
- Dependencies Between Tasks and Requests
 - Making Tasks Dependent on Requests
 - Making Requests Dependent on Tasks
- Visibility into Tasks and Requests
 - Requests Holding Up Progress
 - Project References Section

Overview of Integrating Requests and Project Plans

Mercury IT Governance Center integrates issue tracking with project management using Mercury Demand Management and Mercury Project Management. Mercury Demand Management requests and Mercury Project Management project plans and tasks can be linked to each other through a variety of dependent and informational relationships. Utilizing these relationships, requests can be folded seamlessly into a scalable framework of interlocking initiatives. Linking tasks to requests from Mercury Demand Management also gives instant visibility to detailed activities supporting an overall project.

The components required to integrate requests and project plans are:

• Mercury Project Management

Mercury Project Management enables collaborative project management for both repetitive projects, such as installing a new release of your HRMS applications, and one-time projects, such as developing a new e-commerce capability. With Mercury IT Governance Center, you accelerate project delivery while reducing your project costs.

Mercury Demand Management

Mercury Demand Management is a workflow-driven request resolution system for business applications. It allows you to effectively capture, route and resolve business requests.

Referencing Requests from Project Plans

Requests can be linked to project plans through an informational reference relationship. This is done from the **References** tab in the Project Information window in the Workbench, or from the References section of the Project Detail page.

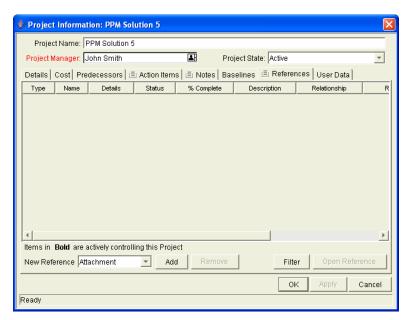


Figure A-1. Project Information window - References tab

Creating Tasks from Requests

Occasionally, a request can be filed by a user that would be desirable to make into its own task in a Mercury Project Management project plan, creating for it deliverable dates and track-able actuals. Tasks can be created from requests in the Project Management Workbench. A task created from a request behaves like any other task in the project plan, save for that the tasks's % Complete and State are automatically updated by the originating request as it moves through its workflow. The new task has the dependency relationship Task Updated by Request.

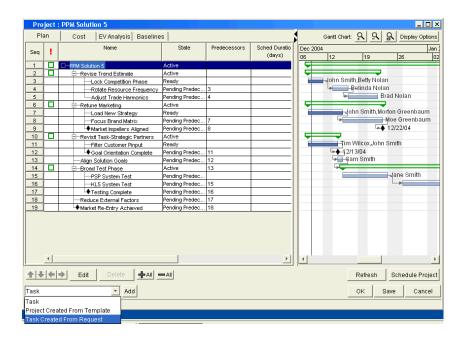
For example: A manager in a software company wants to create a project plan that will track all of the bugs currently logged against a particular product. In the Workbench, the manager can search for bug requests related to the product, and turn them into tasks in the project plan. From there, the manager can perform any typical project plan action, such as tracking the completion dates for each task or monitoring triggered exceptions.



You must be in the Project Management Workbench in order to create a task from a request.

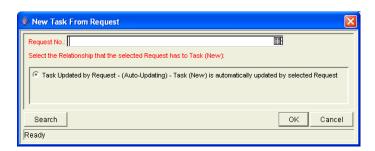
To create a task from a request:

- 1. Open the project plan.
- 2. From the Project window, select **Task Created From Request** from the drop-down list at the bottom-left corner of the window.



3. Click Add.

The New Task From Request window opens.



- 4. To select the request to attach, use one of the following methods:
 - Select a request number from the Request No. field.
 - Click Search to search for a request to add in a separate query window.

5. Click **OK** to create the new task and close the window.

The new task has been created from the selected request and is part of the current project plan. The task is linked to the request.

Dependencies Between Tasks and Requests

The dependencies that can be created between requests and tasks are described in *Table A-1*.

Table A-1. Dependency relationships - requests to tasks

Relationship	Description
Related to this Task	(Informational) - Selected request is related to the task.
Successor	(Blocking) - Action not allowed on selected request until the task closes.
Predecessor	(Blocking) - Action not allowed on the task until the selected request closes.
FF Predecessor	(Finish Finish Predecessor: Blocking) - The task and request complete together.
Task Updated by Request	(Auto-Updating) The task is automatically updated by the selected request.

For more detailed information on using these dependencies, see *Making Tasks Dependent on Requests* and *Making Requests Dependent on Tasks*.

Making Tasks Dependent on Requests

When selecting dependencies between tasks and requests, there are many relationships to choose from. These relationships are set by attaching a request to a task as a reference. This is done from the **References** tab in the Task Information window in the Workbench, or from the References section of the Task Detail page in the standard interface.

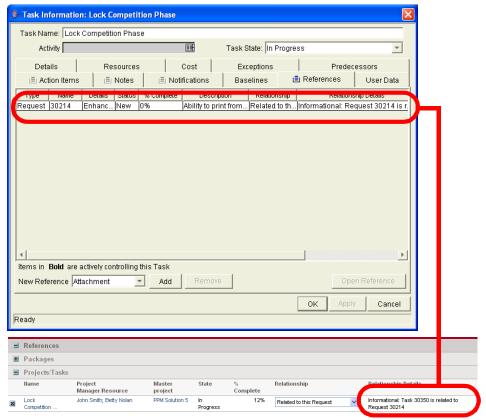


Figure A-2. Task Information window - References tab and References section

The following sections contain more detailed information on dependencies for tasks created from requests.

Task Waits on Request Closure (Successor Relationship)

This relationship dictates that the task state cannot change until the associated request is closed. The task will immediately move into a "Pending Request" state. When the request is closed, the task can be acted upon once more. This does not stop other fields from being edited.

For example: A software company's Support Division makes the decision that no patches will be released without accompanying documentation. The company has an unfortunate history, however, of changing its mind about patches that are to be released, and numerous times there have been documentation changes made to accommodate patches that were cancelled after being initially approved. Patch A's approval request is moving through its resolution process in Mercury Demand Management. The Documentation team is ready to begin making changes to all documents to account for Patch

A, and has created a project plan in Project Management. The project plan includes the task Begin Doc Changes for Patch A.

The Documentation Team's manager creates a reference to Patch A's Request from the Begin Doc Changes for Patch A Task, with the relationship Successor. This way, the task cannot be moved from its status of Ready to In Progress until Patch A's approval request is closed, ensuring that the documentation changes are valid and needed.

Task Can't Complete Until Request Closes (FF Predecessor)

This relationship dictates that the task state cannot change to Complete until the associated request is closed. When the resource working on the task is finished with it, and the state is set to Completed (% Complete will be set to 100%), this task will move into a Completed (Pending Request) state. When the request is closed, the task is then set to 'Completed.' This does not stop other fields from being edited.

For example: A software company's Support Division makes the decision that no patches will be released without accompanying documentation, including bug fixes. The Documentation Team wants to make sure that its documentation is accurate and complete for every bug fix that takes place. The last step in the company's bug fix resolution process is a review by the person who originally filed the bug. A request to fix Bug 62547 has been filed and nearly completed, necessitating changes to the documentation.

The Documentation Team has a project plan in Project Management, one of whose tasks is Doc Changes Complete. The Documentation Team manager creates a reference to Bug 62547's request, with the relationship FF Predecessor. This way, the task cannot be fully completed until Bug 62547's fix has been approved by the requestor, closing the request.

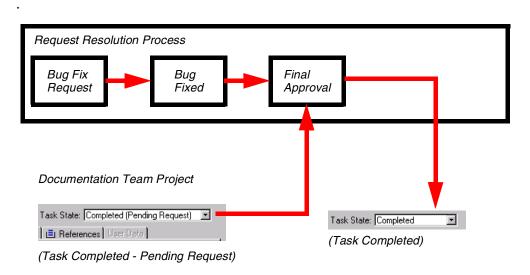


Figure A-3. Example process for FF Predecessor relationship

Task Auto-Updated by Request

This relationship is for tasks created from requests. As the request moves through its process, it will update the task with its status information. When the request is submitted, the tasks moves to In Progress. When the request is completed, the task is Complete. When the request is cancelled or deleted, the task is cancelled. A single request can drive multiple tasks. If the request's workflow has % Complete values defined, the request will also update the task with % Complete information.



Since % Complete and task state are automatically updated by the driving request(s), users cannot update these two fields. The text "(Updated by Request)" will be appended to the Ready and In Progress states to indicate this.

Making Requests Dependent on Tasks

Requests can be made dependent on tasks. This is done from the References section of the Request page in the HTML interface.



Figure A-4. References section for requests

The section, *Request Waits on Task Closure (Predecessor)*, contains more detailed information on dependencies for requests set by tasks:

Request Waits on Task Closure (Predecessor)

This relationship dictates that the request's user cannot perform any workflow actions until the associated task is closed (completed, bypassed, or cancelled). The request will immediately move into a 'Pending Task' status. When the task is closed, the request can be acted upon once more. This does not stop other fields from being edited.

For example: A software company's Support Division makes the decision that no patches will be released without accompanying documentation. The Documentation Team wants to make sure that any patch request won't close until the patch documentation is finished. A Mercury Demand Management user is assigned a request going through the company's patch approval/release process. At the same time, the Documentation Team has a project plan in Project Management, one of whose tasks is 'Patch Docs Completed.' The user creates a reference to that task, with the dependency 'FF Predecessor.' This way, the patch request will not close until the 'Patch Docs Completed' task is complete.

Visibility into Tasks and Requests

Mercury IT Governance Center enables visibility into request and task integration.

Requests Holding Up Progress

You can search for requests that are holding up progress on your projects. Each portlet in the Dashboard that deals with requests includes the field Preventing Action on Requests/Tasks. This field can be set to display requests that are preventing action on other requests or tasks.



Figure A-5. Request portlet filter page Preventing Action On field

Project References Section

You can also view references related to your tasks and project plans using the Project References section on the Project Overview page. Add the section to the Project Overview page and then personalize it to show the references that are relevant to your activities. The section can be personalized to display references based on the following information: Reference types, relationship, time period when they were added, and whether or not they are preventing actions on tasks.

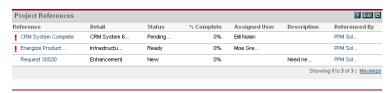


Figure A-6. Project References section

Appendix B Project Management Portlets

Information regarding Project Management data can be organized and presented using the Mercury Project Management portlets. Mercury does not supply a preconfigured Project Management Dashboard page. See *Table B-1* for a complete list of the Project Management portlets.

Projects Portlets

Table B-1. Projects portlets

Projects Portlets	Description
My Tasks	Lists all project tasks currently assigned to you and having a scheduled finish date two weeks from the current date.
Program Project List	Lists the projects within a program. The default parameters show all project items for the program. Project items are sorted by the project hierarchy and optionally, by: Name Resource State Scheduled finish Project hierarchy
Project Gantt	Gantt chart for all projects, tasks, and milestones.
Project List	Lists general information about projects, such as how close they are to completion and their scheduled finish date. Information displayed can be based on project name or other project related criteria.
Project Summary Pie Chart	Pie chart summary of projects grouped by their summary condition. Filter the data by a set of specific projects and subprojects, or filter by department and/or project manager.
Resource Gantt	Gantt chart for resources showing work items including: Requests Tasks Milestones Staffing Profiles

Appendix Reports by Category

In This Appendix:

- Overview of Report Categories
- Administrative Reports
- Change Management Reports
- Demand Management Reports
- Financial Management Reports
- Portfolio Management Reports
- Program Management Reports
- Project Management Reports
- Resource Management Reports
- Time Management Reports

Overview of Report Categories

Reports available through the Mercury IT Governance Center standard interface are listed (by category) and described in the following sections.



Another type of report in Mercury IT Governance Center (not discussed in this document) are server reports, which are submitted and viewed from the Workbench interface, For information about server reports, see the *System Administration Guide and Reference*.

Administrative Reports

The administrative reports (listed in *Table C-1*) are available to users with an administration license.

Table C-1. Administrative reports

Report	Definition
Contact Synchronization	Provides an interface for checking whether Mercury Demand Management contacts are properly defined. This report is also in the Resource category.
Environment Comparison	Helps audit environment definitions when different environments (for example, development and production) are similar to each other.
Environment Detail	Lists the detailed definitions of a given environment or group of environments, the major attributes of the environments, and the attributes of applications tied to the environments.
Environment Group Detail	Contains detailed information about specified environment groups.
Import Requests	Imports requests into Demand Management request tables, moves the requests to the appropriate status, and reports on the results of the execution.
	For more information about this report, see the <i>Open</i> Interface Guide and Reference.

Table C-1. Administrative reports [continued]

Report	Definition
Import Users	Imports data from the user interface tables or an LDAP server.
	For more information about this report, see the <i>Open</i> Interface Guide and Reference.
Lookup Types	Provides information about one or more lookups.
Notification History	Provides information about notifications that have been sent or are pending.
Object Type Detail	Lists all parameters and commands associated with a given object type.
Portlet Detail	Provides information about a portlet or range of portlets.
RCS Check In	Template of a report used to check files into the RCS repository (if the RCS file management system is being used).
RCS Check Out	Template of a report used to check files out of the RCS repository (if the RCS file management system is being used).
Report Type Detail	Provides information about report type definitions.
Request Header Type Detail	Lists detailed definitional information for request header types.
Request Type Detail	Lists detailed definitional information for request types.
Run Field Security Denormalization	Runs field level security-related denormalization tasks for particular entities.
Run ITG Organization Unit Interface	Imports data from the organization unit interface tables or an LDAP server.
Trui IT d'Organization onit interface	For more information about this report, see the <i>Open</i> Interface Guide and Reference.
Run ITG Package Interface	Validates and loads package data from the package open interface tables into the standard Mercury Change Management data model.
	For more information about this report, see the <i>Open</i> Interface Guide and Reference.
Run Workflow Transaction Interface	Validates and runs workflow transactions based on data in the workflow open interface tables.
	For more information about this report, see the <i>Open</i> Interface Guide and Reference.
Security Group Detail	Lists definitional information for one or more security groups.

Table C-1. Administrative reports [continued]

Report	Definition
Special Command Detail	Provides details for a command (special command) or a range of commands.
Synchronize Meta Layer	Assesses or synchronizes the RML (Reporting Meta Layer).
User Data Detail	Displays the definition of custom user data field (for example, fields on entities like packages, requests, workflows, and security groups).
User Detail	Lists the users who have been defined in the Mercury IT Governance system, as well as the security groups attached to each user. This report is also in the Resource category.
Validations	Provides information about the various custom validations that have been entered into the system as well as those that are standard with Mercury IT Governance Center products.
Workflow Detail	Provides detailed definitional information about specific workflows or sets of workflows.
Workflow Statistics	Given a date range and a workflow (or a range of workflows), this report provides statistical information regarding workflow usage.

For More Information

Unless otherwise indicated in *Table C-1*, see the *Reports Guide and Reference* for more information about Administrative reports.

Change Management Reports

The Change Management reports (listed in *Table C-2*) are available to users with a Mercury Change Management application license.

Table C-2. Change Management reports

Report	Definition
Compare Custom Database Setup	Runs custom database comparisons.
Compare Filesystem Environment	Compares the files and file structures of two machines.
Compare MS SQL Server 7 Environments	Compares the data model of two SQL Server Version 7 databases.
Compare Oracle Environments	Compares the data model of two Oracle schemas.
Distribution Detail	Lists the contents and results of a distribution.
Environment Comparison by Objects Migrated	Given two environments, this report looks at the history of all the objects migrated into each environment (using Mercury Change Management) and lists any differences.
Environments/Objects Detail	Lists objects that have been migrated into a given environment or set of environments.
Object History	Provides a workflow step transaction history for packages.
Objects/Environments Detail	Lists objects that have been migrated into a given environment or a set of environments.
Package Details	Returns details about a given package.
Package History	Lists the complete workflow history of a given package.
	Lists three separate sections for analysis:
	 Other packages that contain common objects with a given package
Package Impact Analysis	Objects that have migrated alongside one or more of the objects being migrated on the given package but are not included in the given package
	Recent migrations for each object in the package, showing where changes to the given objects have recently been deployed
Packages Pending	Lists:
	Open packages with pending activity
	Details about each package Panding work for a group of years.
	Pending work for a group of users

Table C-2. Change Management reports [continued]

Report	Definition
Release Detail	Lists requests, packages and distributions associated with a release.
Release Notes	Shows all of the requests and packages in a release as well as their associations.

For More Information

For more information about Change Management reports, see the *Reports Guide and Reference*.

Demand Management Reports

The Demand Management reports (listed in *Table C-3*) are available to users with a Mercury Demand Management application license.

Table C-3. Demand Management reports

Report	Definition
Contact Detail	Queries the contacts already entered in the Demand Management system that are available for entering and updating requests.
DEM Demand Creation History	Shows the history of demand creation for a specified demand set.
DEM Historical SLA Violation	Shown the history of SLA violations for a specified demand set.
DEM Satisfied Demand History	Shows the history of demand that has been satisfied for a specified demand set.
Request Detail	Provides information about requests using a number of selection criteria.
Request Detail (Filter by Custom Fields)	Similar to the Request Detail report except that requests can be filtered by values in custom fields.
Request History	Lists the complete workflow and field change history for each selected request.
Request Quick View	Lists a quick summary of open and closed requests, breaking down the requests by priority.
Request Summary	Displays the total counts for groups of requests matching the selection criteria.
Request Summary (Filter by Custom Fields)	Similar to the Request Summary report except that requests can be filtered by values in custom fields.
Resource Load by Priority	Lists all open requests assigned to different users. This report is also in the Resource category.

For More Information

For more information about Demand Management reports, see the *Reports Guide and Reference*.

Financial Management Reports

The Financial Management reports (listed in *Table C-4*) are available to users with a Mercury Time Management application license.

Table C-4. Financial Management reports

Report	Definition
Actual Time/Cost Summary	Summarizes actual time information entered in non-cancelled time sheets and the calculated charge dollar totals for each grouping. This report is also in the Time Management category.
Project Cost Breakdown	Shows the costs for a project, and the activities with which the costs are associated. This report is also in the Project Management category.
Project Cost Details	Shows the cost details for select projects, grouped by labor/non-labor or operating categorizations. This report is also in the Project Management category.

For More Information

For more information about Financial Management reports, see the *Reports Guide and Reference*.

Portfolio Management Reports

The Portfolio Management reports are available to users with a Mercury Portfolio Management application license.

There are currently no Mercury-supplied reports in this category, but you can create your own custom reports, if you like.

Program Management Reports

The Program Management reports are available to users with a Mercury Program Management application license.

There are currently no Mercury-supplied reports in this category, but you can create your own custom reports, if you like.

Project Management Reports

The Project Management reports (listed in *Table C-5*) are available to users with a Mercury Project Management application license.

Table C-5. Project Management reports

Report	Definition
Project Cost Breakdown	Shows the costs for a project, and the activities with which the costs are associated. Totals include both labor and non-labor costs. This report is also in the Financial Management category.
Project Cost Details	Shows the cost details for select projects, grouped by labor/non-labor or operating categorizations. This report is also in the Financial Management category.
Project Critical Path	Displays the tasks that are on a project's critical path.
Project Custom Detail	Generated in HTML table format, showing only the columns that are selected from the header fields and custom fields based on the selected project.
Project Detail	Queries projects by their header fields.
Project Detail (Filter by Custom Fields)	Queries projects by their header fields. You can filter the query using the project's custom fields.
Project Exception Detail	Lists task details for tasks that have violated user-defined exception rules.
Project Resource	Lists all resources working on a given project and the tasks on which they are working. This report is also in the Resource category.
Project Schedule Change	Compares a project plan with a baseline, or a baseline to another baseline.
Project Status Detail	Summarizes project statuses of selected projects and tasks.
Project Summary	Displays all projects that meet the criteria selected in the header fields.
Project Task Assignment	Shows assignment information for a user or a group of users. This report is also in the Resource category.
Project Template Detail	Lists the parameters and parameter details for project templates.

For More Information

For more information about Project Management reports, see the Reports $Guide\ and\ Reference$.

Resource Management Reports

The Resource Management reports (listed in *Table C-6*) are available to users with the licenses indicated in the definition column in the table.

Table C-6. Resource Management reports

Report	Definition
Contact Synchronization	Provides an interface for checking whether Mercury Demand Management contacts are properly defined. Available to users with an administration license. This report is also in the Administrative category.
Project Resource	Lists all resources working on a given project and the tasks on which they are working. Available to users with a Mercury Project Management license.
Project Task Assignment	Shows assignment information for a user or a group of users. Available to users with a Mercury Project Management license.
Resource Load by Priority	Lists open requests assigned to different users. Available to users with a Mercury Demand Management license.
User Detail	Lists the users who have been defined in the Mercury IT Governance system, as well as the security groups attached to each user. This report is available to users with any application license. This report is also in the Administration category.
Work Allocation Details	Shows much of the same information shown on the Work Allocation definition page—for example, allocation work item information, budget and actuals to date, charge code allocations, and resource restrictions. Available to users with a Mercury Time Management application license. This report is also in the Time Management category.

For More Information

For more information about Resource Management reports, see the *Reports Guide and Reference*.

Time Management Reports

The Time Management reports (listed in *Table C-7*) are available to users with a Mercury Time Management application license.

Table C-7. Time Management reports

Report	Definition
Actual Time/Cost Summary	Summarizes actual time information entered in non-cancelled time sheets and the calculated charge dollar totals for each grouping.
Actual Time Summary	Summarizes actual time information entered in non-cancelled time sheets.
Time Sheet Details	Summarizes multiple time sheets displays their details.
Time Sheet Summary	Summarizes time information entered in non-cancelled time sheets.
Work Allocation Details	Shows much of the same information shown on the Work Allocation definition page—for example, allocation work item information, budget and actuals to date, charge code allocations, and resource restrictions. This report is also in the Resource category.

For More Information

For more information about Time Management reports, see the *Reports Guide* and *Reference*.

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