MercuryTM IT Governance Center Processing Packages (Change Management) Version 5.5.0



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Chapter Introduction

Mercury Change Management automates the migrations and deployment of software code, configurations, and content. These objects are grouped into Packages and are routed along business processes modeled in Mercury's configurable Workflow. Mercury's Workflow automates the process of moving each Package through required steps, which typically involve system build, testing, quality assurance, staging, and final deployment. Mercury Change Management automatically deploys the application components necessary for each Package, such as XML content, HTML files, Java programs, Oracle Application configurations, PeopleSoft panels or Siebel projects.

For example, Mercury Change Management will connect to the development environment, copy Java files from the version control repository and transfer the files to the quality assurance environment. It will then use the Java compiler to compile and link all the files into a single Java program. A built-in scheduler allows the customer to schedule deployments. Mercury Change Management maintains an audit trail for all activities including Package information, application components altered, approvals obtained and deployments performed.

About This Document

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

Key Concepts and Definitions

Defines the key concepts and definitions related to using Mercury Change Management to deploy software and application changes.

1

Accessing Change
ManagementProvides instructions for logging onto Mercury Change
Management.Creating New
PackagesProvides instructions for creating and submitting
Packages to deploy software and application changes.Processing PackagesProvides instructions for viewing and processing
Packages. This includes information on locating
Packages, acting on eligible steps and viewing key
Package information and statuses.

Change Management Reports

Describes the procedures used to submit and view reports.

Intended Audience

The intended audience for this document include:

- Users of Change Management
- Managers who create and manage Packages
- Business users responsible for reporting on Packages

Document Conventions

Table 1-1 lists the types of conventions used in this document.

Table 1-1. Document conventions

Convention	Description	Example
Button, menu, tabs	Names of interface components that can be clicked (such as buttons, menus, and tabs) are shown in bold.	Apply button
Fields, Windows, Pages	Names of windows, fields, and pages are shown as displayed.	New Request window
Code	Code input and output are shown as displayed.	CauchoConfigFile C:/ITG_Home/conf/ resin.conf

Table 1-1. Document conventions

Convention	Description	Example
Link	Linked URLs, filenames, and cross references are shown as blue italicized text.	www.mercury.com
Variable	Variables are shown as italicized text.	ITG_Home/bin directory
Note	Used to identify note boxes that contain additional information.	Note
Caution	Used to identify caution boxes that contain important information. Follow the instructions in all caution boxes, failure to do so may result in loss of data.	Caution
Example	Used to identify example boxes that contain examples of related procedure.	Example

Additional Resources

Mercury Interactive provides the following additional resources to help you successfully use Mercury IT Governance Center:

- Related Documentation
- Customer Support
- Education Services

Related Documentation

The Library includes additional documents related to the topics discussed in this guide. Access the Library through the Mercury ITG Center online help.

Using the Dashboard

This document provides details for defining and configuring the Mercury ITG Dashboard and custom Portlets.

Processing Requests (Demand This document explains how to process Requests Management) using Demand Management. Managing Your Projects (Project This document explains how to work with Projects Management) using Project Management. Using the Workbench This document explains how to navigate through the Workbench interface. Commands and Tokens Guide This document provides information on using and Reference Commands and Tokens. Security Model Guide and This document presents an overview of the data Reference security model and provides instructions for controlling access to different entities. Configuring a Deployment This document provides instructions for System (Change Management) configuring a deployment system. This includes requirements gathering, modeling your processes in a Workflow, defining commands used by the execution engine, and rolling out this system to your users. Configuring a Release This document provides details for configuring, Management System defining and processing Releases in Mercury Change Management. Reports Guide and Reference This document provides details for running Reports. Open Interface Guide and This document provides details for integrating Reference non-Mercury ITG products with Mercury ITG entities.

Customer Support

Customer support and downloads for the Mercury ITG Center and additional product information can be accessed from the Mercury Interactive Support Web site at http://support.mercuryinteractive.com.

Education Services

Mercury Interactive provides a complete training curriculum to help you achieve optimal results using the Mercury IT Governance Center. For more information, visit the Education Services Web site at http://www.merc-training.com/main/ITG.

Chapter Key Concepts and Definitions

This chapter defines the key concepts and definitions related to using Mercury Change Management to deploy software and application changes.

This chapter covers the following topics:

- Software Deployment
- Packages
- Workflows
- Environments
- Workflow Steps
- Results
- Object Types
- Dashboard
- Portlets
- References
- Participant
- Displaying Mercury Change Management Data
- Integration with Version Control
- Integration with Mercury IT Governance Products

Software Deployment

The various objects of a Package are automatically deployed by the Mercury Change Management built-in Java Execution Engine. Based on the Object Type, the execution engine performs the tasks required to install the objects correctly. For example, the execution engine will log into the Development environment with a username and encrypted password, checkout a C Program from your version control repository, and transfer the file to the QA environment. It will then use the C compiler to compile and link the program. Additionally, using the built-in scheduler, you can schedule the deployments to suit your business needs. For example, you can schedule deployments for late at night or during a weekend when system load is minimal.

Packages

Mercury Change Management is an enterprise application designed to deploy and audit software changes to mission critical applications. It does this by gathering all information required for a successful deployment (such as information on Environments and Objects to be migrated) into a single logical unit called the Package. The Package, consisting of the migrating Objects, is then processed through a business Workflow. This results in a successful, easy-to-track software change.



A Package:

- Is the fundamental work unit of Mercury Change Management.
- Represents a logical unit of Objects that should be moved and tracked together.
- Contains all the information needed to process the Package, including the Package Lines, priority, and status.
- Specifies the Workflow to be used to deploy the change.
- Contains a list of all Objects to be tracked and/or migrated as the Package moves through its Workflow.

A Package consists of Objects, each of which is on a separate Package Line. While each line can be acted upon separately, the group of Package Lines and Objects represent a logical unit that should be moved and tracked together. The processing of a Package and Package Lines can vary greatly depending upon the Workflow specified for that Package. *Figure 2-1* shows a sample Package.

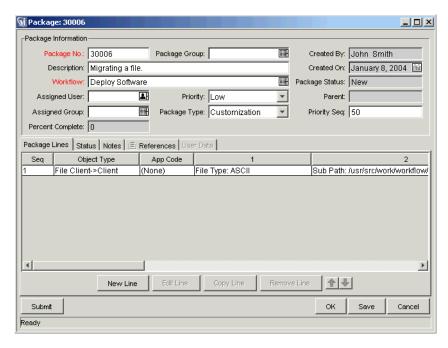


Figure 2-1 Sample Package

Workflows

A Workflow consists of a logical series of steps that define the path followed by Objects in a Package. Workflow configuration and routing is a customizable feature of Mercury Change Management and the Workflow engine can handle virtually any business practice. This allows a department to generate Workflows to automate existing processes, rather than forcing users to adopt a new set of processes to perform their work.

Workflow Steps can range in usage from functional approvals to actual migrations. For example, migration steps automatically move specified Objects from source Environments to destination Environments.

A sample Workflow is shown in *Figure 2-2*:

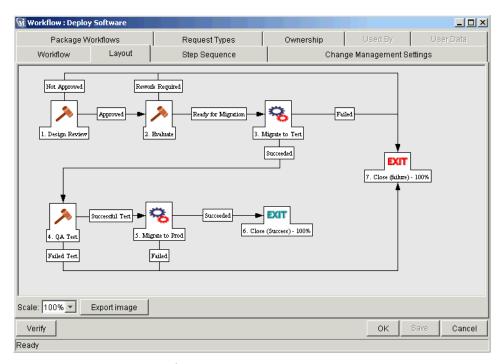


Figure 2-2 Package Workflow

Environments

A Mercury Change Management Environment is composed of a unique combination of server, client, database, and file system data that represents one logical group. For example, the 'DEV' Environment signifies the machines and database that represent the Development instance in the enterprise. One particular machine may be referenced by more than one Environment. For example, two Environments might have databases on the same UNIX machine. One Environment could be used for Development and the other Environment could be used for Quality Control.



The terms server and client are defined very specifically for Mercury Change Management.

The Environment server represents the main host machine for the Environment. This machine may be of any platform type: UNIX, WindowsNT, etc. Typically, the server is a UNIX machine that also houses the database for this Environment.

The Environment client represents a remote client machine that also serves to identify the specified Environment. The client is typically defined when users are doing multi-platform development in a client/server Environment (with some development done on UNIX, and some on Windows NT). The client can correspond to a file server that stores client code accessed by users. Many programs, such as transactional forms, have both client and server components (the user interface code and the database Objects, respectively). A sample Environment is shown in *Figure 2-3*.

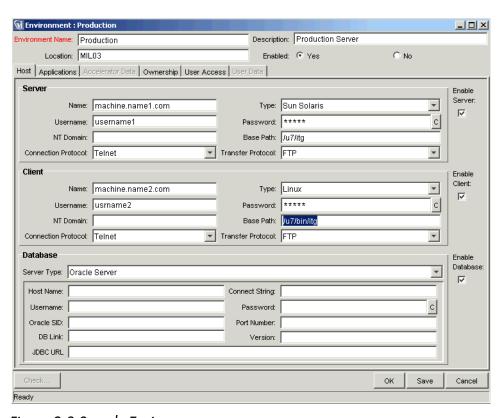


Figure 2-3 Sample Environment

Workflow Steps

Workflow Steps are events that are linked together to form a complete Workflow. Mercury Change Management uses three types of Workflow Steps: Decisions, Executions, and Conditions.

• Decisions are steps where a user or group of users need to indicate the result or outcome, such as an approval of work or an indication that a review has been completed. 'Approve Migration' is an example of a Decision step.

- Executions are steps where the system performs an action and then updates the step with its result. These actions can be as simple as calculating the value for a Token or as complex as copying files, running programs, or updating Web pages.
- Conditions are logic steps used for complex Workflow processing, such as allowing a Workflow to proceed only after all of the prerequisite steps are completed.
- Workflows are entire Workflows that have been enabled for use as Subworkflows. When modeling business processes that include predefined procedures, Subworkflows are a useful time saver.

The Workflow Step Sources window is shown in *Figure 2-4*.

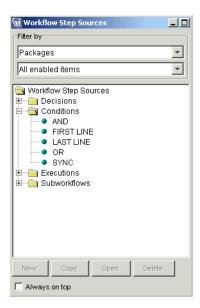


Figure 2-4 Workflow Step Sources Window

Results

A single step can have multiple valid results which manage the Workflow. For example, the 'Approve Migration' step can have two results: Approved or Not Approved. Depending on the Workflow configuration, these results route the Objects differently through the Workflow. Results are user-defined.



As shown in *Figure 2-2*, once the status of the 'Design Review' step becomes Approved, the status of the "Evaluate" step becomes eligible. If, however, the status becomes No, the 'Exit - Close (failure)' step becomes eligible.

Object Types

The Object Types Workbench allows users to define the different types of entities they want to control and migrate. Every Object Type has a unique set of parameters that determines the information it requires, as well as any additional information it may accept. Each Object Type can also have associated Commands which determines its behavior as it moves from one Environment to another. Commands are used to define what a migration means for each type of Object. For example, a File Object Type might only require the copying of a file while a Database Script Object Type might require both copying of a file as well as executing it against the destination database.

Object Types are user-configurable. Mercury Change Management and its Extensions also provide libraries of pre-defined Object Types, falling under one of the following categories:

- Standard Objects
- Custom Objects
- Mercury IT Governance Migrator Objects

Standard Objects

Standard Objects are predefined Object Types that are shipped with Mercury Change Management or one of the Change Management Extensions. These Object Types encapsulate the basic functionality that manages crucial Change Management actions such as migrating and executing file-system level objects and operating-system commands, or applying patches to an Oracle Applications instance. A simple standard Object Type is the File Migration object, which copies a file from one Environment to another. A more complex standard Object Type is the SQL Script, which not only copies the file but also executes the script against the destination database.

Custom Objects

Customers will often need to customize standard Object Types, or produce entirely new Object Types, in order to handle the requirements of their software environments and change management processes. A Custom Objects category is provided to help distinguish these customized Object Types from those that come standard with Mercury Change Management or its Extensions. Such Object Types may have been designed by the customer or by consultants, and are often used for integration with specific third-party tools or in-house products.

Mercury IT Governance Migrator Objects

Mercury ITG Migrator Objects are Object Types that contain functionality to export and import configuration information. These may be used for several purposes: to transfer configuration information between distinct Mercury ITG instances/installations, to extract information from a Mercury ITG database schema into an XML file, or to load information from an XML file into a database schema. This means that you can migrate configuration information using standard Change Management test practices—processing a Package through a Workflow.

A sample Object Type is shown in *Figure 2-5*.

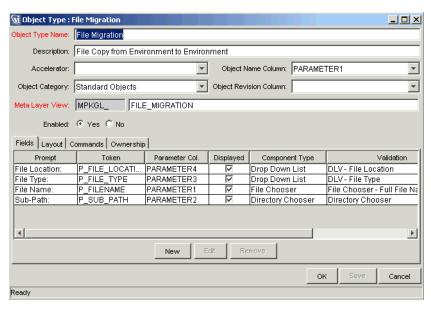


Figure 2-5 Sample Object Type

Dashboard

The Mercury ITG Dashboard consists of a set of configurable, role-based visual displays called Portlets that provide relevant summary information. Users can drill down to any desired level of detail. The Dashboard displays the true status of the initiatives, based on current data captured automatically when the work is performed.

The Dashboard is designed for use by participants throughout the Technology Chain. For example, developers can use the Dashboard to view all their own action items, and end-users can consult their own Dashboards to see the status of all the Requests they have submitted. Tabs in the Dashboard interface allow users to group Portlets according to their own needs. To save time in configuration, your application administrator can define a default Dashboard layout for all users.

A sample Dashboard configuration is shown in *Figure 2-6*.



Figure 2-6 Sample Dashboard Configuration

Portlets

Portlets are configurable, role-based visual displays that provide relevant summary information of your business data. Each user can select which Portlets they would like to display on their Dashboard. They can then personalize those Portlets to display only the information that is relevant to their Projects, Tasks, Packages or Requests.

In addition to providing relevant information for higher visibility, Portlets also provide the user with the ability to drill down into the details of the Project, Task, Request or Package. This enables the user to access and update information from a single Web page.

Mercury IT Governance Center features a set of Portlets for each product. These Portlets are designed to provide the most efficient and flexible access to your business data. It is also possible for advanced users to create custom Portlets for further adaptability.



You can only add Portlets to your Dashboard which are associated with the Mercury ITG products licensed at your site. For a full list of the available Portlets, see Using the Dashboard.

A sample Portlet is shown in *Figure 2-7*.

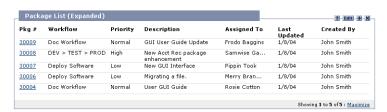


Figure 2-7 Sample Portlet

References

In addition to header and detailed field information, Packages can have references to other entities or points of information that allow for easy access and visibility to related data. Summary information for References is viewed as part of the Package. Each reference can be viewed in detail with a simple click of the mouse. There are several reference types defined in Mercury Change Management: Attachment, Package, Project, Release, Request, Task, and URL. Sample References are shown in *Figure 2-8*.

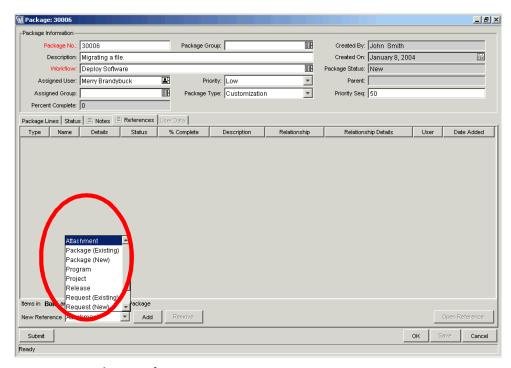


Figure 2-8 Package References

Package

You can add a reference to a Package to relate to other Packages. References to the Package(s) are automatically generated, establishing a two-way tie between the referenced Package(s) and the original.

In addition to referencing existing Packages, you can also create a new Package to be referenced from the **References** tab. You can then specify a relationship (informational or dependent) between the Package and the new reference.

Request

You can add a reference to a Package to relate to Requests. In addition to referencing existing Requests, you can also create a new Request to be referenced from the **References** tab. You can then specify a relationship (informational or dependent) between the Package and the new reference.

For Packages that were spawned from a Request Workflow step, reference to the Request is automatically generated, establishing a two-way tie between the spawned Package and the Request.

Release

You can reference a Package to a given Release. For Packages already associated with a given Release, reference to the Release is automatically generated, establishing a two-way tie between the Package and the Release.

Attachment

You can attach a file from your local machine to the current Package. The attached file is copied to the server and can then accessed by other Mercury Change Management users. This feature is particularly helpful when you need to reference a document that is not already Web-accessible.

Document URL

You can reference an unlimited number of document URLs to a given Package. Document URLs need to be Web-accessible and are attached by simply entering the Web address of the document. Once attached, the document URLs can be opened by selecting the Reference.

Task

You can attach the current Package to a Task in a Mercury Project Management Project. The Task is then associated with this Package. Using Mercury Project Management, you can then set dependencies between the Package and the Task.

Project

You can attach the current Package to a Mercury Project Management Project. The Project is then associated with this Package.

Participant

Users who are involved in moving a Package through a Workflow are considered to be 'Participants' in that Package. A Participant can be:

- The 'Assigned To' user
- A member of the assigned group
- The creator of the Package

A member of a Security Group associated with any of the Workflow Steps contained in the Workflow.

Depending on the settings configured by the application administrator, a Package may not be visible to users who are not Participants in its Workflow. This means users will only see Packages relevant to their business role in their organization. Additionally, users running Reports will only see information for Packages for which they are considered to be Participants.

Displaying Mercury Change Management Data

As more of business processes and solutions are modeled using Mercury Change Management, the data in the system will grow. For example, Change Management may be used to automate 200 different processes—thus potentially introducing 200 Workflows. Sifting through 200 entries in an autocomplete list or 200 search results could be cumbersome.

Mercury Change Management can be configured to display only information that is most relevant to your business role. Depending on this configuration and the Access Grants you have been given by your application administrator, some data will not display when, for instance, you click on an auto-complete list or perform a search for a particular entity.



A Project Manager and a Software Developer will each have different Access Grants. Each sees different sets of Workflows when clicking on autocomplete lists or running searches, with each set suited to their particular business role.

For more information on Access Grants and restricting Mercury ITG data, refer to Security Model Guide and Reference.

Integration with Version Control

Mercury Change Management provides complete integration with all standard version-control systems including RCS, SCCS, PVCS, ClearCase, CCC/Harvest, and Visual SourceSafe. The Change Management outbound API provides all check-in, check-out, and promotion functions during deployment.

File system objects can be deployed to new installations and updated in version control simultaneously. This synchronizes your version-control repository, physical installations, and Change Management Workflows.

Integration with Mercury IT Governance Products

Mercury Change Management can be integrated with other products within the Mercury IT Governance Center.

This section covers the following topics:

- Integration with Mercury Demand Management
- Integration with the Mercury IT Governance Dashboard
- Integration with Third Party Applications through Change Management **Extensions**

Integration with Mercury Demand Management

Mercury Change Management serves as a system to manage the physical deployment of changes to your applications environment, but of equal importance is the gathering and analysis of issues (Requests) related to the stability of the system. To facilitate this Request gathering, Change Management is integrated with Demand Management. Like Change Management, Demand Management is a Workflow based system that features complete audit trail tracking of Requests from inception to close. Demand Management can also be configured to automatically generate Packages in Change Management. The tight integration between Demand Management and Change Management allows Packages to be automatically generated from Requests. The Requests are then automatically updated upon completion of the Package. This closed-loop integration ensures a coherent and consistent view

of your issue statuses and removes the need for redundant data across multiple applications.

Integration with the Mercury IT Governance Dashboard

Mercury Change Management provides an additional level of efficiency when used in conjunction with the Dashboard. The Dashboard is a highly configurable, high-level application that offers greater visibility and control over your business processes. As a complement to the HTML Interface, the Dashboard seamlessly integrates with all Mercury ITG products in a way that allows for delivery of real-time status and exception information on IT initiatives and operational tasks.

Integration with Third Party Applications through Change Management Extensions

Mercury Change Management Extensions are application-specific modules which automate the deployment and post-deployment steps of objects, files, and patches. Extensions are fully integrated with the Mercury Change Management to provide a total solution for managing various enterprise applications. The following Extensions are currently available:

- Extension for Databases
- Extension for Oracle E-Business Suite
- Extension for Oracle Technology
- Extension for eCommerce Technologies
- Extension for SAP® Solutions
- Extension for PeopleSoft Enterprise
- Extension for Siebel *e*Business Applications



Chapter

Accessing Change Management

This chapter provides instructions for logging onto Mercury Change Management.

Change Management features two interfaces: the standard interface and the Workbench. The standard interface uses HTML and Javascript to provide users with access to many key areas of functionality, such as approving Packages and running reports.

The Workbench is a Java applet designed to help administrators, product configuration experts, and power users perform advanced configuring and processing tasks, such as creating Packages, Object Types and Workflows.

Mercury Change Management users will interact mostly with the Workbench. The following sections provide instructions for logging onto Change Management and launching the Workbench:

- Logging on to Mercury Change Management
- Launching the Workbench
- Downloading Workbench Files

Logging on to Mercury Change Management

Mercury Change Management is accessed using a Web browser over a network. Mercury Change Management is a Java based, Web-enabled software system. The software can be executed using certain Java-enabled Web browsers, such as Netscape Communicator 7.02+, or Microsoft Internet Explorer 5.0+.

To access Change Management:

- 1. Contact your Administrator or Webmaster to obtain the URL where Mercury Change Management is installed.
- 2. Enter the information in the Location or Address field of your Web browser. The Logon page opens.



3. Enter your Username and Password in the corresponding fields in the Logon page.

Contact your Administrator to obtain your passwords and permissions.

To allow Change Management to retain your password information, click the Remember my logon check box. After clicking this check box, you will not be required to enter your password again until your session times out.

4. Click Submit.

If you enter an incorrect password, you will be prompted to correct it. Reenter the logon information and click Submit.

Mercury Change Management opens.





The initial page may appear differently at your site, depending on your system data and default configuration. The various Portlets might not contain information until you personalize them.

Changing Your Password

After logging onto Mercury Change Management, you may wish to change your password.

To change your password:

- 1. From the menu bar, select **Settings** -> **Edit My Profile**.
- 2. In the Old Password field, enter your old password.
- 3. In both the New Password and Repeat New Password fields, enter your new password
- 4. Click Done.

You will receive an error message if:

You did not enter your old password correctly.

- The New Password and Repeat New Password fields do not contain the same exact entry.
- The new password you entered is identical to your old password.

If you do not receive an error message, your password has been accepted by the system.

Launching the Workbench

The Workbench is accessed from the Mercury ITG menu bar. Users with a Power license can launch the Workbench by clicking the **Administration** > Open Workbench menu item.





If you have installed a pop-up blocker in your web browser, the Workbench will not open.

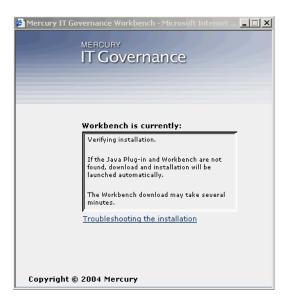
Downloading Workbench Files

The first time you access the Workbench across a network, the entire application will need to be downloaded onto your computer. Make sure to follow all instructions given by the browser and logon screen during this download process.

Subsequently, the program will only download if there is a new version on the server. For this reason it is recommended that the first time you run the Workbench on a computer, you do so across a network with bandwidth of at least 56 kbps.

The first time a user accesses the Workbench after an installation or an upgrade, the necessary files are downloaded onto the client's computer. This means that following an installation or upgrade, the Workbench will take slightly longer to launch than it would under normal operating conditions.

Launching the Workbench will open a small browser window that will indicate the current state of the Workbench. It will display any download or installation activities and will indicate when the Workbench has become active. This window must remain open for the duration of your Workbench session. Closing this window will close the Workbench window.





Chapter

Creating New Packages

This chapter provides instructions for creating and submitting Packages to deploy software and application changes. Packages are created using the Workbench.

This chapter covers the following topics:

- Creating New Packages
- Submitting a Package

Creating New Packages

Packages are used to deploy software and application changes. This section covers the following topics related to defining the contents of a Package, including adding Package Lines and specifying the appropriate deployment Workflow:

- Defining a Package
- Adding Multiple Package Lines Simultaneously
- Adding a Reference
- Copying an Existing Package
- Merging Packages
- Generating a New Package Group
- Editing a Package Group
- Selecting a Workflow for a Package
- Submitting a Package

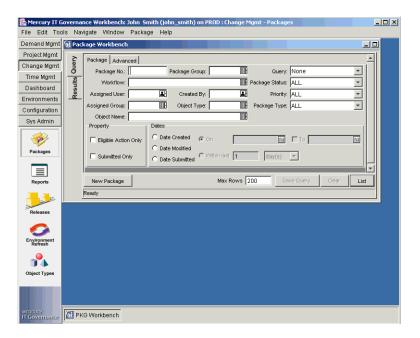
Defining a Package

For each instance of a software migration submission, a new Package needs to be created.

To define a new Package:

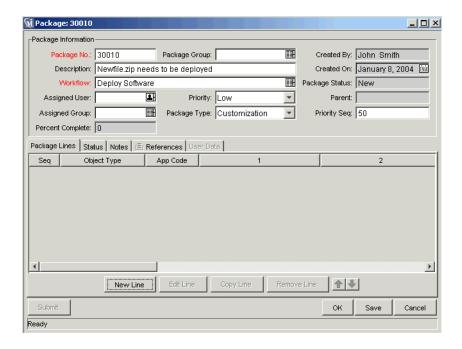
- 1. Open the Workbench.
- 2. Click Change Mgmt in the shortcut bar and click the Packages icon.

The Package Workbench opens.



3. Click New Package on the Package Workbench or select File -> New Package from the menu.

The Package window opens.



4. Enter a description in the Description field, select a Workflow, and enter any additional information that you would like to capture in the Package fields.

After entering information in the Package fields, add one or more Package Lines to the Package. Package Lines capture information specifically related to each object that you are migrating/tracking as the Package proceeds through the Workflow.

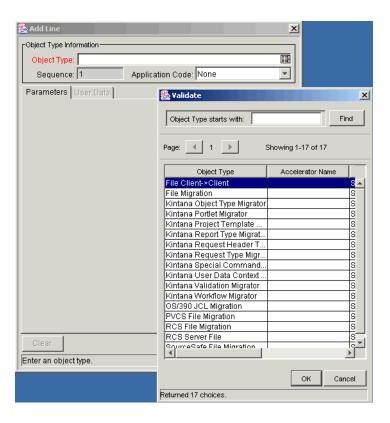
5. Click **New Line** to add a Package Line.

The Add Line window opens. The fields on this window let you enter Object Type specific information.

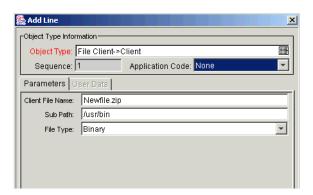
6. From the Object Type field, select the Object Type for the item that you would like to migrate.

If you don't know which Object Type you would like to use or you would like to view all of the possible choices, you can search for an Object Type. To search for and select an Object Type:

a. Click the auto-complete icon to open the Object Type Validate window. You can also type a full or partial name in the Object Type text field. before clicking the auto-complete icon, to find the Object Type you want to select.



b. Select the appropriate Object Type from the list and click **OK**. The Validation window closes and the Parameters tab in the Add Line window is dynamically updated and displays information fields corresponding to the selected Object Type.



7. Fill in the fields on the **Parameters** tab.

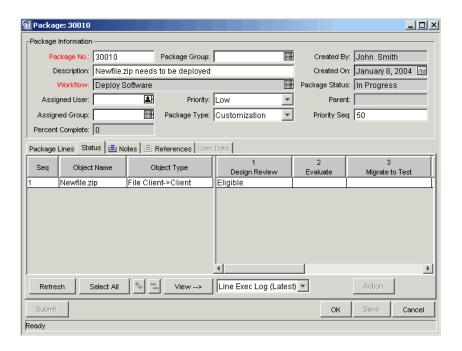
If the User Data tab is enabled, fill in the fields for that tab as well. Only the fields displayed in red are required, but you are encouraged to fill out the tabs as completely as possible.

8. Click **OK** to put the current Package Line into the Package and close the Add Line window. Click Add to put the current Package Line into the Package and clear the screen to add additional Object Types in the Add Line window.



- 9. Click the **Notes** tab and enter any additional information that would be useful for the Package. This field is not required, but it can be used to produce more robust reports and increase Package tracking information and accountability.
- 10. If User Data has been defined, the **User Data** tab is enabled. Click the **User Data** tab and fill in the appropriate fields.
- 11. To save the Package information without submitting it to the Workflow, click Save.
- 12. Click **Submit** to submit the Package to the Workflow.

Submitting the Package to the Workflow generates entries under the Status tab for each of the Workflow Steps defined for the Workflow. As each step in the Workflow is ready to be processed, the step shows an Eligible status. You can view the progress of each Package Line by clicking the **Status** tab.



13. Click **OK** to close the Package window.

Adding Multiple Package Lines Simultaneously

In some instances, you can add multiple Package Lines from a single Add Line window. Multiple Package Lines can be added with different parameters for a given Workflow and Object Type. You can add multiple Package Lines simultaneously when the following conditions exist:

- Package Lines all follow the same Workflow and use the same Object Type.
- The Object Type Parameters include at least one auto-complete list field with an enabled Multi button.

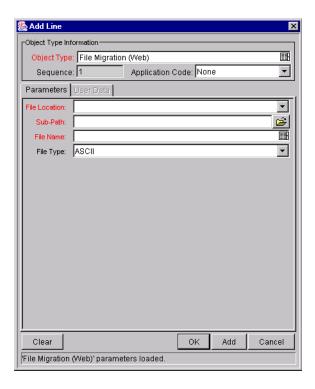
The following example illustrates how to add multiple Package Lines simultaneously. The user is creating a new Package using a Workflow named Dev -> Test -> Prod.

1. In the Package window (in the Workbench), click New Line. The Add Line window opens.

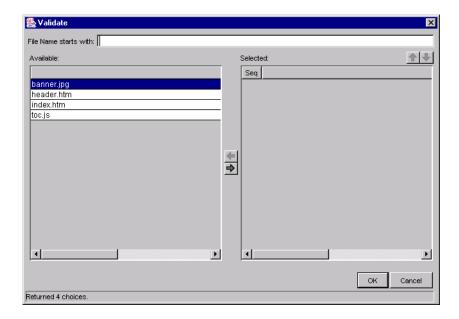
2. Select File Migration (Web) from the Object Type field. The Object Type specific parameters are dynamically displayed.



The File Migration (Web) Object Type was constructed for this example. You can select any Object Type with an enable multi auto-complete list parameter.

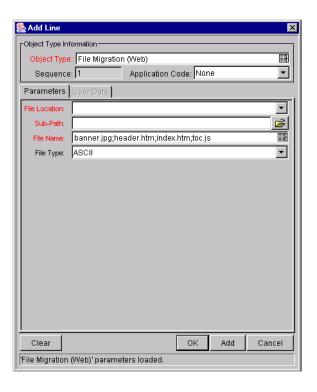


3. Click the File Name auto-complete list. The following Validate window opens.



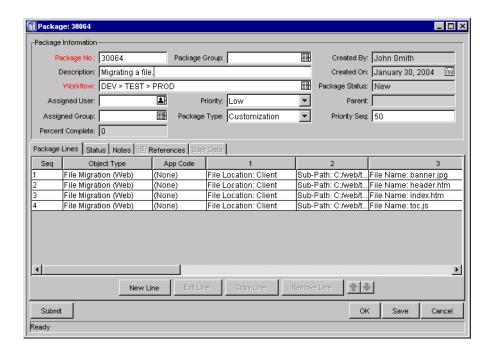
- 4. Double-click or select all desired entities and click the right arrow to move them to the right hand selection box.
- 5. Click **OK** to accept your multiple selections and close the window.

Notice that the items that you selected in the Validate window are listed in the File Name field and separated by commas.



6. Click Add.

A new Package Line is created for each parameter you specified in the Validate window. These lines are then processed through the selected Workflow.





You can only select **Multi** for objects that use an auto-complete or file chooser window to select the object name. All other parameters for that object are assumed to be identical.

Adding a Reference

You can add a reference to a Package from the Workbench or the standard interface. There are several reference types defined in Mercury Change Management: Attachment, Package, Project, Release, Request, Task, and URL. For some reference types, such as for Requests and other Packages, you can create a functional dependency to the reference. For example, you can specify that a Request is a "Predecessor" to the Package. This means that the Package will not continue until the Request closes.

To add a Reference to a new or existing Package from the Workbench:

- 1. Within the Package window, click the **References** tab.
- 2. Select the type of reference to be generated from the New Reference drop down list and click Add.

The following sections provide instructions for referencing different entities from the Package:

- "Attaching Requests" on page 37
- "Attaching Packages" on page 41
- "Attaching Releases" on page 45
- "Attaching Projects" on page 46
- "Attaching Tasks" on page 49
- "Adding an Attachment" on page 51
- "Adding a URL" on page 52



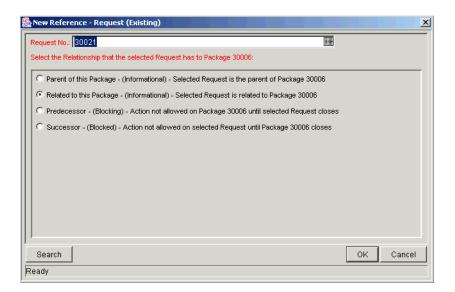
The following procedures detail how to add References to a Package from the Workbench. The procedure for adding References from the standard (HTML) interface uses the same fields and dependencies.

Attaching Requests

To attach Requests to a Package:

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

The New Reference - Request (Existing) window opens.



- 6. To select a Request for an attachment, use one of the following methods:
 - Enter the Request Number in the Request No. field or click the Request No. auto-complete list to locate and select the Request in a Validate window. (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" on page 39.
- 7. Select the type of relationship you want to assign between the Package and its attachment by selecting the appropriate radio button.

See *Table D-5 on page 19* for a description of the various relationships that can be assigned.

8. Click **OK**.

You return to the References tab in the Package window. The new attached Request is displayed as a Reference.

9. Click **OK** to save the attached Request as a Reference and close the Package window.

10. Click **Save** to save the attached Request as a Reference in the Package without closing the Package window.

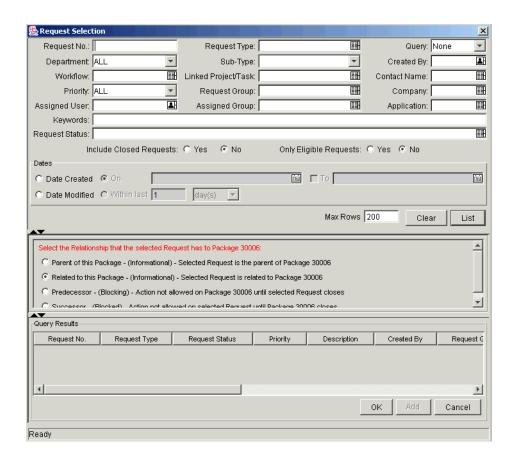
Searching for Requests to Attach

This procedure lets you use additional criteria and expand the search capability for Requests to attach to a Package.

To search for a Request to attach to a Package:

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

The Request Selection 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 the Package.
- 5. Select the type of relationship you want to assign between the Package and its attachment from the Select Relationship for New References drop down list.

See *Table D-5 on page 19* for a description of the various relationships that can be assigned.

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

You return to the References tab in the Package window. The new attached Request displays as a Reference.

- 7. Click **OK** to save the new Reference and close the Package window.
- 8. Click **Save** to save the new Reference in the Package without closing the Package window.

Creating a New Request

To create a new Request from the Package's References tab:

1. Select **Request (New)** from the Reference Type drop down list and click Add.

The New Reference - Request (New) window opens.



2. Select a Request Type from the Request Type auto-complete list and a relationship from the available radio buttons.

3. Click **Create** to create the new Request.

A browser window opens the the Create Request page. The new Request's Description field is defaulted to the Package's description. Fill in all required Request fields and any optional fields.

4. Click Submit.

The Create Request page closes and returns you to the References tab in the Package window. The newly created Request displays as a Reference.

- 5. Click **OK** to save the Request as a Reference and close the Package window.
- 6. Click **Save** to save the Request as a Reference in the Package without closing the Package window.

Attaching Packages

To attach Packages to a Package:

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

The New Reference - Package (Existing) window opens.



- 6. To select a Package for an attachment, use one of the following methods:
 - Enter the Package Number in the Package No. field or click the Package No. auto-complete list to locate and select the Package in a Validate window. (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" on page 42.
- 7. Click the Relationship drop down list to open it. Select the type of relationship you want to assign between the Packages by selecting the appropriate radio button.

See *Table D-5 on page 19* for a description of the various relationships that can be assigned.

8. Click **OK**.

You return to the **References** tab in the Package window. The new attached Package displays as a Reference.

- 9. Click **OK** to save the attached Package as a Reference and close the Package window.
- 10. Click **Save** to save the attached Package as a Reference in the Package without closing the Package window.

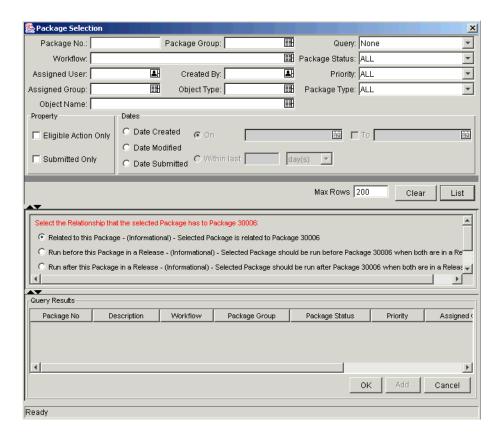
Searching for Packages to Attach

This procedure lets you use additional criteria and expand the search capability for Packages to attach to a Package.

To search for Packages to attach as References to Packages:

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

The Package Selection 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 the Package.
- 5. Select the type of relationship you want to assign between the Package and its attachment from the Select Relationship for New References drop down list.

See *Table D-5 on page 19* for a description of the various relationships that can be assigned.

6. Click **OK**.

You return to the References tab in the Package window. The new attached Package displays as a Reference.

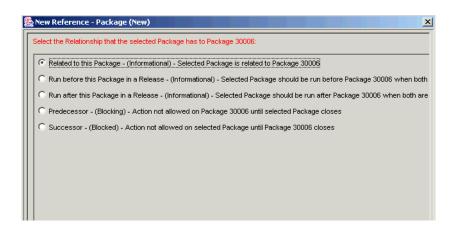
- 7. Click **OK** to save the new Reference and close the Package window.
- 8. Click **Save** to save the new Reference in the Package without closing the Package window.

Creating a New Package

A new Package can be created from a Package's References tab.

1. Select **Package (New)** from the Reference Type drop down list and click Add.

The New Reference - Package (New) window opens.



- 2. Select a relationship from the available radio buttons.
- 3. Click **Create** to create the new Package.

A new Package window opens. The new Package's Description field is defaulted to the original Package's description.

- 4. Specify a Workflow and add Package Lines as you would for any other Package submittal.
- 5. Click Submit.

The Package window closes and returns you to the References tab in the original Package window. The newly created Package displays as a Reference.

- 6. Click **OK** to save the Package as a Reference and close the Package window.
- 7. Click **Save** to save the Package as a Reference in the Package without closing the Package window.

Attaching Releases

To attach Releases to a Package:

- 1. Open the Package window.
- 2. Click the References tab
- 3. Click the New Reference drop down list.
- 4. Select **Release** from the drop down list.
- 5. Click **Add**. The New Reference Release window opens.



6. Enter the Release Name in the Release Name field or click the Release Name auto-complete list to locate and select the Release in a Validate window. (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 Release Name field separated by semi-colons.

7. Click **OK**.

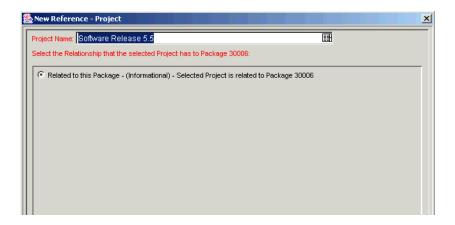
You return to the References tab in the Package window. The new attached Release displays as a Reference.

- 8. Click **OK** to save the attached Release as a Reference and close the Package window.
- 9. Click **Save** to save the attached Release as a Reference in the Package without closing the Package window.

Attaching Projects

To attach Projects to a Package:

- 1. Open the Package window.
- 2. Click the References tab
- 3. Click the New Reference drop down list.
- 4. Select **Project** from the drop down list.
- 5. Click **Add**. The New Reference Project window opens.



- 6. To select a Project for an attachment, use one of the following methods:
 - Enter the Project Name in the Project Name field or click the Project Name auto-complete list to locate and select the Project in a Validate window. (Hold down Ctrl+Click or Shift+Click to select more than one Project.) The selected Project displays in the Project Name field. If you

selected multiple Projects, they all display in the Project Name field separated by semi-colons.

Click **Search** to search for Projects in a separate query window and follow the procedure in "Searching for Projects to Attach" on page 47.

7. Click **OK**.

You return to the References tab in the Package window. The new attached Project displays as a Reference.

- 8. Click **OK** to save the attached Project as a Reference and close the Package window.
- 9. Click **Save** to save the attached Project as a Reference in the Package without closing the Package window.

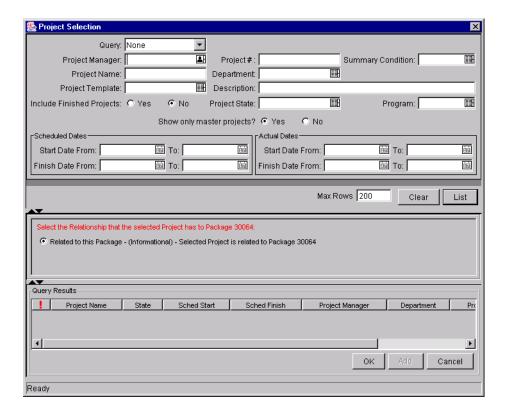
Searching for Projects to Attach

This procedure lets you use additional criteria and expand the search capability for Projects to attach to a Package.

To search for a Project to attach as a Reference:

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

The Project Selection window opens.



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

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

- 4. Select the Project(s) in the Query Results section that you want to attach to the Project.
- 5. Select the type of relationship you want to assign between the Package and its attachment from the Select Relationship for New References drop down list.

See *Table D-5 on page 19* for a description of the various relationships that can be assigned.

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

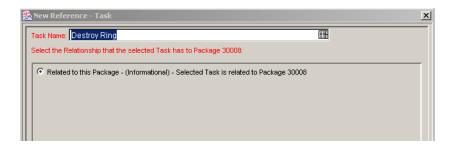
You return to the **References** tab in the Package window. The new attached Project displays as a Reference.

- 7. Click **OK** to save the new Reference and close the Package window.
- 8. Click **Save** to save the new Reference in the Package without closing the Package window.

Attaching Tasks

To attach Tasks to a Package:

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



- 6. To select a Task for an attachment, use one of the following methods:
 - Enter the Task Name or click the Task Name auto-complete list to locate and select the Task in a Validate window. (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" on page 50.
- 7. Click **OK**.

You return to the References tab in the Package window. The new attached Task displays as a Reference.

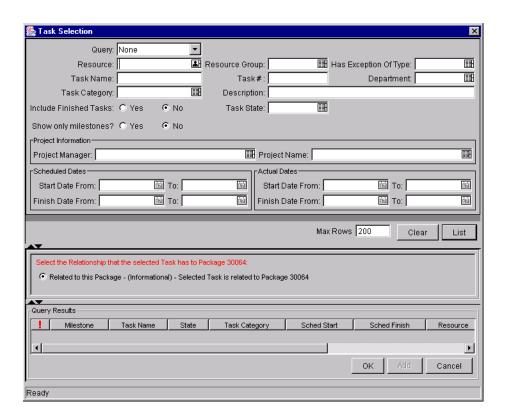
- 8. Click **OK** to save the attached Task as a Reference and close the Package window.
- 9. Click **Save** to save the attached Task as a Reference in the Package without closing the Package window.

Searching for Tasks to Attach

This procedure lets you use additional criteria and expand the search capability for Tasks to attach to a Package.

To search for Tasks to attach to the Package:

1. From the New Reference - Existing 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 Task 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 the Package.
- 5. Click OK to attach the Task(s) to the Package and close the current window.

You return to the **References** tab in the Package window. The new attached Task displays as a Reference.

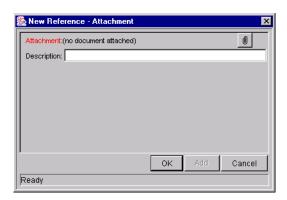
- 6. Click **OK** to save the new Reference and close the Package window.
- 7. Click **Save** to save the new Reference in the Package without closing the Package window.

Adding an Attachment

To add an attachment as a Reference:

1. Select Attachment from the New Reference drop down list and click Add.

The New Reference - Attachment window opens.



- 2. Select the desired file from your local machine and enter a description if desired.
- 3. Click Add to add the selected Attachment as a Reference and continue to add more. Click **OK** to add the selected Attachment as a Reference and

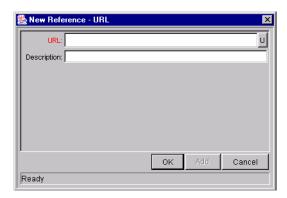
close the References: New window. Click Cancel to exit the References: New window without making changes.

Adding a URL

To add a URL as a Reference:

1. Select **URL** from the New Reference drop down list and click **Add**.

The New Reference - URL window opens.



- 2. Type the URL into the URL field and enter a description if desired.
- 3. Click **OK** to add the specified URL as a Reference and close the New Reference - URL window. Click Cancel to exit the window without making changes.

Valid Package References

Table 4-1. Valid References in the Reference Tab

Туре	Description
Attachment	You can attach a file from your local machine to the current Package. The attached file is copied to the server and can then be accessed by other Mercury Change Management users. This feature is particularly helpful when you need to reference a document that is not already Web accessible.

Table 4-1. Valid References in the Reference Tab [continued]

Туре	Description	
Package (Existing)	You can reference other Packages directly from the Reference tab. Also, if configured as part of the current Workflow, you can spawn a Package from another Package. When this happens, a reference to that Package is automatically generated, establishing a two-way link between the primary and secondary Package.	
Package (New)	New Packages can also be created from a Package in the References tab.	
Project	You can attach the current Package to a Mercury Project Management Project.	
Release	You can associate a Package with a Release by referencing the Release number.	
Request (Existing)	You can reference Requests directly from the Reference tab. Also, if configured as part of the Mercury Demand Management Workflow, you can spawn a Package from a Request. When this happens, a reference to that Request is automatically generated, establishing a two-way link between the Request and Package.	
Request (New)	New Requests can also be created from a Package in the References tab.	
Task	You can attach the current Package to a Mercury Project Management Task.	
URL	You can reference URLs from a Package. Once attached, click on the Web address to open the document in your Web browser. The document must be in a MIME format recognized by your Web browser (Word, Excel, etc.)	
	Use URLs to include more detailed information than what is included in the Package notes, such as a screenshot for a Bug or a report.	

Reference Dependency Relationships

The relationships that can exist between a Package and a Reference are listed below in table *Table 4-2*.

Table 4-2. Reference Relationships

Entity	Relationships	Description
Attachment	Standard Attachment interaction	The attachment is related to this Package.
Packages	Related to this Package	Selected Package is related to this Package
	Run Before this Package in a Release	Selected Package should be run before this Package when both are in a Release.
	Run After This Package in a Release	Selected Package should be run after this Package when both are in a Release.
	Predecessor	Action not allowed on the this Package until the selected Package closes.
	Successor	Action not allowed on the selected Package until this Package closes.
Projects	Related to This Package	Selected Project is related to this Package.
Releases	Contains This Package	The Package is contained in the selected Release.
Requests	Parent of This Package	Selected Request is the parent of this Package.
	Related to This Package	Selected Request is related to this Package.
	Predecessor	Action not allowed on the this Package until the selected Request closes.
	Successor	Action not allowed on the selected Request until this Package closes.
Tasks	Related to This Package	Selected Task is related to this Package.
URL	Standard URL interaction	The URL is related (informational reference only) to this Package.

Copying an Existing Package

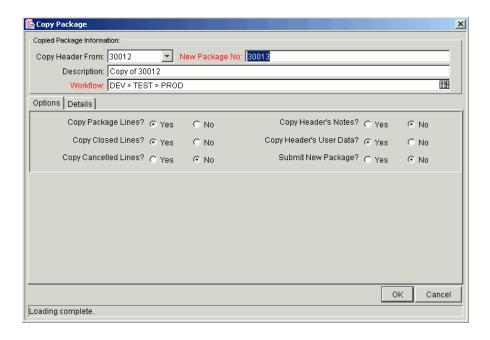
To copy a Package:

1. Locate and select the Package to be copied in the Results tab of the Packages Workbench.



2. Click Copy.

The Copy Package window opens.



- 3. Enter the new Description and select a Workflow.
- 4. Select **Yes** or **No** for the various items on the **Options** tab to specify which Package-specific information should be copied to the new Package.



You must also decide whether or not to automatically submit the Package after a successful copy. To automatically submit the Package, select Yes for the Submit New Package radio button.

- 5. Click the **Details** tab to specify which Package Lines are carried over.
- 6. To exclude a Package Line, select the line and click **Exclude**. The newly excluded line appears in italics.
- 7. Check the Show Parameters check box to see more information about the Package Lines.
- 8. Click OK.

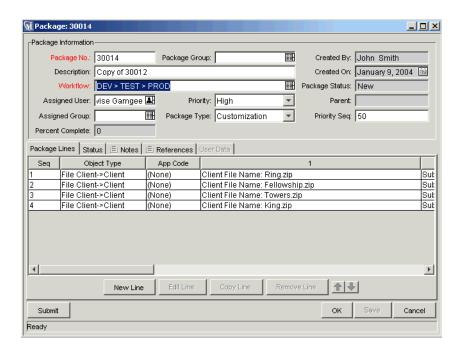
A Question dialog opens.



9. Select **Yes** to edit or **No** to return to the Package Workbench.



If you did not select **Yes** for the Submit New Package radio button, under the **Options** tab, then your Package is *not* submitted. To submit the Package, you must open the copied Package and click Submit.

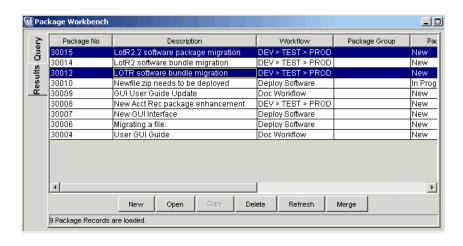


Merging Packages

You can generate a new Package by merging two or more existing Packages. This is advantageous when you would like to generate a single Package consisting of certain Package Lines contained in separate Packages.

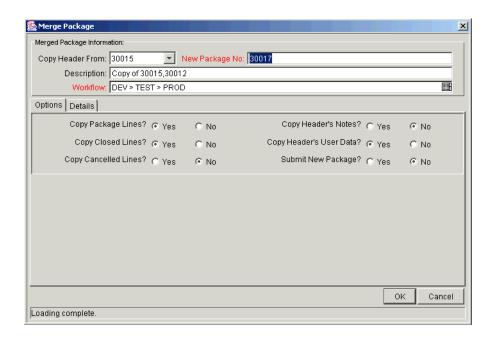
To merge two Packages:

1. Locate and select the Packages to be copied in the **Results** tab of the Packages Workbench. Hold down the Ctrl key to select nonadjacent rows.



2. Click Merge.

The Merge Package window opens.



- 3. Enter the new Description and select a Workflow.
- 4. Select **Yes** or **No** for the various items on the **Options** tab to specify which Package specific information should be copied to the new combined Package.



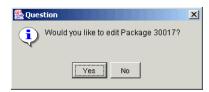
To automatically submit the Package after a successful copy, select **Yes** for the Submit New Package radio button.

- 5. Click the **Details** tab to specify which Package Lines are carried over.
- 6. To exclude a Package Line, select the line and click **Exclude**.

The newly excluded line appears in italics.

- 7. Check the Show Parameters check box to see more information about the Package Lines.
- 8. Click **OK**.

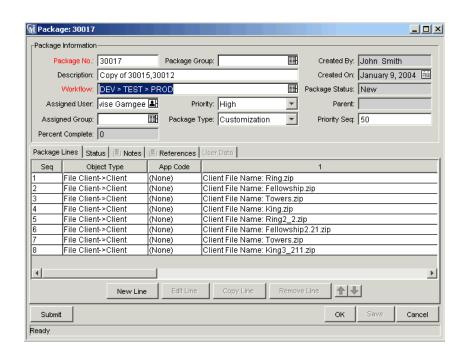
A Question dialog opens.



9. Select **Yes** to edit or **No** to return to the Package Workbench.



If you did not select **Yes** for the Submit New Package radio button, under the **Options** tab, then your Package is *not* submitted. To submit the Package, you must open the copied Package and click Submit.



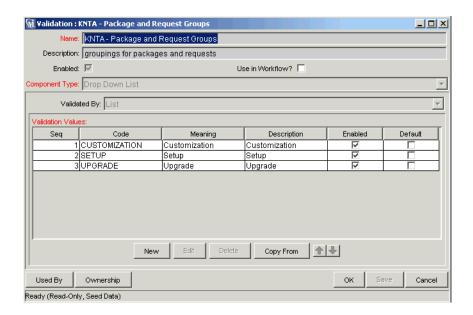
Generating a New Package Group

It is often advantageous to link the new Package to a specific Package Group for tracking and reporting purposes.

To add a new Package Group:

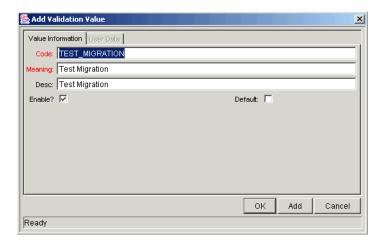
1. From the Workbench menu, select Package > New Package Group.

The Validation: KNTA - Package and Request Groups window opens, listing groupings for Packages and Requests.



2. Click New.

The Add Validation Value window opens.



- 3. Enter all of the required information in both the Value Information and User Data tabs.
- 4. Click **OK** to accept the new Package Group and close the window, or click Add to accept the new Package Group and enter another new Package Group.
- 5. Click **OK** to save the changes.

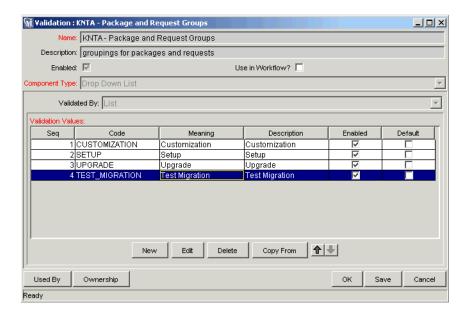
Editing a Package Group

You can also edit existing Package Groups from within the Package Workbench.

To edit an existing Package Group:

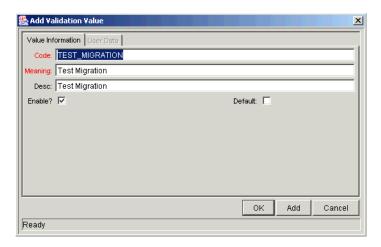
1. From the Workbench menu, select Package > New Package Group.

The Validation: KNTA - Package and Request Groups window opens, listing groupings for Packages and Requests.



- 2. Select the Package Group that you would like to edit.
- 3. Click Edit.

The Edit Validation Value window opens.



4. Make any desired changes and click **OK** to save the changes.



Only users with appropriate Access Grants and security privileges can alter the KNTA Package and Request Groups Validation list. You should consult your Administrator before adding or editing any Package Groups. Package Groups are typically generated to adhere to specific business application standards.

Selecting a Workflow for a Package

Each Package is processed through a Workflow that was defined by your process configuration team. Mercury Change Management users are required to select a Workflow for each Package that they initiate. It is essential that Change Management users route their Packages through Workflows that properly model the appropriate business process.

Mercury IT Governance Center allows for extremely flexible Workflows, allowing you to map and configure almost any business process. Each Mercury ITG implementation will have uniquely defined Workflows.



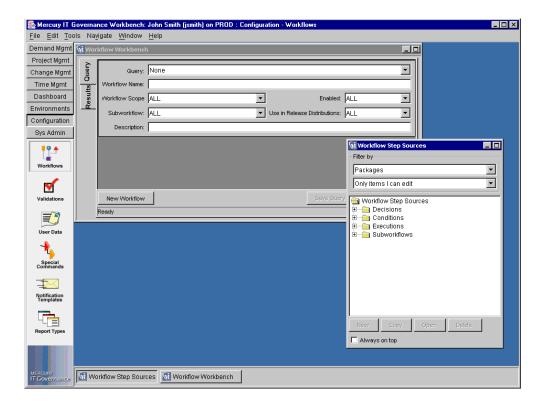
Check with your administrator to verify that you are using the Workflow that accurately represents the business process that you would like to follow.

Although companies typically restrict Workflow editing permissions to certain users, all Change Management power users have permission to view the Workflow windows. Mercury Change Management users are encouraged to familiarize themselves with the Workflows that they are using to process their Packages. Viewing the Workflow's graphical layout can help users decide whether they are using the appropriate Workflow for the current Package.

To view the graphical layout of a Mercury Change Management Workflow:

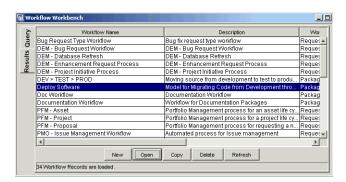
1. Click **Configuration** in the shortcut bar and click the **Workflows** icon.

The Workflow Workbench opens.



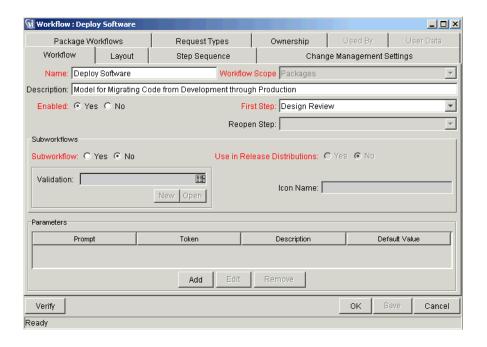
2. Click **List** to display all of the Workflows in the system.

You can restrict the search by entering one or more of the query parameters.

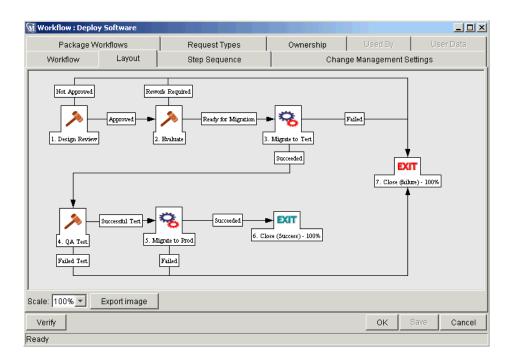


3. Select one or more of the listed Workflows and click **Open**.

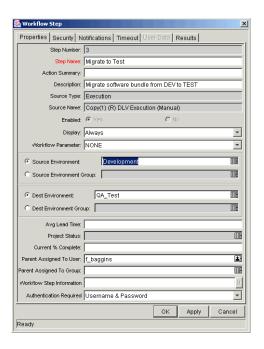
The Workflow window opens.



4. Click the **Layout** tab to view the Workflow's graphical representation.



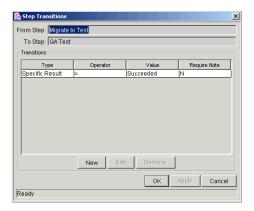
5. Double-click on any numbered step.



The Workflow Step window opens.

- 6. Click on any of the tabs to view the following information:
 - **Properties:** This tab contains general information about the Workflow Step.
 - **Security:** This tab is used to define the Security Groups that are allowed to act on a particular step. All of the enabled Security Groups will appear in either the Available Security Groups field or the Linked Security Groups field. Each user who belongs to a Linked Security Group is able to perform the actions defined for that particular Workflow Step.
 - **Notifications:** This tab is used to attach email Notifications to the specific Workflow Step. Email messages can be sent whenever an event occurs at a Workflow Step. An event can be when the step becomes eligible or when the step completes with a specific result.
 - User Data: This tab on the Workflow Step displays any custom fields for each Workflow Step.
 - **Results:** This tab that lists all the valid results the step can have.

7. Double-click on any transition arrow to view the Step Transitions window. This window details the conditions that must be met in order to continue to the next Workflow Step.





Workflows can consist of multiple Subworkflows which are represented in the **Layout** tab by a single Subworkflow icon. Users can view each of these Subworkflows in the same manner as described above or by opening the desired Workflow in the Workflow Step Source window.

For more information about a particular Workflow or general information on Change Management Workflow processing, consult your administrator or refer to the Workflow chapter in "Configuring a Deployment System".

Submitting a Package

Once a Workflow is selected and Package Lines have been added, the Package is eligible for submission. The following figure illustrates a Package pending submission. Notice that the Submit button remains enabled for pending submission. Submit the Package by clicking Submit. The Package begins moving through its assigned Workflow to completion.

Figure 4-1 shows a Package that has not yet been submitted.

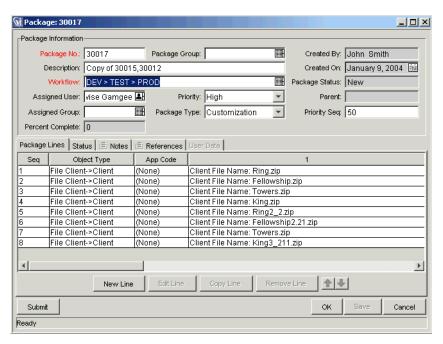


Figure 4-1 Non-submitted Package

Chapter **Processing Packages**

This chapter provides instructions for viewing and processing Packages. This includes information on locating Packages, acting on eligible steps and viewing key Package information and statuses.

During the initial entry of a Package, users specify the Workflow through which the Package is processed. This Workflow is the business and migration process that the Package follows. Workflows are initially determined during system configuration and are modified as needed.

If you have questions concerning the configuration and use of a specific Workflow in your Mercury Change Management instance, consult your business configuration expert.

This chapter covers the following topics:

- Viewing Package Permissions
- Locating In Progress Packages
- Checking a Package Status
- Viewing Information on Packages and Package Lines
- Acting on an Eligible Step Overview
- *Updating Packages in the HTML Interface*
- Processing Packages in the Workbench
- Configuring Workflow Display

Viewing Package Permissions

To increase general accountability and control over the Package process, Mercury Change Management has implemented Package security in two key ways:

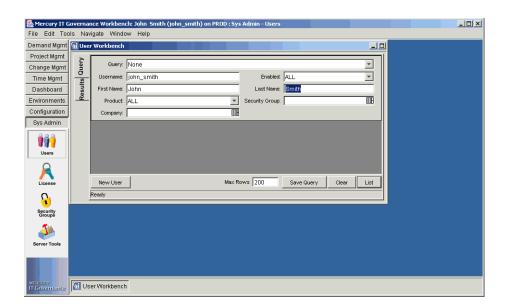
- **Security Group Security:** Users must be included in specific Security Groups (that have the correct Access Grants) for them to have edit-access to different levels of Package processing.
- Workflow Step Security: Each Workflow Step explicitly states which Security Groups can act on that step.

Although the process of setting up Security Group and Workflow Step securities remains an issue for application configuration experts and administrators, all Change Management Power Users have full read-access to view individual security privileges.

To view a user's Security Group(s) membership:

1. In the Workbench, click the Sys Admin screen group and click the Users icon.

The User Workbench opens.



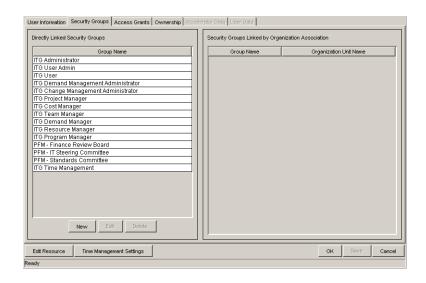
- 2. In the Username field, enter the username.
- 3. Click List.

The **Results** tab opens and displays the username listed on the **Query** tab.

4. Select the username and click **Open**.

The User window opens.

5. Click the **Security Groups** tab.



The Security Groups to which the user belongs are listed in **Security Groups** tab. These Security Groups dictate the level of Mercury Change Management view and edit access. Security Groups are highly configurable and can vary greatly between Mercury Change Management implementations. See Security Model Guide and Reference for details.

Locating In Progress Packages

Packages are sometimes routed through a lengthy business process involving testing, various approvals and rework. Users may wish to check on all of their open Packages to locate any bottlenecks and assist in Package processing.

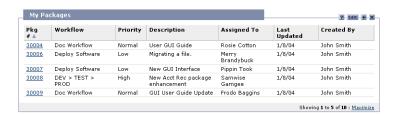
This section covers the following topics:

- Using the My Packages Portlet
- Querying for In Progress Packages
- Reporting on Open Packages

Using Smart URLs to Locate Open Packages

Using the My Packages Portlet

The quickest way to locate relevant Packages is through the Mercury ITG Dashboard. When included on the Dashboard, the My Packages Portlet displays all Packages you have created.

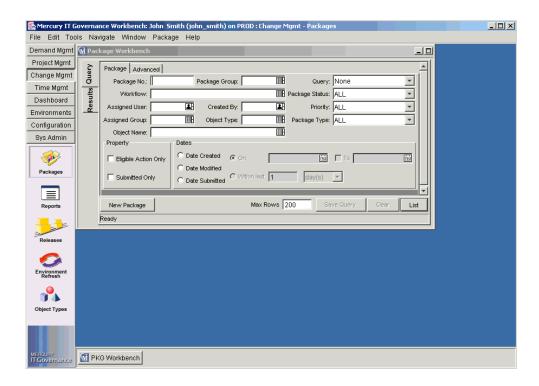


Querying for In Progress Packages

To query for In-Progress Packages:

1. Click the Change Mgmt screen group and click the Packages icon.

The Package Workbench opens.



- 2. From the Package Status drop down list, select In Progress.
- 3. If you would like to limit the search to Packages that you generated, select your username from the Created By drop down list.
- 4. Click List.

The **Results** tab is displayed. Packages are listed in the **Results** tab.



The Query tab can also be helpful in finding all Open (i.e. Not Closed) Packages. The **Advanced** tab allows you to set up entire lists of inclusions and exclusions in your database search. For more information on using the Advanced query, refer to "Query Tab" on page 6.

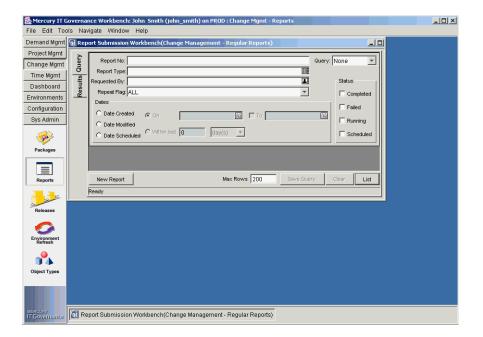
Reporting on Open Packages

Mercury Change Management includes a pre-defined set of Reports that generate HTML text and can be accessed by a Web browser. Among these reports is the Packages Pending Report, which reports on open Packages with pending activity.

To Run the Packages Pending Report:

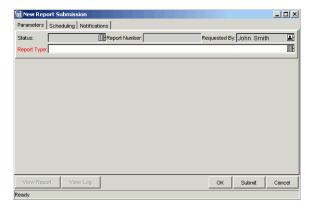
1. Click **Change Mgmt** in the shortcut bar and click the **Reports** icon.

The Report Submission Workbench opens.



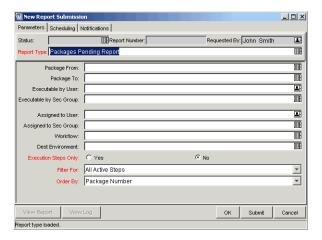
2. Click New Report.

The New Report Submission window opens.



3. From the Report Type auto-complete list, select Packages Pending Report.

The window is dynamically updated.



4. Since you are looking for a Report on all open Packages, accept the default parameters and click **OK**.

The report runs and returns you to the **Results** tab.



5. Select the **Completed** line and click **View Report**.

This displays the following page in a new browser window:



This provides a detailed list of all of the Open Packages. For more information on the Packages Pending Report parameters as well as other Reports available in Change Management, refer to "Change Management Reports" on page 117.

Using Smart URLs to Locate Open Packages

As a Package proceeds through its Workflow, email Notifications can be sent to alert users of pending actions. The logic regarding when emails are sent and the content for each email is defined in the Workflow. Notifications can be sent when a step becomes Eligible, alerting specific users that they need to perform an action or decision. They can also be sent after a step is completed to inform assigned users of the specific outcome.

Change Management Notifications typically instruct the user to review a Package or act on a pending Workflow Step (an execution or a decision). Follow the instructions detailed in the Notification for the appropriate course of action.

The Notification may include a "Smart URL" which points to the specific Package in Mercury Change Management. Enter this URL into your Web browser to proceed to this destination. If you are currently logged onto Change Management, the referenced Package opens. If you are not currently running Change Management, the Mercury IT Governance logon page opens. After you logon, the referenced Package opens.

Figure 5-1 shows a sample Notification.

```
http://machine.company.com/itg/itg.html
Notified Users: jsmith@itg.com
Status change for Request #: 30004.
Description: Sample Notification.
Priority: High
Workflow: Migration Workflow
Workflow Step: 1. Approve (One User)
Old Status: New Status: Eligible
```

Figure 5-1 Sample Notification

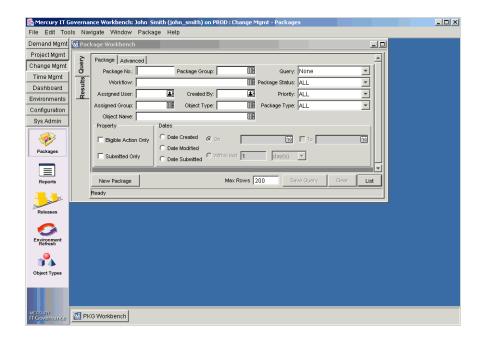
Checking a Package Status

Each Package Line must follow a business process defined in its assigned Workflow. You can view all the Workflow and Subworkflow Steps for each Line in the Status tab in the Package window. This is the current view of the situation.

To view the Status of a particular Package:

1. Click Change Mgmt in the shortcut bar and click the Packages icon.

The Package Workbench opens.

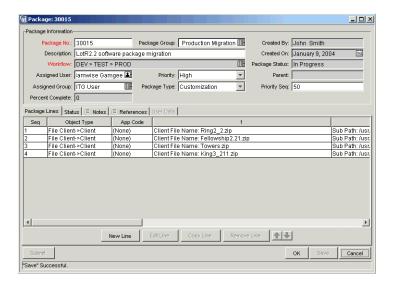


2. Query for the desired Package using one or more of the query parameters. The results display in the **Results** tab.

3. Select the Package and click Open.

The Package window opens.

4. Click the **Status** tab.



You can now review the status of each Package Line. The result of each Workflow Step is recorded in the Package Line row, allowing you to quickly get an idea of which lines have closed successfully or with a failure.



While all the Workflow Steps are listed, a Package Line might not go through each step before being resolved. For example, you might have a Rework step that is only used when rework is required.

Viewing the Subworkflow Step Statuses

The Package Line can be expanded to show any Subworkflow Steps used in the Workflow definition. To view the Subworkflow steps, click the **expand** expand > symbol above the Subworkflow Step. You can also click on the **expand all** symbol to expand all Subworkflows contained within the Status panel. To hide expanded Subworkflow steps, click the **collapse** collapse symbol above the Subworkflow step. To hide all Subworkflow steps, click the **collapse all =** symbol.

Clicking the **expand** expand symbol horizontally expands the Package Line to display all of the steps within the Subworkflow. Subworkflow Steps have a different colored header and are numbered using additional decimal places corresponding to the level of the Workflow.



If Step 3 of a top-level Workflow is a Subworkflow, its steps are displayed as 3.1, 3.2, 3.3, etc. Similarly, if the second step in that Subworkflow is also a Subworkflow step, its steps are displayed as 3.2.1, 3.2.2, 3.2.3, etc.

Figure 5-2 shows expanded Subworkflow Steps on the Package's Status tab.

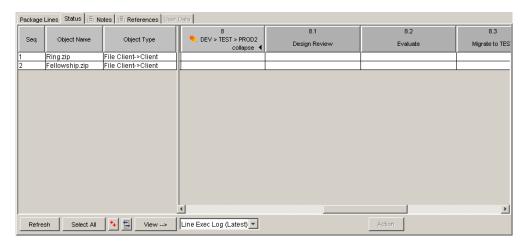


Figure 5-2 Expanded Subworkflow Steps in Status Tab

Viewing Information on Packages and Package Lines

From within a Package's Status tab in the Workbench, users can also view information concerning their Packages and Package Lines.

This section covers the following topics:

- Viewing the Line Execution Log
- Viewing the Package Execution History
- Graphically Viewing a Package Line Status Within a Workflow
- Viewing Line Permissions
- Viewing the Line Transaction History
- Viewing the Decision Detail
- Viewing the Concurrent Package Log
- Viewing the Workflow Step Information URL

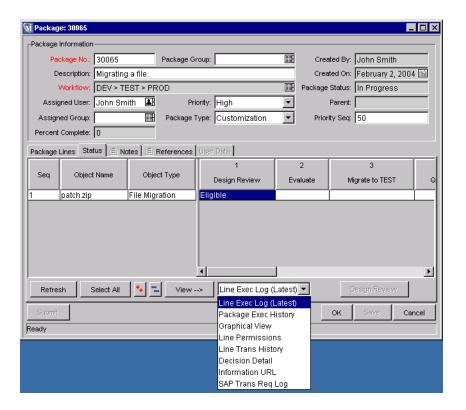
Updating References

Viewing the Line Execution Log

It is possible to select a Package Line and get the details of the execution of that particular line by viewing the Line Execution Log. The line viewed is a subset of the overall execution batch log.

To view the Line Execution Log for a particular Package Line:

1. In the Package window, click the **Status** tab.

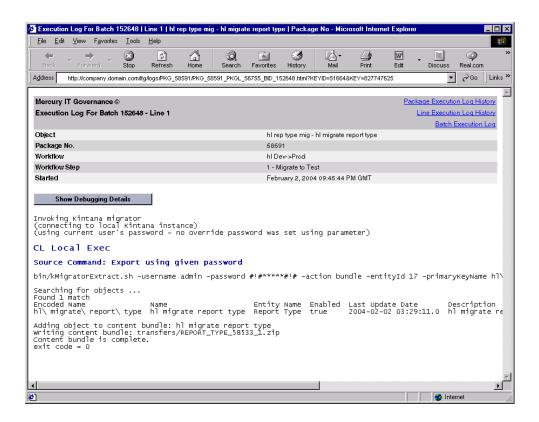


- 2. Select a Package Line.
- 3. Select Line Exec Log (Latest) from the drop down list next to the View--> button near the bottom of the window.
- 4. Click View-->.

A browser window displaying the Line Execution Log opens.

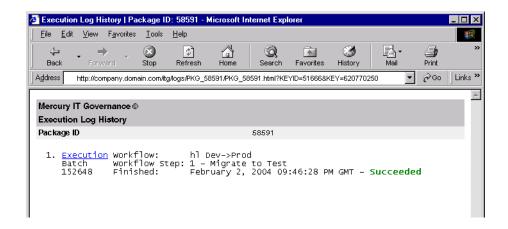


If the Package Line has been configured to migrate to multiple Environments using an Environment Group, the execution log returns an execution summary and link for each Destination Environment. Click the link to get the detailed execution logs for each Environment.



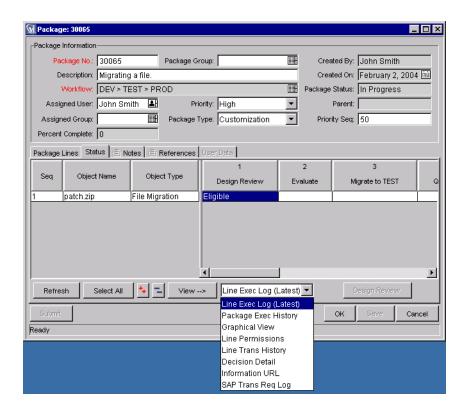
Viewing the Package Execution History

The Package Execution History displays the execution history of each Package Line. It displays the Workflow Step name, execution date, and outcome (succeeded or failed) of each Execution step.



To view the Package Execution History for a particular Package Line:

1. Navigate to the Package's **Status** tab in the Package window.



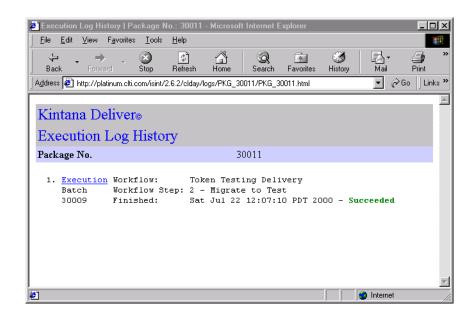
2. Select Package Exec History from the drop down list next to the View--> button near the bottom of the window.

3. Click View-->.

A browser window displaying the Package Execution Log History opens.



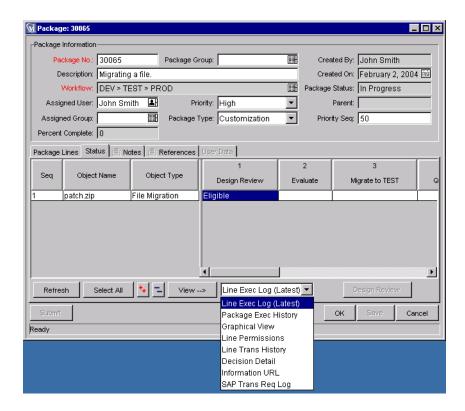
If the Package Line has been configured to migrate to multiple Environments using an Environment Group, the execution log returns an execution summary and link for each Destination Environment. Click the link to get the detailed execution logs for each Environment.



Graphically Viewing a Package Line Status Within a Workflow

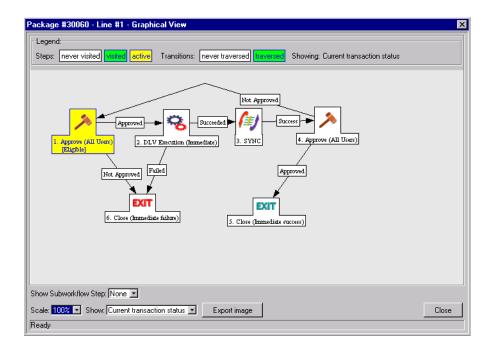
To graphically view a Package Line status for a particular Package Line:

- 1. Navigate to the Package's **Status** tab in the Package window.
- 2. Select a Package Line.



- 3. Select **Graphical View** from the drop down list next to the **View-->** button near the bottom of the window.
- 4. Click View-->.

This opens the Graphical View window. Use the legend at the top of the window to determine which Workflow Steps have been visited and which steps are active.



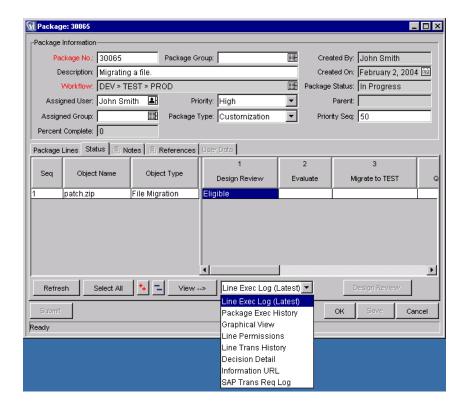
This image displays all of the Workflow Steps and Subworkflows used in the Workflow definition.

To obtain a graphical view of a particular Subworkflow, select the Subworkflow name from the Show Subworkflow Step drop down list located at the bottom of the window. This opens a new window that displays the graphical view of that Subworkflow.

Viewing Line Permissions

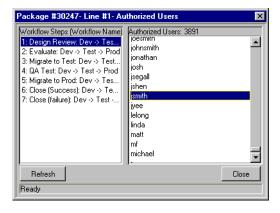
To view the permissions for acting on a particular Package Line:

- 1. Navigate to the Package's **Status** tab in the Package window.
- 2. Select a Package Line.



- 3. Select **Line Permissions** from the drop down list next to the **View-->** button near the bottom of the window.
- 4. Click View-->.

This opens the Authorized Users window and displays the users who can act on the specific steps in the current Package Line. Each Workflow Step is linked to a unique set of Authorized Users.





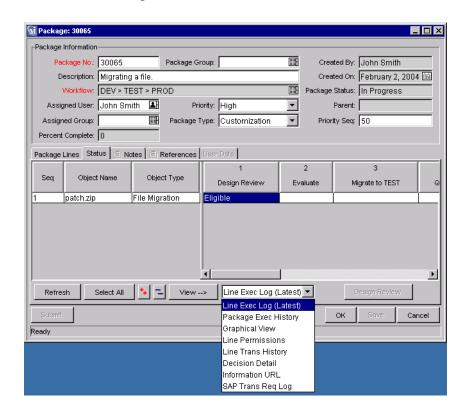
Workflow permissions are established during the initial Workflow configuration. The Line Permissions lists all users in Security Groups that have been enabled for the related Workflow. If you have questions regarding the permissions set for a particular Workflow Step, consult your administrator.

Viewing the Line Transaction History

You can view the transaction history of each Package Line. This provides detailed information on how the Package Line has proceeded through a Change Management Workflow. Information such as the date of the transaction event, the user linked to the Workflow Step, the Workflow Step name and number, status and results are displayed.

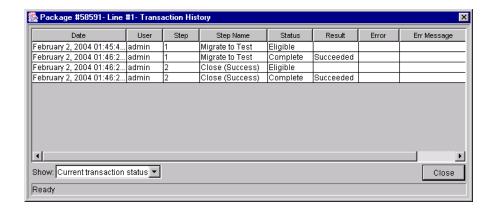
To view the Line Transaction History for a particular Package Line:

- 1. Navigate to the Package's **Status** tab in the Package window.
- 2. Select a Package Line.



- 3. Select Line Trans History from the drop down list next to the View--> button near the bottom of the Status tab.
- 4. Click View-->.

The Transaction History window opens.



5. Select either Current transaction status or Full transaction history from the Show drop down list.



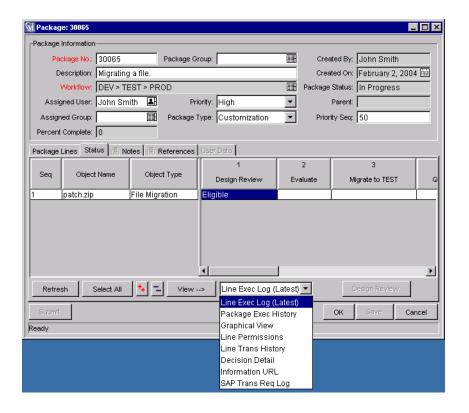
Select Full transaction history to display information on the Subworkflow steps that have been traversed more than once by a single Package Line. An example of a Package that retries a Subworkflow step and then returns from the Subworkflow is shown below.

Selecting Current transaction status will display only information on the most recent transaction through that step.

Viewing the Decision Detail

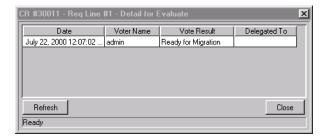
To view the results of a particular Decision step:

- 1. Navigate to the Package's **Status** tab in the Package window.
- 2. Select a Package Line.



- 3. Select the step for which you would like to see the decision results.
- 4. Select **Decision Detail** from the drop down list next to the **View-->** button near the bottom of the window.
- 5. Click View-->.

The the Detail for Evaluate window opens.

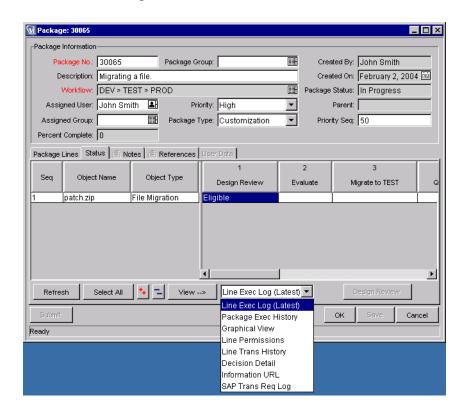


Viewing the Concurrent Package Log

Mercury Change Management is able to track and report on system-triggered concurrent Packages. Users can view the Oracle Applications Concurrent Package Logs for Package activities.

To view the Concurrent Package Log for a particular Package:

- 1. Navigate to the Package's **Status** tab in the Package window.
- 2. Select a Package Line.



- 3. Select Line Exec Log (Latest) from the drop down list next to the View--> button near the bottom of the window.
- 4. Click View-->.

A browser window displaying the Line Execution Log opens. The Line Execution Log contains a section titled Concurrent Request Output that contains the Concurrent Package Log.

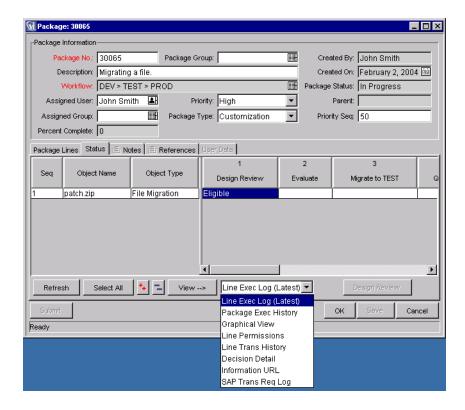


If the Package Line has been configured to migrate to multiple Environments using an Environment Group, the execution log returns an execution summary and link for each Destination Environment. Click the link to get the detailed execution logs for each Environment.

Viewing the Workflow Step Information URL

To view information on a particular Workflow Step:

1. Navigate to the Package's **Status** tab in the Package window.



- 2. Select the step for which you would like to see the Workflow Step Information.
- 3. Select **Information URL** from the drop down list next to the **View-->** button near the bottom of the window.
- 4. Click View-->.

A new browser window that contains information specific to the selected Workflow Step opens.

Updating References

Package References can be updated from the References tab of the Package window in the Workbench and the References section of the Package Detail page in the standard (HTML) interface. See "Adding a Reference" on page 36 for details on adding a Reference to a Package and additional information on setting dependent relationships to references.

This section covers the following topics:

- Changing a Reference
- Deleting a Reference

Changing a Reference

To modify an existing Reference from the Workbench:

- 1. In the Package window, click the **References** tab.
- 2. Click in the referenced entity's Relationship column and select the desired relationship from the drop down list that appears.
- 3. Click **OK** or **Apply**.

Deleting a Reference

To delete an existing Reference from the Workbench:

- 1. In the Package window, click the **References** tab.
- 2. Select the reference to delete.
- 3. Click Remove.

The reference is removed and deleted from the Mercury ITG server.

Acting on an Eligible Step - Overview

Once submitted, each Package Line has one or more Workflow Steps set to **Eligible**, as shown in *Figure 5-3*. This indicates that the given execution or

decision steps need to be performed first in the Package's resolution process. If you have permission to act on the Eligible step, the text in the Status column appears in boldface type.

When a step is Eligible, one of the following actions are required:

• A user must execute some action and then report the result in Mercury Change Management

Or

 A user must make a decision and report that decision in Mercury Change Management.

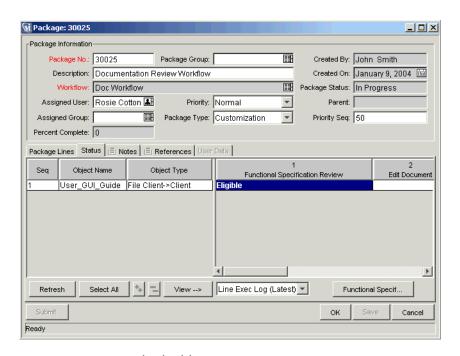


Figure 5-3 Status Tab Eligible Steps

Once the appropriate user executes the action or makes the decision, he uses Mercury Change Management to indicate the outcome of the step.

To indicate the outcome of a step:

- 1. Navigate to the Package **Status** tab for the desired Package.
- 2. Select the eligible Workflow Step to be processed.

A single step for a single Package Line can be selected or multiple steps for multiple Lines can be selected. Click Select All to automatically select all the steps on all the open Lines that are currently eligible for action.

You cannot act on multiple Workflow Steps at once; if you select cells for multiple Workflow Steps, the Action button remains disabled. If the user has the security privileges to perform the given Workflow Step, the button becomes enabled. Refer to "Viewing Line Permissions" on page 85 for instructions on viewing Workflow Step line permissions.

Once a Workflow Step is selected, the button at the bottom right of the **Status** tab changes its title (originally 'Action') to the given step name.

3. Once the **Action** button is enabled, click it to perform the action or decision.

This opens either the Execution or Decision window.

4. In either the Execution or Decision window, select the step's result.

Each step is pre-configured with a selection of valid results. In addition to selecting a result, you can also enter free-form comments in this window.

5. Click **OK** to close the Package window.

Whether the step is a Decision or Execution, the result of the step is processed by the Workflow engine and can lead to a number of changes. Based on the Workflow definition (which can contain multiple Workflow Steps and Subworkflows) the given Workflow Step result can cause additional Workflow Steps to become Eligible, indicating the next actions to be performed in the Package resolution process.

When subsequent steps become Eligible, those steps are completed sequentially, making Eligible the next Workflow Step(s) in line. This process continues until the Package reaches its final state and becomes resolved, usually at a Close step.



The final Package state might not always be a successful migration. A Package might be divided into several Packages that are more manageable, or the Package be cancelled altogether.

Use the **Status** tab to see:

All the possible actions that can take place for the Package

- All the actions that have taken place so far
- The current pending actions that need to be taken for Package resolution



If you have Package Manager authority, it is also possible to Cancel a Package at any point using the Package > Cancel Package menu option.

Updating Packages in the HTML Interface

Change Management users can update certain information on Packages using the standard HTML interface.

This section covers the following topics:

- Approving Packages in the HTML Interface
- Adding a Reference to a Package

Approving Packages in the HTML Interface

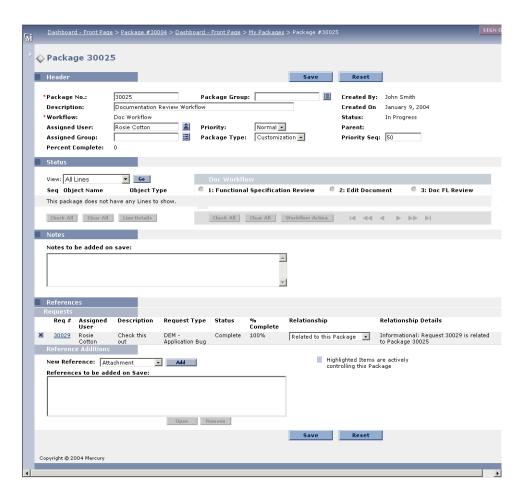
To approve a Package using the HTML interface:

- 1. Logon to Mercury Change Management.
- 2. Navigate to the details page for the Package you want to approve.

The following process of approving a Package in the HTML interface starts in the Package Details page. You can access a Package's Details page using any of the following methods:

- From the My Packages Portlet, click the Package Number of the Package to be approved.
- Selecting **Search > Packages** from the menu and searching for the desired Package. From the Package Search Results page, click the Package Number of the Package to be approved.
- In an email Notification, click the URL of the Package to be approved.

The Package Details page for an example Package is shown below.



- 3. The Status section of the Package Details page displays the Package Line(s) for the Workflow. In the Status section, you can select the following display option from the View drop down list:
 - Pending Lines Only to display only those Package Lines that are eligible for action. Click **Go** to use this option.

or

All Lines to display all the Package Lines for the Workflow. Click Go to use this option.



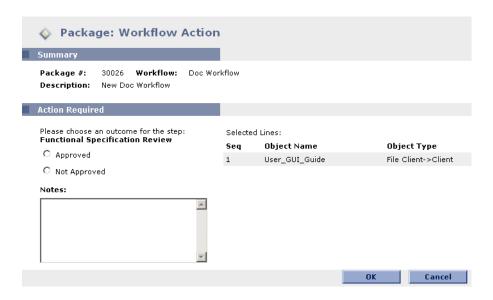
- 4. Select the check box to the left of the Seq column for the Package Line that contains a step you want to approve or disapprove.
- 5. (Optional) To display details about the selected Package Line in a separate browser window, click Line Details.
- 6. Under the Workflow name are the numbered steps that must be completed and approved to move the Workflow to completion. You can move forward or backward through the Workflow's Steps by clicking the directional arrows.
- 7. Select the radio button to the left of the numbered Workflow Step to be approved.
- 8. Select the Eligible checkbox under the Step you want to approve or disapprove.

You can check all eligible boxes for the Workflow Step by clicking Check All. This lets you approve or disapprove a number of steps at one time instead of individually.

You can uncheck all eligible boxes for the Workflow Step by clicking Clear All.

9. If one or more Package Lines are selected for action, click Workflow Action.

The Package: Workflow Action page opens.



10. Under Action Required, select the outcome of the step.

The outcome is configurable and can therefore be different for each Workflow Step, depending on the configuration at your site. In the above example the possible actions are:

- If the Workflow Step is ready for approval, select **Approved**.
 - or
- If the Workflow Step is not ready for approval, select **Not Approved**.
- 11. Enter any necessary information in the Notes text area.
- 12. Click **OK**.

You return to the Package Details page.

Since you approved or disapproved the designated Workflow Step(s), the Workflow has moved onto the next step. Another user is probably responsible for approving/disapproving the next step in the Package Line. This process continues until the Package moves through all of its steps to resolution.



You can only approve Package decision steps using the standard interface. To perform execution steps, logon to the Workbench.

Adding a Reference to a Package

You can add a reference to a Package from the standard interface. There are several reference types defined in Mercury Change Management: Attachment, Package, Project, Release, Request, Task, and URL. For some reference types, such as for Requests and other Packages, you can create a functional dependency to the reference. For example, you can specify that a Request is a "Predecessor" to the Package. This means that the Package will not continue until the Request closes.

To add a Reference to a new or existing Package:

1. Open the Package page.

You can locate your Package using the **Search > Packages** menu item.

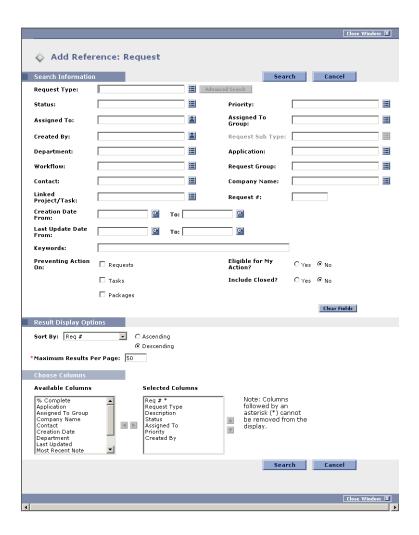
- 2. Scroll down to the References section.
- 3. From the New Reference field, select the type of Reference that you would like to add.

See "Valid Package References" on page 52 for a list of available References.



4. Click Add.

When adding a Package, Request, Task or Project, a page opens presenting search criteria for the entity to be referenced. The following figure displays the page that opens when adding a reference to an existing Request.



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

A page opens presenting search results.



Select the check box next to the entity or entities to be referenced.
 To check all boxes, click Check All. To uncheck all boxes, click Clear All.

- 7. Select a relationship by clicking on of the relationship radio buttons.

 For a complete list of all reference relationships, see *Table D-4 on page 18*.
- 8. Click Add.
- 9. The entities referenced appear in the References to be added on Save list on the Package Detail page.

The References have not been added yet.



10. Click **Save** to add the References to the Package.

Referencing a URL

To add a URL as a Reference:

- 1. Navigate to the Package's Detail page and scroll down to the References section.
- 2. From the New Reference drop down list, select **URL**.
- 3. Click Add.

The Reference URL page opens.



- 4. Type the URL into the URL field and enter a description if desired.
- 5. Click **OK** to add the specified URL as a Reference.
- 6. The referenced URL appears in the References to be added on Save list on the Package Detail page. *The Reference has not been added yet*.
- 7. Click **Save** to add the Reference to the Package.

Referencing an Attachment

To add an attachment as a Reference:

- 1. Navigate to the Package's Detail page and scroll down to the References section.
- 2. From the New Reference drop down list, select **Attachment**.
- 3. Click Add.

The Reference Attachment page opens.



- 4. Select the desired file from your local machine and enter a description if desired.
- 5. Click **OK** to add the selected attachment as a Reference.

The referenced attachment appears in the References to be added on Save list on the Package Detail page.

The Reference has not been added yet.

6. Click **Save** to add the attachment to the Package.

Processing Packages in the Workbench

The majority of user interactions with Packages occur in the Workbench.

This section covers the following topics:

- Acting on a Decision Step
- Acting on an Execution Step
- Using Notifications
- Adding a Package Line to an 'In Progress' Package
- Cancelling Package Lines
- Deleting Packages

Acting on a Decision Step

Decisions are steps in a Workflow where a user or group of users need to indicate the result or outcome, such as an approval of work or an indication that a review has been completed. 'Approve Migration' is an example of a Decision step. You can either act on the decision step yourself or delegate the decision to someone else.

This section covers the following topics:

- Making the Decision on a Decision step
- Delegating the Decision on a Decision Step

Making the Decision on a Decision step

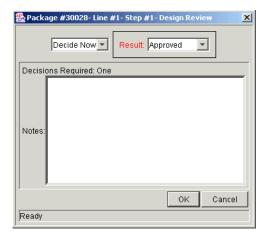
To act on a Decision step:

- 1. Navigate to the Package **Status** tab for the desired Package.
- 2. Select the **Eligible** Decision step.

The **Action** button is enabled. Notice that the label on the Action button changes depending on which step is selected.

3. Click Action.

The Package Decision window opens.



- 4. Select **Decide Now** from the drop down list.
- 5. Select the desired Result (such as **Approved** or **Failed**) and enter any relevant notes in the Notes field.
- 6. Click **OK**.

The Decision has been made and entered into the system.



If the step has been configured so that more than one person has to decide on the result, the Package Line may not move to the next step until all decisions are made. For Decision steps that require more than one person to decide on the result, you can view the current decision results for the Workflow Step using the Decision Detail. For instructions on viewing the Decision Detail, refer to "Viewing the Decision Detail" on page 88.

Delegating the Decision on a Decision Step

If a Workflow Step has been configured for more than one user to participate in a decision, you can delegate your decision to another Change Management user.

To delegate the decision on a Decision step:

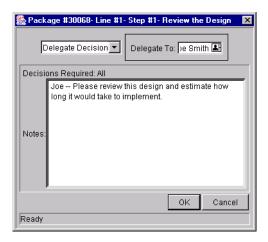
- 1. In the Package window, click the **Status** tab.
- 2. Select the **Eligible** Decision step.

The **Action** button is enabled. Notice that the label on the Action button changes depending on which step is selected.

3. Click Action.

The Package Decision window opens.

- 4. Select **Delegate Decision** from the drop down list.
- 5. Select the user to whom you would like to delegate the decision responsibility in the Delegate To field.



6. Click **OK**.

The user to whom you delegated your decision now has authority to vote on the Workflow Step, even if that user did not previously have authority to do so.



If the step has been configured so that more than one person has to decide on the result, the Package Line may not move to the next step until all decisions are made. However, once your decision has been recorded, the step will remain **Eligible** but the cell will be unbolded, indicating that you no longer need to act on this step.

For Decision steps that require more than one person to decide on the result, you can view the current decision results for the Workflow Step using the Decision Detail. For instructions on viewing the Decision Detail, refer to "Viewing the Decision Detail" on page 88.

Acting on an Execution Step

Executions are steps where the Change Management system performs an action and then updates the step with its result. These actions can be as simple as calculating the value for a Token or as complex as copying files, running programs, or updating Web pages.

This section covers the following topics:

- Starting the Execution Process
- Scheduling an Execution Step for a Later Time

• Bypassing the Execution

Starting the Execution Process

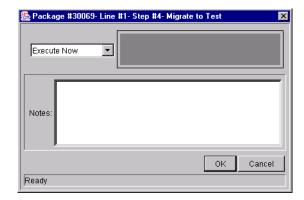
To Start the execution process for an Eligible Execution Step

- 1. Navigate to the Package **Status** tab for the desired Package.
- 2. Select the **Eligible** Execution step.

The **Action** button is enabled. Notice that the label on the **Action** button changes depending on which step is selected.

3. Click the **Action** button.

The Package Execution window opens.



- 4. Select **Execute Now** from the drop down list.
- 5. Click **OK**.

The execution process has begun.



This process could be a software migration, execution of a PL/SQL function, the closing of the Package Line, or a number of other activities. The Execution engine executes the step and sets the result accordingly.

Scheduling an Execution Step for a Later Time

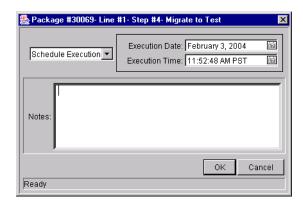
To schedule an execution step for a later time:

- 1. Navigate to the Package **Status** tab for the desired Package.
- 2. Select the **Eligible** Execution step.

The **Action** button is enabled. Notice that the label on the **Action** button changes depending on which step is selected.

3. Click Action.

The Package Execution window opens.



- 4. Select **Scheduled Execution** from the drop down list.
- 5. Fill in the Execution Date and Execution Time for when you would like the step to execute.
- 6. Click **OK**.

The execution process will begin on the scheduled date and time.



You might choose to schedule a software migration for later in the evening when fewer users are on the system. At the scheduled time, the Execution engine executes the step and returns the result.

Bypassing the Execution

You can also bypass the execution and manually set the result of the step without the Execution engine performing any activity.

To bypass the execution:

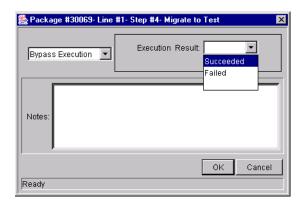
- 1. Navigate to the Package **Status** tab for the desired Package.
- 2. Select the **Eligible** Execution step.

The **Action** button is enabled. Notice that the label on the **Action** button changes depending on which step is selected.

3. Click Action.

The Package Execution window opens.

- 4. Select **Bypass Execution** from the drop down list.
- 5. Select the desired result (such as **Succeeded** or **Failed**) from the Execution Result drop down list.



6. Click **OK**.



If you know that a software migration has already been manually performed, you may want to mark the step as **Successful** without actually migrating the software again.

Using Notifications

As Package Lines make their way through their Package Workflow, email Notifications are often sent to alert individuals regarding certain actions. The logic for when emails are sent and the content for each email is part of the definition for each Workflow.

Notifications will typically instruct the user to review a Package or act on a pending Workflow Step (either an execution or a decision). Follow the instructions detailed in the Notification for the appropriate course of action.

Figure 5-4 illustrates a sample Notification.

```
http://machine.company.com/itg/itg.html
Notified Users: jsmith@itg.com

Status change for Request #: 30004.
Description: Sample Notification.
Priority: High
Workflow: Migration Workflow
Workflow Step: 1. Approve (One User)
Old Status: New Status: Eligible
```

Figure 5-4 Sample Notification

Adding a Package Line to an 'In Progress' Package

Aggressive maintenance of your business systems can introduce the need for quick code migrations using Change Management Packages. You may run into situations where you would like to add a Package Line to a Package that has already been submitted.

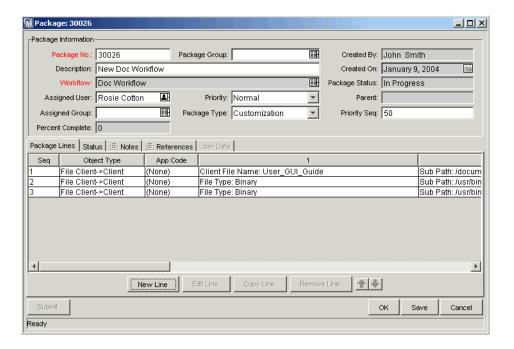


You define and submit a Package that includes a set of Objects to migrate into your production instance. After you click the **Submit** button, a codeveloper notifies you that there is one more file that needs to be migrated into production. You assess the change and decide that it falls within the logical unit of Objects that should be moved and tracked together. You decide to add a Package Line to an In Progress Package.

To add a Package Line to an In Progress Package:

- 1. From the Package Workbench, query and select the desired Package.
- 2. Click Open.

The Package window opens.

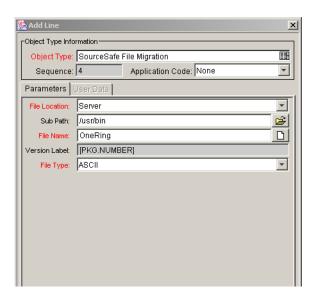


3. Click New Line.

The Add Line window opens.

4. From the Object Type field, select an Object Type.

The **Parameter** tab dynamically display fields corresponding to the selected Object Type.



- 5. Enter the parameters.
- 6. Click **OK** to accept the parameters and close the window or **Add** to accept the parameters and reset the window for another line addition.

The new line is added to the Package window.

7. Click **OK**.

The new Package Line has been added to the Package.



The new Package Line is *not* submitted until you click **OK** or **Save**. The **Submit** button remains disabled throughout this process. The new Package Line is automatically submitted when the Package is saved. It is submitted to the first step in the Workflow, and the user can process it individually until it catches up with the other lines in the Package. When submitted, it is not automatically placed in the same status as the other lines.

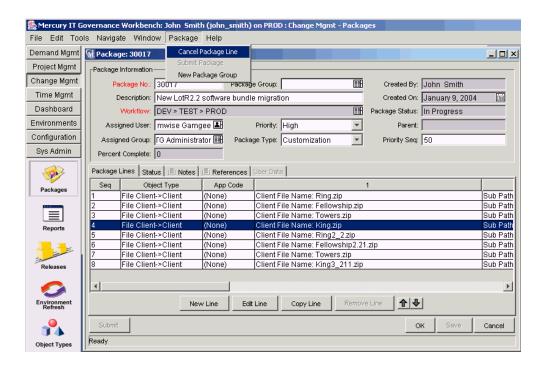
Cancelling Package Lines

Package Lines may need to be cancelled occasionally, for a number of reasons; the files may be out of date, or no longer necessary.

To cancel a Package Line:

- 1. From the Package Workbench, query and select the desired Package.
- 2. Click Open.

The Package window opens.



- 3. Select the Package Line you wish to cancel.
- 4. Select Package > Cancel Package Line from the Workbench menu.

The Package Line has been cancelled.

Deleting Packages

To delete an existing Package:

- 1. From the Package Workbench, query and select the desired Package.
- 2. Click Delete.

A question dialog opens and asks you to confirm that you would like to delete the Package.

3. Click **OK** to delete the Package.

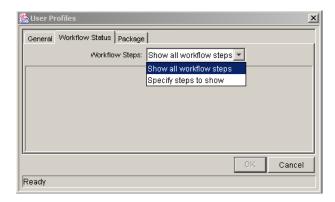
The Package is deleted from your system.

Configuring Workflow Display

You can configure the display of Workflow Steps in the **Status** tab by changing your User Profiles.

To configure the Workflow display:

- 1. Select **Edit > User Profiles** from the Workbench menu.
- 2. Click the Workflow Status tab.



3. Choose either to show all Workflow Steps or to limit your display of Workflow Steps in the Workflow Steps drop down list.

If you choose to limit the steps that you see, select one of the following options:

- **Show Traversed Steps.** You can choose whether or not you want to see steps that have been completed and are no longer active.
- Hide Immediate and Condition Steps Not in Progress. Since you
 typically cannot act on immediate Execution or Condition steps, you
 can choose to hide these steps.

The display of Workflow Steps will change according to your choice.

Hiding Cancelled Package Lines

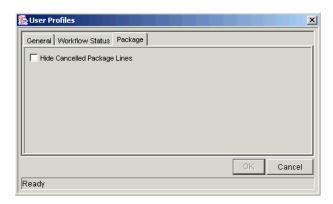
You can configure the display of your Package in the **Package Lines** tab and the **Status** tab by changing your User Profiles.

To hide cancelled Package Lines:

1. Select **Edit > User Profiles** from the Workbench menu.

The User Profiles window opens.

2. Click the **Package** tab.



3. Select whether or not to display cancelled Package lines by selecting the Hide Cancelled Package Lines.

If you check the Hide Cancelled Package Lines check box, the ordering of the remaining Package Lines and their respective sequence numbers remain the same. Also, reordering the visible lines will not affect the hidden (cancelled) lines. The sequence numbers of the visible lines being reordered will swap correspondingly.



Chapter

6

Change Management Reports

Mercury Change Management features a pre-defined set of HTML-based reports that are accessed through a Web browser. The reports provided with Change Management allow users to view the current detailed status of their deployment data at any point in time.

This chapter describes the procedures used to submit and view reports using both the standard interface and the Workbench.

This chapter covers the following topics:

- "Reports Overview" on page 117
- "Processing Reports" on page 120

Reports Overview

The standard reports that ship with Mercury Change Management and a brief description are listed in the following table. These reports can be accessed through both the Workbench and the HTML interface. A complete list of Mercury IT Governance Center Reports, including details for parameters in each report, are located in Reports Guide and Reference.



The following table lists all standard Report Types that have a product scope of **Change Management** or **All Products**.

Table 6-1. Standard Change Management Reports

Report	Description
Compare Custom Database Setup Report	Runs custom Mercury ITG database comparisons for the comparison of actual data within a database as well as within the data model.
Compare Filesystem Environments Report	Compares the files and file structure of two machines.
Compare MS SQL Server 7 Environments Report	Compares the data models of two SQL Server Version 7 databases.
Compare Oracle Environments Report	Compares the data models of two Oracle schema.
Distribution Detail Report	A Release Management report used to list the contents and results of a Distribution.
Environment Comparison by Objects Migrated Report	Looks at the history of all the objects migrated using Mercury Change Management into each environment and lists any differences.
Environment Comparison Report	A System Administration report that audits Environment setup.
Environment Detail Report	A System Administration report that lists the detailed setup of a given Environment or group of Environments.
Environment Group Detail Report	Contains detailed information from the specified Environment Groups.
Environments/Objects Detail Report	Lists objects that have been migrated into a given Environment or sets of Environments grouping the report output by Environment name; an 'Object inventory' for newly migrated objects.
Lookup Types Report	View the configuration details of one or more lookups.
Notification History Report	A Workflow report that lets you view Notifications that have been sent or are pending.
Object Type Detail Report	A System Administration report used to audit the setup of an Object Type or a group of Object Types.
Object History Report	Provides a Workflow Step transaction history for your Packages. It lists all the transactions matching your selection criteria.
Objects/Environments Detail Report	Lists objects that have been migrated into a given Environment or a set of Environments, grouping the report output by Object Type name.
Package Details Report	Use this report for auditing individual Packages. Based on the selection criteria, this report lists individual Packages and detailed information regarding each Package.
Package History Report	Audits the transaction history of individual Packages and lists the complete Workflow history for each selected Package.
Package Impact Analysis Report	Analyzes the impact of a given Package based on the audit history stored in Mercury Change Management.

Report	Description
Packages Pending Report	A worklist of Packages pending user action. Based on your selection criteria, this report lists open Packages with pending activity.
Portlet Detail Report	Returns the definitions of selected Portlets, including columns, filter fields, access security, 'used by,' and the Portlets' full SQL query.
RCS Check In Report	(If you use an RCS file management system) Checks a file into the RCS repository.
RCS Check Out Report	(If you use RCS file management system) Checks a file out of the RCS repository.
Release Detail Report	A Management report used to list the contents of a Release.
Release Notes Report	A Release Management Report that shows all of the Requests and Packages in a Release as well as their associations.
Report Type Detail Report	The parameters and parameter details for each Report Type, as well as the exact commands used to run the report.
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.
Run ITG Package Interface Report	Validates and loads Package data from the Package open interface tables into the standard Mercury Change Management data model.
Run ITG User Interface Report	Imports data from the user interface tables or an LDAP server.
Run License Usage report	View current License usages.
Run Workflow Transaction Interface Report	Validates and runs Workflow transactions based on data in the Workflow open interface tables. Used to kick-off process steps from outside the end-user screens
Security Group Detail Report	Lists the setup information for one or more Security Groups.
Special Command Detail Report	This report lists details for a Special Command or a range of Special Commands.
Synchronize Meta Layer Report	Assesses or synchronizes the Meta Layer.
User Data Detail Report	Reports on the definition of each custom field.
User Detail Report	Lists the users defined in your Mercury ITG system as well as the Security Groups attached to each user.
Validation Report	A System Administration report on the various custom Validations that your System Administrator has entered into the system or which come standard with the Mercury ITG Center.
VC - Check In	Check a file into Version Control.
VC - Check Out	Check a file out of Version Control.
VC - Diff Report	Reporting the differenced between two files in the RCS repository.

Report	Description
VC - Employee History Report	History of the employee specified (i.e. what files the employee has touched).
VC - File Report	History or status of the file specified.
VC - Lock Break	Breaks a lock on a file.
VC - Locked Files report	List of all locked files.
Workflow Detail Report	Use this report to view the complete definition of a specific Workflow or a set of Workflows.
Workflow Statistics Report	Uses a given date range and a Workflow (or a range of Workflows) to provide statistical information regarding the usage of the Workflow.



All Report Types that end with 'Report' are textual reports that list details about specific entities. Report Types that end with 'Program' perform some activity and then report on their results.

Processing Reports

Mercury Change Management reports can be run either from the Workbench or the standard (HTML) interface. Similarly, previously run reports can be viewed from either interface. The following sections provide instructions for processing and viewing reports:

- Submitting a Report from the Workbench
- Submitting a Report from the HTML Interface
- Viewing Previously Submitted Reports

Submitting a Report from the Workbench

To submit a report from the Workbench:

- 1. Click the Change Mgmt shortcut and click the Reports icon.
- 2. The Report Submission Workbench opens.

3. Click New Report.

The New Report Submission window opens.

4. Select the type of report to submit from the Report Type auto-complete list.

After selecting the Report Type, report-specific parameters appear in the **Parameters** tab of the New Report Submission window.

Note

You may not have access to all Report Types. If you need access to a Report Type, but do not see it listed, contact your administrator for permission.

- 5. Fill in all the required parameters (as indicated by the red field label) and any optional parameters for the report.
- 6. Set up the schedule for running the report:
 - a. Click the **Scheduling** tab and specify when the report is to be run. If no scheduling information is entered, the report runs immediately.
 - b. Enter the frequency with which the report should be re-run.
- 7. Set up the Notification:
 - a. Click the Notifications tab.
 - b. Click New.
 - c. Select any users who should be informed of the report results.
 - d. Click **OK** to close the Add Notification for Report Submission window.
- 8. Click **Submit** to run the report.
- 9. Click **View Report** to view the results in your Web browser.
- 10. If the report fails, click **View Log** to view the technical details of the report execution.

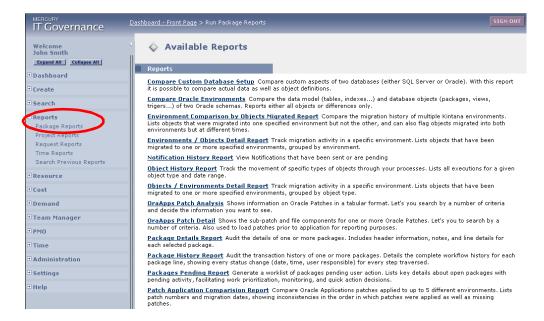
Submitting a Report from the HTML Interface

Mercury Change Management reports can be run from the standard (HTML) interface.

To run a report from the standard interface:

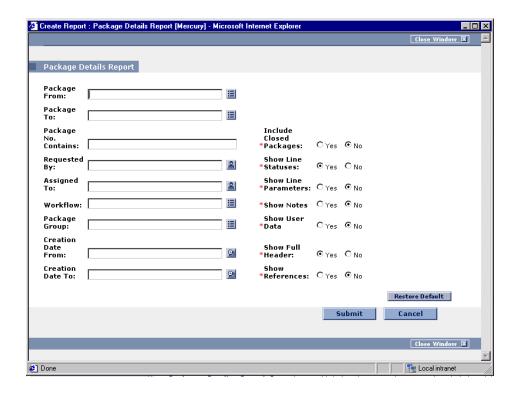
- 1. Logon to Mercury Change Management.
- 2. From the menu bar, select Reports > Package Reports.

The Available Reports page opens.



3. Choose the report to be submitted from the list of Report Types by clicking on its name.

The report's creation page opens.



This example of a Report page shows the required and optional fields for the Package Details 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.

- 4. Enter information in the Report creation page's required fields.
- 5. (Optional) Enter information in the Report creation page's optional fields.
- 6. Click Submit.

The Report Submitted page opens. The report's output is displayed in a separate page.

Viewing Previously Submitted Reports

You can view previously submitted reports. This section discusses the following topics:

- Viewing Reports from the Workbench
- Viewing Reports from the HTML Interface



You may not have permission to view all reports. If that is the case, contact your System Administrator to get permission for reports that are restricted by Security Groups. You may also not have access to any reports that are restricted to Creator only.

Viewing Reports from the Workbench

To view previously submitted reports:

- 1. Enter search criteria in the Query tab of the Reports Workbench.
- 2. Click Search.

All matching report submissions are listed in the **Results** tab.

- 3. Click **Open** to view the criteria used for the report.
- 4. Click **View Report** to view the report output.



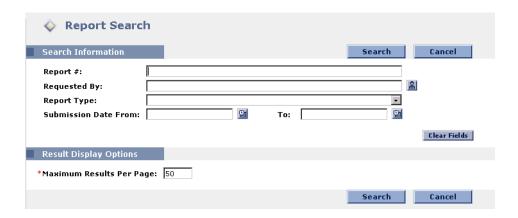
It is not possible to modify the values used for a previous report submission. However, it is possible to select a particular report submission on the **Results** tab of the Report Submissions Workbench and click **Copy**. This makes an exact duplicate of the report submission. The duplicate report submission can be modified and submitted.

Viewing Reports from the HTML Interface

To view a previously submitted report from the standard (HTML) interface:

- 1. Logon to Mercury Change Management.
- 2. Select Search > Reports.

The Report Search page opens.



- 3. In the Search Information section, enter search criteria in the appropriate fields.
- 4. Under Result Display Options, enter the maximum number of results to be displayed.
- 5. Click Search.

The Report Search Results page opens. The page displays summary information about any reports that match your search criteria.

6. Click the Report Number under the Report # column to see the output details of any report.

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