

# HP Application Lifecycle Management

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## User Guide

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# Welcome to This Guide

Welcome to HP Application Lifecycle Management (ALM). ALM empowers IT to manage the core application lifecycle, from requirements through deployment, granting application teams the crucial visibility and collaboration needed for predictable, repeatable, and adaptable delivery of modern applications.

This guide describes how to use the ALM application. It provides descriptive and conceptual information, step-by-step guidance to help you work with the application, and explanations of reference-oriented material.

## How This Guide is Organized

The ALM User Guide contains the following parts:

| Part                          | Description   |
|-------------------------------|---|
| <b>Part I: ALM Basics</b>     | Provides an overview of the ALM features and methodology. It also describes common ALM functionalities and explains the available ALM editions.   |
| <b>Part II: Management</b>    | Describes how to define releases and cycles for managing the application lifecycle. It also describes how to define libraries to track changes in your project, reuse entities in a project, or share entities across multiple projects.<br><b>Relevant task:</b> <ul style="list-style-type: none"><li>➤ "How to Use Releases and Cycles in ALM" on page 174</li><li>➤ "How to Use Libraries and Baselines in ALM" on page 267</li></ul> |
| <b>Part III: Requirements</b> | Describes how to define and manage requirements throughout the application lifecycle.<br><b>Relevant task:</b> "How to Use Requirements in ALM" on page 335   |
| <b>Part IV: Test Plan</b>     | Describes how to plan the testing process, from building a test plan tree to creating tests. It also describes how to work with the VAPI-XP testing tool.<br><b>Relevant task:</b> "How to Plan Tests in ALM" on page 505   |
| <b>Part V: Test Lab</b>       | Describes how to create test sets, execute manual and automated tests, and review test results.<br><b>Relevant task:</b> "How to Run Tests in ALM" on page 716  |
| <b>Part VI: Defects</b>       | Describes how to report defects to a project and keep track of the repair process until the defects are resolved.<br><b>Relevant task:</b> "How to Track Defects in ALM" on page 869  |

| Part                      | Description   |
|---------------------------|---|
| <b>Part VII: Analysis</b> | Describes how you can analyze the application lifecycle management process by creating graphs, standard reports, Excel reports, dashboard pages, and project documentation.<br><br><b>Relevant task:</b> "How to Analyze Data in ALM" on page 911 |
| <b>Glossary</b>           | Provides a list of terms used throughout ALM.   |

## Documentation Library

The Documentation Library is an online help system that describes how to use ALM. You can access the Documentation Library in the following ways:

- Click **Documentation Library** in the ALM Help menu to open the Documentation Library home page. The home page provides quick links to the main help topics.
- Click **Help on this page** in the ALM Help menu to open the Documentation Library to the topic that describes the current page.

## Documentation Library Guides

The Documentation Library consists of the following guides and references, available online, in PDF format, or both. PDFs can be read and printed using Adobe Reader, which can be downloaded from the Adobe Web site (<http://www.adobe.com>).

| Reference                               | Description   |
|---|---|
| <b>Using this Documentation Library</b> | Explains how to use the Documentation Library and how it is organized.  |
| <b>What's New?</b>                      | Describes the newest features in the latest version of ALM.<br>To access, select <b>Help &gt; What's New</b> .          |
| <b>Product Feature Movies</b>           | Short movies that demonstrate the main product features.<br>To access, select <b>Help &gt; Product Feature Movies</b> . |
| <b>Readme</b>                           | Provides last-minute news and information about ALM.  |

## Application Lifecycle Management Guides

| Guide                             | Description   |
|-----------------------------------|---|
| <b>HP ALM User Guide</b>          | Explains how to use ALM to organize and execute all phases of the application life cycle management process. It describes how to specify releases, define requirements, plan tests, run tests, and track defects. |
| <b>HP ALM Administrator Guide</b> | Explains how to create and maintain projects using Site Administration, and how to customize projects using Project Customization.  |
| <b>HP ALM Tutorial</b>            | A self-paced guide teaching you how to use ALM to manage the application life cycle management process.   |

| Guide   | Description   |
|---|---|
| <b>HP ALM Installation Guide</b>              | Describes the installation and configuration processes for setting up ALM Platform. |
| <b>HP Business Process Testing User Guide</b> | Explains how to use Business Process Testing to create business process tests.      |

## ALM Performance Center Guides

| Guide   | Description   |
|---|---|
| <b>HP ALM Performance Center Quick Start</b>              | A self-paced guide giving the Performance Center user a high level overview of creating and running performance tests.  |
| <b>HP ALM Performance Center Guide</b>                    | Explains to the Performance Center user how to create, schedule, run, and monitor performance tests. Explains to the Performance Center administrator how to use Lab Management for overall lab resource management, lab settings management, and system configuration. |
| <b>HP ALM Performance Center Installation Guide</b>       | Describes the installation processes for setting up Performance Center Servers, Performance Center Hosts and other Performance Center components.   |
| <b>HP ALM Performance Center Troubleshooting Guide</b>    | Provides information for troubleshooting problems while working with HP ALM Performance Center.   |
| <b>HP Performance Center of Excellence Best Practices</b> | Provides best practices for successfully building and operating Performance Centers of Excellence.  |
| <b>HP Performance Monitoring Best Practices</b>           | Provides best practices for monitoring the performance of applications under test.  |

## ALM Best Practices

| Guide   | Description  |
|---|--|
| <b>HP ALM Database Best Practices Guide</b>               | Provides best practices for deploying ALM on database servers.       |
| <b>HP ALM Upgrade Best Practices Guide</b>                | Provides methodologies for preparing and planning your ALM upgrade.  |
| <b>HP ALM Business Models Module Best Practices Guide</b> | Provides best practices for working with the Business Models module. |



## ALM API References



| Guide  | Description  |
|--|--|
| <b>HP ALM Project Database Reference</b>           | Provides a complete online reference for the project database tables and fields.   |
| <b>HP ALM Open Test Architecture API Reference</b> | Provides a complete online reference for the ALM COM-based API. You can use the ALM open test architecture to integrate your own configuration management, defect tracking, and home-grown testing tools with an ALM project.                                      |
| <b>HP ALM Site Administration API Reference</b>    | Provides a complete online reference for the Site Administration COM-based API. You can use the Site Administration API to enable your application to organize, manage, and maintain ALM users, projects, domains, connections, and site configuration parameters. |
| <b>HP ALM REST API Reference</b>                   | Provides an online reference for the ALM REST-based API. You can use the REST API to access and work with ALM data.  |
| <b>HP ALM Custom Test Type Guide</b>               | Provides a complete online guide for creating your own testing tool and integrating it into the ALM environment.   |



## Topic Types

The content in this guide is organized by topics. Three main topic types are in use: **Concepts**, **Tasks**, and **Reference**. The topic types are differentiated visually using icons.

| Topic Type   | Description   | Usage   |
|--|---|---|
| <b>Concepts</b><br> | Background, descriptive, or conceptual information.   | Learn general information about what a feature does.  |
| <b>Tasks</b><br>    | <p><b>Instructional Tasks.</b> Step-by-step guidance to help you work with the application and accomplish your goals.</p> <p>Task steps can be with or without numbering:</p> <ul style="list-style-type: none"> <li>▶ <b>Numbered steps.</b> Tasks that are performed by following each step in consecutive order.</li> <li>▶ <b>Non-numbered steps.</b> A list of self-contained operations that you can perform in any order.</li> </ul> | <ul style="list-style-type: none"> <li>▶ Learn about the overall workflow of a task.</li> <li>▶ Follow the steps listed in a numbered task to complete a task.</li> <li>▶ Perform independent operations by completing steps in a non-numbered task.</li> </ul> |
|  | <p><b>Use-case Scenario Tasks.</b></p> <p>Examples of how to perform a task for a specific situation.</p>   | Learn how a task could be performed in a realistic scenario.  |

| Topic Type  | Description   | Usage   |
|---|---|---|
| <b>Reference</b><br>                       | <b>General Reference.</b> Detailed lists and explanations of reference-oriented material.   | Look up a specific piece of reference information relevant to a particular context.   |
|   | <b>User Interface Reference.</b> Specialized reference topics that describe a particular user interface in detail. Selecting <b>Help on this page</b> from the Help menu in the product generally open the user interface topics. | Look up specific information about what to enter or how to use one or more specific user interface elements, such as a window, dialog box, or wizard. |
| <b>Troubleshooting and Limitations</b><br> | <b>Troubleshooting and Limitations.</b> Specialized reference topics that describe commonly encountered problems and their solutions, and list limitations of a feature or product area.  | Increase your awareness of important issues before working with a feature, or if you encounter usability problems in the software.                    |

## Additional Online Resources

The following additional online resources are available from the ALM **Help** menu:

| Part  | Description   |
|---|---|
| <b>Troubleshooting &amp; Knowledge Base</b> | Opens the Troubleshooting page on the HP Software Support Web site where you can search the Self-solve knowledge base. Choose <b>Help &gt; Troubleshooting &amp; Knowledge Base</b> . The URL for this Web site is <a href="http://h20230.www2.hp.com/troubleshooting.jsp">http://h20230.www2.hp.com/troubleshooting.jsp</a> .  |
| <b>HP Software Support</b>                  | <p>Opens the HP Software Support Web site. This site enables you to browse the Self-solve knowledge base. You can also post to and search user discussion forums, submit support requests, download patches and updated documentation, and more. Choose <b>Help &gt; HP Software Support</b>. The URL for this Web site is <a href="http://www.hp.com/go/hpsoftwaresupport">www.hp.com/go/hpsoftwaresupport</a>.</p> <p>Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract.</p> <p>To find more information about access levels, go to: <a href="http://h20230.www2.hp.com/new_access_levels.jsp">http://h20230.www2.hp.com/new_access_levels.jsp</a></p> <p>To register for an HP Passport user ID, go to: <a href="http://h20229.www2.hp.com/passport-registration.html">http://h20229.www2.hp.com/passport-registration.html</a></p> |
| <b>HP Software Web site</b>                 | Opens the HP Software Web site. This site provides you with the most up-to-date information on HP Software products. This includes new software releases, seminars and trade shows, customer support, and more. Choose <b>Help &gt; HP Software Web site</b> . The URL for this Web site is <a href="http://www.hp.com/go/software">www.hp.com/go/software</a> .  |
| <b>Add-ins Page</b>                         | Opens the HP Application Lifecycle Management Add-ins Page, which offers integration and synchronization solutions with HP and third-party tools.   |

Welcome to This Guide

# Part I

---

## ALM Basics



# 1

---

## HP ALM Introduction

This chapter includes:

### Concepts

- ▶ HP ALM Overview on page 23
- ▶ Application Lifecycle Management Roadmap on page 27

## Concepts

### HP ALM Overview

HP Application Lifecycle Management (ALM) empowers IT to manage the core application lifecycle, from requirements through deployment, granting application teams the crucial visibility and collaboration needed for predictable, repeatable, and adaptable delivery of modern applications.

Application lifecycle management is a complex process. Whether your organization is predominantly Agile or you are using both iterative and sequential methods, the aim of effective lifecycle management is greater predictability, heightened repeatability, improved quality, and a ready accommodation of change. Understanding project milestones, deliverables, resource and budget requirements and keeping track of project health, standards and quality indicators, allow delivery managers to achieve these objectives.

ALM simplifies and organizes application management by providing you systematic control over the process. It helps you create a framework and foundation for your application lifecycle management workflow in a central repository.

## **Releases Tracking**

ALM features a system for organizing and tracking application releases, enabling you to align your business priorities and quality expectations with your project requirements, tests, and defects. ALM helps you make more informed release decisions with real-time key performance indicators (KPIs).

## **Requirements and Tests**

ALM helps you define and maintain a repository of requirements and tests. Requirements help ensure that business and testing needs are covered. Tests can then be automatically generated from these requirements to ensure the correct aspects of the application are being tested. To meet the various goals of a project, you can organize the tests in your project into unique groups. ALM provides a method for scheduling and executing tests, collecting test results, and analyzing the data.

## **Defects Tracking**

Analyzing defects and defect trends helps you make effective “go/no-go” decisions. ALM features a system for tracking defects, enabling you to monitor defects from initial detection until resolution. It also allows you to share defects across projects, reducing risk by helping developers find, prioritize, and resolve defects sooner. A centralized defect repository also enables reporting of aggregated defect status and trends across projects.

## **Analysis Tools**

The ability to track progress throughout the application lifecycle process is vital to predictability. ALM provides tools for analyzing each phase of the process including specific instrumentation for Agile projects (for example, burn-up and burn-down charts). You can generate interactive graphs that demonstrate a wide variety of business performance perspectives, or define reports with any cross-section of data. You can also monitor multiple business metrics, by arranging multiple graphs alongside each other in a single view.



## **Asset Libraries**

ALM supports sharing and reuse of asset libraries across projects. Sharable libraries help you manage initiatives with multiple applications to verify that changes to one application do not negatively impact another application. It also helps to drive greater consistency and repeatability, by empowering asset reuse. Specific changes can be applied to the shared assets for each project while allowing the library to maintain its integrity.

## **ALM Integrations**

ALM offers integration with HP testing tools (for example, QuickTest Professional and LoadRunner) as well as third-party and custom testing tools, and requirement and configuration management tools. ALM communicates with the testing tool of your choice, providing you with a complete solution to fully automated application testing.

## **Performance Center Functionality**

ALM includes Performance Center functionality, enabling you to manage all aspects of a large-scale performance testing project, including resource allocation and scheduling, from a centralized location accessible through the Web. Performance Center helps streamline the testing process, reduce resource costs, and increase operating efficiency. For details, see the *HP ALM Performance Center Guide*.

## **Application Governance Functionality**

The ALM solution also includes Application Governance functionality. This component provides a set of capabilities for IT organizations to manage the application development process and enable conformance to IT architectural and technical policies. Application governance gives IT a vehicle to define the application lifecycle, its stages and events, the policies that must be met, and the owners of stages. Application governance automates the key lifecycle activities, including handoffs, policy compliance checks and information flow, supporting the critical control points of the application lifecycle. For details, see the *HP ALM Application Governance Edition documentation*.

## ALM Editions

ALM is available in various editions. For details on the availability of ALM functionality according to editions, see "ALM Editions" on page 143.

| HP ALM Edition                       | Description   |
|--------------------------------------|---|
| HP ALM                               | Complete HP ALM functionality, providing core functionality for managing the Application Lifecycle and scalable Quality Management for mature organizations and Centers of Excellence (CoE) involved with managing enterprise releases. |
| HP Quality Center Starter Edition    | For quality management teams managing small releases.   |
| HP Quality Center Enterprise Edition | For quality management teams managing medium to large releases.   |
| HP ALM Performance Center Edition    | For managing all aspects of large-scale performance testing projects.   |

## Summary

ALM supports you through all phases of managing the application lifecycle. By integrating the tasks involved in application management, ALM enables you to better align IT with your business needs, and optimize efficiency. For details on the application lifecycle management phases, see "Application Lifecycle Management Roadmap" on page 27.

## Application Lifecycle Management Roadmap

The application lifecycle management roadmap with ALM includes the following phases:



| Phase                             | Description  |
|-----------------------------------|--|
| <b>Release Specifications</b>     | <p>Develop a release-cycle management plan to help you manage application releases and cycles more efficiently. You can track the progress of an application release against your plan to determine whether your release is on track.</p> <p>For task details, see "How to Use Releases and Cycles in ALM" on page 174.</p>  |
| <b>Requirement Specifications</b> | <p>Define requirements to meet your business and testing needs. You can manage the requirements and conduct multi-dimensional traceability between requirements, tests and defects, across multiple releases and cycles. ALM provides real-time visibility of requirements coverage and associated defects to evaluate quality and business risk.</p> <p>For task details, see "How to Use Requirements in ALM" on page 335.</p> |
| <b>Test Planning</b>              | <p>Based on the project requirements, you can build test plans and design tests. ALM provides a repository for both manual and automated tests.</p> <p>For task details on test planning, see "How to Plan Tests in ALM" on page 505.</p> <p><b>Performance Center:</b> For task details, see the <i>HP ALM Performance Center Guide</i>.</p>  |

| Phase                  | Description   |
|------------------------|---|
| <b>Test Execution</b>  | <p>Create a subset of the tests in your project designed to achieve specific test goals. ALM supports sanity, functional, regression, and advanced testing. Execute scheduled tests to diagnose and resolve problems.</p> <p>For task details, see "How to Run Tests in ALM" on page 716.</p> <p><b>Performance Center:</b> For task details, see the <i>HP ALM Performance Center Guide</i>.</p> |
| <b>Defect Tracking</b> | <p>Submit defects and track their repair progress. Analyzing defects and defect trends helps you make effective "go/no-go" decisions. ALM supports the entire defect lifecycle—from initial problem detection through fixing the defect and verifying the fix.</p> <p>For task details, see "How to Track Defects in ALM" on page 869.</p>  |

Throughout the application lifecycle, you can monitor and control strategic points by generating reports and graphs. For task details, see "How to Analyze Data in ALM" on page 911.

For an overview of ALM, see "HP ALM Overview" on page 23.

# 2

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## ALM at a Glance

This chapter includes:

### Concepts

- ▶ The ALM Window on page 30
- ▶ ALM Projects on page 31
- ▶ User Privileges on page 31
- ▶ Project History Management on page 31
- ▶ Data Import from Microsoft Word and Microsoft Excel on page 32

### Tasks

- ▶ How to Start ALM on page 33
- ▶ How to Reset Your Password on page 38
- ▶ How to View Administrator Messages on page 39

### Reference

- ▶ ALM Common User Interface on page 40

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## Concepts

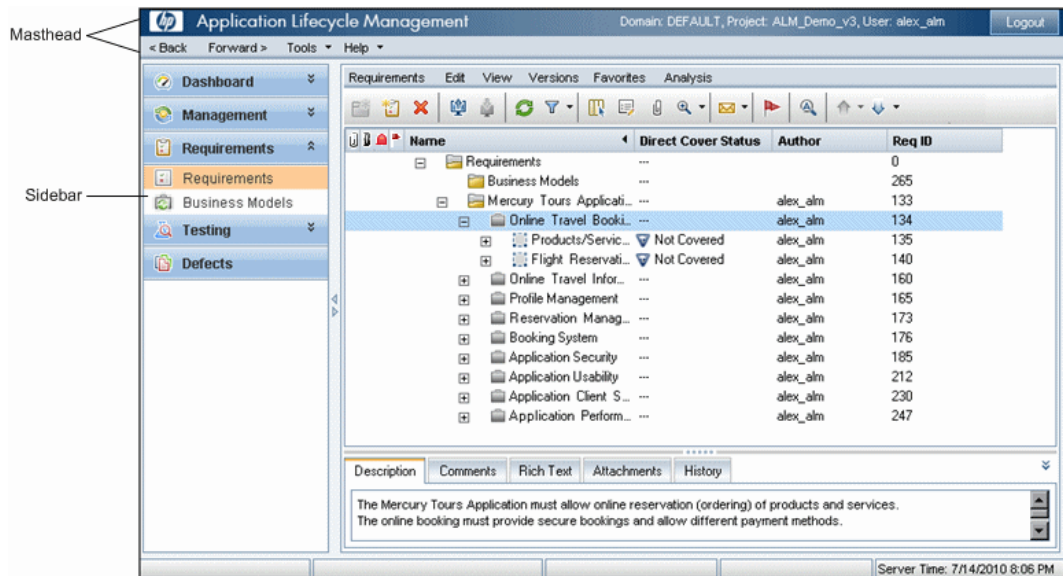
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### The ALM Window

When you connect to a project, the HP Application Lifecycle Management (ALM) main window opens and displays the module in which you were last working. On the upper-right side of the window, the domain, project, and your user name are displayed.



The ALM main window contains the following key elements that are available in all ALM views:

- ▶ **ALM masthead.** Contains navigation buttons, access to common tools, documentation and additional resources.
- ▶ **ALM sidebar.** Contains buttons enabling you to switch between ALM modules.

For more user interface details, see "ALM Common Areas" on page 41.

For a related task, see "How to Start ALM" on page 33.

## **ALM Projects**

When you create an ALM project, you need to store and manage the data that was generated and collected by ALM. Each project is supported by a database that stores project information.

For more information on creating and managing ALM projects, refer to the *HP Application Lifecycle Management Administrator Guide*.

## **User Privileges**

ALM enables you to manage user access to a project. By creating a list of authorized users and assigning each user a password and user group, you control the kinds of additions and modifications that each user makes to the project. The user group determines the privileges that the user has within a project. ALM includes a privileges and permissions mechanism that enables you to create rules for specific fields in a project.

For detailed information on the user groups available in ALM, and on assigning passwords and privileges, refer to the *HP Application Lifecycle Management Administrator Guide*.

## **Project History Management**

When you customize your project, you can instruct ALM to preserve a log of values for the system and user fields in your project. For more information on enabling history for a field, refer to the *HP Application Lifecycle Management Administrator Guide*.

When the history data is no longer needed, you can choose to delete this data from your ALM project. For example, if you have successfully run the test sets you created, you may want to clear the test history from your project.

You can choose to clear all history data, or you can select a specific entity or field whose history you want to clear. In addition, you can choose to delete history data up to and including a specific date. ALM clears the data displayed in the History tab of the corresponding modules.

For user interface details, see "Clear History Dialog Box" on page 51.

## **Data Import from Microsoft Word and Microsoft Excel**

You can import data from a Word document or an Excel worksheet to an ALM project.

### **Data Import from Word**

You can import requirement or test plan data from a Word document to an ALM project. To import from Word, you must install the HP ALM Microsoft Word Add-in and the HP Quality Center Connectivity Add-in on your client machine. To install an add-in, choose **Help > Add-ins Page** to open the HP Application Lifecycle Management Add-ins page, and click the appropriate add-in link.

For more details, see the *HP ALM Microsoft Word Add-in Guide* available on the HP ALM Microsoft Word Add-in page.

### **Data Import from Excel**

You can import requirement, test plan, or defect data from an Excel worksheet to an ALM project. To import from Excel, you must install the HP ALM Microsoft Excel Add-in and the HP Quality Center Connectivity Add-in on your client machine. To install an add-in, choose **Help > Add-ins Page** to open the HP Application Lifecycle Management Add-ins page, and click the appropriate add-in link.

For more details, see the *HP ALM Microsoft Excel Add-in Guide* available on the HP ALM Microsoft Excel Add-in page.



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## Tasks

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### How to Start ALM

This task describes how to launch ALM on your machine from your Web browser. You can work with multiple versions of ALM side-by-side on a workstation. This includes multiple ALM 11.00 clients connecting to different ALM Platform servers, and a single Quality Center 10.00 or 9.2 client.

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**Note:** To enable ALM to work with HP testing tools as well as third-party and custom testing tools, you must log in to the client machine with administrator privileges and register ALM on client machines. For more information, refer to the *HP Application Lifecycle Management Installation Guide*.

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**To start ALM:**

- 1 Open your Web browser and type your ALM URL  
`http://<ALM Platform server name>[:port number]/qcbn`. Contact your system administrator if you do not have the correct URL.

The HP Application Lifecycle Management Options window opens.



- 2 Click the **Application Lifecycle Management** link. Each time ALM is run, it carries out a version check. If it detects a newer version, it downloads the necessary files to your machine.

**Notes:**

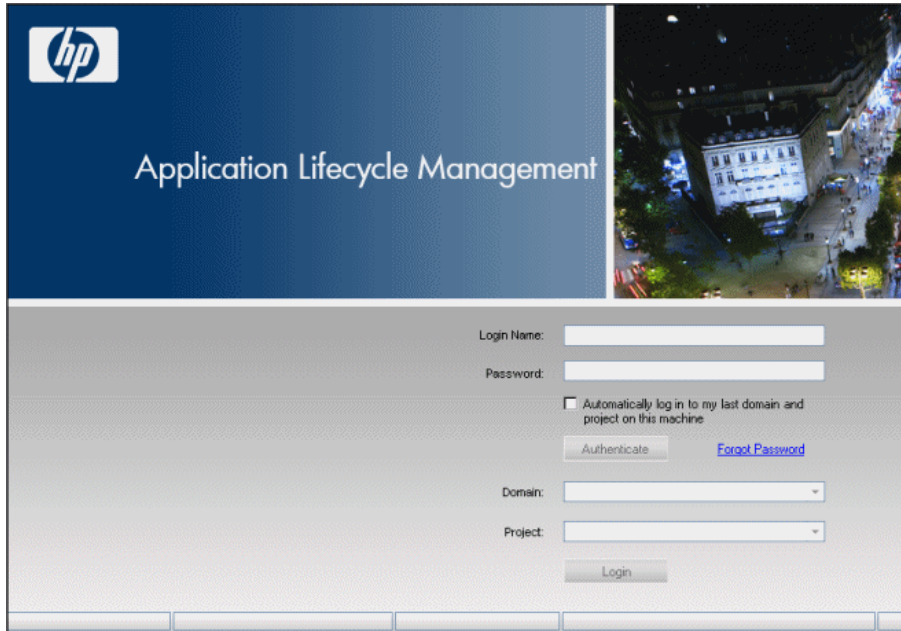
- ▶ **Windows Vista and 7:** If you do not have administrator privileges on your machine, and a Security Warning displays, click **Don't Install**. You will be redirected to the Install screen.
  - ▶ If file downloads are prohibited through your browser, you can install these files by using the **HP ALM Client MSI Generator Add-in** on the **More HP Application Lifecycle Management Add-ins** page. For more information on add-ins, refer to the *HP Application Lifecycle Management Installation Guide*.
- 

- 3** Follow the on-screen instructions.
- 

**Note:** If files are downloaded, but the Login window does not display, you must install a Microsoft Hotfix on your machine. For more information, see HP Software Self-solve knowledge base article KM905289 (<http://h20230.www2.hp.com/selfsolve/document/KM905289>).

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After the ALM version has been checked and files have been updated if necessary, the ALM Login window opens.



- 4** In the **Login Name** box, type your user name.
- 5** In the **Password** box, type the password assigned to you by your site administrator. If you cannot remember your password, click the **Forgot Password** link. For more details, see "How to Reset Your Password" on page 38.
- 6** Select the **Automatically log in to my last domain and project on this machine** check box if you want ALM to automatically log in to the last project in which you were working.
- 7** Click the **Authenticate** button. ALM verifies your user name and password and determines which domains and projects you can access. If you specified automatic login, ALM opens.
- 8** If authentication fails, check that your user name and password are correct and try again.

- 9 In the **Domain** list, select a domain. By default, the last domain in which you were working is displayed.
- 10 In the **Project** list, select a project. By default, the last project in which you were working is displayed.

If the demonstration project was installed on the ALM Platform server, you can select the **ALM\_Demo** project (make sure that you select **DEFAULT** in the **Domain** list). The project includes sample data to help introduce you to ALM. For more information, refer to the *HP Application Lifecycle Management Tutorial*.

- 11 Click the **Login** button. ALM opens and displays the module in which you last worked during your previous session.

The first time you run ALM, the Welcome page opens. From the Welcome page, you can directly access the ALM documentation. If you do not want to display the Welcome page each time you log in to ALM, select **Don't show this again**. To open the Welcome page at any time, choose **Help > Welcome Page**.

- 12 To exit and return to the ALM Login window, click the **Logout** button located in the upper-right corner of the window.

Alternatively, choose **Tools > Change Project** to log in to a different project.

**Note:** When an ALM user session is inactive for a period of time, the session expires. This releases the license in use, making it available for other users.

When a session expires, you are prompted to reconnect. Logging in from the ALM login window includes loading project customization. However, if a project administrator has not made any significant changes to project customization, the customization does not reload when you reconnect. This enables you to reconnect quickly and continue working where you left off.

You can edit reconnect options by modifying the **FAST\_RECONNECT\_MODE** parameter in the Site Configuration tab. For more information, refer to the *HP Application Lifecycle Management Administrator Guide*.

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## How to Reset Your Password

When logging in to ALM, if you cannot remember your password, you can reset it and create a new one.

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**Note:** Resetting your password is unavailable in either of the following situations:

- ▶ It is deactivated by the **PASSWORD\_RESET\_DISABLE** Site Configuration parameter.
- ▶ LDAP authentication is enabled.

For more information, refer to the *HP Application Lifecycle Management Administrator Guide*.

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**To reset your password:**

- 1** In the ALM Login window, click the **Forgot Password** link. The **Forgot Password** dialog box opens.
- 2** In the **Login Name** box, type your user name. By default, the name entered in the ALM Login window is displayed.
- 3** Click **OK**. ALM sends a message to the email address assigned to your ALM user name. Click the link to set a new password.

After you set a new password, the ALM Login window opens, enabling you to log in using your new password.

 **How to View Administrator Messages**

The site administrator can send messages to users connected to ALM projects informing them about important maintenance or other issues. For example, the site administrator may send a message warning that a project you are connected to will be disconnected.

For more details on sending messages from Site Administration, refer to the *HP Application Lifecycle Management Administrator Guide*.

**To view administrator messages:**

- 1** When the site administrator sends you a message, a pop-up window automatically opens on your machine displaying the message text.
- 2** If there is more than one message, use the **Previous Message** and **Next Message** buttons to view other messages.

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## Reference

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### **ALM Common User Interface**

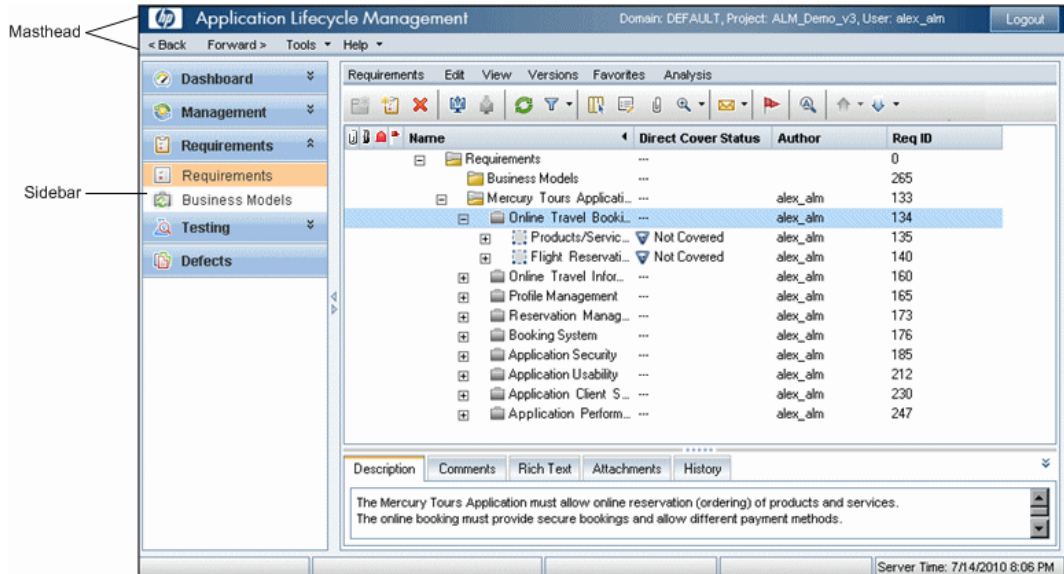
This section includes:

- ▶ ALM Common Areas on page 41
- ▶ ALM Fields on page 48
- ▶ ALM Icons on page 48
- ▶ User Properties Page on page 49
- ▶ Clear History Dialog Box on page 51
- ▶ Task Manager Dialog Box on page 52
- ▶ Send Error Details Dialog Box on page 55



## ALM Common Areas



The common areas include navigation buttons, access to common tools, documentation and additional resources.



|                       |  |
|-----------------------|--|
| <b>To access</b>      | The common areas are available from all ALM views. |
| <b>Relevant tasks</b> | "How to Start ALM" on page 33                      |
| <b>See also</b>       | "The ALM Window" on page 30                        |

## Masthead

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p>Logs you out of your current project and returns you to the ALM Login window.</p> <p><b>Tip:</b> You can change the project you are working in by choosing <b>Tools &gt; Change Project</b>.</p> |
|  | <p>Enables you to navigate to your previous/next view in ALM.</p> <p><b>Tip:</b> Use the <b>Forward</b> button after you navigate to a previous view.</p>   |
| <p>&lt;domain, project, user&gt;</p>  | <p>Details of the current domain, project, and user.</p>  |

| UI Elements (A-Z) | Description  |
|-------------------|--|
| <b>Help</b>       | <p>Enables you to open the HP Application Lifecycle Management Documentation Library and other additional online resources. For details on the additional online resources, see "Additional Online Resources" on page 19.</p> <p>To display version information for each ALM client component, select <b>Help &gt; About HP Application Lifecycle Management Software</b>.</p> <p>To display ALM patch information, select <b>Help &gt; About HP Application Lifecycle Management Software</b>. Click <b>Additional Information</b>.</p> <p>If an error occurs, ALM collects detailed system and usage information, which you can send as an email attachment. It is useful for when you contact ALM support. To send an error report, select <b>Help &gt; Send Error Details</b>. For more details, see "Send Error Details Dialog Box" on page 55.</p> <p><b>Tip:</b> To customize the <b>Help</b> menu, refer to the <i>HP Application Lifecycle Management Installation Guide</i>.</p> |
| <b>Tools</b>      | <p>Includes commands that you can run from each of the ALM modules. For details, see "Tools Menu" on page 44.</p> <p><b>Tip:</b> To customize the <b>Tools</b> menu, refer to the <i>HP Application Lifecycle Management Installation Guide</i>.</p>   |

## Tools Menu

User interface elements are described below:

| UI Elements (A-Z)                       | Description  |
|---|--|
| <b>Change Project</b>                   | Enables you to log out of your current project and select one of the previously opened projects on the same machine, or select a different project from the Login window.  |
| <b>Clear History</b>                    | Opens the Clear History dialog box, enabling you to delete history data from your project. Clearing history requires the appropriate user permissions. For details, see "Clear History Dialog Box" on page 51.   |
| <b>Customize</b>                        | <p>Opens the Project Customization window, enabling you to customize your project. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</p> <p><b>Tip:</b> You can change your ALM password and user details in the Project Customization window. For user interface details, see "User Properties Page" on page 49.</p> |
| <b>Document Generator</b>               | Opens the Document Generator. For details, see Chapter 42, "Project Documents."  |
| <b>Download Standalone Applications</b> | <b>Performance Center:</b> Opens the Application Download window, enabling you to download standalone applications needed for Performance Center.  |
| <b>Event Log</b>                        | <b>Performance Center:</b> Displays information about all events that occur during a performance test run. For details, refer to the <i>HP ALM Performance Center Guide</i> .  |
| <b>New Defect</b>                       | Opens the New Defect dialog box, enabling you to add a new defect. For details, see "Defect Details Dialog Box" on page 896.   |
| <b>Performance Center Settings</b>      | <b>Performance Center:</b> Enables you to configure project settings for your Performance Center project. For details, refer to the <i>HP ALM Performance Center Guide</i> .   |

| UI Elements (A-Z)           | Description  |
|-----------------------------|--|
| <b>Spelling and Grammar</b> | <p><b>Check Spelling.</b> Checks the spelling for the selected text or text box. If there are no errors, a confirmation message opens. If errors are found, the Spelling dialog box opens and displays the word together with replacement suggestions.</p> <p><b>Spelling Options.</b> Opens the Spelling Options dialog box, enabling you to configure the way ALM checks spelling.</p> <p><b>Thesaurus.</b> Opens the Thesaurus dialog box and displays a synonym, antonym, or related word for the selected word. You can replace the selected word or look up new words.</p> |
| <b>Task Manager</b>         | <p>Opens the Task Manager dialog box, enabling you to view the status and progress of asynchronous tasks run in your project. For details, see "Task Manager Dialog Box" on page 52.</p>   |

## Sidebar Buttons

This area enables you to navigate between ALM modules.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ <b>ALM Editions:</b> ALM is also available in three editions which provide subsets of ALM functionality — Quality Center Starter Edition, Quality Center Enterprise Edition, and Performance Center Edition. For details, see Chapter 7, "ALM Editions."</li> <li>▶ If the sidebar is hidden, click the expand button, located on the middle left corner of the window.</li> </ul> |
|------------------------------|---|

User interface elements are described below:

| UI Elements (A-Z)    | Description  |
|----------------------|--|
| <b>Dashboard</b>     | <p>Includes the following modules:</p> <p><b>Analysis View.</b> Enables you to create graphs, reports, and Excel reports.</p> <p><b>Dashboard View.</b> Enables you to create dashboard pages, in which you can view multiple graphs in a single display.</p>  |
| <b>Defects</b>       | <p>Enables you to add defects, determine repair priorities, repair open defects, and analyze the data.</p>   |
| <b>Lab Resources</b> | <p><b>Performance Center:</b> Includes the following modules:</p> <ul style="list-style-type: none"> <li>▶ <b>Timeslots.</b> Enables you to reserve test resources for the purposes of running a performance test or for performing maintenance tasks on them.</li> <li>▶ <b>Hosts.</b> Enables you to manage the allocation and availability of Performance Center host machines.</li> <li>▶ <b>AUT Hosts.</b> Enables you to manage the host machines that make up the Application Under Test (AUT).</li> <li>▶ <b>Topologies.</b> Enables you to create topologies that graphically display the logical components that make up the Application Under Test (AUT) and the relationships between them.</li> </ul> <p>For more information, refer to the <i>HP ALM Performance Center Guide</i>.</p> |
| <b>Management</b>    | <p>Includes the following modules:</p> <ul style="list-style-type: none"> <li>▶ <b>Releases.</b> Enables you to define releases and cycles for the application management process.</li> <li>▶ <b>Libraries.</b> Enables you to define libraries to track changes in your project, reuse entities in a project, or share entities across multiple projects.</li> </ul>  |

| UI Elements (A-Z)   | Description  |
|---------------------|--|
| <b>Requirements</b> | <p>Includes the following modules:</p> <ul style="list-style-type: none"> <li>▶ <b>Requirements.</b> Enables you to manage requirements in a hierarchical tree-structure. Requirements can be linked to other requirements, tests, or defects.</li> <li>▶ <b>Business Models.</b> Enables you to import business process models, and test the quality of the models and their components. Access to this module is dependent on your ALM license.</li> </ul>   |
| <b>Testing</b>      | <p>Includes the following modules:</p> <ul style="list-style-type: none"> <li>▶ <b>Test Resources.</b> Enables you to manage test resources in a hierarchical tree-structure. Test resources can be associated with tests.</li> <li>▶ <b>Business Components.</b> Depending on your ALM license, you may also have access to the <b>Business Components</b> module. This module enables subject matter experts to drive the quality optimization process using Business Process Testing. For more information, refer to the <i>HP Business Process Testing User Guide</i>.</li> <li>▶ <b>Test Plan.</b> Enables you to develop and manage tests in a hierarchical tree-structure. Tests can be linked to requirements and defects.</li> <li>▶ <b>Test Lab.</b> Enables you to manage and run tests. After running tests, you can analyze the results.</li> </ul> |

## ALM Fields

This section lists the fields available in ALM.

| Module Name (A-Z)      | Description   |
|------------------------|---|
| <b>Business Models</b> | "Business Models Module Fields" on page 479                                   |
| <b>Defects</b>         | "Defects Module Fields" on page 891   |
| <b>Management</b>      | "Releases Module Fields" on page 192<br>"Libraries Module Fields" on page 281 |
| <b>Requirements</b>    | "Requirements Module Fields" on page 368                                      |
| <b>Test Lab</b>        | "Test Lab Module Fields" on page 744  |
| <b>Test Plan</b>       | "Test Plan Module Fields" on page 537   |
| <b>Test Resource</b>   | "Test Resources Module Fields" on page 669                                    |

## ALM Icons

This section lists the icons available in ALM.

| Module Name (A-Z)    | Description   |
|----------------------|---|
| <b>Dashboard</b>     | "Dashboard Icons" on page 928   |
| <b>Defects</b>       | "Defects Module Icons" on page 889  |
| <b>Management</b>    | "Releases Module Icons" on page 191<br>"Libraries Module Icons" on page 280 |
| <b>Requirements</b>  | "Requirements Module Icons" on page 365                                     |
| <b>Test Lab</b>      | "Test Lab Module Icons" on page 742   |
| <b>Test Plan</b>     | "Test Plan Module Icons" on page 535  |
| <b>Test Resource</b> | "Test Resources Module Icons" on page 667                                   |



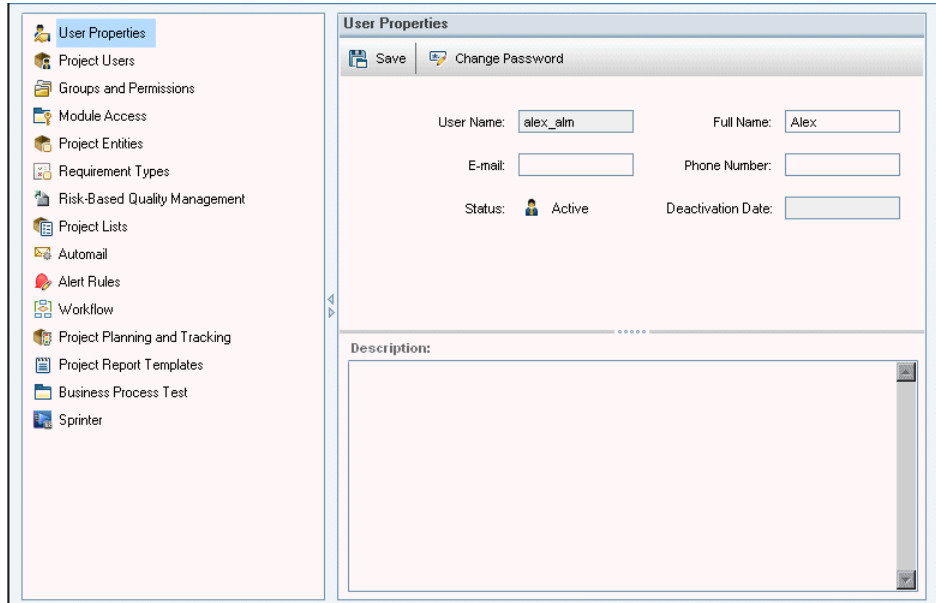
## User Properties Page

This page enables you to change your user properties, including full name, password, email address, phone number, and description.

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**Note:** For additional details on the Project Customization window, refer to the *HP Application Lifecycle Management Administrator Guide*.




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The screenshot displays the 'User Properties' page. On the left is a navigation pane with a list of menu items: User Properties (selected), Project Users, Groups and Permissions, Module Access, Project Entities, Requirement Types, Risk-Based Quality Management, Project Lists, Automail, Alert Rules, Workflow, Project Planning and Tracking, Project Report Templates, Business Process Test, and Sprinter. The main content area is titled 'User Properties' and contains two tabs: 'Save' and 'Change Password'. The 'Save' tab is active. Below the tabs are several input fields: 'User Name' (containing 'alex\_alm'), 'Full Name' (containing 'Alex'), 'E-mail' (empty), 'Phone Number' (empty), 'Status' (set to 'Active' with a user icon), and 'Deactivation Date' (empty). At the bottom of the main area is a 'Description:' label followed by a large, empty text area with a vertical scrollbar.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> In the common toolbar, select <b>Tools &gt; Customize</b>.</li> <li><b>2</b> In the Project Customization window, click the <b>User Properties</b> link.</li> </ol>   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ Email information is important because it enables you to receive email notifications and alerts directly to your mailbox.</li> <li>▶ The site administrator can change and override a user's properties or password. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> </ul> |

User interface elements are described below:

| UI Elements (A-Z)  | Description   |
|--|---|
|   | <p><b>Return.</b> Closes the Project Customization window, and returns to the ALM window.</p>   |
|   | <p><b>Change Password.</b> Opens the Change Password for [user name] dialog box, enabling you to change your login password.</p>  |
|  | <p><b>Save.</b> Saves changes to your user properties.</p>  |
| <b>Deactivation Date</b>   | <p>The date on which the user is scheduled to be deactivated. A deactivated user cannot log in to an ALM project.</p> <p><b>Note:</b> This field is set by the site administrator and is read-only.</p> |
| <b>E-mail</b>  | <p>Determines the email address to which notifications and alerts are delivered.</p>  |
| <b>Full Name/Description/Phone Number</b>  | <p>User details.</p>  |

| UI Elements (A-Z) | Description   |
|-------------------|---|
| <b>Status</b>     | User status is displayed as <b>Active</b> . Only active users can log in to ALM projects. |
| <b>User Name</b>  | Your ALM login name.<br><b>Note:</b> This field is read-only.                             |

## Clear History Dialog Box

This dialog box enables you to delete history data.

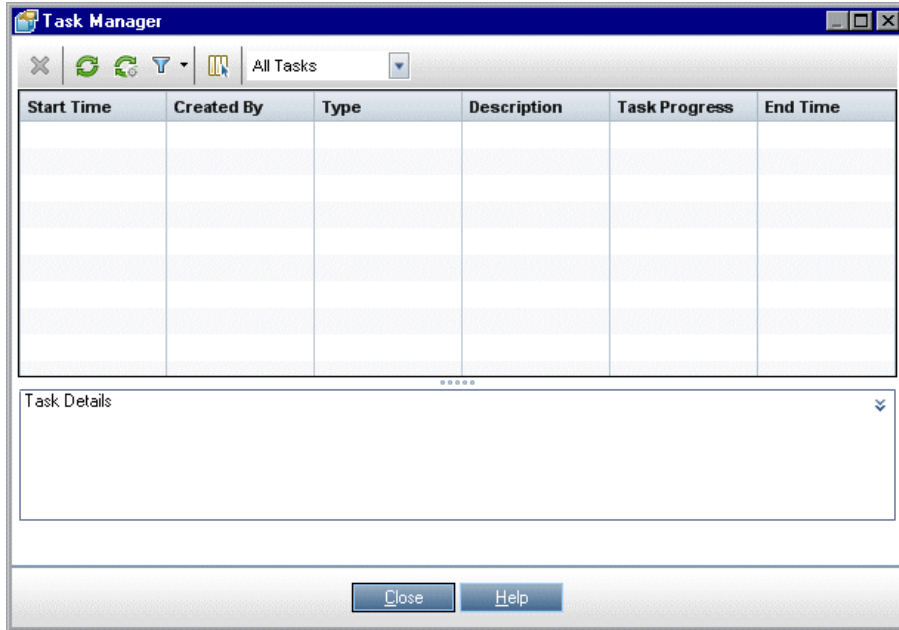
|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the masthead, select <b>Tools &gt; Clear History</b> .        |
| <b>Important information</b> | You must have the appropriate user permissions to clear history. |
| <b>See also</b>              | "Project History Management" on page 31                          |

User interface elements are described below:

| UI Elements (A-Z) | Description  |
|-------------------|--|
| <b>Entity</b>     | The entity whose history you want to delete.<br><b>Note:</b> To delete history data from all entities, select <b>All</b> .                     |
| <b>Field</b>      | The field whose history you want to delete.<br><b>Note:</b> To delete history data from all fields in the selected entity, select <b>All</b> . |
| <b>Until Date</b> | All data up to and including the selected date is deleted.   |








## Task Manager Dialog Box

This dialog box enables you to view the status and progress of asynchronous tasks run in your project. For example, when you create a baseline, ALM runs the task in a background process. You can view the progress of this task in the Task Manager.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the masthead, select <b>Tools &gt; Task Manager</b> .         |
| <b>Important information</b> | ALM clears completed tasks from the Task Manager after two days. |

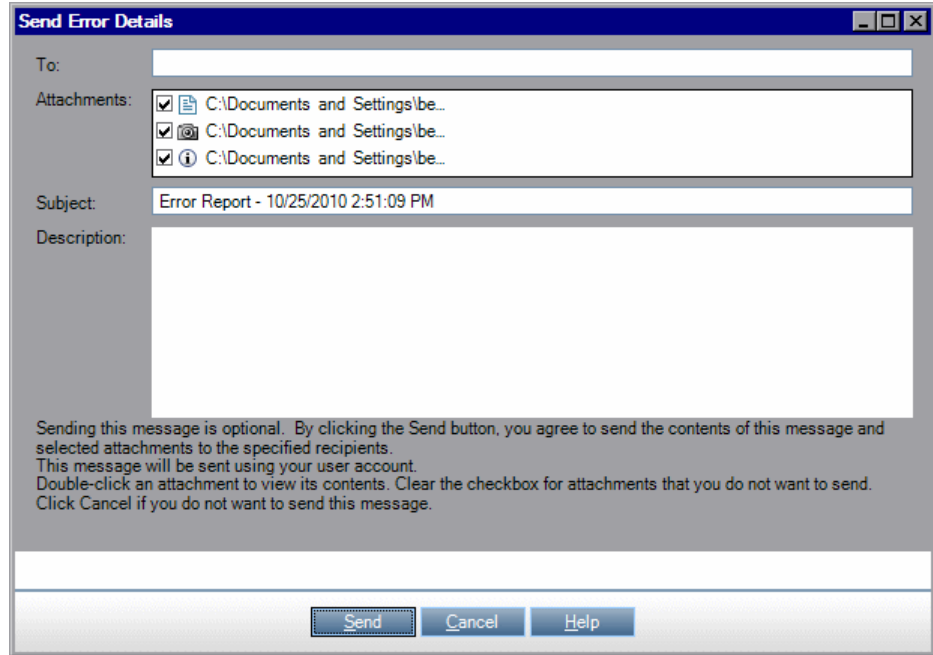
User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Delete.</b> Clears the currently selected tasks from the grid.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>▶ You can clear only completed tasks.</li> <li>▶ A task can be cleared only by the user that ran the task, or by a project administrator.</li> </ul>     |
|  | <p><b>Refresh All.</b> Refreshes the grid so that it displays the most up-to-date task information.</p> <p>If Auto Refresh is enabled, this button is disabled.</p>  |
|  | <p><b>Set Auto Refresh On/Off.</b> When enabled, automatically refreshes the grid every 5 seconds so that it displays the most up-to-date task information.</p>  |
|  | <p><b>Filter/Sort.</b> Opens the Filter dialog box, enabling you to filter and sort the tasks displayed in the grid. For more details, see "Filter Dialog Box" on page 64.</p>   |
|  | <p><b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p>  |
| <p><b>Created By</b></p>  | <p>The name of the user who ran the task.</p>  |
| <p><b>Description</b></p>   | <p>A description of the task.</p>  |
| <p><b>End Time</b></p>  | <p>The time the task completed.</p>  |
| <p><b>Filter</b></p>  | <p>Displays the filter currently applied to the grid. Located directly above the grid.</p>   |
| <p><b>Start Time</b></p>  | <p>The time the task started.</p>  |
| <p><b>Task Details</b></p>  | <p>Displays details of the selected task.</p> <p>Click the <b>Show/Hide</b> arrows   to display or hide this pane.</p> |
| <p><b>Task Id</b></p>   | <p>A unique numeric ID for the task, assigned automatically by ALM.</p>  |

| UI Elements (A-Z)    | Description   |
|----------------------|---|
| <b>Task Progress</b> | The percentage of the task that is complete. When the task completes, displays the final result: <b>Succeeded</b> or <b>Failed</b> .  |
| <b>Task State</b>    | <p>Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Running</b>. The task is in progress.</li> <li>▶ <b>Paused</b>. The task was paused by a user.</li> <li>▶ <b>Finished</b>. The task has completed.</li> </ul> <p><b>Note:</b> If a task is aborted by the user, the Task State value is <b>Finished</b>, and the Task Progress value is <b>Failed</b>.</p> |
| <b>Type</b>          | The task type. For example, <b>ImportBaseline</b> .   |

## Send Error Details Dialog Box

This dialog box enables you to send an error report as a mail attachment. This can be helpful when contacting ALM support, or your local system administrator.



**Send Error Details**

To:

Attachments:  C:\Documents and Settings\be...  
 C:\Documents and Settings\be...  
 C:\Documents and Settings\be...

Subject: Error Report - 10/25/2010 2:51:09 PM

Description:

Sending this message is optional. By clicking the Send button, you agree to send the contents of this message and selected attachments to the specified recipients.  
 This message will be sent using your user account.  
 Double-click an attachment to view its contents. Clear the checkbox for attachments that you do not want to send.  
 Click Cancel if you do not want to send this message.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the masthead, select <b>Help &gt; Send Error Details</b> .   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ The <b>Send Error Details</b> command is enabled by setting the <b>SEND_EXCEPTION_ENABLED</b> parameter in the Site Configuration tab in Site Administration. For details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ The mail message is sent using your ALM user account information.</li> <li>▶ The information collected is sent as mail attachments. Before sending, you can review the attachments and remove any that you do not want to send.</li> </ul> |

User interface elements are described below:

| UI Elements        | Description   |
|--------------------|---|
| <b>To</b>          | Enter a valid email address.  |
| <b>Attachments</b> | Attachments include details of your system, a snapshot of your machine at the time of the error, and any generated log files.<br><br>Double-click an attachment to view its contents. Clear the check box for attachments that you do not want to send. |
| <b>Subject</b>     | The date and time that you send the report.   |
| <b>Description</b> | A description of the error.   |



# 3

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## ALM Common Functionality

This chapter includes:

### Concepts

- ▶ ALM Common Functionality Overview on page 58

### Tasks

- ▶ How to Display ALM Data on page 59
- ▶ How to Modify Attachments on page 61
- ▶ How to Search and Replace ALM Data on page 62

### Reference

- ▶ ALM Common Functionality User Interface on page 63

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## Concepts

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### **ALM Common Functionality Overview**

HP Application Lifecycle Management (ALM) organizes and displays data in grids and trees. You can manipulate the data in various ways, such as rearranging columns, filtering, sorting, and grouping. You can also attach files to records, search for specific text in records, and view history of various entities.

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**Note:** As ALM grids and trees vary in the type of content they display, the tasks and references described in this chapter do not always apply to all grids and trees.

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For task details, see "How to Display ALM Data" on page 59, "How to Modify Attachments" on page 61, and "How to Search and Replace ALM Data" on page 62.

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## Tasks

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### How to Display ALM Data

This task describes how to manipulate ALM data.

- "Filter Records" on page 59
- "Sort Records" on page 60
- "Group Records" on page 60
- "Arrange and Resize Columns" on page 60
- "Display ALM History" on page 61

#### Filter Records

- To filter ALM data to display only those records that meet your criteria, click the **Set Filter/Sort** button . The Filter dialog box opens. In the Filter tab, assign a single condition or multiple conditions. For user interface details, see "Filter Dialog Box" on page 64.

##### Example:

In the Test Lab module, you can define the Status filter as "Failed" and the Tester filter as "David Or Mark". Only failed test runs performed by David or Mark are displayed.

- To further drill down your data, define a cross filter. In the Filter dialog box, click the **Cross Filter** tab. For user interface details, see "Filter Dialog Box" on page 64.

##### Example:

In the test plan tree, you can define the cross filter for associated test sets as "Open". This ensures that only tests that belong to an open test set are displayed. Alternatively, you can define the associated test set filter to find tests that are not in any test set.

## Sort Records

You set sorting priorities of records displayed in the ALM trees and grids. By default, records appear in ALM according to the order in which they were added. In the Filter dialog box, click the **View Order** tab. For user interface details, see "Filter Dialog Box" on page 64.

### Example:

In the Test Grid, if the **Designer** column is assigned the highest sort priority, records are sorted in the ASCII sort order according to the names appearing in the Designer column. If **Test Name** is assigned the next highest priority, test records assigned the same name in the **Designer** column are then sorted in the ASCII sort order according to their test name.

## Group Records

You separate grid data into groups according to specified criteria. In the Filter dialog box, click the **Group** tab. For user interface details, see "Filter Dialog Box" on page 64.

### Example:

In the Defects Grid, if you select the **Assigned To** column as the highest group by priority, records are grouped according to the names appearing in the **Assigned To** column. If you select **Status** and **Severity** as the next highest priorities respectively, defects assigned the same name in the **Assigned To** column are next grouped according to their status, and then their severity.

## Arrange and Resize Columns

You determine which columns are displayed in ALM and the order in which they appear. Select **View > Select Columns**. The Select Columns dialog box opens. For user interface details, see "Select Columns/Select Fields Dialog Box" on page 94.

You resize columns using the mouse. Click on the right edge of a column heading and drag to adjust the width.

## Display ALM History

You view a list of changes made to ALM entities. In addition, you can view previous versions of entities stored in a particular baseline.

Click the **History** tab or button. For user interface details, see "History Tab" on page 85.

## How to Modify Attachments

This task describes how to modify an ALM attachment.

When you open an attachment, ALM downloads the attachment to a local directory on your client machine and opens it in the associated application. After making changes to the attachment, you must save the attachment twice. First, save the local copy of your attachment in the application. Then upload the attachment to your ALM project.

### To modify an attachment:

- 1** Navigate to the Attachments page for the selected ALM record. For user interface details, see "Attachments Page" on page 90.
- 2** Double-click the selected attachment. A local copy opens in the associated application.
- 3** Modify the attachment.
- 4** Save the changes in the application. This saves the local copy of your attachment.
- 5** Close the attachment.
- 6** In ALM, click the **Upload Selected** button to upload the local copy to your ALM project.

## **How to Search and Replace ALM Data**

The following steps describe how to search and replace ALM data.

- "Search Records" on page 62
- "Replace Records" on page 62

### **Search Records**

Using the Find dialog box, you can search records based on the value of a particular field in a tree or grid. You can also search a folder for a particular subfolder or record. For user interface details, see "Find Dialog Box" on page 78.

If available, you can search for keywords and variations of keywords using Text Search. Select **Edit > Text Search**. The Text Search pane opens in the lower part window. For user interface details, see "Text Search Pane" on page 82.

### **Replace Records**

You can replace a field value for a selected record, or for all records in the tree or grid using the Replace dialog box. For user interface details, see "Replace Dialog Box" on page 80.

You can also update a field value for multiple records in a grid or a tree using the Update Selected dialog box. For user interface details, see "Update Selected Dialog Box" on page 96.

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## Reference

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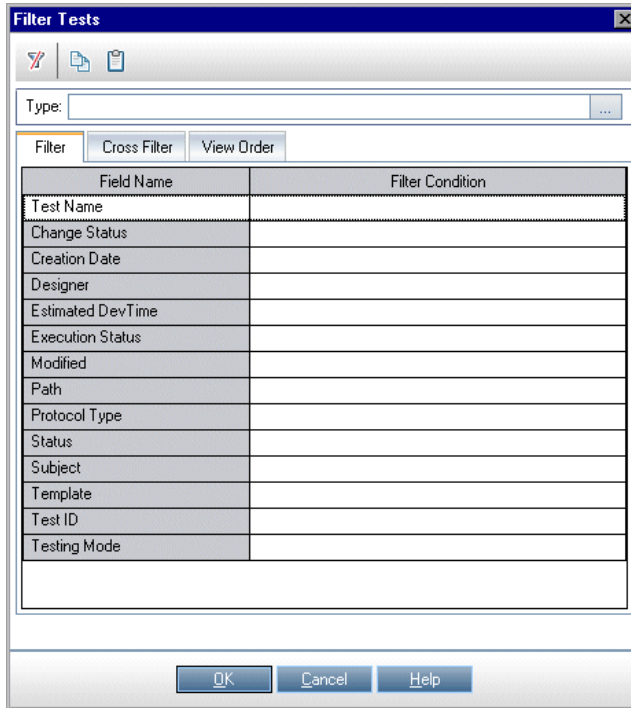
### **ALM Common Functionality User Interface**



This section includes:

- ▶ Filter Dialog Box on page 64
- ▶ Select Filter Condition Dialog Box on page 74
- ▶ Users List Dialog Box on page 76
- ▶ Find Dialog Box on page 78
- ▶ Replace Dialog Box on page 80
- ▶ Text Search Pane on page 82
- ▶ History Tab on page 85
- ▶ Send E-mail Dialog Box on page 87
- ▶ Attachments Page on page 90
- ▶ Snapshot Dialog Box on page 93
- ▶ Select Columns/Select Fields Dialog Box on page 94
- ▶ Update Selected Dialog Box on page 96

## Filter Dialog Box

This dialog box enables you to filter, sort, and group ALM data to display only those records that meet the criteria that you define.






|                              |  |
|------------------------------|--|
| <b>To access</b>             | Click the appropriate <b>Set Filter/Sort</b> button   .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ <b>Tip:</b> You can save filtering and sorting settings as a favorite view and then load it as needed. To save as a favorite view, choose <b>Favorites &gt; Add to Favorites</b>. The Add Favorite dialog box opens. For details on the user interface, see "Add Favorite Dialog Box" on page 117.</li> <li>▶ <b>Quality Center Starter Edition:</b> Not all fields and functionality are available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Display ALM Data" on page 59   |
| <b>See also</b>              | "ALM Common Functionality Overview" on page 58   |




## Filter Dialog Box Common Elements

Common user interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Clear Filter.</b> Clears the filter, sort, and group by settings defined in the Filter dialog box.</p>  |
|  | <p><b>Copy Filter Settings.</b> Copies the filter, sort, and group by settings to the Clipboard.</p>  |
|  | <p><b>Paste Filter Settings.</b> Pastes the filter, sort, and group by settings from the Clipboard to another project. You can also share the settings with another user by pasting them to an email or a text file.</p> <p><b>Tips:</b></p> <ul style="list-style-type: none"> <li>▶ To paste to another project, log in to the project to which you want to paste the settings, display the appropriate module, and open the Filter dialog box. Click the <b>Paste Filter Settings</b> button.</li> <li>▶ To paste to an email or a text file, click the paste button of the target application.</li> </ul> |
| <p><b>Hide Risk-Based Quality Management Columns</b></p>                          | <p>Hides the requirement fields related to risk-based quality management. Only fields for which no filter condition is set are hidden.</p> <p><b>Note:</b> Only available in the Requirements module.</p>   |
| <p><b>Requirement Type</b></p>  | <p>Defines the filter by a selected requirement type.</p> <p>In the <b>Requirement Type</b> box, click the browse button. The Select Filter Condition dialog box opens. Select a requirement type and click <b>OK</b>. The Filter Condition tab displays the relevant field names.</p> <p><b>Note:</b> Only available in the Requirements module.</p>   |

## Filter Tab

This tab enables you to filter ALM data to display only those records that meet the criteria that you define.

|                                     |  |
|-------------------------------------|--|
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>➤ If you are filtering in the requirements tree, parents of filtered entities that do not correspond to the filter are displayed in the tree with the  icon.</li> <li>➤ If you are filtering in the test plan or test set tree, folders in the tree that do not correspond to the filter are not displayed in the tree.</li> <li>➤ <b>Version Control:</b> For details on filtering data based on version control fields, see "How to Filter by Version Control Fields" on page 128.</li> <li>➤ <b>Data-hiding.</b> For additional details when filtering in the Project Customization Data-hiding tab, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> </ul> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Display ALM Data" on page 59</p>  |
| <p><b>See also</b></p>              | <p>"ALM Common Functionality Overview" on page 58</p>  |

User interface elements are described below:

| UI Elements (A-Z)      | Description  |
|------------------------|--|
| <b>Field Condition</b> | <p>Defines a filter condition for a field.</p> <p>Click the corresponding Filter Condition box. Click the browse button. The Select Filter Condition dialog box opens. For more details, see "Select Filter Condition Dialog Box" on page 74.</p>  |
| <b>Field Name</b>      | <p>Lists the fields available for filtering.</p> <p><b>Tip:</b> To search for a field in the Field Name column, click a box in the <b>Field Name</b> column and type the first character of the field name. ALM highlights the first occurrence.</p> <p>For more details on fields see:</p> <ul style="list-style-type: none"> <li>➤ "Requirements Module Fields" on page 368</li> <li>➤ "Test Plan Module Fields" on page 537</li> <li>➤ "Test Resources Module Fields" on page 669</li> <li>➤ "Test Lab Module Fields" on page 744</li> <li>➤ "Defects Module Fields" on page 891</li> <li>➤ <b>Business Process Testing:</b> <ul style="list-style-type: none"> <li>➤ Business Component Module Details Fields under "Understanding the Details Tab" in the <i>HP Business Process Testing User Guide</i>.</li> <li>➤ Business Component Module Parameter Fields under "Understanding the Parameters Tab".</li> </ul> </li> </ul> |

### Cross Filter Tab

This tab enables you to define a second filter on an associated item such as requirements, tests, test sets, or defects.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | The user interface elements available in the Cross Filter tab may change depending on the ALM module. |
| <b>Relevant tasks</b>        | "How to Display ALM Data" on page 59  |
| <b>See also</b>              | "ALM Common Functionality Overview" on page 58  |

User interface elements are described below:

| UI Elements (A-Z)     | Description   |
|-----------------------|---|
| <p><b>Alerts</b></p>  | <p>An alert can be one of the following:</p> <ul style="list-style-type: none"> <li>▶ <b>Show defects with alerts.</b> Filters the defects by alerts that have been triggered. This option is only available in the Defects module.</li> <li>▶ <b>Show models with alerts.</b> Filters the business process model entities by alerts that have been triggered. This option is only available in the Business Models module.</li> <li>▶ <b>Show requirements with alerts.</b> Filters the requirements by alerts that have been triggered. This option is only available in the Requirements module.</li> <li>▶ <b>Show test instances with alerts.</b> Filters the test instances by alerts that have been triggered. This option is only available in the Execution Grid of the Test Lab module.</li> <li>▶ <b>Show tests with alerts.</b> Filters the tests by alerts that have been triggered. This option is only available in the Test Plan module.</li> </ul> |
| <p><b>Defects</b></p> | <p>Performs one of the following:</p> <ul style="list-style-type: none"> <li>▶ Filters the requirements by defects that have been directly or indirectly-linked to the requirements. Available in the Requirements module.</li> <li>▶ Filters the business process model entities by linked defects. Available in the Business Models module.</li> <li>▶ Filters the tests by defects that have been directly or indirectly-linked to the tests. Available in the Test Plan module.</li> <li>▶ Filters the test sets by defects that have been directly or indirectly-linked to the tests. Available in the Test Set Tree of the Test Lab module.</li> </ul> <p>Select &lt;no filter defined&gt; to define a filter. The Filter dialog box opens. For more details, see "Filter Tab" on page 66.</p>  |

| UI Elements (A-Z)               | Description  |
|---------------------------------|--|
| <b>Model Activities</b>         | <p>Filters models by activities that they include.</p> <p>Select <b>&lt;no filter defined&gt;</b> to define a filter. The Filter dialog box opens. For more details, see "Filter Tab" on page 66.</p>  |
| <b>Model Paths</b>              | <p>Filters models by paths that they include.</p> <p>Select <b>&lt;no filter defined&gt;</b> to define a filter. The Filter dialog box opens. For more details, see "Filter Tab" on page 66.</p>   |
| <b>Requirements</b>             | <p>Performs one of the following:</p> <ul style="list-style-type: none"> <li>▶ Filters the business process model entities by linked requirements. Available in the Business Models module.</li> <li>▶ Filters the tests by covered requirements. Available in the Test Plan module.</li> <li>▶ Filters the test instances by tests that cover selected requirements. Available in the Execution Grid of the Test Lab module.</li> <li>▶ Filters the defects by linked requirements. Available in the Defects module.</li> </ul> <p>Select <b>&lt;no filter defined&gt;</b> to define a filter. The Filter dialog box opens. For more details, see "Filter Tab" on page 66.</p> <p>Select <b>Tests with no requirement coverage</b> to filter tests that do not cover any requirements. For example, this can help you identify redundant tests or tests with missing requirement coverage links. This option is only available in the Test Plan module.</p> |
| <b>Requirements: Trace from</b> | <p>Filters the requirements by traced from requirements. Available in the Requirements module.</p> <p>Select <b>&lt;no filter defined&gt;</b> to define a filter. The Filter dialog box opens. For more details, see "Filter Tab" on page 66.</p>  |

| UI Elements (A-Z)             | Description  |
|-------------------------------|--|
| <b>Requirements: Trace to</b> | <p>Filters the requirements by traced to requirements. Available in the Requirements module.</p> <p>Select &lt;<b>no filter defined</b>&gt; to define a filter. The Filter dialog box opens. For more details, see "Filter Tab" on page 66.</p>  |
| <b>Runs</b>                   | <p>Performs one of the following:</p> <ul style="list-style-type: none"> <li>▶ Filters the tests by test runs. Available in the Test Plan module.</li> <li>▶ Filters the test instances by test runs. Available in the Execution Grid of the Test Lab module.</li> </ul> <p>Select &lt;<b>no filter defined</b>&gt; to define a filter. The Filter dialog box opens. For more details, see "Filter Tab" on page 66.</p>  |
| <b>Test Configurations</b>    | <p>Performs one of the following:</p> <ul style="list-style-type: none"> <li>▶ Filters the requirements by test configurations. Available in the Requirements module.</li> <li>▶ Filters the tests by test configurations. Available in the Test Plan module.</li> <li>▶ Filters the test sets by test configurations. Available in the Test Lab module.</li> </ul> <p>Select &lt;<b>no filter defined</b>&gt; to define a filter. The Filter dialog box opens. For more details, see "Filter Tab" on page 66.</p> |
| <b>Test Criteria</b>          | <p>Filters the requirements by test criteria. Available in the Requirements module.</p> <p>Select &lt;<b>no filter defined</b>&gt; to define a filter. The Filter dialog box opens. For more details, see "Filter Tab" on page 66.</p> <p><b>Business Process Testing:</b> Functionality related to test criteria is available only for business process tests. For details, see the <i>HP Business Process Testing User Guide</i>.</p>  |





| UI Elements (A-Z) | Description   |
|-------------------|---|
| <b>Test Sets</b>  | <p>Performs one of the following:</p> <ul style="list-style-type: none"> <li>▶ Filters the tests by test sets that contain the tests. Available in the Test Plan module.</li> <li>▶ Filters the test instances by test sets that contain the test instances. Available in the Execution Grid of the Test Lab module.</li> </ul> <p>Select <b>&lt;no filter defined&gt;</b> to define a filter. The Filter dialog box opens. For more details, see "Filter Tab" on page 66.</p> <p>Select <b>Tests not in any test set</b> to filter tests that are not part of any test set. For example, this can help you identify tests that have not been run. This option is only available in the Test Plan module.</p> |
| <b>Tests</b>      | <p>Performs one of the following:</p> <ul style="list-style-type: none"> <li>▶ Filters the requirements by covered tests. Available in the Requirements module.</li> <li>▶ Filters the business process model entities by linked tests. Available in the Business Models module.</li> <li>▶ Filters the test sets by contained tests. Available in the Test Set Tree of the Test Lab module.</li> <li>▶ Filters the defects by linked tests. Available in the Defects module.</li> </ul> <p>Select <b>&lt;no filter defined&gt;</b> to define a filter. The Filter dialog box opens. For more details, see "Filter Tab" on page 66.</p>   |

## View Order Tab

This tab enables you to sort records according to the ASCII sort order.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | The View Order tab considers records beginning with a space or character before considering those beginning with numbers. It then considers uppercase letters and, finally, lowercase letters. |
| <b>Relevant tasks</b>        | "How to Display ALM Data" on page 59   |
| <b>See also</b>              | "ALM Common Functionality Overview" on page 58   |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|    | Sets the sort priority in the Sorted Fields pane.<br><b>Tip:</b> You can also drag the field names up or down.  |
|    | Moves selected fields between <b>Available Fields</b> and <b>Sorted Fields</b> .<br><b>Tip:</b> You can also drag the field names between panes or double-click a field name to move it across to the other pane. |
|   | Moves all fields between <b>Available Fields</b> and <b>Sorted Fields</b> .   |
|  | Sorts a selected field in the <b>Sorted Fields</b> pane in an ascending or descending order.  |
| <b>Available Fields</b>   | Displays the names of all the fields you can display.   |
| <b>Sorted Fields</b>  | Displays the names of the fields currently assigned a sorting priority.   |



## Group Tab

This tab enables you to separate grid data into groups according to specified criteria. You can determine the information by which ALM groups records, and set the hierarchical order in which they are displayed (up to three levels). This enables you to navigate through large sets of data more easily.

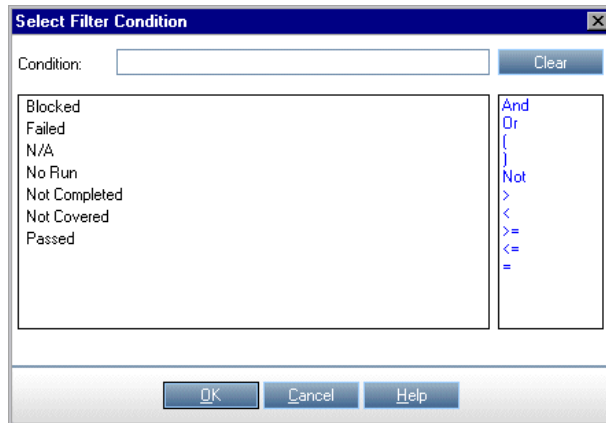
|                                     |   |
|-------------------------------------|---|
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ The Group tab is only available in grid views.</li> <li>▶ You cannot select a group header and perform ALM actions on an entire group. To perform actions on multiple records, use CTRL or SHIFT to select records.</li> <li>▶ If you group records by a field containing multiple values, the information in each value is grouped as its entire value. This value is the category for grouping. For example, a value with English and French will be grouped once as English;French, and not as part of separate English and French categories. For more information on allowing multiple values, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ The group by list displays only system and user-defined fields associated with a User List or Lookup List type field. For more information on field types, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> </ul> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Display ALM Data" on page 59</p>   |
| <p><b>See also</b></p>              | <p>"ALM Common Functionality Overview" on page 58</p>   |

User interface elements are described below:

| UI Elements (A-Z)     | Description   |
|-----------------------|---|
| <b>Group items by</b> | Groups records according to the select field.<br><b>Note:</b> If you change a parent group level to <b>(none)</b> , its child group levels automatically change to <b>(none)</b> .  |
| <b>Then by</b>        | Groups records by additional fields.<br><b>Note:</b> If you group records by more than one field, select fields in the hierarchical order that you want them to be displayed. You cannot select a field that has already been selected. |

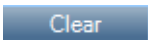
### **Select Filter Condition Dialog Box**

This dialog box enables you to set a filter condition for a field.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | Use one of the following: <ul style="list-style-type: none"> <li>➤ Open the Filter dialog box. In the Filter tab, click a <b>Filter Condition</b> box. Click the drop-down arrow.</li> <li>➤ In a grid view, click a grid filter box under a column name. Click the browse button.</li> </ul>  |
| <b>Important information</b> | In the Requirements module, if you select the <b>Req Parent</b> field, the Select Filter Condition dialog box displays the requirements tree, sorted by requirement name. If you select a requirement from the requirements tree, its full path is displayed in the <b>Condition</b> box. Only requirements which are descendents of this requirement are displayed when you apply the filter. |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Filter Dialog Box" on page 64</li> <li>➤ "Users List Dialog Box" on page 76</li> </ul>   |

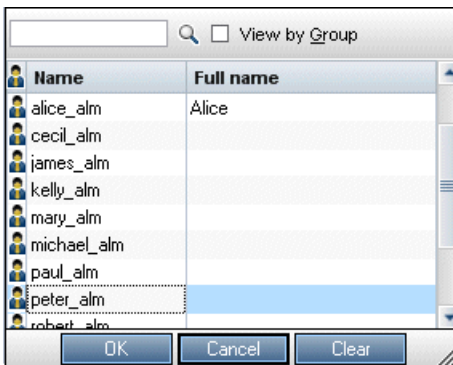
User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description  |
|---|--|
|  | Clears the filter condition.   |
| <field value pane>  | <p>Displays the values that are available for defining a filter condition for the current field. Select a value to add to the <b>Condition</b> box.</p> <p>If you select a field with a user name value, the &lt;condition pane&gt; displays a user list that enables you to sort users, search for users, group users by user groups, and select users from the list or from a group tree. For details, see "Users List Dialog Box" on page 76.</p> <p><b>Note:</b> Some items that appear in hierarchical lists contain sublists. These items are preceded by a folder icon. To choose an item from a sublist, double-click the folder and click the item.</p> |

| UI Elements (A-Z)         | Description  |
|---------------------------|--|
| <logical expression pane> | Displays the operators that are available for defining logical expressions.  |
| <b>Condition</b>          | <p>Indicates the field condition.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ If you enter an item with more than one word, it must be enclosed in quotes. For example, to search for the test Login Boundary, in the <b>Condition box</b>, type the following: "login boundary"</li> <li>▶ If you want to enter only part of the item, use an asterisk (*). For example, to search for all tests with the word Login, in the Condition box, type the following: *login*. To search for all tests that begin with the words Insert New in the Condition box, type the following: "insert new*"</li> <li>▶ To specify an empty field, type the following: ""</li> <li>▶ To specify a non-empty field, type the following: not ""</li> </ul> |


## Users List Dialog Box

This dialog box enables you to choose a user name from a user list. You can sort the users list, search for users, group users by user groups, and select users from the list or from a group tree.



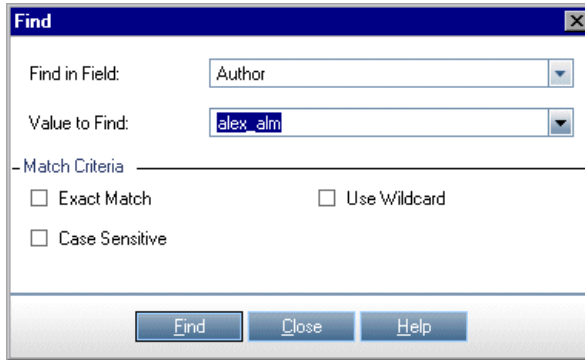
|                              |  |
|------------------------------|--|
| <b>To access</b>             | In an ALM grid or tree, select a column with a user name value, and click the drop-down arrow. The Users List dialog box opens.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ To sort the Users List in ascending or descending order by user name or full name, click the <b>Name</b> or <b>Full Name</b> column heading. Click the column heading again to reverse the sort order.</li> <li>▶ When defining a condition for a user, you can specify the current user (select [CurrentUser]), or an entire user group (for example, [Developer]).</li> </ul> |
| <b>See also</b>              | "Select Filter Condition Dialog Box" on page 74  |


User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Find.</b> Searches users by user name or full name. Type the name of a user (or part of the name) in the <b>Find</b> box and click the <b>Find</b> button. ALM highlights the first record that contains the search string. Press F3 to find subsequent occurrences of the search string.</p> <p><b>Tip:</b> You can also search incrementally by typing the first character of the user name under the <b>Name</b> column. You can type additional characters to narrow down the search. ALM begins searching as soon as you type the first character of the search string, and highlights the record with the first occurrence of all the characters in the search string.</p> |
| <b>Full Name</b>  | The full name of the user.   |
| <b>Name</b>   | The ALM login name.  |
| <b>View by Group</b>  | Displays users by user group.  |


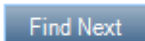
## Find Dialog Box

This dialog box enables you to search for a particular record in a tree or grid. You can search records based on the value of a particular field. You can also search a folder for a particular subfolder or record.



|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>➤ Select <b>Edit &gt; Find</b></li> <li>➤ In the Execution Grid, select <b>Tests &gt; Find</b></li> <li>➤ In the test sets tree, select <b>Edit &gt; Find Folder/Test Set</b></li> </ul> <p><b>Available from the following modules:</b> Requirements, Business Components, Test Plan, Test Resources, Test Lab, and Defects.</p>   |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>➤ If a filter is applied to a tree or grid, the search is restricted to the records currently displayed.</li> <li>➤ <b>Tip:</b> If available, <b>Text Search</b>  is a more powerful tool that enables you to search for keywords and variations of keywords. For more details, see "Text Search Pane" on page 82.</li> </ul> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Search and Replace ALM Data" on page 62</p>  |
| <p><b>See also</b></p>              | <p>"Replace Dialog Box" on page 80</p>  |

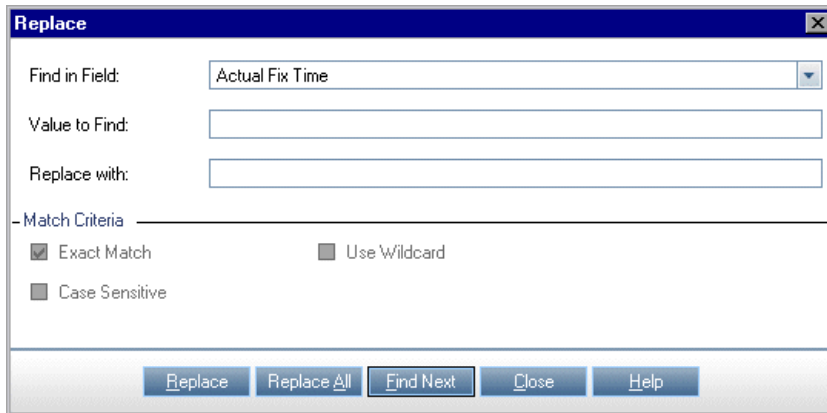
User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p>Searches for the specified value in a tree view. If the search is successful, the Search Results dialog box opens and displays a list of possible matches. Select a result from the list and click <b>Go To</b> to highlight the record in the tree. If the search is unsuccessful, an information box opens.</p> |
|  | <p>Searches for the next record in the grid that matches the specified value. If the search is successful, the matching record is highlighted in the grid. If the search is unsuccessful, an information box opens.</p>  |
| <p><b>Case Sensitive</b></p>  | <p>Instructs ALM to distinguish between uppercase and lowercase characters.</p>  |
| <p><b>Exact Match</b></p>   | <p>Finds records with values that exactly match the specified search string.</p>   |
| <p><b>Find in Field</b></p>   | <p>Indicates the field for ALM to search in.<br/><b>Available from:</b> Requirements module, all module grid views.</p>  |
| <p><b>Find in Folder</b></p>  | <p>Displays the name of the folder selected in the tree.<br/><b>Available from:</b> Component Tree, Test Plan Tree, Test Resource Tree, and Test Sets Tree.</p>  |
| <p><b>Name to Find</b></p>  | <p>The value in the <b>Name</b> field for which ALM searches. The search is not case sensitive. Results include records where the search string matches the value, or part of the value, of the <b>Name</b> field.</p>   |
| <p><b>Search for</b></p>  | <p>Instructs ALM to search for folders only, individual records only, or both folders and individual records.<br/><b>Available from:</b> Component Tree, Test Plan Tree, Test Resource Tree, and Test Sets Tree.</p>   |

| UI Elements (A-Z)    | Description  |
|----------------------|--|
| <b>Use Wildcard</b>  | Enables you to use asterisk (*) characters in your search string in order to type only part of the item. |
| <b>Value to Find</b> | The field value for which ALM searches. The search is not case sensitive.                                |

## Replace Dialog Box




This dialog box enables you to find and replace field values in a tree or grid. You can replace a field value for a selected record, or for all records in the tree or grid.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | Use one of the following: <ul style="list-style-type: none"> <li>▶ In a grid view, select <b>Edit &gt; Replace</b></li> <li>▶ In the Execution Grid, select <b>Tests &gt; Replace</b></li> </ul> |
| <b>Important information</b> | If a filter is applied to a tree or grid, the search and replace is restricted to the records currently displayed.   |
| <b>Relevant tasks</b>        | "How to Search and Replace ALM Data" on page 62  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "Find Dialog Box" on page 78</li> <li>▶ "Update Selected Dialog Box" on page 96</li> </ul>  |

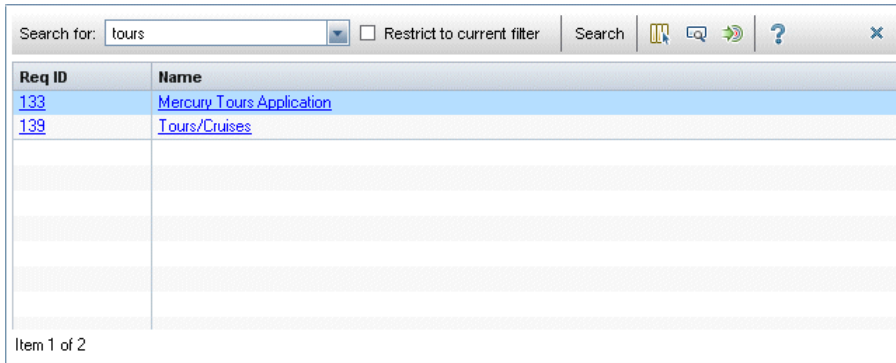


User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | Replaces the specified field value for the selected record.  |
|  | Searches for and replaces the specified field value in all records displayed in the grid.  |
|  | Searches for the next record in the grid that matches the specified value. If the search is successful, the matching record is highlighted in the grid. If the search is unsuccessful, an information box opens. |
| <b>Case Sensitive</b>   | Instructs ALM to distinguish between uppercase and lowercase characters.   |
| <b>Exact Match</b>  | Finds records with values that exactly match the specified search string.  |
| <b>Find in Field</b>  | Indicates the field for ALM to search.   |
| <b>Replace with</b>   | Indicates the replacement field value.   |
| <b>Use Wildcard</b>   | Enables you to use asterisk (*) characters in your search string in order to type only part of the item.   |
| <b>Value to Find</b>  | The field value for which ALM searches.  |




## Text Search Pane

This pane enables you to search for records in predefined fields.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | <p>Select <b>Edit &gt; Text Search</b>. The Text Search pane opens in the lower part window.</p> <p><b>Available from the following modules:</b> Requirements, Business Components, Test Plan, and Defects.</p>   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ Text search is only available if it has been enabled for the project. Contact your ALM site administrator if the search option is unavailable.</li> <li>▶ Searchable text fields are predefined in Project Customization. For more details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ <b>Version Control:</b> ALM searches only checked in versions.</li> <li>▶ <b>Quality Center Starter Edition:</b> Text search is not available.</li> </ul> |
| <b>Relevant tasks</b>        | <p>"How to Search and Replace ALM Data" on page 62</p>  |
| <b>See also</b>              | <p>"Find Dialog Box" on page 78</p>   |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine column appearance and order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.  |
|  | <b>Searchable Fields.</b> Displays the list of predefined search fields set in Project Customization.   |
|  | <b>Go to Entity.</b> Select a record and click the button to display record details.<br><b>Tip:</b> Alternatively, select a record and click the <record ID> or <record Name> link.   |
| <module fields>   | <b>Requirements.</b> For details on the fields available in the Requirements module, see "Requirements Module Fields" on page 368.<br><b>Test Plan.</b> For details on the fields available in the Test Plan module, see "Test Plan Module Fields" on page 537.<br><b>Defects.</b> For details on the fields available in the Defects module, see "Defects Module Fields" on page 891.<br><b>Business Process Testing:</b> For details on the fields available in the Business Components module, see Business Component Module Details Fields under "Understanding the Details Tab" in the <i>HP Business Process Testing User Guide</i> . |
| <b>In</b>   | Enables searching for text in <b>Tests</b> or <b>Design Steps</b> .<br><b>Available from:</b> Test Plan module.   |
| <b>Item</b>   | Number of the item selected in the search results and the total number of items found.  |
| <b>Restrict to current filter</b>   | Indicates whether to search all records in the module or restrict the search to the filtered records.   |

| UI Elements (A-Z) | Description  |
|-------------------|--|
| <b>Search</b>     | Performs the text search on the predefined fields and displays the search results in order of relevance.   |
| <b>Search for</b> | <p>Indicates the keywords you want to find.</p> <p><b>Syntax exceptions:</b></p> <ul style="list-style-type: none"> <li>▶ Text search ignores the following: articles (a, an, the); coordinate conjunctions (and, but, for, nor, or); boolean operators (and, or, not, if, or, then).</li> <li>▶ The search is not case sensitive.</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ When you enter a keyword, ALM searches the predefined fields for the keyword or variations of the keyword. For example, if you type <code>log</code>, the search will find fields containing <code>log</code>, <code>logs</code>, <code>logging</code>, and <code>logged</code>. The search will not find <code>login</code> or <code>logical</code> because these are not variations of the word.</li> <li>▶ If you enter more than one keyword, the results will include all records that contain at least one of the keywords.</li> </ul> |

## History Tab

This tab enables you to view a list of changes made to the currently selected entity. In addition, this tab displays a history of baselines in which the entity appears.

Versions and Baselines
Audit Log

View by: Versions

| Version | Date                 | Modified by | Baselines    |
|---------|----------------------|-------------|--------------|
| 2       | 7/14/2010 7:49:24 PM | alex_alm    |              |
| 1       | 7/14/2010 7:44:40 PM | alex_alm    | Release 10.5 |
|         |                      |             |              |
|         |                      |             |              |
|         |                      |             |              |
|         |                      |             |              |
|         |                      |             |              |

View
Compare
Check Out

Comment for selected version:

|                              |  |
|------------------------------|--|
| <b>To access</b>             | Click the <b>History</b> tab or button.  |
| <b>Important information</b> | For details on preserving the history of changes made to a field, see the <i>HP Application Lifecycle Management Administrator Guide</i> . |
| <b>Relevant tasks</b>        | "How to Display ALM Data" on page 59   |

### Baselines Tab

This tab displays previous versions of entities stored in a particular baseline. For more details, see "Baselines Tab" on page 300.


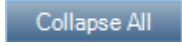
### Versions and Baselines Tab

**Version Control:** This tab is displayed when version control is enabled for a project. For details, see "Versions and Baselines Tab - Versions View" on page 140 and "Baselines Tab" on page 300.

### Audit Log Tab

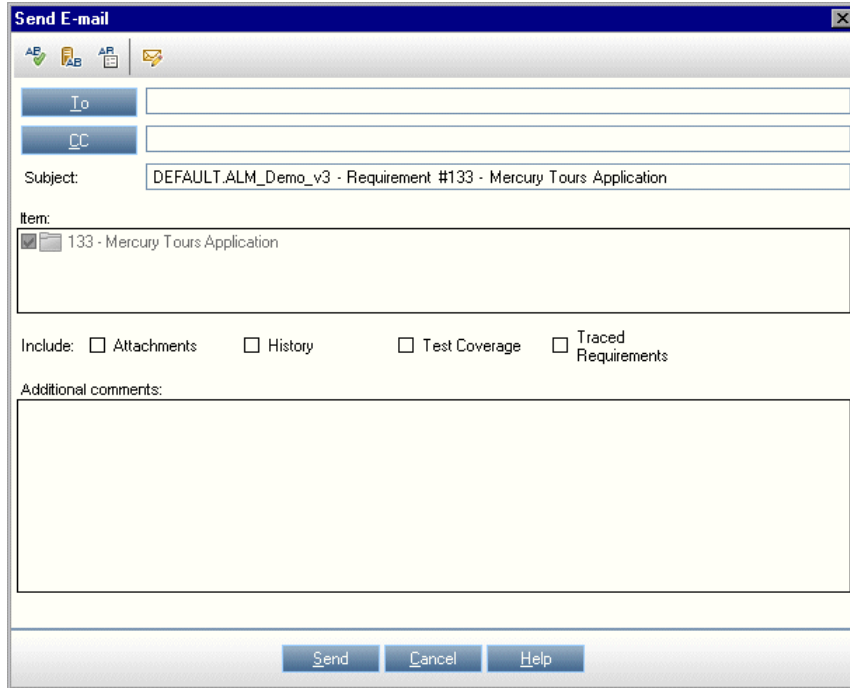
This tab displays the date and time of the change and the name of the user who made the change to the entity.

User interface elements are described below:

| UI Elements (A-Z)  | Description  |
|--|--|
| <br> | Expands or collapses all changes displayed in the grid.  |
| <b>Field</b>   | Specifies which field changes are displayed in the grid. To view changes made to all fields, select <All>. |
| <b>Field Name</b>  | The field modified during the change.  |
| <b>New Value</b>   | The current field value.   |
| <b>Old Value</b>   | The prior field value.   |

## Send E-mail Dialog Box


This dialog box enables you to send an email about an entity to other users. A link is included in the email message that enables the recipient to go directly to the entity.





The dialog box is titled "Send E-mail" and features a standard Windows-style title bar with a close button. Below the title bar is a toolbar with icons for "AE" (with a checkmark), "AP" (with a document icon), "AR" (with a document icon), and an envelope icon. The main area contains several input fields and options:

- To:** A text input field.
- CC:** A text input field.
- Subject:** A text input field containing the text "DEFAULT.ALM\_Demo\_v3 - Requirement #133 - Mercury Tours Application".
- Item:** A list box containing one item: "133 - Mercury Tours Application", which is selected with a checkmark.
- Include:** A group of four checkboxes: "Attachments", "History", "Test Coverage", and "Traced Requirements", all of which are currently unchecked.
- Additional comments:** A large, empty text area for providing extra information.



At the bottom of the dialog box, there are three buttons: "Send", "Cancel", and "Help".

|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p>Select one or more entities. Click the <b>Send by E-mail</b> arrow  and choose one of the following options:</p> <ul style="list-style-type: none"> <li>➤ <b>Send by E-mail.</b> Sends email to recipients selected from a list.</li> <li>➤ <b>Send by E-mail to &lt;specific recipient &gt;.</b> Sends email to a specific recipient. For example, in the Requirements module, choose <b>Send by E-mail to Author</b> to send the email to the user who wrote the requirement.</li> </ul>  |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>➤ By default, ALM sends emails in HTML format. To send emails as plain text instead, edit the <b>MAIL_FORMAT</b> parameter in the <b>Site Configuration</b> tab in Site Administration. For more details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>➤ By default, the link to the entity that is included in the email message contains the path using the default mail server host name and port number. To modify the link's path to a different mail server, edit the <b>ENTITY_LINK_HOST</b> and <b>ENTITY_LINK_PORT</b> parameters in the <b>Site Configuration</b> tab in Site Administration. For more details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>➤ <b>Tip:</b> You can automatically send the email to a specific user type. This can be any column with a user name value, including user-defined fields. Click the <b>Send by Email</b> arrow and choose an option.</li> </ul> |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Check Spelling.</b> Checks the spelling for the selected word or text box.</p>  |
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p> |

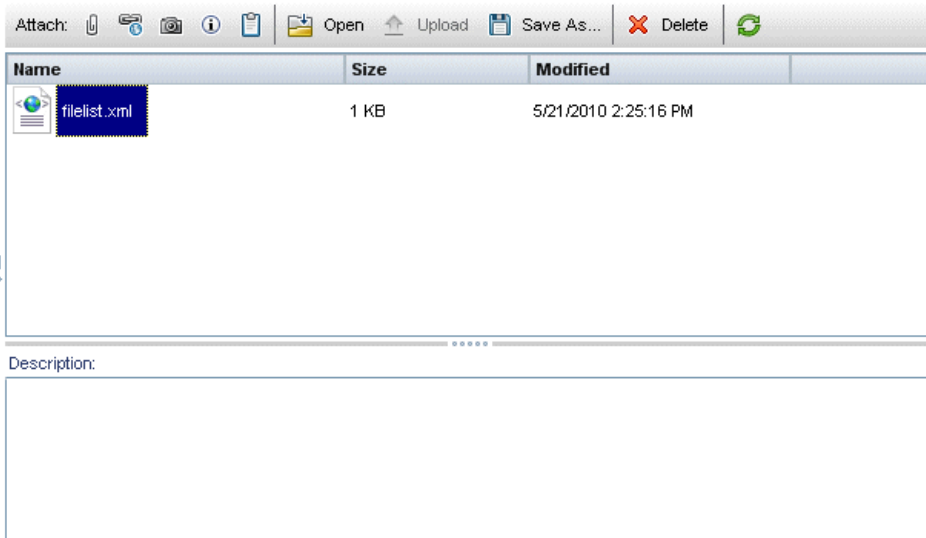












| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.   |
|  | <b>Custom.</b> Opens the Select Fields dialog box, enabling you to determine which fields to display in the email. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.  |
| <b>Additional Comments</b>  | Enables you to add comments about the email.<br>Click in the text box to display a toolbar for formatting and spell checking the text.  |
| <b>Include</b>  | Enables you to include the following: <ul style="list-style-type: none"> <li>▶ <b>Activities</b> (only available from the Business Models module)</li> <li>▶ <b>Attachments</b></li> <li>▶ <b>Design Steps</b> (only available from the Test Plan module)</li> <li>▶ <b>History</b></li> <li>▶ <b>Linkage</b> (only available from the Business Models module)</li> <li>▶ <b>Paths</b> (only available from the Business Models module)</li> <li>▶ <b>Snapshot</b> (only available from the Business Components module)</li> <li>▶ <b>Test Coverage</b> (only available from the Requirements module)</li> <li>▶ <b>Traced Requirements</b> (only available from the Requirements module)</li> </ul> <p><b>Note:</b> The <b>Include</b> option is not available from the Test Resources module.</p> |
| <b>Item</b>   | The entity name.  |
| <b>Send</b>   | Sends the email to the specified distribution list.   |


| UI Elements (A-Z) | Description  |
|-------------------|--|
| <b>Subject</b>    | The subject for the email.<br><b>Default value:</b> The domain, project, entity ID (if applicable), and entity name are displayed.   |
| <b>To/CC</b>      | Indicates a valid email address or user name.<br>Alternatively, click the <b>To</b> button or <b>CC</b> button to select users. The Select Recipients dialog box opens. Select the users or user groups to which you want to send the email. |

## Attachments Page



This page enables you to add and manage attachments to ALM records. You can attach a file, URL, snapshot of your application, items from the Clipboard, or system information.








Attach:       Open  Upload  Save As...  Delete 






| Name   | Size | Modified             |
|--|------|----------------------|
|  filelist.xml | 1 KB | 5/21/2010 2:25:16 PM |

Description:

|                              |  |
|------------------------------|--|
| <b>To access</b>             | Use one of the following: <ul style="list-style-type: none"> <li>➤ Click the <b>Attachments</b> button  in a toolbar</li> <li>➤ Click the <b>Attachments</b> button in a dialog box sidebar</li> <li>➤ Click the <b>Attachments</b> tab</li> </ul> |
| <b>Important information</b> | When you add an attachment, ALM adds the attachment icon  to the record.  |
| <b>Relevant tasks</b>        | "How to Modify Attachments" on page 61   |

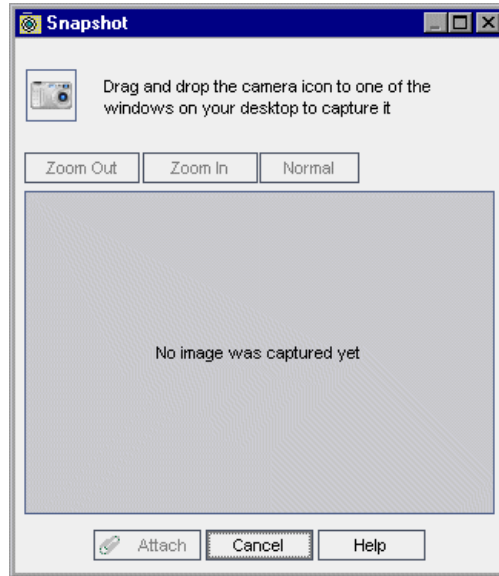
User interface elements are described below:



| UI Elements (A-Z)   | Description   |
|---|---|
|    | <b>File.</b> Opens the Open dialog box, enabling you to add a file attachment to an ALM record.   |
|    | <b>URL.</b> Opens the Attach Uniform Resource Locator (URL) dialog box, enabling you to add a URL attachment to an ALM record. This can be any valid URL scheme such as HTTP, FTP, Gopher, News, Mailto, or File.   |
|    | <b>Snapshot.</b> Opens the Snapshot dialog box, enabling you to add an image of your application to an ALM record. For more details, see "Snapshot Dialog Box" on page 93. Snapshot attachments are assigned a <b>.jpg</b> extension.                         |
|  | <b>System Info.</b> Opens the System Information dialog box, enabling you to attach system information about your machine to an ALM record.<br>System information attachments are assigned a <b>.tsi</b> extension.   |
|  | <b>Clipboard.</b> Attaches the Clipboard content to an ALM record.<br>Copy a text string or an image to the Clipboard and click the <b>Clipboard</b> button. A text string is assigned a <b>.txt</b> extension. An image is assigned a <b>.jpg</b> extension. |

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Download and Open.</b> Opens the selected attachment by downloading it to a local directory on your client machine and opening it in the associated application. You can view or modify an open attachment.</p> |
|  | <p><b>Upload Selected.</b> Uploads the modified attachment to your ALM project. For more details, see "How to Modify Attachments" on page 61.</p>   |
|  | <p><b>Save Attachment.</b> Saves the copy of a selected attachment to your client machine.</p> <p><b>Note:</b> Not available when adding attachments to a new entity.</p>   |
|  | <p><b>Delete Selected.</b> Deletes the selected attachment. To select more than one attachment, use the CTRL key.</p>   |
|  | <p><b>Refresh All.</b> Refreshes the list of attachments on the page.</p>   |
| <p><b>Description</b></p>   | <p>Describes the attachment.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>  |
| <p><b>Modified</b></p>  | <p>The date that the attachment was last modified.</p>  |
| <p><b>Name</b></p>  | <p>The attachment name. An icon for the application associated with the attachment appears next to the name. To rename the attachment, right-click and select <b>Rename</b>.</p>                                      |
| <p><b>Size</b></p>  | <p>The size of the attachment.</p>  |


## Snapshot Dialog Box

This dialog box enables you to capture and attach images of your application to an ALM record.



|                  |   |
|------------------|---|
| <b>To access</b> | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ In the Attachments page, click the <b>Snapshot</b> button .</li> <li>▶ In the Business Components module, click the Snapshot tab and then click the <b>Snapshot</b> button .</li> </ul> |
|------------------|---|

User interface elements are described below (unlabeled elements are shown in angle brackets):

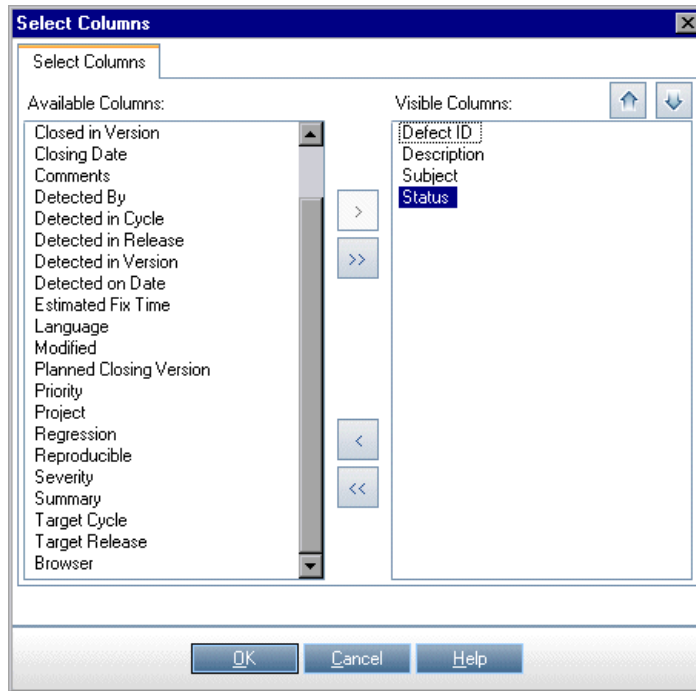
| <b>UI Elements (A-Z)</b>  | <b>Description</b>  |
|---|---|
|  | Drag the camera icon onto an object that you want to capture. |
| <Image area>  | Displays the captured image.                                  |

| UI Elements (A-Z) | Description   |
|-------------------|---|
| <b>Attach</b>     | Adds the snapshot to the ALM record.                                |
| <b>Normal</b>     | Restores to the original magnification level of the captured image. |
| <b>Zoom In</b>    | Magnifies the captured image.                                       |
| <b>Zoom Out</b>   | Reduces the magnification level of the captured image.              |

## **Select Columns/Select Fields Dialog Box**




The Select Columns dialog box enables you to specify which columns are displayed in ALM and the order in which they appear.


The Select Fields dialog box enables you to specify which fields are displayed when sending emails about entities to other users.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <p><b>Select Columns dialog box:</b></p> <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ Select <b>View</b> &gt; <b>Select Columns</b>.</li> <li>▶ In the Execution Grid, select <b>Tests</b> &gt; <b>Select Columns</b>.</li> </ul> <p><b>Select Fields dialog box:</b></p> <p>In the Send E-mail dialog box, click the <b>Custom</b> button.</p> |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> Not all fields and functionality are available.   |
| <b>Relevant tasks</b>        | "How to Display ALM Data" on page 59   |

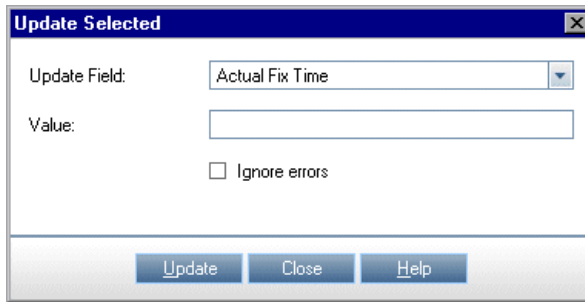
User interface elements are described below:

| <b>UI Elements (A-Z)</b>  | <b>Description</b>   |
|---|--|
|    | <p>Sets the order in which column names appear in <b>Visible Columns</b>.</p> <p><b>Tip:</b> You can also drag the column names up or down.</p>  |
|    | <p>Moves selected fields between <b>Available Columns</b> and <b>Visible Columns</b>.</p> <p><b>Tip:</b> You can also drag the field names between panes or double-click a field name to move it across to the other pane.</p> |
|  | <p>Moves all fields between <b>Available Columns</b> and <b>Visible Columns</b>.</p>   |
| <b>Available Columns</b>  | Lists columns that are not currently displayed.  |
| <b>Hide Risk-Based Quality Management Columns</b>                                   | <p>Hides the requirement fields related to risk-based quality management from the <b>Available Columns</b> list.</p> <p><b>Note:</b> Available only in the Requirements module.</p>  |
| <b>Requirement Type</b>   | <p>Displays the requirement fields related to a selected requirement type in the <b>Available Columns</b> list.</p> <p><b>Note:</b> Available only in the Requirements module.</p>   |

| UI Elements (A-Z)      | Description   |
|------------------------|---|
| <b>Type</b>            | Displays the test fields related to a selected test type in the <b>Available Columns</b> list.<br><b>Note:</b> Available only in the Test Plan and Test Lab modules.  |
| <b>Visible Columns</b> | Lists columns that are currently displayed.<br><b>Note:</b> Columns displayed with the  icon cannot be removed from the <b>Visible Columns</b> list. |

## Update Selected Dialog Box

This dialog box enables you to update a field value for multiple records in a grid or a tree.



|                       |  |
|-----------------------|--|
| <b>To access</b>      | Right-click selected multiple records and select <b>Update Selected</b> .<br><b>Available from the following modules:</b> Requirements, Test Plan (Test Grid only), and Defects. |
| <b>Relevant tasks</b> | "How to Search and Replace ALM Data" on page 62  |
| <b>See also</b>       | "Replace Dialog Box" on page 80  |



User interface elements are described below:

| UI Elements (A-Z)      | Description  |
|------------------------|--|
| <b>Update</b>          | Indicates the number of values that were updated, and the number of instances where the values were not updated. |
| <b>Update in Field</b> | Identifies the field to be updated.  |
| <b>Value</b>           | The replacement value for the selected field.  |



# 4

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## Alerts and Flags

This chapter includes:

### Concepts

- ▶ Alerts Overview on page 100
- ▶ Follow Up Flags Overview on page 102

### Tasks

- ▶ How to Use Alerts on page 103

### Reference

- ▶ Alerts and Flags User Interface on page 109

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## Concepts

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### Alerts Overview

When a requirement, test, or defect changes, HP Application Lifecycle Management (ALM) can alert the associated entities and notify those responsible for any associated entities. Your ALM project administrator can activate alert rules based on associations you make between requirements, tests, and defects. The alert rules in ALM are based on the following associations you can create:

- ▶ You can associate a test in the test plan tree with a requirement. This is accomplished by creating **requirements coverage** in the Test Plan module, or by creating **tests coverage** in the Requirements module. For more information, see "Requirement and Test Coverage Overview" on page 552.
- ▶ You can associate a test instance with a defect. This is performed by creating **Linked Defects** in the Test Plan module, or by adding a defect during a manual test run. For more information, see "Defect Linkage" on page 867.
- ▶ You can create **traceability links** between requirements in the Requirements module. For more information, see "Requirements Traceability Overview" on page 388.

After you establish associations in your project, you can track changes using these associations. When an entity in your project changes, ALM alerts any associated entities that may be impacted by the change. The alerts can be seen by all users. ALM also notifies the person responsible for the entity at the time of the change of any associated entities that may be impacted by the change.

In the Alerts column in a tree or grid view, the Alerts flag indicates the following:

- ▶ A red alert flag  indicates that the alert is new.
- ▶ A gray alert flag  indicates that the alert has already been read.

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**Version Control:** ALM alerts associated entities only when a new version is checked in. The alert states that the version status has changed to **Checked In**. It does not indicate which fields have been modified. You can then compare the new version with the previous version. For more information on comparing versions, see "Versions and Baselines Tab - Versions View" on page 140.

**Note:** While the entity is checked out, changes made to non-versioned fields continue to generate regular alerts, indicating which field was changed. For more information on non-versioned fields, see "Non-versioned Fields" on page 129.

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Your ALM project administrator can activate four alert rules:


| Rule | Description  | Entities Flagged                           | User Notified by Email                    |
|------|--|--|---|
| 1    | When a requirement is modified, alert the associated tests.<br><b>Note:</b> A change to the requirement can be any modification, excluding changes to the <b>Direct Cover Status</b> field and the risk-based quality management fields. | Tests covering the requirement.            | Test designer.                            |
| 2    | When a defect status changes to "Fixed", alert the associated test instances.  | Test instances associated with the defect. | Responsible tester for the test instance. |

| Rule | Description   | Entities Flagged   | User Notified by Email     |
|------|---|--|----------------------------|
| 3    | When a test runs successfully (status changes to "Passed"), alert the linked defects.           | Defects linked to the test run.                                  | User assigned the defect.  |
| 4    | When a requirement is modified or deleted, alert traced to requirements and child requirements. | The requirement's child requirements and traced to requirements. | Author of the requirement. |

For details on activating alert rules in Project Customization, refer to the *HP Application Lifecycle Management Administrator Guide*.

For more details on working with Alerts, see "How to Use Alerts" on page 103.

## Follow Up Flags Overview

You can add a follow up flag  to a specific requirement, test, test instance, or defect to remind yourself to follow up on an issue. For example, you can set a follow up flag on a defect to remind yourself to check the status in a week.

When you add a follow up flag, ALM adds a gray flag icon to the record. When the follow up date arrives, ALM sends you email and changes the flag icon to red.

A follow up flag is specific to your user login name. Anyone else viewing the record does not see your follow up flag. You can open the follow up flag at any time to view or modify the details.

For details on the user interface, see "Flag For Follow Up Dialog Box" on page 111.

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## Tasks

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### How to Use Alerts

This task describes how to work with automatic notification alerts to keep track of changes made to your requirements, tests, and defects.

To learn more about alerts, see "Alerts Overview" on page 100.

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**Tip:** For a use-case scenario related to this task, see "How to Work with Alerts - Use-Case Scenario" on page 105.

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This task includes the following steps:


- "Prerequisites" on page 104
- "View alerts" on page 104
- "Clear alerts" on page 104

## 1 Prerequisites

Verify that alert rules are activated for your project. Alert rules, activated by the project administrator, instruct ALM to send email to notify those responsible when changes occur in your project. For details, refer to the *HP Application Lifecycle Management Administrator Guide*.


## 2 View alerts

View alerts for a single record, or for all records in a module.

- ▶ **View Alerts for a Record.** In a tree or grid view, click the **Alert** flag  in the Alerts column. If this column is not visible, select **View > Indicator Columns**. For user interface details on the Alerts dialog box, see "Alerts Dialog Box" on page 109.
- ▶ **View Alerts for a Module.** To view a list of all alerts for a selected module, in the **Filter** dialog box > **Cross Filter** tab, select the **Show <entity> with alerts** option. For user interface details on the Filter dialog box, see "Filter Dialog Box" on page 64.

## 3 Clear alerts

Clear alerts for a single record, or for all records in a module.

- ▶ **Clear Alerts for a Record.** For a selected record, you can clear an individual alert or all alerts in the Alerts dialog box.
  - ▶ To clear a single alert, click **Clear Alert**  for the alert.
  - ▶ To clear all alerts for the record, click the **Clear All** button.

For user interface details on the Alerts dialog box, see "Alerts Dialog Box" on page 109.

- ▶ **Clear Alerts for a Module.** You can clear all the alerts associated with all the records in an ALM module.
  - ▶ In the Requirement, Test Plan, or Defects module, select **Edit > Clear Alerts**.
  - ▶ In the Test Lab module, select **Tests > Clear Alerts**.



Only alerts associated with records that match the current filter are cleared. In addition, you can only clear alerts that are assigned to you, or that are not assigned to any user. The user to whom an alert is assigned is the user that receives email notification when the alert is triggered. This user is listed in the Alerts dialog box for the alert. For details on alert rules and the users that are sent email notification, see "Alerts Overview" on page 100.

### **How to Work with Alerts - Use-Case Scenario**

This use-case scenario provides an example of working with alerts in ALM.

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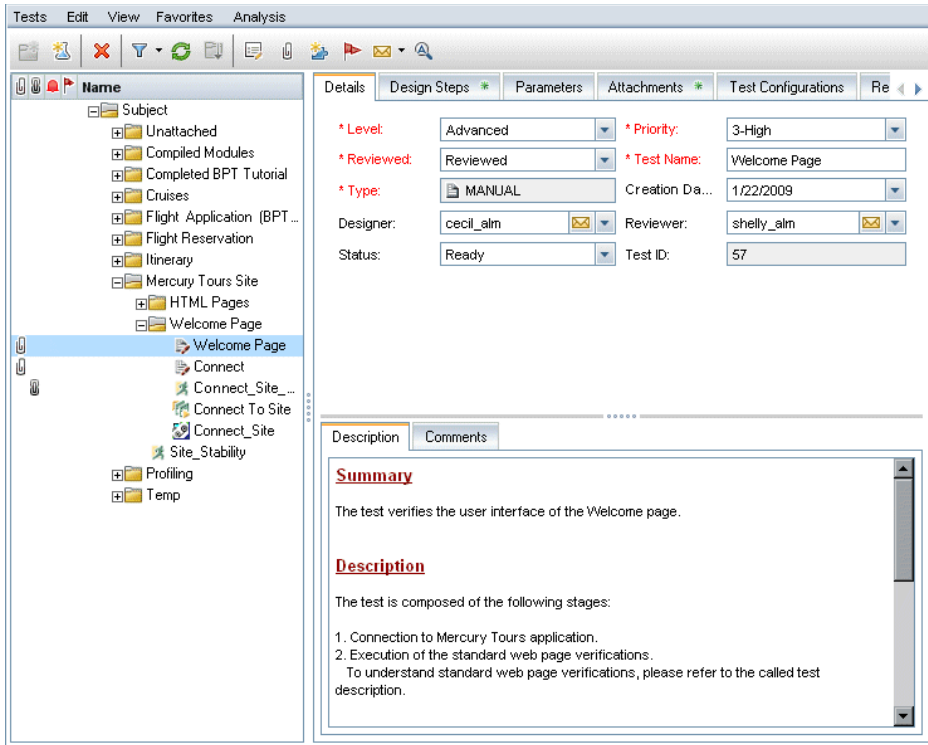
**Note:** For a task related to this scenario, see "How to Use Alerts" on page 103.

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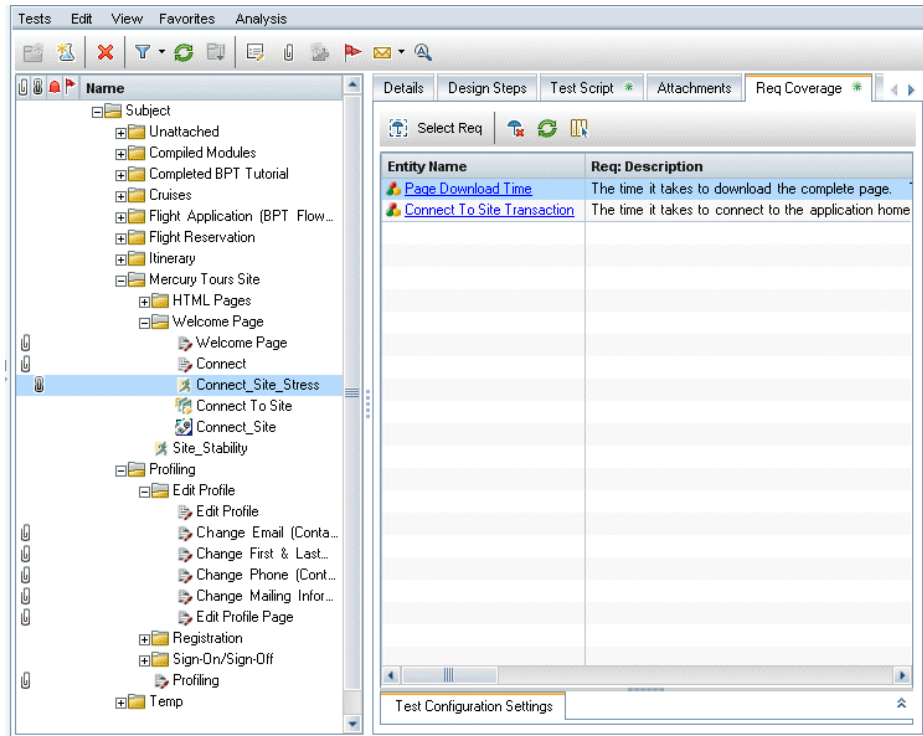
Suppose you are using the **ALM\_Demo** project based on the Mercury Tours application. In Project Customization, your project administrator activates the first rule: **When a requirement is modified, alert the associated tests.** The project administrator also specifies that notifications be sent by email.

In the Requirements module, your QA manager defines the requirement **Page Download Time** (under **Application Performance**).

In the Test Plan module, the QA manager then defines a new test **Connect\_Site\_Stress** for this requirement (under **Mercury Tours Site > Welcome Page**). In the **Details** tab, the project administrator assigns the new test to designer Cecil.

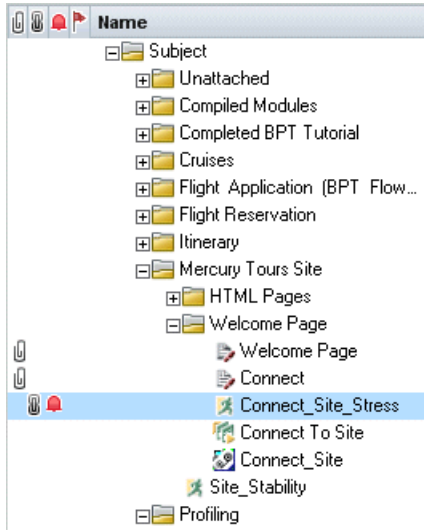


In the **Req Coverage** tab, the QA Manager links the **Connect\_Site\_Stress** test to the **Page Download Time** requirement.



A QA tester, Mike, reviews the requirement **Page Download Time** and decides that 10 seconds to download the page is too long. He changes the requirement description to 7 seconds. As a result, Cecil now needs to adjust his test **Connect\_Site\_Stress** so that it meets the changed requirements.

With the rule activated, Mike's change to the requirement causes ALM to flag the associated test. This alert can be seen by Cecil, the designer responsible for the test, and all other project users.



When clicking the Alerts flag, the Alerts dialog box opens and displays the details of the change. For user interface details, see "Alerts Dialog Box" on page 109.

In addition, Cecil (being the test's designer) receives an automatic ALM notification email message that describes the change Mike made to the **Page Download Time** requirement and recommends that Cecil check the associated test, **Connect\_Site\_Stress**. Cecil clicks a link to open ALM and display the specified requirement or test.

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## Reference

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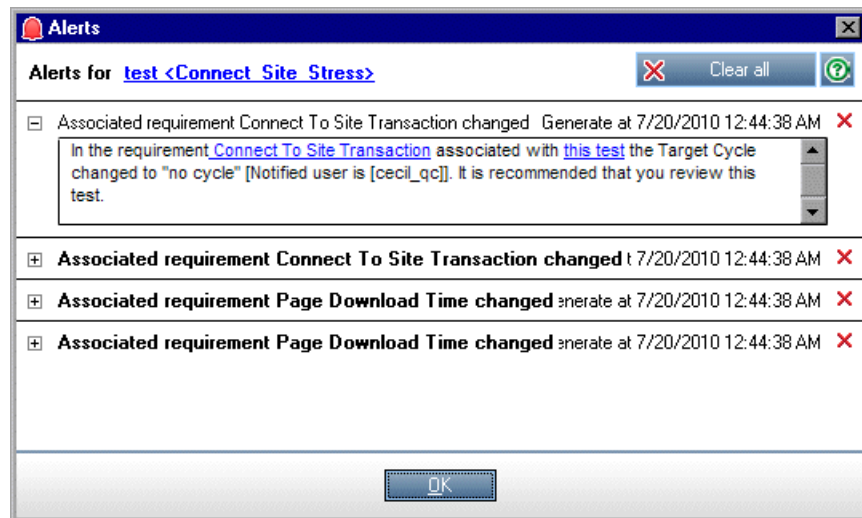
### Alerts and Flags User Interface


This section includes:

- ▶ Alerts Dialog Box on page 109
- ▶ Flag For Follow Up Dialog Box on page 111



### Alerts Dialog Box

This dialog box enables you to view a list of alerts for a selected record.



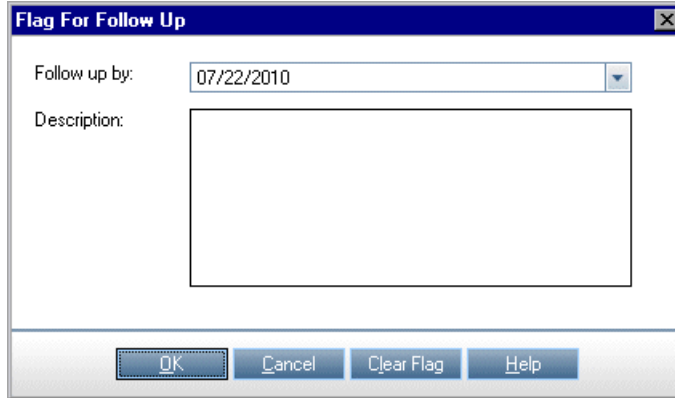
|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>➤ In a tree or grid view, click the <b>Alerts</b> flag  in the Alerts column. If this column is not visible, select <b>View &gt; Indicator Columns</b>.</li> <li>➤ Right-click the entity and select <b>Alerts</b>.</li> </ul> <p>Available for:</p> <ul style="list-style-type: none"> <li>➤ Requirements</li> <li>➤ Tests in the Test Plan module</li> <li>➤ Test instances in the Execution Grid</li> <li>➤ Defects</li> </ul> |
| <p><b>Important information</b></p> | <p>You can only clear alerts that are assigned to you, or that are not assigned to any user. The user to which an alert is assigned is the user that is sent email notification when the alert is triggered. For more details, see "Alerts Overview" on page 100.</p>  |
| <p><b>Relevant tasks</b></p>        | <p>"How to Use Alerts" on page 103</p>   |
| <p><b>See also</b></p>              | <p>"Alerts Overview" on page 100</p>   |


User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p>Deletes all alerts for the record.</p>   |
|  | <p><b>Clear Alert.</b> Deletes the specific alert.</p>  |
| <p>&lt;Alert details pane&gt;</p>   | <p>Displays a list of alerts for the selected record.</p> <p>Expand an alert to view details of the change that triggered the alert.</p> <p>Click a link to highlight the item in the tree or grid.</p> |
| <p>&lt;Selected record&gt;</p>  | <p>Displays the type and name of the selected record. For example, "Alerts for <b>Requirement</b> &lt;Travel Guides&gt;".</p>   |

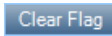
## Flag For Follow Up Dialog Box

This dialog box enables you to create, view, and modify follow up flags to remind yourself to follow up on an issue.



|                         |   |
|-------------------------|---|
| <p><b>To access</b></p> | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ Right-click a record and select <b>Flag for Follow Up</b>.</li> <li>▶ To view or modify an existing flag: In a tree or grid view, click the flag icon  in the Follow Up Flag column. If this column is not visible, select <b>View &gt; Indicator Columns</b>.</li> </ul> <p>Available for:</p> <ul style="list-style-type: none"> <li>▶ Requirements</li> <li>▶ Tests in the Test Plan module</li> <li>▶ Test instances in the Execution Grid</li> <li>▶ Defects</li> </ul> |
| <p><b>See also</b></p>  | <p>"Follow Up Flags Overview" on page 102</p>   |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | Removes the follow up flag.                             |
| <b>Description</b>  | The reminder text in the follow up email ALM sends you. |
| <b>Follow up by</b>   | The date on which ALM sends you a follow up email.      |



# 5

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## Favorite Views

This chapter includes:

### Concepts

- ▶ Favorite Views Overview on page 114

### Tasks

- ▶ How to Use Favorite Views on page 115

### Reference

- ▶ Favorite Views User Interface on page 117

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## Concepts

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### Favorite Views Overview

You determine the way an HP Application Lifecycle Management (ALM) window looks by selecting certain settings for it. For example, these settings may include applying a filter to grid columns, or sorting fields in a grid. You can save this view as a **favorite view** to be reloaded and used in the future.

You decide if others have accessibility to the favorite views by saving them to either a public folder or a private folder. Views in a **public** folder are accessible to all users. Views in a **private** folder are accessible only to the user who created them.

You can create subfolders to help you organize your favorite views. For example, you can create folders for different products, releases, or teams.

Consider the following when working with favorite views:

- ▶ A favorite view is unique to the module in which the view is created. For example, the Favorites menu in the Defects module contains only favorite views created for the Defects module.
- ▶ A favorite view includes the module view setting in which you create it, such as grid or tree view. For example, if you create a favorite view in the test plan tree view, and then load that favorite from the test grid view, ALM switches back to the test plan tree view.

In contrast, all Requirements module views except for the Requirements Grid view share favorite views. For example, if you create a favorite view in the Requirement Details view, loading the favorite from the Coverage Analysis view does not switch back to the Requirement Details view.

Some favorite view commands are accessible only to certain user groups. For more information on user group privileges, refer to the *HP Application Lifecycle Management Administrator Guide*.

For details on working with favorite views, see "How to Use Favorite Views" on page 115.

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## Tasks

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### How to Use Favorite Views

This task describes how to work with favorite views in an ALM project.

To learn more about favorite views, see "Favorite Views Overview" on page 114.

This task includes the following steps:

- "Add a Favorite View" on page 115
- "Load a Favorite View" on page 116
- "Update a Favorite View" on page 116
- "Organize Favorite Views" on page 116

#### **Add a Favorite View**

Arrange an ALM window to meet your needs and save it as a favorite view.

- 1** Determine the way an ALM window looks by selecting certain settings for it. For example, this can include applying a filter, or sorting fields in a grid. For task details on displaying ALM data, see "How to Display ALM Data" on page 59.
- 2** Select **Favorites > Add to Favorites**. For user interface details on the Add Favorite dialog box, see "Add Favorite Dialog Box" on page 117.

## Load a Favorite View

Load an existing view in an ALM window by selecting a recently used favorite view, or by selecting a view from a private or public folder.

- **Load a recently used favorite view.** Open the **Favorites** menu and select a view.

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**Note:** By default, ALM displays the four most recently used views on the **Favorites** menu. You can define the number of views displayed on the menu by setting the **FAVORITES\_DEPTH** parameter in the Site Configuration tab in Site Administration. For more information, refer to the *HP Application Lifecycle Management Administrator Guide*.

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- **Load a favorite view.** Select **Favorites > Private** or **Favorites > Public** and select a view.

## Update a Favorite View

You can update the settings of an existing favorite view.

- 1** Load a favorite view from the **Favorites** menu.
- 2** Make changes to the view.
- 3** Select **Favorites > Add to Favorites**. The Add Favorite dialog box opens.
- 4** In the Favorites list, select the view name and click **OK**.
- 5** Click **OK** to overwrite the previous settings.

## Organize Favorite Views

Organize your favorite views in private or public folders, or delete views no longer in use. From the menu bar, select **Favorites > Organize Favorites**. For user interface details on the Organize Favorites dialog box, see "Organize Favorites Dialog Box" on page 119.

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## Reference

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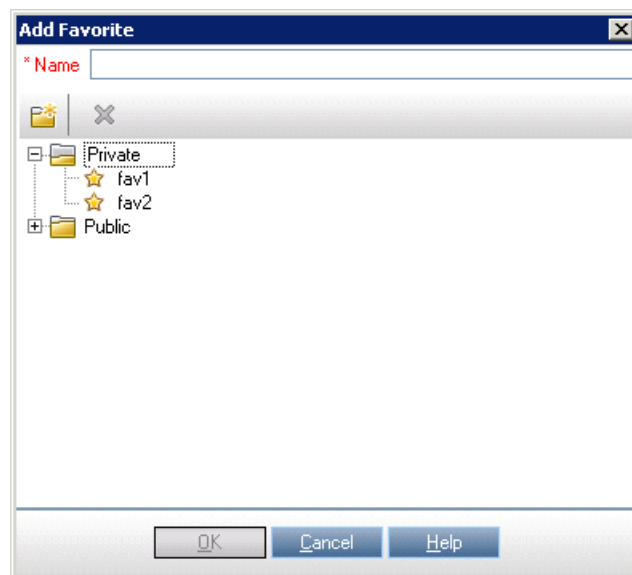
### Favorite Views User Interface

This section includes:

- ▶ Add Favorite Dialog Box on page 117
- ▶ Organize Favorites Dialog Box on page 119



### Add Favorite Dialog Box

This dialog box enables you to add a favorite view to your private folder or to a public folder.



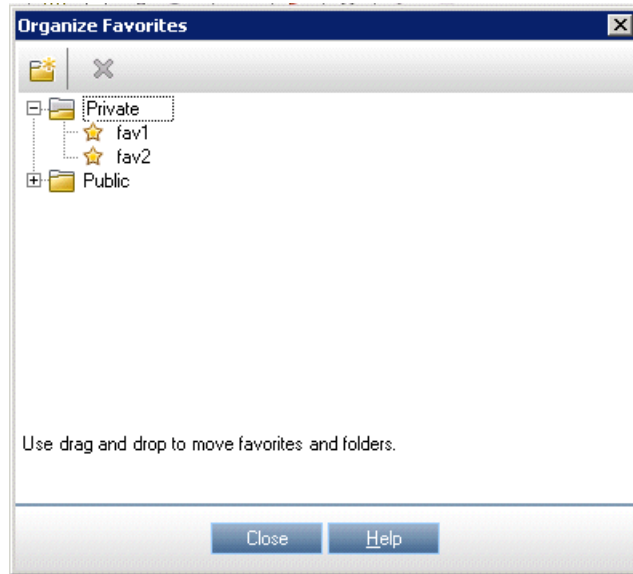
|                       |  |
|-----------------------|--|
| <b>To access</b>      | From a menu bar, select <b>Favorites &gt; Add to Favorites</b> .<br>Available from the following modules: Requirements, Test Plan, Test Lab, and Defects |
| <b>Relevant tasks</b> | "How to Use Favorite Views" on page 115  |
| <b>See also</b>       | "Favorite Views Overview" on page 114  |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>New Folder.</b> Opens the New Favorite Folder dialog box, enabling you to add a folder under a selected folder.                 |
|  | <b>Delete.</b> Deletes the selected favorite or folder. Deleting a favorite folder also deletes its subfolders and favorite views. |
| <b>Name</b>   | The name of the favorite view.   |
| <b>Private</b>  | Favorite views in this folder can only be accessed by you. You cannot delete the <b>Private</b> folder.                            |
| <b>Public</b>   | Favorite views in this folder can be accessed by all users of the project. You cannot delete the <b>Public</b> folder.             |



## Organize Favorites Dialog Box

This dialog box enables you to organize the list of favorite views in private and public folders.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | From a menu bar, select <b>Favorites &gt; Organize Favorites</b> .<br>Available from the following modules: Requirements, Test Plan, Test Lab, and Defects. |
| <b>Important information</b> | Drag and drop favorite views to move them between folders.  |
| <b>Relevant tasks</b>        | "How to Use Favorite Views" on page 115   |
| <b>See also</b>              | "Favorite Views Overview" on page 114   |

User interface elements are described below:

| UI Elements   | Description   |
|---|---|
|  | <p><b>New Folder.</b> Opens the New Favorite Folder dialog box, enabling you to add a folder under a selected folder.</p>                       |
|  | <p><b>Delete.</b> Deletes the selected favorite or folder. Deleting a favorite folder also deletes its favorite views and subfolders.</p>       |
| <p><b>Private</b></p>   | <p>Favorite views in this folder can only be accessed by you. You cannot delete the <b>Private</b> folder.</p>                                  |
| <p><b>Public</b></p>  | <p>Favorite views in this folder can be accessed by all users of the project. You cannot delete the <b>Public</b> folder.</p>                   |
| <p><b>Rename</b></p>  | <p>Right-click a favorite view or folder and select <b>Rename</b>. You cannot rename the <b>Private</b> folder or the <b>Public</b> folder.</p> |



# 6

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## Version Control

This chapter includes:

### Concepts

- ▶ Version Control Overview on page 122

### Tasks

- ▶ How to Use Version Control on page 124
- ▶ How to Filter by Version Control Fields on page 128

### Reference

- ▶ Non-versioned Fields on page 129
- ▶ Moving, Copying, and Deleting Checked-out Entities on page 130
- ▶ Version Control User Interface on page 131

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## Concepts

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### Version Control Overview

In a version control enabled project, you can create and manage HP Application Lifecycle Management (ALM) entities while maintaining previous versions of those entities. This includes requirements, tests, test resources, business process models, and business components.

To make changes to an entity in a version control enabled project, you must first check out the entity. When you check out an entity, ALM locks the entity, preventing other users from overwriting any changes you make. The checked out version of the entity is not visible to other users.



When you finish making changes, you check in the entity. The new version of the entity is then available to other users.

You can view all previous versions of an entity, or check out an earlier version. You can also compare two versions of an entity to view the changes between versions.

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**Note:** To maintain usability and data integrity, ALM stores previous versions of an entity without most data related to relationships between entities. The following data is not stored for previous versions: requirements and tests coverage, requirements traceability, and defect linkage. In addition, risk data is also not stored for previous versions of an entity.

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You can create and manage entities in a version control enabled project in both tree and grid views. In the tree view, an entity checked out by the current user is displayed with an open green lock icon . An entity checked out by another user is displayed with a red lock icon . Grid views contain additional version control fields, such as **Version Status**, indicating whether the entity is checked in or checked out.

For details on ALM fields not stored under version control, see "Non-versioned Fields" on page 129.

For more details on working with version control, see "How to Use Version Control" on page 124.

## Examples

The following examples demonstrate when you can use version control.

### ► Monitor changes and compare versions.

Kelly, the product manager, finds that product development is being implemented differently than she had expected. She reviews the requirements for the product and discovers that some have changed. She compares the current requirements with the versions of the requirements that were agreed upon at the start of the release.

### ► Restore an earlier version.

Michael, a QA tester, receives a new build of the banking application currently being developed. He starts to update the relevant tests to meet the needs of the new release. Then the development team sends out notification of a significant problem with the build. Development rolls back to the previous build. Michael decides to check out and revert back to the versions of tests that were used for the previous build and continue testing from there.

### ► Lock entities for editing.

Robert, a business analyst, wants to update certain functionality for an application. To do this, he needs to update a set of requirements. He requires several days to update the requirements, and doesn't want anyone else to make any changes to the requirements while he is editing them. Robert checks out the relevant requirements, and starts to edit.

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## Tasks

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### How to Use Version Control

This task describes how to work with version control in an ALM project. Version control enables you to create and manage ALM entities while maintaining previous versions of those entities.

To learn more about version control, see "Version Control Overview" on page 122.

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**Note:** Version control functionality is available in the following modules: Requirements, Business Models, Test Plan, and Test Resources.

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This task includes the following steps:

- "Prerequisites" on page 125
- "Check out an entity" on page 125
- "Undo a checkout - optional" on page 125
- "Check in an entity" on page 126
- "View all checked out entities - optional" on page 126
- "Access version history" on page 127
- "Copy, move, or delete checked-out entities" on page 128

## 1 Prerequisites

Verify that version control is enabled for your project. For details on enabling version control, refer to the *HP Application Lifecycle Management Administrator Guide*.


## 2 Check out an entity

To make changes to an entity in a version control enabled project, the entity must be checked out.

Use one of the following:

- ▶ **Automatic checkout.** When you start editing an entity, ALM displays the Check Out dialog box, enabling you to check out the entity.

To instruct ALM to automatically check out entities that you start editing, without displaying the Check Out dialog box, click **Don't show this again** in the Check Out dialog box.

- ▶ **Manual check out.** Select one or more entities. On the module toolbar, click **Check Out** .

For user interface details on the Check Out dialog box, see "Check Out Dialog Box" on page 136.


## 3 Undo a checkout - optional

When an entity is checked out, you can undo the checkout to cancel your changes. Right-click the entity and select **Versions > Undo Check Out**. For more details on the Undo Check Out command, see "Versions Menu and Buttons" on page 131.

#### 4 Check in an entity


When you finish making changes, check in the entity to create a new, updated version available to other users.

Use one of the following:

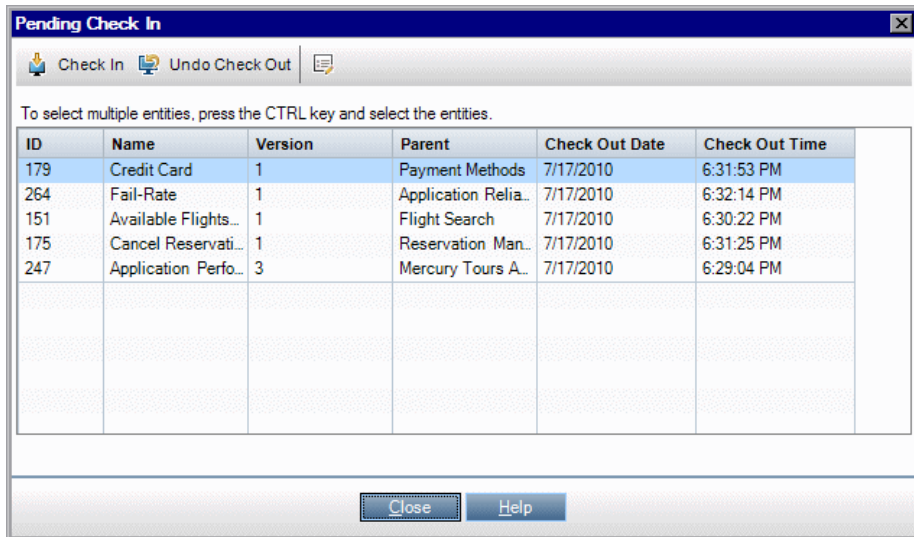
- ▶ **Check in a single entity.** Right-click the entity and select **Versions > Check In**.
- ▶ **Check in multiple entities.** Select the entities. On the module toolbar, click **Check In** .

For user interface details on the Check In dialog box, see "Check In Dialog Box" on page 135.

#### 5 View all checked out entities - optional

You can view all entities in the current module that you have checked out, and check in or undo the checkout for selected entities. Click the **Check In** button  in the top right corner of the ALM window. For user interface details on the Pending Check In dialog box, see "Pending Check In Dialog Box" on page 137.

**Example:**



## 6 Access version history

To view, compare, and check out previous versions of an entity, select the entity and click the **History** tab > **Versions and Baselines** tab. For user interface details, see "Versions and Baselines Tab - Versions View" on page 140.

**Example:**

The screenshot shows a software interface with a menu bar (Tests, Edit, View, Versions, Favorites, Analysis) and a toolbar. The main window is titled '4 Tests are checked out by alex\_alm' and has a 'Check In...' button. The left pane shows a tree view of the project structure, with 'Flight Reservation' selected. The right pane is titled 'Versions and Baselines' and contains a table with the following data:

| Version     | Date                 | Modified by | Baselines |
|-------------|----------------------|-------------|-----------|
| Checked out |                      | alex_alm    |           |
| 3           | 7/17/2010 7:26:42 PM | alex_alm    |           |
| 2           | 7/17/2010 7:25:52 PM | shelly_alm  |           |
| 1           | 2/7/2009 9:40:03 AM  | alex_alm    |           |

Below the table is a text area for a comment, with the text 'Editing after review' entered.

## 7 Copy, move, or delete checked-out entities

Some restrictions apply when moving, copying, and deleting checked-out entities. For details, see "Moving, Copying, and Deleting Checked-out Entities" on page 130.

## How to Filter by Version Control Fields

This task describes how to filter ALM data to display only checked out entities in the Requirements, Business Models, Test Plan, Test Resources, and Test Lab modules. The following table describes how to set the filter conditions:

| Filter Description                               | Filter Conditions for the Test Plan Module                            | Filter Conditions for All Other Modules         |
|--|---|---|
| Display all entities that you have checked out   | Version Status=Checked Out and Version Owner=<your user name>         | Version Checked Out By=<your user name>         |
| Display all entities checked out by another user | Version Status=Checked Out and Version Owner=<other user's user name> | Version Checked Out By=<other user's user name> |

For details on defining filters, see "Filter Dialog Box" on page 64.



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## Reference

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### Non-versioned Fields

When you are working with version control, changes made to some fields in ALM entities are not stored in previous versions of the entities.

Changes to the following fields are not stored under version control:

| Entity       | Fields  |
|--------------|---|
| Requirements | <ul style="list-style-type: none"> <li>▶ Reviewed</li> <li>▶ Direct Cover Status</li> <li>▶ Target Release</li> <li>▶ Target Cycle</li> <li>▶ All RBQM fields.</li> </ul> |
| Tests        | Execution Status  |

Consider the following when working with non-versioned fields in a version control enabled project:

| Action                             | Result   |
|------------------------------------|--|
| Undo a checkout                    | Any changes you made to non-versioned fields while the entity was checked out are not cancelled and the new values remain. |
| Checkout a previous version        | The value of a non-versioned field is the value in the currently checked in version.                                       |
| View and compare previous versions | Non-versioned fields are displayed with the value <b>Non-versioned Field</b> .   |

## Moving, Copying, and Deleting Checked-out Entities

Consider the following guidelines when moving, copying, or deleting entities that are checked out.

### For a single entity

| Description                        | Cut/Paste or Move | Copy/Paste                                      | Delete |
|------------------------------------|-------------------|---|--------|
| Entity checked out by current user | ✓                 | ✗   | ✓      |
| Entity checked out by another user | ✗                 | ✓<br>The current, checked-in version is pasted. | ✗      |

### For a folder that contains several entities

| Cut/Paste or Move | Copy/Paste                                 | Delete  |
|-------------------|--|---|
| ✓                 | All entities in folder must be checked in. | All entities in the folder must be either checked in, or checked out by current user. |

### For several entities (multi-select)

| Cut/Paste or Move  | Copy/Paste                                | Delete   |
|--|---|--|
| All selected entities must be either checked in, or checked out by current user. | All selected entities must be checked in. | All selected entities must be either checked in, or checked out by current user. |

## Version Control User Interface

This section includes:



- ▶ Versions Menu and Buttons on page 131
- ▶ Version Control Fields on page 132
- ▶ Check In Dialog Box on page 135
- ▶ Check Out Dialog Box on page 136
- ▶ Pending Check In Dialog Box on page 137
- ▶ Versions and Baselines Tab - Versions View on page 140

## Versions Menu and Buttons

The Versions menu and version control toolbar buttons are available in a version control enabled project.

|                       |   |
|-----------------------|---|
| <b>To access</b>      | Available from the menu bar or toolbar of the following modules: Requirements, Business Models, Business Components, Test Plan, and Test Resources. |
| <b>Relevant tasks</b> | "How to Use Version Control" on page 124  |
| <b>See also</b>       | "Version Control Overview" on page 122  |

User interface elements are described below:

| UI Elements (A-Z)  | Description   |
|--|---|
|  <b>Check In</b>  | Opens the Check In dialog box, enabling you to check in selected entities. For details, see "Check In Dialog Box" on page 135.    |
|  <b>Check Out</b> | Opens the Check Out dialog box, enabling you to check out selected entities. For details, see "Check Out Dialog Box" on page 136. |

| UI Elements (A-Z)            | Description   |
|------------------------------|---|
| <b>Pending Check In</b>      | Opens the Pending Check In dialog box, enabling you to view a list of all entities in the current module that you have checked out. For details, see "Pending Check In Dialog Box" on page 137.   |
| <b>Undo Check Out</b>        | <p>Cancels the check out of selected entities and discards changes.</p> <p>To undo checkouts for entities checked out by other users, you must have the appropriate user permissions. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</p> <p>When you undo a checkout, any changes you made to non-versioned fields while the entity was checked out are not cancelled and the new values remain. For details, see "Non-versioned Fields" on page 129.</p> |
| <b>Warn Before Check Out</b> | Instructs ALM to display a confirmation message before automatically checking out an entity. For details, see "Check Out Dialog Box" on page 136.   |

## Version Control Fields

This section describes the version control fields available in the ALM modules.

|                       |  |
|-----------------------|--|
| <b>To access</b>      | On the ALM sidebar, select Requirements, Business Models, Business Components, Test Plan, or Test Resources. |
| <b>Relevant tasks</b> | "How to Use Version Control" on page 124   |
| <b>See also</b>       | "Version Control Overview" on page 122   |

## Requirements Module

The Requirements module displays the following additional fields if version control is enabled:

| UI Elements (A-Z)             | Description  |
|-------------------------------|--|
| <b>Version Check Out Date</b> | The date the version was checked out.                                  |
| <b>Version Check Out Time</b> | The time the version was checked out.                                  |
| <b>Version Checked Out By</b> | The name of the user who checked out the version.                      |
| <b>Version Number</b>         | The version number.  |
| <b>Version Status</b>         | The status of the version ( <b>Checked Out</b> or <b>Checked In</b> ). |

## Business Models Module

The Business Models module displays the following additional fields if version control is enabled:

| UI Elements (A-Z)             | Description  |
|-------------------------------|--|
| <b>Version Check Out Date</b> | The date the version was checked out.                                  |
| <b>Version Check Out Time</b> | The time the version was checked out.                                  |
| <b>Version Checked Out By</b> | The name of the user who checked out the version.                      |
| <b>Version Number</b>         | The version number.  |
| <b>Version Status</b>         | The status of the version ( <b>Checked Out</b> or <b>Checked In</b> ). |

## Business Components Module

For the fields that the Business Components module displays if version control is enabled, see the *HP Business Process Testing User Guide*.

### Test Plan Module

The Test Plan module displays the following additional fields if version control is enabled:

| UI Elements (A-Z)     | Description  |
|-----------------------|--|
| <b>Version Date</b>   | The date of the last action (check in or check out) performed for the version. |
| <b>Version Number</b> | The version number.  |
| <b>Version Owner</b>  | The name of the user who performed the last action (check in or check out).    |
| <b>Version Status</b> | The status of the version ( <b>Checked Out</b> or <b>Checked In</b> ).         |
| <b>Version Time</b>   | The time of the last action (check in or check out) performed for the version. |

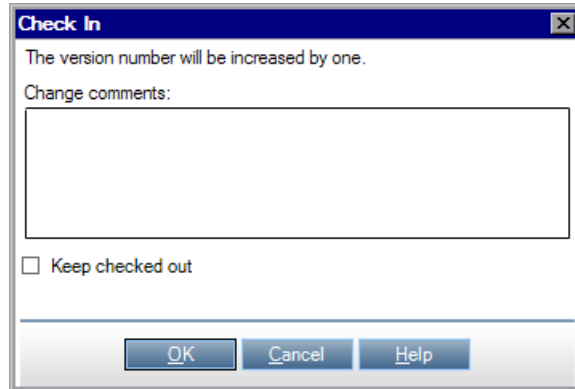
### Test Resources Module

The Test Resources module displays the following additional field if version control is enabled:

| UI Elements           | Description                         |
|-----------------------|-------------------------------------|
| <b>Version Number</b> | The version number of the resource. |

## Check In Dialog Box

This dialog box enables you to check in one or more checked out entities in a version control enabled project. The new version is then available to other users.



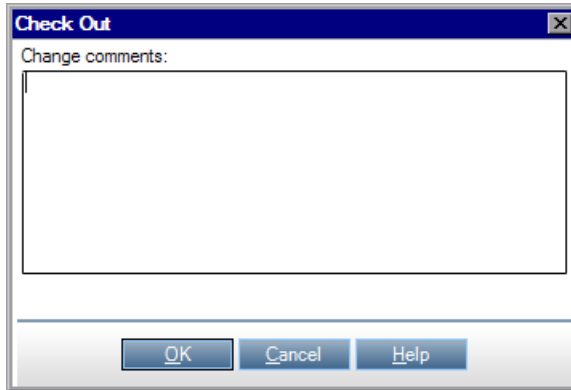
|                              |  |
|------------------------------|--|
| <b>To access</b>             | Right-click an entity and select <b>Versions &gt; Check In</b> .<br>Available from the following modules: Requirements, Business Models, Business Components, Test Plan, and Test Resources. |
| <b>Important information</b> | The version number assigned to a new entity is 1. When an entity is checked in, the version number is increased by one.  |
| <b>Relevant tasks</b>        | "How to Use Version Control" on page 124   |
| <b>See also</b>              | "Version Control Overview" on page 122   |



User interface elements are described below:

| UI Elements (A-Z)       | Description   |
|-------------------------|---|
| <b>Change comments</b>  | Describes the changes that were made to this version.                                 |
| <b>Keep checked out</b> | Stores your changes with the new version number while keeping the entity checked out. |

## Check Out Dialog Box

This dialog box enables you to check out one or more entities in a version control enabled project to make changes to the entities.



|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ Select an entity and start to edit. The Check Out dialog box opens automatically.</li> <li>▶ Right-click an entity and select <b>Versions &gt; Check Out</b>.</li> <li>▶ Select an entity and click the <b>History</b> tab &gt; <b>Versions and Baselines</b> tab. Select a version and click <b>Check Out</b>.</li> </ul> <p>Available from the following modules: Requirements, Business Models, Business Components, Test Plan, and Test Resources.</p> |
| <p><b>Important information</b></p> | <p>In the tree view, checked out entities are indicated by the following icons:</p> <ul style="list-style-type: none"> <li>▶ An entity checked out by the current user is displayed with an open green lock icon .</li> <li>▶ An entity checked out by another user is displayed with a red lock icon .</li> </ul>   |
| <p><b>Relevant tasks</b></p>        | <p>"How to Use Version Control" on page 124</p>  |
| <p><b>See also</b></p>              | <p>"Version Control Overview" on page 122</p>  |

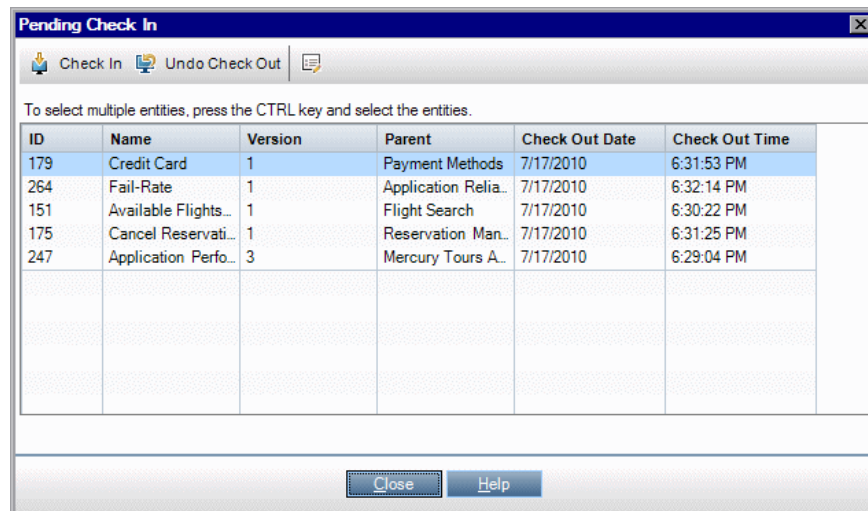


User interface elements are described below:

| UI Elements (A-Z)            | Description   |
|------------------------------|---|
| <b>Change comments</b>       | Describes the reason for the checkout.  |
| <b>Don't show this again</b> | Instructs ALM to automatically check out entities that you start editing, without requesting confirmation.<br>This option is available when an entity is checked out automatically. |

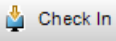
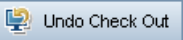

## Pending Check In Dialog Box

This dialog box enables you to view all entities in the current module that you have checked out, and check in or undo the check out for selected entities.



|                              |   |
|------------------------------|---|
| <p><b>To access</b></p>      | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>➤ Click the <b>Check In</b> button in the top right corner of the ALM window.</li> <li>➤ From a module menu bar, select <b>Versions &gt; Pending Check In</b>.</li> </ul> <p>Available from the following modules: Requirements, Business Models, Business Components, Test Plan, and Test Resources.</p> |
| <p><b>Relevant tasks</b></p> | <p>"How to Use Version Control" on page 124</p>   |
| <p><b>See also</b></p>       | <p>"Version Control Overview" on page 122</p>   |

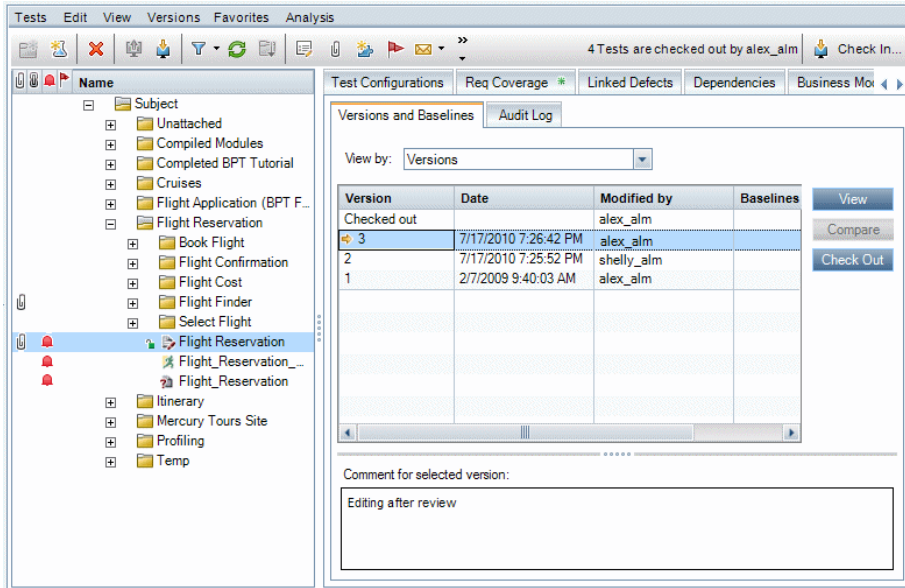
User interface elements are described below (unlabeled elements are shown in angle brackets>):

| <p><b>UI Elements (A-Z)</b></p>   | <p><b>Description</b></p>  |
|---|--|
|    | <p>Opens the Check In dialog box, enabling you to check in selected entities. For details, see "Check In Dialog Box" on page 135.</p>  |
|    | <p>Cancels the check out of selected entities and discards changes.</p> <p>When you undo a checkout, any changes you made to non-versioned fields while the entity was checked out are not cancelled and the new values remain. For details, see "Non-versioned Fields" on page 129.</p>       |
|  | <p><b>Details.</b> Opens a Details dialog box, displaying details for the selected entity. Click a button on the sidebar to view additional details, such as Design Steps, Test Script and Attachments. The buttons available depend on the data available for the particular entity type.</p> |

| UI Elements (A-Z)     | Description   |
|-----------------------|---|
| <grid>                | <p>Displays a list of entities that you have checked out in the current module.</p> <p>You can perform the following actions on the grid:</p> <ul style="list-style-type: none"> <li>▶ To select multiple entities, press the CTRL key and select the entities.</li> <li>▶ To select all entities, right-click and select <b>Select All</b>.</li> <li>▶ To rearrange columns, drag the column headers.</li> </ul> |
| <b>Check Out Date</b> | The date the version was checked out.   |
| <b>Check Out Time</b> | The time the version was checked out.   |
| <b>ID</b>             | The unique numeric ID for the entity, assigned automatically by ALM.  |
| <b>Name</b>           | The name of the checked out entity.   |
| <b>Parent</b>         | The name of the entity one hierarchical level above the selected entity in the tree structure.  |
| <b>Version</b>        | <p>The version number of the checked out entity.</p> <p>The version number assigned to a new entity is 1. When an entity is checked in, the version number is increased by one.</p>   |

## Versions and Baselines Tab - Versions View


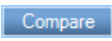

This view displays version history for a selected entity in a version control enabled project.




|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p>Click the <b>History</b> tab &gt; <b>Versions and Baselines</b> tab. In the <b>View by</b> box, select <b>Versions</b>.</p> <p>Available from the following modules: Requirements, Business Models, Business Components, Test Plan, and Test Resources.</p>  |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ To maintain usability and data integrity, ALM stores previous versions of an entity without most data related to relationships between entities. The following data is not stored for previous versions: requirements and tests coverage, requirements traceability, and defect linkage. In addition, risk data is also not stored for previous versions of an entity.</li> <li>▶ Changes to some fields are not stored under version control. For details, see "Non-versioned Fields" on page 129.</li> </ul> |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "How to Use Version Control" on page 124  |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Version Control Overview" on page 122</li> <li>➤ "Baselines Tab" on page 300</li> </ul> |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | Opens a Details dialog box, displaying read-only details for the selected version. Click a button on the sidebar to view additional details for the version, such as the Design Steps, Test Script and Attachments. The buttons available depend on the data stored under version control for the particular entity type. |
|  | <p>Opens the Compare Entities dialog box, enabling you to compare two selected versions. For details, see "Compare Entities Dialog Box" on page 294.</p> <p>To compare two versions, press the CTRL key and select the versions. Then click the <b>Compare</b> button.</p>  |
|  | Opens the Check Out dialog box, enabling you to check out the selected version. For details, see "Check Out Dialog Box" on page 136.  |
| <b>Baseline</b>   | The baseline in which the version appears.  |
| <b>Comment for selected version</b>   | The comments typed by the user when checking in the version.  |
| <b>Date</b>   | The date the version was created.   |
| <b>Modified By</b>  | The user who created the version.   |

| UI Elements (A-Z) | Description   |
|-------------------|---|
| <b>Version</b>    | <p>The version number. If the entity is currently checked out, the Version column for the checked out version displays <b>Checked out</b>. If the entity is checked out by the current user, an arrow icon  indicates the version that was checked out.</p> <p>The default version number for a new entity is 1.</p> |
| <b>View by</b>    | <p>Enables you to select one of the following options for viewing history:</p> <ul style="list-style-type: none"> <li>▶ <b>Versions</b>. Displays version history for the selected entity.</li> <li>▶ <b>Baselines</b>. Displays all versions of the selected entity that are stored in a baseline. For details, see "Baselines Tab" on page 300.</li> </ul>  |

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## ALM Editions

This chapter includes:

### Reference

- ▶ ALM Functionality by Edition on page 144

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## Reference

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### ALM Functionality by Edition

HP Application Lifecycle Management (ALM) is also available in three editions which provide subsets of ALM functionality — HP Quality Center Starter Edition, HP Quality Center Enterprise Edition, and HP ALM Performance Center Edition.

| HP ALM Edition                       | Description   |
|--------------------------------------|---|
| HP ALM                               | Complete HP ALM functionality, providing core functionality for managing the Application Lifecycle and scalable Quality Management for mature organizations and Centers of Excellence (CoE) involved with managing enterprise releases. |
| HP Quality Center Starter Edition    | For quality management teams managing small releases.   |
| HP Quality Center Enterprise Edition | For quality management teams managing medium to large releases.   |
| HP ALM Performance Center Edition    | For managing all aspects of large-scale performance testing projects.   |



The following table indicates the availability of ALM functionality according to editions. Further information on each function is provided below.

| Functionality                                | HP ALM | HP Quality Center Starter Edition | HP Quality Center Enterprise Edition | HP ALM Performance Center Edition |
|--|--------|-----------------------------------|--------------------------------------|-----------------------------------|
| Licensing                                    | ✓      | partial ✓                         | ✓                                    | ✓                                 |
| Modules                                      | ✓      | some exclusions ✓                 | ✓                                    | some exclusions ✓                 |
| Point and Click Installation                 | ✗      | ✓                                 | ✗                                    | ✗                                 |
| Release Management                           | ✓      | ✗                                 | ✓                                    | ✓                                 |
| Project Planning and Tracking (PPT) Releases | ✓      | ✗                                 | ✗                                    | ✗                                 |
| Multiple Requirement Types                   | ✓      | ✗                                 | ✓                                    | ✓                                 |
| Requirement to Requirement Traceability      | ✓      | ✗                                 | ✓                                    | ✓                                 |
| Risk-based Quality Management                | ✓      | ✗                                 | ✓                                    | ✓                                 |
| Business Models Module                       | ✓      | ✗                                 | ✓                                    | ✗                                 |
| Test Resources                               | ✓      | ✓                                 | ✓                                    | partial ✓                         |
| HP Sprinter                                  | ✓      | ✗                                 | ✓                                    | ✗                                 |

| Functionality                  | HP ALM | HP Quality Center Starter Edition | HP Quality Center Enterprise Edition | HP ALM Performance Center Edition |
|--------------------------------|--------|-----------------------------------|--------------------------------------|-----------------------------------|
| Versioning                     | ✓      | ✓<br>single entity                | ✓                                    | ✓                                 |
| Sharing Requirements and Tests | ✓      | ✗                                 | ✗                                    | ✓                                 |
| Sharing Defects                | ✓      | ✗                                 | ✗                                    | ✓                                 |
| Cross Project Customization    | ✓      | ✗                                 | ✗                                    | ✓                                 |
| Cross Project Reporting        | ✓      | ✗                                 | ✗                                    | partial ✓                         |
| Excel Reporting                | ✓      | ✓                                 | ✓                                    | partial ✓                         |
| Business Process Testing       | ✓      | ✓<br>up to five                   | ✓                                    | ✗                                 |
| Extra Options                  | ✓      | ✗                                 | ✓                                    | ✗                                 |
| Upgrading Editions             | —      | ✓                                 | ✓                                    | ✓                                 |

## Licensing

ALM licensing is determined according to your purchase agreement. Quality Center Starter Edition enables a maximum of five concurrent licenses to ALM modules (excluding Performance Center specific modules), an additional five licenses to the Defects module, and a maximum of five Business Process Testing licenses.

ALM Performance Center Edition enables a maximum of five concurrent licenses each to the Requirements and Defects modules.

The site administrator can monitor the license usage from Site Administration. For more details, see the *HP Application Lifecycle Management Administrator Guide*.

## Modules

- ▶ ALM enables access to all modules and functionality.
- ▶ Quality Center Enterprise Edition enables access to all ALM modules, with the exclusion of Performance Center modules.
- ▶ Quality Center Starter Edition allows for access to the following modules: Requirements, Test Plan, Test Resources, Test Lab, Defects, Dashboard, and Business Process Testing (BPT).
- ▶ Performance Center Edition allows for access to the following modules: Releases, Libraries, Requirements, Test Plan, Test Resources, Test Lab, Defects, and Dashboard.

## Point and Click Installation

ALM, Quality Center Enterprise Edition, and ALM Performance Center Edition require a full installation over a supported database.

Quality Center Starter Edition is installed on Windows XP or Windows 2008 with a simple point and click wizard. This includes automatic installation of a JBoss application server, JBoss web server, and SQL 2005 Express.

For more details on installation and supported environments, see the *HP Application Lifecycle Management Installation Guide*.

## **Release Management**

You organize and track your upcoming releases in the Releases module. Quality Center Starter Edition does not support release management. If you are working with this edition, fields and commands related to cycles and releases are not available. For example, Target Cycle and Target Release are not available.

For more details on the Releases module, see "Releases and Cycles Overview" on page 172.

## **Project Planning and Tracking (PPT) Releases**

ALM project planning and tracking (PPT) functionality enables quality assurance managers to track application readiness by defining goals for activities of an application release. PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or ALM Performance Center Edition.

For more details on PPT releases, see Chapter 10, "Project Planning and Tracking (PPT) Releases."

## **Multiple Requirement Types**

ALM includes support for multiple requirement types. Quality Center Starter Edition does not support multiple requirement types.

For more details on requirement types, see "Requirements Module Fields" on page 368.

## **Requirement to Requirement Traceability**

ALM includes support for defining links between requirements. Quality Center Starter Edition does not support requirements traceability.

For more details on requirements traceability, see Chapter 15, "Requirements Traceability."

## **Risk-based Quality Management**

ALM enables you to implement risk-based quality testing. In the Quality Center Starter Edition, the Risk tab is unavailable in the Requirements module. In addition, any risk related fields are not available.

For more details on risk-based quality management, see Chapter 17, "Risk-Based Quality Management."

## **Business Models Module**

ALM and Quality Center Enterprise Edition include the Business Models module, that enables you to import business process models from standard modeling tools, and test their quality in ALM. The Business Models module is not available in Quality Center Starter Edition or ALM Performance Center Edition.

For more details on the Business Models module, see Chapter 18, "Business Process Models."

## **Test Resources**

All editions include the Test Resources module for managing resources used by your tests. ALM Performance Center Edition supports a subset of test resource types.

For more details, see Chapter 26, "Test Resources."

## **HP Sprinter**

ALM and Quality Center Enterprise Edition enable manual testing with HP Sprinter. Sprinter provides enhanced functionality and a variety of tools to assist in the manual testing process. Sprinter is not available for Quality Center Starter Edition or ALM Performance Center Edition.

For more details on Sprinter, see "HP Sprinter Overview" on page 796.

## Versioning

All editions allow for single entity versioning of your ALM projects. For more details, see Chapter 6, "Version Control."

ALM, Quality Center Enterprise Edition, and ALM Performance Center Edition also include baselining of multiple entities in a library. For more details, see Chapter 11, "Libraries and Baselines."

## Sharing Requirements and Tests

The ALM Libraries module enables you to create and compare baselines of requirements, tests, test resources, and business components. You can also reuse an existing set of entities by importing, synchronizing and comparing libraries across multiple projects.

- ▶ Quality Center Starter Edition: The Libraries module is unavailable.
- ▶ Quality Center Enterprise Edition: You can use the Libraries module to create and compare baselines in a project. Quality Center Enterprise Edition does not include importing, synchronizing and comparing libraries across multiple projects.

For more details on the Libraries module, see "Libraries Module Window" on page 275.

## Sharing Defects

You can share and synchronize defects across multiple ALM projects using the *HP ALM Synchronizer*. Defect sharing is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.

For more details, see the *HP ALM Synchronizer User Guide*, available from the HP Application Lifecycle Management Add-ins page.

## Cross Project Customization

ALM includes cross project customization, enabling you to work with template projects. Cross project customization is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.

For more details, see the *HP Application Lifecycle Management Administrator Guide*.

## Cross Project Reporting

When you create graphs in ALM, you can combine and compare data from multiple projects. Cross project reporting is unavailable for entities specific to Performance Center only, such as hosts and timeslots. Cross project reporting is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.

For more details on the ALM reports and graphs, see "Analysis View Window" on page 914.

## Excel Reporting

All editions enable exporting ALM data to Excel for reporting. Excel reporting is unavailable for entities specific to Performance Center only, such as hosts and timeslots.

For more details, see Chapter 39, "Excel Reports."

## Business Process Testing

Quality Center Starter Edition enables a maximum of five Business Process Testing licenses. Business Process Testing is not available for ALM Performance Center Edition.

For more information on Business Process Testing, refer to the *HP Business Process Testing User Guide*.

## Extra Options

The following extra options are available with ALM and Quality Center Enterprise Edition: Service Test Management (STM) and Change Impact Testing (CIT).

## Upgrading Editions

You can upgrade your HP ALM 11.00 edition to another edition. For more information on upgrading, refer to the *HP Application Lifecycle Management Installation Guide*.





# 8

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## ALM Keyboard Shortcuts

This chapter includes:

### Reference

- ▶ ALM Keyboard Shortcut Reference on page 154

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## Reference

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### **ALM Keyboard Shortcut Reference**

You can navigate HP Application Lifecycle Management (ALM), and perform many ALM commands, using shortcut keys.

This section includes:

- "General Keyboard Shortcuts" on page 155
- "Attachments Shortcuts" on page 156
- "Send Email Dialog Box Shortcuts" on page 157
- "Releases Module Shortcuts" on page 157
- "Libraries Module Shortcuts" on page 158
- "Requirements Module Shortcuts" on page 159
- "Business Models Module Shortcuts" on page 159
- "Test Resources Module Shortcuts" on page 160
- "Business Components Module Shortcuts" on page 161
- "Test Plan Module Shortcuts" on page 161
- "Test Lab Module Shortcuts" on page 161
- "Defects Module Shortcuts" on page 163
- "Dashboard Shortcuts" on page 164



## General Keyboard Shortcuts

You can navigate ALM, and perform common commands, by pressing the following shortcut keys:

| Shortcut Key              | Function  |
|---------------------------|---|
| DOWN ARROW or UP ARROW    | Selects the previous and next item respectively.  |
| LEFT ARROW or RIGHT ARROW | <b>In tree folders:</b> Collapses or expands the folders respectively.<br><b>In grid views:</b> Selects the previous and next grid column respectively. |
| TAB                       | Selects the next data box in a tab or dialog box.   |
| SHIFT+TAB                 | Selects the previous data box in a tab or dialog box.   |
| CTRL+TAB                  | Moves forward through the tabs.   |
| CTRL+SHIFT+TAB            | Moves backward through the tabs.  |
| ALT                       | Focuses on the module menu options. Press LEFT ARROW, RIGHT ARROW, DOWN ARROW or UP ARROW to navigate the menus.  |
| ALT+DOWN                  | Opens the drop-down lists for list boxes. Press DOWN ARROW or UP ARROW to select a list value.  |
| LEFT ARROW                | Expands a folder that contains sub-folders in the tree view (if it is collapsed).   |
| RIGHT ARROW               | Collapses a folder that contains sub-folders in the tree view (if it is expanded).  |
| ALT+G                     | Goes to the selected entity.  |
| ALT+HOME/END              | Displays the first or last entity respectively in the Requirement Details, Defect Details, or Test Instance Properties dialog box.                      |
| ALT+LEFT/RIGHT ARROW      | Displays the previous or next entity respectively in the Requirement Details, Defect Details, or Test Instance Properties dialog box.                   |

| Shortcut Key               | Function   |
|----------------------------|--|
| CTRL+F                     | Opens a Find dialog box that helps you search for specified text.                                      |
| CTRL+C                     | Copies the selected item and saves it to the Clipboard.  |
| CTRL+V                     | Pastes the contents of the Clipboard to the selected location.   |
| CTRL+X                     | Cuts the selected item and saves it to the Clipboard.  |
| CTRL+Z                     | Undoes the last action.  |
| CTRL+A                     | Selects all items in a grid.   |
| F1                         | Displays help for the selected dialog box.   |
| F2                         | Renames an entity.   |
| F5                         | Refreshes the page.  |
| F7                         | Spell checks the selected word or text box.  |
| SHIFT+F7,<br>SHIFT+CTRL+F7 | Opens the Thesaurus dialog box and displays a synonym, antonym, or related word for the selected word. |
| ALT                        | Accesses the menu bar.   |
| TAB                        | Creates a tab for memo fields.   |
| CTRL+SHIFT+TAB             | Changes the hierarchical position of list items in a memo field.                                       |

### **Attachments Shortcuts**

You can perform the following commands in the Attachments tab/dialog box by pressing the corresponding shortcut keys:

| Shortcut Key | Function             |
|--------------|----------------------|
| CTRL+F       | Attaches a file.     |
| CTRL+W       | Attaches a URL.      |
| CTRL+P       | Attaches a snapshot. |

| Shortcut Key | Function                           |
|--------------|------------------------------------|
| CTRL+I       | Attaches system information.       |
| CTRL+B       | Attaches Clipboard content.        |
| CTRL+O       | Downloads and opens an attachment. |
| CTRL+U       | Uploads an attachment.             |
| CTRL+S       | Saves an attachment.               |
| DELETE       | Deletes an attachment.             |

### Send Email Dialog Box Shortcuts

You can perform the following commands in the Send Email dialog box by pressing the corresponding shortcut keys:

| Shortcut Key   | Function  |
|----------------|---|
| ALT+C OR ALT+T | Opens the Select Recipients dialog box.                         |
| ALT+S          | Sends the email.  |
| CTRL+ALT+O     | Opens the Spelling Options dialog box.                          |
| CTRL+ALT+T     | Opens the Thesaurus dialog box.                                 |
| CTRL+M         | Sends the entity by email from the entity's Details dialog box. |

### Releases Module Shortcuts

You can perform the following commands in the Releases module by pressing the corresponding shortcut keys:

| Shortcut Key | Function  |
|--------------|---|
| CTRL+A       | Adds a new threshold from the Threshold view.   |
| CTRL+N       | <b>Releases module:</b> Creates a new release folder.<br><b>New Release, New Cycle, New Scope Item, or New Milestone dialog box:</b> Clears all fields. |

| Shortcut Key    | Function  |
|-----------------|---|
| CTRL+R          | Creates a new release.  |
| CTRL+Y          | Creates a new cycle.  |
| CTRL+D          | <b>Releases module:</b> Creates a copy of a cycle.<br><b>Threshold view:</b> If enabled, deletes a threshold. |
| ALT+C           | Closes the New Release Folder dialog box.   |
| ALT+O           | Saves the New Release Folder dialog box.  |
| CTRL+ALT+D      | Creates a copy of a milestone.  |
| CTRL+SHIFT+2    | Expands and collapses Releases module entities.   |
| DELETE          | Deletes the selected entity. Entities include: release folders, releases, cycles, and milestones.             |
| CTRL+M          | Creates a new milestone.  |
| ALT+N           | <b>Release Scope tab:</b> Adds a new scope item.  |
| ALT+HOME        | <b>Scope Item Details dialog box:</b> Goes to the first scope item.   |
| ALT+END         | <b>Scope Item Details dialog box:</b> Goes to the last scope item.  |
| ALT+LEFT ARROW  | <b>Scope Item Details dialog box:</b> Goes to the previous scope item.  |
| ALT+RIGHT ARROW | <b>Scope Item Details dialog box:</b> Goes to the next scope item.  |

### Libraries Module Shortcuts

You can perform the following commands in the Libraries module by pressing the corresponding shortcut keys:

| Shortcut Key | Function             |
|--------------|----------------------|
| ALT+B        | Adds a new baseline. |
| ALT+M        | Imports a library.   |

| Shortcut Key | Function                                       |
|--------------|--|
| CTRL+ALT+N   | Adds a new library folder.                     |
| ALT+N        | Adds a new library.                            |
| CTRL+SHIFT+2 | Expands and collapses Library module entities. |
| DELETE       | Deletes the selected Library module entity.    |

### Requirements Module Shortcuts

You can perform the following commands in the Requirements module by pressing the corresponding shortcut keys:

| Shortcut Key | Function   |
|--------------|--|
| CTRL+ALT+N   | Creates a new folder.  |
| ALT+G        | Opens the Create New Requirement dialog box.                       |
| ALT+N        | Creates a new requirement.   |
| CTRL+I       | Zooms in.  |
| CTRL+O       | Zooms out one level.   |
| SHIFT+CTRL+O | Zooms out to root level.   |
| CTRL+A       | Adds test to coverage.   |
| CTRL+M       | <b>Requirement Details dialog box:</b> Sends requirement by email. |

### Business Models Module Shortcuts

You can perform the following commands in the Business Models module by pressing the corresponding shortcut keys:

| Shortcut Key | Function              |
|--------------|-----------------------|
| CTRL+ALT+N   | Creates a new folder. |
| ALT+I        | Imports a model.      |

| Shortcut Key | Function  |
|--------------|---|
| ALT+G        | Opens the Go To Model dialog box.   |
| CTRL+R       | Goes to the representative requirement.   |
| ALT+S        | <b>Linkage tab in the Grid view and Tree view:</b> Opens the Select Requirements/Select Tests pane. |
| ALT+R        | <b>Linkage tab in the Grid view and Tree view:</b> Removes a requirement or a test from linkage.    |
| CTRL+DEL     | Deletes a folder, a model, or a path.   |
| CTRL+N       | Clears path details.  |
| CTRL+/-      | Zooms in/out of the model diagram.  |
| F2           | Renames a path.   |

### **Test Resources Module Shortcuts**

You can perform the following commands in the Test Resources module by pressing the corresponding shortcut keys:

| Shortcut Key | Function                            |
|--------------|-------------------------------------|
| CTRL+N       | Creates a new test resource folder. |
| CTRL+R       | Creates a new test resource.        |



## Business Components Module Shortcuts

You can perform commands in the Business Components module by pressing the corresponding shortcut keys. For details, see the *HP Business Process Testing User Guide*.

## Test Plan Module Shortcuts

You can perform the following commands in the Test Plan module by pressing the corresponding shortcut keys:

| Shortcut Key | Function  |
|--------------|---|
| ALT+G        | Opens the Go To Test dialog box.                              |
| ALT+N        | <b>Design Steps tab:</b> Creates a new step.                  |
| CTRL+P       | <b>Design Steps tab:</b> Inserts a parameter.                 |
| SHIFT+ALT+A  | <b>Design Steps tab:</b> Adds attachments.                    |
| CTRL+L       | <b>Design Steps tab:</b> Adds a call to a manual test.        |
| CTRL+S       | <b>Design Steps tab:</b> Saves a step.                        |
| ALT+N        | <b>Test Parameters tab:</b> Creates a new parameter.          |
| CTRL+DELETE  | <b>Test Parameters tab:</b> Deletes a parameter.              |
| ALT+R        | <b>Req Coverage tab:</b> Removes a requirement from coverage. |

## Test Lab Module Shortcuts

You can perform the following commands in the Test Lab module by pressing the corresponding shortcut keys:

| Shortcut Key | Function   |
|--------------|--|
| ALT+N        | <b>Test Sets tab:</b> Creates a new test set.              |
| ALT+G        | <b>Test Sets tab:</b> Opens the Go To Test Set dialog box. |
| CTRL+F9      | <b>Execution Grid tab in the Test Sets tab:</b> Runs test. |

| Shortcut Key          | Function   |
|-----------------------|--|
| CTRL+ALT+F9           | <b>Execution Grid tab in the Test Sets tab:</b> Runs test manually.                            |
| CTRL+SHIFT+F9         | <b>Execution Grid tab in the Test Sets tab:</b> Continues manual run.                          |
| ALT+F9                | <b>Execution Grid tab in the Test Sets tab:</b> Runs test set.                                 |
| DELETE                | <b>Execution Grid tab in the Test Sets tab:</b> Removes selected test instances from test set. |
| ALT+END/HOME          | <b>Test Runs tab:</b> Selects the first/last run.  |
| ALT+LEFT/RIGHT ARROWS | <b>Test Runs tab:</b> Selects the next/previous run.   |
| DELETE                | Deletes the selected run.  |
| F5                    | Refreshes the page.  |

### **Manual Runner Shortcuts**

You can perform the following commands in the Manual Runner dialog box by pressing the corresponding shortcut keys:

| Shortcut Key | Function   |
|--------------|--|
| CTRL+R       | Begins the run.  |
| CTRL+Q       | Ends the run.  |
| CTRL+K       | Cancels the run.   |
| CTRL+U       | Opens the Attachments dialog box.  |
| CTRL+N       | Adds a new defect.   |
| CTRL+B       | Adds an existing defect.   |
| CTRL+S       | <b>Manual Runners's Step Details dialog box:</b> Adds attachments to the test step.  |
| CTRL+P       | <b>Manual Runners's Step Details dialog box:</b> Passes the selected test run steps. |

| Shortcut Key | Function  |
|--------------|---|
| CTRL+F       | <b>Manual Runners's Step Details dialog box:</b> Fails the selected test run steps. |
| CTRL+A       | <b>Manual Runners's Step Details dialog box:</b> Passes all the test run steps.     |
| CTRL+G       | <b>Manual Runners's Step Details dialog box:</b> Fails all the test run steps.      |

### Defects Module Shortcuts

You can perform the following commands in the Defects module by pressing the corresponding shortcut keys:

| Shortcut Key | Function   |
|--------------|--|
| ALT+N        | Adds a new defect.                                       |
| ALT+G        | Opens the Go To Defect dialog box.                       |
| CTRL+DELETE  | Deletes the selected defects.                            |
| CTRL+ALT+G   | <b>Defects grid:</b> Finds similar defects.              |
| CTRL+ALT+F   | <b>Defects grid:</b> Finds similar text.                 |
| CTRL+L       | Finds the next instance of the specified text.           |
| CTRL+M       | <b>Defect Details dialog box:</b> Sends defect by email. |
| CTRL+N       | <b>New Defect dialog box:</b> Clears all fields.         |

 **Dashboard Shortcuts**

This section includes keyboard shortcuts that you can use in the Dashboard modules.

**Analysis View Module Shortcuts**

You can perform the following commands in the Analysis View module by pressing the corresponding shortcut keys:

| Shortcut Key | Function   |
|--------------|--|
| ALT+A        | Opens the Set Graph Appearance dialog box.   |
| ALT+C        | Copies graph to clipboard, in color.   |
| ALT+F        | Displays graph or standard reports in full screen.   |
| ALT+G        | Generates selected graph or standard report and displays it in the view.                     |
| ALT+I        | Displays summary graphs in pie chart format.   |
| ALT+L        | Displays progress graphs in line chart format.   |
| ALT+M        | Copies graph to clipboard, in monochrome.  |
| ALT+O        | Displays the graph in bar chart format.  |
| ALT+P        | <b>In graphs:</b> Prints graph in color.<br><b>In standard reports:</b> Prints current page. |
| ALT+Q        | Opens the Excel Report Query Builder dialog box, when in the Query tab.                      |
| ALT+R        | Displays the graph as a data grid.   |
| ALT+S        | <b>In graphs:</b> Saves graph image.<br><b>In standard reports:</b> Saves current page.      |
| ALT+T        | In progress graphs, shows/hides total values.  |
| ALT+U        | Opens Edit Group By Categories dialog box.   |
| ALT+V        | Resets group by categories.  |
| ALT+X        | Opens Edit X-Axis Categories dialog box.   |

| Shortcut Key   | Function  |
|----------------|---|
| ALT+Y          | Resets x-axis categories.   |
| ALT+N          | Scrolls graph to the right, when zoom is active.  |
| ALT+B          | <b>In graphs:</b> Scrolls graph to the left, when zoom is active.<br><b>In standard reports:</b> Displays first page. |
| ALT+E          | Displays the last page of a standard report.  |
| ALT+UP ARROW   | <b>In graphs:</b> Increases zoom level.<br><b>In standard reports:</b> Displays next page.                            |
| ALT+DOWN ARROW | <b>In graphs:</b> Decreases zoom level.<br><b>In standard reports:</b> Displays previous page.                        |
| ALT+SPACE      | Resets graph zoom.  |
| CTRL+E         | Opens the New Excel Report dialog box.  |
| CTRL+G         | Opens the New Graph dialog box.   |
| CTRL+R         | Opens the New Standard Report dialog box.   |
| CTRL+P         | Opens the Graph Wizard.   |
| CTRL+DELETE    | Deletes the selected folder or analysis item.   |
| CTRL+ALT+C     | Copies full-screen graph to clipboard, in color.  |
| CTRL+ALT+F     | Opens the New Folder dialog box.  |
| CTRL+ALT+M     | Copies full-screen graph to clipboard, in monochrome.   |
| CTRL+ALT+P     | <b>In graphs:</b> Prints graph in monochrome.<br><b>In standard reports:</b> Prints all pages.                        |
| CTRL+ALT+S     | Saves all standard reports pages.   |
| CTRL+T         | Create project report (for template-based reports).   |
| ALT+A          | Add a report section (for template-based reports).  |
| ALT+R          | Delete a report section (for template-based reports).   |
| ALT+P          | Preview the report (for template-based reports).  |

| Shortcut Key   | Function   |
|----------------|--|
| ALT+C          | Create a new template file (for template-based reports).                     |
| ALT+UP ARROW   | Move section up (for template-based reports).                                |
| ALT+DOWN ARROW | Move section down (for template-based reports).                              |
| CTRL+ALT+S     | Opens the New Graph dialog box for creating a New Release Scorecard graph.   |
| CTRL+ALT+M     | Opens the New Graph dialog box for creating a KPI Over Time graph.           |
| CTRL+ALT+B     | Opens the New Graph dialog box for creating a KPI Breakdown graph.           |
| CTRL+ALT+T     | Opens the New Graph dialog box for creating a KPI Breakdown Over Time graph. |

### Dashboard View Module Shortcuts

You can perform the following commands in the Dashboard View module by pressing the corresponding shortcut keys:

| Shortcut Key | Function   |
|--------------|--|
| ALT+A        | Goes to the selected graph in the analysis tree.                   |
| ALT+F        | Displays the selected graph in full screen.                        |
| ALT+G        | Generates the selected dashboard page and displays it in the view. |
| ALT+I        | Generates the selected graph.                                      |
| CTRL+P       | Opens the New Dashboard Page dialog box.                           |
| CTRL+DELETE  | Deletes the selected folder or dashboard page.                     |
| CTRL+ALT+F   | Opens the New Folder dialog box.                                   |
| UP ARROW     | Moves the selected graph placeholder to row above.                 |
| DOWN ARROW   | Moves the selected graph placeholder to row below.                 |
| LEFT ARROW   | Moves the selected graph placeholder to the left, if vacant.       |

| Shortcut Key       | Function  |
|--------------------|---|
| RIGHT ARROW        | Moves the selected graph placeholder to the right, if vacant. |
| BACKSPACE / DELETE | Removes the selected graph placeholder from dashboard page.   |
| SPACE              | Expands/reduces the selected graph placeholder.               |
| ENTER              | Adds the selected graph to the dashboard page.                |





# Part II

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## Management

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### ALM Editions:

- ▶ The Releases module is not available for Quality Center Starter Edition.
  - ▶ Functionality related to PPT is not available for Quality Center Starter Edition and Quality Center Enterprise Edition.
  - ▶ The Libraries module is not available with Quality Center Starter Edition. Quality Center Enterprise Edition includes some Libraries module functionality.
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# 9

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## Releases and Cycles

This chapter includes:

### Concepts

- ▶ Releases and Cycles Overview on page 172

### Tasks

- ▶ How to Use Releases and Cycles in ALM on page 174

### Reference

- ▶ Releases and Cycles User Interface on page 183

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## Concepts

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### Releases and Cycles Overview

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**Quality Center Starter Edition:** The Releases module is not available.

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The issuing of application releases is often challenging. It requires aligning your business priorities and quality expectations with your project requirements, tests, and defects. Most applications require testing on multiple hardware platforms, multiple configurations (computers, operating systems, and browsers), and multiple application versions. Managing all aspects of an application release can be time-consuming and difficult. You begin the application management process by defining releases.

HP Application Lifecycle Management (ALM) enables you to organize and track your upcoming releases by defining releases and cycles. A **release** represents a group of changes in one or more applications that will be available for distribution at the same time. Each release can contain a number of cycles. A **cycle** is a set of development and quality assurance efforts performed to achieve a common goal based on the release timeline. Both releases and cycles have defined start and end dates.

After defining releases and cycles, you define and review requirements and assign them to releases and cycles. **Requirements** describe in detail your application needs, and are used as a basis for creating a test plan. The tests you create during the test plan phase should cover these requirements.

After assigning requirements to releases and cycles, you create test set folders and assign them to cycles. A **test set** is a group of test instances in an ALM project designed to achieve specific test goals. After assigning test set folders to a cycle, you run the test sets under these test set folders.

If an application flaw is detected while running a test set, you can submit a defect. ALM automatically creates a link between the test run, associated release and cycle, and the new defect.

A defect can be submitted to an ALM project from any module at any stage of the application management process. While reviewing and deciding which new defects need to be fixed, the defects can be assigned to the appropriate release and cycle.

Following test runs, you can review the test progress to determine how well it meets the release goals. You can also determine how many defects were resolved, and how many still remain open. The results can be analyzed at a release or at a cycle level.

You can track the progress of the application management process in real time by analyzing the releases tree and ensuring that it matches the release goals.

For related task details, see "How to Use Releases and Cycles in ALM" on page 174.

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## Tasks

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### **How to Use Releases and Cycles in ALM**

This task describes how to create and track releases and cycles. To learn more about releases and cycles, see "Releases and Cycles Overview" on page 172.

You can also use Project Planning and Tracking (PPT) to track your application releases. PPT helps you make more informed release decisions using real-time key performance indicators (KPIs). For task details on working with PPT, see "How to Work with PPT" on page 213.

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#### **Note:**

- **Quality Center Starter Edition:** The Releases module is not available.
  - **Use-case:** For a use-case scenario related to this task, see "Work with Releases and Cycles - Use-Case Scenario" on page 177.
  - **Higher-level task:** This task is part of a higher-level task. For details, see "Application Lifecycle Management Roadmap" on page 27.
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This task includes the following steps:

- "Define releases and cycles" on page 175
- "Assign requirements" on page 175
- "Assign and run test sets" on page 175
- "Assign defects" on page 176
- "Analyze releases and cycles" on page 176

## 1 Define releases and cycles

Define releases and cycles in a hierarchical releases tree.

- a Open the Releases module.** On the ALM sidebar, under **Management**, select **Releases**.
- b Create folders.** Right-click the **Releases** root folder and select **New Release Folder**. To create a sub-folder, right-click a folder and select **New Release Folder**.
- c Add releases to folders.** Right-click a folder or sub-folder and select **New Release**. Fill in fields in the New Release dialog box. For user interface details, see "New Release/Release Details Dialog Box" on page 194.
- d Add cycles to a release.** Right-click a release and select **New Cycle**. Fill in fields in the New Cycle dialog box. For user interface details, see "New Cycle/Cycle Details Dialog Box" on page 197.

## 2 Assign requirements

In the Requirements module, assign requirements to releases and cycles.

- **Assign to release.** Right-click a requirement and select **Assign to Release**. For user interface details on the Select Releases dialog box, see "Select Releases Dialog Box" on page 207.
- **Assign to cycle.** Right-click a requirement and select **Assign to Cycle**. For user interface details on the Select Cycles dialog box, see "Select Cycles Dialog Box" on page 205.

## 3 Assign and run test sets

In the Test Lab module, assign test sets folders to cycles, and then run the test sets.

- a Assign to cycles.** Right-click a test set folder and select **Assign to Cycle**. For user interface details on the Select Cycles dialog box, see "Select Cycles Dialog Box" on page 205.
- b Run tests.** For task details on running tests, see "How to Run Tests in ALM" on page 716.

## 4 Assign defects

Assign defects to a target release and a target cycle. For task details, see "How to Track Defects in ALM" on page 869.

## 5 Analyze releases and cycles

View statistics and graphs to track the progress of your releases and cycles.

### a View assigned requirements and test set folders.

To view statistics on the requirements and test set folders assigned to your releases and cycles, in the Releases module, select a release or cycle and click the **Details** tab. In the **Statistics** area, view statistics on assigned requirements and test set folders. For user interface details on the Releases module window, see "Releases Module Window" on page 184.

### b View coverage progress.

View statistics and graphs which provide visual indications of the current progress of your release or cycle.

- **For a release:** Select a release in the releases tree, click the **Status** tab, and then click the **Progress** tab.
- **For a cycle:** Expand a release in the releases tree, select a cycle, and click the **Progress** tab.

For user interface details, see "Progress Tab" on page 200.

### c View defects.

View graphs in the Releases module displaying the number of defects submitted over the course of a release or cycle.

- **For a release:** Select a release in the releases tree, click the **Status** tab, and then click the **Quality** tab.
- **For a cycle:** Expand a release in the releases tree, select a cycle, and click the **Quality** tab.

For user interface details, see "Quality Tab" on page 203.



## Work with Releases and Cycles - Use-Case Scenario

This use-case scenario describes the release management workflow.

---

**Note:** For a task related to this scenario, see "How to Use Releases and Cycles in ALM" on page 174.

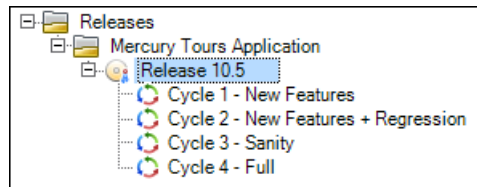
---

This scenario includes the following steps:

- "Define releases and cycles" on page 175
- "Assign Requirements" on page 178
- "Assign and Run Test Sets" on page 178
- "Assign Defects" on page 179
- "Analyze Releases and Cycles" on page 180

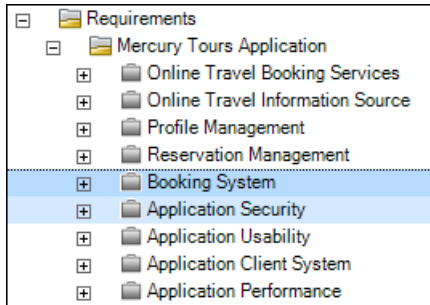
### 1 Define Releases and Cycles

Suppose you are developing a flight reservation application. In four months, you plan on releasing version 10.5. Your release includes four cycles. The first cycle is for testing new features. The second cycle is for regression testing. The third cycle is for sanity testing. The fourth cycle verifies the full functionality of the application. Your releases tree may be defined as follows:



## 2 Assign Requirements

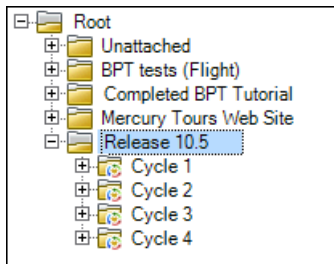
In the Requirements module, you decide which requirements need to be covered in each cycle and assign them to the relevant cycles accordingly. For example, in the requirements tree, under the **Mercury Tours Application** folder, you might assign **Booking System** and **Application Security** to the **Cycle 1 - New Features** cycle in the **Release 10.5** release.



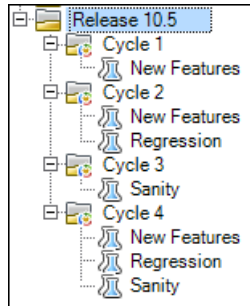
Requirements are then used as a basis for the test plan in the Test Plan module. You create tests and associate them with the assigned requirements to create coverage.

## 3 Assign and Run Test Sets

In the Test Lab module, you create test set folders and assign them to specific cycles. For this example, you might define the Cycle 1, Cycle 2, Cycle 3, and Cycle 4 test set subfolders:



For each assigned test set folder, you then create test sets and add tests to them, for example:



#### 4 Assign Defects

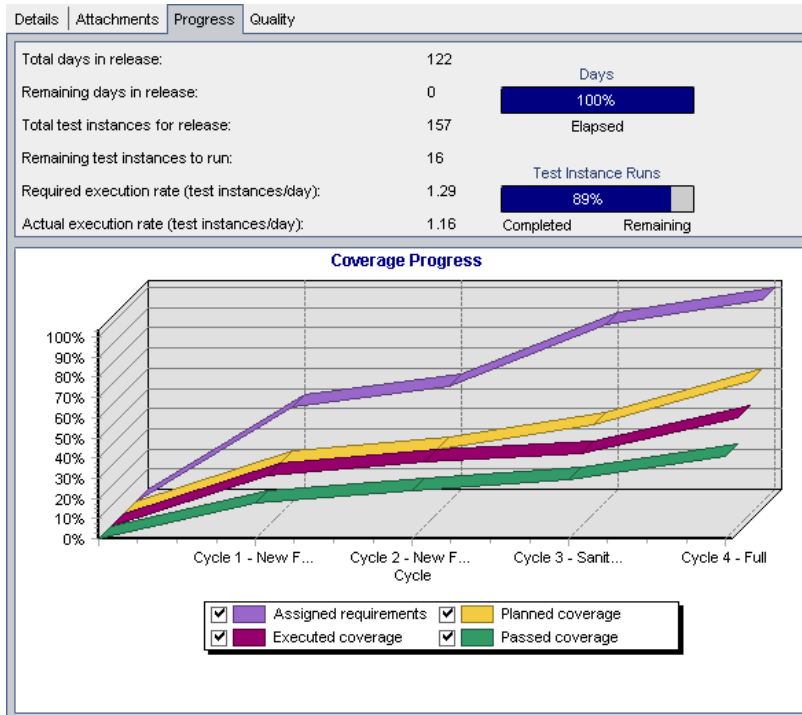
A defect is detected while running a test instance from a test set in the **Cycle 1** test set folder. When the defect is initially submitted to the project, the **Detected in Release** field is assigned to the **Release 10.5** release, and the **Detected in Cycle** field is assigned to the **Cycle 1 - New Features** cycle.

Continuing with this example, suppose this defect is planned to be fixed in the next cycle. The **Target Release** field would be assigned to **Release 10.5**, and the **Target Cycle** field would be assigned to **Cycle 2 - New Features + Regression**.

## 5 Analyze Releases and Cycles

After running the test sets from the assigned test set folders, you can review the progress in the Progress tab of the Releases module to determine how well it meets your release goals. This provides you with a high-level overview of the progress of your release.

The following shows the progress in the Release 10.5 example:



The top pane shows the total and remaining days in the release, total test instances for the release, actual and remaining test instances to run, and more.

The bottom pane displays the Coverage Progress graph. The curves displayed in this graph are accumulative, that is, each curve is calculated by accumulating all the release information from the beginning of the release.

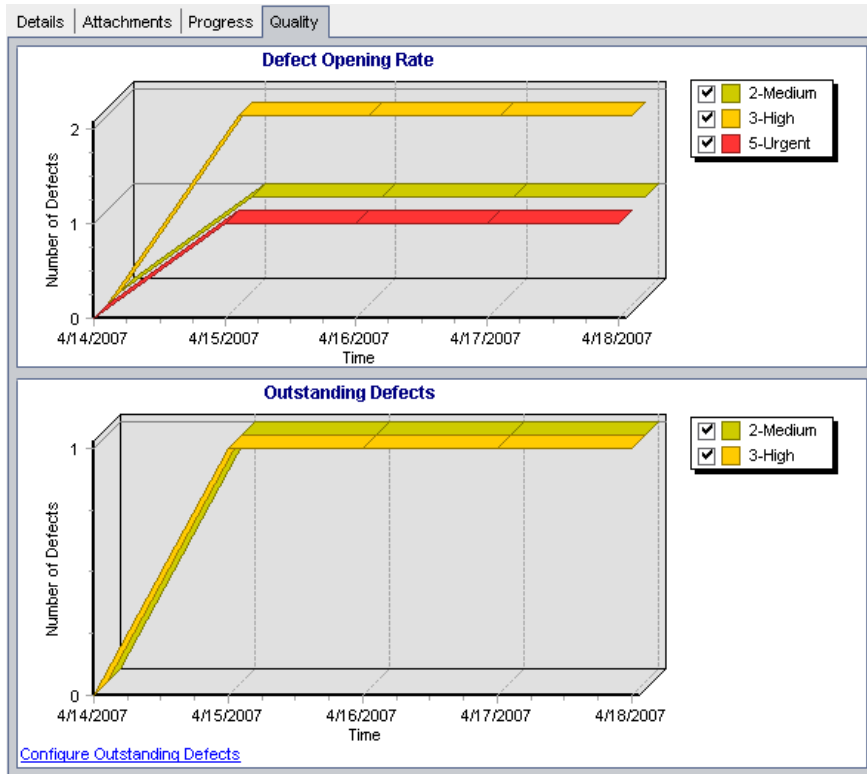
The **Assigned requirements** curve indicates the distribution of the assigned requirements within the release's cycles. In this example, the curve indicates a 100% value in the **Cycle 4 - Full** cycle.

The **Planned coverage** curve below the Assigned requirements curve indicates the percentage of requirements that are covered throughout the release. In this example only 60% of the requirements are covered in the **Cycle 4 - Full** cycle.

The **Executed coverage** curve below the Planned coverage curve indicates the percentage of tests that were run as the release progressed. In this example, the curve indicates that at **Cycle 4 - Full** only 40% of the assigned tests were run.

The **Passed coverage** curve is below the Executed coverage curve. It indicates the test runs in which the most recent status is passed. In this example, the curve indicates a 20% value in the **Cycle 4 - Full** cycle.

For each cycle, you can view the number of defects submitted and their severity in the Quality tab. Suppose that while running the **Cycle 1** test set under the **Release 10.5** test set folder, four application flaws are detected. In the Releases tree, you would select **Cycle 1 - New Features** cycle and click the Quality tab to view the number of defects opened over the course of the cycle. The defects are categorized by severity level, ranging from **1-Low** to **5-Urgent**.



In the Defect Opening Rate graph, you can see that out of the four defects detected while testing the first cycle, two defects are assigned a severity value of **3-High**, one defect is assigned **5-Urgent**, and one defect is assigned **2-Medium**.

In the Outstanding Defects graph, you can see that two out of the four defects are still outstanding. One defect is assigned **2-Medium** the other defect is assigned **3-High**.

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## Reference

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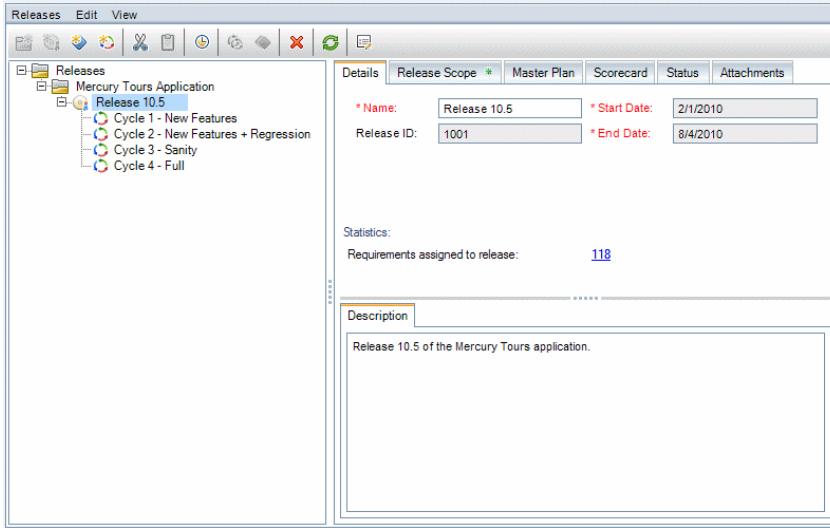
### Releases and Cycles User Interface

This section includes:

- ▶ Releases Module Window on page 184
- ▶ Releases Module Menus and Buttons on page 186
- ▶ Releases Module Icons on page 191
- ▶ Releases Module Fields on page 192
- ▶ New Release/Release Details Dialog Box on page 194
- ▶ New Cycle/Cycle Details Dialog Box on page 197
- ▶ Progress Tab on page 200
- ▶ Quality Tab on page 203
- ▶ Select Cycles Dialog Box on page 205
- ▶ Select Releases Dialog Box on page 207
- ▶ Reschedule Release/Cycle/Milestone Dialog Box on page 208

## Releases Module Window

This window enables you to define and track releases and cycles.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the ALM sidebar, under Management, select <b>Releases</b> .               |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> The Releases module is not available. |
| <b>Relevant tasks</b>        | "How to Use Releases and Cycles in ALM" on page 174                          |
| <b>See also</b>              | "Releases and Cycles Overview" on page 172                                   |



User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)                    | Description   |
|--------------------------------------|---|
| <Releases module common UI elements> | <ul style="list-style-type: none"> <li>▶ <b>Release fields.</b> For field definitions, see "Releases Module Fields" on page 192.</li> <li>▶ <b>Release menus and buttons.</b> For command and button descriptions, see "Releases Module Menus and Buttons" on page 186.</li> <li>▶ <b>Release icons.</b> For icon descriptions, see "Releases Module Icons" on page 191.</li> <li>▶ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu and sidebar, see "ALM Common Areas" on page 41.</li> </ul> |
| <Releases tree>                      | A graphical representation of your releases.  |
| <b>Attachments tab</b>               | Lists attachments that provide additional information about the currently selected folder, release, or cycle. For more details, see "Attachments Page" on page 90.  |
| <b>Description tab</b>               | Describes the currently selected folder, release, or cycle.<br>Click in the text box to display a toolbar for formatting and spell checking the text.   |
| <b>Details tab</b>                   | Displays details of the currently selected folder, release, or cycle. The <b>Statistics</b> area displays the requirements and test set folders associated with the release or cycle. For more details, see "Releases Module Fields" on page 192.   |
| <b>Master Plan tab</b>               | Shows the progress of a release in a Gantt chart. For more details, see "Master Plan Tab" on page 246.<br><br><b>ALM Editions:</b> This tab is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.  |

| UI Elements (A-Z)        | Description   |
|--------------------------|---|
| <b>Release Scope tab</b> | Shows the release scope items of the currently selected release. For more details, see "Release Scope Tab" on page 225.<br><b>ALM Editions:</b> This tab is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.   |
| <b>Scorecard tab</b>     | Shows a KPI scorecard of the status of the currently selected release. For more details, see "Scorecard Tab" on page 250.<br><b>ALM Editions:</b> This tab is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.   |
| <b>Status tab</b>        | Includes the following tabs: <ul style="list-style-type: none"> <li>▶ <b>Progress tab.</b> Shows a high-level overview of the progress of the currently selected release or cycle. For more details, see "Progress Tab" on page 200.</li> <li>▶ <b>Quality tab.</b> Shows the number of defects opened over the course of the currently selected release or cycle. It also shows the number of outstanding defects. For more details, see "Quality Tab" on page 203.</li> </ul> |



## Releases Module Menus and Buttons




This section describes the menus and buttons available in the Releases module.





|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under Management, select <b>Releases</b> .  |
| <b>Important information</b> | <b>Tip:</b> You can access the menu bar from the Releases module by pressing the shortcut key ALT. Additionally, you can perform many other ALM operations using shortcut keys. For a list of shortcut keys, see "ALM Keyboard Shortcut Reference" on page 154.<br><b>Quality Center Starter Edition:</b> The Releases module is not available. |




|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "How to Use Releases and Cycles in ALM" on page 174   |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Releases Module Icons" on page 191</li> <li>➤ "Releases Module Window" on page 184</li> <li>➤ "Releases and Cycles Overview" on page 172</li> </ul> |

User interface elements are described below:

| UI Elements (A-Z)  | Menu | Description  |
|--|------|--|
| <b>Collapse</b>  | View | Collapses all branches in the releases tree.   |
|  <b>Cut/Paste</b> | Edit | <p>Moves a selected release folder or release to a different location in the releases tree.</p> <p><b>Note:</b> Moving a release folder also moves its releases and cycles. Moving a release also moves its cycles. The root folder cannot be moved.</p> <p><b>Tip:</b> You can also move a release folder or a release to a new location in the releases tree by dragging it.</p> |
|  <b>Delete</b>   | Edit | <p>Deletes selected release folders, releases, or cycles. Deleting a folder also deletes its releases and cycles. Deleting a release also deletes its cycles.</p> <p><b>Note:</b> Deleting a release folder, release, or cycle also unassigns the associated requirements, test set folders, and defects.</p>  |

| UI Elements (A-Z)  | Menu     | Description  |
|--|----------|--|
|  <b>Details</b>               | Releases | <p>Opens the corresponding Details dialog box, enabling you to view and update details of the selected release, cycle, or milestone.</p> <p>For more details, see:</p> <ul style="list-style-type: none"> <li>➤ "New Release/Release Details Dialog Box" on page 194</li> <li>➤ "New Cycle/Cycle Details Dialog Box" on page 197</li> <li>➤ "Milestone Details Dialog Box" on page 248</li> </ul> <p><b>ALM Editions:</b> Milestones are not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p> |
|  <b>Duplicate Cycle</b>       | Edit     | <p>Creates a copy of the selected cycle within the same release.</p> <p>To duplicate more than one cycle, press the <b>CTRL</b> key and select the cycles you want to duplicate. You can select only cycles that belong to the same release.</p>   |
|  <b>Duplicate Milestone</b> | Edit     | <p>Creates a copy of the selected milestone within the same release.</p> <p>To duplicate more than one milestone, press the <b>CTRL</b> key and select the milestones you want to duplicate. You can select only milestones that belong to the same release.</p> <p><b>ALM Editions:</b> This feature is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p>   |

| UI Elements (A-Z)   | Menu     | Description  |
|---|----------|--|
| Expand All  | View     | Expands all branches in the releases tree.   |
|  <b>New Cycle</b>                      | Releases | <p>Opens the New Cycle dialog box, enabling you to add a cycle to a selected release. For more details, see "New Cycle/Cycle Details Dialog Box" on page 197.</p>  |
|  <b>New Milestone</b>                  | Releases | <p>Opens the New Milestone dialog box, enabling you to add a milestone to a selected release. For more details, see "New Milestone Dialog Box" on page 230.</p> <p><b>ALM Editions:</b> This feature is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p>  |
|  <b>New Release/ New Empty Release</b> | Releases | <p>Opens the New Release dialog box, enabling you to add a release to a selected release folder. For more details, see "New Release/Release Details Dialog Box" on page 194.</p> <p><b>Note:</b> When working with a project that is linked to a template project, the New Empty Release option is available instead of the New Release option.</p> <p><b>ALM Editions:</b> New Empty Release is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p> |
|  <b>New Release Folder</b>           | Releases | <p>Opens the New Release Folder dialog box, enabling you to add a folder under a selected folder.</p>  |

| UI Elements (A-Z)  | Menu     | Description  |
|--|----------|--|
|  <b>New Release From Template</b> | Releases | <p>Opens the New Release from Template dialog box, enabling you create a release based on a release from a template project. For more details, see "New Release From Template Dialog Box" on page 261.</p> <p><b>ALM Editions:</b> This option is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p> <p><b>Note:</b> This option is available in a project that is linked and synchronized with a template project.</p> |
| <b>Rename</b>  | Edit     | <p>Renames a selected release folder, release, or cycle. You cannot rename the root folder.</p>  |
|  <b>Refresh All</b>               | View     | <p>Refreshes the releases tree so that it displays the most up-to-date information.</p>  |
|  <b>Reschedule</b>               | Releases | <p>Opens the Reschedule dialog box, enabling you to reschedule the start and end date of a release, cycle, or milestone. For more details, see "Reschedule Release/Cycle/Milestone Dialog Box" on page 208.</p> <p><b>ALM Editions:</b> The capability to reschedule milestones is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p>   |




| UI Elements (A-Z)     | Menu               | Description  |
|-----------------------|--------------------|--|
| Show Requirements     | <right-click menu> | Goes to the Requirements module and displays the requirements assigned to the selected release or cycle. |
| Show Test Set Folders | <right-click menu> | Goes to the Test Lab module and displays the test set folders assigned to the selected cycle.            |



## Releases Module Icons

This section describes the icons available in the Releases module.

|                       |   |
|-----------------------|---|
| To access             | On the ALM sidebar, under Management, select <b>Releases</b> .  |
| Important information | <b>ALM Editions:</b> The Releases module is not available for Quality Center Starter Edition.   |
| Relevant tasks        | "How to Use Releases and Cycles in ALM" on page 174   |
| See also              | <ul style="list-style-type: none"> <li>▶ "Releases Module Menus and Buttons" on page 186</li> <li>▶ "Releases Module Window" on page 184</li> <li>▶ "Releases and Cycles Overview" on page 172</li> </ul> |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <green asterisk>. The tab is populated.   |
|  | <b>Milestone.</b> A milestone of a release in the releases tree.<br><b>ALM Editions:</b> This icon is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition. |
|  | <b>Release Folder.</b> A folder for organizing releases.  |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Release.</b> A release in the releases tree.          |
|  | <b>Cycle.</b> A cycle of a release in the releases tree. |

## Releases Module Fields

The Releases module **Details** tab displays the following fields for a release or a cycle.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under Management, select <b>Releases</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ The dates for the cycles must be contained within the dates for the releases.</li> <li>▶ You can add user-defined fields and change the label of any of the fields in the Releases module. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You can use the Script Editor to restrict and dynamically change the fields and values in the Releases module. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ For project planning and tracking (PPT) fields, see "PPT Fields" on page 223.</li> <li>▶ <b>Quality Center Starter Edition:</b> The Releases module is not available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Use Releases and Cycles in ALM" on page 174   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "Releases Module Window" on page 184</li> <li>▶ "Releases and Cycles Overview" on page 172</li> </ul>  |



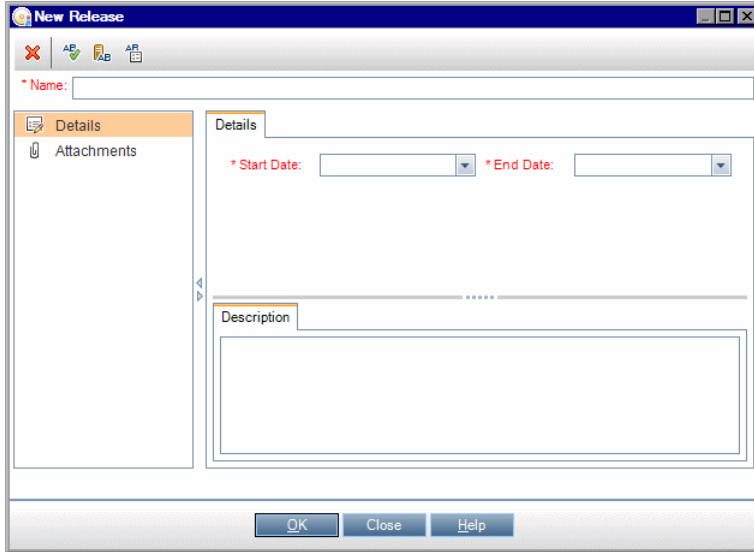
The fields are described below:

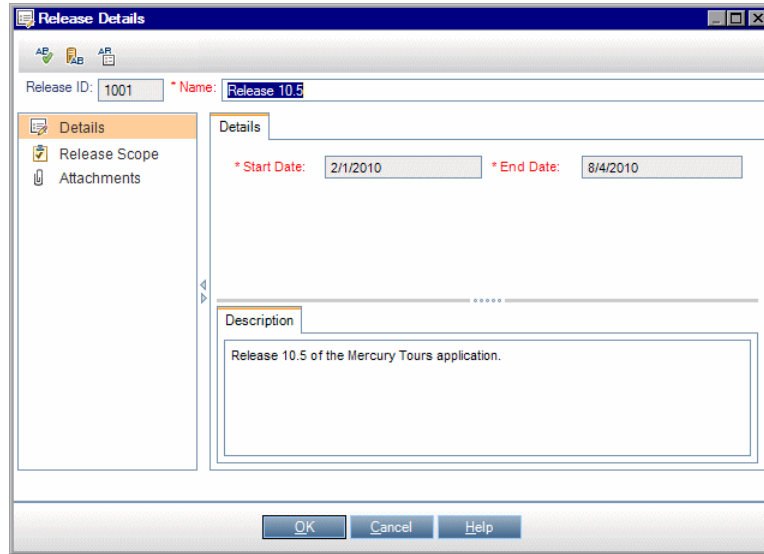
| UI Elements (A-Z)                         | Description   |
|---|---|
| <b>Cycle ID</b>                           | A unique numeric ID for the cycle, assigned automatically by ALM. The Cycle ID is read-only.  |
| <b>End Date</b>                           | The date on which the release or cycle ends.  |
| <b>Name</b>                               | The folder, release, or cycle name.   |
| <b>Release ID</b>                         | A unique numeric ID for the release, assigned automatically by ALM. The Release ID is read-only.  |
| <b>Requirements assigned to cycle</b>     | <p>The number of requirements associated with the selected cycle.</p> <p>To view the requirements assigned to the cycle in the Requirements module, click the link displaying the number of requirements.</p>         |
| <b>Requirements assigned to release</b>   | <p>The number of requirements associated with the selected release.</p> <p>To view the requirements assigned to the release in the Requirements module, click the link displaying the number of requirements.</p>     |
| <b>Start Date</b>                         | The date on which the release or cycle starts.  |
| <b>Test set folders assigned to cycle</b> | <p>The number of test set folders associated with the selected cycle.</p> <p>To view the test set folders assigned to the cycle in the Test Lab module, click the link displaying the number of test set folders.</p> |

## **New Release/Release Details Dialog Box**

The New Release dialog box enables you to define a new release.





The Release Details dialog box enables you to view and update the details of the selected release.





|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <ul style="list-style-type: none"> <li>➤ <b>New Release dialog box:</b> In the Releases module, right-click a release folder and select <b>New Release</b>.</li> <li><b>From a template based project:</b> In the Releases module, right-click a release folder and select <b>New Empty Release</b>.</li> <li>➤ <b>Release Details dialog box:</b> In the Releases module, right-click a release and select <b>Details</b>.</li> </ul>                                 |
| <p><b>Important information</b></p> | <p><b>ALM Editions:</b> The New Release dialog box is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p> <p><b>Note:</b> The <b>New Empty Release</b> option is available in a project that is linked and synchronized with a template project. For more details on linking and synchronizing template projects, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</p> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Use Releases and Cycles in ALM" on page 174</p>   |
| <p><b>See also</b></p>              | <p>"Releases and Cycles Overview" on page 172</p>  |

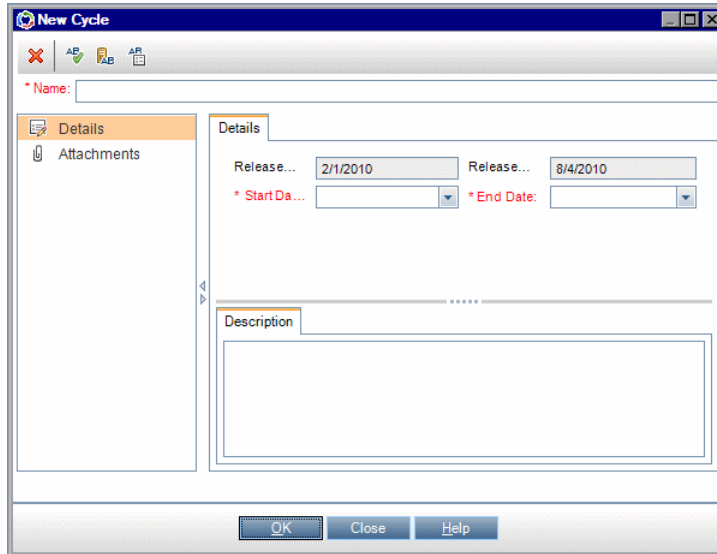
User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Clear All Fields.</b> Clears the data.</p> <p><b>Available from:</b> New Release dialog box</p>   |
|  | <p><b>Check Spelling.</b> Checks the spelling for the selected word or text box.</p>  |
|  | <p><b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.</p>  |
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p>   |
| <p><b>Attachments</b></p>   | <p>Enables you to add attachments that provide additional information about the new release. For more details, see "Attachments Page" on page 90.</p>   |
| <p><b>Details</b></p>   | <p>Lists release fields. Required fields are displayed in red. For details on the available release fields, see "Releases Module Fields" on page 192.</p> <p><b>Tip:</b> Clicking in the <b>Description</b> field on this page displays a toolbar for formatting and spell checking the text.</p>   |
| <p><b>Name</b></p>  | <p>Type a name for the new release.</p>   |
| <p><b>Release Scope</b></p>   | <p>Shows the release scope items of the currently selected release. For more details, see "Release Scope Tab" on page 225.</p> <p><b>ALM Editions:</b> This tab is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p> <p><b>Available from:</b> Release Details dialog box</p> |

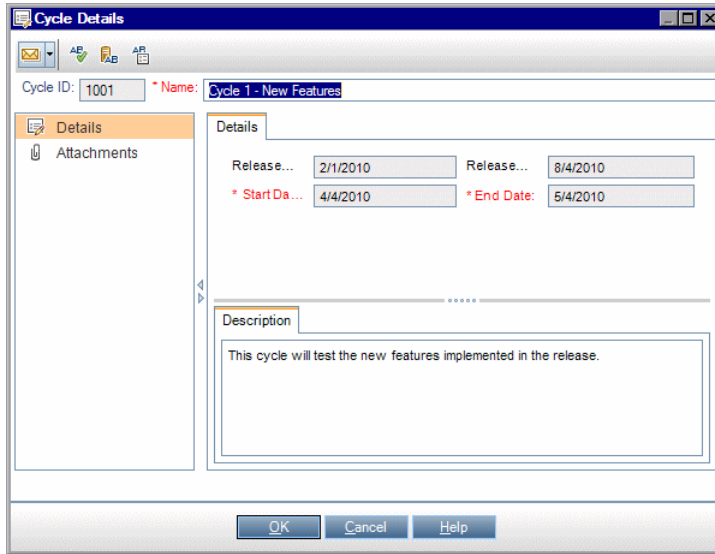
## New Cycle/Cycle Details Dialog Box

The New Cycle dialog box enables you to define a new release.

The Cycle Details dialog box enables you to view and update the details of the selected release.







The screenshot shows a dialog box titled "New Cycle" with a standard Windows-style title bar. The dialog is divided into two main sections. On the left is a sidebar with a tree view containing "Details" (selected) and "Attachments". The main area is split into two tabs: "Details" and "Description". The "Details" tab contains several input fields: a text box for "\* Name:" at the top; two "Release..." text boxes with values "2/1/2010" and "8/4/2010"; and two dropdown menus for "\* Start Da..." and "\* End Date:". The "Description" tab is currently empty. At the bottom of the dialog are three buttons: "OK", "Close", and "Help".



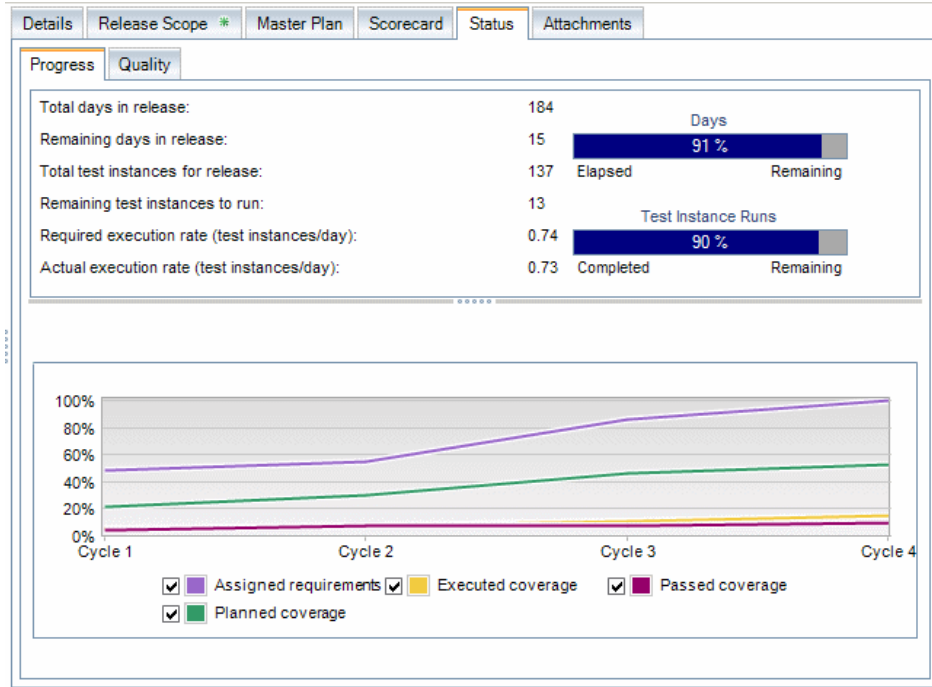
|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p><b>New Cycle dialog box:</b> In the Releases module, right-click a release and select <b>New Cycle</b>.</p> <p><b>Cycle Details dialog box:</b> In the Releases module, expand a release, right-click a cycle and select <b>Details</b>.</p> |
| <p><b>Important information</b></p> | <p><b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p>   |
| <p><b>Relevant tasks</b></p>        | <ul style="list-style-type: none"> <li>➤ "How to Use Releases and Cycles in ALM" on page 174</li> <li>➤ "How to Work with PPT" on page 213</li> </ul>   |
| <p><b>See also</b></p>              | <ul style="list-style-type: none"> <li>➤ "Releases and Cycles Overview" on page 172</li> <li>➤ "PPT Releases Overview" on page 212</li> <li>➤ "Releases Module Window" on page 184</li> </ul>   |


User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Clear All Fields.</b> Clears the data.<br><b>Available from:</b> New Cycle dialog box   |
|  | <b>Check Spelling.</b> Checks the spelling for the selected word or text box.  |
|  | <b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.  |
|  | <b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.   |
| <b>Attachments</b>  | Enables you to add attachments that provide additional information about the cycle. For more details, see "Attachments Page" on page 90.   |
| <b>Details</b>  | Lists cycle fields. Required fields are displayed in red. For details on the available cycle fields, see "Releases Module Fields" on page 192.<br><b>Tip:</b> Clicking in the <b>Description</b> field on this page displays a toolbar for formatting and spell checking the text. |
| <b>Name</b>   | The name of the cycle.   |

## Progress Tab

This tab displays statistics and graphs to provide visual indications of the current progress of your release or cycle. You can view information such as elapsed and remaining days, completed and remaining test instances to run, and actual and required execution rate.



|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p>In the Releases module:</p> <ul style="list-style-type: none"> <li>► For a release: Select a release in the releases tree, click the <b>Status</b> tab, and then click the <b>Progress</b> tab.</li> <li>► For a cycle: Expand a release, select a cycle and click the <b>Progress</b> tab.</li> </ul> |
| <p><b>Important information</b></p> | <p>Click the <b>Refresh All</b> button  in the Releases module toolbar to display the most up-to-date data.</p> <p><b>Quality Center Starter Edition:</b> The Releases module is not available.</p>                    |



|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | "How to Use Releases and Cycles in ALM" on page 174  |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Releases and Cycles Overview" on page 172</li> <li>➤ "Releases Module Window" on page 184</li> </ul> |

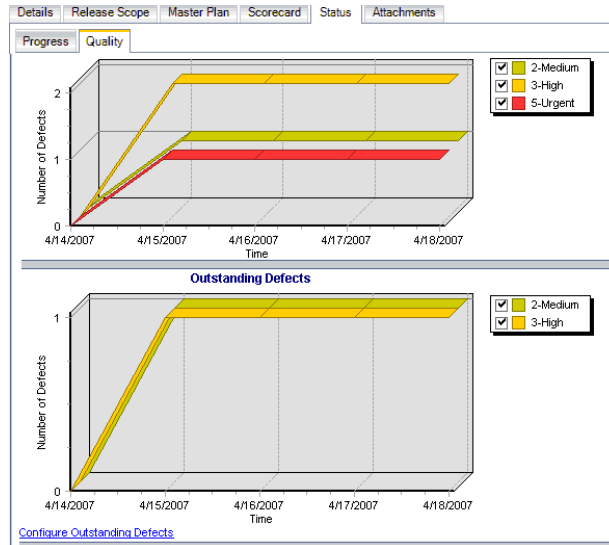
User interface elements are described below:


| <b>UI Elements</b>                                  | <b>Description</b>   |
|---|--|
| <b>Total days in release/cycle</b>                  | The total number of days in a selected release or cycle (end date - start date).   |
| <b>Remaining days in release/cycle</b>              | The total number of days remaining in a selected release or cycle.   |
| <b>Total test instances for release/cycle</b>       | The total number of test instances included in the test set folders assigned to a selected release or cycle.                       |
| <b>Remaining test instances to run</b>              | The total number of test instances included in the assigned test set folders of a selected release or cycle that have not yet run. |
| <b>Required execution rate (test instances/day)</b> | The average number of test instance runs required per day for the remaining days in a selected release or cycle.                   |
| <b>Days (progress bar)</b>                          | The percentage of days elapsed in a selected release or cycle.   |

| UI Elements                              | Description   |
|--|---|
| <b>Test Instance Runs (progress bar)</b> | The percentage of test instance runs completed in a selected release or cycle.  |
| <b>Coverage Progress graph</b>           | Displays coverage progress for a selected release or cycle.<br>Display options include: <ul style="list-style-type: none"> <li>▶ <b>Assigned requirements.</b> The accumulated percentage of requirements assigned to all cycles within the selected release. This option available for releases only.</li> <li>▶ <b>Planned coverage.</b> The accumulated percentage of tests planned for a selected cycle, or for all cycles within a selected release.</li> <li>▶ <b>Executed coverage.</b> The accumulated percentage of tests planned for a selected cycle, or for all cycles within a selected release.</li> <li>▶ <b>Passed coverage.</b> The accumulated percentage of tests that ran successfully in a selected cycle, or for all cycles within a selected release.</li> </ul> |

## Quality Tab

This tab displays the number of defects submitted over the course of a release or cycle in graphical format. You can view the graphs at any stage of the application management process to check the progress of your release.



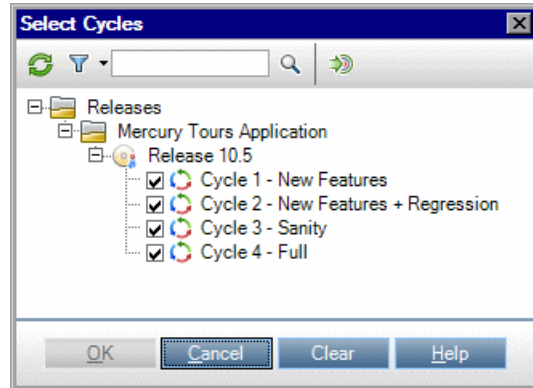
|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p>In the Releases module:</p> <ul style="list-style-type: none"> <li>▶ For a release: Select a release in the releases tree, click the <b>Status</b> tab, and then click the <b>Quality</b> tab.</li> <li>▶ For a cycle: Expand a release, select a cycle and click the <b>Quality</b> tab.</li> </ul>                                 |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ Click the <b>Refresh All</b> button  in the Releases module toolbar to display the most up-to-date data.</li> <li>▶ <b>Quality Center Starter Edition:</b> The Releases module is not available.</li> </ul> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Use Releases and Cycles in ALM" on page 174</p>  |
| <p><b>See also</b></p>              | <p>"Releases and Cycles Overview" on page 172<br/> "Releases Module Window" on page 184</p>   |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)                       | Description  |
|---|--|
| <Defect severity level display options> | Determine which defects are displayed in the graph based on defect severity level. The severity levels ranges from <b>Low-1</b> to <b>Urgent-5</b> .   |
| <b>Configure Outstanding Defects</b>    | Opens the Configure Outstanding Defects dialog box, enabling you to determine which defects are displayed in the graph by filtering them by their status.<br><br>To display or hide defects, move statuses between the <b>Available Defect Status</b> and <b>Visible Defect Status</b> boxes.  |
| <b>Defect Opening Rate graph</b>        | Displays the number of defects opened over the course of the selected release or cycle.<br><br>The graph displays defects whose <b>Detected in Release</b> or <b>Detected in Cycle</b> value matches the selected release or cycle. The defects are grouped according to their level of <b>Severity</b> . The x-axis displays the number of defects according to their severity on the last day of each cycle.   |
| <b>Outstanding Defects graph</b>        | Displays the number of outstanding defects for the selected release or cycle.<br><br>The graph displays defects whose <b>Target Release</b> or <b>Target Cycle</b> value matches the selected release or cycle, or is empty. The defects are grouped according to their level of <b>Severity</b> . The x-axis displays the number of outstanding defects according to their severity on the last day of each cycle. By default, <b>New</b> , <b>Open</b> , and <b>Reopened</b> defects are considered outstanding. |





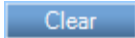
## Select Cycles Dialog Box

This dialog box enables you to assign requirements and test set folders to cycles defined in the releases tree.



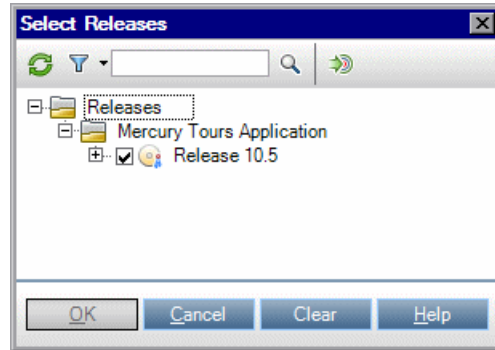
|                              |   |
|------------------------------|---|
| <b>To access</b>             | Right-click a requirement in the Requirements module, or a test set folder in the Test Lab module, and select <b>Assign to Cycle</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ <b>Quality Center Starter Edition:</b> Functionality related to Release management is not available.</li> <li>▶ When you assign a requirement to a cycle, the value is entered in the requirement's <b>Target Cycle</b> field. In addition, the cycle's release is entered in the <b>Target Release</b> field.</li> <li>▶ When you assign a test set folder to a cycle, the test set's subfolders are automatically assigned to the same cycle.</li> </ul> |
| <b>Relevant tasks</b>        | <ul style="list-style-type: none"> <li>▶ "How to Use Requirements in ALM" on page 335</li> <li>▶ "How to Create Test Sets" on page 752</li> <li>▶ "How to Use Releases and Cycles in ALM" on page 174</li> </ul>  |
| <b>See also</b>              | "Releases and Cycles Overview" on page 172  |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Refresh.</b> Refreshes the releases tree so that it displays the most up-to-date information.  |
|  | <b>Filter/Sort.</b> Enables you to filter the data according to the criteria that you choose. For more details, see "Filter Dialog Box" on page 64. |
|  | <b>Find.</b> Searches the releases tree for the value you specify in the <b>Find</b> box.   |
|  | <b>Go to Entity by ID.</b> Opens the Go to Cycle dialog box, enabling you to locate the cycle in the tree according to Cycle ID.                    |
|  | Clears the assigned cycle from the requirement.<br><b>Available from:</b> Requirements module   |
| <Find box>  | Enter the name of the cycle you want to search for and click the <b>Find</b> button.  |
| <Releases tree>   | Displays the releases tree in the Releases module.<br>Expand the tree and select a cycle. You can assign requirements to more than one cycle.       |




## Select Releases Dialog Box



This dialog box enables you to assign requirements to releases defined in the releases tree.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Requirements module, right-click a requirement and select <b>Assign to Release</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ <b>Quality Center Starter Edition:</b> Functionality related to Release management is not available.</li> <li>▶ When you assign a requirement to a release, the value is entered in the requirement's <b>Target Release</b> field.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Use Releases and Cycles in ALM" on page 174  |
| <b>See also</b>              | "Releases and Cycles Overview" on page 172   |

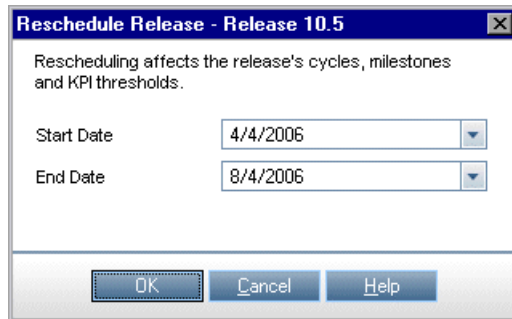
User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Refresh.</b> Refreshes the releases tree so that it displays the most up-to-date information.  |
|  | <b>Filter/Sort.</b> Enables you to filter the data according to the criteria that you choose. For more details, see "Filter Dialog Box" on page 64. |
|  | <b>Find.</b> Searches the releases tree for the value you specify in the <b>Find</b> box.   |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Go to Entity by ID.</b> Opens the Go to Release dialog box, enabling you to locate the release in the tree according to Release ID. |
|  | Clears the assigned release from the requirement.  |
| <Find box>  | Enter the name of the release you want to search for and click the <b>Find</b> button.   |
| <Releases tree>   | Displays the releases tree in the Releases module.<br>Expand the tree and select one or more releases.                                 |

## Reschedule Release/Cycle/Milestone Dialog Box

This dialog box enables you to reschedule the start and end date of a release, cycle, or milestone.





|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Releases module, right-click a release, cycle, or milestone. Select <b>Reschedule</b> .   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> <li>▶ When rescheduling a release, the related cycles, milestones, and KPI thresholds are rescheduled accordingly.</li> <li>▶ When rescheduling a milestone, the related KPI thresholds are rescheduled accordingly.</li> </ul> |
| <b>Relevant tasks</b>        | <ul style="list-style-type: none"> <li>▶ "How to Use Releases and Cycles in ALM" on page 174</li> <li>▶ "How to Work with PPT" on page 213</li> </ul>  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "Releases and Cycles Overview" on page 172</li> <li>▶ "PPT Releases Overview" on page 212</li> </ul>  |

User interface elements are described below:

| <b>UI Elements (A-Z)</b> | <b>Description</b>   |
|--------------------------|--|
| <b>Due Date</b>          | The date on which the milestone ends.<br><b>Available from:</b> Reschedule Milestone dialog box            |
| <b>End Date</b>          | The date on which the release or cycle ends.<br><b>Available from:</b> Reschedule Release/Cycle dialog box |
| <b>Start Date</b>        | The date on which the release, cycle, or milestone starts.   |



# 10

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## **Project Planning and Tracking (PPT) Releases**

This chapter includes:

### **Concepts**

- ▶ PPT Releases Overview on page 212

### **Tasks**

- ▶ How to Work with PPT on page 213

### **Reference**

- ▶ KPI Types on page 220
- ▶ PPT User Interface on page 222

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## Concepts

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### PPT Releases Overview

Project planning and tracking (PPT) enables quality assurance managers to track application readiness by defining goals for activities of an application release.

For each release, you define release scope items. A **release scope item** refers to a subdivided section of a release, for example a new feature, a change to an existing feature, or a new theme. For each scope item you define the related requirements, tests, test sets, and defects. To measure the progress of the release scope items, you associate them with milestones. A **milestone** is a point in the time-line of a release that signifies the completion of a deliverable. It enables you to track and validate the progress of the release. A milestone can be associated with one or more release scope items.

PPT collects and analyzes the data from the defined milestones using key performance indicators (KPIs). A **KPI** is a quantifiable measure designed to track a critical performance variable over time, and measure the essential outcome of quality assurance activities. For each KPI, you define threshold levels to set warning limits.

PPT uses the KPIs to analyze a milestone's readiness data, and to show the overall health and deployment readiness of a release in the form of a scorecard. The scorecard monitors and tracks how well each milestone is being met on a daily basis. To further analyze your output, you can generate dashboard reports and graphs.

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**ALM Editions:** Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.

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For task details, see "How to Work with PPT" on page 213.

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## Tasks

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### How to Work with PPT

This task describes how to define releases, release scopes and milestones, and how to track release scope status in the Releases module. To learn more about PPT, see "PPT Releases Overview" on page 212.

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#### Note:

- ▶ **ALM Editions:** Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.
  - ▶ **Use-case:** For a use-case scenario related to this task, see "How to Work with PPT - Use-Case Scenario" on page 215.
  - ▶ **Product Feature Movie:** To view a movie that demonstrates PPT, choose **Help > Product Feature Movies** in the ALM main window and select **Project Planning and Tracking**.
- 

This task includes the following steps:

- ▶ "Define releases" on page 214
- ▶ "Define release scope items" on page 214
- ▶ "Define milestones" on page 214
- ▶ "Analyze progress" on page 215

## 1 Define releases

- a Open the Releases module.** On the ALM sidebar, under **Management**, select **Releases**. For user interface details on the Releases module, see "Releases Module Window" on page 184.
- b Create folders.** Right-click the **Releases** root folder and select **New Release Folder**. To create a sub-folder, right-click a folder and select **New Release Folder**.
- c Add releases.** Right-click a release folder and select **New Release**. For user interface details, see "New Release/Release Details Dialog Box" on page 194.

Alternatively, if you are working with a project that is linked to a template project, you can create a release by copying from the template project. Right-click a release folder and select **New Release from Template**. For user interface details, see "New Release From Template Dialog Box" on page 261.

## 2 Define release scope items

In the releases tree, select a release. Click the **Release Scope** tab. Add release scope items and define the related requirements, tests, test sets, and defects. For user interface details, see "Release Scope Tab" on page 225.

## 3 Define milestones

- a Add milestones.** In the releases tree, right-click a release and select **New Milestone**. The New Milestone dialog box opens. Define timelines for your milestone. For user interface details, see "New Milestone Dialog Box" on page 230.
- b Associate release scope items.** In the releases tree, select a milestone. Click the **Milestone Scope** tab. Associate the milestone with release scope items. For user interface details, see "Milestone Scope Tab" on page 232.
- c Associate KPIs.** Click the **KPIs** tab. Configure related KPIs and set boundaries for performance against those KPIs. For user interface details, see "KPIs Tab" on page 235. For more details on KPI types, see "KPI Types" on page 220.

## 4 Analyze progress

- **View scorecard.** In the releases tree, select a release. Click the **Scorecard** tab. View the status and progress of your defined milestones. For user interface details on the Scorecard tab, see "Scorecard Tab" on page 250.
- **View Gantt chart.** In the releases tree, select a release. Click the **Master Plan** tab. For user interface details, see "Master Plan Tab" on page 246.
- **Create PPT graphs.** For task details on how to generate graphs, see "How to Generate a PPT Graph" on page 981.



### **How to Work with PPT - Use-Case Scenario**

This use-case scenario demonstrates how to work with PPT. For example, suppose your organization is releasing a new version of a purchase order application in 6 months. The new version includes the following enhancements: new mobile interface, additional sales reports, and enhancements to the purchase order forms. You, as quality assurance manager, must define the release scope items and milestones, and track progress and quality of the release against your defined scope items.

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**Note:** For a task related to this scenario, see "How to Work with PPT" on page 213.

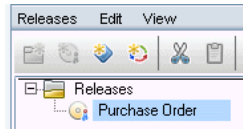
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This scenario includes the following steps:

- "Define a release" on page 216
- "Define release scope items" on page 216
- "Define a milestone" on page 217
- "Analyze progress" on page 219

## 1 Define a release

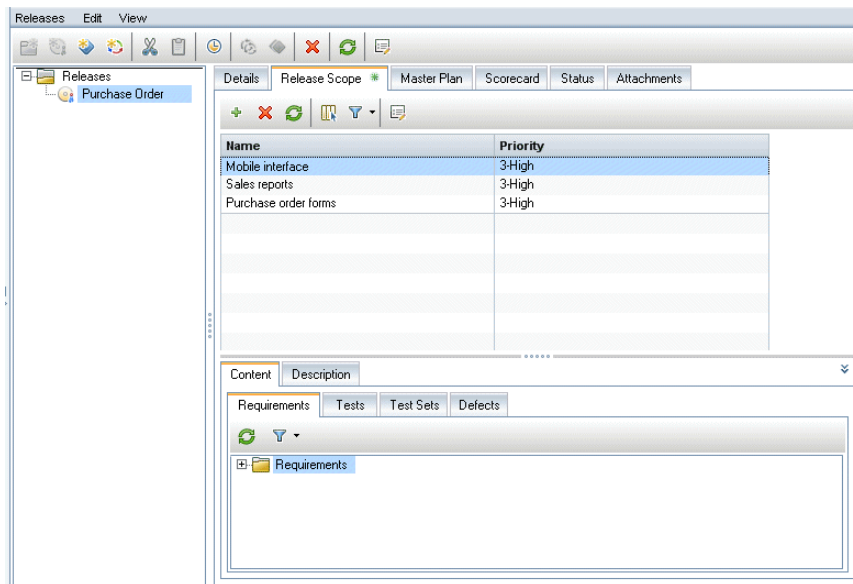
In the Releases module, define the **Purchase Order** release and set the release duration to 6 months.



## 2 Define release scope items

Select the **Purchase Order** release and define the following release scope items: **Mobile interface**, **Sales reports**, and **Purchase order forms**.

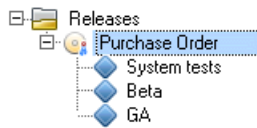
Under the **Content** tab, for each release scope item, determine the scope by assigning related requirements, tests, test sets, and defects.





### 3 Define a milestone

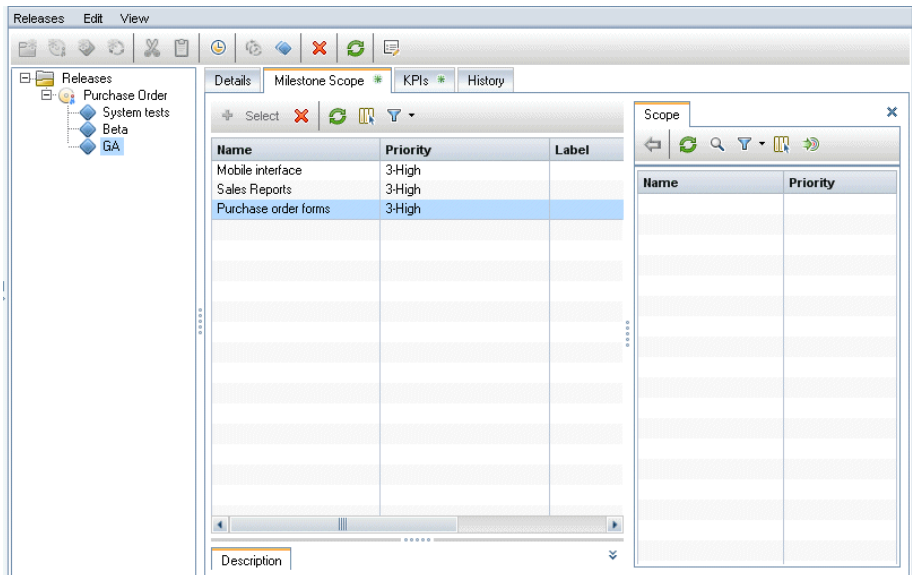
Add the following milestones to your release: **System tests**, **Beta**, and **GA**.



To measure the readiness of the **System tests** milestone, associate it with the following release scope items: **Mobile interface**, **Sales reports**, and **Purchase order forms**.

To measure the readiness of the **Beta** milestone, associate it with the following release scope items: **Sales reports** and **Purchase order forms**.

To measure the readiness of the **GA** (General Availability) milestone, associate it with the following release scope items: **Mobile interface**, **Sales reports**, and **Purchase order forms**.



For each milestone, you define related KPIs using the KPIs tab. For each milestone, select the **Severe Defects** KPI. In the Threshold pane, under the **Date** column, the start and end dates of the selected milestone are displayed. Under the **OK Below** column, both values are set to **10**. The KPI state is considered acceptable when there are less than 10 defects with severity levels of **5-Urgent** or **4-Very High** out of the defects that still need to be fixed. Under **% Warning Range**, the warning limits are set to **10**. A value higher than 10 is considered critical. The Threshold Preview chart shows the threshold values with respect to the y-axis.

The screenshot displays the 'KPIs' configuration window. The 'KPIs' tab is active, showing a table with 'Scope' and 'KPIs' columns. The 'Severe Defects' KPI is selected. Below this, the 'Thresholds' section shows the configuration for the 'Severe Defects' KPI. The 'Scope Item' is set to 'All'. The 'Date' column shows 'Start: 8/1/2010' and 'Due: 8/31/2010'. The 'OK Below' column is set to 10, and the '% Warning Range' column is also set to 10. To the right, the 'Threshold Preview' chart shows a vertical axis for 'Severe Defects' ranging from 9 to 12. The chart is divided into three horizontal bands: a green band for 'OK' (below 10), a yellow band for 'Warning' (between 10 and 11), and a red band for 'Critical' (above 11). A legend at the bottom of the chart identifies these bands.

| Date            | OK Below | % Warning Range |
|-----------------|----------|-----------------|
| Start: 8/1/2010 | 10       | 10              |
| Due: 8/31/2010  | 10       | 10              |
|                 |          |                 |
|                 |          |                 |
|                 |          |                 |
|                 |          |                 |
|                 |          |                 |
|                 |          |                 |

## 4 Analyze progress

After running calculations for this project, select the **Purchase Order** release from the releases tree. Click the **Scorecard** tab. The scorecard enables you to view the scope items, the milestones, and the KPI results. For example, under the **System tests** milestone, the **Purchase order forms** release scope item indicates the number of planned severe defects is 10 and the actual value is 24.

| Purchase Order Scorecard |                |        |                |        |                |        |
|--------------------------|----------------|--------|----------------|--------|----------------|--------|
|                          | System tests   |        | Beta           |        | GA             |        |
|                          | Severe Defects |        | Severe Defects |        | Severe Defects |        |
|                          | Planned        | Actual | Planned        | Actual | Planned        | Actual |
| Mobile interface         | 10             | 7      |                |        | 10             | 7      |
| Purchase order forms     | 10             | 24     | 10             | 24     | 10             |        |
| Sales Reports            | 10             | 14     | 10             | 14     | 10             |        |

\* Data updated to: 7/20/2010 1:12:00 PM. KPIs are calculated at predefined hours on a daily basis. KPI calculations end when a milestone reaches its due date.

To drill down further and display the scorecard as a graph, you can click a KPI value.

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## Reference

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### KPI Types

This section describes the system defined KPI types.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | <ul style="list-style-type: none"><li>▶ You can modify system defined KPIs and add additional user-defined KPIs to your project. For more details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li><li>▶ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li></ul> |
|------------------------------|--|

KPI types are described below:

| KPI Type (A-Z)                 | Description   |
|--------------------------------|---|
| <b>Authored Tests</b>          | Calculates the number of tests that their planning status is set to <b>Ready</b> .  |
| <b>Automated Tests</b>         | Calculates the percentage of automated tests.   |
| <b>Covered Requirements</b>    | Calculates the percentage of requirements covered by at least one test.   |
| <b>Defects Fixed per Day</b>   | Calculates the number of defects fixed per day.   |
| <b>Passed Requirements</b>     | Calculates the percentage of requirements that all their covered tests have an execution status of <b>Passed</b> .  |
| <b>Passed Tests</b>            | Calculates the percentage of tests that their last run has an execution status of <b>Passed</b> .   |
| <b>Rejected Defects</b>        | Calculates the percentage of rejected defects.  |
| <b>Reviewed Requirements</b>   | Calculates the percentage of business or functional requirements that have been reviewed.   |
| <b>Severe Defects</b>          | Calculates the number of defects assigned a severity level of <b>5-Urgent</b> or <b>4-Very High</b> out of defects with the status of <b>New, Open</b> or <b>Reopened</b> . |
| <b>Test Instances Executed</b> | Calculates the percentage of executed test instances.   |
| <b>Tests Executed</b>          | Calculates the percentage of executed tests.  |

## **PPT User Interface**

This section includes:

- ▶ PPT Fields on page 223
- ▶ Release Scope Tab on page 225
- ▶ New Scope Item/Scope Item Details Dialog Box on page 228
- ▶ New Milestone Dialog Box on page 230
- ▶ Milestone Scope Tab on page 232
- ▶ KPIs Tab on page 235
- ▶ New KPI/KPI Details Dialog Box on page 238
- ▶ Thresholds Page on page 242
- ▶ New Threshold Value Dialog Box on page 245
- ▶ Master Plan Tab on page 246
- ▶ Milestone Details Dialog Box on page 248
- ▶ Scorecard Tab on page 250
- ▶ KPI Drill Down Graph on page 253
- ▶ Breakdown Over Time Graph on page 255
- ▶ Scorecard Layout Dialog Box on page 259
- ▶ New Release From Template Dialog Box on page 261

 **PPT Fields**

This section describes the PPT fields in the Releases module.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | <ul style="list-style-type: none"> <li>➤ You can add user-defined fields and change the label of any of the fields in the Releases module. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>➤ You can use the Script Editor to restrict and dynamically change the fields and values in the Releases module. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>➤ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Work with PPT" on page 213  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Release Scope Tab" on page 225</li> <li>➤ "Master Plan Tab" on page 246</li> <li>➤ "Scorecard Tab" on page 250</li> <li>➤ "PPT Releases Overview" on page 212</li> </ul>  |

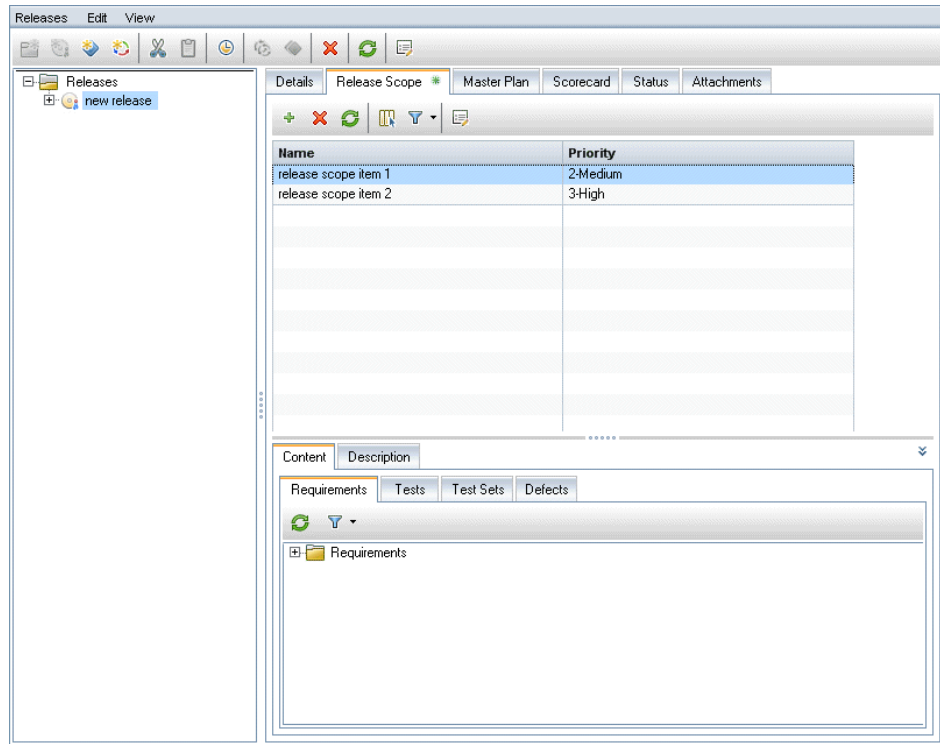
The fields are described below:

| UI Elements (A-Z)          | Description  |
|----------------------------|--|
| <b>Due Date</b>            | The date on which the milestone ends.  |
| <b>KPI Type</b>            | The type of KPI. For more details, see "KPI Types" on page 220.  |
| <b>Label</b>               | The release scope item name as it is displayed in the chart of the Master Plan tab.  |
| <b>Milestone ID</b>        | A unique numeric ID for the milestone, assigned automatically by ALM. The Milestone ID is read-only.                               |
| <b>Modified</b>            | The date and time the release scope item or milestone was last changed.<br><b>Default value:</b> The database server date and time |
| <b>Name</b>                | The release scope item or milestone name.  |
| <b>Owner</b>               | The user name of the person who owns the release scope item.   |
| <b>Priority</b>            | The priority of the release scope item, ranging from low priority (level 1) to high priority (level 3).                            |
| <b>Release End Date</b>    | The date on which the release ends.  |
| <b>Release ID</b>          | A unique numeric ID for the release, assigned automatically by ALM. The Release ID is read-only.                                   |
| <b>Release Start Date</b>  | The date on which the release starts.  |
| <b>Scope Item ID</b>       | A unique alphanumeric ID for the release scope item that is assigned automatically. This field cannot be modified.                 |
| <b>Start Tracking Date</b> | The date on which the milestone starts.  |










## Release Scope Tab

This tab enables you to define and update release scope items.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Releases module, select a release and click the <b>Release Scope</b> tab.   |
| <b>Important information</b> | <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition. |
| <b>Relevant tasks</b>        | "How to Work with PPT" on page 213   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "PPT Releases Overview" on page 212</li> <li>➤ "Releases Module Window" on page 184</li> </ul>                                  |

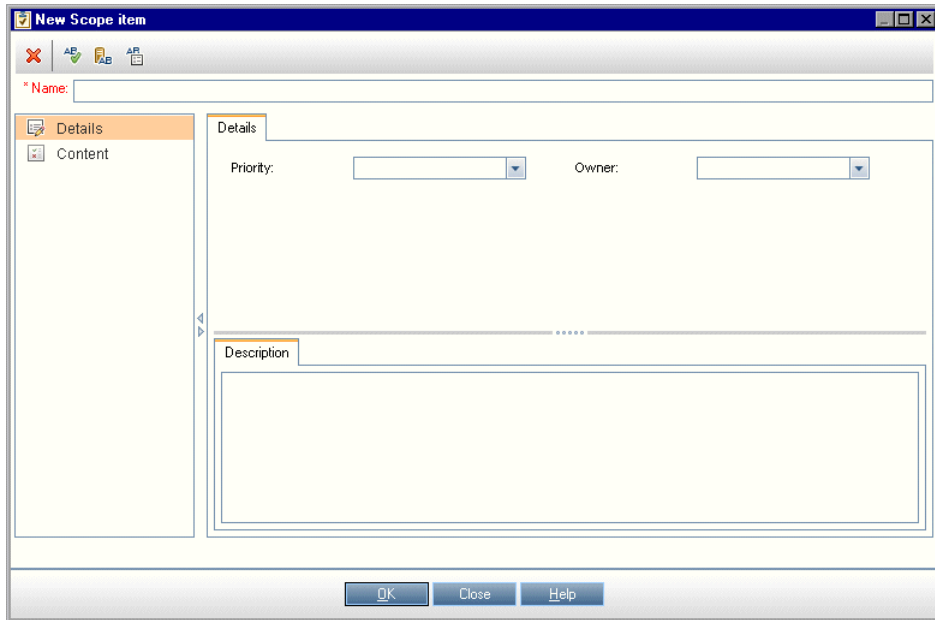
User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|    | <b>New Scope Item.</b> Opens the New Scope Item dialog box, enabling you to define a release scope item. For more details, see "New Scope Item/Scope Item Details Dialog Box" on page 228.   |
|    | <b>Delete.</b> Deletes selected release scope item.  |
|    | <b>Refresh.</b> Refreshes the release scope grid so that it displays the most up-to-date information.  |
|    | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the release scope grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |
|    | <b>Filter/Sort.</b> Enables you to filter the data according to the criteria that you choose. For more details, see "Filter Dialog Box" on page 64.  |
|    | <b>Scope Item Details.</b> Opens the Scope Item Details dialog box, enabling you to display the details of the selected release scope item. For more details, see "New Scope Item/Scope Item Details Dialog Box" on page 228.        |
|  | <b>Show/Hide.</b> Shows/hides the Description and Content tabs.  |

| UI Elements            | Description  |
|------------------------|--|
| <b>Content tab</b>     | <p>Enables you to select content to be included in the release scope item. It includes the following tabs:</p> <ul style="list-style-type: none"> <li>▶ <b>Requirements.</b> Displays the requirements tree.<br/>Expand the tree and select the folders/requirements to include in the release scope item.</li> <li>▶ <b>Tests.</b> Displays the test plan tree.<br/>Expand the tree and select the folders/tests to include in the release scope item.<br/><br/>To only include tests covered by the requirements selected in the Requirements tab, select <b>Tests covering selected requirements.</b></li> <li>▶ <b>Test Sets.</b> Displays the test set tree.<br/>Expand the tree and select the test set folders to include in the release scope item.<br/><br/>To only include test sets that contain tests selected in the Test tab, select <b>Test sets containing selected tests.</b></li> <li>▶ <b>Defects.</b> Displays the defects grid.<br/>Define a filter to determine the defects to be included in the release scope item.</li> </ul> |
| <b>Description tab</b> | <p>Describes the release scope item.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>   |






## New Scope Item/Scope Item Details Dialog Box

This dialog box enables you to define and update the release scope items.



|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>➤ In the <b>Release Scope</b> tab, right-click the release scope grid and select <b>New Scope Item</b>. The New Scope Item dialog box opens.</li> <li>➤ In the <b>Release Scope</b> tab, right-click a release scope item and select <b>Scope Item Details</b>. The Scope Item Details dialog box opens.</li> </ul> |
| <p><b>Important information</b></p> | <p><b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p>   |
| <p><b>Relevant tasks</b></p>        | <p>"How to Work with PPT" on page 213</p>   |
| <p><b>See also</b></p>              | <ul style="list-style-type: none"> <li>➤ "PPT Releases Overview" on page 212</li> <li>➤ "Releases Module Window" on page 184</li> </ul>   |

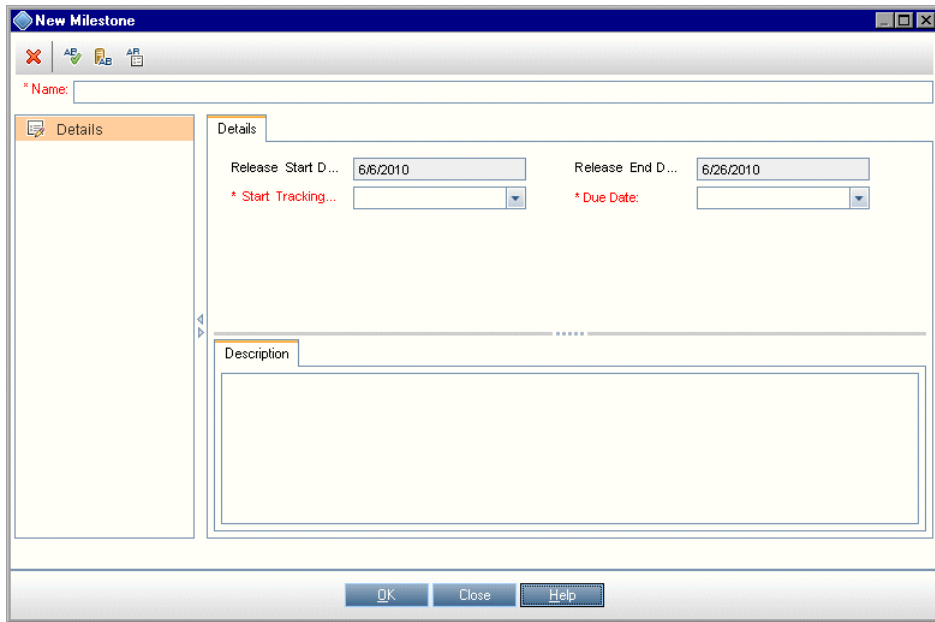
User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>First/Previous/Next/Last Entity.</b> Allows you to browse through the release scope items.</p> <p><b>Available from:</b> Scope Item Details dialog box</p>  |
|  | <p><b>Clear All Fields.</b> Clears all the fields in the dialog box.</p> <p><b>Available from:</b> New Scope Item dialog box</p>  |
|  | <p><b>Spell Check.</b> Checks the spelling for the selected word or text box.</p>   |
|  | <p><b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.</p>  |
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p>   |
| <p><b>Content</b></p>   | <p>Displays the content to be included in the release scope item. It includes the following tabs:</p> <ul style="list-style-type: none"> <li>▶ <b>Requirements.</b> Displays the requirements tree.<br/>Expand the tree and select the folders/requirements to include in the release scope item.</li> <li>▶ <b>Tests.</b> Displays the test plan tree.<br/>Expand the tree and select the folders/tests to include in the release scope item.<br/><br/>To only include tests covered by the requirements selected in the Requirements tab, select <b>Tests covering selected requirements.</b></li> <li>▶ <b>Test Sets.</b> Displays the test set tree.<br/>Expand the tree and select the test set folders to include in the release scope item.<br/><br/>To only include test sets that contain tests selected in the Test tab, select <b>Test sets containing selected tests.</b></li> <li>▶ <b>Defects.</b> Displays the defects grid.<br/>Define a filter to determine the defects to be included in the release scope item.</li> </ul> |

| UI Elements (A-Z)  | Description   |
|--------------------|---|
| <b>Details</b>     | Displays details of a release scope item. For details on the available fields, see "PPT Fields" on page 223.                |
| <b>Description</b> | Describes the release scope item.<br>Click in the text box to display a toolbar for formatting and spell checking the text. |
| <b>Name</b>        | The release scope item name.  |





## New Milestone Dialog Box

This dialog box enables you to define milestones.



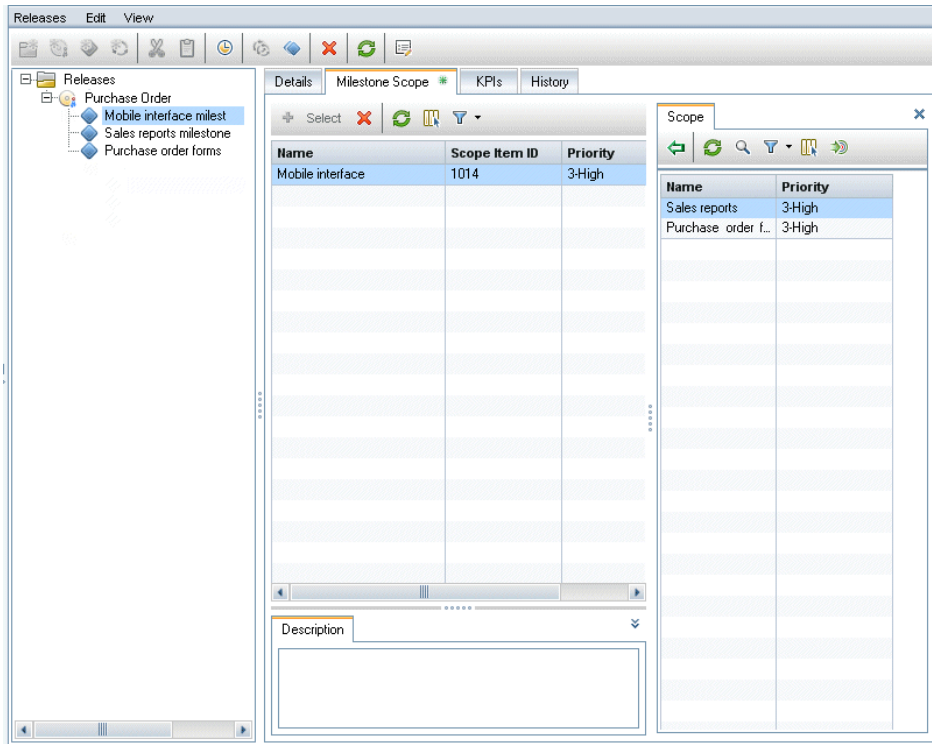
|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Releases module, right-click a release and choose <b>New Milestone</b> .   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You can limit the number of milestones that can be defined per release using the <b>MAX_MILESTONES_PER_RELEASE</b> parameter in the Site Configuration tab in Site Administration. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Work with PPT" on page 213  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "PPT Releases Overview" on page 212</li> <li>▶ "Releases Module Window" on page 184</li> </ul>   |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|   | <b>Clear All Fields.</b> Clears all the fields in the dialog box.<br><b>Available from:</b> New Milestone dialog box |
|  | <b>Spell Check.</b> Checks the spelling for the selected word or text box.   |
|  | <b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.                                |
|  | <b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.                                       |
| <b>Description</b>  | The description of the milestone.  |
| <b>Details</b>  | Displays milestone details. For details on the available fields, see "PPT Fields" on page 223.                       |
| <b>Name</b>   | The milestone name.  |

## Milestone Scope Tab

This tab enables you to associate milestones with release scope items.








|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p>Select a milestone. Click the <b>Milestone Scope</b> tab.</p>  |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ You can limit the number of scope items that can be defined per release using the <b>MAX_SCOPE_ITEMS_PER_RELEASE</b> parameter in the Site Configuration tab in Site Administration. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> </ul> |



|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "How to Work with PPT" on page 213  |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "PPT Releases Overview" on page 212</li> <li>➤ "Releases Module Window" on page 184</li> </ul> |



## Milestone Scope Grid





User interface elements are described below:

| UI Elements (A-Z)  | Description  |
|--|--|
|  Select | <b>Select Scope Items.</b> Opens the Scope pane, enabling you to select release scope items.   |
|         | <b>Remove Scope Items.</b> Removes selected scope items from the grid.   |
|         | <b>Refresh.</b> Refreshes the milestone scope grid so that it displays the most up-to-date information.  |
|         | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the milestone scope grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |
|         | <b>Filter/Sort.</b> Enables you to filter data according to the criteria that you choose. For more details, see "Filter Dialog Box" on page 64.  |

## Scope Pane

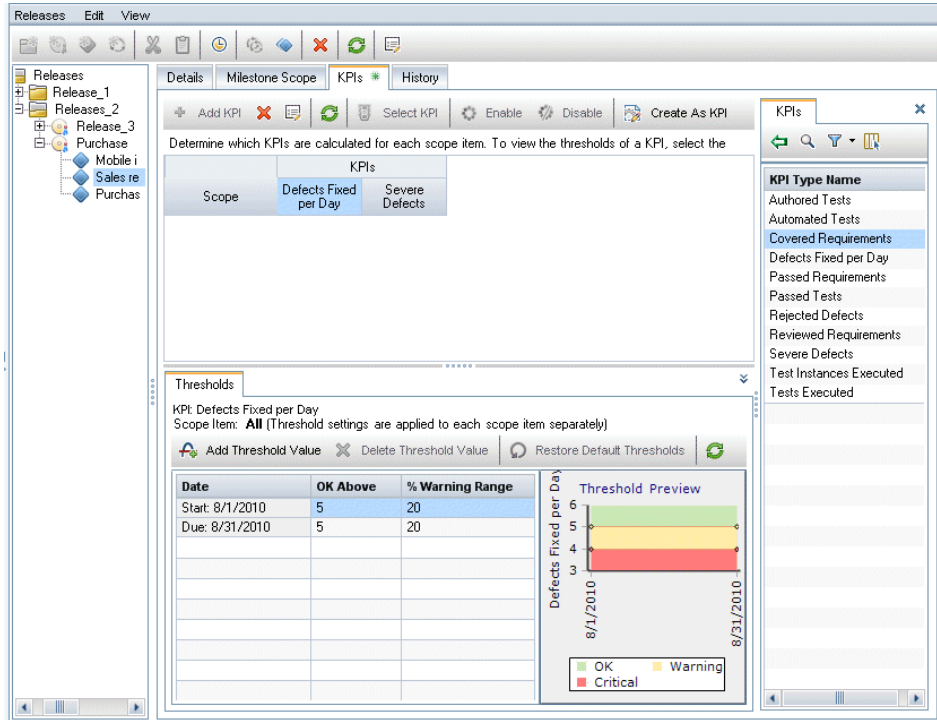
User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Add Scope Item.</b> Adds selected release scope items to the milestone scope grid.</p> <p><b>Tip:</b> You can also add release scope items by dragging a them from the scope item grid to the milestone scope grid.</p> |
|  | <b>Refresh All.</b> Refreshes the scope item grid.  |

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Find.</b> Searches for a specific release scope item in the scope item grid.</p> <p>Type the name (or part of the name) of the release scope item in the Find box and click <b>Find</b>. If the search is successful, the release scope item is highlighted in the scope item grid.</p> |
|  | <p><b>Filter/Sort.</b> Filters and sorts the release scope items in the scope item grid. For more details, see "Filter Dialog Box" on page 64.</p>  |
|  | <p><b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine column appearance and order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p>   |
|  | <p><b>Go to Scope Item by ID.</b> Opens the Go To Scope Item dialog box, enabling you to find a specific test by <b>Scope Item ID</b>.</p> <p><b>Note:</b> You can only go to release scope items that are in the current filter.</p>   |

## KPIs Tab

This tab enables you to define the KPIs for tracking the milestone scope, and setting the KPI thresholds.



**KPIs**

Determine which KPIs are calculated for each scope item. To view the thresholds of a KPI, select the

| Scope | Defects Fixed per Day | Severe Defects |
|-------|-----------------------|----------------|
|       |                       |                |

**Thresholds**

KPI: Defects Fixed per Day  
Scope Item: All (Threshold settings are applied to each scope item separately)

Add Threshold Value Delete Threshold Value Restore Default Thresholds

| Date            | OK Above | % Warning Range |
|-----------------|----------|-----------------|
| Start: 8/1/2010 | 5        | 20              |
| Due: 8/31/2010  | 5        | 20              |
|                 |          |                 |
|                 |          |                 |
|                 |          |                 |
|                 |          |                 |
|                 |          |                 |

**Threshold Preview**

Defects Fixed per Day



8/1/2010 8/31/2010



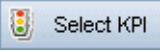

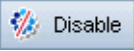
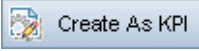

OK Warning Critical

|                              |   |
|------------------------------|---|
| <b>To access</b>             | Select a milestone. Click the <b>KPIs</b> tab.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You can customize the default KPIs and create your own KPIs. For more details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You can limit the number of KPIs that can be defined per milestone using the <b>MAX_KPIS_PER_MILESTONE</b> parameter in the Site Configuration tab in Site Administration. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You can limit the number of threshold values that can be defined per KPI using the <b>MAX_THRESHOLD_VALUES_PER_KPI</b> parameter in the Site Configuration tab in Site Administration. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Work with PPT" on page 213  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "PPT Releases Overview" on page 212</li> <li>▶ "Releases Module Window" on page 184</li> </ul>   |

## Main Area



User interface elements are described below:



| UI Elements (A-Z)   | Description  |
|---|--|
|  | Opens the KPI pane, enabling you to select KPIs.                         |
|  | <b>Delete KPI.</b> Removes the selected KPI from the new milestone grid. |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Show KPI Details.</b> Opens the KPI Details dialog box, enabling you to update KPIs and thresholds. For more details, see "New KPI/KPI Details Dialog Box" on page 238. |
|  | <b>Refresh.</b> Refreshes the grid so that it displays the most up-to-date information.  |
|  | Displays thresholds for a selected KPI column. This option is enabled by selecting a single cell.  |
|  | Includes the selected KPI in the defined milestone scope.  |
|  | Excludes the selected KPI from the defined milestone scope.  |
|  | Opens the New KPI dialog box, enabling you to create a KPI based on a selected KPI. For more details, see "New KPI/KPI Details Dialog Box" on page 238.                    |
|  | <b>Show/Hide.</b> Shows/hides the Thresholds pane.   |
| <b>Thresholds pane</b>  | Enables you to manage threshold values for selected KPIs. For more details, see "Thresholds Page" on page 242.   |

## KPIs Pane

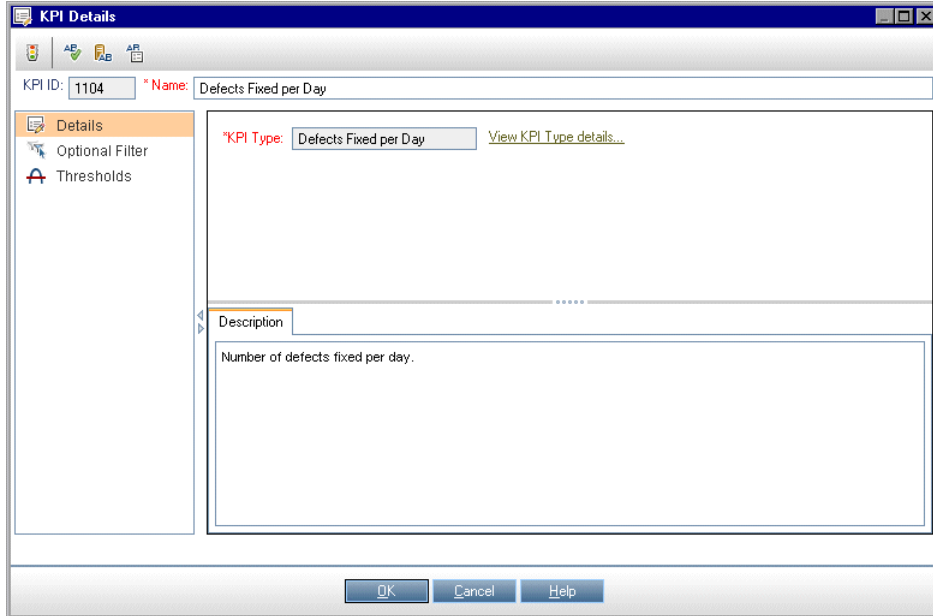
User interface elements are described below:


| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Add KPI.</b> Adds selected KPI to the main area in the KPI tab.  |
|  | <b>Find.</b> Searches for a specific KPI in the KPI grid. Type the name (or part of the name) of the KPI in the Find box and click <b>Find</b> . If the search is successful, the KPI is highlighted in the KPI grid. |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Filter/Sort.</b> Filters and sorts the KPIs in the KPI grid. For more details, see "Filter Dialog Box" on page 64.  |
|  | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine column appearance and order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |

## New KPI/KPI Details Dialog Box






This dialog box enables you to define and update KPIs.



|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>➤ Select a milestone. Click the <b>KPIs</b> tab. Click <b>Create As KPI</b>. The New KPI dialog box opens.</li> <li>➤ Select a milestone. Click the <b>KPIs</b> tab. Click <b>Show KPI Details</b> . The KPI Details dialog box opens.</li> </ul>   |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>➤ You can limit the number of KPIs that can be defined per milestone using the <b>MAX_KPIS_PER_MILESTONE</b> parameter in the Site Configuration tab in Site Administration. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>➤ You can limit the number of threshold values that can be defined per KPI using the <b>MAX_THRESHOLD_VALUES_PER_KPI</b> parameter in the Site Configuration tab in Site Administration. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>➤ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> </ul> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Work with PPT" on page 213</p>  |
| <p><b>See also</b></p>              | <ul style="list-style-type: none"> <li>➤ "KPI Types" on page 220</li> <li>➤ "PPT Releases Overview" on page 212</li> <li>➤ "Releases Module Window" on page 184</li> </ul>   |

## Common Elements

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Clear all Fields.</b> Clears all fields in the dialog box.<br><b>Available from:</b> New KPI dialog box                                |
|  | <b>Show KPI Type Definition.</b> Opens the KPI Type Definition dialog box, enabling you to view additional information on a selected KPI. |
|  | <b>Spell Check.</b> Checks the spelling for the selected word or text box.  |
|  | <b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.   |
|  | <b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.  |
| <b>KPI ID</b>   | A unique alphanumeric ID for the KPI that is assigned automatically. The KPI ID field cannot be modified.                                 |
| <b>Name</b>   | The KPI name.   |

## Details View

User interface elements are described below:



| UI Elements (A-Z)            | Description   |
|------------------------------|---|
| <b>Description</b>           | A description of the selected KPI.  |
| <b>KPI Type</b>              | The type of KPI. For details on the available KPI, see "KPI Types" on page 220. |
| <b>View KPI Type Details</b> | Displays details on the selected KPI.   |



### Optional Filter View

This view enables you to narrow down the entities population in each milestone scope item.

User interface elements are described below:

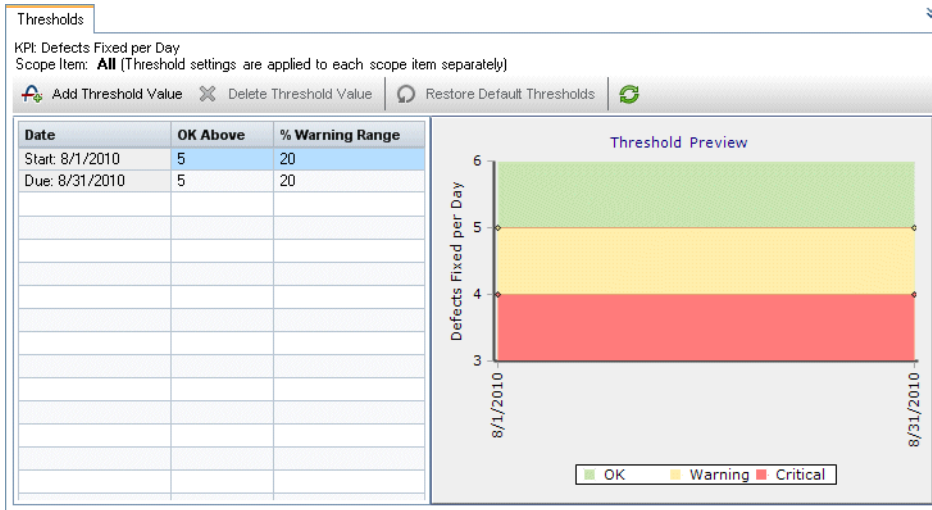
| UI Elements   | Description   |
|---|---|
|  | <b>Set Filter/Sort.</b> Enables you to limit the KPI data according to your chosen criteria. For more details on filtering, see "Filter Dialog Box" on page 64. |
|  | <b>Clear Filter.</b> Clears the defined filter.   |
| <b>View KPI Type Details</b>  | Displays details on the selected KPI.   |


### Thresholds View

This view enables you to manage threshold values for a selected KPI. For more details, see "Thresholds Page" on page 242.

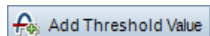
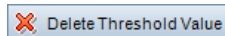
## Thresholds Page

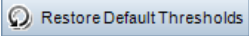

This pane enables you to manage threshold values for selected KPIs.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ Select a milestone. Click the <b>KPIs</b> tab. Click <b>Create As KPI</b>. The New KPI dialog box opens. Click <b>Thresholds</b>.</li> <li>▶ Select a milestone. Click the <b>KPIs</b> tab. Click <b>Show KPI Details</b> . The KPI Details dialog box opens. Click <b>Thresholds</b>.</li> <li>▶ Select a milestone. Click the <b>KPIs</b> tab. The Thresholds pane is displayed on the bottom.</li> </ul>  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You can modify the default threshold values of a KPI. For more details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You can limit the number of threshold values that can be defined per KPI using the <b>MAX_THRESHOLD_VALUES_PER_KPI</b> parameter in the Site Configuration tab in Site Administration. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Work with PPT" on page 213  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "PPT Releases Overview" on page 212</li> <li>▶ "Releases Module Window" on page 184</li> </ul>   |





User interface elements are described below:

| <b>UI Elements (A-Z)</b>  | <b>Description</b>  |
|---|---|
|  | <p>Opens the New Threshold Value dialog box, enabling you define the threshold values for a selected KPI. For more details, see "New Threshold Value Dialog Box" on page 245.</p> |
|  | <p>Removes selected threshold value from the thresholds grid.</p>   |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | Restores default KPI threshold.  |
|  | <b>Refresh All.</b> Refreshes the new thresholds grid so that it displays the most up-to-date information.   |
| <b>% Warning Range</b>  | <p>Determines the KPI's warning range.</p> <p>A value lower than <b>OK Above</b> and higher than the warning limit, indicates a warning KPI state.</p> <p>A value higher than the <b>OK Below</b> and lower than the warning limit, indicates a warning KPI state.</p>   |
| <b>Date</b>   | The threshold value date.  |
| <b>OK Above</b>   | <p>A value lower than <b>OK Above</b> and higher than the warning limit, indicates a warning KPI state.</p> <p>A value lower than the warning limit, indicates a critical KPI state.</p>   |
| <b>OK Below</b>   | <p>A value higher than the <b>OK Below</b> and lower than the warning limit, indicates a warning KPI state.</p> <p>A value higher than the warning limit are critical, indicates a critical KPI state.</p>   |
| <b>Threshold Preview</b>  | <p>Provides a visual indicator of the thresholds of the selected KPI over the duration of the milestone.</p> <p>Includes the following color-coded thresholds:</p> <ul style="list-style-type: none"> <li>➤ <b>Green.</b> Indicates a good KPI state.</li> <li>➤ <b>Yellow.</b> Indicates an acceptable or a warning KPI state.</li> <li>➤ <b>Red.</b> Indicates a bad KPI state.</li> </ul> |

## New Threshold Value Dialog Box

This dialog box enables you to set threshold values for selected KPIs.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>➤ Select a milestone. Click the <b>KPIs</b> tab. Click <b>Create As KPI</b>. The New KPI dialog box opens. Click <b>Thresholds</b>. Click <b>Add Threshold Value</b> .</li> <li>➤ Select a milestone. Click the <b>KPIs</b> tab. Click <b>Show KPI Details</b> . The KPI Details dialog box opens. Click <b>Thresholds</b>. Click <b>Add Threshold Value</b> .</li> <li>➤ Select a milestone. Click the <b>KPIs</b> tab. The Thresholds pane is displayed on the bottom. Click <b>Add Threshold Value</b> .</li> </ul> |
| <b>Important information</b> | <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.   |
| <b>Relevant tasks</b>        | "How to Work with PPT" on page 213   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "PPT Releases Overview" on page 212</li> <li>➤ "Releases Module Window" on page 184</li> </ul>  |

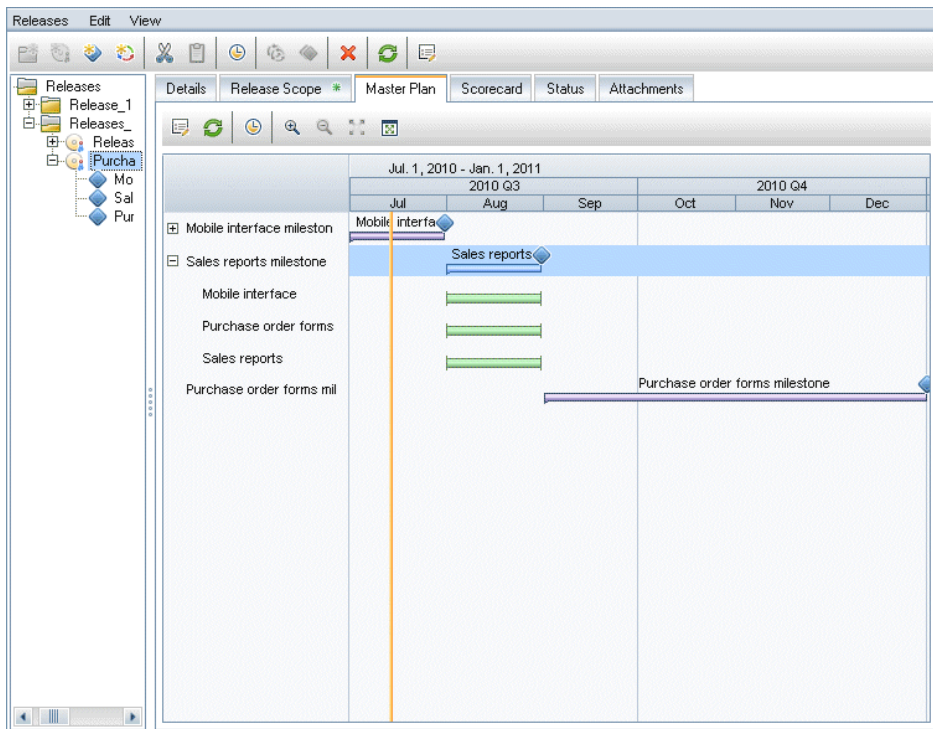
User interface elements are described below:

| UI Elements (A-Z)      | Description  |
|------------------------|--|
| <b>% Warning Range</b> | <p>Determines the KPI's warning range.</p> <p>A value lower than <b>OK Above</b> and higher than the warning limit, indicates a warning KPI state.</p> <p>A value higher than the <b>OK Below</b> and lower than the warning limit, indicates a warning KPI state.</p> |
| <b>Date</b>            | The threshold value date.  |

| UI Elements (A-Z) | Description   |
|-------------------|---|
| <b>OK Above</b>   | A value lower than <b>OK Above</b> and higher than the warning limit, indicates a warning KPI state.<br>A value lower than the warning limit, indicates a critical KPI state.                   |
| <b>OK Below</b>   | A value higher than the <b>OK Below</b> and lower than the warning limit, indicates a warning KPI state.<br>A value higher than the warning limit are critical, indicates a critical KPI state. |





## Master Plan Tab



This tab displays the progress of a release in a Gantt chart.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Releases module, select a release and click the <b>Master Plan</b> tab.   |
| <b>Important information</b> | <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition. |
| <b>Relevant tasks</b>        | "How to Work with PPT" on page 213   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "PPT Releases Overview" on page 212</li> <li>➤ "Releases Module Window" on page 184</li> </ul>                                  |

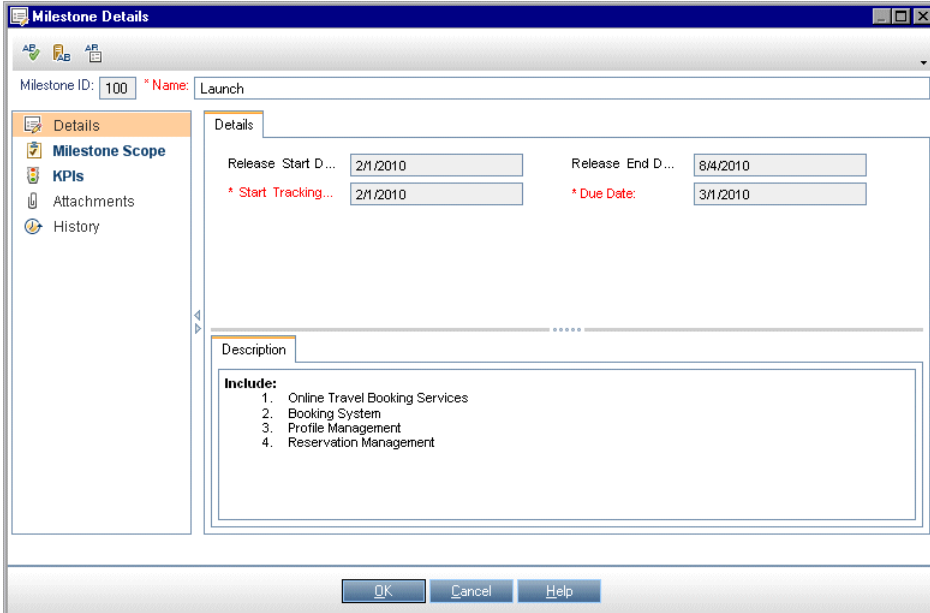
User interface elements are described below:

| <b>UI Elements</b>  | <b>Description</b>  |
|---|---|
|    | <p><b>Show Details.</b> Opens the appropriate Details dialog box, depending on the selected entity. You can select the following entities: cycles, milestones, and release scope items.</p> <p>For more details on cycle details, see "New Cycle/Cycle Details Dialog Box" on page 197.</p> <p>For more details on milestone details, see "Milestone Details Dialog Box" on page 248.</p> <p>For more details on release scope item details, see "New Scope Item/Scope Item Details Dialog Box" on page 228.</p> <p><b>Tip:</b> You can also double-click an entity on the chart. The appropriate Details dialog box opens.</p> |
|  | <p><b>Refresh.</b> Refreshes the chart.</p>   |
|  | <p><b>Reschedule.</b> Reschedules the start and end date of a release, cycle or milestone. For more details, see "Reschedule Release/Cycle/Milestone Dialog Box" on page 208.</p>   |
|  | <p><b>Zoom In/Out.</b> Changes the magnification of the chart.</p>  |

| UI Elements   | Description  |
|---|--|
|  | <b>Display Entire Release.</b> Restores the chart to its normal size. This button is enabled when the Zoom In and Zoom Out buttons are in use. |
|  | <b>Full Screen View.</b> Opens the chart in a new window and maximizes its display.  |

## Milestone Details Dialog Box

This dialog box enables you to view and update the milestones.



**Milestone Details**

Milestone ID:  \* Name:

**Details**

Release Start D...  Release End D...   
 \* Start Tracking...  \* Due Date:

**Description**

**Include:**




1. Online Travel Booking Services
2. Booking System
3. Profile Management
4. Reservation Management

OK Cancel Help



|                              |   |
|------------------------------|---|
| <b>To access</b>             | Use one of the following: <ul style="list-style-type: none"> <li>▶ In the Releases module, select a release and click the <b>Master Plan</b> tab. Double-click a milestone on the chart.</li> <li>▶ In the Releases module, right-click a release and choose <b>Details</b>.</li> </ul> |
| <b>Important information</b> | <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.  |
| <b>Relevant tasks</b>        | "How to Work with PPT" on page 213  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "PPT Releases Overview" on page 212</li> <li>▶ "Releases Module Window" on page 184</li> </ul>   |

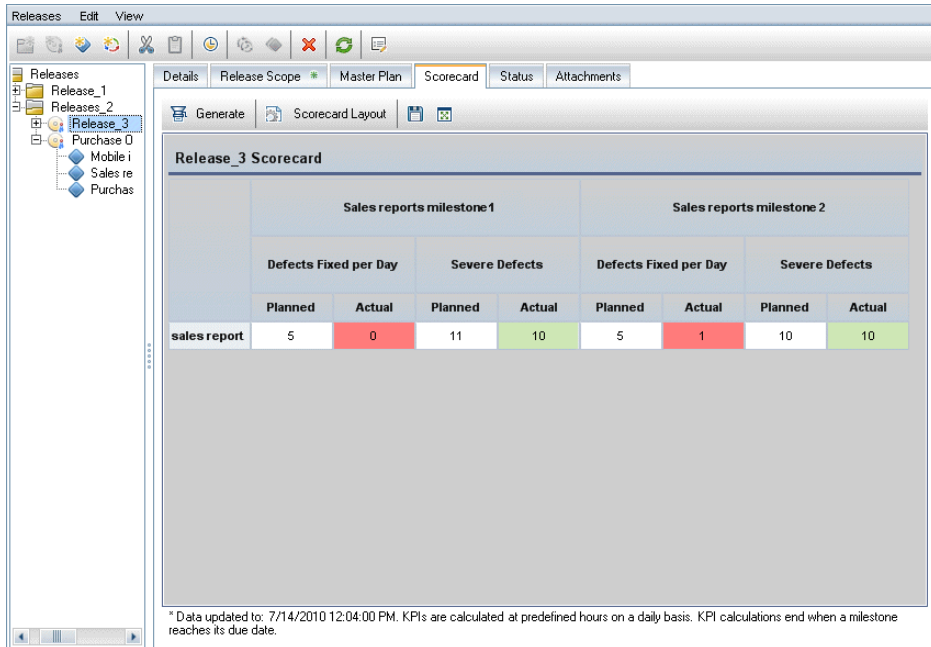
User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|    | <b>Spell Check.</b> Checks the spelling for the selected word or text box.   |
|   | <b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.  |
|  | <b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.   |
| <b>Attachments</b>  | Enables you to add attachments that provide additional information about the new milestone. For more details, see "Attachments Page" on page 90. |
| <b>Description</b>  | A description for the milestone.   |
| <b>Details</b>  | Displays milestone details. For details on the available fields, see "PPT Fields" on page 223.   |
| <b>History</b>  | Enables you to view the fields modified during the change. For more details, see "History Tab" on page 85.                                       |

| UI Elements (A-Z)      | Description   |
|------------------------|---|
| <b>KPIs</b>            | Enables you to view define KPIs and set thresholds. For more details, see "KPIs Tab" on page 235.             |
| <b>Milestone ID</b>    | A unique numeric ID for the milestone, assigned automatically by ALM. The Milestone ID is read-only.          |
| <b>Milestone Scope</b> | Enables you to view and update a release scope item. For more details, see "Milestone Scope Tab" on page 232. |
| <b>Name</b>            | The milestone name.   |

## Scorecard Tab

This tab displays KPI calculations to enable you to determine the status of your release. Clicking KPI cells enables you to drill down and display calculations as graphs.




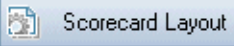

**Release\_3 Scorecard**


|              | Sales reports milestone 1 |        |                |        | Sales reports milestone 2 |        |                |        |
|--------------|---------------------------|--------|----------------|--------|---------------------------|--------|----------------|--------|
|              | Defects Fixed per Day     |        | Severe Defects |        | Defects Fixed per Day     |        | Severe Defects |        |
|              | Planned                   | Actual | Planned        | Actual | Planned                   | Actual | Planned        | Actual |
| sales report | 5                         | 0      | 11             | 10     | 5                         | 1      | 10             | 10     |

\* Data updated to: 7/14/2010 12:04:00 PM. KPIs are calculated at predefined hours on a daily basis. KPI calculations end when a milestone reaches its due date.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Releases module, select a release and click the <b>Scorecard</b> tab.   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ To view progress in the <b>Scorecard</b> tab, you must run calculations for your project. You can schedule to run calculations automatically or manually. For more details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Work with PPT" on page 213   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "PPT Releases Overview" on page 212</li> <li>▶ "Releases Module Window" on page 184</li> <li>▶ "View Tab – PPT Graphs" on page 987</li> </ul>   |

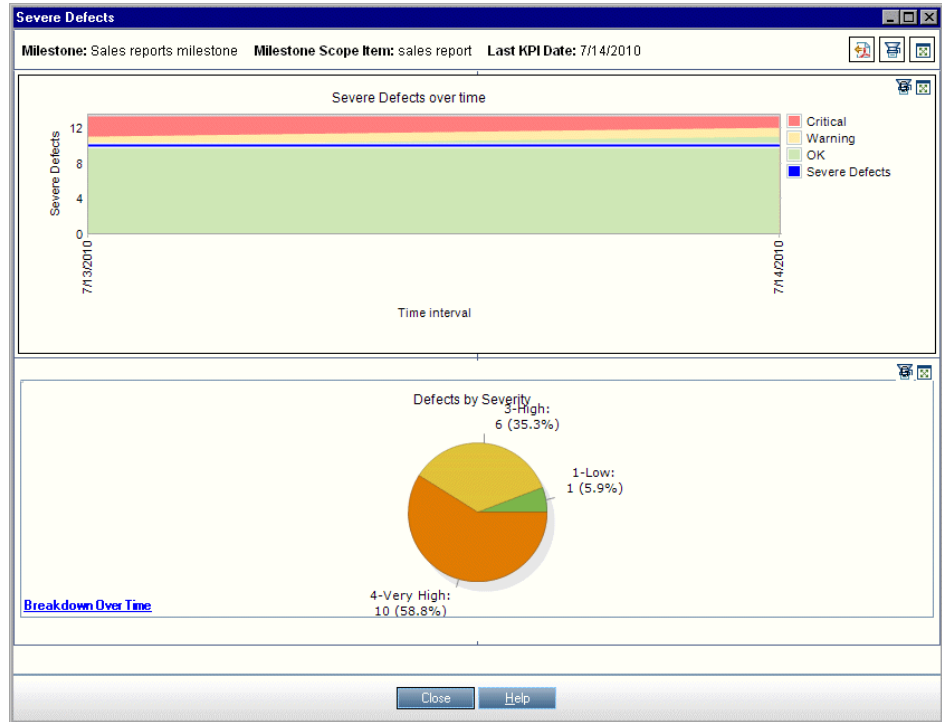
User interface elements are described below:

| UI Elements  | Description  |
|--|--|
|  Generate          | <p>Refreshes the scorecard table, so that it displays the most up-to-date information.</p> <p>For details on the scorecard table, see "View Tab – PPT Graphs" on page 987.</p> <p><b>Note:</b> KPIs are calculated at predefined hours on a daily basis. Milestones are calculated once they reach their due date.</p> |
|  Scorecard Layout | <p><b>Scorecard Layout.</b> Opens the Scorecard Layout dialog box enabling you to configure the scorecard table. For more details, see "Scorecard Layout Dialog Box" on page 259.</p>  |
|                   | <p><b>Save Graph Image.</b> Saves the scorecard table as an image.</p>   |

| UI Elements   | Description  |
|---|--|
|  | <b>Full Screen.</b> Displays the scorecard table in full-screen mode.  |
| <KPI cell>  | You can perform the following actions in a KPI cell: <ul style="list-style-type: none"><li>▶ Click a KPI cell to display a graph representation of this cell. For more details, see "KPI Drill Down Graph" on page 253.</li><li>▶ Hover over a KPI cell to view a tooltip containing the KPI's threshold values.</li></ul> |




## KPI Drill Down Graph

This graph shows calculations of a KPI cell. The top area shows changes in the KPI calculations over time. The bottom area shows KPI breakdown calculations.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Releases module, select a release and click the <b>Scorecard</b> tab. Click a KPI cell.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ The graph page can contain up to two additional graphs. You can customize this page and determine whether or not to display these additional graphs. For more details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Work with PPT" on page 213  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "PPT Releases Overview" on page 212</li> <li>▶ "Releases Module Window" on page 184</li> </ul>   |

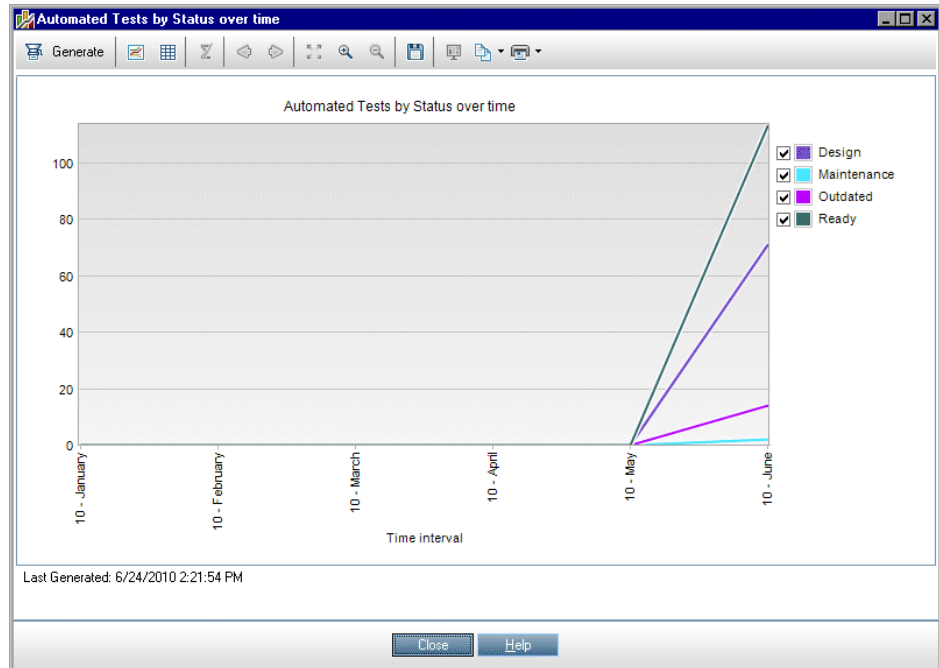
User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|    | <b>Export to PDF.</b> The Save As dialog box opens enabling you to save the graph as a PDF.   |
|  | <b>Generate All Graphs in Page/Generate Graph.</b> Refreshes all the graphs on the page, or the selected graph, so that they display the most up-to-date information.     |
|  | <p><b>View Page in Full Screen.</b> Displays the dashboard page in full-screen mode.</p> <p><b>View Graph in Full Screen.</b> Displays the graph in full-screen mode.</p> |
| <graph area>  | Hover over a graph segment to view a tooltip containing additional information.   |

| UI Elements (A-Z)               | Description   |
|---------------------------------|---|
| <b>Breakdown Over Time link</b> | Click to drill down to the graph's data and show specific points during a period of time. Opens a breakdown over time graph. For more details, see "Breakdown Over Time Graph" on page 255.<br><b>Available from:</b> graph area on the bottom of the page. |
| <b>Last KPI Date</b>            | Indicates when the KPI was last calculated.   |
| <b>Milestone</b>                | The name of the selected milestone.   |
| <b>Milestone Scope Item</b>     | The name of the selected milestone scope item.  |



## Breakdown Over Time Graph

This graph displays specific points during a period of time.












|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <p><b>From the Releases module:</b></p> <ol style="list-style-type: none"> <li><b>1</b> Select a release and click the <b>Scorecard</b> tab.</li> <li><b>2</b> Click a KPI cell. On the bottom of the KPI graph page, click the <b>Breakdown Over Time</b> link.</li> </ol> <p><b>From the Dashboard module:</b></p> <ol style="list-style-type: none"> <li><b>1</b> Select <b>Analysis View</b>.</li> <li><b>2</b> Expand the analysis tree, and select one of the following graphs: <b>KPI Breakdown</b> or <b>Release Scorecard</b>.</li> <li><b>3</b> Click the <b>View</b> tab.</li> <li><b>4</b> For a KPI Breakdown graph, click the <b>Breakdown Over Time</b> link.<br/>For a Release Scorecard, click a KPI cell. On the bottom of the KPI graph page, click the <b>Breakdown Over Time</b> link.</li> </ol> |
| <p><b>Important information</b></p> | <p><b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p>  |
| <p><b>Relevant tasks</b></p>        | <p>"How to Work with PPT" on page 213</p>  |
| <p><b>See also</b></p>              | <ul style="list-style-type: none"> <li>➤ "PPT Releases Overview" on page 212</li> <li>➤ "Releases Module Window" on page 184</li> <li>➤ "KPI Drill Down Graph" on page 253</li> </ul>  |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Generate.</b> Refreshes the graph so that it displays the most up-to-date information.</p> |
|  | <p><b>Line Chart.</b> Switches the chart format to a line chart.</p>                             |

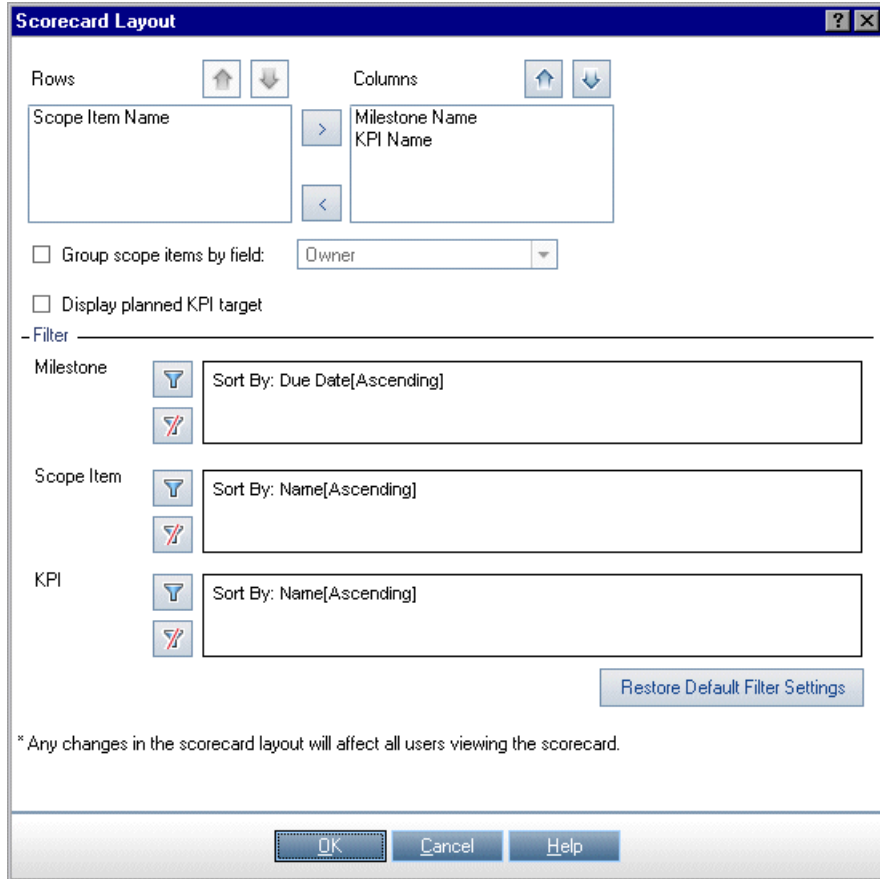


| UI Elements (A-Z)   | Description  |
|---|--|
|    | <b>Data Grid.</b> The grid creates a matrix of the graph's x-axis and Grouped By categories. A <b>Total</b> row is added that displays the total of each Grouped By category.  |
|    | <b>Show/Hide Total Values.</b> Shows/hides a <total> category to the graph, representing the sum of all the other Grouped By categories.<br><b>Tip:</b> After showing the <total> category, click its label in the legend to hide the category.  |
|    | <b>Scroll to the Left/Right.</b> Scrolls the graph to the left or right. These buttons are enabled when the Zoom In and Zoom Out buttons are in use.   |
|    | <b>Show All.</b> Restores the graph to its normal size. This button is enabled when the Zoom In and Zoom Out buttons are in use.   |
|    | <b>Zoom In/Out.</b> Changes the magnification of the graph.  |
|    | <b>Save Graph Image.</b> When viewing a graph as a bar, pie chart, or line chart, saves the graph image. You can select from a variety of graphic file formats.<br><b>Save Graph Data.</b> When viewing a data grid, saves the graph data. You can save the data as an Excel spreadsheet, a Word file, an HTML document, or a text file. |
|  | <b>Set Graph Appearance.</b> Opens the Graph Appearance dialog box, enabling you to customize the graph title, graph color, and graph display. For more details, see "Graph Appearance Dialog Box" on page 975.  |





| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Copy Graph to Clipboard.</b> Includes the following options:</p> <ul style="list-style-type: none"> <li>➤ <b>Copy Graph (Color).</b> Copies the graph in color to the Clipboard.</li> <li>➤ <b>Copy Graph (Monochrome).</b> Copies the graph in monochrome to the Clipboard.</li> <li>➤ <b>Copy Full Screen Graph (Color).</b> Copies the graph in color to the Clipboard, enlarged to fit full screen.</li> <li>➤ <b>Copy Full Screen Graph (Monochrome).</b> Copies the graph in monochrome to the Clipboard, enlarged to fit full screen.</li> </ul> |
|  | <p><b>Print Graph.</b> Includes the following options:</p> <ul style="list-style-type: none"> <li>➤ <b>Print Graph (Color).</b> Prints the graph in color. This is the default button option.</li> <li>➤ <b>Print Graph (Monochrome).</b> Prints the graph in monochrome.</li> <li>➤ <b>Print Graph and Details (Color).</b> Prints the graph and its description in color.</li> <li>➤ <b>Print Graph and Details (Monochrome).</b> Prints the graph and its description in monochrome.</li> </ul>  |
| <graph area>  | <p>Hover over a graph segment to view a tooltip containing additional information.</p>  |
| <legend>  | <p>Displays the chart categories and their corresponding color. Click a category to show or hide the category in the graph.</p>   |

## Scorecard Layout Dialog Box

This dialog box enables you to configure the scorecard table settings.



**Scorecard Layout** [?] [X]



Rows   Columns  



Scope Item Name > Milestone Name  
KPI Name



Group scope items by field: Owner

Display planned KPI target

- Filter

Milestone  Sort By: Due Date[Ascending]  


Scope Item  Sort By: Name[Ascending]  


KPI  Sort By: Name[Ascending]  


[Restore Default Filter Settings](#)






\* Any changes in the scorecard layout will affect all users viewing the scorecard.

OK Cancel Help

|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Releases module, select a release and click the <b>Scorecard</b> tab. Click the <b>Scorecard Layout</b> button.   |
| <b>Important information</b> | <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition. |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "How to Work with PPT" on page 213  |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "PPT Releases Overview" on page 212</li> <li>➤ "Releases Module Window" on page 184</li> </ul> |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | Sets the order in which row or column names appear in scorecard table.   |
|  | Moves selected names between <b>Rows</b> and <b>Columns</b> .  |
|  | Enables you to narrow and sort the <b>Milestone, Scope Item, or KPI</b> data according to your chosen criteria. For more details on filtering, see "Filter Dialog Box" on page 64.       |
|  | Clears the defined filter.   |
|  | Restores default filter definitions.   |
| <b>Columns</b>  | Lists columns that are currently displayed in the scorecard table.   |
| <b>Display Planned KPI Target</b>   | Displays the OK value of a KPI's threshold in the <b>Planned</b> column of the scorecard table.<br><b>Note:</b> The <b>Planned</b> column is displayed only when this option is enabled. |
| <b>Group Scope Item by Field</b>  | Groups according to a specified scope item field.  |
| <b>Rows</b>   | Lists rows that are currently displayed in the scorecard table.  |

## New Release From Template Dialog Box

This dialog box enables you to create a new release by copying from an existing release in a template project.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Releases module, right-click a release folder and select <b>New Release from Template &gt; New Release from Template</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ <b>The following release properties are copied from the template project:</b> description, start/end dates, cycles, milestones, KPIs, KPI thresholds, attachments, and user-defined fields.</li> <li>▶ <b>The following release properties are not copied from the template project:</b> release scope, milestone scope, and links to ALM entities in other modules.</li> <li>▶ After creating the new release, you must update the copied dates.</li> <li>▶ The New Release from Template option is available in a project that is linked and synchronized with a template project. For more details on linking and synchronizing template projects, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Work with PPT" on page 213   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "PPT Releases Overview" on page 212</li> <li>▶ "Releases Module Window" on page 184</li> </ul>  |

User interface elements are described below:

| UI Elements (A-Z)       | Description   |
|-------------------------|---|
| <b>Template Release</b> | Displays the releases available from the template project.<br>Expand the tree and select a release.   |
| <b>Release Name</b>     | The name of the new release.<br><b>Note:</b> If the release name already exists in the Releases module, the suffix _Copy will be added to the release name. |

# 11

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## Libraries and Baselines

This chapter includes:

### Concepts

- ▶ Libraries Overview on page 264

### Tasks

- ▶ How to Use Libraries and Baselines in ALM on page 267

### Reference

- ▶ Libraries and Baselines User Interface on page 274

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## Concepts

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### Libraries Overview

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**Quality Center Starter Edition:** The Libraries module functionality described in this chapter is not available.

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In the Libraries module, you define a hierarchical libraries tree to create and manage your libraries. A **library** represents a set of entities in a project and the relationships between them. The entities in a library can include requirements, tests, test resources, and business components.

After you create a library, you can create a baseline to keep track of changes made to your project over time. A **baseline** is a snapshot of the library at a specific point in time. You can compare baselines at all stages of the application development lifecycle.

Viewing baseline history enables you to track changes made to individual entities in your library over time. As development continues, you can view and compare all versions of an entity that are stored in a baseline.

You can also import a library. Importing a library enables you to reuse and share an existing set of entities. As development continues, you can compare and synchronize libraries. For details, see "Imported Libraries Overview" on page 306. **ALM Editions:** Imported library functionality is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.

Creating and managing libraries and baselines requires appropriate user permissions. For more information, refer to the *HP Application Lifecycle Management Administrator Guide*.



This section also includes:

- "Baselines Overview" on page 265
- "Pinned Test Sets" on page 266

For task details, see "How to Use Libraries and Baselines in ALM" on page 267.

## **Baselines Overview**

After you create a library, you can create a baseline. A baseline is a snapshot of your library at a specific point in time. You can use a baseline to mark any significant milestone in the application development lifecycle. A baseline includes all the entities defined in the library, including requirements, tests, and test resources. Baselines also include:

- the relationships between the entities in the library, such as traceability and coverage
- any related entities outside of the library that the tests in the library need in order to run, such as called tests and test resources

Baselines enable you to keep track of changes made to your project over time. You can use baselines in the following ways:

- Compare baselines at all stages of the application development lifecycle. For example, you can compare two baselines in a library to assess the impact of changes made to requirements over time. You can then update the relevant tests in your project accordingly. You can also compare a baseline to the current entities in the library.
- Pin a test set to a baseline. This ensures that when you run the test set, the versions of the tests stored in a baseline you specify are run. For more details, see "Pinned Test Sets" on page 266.
- Use a baseline to share the entities in a library. This enables you to reuse the library's entities within your project, or in a different project. To import a library, the library must contain a baseline. For details on importing a library, see "Imported Libraries Overview" on page 306.  
**ALM Editions:** Imported library functionality is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.

## Baseline Examples

The following examples demonstrate how you can use baselines:

### ► Establish content of a release - stakeholder sign off

Your organization is starting development of a new version of an application. Robert, a business analyst, presents a group of requirements to the stakeholders to review. After the requirements are reviewed and approved, he creates a baseline. Stakeholders can then sign off on the agreed upon release content.

### ► Monitor change

Kelly, a product manager, finds that product development is being implemented differently than she expected. She reviews the requirements for the product and discovers that some have changed. She compares the current requirements with the requirements in the baseline created and agreed upon at the start of the release.

### ► Evaluate the impact of changes

Michael, a QA tester, is responsible for a large group of tests that are part of the latest application release. He is updating some of the tests in accordance with the requirements for the release. Following the latest requirements review meeting, he is notified that some of the requirements have been changed. Michael compares the current requirements with the requirements in the baseline created at the start of the release. He identifies which changes affect tests he is working on, and updates the tests to reflect the changes.

## Pinned Test Sets

You can pin a test set to a baseline. When you pin a test set to a baseline, the tests that are in the test set are associated with the versions of the tests stored in a baseline you select. When you run the tests in a pinned test set, the versions of the tests stored in the specified baseline are run.

A pinned test set can include only tests that are included in the baseline. When you pin a test set to a baseline, tests that are not a part of the baseline are removed from the test set. In addition, all test runs are deleted from the test set. When you add tests to a pinned test set, you can select only tests that are included in the baseline.

You can also clear a pinned test set. If the test set includes tests that no longer exist in the Test Plan module, the tests are deleted from the test set. In addition, all test runs in the test set are deleted. The tests in the test set are then associated with the current tests in the Test Plan module.

For user interface details, see "Select Baseline Dialog Box" on page 303.

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## Tasks

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### How to Use Libraries and Baselines in ALM

This task describes how to work with libraries and baselines.

To learn more about libraries and baselines, see "Libraries Overview" on page 264.

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#### Note:

- ▶ **ALM Editions:** Quality Center Enterprise Edition does not include all Libraries module functionality. This module is not available with Quality Center Starter Edition.
  - ▶ **Product Feature Movie:** To view a movie that demonstrates versioning and baselining capabilities, choose **Help > Product Feature Movies** in the ALM main window and select **Versioning and Sharing**.
- 

This task includes the following steps:

- ▶ "Create a library" on page 268
- ▶ "Create a baseline" on page 270
- ▶ "Monitor library tasks - optional" on page 271
- ▶ "Compare baselines" on page 271
- ▶ "Pin a test set to a baseline" on page 272

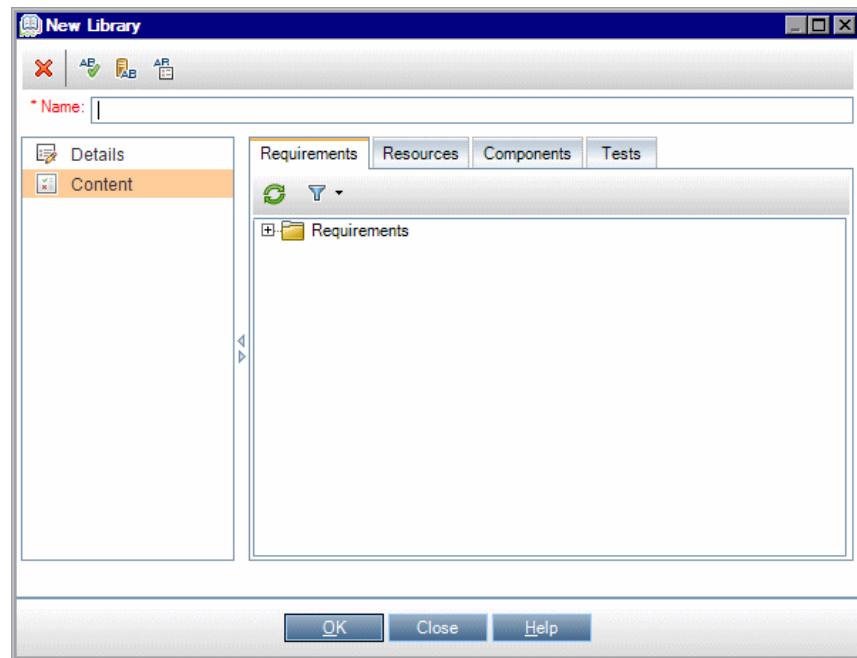
- "View baseline history" on page 273
- "Share a library" on page 273

## 1 Create a library

Define a hierarchical framework for your libraries by creating a libraries tree that can contain folders and subfolders.

- Open the Libraries module.** On the ALM sidebar, under **Management**, select **Libraries**.
- Create folders.** Right-click the **Libraries** root folder and select **New Folder**. To create a sub-folder, right-click a folder and select **New Folder**.
- Add libraries to folders.** Right-click a folder and select **Create Library**. In the New Library dialog box, fill in fields on the Details page. For user interface details, see "New Library/Library Details Dialog Box" on page 283.

On the **Content** page, select entities to include in the library. For user interface details, see "Content Tab" on page 285.



You can define a filter to help you select the entities that you want to include. This can be useful, for example, if you want to create a library that is not based solely on the hierarchical structure of your project.

**Example:**

Jim, the project manager, has a new project with a major security impact. The test plan tree in his project is organized hierarchically based on products and versions. Jim creates a library that includes the relevant test folders, and defines a filter for the library to include only security-related tests in those folders.

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**Note:** In order to maintain optimal performance, the number of entities that a library can contain is limited. You can change the default values by setting the `LIBRARY_FUSE` and `REQUIREMENTS_LIBRARY_FUSE` parameters in the Site Configuration tab in Site Administration. For details, refer to the *HP Application Lifecycle Management Administrator Guide*.

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## 2 Create a baseline

Create a baseline for a library to track changes made to entities in your project over time.

- a** In the Libraries module, right-click a library and select **Create Baseline**. For user interface details, see "Create Baseline Wizard" on page 287.
- b** Click the **View Log** button in the Details tab. The Log: Create Baseline dialog box opens and displays progress.

**Note:** When the process is complete, view the log before refreshing the display. If you refresh the display after the baseline is created, the **View Log** button is no longer displayed, and you cannot view the log.

For user interface details on the Libraries module window, see "Libraries Module Window" on page 275.

- c** Click the **Refresh** button on the module toolbar to refresh the display. The baseline details are displayed in the Details tab. For details on the available fields in the Details tab, see "Libraries Module Fields" on page 281.

### 3 Monitor library tasks - optional

When you create a baseline, ALM performs the task in the background, enabling you to continue working in ALM while the process is running. You can view the status and progress of all asynchronous tasks run for the project using the Task Manager.

On the ALM masthead, select **Tools > Task Manager**. For user interface details, see "Task Manager Dialog Box" on page 52.

### 4 Compare baselines

Compare two baselines in a library, or compare a baseline to the current entities in the library.

- a** In the Libraries module, right-click a baseline, click **Compare To**, and choose one of the following:
  - ▶ **Select Baseline.** Compares the baseline you selected with another baseline in the library. Opens the Select Baseline dialog box. Click the browse button to select a baseline from the list.
  - ▶ **Current Entities.** Compares the baseline you selected with the current entities in the library.

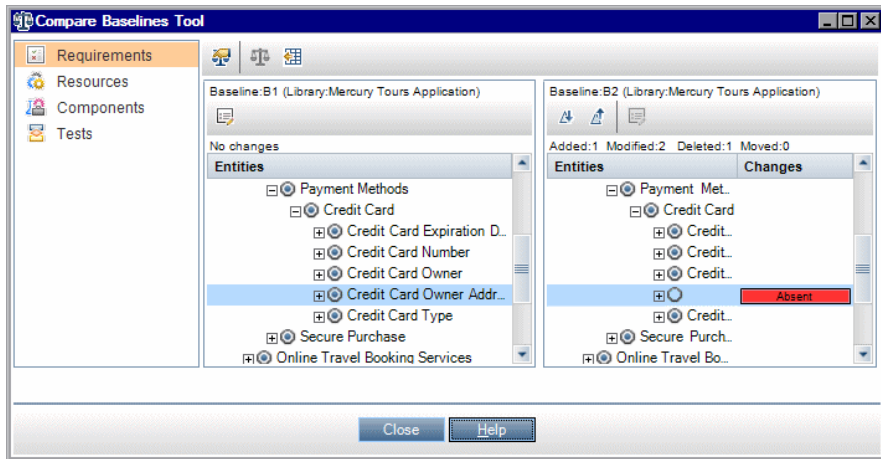
For user interface details on the Compare Baselines Tool, see "Compare Baselines Tool Dialog Box" on page 290.



- b** To save the baseline comparison results in .csv file format, click the **Export Comparison Results** button. After saving, the file opens in the default application defined for opening .csv files on your computer, such as Microsoft Excel.

**Example:**

Comparing two baselines that were created for the Mercury Tours Application library at different stages of development shows the following results:



**5 Pin a test set to a baseline**

You can pin a test set to a baseline to associate the test set with the versions of the tests stored in a baseline you select.

- ▶ In the Test Lab module, right-click a test set and select **Pin to Baseline**. For user interface details on the Select Baseline dialog box, see "Select Baseline Dialog Box" on page 303.
- ▶ To clear a pinned baseline, right-click a test set and select **Clear Pinned Baseline**.

For concept details on pinned test sets, see "Pinned Test Sets" on page 266.



## 6 View baseline history

View and compare all versions of an entity that are stored in a baseline.

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**Note:** Available from the following modules: Requirements, Business Components, Test Plan, Test Resources.

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Select an entity in the tree or grid, and click **History** tab > **Baselines** tab.

**Version Control:** Select an entity and click **History** tab > **Versions and Baselines** tab. In the **View By** box, select **Baselines**.

For user interface details on the Baselines tab, see "Baselines Tab" on page 300.

## 7 Share a library

Import a library to reuse an existing set of entities within a project or across multiple projects. As development continues, compare and synchronize libraries. For task details, see "How to Share Libraries" on page 310. **ALM Editions:** Imported library functionality is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.

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## Reference

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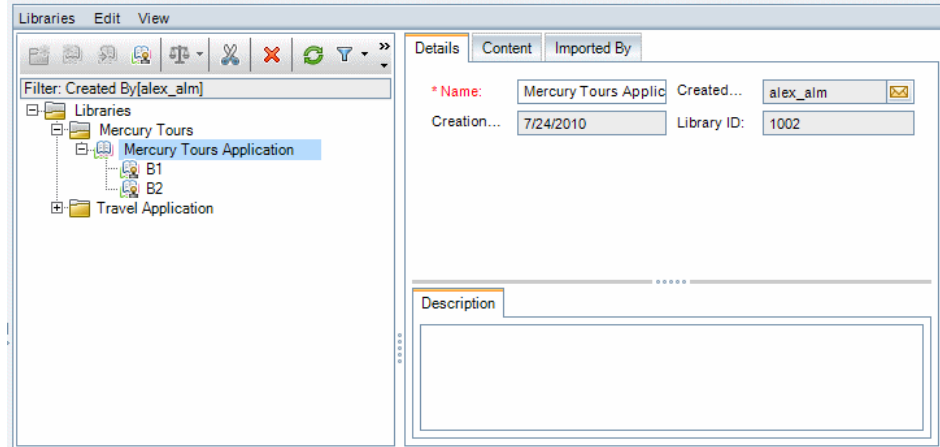
### **Libraries and Baselines User Interface**

This section includes:

- ▶ Libraries Module Window on page 275
- ▶ Libraries Module Menus and Buttons on page 277
- ▶ Libraries Module Icons on page 280
- ▶ Libraries Module Fields on page 281
- ▶ New Library/Library Details Dialog Box on page 283
- ▶ Content Tab on page 285
- ▶ Create Baseline Wizard on page 287
- ▶ Compare Baselines Tool Dialog Box on page 290
- ▶ Compare Entities Dialog Box on page 294
- ▶ Comparison Settings Dialog Box on page 298
- ▶ Baselines Tab on page 300
- ▶ Select Baseline Dialog Box on page 303

## Libraries Module Window

The Libraries module window enables you to create and manage libraries and baselines.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under Management, select <b>Libraries</b> .   |
| <b>Important information</b> | <b>ALM Editions:</b> Quality Center Enterprise Edition does not include all Libraries module functionality. This module is not available with Quality Center Starter Edition. |
| <b>Relevant tasks</b>        | <ul style="list-style-type: none"> <li>➤ "How to Use Libraries and Baselines in ALM" on page 267</li> <li>➤ "How to Share Libraries" on page 310</li> </ul>                   |
| <b>See also</b>              | "Libraries Overview" on page 264  |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements                           | Description  |
|---------------------------------------|--|
| <Libraries module common UI elements> | <ul style="list-style-type: none"> <li>▶ <b>Library fields.</b> For field definitions, see "Libraries Module Fields" on page 281.</li> <li>▶ <b>Library menus and buttons.</b> For command and button descriptions, see "Libraries Module Menus and Buttons" on page 277.</li> <li>▶ <b>Library icons.</b> For icon descriptions, see "Libraries Module Icons" on page 280.</li> <li>▶ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu and sidebar, see "ALM Common Areas" on page 41.</li> </ul> |
| <Libraries tree>                      | A graphical representation of your libraries.  |
| <Filter status bar>                   | Describes the filter currently applied to the tree. Located directly above the libraries tree.   |
| <b>Content tab</b>                    | Displays the entities included in the selected library. For details, see "Content Tab" on page 285.  |
| <b>Description tab</b>                | <p>A description of the currently selected library folder, library, or baseline.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>   |
| <b>Details tab</b>                    | Describes the library folder, library, or baseline selected in the libraries tree.   |




| UI Elements              | Description  |
|--------------------------|--|
| <b>Imported By tab</b>   | Displays a list of projects that have imported the selected library. This tab is visible only when the current project or other projects have imported the selected library. For more details, see "Imported By Tab" on page 322.<br><b>ALM Editions:</b> Not available for Quality Center Starter Edition or Quality Center Enterprise Edition. |
| <b>Imported From tab</b> | Displays details about the library from which the currently selected library was imported. This tab is visible only when the selected library is imported. For more details, see "Imported From Tab" on page 324.<br><b>ALM Editions:</b> Not available for Quality Center Starter Edition or Quality Center Enterprise Edition.                 |




## Libraries Module Menus and Buttons





This section describes the menus and buttons available in the Libraries module.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under Management, select <b>Libraries</b> .   |
| <b>Important information</b> | <b>Tip:</b> You can access the menu bar from the Libraries module by pressing the shortcut key ALT. Additionally, you can perform many other ALM operations using shortcut keys. For a list of shortcut keys, see "ALM Keyboard Shortcut Reference" on page 154.<br><b>ALM Editions:</b> Quality Center Enterprise Edition does not include all Libraries module functionality. This module is not available with Quality Center Starter Edition. |
| <b>Relevant tasks</b>        | "How to Use Libraries and Baselines in ALM" on page 267   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Libraries Module Icons" on page 280</li> <li>➤ "Libraries Overview" on page 264</li> </ul>  |

User interface elements are described below:

| UI Elements (A-Z)  | Menu      | Description  |
|--|-----------|--|
|  <b>Compare To</b>        | Libraries | <p>Compares the currently selected library or baseline with other libraries or baselines. Includes the following options:</p> <p>For a selected library: <b>ALM Editions:</b> Not available for Quality Center Starter Edition or Quality Center Enterprise Edition.</p> <ul style="list-style-type: none"> <li>▶ <b>Latest Baseline Created.</b> Compares the selected library with the most recent baseline created in the other library.</li> <li>▶ <b>Select Baseline.</b> Opens the Select Baseline dialog box, enabling you to select a baseline in another library with which to compare.</li> </ul> <p>For a selected baseline:</p> <ul style="list-style-type: none"> <li>▶ <b>Current Entities.</b> Compares the selected baseline with the current entities in the library.</li> <li>▶ <b>Select Baseline.</b> Opens the Select Baseline dialog box, enabling you to select a baseline in the library with which to compare.</li> </ul> |
|  <b>Create Baseline</b> | Libraries | <p>Enables you to create a baseline for a selected library. For more details, see "Create Baseline Wizard" on page 287.</p>  |
|  <b>Create Library</b>  | Libraries | <p>Opens the Create Library dialog box, enabling you to add a library to a selected library folder. For more details, see "New Library/Library Details Dialog Box" on page 283.</p>  |

| UI Elements (A-Z)  | Menu | Description  |
|--|------|--|
|  <b>Cut/Paste</b> | Edit | <p>Moves a selected library folder or library to a different location in the libraries tree.</p> <p><b>Note:</b> Moving a library folder also moves its libraries and baselines. Moving a library also moves its baselines. You cannot move a baselines or the root folder.</p> <p><b>Tip:</b> You can also move a library folder or a library to a new location in the libraries tree by dragging it.</p>   |
|  <b>Delete</b>    | Edit | <p>Deletes selected library folders, libraries, or baselines.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>▶ You cannot delete a library folder that contains libraries, or delete a library that contains baselines.</li> <li>▶ Deleting a library or baseline does not delete the library's entities from your project.</li> <li>▶ If you delete a baseline, you can no longer compare between the baseline's library and another library that was imported from or synchronized with the baseline.</li> <li>▶ Deleting a baseline also deletes test sets pinned to the baseline.</li> </ul> |
|  <b>Filter</b>  | View | <p>Enables you to filter the libraries in the libraries tree. For more details, see "Filter Dialog Box" on page 64.</p>  |

| UI Elements (A-Z)  | Menu      | Description  |
|--|-----------|--|
|  <b>Import Library</b>  | Libraries | Opens the Import Library Wizard, enabling you to import a library under a selected library folder. For more details, see "Import Library Wizard" on page 316.<br><b>ALM Editions:</b> Not available for Quality Center Starter Edition or Quality Center Enterprise Edition. |
|  <b>Library Details</b> | Libraries | Opens the Library Details dialog box, enabling you to view and edit the details of the selected library. For details, see "Libraries Module Window" on page 275.   |
|  <b>New Folder</b>      | Libraries | Opens the New Library Folder dialog box, enabling you to add a folder under a selected folder.   |
|  <b>Refresh</b>         | View      | Refreshes the libraries tree and tabs so that they display the most up-to-date information.  |
| <b>Rename</b>  | Edit      | Renames a selected library folder, library, or baseline. You cannot rename the root folder.  |






## Libraries Module Icons

This section describes the icons available in the Libraries module.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under Management, select <b>Libraries</b> .   |
| <b>Important information</b> | <b>ALM Editions:</b> Quality Center Enterprise Edition does not include all Libraries module functionality. This module is not available with Quality Center Starter Edition. |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Libraries Module Menus and Buttons" on page 277</li> <li>➤ "Libraries Module Window" on page 275</li> </ul>                         |



User interface elements are described below:

| UI Elements   | Description   |
|---|---|
|  | <green asterisk>. The applicable tab is populated.  |
|  | <b>Baseline.</b> A baseline for a library in the libraries tree.  |
|  | <b>Imported Library.</b> A library that was imported from the same project or from a different project. |
|  | <b>Library Folder.</b> A folder for organizing libraries.   |
|  | <b>Library.</b> A library in the libraries tree.  |

## Libraries Module Fields

This section describes the Libraries module fields.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under Management, select <b>Libraries</b> .   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You can add user-defined fields and change the label of any of the fields in the Details tab. You can also customize project lists. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You can use the Script Editor to restrict and dynamically change the fields and values in the Libraries module. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ <b>ALM Editions:</b> Quality Center Enterprise Edition does not include all Libraries module functionality. This module is not available with Quality Center Starter Edition.</li> </ul> |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "How to Use Libraries and Baselines in ALM" on page 267 |
| <b>See also</b>       | "Libraries Overview" on page 264                        |

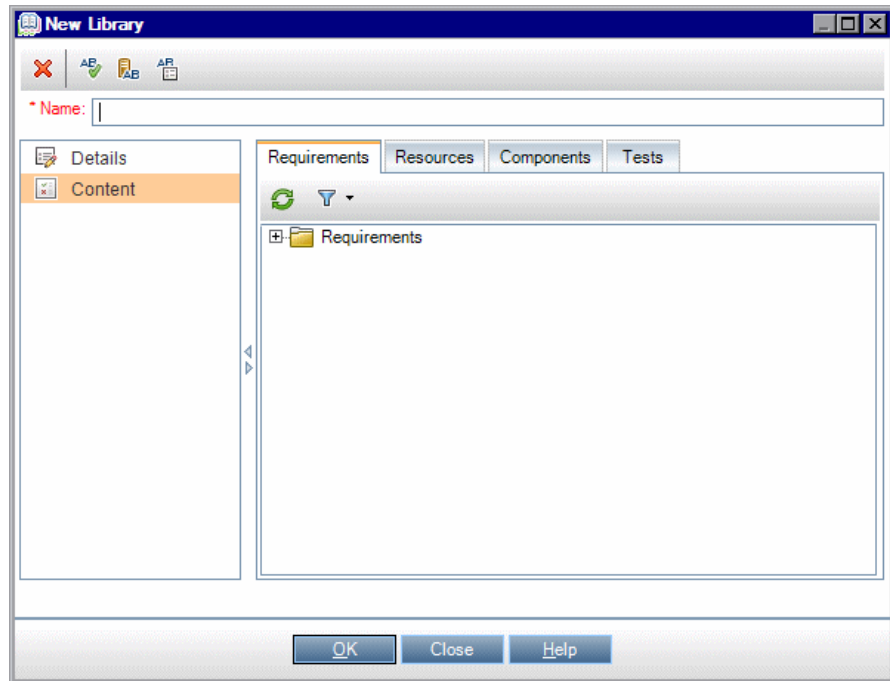
The fields are described below:

| <b>UI Elements (A-Z)</b> | <b>Description</b>   |
|--------------------------|--|
| <b>Baseline ID</b>       | A unique numeric ID for the baseline that ALM assigns automatically.   |
| <b>Created By</b>        | The user name of the person who created the library or baseline.   |
| <b>Creation Date</b>     | The date on which the library or baseline was created.   |
| <b>Description</b>       | A description of the library folder, library, or baseline.<br>Click in the text box to display a toolbar for formatting and spell checking the text. |
| <b>Library ID</b>        | A unique numeric ID for the library that ALM assigns automatically.  |
| <b>Modified</b>          | The date and time on which the baseline was last renamed or the description was changed.   |
| <b>Name</b>              | The folder, library, or baseline name.   |

## New Library/Library Details Dialog Box





The New Library dialog box enables you to add a library to a library folder.

The Library Details dialog box enables you to view and update the details and content of a library.



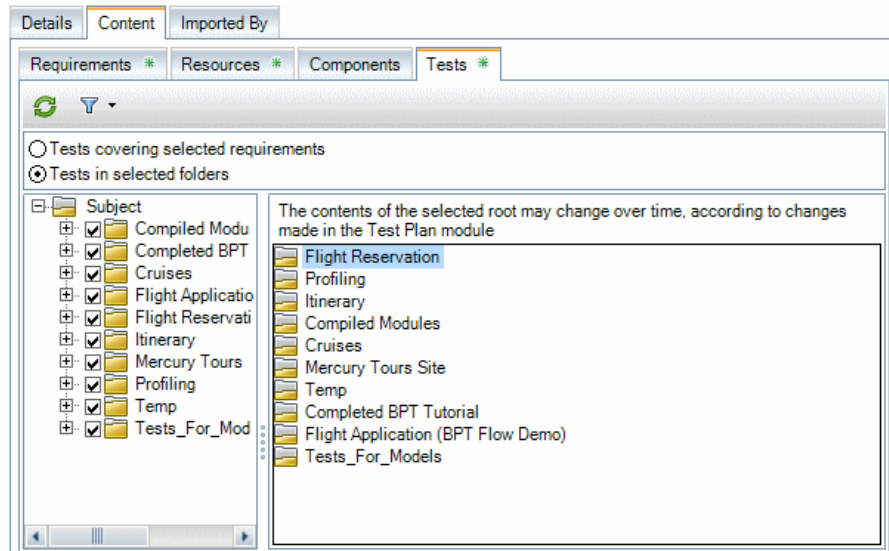
|                              |   |
|------------------------------|---|
| <b>To access</b>             | <p><b>New Library dialog box:</b> In the Libraries module, right-click a library folder and select <b>Create Library</b>.</p> <p><b>Library Details dialog box:</b> In the Libraries module, right-click a library and select <b>Library Details</b>.</p> |
| <b>Important information</b> | <p><b>Quality Center Starter Edition:</b> This dialog box is not available.</p>   |
| <b>Relevant tasks</b>        | <p>How to Use Libraries and Baselines in ALM</p>  |
| <b>See also</b>              | <p>"Libraries Overview" on page 264</p>   |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Clear All Fields.</b> Clears the data.<br/> <b>Available from:</b> New Library dialog box</p>  |
|  | <p><b>Check Spelling.</b> Checks the spelling for the selected word or text box.</p>   |
|  | <p><b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.</p>   |
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p>  |
| <p><b>Content</b></p>   | <p>Enables you to select entities in your project to include in the library. For details, see "Content Tab" on page 285.</p>                               |
| <p><b>Description</b></p>   | <p>A description of the library. Clicking inside the Description field displays a toolbar for formatting and spell checking the text.</p>                  |
| <p><b>Details</b></p>   | <p>Lists library fields. Required fields are displayed in red. For details on the available library fields, see "Libraries Module Fields" on page 281.</p> |
| <p><b>Library ID</b></p>  | <p>A unique numeric ID for the library that ALM assigns automatically.</p>   |
| <p><b>Name</b></p>  | <p>The name you assign to the library.<br/> <b>Syntax exceptions:</b> A library name cannot include the following characters: \ / : * ? " &lt; &gt;  </p>  |



## Content Tab

This tab enables you to select or view the entities included in a library.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ In the Libraries module, select a library and click the <b>Content</b> tab.</li> <li>▶ In the New Library dialog box or the Library Details dialog box, click <b>Content</b> on the sidebar.</li> </ul>  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ When you select tests to include in a library, you do not need to select related entities that a test needs to run, such as its called tests and test resources. When you create a baseline for the library, ALM automatically includes those related entities in the baseline.</li> <li>▶ <b>Quality Center Starter Edition:</b> This is not available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Use Libraries and Baselines in ALM" on page 267  |
| <b>See also</b>              | "Libraries Overview" on page 264   |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Refresh.</b> Refreshes the tab so that it displays the most up-to-date information.</p>  |
|  | <p><b>Filter.</b> Enables you to filter the entities in the tree.</p> <p>The filter determines the following:</p> <ul style="list-style-type: none"> <li>▶ the folders and records that are displayed and available for selection in the Content tab</li> <li>▶ the entities that are included when you create a baseline or import the library</li> </ul> <p><b>Note:</b> Creating a relative filter for a library, such as filtering by the Test Plan <b>Path</b> field, is not supported. If the library is then imported to create a new library, the baseline that is created automatically after import, which is the basis for future comparison and synchronization, is based on the relative filter and does not function properly within the imported library.</p> |
| <Filter status bar>   | <p>Describes the filter currently applied to the tree. Located directly above the libraries tree.</p>  |
| <Left pane>   | <p>The entity tree for the selected module. Displays the folders that are available for selection.</p> <p>Select a folder to include it in the library. Contents of the selected folder are displayed in the right pane.</p> <p><b>Note:</b> In the Requirements tab, you can also select individual requirements.</p>   |
| <Right pane>  | <p>Displays the child entities of the selected folder. The contents displayed may change over time, according to changes made in the module.</p> <p>This pane is not displayed in the Requirements tab. All requirements are displayed in the tree in the left pane.</p>   |
| <b>Components</b>   | <p>Business Components module content for the library.</p>   |
| <b>Requirements</b>   | <p>Requirements module content for the library.</p>  |

| UI Elements (A-Z) | Description   |
|-------------------|---|
| <b>Resources</b>  | Test Resources module content for the library.  |
| <b>Tests</b>      | <p>Test Plan module content for the library.</p> <p>Select an option for including tests in the library:</p> <ul style="list-style-type: none"> <li>▶ <b>Tests in selected folders.</b> Enables you to select folders in the tree to include in the library.</li> <li>▶ <b>Tests covering selected requirements.</b> Includes only the tests that cover the requirements that are selected for the library.</li> </ul> <p><b>Note:</b> Selecting this option clears any previous selection or filter defined in this tab.</p> |

## Create Baseline Wizard

This wizard enables you to create a baseline for a library.


|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Libraries module, right-click a library and select <b>Create Baseline</b> . |
| <b>Wizard map</b>            | This wizard contains:<br>Baseline Verification Page > New Baseline Page            |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> This is not available.                      |
| <b>Relevant tasks</b>        | "How to Use Libraries and Baselines in ALM" on page 267                            |
| <b>See also</b>              | "Baselines Overview" on page 265   |

## **Baseline Verification Page**

This wizard page enables you to view and save results of the baseline verification process.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | General information about this wizard is available here: "Create Baseline Wizard" on page 287. |
| <b>Wizard map</b>            | The Create Baseline Wizard contains:<br><b>Baseline Verification Page</b> > New Baseline Page  |
| <b>See also</b>              | "Baselines Overview" on page 265   |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | Saves the Baseline Verification log in a text file.<br>Review the log and resolve any issues, if necessary, before continuing to create the baseline.   |
| <b>Verification results</b>   | Displays the results of the library size verification. The process checks that the size of the library does not exceed the limit defined in Site Administration. For more information, see the <i>HP Application Lifecycle Management Administrator Guide: LIBRARY_FUSE</i> . |



 **New Baseline Page**

This wizard page enables you to assign a name to the baseline.

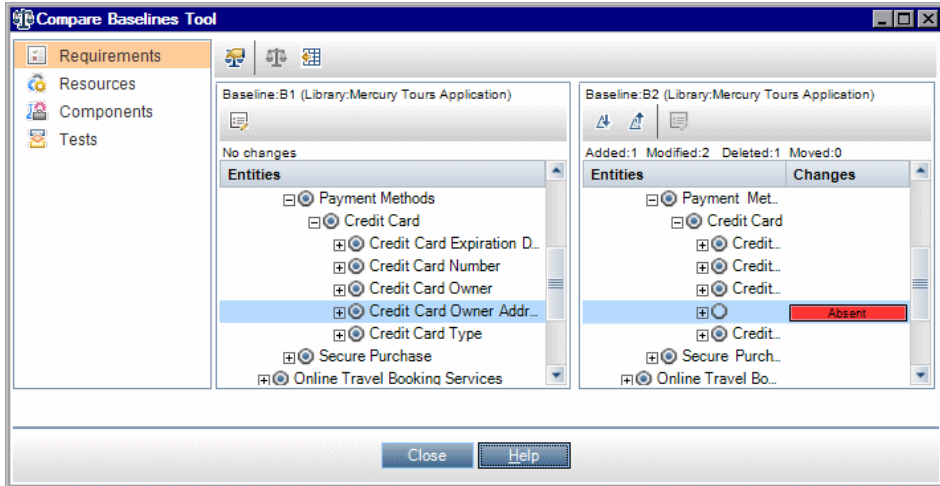
|                              |   |
|------------------------------|---|
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ General information about this wizard is available here: "Create Baseline Wizard" on page 287.</li> <li>▶ When you create a baseline for a library that includes tests, related entities that the tests need to run, such as their called tests and test resources, are also included in the baseline. These related entities do not need to be defined in the library.</li> <li>▶ The baseline is created in a background process, and may take some time. You can continue working in ALM during baseline creation.</li> </ul> |
| <b>Wizard map</b>            | The Create Baseline Wizard contains:<br>Baseline Verification Page > <b>New Baseline Page</b>   |
| <b>See also</b>              | "Baselines Overview" on page 265  |

User interface elements are described below:

| UI Elements (A-Z)    | Description                          |
|----------------------|--------------------------------------|
| <b>Baseline Name</b> | The name you assign to the baseline. |



## Compare Baselines Tool Dialog Box




This dialog box enables you to compare two baselines in a library, or compare a baseline to the current entities in the library. For example, you can compare baselines at different stages of development to review and assess the impact of changes made to requirements in your project.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <p>In the Libraries module, right-click a baseline, click <b>Compare To</b>, and choose one of the following:</p> <ul style="list-style-type: none"> <li>▶ <b>Select Baseline.</b> Compares the baseline you selected with another baseline in the library. Opens the Select Baseline dialog box. Click the browse button to select a baseline from the list.</li> <li>▶ <b>Current Entities.</b> Compares the baseline you selected with the current entities in the library.</li> </ul>  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ ALM does not consider changes made to <b>Target Release</b> and <b>Target Cycle</b> fields when determining whether an entity has been modified.</li> <li>▶ If coverage or traceability between two entities was deleted and then added again, those entities are considered modified.</li> <li>▶ Coverage of tests or requirements in the library by entities outside of the library is not considered when comparing baselines.</li> <li>▶ <b>Quality Center Starter Edition:</b> This is not available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Use Libraries and Baselines in ALM" on page 267  |
| <b>See also</b>              | "Baselines Overview" on page 265   |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

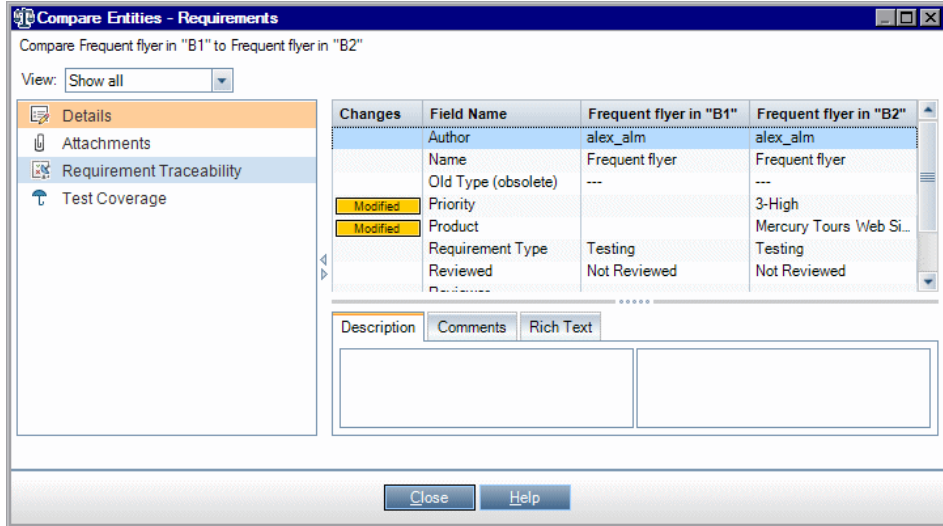
| UI Elements   | Description   |
|---|---|
|  | <p><b>Comparison Settings.</b> Opens the Comparison Settings dialog box, enabling you to define settings for comparing baselines. For more details, see "Comparison Settings Dialog Box" on page 298.</p> |
|  | <p><b>Compare Entities.</b> Opens a Compare Entities dialog box, enabling you to view details of the entity in each baseline. For details, see "Compare Entities Dialog Box" on page 294.</p>             |

| UI Elements   | Description   |
|---|---|
|  | <p><b>Export Comparison Results.</b> Enables you to save the baseline comparison results in .csv file format. After saving, the file opens in the default application defined for opening .csv files on your computer, such as Microsoft Excel.</p>   |
|  | <p><b>Details.</b> Opens a Details dialog box, enabling you to view details of the selected entity stored in the baseline.</p> <p>Select an entity and click the <b>Details</b> button.</p> <p>For example, select a requirement in one of the panes. The Requirement Details dialog box opens and displays details of the requirement in the baseline.</p> |
|  | <p><b>Go to Next/Previous Change.</b> Moves to the next/previous change for the selected module.</p>  |
| <p>&lt;Baseline identification bar&gt;</p>  | <p>Located at the top of each baseline pane, indicates the name of the baseline displayed in the pane below.</p>  |
| <p>&lt;Counter bar&gt;</p>  | <p>Located above each baseline pane, displays the number of entities that were added, modified, deleted, or moved, according to change status.</p>  |
| <p>&lt;Left pane&gt;</p>  | <p>Displays entities stored in the older baseline.</p>  |
| <p>&lt;Right pane&gt;</p>   | <p>Displays entities stored in the more recently created baseline or current entities.</p>  |
| <p>&lt;Sidebar&gt;</p>  | <p>Enables you to view comparison results for entities by module. For example, select <b>Tests</b> to view comparison results for the Test Plan module.</p> <p>The sidebar displays only the modules that are included in the library.</p>  |

| UI Elements     | Description   |
|-----------------|---|
| <b>Changes</b>  | <p>Indicates differences between the two baselines. Possible values include the following:</p> <ul style="list-style-type: none"> <li>▶ <b>Added.</b> The entity did not exist in the older baseline.</li> <li>▶ <b>Modified.</b> There is a difference in the entity between the baselines.</li> <li>▶ <b>Absent.</b> The entity does not exist in the newer baseline.</li> <li>▶ <b>Moved.</b> The entity is in a different location in the tree structure in the newer baseline.</li> <li>▶ <b>Moved and Modified.</b> The entity has changed and has been moved to a different location in the tree.</li> </ul> <p>A deleted or moved entity is displayed in its original location in the tree, indicated by a placeholder. This maintains the hierarchical structure, enabling you to compare changes between baselines.</p> |
| <b>Entities</b> | <p>Displays the library's entities in the same hierarchical structure as defined in the selected module.</p>  |

## Compare Entities Dialog Box

This page enables you to compare an entity between two baselines in a library, or between two libraries.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>➤ In the Compare Baselines Tool or Compare Libraries Tool dialog box, select a modified entity and click the <b>Compare Entities</b> button.</li> <li>➤ In the <b>History tab &gt; Baselines tab</b>, select two versions and click the <b>Compare</b> button.</li> <li>➤ <b>Version Control:</b> In the <b>History tab &gt; Versions and Baselines tab</b>, select two versions and click the <b>Compare</b> button.</li> </ul> <p>Available from the following modules: Requirements, Business Components, Test Plan, Test Resources</p> |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>➤ Changes made to <b>Target Release</b> and <b>Target Cycle</b> fields do not cause the fields to be marked as modified.</li> <li>➤ <b>Version Control:</b> <ul style="list-style-type: none"> <li>➤ Compare two versions of an entity in a version control enabled project.</li> <li>➤ Not all sidebar buttons are displayed. The buttons available depend on the information stored under version control. For more details, see "Version Control Overview" on page 122.</li> </ul> </li> </ul>   |
| <b>Relevant tasks</b>        | <ul style="list-style-type: none"> <li>➤ "How to Use Libraries and Baselines in ALM" on page 267</li> <li>➤ "How to Use Version Control" on page 124</li> </ul>  |
| <b>See also</b>              | "Baselines Overview" on page 265   |

User interface elements are described below (unlabeled elements are shown in angle brackets):

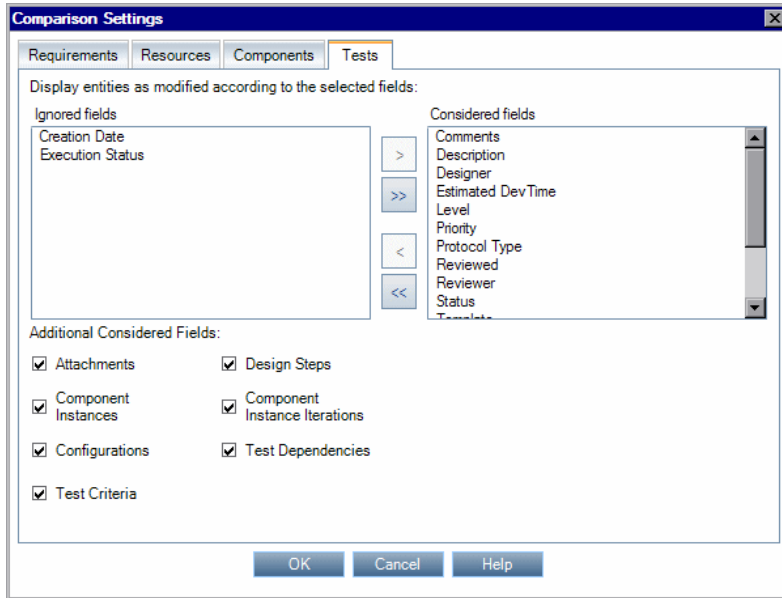
| UI Elements (A-Z)      | Description   |
|------------------------|---|
| <Results grid>         | Displays fields and the field value stored in each version of the entity. Indicates each field whose value has changed.   |
| <Sidebar>              | <p>Enables you to view additional comparison results. The buttons displayed depend on the type of entity you are comparing.</p> <p><b>Note:</b> If you are comparing a QuickTest entity, the <b>QTP Comparison</b> button is displayed, enabling you to open the QuickTest Asset Comparison Tool. For more information on working with QuickTest, refer to the <i>HP QuickTest Professional User Guide</i>.</p>   |
| <b>Attachments tab</b> | Enables you to compare attachments stored in each version. The <b>Changes</b> column indicates if an attachment has been added, deleted, or modified. You can open or save an attachment to view and compare changes.   |
| <b>Changes</b>         | <p>Indicates a modified field.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>▶ <b>Version Control:</b> Changes to some fields are not stored under version control. For more details, see "Non-versioned Fields" on page 129.</li> <li>▶ For traceability and coverage, if a linked entity is marked as both <b>Deleted</b> and <b>Added</b>, or is displayed as <b>Missing</b> on both sides, this can indicate that the link between the entities was deleted and then added.</li> </ul> |
| <b>Comments tab</b>    | Enables you to compare the contents of the Comments field stored in each version.   |
| <b>Description tab</b> | Enables you to compare the contents of the Description field stored in each version.  |
| <b>Field Name</b>      | The name of the field.  |




| UI Elements (A-Z)    | Description   |
|----------------------|---|
| <b>Rich Text tab</b> | Enables you to compare rich text. Each pane in the Rich Text tab indicates if rich text has been added, deleted, or modified for the relevant entity version. You can open or save the rich text as a file to view and compare changes. |
| <b>View</b>          | Enables you to select a display option for results.   |



## Comparison Settings Dialog Box

This page enables you to define settings for comparing libraries or baselines. You can select which fields ALM considers when determining whether an entity has been modified.



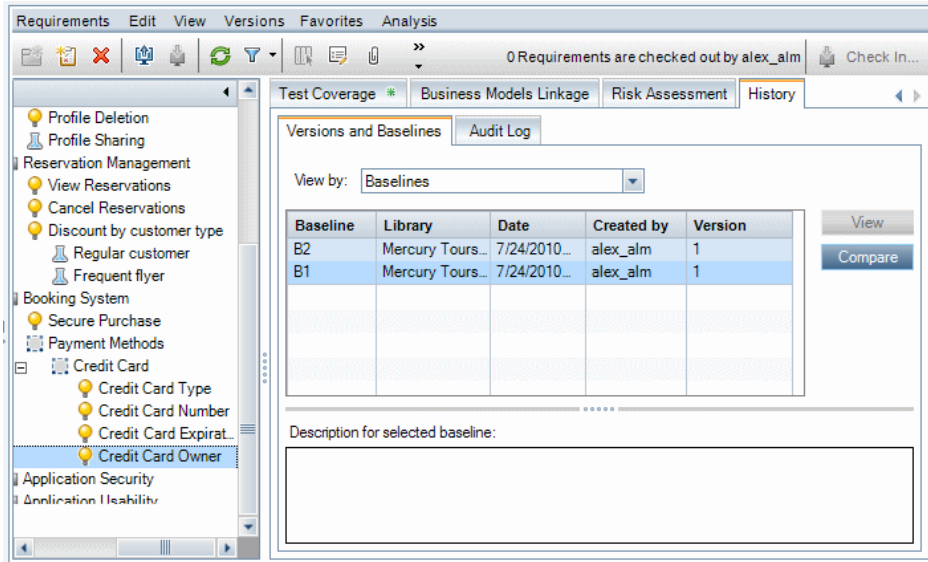
|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Compare Baselines Tool or Compare Libraries Tool, click the <b>Comparison Settings</b> button  .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>➤ ALM does not consider changes made to <b>Target Release</b> and <b>Target Cycle</b> fields when determining whether an entity has been modified.</li> <li>➤ <b>Quality Center Starter Edition:</b> This is not available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Use Libraries and Baselines in ALM" on page 267   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Compare Baselines Tool Dialog Box" on page 290</li> <li>➤ "Compare Libraries Tool Dialog Box" on page 325</li> </ul>  |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p>Moves selected fields between <b>Ignored Fields</b> and <b>Considered Fields</b>.</p> <p><b>Tip:</b> You can also drag the field names between panes or double-click a field name to move it across to the other pane.</p>                       |
|  | <p>Moves all fields between <b>Ignored Fields</b> and <b>Considered Fields</b>.</p>   |
| <Module tabs>   | <p>Enable you to configure comparison settings per module. The Comparison Setting dialog box displays tabs for modules included in the library.</p>   |
| <b>Additional considered fields</b>   | <p>Instructs ALM to consider the entity as modified based on changes made to the selected fields.</p> <p><b>Note:</b> To instruct ALM to ignore coverage, you must clear the <b>Coverage</b> check box in both the Requirements and Tests tabs.</p> |
| <b>Considered fields</b>  | <p>ALM displays the entity as modified based on changes made to fields in this box.</p>   |
| <b>Ignored Fields</b>   | <p>ALM does not display the entity as modified based on changes made to fields in this box.</p>   |



## Baselines Tab

This view displays baseline history for a selected entity. You can view and compare all versions of the entity that are stored in a baseline.



|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <p>Select an entity in the tree or grid, and click <b>History</b> tab &gt; <b>Baselines</b> tab.</p> <p><b>Version Control:</b> Select an entity and click <b>History</b> tab &gt; <b>Versions and Baselines</b> tab. In the <b>View By</b> box, select <b>Baselines</b>.</p> <p>Available from the following modules: Requirements, Business Components, Test Plan, Test Resources.</p> |
| <p><b>Important information</b></p> | <p><b>Quality Center Starter Edition:</b> This tab is not available.</p>   |
| <p><b>Relevant tasks</b></p>        | <p>"How to Use Libraries and Baselines in ALM" on page 267</p>   |
| <p><b>See also</b></p>              | <p>"Baselines Overview" on page 265</p>  |

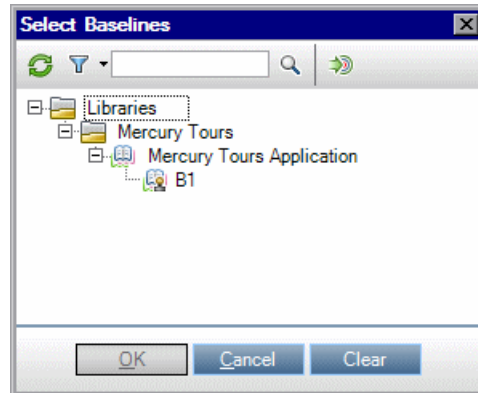
User interface elements are described below:


| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p>Opens a Details dialog box, displaying read-only details for the version of the entity stored in the selected baseline. Select an option on the sidebar to view additional information, such as the Test Coverage and Attachments. The buttons displayed depend on the type of entity selected in the tree or grid.</p> <p><b>Note:</b> If you are viewing information for a QuickTest test, clicking the <b>Test Script</b> button opens the test in a QuickTest viewer, enabling you to view the test or open the test in QuickTest. For more information, refer to the <i>HP QuickTest Professional User Guide</i>.</p> |
|  | <p>Opens the Compare Entities dialog box, enabling you to compare two selected baseline versions. For details, see "Compare Entities Dialog Box" on page 294.</p> <p>To compare two baseline versions, press the CTRL key and select the versions. Then click the <b>Compare</b> button.</p>  |
| <b>Baseline</b>   | The name of the baseline in which the entity is stored.   |
| <b>Created By</b>   | The name of the user who created the baseline.  |
| <b>Date</b>   | The date the baseline was created.  |
| <b>Description for selected baseline</b>  | The descriptions typed by the user when creating the baseline.  |
| <b>Library</b>  | The library for which the baseline was created.   |

| UI Elements (A-Z) | Description  |
|-------------------|--|
| <b>Version</b>    | <p>The version number of the entity stored in the selected baseline.</p> <p>Available in version control enabled projects only.</p>  |
| <b>View by</b>    | <p>Enables you to select one of the following options for viewing history:</p> <ul style="list-style-type: none"> <li>▶ <b>Baselines.</b> Displays all versions of the selected entity that are stored in a baseline.</li> <li>▶ <b>Versions.</b> Displays version history for the selected entity. For details, see "Versions and Baselines Tab - Versions View" on page 140.</li> </ul> <p>Available in version control enabled projects only.</p> |





## Select Baseline Dialog Box

This dialog box enables you to pin a test set to a baseline. This associates the tests in the test set with the tests stored in a baseline that you specify. When you run a test set that is pinned to a baseline, ALM runs the versions of the tests that are stored in the specified baseline.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Test Lab module, right-click a test set and select <b>Pin to Baseline</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ A pinned test set can include only tests that are included in the baseline. When you pin a test set, ALM removes tests that are not included in the baseline from the test set.</li> <li>▶ A pinned test set is displayed with the pinned test set icon  in the test set tree.</li> <li>▶ When you pin a test set, ALM deletes all test runs from the test set.</li> <li>▶ <b>Quality Center Starter Edition:</b> This feature is not available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Use Libraries and Baselines in ALM" on page 267   |
| <b>See also</b>              | "Pinned Test Sets" on page 266  |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Refresh.</b> Refreshes the libraries tree so that it displays the most up-to-date information.   |
|  | <b>Filter/Sort.</b> Enables you to filter the data according to the criteria that you choose. For more details, see "Filter Dialog Box" on page 64. |
|  | <b>Find.</b> Searches the libraries tree for the value you specify in the <b>Find</b> box.  |
|  | <b>Go to Baseline by ID.</b> Opens the Go to Baseline dialog box, enabling you to locate the baseline in the tree according to Baseline ID.         |
| <Find box>  | Enter the name of the library you want to search for and click the <b>Find</b> button.  |
| <Libraries tree>  | Enables you to select a baseline from the libraries tree.   |



# 12

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## Imported Libraries

This chapter includes:

### Concepts

- ▶ Imported Libraries Overview on page 306

### Tasks

- ▶ How to Share Libraries on page 310

### Reference

- ▶ Imported Libraries User Interface on page 315

**Troubleshooting and Limitations** on page 330

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## Concepts

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### Imported Libraries Overview

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**ALM Editions:** Imported libraries functionality is not available for Quality Center Starter Edition and Quality Center Enterprise Edition.

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Importing a library enables you to share or reuse an existing set of entities in projects across your enterprise. You import a library by selecting a baseline in another library from which to import. You can import a library from the same project, or from a different project.

When you import a library, the library is added to your libraries tree, and the library's entities are copied to the corresponding modules in your project. If the library includes associated entities, such as requirements that have test coverage, this relationship is also copied. In addition, any related entities outside of the library that the tests in the library need in order to run are also imported, such as called tests and test resources.

You can compare associated libraries at all stages of the application development lifecycle. For example, you can compare an imported library with the source library from which it was imported. When changes are made to entities in a library, you can synchronize libraries to update the entities in an associated library.

Importing and synchronizing libraries requires appropriate user permissions. For details, see "How to Share Libraries" on page 310.

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**Note:** You can also share defects across multiple ALM projects. You share and synchronize defects using the *HP Quality Center Synchronizer*. For more information, see the *HP Quality Center Synchronizer User Guide*, available from the HP Application Lifecycle Management Adds-ins Page.

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This section also includes:

- "Library Synchronization Overview" on page 308
- "Library Verification" on page 309

For related task details, see "How to Share Libraries" on page 310.

## **Imported Library Examples**

The following examples demonstrate how you can use libraries.

### **➤ Reuse requirements and tests for a new release.**

While developing a new application, you create a library that includes all the entities in your project that are relevant to the application. After work is complete, you release the new application. As you are about to begin work on the next version, you can import the library, and start making adjustments to requirements and tests to meet the needs of the new version.

### **➤ Create a set of requirements, tests, and resources for use by multiple applications.**

Your project contains requirements in the Requirements module that are relevant to an application you are developing. The project also contains tests in the test plan module that you developed to test those requirements. In addition, you have created relationships between the requirements and tests, such as traceability and coverage. You can create a library that represents the application. Then import this library as a self-contained component of other applications.

### **➤ Update imported libraries with changes made in the source library.**

A library in your project includes requirements and tests for a calculator application. Multiple other projects have imported the library, and are using the application's requirements and tests in other applications they are developing. The business analyst has revised some requirements for the calculator application. To update the imported libraries with these changes, you can synchronize the imported libraries with the source library.

► **Update a source library with developments in an imported library.**

A tester works with an imported library that contains a set of regression tests for the banking application currently in development. During testing, she develops new tests to test the added functionality in the new version of the banking application. When testing is complete, the tester wants to update the regression tests in the source library. The source library can be synchronized with the imported library to update the tests for future testing needs.

 **Library Synchronization Overview**

You can synchronize two associated libraries to update one library with changes made in another library. You can update an imported library with changes made in the source library. You can also update a source library with changes made in the imported library.

During synchronization, data from the other library's baseline is copied to your library. The following table summarizes how the entities in your library are updated:

| Event in Source Library | Event in Your Library   |
|-------------------------|---|
| An entity was added     | The entity is added.  |
| An entity was modified  | The entity is updated.<br>If the entity was modified in both libraries, the entity in your library is overwritten.<br><b>Version Control:</b> A new version is created.                     |
| An entity was deleted   | A new folder is created and the deleted entity is moved to the new folder. The new folder is named SYNC_OBSOLETE_<library_id>_<current_date> and is located under the module's root folder. |
| An entity was moved     | The entity and its children are moved.  |

Entities in a library must not be edited during synchronization. If entities in your library are being edited by another user during the synchronization process, synchronization cannot complete successfully.

**Version Control:** All entities in your library must be checked in before synchronization. If an entity in your library is checked out, synchronization cannot complete successfully.

After you synchronize libraries, a baseline is automatically created for the updated library. This baseline is the basis for comparing the libraries at any point in time and should not be deleted.

For related task details, see "How to Share Libraries" on page 310.

## **Library Verification**

When you import a library, or synchronize libraries, the library is first verified. The verification process includes the following checks:

- ▶ **Requirement type check.** Checks that your project contains the necessary requirement types. If the source library contains customized requirement types, your project must contain the same requirement types. For more information on customized requirement types, see *HP Application Lifecycle Management Administrator Guide*.
- ▶ **Entities compatibility check.** Checks that your project has the necessary extensions enabled. If the source project has an extension enabled, and the source library includes entities for that extension, your project must also have that extension enabled. For more information on extensions, see *HP Application Lifecycle Management Administrator Guide*.
- ▶ **Library size check.** Checks that the number of entities in the library does not exceed the maximum defined by the LIBRARY\_FUSE configuration parameter in Site Administration. For more information, see the *HP Application Lifecycle Management Administrator Guide*: LIBRARY\_FUSE.

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## Tasks

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### How to Share Libraries

This task describes how to share libraries between projects or within a project.

To learn more about sharing libraries, see "Imported Libraries Overview" on page 306.

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**ALM Editions:** Imported libraries functionality is not available for Quality Center Starter Edition and Quality Center Enterprise Edition.

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This task includes the following steps:

- "Prerequisites" on page 311
- "Import a library" on page 311
- "Compare libraries" on page 312
- "Synchronize libraries" on page 313
- "Monitor library tasks" on page 314

## 1 Prerequisites

- ▶ To import and synchronize libraries, you must have the appropriate Library module user permissions, as well as **Create** and **Update** permissions for the entity types you are importing. In addition to these permissions, synchronizing libraries requires **Delete** permissions for the entity types in the library. For more information on Library module permissions, refer to the *HP Application Lifecycle Management Administrator Guide*.
- ▶ Verify that a baseline has been created for the library you want to import. For task details, see "How to Use Libraries and Baselines in ALM" on page 267.
- ▶ **Business Process Testing:** Before importing a project with application areas to another project, make sure you have connected to the destination project at least one time from within QuickTest Professional. For instructions, see the *HP QuickTest Professional User Guide*.

## 2 Import a library

Import an existing library to your libraries tree to reuse a set of entities in your project or from a different project.

- a** In the Libraries module, right-click a library folder and select **Import Library**. For user interface details on the Import Library wizard, see "Import Library Wizard" on page 316.

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**Note: Business Process Testing:** When importing libraries, components in the **Obsolete** and **Component Requests** folders are not included in the process.

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- b** Click the **View Log** button in the Details tab. The Log: Import Library dialog box opens and displays progress.

**Note:** When the process is complete, view the log before refreshing the display. If you refresh the display after the library is imported, the **View Log** button is no longer displayed, and you cannot view the log.

For user interface details on the Libraries module window, see "Libraries Module Window" on page 275.

- c** Click the **Refresh** button on the module toolbar to refresh the display. The library details are displayed in the Details tab. For details on the available fields in the Details tab, see "Libraries Module Fields" on page 281.

### 3 Compare libraries

Compare libraries to review changes made to entities in your projects over time.

- a** In the libraries tree, right-click a library and select **Compare To**. Select a library with which to compare, and choose one of the following:
  - **Latest Baseline Created.** Compare the library with the most recent baseline created in the other library.
  - **Select Baseline.** Select a baseline in the other library with which to compare. Opens the Select Baseline dialog box. Click the browse button to select a baseline from the list.

**Available for:** a source library or an imported library.

For user interface details on the Compare Libraries Tool, see "Compare Libraries Tool Dialog Box" on page 325.

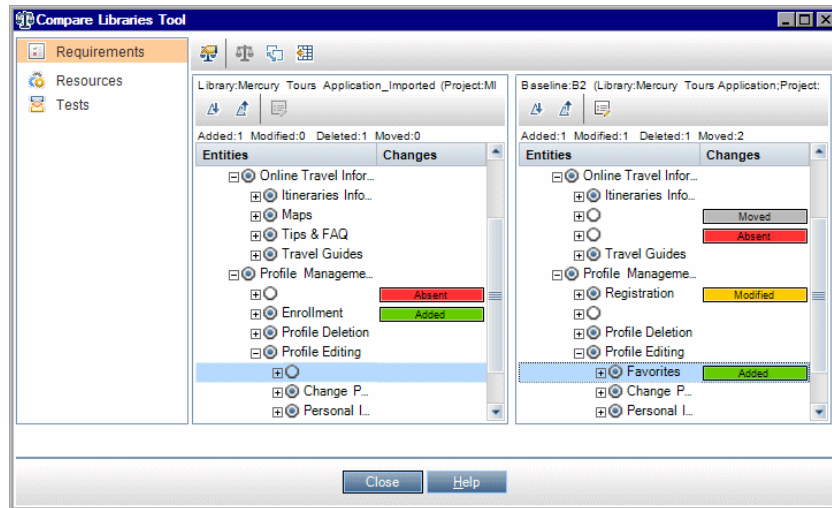
- b** To save the library comparison results in .csv file format, click the **Export Comparison Results** button. After saving, the file opens in the default application defined for opening .csv files on your computer, such as Microsoft Excel.






**Example:**

Comparing the imported Mercury Tours Application library with the source library from which it was imported shows the following results:



#### 4 Synchronize libraries

Synchronize libraries to update your library with changes made in another associated library. You can update an imported library with changes made in the source library. You can also update a source library with changes made in the imported library.

- a In the libraries tree, select the library that you want to update. Using the Compare Libraries Tool, compare the library by selecting a baseline in the other library with which to synchronize. For user interface details on the Compare Libraries Tool, see "Compare Libraries Tool Dialog Box" on page 325.
- b In the Compare Libraries Tool, click the **Synchronize** button . The Library Verification dialog box opens, displaying the verification results.

For user interface details on the Library Verification dialog box, see "Library Verification Dialog Box" on page 329.

For concept details on library verification, see "Library Verification" on page 309.

- c Click **Continue** to start the synchronization. The data is copied from the other library's baseline to your library.

If the baseline includes an entity type that it did not contain at the time of import, a parent folder is created in your project. For example, you imported a library containing only tests, and defined a target root folder for the Test Plan module only. Later, requirements were added to the source library. During synchronization, a new folder is created in the Requirements module in your project, under the Requirements root folder, to store the newly imported requirements.

- d Close the Compare Libraries Tool dialog box. Synchronization continues in a background process, and may take some time. You can continue working in your project during the synchronization process.
- e Click the **View Log** button in the Details tab. The Log: Synchronize Libraries dialog box opens and displays progress.

For user interface details on the Libraries module window, see "Libraries Module Window" on page 275.

- f Click the **Refresh** button on the module toolbar to refresh the display. When the process completes, the **Last Synchronization** date is updated in the Imported By or Imported From tab.

## 5 Monitor library tasks

When you import or synchronize libraries, these tasks are performed in the background, enabling you to continue working in your project while the processes are running. You can view the status and progress of all asynchronous tasks for the project using the Task Manager.

On the ALM masthead, select **Tools > Task Manager**. For user interface details, see "Task Manager Dialog Box" on page 52.

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## Reference

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### Imported Libraries User Interface

This section includes:

- ▶ Import Library Wizard on page 316
- ▶ Imported By Tab on page 322
- ▶ Imported From Tab on page 324
- ▶ Compare Libraries Tool Dialog Box on page 325
- ▶ Library Verification Dialog Box on page 329

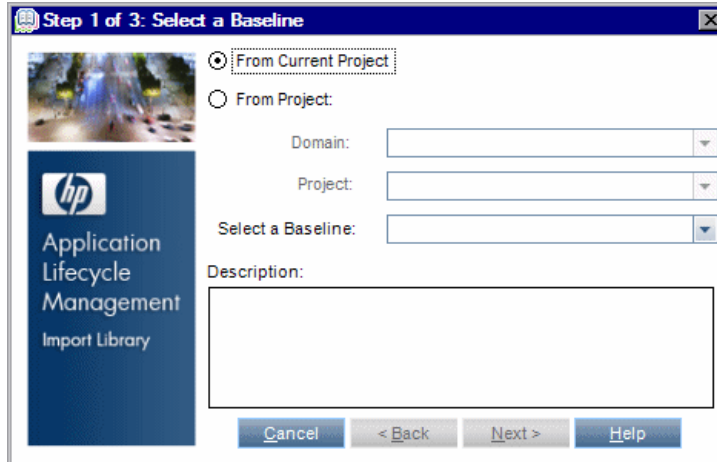
## Import Library Wizard

This wizard enables you to import a library to share and reuse an existing set of entities. You import a library by selecting a baseline in another library from which to import. You can import a library from the same project or from a different project.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Libraries module, right-click a library folder and select <b>Import Library</b> .   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>➤ Importing libraries requires appropriate user permissions, including: <b>Import library</b>, <b>Capture baseline</b>, and <b>Create</b> and <b>Update</b> permissions for the entity types you are importing. For more information on user permissions, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>➤ After you import a library, a baseline is automatically created for the new library in your project. This baseline is the basis for comparing the libraries at any point in time and should not be deleted.</li> <li>➤ <b>ALM Editions:</b> Imported libraries functionality is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Share Libraries" on page 310   |
| <b>Wizard map</b>            | This wizard contains:<br>Select a Baseline Page > Library Verification Page > Select Target Root Folders Page  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Imported Libraries Overview" on page 306</li> <li>➤ "Libraries Overview" on page 264</li> <li>➤ "Troubleshooting and Limitations" on page 330</li> </ul>   |

## Select a Baseline Page

This wizard page enables you to select a baseline in the library you are importing.



|                              |  |
|------------------------------|--|
| <b>Important information</b> | General information about this wizard is available here: "Import Library Wizard" on page 316.                                      |
| <b>Wizard map</b>            | The Import Library Wizard contains:<br><b>Select a Baseline Page</b> > Library Verification Page > Select Target Root Folders Page |
| <b>See also</b>              | "Baselines Overview" on page 265   |

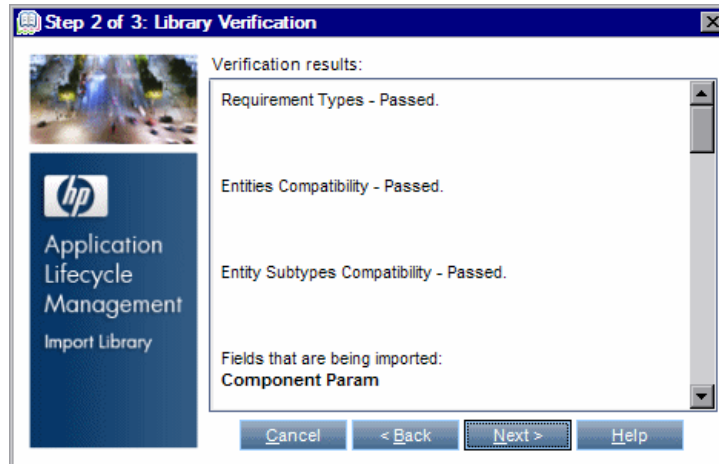
User interface elements are described below:

| UI Elements (A-Z)           | Description  |
|-----------------------------|--|
| <b>Description</b>          | A description of the library you are importing.                            |
| <b>Domain</b>               | The domain in which the library you are importing is located.              |
| <b>From Current Project</b> | Enables you to import a library from the project in which you are working. |

| UI Elements (A-Z)        | Description   |
|--------------------------|---|
| <b>From Project</b>      | Enables you to select a domain and project from which to import a library.  |
| <b>Project</b>           | The project in which the library you are importing is located.  |
| <b>Select a Baseline</b> | Enables you to select a baseline from which to import the library. Click the browse button to display the libraries tree in the selected project. Only libraries that can be imported are displayed. You cannot import an imported library. |

## Library Verification Page

This wizard page enables you to view results of the library verification process.



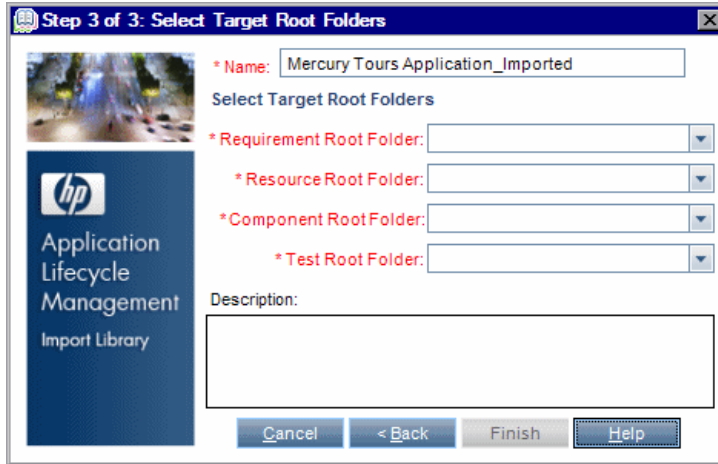
|                              |  |
|------------------------------|--|
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ General information about this wizard is available here: "Import Library Wizard" on page 316.</li> <li>▶ If any of the verification checks have the status <b>Failed</b>, you cannot proceed with the import process. Click <b>Cancel</b>.</li> </ul> |
| <b>Wizard map</b>            | The Import Library Wizard contains:<br>Select a Baseline Page > <b>Library Verification Page</b> > Select Target Root Folders Page   |
| <b>See also</b>              | "Library Verification" on page 309   |

User interface elements are described below:

| UI Elements (A-Z)           | Description   |
|-----------------------------|---|
| <b>Verification Results</b> | Displays the verification results and the list of fields to be imported. The import process can continue if all verification checks have the status <b>Passed</b> . |

## **Select Target Root Folders Page**

This wizard page enables you to select a location in your project for each of the root folders you are importing.



|                                     |   |
|-------------------------------------|---|
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ General information about this wizard is available here: "Import Library Wizard" on page 316.</li> <li>▶ You cannot import a library under the same previously imported library. For more details, see "Troubleshooting and Limitations" on page 330.</li> <li>▶ The library is imported in a background process, and may take some time. You can continue working in your project during the import process.</li> </ul> |
| <p><b>Wizard map</b></p>            | <p>The Import Library Wizard contains:<br/>                 Select a Baseline Page &gt; Library Verification Page &gt; <b>Select Target Root Folders Page</b></p>   |

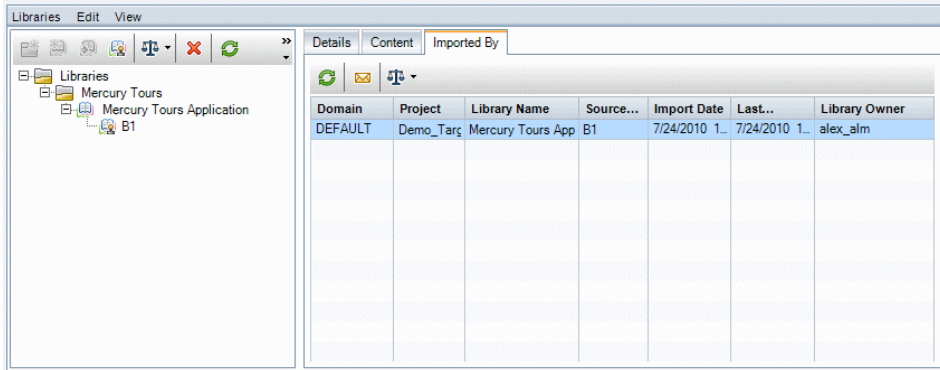


User interface elements are described below:

| UI Elements (A-Z)                 | Description   |
|-----------------------------------|---|
| <b>Description</b>                | A description for the library. By default, if the source library and baseline contain descriptions, the descriptions are displayed.   |
| <b>Name</b>                       | The name of the library. By default, the name of the library from which you are importing is displayed with the suffix <b>_Imported</b> .   |
| <b>Select Target Root Folders</b> | <p>The location in your project for each of the imported folders. For example, in the <b>Requirement Root Folder</b> box, specify a location for the imported requirements. All of the requirement folders defined in the library are imported under the requirement folder you specify. Click the browse button to display the requirements tree in your project. Select a folder or create a new folder for the imported requirements.</p> <p>Note: If the library you are importing contains tests, the baseline automatically includes related entities that the tests need to run, such as test resources. In this case, the Resource Root Folder box is also displayed, enabling you to select a target folder for the imported test resources.</p> |



## Imported By Tab


This tab displays a list of projects that imported a selected library.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | Select a library in the libraries tree and click the <b>Imported By</b> tab. This tab is available only when the selected library has been imported.   |
| <b>Important information</b> | You can rearrange columns in the grid by dragging the column headers.<br><b>ALM Editions:</b> Imported libraries functionality is not available for Quality Center Starter Edition or Quality Center Enterprise Edition. |
| <b>Relevant tasks</b>        | "How to Share Libraries" on page 310   |

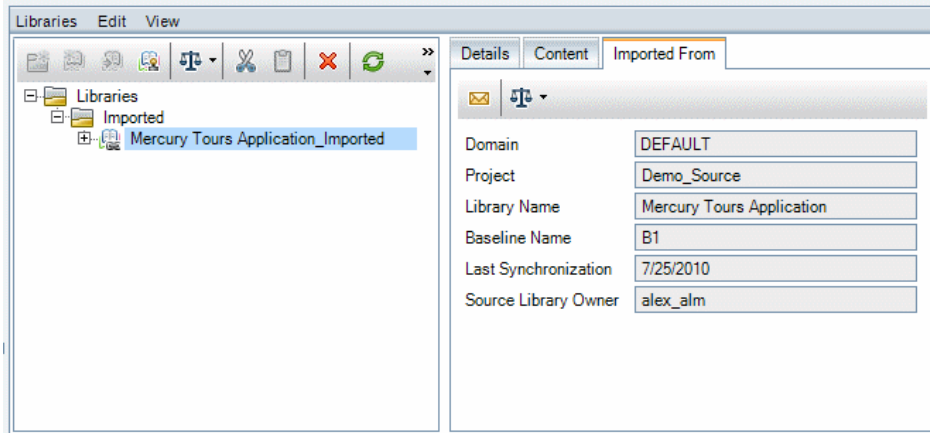
User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Refresh.</b> Refreshes the tab so that it displays the most up-to-date information.   |
|  | <b>Send mail.</b> Sends an email with details about the selected library. For more details, see "Send E-mail Dialog Box" on page 87. |

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Compare To.</b> Compares the source library selected in the libraries tree with a library that imported the source library.</p> <p>Select an imported library in the grid and click <b>Compare To</b>. Select a baseline in the imported library with which to compare.</p> |
| <b>Domain</b>   | The domain in which the imported library is located.  |
| <b>Import Date</b>  | The date the library was imported.  |
| <b>Last Synchronization</b>   | The date of the most recent synchronization of the imported and source libraries.   |
| <b>Library Name</b>   | The name of the imported library.   |
| <b>Library Owner</b>  | The user name of the person who imported the library.   |
| <b>Project</b>  | The name of the project that imported the library.  |
| <b>Source Baseline Name</b>   | The initial value indicates the name of the baseline in the source project from which the selected library was imported. After synchronization, indicates the name of the baseline in the source project with which the selected library was synchronized.                        |



## Imported From Tab

This tab displays details of the source library from which a selected library is imported.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | Select an imported library in the libraries tree and click the <b>Imported From</b> tab.  |
| <b>Important information</b> | <b>ALM Editions:</b> Imported libraries functionality is not available for Quality Center Starter Edition or Quality Center Enterprise Edition. |
| <b>Relevant tasks</b>        | "How to Share Libraries" on page 310  |

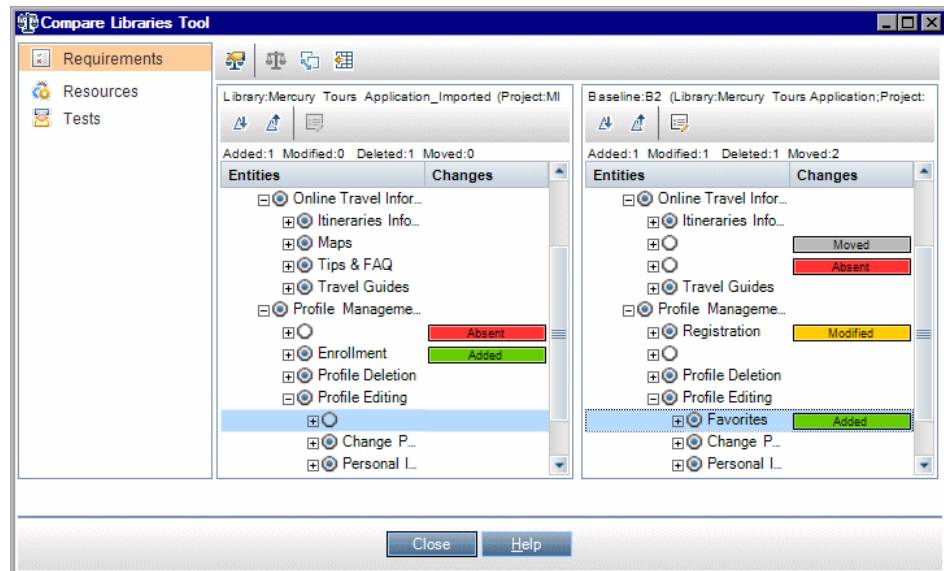
User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Send Mail to Owner.</b> Sends an email to the source library owner. For more details, see "Send E-mail Dialog Box" on page 87.                                   |
|  | <b>Compare To Source.</b> Compares the selected library with the library from which it was imported. Select a baseline in the source library with which to compare. |

| UI Elements (A-Z)           | Description   |
|-----------------------------|---|
| <b>Baseline Name</b>        | The name of the baseline in the source project from which the project was imported.   |
| <b>Domain</b>               | The domain in which the source project is located.  |
| <b>Last Synchronization</b> | The date of the most recent synchronization of the imported and source libraries. When the library is first imported, the value of this field is <b>N/A</b> . |
| <b>Library Name</b>         | The name of the library in the source project.  |
| <b>Project</b>              | The name of the source project.   |
| <b>Source Library Owner</b> | The user name of the person who created the library in the source project.  |







## Compare Libraries Tool Dialog Box

This dialog box enables you to compare two associated libraries. You can compare an imported library with the source library from which it was imported.



|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p>In the libraries tree, right-click a library and select <b>Compare To</b>. Select a library with which to compare, and choose one of the following:</p> <ul style="list-style-type: none"> <li>▶ <b>Latest Baseline Created.</b> Compare the library with the most recent baseline created in the other library.</li> <li>▶ <b>Select Baseline.</b> Select a baseline in the other library with which to compare. Opens the Select Baseline dialog box. Click the browse button to select a baseline from the list.</li> </ul> <p><b>Available for:</b> a source library or an imported library</p>  |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ Changes made to <b>Target Release</b> and <b>Target Cycle</b> fields are not considered when determining whether an entity has been modified.</li> <li>▶ If coverage or traceability between two entities was deleted and then added again, those entities are considered modified.</li> <li>▶ Coverage of tests or requirements in the library by entities outside of the library is not considered when comparing libraries.</li> <li>▶ <b>ALM Editions:</b> Imported libraries functionality is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.</li> </ul> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Share Libraries" on page 310</p>   |
| <p><b>See also</b></p>              | <p>"Library Synchronization Overview" on page 308</p>   |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|    | <b>Comparison Settings.</b> Opens the Comparison Settings dialog box, enabling you to define settings for comparing libraries. For more details, see "Comparison Settings Dialog Box" on page 298.  |
|    | <b>Compare Entities.</b> Opens a Compare Entities dialog box, enabling you to view details of the entity in each library. For details, see "Compare Entities Dialog Box" on page 294.   |
|    | <b>Synchronize.</b> Updates your library, displayed in the left pane, with changes indicated in the baseline displayed in the right pane.<br><br>For more details, see "Library Synchronization Overview" on page 308.<br><br>Note: Synchronizing libraries requires the appropriate user permissions. For details, see step 1 of "How to Share Libraries" on page 310. |
|    | <b>Export Comparison Results.</b> Enables you to save the library comparison results in .csv file format. After saving, the file opens in the default application defined for opening .csv files on your computer, such as Microsoft Excel.   |
|  | <b>Go to Next/Previous Change.</b> Moves to the next/previous change for the selected module.   |
|  | <b>Details.</b> Opens a Details dialog box, enabling you to view details of the selected entity.<br><br>Select an entity and click the <b>Details</b> button.<br><br>For example, select a requirement in one of the panes. The Requirement Details dialog box opens and displays details of the requirement in the selected library or baseline.                       |
| <Identification bar>  | Located at the top of each pane, indicates the name of the library or baseline displayed in the pane below.   |

| UI Elements (A-Z) | Description   |
|-------------------|---|
| <Counter bar>     | Located above each pane, displays the number of entities that were added, modified, deleted, or moved, according to change status.  |
| <Left pane>       | Displays the library you selected in the libraries tree.  |
| <Right pane>      | Displays the baseline in the library with which you are comparing.  |
| <Sidebar buttons> | <p>Enable you to view comparison results for entities by module. For example, click the <b>Tests</b> button to view comparison results for the Test Plan module.</p> <p>The sidebar displays only the modules that are included in the library.</p>   |
| <b>Changes</b>    | <p>Indicates differences between the two libraries. Possible values include the following:</p> <ul style="list-style-type: none"> <li>➤ <b>Added.</b> The entity does not exist in the other library.</li> <li>➤ <b>Modified.</b> The entity has been modified in the library.</li> <li>➤ <b>Absent.</b> The entity does not exist in the library.</li> <li>➤ <b>Moved.</b> The entity is in a different location in the tree structure in the library.</li> <li>➤ <b>Moved and Modified.</b> The entity has changed and has been moved to a different location in the tree.</li> </ul> <p>A deleted or moved entity is displayed in its original location in the tree, indicated by a placeholder. In addition, a placeholder is displayed in the tree where an entity was added in the other library. This maintains the hierarchical structure, enabling you to compare changes between the libraries.</p> |
| <b>Entities</b>   | Displays the library's entities in the same hierarchical structure as defined in the selected module.   |



## Library Verification Dialog Box

This dialog box enables you to view results of the library verification process when synchronizing libraries.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Compare Libraries Tool dialog box, click the <b>Synchronize</b> button.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ If any of the verification checks have the status <b>Failed</b>, you cannot proceed with the synchronization. Click <b>Cancel</b>.</li> <li>▶ <b>ALM Editions:</b> Imported libraries functionality is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Share Libraries" on page 310  |
| <b>See also</b>              | "Library Verification" on page 309  |

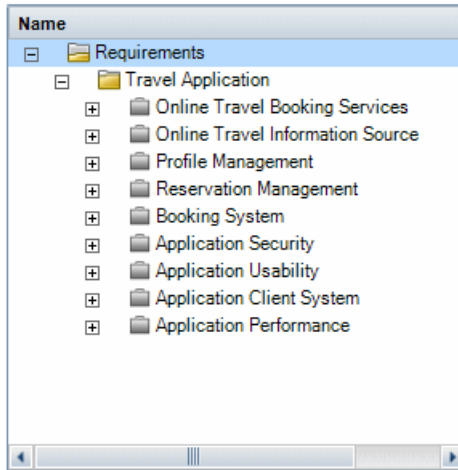
User interface elements are described below:

| <b>UI Elements (A-Z)</b>    | <b>Description</b>   |
|-----------------------------|--|
| <b>Verification Results</b> | Displays the verification results and the list of fields to be imported. The synchronization process can continue if all verification checks have the status <b>Passed</b> .   |
| <b>Continue</b>             | <p>Starts the synchronization process. The data is copied from the other library's baseline to your library.</p> <p>Close the Compare Libraries Tool dialog box. Synchronization continues in a background process, and may take some time. To continue working in your project during the synchronization process, close the Compare Libraries Tool dialog box.</p> |

## Troubleshooting and Limitations

You cannot import a library under the same previously imported library. This applies in the requirements, test plan, or test resources tree.

For example, in the requirements tree, the Travel Application folder is an imported library. If you want to import the Travel Application library again, you cannot define the Travel Application folder or any of its child folders as the root folder for the requirements in the library.



# Part III

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## Requirements



# 13

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## Introducing Requirements

This chapter includes:

### Concepts

- ▶ Introducing Requirements Overview on page 334

### Tasks

- ▶ How to Use Requirements in ALM on page 335

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## Concepts

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### Introducing Requirements Overview

Requirements describe in detail what needs to be solved or achieved to meet the objectives of your application under development. Clearly and correctly defining requirements at the front end of a project provides the following advantages:

- ▶ Provides stakeholders guidelines of what the priorities are
- ▶ Sets clear expectations between stakeholders
- ▶ Cuts waste and eliminates unnecessary expenditure

The Requirements module enables you to define, manage and track requirements at all stages of the application lifecycle management.

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**Quality Center Starter Edition:** Not all fields and functionality in the Requirements module are available.

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For task details, see "How to Use Requirements in ALM" on page 335.

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## Tasks

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### How to Use Requirements in ALM

This task describes how to create and manage requirements in ALM.

To learn more about requirements, see "Introducing Requirements Overview" on page 334.

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**Note:** This task is part of a higher-level task. For details, see "Application Lifecycle Management Roadmap" on page 27.

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This task includes the following steps:

- "Prerequisites" on page 336
- "Create requirements" on page 336
- "Import business process models" on page 337
- "Trace requirements" on page 337
- "Calculate risk" on page 337
- "Create coverage" on page 337
- "Link to defects" on page 338
- "Assign to releases" on page 338
- "Analyze requirements" on page 338
- "Establish baseline" on page 338

## 1 Prerequisites

Determine the requirements scope by gathering information such as functional and technical specifications, marketing and business requirements documents, and stakeholders goals.

### Example:

Some questions you may want to ask are:

- What is the main purpose and direction of the application?
- What are the critical constraints of the application?
- What are the major features of the application?
- What is the relative importance of each element in the application functionality?
- What are the critical or high-risk functions of the application?
- What are your business or testing priorities?
- Do your customers/end-users agree with your priorities?
- What are your overall quality goals?

## 2 Create requirements

Define a hierarchical framework for your requirements scope by creating a requirements tree.

Define different groups of requirements in the requirements tree. For each requirement group, you create a list of detailed requirements in the requirements tree. Each requirement in the tree can include any relevant attachments and rich text documents.

You then assign the requirement a priority level which can be taken into consideration when creating the test plan.

For task details, see "How to Create Requirements" on page 341.



### **3 Import business process models**

If you work with business process models, you can create a framework of requirements by importing models created with standard modeling tools. The Business Models module enables you to analyze the quality of your business process models and business flows. For task details, see "How to Work with Business Process Models" on page 453.

### **4 Trace requirements**

You can add traceability between the requirements. When analyzing the impact of a change proposed in a specific requirement, traceability shows the other requirements that the change might affect. For task details, see "How to Trace Requirements" on page 389.

To determine the completeness of the relationships between your requirements, you can generate a traceability matrix. For task details, see "How to Use the Traceability Matrix" on page 405.

### **5 Calculate risk**

Use risk-based quality management to calculate at which level to test each requirement, based on the nature of the requirement and the resources you have available. For task details, see "How to Assess Risk" on page 426.

### **6 Create coverage**

Create coverage between your requirements and tests to ensure that all requirements are implemented in the project. For task details, see "How to Create Coverage" on page 554.

You can also create coverage by converting requirements to tests in the test plan tree. Coverage is automatically created between the requirements and their corresponding tests. For task details, see "How to Create Requirements" on page 341.

## 7 Link to defects

You can link a requirement to specific defects. This is useful, for example, when coverage is created between requirements and tests. Linking defects can help you ensure compliance with your requirements and testing needs. If a requirement changes, you can immediately identify which tests and defects are affected, and who is responsible.

For user interface details, see "Linked Defects/Entities Page" on page 902.

## 8 Assign to releases

Assign requirements to releases or cycles defined in the releases tree in the Releases module.

- ▶ **Assign to release.** Right-click a requirement and select **Assign to Release**. For user interface details, see "Select Releases Dialog Box" on page 207.
- ▶ **Assign to cycle.** Right-click a requirement and select **Assign to Cycle**. For user interface details, see "Select Cycles Dialog Box" on page 205.

## 9 Analyze requirements

Review your requirements to ensure that they meet the defined requirements scope. After a requirement is approved, you change the status of a requirement from **Not Reviewed** to **Reviewed**.

To help review the requirements, you can generate reports and graphs. For task details, see "How to Analyze Data in ALM" on page 911.

## 10 Establish baseline

Create a baseline to sign off on or compare significant milestones in your application lifecycle. For task details, see "How to Use Libraries and Baselines in ALM" on page 267.

# 14

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## Requirements Specification

This chapter includes:

### Concepts

- ▶ Requirements Specification Overview on page 340

### Tasks

- ▶ How to Create Requirements on page 341

### Reference

- ▶ Requirements User Interface on page 345

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## Concepts

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### Requirements Specification Overview

Requirements are recorded in the Requirements module by creating a requirements tree. The **requirements tree** is a graphical representation of your requirements specification, displaying the hierarchical relationship between different requirements. The tree includes different groups of requirements based either on requirement type or functional area.

For each requirement group, you create a list of detailed requirements in the requirements tree. Each requirement in the tree is described in detail and can include any relevant links and attachments.

After creating a requirements tree, the requirements can be used as a basis for defining tests in your test plan tree.

For task details, see "How to Create Requirements" on page 341.

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## Tasks

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### How to Create Requirements

This task describes how to define and update your requirements in the Requirements module. After you have created a requirements tree, you can use the requirements as a basis for defining the tests in your test plan tree.

To learn more about creating requirements, see "Requirements Specification Overview" on page 340.

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#### Note:

- **Higher-level task:** This task is part of a higher-level task. For details, see "How to Use Requirements in ALM" on page 335.
  - **Use-case:** For a use-case scenario related to this task, see "How to Create Requirements - Use-Case Scenario" on page 343.
- 

This task includes the following steps:

- "Create requirements" on page 342
- "Import requirements - optional" on page 342
- "Update requirements" on page 342
- "Convert requirements to tests - optional" on page 343

## 1 Create requirements

- a **Open the Requirements module.** On the ALM sidebar, under **Requirements**, select **Requirements**. In the **View** menu, select **Requirements Tree**.

For user interface details on the Requirements module, see "Requirements Module Window" on page 346.

- b **Create folders.** Click the **Requirements** root folder and select **New Folder**. To create a sub-folder, click a folder and select **New Folder**. In the New Requirement Folder dialog box, type a folder name.
- c **Add requirements.** Right-click a requirement folder and select **New Requirement**. To create a sub-requirement, right-click a requirement and select **New Requirement**. For user interface details, see "New Requirement Dialog Box" on page 377.

## 2 Import requirements - optional

In addition to creating requirements directly in ALM, you can also import requirements to your ALM project from Microsoft Word, Microsoft Excel, or other third-party requirement management tools. To import requirements, you must first install the appropriate add-in. For more details on add-ins, see the *HP Application Lifecycle Management Installation Guide*.

## 3 Update requirements

For each requirement, you can update its details, attachments, and rich text documents. Right-click a requirement and select **Requirement Details**. The Requirement Details dialog box opens. For user interface details, see "Requirement Details Page" on page 375.

## 4 Convert requirements to tests - optional

To assist you in establishing a test plan tree in the Test Plan module, you can use your requirements as a basis for defining your tests. You can reuse your requirements and convert them to the following entities in your test plan tree: test subjects, tests, test steps, or step descriptions.

There are two methods you can use to create tests from requirements:

- **Convert requirements to tests.** Use this option to convert requirements to test subjects, tests, test steps, or step descriptions.

Right click a requirement or folder and select **Convert to Tests**. The Convert to Tests wizard opens. For user interface details, see "Convert to Tests Wizard" on page 379.

- **Convert requirements to tests and add them to a test set.** Use this option to convert requirements to tests in a specified subject in the test plan tree and a specified test set in the Test Lab module.

Right click a requirement select **Generate Test**. The Generate Test dialog box opens. For user interface details, see "Generate Test Dialog Box" on page 385.

### **How to Create Requirements - Use-Case Scenario**

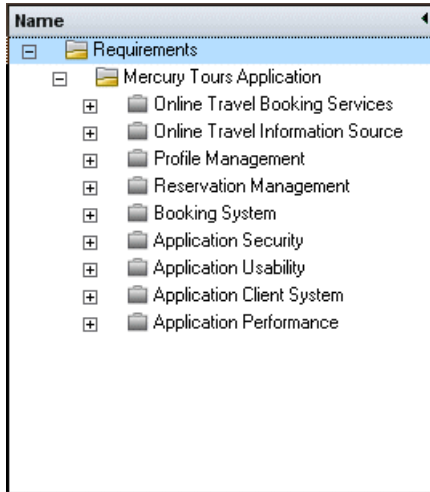
This use-case scenario provides an example of specifying requirements in the Requirements module.

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**Note:** For a task related to this scenario, see "How to Create Requirements" on page 341.

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The following scenario uses a project based on an application for reserving flights and vacations. You may define your major requirements as: **Online Travel Booking Services, Online Travel Information Source, Profile Management, Reservation Management, Booking System, Application Security, Application Usability, Application Client System, and Application Performance.**



For each requirement group, you create a list of detailed requirements in the requirements tree. The **Profile Management** requirement can be broken down into the following requirements:



Each requirement in the tree can include any relevant attachments and rich text documents.



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## Reference

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### Requirements User Interface

This section includes:

- Requirements Module Window on page 346
- Requirements Module Menus and Buttons on page 353
- Requirements Module Icons on page 365
- Requirements Module Fields on page 368
- Requirement Details Page on page 375
- New Requirement Dialog Box on page 377
- Convert to Tests Wizard on page 379
- Generate Test Dialog Box on page 385

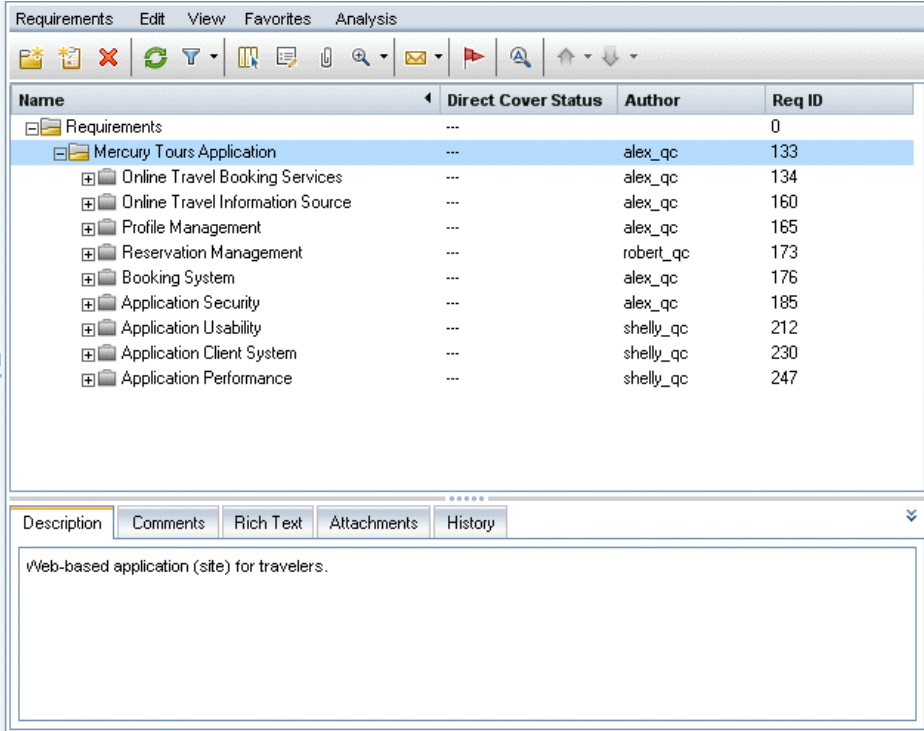
## Requirements Module Window

This window enables you to define and maintain ALM requirements.

It contains the following views: Requirements Tree, Requirement Details, Requirements Grid, Coverage Analysis, and Traceability Matrix. You select a view from the **View** menu.

### Requirements Tree

This view enables you to view your requirements hierarchically in a tree.



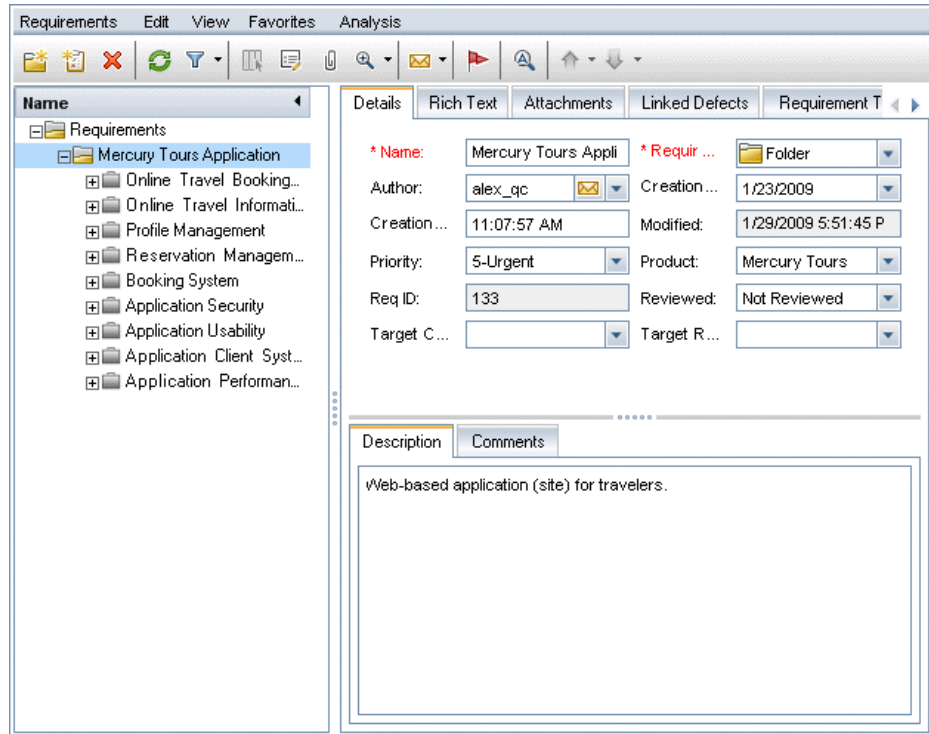
The screenshot shows the Requirements Module Window with the Requirements Tree view. The window title is "Requirements" and it has a menu bar with "Edit", "View", "Favorites", and "Analysis". The toolbar contains various icons for navigation and editing. The main area displays a tree structure of requirements:

| Name                             | Direct | Cover | Status | Author    | Req ID |
|----------------------------------|--------|-------|--------|-----------|--------|
| Requirements                     |        |       | ...    |           | 0      |
| Mercury Tours Application        |        |       | ...    | alex_qc   | 133    |
| Online Travel Booking Services   |        |       | ...    | alex_qc   | 134    |
| Online Travel Information Source |        |       | ...    | alex_qc   | 160    |
| Profile Management               |        |       | ...    | alex_qc   | 165    |
| Reservation Management           |        |       | ...    | robert_qc | 173    |
| Booking System                   |        |       | ...    | alex_qc   | 176    |
| Application Security             |        |       | ...    | alex_qc   | 185    |
| Application Usability            |        |       | ...    | shelly_qc | 212    |
| Application Client System        |        |       | ...    | shelly_qc | 230    |
| Application Performance          |        |       | ...    | shelly_qc | 247    |

Below the tree, the "Description" tab is selected, showing the text: "Web-based application (site) for travelers."

## Requirement Details

This view enables you to create links between requirements and other entities. It also enables you to calculate and analyze requirement risks. For more details, see "Requirement Details Page" on page 375.



The screenshot displays the 'Requirement Details' page. The left sidebar shows a tree view under 'Requirements' with 'Mercury Tours Application' selected. The main content area has tabs for 'Details', 'Rich Text', 'Attachments', 'Linked Defects', and 'Requirement T...'. The 'Details' tab is active, showing a form with the following fields:

|              |                     |              |                     |
|--------------|---------------------|--------------|---------------------|
| * Name:      | Mercury Tours Appli | * Requir ... | Folder              |
| Author:      | alex_gc             | Creation ... | 1/23/2009           |
| Creation ... | 11:07:57 AM         | Modified:    | 1/29/2009 5:51:45 P |
| Priority:    | 5-Urgent            | Product:     | Mercury Tours       |
| Req ID:      | 133                 | Reviewed:    | Not Reviewed        |
| Target C...  |                     | Target R...  |                     |

Below the form, there are tabs for 'Description' and 'Comments'. The 'Description' tab is active, showing the text: 'Web-based application (site) for travelers.'

## Requirements Grid

This view enables you to view requirements in a flat non-hierarchical view. Each line in the grid displays a separate requirement.

| Name                                | Direct Cover Status | Author    | Req ID |
|-------------------------------------|---------------------|-----------|--------|
| Requirements                        | ---                 |           | 0      |
| Mercury Tours Application           | ---                 | alex_qc   | 133    |
| Online Travel Booking Services      | ---                 | alex_qc   | 134    |
| Products/Services On Sale           | Not Covered         | shelly_qc | 135    |
| Flight Tickets                      | Failed              | shelly_qc | 136    |
| Flight Search                       | Failed              | robert_qc | 141    |
| Search Conditions                   | Not Covered         | shelly_qc | 142    |
| Origin And Destination              | Failed              | peter_qc  | 143    |
| One-Way Trip                        | Failed              | robert_qc | 149    |
| Relevant Flights                    | Not Completed       | robert_qc | 152    |
| Names Of Passengers                 | Failed              | robert_qc | 156    |
| Itineraries Information             | Not Covered         | alex_qc   | 161    |
| Registration                        | Not Covered         | robert_qc | 166    |
| Customer Identification Information | Failed              | robert_qc | 167    |
| Change Password                     | Not Covered         | robert_qc | 170    |
| View Reservations                   | Not Completed       | robert_qc | 174    |
| Secure Purchase                     | Not Completed       | alex_qc   | 177    |
| Credit Card                         | Not Covered         | alex_qc   | 179    |
| Credit Card Type                    | Not Completed       | robert_qc | 180    |
| Access Authorization                | Not Covered         | alex_qc   | 186    |
| Customers vs. Site Visitors         | Failed              | alex_qc   | 187    |

At the bottom of the window, there are tabs for: Description, Comments, Rich Text, Attachments, and History.

## Coverage Analysis

This view enables you to analyze the breakdown of child requirements according to test coverage status. For more details, see "Coverage Analysis View" on page 561.

The screenshot displays a 'Coverage analysis' window with the following data:

| Name                       | Direct Cover Status | Coverage Analysis |
|----------------------------|---------------------|-------------------|
| Requirements               | ...                 | 38 15 65          |
| Mercury Tours Application  | ...                 | 38 15 65          |
| Online Travel Booking...   | ...                 | 13 5 7            |
| Online Travel Informati... | ...                 | 4                 |
| Profile Management         | ...                 | 2 1 4             |
| Reservation Managem...     | ...                 | 2                 |
| Booking System             | ...                 | 1 5 2             |
| Application Security       | ...                 | 3 1 22            |
| Application Usability      | ...                 | 14 1 2            |
| Application Client Syst... | ...                 | 2 14              |
| Application Performan...   | ...                 | 3 10 4            |

Below the table, the 'Description' tab is active, showing the text: "Web-based application (site) for travelers."

## Traceability Matrix

This view enables you to view traceability relationships between requirements and other requirements or tests in a matrix. For more details, see "Traceability Matrix View" on page 410.

The screenshot displays the Requirements Traceability Matrix interface. At the top, there is a menu bar with 'Requirements', 'Edit', 'View', 'Favorites', and 'Analysis'. Below the menu bar are several icons and a 'Show Full Path' checkbox. The main area contains a filter: 'Filter: Author[bob]; Link Filters: Number of traced from requirements[>0]'. Below the filter, it states 'Total number of traced from requirements: 4'. The main table has the following data:

| Req ID | Name  | Number of traced from requirements | Author |
|--------|-------|------------------------------------|--------|
| 1      | req1  | 2                                  | bob    |
| 2      | req2  | 1                                  | bob    |
| 4      | req4  | 1                                  | bob    |
| 7      | req3a | 3                                  | bob    |

Below the main table is a section titled 'Traced From Requirements' with a 'Show Full Path' checkbox. It contains a smaller table:

| Req ID | Name |
|--------|------|
| 2      | req2 |
| 3      | req3 |

|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the ALM sidebar, under <b>Requirements</b> , select <b>Requirements</b> . Select a requirements view from the <b>View</b> menu. |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> Not all fields and functionality in the Requirements module are available.                  |
| <b>Relevant tasks</b>        | "How to Create Requirements" on page 341   |
| <b>See also</b>              | "Requirements Specification Overview" on page 340  |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements                              | Description   |
|--|---|
| <Requirements module common UI elements> | <ul style="list-style-type: none"> <li>▶ <b>Requirement fields.</b> For field definitions, see "Requirements Module Fields" on page 368.</li> <li>▶ <b>Requirement menus and buttons.</b> For command and button descriptions, see "Requirements Module Menus and Buttons" on page 353.</li> <li>▶ <b>Requirement icons.</b> For icon descriptions, see "Requirements Module Icons" on page 365.</li> <li>▶ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu and sidebar, see "ALM Common Areas" on page 41.</li> </ul> |
| <Requirements tree>                      | <p>Located on the left side of the window, organizes and displays your requirements hierarchically.</p> <p><b>Available from:</b> Requirements Tree, Requirement Details, and Coverage Analysis</p>   |
| <Filter status bar>                      | <p>Describes the filter currently applied to the grid or tree. Located directly above the grid filter boxes or tree.</p> <p>In grid views:</p> <ul style="list-style-type: none"> <li>▶ <b>Showing &lt;x&gt; results.</b> Indicates the number of records currently displayed out of the total records.</li> <li>▶ <b>Retrieve all &lt;x&gt; results.</b> Click to display all records.</li> </ul>  |
| <b>Attachments tab</b>                   | <p>Lists attachments that provide additional information about the currently selected requirement. For more details, see "Attachments Page" on page 90.</p>   |
| <b>Business Models Linkage</b>           | <p>Lists the business model entities linked to the currently selected requirement. For more details, see "Business Models Linkage Tab" on page 573.</p>   |
| <b>Comments tab</b>                      | <p>Comments about the currently selected requirement.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>   |

| UI Elements                              | Description  |
|--|--|
| <b>Description tab</b>                   | Describes the currently selected requirement.<br>Click in the text box to display a toolbar for formatting and spell checking the text.  |
| <b>Details tab</b>                       | Details the currently selected requirement.  |
| <b>History tab</b>                       | Lists changes made to the currently selected requirement. For more details, see "History Tab" on page 85.  |
| <b>Linked Defects tab</b>                | Lists the defects linked to the currently selected requirement. For more details, see "Linked Defects/Entities Page" on page 902.  |
| <b>Represented Items</b>                 | Lists the business process model entities represented by the selected requirement.<br><b>Available from:</b> Business Model requirements   |
| <b>Requirements Traceability tab</b>     | Lists the requirements linked to the currently selected requirement. For more details, see "Relationships Tab" on page 395 and "Impact Analysis Tab" on page 400.  |
| <b>Rich Text tab</b>                     | Enables you to add, view, and edit rich text using an HTML editor from within ALM.<br><b>Note:</b><br><ul style="list-style-type: none"> <li>▶ Changes you make to the rich text for a requirement are saved automatically when you move to a different requirement or a different module.</li> <li>▶ If your project was upgraded from a previous version of Quality Center, rich text that existed before the upgrade is saved as an attachment to the requirement, accessible from the requirement's Attachments page.</li> </ul> For details on defining rich text templates, see the <i>HP Application Lifecycle Management Administrator Guide</i> . |
| <b>Risk Analysis/Risk Assessment tab</b> | Calculates and analyzes risk for the currently selected requirement. For more details, see "Risk Assessment Tab" on page 433 and "Risk Analysis Tab" on page 439.  |
| <b>Test Coverage tab</b>                 | Lists the tests associated with the currently selected requirement. For more details, see "Test Coverage Page" on page 576.  |




## Requirements Module Menus and Buttons

This section describes the menus and buttons available in the Requirements module.


|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under <b>Requirements</b> , select <b>Requirements</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ Some menu commands and buttons are not available in all requirement views.</li> <li>▶ <b>Tip:</b> You can access the menu bar from the Requirements module by pressing the shortcut key ALT. Additionally, you can perform many other ALM operations using shortcut keys. For a list of shortcut keys, see "ALM Keyboard Shortcut Reference" on page 154.</li> <li>▶ <b>Version Control:</b> Additional menu commands and buttons are available in a version control enabled project. For details, see "Versions Menu and Buttons" on page 131.</li> <li>▶ <b>Quality Center Starter Edition:</b> Not all commands and buttons are available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Create Requirements" on page 341  |
| <b>See also</b>              | "Requirements Module Icons" on page 365<br>"Requirements Specification Overview" on page 340  |



User interface elements are described below (unlabeled elements are shown in angle brackets):


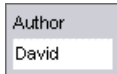
| UI Elements (A-Z)  | Menu               | Description  |
|--|--------------------|--|
| <b>Add to Favorites</b>  | Favorites          | Opens the Add Favorite dialog box, enabling you to add a favorite view to your private or the public folder. For details, see "Add Favorite Dialog Box" on page 117. |
| <b>Alerts</b>  | Edit               | Opens the Alerts dialog box, enabling you to display alerts for the requirements. For details, see "Alerts Dialog Box" on page 109.                                  |
| <b>Assign to Cycle</b>   | Requirements       | Opens the Select Cycles dialog box, enabling you to assign selected requirements to cycles. For more details, see "Select Cycles Dialog Box" on page 205.            |
| <b>Assign to Release</b>   | Requirements       | Opens the Select Releases dialog box, enabling you to assign selected requirements to releases. For more details, see "Select Releases Dialog Box" on page 207.      |
|  <b>Attachments</b> | <right-click menu> | Opens the Attachments page, enabling you to add attachments to the selected requirement. For details, see "Attachments Page" on page 90.                             |
| <b>Clear Alerts</b>  | Edit               | Clears displayed alerts for the module. For more details, see "How to Use Alerts" on page 103.   |
| <b>Clear Follow Up Flag</b>  | Edit               | Clears a follow up flag of a selected requirement. For details on follow up flags, see "Follow Up Flags Overview" on page 102.                                       |
| <b>Collapse</b>  | View               | Collapses all branches in the requirements tree.   |





| UI Elements (A-Z)                    | Menu         | Description  |
|--------------------------------------|--------------|--|
| <b>Configure Traceability Matrix</b> | Edit         | <p>Opens the Configure Traceability Matrix wizard, enabling you to set the entities displayed the matrix. For more details, see "Configure Traceability Matrix Wizard" on page 414.</p> <p><b>Available from:</b> Traceability Matrix</p>  |
| <b>Convert to Tests</b>              | Requirements | <p>Opens the Convert to Tests wizard, enabling you to convert selected requirements to tests in a specified subject in the test plan tree. For more details, see "Convert to Tests Wizard" on page 379.</p>  |
| <b>Copy/Paste</b>                    | Edit         | <p>Copies selected requirements within the same project or across projects. When you copy a requirement, any children of the requirement are also copied.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ Test coverage, defect linkage, and risk-based quality management data for the requirement are not copied.</li> <li>▶ To copy a requirement with traceability, you must also copy its associated traced requirements.</li> <li>▶ The root folder cannot be copied within the same project.</li> <li>▶ If you paste a requirement that has the same name as an existing requirement, the suffix <code>_Copy</code> is added automatically to the end of the requirement's name.</li> </ul> |

| UI Elements (A-Z)        | Menu | Description   |
|--------------------------|------|---|
| <b>Copy URL/Paste</b>    | Edit | Copies a selected requirement and pastes its URL as a link. The requirement itself is not copied. Instead, you can paste the address into another location, such as an email or a document. Clicking the link opens ALM and takes you to the requirement. If you are not already logged in, ALM first prompts for login details.  |
| <b>Coverage Analysis</b> | View | Displays the Coverage Analysis view, enabling you to analyze the breakdown of child requirements according to test coverage status. For details, see "Coverage Analysis View" on page 561.  |
| <b>Cut/Paste</b>         | Edit | <p>Moves selected requirements to a different location in the requirements tree.</p> <p><b>Note:</b> Moving a requirement to a different location in the requirements tree also moves its child requirements, tests coverage, requirement traceability links, and defects linkage. The root folder cannot be moved.</p> <p><b>Tip:</b> You can also move a requirement to a new location by dragging it. In the requirements tree, click a requirement and drag it under a folder or a requirement.</p> |



| UI Elements (A-Z)   | Menu               | Description  |
|---|--------------------|--|
|  <b>Delete</b> | Edit               | <p>Deletes selected requirements. Deleting a requirement also deletes its child requirements, tests coverage, requirement traceability links, and defects linkage. You cannot delete the root folder.</p> <p><b>Version Control:</b> Deleting a requirement deletes all previous versions of the requirement.</p>  |
| <b>Expand All</b>   | View               | Expands all branches in the requirements tree.   |
| <b>Export</b>   | Requirements       | <p>Opens the Export Coverage Analysis dialog box, enabling you to save the Coverage Analysis view to a Microsoft Word document. The document displays a bar graph for each parent requirement in the requirements tree.</p> <p><b>Available from:</b> Coverage Analysis</p>  |
| <b>Export</b>   | <right-click menu> | <p>Opens the Export All Grid Data dialog box, enabling you to export the requirements in a grid as a text file, Microsoft Excel worksheet, Microsoft Word document, or HTML document.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>All.</b> Exports all requirements in the grid.</li> <li>▶ <b>Selected.</b> Exports selected requirements in the grid.</li> </ul> <p><b>Available from:</b> Requirements Grid</p> |


| UI Elements (A-Z)   | Menu         | Description   |
|---|--------------|---|
| <b>Export Traceability Matrix</b>   | Analysis     | <p>Opens the Export Traceability Matrix dialog box, enabling you to save the Traceability Matrix view to a Microsoft Excel worksheet.</p> <p><b>Available from:</b> Traceability Matrix</p>   |
|  <b>Filter/Sort</b>        | View         | <p>Enables you to filter and sort the requirements in the requirements tree or grid. For more details, see "Filter Dialog Box" on page 64.</p>  |
| <b>Find</b>   | Edit         | <p>Searches for a requirement in the Requirements module. For more details, see "Find Dialog Box" on page 78.</p>   |
| <b>Find Next</b>  | Edit         | <p>Searches for the next item in the requirements grid that meet the previously defined search criteria.</p> <p><b>Available from:</b> Requirements Grid</p>  |
|  <b>Flag for Follow Up</b> | Edit         | <p>Opens the Flag For Follow Up dialog box, enabling you to define a follow up flag for a selected requirement. For more details, see "Flag For Follow Up Dialog Box" on page 111.</p>  |
| <b>Generate Test</b>  | Requirements | <p>Opens the Generate Test dialog box, enabling you to convert selected requirements to tests in a specified subject in the test plan tree and a specified test set in the Test Lab module. For more details, see "Generate Test Dialog Box" on page 385.</p> |




| UI Elements (A-Z)   | Menu               | Description  |
|---|--------------------|--|
| <b>Go to Requirement</b>  | Requirements       | Opens the Go To Requirement dialog box, enabling you to find a specific requirement by <b>ReqID</b> . To display the requirement in the requirements tree, click <b>Show in Tree</b> . To display the requirement in the Requirement Details dialog box, click <b>Show Details</b> . You can only go to requirements that are in the current filter.                           |
|  <b>Go To Requirement in Requirements Tree</b> | <right-click menu> | <p>Goes to the Requirements Tree view and highlights the selected requirement.</p> <p><b>Available from:</b> Requirements Grid and Traceability Matrix</p>   |
| <b>Graphs</b>   | Analysis           | <p>Lists the graphs you can generate for requirements data. Select a predefined graph, or launch the graph wizard.</p> <p>For details on the predefined graph types, see "Graph Types" on page 942.</p>  |
| <b>Grid Filters</b><br>                      | View               | <p>Displays a grid filter box under each column name, enabling you to define a filter condition for a column.</p> <p>Type directly into the box, or click the box to display the browse button, which opens the Select Filter Condition dialog box. For more details, see "Select Filter Condition Dialog Box" on page 74.</p> <p><b>Available from:</b> Requirements Grid</p> |


| UI Elements (A-Z)  | Menu         | Description  |
|--|--------------|--|
| Indicator Columns  | View         | Displays the following columns on the left-side of the requirements window:  . For more details, see "Requirements Module Icons" on page 365.   |
| Information Panel  | View         | Displays information panel tabs on the bottom of the requirement view. For more details, see "Requirements Module Window" on page 346.   |
| Invert Selection   | Edit         | Unselects all previously selected requirements in the grid and selects all previously unselected requirements.<br><br><b>Available from:</b> Requirements Grid   |
|  <b>Move Down</b><br> <b>Move Up</b> |              | Enables you to move selected requirements in the requirements tree up or down to set their order.<br><br><b>Note:</b> The <b>Move Up</b> and <b>Move Down</b> buttons are not available if the requirements in the requirements tree are already sorted using the View Order tab in the Filter dialog box. For more details on the View Order tab, see "Filter Dialog Box" on page 64.<br><br><b>Available from:</b> Requirements Tree, Requirement Details, and Coverage Analysis |
|  <b>New Folder</b>  | Requirements | Opens the Create New Requirement Folder dialog box, enabling you to add a folder under a selected folder.<br><br><b>Available from:</b> Requirements Tree, Requirement Details, and Coverage Analysis  |



| UI Elements (A-Z)  | Menu         | Description  |
|--|--------------|--|
|  <b>New Requirement</b> | Requirements | <p>Opens the New Requirement dialog box, enabling you to add a requirement under a selected requirement. For more details, see "New Requirement Dialog Box" on page 377.</p> <p><b>Available from:</b> Requirements Tree, Requirement Details, and Coverage Analysis</p> |
| <b>Organize Favorites</b>  | Favorites    | <p>Opens the Organize Favorites dialog box, enabling you to organize the list of favorite views by changing properties or deleting views. For details, see "Organize Favorites Dialog Box" on page 119.</p>  |
| <b>Private</b>   | Favorites    | <p>Lists the favorite views that are accessible only to the user who created them.</p>   |
| <b>Public</b>  | Favorites    | <p>Lists the favorite views that are accessible to all users.</p>  |
| <b>Recently used</b>   | Analysis     | <p>Displays the most recently viewed reports and graphs in the Requirements module.</p>  |
|  <b>Refresh All</b>   | View         | <p>Refreshes the requirements tree or grid so that it displays the most up-to-date requirements.</p>   |
| <b>Rename</b>  | Edit         | <p>Renames a selected requirement. You cannot rename the root folder.</p> <p><b>Syntax exceptions:</b> A requirement name cannot include the following characters: \ ^ *</p>   |
| <b>Replace</b>   | Edit         | <p>Replaces a requirement field value in the tree or grid. For more details, see "Replace Dialog Box" on page 80.</p>  |

| UI Elements (A-Z)  | Menu         | Description  |
|--|--------------|--|
| <b>Reports</b>   | Analysis     | Lists the predefined reports you can produce on requirements data. For details on the report types, see "Predefined Standard Reports" on page 1042.  |
|  <b>Requirement Details</b> | Requirements | Opens the Requirement Details dialog box, enabling you to display the details of the selected requirement. For more details, see "Requirement Details Page" on page 375.   |
| <b>Requirement Details</b>   | View         | Displays the Requirement Details view, enabling you to create links between requirements and other entities. It also enables you to calculate and analyze requirement risks. For more details, see "Requirement Details Page" on page 375. |
| <b>Requirements Grid</b>   | View         | Displays the Requirements Grid view, enabling you to view requirements in a flat non-hierarchical view. Each line in the grid displays a separate requirement.   |
| <b>Requirements Tree</b>   | View         | Displays the Requirements Tree view, enabling you to view your requirements hierarchically in a tree.  |
| <b>Select All</b>  | Edit         | Selects all requirements in the grid.<br><b>Available from:</b> Requirements Grid  |

| UI Elements (A-Z)   | Menu         | Description   |
|---|--------------|---|
|  <b>Select Columns</b> | View         | <p>Opens the Select Columns dialog box, enabling you to determine which fields to display in the requirements tree or grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p> |
|  <b>Send by E-mail</b> | Requirements | <p>Opens the Send E-mail dialog box, enabling you to send requirement email to recipients selected from a list or to the author of the requirement. For more details, see "Send E-mail Dialog Box" on page 87.</p>          |
| <b>Show Full Path</b>   | View         | <p>Displays the path of the requirements in the requirements tree.</p> <p><b>Available from:</b> Traceability Matrix</p>  |
| <b>Test Coverage &gt; Show Add Criteria to Coverage</b>   | View         | <p>Enables the Add Criterion Coverage dialog box. For more details, see "Add Criterion Coverage Dialog Box" on page 585.</p> <p><b>Available from:</b> Requirements Tree, Requirement Details, and Coverage Analysis</p>    |
|  <b>Text Search</b>  | Edit         | <p>Opens the text search pane in the lower part of the Requirements module window, enabling you to search for records in predefined fields. For more details, see "Text Search Pane" on page 82.</p>                        |







| UI Elements (A-Z)   | Menu      | Description   |
|---|-----------|---|
| <b>Update Selected</b>  | Edit      | Opens the Update Selected dialog box, enabling you to update a field value for multiple selected requirements in the tree or grid. For more details, see "Update Selected Dialog Box" on page 96.   |
|  <b>Zoom</b> | View      | <p>Changes the level of detail in the requirements tree. Includes the following options:</p> <p><b>Zoom In.</b> Displays the selected requirement and includes a heading with the hierarchical path of the requirement.</p> <p><b>Zoom Out One Level.</b> Undoes the previous zoom in command.</p> <p><b>Zoom Out To Root.</b> Enlarges to the highest hierarchical level and display the entire requirements tree.</p> |
| <list of recently used favorite views>  | Favorites | <p>Displays the four most recently used favorite views in the Requirements module.</p> <p>You can define the number of views displayed on the menu by setting the <b>FAVORITES_DEPTH</b> parameter in the Site Configuration tab in Site Administration. For details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</p>   |











## Requirements Module Icons



This section describes the icons available in the Requirements module.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under <b>Requirements</b> , select <b>Requirements</b> .                    |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> Not all icons are available.                             |
| <b>See also</b>              | "Requirements Module Menus and Buttons" on page 353<br>"Requirements Module Window" on page 346 |

The icons are described below:

| UI Elements   | Description  |
|---|--|
|    | < <b>green asterisk</b> >. The applicable tab is populated.  |
|    | <b>Alerts.</b> Click to view alerts for the requirement. <ul style="list-style-type: none"> <li>▶ <b>Red alert.</b> The alert is new.</li> <li>▶ <b>Gray alert.</b> The alert has already been read.</li> </ul> For more details, see "Alerts Dialog Box" on page 109. |
|   | <b>Attachments.</b> Click to view attachments for the specified requirement. For more details, see "Attachments Page" on page 90.  |
|  | <b>Child.</b> A child requirement affected by a change to a selected requirement. For more details, see "Impact Analysis Tab" on page 400.   |
|  | <b>Parent.</b> A parent requirement that affects a selected requirement. For more details, see "Impact Analysis Tab" on page 400.  |
|  | <b>Trace To.</b> A requirement that is affected by a selected requirement. For more details, see "Impact Analysis Tab" on page 400.  |

| UI Elements   | Description  |
|---|--|
|    | <b>Trace From.</b> A requirement that affects a selected requirement. For more details, see "Impact Analysis Tab" on page 400.   |
|    | <b>Recursive Relationship.</b> The same requirement participates more than once in the relationship. For more details, see "Impact Analysis Tab" on page 400.  |
|    | <b>Follow Up Flags.</b> Click to view follow up flags for the requirement.<br><ul style="list-style-type: none"> <li>➤ <b>Gray flag.</b> The follow up flag is new.</li> <li>➤ <b>Red flag.</b> The follow up date has arrived.</li> </ul> For more details, see "Flag For Follow Up Dialog Box" on page 111.  |
|    | <b>Linked Defects.</b> Click to view linked defects for the requirement. For more details, see "Linked Defects/Entities Page" on page 902.   |
|    | <b>Business Requirement.</b> A business process requirement.   |
|    | <b>Folder Requirement.</b> A folder for organizing requirements.   |
|   | <b>Functional Requirement.</b> A system behavioral requirement.  |
|  | <b>Group Requirement.</b> A collection of related requirements.  |
|  | <b>Testing Requirement.</b> A testing type requirement.  |
|  | <b>Business Model Requirement.</b> A requirement representing a business process model entity.<br><b>Notes:</b> <ul style="list-style-type: none"> <li>➤ Business model requirements are created automatically for each model entity added to the Business Models module.</li> <li>➤ You cannot change the requirement type of business model requirements.</li> </ul> |

| UI Elements   | Description   |
|---|---|
|  | <b>Undefined Requirement.</b> A requirement with an undefined type.   |
|  | <b>Version Control.</b> The requirement is checked out. <ul style="list-style-type: none"><li>▶ <b>Green lock.</b> The requirement is checked out by the current user.</li><li>▶ <b>Red lock.</b> The requirement is checked out by another user.</li></ul> |

## Requirements Module Fields

This section describes the Requirements module fields.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under <b>Requirements</b> , select <b>Requirements</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You can add user-defined fields and change the label of any of the fields in the Requirements module. You can also customize project lists. For more details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You can use the Script Editor to restrict and dynamically change the fields and values in the Requirements module. For more details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ When you select a requirement column with a user name value (including user-defined fields), ALM displays a list with the name and full name of each user. You can search for users, sort users, group users by user group, and select users from the users list or a group tree. For more details, see "Users List Dialog Box" on page 76.</li> <li>▶ Some fields are not available in all requirement views.</li> <li>▶ <b>Version Control:</b> Additional fields are available in a version control enabled project. For details, see "Version Control Fields" on page 132.</li> <li>▶ <b>Quality Center Starter Edition:</b> Not all fields are available.</li> </ul> |
| <b>See also</b>              | "Requirements Module Window" on page 346  |



The fields are described below:








| UI Elements (A-Z)        | Description  |
|--------------------------|--|
| <b>Author</b>            | The user name of the person who created the requirement.<br><b>Default value:</b> Login user name.   |
| <b>Comments</b>          | Comments about the requirement.<br>Click in the text box to display a toolbar for formatting and spell checking the text.  |
| <b>Coverage Analysis</b> | Graphically displays the direct cover status of the requirement and its children. Requirements which do not match the current filter, or requirements with direct cover status "N/A" are not counted in the analysis.<br><b>Note:</b> If you set the coverage by cycle, ALM does not use the <b>Direct Cover Status</b> field in its calculations. Instead, it uses calculated direct cover status values based on the tests that have instances belonging to test set folders that are assigned to cycles included in the filter. In this case, requirements that do not have test coverage for any of the cycles in the filter are not counted in the analysis. For more details on setting coverage by cycle, see "Analysis Settings Dialog Box" on page 581. |
| <b>Created By</b>        | The user name of the person who created the requirement link.<br><b>Default value:</b> The login user name.  |
| <b>Creation Date</b>     | The date on which the requirement or requirement link was created.<br><b>Default value:</b> Current database server date.  |
| <b>Creation Time</b>     | The time at which the requirement was created.<br><b>Default value:</b> Current database server time.  |
| <b>Description</b>       | A description of the requirement.<br>Click in the text box to display a toolbar for formatting and spell checking the text.  |

| UI Elements (A-Z)          | Description   |
|----------------------------|---|
| <b>Direct Cover Status</b> | <p>The current status of the requirement, determined according to the status of the tests associated with the requirement.</p> <p>A requirement status can be one of the following:</p> <ul style="list-style-type: none"> <li>➤ <b>Blocked.</b> One or more tests covered by the requirement have an execution status of "Blocked".</li> <li>➤ <b>Not Covered.</b> The requirement has not been linked to a test.</li> <li>➤ <b>Failed.</b> One or more tests covered by the requirement have an execution status of "Failed", and none have an execution status of "Blocked".</li> <li>➤ <b>Not Completed.</b> One or more tests covered by the requirement have an execution status of "Not Completed", and none have an execution status of "Blocked" or "Failed". Alternatively, tests covered by the requirement have execution statuses of "Passed" and "No Run".</li> <li>➤ <b>Passed.</b> All the tests covered by the requirement have an execution status of "Passed".</li> <li>➤ <b>No Run.</b> All the tests covered by the requirement have an execution status of "No Run".</li> <li>➤ <b>N/A.</b> The current status of the requirement is not applicable.</li> <li>➤ <b>-----.</b> The requirement does not have a direct cover status as it belongs to a requirement type that does not support coverage.</li> </ul> <p><b>Default value:</b> The status is <b>Not Covered</b>.</p> |
| <b>Modified</b>            | <p>The date and time on which the requirement or requirement link was modified.</p> <p><b>Default value:</b> The current database server date and time.</p>   |
| <b>Name</b>                | <p>The requirement name.</p>  |

| UI Elements (A-Z)                             | Description   |
|---|---|
| <b>Old Type (obsolete)</b><br>(formerly Type) | The type of requirement (obsolete). In previous versions of ALM, the type could be any value configured in the project, with typical values <b>Change, Functional, Guideline, Quality, Standard, and System</b> .<br><br>This field is only available for requirements of undefined type. |
| <b>Priority</b>                               | The priority of the requirement, ranging from low priority (level 1) to urgent priority (level 5).  |
| <b>Product</b>                                | The component of the application on which the requirement is based.   |
| <b>RBQM Business Impact</b>                   | The calculated Business Criticality for the requirement. Possible values are <b>A (High), B (Medium), and C (Low)</b> . This field is only in use for assessment requirements.  |
| <b>RBQM Custom Business Impact</b>            | The user-defined custom Business Criticality for the requirement. Possible values are <b>A (High), B (Medium), and C (Low)</b> . This field is only in use for assessment requirements.   |
| <b>RBQM Custom Failure Probability</b>        | The user-defined custom Failure Probability for the requirement. Possible values are <b>1 (High), 2 (Medium), and 3 (Low)</b> . This field is only in use for assessment requirements.  |
| <b>RBQM Custom Functional Complexity</b>      | The user-defined custom Functional Complexity for the requirement. Possible values are <b>1 (High), 2 (Medium), and 3 (Low)</b> . This field is only in use for assessment requirements.  |
| <b>RBQM Custom Risk</b>                       | The user-defined custom Risk for the requirement. Possible values are <b>A (High), B (Medium), and C (Low)</b> . This field is only in use for assessment requirements.   |
| <b>RBQM Custom Testing Hours</b>              | The user-defined effort required to test the requirement, measured in units defined in Project Customization. This field is only in use for assessment requirements.  |
| <b>RBQM Custom Testing Level</b>              | The user defined level at which to test the requirement. Possible values are <b>1-Full, 2-Partial, 3-Sanity, and 4-None</b> . This field is only in use for assessment requirements.  |

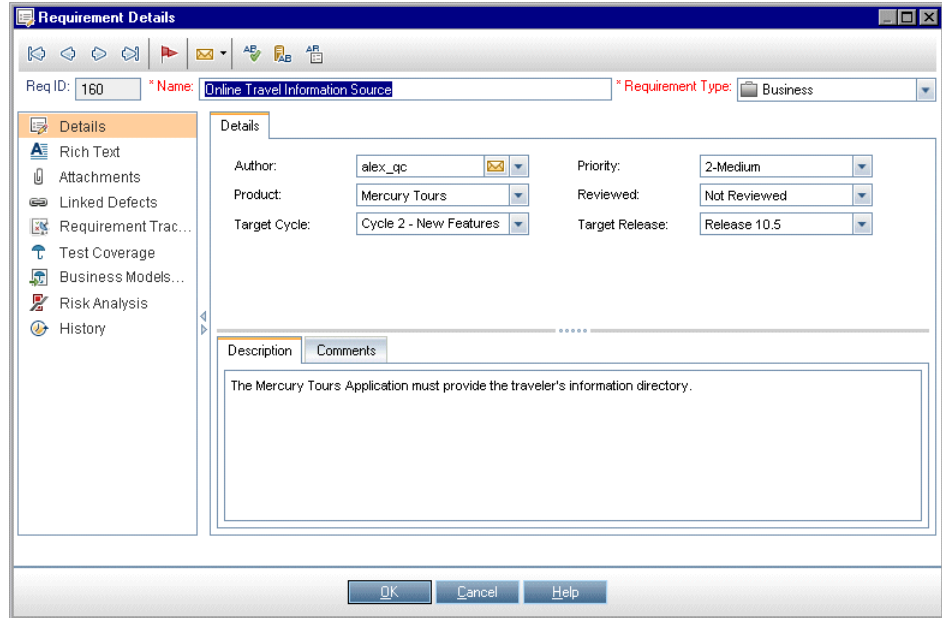
| UI Elements (A-Z)                           | Description  |
|---|--|
| <b>RBQM Date of Last Analysis</b>           | The date a risk-based quality management analysis was last performed on the requirement. This field is only in use for analysis requirements.  |
| <b>RBQM Effective Business Impact</b>       | The effective Business Criticality for the requirement. Possible values are <b>A (High)</b> , <b>B (Medium)</b> , and <b>C (Low)</b> . This field is only in use for assessment requirements.  |
| <b>RBQM Effective Failure Probability</b>   | The effective Failure Probability for the requirement. Possible values are <b>1 (High)</b> , <b>2 (Medium)</b> , and <b>3 (Low)</b> . This field is only in use for assessment requirements.   |
| <b>RBQM Effective Functional Complexity</b> | The effective Functional Complexity for the requirement. Possible values are <b>1 (High)</b> , <b>2 (Medium)</b> , and <b>3 (Low)</b> . This field is only in use for assessment requirements.   |
| <b>RBQM Effective Risk</b>                  | The effective Risk for the requirement. Possible values are <b>A (High)</b> , <b>B (Medium)</b> , and <b>C (Low)</b> . This field is only in use for assessment requirements.  |
| <b>RBQM Estimated RnD Effort</b>            | The user-defined estimate of the effort required to develop the requirement. This field is only in use for assessment requirements.  |
| <b>RBQM Exclude from Analysis</b>           | Indicates whether to exclude the requirement from risk analysis. A requirement may be excluded from risk analysis if it belongs to a type for which risk assessments are not available, or if you specifically exclude it from analysis. |
| <b>RBQM Failure Probability</b>             | The calculated Failure Probability for the requirement. Possible values are <b>1 (High)</b> , <b>2 (Medium)</b> , and <b>3 (Low)</b> . This field is only in use for assessment requirements.  |
| <b>RBQM Functional Complexity</b>           | The calculated Functional Complexity for the requirement. Possible values are <b>1 (High)</b> , <b>2 (Medium)</b> , and <b>3 (Low)</b> . This field is only in use for assessment requirements.  |
| <b>RBQM Risk</b>                            | The calculated Risk for the requirement. Possible values are <b>A (High)</b> , <b>B (Medium)</b> , and <b>C (Low)</b> . This field is only in use for assessment requirements.   |

| UI Elements (A-Z)                            | Description  |
|--|--|
| <b>RBQM Testing Hours</b>                    | The calculated effort required to test the requirement, measured in units defined in Project Customization. This field is only in use for assessment requirements.   |
| <b>RBQM Testing Level</b>                    | The calculated level at which to test the requirement. Possible values are <b>1-Full</b> , <b>2-Partial</b> , <b>3-Sanity</b> , and <b>4-None</b> . This field is only in use for assessment requirements. |
| <b>RBQM Use Custom Business Impact</b>       | Indicates whether to use the user-defined Business Criticality, instead of the Business Criticality calculated by ALM. This field is only in use for assessment requirements.                              |
| <b>RBQM Use Custom Failure Probability</b>   | Indicates whether to use the user-defined Failure Probability, instead of the Failure Probability calculated by ALM. This field is only in use for assessment requirements.                                |
| <b>RBQM Use Custom Functional Complexity</b> | Indicates whether to use the user-defined Functional Complexity, instead of the Functional Complexity calculated by ALM. This field is only in use for assessment requirements.                            |
| <b>RBQM Use Custom Results</b>               | Indicates whether to use the user-defined testing effort and testing level, instead of the values calculated by ALM. This field is only in use for assessment requirements.                                |
| <b>RBQM Use Custom Risk</b>                  | Indicates whether to use the user-defined Risk, instead of the Risk calculated by ALM. This field is only in use for assessment requirements.  |
| <b>Req ID</b>                                | A unique alphanumeric ID for the requirement that is assigned automatically. The Req ID field cannot be modified.  |
| <b>Req Parent</b>                            | The name of the parent requirement.  |
| <b>Requirement Trace ID</b>                  | A unique alphanumeric ID for the requirement link that is assigned automatically.  |

| UI Elements (A-Z)       | Description   |
|-------------------------|---|
| <b>Requirement Type</b> | <p>The type of requirement.</p> <p><b>Default values:</b></p> <ul style="list-style-type: none"> <li>➤  <b>Business.</b> A business process requirement. By default, you cannot add coverage to this requirement.</li> <li>➤  <b>Folder.</b> A folder for organizing requirements. By default, you cannot add coverage to this requirement.</li> <li>➤  <b>Functional.</b> A system behavioral requirement.</li> <li>➤  <b>Group.</b> A collection of related requirements.</li> <li>➤  <b>Testing.</b> A system performance requirement.</li> <li>➤  <b>Business Model.</b> A requirement representing a business process model entity.</li> <li>➤  <b>Undefined.</b> An undefined requirement.</li> </ul> <p><b>Note:</b> You can customize the default types and create your own requirement types. For more details on customizing requirement types, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</p> |
| <b>Reviewed</b>         | Indicates whether the requirement has been reviewed and approved by the person responsible.   |
| <b>Target Cycle</b>     | Indicates the cycle to which the requirement is assigned.   |
| <b>Target Release</b>   | Indicates the release to which the requirement is assigned.   |
| <b>Trace Comment</b>    | Displays comments about the requirement link.   |




## Requirement Details Page

This page enables you to update the details, attachments, tests coverage, requirement traceability links, risk-based quality management settings, and defect links for any requirement. You can also view a list of changes made to any requirement.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | Use one of the following: <ul style="list-style-type: none"> <li>▶ In the <b>Requirements</b> module, right-click a requirement and select <b>Requirement Details</b>. The Requirement Details dialog box opens.</li> <li>▶ Select <b>View &gt; Requirement Details</b>. The Requirement Details view opens.</li> </ul> |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> Not all fields and functionality are available in Requirement Details.   |
| <b>Relevant tasks</b>        | "How to Create Requirements" on page 341  |
| <b>See also</b>              | "Requirements Specification Overview" on page 340   |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

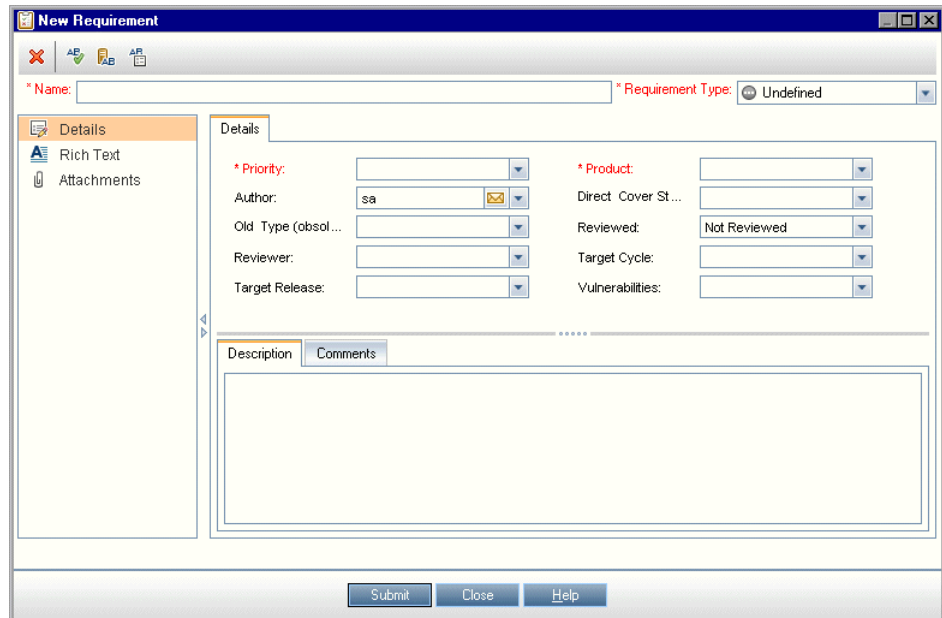
| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>First/Previous/Next/Last Entity.</b> Allows you to browse through the requirements.</p> <p><b>Available from:</b> Requirement Details dialog box</p>   |
|  | <p><b>Flag for Follow Up.</b> Opens the Flag For Follow Up dialog box, enabling you to define a follow up flag for the requirement. For details, see "Flag For Follow Up Dialog Box" on page 111.</p>  |
|  | <p><b>Send by Email.</b> Sends an email with the requirement details. For more details, see "Send E-mail Dialog Box" on page 87.</p>   |
| <p><b>Details</b></p>   | <p>Details the currently selected requirement. For details on the available fields, see "Requirements Module Fields" on page 368.</p>  |
| <p><b>Attachments</b></p>   | <p>Lists attachments that provide additional information about the currently selected requirement. For more details, see "Attachments Page" on page 90.</p>  |
| <p><b>Business Models Linkage</b></p>   | <p>Lists the business model entities linked to the currently selected requirement. For more details, see "Business Models Linkage Tab" on page 573.</p>  |
| <p><b>History</b></p>   | <p>Displays a list of changes made to the currently selected requirement. For more details, see "History Tab" on page 85.</p> <p>In addition, this tab displays a history of baselines in which the requirement appears. For more details, see "History Tab" on page 85.</p> |
| <p><b>Linked Defects</b></p>  | <p>Lists the defects linked to the currently selected requirement. For more details, see "Linked Defects/Entities Page" on page 902.</p>   |
| <p><b>Requirements Traceability</b></p>   | <p>Lists the requirements linked to the currently selected requirement. For more details, see "Impact Analysis Tab" on page 400 and "Relationships Tab" on page 395.</p>   |



| UI Elements (A-Z)                    | Description   |
|--------------------------------------|---|
| <b>Rich Text</b>                     | Enables you to add, view, and edit rich text using an editor from within ALM.<br><b>Note:</b> Changes you make to the rich text for a requirement are saved automatically when you move to a different requirement or a different module. |
| <b>Risk Analysis/Risk Assessment</b> | Calculates and analyzes risk for the currently selected requirement. For more details, see "Risk Assessment Tab" on page 433 and "Risk Analysis Tab" on page 439.   |
| <b>Test Coverage</b>                 | Lists the tests associated with the currently selected requirement. For more details, see "Test Coverage Page" on page 576.   |

## New Requirement Dialog Box

This dialog box enables you to add a new requirement to the Requirements module.



**New Requirement**

\* Name:  \* Requirement Type: Undefined

Details

Rich Text

Attachments

\* Priority:

Author: sa

Old Type (obso...):

Reviewer:

Target Release:

\* Product:

Direct Cover St...:

Reviewed: Not Reviewed

Target Cycle:

Vulnerabilities:






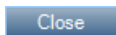
Description

Comments

Submit Close Help

|                       |  |
|-----------------------|--|
| <b>To access</b>      | In the <b>Requirements</b> module, right-click a requirement and select <b>New Requirement</b> .<br><br><b>Available from:</b> Requirements Tree, Requirement Details, and Coverage Analysis |
| <b>Relevant tasks</b> | "How to Create Requirements" on page 341   |
| <b>See also</b>       | "Requirements Specification Overview" on page 340  |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)   | Description   |
|---|---|
|    | Clears the data.  |
|    | <b>Spell Check.</b> Checks the spelling for the selected word or text box.  |
|    | <b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.  |
|    | <b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.   |
|  | Adds the new requirement to the requirements tree. The New Requirement page remains open.   |
|  | Closes the New Requirement page.  |
| <b>Attachments</b>  | Enables you to add attachments for the currently selected requirement. For more details, see "Attachments Page" on page 90.             |
| <b>Details</b>  | Required fields are displayed in red. For details on the available requirement fields, see "Requirements Module Fields" on page 368.    |
| <b>Requirement Name</b>   | Type a name for the new requirement.<br><br><b>Syntax exceptions:</b> A requirement name cannot include the following characters: \ ^ * |

| UI Elements (A-Z)       | Description  |
|-------------------------|--|
| <b>Requirement Type</b> | Select a requirement type. For more details on requirement types, see "Requirement Type" on page 374.<br><b>Quality Center Starter Edition:</b> This field is not available.   |
| <b>Rich Text</b>        | Enables you to add, view, and edit rich text using an HTML editor from within ALM.<br><b>Note:</b> Changes you make to the rich text for a requirement are saved automatically when you move to a different requirement or a different module. |

## Convert to Tests Wizard

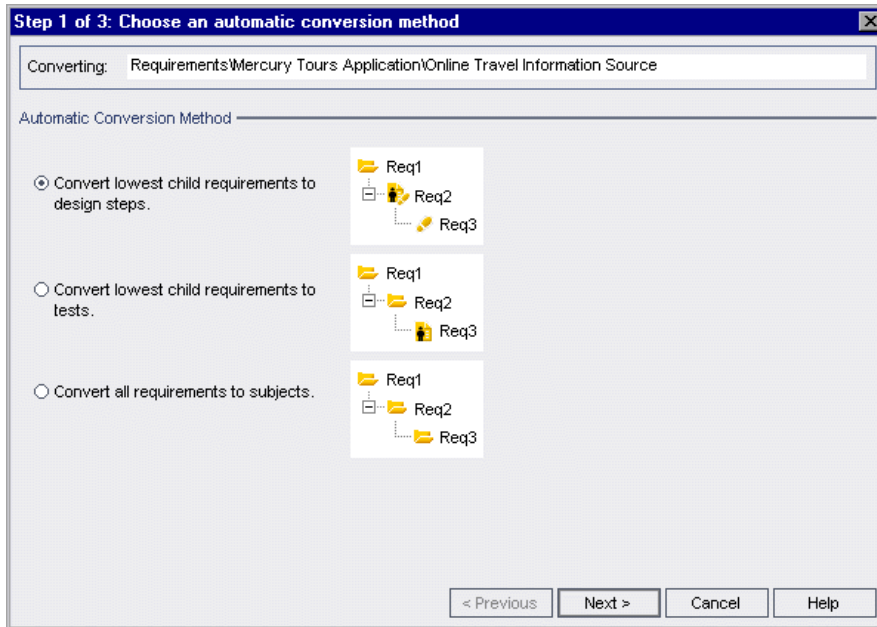
This wizard enables you to convert requirements to tests in a specified subject in the test plan tree. Coverage is automatically created between the requirements and their corresponding tests. You can convert selected requirements or all requirements in the requirements tree.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the <b>Requirements</b> module, right-click a requirement in the requirements tree and select <b>Convert to Tests</b> . To convert all requirements, right-click the root requirement folder in the requirements tree and select <b>Convert to Tests</b> .   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You must have the necessary permissions to create tests.</li> <li>▶ The following requirement types are set so that, by default, you cannot convert them to tests: Business, Folder, and Group.</li> </ul> <p>To enable you to convert, you must enable test coverage for these requirement types. For more details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</p> |
| <b>Wizard map</b>            | This wizard contains:<br>Choose an Automatic Conversion Method Page > Manual Changes to the Automatic Conversion Page > Choose the Destination Subject Path Page  |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "How to Create Requirements" on page 341          |
| <b>See also</b>       | "Requirements Specification Overview" on page 340 |

 **Choose an Automatic Conversion Method Page**

This wizard page enables you to choose an automatic conversion method. You can convert requirements to design steps, tests, or subjects.



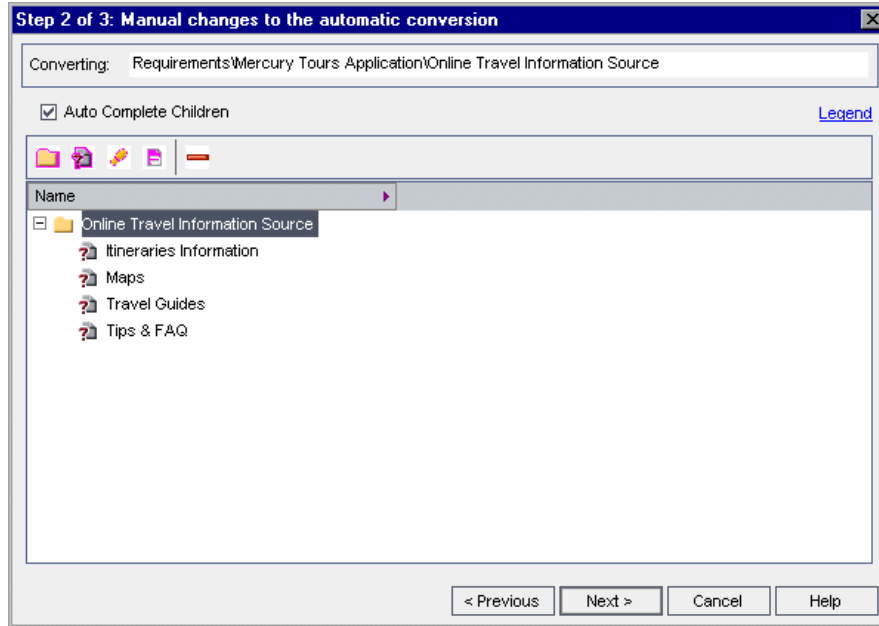
|                              |   |
|------------------------------|---|
| <b>Important information</b> | General information about this wizard is available here: "Convert to Tests Wizard" on page 379.   |
| <b>Wizard map</b>            | The Convert to Tests Wizard contains:<br><b>Choose an Automatic Conversion Method Page</b> ><br>Manual Changes to the Automatic Conversion Page ><br>Choose the Destination Subject Path Page |

User interface elements are described below:

| UI Elements (A-Z)  | Description   |
|--|---|
| <b>Cancel</b>  | <p>If you are canceling before starting the conversion process, the wizard closes.</p> <p>If you are canceling after starting the conversion process, Click the <b>Stop</b> button in the progress bar.</p> |
| <b>Convert all requirements to subjects</b>              | Converts all selected requirements to subjects in the Test Plan module.   |
| <b>Convert lowest child requirements to design steps</b> | Converts all lowest level child requirements to design steps, the next level up to tests, and all levels above to subjects.   |
| <b>Convert lowest child requirements to tests</b>        | Converts all lowest level child requirements to tests and all levels above to subjects.   |
| <b>Converting</b>  | The path of the selected requirements.  |
| <b>Next</b>  | Starts the conversion process. The results are displayed in the Manual Changes to the Automatic Conversion Page.  |






## Manual Changes to the Automatic Conversion Page

This wizard page enables you to manually set requirements to subjects in the test plan tree, tests, test steps, or step descriptions. You can also choose to exclude requirements from the conversion process.



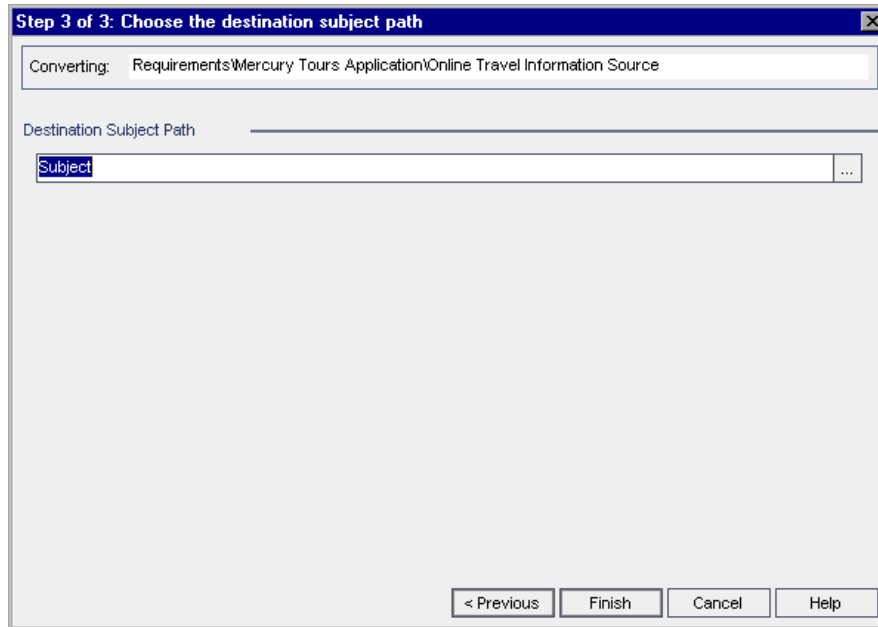
|                                     |  |
|-------------------------------------|--|
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ General information about this wizard is available here: "Convert to Tests Wizard" on page 379.</li> <li>▶ If you are converting a single requirement, the wizard skips this page.</li> </ul> |
| <p><b>Wizard map</b></p>            | <p>The Convert to Tests Wizard contains:</p> <p>Choose an Automatic Conversion Method Page &gt;<br/> <b>Manual Changes to the Automatic Conversion Page</b> &gt;<br/>         Choose the Destination Subject Path Page</p>             |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Convert to Subject.</b> Changes the selected item to a subject in the test plan tree. Children can then be either subjects or tests. Subject names must be unique.   |
|  | <b>Convert to Test.</b> Changes the selected item to a test in the test plan tree. Children are then converted to steps. Test names must be unique.   |
|  | <b>Convert to Step.</b> Changes the selected item to a step in the test plan tree. Children are then converted to step descriptions.  |
|  | <b>Convert to Description.</b> Changes the selected item to a step description in the test plan tree. Children are then converted to indented description text.   |
|  | <b>Exclude from Conversion.</b> Excludes the selected item from the test plan tree.   |
| <b>Auto Complete Children</b>   | Changes the level of the children of the selected parent. For example, if you change the level of a parent from a subject to a test, the wizard changes the level of all the children from tests to test steps. |
| <b>Converting</b>   | The path of the selected requirement.   |
| <b>Legend</b>   | Provides a legend for this wizard page.   |

## Choose the Destination Subject Path Page

This wizard page enables you to define the destination subject path in the test plan tree.



|                                     |  |
|-------------------------------------|--|
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ General information about this wizard is available here: "Convert to Tests Wizard" on page 379.</li> <li>▶ If you are converting a single requirement, the wizard skips this page.</li> </ul> |
| <p><b>Wizard map</b></p>            | <p>The Convert to Tests Wizard contains:</p> <p>Choose an Automatic Conversion Method Page &gt;<br/> <b>Manual Changes to the Automatic Conversion Page &gt;</b><br/>         Choose the Destination Subject Path Page</p>             |

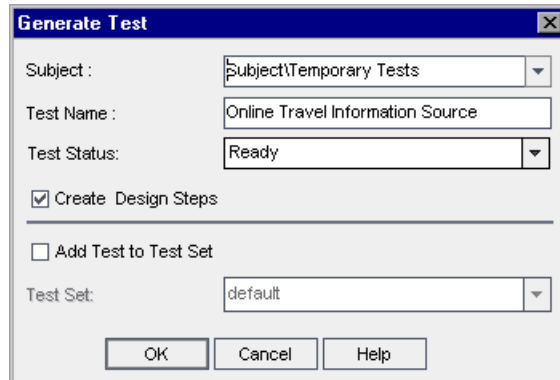


User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)               | Description   |
|---------------------------------|---|
| <b>Converting</b>               | The path of the selected requirements.  |
| <b>Destination Subject Path</b> | Sets the destination subject path in the Test Plan module.<br><b>Default value:</b> The subject folder and tests are placed in the Subject folder of the Test Plan module.  |
| <b>Finish</b>                   | Starts the conversion process. When the conversion process ends, click <b>OK</b> . The page displays errors generated while converting the requirements.<br><b>Note:</b> If you stop the conversion process, any requirements already converted are not deleted from the test plan tree. You must delete them manually. |

## Generate Test Dialog Box

This dialog box enables you to convert requirements to tests in specified subjects in the test plan tree. You can also specify whether or not to add the tests to specified test sets in the Test Lab module.



The screenshot shows the 'Generate Test' dialog box with the following configuration:

- Subject:** Subject\Temporary Tests
- Test Name:** Online Travel Information Source
- Test Status:** Ready
- Create Design Steps
- Add Test to Test Set
- Test Set:** default

Buttons at the bottom: OK, Cancel, Help.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the <b>Requirements</b> module, right-click a requirement and select <b>Generate Test</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ After converting requirements, coverage is automatically created between the requirements and their corresponding tests.</li> <li>▶ The following requirement types are set so that, by default, you cannot convert them to tests: Business, Folder, and Group.</li> </ul> <p>To enable you to convert, you must enable test coverage for these requirement types. For more details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</p> |
| <b>Relevant tasks</b>        | "How to Create Requirements" on page 341  |
| <b>See also</b>              | "Requirements Specification Overview" on page 340   |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| <b>UI Elements (A-Z)</b>    | <b>Description</b>  |
|-----------------------------|---|
| <b>Add Test to Test Set</b> | Adds the test to a test set in the Test Lab module.   |
| <b>Create Design Steps</b>  | Adds a test step for each child requirement.  |
| <b>Subject</b>              | The subject from your test plan tree.<br><b>Default value:</b> The test is placed in the <b>Temporary Tests</b> folder in the Test Plan module. |
| <b>Test Name</b>            | The name of the test.<br><b>Default value:</b> The same name as the requirement.  |
| <b>Test Set</b>             | The name of the test set.   |
| <b>Test Status</b>          | The planning status for the test.<br><b>Default value:</b> <b>Design</b> .  |

# 15

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## Requirements Traceability

This chapter includes:

### Concepts

- ▶ Requirements Traceability Overview on page 388

### Tasks

- ▶ How to Trace Requirements on page 389

### Reference

- ▶ Requirements Traceability User Interface on page 395

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## Concepts

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### Requirements Traceability Overview

Requirements traceability defines a relationship between two or more requirements. When analyzing the impact of a change proposed in a specific requirement, the traceability links indicate the other requirements that the change might affect.

You can add traceability links to and from a selected requirement.

- ▶ **Trace from** links indicate requirements that affect a selected requirement.
- ▶ **Trace to** links indicate requirements that are affected by a selected requirement.

When a requirement changes, HP Application Lifecycle Management (ALM) can alert the affected requirements. For more details on alerts, see "Alerts Overview" on page 100.

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**Quality Center Starter Edition:** Requirements traceability is not available.

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For task details, see "How to Trace Requirements" on page 389.

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## Tasks

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### How to Trace Requirements

This task describes how to define traceability links between requirements, and how to view the associations and dependencies that exist between the requirements.

To learn more about tracing requirements, see "Requirements Traceability Overview" on page 388.

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**Tip:** For a use-case scenario related to this task, see "How to Trace Requirements - Use-Case Scenario" on page 390.

---

This task includes the following steps:

- "Define traceability links" on page 389
- "View traceability impact" on page 390
- "View traceability impact" on page 390

#### 1 Define traceability links

- a** In the Requirements module, select the **Requirement Details** view. Click the **Requirements Traceability** tab.
- b** To define a traceability link, select a requirement from the requirements tree.
- c** In the **Relationships** tab, click the **Add Requirement Traceability** button to display the requirements tree in the right pane. Add traceability links. For user interface details, see "Relationships Tab" on page 395.

## 2 View traceability impact

Click the **Impact Analysis** tab. Review the associations and dependencies that exist between the requirements. For user interface details, see "Impact Analysis Tab" on page 400.

## 3 Generate a traceability matrix - Optional

You can generate a traceability matrix to determine the completeness of the relationships between your requirements.

In the Requirements module, select **View > Traceability Matrix**. Configure the traceability matrix. For task details, see "How to Use the Traceability Matrix" on page 405.



## How to Trace Requirements - Use-Case Scenario

This use-case scenario provides an example of tracing requirements in ALM.

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**Note:** For a task related to this scenario, see "How to Trace Requirements" on page 389.

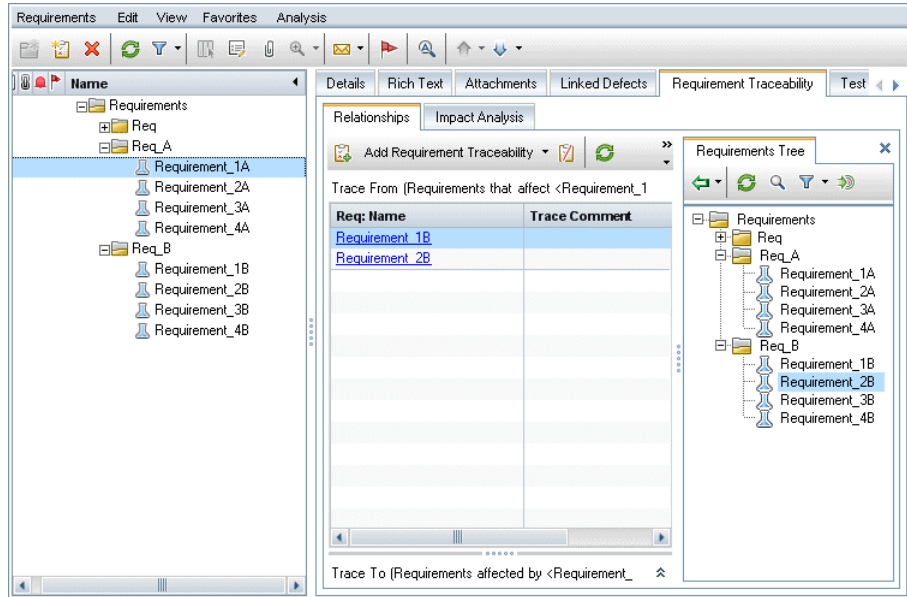
---

This scenario includes the following steps:

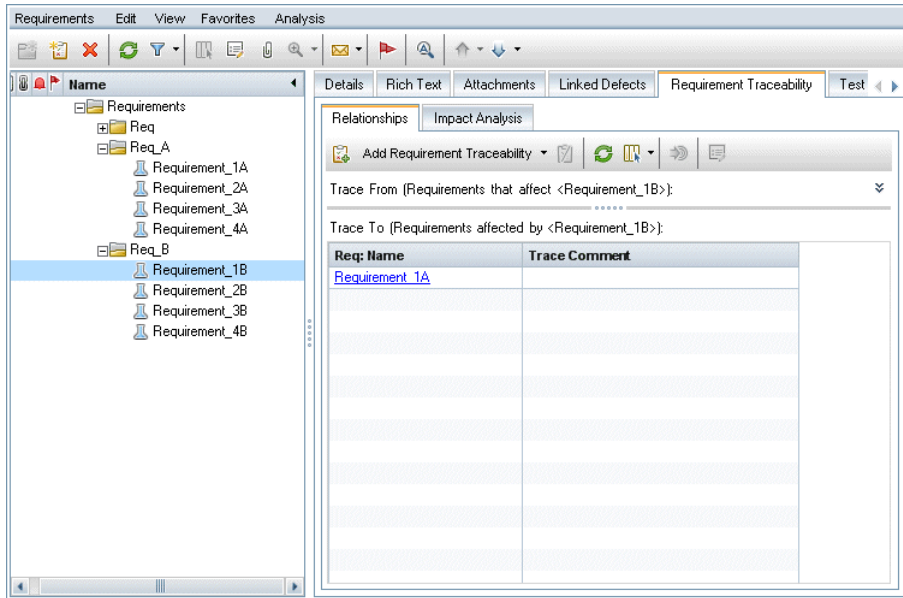
- "Define traceability links" on page 391
- "View Traceability Impact" on page 393

## 1 Define traceability links

In the Requirements module, select the **Requirement Details** view. Click the **Requirements Traceability** tab. To implement a relationship between the requirements, suppose Requirement\_1B and Requirement\_2B affect Requirement\_1A. You select Requirement\_1A in the requirements tree. In the Relationships tab, you add Requirement\_1B and Requirement\_2B to the Trace From grid.



If you select Requirement\_1B in the requirements tree, the Trace To grid indicates that Requirement\_1B is traced to Requirement\_1A.

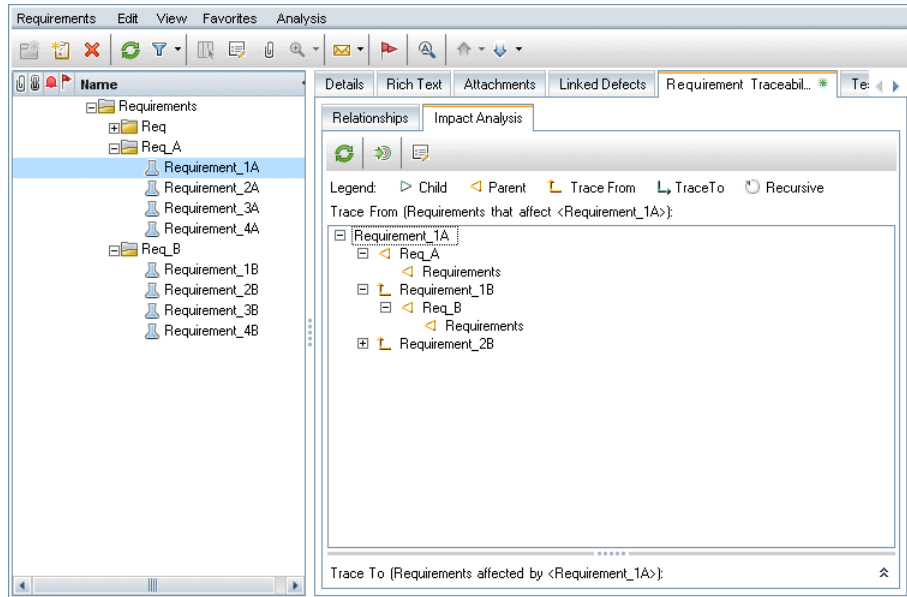


If you select Requirement\_2B in the requirements tree, the Trace To grid indicates that Requirement\_2B is traced to Requirement\_1A.

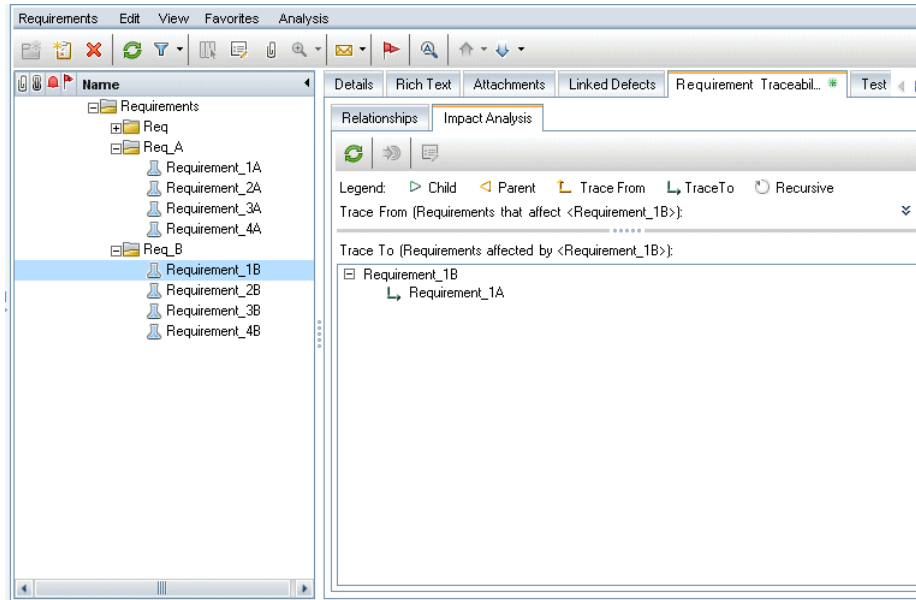


## 2 View Traceability Impact

In the following Impact Analysis tab, the Trace From tree indicates that Requirement\_1A is traced from Requirement\_1B and Requirement\_2B. Req\_A is the parent requirement of Requirement\_1A. Req\_B is the parent requirement of Requirement\_1B.



The Trace To tree displays requirements that are affected by a selected requirement. For example, the following Trace To tree indicates that Requirement\_1B is traced to Requirement\_1A.



## Reference

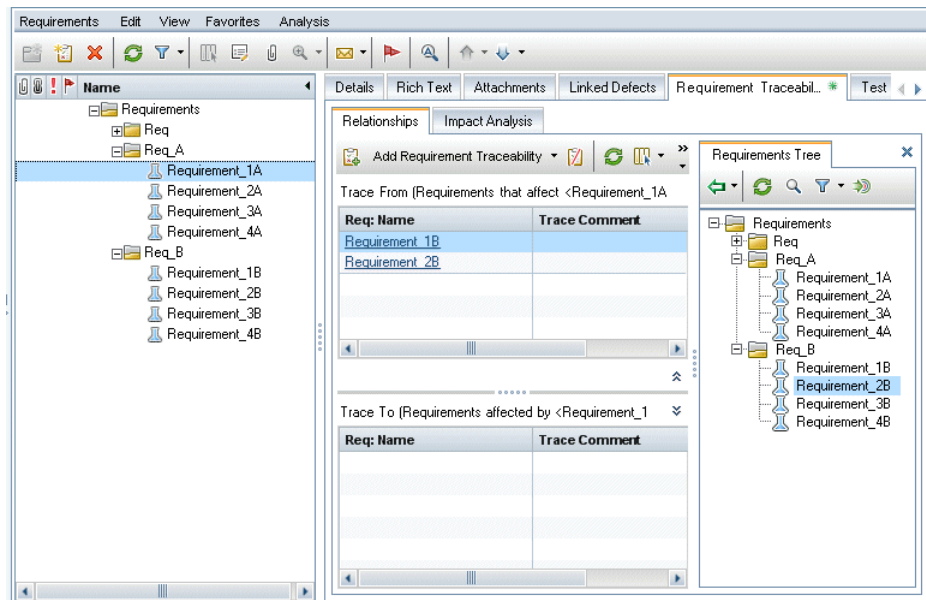
### Requirements Traceability User Interface

This section includes:

- ▶ Relationships Tab on page 395
- ▶ Impact Analysis Tab on page 400

### Relationships Tab




This tab enables you to define relationships between requirements. It helps you understand associations and dependencies that exist between the requirements by displaying them in a grid structure.







|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Requirements module, select <b>View &gt; Requirement Details</b> . Click the <b>Requirements Traceability</b> tab.   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ The Relationships tab shows the affected requirements excluding their child requirements.</li> <li>▶ <b>Quality Center Starter Edition:</b> Requirements traceability is not available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Trace Requirements" on page 389   |
| <b>See also</b>              | "Requirements Traceability Overview" on page 388<br>"Impact Analysis Tab" on page 400   |

## Trace From/Trace To Grid

User interface elements are described below:

| UI Elements (A-Z)  | Description   |
|--|---|
|  Add Requirement Traceability ▾ | <p>Defines traceability relationships between the requirements.</p> <p>Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Add Requirement Traceability</b> or <b>From Requirements Tree</b>. Displays the requirements tree in the right pane, enabling you to add traceability links from the requirements tree to the selected requirement. For more details, see "Requirements Tree Pane" on page 398.</li> <li>▶ <b>By ID (Trace From)</b>. Opens the Trace Existing Requirement dialog box, enabling you to add a traceability link to the Trace From grid by typing a requirement ID.</li> <li>▶ <b>By ID (Trace To)</b>. Opens the Trace Existing Requirement dialog box, enabling you to add a traceability link to the Trace To grid by typing a requirement ID.</li> </ul> |
|                                 | <p><b>Remove from Traceability.</b> Removes a traceability relationship link from the Trace From or Trace To grid.</p> <p><b>Tip:</b> Press the CTRL key to select multiple links.</p>  |
|                               | <p><b>Refresh All.</b> Refreshes the grids.</p>   |







| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Select Columns.</b> Sets column appearance and order.</p> <p>Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Select Column (Trace From).</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the Trace From grid and their order.</li> <li>▶ <b>Select Column (Trace To).</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the Trace To grid and their order.</li> </ul> <p>For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p> |
|  | <p><b>Go To Requirement.</b> Displays a traced requirement in the requirements tree.</p>   |
|  | <p><b>Requirement Details.</b> Opens the Requirement Details dialog box, enabling you to display the details of the selected requirement. For more details, see "Requirement Details Page" on page 375.</p>  |
|  | <p><b>Show/Hide.</b> Shows/hides the Trace From or the Trace To pane.</p>  |
| <requirement fields>  | <p>For details on the requirement fields available from the grids, see "Requirements Module Fields" on page 368.</p>   |
| <b>Trace From pane</b>  | <p>Displays requirements that affect a selected requirement.</p>   |
| <b>Trace To pane</b>  | <p>Displays requirements that are affected by a selected requirement.</p>  |

### Requirements Tree Pane

This pane enables you to add traceability links from the requirements tree to the selected requirement.

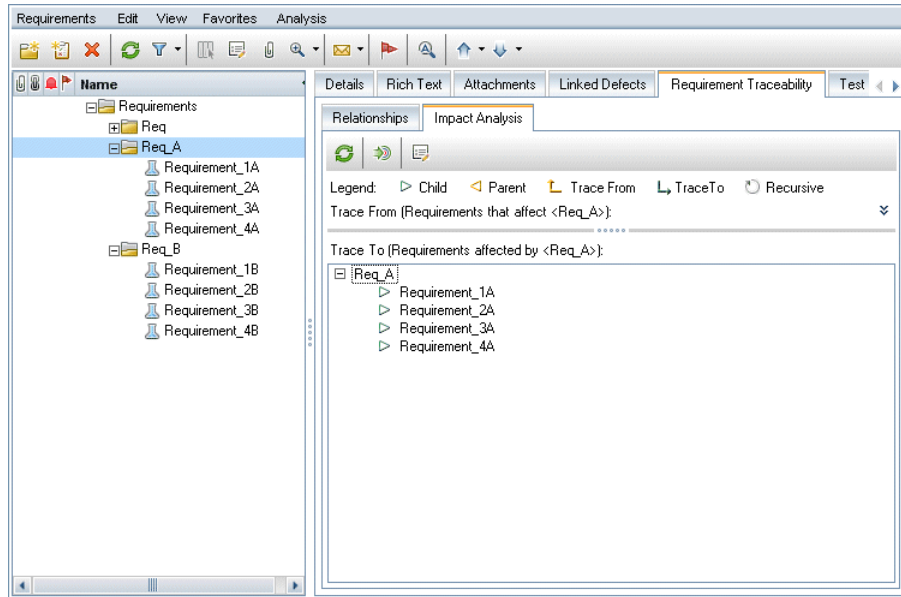
|                  |  |
|------------------|--|
| <b>To access</b> | <p>In the Requirements module, select the <b>Requirement Details</b> view. Click the <b>Requirements Traceability</b> tab. Click the <b>Add Requirement Traceability</b> button.</p> |
|------------------|--|

User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|    | <p><b>Add to Traceability.</b> Adds traceability links from the requirements tree.</p> <p>Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Add to Traceability (Trace From).</b> Adds selected requirements to the Trace From grid.</li> <li>▶ <b>Add to Traceability (Trace To).</b> Adds selected requirements to the Trace To grid.</li> </ul> <p><b>Tip:</b> You can also add traceability links by dragging a requirement in the tree to the appropriate grid.</p> |
|    | <p><b>Refresh All.</b> Refreshes the requirements tree.</p>  |
|    | <p><b>Set Filter/Sort.</b> Filters and sorts the requirements in the requirements tree. For more details, see "Filter Dialog Box" on page 64.</p>  |
|    | <p><b>Find.</b> Searches for a specific requirement in the tree.</p> <p>Type the name (or part of the name) of the requirement in the <b>Find</b> box and click <b>Find</b>. If the search is successful, the requirement is highlighted in the tree.</p>  |
|  | <p><b>Go to Requirement by ID.</b> Opens the Go To Requirement dialog box, enabling you to find a specific requirement by <b>ReqID</b>.</p> <p><b>Note:</b> You can only go to requirements that are in the current filter.</p>  |
|  | <p><b>Close.</b> Hides the requirements tree in the right pane.</p>  |

## Impact Analysis Tab





This tab enables you to analyze the impact of requirement changes by reviewing the relationships. It helps you understand associations and dependencies that exist between the requirements by displaying them in a hierarchical tree structure.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Requirements module, select <b>View &gt; Requirement Details</b> . Click the <b>Requirements Traceability</b> tab and then the <b>Impact Analysis</b> tab.   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ The Impact Analysis tab shows the affected parent and child requirements.</li> <li>▶ <b>Quality Center Starter Edition:</b> Requirements traceability is not available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Trace Requirements" on page 389   |
| <b>See also</b>              | "Requirements Traceability Overview" on page 388<br>"Relationships Tab" on page 395   |



User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Refresh All.</b> Refreshes the tree.  |
|  | <b>Go To Requirement.</b> Displays a traced requirement in the requirements tree.  |
|  | <b>Requirement Details.</b> Opens the Requirement Details dialog box, enabling you to display the details of the selected requirement. For more details, see "Requirement Details Page" on page 375. |
|  | <b>Show/Hide.</b> Shows/hides the Trace From or the Trace To pane.   |
| <b>Legend</b>   | Describes the relationships between the requirements. For more details on the traceability icons, see "Requirements Module Icons" on page 365.   |
| <b>Trace From pane</b>  | Displays requirements that affect a selected requirement.  |
| <b>Trace To pane</b>  | Displays requirements that are affected by a selected requirement.   |



# 16

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## Traceability Matrix

This chapter includes:

### Concepts

- ▶ Traceability Matrix Overview on page 404

### Tasks

- ▶ How to Use the Traceability Matrix on page 405

### Reference

- ▶ Traceability Matrix User Interface on page 409

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## Concepts

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### Traceability Matrix Overview

The traceability matrix enables you to determine the extent of relationships between requirements and other requirements, and between requirements and tests. It helps you verify that all requirements are met, and identify changes to the scope of your requirements when they occur.

The traceability matrix lists source requirements, and their associated requirements and tests. The total number of relationships is listed for each source requirement. A low value may imply that the source requirement is not associated with enough requirements or tests. A high value may imply that the source requirement is too complex and can perhaps be simplified. A zero value indicates that no relationship exists.

For task details, see "How to Use the Traceability Matrix" on page 405.

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## Tasks

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### How to Use the Traceability Matrix

This task describes how to configure and display the traceability matrix.

To learn more about the traceability matrix, see "Traceability Matrix Overview" on page 404.

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#### Note:

- **Use-case:** For a use-case scenario related to this task, see "How to Use the Traceability Matrix - Use-Case Scenario" on page 406.
- **Product Feature Movie:** To view a movie that demonstrates how to create a traceability matrix, choose **Help > Product Feature Movies** in the ALM main window and select **Traceability Matrix**.

---

This task includes the following steps:

- "Prerequisites" on page 405
- "Configure the traceability matrix" on page 406
- "View the traceability matrix" on page 406

#### 1 Prerequisites

- a Define requirement traceability links.** In the Requirements module, select **View > Requirement Details**. Click the **Requirements Traceability** tab. Define traceability links between requirements. For task details on how to trace requirements, see "How to Trace Requirements" on page 389.

- b Define requirement and test coverage.** Create coverage by linking requirements to tests. You can create coverage from the Requirements or the Test Plan module. For task details, see "How to Create Coverage" on page 554.

## 2 Configure the traceability matrix

- a** In the Requirements module, select **View > Traceability Matrix**.
- b** Click the **Configure Traceability Matrix** button. The Configure Traceability Matrix wizard opens. Define the matrix. For user interface details, see "Configure Traceability Matrix Wizard" on page 414.

## 3 View the traceability matrix

In the Traceability Matrix view, analyze and review the traceability links between requirements, and the links between requirements and tests. For user interface details, see "Traceability Matrix View" on page 410.



### **How to Use the Traceability Matrix - Use-Case Scenario**

This use-case scenario provides an example of how to configure the traceability matrix and how to view the results. In this scenario, you will identify requirements that have an impact on the specified source requirements.

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**Note:** For a task related to this scenario, see "How to Use the Traceability Matrix" on page 405.

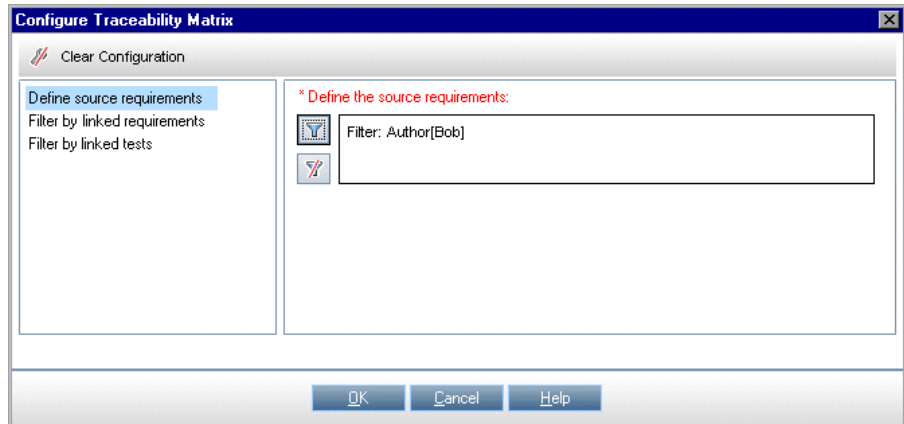
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This scenario includes the following steps:

- "Define the source requirements" on page 407
- "Define the linked requirements" on page 407
- "View the traceability matrix" on page 408

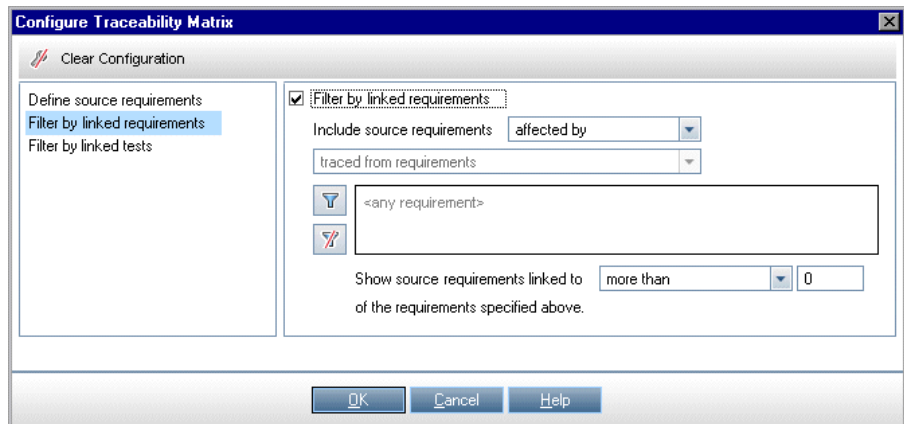
## 1 Define the source requirements

In the Configure Traceability Matrix, limit the matrix to requirements authored by a specific user, for example **Bob**.



## 2 Define the linked requirements

In **Filter by linked requirements**, identify the requirements that have an impact on the defined source requirements.



### 3 View the traceability matrix

The traceability matrix grid displays the source requirements and number of traced from requirements. For example, the req1 requirement is linked to two traced from requirements.

The Traced From Requirements tab displays the requirements that have an impact on a specified source requirement. For example, req2 and req3 have an impact on req1.

The screenshot shows a software interface with a menu bar (Requirements, Edit, View, Favorites, Analysis) and a toolbar with buttons for 'Configure Traceability Matrix', 'Show Full Path', and 'Generate Traceability Matrix'. Below the toolbar, a filter is set to 'Author[bob]' and 'Link Filters: Number of traced from requirements[>0]'. The total number of traced from requirements is 4.

| Req ID | Name  | Number of traced from requirements | Author |
|--------|-------|------------------------------------|--------|
| 1      | req1  | 2                                  | bob    |
| 2      | req2  | 1                                  | bob    |
| 4      | req4  | 1                                  | bob    |
| 7      | req3a | 3                                  | bob    |

The 'Traced From Requirements' tab is active, showing a list of requirements that impact the selected source requirement (req1):

| Req ID | Name |
|--------|------|
| 2      | req2 |
| 3      | req3 |



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## Reference

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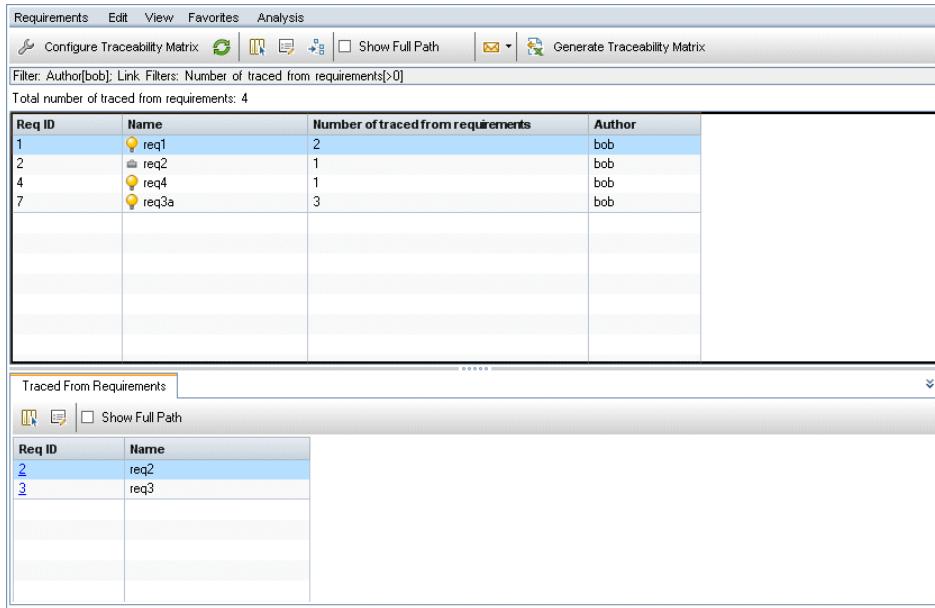
### **Traceability Matrix User Interface**

This section includes:

- ▶ Traceability Matrix View on page 410
- ▶ Configure Traceability Matrix Wizard on page 414

## Traceability Matrix View

This view enables you to analyze the traceability matrix.



| Req ID | Name  | Number of traced from requirements | Author |
|--------|-------|------------------------------------|--------|
| 1      | req1  | 2                                  | bob    |
| 2      | req2  | 1                                  | bob    |
| 4      | req4  | 1                                  | bob    |
| 7      | req3a | 3                                  | bob    |







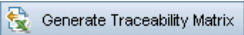

  

| Req ID | Name |
|--------|------|
| 2      | req2 |
| 3      | req3 |

|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Requirements module, select <b>View &gt; Traceability Matrix</b> .                        |
| <b>Important information</b> | The data displayed in the traceability matrix grid is not editable.                              |
| <b>Relevant tasks</b>        | "How to Use the Traceability Matrix" on page 405   |
| <b>See also</b>              | "Traceability Matrix Overview" on page 404<br>"Configure Traceability Matrix Wizard" on page 414 |

## Traceability Matrix Grid

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|    | Opens the Configure Traceability Matrix wizard, enabling you to define the matrix. For more details, see "Configure Traceability Matrix Wizard" on page 414.  |
|    | <b>Refresh All.</b> Refreshes the matrix so that it displays the most up-to-date data.  |
|    | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the matrix and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.        |
|    | <b>Requirement Details.</b> Opens the Requirement Details dialog box, enabling you to display the details of the selected requirement. For more details, see "Requirement Details Page" on page 375.                            |
|    | <b>Go To Requirement in Requirements Tree.</b> Goes to the Requirements Tree view and highlights the selected requirement.  |
|   | <b>Send E-mail.</b> Opens the Send E-mail dialog box, enabling you to send requirement email to recipients selected from a list or to the author of the requirement. For more details, see "Send E-mail Dialog Box" on page 87. |
|  | <b>Generate Traceability Matrix.</b> Opens the Generate Traceability Matrix dialog box, enabling you to save the Traceability Matrix view to a Microsoft Excel worksheet.   |
|  | <b>Show/Hide.</b> Shows/hides the lower pane of the Traceability Matrix view.   |
| <grid fields>   | For details on the requirement fields available from the grid, see "Requirements Module Fields" on page 368.  |
| Name  | The requirement name.   |



| UI Elements (A-Z)                         | Description   |
|---|---|
| <b>Number of linked tests</b>             | The number of tests associated with a selected requirement.             |
| <b>Number of traced from requirements</b> | The number of requirements that affect a selected requirement.          |
| <b>Number of traced to requirements</b>   | The number of requirements that are affected by a selected requirement. |
| <b>Show Full Path</b>                     | Displays the path of the requirements in the requirements tree.         |

### Traced From Requirements Tab

This tab displays requirements that affect a selected requirement.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | This tab is available when the following options are set in the Filter By Linked Requirements page of the Configure Traceability Matrix wizard: <b>Include source requirements affected by</b> or <b>Include source requirements not affected by</b> . For more details on the Filter By Linked Requirements page, see "Configure Traceability Matrix Wizard" on page 414. |
|------------------------------|--|

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the matrix and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |
|  | <b>Requirement Details.</b> Opens the Requirement Details dialog box, enabling you to display the details of the selected requirement. For more details, see "Requirement Details Page" on page 375.                     |



| UI Elements (A-Z) | Description  |
|-------------------|--|
| <grid fields>     | For details on the requirement fields available from the grid, see "Requirements Module Fields" on page 368. |
| Show Full Path    | Displays the path of the requirements in the requirements tree.  |

### Traced To Requirements Tab

This tab displays requirements that are affected by a selected requirement.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | This tab is available when the following options are set in the Filter By Linked Requirements page of the Configure Traceability Matrix wizard: <b>Include source requirements affecting</b> or <b>Include source requirements not affecting</b> . For more details on the Filter By Linked Requirements page, see "Configure Traceability Matrix Wizard" on page 414. |
|------------------------------|--|

User interface elements are described below (unlabeled elements are shown in angle brackets):



| UI Elements (A-Z)   | Description  |
|---|--|
|   | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the matrix and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |
|  | <b>Requirement Details.</b> Opens the Requirement Details dialog box, enabling you to display the details of the selected requirement. For more details, see "Requirement Details Page" on page 375.                     |
| <grid fields>   | For details on the requirement fields available from the grid, see "Requirements Module Fields" on page 368.   |
| Show Full Path  | Displays the path of the requirements in the requirements tree.  |

## Linked Tests Tab

This tab displays tests that are linked to a selected requirement.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | This tab is available when the following options are set in the Filter By Linked Tests page of the Configure Traceability Matrix wizard: <b>Include source requirements linked to</b> or <b>Include source requirements not linked to</b> . For more details on the Filter By Linked Tests page, see "Configure Traceability Matrix Wizard" on page 414. |
|------------------------------|--|

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the matrix and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |
|  | <b>Test Details.</b> Opens the Test Details dialog box, enabling you to display the details of the selected test. For more details, see "Test Details Dialog Box" on page 540.   |
| <grid fields>   | For details on the test fields available from the grid, see "Test Plan Module Fields" on page 537.   |
| <b>Show Full Path</b>   | Displays the path of the tests in the test plan tree.  |

## Configure Traceability Matrix Wizard

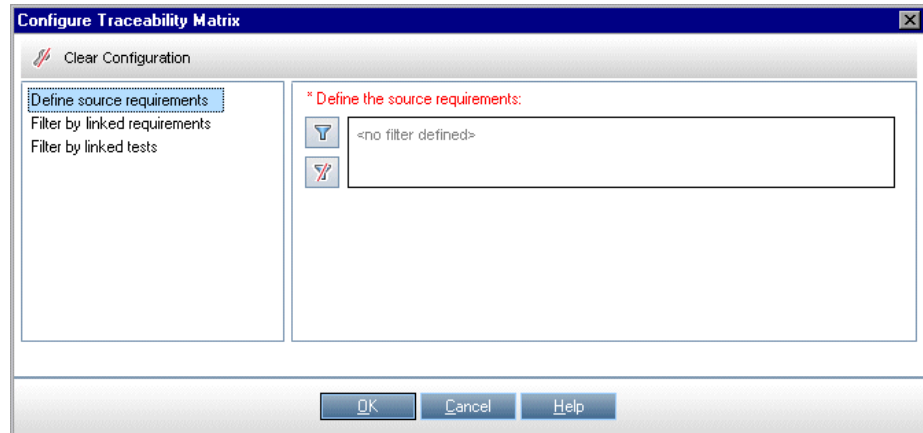
This wizard enables you configure the traceability matrix.

|                   |  |
|-------------------|--|
| <b>To access</b>  | In the Requirements module, select <b>View &gt; Traceability Matrix</b> . Click the <b>Configure Traceability Matrix</b> button. |
| <b>Wizard map</b> | The wizard contains:<br>Define Source Requirements Page > Filter By Linked Requirements Page > Filter By Linked Tests Page       |

|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | "How to Use the Traceability Matrix" on page 405                                     |
| <b>See also</b>       | "Traceability Matrix Overview" on page 404<br>"Traceability Matrix View" on page 410 |

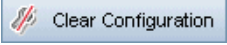


## **Define Source Requirements Page**

This wizard page enables you to define the source requirements.



|                              |   |
|------------------------------|---|
| <b>Important information</b> | General information about this wizard is available here:<br>"Configure Traceability Matrix Wizard" on page 414.   |
| <b>Wizard map</b>            | The Configure Traceability Matrix Wizard contains:<br><b>Define Source Requirements Page</b> > Filter By Linked Requirements Page > Filter By Linked Tests Page |

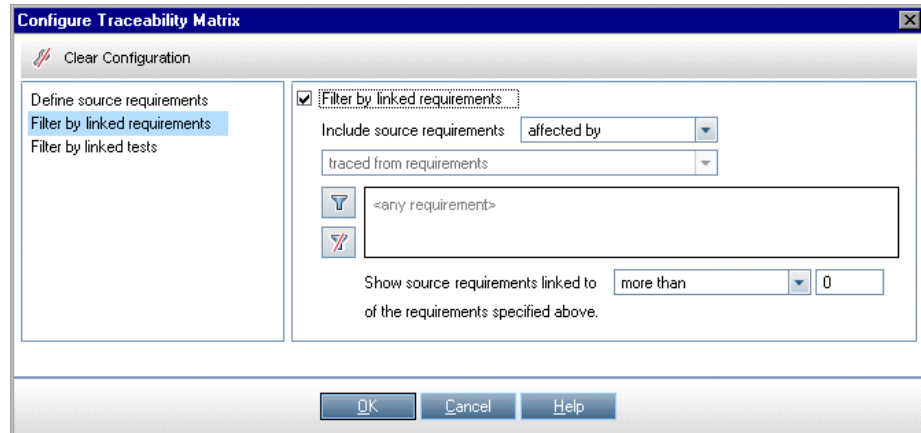
User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|  | Clears the defined configuration.  |
|  | <p><b>Set Filter/Sort.</b> Filters and sorts the source requirements in the Requirements module. For more details on filtering, see "Filter Dialog Box" on page 64.</p> <p><b>Note:</b> Filter settings are not applied to child requirements.</p> |
|  | <p><b>Clear Filter.</b> Clears the defined filter.</p>   |






## Filter By Linked Requirements Page

This wizard page enables you to define the requirements linked to and from the source requirements.



|                              |   |
|------------------------------|---|
| <b>Important information</b> | General information about this wizard is available here: "Configure Traceability Matrix Wizard" on page 414.  |
| <b>Wizard map</b>            | The Configure Traceability Matrix Wizard contains:<br>Define Source Requirements Page > <b>Filter By Linked Requirements Page</b> > Filter By Linked Tests Page |

User interface elements are described below:

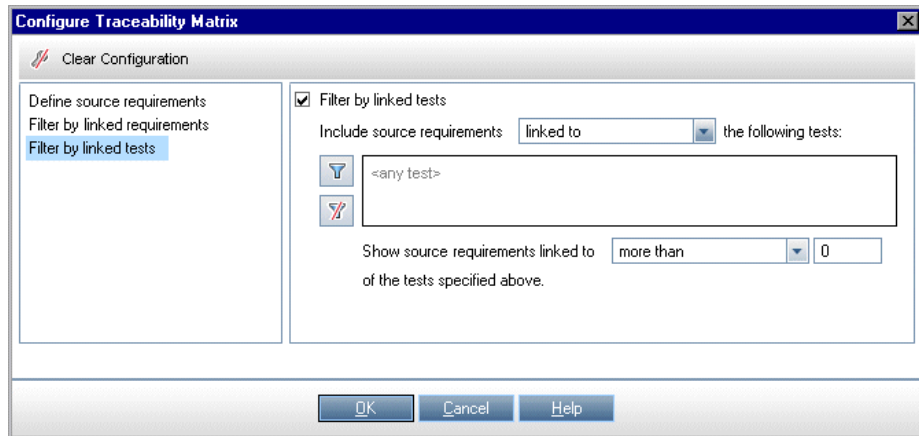
| UI Elements   | Description   |
|---|---|
|  Clear Configuration | Clears the defined configuration.   |
|                      | <b>Set Filter/Sort.</b> Filters and sorts the linked requirements. For more details on filtering, see "Filter Dialog Box" on page 64. |
|                      | <b>Clear Filter.</b> Clears the defined filter.   |

| UI Elements   | Description   |
|---|---|
| <b>Filter by linked requirements</b>  | Filters the source requirements by linked requirements.   |
| <b>Include source requirements affected by traced from requirements</b>                     | Shows the source requirements that are impacted by the selected requirements.                               |
| <b>Include source requirements not affected by traced from requirements</b>                 | Shows the source requirements that are not impacted by the selected requirements.                           |
| <b>Include source requirements affecting direct children and traced to requirements</b>     | Shows the source requirements that impact their child requirements and their traced to requirements.        |
| <b>Include source requirements affecting direct children</b>                                | Shows the source requirements that impact their child requirements.   |
| <b>Include source requirements affecting traced to requirements</b>                         | Shows the source requirements that impact their traced to requirements.                                     |
| <b>Include source requirements not affecting direct children and traced to requirements</b> | Shows the source requirements that do not impact their child requirements and their traced to requirements. |
| <b>Include source requirements not affecting direct children</b>                            | Shows the source requirements that do not impact their child requirements.                                  |
| <b>Include source requirements not affecting traced to requirements</b>                     | Shows the source requirements that do not impact their traced to requirements.                              |

| UI Elements  | Description   |
|--|---|
| <b>Show source requirements linked to more than &lt;number&gt; of the requirements specified above</b> | Shows the source requirements that are linked to more than the specified number of requirements.<br><b>Note:</b> This option is available when one of the following options is selected: <b>Include source requirements affected by</b> or <b>Include source requirements affecting</b> . |
| <b>Show source requirements linked to less than &lt;number&gt; of the requirements specified above</b> | Shows the source requirements that are linked to less than the specified number of requirements.<br><b>Note:</b> This option is available when one of the following options is selected: <b>Include source requirements affected by</b> or <b>Include source requirements affecting</b> . |




## Filter By Linked Tests Page

This wizard page enables you to define the associated tests.



|                              |   |
|------------------------------|---|
| <b>Important information</b> | General information about this wizard is available here: Configure Traceability Matrix Wizard.  |
| <b>Wizard map</b>            | The Configure Traceability Matrix Wizard contains:<br>Define Source Requirements Page > Filter By Linked Requirements Page > <b>Filter By Linked Tests Page</b> |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements   | Description  |
|---|--|
|  | Clears the defined configuration.  |
|  | <b>Set Filter/Sort.</b> Filters and sorts the linked tests. For more details on filtering, see "Filter Dialog Box" on page 64. |
|  | <b>Clear Filter.</b> Clears the defined filter.  |
| <b>Filter by linked tests</b>   | Filters the source requirements by linked tests.   |

| UI Elements   | Description   |
|---|---|
| <b>Include source requirements linked to the following tests</b>                                | Shows the source requirements that are linked to the specified tests.   |
| <b>Include source requirements not linked to the following tests</b>                            | Shows the source requirements that are not linked to the specified tests.   |
| <b>Show source requirements linked to less than &lt;number&gt; of the tests specified above</b> | Shows the source requirements that are linked to less than the specified number of tests.<br><b>Note:</b> This option is available when the <b>Include source requirements linked to the following tests</b> is selected. |
| <b>Show source requirements linked to more than &lt;number&gt; of the tests specified above</b> | Shows the source requirements that are linked to more than the specified number of tests.<br><b>Note:</b> This option is available when the <b>Include source requirements linked to the following tests</b> is selected. |



# 17

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## Risk-Based Quality Management

This chapter includes:

### Concepts

- ▶ Risk-Based Quality Management Overview on page 424

### Tasks

- ▶ How to Assess Risk on page 426

### Reference

- ▶ Risk-Based Quality Management User Interface on page 433

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## Concepts

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### Risk-Based Quality Management Overview

When planning how to test your requirements, you generally do not have unlimited resources available, and are not able to fully test every requirement. You must make compromises and only partially test requirements that have low criticality to the business, or those that have only a minor risk associated with their implementation. The risk-based quality management feature enables you to calculate at which level to test each requirement, based on the nature of the requirement and the resources you have available. You can then plan your testing process based on these recommendations.

Each requirement type with risk-based quality management enabled can support either risk analysis which is referred to as an **analysis requirement**, or an individual risk assessment which is referred to as an **assessment requirement**.

- ▶ An **analysis requirement** is a requirement belonging to a type that represents higher levels in the requirements tree hierarchy, such as the **Folder** type. You perform risk analysis on an analysis requirement based on the assessment requirements under it in the requirements tree.

The risk results of multiple assessment requirements are aggregated to give an overall risk analysis which can then be used to determine testing effort and test strategy.

- ▶ An **assessment requirement** is a requirement belonging to a type that represents requirements that are children of analysis requirements and at a lower level in the requirements tree hierarchy. Assessment requirements under a particular analysis requirement form the basis for risk analysis on that analysis requirement.

For each assessment requirement under the analysis requirement, you can assign or calculate the **Risk** and **Functional Complexity**.



Risk is composed of its **Business Criticality** and **Failure Probability**. Business Criticality measures how crucial a requirement is for the business. Failure Probability indicates how likely a test based on the requirement is to fail.

Functional Complexity indicates the complexity of the requirement's implementation.

You can enable each requirement type for risk-based quality management. For more information, see the *HP Application Lifecycle Management Administrator Guide*.

You can customize default settings for risk-based quality management. For more information, see the *HP Application Lifecycle Management Administrator Guide*.

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**Quality Center Starter Edition:** Risk-based quality management is not available.

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For task details, see "How to Assess Risk" on page 426.

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## Tasks

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### **How to Assess Risk**

This task describes how to assess risk in ALM.

To learn more about assessing risk, see "Risk-Based Quality Management Overview" on page 424.

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**Note:**

- ▶ **Use-case:** For a use-case scenario related to this task, see "How to Assess Risk - Use-Case Scenario" on page 429.
  - ▶ **Product Feature Movie:** To view a movie that demonstrates the risk-based quality management options, choose **Help > Product Feature Movies** in the ALM main window and select **Risk-Based Quality Management**.
- 

This task includes the following steps:

- ▶ "Assess requirements" on page 427
- ▶ "Define testing policy settings" on page 427
- ▶ "Finalize the testing policy" on page 428
- ▶ "Analyze the testing strategy" on page 428

## 1 Assess requirements

- a Display the Risk Assessment tab.** In the Requirements module, choose **View > Requirement Details**. In the requirements tree, under an analysis requirement, select an assessment requirement. Click the **Risk Assessment** tab. For user interface details, see "Risk Assessment Tab" on page 433.
- b Determine Risk and Functional Complexity.** Click the **Assessment Questions** tab. The following sub-tabs are displayed: **Business Criticality**, **Failure Probability**, and **Functional Complexity**. In each sub-tab, assign values to the set of criteria. For user interface details on the Assessment Questions tab, see "Risk Assessment Tab" on page 433.  
  
You can also ignore the values calculated on the basis of the values for the criteria, and use instead a custom value. To assign values directly to each category, click the **Assessment Results** tab. For user interface details on the Assessment Results tab, see "Risk Assessment Tab" on page 433.
- c** For each assessment requirement under the analysis requirement, assign or calculate the Risk and Functional Complexity.

## 2 Define testing policy settings

- a** In the requirements tree, select the analysis requirement. Click the **Risk Analysis** tab. For user interface details, see "Risk Analysis Tab" on page 439.
- b** Under **Analysis Constants**, define the initial settings for testing the analysis requirement and the assessment requirements under it. These settings include how much time to assign to a requirement of a specific Functional Complexity were you to test it fully and how long it would take you to perform partial or basic testing on a requirement. You also decide which level of testing you want to perform on requirements for each Risk and Functional Complexity.

For user interface details on the Analysis Constants pane, see "Risk Analysis Tab" on page 439.

### 3 Finalize the testing policy

- a **Calculate the Testing Policy.** In the Risk Analysis tab, click the **Analyze** button to calculate the Testing Level and Testing Time for each assessment requirement under the analysis requirement. The **Total required test time**, **Total allocated testing time**, and **Total required development time** are updated.

For user interface details on the Risk Analysis tab, see "Risk Analysis Tab" on page 439.

- b **Adjust the Testing Policy.** Under **Analysis Constants**, you can make adjustments to the testing policy to ensure that you have enough time to perform all the testing, and that no resources are wasted.

For user interface details on the Analysis Constants pane, see "Risk Analysis Tab" on page 439.

- c **Apply results for each assessment requirement.** Click the **Analysis and Apply to Children** button. The analysis is applied to all assessment requirements under the analysis requirement that match the current filter.

### 4 Analyze the testing strategy

- To generate a report detailing the testing strategy of the analysis requirement, in the Risk Analysis tab, click the **Report** button. The Generate Report dialog box opens. For user interface details, see "Generate Report Dialog Box" on page 445.
- To analyze the testing strategy for an assessment requirement, select an assessment requirement from the requirements tree, click the **Risk Assessment** tab. The results are displayed in the Assessment Results sub-tab. For user interface details, see "Risk Assessment Tab" on page 433.

## How to Assess Risk - Use-Case Scenario

This use-case scenario provides an example of assessing risk in ALM.

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**Note:** For a task related to this scenario, see "How to Assess Risk" on page 426.

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The following scenario uses a project based on an application for reserving flights and vacations. You want to plan the testing of the analysis requirement **Online Travel Information Source**, located under **Mercury Tours Application**.



You begin by assigning values to the Business Criticality criteria for the child assessment requirement **Itineraries Information**. As information on travel itineraries is for display purposes and does not involve calculation or validation, you assign the value **Display** to the criterion **Type of Process**. As incorrect information on travel itineraries could result in legal action, you assign the value **Legal** to the criterion **Impact of failure**.

You also assign the value **Very often** to the criterion **Frequency of use**, and the value **Many/High** to the criterion **Number/Significance of affected users**. ALM now calculates the Business Criticality of the requirement as **A - Critical**.

Assessment Status: **In Progress**  Exclude from Analysis

Assessment Results | Assessment Questions

Business Criticality | Failure Probability | Functional Complexity

Assign values to the following criteria to assess the Business Criticality of this requirement:

| Criteria                              | Value      |
|---------------------------------------|------------|
| Type of process                       | Display    |
| Impact of failure                     | Legal      |
| Frequency of use                      | Very often |
| Number/Significance of affected users | Many/ High |

Description of Criterion: "Type of process"

The type of process represented by the requirement.  
 This criterion has the following possible values:  
**Calculation/ Validation** - The feature represented by the requirement is an important calculation or validation.  
**Data Change** - The feature represented by the requirement modifies application data.  
**Display** - The feature represented by the requirement modifies the application display.

Calculated Business Criticality : **A-Critical**

Similarly, you determine the Failure Probability by assigning values to its criteria. ALM calculates the Failure Probability as **2 - Medium**. Next, you determine the Functional Complexity by assigning values to its criteria. ALM calculates the Functional Complexity as **1 - High**. The overall Risk Category is **A - High** and the overall Functional Complexity is **1 - High**.

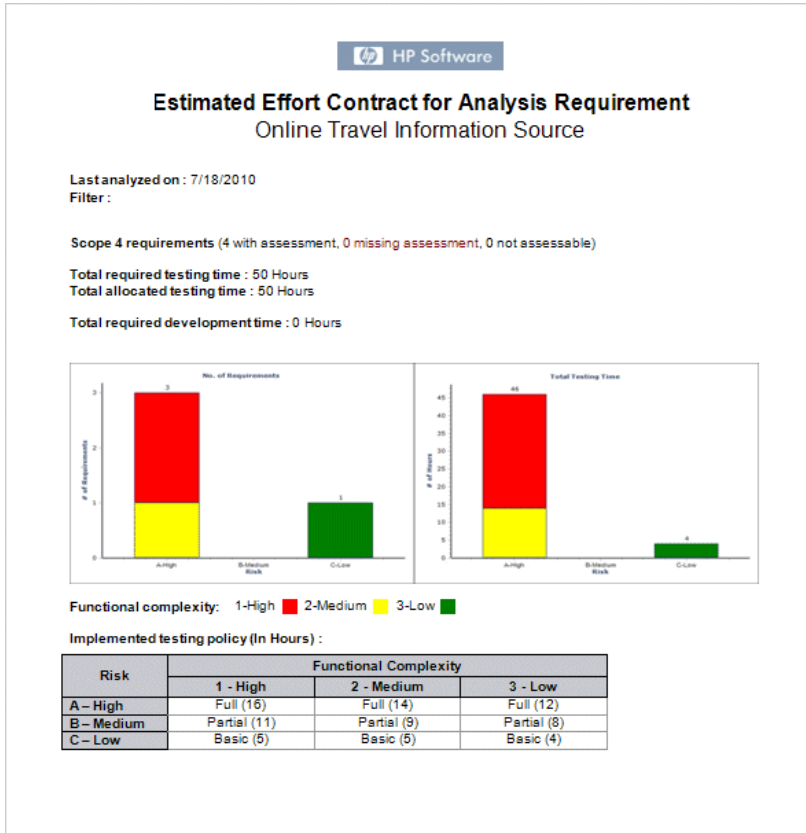
You then proceed to determine the Risk and Functional Complexity for each of the assessment requirements **Maps, Travel Guides, and Tips & FAQ**.

You are now ready to perform a risk analysis on the requirement **Online Travel Information Source**. You decide to use ALM's default testing policy and perform a risk analysis based on this policy. ALM calculates that you need 55 hours to test the requirement. However, you only have 50 hours available, which is 90% of the required resources, so need to modify the testing policy.



You change the Testing Time for requirements with Functional Complexity set to 1-High from 18 hours to 16 hours and requirements with Functional Complexity set to 2-Medium from 15 hours to 14 hours. The time needed to test the requirement is now estimated at 50 hours, which is the amount of time you have available, so you decide to accept this modified testing policy.

You now have sufficient resources to test the requirement, so you create a risk analysis report to summarize the testing strategy recommended by ALM, and give it to your organization to use as a basis for their test plan.





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## Reference

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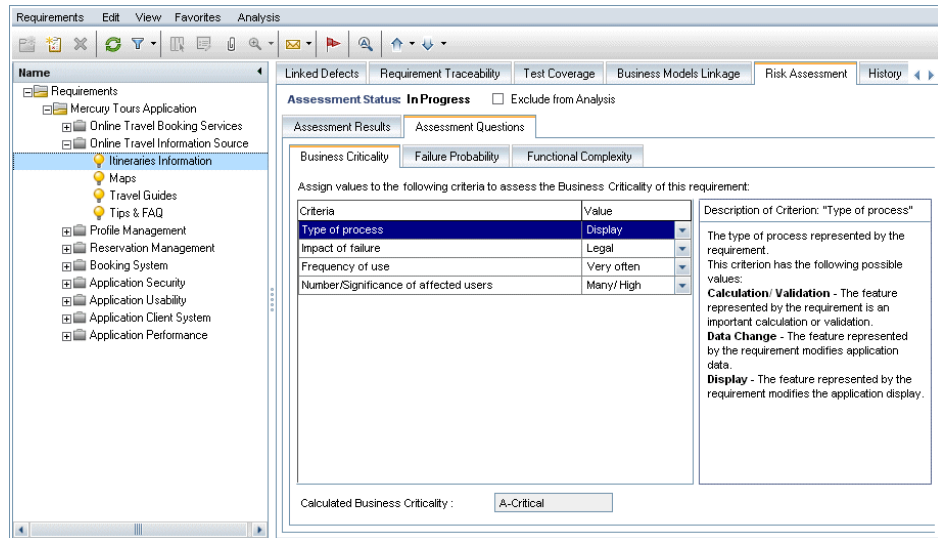
### Risk-Based Quality Management User Interface

This section includes:

- Risk Assessment Tab on page 433
- Risk Analysis Tab on page 439
- Generate Report Dialog Box on page 445

### Risk Assessment Tab

This tab enables you to determine the Business Criticality, Failure Probability, and Functional Complexity of a requirement by assigning them values directly or by assigning values to a set of criteria.



Requirements Edit View Favorites Analysis

Linked Defects Requirement Traceability Test Coverage Business Models Linkage Risk Assessment History

Assessment Status: **In Progress**  Exclude from Analysis

Assessment Results Assessment Questions

Business Criticality Failure Probability Functional Complexity

Assign values to the following criteria to assess the Business Criticality of this requirement:

| Criteria                              | Value      | Description of Criterion: "Type of process"  |
|---------------------------------------|------------|--|
| Type of process                       | Display    | The type of process represented by the requirement.  |
| Impact of failure                     | Legal      | This criterion has the following possible values:  |
| Frequency of use                      | Very often | <b>Calculation/ Validation</b> - The feature represented by the requirement is an important calculation or validation. |
| Number/Significance of affected users | Many/ High | <b>Data Change</b> - The feature represented by the requirement modifies application data.                             |
|                                       |            | <b>Display</b> - The feature represented by the requirement modifies the application display.                          |

Calculated Business Criticality :

|                              |   |
|------------------------------|---|
| <b>To access</b>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>➤ In the <b>Requirements</b> module, select the <b>Requirement Details</b> view. Select an assessment requirement and click the <b>Risk Assessment</b> tab.</li> <li>➤ In the <b>Requirements</b> module, right-click an assessment requirement and select <b>Requirement Details</b>. The Requirement Details dialog box opens. Click the <b>Risk Assessment</b> button.</li> </ul>  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>➤ If you do not determine the Business Criticality, Failure Probability, and Functional Complexity for a requirement, ALM does not include the requirement in the risk analysis.</li> <li>➤ You can customize the criteria, their possible values, and how these values determine the Business Criticality, Failure Probability, and Functional Complexity. You can also customize how the Business Criticality and Failure Probability are used to calculate the Risk. For more information, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>➤ <b>Quality Center Starter Edition:</b> Risk-based quality management is not available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Assess Risk" on page 426  |
| <b>See also</b>              | <p>"Risk Analysis Tab" on page 439</p> <p>"Risk-Based Quality Management Overview" on page 424</p>  |

### Risk Assessment Tab Common Elements

Common user interface elements are described below:

| UI Elements (A-Z)            | Description  |
|------------------------------|--|
| <b>Assessment Status</b>     | The current status of the assessment requirement. An assessment status can be one of the following: <b>Not Started</b> , <b>In Progress</b> , and <b>Completed</b> . |
| <b>Exclude from Analysis</b> | Ignores the selected assessment requirement when performing risk analysis.   |

## Assessment Results Tab - Assessment Summary Area

This area displays the assigned or calculated values of the Risk and Functional Complexity of an assessment requirement.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | The Assessment Summary area shows the Risk and Functional Complexity values calculated in the Assessment Questions tab. You can ignore these values and use instead custom values. |
| <b>Relevant tasks</b>        | "How to Assess Risk" on page 426   |
| <b>See also</b>              | "Assessment Questions Tab" on page 438   |

User interface elements are described below:

| UI Elements (A-Z)           | Description  |
|-----------------------------|--|
| <b>Business Criticality</b> | <p>Measures how important the requirement is to your business.</p> <p>Select <b>Use custom</b> to ignore the calculated value and use instead a custom value. Possible values are <b>A - Critical</b>, <b>B - Important</b>, and <b>C - Nice to Have</b>.</p> <p><b>Example:</b> A requirement affecting a minor feature that is likely to be used rarely might be assigned a Nice to Have Business Criticality, whereas a requirement that is essential to your application's functionality would probably be assigned a Critical Business Criticality.</p>   |
| <b>Failure Probability</b>  | <p>Measures how likely a test on the requirement is to fail.</p> <p>Select <b>Use custom</b> to ignore the calculated value and use instead a custom value. Possible values are <b>1 - High</b>, <b>2 - Medium</b>, and <b>3 - Low</b>.</p> <p><b>Example:</b> A requirement whose implementation involves making significant changes across most areas of your application would probably be assigned a High Failure Probability. In contrast, a requirement that involves changing an icon in your application would probably not have many associated risks, and so is likely to be assigned a Low Failure Probability.</p> |

| UI Elements (A-Z)                   | Description  |
|-------------------------------------|--|
| <p><b>Functional Complexity</b></p> | <p>Indicates the complexity of the requirement's implementation.</p> <p>Select <b>Use custom</b> to ignore the calculated value and use instead a custom value. Possible values are <b>1 - High</b>, <b>2 - Medium</b>, and <b>3 - Low</b>.</p> <p><b>Example:</b> A requirement whose implementation involves making significant changes to your application to enable it to communicate with other systems probably has a high complexity and would be assigned a High Functional Complexity. In contrast, a requirement that involves no significant changes to enable your application to communicate with other systems would probably not have many associated risks, and so is likely to be assigned a Low Functional Complexity.</p> |
| <p><b>Risk</b></p>                  | <p>Calculates the risk based on the Business Criticality and Failure Probability for the requirement.</p> <p>Select <b>Use custom</b> to ignore the calculated value and use instead a custom value. Possible values are <b>1 - High</b>, <b>2 - Medium</b>, and <b>3 - Low</b>.</p>   |

### Assessment Results Tab - Testing Policy Area

This area displays the conclusions of the last analysis you performed on an analysis requirement that is a parent of the assessment requirement.

|                                     |  |
|-------------------------------------|--|
| <p><b>Important information</b></p> | <p>To view and edit testing policy of an assessment requirement in the Testing Policy area, you must first perform analysis on relevant analysis requirements (parent requirements) and apply results to all assessment requirements (children requirements) in the Risk Analysis tab.</p> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Assess Risk" on page 426</p>  |
| <p><b>See also</b></p>              | <p>"Risk Analysis Tab" on page 439</p>   |

User interface elements are described below:

| UI Elements (A-Z)                            | Description   |
|--|---|
| <b>Based on analysis requirement</b>         | Displays the analysis requirement on which the last analysis that included the current requirement was performed. You can click the analysis requirement's name to go to the analysis requirement in the requirements tree.   |
| <b>Calculated Testing Level</b>              | The level at which to test the requirement, as calculated in the last analysis that included the current requirement.   |
| <b>Calculated Testing Time</b>               | The time allocated to test the requirement, as calculated in the last analysis that included the current requirement.   |
| <b>Estimated development time (optional)</b> | The estimated time needed to develop the requirement. ALM can then calculate the total estimated development time for an analysis requirement and its children as the sum of the estimated development times of the children. Assigning the estimated development time is optional, and does not affect the risk analysis.  |
| <b>Last analyzed on date</b>                 | The date on which the last analysis that included the current requirement was performed.  |
| <b>Use these for the next calculation</b>    | <p>Overrides the calculated values in the next calculation, and instead uses custom values.</p> <p>In the <b>Testing Level</b> box, select the Testing Level to use for the next calculation. In the <b>Testing Time</b> box, type the Testing Effort to use for the next calculation. When you next perform an analysis that includes the current requirement, these values will be used instead of the calculated values.</p> |

### Assessment Questions Tab

This tab displays lists of criteria used to determine Business Criticality, Functional Probability, and Functional Complexity.

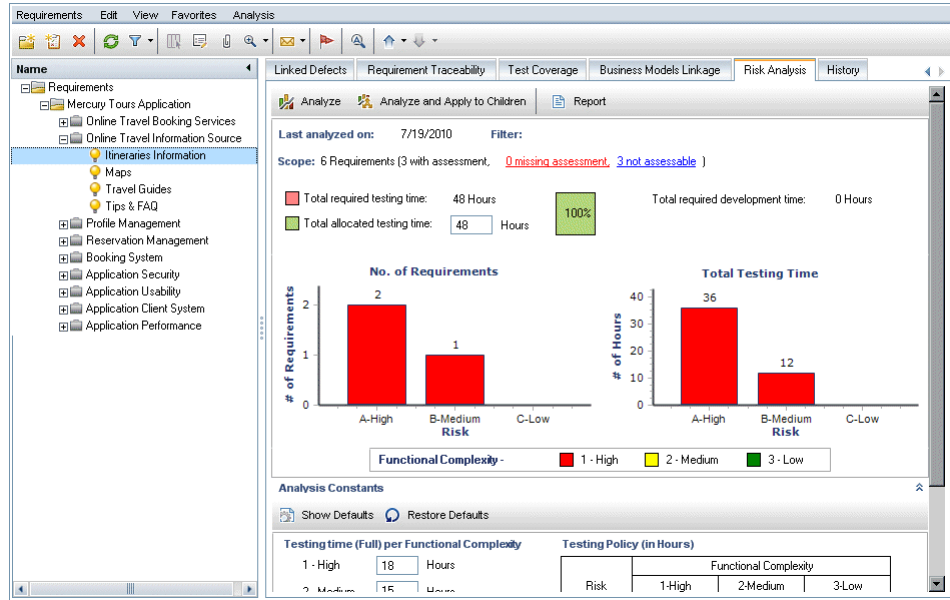
|                       |                                  |
|-----------------------|----------------------------------|
| <b>Relevant tasks</b> | "How to Assess Risk" on page 426 |
| <b>See also</b>       | "Risk Analysis Tab" on page 439  |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
| <b>Business Criticality/<br/>Functional<br/>Probability/<br/>Functional<br/>Complexity tab</b>                                  | Each tab lists criteria to consider when assessing each category.  |
| <b>Calculated Business<br/>Criticality/<br/>Calculated Functional<br/>Probability/<br/>Calculated Functional<br/>Complexity</b> | Updates according to the values you assigned to the criteria of the selected category.<br><br><b>Note:</b> You can ignore the value calculated on the basis of the values for the criteria, and use instead a custom value when performing risk analysis. In the Assessment Summary area of the Assessment Results tab, select <b>Use custom</b> . |
| <b>Criteria</b>   | Lists the criteria to use for assessing a selected category.   |
| <b>Description of<br/>Criterion</b>   | Explains the selected criterion.   |
| <b>Value</b>  | Lists the possible values that can be assigned to each criterion.  |

## Risk Analysis Tab

This tab enables you to define the testing policy settings and to determine the total estimated testing time for the analysis requirement and the assessment requirements under it.



**Requirements**   Edit   View   Favorites   Analysis

Linked Defects   Requirement Traceability   Test Coverage   Business Models Linkage   **Risk Analysis**   History

Analyze   Analyze and Apply to Children   Report

Last analyzed on: 7/19/2010   Filter:

Scope: 6 Requirements (3 with assessment, 0 missing assessment, 3 not assessable)

Total required testing time: 48 Hours   Total required development time: 0 Hours

Total allocated testing time: 48 Hours   100%

**No. of Requirements**

| Risk     | No. of Requirements |
|----------|---------------------|
| A-High   | 2                   |
| B-Medium | 1                   |
| C-Low    | 0                   |

**Total Testing Time**

| Risk     | Total Testing Time (Hours) |
|----------|----------------------------|
| A-High   | 36                         |
| B-Medium | 12                         |
| C-Low    | 0                          |

Functional Complexity - 1 - High   2 - Medium   3 - Low

Analysis Constants

Show Defaults   Restore Defaults

Testing time (Full) per Functional Complexity

|            |    |       |
|------------|----|-------|
| 1 - High   | 18 | Hours |
| 2 - Medium | 12 | Hours |

Testing Policy (in Hours)

| Risk       | Functional Complexity |          |       |
|------------|-----------------------|----------|-------|
|            | 1-High                | 2-Medium | 3-Low |
| 1 - High   |                       |          |       |
| 2 - Medium |                       |          |       |

|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>➤ In the <b>Requirements</b> module, select the <b>Requirement Details</b> view. Select an analysis requirement and click the <b>Risk Analysis</b> tab.</li> <li>➤ In the <b>Requirements</b> module, right-click an analysis requirement and select <b>Requirement Details</b>. The Requirement Details dialog box opens. Click the <b>Risk Analysis</b> button.</li> </ul>   |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>➤ Make sure that you have determined the Risk and Functional Complexity Categories of all assessment requirements that are located under the analysis requirement for which you want to finalize the testing policy, and that you want to include in the risk analysis. For more details, see "Risk Assessment Tab" on page 433.</li> <li>➤ You can filter the requirements tree to include only the assessment requirements you want to include in the risk analysis. For more details on filtering, see "Filter Dialog Box" on page 64.</li> <li>➤ You can customize each requirement type for risk-based quality management. For more information, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>➤ You can customize the testing policy used by default. For more details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>➤ <b>Quality Center Starter Edition:</b> Risk-based quality management is not available.</li> </ul> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Assess Risk" on page 426</p>  |
| <p><b>See also</b></p>              | <p>"Risk Assessment Tab" on page 433<br/>         "Risk-Based Quality Management Overview" on page 424</p>   |


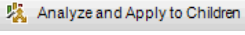



## Risk Analysis - main area

This tab enables you to calculate the total estimated testing time for the analysis requirement and the assessment requirements under it. The calculation is based on the testing policy defined in the Analysis Constants pane.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ If you do not want to use the default Testing Effort and Testing Level values when calculating the testing policy in this main area, make sure that you have defined custom values in the Analysis Constants pane.</li> <li>▶ After calculating the testing policy in this main area, compare the total calculated testing time with the resources you have available. If the resources you have available are not sufficient to test the requirement according to the current settings, you can change the settings in the Analysis Constants pane, and perform the calculation again.</li> </ul> |
|------------------------------|---|

User interface elements are described below:


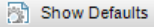
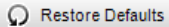
| UI Elements (A-Z)   | Description  |
|---|--|
|    | <p>Calculates the Testing Level and Testing Time for each assessment requirement under the analysis requirement that matches the current filter.</p> <p>This calculation is based on the assessment requirements' Risk Category, and the Testing Level and Testing Time values you defined for the analysis requirement.</p> |
|  | <p>Propagates the analysis results to all assessment requirements under the analysis requirement that match the current filter.</p>  |
|  | <p>Opens the Generate Report dialog box. For more details, see "Generate Report Dialog Box" on page 445.</p>   |
| <b>Filter</b>   | <p>The filter used to determine which requirements were included in the risk analysis. For more details on filtering, see "Filter Dialog Box" on page 64.</p>  |

| UI Elements (A-Z)                      | Description   |
|--|---|
| <b>Functional Complexity</b>           | A legend of the Functional Complexity values displayed in the graphs.   |
| <b>Last analyzed on</b>                | The date on which the risk analysis was last performed.   |
| <b>No. of Requirements</b>             | <p>Displays the number of sub-requirements of the analysis requirement of each Risk Category.</p> <p>To display a list of requirements included in the analysis, click a segment in the graph. The Drill Down Results dialog box opens and displays a grid with a list of requirements in the category. For more details, see "Drill Down Results Dialog Box" on page 977.</p>  |
| <b>Scope</b>                           | <p>The number of requirements included in the risk analysis. Also provides a breakdown of which requirements were assessed, which were missing assessment, and which were not assessable.</p> <p>To display a list of requirements not included in the analysis, click the <b>missing assessment</b> or <b>not assessable</b> links. The Drill Down Results dialog box opens and displays a grid with a list of requirements in the category. For more details, see "Drill Down Results Dialog Box" on page 977.</p> <p><b>Tip:</b> The <b>missing assessment</b> link displays the requirements for which you did not determine a category or exclude explicitly from the analysis. Verify that there are no requirements that should be assigned a category. If you do not want to include a requirement in the analysis, then exclude it from the analysis explicitly.</p> |
| <b>Total allocated testing time</b>    | The total time allocated to test the requirements included in the risk analysis.  |
| <b>Total required development time</b> | Displays the total time required to develop all the assessment requirements under the analysis requirement, based on the required development time you optionally estimated for each assessment requirement.  |

| UI Elements (A-Z)                  | Description  |
|------------------------------------|--|
| <b>Total required testing time</b> | Displays the total calculated time required to test all the assessment requirements under the analysis requirement matching the current filter and included in the risk analysis.  |
| <b>Total Testing Time</b>          | Displays the total calculated testing time required to test all the requirements of each Risk Category.<br><br>To display a list of requirements included in the analysis, click a segment in the graph. The Drill Down Results dialog box opens and displays a grid with a list of requirements in the category. For more details, see "Drill Down Results Dialog Box" on page 977. |

### Analysis Constants Pane

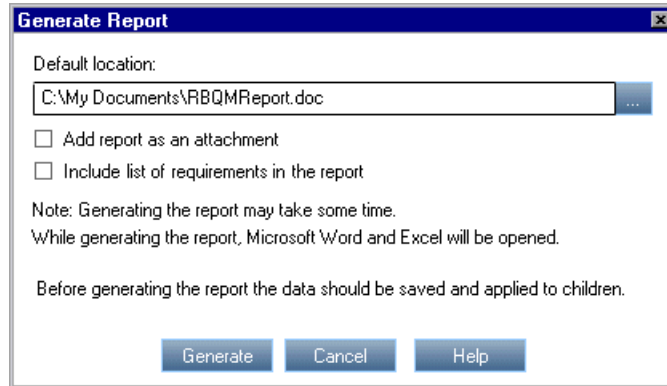
User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|    | <b>Show/Hide.</b> Shows/hides the Analysis Constants pane.   |
|    | Opens the Risk-Based Quality Management Constants Defaults dialog box, enabling you to view the default constants in use.  |
|  | Assigns default values to the constants used for the current requirement.  |
| <b>Testing Time (full) per Functional Complexity</b>                                | The time needed to fully test a requirement with that Functional Complexity. For each Functional Complexity value, type the estimated testing time.<br><br><b>Example:</b> A requirement with a high Functional Complexity generally requires more testing time as it is more likely that the requirement's implementation contains defects. |

| UI Elements (A-Z)                                    | Description  |
|--|--|
| <p><b>Testing Level (Full = 100%, None = 0%)</b></p> | <p>Defines how much Testing Time is required for a requirement as a percentage of full testing.</p> <p>In the <b>Partial</b> and <b>Basic</b> boxes, type the default Testing Time required for partial testing and basic testing of a requirement. You express this as a percentage of the effort required for full testing</p> <p>A requirement whose Testing Level is set to <b>None</b> is not tested at all, and the testing effort is zero.</p> <p><b>Example:</b> If 20 hours are required to perform full testing on a requirement and partial testing is defined as 75% of full testing, ALM calculates that 15 hours are required to perform partial testing on the requirement.</p> |
| <p><b>Testing Policy (in Hours) grid</b></p>         | <p>Defines the level at which to test a requirement of each Risk and Functional Complexity category.</p> <p>To define these levels, click the arrow next to the cell in the grid. Select a Testing Level from the available Testing Levels. The available Testing Levels are <b>Full</b>, <b>Partial</b>, <b>Basic</b>, and <b>None</b>. Next to each Testing Level, you can see the estimated time needed to test a requirement at that level, based on the Testing Efforts and Testing Levels you defined.</p>   |

## Generate Report Dialog Box

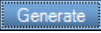
This dialog box enables you to generate a report for analyzing the testing strategy for the analysis requirement and for the assessment requirements under it.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ In the <b>Requirements</b> module, select the <b>Requirement Details</b> view. Select an analysis requirement and click the <b>Risk Analysis</b> tab. Click the <b>Report</b> button.</li> <li>▶ In the <b>Requirements</b> module, right-click an analysis requirement and select <b>Requirement Details</b>. The Requirement Details dialog box opens. Click the <b>Risk Analysis</b> button. Click the <b>Report</b> button.</li> </ul>  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ To generate a report, you must first save the analysis and apply it to all assessment requirements under the analysis requirement. For more details, see "Risk Analysis Tab" on page 439.</li> <li>▶ To generate a report, Microsoft Word must be installed on your machine.</li> <li>▶ The analysis results are only valid for the requirements at the time the analysis was last performed. If you subsequently modify the Risk or Functional Complexity Categories of the requirements, or the testing policy, you should re-perform the analysis.</li> <li>▶ <b>Quality Center Starter Edition:</b> Risk-based quality management is not available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Assess Risk" on page 426  |
| <b>See also</b>              | <p>"Risk Analysis Tab" on page 439</p> <p>"Risk-Based Quality Management Overview" on page 424</p>  |

User interface elements are described below:

| <b>UI Elements (A-Z)</b>           | <b>Description</b>  |
|------------------------------------|---|
| <b>Add report as an attachment</b> | Adds the report as an attachment to the analysis requirement.   |
| <b>Default location</b>            | The location and name of the Word file to which you want the data to be exported. You can click the browse button to select a location from the Save As dialog box. |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | Generates the report as a Microsoft Word document. |
| <b>Include list of requirements in the report</b>                                 | Includes a list of the requirements in the report. |





# 18

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## Business Process Models

This chapter includes:

### Concepts

- ▶ Business Process Models Overview on page 450

### Tasks

- ▶ How to Work with Business Process Models on page 453

### Reference

- ▶ Business Models Module User Interface on page 459

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## Concepts

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### Business Process Models Overview

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**ALM Editions:** The Business Models module is not available for Quality Center Starter Edition or Performance Center Edition.

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The HP Application Lifecycle Management (ALM) Business Models module addresses the need for a stronger connection between business process modeling, quality assurance management, and requirement definitions. The module integrates business process models into the application lifecycle.

Integrating business process models into ALM involves importing business process models into ALM, and linking requirements and tests to models, activities, and end-to-end business flows. After executing tests, you can display quality status views on the business process model level.

To work with business process models in ALM, you must first design models with standard modeling tools, and import the models to ALM. For more details, see "Business Process Models File Import" on page 451.

In addition to the standard business process model entities, ALM enables you to perform quality testing on end-to-end business flows ("**paths**"). For more details, see "Business Process Model Paths" on page 452.

For details on working with business process models, see "How to Work with Business Process Models" on page 453.

## Business Process Models File Import

To work with business process models in ALM, you must first create models in standard BPMN or EPC modeling tools, and export them to files.

ALM supports the following model and file formats:

- **BPMN 1.1** models exported to **XPDL 2.0/2.1** files
- **EPC 7.1** models exported to **AML** files (.xml extension)

During the import process, you can map model and activity attributes to ALM memo or string fields. This enables you to edit attribute values in ALM.

For each model that you import to ALM, business process model entities are created under the selected folder: an entity for the model as a whole, and an entity for each of the model's activities.

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**Note:** If you use Metastorm ProVision, you should export models using the **Independent Sub-Process** option.

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In addition, **representative requirements** are created automatically for the model and for each of its activities in the Requirements module.

- Representative requirements for models are created under the **Business Models** requirement folder.
- Representative requirements for activities are created under the **Activities** sub-folder. If the same activity is included in several models, the same requirement is used to represent the activity.

Representative requirements are assigned the **Business Model** requirement type.

## Re-importing models

If changes are made to a model in the model authoring tool, you can apply the changes to the model in ALM by re-importing the model. ALM automatically updates the model entities, as follows:

- ▶ Activities added or deleted in the re-imported model are added or deleted in the model in ALM.

---

**Note:** Activities are identified by the GUID assigned to them by the authoring tool. A re-imported activity with a different GUID than the original activity is re-imported as a separate activity.

---

- ▶ Paths are automatically updated in ALM, provided that alternative paths are found. If alternative paths cannot be found, you must assign a new path to the path entity, or delete the path entity.

## Business Process Model Paths

The quality of a business process model is determined not only by its activities, but also by the business flows within the model, or paths. A **path** is an end-to-end sequence of transitions between activities in a model.

A business process model that you create with standard modeling tools does not include path definitions. As paths are important for verifying the quality of a business process, ALM enables you to define paths in your imported models.

ALM automatically analyzes all possible end-to-end paths in a model, and allows you to select those paths that are important to test.

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**Note:** Recursive paths that repeat the same activity are not supported.

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For each path you create, a representative requirement is created automatically under the **Paths** group requirement, a child of the model representative requirement.

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## Tasks

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### How to Work with Business Process Models

This task describes how to specify business process models in ALM.

To learn more about business process modeling in ALM, see "Business Process Models Overview" on page 450.

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**Product Feature Movie:** To view a movie that demonstrates how to integrate business process models into the application lifecycle, choose **Help > Product Feature Movies** in the ALM main window and select **Business Process Models**.

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This task includes the following steps:

- "Prerequisites" on page 453
- "Import or re-import business process models" on page 454
- "Create paths" on page 455
- "Develop requirements and tests" on page 455
- "Link requirements and tests to model entities" on page 455
- "Analyze the quality of business process models" on page 456

#### 1 Prerequisites

- With standard modeling tools, create business process models, and export the business process models to files.

ALM supports the following model and file formats:

- **BPMN 1.1** models exported to **XPDL 2.0/2.1** files
- **EPC 7.1** models exported to **AML** files (.xml extension)

- To enable mapping of model and activity attributes to ALM entities, add string or memo fields to the following entities:

- **Business Process Models**
- **Business Process Model Elements**

For more details on adding user-defined fields, refer to the *HP Application Lifecycle Management Administrator Guide*.

## 2 Import or re-import business process models

For concept details, see "Business Process Models File Import" on page 451.

- a Open the Business Models module.** On the ALM sidebar, under **Requirements**, select **Business Models**. In the **View** menu, select **Model Tree**.
- b Create a folder.** Right-click the **Models** root folder and select **New Folder**. To create a sub-folder, right-click a folder and select **New Folder**.
- c Open the Import Models dialog box.** Right-click a folder and select **Import Model**. For user interface details, see "Import Models Dialog Box" on page 482.
- d Select a file and models.** In the Import Models dialog box, select a file to import. After the file is analyzed, select the models you want to import from the file.
- e Map model and activity attributes to ALM fields.** In the Import Models dialog box, click **Import Attributes**. For user interface details, see "Map Imported Attributes to User Fields Dialog Box" on page 485.
- f Track import status.** Track the import status in the Import Models dialog box. When import is complete, click **OK** to close the Importing Models dialog box.

### 3 Create paths

For concept details, see "Business Process Model Paths" on page 452.

- a** In the Business Models module, select **View > Model Tree**.
- b** **Open the New Path dialog box.** Right-click a business process model and select **New Path**. For user interface details, see "New Model Path/Model Path Details Dialog Box" on page 490.
- c** **Select a path.** In the Path drop-down list, select a path that is important to test. The activities along the path are highlighted in the model diagram, and a description of the path is displayed in the Path Description tab.

### 4 Develop requirements and tests

To determine the quality of business process models in ALM, you must develop requirements and tests that cover all the critical aspects of the model.

To assist you in this, ALM automatically creates a structure of business model requirements that represent the models and activities that you import, and the paths that you create.

- a** Use one of the following:
  - Use the representative requirements as a basis for developing a detailed requirements tree and adding test coverage.
  - If you have existing requirements, not related to the representative requirements, you can continue developing them. Later, link them manually to the relevant model entities.
- b** Depending on your testing strategy, create test coverage for the requirements.

For task details, see "How to Use Requirements in ALM" on page 335.

### 5 Link requirements and tests to model entities

For requirements and tests to be included in the quality analysis, you must link them to their respective model entities. For task details, see "Link Requirements and Tests to Model Entities" on page 456.

## 6 Analyze the quality of business process models

After you run tests on your model entities, generate graphs that analyze the quality of a model entity.

- a Open the Model Analysis view.** In the Business Models module, select **View > Model Analysis**. For user interface details, see "Model Analysis View" on page 464.
- b Select a model entity for the root of the analysis.** Use one of the following:
  - In the Models Map tab, select a model. The corresponding model node is highlighted in the business models tree.
  - In the business models tree, select a model entity.
- c Click the Quality Analysis tab.**
- d In the Depth drop-down list, select the number of levels to include in the analysis.**
- e Depending on your requirements strategy, choose whether to include representative or child requirements in the analysis.**
- f Click on graph bars to drill down to records represented by the bars.** For task details, see "Drill down to graph data" on page 938.

## 7 Generate a report of business process models

Include business process model entities in project reports. For task details, see "How to Create Project Reports" on page 993.



### Link Requirements and Tests to Model Entities

The following steps describe how to link requirements and tests to their respective model entities.

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**Note:** This task is part of a higher-level task. For details, see "How to Work with Business Process Models" on page 453.

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**When creating model linkage, consider the following:**

- If you developed your requirements under the representative requirements, the requirements and their covering tests are automatically linked to their respective model entities.
- If your requirements are not related to the representative requirements, you must link the requirements manually to their respective model entities.
- Tests that cover linked requirements are automatically linked to the same model entities. You can also manually link other tests directly to model entities.
- You cannot manually link representative requirements to model entities.


This task includes the following steps:

- "Link requirements and tests directly to model entities" on page 457
- "Link model entities to tests" on page 458
- "Link model entities to requirements" on page 458


**Link requirements and tests directly to model entities**

- 1** In the Business Models module, select **View > Model Tree**.
- 2** Select a model entity, and click the **Linkage** tab. For user interface details, see "Linkage Tab" on page 493.
- 3** Click either the **Requirements** or **Tests** tab.
- 4** Click **Select Requirements** or **Select Tests**, respectively.
- 5** In the **Requirements Tree/Test Plan Tree** pane, right-click requirements or tests and select **Add to Linkage**. For user interface details, see "Requirements Tree and Test Plan Tree Pane" on page 497.
- 6** Alternatively, create linkage to any model entity by dragging requirements and tests to entities in the model diagram.

### **Link model entities to tests**

- 1** In **Test Plan > Test Plan Tree** view, select a test and click the **Business Models Linkage** tab.
- 2** Click **Add to Linkage**  to display the business models tree in the right pane.
- 3** Link model entities to tests. For user interface details, see "Business Models Linkage Tab" on page 573.

### **Link model entities to requirements**

- 1** In **Requirements > Requirement Details** view, select a requirement and click the **Business Models Linkage** tab.
- 2** Click **Add to Linkage**  to display the business models tree in the right pane.
- 3** Link model entities to requirements. For user interface details, see "Business Models Linkage Tab" on page 573.

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## Reference

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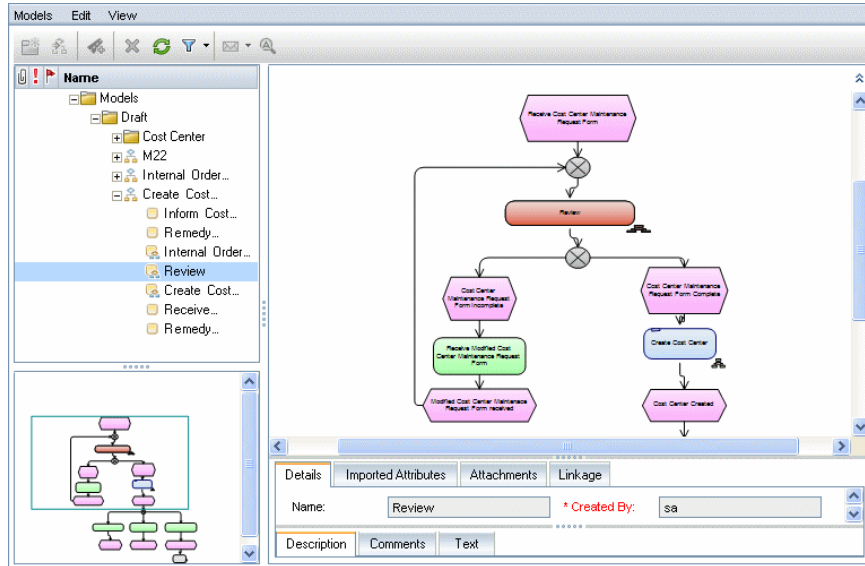
### **Business Models Module User Interface**

This section includes:

- ▶ Business Models Module Window on page 460
- ▶ Model Analysis View on page 464
- ▶ Business Models Module Menus and Buttons on page 470
- ▶ Business Models Module Icons on page 477
- ▶ Business Models Module Fields on page 479
- ▶ Import Models Dialog Box on page 482
- ▶ Map Imported Attributes to User Fields Dialog Box on page 485
- ▶ Model Details/Model Activity Details Dialog Box on page 487
- ▶ New Model Path/Model Path Details Dialog Box on page 490
- ▶ Linkage Tab on page 493
- ▶ Requirements Tree and Test Plan Tree Pane on page 497
- ▶ Represented Items Tab on page 499


## Business Models Module Window


This window enables you to define and maintain business process models in ALM.



|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <p>On the ALM sidebar, under <b>Requirements</b>, select <b>Business Models</b>.</p>   |
| <p><b>Important information</b></p> | <p>The Business Models module includes the following views:</p> <ul style="list-style-type: none"> <li>▶ <b>Model Tree.</b> Displays business process models and their elements in a hierarchical tree.</li> <li>▶ <b>Model Grid.</b> Displays a flat list of models, activities or paths.</li> <li>▶ <b>Model Analysis.</b> Displays an analysis of a model's testing coverage and quality. For user interface details, see "Model Analysis View" on page 464.</li> </ul> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Work with Business Process Models" on page 453</p>  |
| <p><b>Learn more</b></p>            | <p>"Business Process Models Overview" on page 450<br/>                 "Business Models Module Fields" on page 479</p>   |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
| <Business Models module common UI elements>                                       | <ul style="list-style-type: none"> <li>▶ <b>Business Model fields.</b> For field definitions, see "Business Models Module Fields" on page 479.</li> <li>▶ <b>Business Model menus and buttons.</b> For command and button descriptions, see "Business Models Module Menus and Buttons" on page 470.</li> <li>▶ <b>Business Model icons.</b> For icon descriptions, see "Business Models Module Icons" on page 477.</li> <li>▶ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu and sidebar, see "ALM Common Areas" on page 41.</li> </ul> |
|  | <p>Hides or shows the model diagram and diagram overview.</p> <p><b>Available from:</b> Model Tree view</p>   |
| <business models tree>  | <p>A hierarchical representation of business process models, activities, and paths. Activities and paths are displayed as children of their respective models.</p> <p><b>Note:</b> The position of business process models in the tree does not necessarily reflect connections between models. Connections between models are displayed in the Model Analysis view. For user interface details, see "Model Analysis View" on page 464.</p>   |
| <business process model diagram pane>   | <p>Located in the upper-right side of the window, a diagram of the currently selected business process model. An activity or a path that you select in the business models tree is highlighted in the diagram.</p> <p><b>Tips:</b></p> <ul style="list-style-type: none"> <li>▶ Hold down the CTRL key and use the mouse wheel to zoom in and out.</li> <li>▶ Select an activity in the diagram to view its details in the main window.</li> <li>▶ Double-click an activity to view its details in a separate window.</li> </ul>                                    |

| UI Elements (A-Z)   | Description   |
|---|---|
| <p>&lt;business process model overview&gt;</p>  | <p>Located in the lower-left side of the window, a reduced diagram of the currently selected business process model. The framed area of the model in the overview is magnified in the diagram pane.</p> <p><b>Tips:</b></p> <ul style="list-style-type: none"> <li>▶ Select an area in the overview to focus on the selected area in the diagram pane.</li> <li>▶ Drag or resize the frame to change the focus of the model in the diagram pane.</li> </ul> |
| <p>&lt;filter status bar&gt;</p>  | <p>Describes the filter currently applied to the grid or tree. Located directly above the grid filter boxes or tree.</p>  |
| <p>&lt;grid filters&gt;</p>  | <p>Displays a grid filter box under each column name, enabling you to define a filter condition for a column.</p> <p>Type directly into the box, or click the box to display the browse button, which opens the Select Filter Condition dialog box. For user interface details, see "Select Filter Condition Dialog Box" on page 74.</p> <p><b>Available from:</b> Model Grid view</p>  |
| <p><b>Activities</b></p>  | <p>Displays a list of activities across multiple business process models.</p> <p><b>Tip:</b> To group activities by business process model, select <b>Group By Owner Model</b>.</p> <p><b>Available from:</b> Model Grid view</p>   |
| <p><b>Attachments</b></p>   | <p>Lists attachments that provide additional information about the currently selected business process model, activity or path. For more details, see "Attachments Page" on page 90.</p>  |
| <p><b>Comments</b></p>  | <p>Comments about the currently selected model entity.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>  |
| <p><b>Description</b></p>   | <p>Describes the currently selected model entity.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>   |

| UI Elements (A-Z)           | Description   |
|-----------------------------|---|
| <b>Details</b>              | Details the currently selected model entity.  |
| <b>Group By Owner Model</b> | <p>If selected in combination with <b>Activities</b> or <b>Paths</b>, groups the activities or paths according to the model in which they are defined.</p> <p>If this option is not selected, the activities or paths are displayed in a flat list.</p> <p><b>Available from:</b> Model Grid view</p> |
| <b>History</b>              | Lists changes made to the currently selected business process model. For more details, see "History Tab" on page 85.  |
| <b>Imported Attributes</b>  | <p>Lists field labels and values relevant to the business process model or activity, as defined in the model authoring tool.</p> <p><b>Note:</b> This tab is read-only.</p>   |
| <b>Linkage</b>              | Contains the Requirements and Tests tabs that list entities linked to the business process model, activity, or path. For more details, see "Linkage Tab" on page 493.   |
| <b>Models</b>               | <p>Displays a list of business process models.</p> <p><b>Available from:</b> Model Grid view</p>  |
| <b>Paths</b>                | <p>Displays a list of paths across multiple business process models.</p> <p><b>Tip:</b> To group activities by business process model, select <b>Group By Owner Model</b>.</p> <p><b>Available from:</b> Model Grid view</p>  |
| <b>Text</b>                 | <p>Text displayed in an activity entity. The field is read-only.</p> <p><b>Available from:</b> Model activities</p>   |

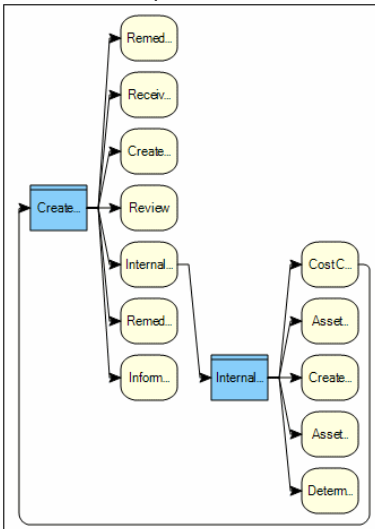
## Model Analysis View

This view enables you to analyze the quality of business process models, activities, and paths.

Models Map
Quality Analysis

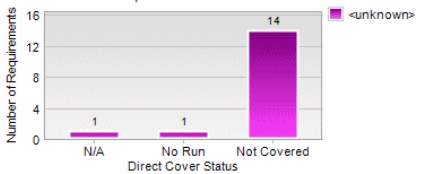
Depth: Show All Nested Levels  Include requirement children  Include representative requirements  Generate

Entities included in the analysis:
Status: Last Generated: 11/21/2010 2:35:05 PM



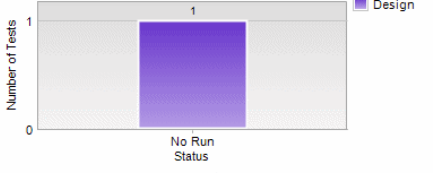
■ Model    ■ Path    ■ Activity

requirements




| Direct Cover Status | Number of Requirements |
|---------------------|------------------------|
| N/A                 | 1                      |
| No Run              | 1                      |
| Not Covered         | 14                     |

Tests



| Status | Number of Tests |
|--------|-----------------|
| No Run | 1               |

defects





464



|                              |   |
|------------------------------|---|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> In the Business Models module, select <b>View &gt; Model Analysis</b>.</li> <li><b>2</b> Use one of the following: <ul style="list-style-type: none"> <li>▶ In the <b>Models Map</b> tab, select a model. The corresponding model entity is highlighted in the business models tree.</li> <li>▶ In the business models tree, select a model entity.</li> </ul> </li> <li><b>3</b> Click the <b>Quality Analysis</b> tab.</li> </ol> |
| <b>Important information</b> | <p>The Model Analysis view includes the following tabs:</p> <ul style="list-style-type: none"> <li>▶ <b>Models Map</b>. Displays relationships between business process models imported into ALM.</li> <li>▶ <b>Quality Analysis</b>. Analyzes the quality of a business process model entity.</li> </ul>   |
| <b>Relevant tasks</b>        | "How to Work with Business Process Models" on page 453  |
| <b>Learn more</b>            | "Business Process Models Overview" on page 450  |

## Models Map Tab

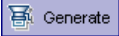
User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements   | Description   |
|---|---|
|  | <p>A business process model.</p> <p><b>Tip:</b> Double-click a model to view model details in a separate window. For user interface details, see "Model Details/Model Activity Details Dialog Box" on page 487.</p> |
|  | <p>Indicates that the model at the tip of the arrow is a sub-process of the model at the tail of the arrow.</p>   |

| UI Elements | Description  |
|-------------|--|
| -----       | A bi-directional link, indicating that the model at one end of the line is a continuation of the model at the other end of the line.   |
| <map area>  | <p>Displays all the business process models imported to ALM, and the hierarchical connections between the models.</p> <p>Select a model in the map area that you want to analyze, and then click the <b>Quality Analysis</b> tab.</p> <p><b>Tip:</b> Hold down the CTRL key and use the mouse wheel to zoom in and out of the map image.</p> |

### Quality Analysis Tab Toolbar

User interface elements are described below:



| UI Elements (A-Z)  | Description  |
|--|--|
|  Generate | Refreshes the analysis graphs to include the most up-to-date information.  |
| Depth  | <p>Defines the number of hierarchical levels, from the root entity down, displayed in the entities pane. Entities displayed in the entities pane are analyzed in the analysis graphs.</p> <p><b>Standalone Entity.</b> Displays the root entity alone.</p> <p><b>One Nested Level.</b> Displays the root entity, and entities one level down from the current entity.</p> <p><b>All Nested Levels.</b> Displays and analyzes the root entity, and all entities leading off from the root entity on all levels.</p> |


| UI Elements (A-Z)                          | Description  |
|--|--|
| <b>Include requirement children</b>        | Instructs ALM to include in the analysis all child requirements of the requirements linked to the model entities in the entities pane.   |
| <b>Include representative requirements</b> | Instructs ALM to include in the analysis the representative requirements linked to the model entities in the entities pane.<br><b>Tip:</b> Use this option if representative requirements are linked to tests. |

### Quality Analysis Tab Entities Pane

This pane displays the business process model entities that are analyzed in the graphs pane.

User interface elements are described below (unlabeled elements are shown in angle brackets>):


| UI Elements (A-Z)  | Description                      |
|--|----------------------------------|
|   | A business process model entity. |
|  | A path entity.                   |

| UI Elements (A-Z)   | Description   |
|---|---|
|  | An activity entity.   |
| <entities pane>   | Displays business process models, activities, and paths that are analyzed in the graphs pane, and hierarchical connections between them.<br><b>Notes:</b> <ul style="list-style-type: none"> <li>▶ The number of hierarchical levels displayed is determined by the value in the <b>Depth</b> field.</li> <li>▶ An activity that is included in more than one model or path is displayed in the entities pane once.</li> </ul> <b>Tips:</b> <ul style="list-style-type: none"> <li>▶ To change the root entity displayed in the entities pane, select a model in the Models Map tab, or select an entity in the business models tree.</li> <li>▶ Hold down the CTRL key and use the mouse wheel to zoom in and out.</li> <li>▶ Double-click an entity to display entity details.</li> </ul> |

### Quality Analysis Tab Graphs Pane

This pane displays graphs that analyze the quality of the entities displayed in the entities pane.

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>View Graph in Full Screen.</b> Opens the graph in a new window and maximizes its display. In the new window you can customize the graph view and save the graph data. For user interface details, see "View Tab – Graphs/ Graph Window" on page 952. |
| <b>Last Generated</b>   | The date and time that the graph data was last refreshed. Click <b>Generate</b> to refresh the data.  |





| UI Elements (A-Z)         | Description   |
|---------------------------|---|
| <graph area>              | <p>You can perform the following actions in the graph area:</p> <ul style="list-style-type: none"> <li>▶ Drill down to the graph's data by clicking on a segment in the graph. For task details, see "Drill down to graph data" on page 938.</li> <li>▶ Right-click an area in the graph to change its color.</li> <li>▶ Hover over a bar to view a tooltip containing the area's category, x-axis, and y-axis values.</li> </ul> |
| <graph title>             | <p>Click a graph title to change the graph's titles and appearance. For user interface details, see "Graph Appearance Dialog Box" on page 975.</p>  |
| <legend>                  | <p>Displays the graph categories and their corresponding color.</p> <p><b>Tip:</b> Right-click a category to change its color.</p>  |
| <b>Requirements graph</b> | <p>Displays the coverage status of requirements linked to the model entities displayed in the entities pane.</p> <p><b>Note:</b> The scope of requirements included in the graph is determined by the <b>Include requirement children</b> and <b>Include representative requirements</b> options.</p>   |
| <b>Tests graph</b>        | <p>Displays the execution status of tests linked to the model entities displayed in the entities pane.</p> <p><b>Note:</b> The tests graph includes tests that are linked to the requirements included in the Requirements graph, and tests that are linked directly to the entities displayed in the entities pane.</p>  |
| <b>Defects graph</b>      | <p>Displays the severity of defects linked to the model entities displayed in the entities pane.</p> <p><b>Note:</b> The defects graph includes defects linked to the requirements in the Requirements graph, and to the tests in the Tests graph.</p>  |


## Business Models Module Menus and Buttons

This section describes the menus and buttons available in the Business Models module.


|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the ALM sidebar, under <b>Requirements</b> , select <b>Business Models</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ Some menu commands and buttons are not available in all model views.</li> <li>▶ <b>Tip:</b> You can access the menu bar from the Business Models module by pressing the shortcut key ALT. Additionally, you can perform many other ALM operations using shortcut keys. For a list of shortcut keys, see "ALM Keyboard Shortcut Reference" on page 154.</li> <li>▶ <b>Version Control:</b> Additional menu commands and buttons are available in a version control enabled project. For details, see "Versions Menu and Buttons" on page 131.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Work with Business Process Models" on page 453   |
| <b>Learn more</b>            | "Business Models Module Icons" on page 477   |




User interface elements are described below:



| UI Elements (A-Z)  | Menu   | Description  |
|--|--------|--|
| <b>Copy URL/Paste</b>  | Edit   | Copies a model entity or folder and pastes its URL as a link. The item itself is not copied. Instead, you can paste the address into another location, such as an email or a document. Clicking the link opens ALM and takes you to the item. If you are not already logged in, ALM first prompts for login details. |
|   <b>Cut/Paste</b> | Edit   | <p>Moves a business process model or folder to a different location in the tree. Activities and paths are moved together with their model.</p> <p><b>Tip:</b> You can also move a business process model or folder by dragging it to a new location in the tree.</p>   |
|  <b>Delete</b>  | Edit   | <p>Deletes selected model entities or folders. You cannot delete the root folder.</p> <p><b>Note:</b> Deleting a folder deletes all the items included in it.</p>  |
| <b>Details</b>   | Models | Opens the details dialog box for the selected model entity. For more details, see "Model Details/Model Activity Details Dialog Box" on page 487.   |
| <b>Expand All/Collapse</b>   | View   | Expands/collapses all the nodes under the selected folder.   |
|  <b>Filter/Sort</b>   | View   | Enables you to filter and sort the models in the business models tree or grid. Any currently applied filters or sorting orders are displayed below the toolbar. For more details, see "Filter Dialog Box" on page 64.  |


| UI Elements (A-Z)   | Menu             | Description  |
|---|------------------|--|
| <b>Find</b>   | Edit             | Opens the Find dialog box, enabling you to search for a model entity under the selected folder. For more details, see "Find Dialog Box" on page 78.                              |
| <b>Fit Overview to Window</b>   | right-click menu | Adjusts the zoom level of the diagram overview so that the entire model is visible in the overview pane.   |
| <b>Fit to Window</b>  | right-click menu | Adjusts the zoom level of the model diagram so that the entire model is visible in the diagram pane.   |
|  <b>Flag for Follow Up</b> | Edit             | Opens the Flag For Follow Up dialog box, enabling you to define a follow up flag for a selected model entity. For more details, see "Flag For Follow Up Dialog Box" on page 111. |
| <b>Go to Model</b>  | Models           | Opens the Go To Model dialog box, enabling you to find a specific model by Model ID. You can only go to models that are in the current filter.                                   |
| <b>Go to Representative Requirement</b>   | Models           | Opens the requirements tree in the Requirements module, and highlights the representative requirement of the selected model entity.  |
| <b>Go to Requirement in Requirements Tree</b>   | right-click menu | Opens the requirements tree in the Requirements module, and highlights the selected requirement.<br><b>Available from:</b> Linkage tab > Requirements tab                        |
| <b>Go To Sub-Model</b>  | right-click menu | Navigates to the sub-model in the business models tree that is represented by the selected activity.   |



| UI Elements (A-Z)   | Menu             | Description  |
|---|------------------|--|
| <b>Go to Test in Test Set</b>   | right-click menu | <p>Enables you to view instances of a test in test sets in the Test Lab module.</p> <p>If there is only one instance of the selected test, the Test Lab module opens with the instance highlighted.</p> <p>If there is more than one instance of the selected test, the Select Test Set dialog box opens, and you select a test set and instance.</p> <p><b>Available from:</b> Linkage tab &gt; Tests tab</p> |
| <b>Go to Test in Test Tree</b>  | right-click menu | <p>Opens the test plan tree in the Test Plan module, and highlights the selected test.</p> <p><b>Available from:</b> Linkage tab &gt; Tests tab</p>  |
|  <b>Import Model</b> | Models           | <p>Opens the Import Models dialog box, enabling you to import or re-import business process models from a source file. For more details, see "Import Models Dialog Box" on page 482.</p> <p><b>Available from:</b> Model Tree view</p>   |
| <b>Indicator Columns</b>  | View             | <p>Displays indicators on the left-side of the business process model window. For more details, see "Business Models Module Icons" on page 477.</p>  |
| <b>Model Analysis</b>   | View             | <p>Displays the Model Analysis view, enabling you to analyze the quality of selected business process models. For more details, see "Model Analysis View" on page 464.</p>   |

| UI Elements (A-Z)   | Menu             | Description   |
|---|------------------|---|
| <b>Model Grid</b>   | View             | Displays the Model Grid view, enabling you to view business process models, activities, or paths in a flat, non-hierarchical view.  |
| <b>Model Tree</b>   | View             | Displays the Model Tree view, enabling you to view your business process models and elements hierarchically in a tree, and to view a diagram of the selected model.   |
|  <b>New Folder</b> | Models           | <p>Opens the New Folder dialog box, enabling you to add a folder under a selected folder in the business models tree.</p> <p><b>Syntax exceptions:</b> The folder name cannot include the following characters: \ ^ *</p> <p><b>Available from:</b> Model Tree view</p> |
|  <b>New Path</b>   | Models           | <p>Opens the New Business Model Path dialog box, enabling you to define a sequence of transitions between activities in a model. For more details, see "New Model Path/Model Path Details Dialog Box" on page 490.</p> <p><b>Available from:</b> Model Tree view</p>    |
|  <b>Refresh</b>  | View             | Refreshes the business process model view so that it displays the most up-to-date information.  |
| <b>Remove From Linkage</b>  | right-click menu | <p>Removes the selected requirement or test from the linkage grid.</p> <p><b>Available from:</b> Linkage tab &gt; Tests and Requirements tabs</p>   |

| UI Elements (A-Z)  | Menu             | Description  |
|--|------------------|--|
| Rename   | Edit             | Enables you to rename the selected business process model folder.<br><b>Available from:</b> Model Tree view  |
| Select All   | Edit             | Selects all records displayed in grid.<br><b>Available from:</b> Model Grid view and Linkage tab > Tests and Requirements tabs   |
|  Select Columns   |                  | Opens the Select Columns dialog box, enabling you to determine which fields are displayed in the business models grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.<br><b>Available from:</b> Model Grid view |
| Select Requirements/<br>Select Tests   | right-click menu | Opens a panel displaying the following tabs:<br><ul style="list-style-type: none"> <li>▶ Requirements Tree</li> <li>▶ Test Plan Tree</li> </ul> The panel enables you to link requirements and tests to model entities.                                      |
|  Send by E-mail | Models           | Opens the Send E-mail dialog box, enabling you to send business process models by email to recipients selected from a list. For more details, see "Send E-mail Dialog Box" on page 87.   |
| Show Full Path   | right-click menu | Displays the full path of linked requirements or tests. The path is displayed in the Name column of linked requirements, and in the Test Name column of linked tests.<br><b>Available from:</b> Linkage tab > Tests and Requirements tabs                    |







| UI Elements (A-Z)  | Menu             | Description   |
|--|------------------|---|
|  <b>Text Search</b> | Edit             | <p>Opens the text search pane in the lower part of the Business Model module window, enabling you to search for records in predefined fields. For more details, see "Text Search Pane" on page 82.</p> <p><b>Available from:</b> Model entities</p> |
| <b>Zoom In</b>   | right-click menu | Increases the zoom level of the model diagram.  |
| <b>Zoom Overview In</b>  | right-click menu | Increases the zoom level of the diagram overview.   |
| <b>Zoom Out</b>  | right-click menu | Decreases the zoom level of the model diagram.  |
| <b>Zoom Overview Out</b>   | right-click menu | Decreases the zoom level of the diagram overview.   |







## Business Models Module Icons

This section describes the icons available in the Business Models module.

|                       |   |
|-----------------------|---|
| <b>To access</b>      | On the ALM sidebar, under <b>Requirements</b> , select <b>Business Models</b> .                       |
| <b>Relevant tasks</b> | "How to Work with Business Process Models" on page 453  |
| <b>Learn more</b>     | "Business Models Module Menus and Buttons" on page 470<br>"Business Models Module Window" on page 460 |

The icons are described below:

| UI Elements   | Description   |
|---|---|
|    | < <b>green asterisk</b> >. The applicable tab is populated.   |
|    | <b>Alerts.</b> Click to view alerts for the model entity. <ul style="list-style-type: none"> <li>▶ <b>Red alert.</b> The alert is new.</li> <li>▶ <b>Gray alert.</b> The alert has already been read.</li> </ul> For more details, see "Alerts Dialog Box" on page 109.                                     |
|   | <b>Attachments.</b> Click to view attachments for the specified model entity. For more details, see "Attachments Page" on page 90.  |
|  | <b>Follow Up Flags.</b> Click to view follow up flags for the model entity. <ul style="list-style-type: none"> <li>▶ <b>Gray flag.</b> The follow up flag is new.</li> <li>▶ <b>Red flag.</b> The follow up date has arrived.</li> </ul> For more details, see "Flag For Follow Up Dialog Box" on page 111. |
|  | Business process model folder   |
|  | Business process model  |

| UI Elements   | Description  |
|---|--|
|  | Re-imported business process model<br><b>Available from:</b> Import Models dialog box  |
|  | Business process model activity  |
|  | Activity that expands to a sub-model   |
|  | Business process model path  |
|  | Unresolved path  |
|  | <p><b>Version Control.</b> The model entity is checked out.</p> <ul style="list-style-type: none"> <li>▶ <b>Green lock.</b> The model entity is checked out by the current user.</li> <li>▶ <b>Red lock.</b> The model entity is checked out by another user.</li> </ul> |

## Business Models Module Fields

This section describes the Business Models module fields.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the ALM sidebar, under <b>Requirements</b> , select <b>Business Models</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You can add user-defined fields and change the label of any of the fields in the Business Models module. You can also customize project lists. For more details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You can use the Script Editor to restrict and dynamically change the fields and values in the Business Models module. For more details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ When you select a business process model column with a user name value (including user-defined fields), ALM displays a list with the name and full name of each user. You can search for users, sort users, group users by user group, and select users from the users list or a group tree. For more details, see Users List Dialog Box.</li> <li>▶ <b>Version Control:</b> Additional fields are available in a version control enabled project. For details, see "Version Control Fields" on page 132.</li> <li>▶ Some fields are not available in all business process model views.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Work with Business Process Models" on page 453   |
| <b>Learn more</b>            | "Business Models Module Window" on page 460  |

User interface elements are described below:

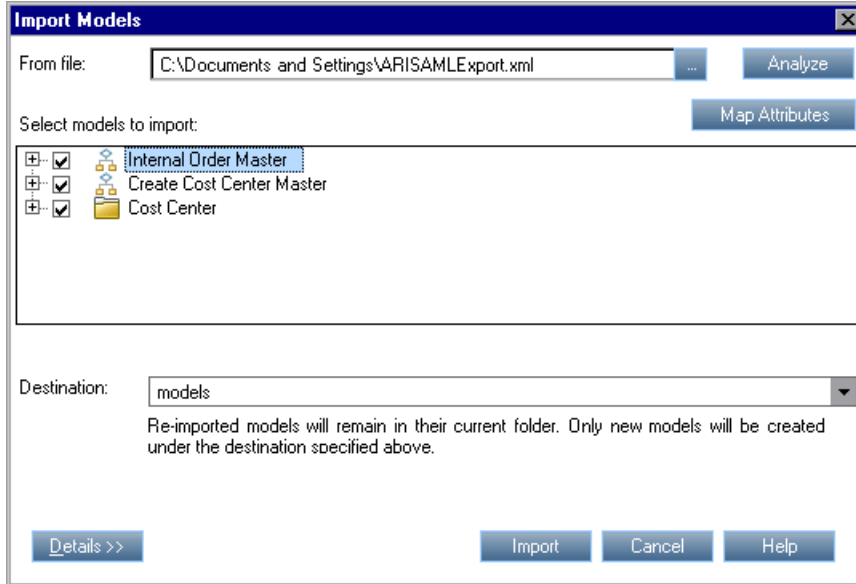
| UI Elements (A-Z)                              | Description   |
|--|---|
| <b>Activity ID/Folder ID/ Path ID/Model ID</b> | A unique numeric ID for the entity that is assigned automatically. The ID field cannot be modified.   |
| <b>Comments</b>                                | Comments on the entity.<br>Click in the text box to display a toolbar for formatting and spell checking the text.                                     |
| <b>Created By</b>                              | <b>Models/Activities:</b> The user who first imported the entity.<br><b>Paths:</b> The user who created the path.                                     |
| <b>Creation Date</b>                           | <b>Models/Activities:</b> The date and time on which the entity was first imported.<br><b>Paths:</b> The date and time on which the path was created. |
| <b>Description</b>                             | A description of the entity.<br>Click in the text box to display a toolbar for formatting and spell checking the text.                                |
| <b>Guid</b>                                    | A unique code identifying the model. The code helps identify the model in case of re-import.  |
| <b>Guid of referenced element</b>              | If an activity references a business process model, the unique code identifying the model.  |
| <b>Import Date</b>                             | The date and time on which the entity was last imported.  |
| <b>Imported By</b>                             | The user who last imported the entity.  |
| <b>Imported File Name</b>                      | The name of the source file from which the model was last imported.   |
| <b>Lane</b>                                    | The location of an activity within a model.   |
| <b>Model Author</b>                            | The user who created the model in the model authoring tool.   |
| <b>Name</b>                                    | The entity name.  |
| <b>Notation</b>                                | The notation that is used to implement the model in the source file. Possible values are <b>EPC</b> or <b>BPMN</b> .                                  |



| UI Elements (A-Z)       | Description   |
|-------------------------|---|
| <b>Notation Version</b> | The version of the notation (EPC or BPMN) that is used to implement the model in the source file. |
| <b>Path Description</b> | Lists the activities included in the path.  |
| <b>Pool</b>             | The location of an activity within a model.   |
| <b>Priority</b>         | The priority of the entity.   |
| <b>Prototype</b>        | Possible values are <b>As-Is</b> or <b>To-Be</b> .  |
| <b>Status</b>           | The status of the entity.   |
| <b>Text</b>             | Text displayed in the activity diagram, as defined in the modeling tool.                          |
| <b>Type</b>             | The activity type.  |
| <b>Vendor</b>           | The modeling tool used to create the business process model.                                      |

## Import Models Dialog Box

This dialog box enables you to import business process models from a source file.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Business Models module, in the <b>Model Tree</b> view, right-click a folder, and select <b>Import Model</b> .               |
| <b>Important information</b> | Characters in names of imported models and activities that are illegal in ALM (for example, \ ^ *), are replaced with underscores. |
| <b>Relevant tasks</b>        | "How to Work with Business Process Models" on page 453   |
| <b>Learn more</b>            | "Business Models Module Window" on page 460  |

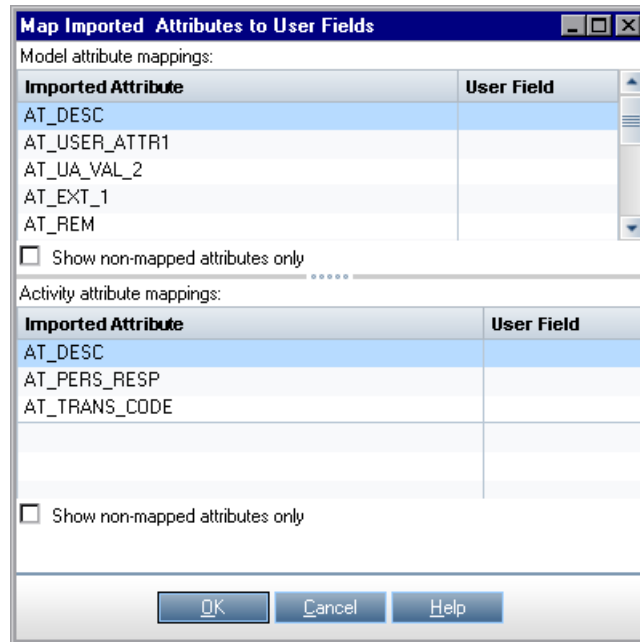
User interface elements are described below:

| UI Elements (A-Z)              | Description  |
|--------------------------------|--|
| Analyze                        | Scans the source file for business process models. The models in the file are displayed in the file content area.  |
| Details >>                     | Shows/hides options for defining representative requirements.  |
| Import                         | Imports the models selected in the Select models to import pane.<br>The Importing Models dialog box opens, displaying the progress and status of the file import.  |
| Map Attributes                 | Opens the Map Imported Attributes to User Fields dialog box. For user interface details, see "Map Imported Attributes to User Fields Dialog Box" on page 485.  |
| <b>Select models to import</b> | Displays the business process models contained in the source file.<br>If you selected a file with ARIS notation, structured models are displayed hierarchically.   |
| <b>From file</b>               | The source file from which business process models are imported.<br><b>Tip:</b> Click the browse button to locate a file in a folder.  |
| <b>Destination</b>             | The folder in the business models tree under which the imported model will be added.<br><b>Notes:</b><br><ul style="list-style-type: none"> <li>▶ You cannot import models under the root <b>Models</b> folder.</li> <li>▶ Re-imported models remain in the original folder.</li> </ul> <b>Tip:</b> Click the drop-down button to select a folder in the business models tree. |

| UI Elements (A-Z)                     | Description  |
|---------------------------------------|--|
| <p><b>Requirement destination</b></p> | <p>The folder in the requirements tree under which representative requirements of the imported business process model are added.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ You cannot select the <b>Requirements</b> root folder.</li> <li>▶ Representative requirements of re-imported models remain in the original folder.</li> </ul> <p><b>Tip:</b> Click the drop-down button to select a folder in the requirements tree.</p> <p>Available if the <b>Details</b> pane is expanded.</p> |
| <p><b>Rename requirements</b></p>     | <p>Instructs ALM to rename representative requirements of re-imported models. The requirements are renamed according to the new names given to the business process model and its activities.</p> <p>Available if the <b>Details</b> pane is expanded.</p>   |

## Map Imported Attributes to User Fields Dialog Box

This dialog box enables you to map model and activity attributes to ALM fields.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Import Models dialog box, select a file to import, and click <b>Map Attributes</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ To enable attribute mapping, you must add string or memo fields to the Business Process Models and Business Process Model Elements entities. For more details on adding user-defined fields, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ If user fields are not defined, imported attributes are not displayed in the appropriate grid.</li> <li>▶ If the selected models include attributes that were previously mapped, the existing mappings are displayed.</li> </ul> |

|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | "How to Work with Business Process Models" on page 453 |
| <b>Learn more</b>     | "Business Models Module Window" on page 460            |

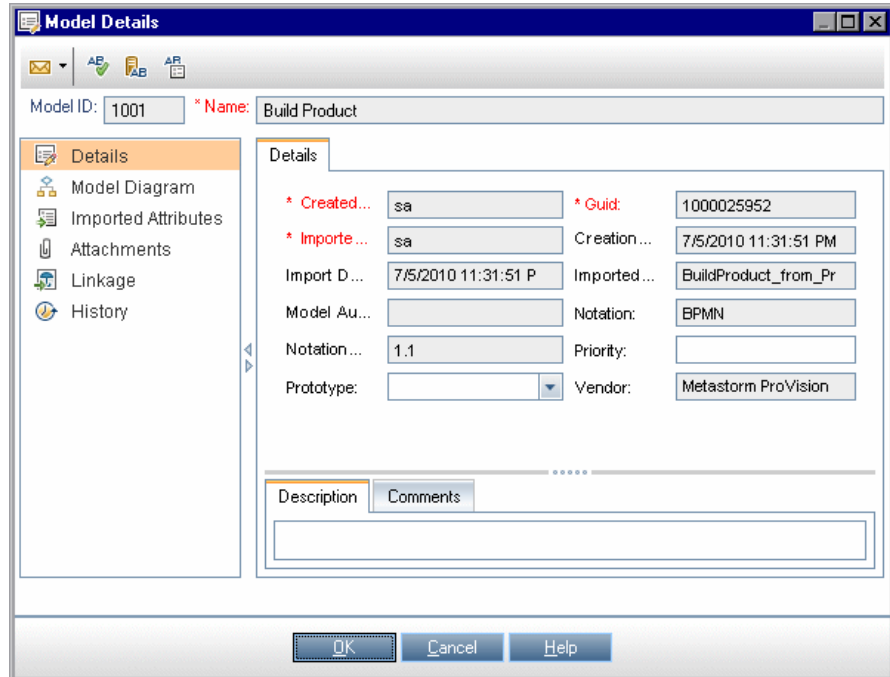
User interface elements are described below:

| <b>UI Elements</b>                     | <b>Description</b>   |
|--|--|
| <b>Model attribute mappings</b>        | Displays the imported model attributes, and the ALM fields to which they are mapped.<br><b>Note:</b> Toggle the <b>Show non-mapped attributes only</b> option to show or hide mapped attributes.   |
| <b>Activity attribute mappings</b>     | Displays the imported activity attributes, and the ALM fields to which they are mapped.<br><b>Note:</b> Toggle the <b>Show non-mapped attributes only</b> option to show or hide mapped attributes.  |
| <b>Imported Attribute</b>              | Lists the model or activity attributes imported from the source file.  |
| <b>User Field</b>                      | Lists the user-defined fields that are mapped to the corresponding attributes.<br><b>Notes:</b> <ul style="list-style-type: none"> <li>➤ The drop-down list includes only user fields that are not already mapped to attributes in the selected models.</li> <li>➤ If user fields are mapped to attributes in imported models, you can reassign them to other attributes in the selected models. This will override the previous mapping.</li> </ul> |
| <b>Show non-mapped attributes only</b> | Enables you to hide attributes that are already mapped to ALM fields.  |

## Model Details/Model Activity Details Dialog Box





The Model Details dialog box enables you to view and update details of a business process model.

The Model Activity Details dialog box enables you to view and update details of a business process model activity.



|                       |   |
|-----------------------|---|
| <b>To access</b>      | In the Business Model module, right-click a business process model or activity, and select <b>Details</b> . |
| <b>Relevant tasks</b> | "How to Work with Business Process Models" on page 453  |
| <b>Learn more</b>     | "Business Process Models Overview" on page 450  |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Send by E-mail.</b> Opens the Send E-mail dialog box, enabling you to send a business process model by email to recipients selected from a list. For more details, see "Send E-mail Dialog Box" on page 87.</p> <p><b>Available from:</b> Business Process Model Details dialog box</p> |
|  | <p><b>Spell Check.</b> Checks the spelling for the selected word or text box.</p>   |
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p>   |
|  | <p><b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.</p>  |
| <p>&lt;Business Models module fields&gt;</p>                                      | <p>For details on the fields available in the Business Models module, see "Business Models Module Fields" on page 479.</p>  |
| <p><b>Attachments</b></p>   | <p>Lists attachments that provide additional information about the currently selected model entity. For more details, see "Attachments Page" on page 90.</p>  |
| <p><b>Details</b></p>   | <p>Lists the relevant fields for the selected business entity. For details, see "Business Models Module Fields" on page 479.</p>  |
| <p><b>History</b></p>   | <p>Lists changes made to the currently selected business process model. For more details, see "History Tab" on page 85.</p> <p><b>Available from:</b> Business Process Model Details dialog box</p>   |
| <p><b>Imported Attributes</b></p>   | <p>Lists field labels and values relevant to the business entity, as defined in the modeling tool.</p>  |

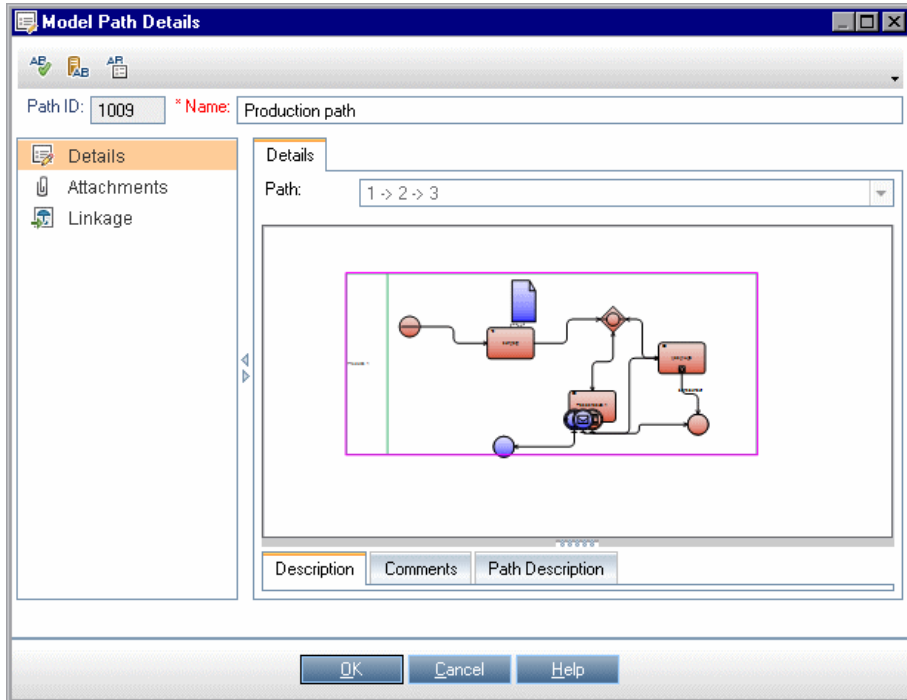


| UI Elements (A-Z)    | Description  |
|----------------------|--|
| <b>Linkage</b>       | Contains the Requirements and Tests tabs that list entities linked to the business entity. For more details, see "Linkage Tab" on page 493.  |
| <b>Model Diagram</b> | <p><b>Business Process Model Details dialog box:</b> Displays a diagram of the current business process model.</p> <p><b>Model Activity Details dialog box:</b> Displays a diagram of the business process model in which the current activity is embedded. The current activity is highlighted in the model diagram.</p> <p><b>Tip:</b> Right-click an area in the diagram, and select one of the zoom options.</p> |

## **New Model Path/Model Path Details Dialog Box**




The New Model Path dialog box enables you to define a path of transitions between activities in a business process model.

The Model Path Details dialog box enables you to view and update details of a business process model path.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <p><b>New Model Path dialog box:</b></p> <ol style="list-style-type: none"> <li><b>1</b> In the Business Models module, select the <b>Model Tree</b> view.</li> <li><b>2</b> Right-click a business process model and select <b>New Path</b>.</li> </ol> <p><b>Model Path Details dialog box:</b><br/>In the Business Models module, right-click a path and select <b>Details</b>.</p> |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ Paths are created in the business models tree as a sub-entities of the business process model.</li> <li>▶ Recursive paths that repeat the same activity are not supported.</li> </ul>   |
| <b>Relevant tasks</b>        | "How to Work with Business Process Models" on page 453   |
| <b>Learn more</b>            | "Business Process Model Paths" on page 452   |

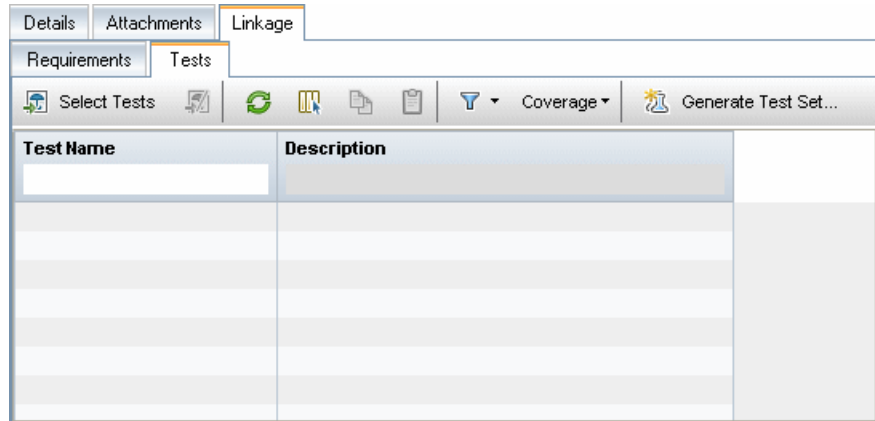
User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|    | <b>Spell Check.</b> Checks the spelling for the selected word or text box.  |
|   | <b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.  |
|  | <b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.   |
| <Business Models module fields>   | For details on the fields available in the Business Models module, see "Business Models Module Fields" on page 479.   |
| <model diagram>   | A diagram of the business process model. When you select paths in the <b>Paths</b> drop-down list, the activities and nodes along the path are highlighted. |
| <b>Attachments</b>  | Lists attachments that provide additional information about the currently selected path. For more details, see "Attachments Page" on page 90.               |

| UI Elements (A-Z)       | Description  |
|-------------------------|--|
| <b>Comments</b>         | <p>Comments about the currently selected path.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>   |
| <b>Description</b>      | <p>Describes the currently selected path.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>  |
| <b>Details</b>          | <p>Lists the relevant fields for the selected path. For details, see "Business Models Module Fields" on page 479.</p>  |
| <b>Linkage</b>          | <p>Contains the Requirements and Tests tabs that list entities linked to the path.</p> <p><b>Available from:</b> Model Path Details dialog box</p>   |
| <b>Path</b>             | <p><b>New Business Model Path dialog box:</b> A drop-down list of possible end-to-end paths in the business process model. Select a path that is important to test.</p> <p><b>Business Model Path Details dialog box:</b> A notation of the current end-to-end path. The activities in the path are represented by numbers.</p> <p><b>Note:</b> If the path is unresolved, select a new path from the drop-down list.</p> <p><b>Tip:</b> Click the <b>Path Description</b> tab to view a full description of the path, including the full names of the activities in the path.</p> |
| <b>Path Description</b> | <p>A Full description of the path, including the full names of the activities in the path.</p>   |

## Linkage Tab






This tab enables you to link requirements and tests to a model entity.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | Select a business process model entity, and click the <b>Linkage</b> tab or button.   |
| <b>Important information</b> | Requirement linkage is created automatically when you convert a representative requirement to a test. Therefore, even if you have not yet added requirements linkage, it may already exist. |
| <b>Relevant tasks</b>        | "How to Work with Business Process Models" on page 453  |







## Requirements Tab



User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements  | Description  |
|--|--|
|   | <p>Opens a panel displaying the following tabs:</p> <ul style="list-style-type: none"> <li>➤ Requirements Tree</li> <li>➤ Test Plan Tree</li> </ul> <p>The panel enables you to link requirements and tests to model entities.</p> <p>For more details, see "Requirements Tree and Test Plan Tree Pane" on page 497.</p> |
|   | <p><b>Remove From Linkage.</b> Removes selected requirements from the linkage grid.</p>  |
|   | <p><b>Refresh All.</b> Refreshes the linkage grid.</p>   |
|   | <p><b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the linkage grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p>  |
|  | <p><b>Copy/Paste.</b> Copies linked requirements to another model entity. To paste the copied requirements, select a model entity, click the <b>Linkage &gt; Requirements</b> tab, and click <b>Paste</b>.</p>   |
| <p>&lt;linkage grid&gt;</p>  | <p>For field definitions, see "Requirements Module Fields" on page 368.</p>  |

## Tests Tab

User interface elements are described below:

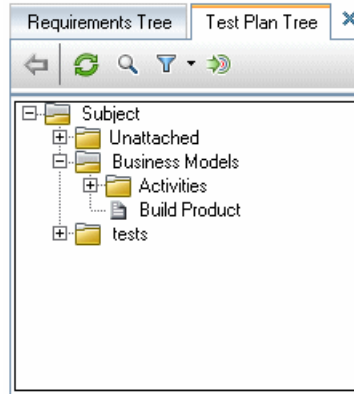
| UI Elements   | Description   |
|---|---|
|    | <p>Opens a panel displaying the following tabs:</p> <ul style="list-style-type: none"> <li>▶ Requirements Tree</li> <li>▶ Test Plan Tree</li> </ul> <p>The panel enables you to link requirements and tests to model entities.</p> <p>For more details, see "Requirements Tree and Test Plan Tree Pane" on page 497.</p>  |
|    | <p><b>Remove From Linkage.</b> Removes selected tests from the linkage grid.</p> <p><b>Note:</b> You cannot remove tests covering linked requirements.</p>  |
|    | <p><b>Refresh All.</b> Refreshes the linkage grid.</p>  |
|    | <p><b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the linkage grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p>   |
|  | <p><b>Copy/Paste.</b> Copies linked tests to another model entity. To paste the copied tests, select a model entity, click the <b>Linkage &gt; Tests</b> tab, and click <b>Paste</b>.</p>   |
|  | <p><b>Set Filter/Sort.</b> Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Set Filter/Sort.</b> Opens the Filter dialog box, enabling you to filter and sort tests.</li> <li>▶ <b>Clear Filter/Sort.</b> Clears any filters or sorting that you have applied.</li> </ul> <p>For more details, see "Filter Dialog Box" on page 64.</p> |

| UI Elements   | Description  |
|---|--|
|  | <p>Select the type of linked tests displayed in the grid.</p> <ul style="list-style-type: none"> <li>▶ <b>Direct Coverage.</b> Displays tests linked directly to the model entity, or to the representative requirement. This option is always selected.</li> <li>▶ <b>Linked Requirement Coverage.</b> Displays tests linked to requirements that are linked to the model entity.</li> <li>▶ <b>Children Requirement Coverage.</b> Displays tests that are linked to child requirements of requirements that are linked to the model entity.</li> </ul> |
|  | <p>Enables you to create a test set containing the tests in the linkage grid.</p> <p>In the Select Test Set Folder dialog box, select the folder in the test sets tree under which the test set is created.</p>  |
| <p>&lt;linkage grid&gt;</p>   | <p>For field definitions, see "Test Plan Module Fields" on page 537.</p>   |









## Requirements Tree and Test Plan Tree Pane

This pane enables you to link requirements and tests to a business process model entity.



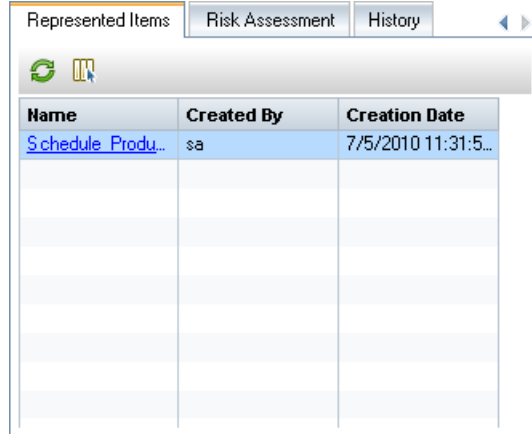
|                              |   |
|------------------------------|---|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> Select a business process model, activity, or path, and click the <b>Linkage</b> tab or button.</li> <li><b>2</b> Click the <b>Requirements</b> or <b>Tests</b> tab.</li> <li><b>3</b> Click the <b>Select Requirements</b> or <b>Select Tests</b> button.</li> </ol> |
| <b>Important information</b> | In the Business Models module window, you can create linkage by dragging and dropping requirements and tests to any entity in the model diagram.  |
| <b>Relevant tasks</b>        | "How to Work with Business Process Models" on page 453  |

User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|    | <p><b>Add to Linkage.</b> Adds a selected requirement, test or folder to the linkage grid.</p> <p><b>Tip:</b> Alternatively, create linkage to any model entity by dragging requirements and tests directly to entities in the model diagram.</p>  |
|    | <p><b>Refresh.</b> Refreshes the tree to display the most up-to-date information.</p>  |
|    | <p><b>Find.</b> Searches for a specific requirement or test in the tree.</p> <p>Type the name (or part of the name) of the requirement or test in the Find box and click <b>Find</b>. If the search is successful, the requirement or test is highlighted in the tree.</p>   |
|    | <p><b>Filter/Sort.</b> Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Set Filter/Sort.</b> Opens the Filter dialog box, enabling you to filter and sort tests.</li> <li>▶ <b>Clear Filter/Sort.</b> Clears any filters or sorting that you have applied.</li> </ul> <p>For more details, see "Filter Dialog Box" on page 64.</p>  |
|  | <p><b>Go to Requirement by ID.</b> Opens the Go To Requirement dialog box, enabling you to find a specific requirement by <b>ReqID</b>.</p> <p><b>Go to Test by ID.</b> Opens the Go To Test dialog box, enabling you to find a specific test by <b>Test ID</b>.</p> <p><b>Note:</b> You can only go to requirements and tests that are in the current filter.</p> |
|  | <p>Hides the Requirement Tree and Test Plan tree pane.</p>   |

## Represented Items Tab


This tab lists business process model entities represented by the selected requirement.




| Name              | Created By | Creation Date       |
|-------------------|------------|---------------------|
| Schedule Produ... | sa         | 7/5/2010 11:31:5... |
|                   |            |                     |
|                   |            |                     |
|                   |            |                     |
|                   |            |                     |
|                   |            |                     |

|                       |  |
|-----------------------|--|
| <b>To access</b>      | In the <b>Requirements</b> module, open the Requirement Details view, select a Business Model requirement, and click the <b>Represented Items</b> tab. |
| <b>Relevant tasks</b> | "How to Create Requirements" on page 341<br>"How to Work with Business Process Models" on page 453   |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Refresh.</b> Refreshes the grid to display the most up-to-date information. |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the requirements tree or grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p> |
| <p>&lt;<b>business model entities grid</b>&gt;</p>                                | <p>Click a link in the grid to go to the represented business process model entity in the business models tree.</p> <p>For field definitions, see "Business Models Module Fields" on page 479.</p>   |

# Part IV

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## Test Plan



# 19

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## Introducing Test Planning

This chapter includes:

### Concepts

- ▶ Test Plan Overview on page 504

### Tasks

- ▶ How to Plan Tests in ALM on page 505

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## Concepts

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### Test Plan Overview

Developing a clear and concise test plan is fundamental to successful application testing. A good test plan enables you to assess the quality of your application at any point in the application management process.

Outline a strategy for achieving your requirements, as defined in the Requirements module. Ask yourself two basic questions:

#### **How should you test your application?**

- ▶ Which testing techniques will you use (stress tests, security tests, performance and load tests, etc.)?
- ▶ How will you handle defects (severity classification, authorization to open and close defects, etc.)?

#### **What resources do you require?**

- ▶ What resources do you require to test (personnel, hardware, etc.)?
- ▶ When will the various tasks be completed?

For example, consider a flight reservation application that lets you manage flight scheduling, passenger bookings, and ticket sales. Testing will require designing both manual and automated tests. You could assign testing personnel with programming experience the task of designing automated tests, while non-programmers could design manual tests.



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## Tasks

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### How to Plan Tests in ALM

This task describes how to work with tests in HP Application Lifecycle Management (ALM).

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**Note:** This task is part of a higher-level task. For details, see "Application Lifecycle Management Roadmap" on page 27.

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This task includes the following steps:

- "Prerequisites" on page 506
- "Create a test plan tree" on page 506
- "Create dependencies with test resources – optional" on page 506
- "Define test parameters" on page 507
- "Define test configurations" on page 507
- "Create test steps" on page 507
- "Automate tests" on page 507
- "Create requirements coverage" on page 508
- "Link a test to a defect" on page 508
- "Analyze test plan data" on page 508
- "Establish a baseline" on page 509

## 1 Prerequisites

A set of requirements is defined in the Requirements tree.

For task details, see "How to Use Requirements in ALM" on page 335.

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**Tip:** You can automatically create tests based directly on your requirements in the Requirements module. For more details, see "Convert requirements to tests - optional" on page 343 in the "How to Create Requirements" task.

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## 2 Create a test plan tree

Create a test plan tree of test subject folders and tests. For task details, see "How to Create Tests" on page 513.

## 3 Create dependencies with test resources – optional

You can associate tests with a set of resources that you upload to the ALM repository.

You can then view these dependencies and determine the resources that are in use. For task details, see "How to Use Test Resources" on page 658.

**Business Process Testing:** You can associate component steps with application area resources that you upload.

## 4 Define test parameters

To make tests more flexible, you can include parameters in test steps. This enables you to run the same test repeatedly and assign different values to the parameters. For task details, see "How to Use Test Parameters" on page 589.

## 5 Define test configurations

To run tests for different use-cases, you can define test configurations. This enables you to run the same test under different scenarios. For task details, see "How to Work with Test Configurations" on page 625.

## 6 Create test steps

Create test steps describing the operations to perform and their expected results. After you define the test steps, decide whether to perform the test manually or to automate it. For task details, see "How to Design Test Steps" on page 605.

## 7 Automate tests

After designing test steps, decide which tests to automate. Factors influencing test automation include frequency of execution, volume of data input, length of execution time, and complexity. For task details, see "How to Design Test Steps" on page 605.

**System Tests.** You can also create automated system tests that provide system information for a machine, capture a desktop image, or restart a machine. For task details, see "How to Create System Tests" on page 651.

## 8 Create requirements coverage

Link each test in the test plan tree with a requirement or requirements in the requirements tree. By defining requirements coverage for a test, you keep track of the relationship between the tests in your test plan and your original requirements. For task details, see "How to Create Coverage" on page 554.

## 9 Link a test to a defect

Link a test to specific defects. This is useful, for example, when a new test is created specifically for a known defect. By creating a link, you can determine if the test should be run based on the status of the defect. For user interface details, see "Linked Defects/Entities Page" on page 902.

## 10 Analyze test plan data

Analyze the test plan by generating reports and graphs.

Use one of the following:

- ▶ **View dynamic graphs of test subjects.** In the test plan tree, select a test subject, and click the **Live Analysis** tab. For task details on generating live analysis graphs, see "How to Generate Live Analysis Graphs" on page 1057.
- ▶ **View test plan data in a graph.** On the Test Plan module menu, select **Analysis > Graphs**. For task details on generating graphs, see "How to Generate a Graph" on page 936.
- ▶ **Create a report of test plan data.** On the Test Plan module menu, select **Analysis > Reports**. For task details on creating reports, see "How to Generate Standard Reports" on page 1037.

For details on additional analysis tools in ALM, see "How to Analyze Data in ALM" on page 911.

## 11 Establish a baseline

After your test plan has been reviewed and approved, you can create a baseline. A baseline provides you with a snapshot of your test plan at a specific point in time. Use a baseline to mark any significant milestone in the application lifecycle. The baseline then serves as a point of reference against which changes can be compared. For task details, see "How to Use Libraries and Baselines in ALM" on page 267.



# 20

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## Test Plan Specification

This chapter includes:

### Concepts

- ▶ Test Plan Specification Overview on page 512

### Tasks

- ▶ How to Create Tests on page 513

### Reference

- ▶ Test Types on page 517
- ▶ Test Plan User Interface on page 518

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## Concepts

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### Test Plan Specification Overview

The typical application is too large to test as a whole. The Test Plan module enables you to divide your application according to functionality. You divide your application into units, or **subjects**, by creating folders in a test plan tree. This is a graphical representation of your test plan, displaying your tests according to the hierarchical relationship of their functions.

After you define subjects in the tree, you decide which tests to create for each subject and add them to the tree. At this stage, you define basic information about the test, such as its name, status, and the designer. You can also attach a file, URL, application snapshot or system information to illustrate a test. Afterwards, you define the test steps. **Test steps** contain detailed instructions on how to execute a test and evaluate the results.

ALM enables you to use the same test to test different use-cases, each with its own **test configuration**. Each test configuration uses a different set of data. You define the data by adding **test parameter** values for each test configuration. A test parameter is a variable that can be assigned a value.

During the application management process, you may need to modify your test plan. You can update the test plan tree at any time.

There are a number of methods for organizing your test plan by subject. For example, you could define subjects according to:

- ▶ Application functionality—such as editing, file operations, and reporting
- ▶ Type of testing—such as functional, user interface, performance, and load

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**Note:** Developing and editing a test plan tree requires appropriate user permissions. For more information, refer to the *HP Application Lifecycle Management Administrator Guide*.

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For details on specifying tests, see "How to Create Tests" on page 513.



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# Tasks

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## How to Create Tests

This task describes how to create folders of test subjects in the test plan tree, and add tests to the test subjects.

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**Note:** This task is part of a higher-level task. For details, see "How to Plan Tests in ALM" on page 505.

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To learn more about test specification, see "Test Plan Specification Overview" on page 512.


This task includes the following steps:

- "Create test subjects" on page 513
- "Create tests in the test plan tree" on page 514
- "Create a manual template test – optional" on page 515
- "Add steps to tests" on page 516

### 1 Create test subjects

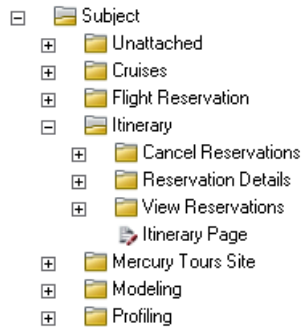
Create folders in the test plan tree. Each folder represents a **test subject** – a testing area in your application.

**To create a test subject:**

- a** On the ALM sidebar, under **Testing**, select **Test Plan**.
- b** Select **View > Test Plan Tree**.
- c** Select the **Subject** root folder or an existing test subject, and click **New Folder** .

**Example:**

To test a flight reservation application that lets you manage flight scheduling, passenger bookings, and ticket sales, you might define the following subjects for the test plan tree:



Notice how the **Itinerary** subject contains additional subject folders. These folders further categorize the tests in the test plan tree by creating additional levels of subjects. For the complete example, refer to the **ALM\_Demo** project.

## 2 Create tests in the test plan tree

Create tests under test subject folders.

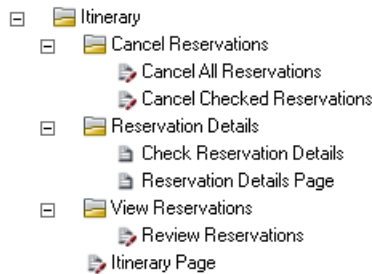
**To create tests:**

- a** In the Test Plan tree, right-click the folder, and select **New Test**.
- b** Fill in the fields in the New Test dialog box. For user interface details, see "New Test Dialog Box" on page 543.

Each test should have a distinct objective, such as verifying a specific function or system requirement. The tests you define should be based on the goals you set at the beginning of the application management process.

**Example:**

In the test plan tree shown in the previous step, you might assign tests to the **Itinerary** subject folders as follows:

**3 Import tests – optional**

In addition to creating a test plan tree in the ALM Test Plan module, you can also import test plan data from Microsoft Word or Microsoft Excel to your ALM project. To import from Word, you must install the **HP ALM Microsoft Word Add-in** and the **HP Quality Center Connectivity Add-in**. To import from Excel, you must install the **HP ALM Microsoft Excel Add-in** and the **HP Quality Center Connectivity Add-in**. You can install the add-ins from the HP Application Lifecycle Management Add-ins page. For more information, refer to the *HP Application Lifecycle Management Installation Guide*.

**4 Create a manual template test – optional**

If there are common instructions that will be repeated in several tests, for example Log in to the application, you can create a manual template test of common instructions, that is then called by other manual tests.

**Note:** It is not essential to mark a test as a template test to be able to call it.

**To create a manual template test:**

- a** Create a manual test, as described in Step 2 – "Create tests in the test plan tree."
- b** Right-click the new test in the test plan tree, and select **Mark as Template Test**. The test icon changes from gray to white, indicating that it is now a template test.

**5 Create a QuickTest template test – optional**

The template test defines which QuickTest add-ins ALM associates with a new QuickTest test. For more details, refer to the QuickTest documentation and the relevant QuickTest add-in documentation.

In addition to the default QuickTest template test that is provided with the ALM client, you can create other QuickTest template tests.

**To create a QuickTest template test:**

- a** Create a QuickTest Professional test, as described in Step 2: "Create tests in the test plan tree".
- b** Right-click the new test in the test plan tree, and select **Mark as Template Test**. The test icon changes from gray to white, indicating that it is now a template test.

**6 Add steps to tests**

Add steps to tests, describing the actions a tester should perform to complete the tests.

For task details, see "How to Design Test Steps" on page 605.

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## Reference

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### Test Types

The following test types are available in the Test Plan module.

**ALM Editions:** Not all test types are available with each edition.

| Test Icon   | Test Type               | Description  |
|---|-------------------------|--|
|    | <b>BUSINESS-PROCESS</b> | A business process test. For details, refer to the <i>HP Business Process Testing User Guide</i> .   |
|    | <b>FLOW</b>             | A test comprising a collection of business components in a fixed sequence that performs a specific task. For more details, refer to the <i>HP Business Process Testing User Guide</i> .  |
|    | <b>LR-SCENARIO</b>      | A scenario that is executed by LoadRunner, the HP load testing tool.   |
|    | <b>MANUAL</b>           | A test that is run manually.   |
|   | <b>PERFORMANCE-TEST</b> | A performance test. For details, refer to the <i>HP ALM Performance Center Guide</i> .   |
|  | <b>QAINSPPECT_TEST</b>  | A test that is executed by QAIInspect, the HP security testing tool.   |
|  | <b>QUICKTEST_TEST</b>   | A test that is executed by QuickTest Professional, the HP functional enterprise testing tool.<br><br>This test type is only available if you have installed the appropriate add-in from the HP Application Lifecycle Management Add-ins page. For more details on installing add-ins, refer to the <i>HP Application Lifecycle Management Installation Guide</i> . |

| Test Icon   | Test Type           | Description   |
|---|---------------------|---|
|  | <b>SERVICE-TEST</b> | <p>A test that is executed by Service Test, HP's tool for creating tests for GUI-less applications such as Web and REST services. For more details, refer to the <i>HP Service Test User Guide</i>.</p> <p>This test type is only available if you have installed the appropriate add-in from the HP Application Lifecycle Management Add-ins page. For more details on installing add-ins, refer to the <i>HP Application Lifecycle Management Installation Guide</i>.</p> |
|  | <b>SYSTEM-TEST</b>  | <p>A test that instructs ALM to provide system information, capture a desktop image, or restart a machine.</p>  |
|  | <b>VAPI-XP-TEST</b> | <p>A test that is created by Visual API-XP, the ALM open test architecture API testing tool. For more information on VAPI-XP tests, see "VAPI-XP Tests" on page 681.</p>  |

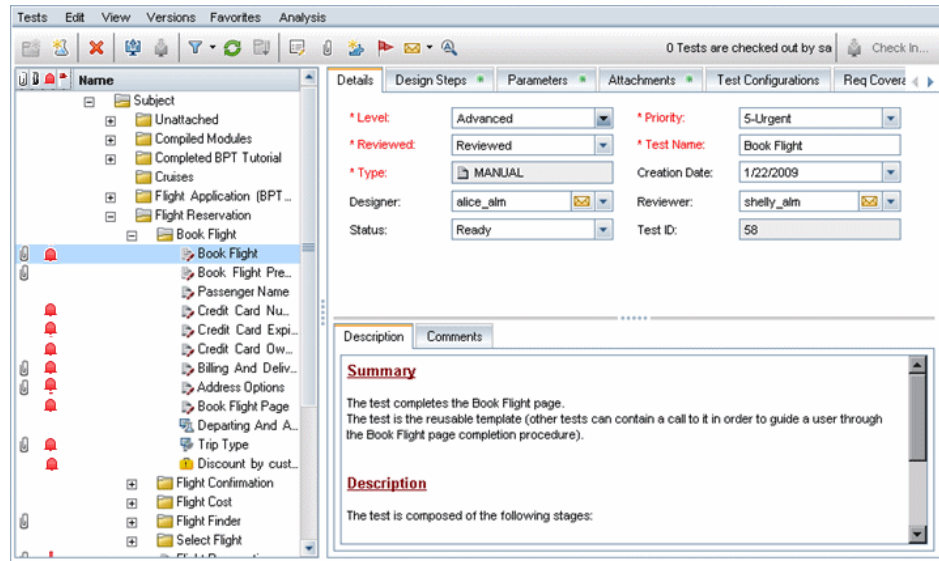
## Test Plan User Interface

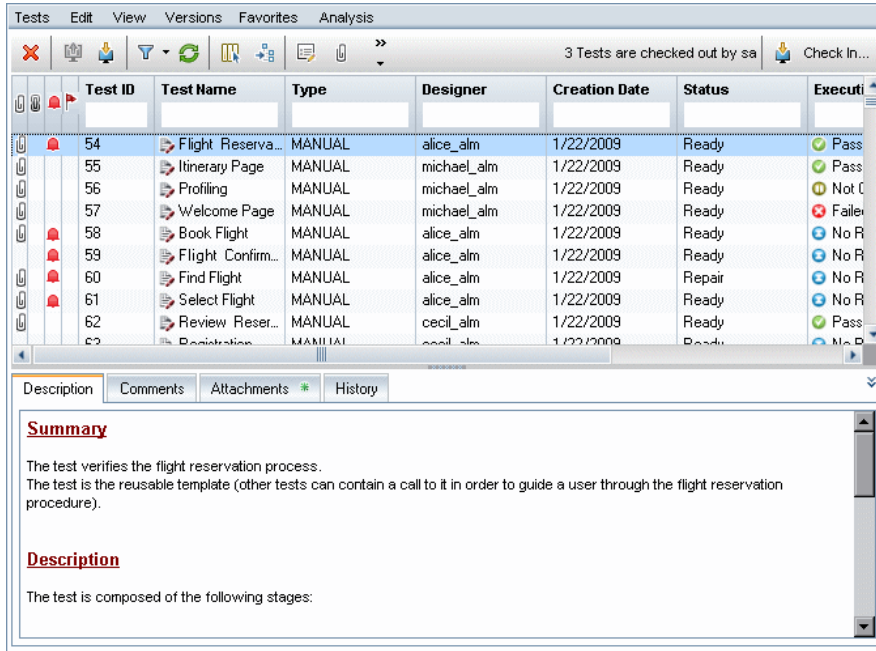
This section includes:

- ▶ Test Plan Module Window on page 519
- ▶ Test Plan Module Menus and Buttons on page 524
- ▶ Test Plan Module Icons on page 535
- ▶ Test Plan Module Fields on page 537
- ▶ Test Details Dialog Box on page 540
- ▶ New Test Dialog Box on page 543
- ▶ Sort Folders in Test Plan Tree Dialog Box on page 546
- ▶ Paste Tests/Folders to Target Project Dialog Box on page 548

## Test Plan Module Window

The test plan window enables you to define and maintain ALM tests.






|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Testing</b>, select <b>Test Plan</b>.</li> <li><b>2</b> In the <b>View</b> menu, select <b>Test Grid</b> or <b>Test Plan Tree</b>.</li> </ol>  |
| <p><b>Important information</b></p> | <p>The Test Plan window includes the following views.</p> <ul style="list-style-type: none"> <li>▶ <b>Test Plan Tree.</b> Displays test subjects and tests hierarchically in a tree.</li> <li>▶ <b>Test Grid.</b> Displays tests in a flat, non-hierarchical view. Each line in the grid displays a separate test.</li> </ul> <p><b>Tip:</b> To enable scrolling in the Test Grid view after editing a field, click the <b>Escape</b> key, then scroll using the mouse wheel or the up/down arrow keys.</p> <p><b>Quality Center Starter Edition:</b> Not all fields and functionality in the Test Plan module are available.</p> <p><b>Business Process Testing:</b> Different tabs are displayed in this module if you are working with a business process test. For details, refer to the <i>HP Business Process Testing User Guide</i>.</p> |



|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "How to Plan Tests in ALM" on page 505<br>"How to Create Tests" on page 513 |
| <b>See also</b>       | "Test Plan Module Fields" on page 537                                       |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description  |
|---|--|
| <Test Plan module common UI elements>   | <ul style="list-style-type: none"> <li>▶ <b>Test Plan fields.</b> For field definitions, see "Test Plan Module Fields" on page 537.</li> <li>▶ <b>Test Plan menus and buttons.</b> For command and button descriptions, see "Test Plan Module Menus and Buttons" on page 524.</li> <li>▶ <b>Test Plan icons.</b> For icon descriptions, see "Test Plan Module Icons" on page 535.</li> <li>▶ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu and sidebar, see "ALM Common Areas" on page 41.</li> </ul> |
| <test plan tree>  | <p>Located on the left side of the window, organizes and displays your tests hierarchically.</p> <p><b>Note:</b> Items in a folder are alphabetized. You cannot move items within a folder.</p>  |
| <filter status bar>   | <p>Describes the filter currently applied to the grid or tree. Located directly above the grid filter boxes or tree.</p> <p>In grid views:</p> <ul style="list-style-type: none"> <li>▶ <b>Showing &lt;x&gt; results.</b> Indicates the number of records currently displayed out of the total records.</li> <li>▶ <b>Retrieve all &lt;x&gt; results.</b> Click to display all records.</li> </ul>   |
| <grid filters><br> | <p>Displays a grid filter box under each column name, enabling you to define a filter condition for a column.</p> <p>Type directly into the box, or click the box to display the browse button, which opens the Select Filter Condition dialog box. For user interface details, see "Select Filter Condition Dialog Box" on page 74.</p> <p><b>Available from:</b> Test Grid view</p>  |

| UI Elements (A-Z)              | Description   |
|--------------------------------|---|
| <b>Attachments tab</b>         | Lists attachments that provide additional information about the currently selected test. For more details, see "Attachments Page" on page 90.   |
| <b>Business Models Linkage</b> | Lists the business model entities linked to the currently selected test. For more details, see "Business Models Linkage Tab" on page 573.   |
| <b>Criteria tab</b>            | <p>Display criteria of the selected business process test. For more details, see "Criteria Tab" on page 621.</p> <p><b>Business Process Testing:</b> Functionality related to test criteria is available only for business process tests. For details, see the <i>HP Business Process Testing User Guide</i>.</p> |
| <b>Dependencies tab</b>        | Displays dependency relationships that exist between entities such as test resources and tests. For more information, see "Dependencies Tab" on page 675.   |
| <b>Design Steps tab</b>        | Lists the instructions on how to execute the selected test. For more details, see "Design Steps Tab/Design Step Details Dialog Box" on page 610.  |
| <b>Details tab</b>             | <p>Lists the test fields. For details on test fields, see "Test Plan Module Fields" on page 537.</p> <p><b>Tip:</b> Clicking in the <b>Description</b> or <b>Comments</b> field in this tab displays a toolbar for formatting and spell checking the text.</p>  |
| <b>History tab</b>             | Lists changes made to the currently selected test. For more details, see "History Tab" on page 85.  |
| <b>Linked Defects tab</b>      | Lists the defects linked to the currently selected test. For more details, see "Linked Defects/Entities Page" on page 902.  |
| <b>Live Analysis tab</b>       | <p>Displays a graphical representation of test data related to the selected test subject folder. For more details, see "Live Analysis Tab" on page 1060.</p> <p><b>Available from:</b> Test Plan Tree view</p>  |


| UI Elements (A-Z)              | Description  |
|--------------------------------|--|
| <b>Parameters tab</b>          | Lists parameters associated with the currently selected test. Parameters can be incorporated in the test's design steps. For more details, see "Parameters Tab/Parameters Dialog Box" on page 593. |
| <b>Req Coverage tab</b>        | Lists the requirements that are met by the currently selected test. For more details, see "Req Coverage Tab" on page 564.  |
| <b>Test Configurations tab</b> | Displays the test configurations of the selected test. For more details, see "Test Configurations Tab" on page 632.  |
| <b>Test Design tab</b>         | <b>Performance Center:</b> Displays a detailed summary of the selected performance test. For more details, refer to the <i>HP ALM Performance Center Guide</i> .                                   |
| <b>Test Script tab</b>         | For automated tests, the test script that is run by the testing tool for the currently selected test. For more details, see "Test Script Tab" on page 617.   |


## Test Plan Module Menus and Buttons

This section describes the menus and buttons available in the Test Plan module.


|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under <b>Testing</b> , select <b>Test Plan</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ Some menu commands and buttons are not available in all test plan views.</li> <li>▶ <b>Tip:</b> You can access the menu bar from the Test Plan module by pressing the shortcut key <b>ALT</b>. Additionally, you can perform many other ALM operations using shortcut keys. For a list of shortcut keys, see "ALM Keyboard Shortcut Reference" on page 154.</li> <li>▶ <b>Version Control:</b> Additional menu commands and buttons are available in a version control enabled project. For details, see "Versions Menu and Buttons" on page 131.</li> <li>▶ <b>Quality Center Starter Edition:</b> Not all commands and buttons are available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Create Tests" on page 513   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "Test Plan Module Window" on page 519</li> <li>▶ "Test Plan Module Icons" on page 535</li> </ul>   |

User interface elements are described below (unlabeled elements are shown in angle brackets):



| UI Elements (A-Z)  | Menu      | Description  |
|--|-----------|--|
| <list of recently used favorite views>   | Favorites | Displays the four most recently used favorite views in the Test Plan module.<br><br>You can define the number of views displayed on the menu by setting the <b>FAVORITES_DEPTH</b> parameter in the Site Configuration tab in Site Administration. For details, see the <i>HP Application Lifecycle Management Administrator Guide</i> . |
| <b>Add to Favorites</b>  | Favorites | Opens the Add Favorite dialog box, enabling you to add a favorite view to your private or the public folder. For details, see "Add Favorite Dialog Box" on page 117.   |
| <b>Alerts</b>  | Edit      | Opens the Alerts dialog box, enabling you to display alerts for the test. For details, see "Alerts Dialog Box" on page 109.  |
|  <b>Attachments</b> | <toolbar> | Opens the Attachments page, enabling you to add attachments to the selected test. For details, see "Attachments Page" on page 90.  |
| <b>Clear Alerts</b>  | Edit      | Clears displayed alerts for the module. For more details, see "How to Use Alerts" on page 103.   |
| <b>Clear Follow Up Flag</b>  | Edit      | Clears a follow up flag of a selected test. For more details, see "Follow Up Flags Overview" on page 102.<br><br><b>Available from:</b> Test Grid  |
| <b>Collapse</b>  | View      | Collapses all branches in the test plan tree.  |



| UI Elements (A-Z)   | Menu  | Description  |
|---|-------|--|
|  <b>Convert to Component</b> | Tests | Creates components from a test or a flow. For details, refer to the <i>HP Business Process Testing User Guide</i> .  |
| <b>Copy URL/Paste</b>   | Edit  | Copies a selected test and pastes its URL as a link. The test itself is not copied. Instead, you can paste the address into another location, such as an email or a document. Clicking the link opens ALM and takes you to the test. If you are not already logged in, ALM first prompts for login details.  |
| <b>Copy/Paste</b>   | Edit  | Copies selected tests within the same project or across projects. When you copy a test subject, any subfolders and tests of the test subject are also copied. <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ When you copy a test from one project to another, if the test contains calls to other tests, or if the tests are dependent on test resources or other entities, you can instruct ALM to copy them using one of three methods. For more details, see "Paste Tests/ Folders to Target Project Dialog Box" on page 548.</li> <li>▶ To copy tests across projects, both projects must use the same ALM version and patch level.</li> </ul> |


| UI Elements (A-Z) | Menu | Description   |
|-------------------|------|---|
| Cut/Paste         | Edit | <p>Moves selected tests to a different location in the test plan tree.</p> <p><b>Note:</b> When moving a test subject, any subfolders and tests of the test subject are moved with it. The root folder cannot be moved.</p> <p><b>Tip:</b> You can also move a test or test subject to a new location in the test plan tree by dragging it.</p> |




| UI Elements (A-Z)   | Menu | Description  |
|---|------|--|
|  <b>Delete</b> | Edit | <p>Deletes the selected test or folder in the test plan tree.</p> <p>When deleting a folder, select one of the following options:</p> <p><b>Delete folders only.</b> Deletes folders and moves all related tests to the Unattached folder.</p> <p><b>Delete folder and tests.</b> Deletes folders, tests, and test scripts.</p> <p><b>Version Control:</b> Deleting a test deletes all previous versions of the test.</p> <p>When deleting a test, if dependencies are defined for the test, the Delete Test dialog box opens. To view the <b>Used By</b> entities, click Details.</p> <p><b>Caution:</b></p> <ul style="list-style-type: none"> <li>▶ If you choose to delete a folder and tests, all subfolders and tests under the selected folder are deleted permanently.</li> <li>▶ If you delete a test, the test and test script are deleted permanently.</li> <li>▶ If dependencies are defined for a test, deleting the test may impact the dependent entities. To view the dependencies before you delete, click the Dependencies tab. For more details on related entities, see "Dependencies Tab" on page 675.</li> <li>▶ <b>Performance Testing:</b> Deleting a performance test that is linked to a timeslot will affect the timeslot.</li> </ul> |










| UI Elements (A-Z)   | Menu               | Description  |
|---|--------------------|--|
| <b>Description Page</b>   | <right-click menu> | Opens the Description tab.<br><b>Available from:</b> Test Grid   |
|  <b>Edit Test</b>    | Tests              | <b>Performance Center:</b> Opens the Performance Test Designer, enabling you to design a performance test. For details, refer to the <i>HP ALM Performance Center Guide</i>  |
| <b>Expand All</b>   | View               | Expands all branches in the test plan tree.  |
| <b>Export</b>   | <right-click menu> | Opens the Export Grid Data dialog box, enabling you to export the tests in a grid as a text file, Microsoft Excel worksheet, Microsoft Word document, or HTML document.<br>Choose one of the following options:<br><ul style="list-style-type: none"> <li>➤ <b>All.</b> Exports all tests in the grid.</li> <li>➤ <b>Selected.</b> Exports selected tests in the grid.</li> </ul> <b>Available from:</b> Test Grid |
|  <b>Filter/Sort</b> | View               | Enables you to filter and sort the tests in the test tree or grid. Any currently applied filters or sorting orders are displayed below the toolbar. For more details, see "Filter Dialog Box" on page 64.<br><b>Note:</b> A filter that is defined in one test plan view does not apply to the other view.   |
| <b>Find</b>   | Edit               | Opens the Find dialog box, enabling you to search for a test in the Test Plan module. For more details, see "Find Dialog Box" on page 78.  |

| UI Elements (A-Z)   | Menu               | Description  |
|---|--------------------|--|
| <b>Find Next</b>  | Edit               | Searches for the next item in the test grid that meets the previously defined search criteria.   |
|  <b>Flag for Follow Up</b>           | Edit               | Opens the Flag For Follow Up dialog box, enabling you to define a follow up flag for a selected test. For more details, see "Flag For Follow Up Dialog Box" on page 111.   |
| <b>Go to Test</b>   | Tests              | Opens the Go To Test dialog box, enabling you to find a specific test by <b>Test ID</b> . You can only go to tests that are in the current filter.   |
|  <b>Go to Test in Test Plan Tree</b> | <toolbar>          | Goes to the Test Plan Tree view and highlights the selected test.<br><b>Available from:</b> Test Grid  |
| <b>Go to Test in Test Set</b>   | Tests              | Enables you to view instances of a test in test sets in the Test Lab module.<br><br>If there is only one instance of the selected test, the Test Lab module opens with the instance highlighted.<br><br>If there is more than one instance of the selected test, the Select Test Set dialog box opens, and you select a test set and instance. |
| <b>Graphs</b>   | Analysis           | Lists the graphs you can generate for test plan data. Select a predefined graph, or launch the graph wizard.<br><br>For details on the predefined graph types, see "Graph Types" on page 942.  |
| <b>History Page</b>   | <right-click menu> | Opens the History tab. For more details, see "History Tab" on page 85.<br><b>Available from:</b> Test Grid   |

| UI Elements (A-Z)            | Menu     | Description   |
|------------------------------|----------|---|
| <b>Indicator Columns</b>     | View     | Displays indicators on the left-side of the test window. For more details, see "Test Plan Module Icons" on page 535.<br><b>Available from:</b> Test Grid  |
| <b>Invert Selection</b>      | Edit     | Unselects all previously selected tests in the grid and selects all previously unselected tests.<br><b>Available from:</b> Test Grid  |
| <b>Live Analysis</b>         | Analysis | Lists options for displaying graphs in the Live Analysis tab. Add or delete a graph, or configure its appearance. For details on live analysis, see "Live Analysis Graphs Overview" on page 1056.<br><b>Available from:</b> Live Analysis tab   |
| <b>Mark as Template Test</b> | Tests    | <b>For manual tests.</b> Marks a test as a template test that you can then call from another test.<br>After you mark a template test, the manual test icon changes from gray to white  .<br><b>For QuickTest Professional tests.</b> Marks a test as a template test that you will then be able to use to create other QuickTest Professional tests. |
| <b>Most Recently Used</b>    | Analysis | Lists the most recently viewed reports and graphs in the Test Plan module.  |

| UI Elements (A-Z)  | Menu      | Description   |
|--|-----------|---|
|  <b>New Folder</b>    | Tests     | <p>Opens the New Test Folder dialog box, enabling you to add a test subject under a selected folder.</p> <p><b>Syntax exceptions:</b> A folder name cannot include the following characters: \ ^ *</p> <p><b>Available from:</b> Test Plan Tree</p> |
|  <b>New Test</b>      | Tests     | <p>Opens the Create New Test dialog box, enabling you to add a test under a selected folder. For more details, see "New Test Dialog Box" on page 543.</p> <p><b>Available from:</b> Test Plan Tree</p>  |
| <b>Organize Favorites</b>  | Favorites | Organizes your favorite views. For details, "Organize Favorites Dialog Box" on page 119.  |
| <b>Private</b>   | Favorites | Lists the favorite views that are accessible only to the user who created them.   |
| <b>Public</b>  | Favorites | Lists the favorite views that are accessible to all users.  |
|  <b>Refresh All</b> | View      | Refreshes the test plan tree or grid so that it displays the most up-to-date tests.   |
| <b>Rename</b>  | Edit      | <p>Renames a selected test or folder. You cannot rename the root folder.</p> <p><b>Syntax exceptions:</b> A test name cannot include the following characters: \ / : " ? &lt; &gt;   * % ' </p>   |
| <b>Replace</b>   | Edit      | In the test grid, opens the Replace dialog box, enabling you to replace a test field value. For more details, see "Replace Dialog Box" on page 80.  |

| UI Elements (A-Z)   | Menu               | Description   |
|---|--------------------|---|
| <b>Report Selected</b>  | <right-click menu> | Displays a report of the selected tests.  |
| <b>Reports</b>  | Analysis           | Lists the predefined reports you can produce on test plan data. For details on the report types, see "Predefined Standard Reports" on page 1042.  |
| <b>Req Coverage</b>   | View               | Enables the Advanced Coverage dialog box. For more details, see "Add Advanced Coverage Dialog Box" on page 571.   |
|  <b>Run Test</b>         | Tests              | <b>Performance Center:</b> Enables you to run the selected performance test from the Test Plan module. For more details on running performance tests, refer to the <i>HP ALM Performance Center Guide</i> . |
| <b>Select All</b>   | Edit               | Selects all tests in the grid.<br><b>Available from:</b> Test Grid  |
|  <b>Select Columns</b>   | View               | Opens the Select Columns dialog box, enabling you to determine which fields to display in the test grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.        |
|  <b>Send by E-mail</b> | Tests              | Opens the Send E-mail dialog box, enabling you to send a test by email to recipients selected from a list, or to the test designer. For more details, see "Send E-mail Dialog Box" on page 87.              |
| <b>Show Details and History</b>   | <right-click menu> | Displays information panel tabs on the bottom of the test grid.<br><b>Available from:</b> Test Grid   |







| UI Elements (A-Z)  | Menu  | Description  |
|--|-------|--|
|  <b>Sort Folders</b>    | View  | Opens the Sort Folders in Test Plan Tree dialog box, enabling you to rearrange subfolders in a test subject folder. For more details, see "Sort Folders in Test Plan Tree Dialog Box" on page 546. |
|  <b>Test Details</b>    | Tests | Opens the Test Details dialog box, displaying the details of the selected test. For more details, see "Test Plan Module Window" on page 519.   |
| <b>Test Grid</b>   | View  | Displays the Test Grid view, enabling you to view tests in a flat, non-hierarchical view. Each line in the grid displays a separate test.  |
| <b>Test Plan Tree</b>  | View  | Displays the Test Plan Tree view, enabling you to view your tests and test subject hierarchically in a tree.   |
|  <b>Text Search</b>     | Edit  | Opens the text search pane in the lower part of the Test Plan module window, enabling you to search for records in predefined fields. For more details, see "Text Search Pane" on page 82.         |
| <b>Update Selected</b>   | Edit  | Opens the Update Selected dialog box, enabling you to update a field value for multiple selected tests in the grid. For more details, see "Update Selected Dialog Box" on page 96.                 |
|  <b>Upload Script</b> | Tests | <b>Performance Center:</b> Enables you to upload VuGen scripts to ALM. For more details, refer to the <i>HP ALM Performance Center Guide</i> .   |















## Test Plan Module Icons

This section describes the icons available in the Test Plan module.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under <b>Testing</b> , select <b>Test Plan</b> .  |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> Not all icons are available.   |
| <b>Relevant tasks</b>        | How to Create Tests   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Test Plan Module Menus and Buttons" on page 524</li> <li>➤ "Test Plan Module Window" on page 519</li> </ul> |

The icons are described below:

| UI Elements   | Description   |
|---|---|
|    | < <b>green asterisk</b> >. The applicable tab is populated.   |
|    | <p><b>Alerts.</b> Click to view alerts for the test.</p> <ul style="list-style-type: none"> <li>➤ <b>Red alert.</b> The alert is new.</li> <li>➤ <b>Gray alert.</b> The alert has already been read.</li> </ul> <p>For more details, see "Alerts Dialog Box" on page 109.</p>                                     |
|   | <p><b>Attachments.</b> Click to view attachments for the specified test. For more details, see "Attachments Page" on page 90.</p>   |
|  | <p><b>Follow Up Flags.</b> Click to view follow up flags for the test.</p> <ul style="list-style-type: none"> <li>➤ <b>Gray flag.</b> The follow up flag is new.</li> <li>➤ <b>Red flag.</b> The follow up date has arrived.</li> </ul> <p>For more details, see "Flag For Follow Up Dialog Box" on page 111.</p> |
|  | <p><b>Linked Defects.</b> Click to view linked defects for the test. For more details, see "Linked Defects/Entities Page" on page 902.</p>  |
|  | Subject folder  |

| UI Elements   | Description   |
|---|---|
|    | Manual test   |
|    | Manual test that includes test steps                          |
|    | Manual Template test  |
|    | Manual Template test that includes test steps                 |
|    | Business process test   |
|    | Flow of business components                                   |
|    | LoadRunner scenario   |
|    | QuickTest Professional test                                   |
|    | QuickTest Professional Template test                          |
|    | QuickTest Professional test that includes test steps          |
|  | QuickTest Professional Template test that includes test steps |
|  | Visual API-XP test  |
|  | System test   |
|  | Vuser Script test   |



| UI Elements   | Description  |
|---|--|
|  | QAInspect test   |
|  | <p><b>Version Control.</b> The test is checked out.</p> <ul style="list-style-type: none"> <li>▶ <b>Green lock.</b> The test is checked out by the current user.</li> <li>▶ <b>Red lock.</b> The test is checked out by another user.</li> </ul> |

## Test Plan Module Fields

This section describes the Test Plan module fields.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under <b>Testing</b> , select <b>Test Plan</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You can add user-defined fields and change the label of any of the fields in the Test Plan module. You can also customize project lists. For more details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You can use the Script Editor to restrict and dynamically change the fields and values in the Test Plan module. For more details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ When you select a test plan column with a user name value (including user-defined fields), ALM displays a list with the name and full name of each user. You can search for users, sort users, group users by user group, and select users from the users list or a group tree. For more details, see "Users List Dialog Box" on page 76.</li> <li>▶ Some fields are not available in all test plan views.</li> <li>▶ <b>Version Control:</b> Additional fields are available in a version control enabled project. For details, see "Version Control Fields" on page 132.</li> <li>▶ <b>Quality Center Starter Edition:</b> Not all fields are available.</li> </ul> |
| <b>See also</b>              | "Test Plan Module Window" on page 519   |

## Test Plan Fields

| UI Elements (A-Z)         | Description  |
|---------------------------|--|
| <b>Comments</b>           | Displays comments about the test.<br>Click in the text box to display a toolbar for formatting and spell checking the text.  |
| <b>Creation Date</b>      | The date on which the test was created. By default, the creation date is set to the current ALM Platform server date. Click the down arrow to display a calendar and select a different creation date.   |
| <b>Description</b>        | Describes the test.<br>Click in the text box to display a toolbar for formatting and spell checking the text.  |
| <b>Designer</b>           | The user name of the person who designed the test.   |
| <b>Estimated Dev Time</b> | The time estimated to design and develop the test.   |
| <b>Execution Status</b>   | The execution status of the last run of an instance of the test. Execution status can be one of the following: <ul style="list-style-type: none"> <li>▶ <b>Blocked.</b> One or more steps cannot run. For example, the test is running on a remote machine but cannot continue due to some environmental failure, such as network problems or hardware failure.</li> <li>▶ <b>Failed.</b> One or more steps in the run failed, and none have the status "Blocked".</li> <li>▶ <b>N/A.</b> The current status of the test is not applicable.</li> <li>▶ <b>No Run.</b> No steps have been run.</li> <li>▶ <b>Not Completed.</b> One or more steps were not completed or not run, and none have the status "Blocked" or "Failed".</li> <li>▶ <b>Passed.</b> The run was successful.</li> </ul> |
| <b>Modified</b>           | The date and time of the last change to the test.  |
| <b>Path</b>               | The path of this test relative to the Tests directory in the project repository.   |
| <b>Status</b>             | The planning status of the test. The default status is Design.   |

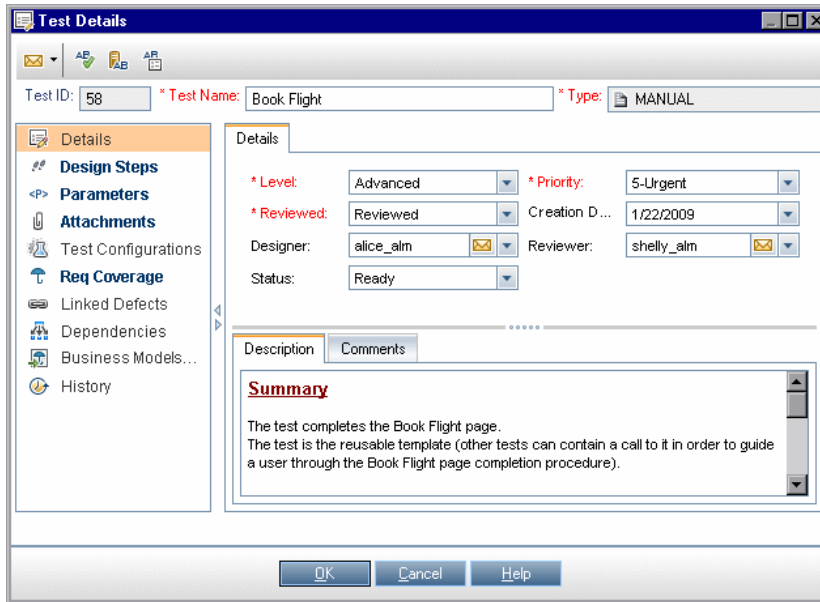
| UI Elements (A-Z) | Description   |
|-------------------|---|
| <b>Subject</b>    | The subject folder in the test plan tree in which the test resides.   |
| <b>Template</b>   | Indicates whether the manual test or QuickTest Professional test is a test template. The value in this column is <b>Y</b> if the test is a test template; <b>N</b> or empty otherwise. For task details, see "How to Create Tests" on page 513. |
| <b>Test ID</b>    | A unique numeric ID for the test, assigned automatically by ALM. This is a read-only field.   |
| <b>Test Name</b>  | The name of the test.   |
| <b>Type</b>       | The test type of the current test. For more details, see "Test Types" on page 517.  |

### Test Parameter Fields

| UI Elements (A-Z)     | Description  |
|-----------------------|--|
| <b>Default Value</b>  | A default value for the parameter. The default value helps users assign an actual value for test runs.<br>Click in the text box to display a toolbar for formatting and spell checking the text. |
| <b>Description</b>    | A description of the parameter.<br>Click in the text box to display a toolbar for formatting and spell checking the text.  |
| <b>Modified</b>       | The date and time on which the test parameter was last modified.   |
| <b>Order</b>          | The position of the parameter in the set of parameters.  |
| <b>Parameter Name</b> | The parameter name.  |
| <b>Used</b>           | Indicates whether the parameter is included in a design step.  |



## Test Details Dialog Box



The Test Details dialog box enables you to view and update a single test.



|                       |   |
|-----------------------|---|
| <b>To access</b>      | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Testing</b>, select <b>Test Plan</b>.</li> <li><b>2</b> Right-click a test, and select <b>Test Details</b>.</li> </ol> |
| <b>Relevant tasks</b> | <p>"How to Plan Tests in ALM" on page 505</p> <p>"How to Create Tests" on page 513</p>  |
| <b>See also</b>       | "Test Plan Module Fields" on page 537   |

User interface elements are described below:

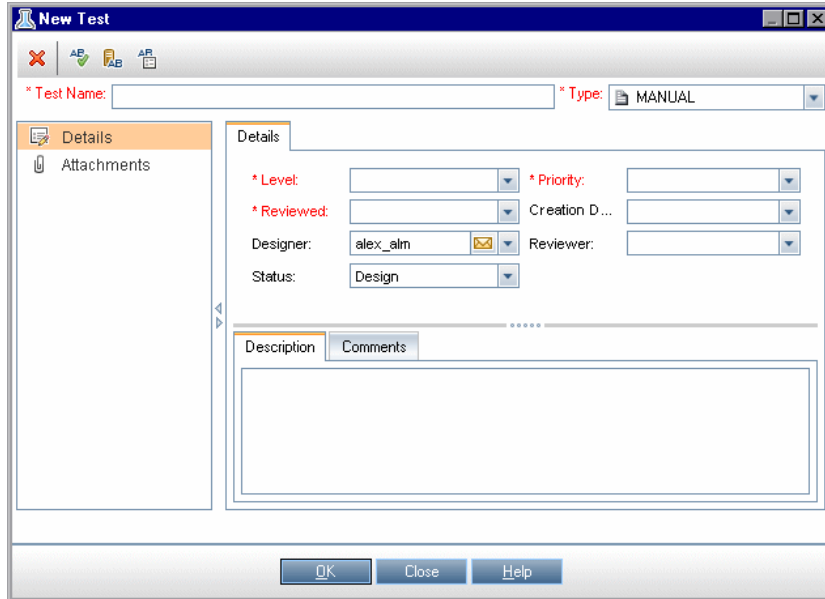
| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Send by Email.</b> Sends an email with the test details. For more details, see "Send E-mail Dialog Box" on page 87. |
|  | <b>Spell Check.</b> Checks the spelling for the selected word or text box.   |

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.  |
|  | <b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.   |
| <b>Attachments</b>  | Lists attachments that provide additional information about the currently selected test. For more details, see "Attachments Page" on page 90.   |
| <b>Business Models Linkage</b>  | Lists the business process model entities that are linked to the selected test. For more details, see "Business Models Linkage Tab" on page 573.  |
| <b>Criteria</b>   | Display criteria of a selected business process test. For more details, see "Criteria Tab" on page 621.   |
| <b>Dependencies</b>   | Displays dependency relationships that exist between entities such as test resources and tests. For more information, see "Dependencies Tab" on page 675.   |
| <b>Design Steps</b>   | Lists the instructions on how to execute the selected test. For more details, see "Design Steps Tab/Design Step Details Dialog Box" on page 610.  |
| <b>Details</b>  | Lists the test fields. For details on test fields, see "Test Plan Module Fields" on page 537.<br><b>Tip:</b> Clicking in the <b>Description</b> or <b>Comments</b> field in this tab displays a toolbar for formatting and spell checking the text. |
| <b>History</b>  | Lists changes made to the currently selected test. For more details, see "History Tab" on page 85.  |
| <b>Linked Defects</b>   | Lists the defects linked to the currently selected test. For more details, see "Linked Defects/Entities Page" on page 902.  |
| <b>Parameters</b>   | Lists parameters associated with the currently selected test. Parameters can be incorporated in the test's design steps. For more details, see "Parameters Tab/Parameters Dialog Box" on page 593.  |

| UI Elements (A-Z)          | Description  |
|----------------------------|--|
| <b>Req Coverage</b>        | Lists the requirements that are met by the currently selected test. For more details, see "Req Coverage Tab" on page 564.                                  |
| <b>Test Configurations</b> | Displays configurations of a selected test. For more details, "Test Configurations Tab" on page 632.   |
| <b>Test Script</b>         | For automated tests, the test script that is run by the testing tool for the currently selected test. For more details, see "Test Script Tab" on page 617. |





## New Test Dialog Box

This dialog box enables you to add a new test to the test plan tree.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | Select a subject folder in the test plan tree, right-click and select <b>New Test</b> .   |
| <b>Important information</b> | If you have installed the QuickTest Professional Add-in on your machine, the Create New Test dialog box includes the <b>Template</b> box. |
| <b>Relevant tasks</b>        | "How to Create Tests" on page 513   |

User interface elements are described below:

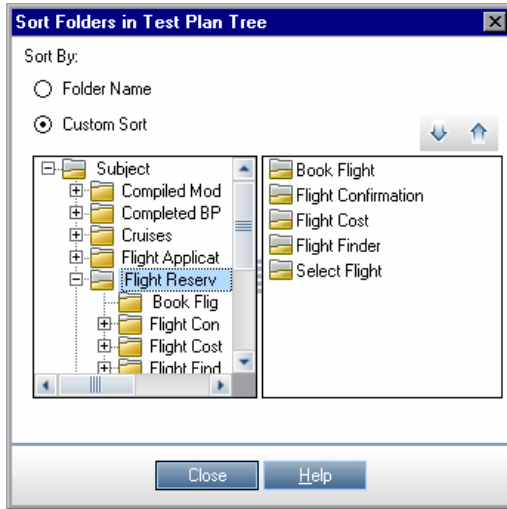
| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Clear All Fields.</b> Clears all data in the dialog box.</p>  |
|  | <p><b>Spell Check.</b> Checks the spelling for the selected word or text box.</p>   |
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p>   |
|  | <p><b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.</p>  |
| <p><b>Attachments</b></p>   | <p>Enables you to add attachments that provide additional information about the new test. For more details, see "Attachments Page" on page 90.</p>  |
| <p><b>Details</b></p>   | <p>Lists test fields. Required fields are displayed in red. For details on the available test fields, see "Test Plan Module Fields" on page 537.</p> <p><b>Tip:</b> Clicking in the <b>Description</b> or <b>Comments</b> field on this page displays a toolbar for formatting and spell checking the text.</p> |




| UI Elements (A-Z) | Description   |
|-------------------|---|
| <b>Template</b>   | <p>Available if you selected <b>QUICKTEST_TEST</b> from the <b>Test Type</b> list.</p> <p>Select another QuickTest test as a template for the new test. The template test is copied to your new test, without the test results.</p> <p>To select a template test, click the browse button. The Select Tests dialog box opens. By default, only QuickTest template tests are displayed.</p> <p>Select the template test and click the <b>Add Test</b> button.</p> <p><b>Note:</b> To set the QuickTest add-ins that ALM associates with a new QuickTest test, choose a template test that lists the appropriate add-ins. Alternatively, use the default template test provided on your ALM client. This test loads the Web and ActiveX add-ins by default. For more information, refer to the QuickTest documentation and the relevant QuickTest add-in documentation.</p> |
| <b>Test Name</b>  | <p>Type a name for the new test.</p> <p><b>Syntax exceptions:</b> A test name cannot include the following characters: \ / : " ? &lt; &gt;   * % ' </p>   |
| <b>Type</b>       | <p>Select a manual or automated test type. For considerations on whether or not to automate a test, see "Test Automation" on page 603.</p> <p>For details on test types, see "Test Types" on page 517.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ If you select the <b>MANUAL</b> test type, you can design the test manually and then convert the test to an automated test type later in the Design Steps tab.</li> <li>▶ If you select an automated test type, you can select a different automated testing tool later in the Design Steps tab, but you cannot convert it back to the <b>MANUAL</b> test type.</li> <li>▶ If you select the <b>FLOW</b> test type, you cannot convert it to a different test type.</li> </ul>   |


## Sort Folders in Test Plan Tree Dialog Box

This dialog box enables you to sort folders in the test plan tree and create a custom sort according to your needs.



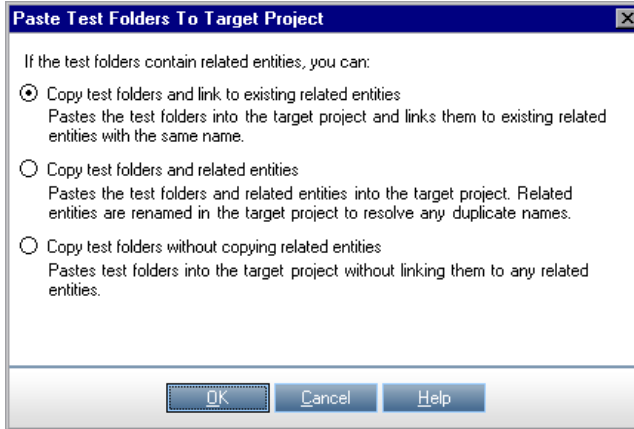
|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <ol style="list-style-type: none"> <li><b>1</b> In the Test Plan module, choose <b>View &gt; Test Plan Tree</b>.</li> <li><b>2</b> Select a folder, and click <b>Sort Folders</b> .</li> </ol>   |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ You must have project administrator permissions to create a custom sort. For more information on assigning user group permissions, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ To view the changes in the test plan tree, click <b>Refresh</b>.</li> </ul> |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Move Down Item/Move Up Item.</b> Moves the selected subfolder up or down within the parent folder.   |
| <b>Custom Sort</b>  | Enables you to reorder the subfolders in a selected test subject folder.<br><br>Select a test subject folder in the left pane, and rearrange the subfolders in the right pane by dragging or using the vertical arrows. |
| <b>Folder Name</b>  | Sorts the subfolders alphabetically in the selected test subject folder.  |

## Paste Tests/Folders to Target Project Dialog Box

This dialog box enables you to choose how ALM copies a test or test subject across projects.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> In the test plan tree or grid, select a test or subject folder.</li> <li><b>2</b> Right-click and select <b>Copy</b>.</li> <li><b>3</b> Open another instance of ALM and log in to the project to which you want to paste the tests.</li> <li><b>4</b> Right-click and select <b>Paste</b>.</li> </ol> |
| <b>Important information</b> | To copy tests across projects, both projects must use the same ALM version and patch level.  |

User interface elements are described below:

| UI Elements  | Description  |
|--|--|
| <b>Copy tests/test folders and link to existing related entities</b> | ALM copies the tests or subject folders and pastes them into the target project. The copied tests or subject folders are linked to existing test resources and called tests with the same name and path. If a related test resource or a test does not exist in the target project, ALM copies it to the target project. |
| <b>Copy tests/test folders and related entities</b>                  | ALM copies the tests or subject folders along with the related test resources and called tests, and pastes them into the target project. If a related test resource or a called test already exists in the target project, the copied related test resource or called test is renamed to resolve the duplicate name.     |
| <b>Copy tests/test folders without copying related entities</b>      | ALM copies the tests or subject folders without copying the related test resources or called tests, and pastes them into the target project. The copied items are not linked to any related entities.  |



# 21

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## Requirement and Test Coverage

This chapter includes:

### Concepts

- ▶ Requirement and Test Coverage Overview on page 552

### Tasks

- ▶ How to Create Coverage on page 554

### Reference

- ▶ Requirement and Test Coverage User Interface on page 560

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## Concepts

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### Requirement and Test Coverage Overview

It is essential that the tests in your test plan meet your original requirements. To keep track of the relationship between your requirements and tests, you add links between them.

In the Test Plan module, you create requirement coverage by selecting requirements to link to a test. Requirement coverage assists you in assessing the impact of a change in the test or requirement. A test can cover more than one requirement.

Alternatively, in the Requirements module, you create test coverage by linking tests to a requirement. Test coverage assists you in assessing the impact of a change in the test or requirement. A requirement can be covered by more than one test.

Instead of covering each requirement only at the level of the test, you can cover a requirement by test configurations. A **test configuration** represents a specific use-case of a test. For example, a test configuration can specify a subset of data or a run-time environment that the test should use. Covering test configurations with requirements provide finer granularity for requirement coverage by enabling coverage by different use-cases of a test. For more details on test configurations, see "Test Configurations Overview" on page 624.

If you work with the **Business Models** module, you can link model entities to tests, either in the Test Plan module or in the Business Models module.

**Business Process Testing:** When creating coverage between requirements and business process tests, instead of covering each requirement only at the level of a test and/or its test configurations, you can also define coverage by a criterion. HP Application Lifecycle Management (ALM) creates a criterion for each business component and flow. You decide whether to include the criterion for calculating coverage. For more details on criteria, see the *HP Business Process Testing User Guide*.



**Note:** You can link requirements and tests to defects. This can help you ensure compliance with your testing needs throughout the application management process. If a requirement changes, you can immediately identify which tests and defects are affected, and who is responsible. For more details, see "Defect Linkage" on page 867.

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For task details, see "How to Create Coverage" on page 554.

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## Tasks

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### **How to Create Coverage**

The following steps describe how to create coverage by linking requirements to tests. Instead of covering each requirement only at the level of the test, you can cover a requirement by test configurations.

You can create coverage from the Requirements or the Test Plan module. It also describes how to examine the status of your requirements by understanding the breakdown of child requirements according to test coverage.

To learn more about creating coverage, see "Requirement and Test Coverage Overview" on page 552.

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**Tip:** For a use-case scenario related to this task, see "How to Create Coverage - Use-Case Scenario" on page 556.

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**Note:** This task is part of a higher-level task. For details, see "How to Plan Tests in ALM" on page 505.

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- "Link requirements to tests" on page 555
- "Link tests to requirements" on page 555
- "Analyze coverage" on page 555

### Link requirements to tests

- a** In the Test Plan module, select the **Test Plan Tree** view.
- b** Select a test and click the **Req Coverage** tab. Click the **Select Req** button to display the requirements tree in the right pane. Add to coverage your selected requirements. For user interface details, see "Req Coverage Tab" on page 564.

### Link tests to requirements

- a** In the Requirements module, select the **Requirement Details** view.
- b** Select a requirement and click the **Test Coverage** tab. Click the **Select** button to display the test plan tree in the right pane. Add to coverage your selected tests. For user interface details, see "Test Coverage Page" on page 576.

### Analyze coverage

In the **Requirements** module, select **Coverage Analysis** from the **View** menu. Examine the status of your requirements and child requirements according to test coverage.

For user interface details, see "Coverage Analysis View" on page 561.

## **How to Create Coverage - Use-Case Scenario**

This use-case scenario provides an example of creating coverage in ALM.

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**Note:** For a task related to this scenario, see "How to Create Coverage" on page 554.

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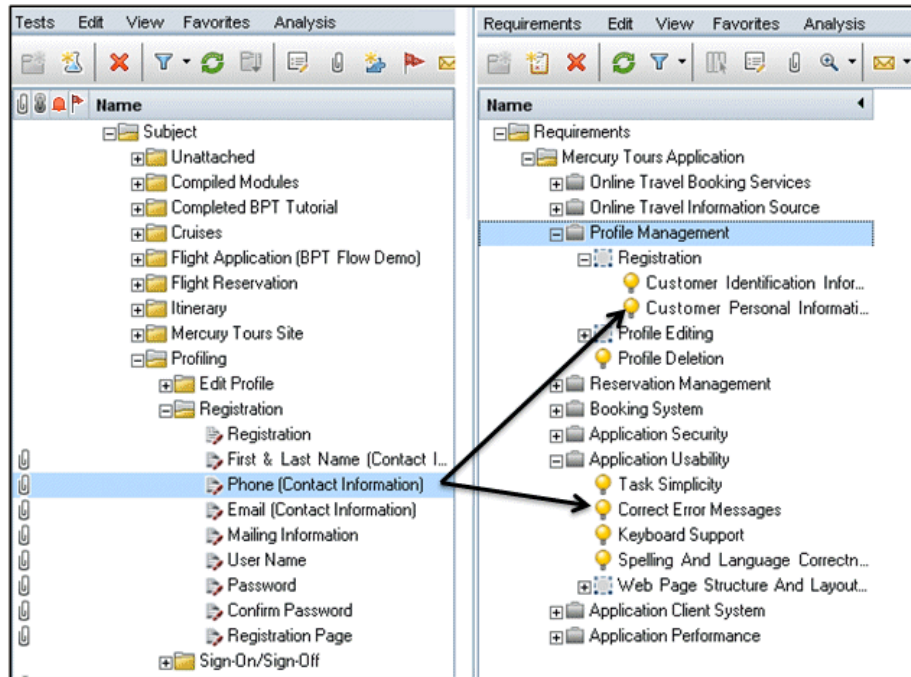
This scenario includes the following steps:

- "Link requirements to tests" on page 557
- "Link tests to requirements" on page 558
- "Analyze coverage" on page 559

## Link requirements to tests

Using the **ALM\_Demo** project, in the test plan tree, under **Profiling**, expand the **Registration** folder and select the **Phone (Contact Information)** test.

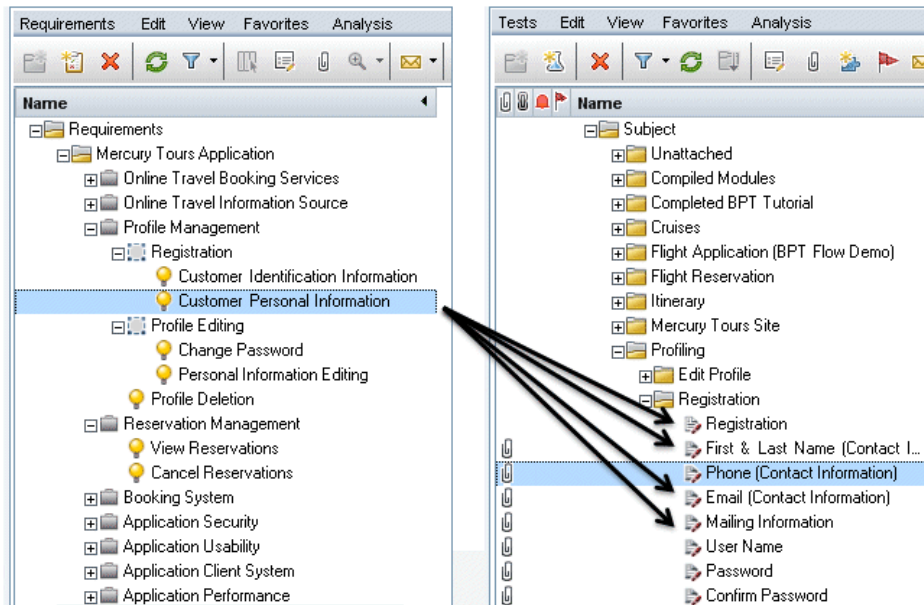
The **Phone (Contact Information)** test verifies the customer phone number in the Registration page. If you click the **Req Coverage** tab, you can see that this test covers the following requirement topics: **Customer Personal Information**, and **Correct Error Messages**.



## Link tests to requirements

You can also link coverage in the **ALM\_Demo** project from the other direction. In the Requirements module, go to the requirements tree. Under **Requirements**, expand the requirement topics **Mercury Tours Application**, **Profile Management**, and **Registration**, and then select the requirement **Customer Personal Information**.

The **Customer Personal Information** requirement ensures that the flight reservation system includes personal information about the customer. In the **Test Coverage** tab, you can see that this requirement is covered by the following tests: **Email (Contact Information)**, **First & Last Name (Contact Information)**, **Mailing Information**, **Phone (Contact Information)**, and **Registration**.



## Analyze coverage

In the **ALM\_Demo** project, select the requirement **Application Client System**, located under the requirement **Mercury Tours Application**. This requirement has twelve children, including itself. In the Coverage Analysis, you can see that two of the children have a status of Failed (one or more of the tests covered by the requirement failed). When you analyze this, you can see that three (27%) of the tests associated with this requirement failed.

The screenshot displays the Requirements Analysis tool interface. The top menu includes 'Requirements', 'Edit', 'View', 'Favorites', and 'Analysis'. Below the menu is a toolbar with icons for home, refresh, delete, and redo, along with a 'Coverage analysis' button and a 'Settings...' button. The main area is divided into two panes: a tree view on the left and a data table on the right.

The tree view shows a hierarchy of requirements under 'Requirements'. The 'Mercury Tours Application' requirement is selected and expanded, showing its children: 'Online Travel Booking...', 'Online Travel Informati...', 'Profile Management', 'Reservation Managem...', 'Booking System', 'Application Security', 'Application Usability', 'Application Client Syst...', and 'Application Performan...'. Each requirement in the tree has a small bar chart indicating its coverage status.

The data table on the right provides a detailed view of the coverage analysis for each requirement. The columns are 'Name', 'Direct Cover Status', and 'Coverage Analysis'. The 'Coverage Analysis' column contains a bar chart with three segments: red (Failed), yellow (Warning), and green (Passed). The numbers in the table represent the count of tests in each status.

| Name                       | Direct Cover Status | Coverage Analysis |
|----------------------------|---------------------|-------------------|
| Requirements               | ...                 | 38 15 65          |
| Mercury Tours Application  | ...                 | 38 15 65          |
| Online Travel Booking...   | ...                 | 13 5 7            |
| Online Travel Informati... | ...                 | 4                 |
| Profile Management         | ...                 | 2 1 4             |
| Reservation Managem...     | ...                 | 2                 |
| Booking System             | ...                 | 1 5 2             |
| Application Security       | ...                 | 3 1 22            |
| Application Usability      | ...                 | 14 1 2            |
| Application Client Syst... | ...                 | 2 14              |
| Application Performan...   | ...                 | 3 10 4            |

Below the table is a description pane with tabs for 'Description', 'Comments', 'Rich Text', 'Attachments', and 'History'. The 'Description' tab is active, showing the text: 'Web-based application (site) for travelers.'

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## Reference

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### Requirement and Test Coverage User Interface

This section includes:

- ▶ Coverage Analysis View on page 561
- ▶ Req Coverage Tab on page 564
- ▶ Add Configuration Coverage Dialog Box on page 569
- ▶ Add Advanced Coverage Dialog Box on page 571
- ▶ Business Models Linkage Tab on page 573
- ▶ Test Coverage Page on page 576
- ▶ Analysis Settings Dialog Box on page 581
- ▶ Coverage Analysis Dialog Box on page 583
- ▶ Add Criterion Coverage Dialog Box on page 585



## Coverage Analysis View



This view enables you to examine the status of your requirements by displaying the breakdown of child requirements according to test coverage. You can set the coverage analysis by cycle, enabling you to view in the analysis only the coverage of runs that are assigned to specific cycles.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the <b>Requirements</b> module, select <b>Coverage Analysis</b> from the <b>View</b> menu.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ By default, coverage is available only for the following requirement types: <b>Functional</b>, <b>Testing</b>, and <b>Undefined</b>.</li> <li>▶ <b>Quality Center Starter Edition</b>: Not all fields and functionality in the Coverage Analysis view are available.</li> </ul> |

|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | "How to Create Coverage" on page 554     |
| <b>See also</b>       | "Requirements Module Window" on page 346 |

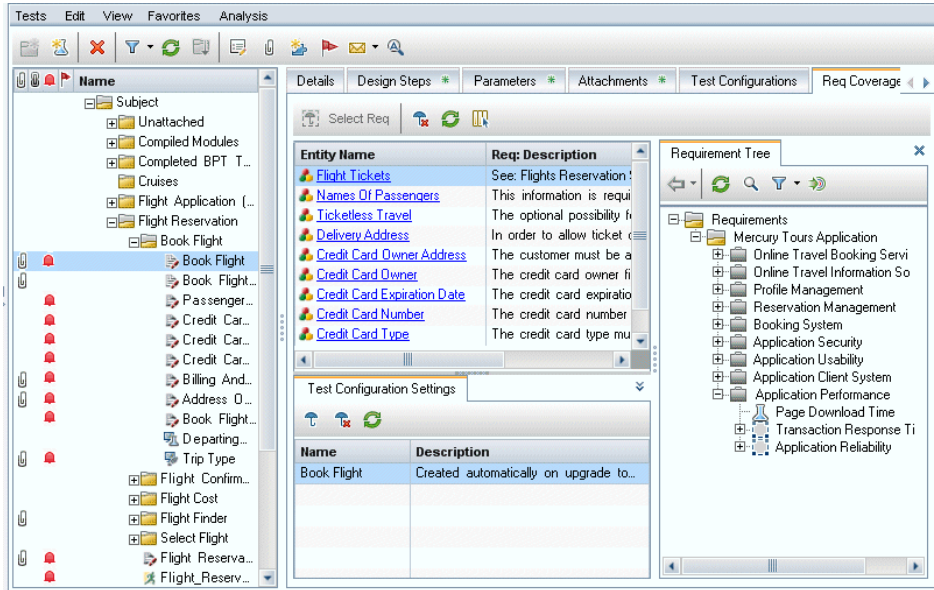
User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)   | Description  |
|---|--|
|  | Opens the Analysis Settings dialog box, enabling you to define the coverage analysis settings. For more details, see "Analysis Settings Dialog Box" on page 581. |
|  | <b>Show.</b> Displays information panel tabs on the bottom of the requirement view. For more details, see "Requirements Module Window" on page 346.              |

| UI Elements (A-Z)                           | Description  |
|---|--|
| <Coverage Analysis view common UI elements> | <ul style="list-style-type: none"> <li>▶ <b>Coverage Analysis fields.</b> For field definitions, see "Requirements Module Fields" on page 368.</li> <li>▶ <b>Coverage Analysis view menus and buttons.</b> For command and button descriptions, see "Requirements Module Menus and Buttons" on page 353.</li> <li>▶ <b>Coverage Analysis icons.</b> For icon descriptions, see "Requirements Module Icons" on page 365.</li> </ul>   |
| <b>Legend</b>                               | <p>Displays the color coding used to indicate the direct cover status of the requirements and their children.</p> <p>A requirement status can be one of the following:</p> <ul style="list-style-type: none"> <li>▶ <b>Blocked.</b> One or more tests covered by the requirement have an execution status of "Blocked".</li> <li>▶ <b>Failed.</b> One or more tests covered by the requirement have an execution status of "Failed", and none have an execution status of "Blocked".</li> <li>▶ <b>No Run.</b> All the tests covered by the requirement have an execution status of "No Run".</li> <li>▶ <b>Not Completed.</b> One or more tests covered by the requirement have an execution status of "Not Completed", and none have an execution status of "Blocked" or "Failed". Alternatively, tests covered by the requirement have execution statuses of "Passed" and "No Run".</li> <li>▶ <b>Not Covered.</b> The requirement has not been linked to a test.</li> <li>▶ <b>Passed.</b> All the tests covered by the requirement have an execution status of "Passed".</li> </ul> |

## Req Coverage Tab

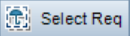


This tab enables you to view the requirements that are covered by a selected test in the test plan tree.




|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the <b>Test Plan</b> module, select the <b>Test Plan Tree</b> view. Select a test and click the <b>Req Coverage</b> tab.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ Requirement coverage is created automatically when you convert a requirement to a test. Therefore, even if you have not yet added requirement coverage, it may already exist. For more details, see "Convert to Tests Wizard" on page 379 and "Generate Test Dialog Box" on page 385.</li> <li>▶ The following requirement types are set so that, by default, you cannot add coverage to them: Business, Folder, and Group.<br/><br/>To enable you to add coverage, you must enable test coverage for these requirement types. For more details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Create Coverage" on page 554<br>"How to Work with Test Configurations" on page 625   |
| <b>See also</b>              | "Requirement and Test Coverage Overview" on page 552<br>"Test Configurations Overview" on page 624   |

## Requirement Coverage Grid





User interface elements are described below (unlabeled elements are shown in angle brackets>):



| UI Elements (A-Z)  | Description  |
|--|--|
|  Select Req | Displays the requirements tree in the right pane, enabling you to add requirement coverage to a test. For more details, see "Requirement Tree Pane" on page 567. |
|             | <b>Remove Selected.</b> Removes selected requirements from the coverage grid.  |
|             | <b>Refresh All.</b> Refreshes the coverage grid.   |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the coverage grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p> |
| <coverage grid>   | <p>For field definitions, see "Requirements Module Fields" on page 368.</p>  |
| <b>Coverage Mode</b>  | <p>Indicates whether an entity is covered by selected test configurations or all test configurations.</p>  |
| <b>Coverage Type</b>  | <p>The type of coverage.</p>   |
| <b>Entity Name</b>  | <p>The name of the requirement.</p>  |
| <b>Go To Requirement in Requirements Tree</b>                                     | <p>Right-click a requirement in the coverage grid to go to the requirements tree in the Requirements module and highlight the selected requirement.</p>  |
| <b>Show Full Path</b>   | <p>Right-click a requirement in the coverage grid to display the location of the selected requirement in the requirements tree.</p>  |

## Requirement Tree Pane

User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|    | <p><b>Add to Coverage.</b> Adds requirement coverage to a specified test.</p> <p>Includes the following options:</p> <ul style="list-style-type: none"> <li>➤ <b>Add to Coverage (Without Children).</b> Adds selected requirement without its child requirements to the coverage grid. Alternatively, you can double-click or drag the selected requirement to the coverage grid. When the specified test contains more than one test configuration, the Add Configuration Coverage dialog box opens. For more details, see "Add Configuration Coverage Dialog Box" on page 569.</li> <li>➤ <b>Add to Coverage (Include Children).</b> Adds selected requirements, including their child requirements. The associated test configurations are added to the Test Configuration Settings pane.</li> </ul> <p><b>Note:</b> Only child requirements that match the current filter and that belong to a type that supports test coverage are added to the coverage.</p> <p><b>Business Process Testing:</b> When adding requirement coverage to a business process test, the Add Advanced Coverage dialog box opens. For more details, see "Add Advanced Coverage Dialog Box" on page 571.</p> |
|  | <p><b>Refresh.</b> Refreshes the requirements tree.</p>  |
|  | <p><b>Set Filter.</b> Filters and sorts the requirements in the requirements tree. For more details, see "Filter Dialog Box" on page 64.</p>   |
|  | <p><b>Find.</b> Searches for a specific requirement in the tree.</p> <p>Type the name (or part of the name) of the requirement in the <b>Find</b> box and click <b>Find</b>. If the search is successful, the requirement is highlighted in the tree.</p>  |

| UI Elements   | Description  |
|---|--|
|  | <p><b>Go to Requirement by ID.</b> Opens the Go To Requirement dialog box, enabling you to find a specific requirement by ReqID.</p> <p><b>Note:</b> You can go only to requirements that are in the current filter.</p> |
|  | <p><b>Close.</b> Hides the requirements tree in the right pane.</p>  |

### Test Configuration Settings Tab




This tab displays the test configurations associated with the requirement coverage. For more details, see "Test Configuration Settings Tab" on page 639.

### Criterion Settings Tab

This tab enables you to add or remove criterion of a selected covered test.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | <p><b>Business Process Testing:</b> Functionality related to test criteria is available only for business process tests. For details, see the <i>HP Business Process Testing User Guide</i>.</p> |
|------------------------------|--|

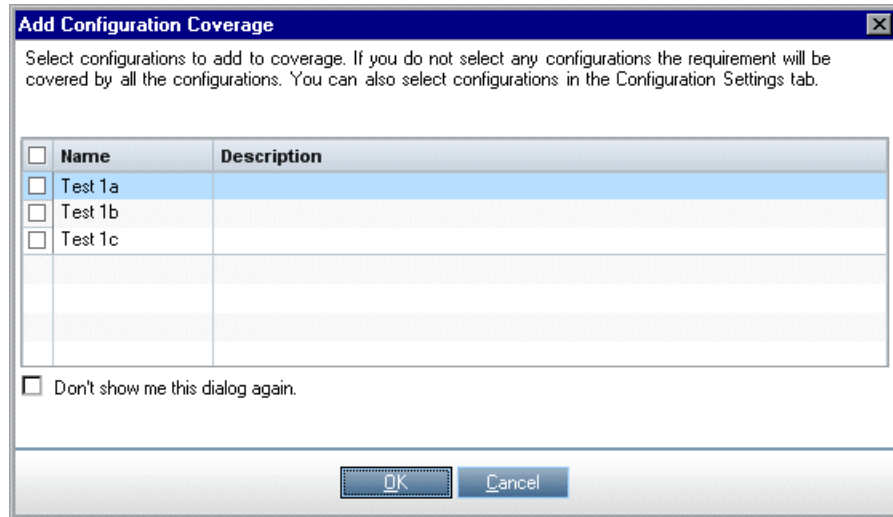
User interface elements are described below:


| UI Elements   | Description   |
|---|---|
|  | <p><b>Add Criteria.</b> Opens the Add Criteria dialog box enabling you to add criteria to the criterion settings grid. For more details, see "Add Criterion Coverage Dialog Box" on page 585.</p> |
|  | <p><b>Remove Criteria.</b> Removes selected criteria from the criterion settings grid.</p> <p><b>Note:</b> If the last criterion is removed, coverage reverts to test-level.</p>                  |
|  | <p><b>Refresh.</b> Refreshes the criterion settings grid.</p>   |



## Add Configuration Coverage Dialog Box

This dialog box enables you to add test configurations to coverage.



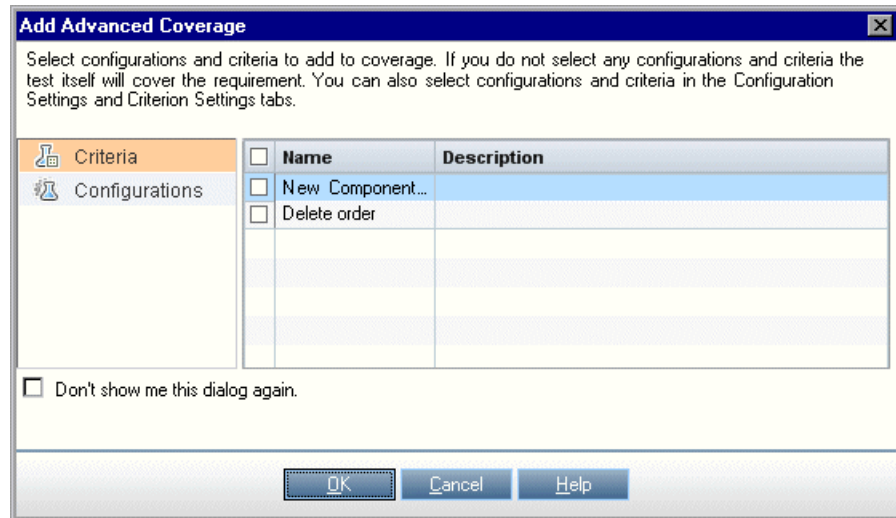
|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> In the <b>Test Plan</b> module, select a test from the test plan tree. Click the <b>Req Coverage</b> tab.</li> <li><b>2</b> Click <b>Select Req</b> to display the Requirement Tree pane.</li> <li><b>3</b> Select a requirement. Click <b>Add to coverage (Without Children)</b> . The Add Configuration Coverage dialog box opens.</li> </ol> |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ This dialog box opens only if the selected test contains more than one test configuration.</li> <li>▶ <b>Business Process Testing:</b> When adding requirement coverage to a business process test, the Add Advanced Coverage dialog box opens. For more details, see "Add Advanced Coverage Dialog Box" on page 571.</li> </ul>  |
| <b>Relevant tasks</b>        | "How to Create Coverage" on page 554   |
| <b>See also</b>              | "Coverage Analysis View" on page 561   |


User interface elements are described below:

| UI Elements (A-Z)                      | Description   |
|--|---|
| <b>Description</b>                     | The description of the test configuration.  |
| <b>Don't show me this dialog again</b> | Hides this dialog box.<br>To reveal this dialog box, select <b>View &gt; Req Coverage &gt; Show Advanced Coverage dialog.</b> |
| <b>Name</b>                            | The name of the test configuration.   |

## Add Advanced Coverage Dialog Box

This dialog box enables you to add criteria and test configurations to coverage.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> In the <b>Test Plan</b> module, select a business process test from the test plan tree. Click the <b>Req Coverage</b> tab.</li> <li><b>2</b> Click <b>Select Req</b> to display the Requirement Tree pane.</li> <li><b>3</b> Select a requirement. Click <b>Add to coverage</b> . The Add Advanced Coverage dialog box opens.</li> </ol> |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ <b>Business Process Testing:</b> This dialog box is available only for business process tests.</li> <li>▶ This dialog box opens only if the selected business process test contains criteria and test configurations.</li> </ul>   |
| <b>Relevant tasks</b>        | "How to Create Coverage" on page 554  |
| <b>See also</b>              | "Coverage Analysis View" on page 561  |

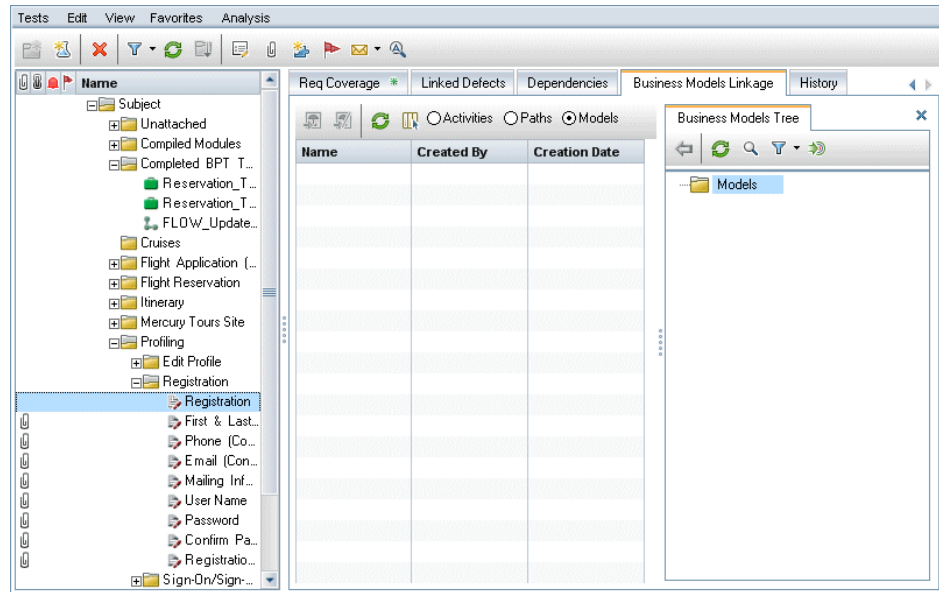
User interface elements are described below:

| UI Elements (A-Z)                      | Description   |
|--|---|
| <b>Criteria</b>                        | Enables you to select criteria.<br><b>Business Process Testing:</b> Functionality related to test criteria is available only for business process tests. For details, see the <i>HP Business Process Testing User Guide</i> . |
| <b>Configurations</b>                  | Enables you to select test configurations. For details, see the <i>HP Business Process Testing User Guide</i> .   |
| <b>Don't show me this dialog again</b> | Hides this dialog box.<br>To reveal this dialog box, select <b>View &gt; Req Coverage &gt; Show Advanced Coverage dialog</b> .  |

## Business Models Linkage Tab

**Requirements module:** This tab enables you to view the business process model entities that are covered by a selected requirement in the requirements tree.

**Test Plan module:** This tab enables you to view the business process model entities that are covered by a selected test in the test plan tree.







|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p><b>In the Requirements module:</b><br/>Select the <b>Requirement Details</b> view, select a requirement, and click the <b>Business Models Linkage</b> tab.</p> <p><b>In the Test Plan module:</b><br/>Select the <b>Test Plan Tree</b> view, select a test (or a Business Process Testing flow), and click the <b>Business Models Linkage</b> tab.</p> |
| <p><b>Important information</b></p> | <p>Business models can be linked to tests automatically by converting representative requirements of model entities to tests.</p>   |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "Link Requirements and Tests to Model Entities" on page 456 |
| <b>See also</b>       | "Business Process Models Overview" on page 450              |







### Business Models Linkage Grid

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements   | Description  |
|---|--|
|  | <b>Add to Linkage.</b> Displays the business models tree in the right pane, enabling you to add business model entities to a test or requirement. For more details, see "Business Models Tree Pane" on page 575.               |
|  | <b>Remove from Linkage.</b> Removes selected model entities from the linkage grid.   |
|  | <b>Refresh.</b> Refreshes the linkage grid to display the most up-to-date information.   |
|  | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the linkage grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |
| <linkage grid>  | Click a link in the grid to go to the model entity in the business models tree.<br><br>For field definitions, see "Business Models Module Fields" on page 479.   |
| <b>Activities</b>   | Lists the business process model activities linked to the selected requirement or test.  |
| <b>Paths</b>  | Lists the business process model paths linked to the selected requirement or test.   |
| <b>Models</b>   | Lists the business process models linked to the selected requirement or test.  |

## Business Models Tree Pane

User interface elements are described below:

| UI Elements   | Description   |
|---|---|
|    | <p><b>Add to Linkage.</b> Links the selected model entity to the current requirement or test.</p> <p><b>Tip:</b> You can also link model entities by double-clicking a model entity, or by dragging it from the business models tree to the linkage grid.</p> |
|    | <p><b>Refresh.</b> Refreshes the business models tree.</p>  |
|    | <p><b>Find.</b> Searches for a specific model entity in the tree.</p> <p>Type the name (or part of the name) of the model entity in the <b>Find</b> box and click <b>Find</b>. If the search is successful, the entity is highlighted in the tree.</p>        |
|    | <p><b>Filter/Sort.</b> Filters and sorts the entities in the business models tree. For more details, see "Filter Dialog Box" on page 64.</p>  |
|    | <p><b>Go to Model Folder by ID.</b> Opens the Go To Model dialog box, enabling you to find a specific model by Model ID.</p> <p><b>Note:</b> You can only go to models that are in the current filter.</p>  |
|  | <p><b>Close.</b> Hides the business models tree in the right pane.</p>  |

## Test Coverage Page

This page enables you to view the tests that are covering a selected requirement in the requirements tree.

The screenshot displays the 'Test Coverage' page within a software application. The interface is divided into several sections:

- Requirements Tree (Left):** A hierarchical tree view showing the 'Mercury Tours Application' with sub-items like 'Online Travel Booking...', 'Profile Management', 'Registration', 'Profile Editing', and 'Reservation Managem...'. The 'Registration' requirement is selected.
- Table (Center):** A table showing test coverage for the selected requirement. The columns are 'Coverage Type', 'Entity Name', 'Coverage Status', and 'Coverage Mode'.
 





| Coverage Type | Entity Name       | Coverage Status | Coverage Mode      |
|---------------|-------------------|-----------------|--------------------|
| Test          | Registration      | No Run          | All Configurations |
| Test          | First & Last N... | Failed          | All Configurations |
| Test          | Phone /Contac...  | Passed          | All Configurations |
| Test          | Email /Contac...  | Failed          | All Configurations |
| Test          | Mainna Inform...  | Passed          | All Configurations |
- Coverage Chart (Right):** A pie chart titled 'Coverage Chart' showing the distribution of test results:
  - 2 Passed (40%)
  - 1 No Run (20%)
  - 2 Failed (40%)





|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the <b>Requirements</b> module, select the <b>Requirement Details</b> view. Select a requirement and click the <b>Test Coverage</b> tab.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ Test coverage is created automatically when you generate a test from a requirement. Therefore, even if you have not yet added test coverage, it may already exist. For more details, see "Convert to Tests Wizard" on page 379 and "Generate Test Dialog Box" on page 385.</li> <li>▶ The following requirement types are set so that, by default, you cannot add coverage to them: Business, Folder, and Group.<br/>To enable you to add coverage, you must enable test coverage for these requirement types. For more details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Create Coverage" on page 554   |
| <b>See also</b>              | "Requirement and Test Coverage Overview" on page 552   |

## Test Coverage Grid

User interface elements are described below (unlabeled elements are shown in angle brackets>):






| UI Elements (A-Z)  | Description  |
|--|--|
|  Select | <b>Select Tests.</b> Displays the test plan tree in the right pane, enabling you to add test coverage to a requirement. For more details, see "Test Plan Tree Pane" on page 579. |
|         | <b>Remove From Coverage.</b> Removes selected tests from the coverage grid.  |
|         | <b>Refresh All.</b> Refreshes the coverage grid.   |
|         | <b>Set Filter/Sort.</b> Filters and sorts the tests in the coverage grid. For more details, see "Filter Dialog Box" on page 64.  |



| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the coverage grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p>         |
|  | <p><b>Show/Hide.</b> Shows/hides the lower pane of the Test Coverage page.</p>   |
| <coverage grid>   | <p>For field definitions, see "Test Plan Module Fields" on page 537.</p>   |
| <b>Coverage Mode</b>  | <p>Indicates whether the test coverage includes all the test configurations associated with a selected test, or specific test configurations. The value in this column can be <b>Selected Configurations</b> or <b>All Configurations</b>.</p> |
| <b>Coverage Type</b>  | <p>The type of coverage.</p>   |
| <b>Entity Name</b>  | <p>The name of the test.</p>   |
| <b>Coverage Status</b>  | <p>The current execution status of the test.</p>   |
| <b>Full Coverage</b>  | <p>Shows the test coverage of all the children of the selected requirement.</p>  |
| <b>Go To Test in Test Lab</b>   | <p>Right-click a test in the coverage grid to go to the Execution Grid in the Test Lab module and highlight the selected test.</p>   |
| <b>Go To Test in Test Plan</b>  | <p>Right-click a test in the coverage grid to go to the test plan tree in the Test Plan module and highlight the selected test.</p>  |
| <b>Status Filter</b>  | <p>Filters the coverage grid by status type.</p>   |

## Test Plan Tree Pane

This pane enables you to add tests to the requirement's test coverage. When adding tests, ALM also adds the associated test configurations displayed in the Test Configurations pane.

User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|    | <p><b>Add to Coverage.</b> Adds selected test including its associated test configurations to the requirement's test coverage. Alternatively, you can double-click or drag the selected test to the test coverage grid.</p> <p><b>Note:</b> If you select a folder, only tests that match your current filter are added to the test coverage.</p> <p><b>Business Process Testing:</b> When adding a business process test, the Add Criterion Coverage dialog box opens. For more details, see "Add Criterion Coverage Dialog Box" on page 585.</p> <p><b>Tip:</b> To add selected configurations of a test to the requirement's test coverage, add coverage from the Test Configurations pane.</p> |
|    | <p><b>Refresh All.</b> Refreshes the requirements tree.</p>  |
|  | <p><b>Set Filter/Sort.</b> Filters and sorts the tests in the tree. For more details, see "Filter Dialog Box" on page 64.</p>  |
|  | <p><b>Find.</b> Searches for a specific test in the tree.</p> <p>Type the name (or part of the name) of the test in the Find box and click <b>Find</b>. If the search is successful, the test is highlighted in the tree.</p>  |
|  | <p><b>Go to Test by ID.</b> Opens the Go To Test dialog box, enabling you to find a specific test by <b>Test ID</b>.</p> <p><b>Note:</b> You can only go to tests that are in the current filter.</p>  |

| UI Elements   | Description   |
|---|---|
|  | <b>Close.</b> Hides the Test Plan Tree pane.                |
|  | <b>Show/Hide.</b> Shows/hides the Test Configurations pane. |

### Test Configurations Pane

This pane enables you to add selected test configurations to the requirement's test coverage. For more details, see "Test Configurations Pane" on page 641.

### Coverage Chart tab

This tab displays a pie chart which graphically shows the run status of the tests in the coverage grid.

### Test Configuration Status tab




This tab displays the status of the configurations associated with a covered test. For more details, see "Test Configuration Status Tab" on page 644.

### Criterion Settings tab

This tab enables you to add or remove criterion of a selected covered test.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | Functionality related to test criteria is available only for business process tests. For details, see the <i>HP Business Process Testing User Guide</i> . |
|------------------------------|---|

User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|  | <b>Add Criteria.</b> Opens the Add Criteria dialog box enabling you to add criteria to the criterion settings grid. For more details, see "Add Criterion Coverage Dialog Box" on page 585. |
|  | <b>Remove Criteria.</b> Removes selected criteria from the criterion settings grid.  |
|  | <b>Refresh.</b> Refreshes the criterion settings grid.   |

## Analysis Settings Dialog Box

This dialog box displays the coverage status for a requirement and its children according to the current analysis settings.

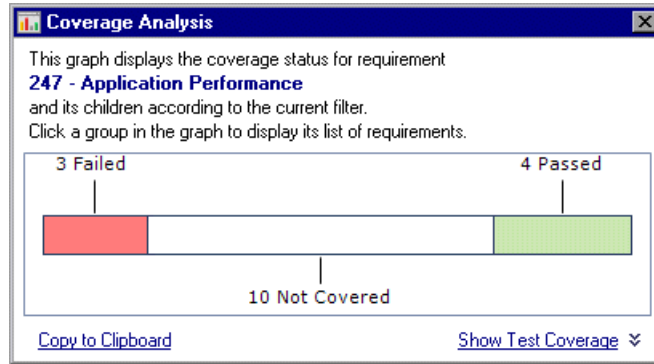
|                       |   |
|-----------------------|---|
| <b>To access</b>      | In the <b>Coverage Analysis</b> view, click the <b>Settings</b> button. |
| <b>Relevant tasks</b> | "How to Create Coverage" on page 554                                    |
| <b>See also</b>       | "Coverage Analysis View" on page 561                                    |

User interface elements are described below:

| UI Elements (A-Z)         | Description   |
|---------------------------|---|
| <b>Coverage Analysis</b>  | <p>Calculates the current coverage status of the requirements based on the <b>Direct Cover Status</b> field values. The status is graphically displayed under the <b>Coverage Analysis</b> field of the Coverage Analysis view.</p> <p>For more details on the <b>Direct Cover Status</b> field, see "Direct Cover Status" on page 370.</p> <p>For more details on the <b>Coverage Analysis</b> field, see "Coverage Analysis" on page 369.</p>   |
| <b>Execution Analysis</b> | <p>Calculates the coverage status of the requirements based on the runs of the covering tests that were run in the selected cycles. The Execution Analysis option does not use the <b>Direct Cover Status</b> field in its calculations.</p> <p>Tests that were not assigned to run in any of the selected cycles are assigned the status <b>No Run</b>. Requirements not covered by any tests are not counted in the analysis.</p> <p>In the <b>Execution Analysis</b> box, click the arrow button. The releases tree opens. Expand the tree and select the cycles for which you want to analyze coverage.</p> <p>The status is graphically displayed under the <b>Coverage Analysis</b> field of the Coverage Analysis view. For more details on the <b>Coverage Analysis</b> field, see "Coverage Analysis" on page 369.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>➤ When the <b>Execution Analysis</b> option is selected, the <b>Direct Cover Status</b> field is unavailable in the Coverage Analysis view.</li> <li>➤ <b>Quality Center Starter Edition:</b> Execution Analysis is not available.</li> </ul> |

## Coverage Analysis Dialog Box

This dialog box displays the coverage status for a requirement and its children according to the current filter.



|                       |   |
|-----------------------|---|
| <b>To access</b>      | In the <b>Coverage Analysis</b> view, right-click a requirement and choose <b>Coverage Analysis</b> . |
| <b>Relevant tasks</b> | "How to Create Coverage" on page 554  |
| <b>See also</b>       | "Coverage Analysis View" on page 561  |

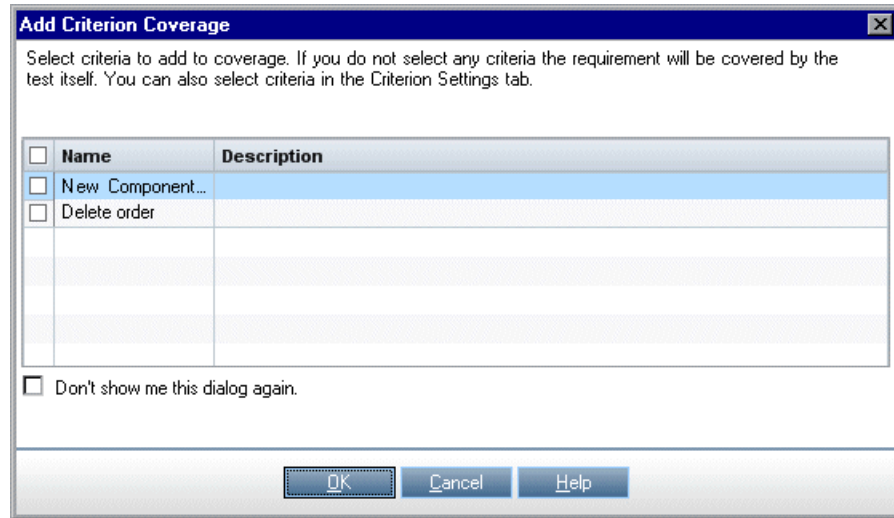
User interface elements are described below (unlabeled elements are shown in angle brackets):




| UI Elements (A-Z)         | Description   |
|---------------------------|---|
| <graph area>              | <p>Displays the coverage status for a selected requirement and its children.</p> <p>Click a section in the graph to display a list of child requirements with the selected status.</p> <p>From the list, you can select a requirement and click <b>Go To</b> to highlight it in the requirements tree.</p> <p><b>Example:</b> Clicking the <b>Failed</b> area lists the requirements with the status of Failed.</p>   |
| <b>Copy to Clipboard</b>  | <p>Copies a snapshot of the Coverage Analysis dialog box to the Clipboard.</p>  |
| <b>Show Test Coverage</b> | <p>Extends the dialog box and displays the Test Coverage Chart. This pie chart graphically displays the full test coverage for the requirement, grouped according to test status.</p> <p>Click a section in the chart to view the list of tests with the selected status that cover the requirement and its children. The Tests Coverage dialog box opens with the <b>Status Filter</b> set to the status of the area you selected in the chart. For more details, see "Test Coverage Page" on page 576.</p> <p><b>Note:</b> If a parent requirement has several children all of which cover the same test, that test is included only once in the parent requirement's Tests Coverage Chart.</p> |



## Add Criterion Coverage Dialog Box

This dialog box enables you to add criteria for a test.



|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <ol style="list-style-type: none"> <li><b>1</b> In the <b>Requirements</b> module, select a requirement from the requirements tree. Click the <b>Test Coverage</b> tab. Click <b>Select</b>  to display the Test Plan Tree pane on the right-side of the window.</li> <li><b>2</b> In the Test Plan Tree pane, select a business process test and click <b>Add to coverage</b> . Alternatively, in the Test Configurations pane, select a test configuration of a business process test and click <b>Add configurations to coverage</b> . The Add Criterion Coverage dialog box opens.</li> </ol> |
| <p><b>Important information</b></p> | <p><b>Business Process Testing:</b> Functionality related to test criteria is available only for Business Process tests. For details, see the <i>HP Business Process Testing User Guide</i>.</p>   |
| <p><b>Relevant tasks</b></p>        | <p>"How to Create Coverage" on page 554</p>  |
| <p><b>See also</b></p>              | <p>"Coverage Analysis View" on page 561</p>  |

User interface elements are described below:

| UI Elements (A-Z)                      | Description  |
|--|--|
| <b>Description</b>                     | The description of the criterion.  |
| <b>Don't show me this dialog again</b> | Hides this dialog box.<br>To reveal this dialog box, select <b>View &gt; Test Coverage &gt; Show Add Criterion Coverage.</b> |
| <b>Name</b>                            | The name of the criterion.   |

# 22

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## Test Parameters

This chapter includes:

### Concepts

- ▶ Test Parameters Overview on page 588

### Tasks

- ▶ How to Use Test Parameters on page 589

### Reference

- ▶ Test Parameters User Interface on page 592

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## Concepts

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### Test Parameters Overview

You can add parameters to your tests. A **test parameter** is a variable that can be assigned a value outside the test from which it is defined. Using parameters can increase the flexibility of your tests by enabling you to run the same test repeatedly with different data each time.

When working with a manual test, you can add parameters to the design steps from within the test or you can add parameters by calling them from other tests. This is useful if you have common steps you often want to perform as part of other tests. For example, you can create a template test **Login\_Template** that logs a user in when you start the application. You need to call this test at the beginning of each test. In some cases, you will want to log in as a regular user while in others, you will need to log in as the project administrator.

For this purpose, you can create two parameters, <<<user name>>> and <<<password>>>, and change the values according to the type of test that is calling **Login\_Template**. If the most common login is a regular user, you can set the default values for the parameters to a regular user name and password. For more information on calling manual tests, see "How to Design Test Steps" on page 605.

When working with an automated test, you can define parameters for a test script from within the test or you can load parameters from a shared test resource file. For more information on using test resources, see "How to Use Test Resources" on page 658.

For task details, see "How to Use Test Parameters" on page 589.

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## Tasks

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### How to Use Test Parameters

This task describes how to work with test parameters.

To learn more about test parameters, see "Test Parameters Overview" on page 588.

**Business Process Testing/QuickTest Professional:** When working with a Business Process or QuickTest test type, different options are available for working with test parameters. For more details, see the *HP Business Process Testing User Guide*, and the *HP QuickTest Professional User Guide*.

This task includes the following steps:

- "Prerequisites" on page 590
- "Define test parameters" on page 590
- "Add parameters to a design step" on page 590
- "Assign actual values to parameters" on page 590


## 1 Prerequisites

A manual test is defined in the test plan tree. For more details, see "How to Plan Tests in ALM" on page 505.

## 2 Define test parameters

In the Parameters tab, plan and define the test parameters you will use in the test design steps. For user interface details, see "New Test Parameter/Test Parameter Details Dialog Box" on page 596.

## 3 Add parameters to a design step

While creating design steps, click **Insert Parameter**  to add a parameter to a design step. The Parameters dialog box opens. For user interface details, see "Parameters Tab/Parameters Dialog Box" on page 593.

Alternatively, in the description or expected result of a design step, type a new or existing parameter name, using the syntax <<<parameter name>>>. If you typed a new parameter, it is automatically added to the test parameter grid.

If you apply formatting to a parameter name in a design step, you must apply the same formatting to the entire parameter name, including the <<< and >>> characters. For example, if you want to italicize the parameter <<<password>>>, you must italicize the entire string <<<password>>> and not just the word password.

## 4 Assign actual values to parameters

Before you run a test, ALM prompts you to assign actual values to the parameters included in the test. The **actual value** is the data that is used during the test run. You can take the parameter default values and use them as actual values.

ALM prompts you to assign actual values at three stages of designing your test. For user interface details, see "Called Test Parameters/Parameters of Test Dialog Box" on page 598.

According to your testing policy, you can assign actual values at any of these stages:

- **When you call a test with parameters.** If you assign actual values to parameters when you call a test, the values are automatically applied to each test instance that you create from the calling test.
- **When you create a test instance.** If you assign actual values to parameters when you create a test instance, the values are automatically applied to each run of the test instance. You can also assign actual values to test instances in the Execution Settings view of a test instance. see "Test Instance Details - Execution Settings View" on page 844.
- **When you run a test.** If you assign actual values to parameters for a test run, the values apply to that test run only. If you do not assign actual values at this stage, the test will run with null values.

At each of these stages, you can only assign values to parameters that have not already been assigned values.

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## Reference

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### **Test Parameters User Interface**

This section includes:

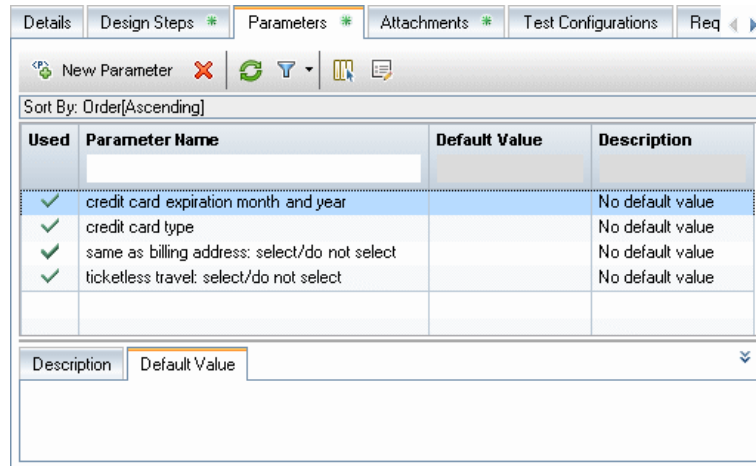
- ▶ Parameters Tab/Parameters Dialog Box on page 593
- ▶ New Test Parameter/Test Parameter Details Dialog Box on page 596
- ▶ Called Test Parameters/Parameters of Test Dialog Box on page 598




## Parameters Tab/Parameters Dialog Box

The Parameters tab enables you to create and view test parameters.







The Parameters dialog box enables you to insert test parameters in a test step.






|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p><b>Parameters tab:</b><br/>In the test plan tree, select a test, and click the <b>Parameters</b> tab.</p> <p><b>Parameters dialog box:</b><br/>In the test plan tree, select a test (other than a business process test or flow) and click the <b>Design Steps</b> tab. Double-click a design step and position the cursor in the Description or Expected Result field. Click <b>Insert Parameter</b> .</p> |
| <p><b>Important information</b></p> | <p>After you select a parameter in the Parameters dialog box, the parameter is inserted at the cursor location in the design step, using the syntax &lt;&lt;&lt;parameter name&gt;&gt;&gt;.</p>   |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Use Test Parameters" on page 589</li> <li>➤ <i>HP Business Process Testing User Guide</i></li> </ul> |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Test Parameters Overview" on page 588</li> <li>➤ <i>HP Business Process Testing User Guide</i>.</li> </ul>  |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

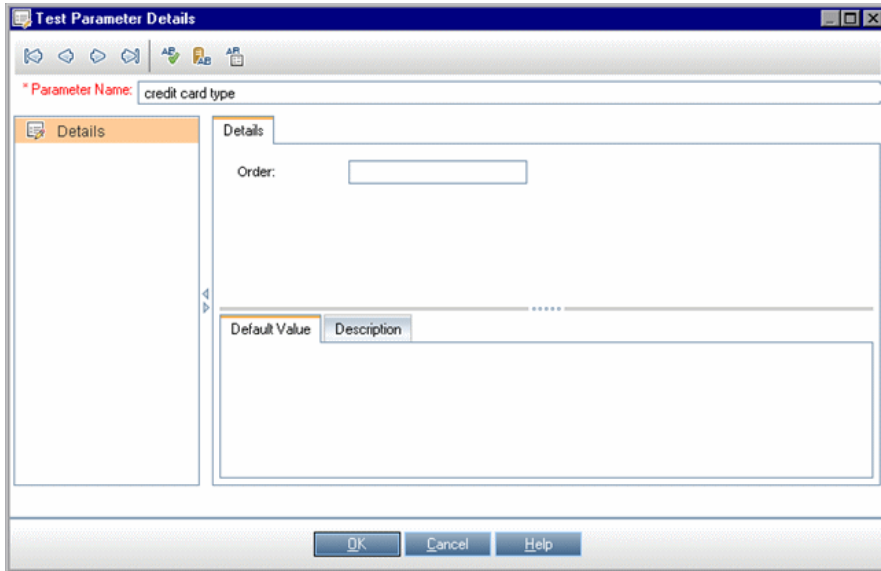
| UI Elements (A-Z)   | Description   |
|---|---|
|    | <p><b>Go To Resource.</b> Goes to the test resources tree and highlights the selected resource.</p> <p><b>Note:</b> This option is available only for automated test types.</p>   |
|    | <p><b>Resource Preview.</b> Displays the content of the selected test resource.</p> <p><b>Note:</b> This option is available only for automated test types.</p>   |
|    | <p>Opens the Map Parameters dialog box, enabling you to map the parameter names to the column names in the selected test resource file.</p> <p>Under the <b>Mapped Value</b> column, type the test resource column name for each parameter name.</p> <p><b>Available from:</b> Automated test types</p> |
|  | <p><b>New Parameter.</b> Opens the New Test Parameter dialog box, enabling you to define a new parameter. For more details, see "New Test Parameter/Test Parameter Details Dialog Box" on page 596.</p>   |
|  | <p><b>Delete.</b> Deletes the currently selected parameter. If you delete a parameter that is included in a design step, the parameter in the design step is replaced by regular text, using the syntax: &lt;parameter name&gt;.</p>  |
|  | <p><b>Refresh.</b> Refreshes the test parameter so that it displays the most up-to-date information.</p>  |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Set Filter/Sort.</b> Opens the Filter Test Parameters dialog box, enabling you to filter and sort the test parameters in the test parameter grid. Any currently applied filters or sorting orders are displayed below the toolbar. For more details, see "Filter Dialog Box" on page 64.</p> |
|  | <p><b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields are displayed and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p>   |
|  | <p><b>Parameter Details.</b> Opens the Test Parameter Details dialog box, displaying the details of the selected parameter. For more details, see "New Test Parameter/Test Parameter Details Dialog Box" on page 596.</p>  |
| <p>&lt;test parameter fields&gt;</p>  | <p>For details on the fields available for test parameters, see "Test Plan Module Fields" on page 537.</p>   |
| <p><b>Data Resource</b></p>   | <p>Enables you to load a test resource file from the test resources tree. For more details on test resources, see "How to Use Test Resources" on page 658.</p> <p><b>Note:</b> This option is available only for automated test types.</p>   |
| <p><b>Default Value</b></p>   | <p>The default value of the parameter.</p>   |
| <p><b>Description</b></p>   | <p>The description of the parameter.</p>   |
| <p><b>Used</b></p>  | <p>Indicates whether the parameter is included in a design step.</p>   |

## **New Test Parameter/Test Parameter Details Dialog Box**

The New Test Parameter dialog box enables you to define a test parameter.






The Test Parameter Details dialog box enables you to view and modify test parameter details.



|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p><b>New Test Parameter:</b><br/>In the test plan tree, select a test and click the <b>Parameters</b> tab. Click the <b>New Parameter</b> button. The New Test Parameter dialog box opens.</p> <p><b>Test Parameter Details:</b><br/>In the test plan tree, select a test and click the <b>Parameters</b> tab. Double-click a parameter.</p> |
| <p><b>Important Information</b></p> | <p><b>Business Process Testing:</b> When working with a Business Process test type, different options are available for working with test parameters.</p>   |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Use Test Parameters" on page 589</li> <li>➤ <i>HP Business Process Testing User Guide</i></li> </ul> |
| <b>See also</b>       | "Test Parameters Overview" on page 588  |

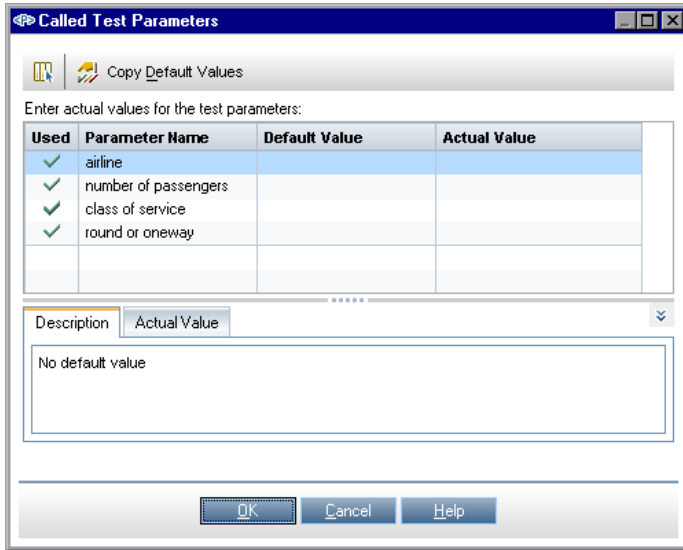
User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>First/Previous/Next/Last Entity.</b> Allows you to browse through the test parameters.</p> <p><b>Available from:</b> Test Parameter Details dialog box</p> |
|  | <p><b>Clear All Fields.</b> Clears all fields.</p> <p><b>Available from:</b> New Test Parameter dialog box</p>   |
|  | <p><b>Spell Check.</b> Checks the spelling for the selected word or text box.</p>  |
|  | <p><b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.</p>   |
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p>  |
| <b>Default Value</b>  | <p>The default value of the parameter.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>                         |
| <b>Description</b>  | <p>The description of the parameter.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>                           |
| <b>Details tab</b>  | <p>For details on the fields available for test parameters, see "Test Plan Module Fields" on page 537.</p>   |

## Called Test Parameters/Parameters of Test Dialog Box


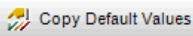
The Called Test Parameters dialog box enables you to view and assign actual values for parameters included in a called test.

The Parameters of Test dialog box enables you to assign actual values for parameters in test instances or test runs.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ In the Test Plan module, select a test and click the <b>Design Steps</b> tab. Right-click a step and select <b>Call to Test</b>. Select a test. If the selected test includes parameters, the Called Test Parameters dialog box opens.</li> <li>▶ In the Test Plan module, select a test and click the <b>Design Steps</b> tab. Right-click a step that contains a call to a test, and select <b>Called Test Parameters</b>. The Called Test Parameters dialog box opens.</li> <li>▶ In the Test Lab module, run a test with parameters. The Parameters of Test dialog box prompts you to assign actual values to the parameters.</li> </ul> |
| <b>Important information</b> | Only parameters for which you have not already assigned actual values are displayed.   |
| <b>Relevant tasks</b>        | "How to Use Test Parameters" on page 589   |
| <b>See also</b>              | "Test Parameters Overview" on page 588   |

User interface elements are described below:

| <b>UI Elements (A-Z)</b>  | <b>Description</b>  |
|---|---|
|  | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields are displayed in the dialog box and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |
|  | Replaces the values in the Actual Value column with values in the Default Value column for the currently selected parameters.   |
| <b>Actual Value</b>   | The actual value that is used for the parameter during the test run.<br>Type the actual value in the Actual Value column or tab.  |
| <b>Default Value</b>  | The default value of the parameter.   |
| <b>Description</b>  | The description of the parameter.   |

| UI Elements (A-Z)     | Description   |
|-----------------------|---|
| <b>Parameter Name</b> | The name of the parameter.                                    |
| <b>Used</b>           | Indicates whether the parameter is included in a design step. |



# 23

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## Test Design

This chapter includes:

### Concepts

- ▶ Test Design Overview on page 602
- ▶ Test Automation on page 603

### Tasks

- ▶ How to Design Test Steps on page 605

### Reference

- ▶ Design Steps User Interface on page 609

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## Concepts

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### Test Design Overview

After you add a test to the test plan tree, you build the test by defining design steps. For details, see "How to Design Test Steps" on page 605.

After you define the test steps, decide whether to perform the test manually or to automate it.

For manual tests you define steps, execute them on your application, and record the results of each step. Use manual tests in cases where the test requires a response by the tester, for usability tests, onetime tests, tests that need to be run immediately, tests requiring knowledge of the application, and tests without predictable results.

For example, in the flight reservation application, tests that check if a dialog box is user-friendly require user response. Therefore, you should make these tests manual.

For automated tests, the testing expert can use the design steps as the basis for creating the detailed test script. Automated tests require that you create automated test scripts using HP testing tools, or third-party testing tools. For details on automating tests, see "Test Automation" on page 603.

As part of test design, you can include a call to another manual test. When you run the calling test, it includes the steps from the called test. This is useful if you have common steps you often want to perform as part of other tests.

For example, suppose you want to include a login step in a number of different tests. You can create a test **Login\_Template** that logs in a user when you start your application. You can call this test at the beginning of each test.

Called tests can include test parameters. These are useful if you want to run the called test with different data according to the type of test that is calling it. For details on using parameters in manual tests, see "Test Parameters Overview" on page 588.

For task details, see "How to Design Test Steps" on page 605.

## Test Automation

Test planning involves deciding which tests to automate. If you choose to automate a test, you can generate a test script and run the test using QuickTest Professional, LoadRunner, or Visual API-XP.

Automating a test allows unattended execution of the test at high speed. It also makes the test reusable and repeatable. For example, you automate functional, benchmark, unit, stress and load tests, as well as tests requiring detailed information about applications.

Consider the following issues when deciding whether to automate a test.

### **Frequency of Execution**

Tests that will run with each new version of your application are good candidates for automation. These include sanity tests that check basic functionality across an entire application. Each time there is a new version of the application, you run these tests to check the stability of the new version, before proceeding to more in-depth testing.

Tests that use multiple data values for the same operation (data-driven tests) are also good candidates for automation. Running the same test manually—each time with a different set of input data—can be tedious and ineffective. By creating an automated data-driven test, you can run a single test with multiple sets of data.

### **Stress/Load Testing**

It is also recommended that you automate tests that are run many times (stress tests) and tests that check a multi-user client/server system (load tests). For example, suppose a test must be repeated a thousand times. Running the test manually would be extremely impractical. In this case, you can create a test that runs a thousand iterations.

### **When Not to Automate Tests**

Generally, the more user involvement a test requires, the less appropriate it is to automate. The following describes test cases that should not be automated:

- ▶ Usability tests—tests providing usage models that check how easy the application is to use.
- ▶ Tests that you only have to run once.
- ▶ Tests that you need to run immediately.
- ▶ Tests based on user intuition and knowledge of the application.
- ▶ Tests with no predictable results.

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## Tasks

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### How to Design Test Steps

After adding tests to the test plan tree, describe the detailed, step-by-step instructions the tester should perform to complete a test. Each test step includes a description of an action.

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**Note:** This task is part of a higher-level task. For details, see "How to Plan Tests in ALM" on page 505.

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To learn more about test design, see "Test Design Overview" on page 602.

This task includes the following steps:

- "Prerequisites" on page 605
- "Create test steps" on page 606
- "Call a template test – optional" on page 607
- "Generate an automated test – optional" on page 607
- "Results" on page 608

#### **1 Prerequisites**



Tests, and basic test information, are defined in the test plan tree.

For task details on creating tests, see "How to Create Tests" on page 513.

## 2 Create test steps

Describe the steps a tester must perform to run a test. A test step includes the actions to perform on your application, the input to enter, and the expected results.

**To create test steps:**

- a** In the Test Plan module, select **View > Test Plan Tree**, and select a test.
- b** Click the **Design Steps** tab.
- c** If there are existing design steps, select the step below which you want to add a new step.
- d** Click **New Step** . Fill in the fields in the Design Step Details dialog box. For user interface details, see "Design Steps Tab/Design Step Details Dialog Box" on page 610.
- e** To add a parameter to a design step, in the Design Step Details dialog box, click **Insert Parameter** . For details on working with test parameters, see "How to Use Test Parameters" on page 589.

**Example:**

To test the Reservation Details page in the Mercury Tours application, you might create design steps as follows:


| Step Name                                  | Description  | Expected Result   |
|--|--|---|
| Initialization                             | 1. Register new user profile. 2. Create different flight reservations for the user. Print Flight Confirmation for each reservation created to compare the reservation details in following steps.  |   |
| Step 1: Open Itinerary                     | Select the Itinerary from the top menu.  | The Itinerary page opens. All the flight reservations that you have created in the Initialization step should be shown. |
| Step 2: Compare Flight Reservation Details | Compare the flight reservation details in the Flight Confirmation page (printed in the Initialization step), to the details in the Itinerary page. Check each of the following: 1. Booking date and time. 2. Departing and returning destinations. 3. Airline and flight number. 4. Service class. 5. Number of passengers. 6. Prices and Total Airfare. | All flight reservation details must be identical on Flight Confirmation and Itinerary page.                             |

### 3 Call a template test – optional

To include commonly used instructions in your test, for example Log in to the application, you can call a template test from within your test that includes common instructions.

**Note:** For details on creating template tests, see "How to Create Tests" on page 513.

**To call a template test:**

- a Select the test in which you want to include a template test.
- b Click the **Design Steps** tab.
- c If there are existing design steps, select the step below which you want to call a template test.
- d Click **Call to Test** .
- e In the Select Test dialog box, select the test that you want to call. For user interface details, see "Select Test Dialog Box" on page 618.

A call to the selected template test is inserted below the selected step. When you run the test, the template test's design steps are listed accordingly.


### 4 Generate an automated test – optional

After you have created steps for a manual test, you can generate a test script skeleton in which you can write scripts to run the test as an automated test.

**Notes:**

- You can generate an automated test before designing test steps, or by selecting an automated test type when you create the test.
- For considerations on whether or not to automate a test, see "Test Automation" on page 603.
- For a list of automated test types, see "Test Types" on page 517.

**To generate an automated test:**


In the Design Steps tab, click **Generate Script**  and choose an automated test type to which to convert.

Any text that appeared in the steps of the manual test is listed as comments in the generated test script. If the manual test has parameters, they are also listed as comment text.

**Example:**

In the flight reservation application, you can automate a test that checks whether the login mechanism works. After adding test steps, you create a test script. Then, using QuickTest Professional, you complete the automated test script.

## **5 Results**

The design steps that you add appear in the Design Steps tab. The first time you add design steps to a test, a footprint  appears in the test plan tree next to the test icon, indicating that steps were defined for the test.



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## Reference

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### Design Steps User Interface

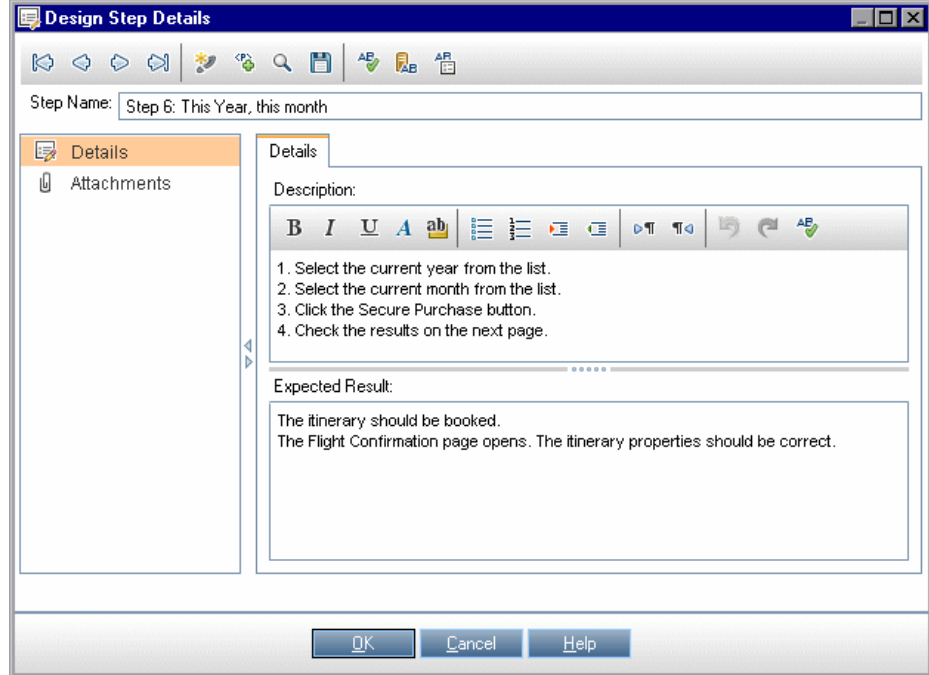
This section includes:

- ▶ Design Steps Tab/Design Step Details Dialog Box on page 610
- ▶ Test Script Tab on page 617
- ▶ Select Test Dialog Box on page 618
- ▶ Paste Design Steps to Target Project Dialog Box on page 620
- ▶ Criteria Tab on page 621

## Design Steps Tab/Design Step Details Dialog Box

The Design Steps tab enables you to view and edit design steps for the selected test. The Design Step Details dialog box enables you to create and edit individual design steps.









| Step Name                       | Description   | Expected Result   |
|---------------------------------|---|---|
| Call <Connect And Sign-On>      | Call <Connect And Sign-On> with the following parameters: user name = ?, mercury tours url = ?, password = ?  |   |
| Call <Book Flight Preparation>  | Call <Book Flight Preparation> with the following parameters: return flight = ?, sections to complete = ?, airline = ?, number of passengers = ?, class of service = ?, depart flight = ?, round or oneway = ?                                |   |
| Step 3: General                 | After each step performing, in case of incorrect filling, make sure that you can go back and refill all fields  |   |
| Step 4: Future Year             | <ol style="list-style-type: none"> <li>1. Select a future year from the list.</li> <li>2. Select a month from the list.</li> <li>3. Click the Secure Purchase button.</li> <li>4. Check the results on the next page.</li> </ol>              | The itinerary should be booked. The Flight Confirmation page opens. The itinerary properties should be correct. |
| Step 5: Future Month, This Year | <ol style="list-style-type: none"> <li>1. Select the current year from the list.</li> <li>2. Select a future month from the list.</li> <li>3. Click the Secure Purchase button.</li> <li>4. Check the results on the next page.</li> </ol>    | The itinerary should be booked. The Flight Confirmation page opens. The itinerary properties should be correct. |
| Step 6: This Year, this month   | <ol style="list-style-type: none"> <li>1. Select the current year from the list.</li> <li>2. Select the current month from the list.</li> <li>3. Click the Secure Purchase button.</li> <li>4. Check the results on the next page.</li> </ol> | The itinerary should be booked. The Flight Confirmation page opens. The itinerary properties should be correct. |
| Step 7: Past                    | <ol style="list-style-type: none"> <li>4. Select an expired date.</li> </ol>  | The itinerary should not be booked.   |











|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p><b>Design Steps tab:</b> In the Test Plan module, select a test in the test plan tree, and click the <b>Design Steps</b> tab.</p> <p><b>Design Step Details dialog box:</b> In the Test Plan module, select a test in the test plan tree, and click the <b>Design Steps</b> tab. Then use one of the following:</p> <ul style="list-style-type: none"> <li>➤ Right-click the design steps grid, or a design step, and select <b>New Step</b>.</li> <li>➤ Right-click a design step and select <b>Edit Step</b>.</li> </ul> |
| <p><b>Important information</b></p> | <p>If you apply formatting to a parameter name in a design step, you must apply the same formatting to the entire parameter name, including the &lt;&lt;&lt; and &gt;&gt;&gt; characters. For example, if you want to italicize the parameter password, you must italicize the entire string &lt;&lt;&lt;password&gt;&gt;&gt; and not just the word password.</p>   |




|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | "How to Design Test Steps" on page 605 |
| <b>See also</b>       | "Test Design Overview" on page 602     |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)   | Description   |
|---|---|
|    | Allows you to browse through design steps.<br><b>Available from:</b> Design Step Details dialog box   |
|    | <b>Check Spelling.</b> Checks the spelling for the selected word or text box.<br><b>Available from:</b> Design Step Details dialog box  |
|    | <b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.<br><b>Available from:</b> Design Step Details dialog box                                       |
|    | <b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.<br><b>Available from:</b> Design Step Details dialog box                                |
|    | <b>New Step.</b> Creates a new design step in the Design Step Editor dialog box.<br>The new step is added below the selected step.  |
|  | <b>Edit Step.</b> Opens the selected design step in the Design Step Editor dialog box.<br><b>Tip:</b> Double-click a step to edit.<br><b>Available from:</b> Design Steps tab |
|  | <b>ReNUMBER Steps.</b> Renumbers the design steps sequentially. Use this command after you rearrange steps.<br><b>Available from:</b> Design Steps tab                        |
|  | <b>Delete Selected.</b> Deletes the selected design steps.  |

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Copy/Paste Steps.</b> Copies the selected design steps and pastes them to another test in the same project or in another project. The copied design step is inserted above the selected step.</p> <p>When you paste design steps to another project, the Paste Design Steps to Target Project dialog box opens. For details, see "Paste Design Steps to Target Project Dialog Box" on page 620.</p> <p><b>Notes:</b> Parameters included in the design step are copied to the target test.</p> <p><b>Available from:</b> Design Steps tab</p> |
|  | <p><b>Attachments.</b> Opens the Attachments page, enabling you to add attachments to the selected design step. For details, see "Attachments Page" on page 90.</p> <p>After you add an attachment, the  icon displays in the Design Steps grid, next to the appropriate design step.</p> <p><b>Note:</b> If you add an attachment to a design step, a copy of the attachment is made every time the test is run.</p>  |
|  | <p><b>Call to Test.</b> Opens the Select Test dialog box, enabling you to call another manual test. For details, see "Select Test Dialog Box" on page 618. The call to the test is inserted as a new design step below the selected step.</p> <p><b>Available from:</b> Design Steps tab</p>  |

| UI Elements (A-Z)   | Description   |
|---|---|
|    | <p><b>Generate Script.</b> Enables you to convert the test to an automated test type that is run by the applicable automatic testing tool. For considerations on whether or not to automate a test, see "Test Automation" on page 603.</p> <p>For details on test types, see "Test Types" on page 517.</p> <p>ALM generates a test script skeleton based on the current design steps.</p> <p>The test icon next to the test you automated is replaced with the automated test icon.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ After automating a test, you cannot convert it back to the <b>MANUAL</b> test type.</li> <li>▶ For automated test types other than <b>FLOW</b>, you can use this button to select a different testing tool.</li> </ul> <p><b>Available from:</b> Design Steps tab</p> |
|    | <p><b>Insert Parameter.</b> Opens the Parameters dialog box, enabling you to insert a test parameter in the <b>Description</b> or <b>Expected Result</b> field. The parameter is inserted at the cursor position. For user interface details, see "Parameters Tab/Parameters Dialog Box" on page 593.</p>   |
|  | <p><b>Find Text.</b> In the Design Steps tab, opens the Find dialog box, enabling you to find text in specific fields. For details, see "Find Dialog Box" on page 78.</p> <p><b>Find/Replace Text.</b> In the Design Step Details dialog box, opens the Find &amp; Replace dialog box, enabling you to find or replace a specified string in the selected field.</p>  |
|  | <p><b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to define which columns appear in the grid, and the order in which they appear. For details, see "Select Columns/Select Fields Dialog Box" on page 94.</p> <p><b>Available from:</b> Design Steps tab</p>   |

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Adjust Rows Height.</b> Adjusts the row size of the steps in a test. This enables you to view all the text in the Description or Expected Result columns if the text is long.</p> <p><b>Tip:</b> To resize a single step, position the mouse in the gray sidebar on the gridline below the step. The cursor changes to a vertical arrow. Drag the gridline up or down.</p> <p><b>Available from:</b> Design Steps tab</p>   |
|  | <p><b>Save Steps.</b> Saves the design steps in the project. If you are typing long text, use the <b>Save Steps</b> button to prevent data loss.</p>  |
|  | <p><b>Move Down/Move Up.</b> Moves the selected design step up or down in the design steps grid.</p> <p><b>Tip:</b> Alternatively, select a design step and drag it to a new position.</p>  |
| <design steps grid>   | <p>Displays design steps that are included in the selected test.</p> <p><b>Available from:</b> Design Steps tab</p>   |
| <b>Attachments</b>  | <p>Enables you to add attachments that provide additional information about the design step. For more details, see "Attachments Page" on page 90.</p> <p><b>Available from:</b> Design Step Details dialog box</p>  |
| <b>Description</b>  | <p>Instructions for the tester to perform.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ Test parameters included in the <b>Description</b> field are surrounded by &lt;&lt;&lt; &gt;&gt;&gt; brackets.</li> <li>▶ <b>Design Steps Tab:</b> If a step is a call to another test, the <b>Description</b> field displays a link to the called test, and actual values of the parameters included in the called test. To edit actual values of the called test parameters, right-click the link, and choose <b>Called Test Parameters</b>.</li> </ul> <p><b>Tip:</b> Clicking in this field displays a toolbar for formatting and spell checking the text.</p> |

| UI Elements (A-Z)      | Description   |
|------------------------|---|
| <b>Details</b>         | Design step details. Required fields are displayed in red.<br><b>Available from:</b> Design Step Details dialog box   |
| <b>Expected Result</b> | The expected state after the step instructions are performed.<br><b>Tip:</b> Clicking in this field displays a toolbar for formatting and spell checking the text.  |
| <b>Step Name</b>       | The name of the step.<br><b>Default value:</b> The sequential number of the design step. For example, Step 1 if you are adding a step to a test for the first time.<br><b>Notes:</b><br><ul style="list-style-type: none"> <li>➤ Test parameters included in the <b>Step Name</b> field are surrounded by &lt;&lt;&lt; &gt;&gt;&gt; brackets.</li> <li>➤ If a step is a call to another test, the <b>Step Name</b> field displays a link to the called test, and actual values of the parameters included in the called test. To edit actual values of the called test parameters, right-click the link, and choose <b>Called Test Parameters</b>.</li> </ul> |



## Test Script Tab

This tab contains the script run by the testing tool designated for the selected test.

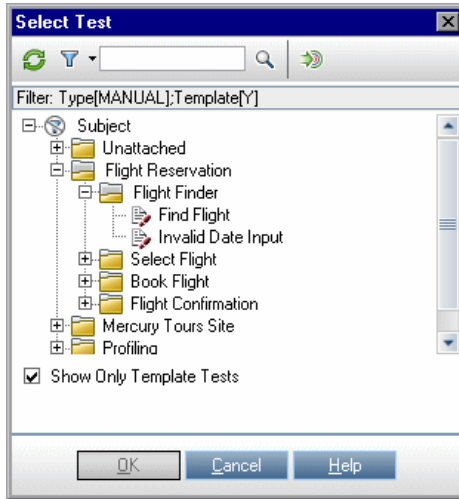
|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the test plan tree, select a test, and click the <b>Test Script</b> tab.<br><b>Available from:</b> Automated test types   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ For details on the user interface for system tests, see "Test Script Tab – System Tests" on page 653.</li> <li>▶ The Test Script tab is populated with elements designed by the applicable testing tool. For more details, see the documentation for the testing tool.</li> <li>▶ You can view Service Test scripts only if you have installed the appropriate add-in from the HP Application Lifecycle Management Add-ins page. For more details on installing add-ins, refer to the <i>HP Application Lifecycle Management Installation Guide</i>.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Design Test Steps" on page 605   |
| <b>See also</b>              | "Test Automation" on page 603  |

User interface elements are described below:

| UI Elements   | Description   |
|---------------|---|
| <b>Launch</b> | Displays the testing script in the applicable testing tool. |





## Select Test Dialog Box

This dialog box enables you to select a manual test that is called by a design step.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> In the Test Plan module, select a test in the test plan tree, and click the <b>Design Steps</b> tab.</li> <li><b>2</b> Right-click the design step below which you want to add a call to a manual test, and select <b>Call to Test</b>.</li> </ol>                                  |
| <b>Important information</b> | <p>If the called test contains parameters, the Called Test Parameters dialog box opens, enabling you to set actual parameter values. The actual values are used by default in test instances created from the current test. For user interface details, see "Called Test Parameters/Parameters of Test Dialog Box" on page 598.</p> |
| <b>Relevant tasks</b>        | <p>"How to Design Test Steps" on page 605</p>   |
| <b>See also</b>              | <p>"Test Design Overview" on page 602</p>   |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Refresh.</b> Refreshes the test tree so that it displays the most up-to-date tests.  |
|  | <b>Filter/Sort.</b> Opens the Filter Tests dialog box, enabling you to filter and sort the tests in the test plan tree. For details, see "Filter Dialog Box" on page 64.  |
|  | <b>Find.</b> Searches for a specific test in the test plan tree. Type the name of the test in the <b>Find</b> box and click the <b>Find</b> button. If the search is successful, the test is highlighted in the tree. Click the <b>Find</b> button again to highlight the next match. |
|  | <b>Go To Test By ID.</b> Opens the Go To Test dialog box, enabling you to select a test by its ID.  |
| <test plan tree>  | Displays folders in the test plan tree that contain manual tests. If the <b>Show only Template Tests</b> check box is selected, only folders that contain template tests are displayed.<br><br>Expand the tree to locate the test that you want to call.                              |
| <b>Show Only Template Tests</b>   | Instructs ALM to display only template tests. To choose a test that is not a template test, clear the check box.  |

## Paste Design Steps to Target Project Dialog Box

This dialog box enables you to select the way in which design steps are copied from a test in one project to a test in another project.

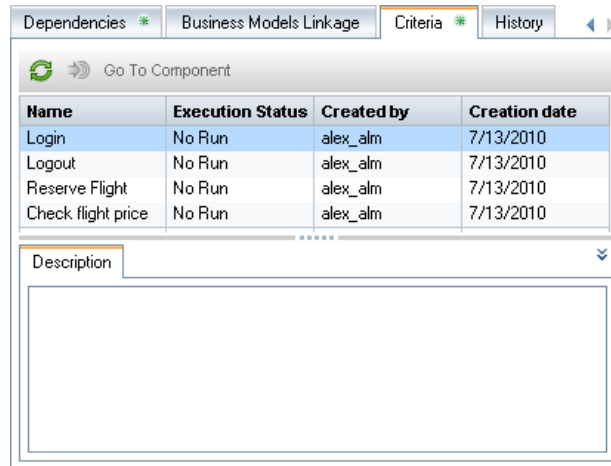
|                              |   |
|------------------------------|---|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> In the source project, right-click a design step and select <b>Copy</b>.</li> <li><b>2</b> Open the target project in a separate browser window.</li> <li><b>3</b> In the target project, right-click a design step below which you want to insert the copied step, and select <b>Paste</b>.</li> </ol> |
| <b>Important information</b> | The source and target projects must use the same ALM version and patch level.   |

User interface elements are described below:

| UI Elements  | Description   |
|--|---|
| <b>Copy design steps and link to existing related entities</b> | ALM copies the design steps and pastes them into the target project. The copied design steps are linked to existing tests with the same name. If a called test does not exist in the target project, ALM copies it to the target project. |
| <b>Copy design steps and related entities</b>                  | ALM copies the design steps and called tests and pastes them into the target project. If a called test name already exists in the target project, the copied called test is renamed to resolve the duplicate test name.                   |
| <b>Copy design steps without copying related entities</b>      | ALM copies the design steps without copying the called tests, and pastes them into the target project. The copied design steps are not linked to any called tests.  |



## Criteria Tab

This tab enables you to view the criteria of the selected business process test.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the test plan tree, select a business process test, and click the <b>Criteria</b> tab.  |
| <b>Important information</b> | <b>Business Process Testing:</b> Functionality related to test criteria is only available for business process tests. For details, see the <i>HP Business Process Testing User Guide</i> . |
| <b>See also</b>              | "Requirement and Test Coverage Overview" on page 552   |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Refresh.</b> Refreshes the criteria grid.                       |
|  | Goes to the Test Script tab and highlights the selected component. |
| <b>Created by</b>   | The user name of the person who created the criterion.             |

| UI Elements (A-Z)       | Description  |
|-------------------------|--|
| <b>Creation date</b>    | The date on which the criterion was created. By default, the creation date is set to the server date on which the criterion was created. |
| <b>Description</b>      | The description of the criterion.  |
| <b>Execution Status</b> | The current execution status of the criterion. Execution status can be one of the following: Failed, N/A, No Run, Not Completed, Passed. |
| <b>Name</b>             | The name of the criterion.   |

# 24

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## Test Configurations

This chapter includes:

### Concepts

- ▶ Test Configurations Overview on page 624

### Tasks

- ▶ How to Work with Test Configurations on page 625

### Reference

- ▶ Test Configurations User Interface on page 631

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## Concepts

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### Test Configurations Overview

When you create a test in HP Application Lifecycle Management (ALM), you can use test configurations to test various use-cases, each time with a different set of data. A **test configuration** represents a specific use-case of a test. For example, a test configuration can specify a subset of data or a run-time environment that the test should use. By using test configurations, you can create more generic tests and reuse them by associating a different set of data with each configuration.

When you create a test in the Test Plan module, a single test configuration with the same name as the test is created automatically. You can view this test configuration and add additional ones in the Test Configurations tab of the Test Plan module. You associate a test configuration with data in the Parameters tab of the Test Plan module.

To provide finer granularity for requirements coverage, instead of covering each requirement only at the level of the test, you can link a requirement to a specific test configuration. For example, you can use a single test to cover multiple requirements by associating different test configurations in the same test with each requirement.

After creating coverage, you define a test set in the Test Lab module. A test set can include any or all of the test configurations defined for a test, or it can include test configurations based on requirement coverage. When you run a test set, the parameter values are retrieved from the data set according to the settings defined for each test configuration.

For task details, see "How to Work with Test Configurations" on page 625.



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# Tasks

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## How to Work with Test Configurations

This task describes how to work with test configurations.

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### Note:

- **Use-case:** For a use-case scenario related to this task, see "How to Work with Test Configurations - Use-Case Scenario" on page 626.
- **Product Feature Movie:** To view a movie that demonstrates how to work with test configurations, choose **Help > Product Feature Movies** in the ALM main window and select **Data Awareness**.

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This task includes the following steps:

- "Prerequisites" on page 625
- "Define test configurations" on page 626
- "Create Coverage" on page 626
- "Define test sets" on page 626
- "View test results" on page 626

### 1 Prerequisites

- a** Define requirements in the Requirements module. For task details, see "How to Create Requirements" on page 341.
- b** Define tests with test parameters in the Test Plan module.

For task details on creating tests, see "How to Create Tests" on page 513.

For task details on test parameters, see "How to Use Test Parameters" on page 589.

## 2 Define test configurations

- a In the test plan tree, select a test and click the **Test Configurations** tab.
- b Define configurations for the test. For user interface details, see "Test Configurations Tab" on page 632.

**Business Process Testing:** For more details on working with test configuration, see the *HP Business Process Testing User Guide*.

**QuickTest Professional:** For more details on working with test configuration, see the section on working with ALM in the *HP QuickTest Professional User Guide*.

## 3 Create Coverage

Link requirements to the test or to specific test configurations. For task details, see "How to Create Coverage" on page 554.

## 4 Define test sets

Create and define a test set in the Test Lab module. For task details, see "How to Create Test Sets" on page 752.

## 5 View test results

View the test set run results. For task details, see "How to View Test Results" on page 833.



## How to Work with Test Configurations - Use-Case Scenario

This use-case scenario provides an example of how to work with test configurations in ALM.

Suppose your company is releasing a new version of a purchase order application in the upcoming months. The new version includes several new enhancements. One of the enhancements is a new purchase order form. The form must provide different solutions for Gold Card, Silver Card, and Bronze Card users.

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**Note:** For a task related to this scenario, see "How to Work with Test Configurations" on page 625.

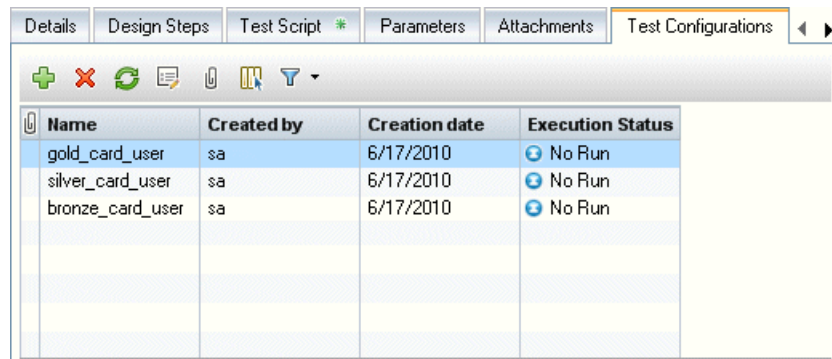
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This scenario includes the following steps:

- "Define test configurations" on page 627
- "Create coverage" on page 628
- "Define a test set" on page 629
- "View test results" on page 630

## 1 Define test configurations

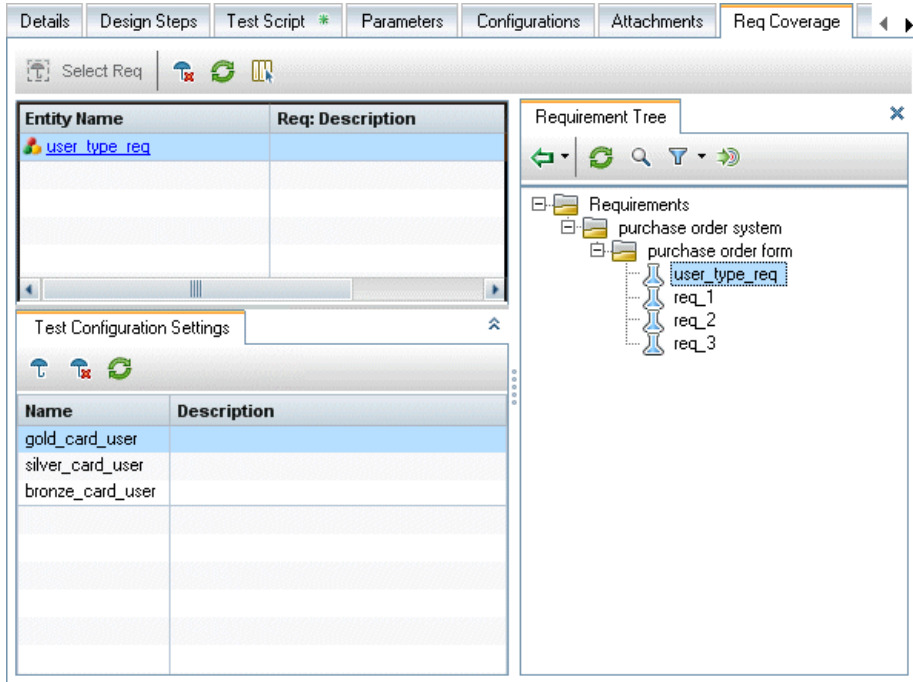
In the test plan tree, select the **user\_type** test and click the **Test Configuration** tab. Rename the existing test configuration to **gold\_card\_user**. Define the following test configurations: **silver\_card\_user** and **bronze\_card\_user**. In the **Data** tab, for each test configuration, specify the data to be used for testing each scenario.



| Name             | Created by | Creation date | Execution Status |
|------------------|------------|---------------|------------------|
| gold_card_user   | sa         | 6/17/2010     | No Run           |
| silver_card_user | sa         | 6/17/2010     | No Run           |
| bronze_card_user | sa         | 6/17/2010     | No Run           |

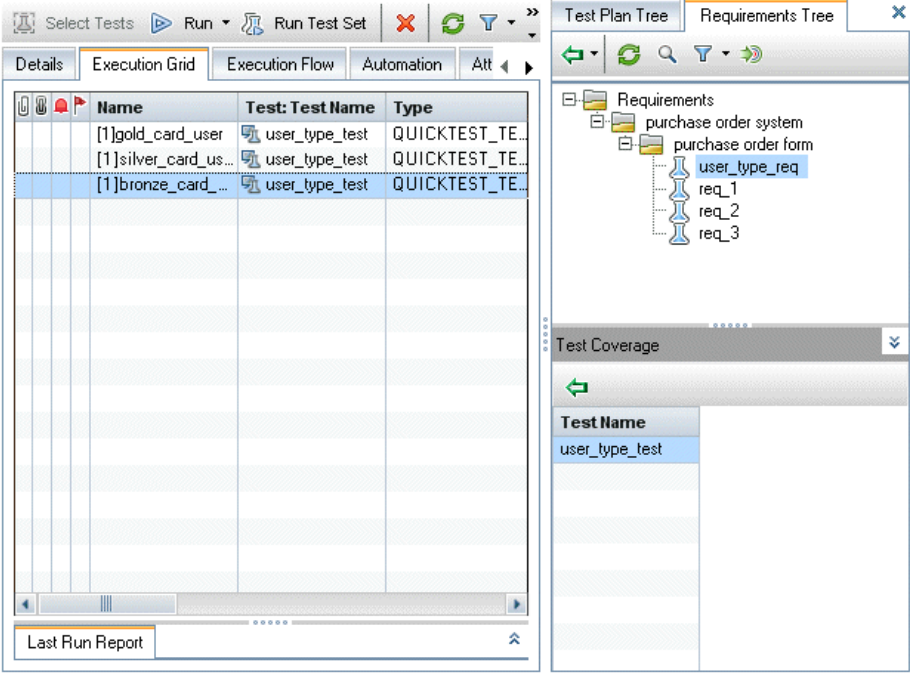
## 2 Create coverage

In the Req Coverage tab, create requirement coverage between the **user\_type\_req** requirement and the **user\_type** test. Click **Add to Coverage**. The Add Configuration Coverage dialog box opens and displays the available test configurations. Add the test configurations to coverage. The Test Configuration Settings tab lists the test configurations included in the coverage.



### 3 Define a test set

In the Execution Grid tab of the Test Lab module, create a test set based on your coverage. Add the **user\_type\_req** requirement from the Requirements Tree pane. Note that the Test Coverage pane lists the tests that cover the selected requirement. The Execution Grid displays the test configurations included in the test set.



## 4 View test results

After running the test set, view the results. The Test Runs tab indicates that the test run with the **bronze\_card\_user** test configuration failed, and that the test run with the **gold\_card\_user** and **silver\_card\_user** test configurations passed.

Test Sets | Test Runs

Test Runs | Edit | View | Analysis

Filter: Exec Date[[ThisMonth]]; Sort By: Exec Date[Descending]; Exec Time[Descending]

| Run ID | Run Name        | Test: Test Name | Configuration... | Status | Exec Date<br>[ThisMonth] | Tester |
|--------|-----------------|-----------------|------------------|--------|--------------------------|--------|
| 3      | Fast_Run_5-1... | user_type_test  | bronze_card_user | Failed | 6/17/2010                | sa     |
| 2      | Fast_Run_5-1... | user_type_test  | silver_card_user | Passed | 6/17/2010                | sa     |
| 1      | Fast_Run_5-1... | user_type_test  | gold_card_user   | Passed | 6/17/2010                | sa     |

Comments | Report | Attachments | History

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## Reference

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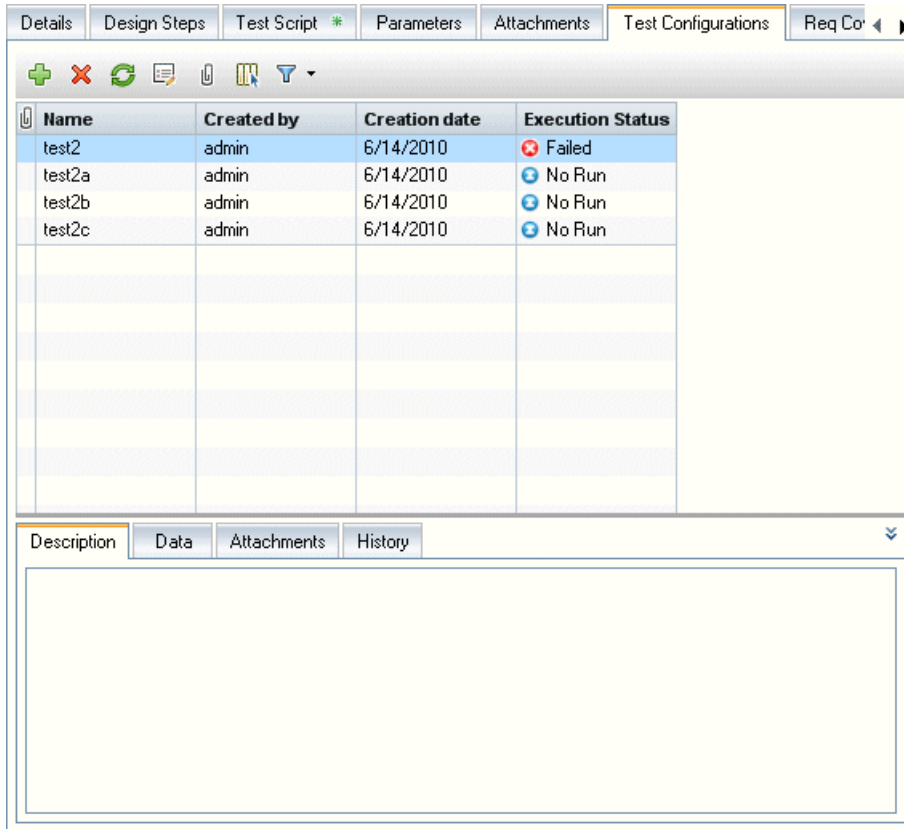
### **Test Configurations User Interface**

This section includes:

- ▶ Test Configurations Tab on page 632
- ▶ New Test Configuration/Test Configuration Details Dialog Box on page 635
- ▶ Data Tab on page 637
- ▶ Test Configuration Settings Tab on page 639
- ▶ Test Configurations Pane on page 641
- ▶ Test Configuration Status Tab on page 644
- ▶ Generate Test Configuration Dialog Box on page 646

## Test Configurations Tab

This dialog box enables you to define and update test configurations.










|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the test plan tree, select a test and click the <b>Test Configurations</b> tab.  |
| <b>Important information</b> | <p><b>Business Process Testing:</b> For more details on working with test configurations, see the <i>HP Business Process Testing User Guide</i>.</p> <p><b>QuickTest Professional:</b> For more details on working with test configuration, see the section on working with ALM in the <i>HP QuickTest Professional User Guide</i>.</p> |



|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | "How to Work with Test Configurations" on page 625 |
| <b>See also</b>       | "Test Configurations Overview" on page 624         |

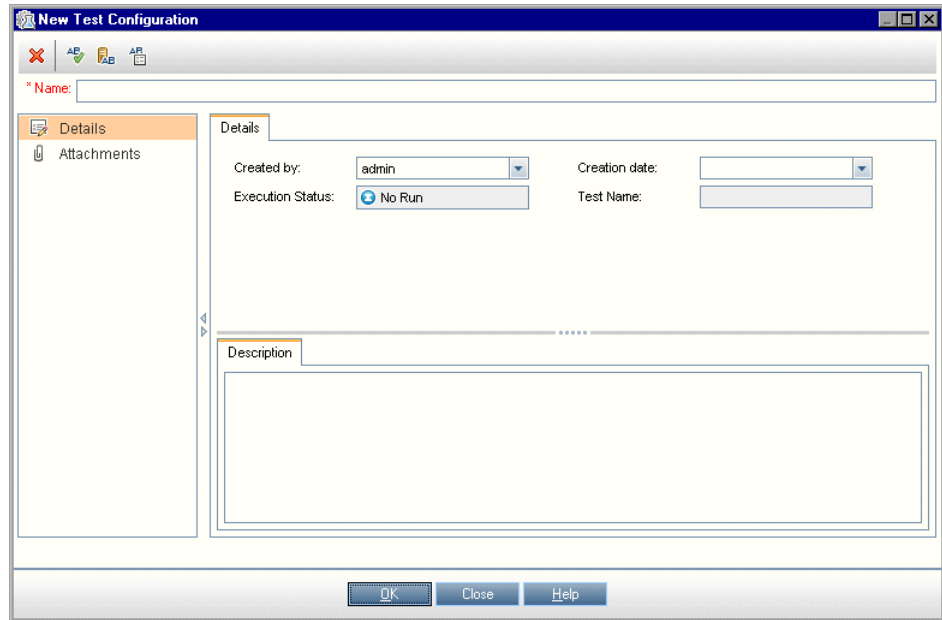
User interface elements are described below:



| UI Elements (A-Z)   | Description   |
|---|---|
|    | <b>New Test Configuration.</b> Opens the New Test Configuration dialog box, enabling you to define a test configuration. For more details, see "New Test Configuration/Test Configuration Details Dialog Box" on page 635.                                |
|    | <b>Delete Test Configuration.</b> Deletes selected test configuration from the test configurations grid.  |
|    | <b>Refresh.</b> Refreshes the test configurations grid so that it displays the most up-to-date information.   |
|    | <b>Test Configuration Details.</b> Opens the Test Configuration Details dialog box, enabling you to display details of the selected test configuration. For more details, see "New Test Configuration/Test Configuration Details Dialog Box" on page 635. |
|   | <b>Attachments.</b> Opens the Attachments page in the Test Configuration Details dialog box, enabling you to view attachments of the currently selected test configuration. For more details, see "Attachments Page" on page 90.                          |
|  | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields are displayed and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.   |
|  | <b>Set Filter.</b> Enables you to filter and sort the test configurations in the test configurations grid. For more details, see "Filter Dialog Box" on page 64.  |
| <b>Attachments tab</b>  | Lists attachments that provide additional information about the currently selected test configuration. For more details, see "Attachments Page" on page 90.   |

| UI Elements (A-Z)       | Description  |
|-------------------------|--|
| <b>Created By</b>       | The user name of the person who created the test configuration.  |
| <b>Creation Date</b>    | The date on which the test configuration was created. By default, the creation date is set to the current ALM Platform server date.  |
| <b>Data tab</b>         | The data associated with the currently selected test configuration. For more details, see "Data Tab" on page 637.  |
| <b>Description</b>      | Describes the test configuration.  |
| <b>Execution Status</b> | The execution status of the last run of a test configuration. By default, the execution status can be one of the following: Blocked, Failed, N/A, No Run, Not Completed, Passed. |
| <b>ID</b>               | A unique numeric ID for the test configuration, assigned automatically by ALM.   |
| <b>Modified</b>         | The date and time of the last change to the test configuration.  |
| <b>Name</b>             | The name of the test configuration.  |
| <b>Test ID</b>          | A unique numeric ID for the test, assigned automatically by ALM.   |
| <b>Test Name</b>        | The name of the test.  |






## New Test Configuration/Test Configuration Details Dialog Box

This dialog box enables you to define and update test configurations.



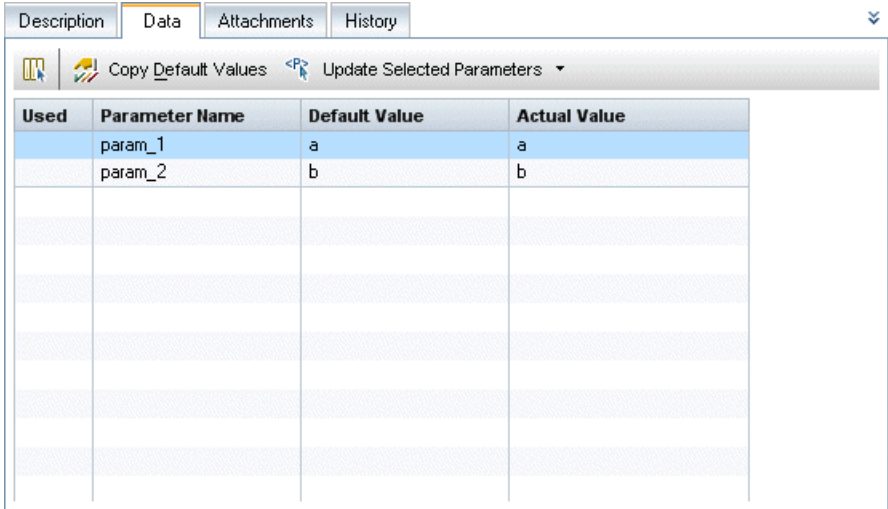
|                              |   |
|------------------------------|---|
| <p><b>To access</b></p>      | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ In the test plan tree, select a test and click the <b>Test Configurations</b> tab. Click the <b>New Test Configuration</b> button . The New Test Configuration dialog box opens.</li> <li>▶ In the test plan tree, select a test and click the <b>Test Configurations</b> tab. Click the <b>Test Configuration Details</b> button . The Test Configuration Details dialog box opens.</li> </ul> |
| <p><b>Relevant tasks</b></p> | <p>"How to Work with Test Configurations" on page 625</p>   |
| <p><b>See also</b></p>       | <p>"Test Configurations Overview" on page 624</p>   |


User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>First/Previous/Next/Last Entity.</b> Allows you to browse through the test configurations.</p> <p><b>Available from:</b> Test Configuration Details dialog box</p>  |
|  | <p><b>Clear All Fields.</b> Clears all fields.</p> <p><b>Available from:</b> New Test Configuration dialog box</p>  |
|  | <p><b>Spell Check.</b> Checks the spelling for the selected word or text box.</p>   |
|  | <p><b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.</p>  |
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p>   |
| <p><b>Attachments tab</b></p>   | <p>Lists attachments that provide additional information about the currently selected test configuration. For more details, see "Attachments Page" on page 90.</p>  |
| <p><b>Data tab</b></p>  | <p>The data associated with the currently selected test configuration. For more details, see "Data Tab" on page 637.</p> <p><b>Available from:</b> Test Configuration Details dialog box</p>  |
| <p><b>Description tab</b></p>   | <p>Describes the currently selected test configuration.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>   |
| <p><b>History tab</b></p>   | <p>Displays the date and time of the change and the name of the user who made the change to the test configuration. For more details, see "History Tab" on page 85.</p> <p><b>Available from:</b> Test Configuration Details dialog box</p> |
| <p><b>Details tab</b></p>   | <p>Details the currently selected test configuration. For details on the available fields, see "Test Configurations Tab" on page 632.</p>   |

# Data Tab


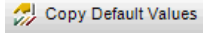

This dialog box shows the data defined for a selected test configuration.



|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ In the test plan tree, select a test and click the <b>Test Configurations</b> tab. On the bottom pane, click the <b>Data</b> tab.</li> <li>▶ In the test plan tree, select a test and click the <b>Test Configurations</b> tab. Click the <b>Test Configuration Details</b> button . The Test Configuration Details dialog box opens. Click <b>Data</b>.</li> </ul> |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ <b>Business Process Testing:</b> When working with a business process test type, different options are available in the Data tab. For more details, see the <i>HP Business Process Testing User Guide</i>.</li> <li>▶ <b>QuickTest Professional:</b> When working with a QuickTest test type, different options are available in the Data tab. For more details, see the section on working with ALM in the <i>HP QuickTest Professional User Guide</i>.</li> </ul>                     |


|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | "How to Work with Test Configurations" on page 625 |
| <b>See also</b>       | "Test Configurations Overview" on page 624         |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields are displayed and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |
|  | Replaces actual values with default values for the currently selected parameters.   |
|  | Enables you to update the actual value of all or selected parameters across all test instances associated with the selected test configurations in the Test Lab module.                                       |
| <b>Actual Value</b>   | The actual value that is used for the parameter during the test run.  |
| <b>Default Value</b>  | The default value of the parameter as defined in the test level.  |
| <b>Description</b>  | The description of the parameter.   |
| <b>Modified</b>   | The last modified date of the parameter.  |
| <b>Order</b>  | The position of the parameter in the set of parameters.   |
| <b>Parameter Name</b>   | The name of the parameter.  |
| <b>Used</b>   | Indicates whether the parameter is included in a design step.   |




## Test Configuration Settings Tab

This tab displays the test configurations associated with the requirement coverage.

| Test Configuration Settings  |             |
|---|-------------|
| Name  | Description |
| test2   |             |
| test2a  |             |
| test2b  |             |
| test2c  |             |
|   |             |

|                              |   |
|------------------------------|---|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> In the <b>Test Plan</b> module, select the <b>Test Plan Tree</b> view.</li> <li><b>2</b> Select a test and click the <b>Req Coverage</b> tab.</li> <li><b>3</b> Click <b>Select Req</b> button.</li> <li><b>4</b> In the Requirements Tree pane, click <b>Add to Coverage</b> to add requirement coverage to a specified test. Requirement coverage is added to the requirement coverage grid. The Test Configuration Settings tab is displayed on the bottom of the Req Coverage tab.</li> </ol> |
| <b>Important information</b> | This tab is displayed only when coverage has been created.  |
| <b>Relevant tasks</b>        | <p>"How to Create Coverage" on page 554</p> <p>"How to Work with Test Configurations" on page 625</p>   |
| <b>See also</b>              | <p>"Req Coverage Tab" on page 564</p> <p>"Test Configurations Overview" on page 624</p>   |

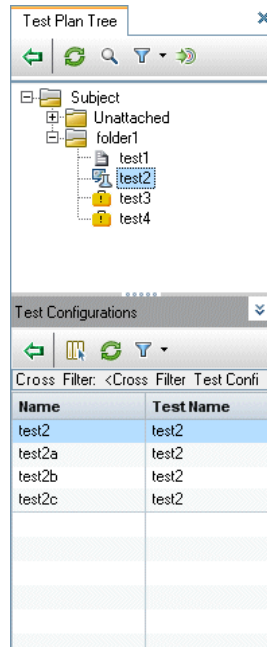
User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|  | <p><b>Add Configuration.</b> Opens the Add Configuration Coverage dialog box, enabling you to add configurations to the list of test configurations covering the selected requirement.</p> |
|  | <p><b>Remove Configuration.</b> Removes the selected configurations from the list of test configurations covering the selected requirement.</p>  |
|  | <p><b>Refresh.</b> Refreshes the test configuration grid.</p>  |
| <p><b>Description</b></p>   | <p>The description of the test configuration.</p>  |
| <p><b>Name</b></p>  | <p>The name of the test configuration.</p>   |



## Test Configurations Pane

This pane lists the test configurations of a selected test.



### To access

#### From the Requirements module:





- 1 Select **View > Requirement Details**. Select a requirement and click the **Test Coverage** tab.
- 2 Click the **Select** button. The Test Plan Tree and the Test Configurations panes are displayed.

#### From the Test Lab module:

- 1 Select the **Test Sets** tab. Select a test set and click the **Execution Grid** tab or the **Execution Flow** tab.
- 2 Click the **Select Tests** button. The Test Plan Tree tab and the Test Configurations pane are displayed.

|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | "How to Create Coverage" on page 554<br>"How to Work with Test Configurations" on page 625 |
| <b>See also</b>       | "Test Coverage Page" on page 576<br>"Test Configurations Overview" on page 624             |

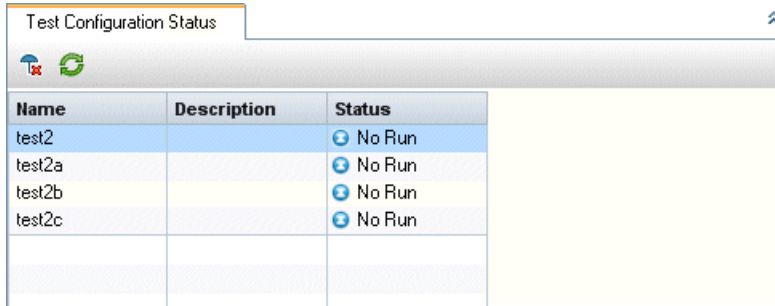
User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|    | <p><b>Add Test Configuration to Coverage.</b> Adds a test instance that uses the selected test configuration to the requirement's test coverage.</p> <p><b>Add Test Configuration to Test Set.</b> Adds a test instance that uses the selected test configuration to the test set.</p> <p><b>Business Process Testing:</b> When including a test configuration of a business process test, the Add Criterion Coverage dialog box opens. For more details, see "Add Criterion Coverage Dialog Box" on page 585.</p> |
|    | <p><b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the test configurations grid and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p>  |
|   | <p><b>Refresh All.</b> Refreshes the test configurations grid.</p>   |
|  | <p><b>Set Filter/Sort.</b> Filters and sorts the test configurations in the grid. For more details, see "Filter Dialog Box" on page 64.</p>  |
| <b>Created By</b>   | The user name of the person who created the test configuration.  |
| <b>Creation Date</b>  | The date on which the test was created. By default, the creation date is set to the current ALM Platform server date.  |
| <b>Description</b>  | A description of the test configuration.   |

| UI Elements             | Description  |
|-------------------------|--|
| <b>Execution Status</b> | The execution status of the last run of a test configuration. By default, the execution status can be one of the following: Blocked, Failed, N/A, No Run, Not Completed, Passed. |
| <b>ID</b>               | A unique numeric ID for the test configuration, assigned automatically by ALM.   |
| <b>Modified</b>         | The date and time of the last change to the test configuration.  |
| <b>Name</b>             | The test configuration name.   |
| <b>Test ID</b>          | A unique numeric ID for the test, assigned automatically by ALM.   |
| <b>Test Name</b>        | The test name.   |

## Test Configuration Status Tab



This tab displays the status of the test configurations associated with a covered requirement.



| Name   | Description | Status |
|--------|-------------|--------|
| test2  |             | No Run |
| test2a |             | No Run |
| test2b |             | No Run |
| test2c |             | No Run |
|        |             |        |

|                       |   |
|-----------------------|---|
| <b>To access</b>      | <ol style="list-style-type: none"> <li><b>1</b> In the <b>Requirements</b> module, select the <b>Requirement Details</b> view. Select a requirement and click the <b>Test Coverage</b> tab.</li> <li><b>2</b> Click the <b>Select</b> button. The Test Plan Tree and the Test Configurations panes display on the right-side of the Test Coverage tab.</li> <li><b>3</b> Click <b>Add to Coverage</b> to add test coverage. Test coverage is added to the test coverage grid. The Test Configuration Status tab is displayed on the bottom of the Test Coverage tab.</li> </ol> |
| <b>Relevant tasks</b> | <p>"How to Create Coverage" on page 554</p> <p>"How to Work with Test Configurations" on page 625</p>   |
| <b>See also</b>       | <p>"Test Coverage Page" on page 576</p> <p>"Test Configurations Overview" on page 624</p> <p>"Requirement and Test Coverage Overview" on page 552</p>   |

User interface elements are described below:

| UI Elements   | Description   |
|---|---|
|  | <b>Remove Configuration.</b> Removes selected configuration from the list of configurations used to cover the selected requirement.   |
|  | <b>Refresh All.</b> Refreshes the configuration status grid.  |
| <b>Name</b>   | The test configuration name.  |
| <b>Description</b>  | The description of the test configuration.  |
| <b>Status</b>   | <p>The current test run status of the test configuration. By default, the status can be one of the following: Blocked, Failed, N/A, No Run, Not Completed, Passed.</p> <p><b>Business Process Testing:</b> To view the criteria status of a test configuration, click its status value. The Criteria Status dialog box opens.</p> |

## Generate Test Configuration Dialog Box

After upgrading from a previous version of Quality Center, this dialog box enables you to create a test configuration from an existing test instance.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> In the Test Lab module, select the <b>Test Sets</b> tab.</li> <li><b>2</b> Select a test set and click the <b>Execution Grid</b> tab.</li> <li><b>3</b> In the grid, right-click a test instance and choose <b>Generate Test Configuration</b>.</li> </ol>   |
| <b>Important information</b> | <p>When generating a test configuration from a test instance, ALM performs the following actions:</p> <ul style="list-style-type: none"> <li>▶ Associates the test instance with the generated test configuration.</li> <li>▶ Associates the test instance's runs with the generated test configuration.</li> <li>▶ Associates the test instance's links (for example, tests, requirements) with the generated test configuration.</li> <li>▶ Sets the generated test configuration status to be the same as the status of the test instance.</li> <li>▶ Copies the parameter values of the test instance to the generated test configuration.</li> </ul> <p><b>Business Process Testing:</b> The <b>Generate Test Configuration</b> option is enabled only for business process test configuration instances that have been modified and no longer match their original static configurations. (This option is not available for dynamic configurations.) For information on generating test configurations for business process test instances, see the <i>HP Business Process Testing User Guide</i>.</p> |
| <b>Relevant tasks</b>        | <p>"How to Create Coverage" on page 554</p> <p>"How to Work with Test Configurations" on page 625</p>  |
| <b>See also</b>              | <p>"Test Coverage Page" on page 576</p> <p>"Test Configurations Overview" on page 624</p>  |

User interface elements are described below:

| UI Elements                        | Description                                   |
|------------------------------------|---|
| <b>New Test Configuration Name</b> | The name of the generated test configuration. |





# 25

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## System Tests

This chapter includes:

### Concepts

- ▶ System Tests Overview on page 650

### Tasks

- ▶ How to Create System Tests on page 651

### Reference

- ▶ System Test User Interface on page 653

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## Concepts

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### System Tests Overview

You can run a system test to retrieve a machine's system information, view a captured desktop image of a test run on a machine, or restart a machine. For example, you can run a system cleanup test that will restart the machine on which an automated test failed. You can also create a system test to retrieve information about a machine's resource usage before or after a test run.

You create a system test by adding a system test to a test subject folder, defining the test, and adding the test to a test set.

---

**Note:** To run a system test, you must install the following add-ins on the machine where the test is to be run:

- ▶ HP Quality Center System Test Remote Agent Add-in
- ▶ HP Quality Center Connectivity Add-in

For more information on HP Application Lifecycle Management (ALM) add-ins, refer to the *HP Application Lifecycle Management Installation Guide*.

---

When running a system test, the following steps can be created:

- ▶ **SysInfo.** Collection of system information
- ▶ **Snapshot.** Capture of desktop image
- ▶ **Reboot Start** and **Reboot Finish.** Machine restart

You can view details for each of these steps after your system test has finished running. You can also view the system information that has been retrieved—such as CPU, memory, and processes running on the machine—and an image of the machine executing the system test.

For task details, see "How to Create System Tests" on page 651.

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## Tasks

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### How to Create System Tests

This task describes how to create and run a system test, that instructs ALM to provide system information for a machine, capture a desktop image, or restart a machine.

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**Note:** This task is part of a higher-level task. For details, see "How to Plan Tests in ALM" on page 505.

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This task includes the following steps:

- "Prerequisites" on page 651
- "Create a system test" on page 651
- "Configure a system test" on page 652
- "Run system tests" on page 652

#### 1 Prerequisites

Test subjects are defined in the test plan tree.


For task details on creating test subjects, see Step 1, "Create test subjects" in the How to Create Tests task.

#### 2 Create a system test

Create a system test in a subject folder.

- a** In the Test Plan Tree view, right-click a test subject, and select **New Test**.
- b** In the New Test dialog box, select **SYSTEM-TEST** in the **Type** field.

- c** Fill in other fields in the New Test dialog box. For user interface details, see "New Test Dialog Box" on page 543.

A new test with the system test icon  is added to the test plan tree under the subject folder you selected.

### **3 Configure a system test**

Select the operations a system test should perform.

- a** Select a system test in the test plan tree.
- b** Click the **Test Script** tab to configure the system test settings. For user interface details, see "Test Script Tab – System Tests" on page 653.

### **4 Run system tests**

Run system tests in the Test Lab module. For details on running tests, see "How to Run Tests in ALM" on page 716.

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## Reference

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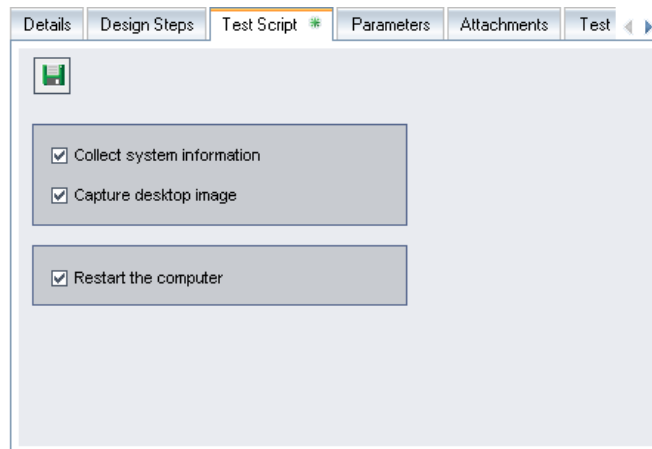
### System Test User Interface

This section includes:

- ▶ Test Script Tab – System Tests on page 653


### Test Script Tab – System Tests

This tab enables you to define settings for the system test.



|                       |  |
|-----------------------|--|
| <b>To access</b>      | In the test plan tree, select a system test, and click the <b>Test Script</b> tab. |
| <b>Relevant tasks</b> | "How to Create System Tests" on page 651   |
| <b>See also</b>       | "System Tests Overview" on page 650  |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | Saves the system test settings.  |
| <b>Capture desktop image</b>  | Instructs ALM to add an attachment displaying a snapshot of the machine's desktop, when the test is run.   |
| <b>Collect system information</b>   | Instructs ALM to collect information such as CPU, memory, and processes running on the machine when the test is run.   |
| <b>Restart the computer</b>   | <p>Instructs ALM to restart the machine when the test is run.</p> <p><b>Note:</b></p> <p>To use the <b>Restart the computer</b> option, you must enable auto login on your machine. Choose <b>Start &gt; Programs &gt; HP ALM Platform System Test Agent &gt; System Test Agent (configuration)</b>. The Auto Restart Settings dialog box opens. By default, <b>User Name</b> and <b>Domain</b> are read-only. Type your password.</p> <p>To select a different user name, reopen the Auto Restart Settings dialog box. <b>User Name</b> and <b>Domain</b> are no longer read-only. Modify the values.</p> |

# 26

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## Test Resources

This chapter includes:

### Concepts

- ▶ Test Resources Overview on page 656

### Tasks

- ▶ How to Use Test Resources on page 658

### Reference

- ▶ Test Resources User Interface on page 661

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## Concepts

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### Test Resources Overview

The Test Resources module enables you to manage resources used by your tests. You can organize your resources by defining a hierarchical **test resource tree** containing resource folders and resources. For each resource in the tree, you select and upload a set of resource files to the HP Application Lifecycle Management (ALM) repository. These files can be used by one or more tests.

You can then define dependencies between resources and tests. For more details on dependencies, see "Entity Dependencies Overview" on page 657.

For task details, see "How to Use Test Resources" on page 658.

#### **Example**

Michael, a QA tester, works with an external testing tool that stores its tests in ALM. Each test uses a shared configuration file that is common to a number of tests. He therefore wants a single point of maintenance for the configuration file, rather than saving separate copies of the file for each test.

Michael uses his testing tool to define the configuration file as a resource and define each test that uses the file as dependent on that resource. As only one copy of the resource exists in ALM, replacing the configuration file would replace it for all tests that depend on it.

After Michael defines dependencies, if he attempts to delete the resource, ALM will warn him that this may affect tests that depend on it. In addition, if he copies one of the tests that depend on the resource between projects, ALM will enable him to choose to copy the resource as well as the test.



## Entity Dependencies Overview

Dependencies define relationships between entities such as tests, components, and test resources. When analyzing the impact of a change proposed to a specific entity, the dependencies indicate the other entities that the change might affect. For example, you may want to view dependencies before deleting or copying an entity.

Dependency relationships are displayed in the Dependencies tab. This tab is available from the Test Plan, Business Components, and Test Resources modules. You can view the entities used by a selected entity, and the entities that a using a selected entity.

You can define dependencies between entities using other HP testing tools, for example, QuickTest Professional. For more information, refer to the *HP QuickTest Professional User Guide*.

You can also define dependencies between entities by writing your own application. For more information, refer to the *HP ALM Open Test Architecture API Reference*.

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## Tasks

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### How to Use Test Resources

This task describes how to manage test resources in the Test Resources module. Create a test resource tree, upload and download resources, and define dependencies between resources and other entities such as tests.

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**Note:** This task is part of a higher-level task. For details, see "How to Plan Tests in ALM" on page 505.

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This task includes the following steps:

- "Prerequisites" on page 658
- "Create resources" on page 658
- "Upload resource files" on page 659
- "Download resource files" on page 659
- "Define dependencies" on page 659
- "View dependencies" on page 660

#### 1 Prerequisites

For more information on working with QuickTest resources, see the section on working with ALM in the *HP QuickTest Professional User Guide*.

#### 2 Create resources

- a** **Open the Test Resources module.** On the ALM sidebar, under **Testing**, select **Test Resources**.
- b** **Create folders.** Right-click the **Resources** root folder and select **New Resource Folder**. To create a sub-folder, right-click a folder and select **New Resource Folder**.

- c **Add resources to folders.** Right-click a folder or sub-folder and select **New Resource**. Fill in the fields in the New Resource dialog box. For user interface details, see "New Resource/Resource Details Dialog Box" on page 677.

### 3 Upload resource files

You can upload files for each resource in the test resource tree to the ALM repository.

Select a resource in the test resource tree and click the **Resource Viewer** tab. For user interface details, see "Resource Viewer Tab" on page 671.

**Business Process Testing:** When working with application areas, launch the testing tool in the **Application Area Viewer** tab to work with the resource. For user interface details, see "Application Area Viewer Tab" on page 673.

### 4 Download resource files

To view and edit your test resources, you can download them to a local directory.

Select a resource in the test resource tree and click the **Resource Viewer** tab. For user interface details, see "Resource Viewer Tab" on page 671.

### 5 Define dependencies

You define dependencies between entities from your testing tool, for example, QuickTest Professional. For more information, refer to the *HP QuickTest Professional User Guide*.

You can also define dependencies between entities by writing your own application. For more information, refer to the *HP ALM Open Test Architecture API Reference*.

## 6 View dependencies

View the relationships between entities such as tests, components, and test resources. You can view the entities that depend on a selected entity, and the entities on which a selected entity depends.

Select a resource (Test Resources module), test (Test Plan module) or component (Business Components module) and click the **Dependencies** tab. For user interface details, see "Dependencies Tab" on page 675.

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## Reference

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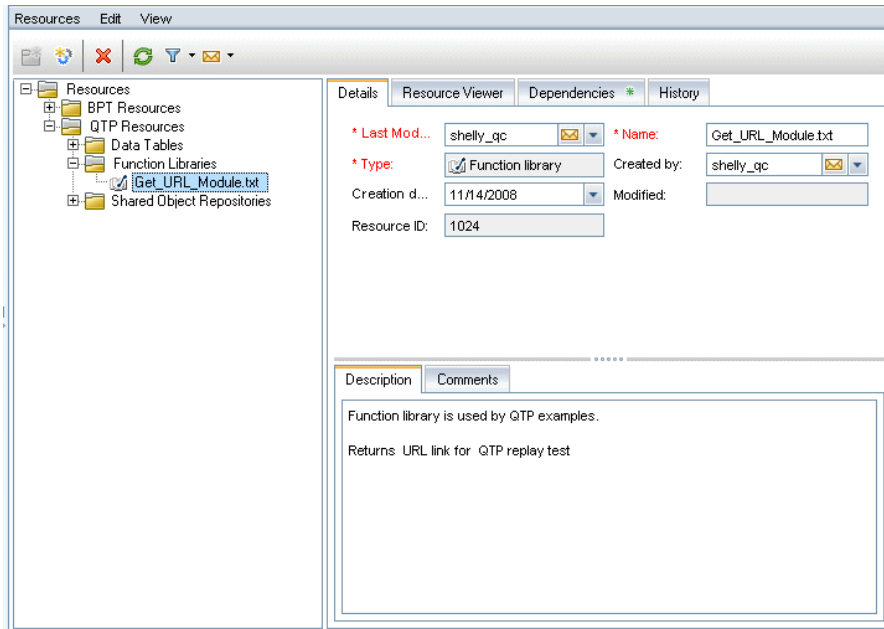
### **Test Resources User Interface**

This section includes:

- ▶ Test Resources Module Window on page 662
- ▶ Test Resources Module Menus and Buttons on page 664
- ▶ Test Resources Module Icons on page 667
- ▶ Test Resources Module Fields on page 669
- ▶ Resource Viewer Tab on page 671
- ▶ Application Area Viewer Tab on page 673
- ▶ Dependencies Tab on page 675
- ▶ New Resource/Resource Details Dialog Box on page 677
- ▶ Paste Resources To Target Project Dialog Box on page 679

## Test Resources Module Window

This window enables you to manage resources used by your tests.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the ALM sidebar, under <b>Testing</b> , select <b>Test Resources</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ <b>QuickTest Professional:</b> For more details on working with QuickTest resources, see the section on working with ALM in the <i>HP QuickTest Professional User Guide</i>.</li> <li>▶ <b>Business Process Testing:</b> When an ALM project with Business Process Testing is connected to QuickTest Professional, a <b>BPT Resources</b> folder is created automatically in the tree. The BPT Resources folder contains all the QuickTest resources available for business components in the project. For details about Business Process Testing application areas, see the <i>HP Business Process Testing User Guide</i>.</li> <li>▶ <b>Performance Center:</b> For more details on working with Performance Center resources, see the <i>HP ALM Performance Center Guide</i>.</li> </ul> |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "How to Use Test Resources" on page 658 |
| <b>See also</b>       | "Test Resources Overview" on page 656   |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)                          | Description   |
|--|---|
| <Test Resources module common UI elements> | <ul style="list-style-type: none"> <li>▶ <b>Test Resource fields.</b> For field definitions, see "Test Resources Module Fields" on page 669.</li> <li>▶ <b>Test Resource menus and buttons.</b> For command and button descriptions, see "Test Resources Module Menus and Buttons" on page 664.</li> <li>▶ <b>Test Resource icons.</b> For icon descriptions, see "Test Resources Module Icons" on page 667.</li> <li>▶ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu and sidebar, see "ALM Common Areas" on page 41.</li> </ul> |
| <test resource tree>                       | <p>A graphical representation of your test resources.</p> <p><b>Note:</b> When Sprinter is used for manual testing in your project, a <b>Sprinter</b> folder is added to the <b>Resources</b> folder. This folder contains a subfolder for each Sprinter user and is used to store user information. <b>Caution:</b> The <b>Sprinter</b> folder is managed by Sprinter only. You must not make any changes to the folder or subfolders. For more details, see the <i>HP Sprinter User Guide</i>.</p>  |
| <b>Dependencies tab</b>                    | Displays dependency relationships that exist between entities such as test resources, components, and tests. For more information, see "Dependencies Tab" on page 675.  |
| <b>Details tab</b>                         | Displays details of the currently selected resource folder or resource. For more details, see "Test Resources Module Fields" on page 669.   |

| UI Elements (A-Z)                 | Description   |
|-----------------------------------|---|
| <b>History tab</b>                | <p>Displays a history of baselines in which the test resource appears. You can also compare two baseline versions.</p> <p><b>Version Control:</b> You can view all previous versions of a test resource.</p> <p>For more details on the History tab, see "History Tab" on page 85.</p>  |
| <b>Monitors Configuration tab</b> | <p><b>Performance Center:</b> Enables you to configure Performance Center monitor profiles. For details, see the <i>HP ALM Performance Center Guide</i>.</p>  |
| <b>Resource Viewer tab</b>        | <p>Enables you to upload and download test resource files from the ALM repository. For more information, see "Resource Viewer Tab" on page 671.</p> <p><b>Note:</b> Some resources have different viewer tabs, such as the application area resource. For details on its viewer tab, see "Application Area Viewer Tab" on page 673.</p> |

## Test Resources Module Menus and Buttons



This section describes the menus and buttons available in the Test Resources module.





|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under <b>Testing</b> , select <b>Test Resources</b> .   |
| <b>Important information</b> | <b>Tip:</b> You can access the menu bar from the Test Resources module by pressing the shortcut key ALT. Additionally, you can perform many other ALM operations using shortcut keys. For a list of shortcut keys, see "ALM Keyboard Shortcut Reference" on page 154. |
| <b>Relevant tasks</b>        | "How to Use Test Resources" on page 658   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Test Resources Module Window" on page 662</li> <li>➤ "Test Resources Module Icons" on page 667</li> <li>➤ "Test Resources Overview" on page 656</li> </ul>  |



User interface elements are described below:

| UI Elements (A-Z)     | Menu | Description  |
|-----------------------|------|--|
| <b>Collapse</b>       | View | Collapses all branches in the test resource tree.  |
| <b>Copy URL/Paste</b> | Edit | Copies a selected resource and pastes its URL as a link. The resource itself is not copied. Instead, you can paste the address into another location, such as an email or a document. Clicking the link opens ALM and takes you to the resource file or folder. If you are not already logged in, ALM first prompts for login details.   |
| <b>Copy/Paste</b>     | Edit | <p>Copies selected resources or folders within the same project or across projects.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ When you copy a resource from one project to another, if the resource is dependent on other test resources, you can instruct ALM to copy using one of three methods. For more details, see "Paste Resources To Target Project Dialog Box" on page 679.</li> <li>▶ To copy resources across projects, both projects must use the same ALM version and patch level.</li> </ul> |

| UI Elements (A-Z)   | Menu | Description  |
|---|------|--|
| Cut/Paste   | Edit | <p>Moves selected resources to a different location in the test resource tree.</p> <p><b>Note:</b> The root folder cannot be moved.</p> <p><b>Tip:</b> You can also move a resource to a new location in the test resource tree by dragging it.</p>  |
|  <b>Delete</b>   | Edit | <p>Deletes selected resources and folders from the test resource tree.</p> <p>If other entities depend on the resource, the Delete Resource dialog box opens. The related entities are displayed.</p> <p><b>Caution:</b> If other entities depend on the resource, deleting the resource may impact these related entities. You can view related entities in the Dependencies tab. For more information, see "Dependencies Tab" on page 675.</p> <p><b>Version Control:</b> Deleting a resource deletes all previous versions of the resource.</p> |
| <b>Expand All</b>   | View | Expands all branches in the test resource tree.  |
|  <b>Filter</b> | View | Enables you to filter the resources in the test resource tree. For more details, see "Filter Dialog Box" on page 64.   |
| <b>Find</b>   | Edit | Opens the Find dialog box, enabling you to search for a resource in the test resource tree. For more details, see "Find Dialog Box" on page 78.  |








| UI Elements (A-Z)  | Menu      | Description   |
|--|-----------|---|
|  <b>New Resource</b>        | Resources | Opens the New Resource dialog box, enabling you to add a resource to a selected folder. For more details, see "New Resource/Resource Details Dialog Box" on page 677.     |
|  <b>New Resource Folder</b> | Resources | Opens the New Resource Folder dialog box, enabling you to add a folder under a selected folder.   |
|  <b>Refresh All</b>         | View      | Refreshes the test resource tree so that it displays the most up-to-date information.   |
| <b>Rename</b>  | Edit      | Renames a selected resource or folder.  |
|  <b>Send by E-mail</b>      | Resources | Opens the Send E-mail dialog box, enabling you to send a resource by email to recipients selected from a list. For more details, see "Send E-mail Dialog Box" on page 87. |



## Test Resources Module Icons

This section describes the icons available in the Test Resources module.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the ALM sidebar, under <b>Testing</b> , select <b>Test Resources</b> .  |
| <b>Important information</b> | <b>ALM Editions:</b> Not all resource types are available with each edition.   |
| <b>Relevant tasks</b>        | "How to Use Test Resources" on page 658  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Test Resources Module Window" on page 662</li> <li>➤ "Test Resources Module Menus and Buttons" on page 664</li> <li>➤ "Test Resources Overview" on page 656</li> </ul> |

User interface elements are described below:

| UI Elements   | Description   |
|---|---|
|    | <b>Application area.</b> Provides all settings and resources required to create the content of keyword-driven business components for a particular application or part of an application. For details about application areas, see the <i>HP Business Process Testing User Guide</i> .  |
|    | <b>Data Table.</b> Contains data to be used for driving the QuickTest run steps. For details about data table, see the <i>HP QuickTest Professional User Guide</i> .  |
|    | <b>Environment Variables.</b> Contains variables and corresponding values that can be accessed from QuickTest tests. For details about environment variables, see the <i>HP QuickTest Professional User Guide</i> .   |
|    | <b>Function Library.</b> Contains Visual Basic script functions, subroutines, and modules for use with QuickTest tests. For details about function libraries, see the <i>HP QuickTest Professional User Guide</i> .   |
|    | <b>Recovery Scenario.</b> Contains scenarios which include definitions of unexpected events and the operations necessary to recover the QuickTest run sessions. For details about recovery scenarios, see the <i>HP QuickTest Professional User Guide</i> .   |
|  | <b>Shared Object Repository.</b> Contains information that enables QuickTest to identify the objects in your application. QuickTest enables you to maintain the reusability of your tests by storing all the information regarding your test objects in shared object repositories. For details about shared object repositories, see the <i>HP QuickTest Professional User Guide</i> . |
|  | <b>Test Resource.</b> A generic test resource type for use by all test types.   |

| UI Elements   | Description   |
|---|---|
|  | <b>Monitor Over Firewall.</b> Contains Performance Center monitor settings for servers that are located over a firewall. For details about monitor over firewall, see the <i>HP Performance Center Guide</i> .                            |
|  | <b>Monitor Profile.</b> Contains Performance Center monitor settings that can be saved as a monitor profile to be used by any load test in your project. For details about monitor profiles, see the <i>HP Performance Center Guide</i> . |

## Test Resources Module Fields

This section describes the Test Resources module fields.

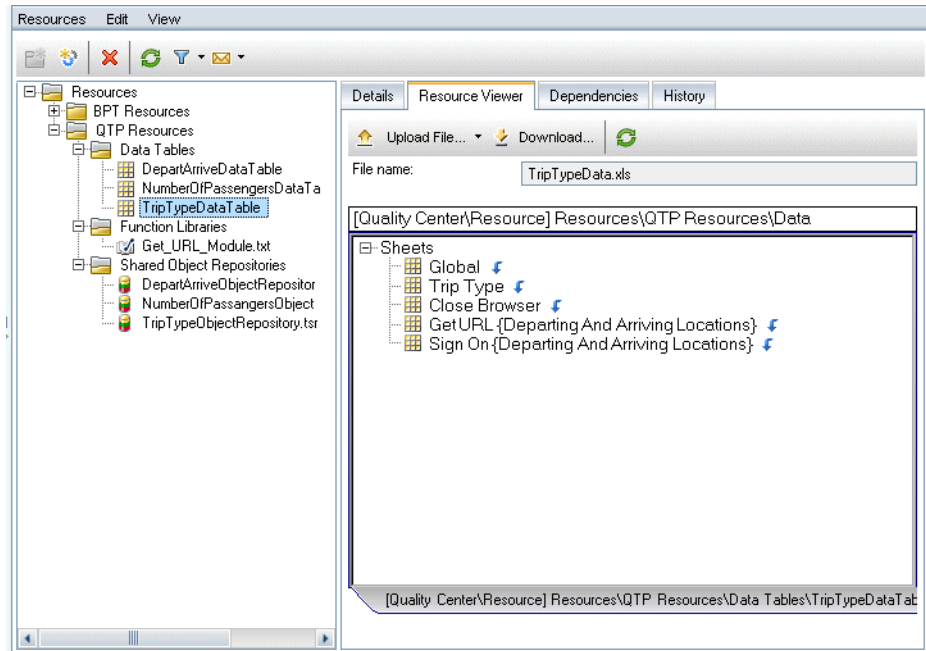
|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under <b>Testing</b> , select <b>Test Resources</b> .   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You can add user-defined fields and change the label of any of the fields in the Test Resources module. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You can use the Script Editor to restrict and dynamically change the fields and values in the Test Resources module. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Use Test Resources" on page 658   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "Test Resources Module Window" on page 662</li> <li>▶ "Test Resources Overview" on page 656</li> </ul>   |

The fields are described below:

| UI Elements (A-Z)     | Description  |
|-----------------------|--|
| <b>Comments</b>       | Displays comments about the resource. To add a new comment, click the <b>Add Comment</b> button. A new section is added to the <b>Comments</b> box, displaying your user name and the database's current date.                         |
| <b>Created By</b>     | The user who created the resource.   |
| <b>Creation Date</b>  | The date on which the resource was created.<br><b>Default value:</b> The current database server date.   |
| <b>Description</b>    | Describes the folder or resource.<br>Click in the text box to display a toolbar for formatting and spell checking the text.<br><b>Business Process Testing:</b> When specifying an application area resource, this field is mandatory. |
| <b>File Name</b>      | The file name.   |
| <b>Folder ID</b>      | A unique numeric ID for the folder that is assigned by ALM. This field cannot be modified.   |
| <b>Name</b>           | The folder or resource name.   |
| <b>Modified</b>       | The date the resource was modified.  |
| <b>Resource ID</b>    | A unique numeric ID for the file that is assigned by ALM. This field cannot be modified.   |
| <b>Type</b>           | Indicates the type of resource. For details, see "Test Resources Module Icons" on page 667.  |
| <b>Version number</b> | <b>Version Control:</b> The version number of the resource. If version control is enabled for your project, this field is displayed.   |


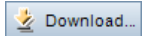

## Resource Viewer Tab

This tab enables you to upload files for each resource in the test resource tree to the ALM repository. You can also download files to a local directory.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Test Resources module, select a resource in the test resource tree and click the <b>Resource Viewer</b> tab.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ To view the resource content, you must install the relevant add-in or extension. For more information on the QuickTest Professional add-in, refer to the <i>HP QuickTest Professional User Guide</i>.</li> <li>▶ Some resources have different viewer tabs, such as the application area resource. For details on its viewer tab, see "Application Area Viewer Tab" on page 673.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Use Test Resources" on page 658  |
| <b>See also</b>              | "Test Resources Overview" on page 656  |

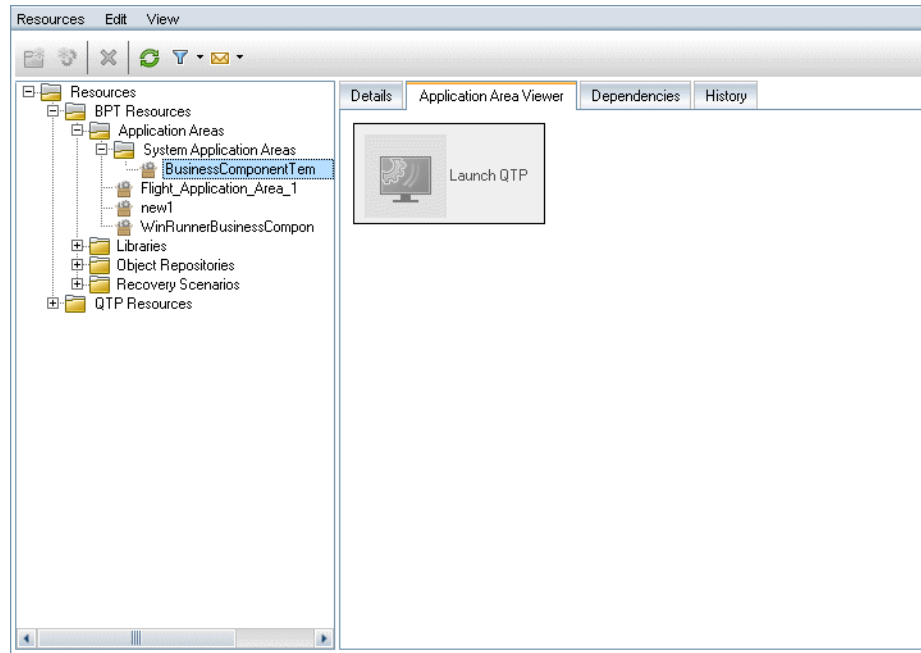
User interface elements are described below:

| UI Elements   | Description   |
|---|---|
|  | <p><b>Upload File.</b> Uploads the file or folder to the ALM repository. Includes the following options:</p> <ul style="list-style-type: none"> <li>➤ <b>Upload File.</b> Opens the Upload File dialog box, enabling you to select a file.</li> <li>➤ <b>Upload Folder.</b> Opens the Browse for Folder dialog box, enabling you to select a folder.</li> </ul> <p>To replace an uploaded file, upload again.</p> |
|  | <p><b>Download.</b> Opens the Browse for Folder dialog box, enabling you to download a selected folder.</p>   |
|  | <p><b>Refresh.</b> Refreshes the tab.</p>   |
| <p><b>File name</b></p>   | <p>Resource file name.</p>  |



## Application Area Viewer Tab

This tab enables you to launch the testing tool for the application area resource.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | <b>Business Process Testing:</b> In the Test Resources module, select an application area resource in the test resource tree and click the <b>Application Area Viewer</b> tab.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ To view the resource content, you must install the relevant testing tool, add-in, or extension. For more information on the QuickTest Professional add-in, refer to the <i>HP QuickTest Professional User Guide</i>.</li> <li>▶ Launching an ALM version 11.00 application area resource in QuickTest Professional version 10.00 is not supported. Instead, open the application area directly in QuickTest Professional.</li> </ul> |

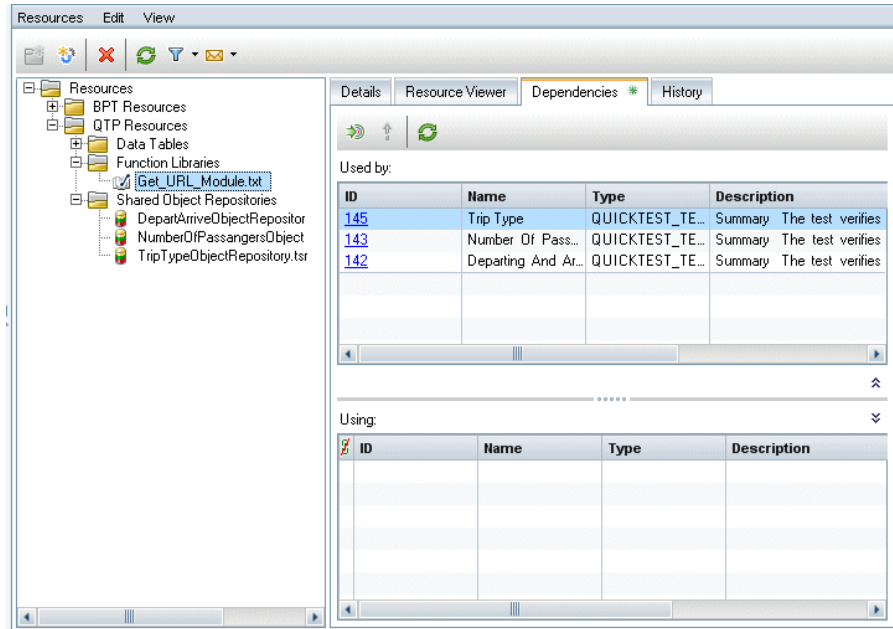
|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "How to Use Test Resources" on page 658 |
| <b>See also</b>       | "Test Resources Overview" on page 656   |

User interface elements are described below:

| <b>UI Elements</b>                 | <b>Description</b>   |
|------------------------------------|--|
| <b>Launch &lt;testing tool&gt;</b> | <p>Launches the relevant testing tool.</p> <p><b>Version Control:</b> The <b>Launch</b> button is disabled when attempting to open an application area from an older version or baseline. Instead, open the application area directly in QuickTest Professional.</p> |






## Dependencies Tab

This tab displays the relationships between entities such as tests, components, and test resources. You can view the entities that depend on a selected entity (**Used By** grid), and the entities that a selected entity depends on (**Using** grid).



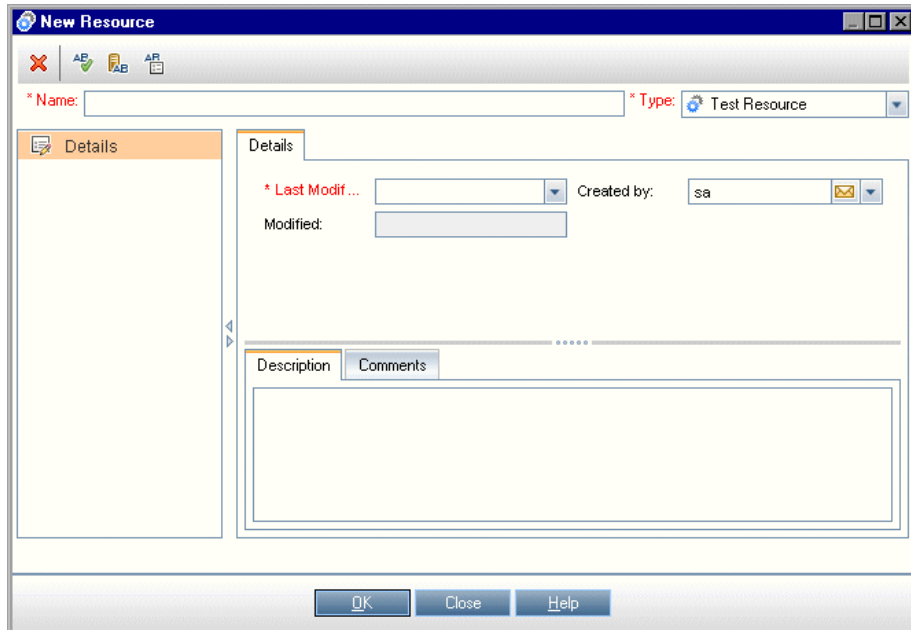
|                       |  |
|-----------------------|--|
| <b>To access</b>      | Use one of the following: <ul style="list-style-type: none"> <li>▶ Test Resources module: Select a resource in the test resource tree and click the <b>Dependencies</b> tab.</li> <li>▶ Test Plan module: Select a test in the test plan tree and click the <b>Dependencies</b> tab.</li> <li>▶ Business Components module: Select a component in the component tree and click the <b>Dependencies</b> tab.</li> </ul> |
| <b>Relevant tasks</b> | "How to Use Test Resources" on page 658  |
| <b>See also</b>       | "Entity Dependencies Overview" on page 657   |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <b>Go To.</b> Enables you to navigate to a selected entity.   |
|  | <b>Show Broken Relation.</b> Displays details of the broken relation for the selected relation in the <b>Using</b> grid.<br>Select an entity in the <b>Using</b> grid that is marked as a broken relation and click the <b>Show Broken Relation</b> button. |
|  | <b>Refresh.</b> Refreshes the tab.  |
|  | <b>Broken Relation.</b> The related entity no longer exists. Click the icon for details.  |
|  | <b>Show/Hide arrow.</b> Displays or hides the <b>Used By</b> or <b>Using</b> grid.  |
| <Used by grid>  | Displays entities that depend on a selected entity.   |
| <Using grid>  | Displays the related entities that a selected entity depends on.  |
| <b>Description</b>  | The description of the associated entity.   |
| <b>ID</b>   | A unique numeric ID for the associated entity. The ID is assigned automatically by ALM.   |
| <b>Name</b>   | The name of the associated entity.  |
| <b>Type</b>   | The type of the associated entity.  |
| <b>Owner Name</b>   | The name of entity that owns the selected entity.   |
| <b>Owner Type</b>   | The type of entity that owns the selected entity.   |






## New Resource/Resource Details Dialog Box

This dialog box enables you to add and view resources.



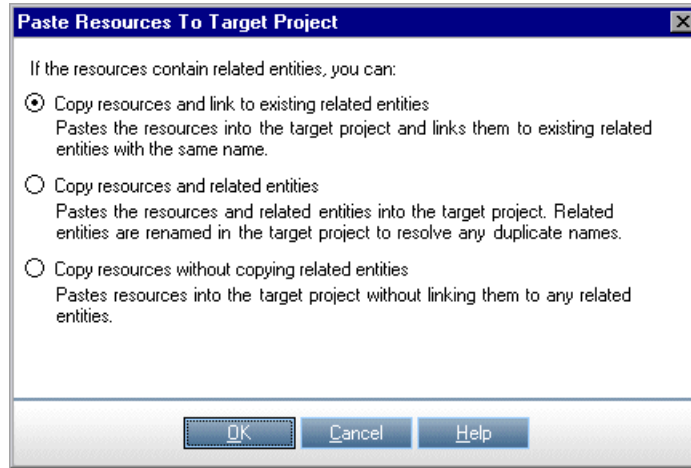
|                              |  |
|------------------------------|--|
| <b>To access</b>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ In the Test Resources module, right-click a resource folder and select <b>New Resource</b>. The New Resource dialog box opens.</li> <li>▶ In the Test Resources module, click the <b>History</b> tab. Click <b>Baselines</b> or <b>Versions and Baselines</b>. Click the <b>View</b> button. The Resource Details dialog box opens.</li> </ul> |
| <b>Important information</b> | <p><b>Version Control:</b> The new resource is automatically checked out. For more information, see "Check Out Dialog Box" on page 136.</p>  |
| <b>Relevant tasks</b>        | <p>"How to Use Test Resources" on page 658</p>   |
| <b>See also</b>              | <p>"Test Resources Overview" on page 656</p>   |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | Clears the content in the dialog box.<br><b>Available from:</b> New Resource dialog box  |
|  | <b>Send by Email.</b> Sends an email with the test resource details. For more details, see "Send E-mail Dialog Box" on page 87.<br><b>Available from:</b> Resource Details dialog box                  |
|  | <b>Check Spelling.</b> Checks the spelling for the selected word or text box.  |
|  | <b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.   |
|  | <b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.  |
| <b>Dependencies</b>   | Displays the relationships between the currently selected test resource and other entities. For more details, see "Dependencies Tab" on page 675.  |
| <b>Details</b>  | Details of the currently selected test resource. For details on the available fields, see "Test Resources Module Fields" on page 669.  |
| <b>Name</b>   | The name of the resource.  |
| <b>Resource Viewer</b>  | Enables you to upload files for the currently selected test resource to the ALM repository. You can also download files to a local directory. For more details, see "Resource Viewer Tab" on page 671. |
| <b>Type</b>   | Indicates the type of resource. For details, see "Test Resources Module Icons" on page 667.  |

## Paste Resources To Target Project Dialog Box

This dialog box enables you to choose how ALM copies test resources across projects.



|                         |  |
|-------------------------|--|
| <p><b>To access</b></p> | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ In the Test Resources module, right-click a resource folder and select <b>New Resource</b>. The New Resource dialog box opens.</li> <li>▶ In the Test Resources module, click the <b>History</b> tab. Click <b>Baselines</b> or <b>Versions and Baselines</b>. Click the <b>View</b> button. The Resource Details dialog box opens.</li> </ul> |
|-------------------------|--|

User interface elements are described below:

| UI Elements  | Description   |
|--|---|
| <p><b>Copy resources and link to existing related entities</b></p> | <p>ALM copies the test resources and pastes them into the target project. The copied test resources are linked to existing entities with the same name and path. If a related entity does not exist in the target project, ALM copies it to the target project.</p> |
| <p><b>Copy resources and related entities</b></p>                  | <p>ALM copies the test resources along with the related entities, and pastes them into the target project. If an entity already exists in the target project, the copied related entity is renamed to resolve the duplicate name.</p>                               |
| <p><b>Copy resources without copying related entities</b></p>      | <p>ALM copies the test resources without copying the related entities, and pastes them into the target project. The copied items are not linked to any related entities.</p>  |



# 27

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## VAPI-XP Tests

This chapter includes:

### Concepts

- ▶ VAPI-XP Tests Overview on page 682

### Tasks

- ▶ How to Create VAPI-XP Test Scripts on page 683
- ▶ How to Edit VAPI-XP Test Scripts on page 693
- ▶ How to Use the VAPI-XP API on page 698
- ▶ How to Run VAPI-XP Tests in Debug Mode on page 704
- ▶ How to Run VAPI-XP Tests in Test Mode on page 705
- ▶ How to Debug VAPI-XP Tests Scripts Test Mode on page 706

### Reference

- ▶ VAPI-XP User Interface on page 709

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## Concepts

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### VAPI-XP Tests Overview

The VAPI-XP testing tool enables you to create new testing scripts using Microsoft VBScript, Microsoft JavaScript (JScript version), PerlScript, and PythonScript, and integrate these scripts into your application management process. Using VAPI-XP test scripts, you can test COM/DCOM servers, SOAP-based Web services, Java APIs (such as Java classes and EJBs), and console applications. You can also use VAPI-XP to create a LoadRunner virtual user.

In addition, VAPI-XP is fully integrated with HP Application Lifecycle Management (ALM), enabling you to design your VAPI-XP test script to call any ALM test or test set, and execute it as part of your own script. This allows you to build a more advanced test set execution flow, in which you can filter tests in a test set during execution, based on the status or type of each test.

VAPI-XP is also fully integrated with the ALM Open Test Architecture API. All open test architecture API classes and methods can be referenced from the VAPI-XP user interface so that you can easily include them in your test script.

For task details, see:

- ▶ "How to Create VAPI-XP Test Scripts" on page 683
- ▶ "How to Edit VAPI-XP Test Scripts" on page 693
- ▶ "How to Use the VAPI-XP API" on page 698
- ▶ "How to Run VAPI-XP Tests in Debug Mode" on page 704
- ▶ "How to Run VAPI-XP Tests in Test Mode" on page 705
- ▶ "How to Debug VAPI-XP Tests Scripts Test Mode" on page 706

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## Tasks

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### How to Create VAPI-XP Test Scripts

You create a VAPI-XP test script from the test plan tree in the Test Plan module.

To learn more about VAPI-XP tests, see "VAPI-XP Tests Overview" on page 682.



**Note:** You can also convert a manual test to a VAPI-XP test. In the **Design Steps** tab, click the **Generate Script** button and select **VAPI-XP-TEST**. ALM creates a VAPI-XP test script that includes code for the steps that you defined. It also includes code for called tests that were part of the original manual test. For more information on manual tests, see Chapter 23, "Test Design."

---

#### To create a VAPI-XP test script:

- 1** Choose a subject folder in the test plan tree.
- 2** Click the **New Test** button or choose **Tests > New Test**. The New Test dialog box opens.
- 3** In the **Test Type** box, select **VAPI-XP-TEST**.
- 4** In the **Test Name** box, type a name for the test. Note that a test name cannot include the following characters: \ / : " ? < > | \* % ' .



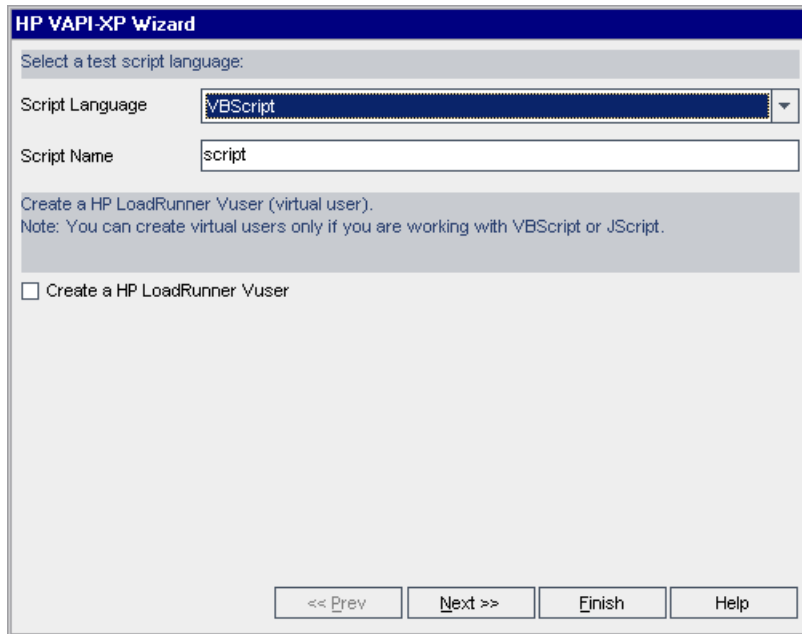
- 5 Add test details in the Details tab. Click **OK**.

---

**Note:** If required test fields were defined in the Project Customization window, the Required Test Fields dialog box opens. Select values for the required fields, and click **OK**.

---

The HP VAPI-XP Wizard opens.



- 6 In the **Script Language** box, select a script language.

**Notes:**

- ▶ To create a VAPI-XP test script using ActiveState's ActivePython or ActivePerl scripts, you must install the script language on your machine. From the **Help** menu in the Test Script tab, select **ActivePython Home Page** or **ActivePerl Home Page**, and follow the appropriate installation instructions.
  - ▶ Microsoft's VBScript and JScript are usually installed with Internet Explorer. If they are not installed on your machine, select **VBScript Home Page** or **JScript Home Page** from the **Help** menu in the Test Script tab, and follow the appropriate installation instructions.
- 

**7** In the **Script Name** box, type a name for the VAPI-XP test script.

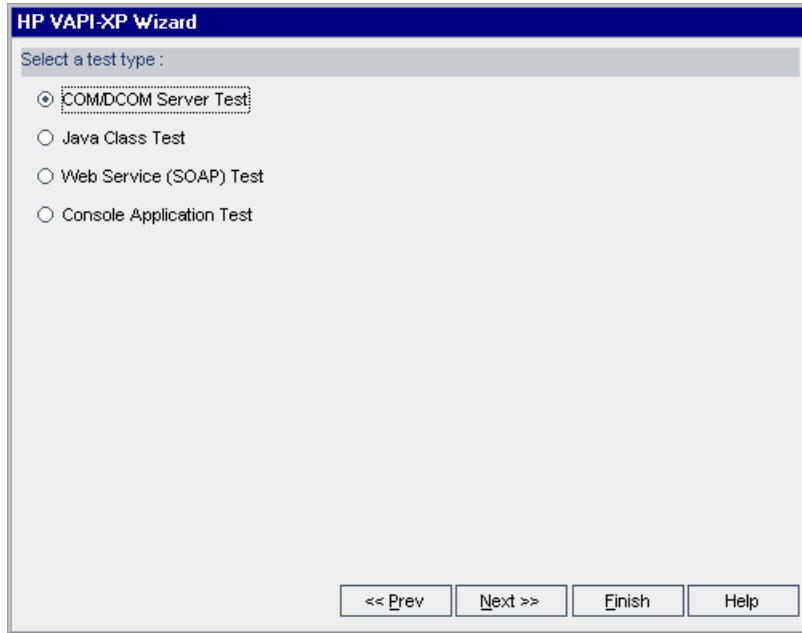
**8** If you selected VBScript or JavaScript as your test scripting language, you can select **Create HP LoadRunner Vuser** to create a LoadRunner virtual user script that can be run in the LoadRunner Controller.

---

**Note:** To run this virtual user in the Controller, you must install the latest version of the HP Quality Center Connectivity Add-in on your LoadRunner client machine. This add-in is available from the HP Application Lifecycle Management Add-ins page. For more information, refer to the *HP Application Lifecycle Management Installation Guide*.

---

- 9 Click **Next** to continue creating the test script using the HP VAPI-XP Wizard. The following dialog box opens.



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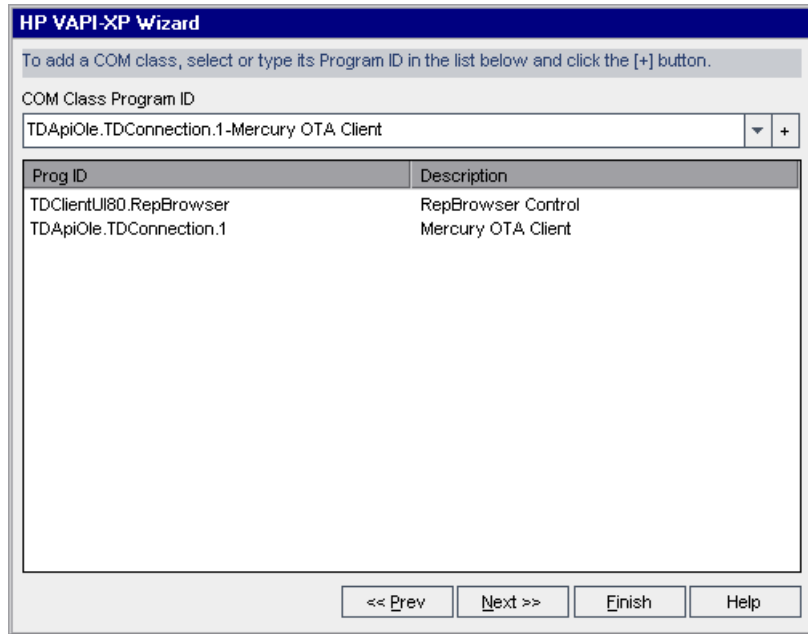
**Note:** In each dialog box, you can click **Finish** to close the Wizard and continue creating the test script in the Test Script tab.

---

- 10 Select the type of test you want to create.

**11** Click **Next** to continue creating the test script using the HP VAPI-XP Wizard.

- If you selected **COM/DCOM Server Test**, choose the Program IDs of the COM/DCOM objects in your machine's registry that you want to test, and click the + button. Each selected COM/DCOM object and its description is displayed in the box below.



- ▶ If you selected **Java Class Test**, type the full name of the Java class that you want to test in the **Java Class Name** box, and click the + button. The Java class name you typed appears in the text box below.

HP VAPI-XP Wizard

To add a java class, enter the full java class name in the edit box below, and click the [+] button.

Java Class Name  +

Java Virtual Machine \_\_\_\_\_

Note that a Bean Scripting Framework (BSF) Java package is required.

JVM Runtime

Java Compiler

Classpath

JVM Parameters

<< Prev    Next >>    Finish    Help

---

**Note:** You can only use a Java class that has a public constructor that does not take arguments.

---

Under **Java Virtual Machine**, specify the following:

- ▶ **JVM Runtime.** The Java virtual machine runtime executable file (usually **java.exe**).
- ▶ **Java Compiler.** The executable file that recompiles the bytecode at the execution platform (usually **javac.exe**).



- **Classpath.** A list of additional (non-standard) Java libraries, separated by semi-colons (;), required to run the specified Java application. Note that if you do not specify the Java classpath, ALM uses the environment variable **CLASSPATH**.
- **JVM Parameters.** The parameters for the Java virtual machine run-time executable file.

When working with Java virtual machines, add the location of the BSF DLLs to the system path, as follows: In the Control Panel, choose **System > System Properties**, and then click the **Advanced** tab. Click the **Environment Variables** button, and in the **System Variables** area, edit the **Path** parameter by adding the path of the following DLLs: **msvc60.dll**, **bsfactivscriptengine.dll**, and **bsfactivscriptengine\_g.dll**. Click **OK**.

- If you selected **Web Service (SOAP) Test**, choose the SOAP client library from the **SOAP Client Library** list, and type or select the URL you want to test in the **Web Service Definition** box. Click the + button. The URL you typed appears in the text box below.

**HP VAPI-XP Wizard**

To add a Web service, select a SOAP client library, enter a Web service URL, and click the [+] button.

SOAP Client Library

Web Service Definition (WSDL URL)  +

<< Prev   Next >>   Finish   Help

---

**Note:** Two SOAP client libraries are supported: Microsoft SOAP SDK and PocketSOAP. Note that even if you choose to work with PocketSOAP, you must install Microsoft SOAP SDK to parse Web services. If Microsoft SOAP SDK is not already installed on your machine, run the **SoapToolkit30.exe** file located in the **Redist** directory on your ALM installation DVD.

---

- ▶ If you selected **Console Application Test**, type the name of the application file you want to test in the **Application Executable File** box, and its parameters in the **Command Line Parameters** box.

Clear the **Use VAPI-XP Output instead of Standard Output** box if you do not want to replace the standard output with the VAPI-XP output window.

In the **Application Timeout** box, type the time, in milliseconds, for ALM to wait for the application to finish running. Note that if the timeout is set to **-1**, ALM waits an infinite amount of time for the application to finish running.

Click the + button. The data you entered appears in the text box below.

**HP VAPI-XP Wizard**

To add a console application, enter an application file name and parameters, and click the [+] button.

Console Application

Application Executable File   
ping.exe

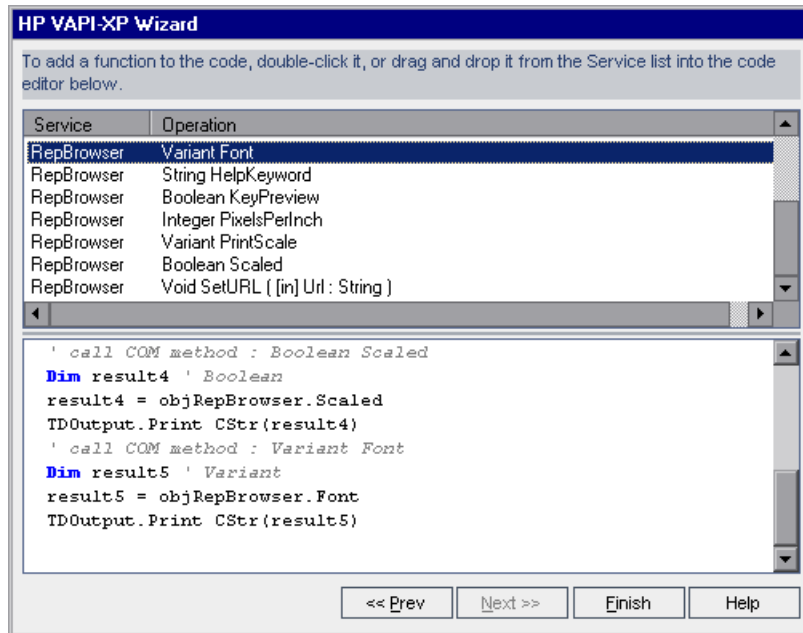
Command Line Parameters  
delta

Use Vapi-XP Output instead of Standard Output.

Application Timeout (in milliseconds, -1 = INFINITE)

| Application | Arguments | Timeout | Use Output |
|-------------|-----------|---------|------------|
| ping.exe    |           | -1      | true       |

- 12** Click **Next** to continue creating the test script using the HP VAPI-XP Wizard. The following dialog box opens.



- 13** In the **Service** list, select the functions you want to add to your test script. Double-click each function, or drag and drop it, to add it to your script code. The function is added to the box below the Service list.
- 14** If required, enter additional parameters or add extra code to the script in the lower pane.
- 15** Click **Finish**. The new test appears in the test plan tree under the subject folder you selected.

---

**Note:** You can choose to add details and attachments to the VAPI-XP test you created, or define requirements coverage. For information, see Chapter 20, "Test Plan Specification."

---

## How to Edit VAPI-XP Test Scripts

After you have created a VAPI-XP test script using the HP VAPI-XP Wizard, you can edit it in the Test Script tab.

To learn more about VAPI-XP tests, see "VAPI-XP Tests Overview" on page 682.



**Tip:** You can display the Test Script tab in a separate window by selecting **View > Window Screen**, or clicking the **Window Screen** button.

---

**To edit a VAPI-XP test script:**

- 1 In the test plan tree, select a VAPI-XP test, and click the **Test Script** tab. The test script is displayed.

```

' sample_test [VBScript]
' Created by Application Lifecycle Management
' 9/19/2010 3:45:57 PM
' =====
'
' -----
' Main Test Function
' Debug - Boolean. Equals to false if running in [Test Mode] : reporting
' CurrentTestSet - [OTA COM Library].TestSet.
' CurrentTSTest - [OTA COM Library].TSTest.
' CurrentRun - [OTA COM Library].Run.
' -----
Sub Test_Main(Debug, CurrentTestSet, CurrentTSTest, CurrentRun)
' *** VBScript Limitation ! ***
' "On Error Resume Next" statement suppresses run-time script errors.
' To handle run-time error in a right way, you need to put "If Err.Num
' after each line of code that can cause such a run-time error.
On Error Resume Next

' clear output window
TDOutput.Clear

' TODO: put your code here

If Not Debug Then

```

---

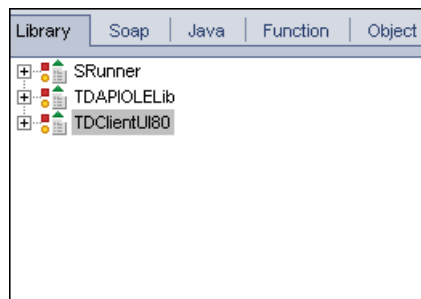
**Note:** To view or edit the properties of the test script you created, choose **Test > Properties**.

---

- 2 To view a list of object definitions, methods, and properties that you can add to your script, select one of the following options:
  - **Test > References > COM Library References.** Opens the References dialog box in which you can choose the COM object definitions, methods, and properties you want to view.
  - **Test > References > SOAP Web Service References.** Opens the Add Web Service Reference dialog box in which you can type the Web service object definition or method you want to view.
  - **Test > References > Java Class References.** Opens the Add Java Class Reference dialog box in which you can type the Java class object definition or method you want to view.



- 3 Select **View > Browsers**, or click the **Show/Hide Browsers** button. The following tabs are displayed.



- **Library tab.** Displays a list of VAPI-XP (SRRunner), ALM (TDAPIOLELib), and COM/DCOM object definitions, methods, and properties that you can add to your script. For an explanation of VAPI-XP object definitions, methods, and properties, see "How to Use the VAPI-XP API" on page 698. For an explanation of ALM object definitions, methods, and properties, refer to the *HP ALM Open Test Architecture API Reference*.
- **Soap tab.** Displays a list of Web service object definitions and methods that you can add to your script.
- **Java tab.** Displays a list of Java class object definitions and methods that you can add to your script.

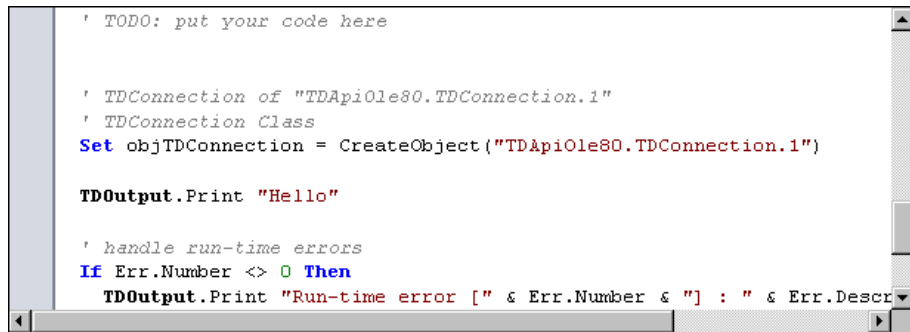
- ▶ **Function tab.** Displays a list of functions contained in your script.
- ▶ **Object tab.** Displays a list of objects with defined names that you can add to your script.

---

**Note:** For a description of each object definition, method, or property, select **View > Output**, and click the **Help** tab.

---

- 4 To add an object definition, method, or property to the current function in your script, place the cursor in the appropriate place in your code, and double-click the object definition, method, or property in the Library, Soap, or Java tabs.



```
' TODO: put your code here

' TDConnection of "TDApiOle80.TDConnection.1"
' TDConnection Class
Set objTDConnection = CreateObject("TDApiOle80.TDConnection.1")

TDOutput.Print "Hello"

' handle run-time errors
If Err.Number <> 0 Then
    TDOutput.Print "Run-time error [" & Err.Number & "] : " & Err.Descrip
```



- 5 To add an object with a defined name, select the object definition, method, or property in the Library, Soap, or Java tabs, and choose **Test > Add Object**. In the Add Object dialog box, type the name you want to assign to the object and click **OK**. The object is added to the Object tab.

| Library         |                         | Soap | Java | Function | Object |
|-----------------|-------------------------|------|------|----------|--------|
| Name            | ProgID                  |      |      |          |        |
| TDConnection    | TDApiOle80.TDConnection |      |      |          |        |
| TDHelper        | SRunner.TDHelper        |      |      |          |        |
| TDInput         | SRunner.TDInput         |      |      |          |        |
| <b>TDOutput</b> | <b>SRunner.TDOutput</b> |      |      |          |        |
| ThisTest        | TDApiOle80.Test         |      |      |          |        |
| XTools          | SRunner.XTools          |      |      |          |        |

To add the object to your script, double-click the object, or right-click it and select **Insert into Script**.



- 6 To check the syntax of your code, choose **Test > Check Syntax**, or click the **Syntax Check** button. Select **View > Output** to view the verification results in the **Output** tab.

## Additional Editing Functions

You can perform the following editing functions in the Test Script tab:

- To undo a previous action, click the **Undo** button. To restore an action that was undone, click the **Redo** button.



- To remove a section of code from one part of your script, and place it in another part of the script, select the section and click the **Cut** and **Paste** buttons.



- To copy a section of code from one part of your script, and place it in another part of the script, select the section and click the **Copy** and **Paste** buttons.



- To delete a section of code, select it and click the **Delete** button.



- ▶ To locate specific text within your script, click the **Find in Script** button. In the Find Text dialog box, type the text for which you want to search. Select the options, direction, scope, and origin for your search, and click **OK**.

To find another occurrence of the text within the script, choose **Search > Find Next**.



- ▶ To locate specific text within your script and replace it with different text, click the **Replace** button. In the Find Text dialog box, type the text you want to search for in the **Text to find** box. Type the text with which you want to replace this text in the **Replace with** box. Select the options, direction, scope, and origin for your search, and click **OK**. To replace all instances of the text in the script, click the **Replace All** button.

- ▶ To locate a specific line number within your script, choose **Search > Go to Line Number**. In the Go to Line Number dialog box, type the line number you want to find, and click **OK**.



- ▶ To change the editor options, such as the margins, fonts, and screen/text colors, click the **Editor** button. Set the properties you want in the Editor, Display, and Colors tabs, and click **OK**.



After you have finished editing your script, click the **Save** button to save the changes you made.

## **How to Use the VAPI-XP API**

The VAPI-XP tool contains a built-in library of VAPI-XP object definitions that you can reference as you are creating your test script.

To learn more about VAPI-XP tests, see "VAPI-XP Tests Overview" on page 682.

### **Using the TDHelper Object**

The TDHelper object supplies the following functions that you can use to perform ALM-related tasks.

**RunTestSet**

Executes the selected test set and returns the accumulated test set execution status.

```
RunTestSet([Name = "default"], [Filter = ""], [Locally = FALSE], [Host = ""],  
[HostGroup = ""])
```

**Name.** Test set name. Optional. Default = "default"

**Filter.** Test filter. Defines tests to run. If empty, instructs ALM to run all the tests in a specified test set. Optional. Default = ""

**Locally.** If set to TRUE, instructs ALM to run test set locally. Optional. Default = FALSE

**Host.** Host on which test set will be run. Optional. Default = ""

**HostGroup.** Host group in which test set will be run. Optional. Default = ""

**RunTest**

Executes the selected test and returns the test execution status.

```
RunTest(Name, Instance, TestSet, [Locally = FALSE], [Host = ""], [HostGroup = ""])
```

**Name.** Test name.

**Instance.** Test instance.

**TestSet.** Test set name.

**Locally.** If set to TRUE, instructs ALM to run test set locally. Optional. Default = FALSE

**Host.** Host on which test set will be run. Optional. Default = ""

**HostGroup.** Host group in which test set will be run. Optional. Default = ""

### **AddDefect**

Adds a new defect to the current test, if the test is being run in debug mode. If the test is being run in test mode, a new defect is added to the current run of the test instance in the current test set. Returns a created defect object.

*AddDefect([Fields], [StepKey])*

**Fields.** Two-dimensional array—the first dimension is for the field name, and the second for the field value. Optional.

**StepKey.** Step ID for step related to new defect. Optional.

### **AddDefectUI**

Adds a new defect to the current test (in debug mode) or the current run (in test mode), using the ALM New Defect dialog box.

*AddDefectUI([StepKey])*

**StepKey.** Step ID for step related to new defect. Optional.

### **AddStepToRun**

Adds a new step to the current run. Returns a created step object.

*AddStepToRun(Name, [Desc], [Expected], [Actual], [Status])*

**Name.** Step name.

**Desc.** Step description. Optional.

**Expected.** Expected step result. Optional.

**Actual.** Actual step result. Optional.

**Status.** Step status. Optional.

## DownloadAttachment

Downloads the attachment associated with a test object. Returns the local path to which the download was performed.

*DownloadAttachment(Name, item)*

**Name.** The attachment name.

**item.** Reference to the object with the attachment.

## UploadAttachment

Uploads an attachment and associates it with a test object.

*UploadAttachment(path, item)*

**path.** The local path (fully specified file name) of the item to upload.

**item.** Reference to the object to which to associate the attachment.

## Using the TDInput Object

The TDInput object supplies the following function that you can use to obtain an input value from an end user.

### GetInput

Displays the Input dialog box, enabling you to obtain an input value from an end user.

*GetInput([Caption],[Name])*

**Caption.** Dialog box caption. Optional.

**Name.** Name of the input value. Optional.

## Using the TDOOutput Object

The TDOOutput object supplies the following functions that you can use to control the VAPI-XP Output tab.

### Clear Method

Clears the Output tab.

*Clear*

### Print Method

Prints the text message to a new line in the Output tab.

*Print(Msg)*

### HookDebug Property

Sets or removes the hook for the OutputDebugString tab API function.

*HookDebug*

### Text Property

Gets or sets the Output tab text.

*String Text*

## Using the XTools Object

The XTools object supplies the following functions that you can use to perform general tasks.

### run

Runs command line with passed attributes.

```
run(Command, [Args = ""], [Timeout = -1], [UseOutput = TRUE])
```

**Command.** Application executable file.

**Args.** Application arguments. Optional. Default = ""

**Timeout.** Timeout in milliseconds. If this is -1, ALM waits an infinite amount of time for the application to finish running.

**UseOutput.** If TRUE, ALM replaces the standard output with the VAPI-XP output window.

### WrapArray

Creates an array of variants from an array of objects. For example, if a called object returns as a method result an array of strings, none of the supported script engines is able to read the array. Calling the WrapArray function and passing the returned array as a function parameter creates an array of variants that can be understood by the scripting engine.

```
WrapArray(array)
```

**array.** Array to wrap.

### Sleep

Suspends script execution for a specified amount of time.

```
Sleep(interval)
```

**interval.** Time (in milliseconds) for script execution suspension

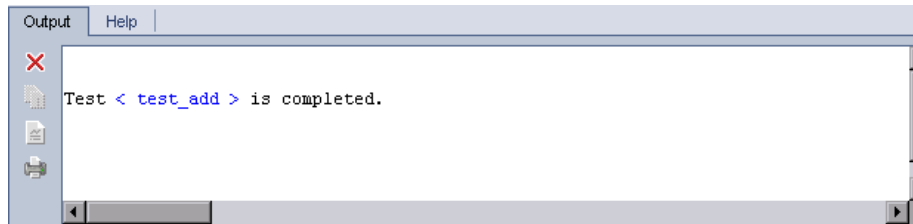
## How to Run VAPI-XP Tests in Debug Mode

After you have created and edited your VAPI-XP test script, you can run it in debug mode or test mode. Running a VAPI-XP test in debug mode enables you to execute the test without including it in a test set and without creating test run data in the ALM project. It is generally recommended that you use the debug mode while you are developing your test, and the test mode once you have completed creating your test.

To learn more about VAPI-XP tests, see "VAPI-XP Tests Overview" on page 682.

### To run a VAPI-XP test in debug mode:

- 1 In the Test Plan module, select a VAPI-XP test from the test plan tree, and click the **Test Script** tab.
- 2 Select **Test > Execute (Debug Mode)**, or click the **Execute Script** button. ALM begins executing the test script you selected.
- 3 Select **View > Output** to view the output generated by the test script.



- To clear the Output tab, click the **Clear Output** button.



- To copy the output text to the clipboard, select it and click the **Copy Selected Text to Clipboard** button.



- To view the test script output in a Web browser, click the **Open Output Text in Web Browser** button.



- To print the test script output, click the **Print Output** button.



- 4 To stop executing the VAPI-XP test before it finishes running, select **Test > Stop**, or click the **Stop** button.



## How to Run VAPI-XP Tests in Test Mode

You can run your VAPI-XP test in test mode once you have added the test to a test set in the Test Lab module.

When you run a VAPI-XP test in test mode, test run data is created in the ALM project. You can run your VAPI-XP test in test mode from either the Test Plan or Test Lab module.

---

**Note:** To run VAPI-XP tests remotely, you must install the HP ALM Client Registration Add-in and the HP Quality Center Connectivity Add-in on the host machine on which the tests are executed. For more information on add-ins, refer to the *HP Application Lifecycle Management Installation Guide*.

---

To learn more about VAPI-XP tests, see "VAPI-XP Tests Overview" on page 682.

### To run a VAPI-XP test in test mode from the Test Plan module:

- 1** Select a VAPI-XP test from the test plan tree, and click the **Test Script** tab.
- 2** Select **Test > Execute (Test Mode)**. The Select Test Set dialog box opens.
- 3** In the **Test Set** box, select the test set containing the current VAPI-XP test.
- 4** In the **Instance** box, select the test instance that you want to run.
- 5** In the **Run Name** box, type the name you want to assign to the test run.
- 6** Click **OK**. ALM begins executing the test you selected.
- 7** To view the output generated by the test script, select **View > Output**. For an explanation of the Output tab, see "How to Run VAPI-XP Tests in Debug Mode" on page 704.
- 8** To stop executing the VAPI-XP test before it finishes running, select **Test > Stop**, or click the **Stop** button.



**To run a VAPI-XP test in test mode from the Test Lab module:**

- 1** From the **Test Sets** tab, select the test set containing the VAPI-XP test you want to run.
- 2** In the **Execution Grid**, select the test you want to run, and click the **Run** button. The Automatic Runner dialog box opens, displaying the selected test.
- 3** In the **Run on Host** column, select a host machine on which to run the VAPI-XP test, or choose **Run All Tests Locally** to run the test on your local machine.
- 4** Click the **Run** button. The VAPI-XP Test Script window opens as ALM begins executing the selected VAPI-XP test. When ALM finishes executing the test, the Automatic Runner dialog box displays the status of the test run.

## **How to Debug VAPI-XP Tests Scripts Test Mode**

If your test run was not successfully completed, you can use VAPI-XP's Integrated Debugger to assist you in debugging your VAPI-XP test script.

---

**Note:** You cannot use the Integrated Debugger to debug PerlScript or PythonScript test scripts.

---

To learn more about VAPI-XP tests, see "VAPI-XP Tests Overview" on page 682.

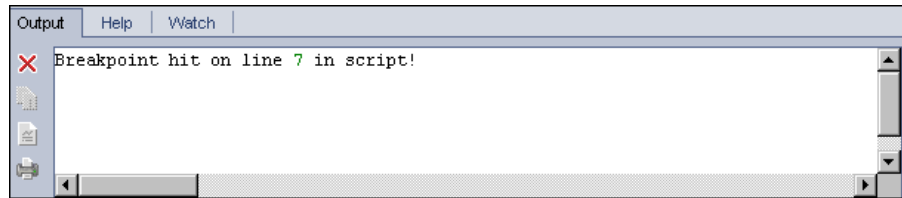
**To debug a VAPI-XP test script:**

- 1** In the **Test Script** tab of the Test Plan module, select **Debug > Integrated Debugger**. Additional buttons controlling the debugging process are displayed on the toolbar.
- 2** To set a breakpoint in a script, select the line in the script where you want to set the breakpoint, and choose **Debug > Toggle Breakpoint** or click the **Toggle Breakpoint** button. Alternatively, click the gray margin next to the line in the script. The line you selected is highlighted in red.

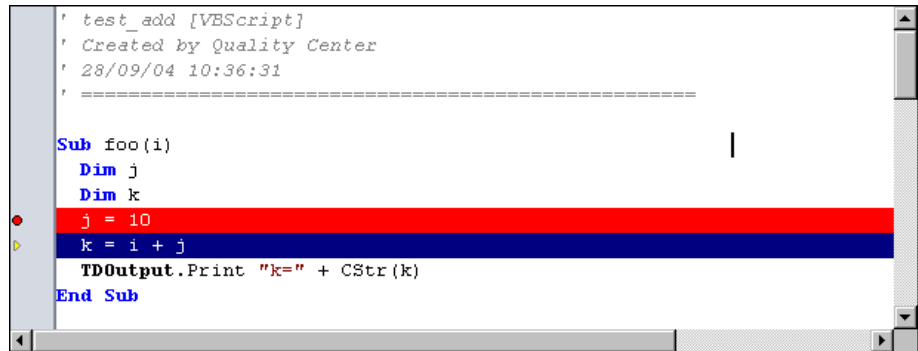




- 3 Click the **Execute Script** button. ALM begins executing the script, stopping at the defined breakpoint. The Output tab displays the following message.



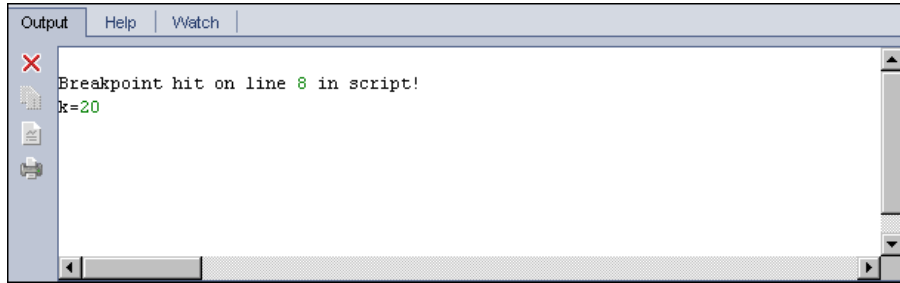
- 4 To instruct ALM to enter the script after the breakpoint, choose **Debug > Step Into** or click the **Step Into** button. The line in the script that follows the breakpoint is highlighted in blue.



- 5 To instruct ALM to step over a line in the script, click the **Step Over** button or choose **Debug > Step Over**.



- 6 To instruct ALM to execute the script, choose **Debug > Step Out** or click the **Step Out** button. The output is displayed in the **Output** tab.



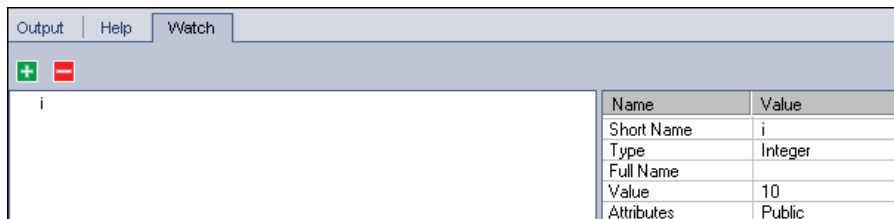
- 7 To view or edit the value of each variable in the script, choose **Debug > Variables** or click the **Show Variables** button. The Variables dialog box opens, displaying the variables available in the current script. Select a variable to view its properties.

To change a variable's value, type the new value you want to assign to it in the **Value** box and click **Update**. Click **OK** to save your changes and close the Variables dialog box.



- 8 To view information about a specific variable while debugging, choose **Debug > Watch** or click the **Show Watch Window** button to display the Watch tab.

To add a variable to the Watch tab, click **+**, type a variable name in the **Prompt** box, and click **OK**. The variable and its values are displayed in the Watch tab.



- 9 To instruct ALM to resume executing the script, choose **Debug > Resume Execution** or click the **Resume Execution** button.



- 10 Choose **Debug > Stop Debugging**, or click the **Stop Debugging** button to stop the Integrated Debugger from debugging your script.

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## Reference

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### **VAPI-XP User Interface**

This section includes:

- HP VAPI-XP Wizard on page 709
- Test Script Tab on page 709

### **HP VAPI-XP Wizard**

This wizard enables you to create VAPI-XP test scripts. For more details, see "How to Create VAPI-XP Test Scripts" on page 683.

### **Test Script Tab**

This tab enables you to view and edit your VAPI-XP test scripts. For more details, see:

- "How to Edit VAPI-XP Test Scripts" on page 693
- "How to Use the VAPI-XP API" on page 698



# Part V

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## Test Lab

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**Quality Center Starter Edition:** Fields and functionality related to release management and baselining are not available in the Test Lab module.

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# 28

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## Introducing Test Execution

This chapter includes:

### Concepts

- ▶ Test Execution Overview on page 714

### Tasks

- ▶ How to Run Tests in ALM on page 716
- ▶ How to Work with Draft Runs on page 719

### Reference

- ▶ The Test Lab Module User Interface on page 720

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## Concepts

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### Test Execution Overview

You begin test execution by creating test sets, and choosing which tests to include in each set. A **test set** contains a subset of the tests in an HP Application Lifecycle Management (ALM) project designed to achieve specific test goals. As your application changes, you run the manual and automated tests in your project in order to locate defects and assess quality.

You can run ALM tests manually or automatically:

#### **Running Tests Manually**

You can run tests manually in ALM using:

- ▶ **HP Sprinter.** Sprinter provides enhanced functionality to assist you in the manual testing process. **ALM Editions:** Sprinter functionality is not available with Quality Center Starter Edition and Performance Center Edition.
- ▶ **Manual Runner.** If you are not working with Sprinter, you can run tests manually using Manual Runner.

You can run manual and automated tests manually in ALM. When you run a test manually, you follow the test steps and perform operations on the application under test. You pass or fail each step, depending on whether the actual application results match the expected output.

#### **Running Tests Automatically**

- ▶ You run tests automatically using Automatic Runner.
- ▶ You can run manual and automated tests automatically.
- ▶ When you run an automated test automatically, ALM opens the selected testing tool automatically, runs the test on your local machine or on remote hosts, and exports the results to ALM.
- ▶ When you run a manual test automatically, ALM notifies a designated tester by email to run the test on a specified host.

Following test runs, you review and analyze test results. Your goal is to identify failed steps and determine whether a defect has been detected in your application, or if the expected results of your test need to be updated. You can validate test results regularly by viewing run data and by generating reports and graphs.

You can also set a test as a draft run to instruct ALM to ignore the run results. For details, see "Draft Runs" on page 715.

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**Quality Center Starter Edition:** Fields and functionality related to release management and baselining are not available in the Test Lab module.

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For task details, see "How to Run Tests in ALM" on page 716.

### **Draft Runs**

Setting a test as a draft run instructs ALM to ignore the run results. When you set a test instance as a draft run, the outcome of the run does not impact the execution status of the test, the status of the test instance, or the coverage status. ALM also ignores draft runs when calculating the remaining number of test instances to run, and when displaying results in coverage, progress, and live analysis graphs.

You can designate a test run as a draft before you perform the test. You can also mark a test run as a draft by modifying the **Draft Run** field at any time after the run. When you change the **Draft Run** value for a run, ALM recalculates all relevant statistics, and updates relevant status fields. Graphs display updated results.

Draft runs enable you to try out tests while they are still in development, or after they have been modified. For example, you may want to test that each step description is formulated correctly, or try out a part of a large test script.

Setting a test run as a draft requires the appropriate user permissions. For more information, refer to the *HP Application Lifecycle Management Administrator Guide*.

For task details, see "How to Work with Draft Runs" on page 719.

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## Tasks

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### How to Run Tests in ALM

This task describes how to run tests in your project using the ALM Test Lab module.

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**Note:** This task is part of a higher-level task. For details, see "Application Lifecycle Management Roadmap" on page 27.

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**Quality Center Starter Edition:** Fields and functionality related to release management and baselining are not available in the Test Lab module.

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This task includes the following steps:

- "Create test sets" on page 717
- "Schedule test runs" on page 717
- "Run tests manually" on page 717
- "Run tests automatically" on page 717
- "Run performance tests" on page 718
- "View and analyze test results" on page 718
- "Link to a defect" on page 718

## **1 Create test sets**

Start by creating and defining test sets in the Test Lab module. After you have created test sets, you assign test set folders to cycles defined in the releases tree in the Releases module.

For task details, see "How to Create Test Sets" on page 752.

## **2 Schedule test runs**

You can set conditions, and schedule the date and time for executing your tests. You can also set the sequence in which to execute the tests.

For task details, see "How to Schedule Test Runs" on page 783.

## **3 Run tests manually**

You can run manual and automated tests manually, executing the test steps that you defined during test planning.

For task details, see "How to Run Tests Manually" on page 799.

## **4 Run tests automatically**

You can select manual and automated tests in a test set to run automatically.

For task details, see "How to Run Tests Automatically" on page 816.

## 5 Run performance tests

**Performance Center:** You can run performance tests to create load on an application and test its performance. For details, refer to the *HP ALM Performance Center Guide*.

## 6 View and analyze test results

**View test results.** After you run tests, review results to determine if the actual results match the expected results of the tests. For task details on viewing test results, see "How to View Test Results" on page 833.

**Analyze run data by creating graphs and reports.** Use one of the following:

- ▶ **View dynamic graphs of test set folders.** In the test sets tree, select a test folder, and click the **Live Analysis** tab. For task details on generating live analysis graphs, see "How to Generate Live Analysis Graphs" on page 1057.
- ▶ **View test set data in a graph.** On the Test Lab module menu, select **Analysis > Graphs**. For task details on generating graphs, see "How to Generate a Graph" on page 936.
- ▶ **Create a report of test set data.** On the Test Lab module menu, select **Analysis > Reports**. For task details on creating reports, see "How to Generate Standard Reports" on page 1037.

For details on additional analysis tools in ALM, see "How to Analyze Data in ALM" on page 911.

## 7 Link to a defect

If a defect has been detected, you can create a new defect and link it to the test set, test instance, test run, or run step, or link an already-existing defect.

For user interface details, see "Linked Defects/Entities Page" on page 902.

## How to Work with Draft Runs

This task describes how to set test runs as draft runs.

You can set a test run as a draft in the following ways:

- **Before a test run.** You can mark a test that you are running manually as a draft run before performing the test. In the Manual Runner: Run Details page, set the value of the **Draft Run** field to **Y**. For user interface details, see "Manual Runner Wizard" on page 805.
- **After a test run.** You can mark any test run as a draft by modifying the **Draft Run** field for the run. For details on accessing run details, see "How to View Test Results" on page 833.

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## Reference

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### **The Test Lab Module User Interface**

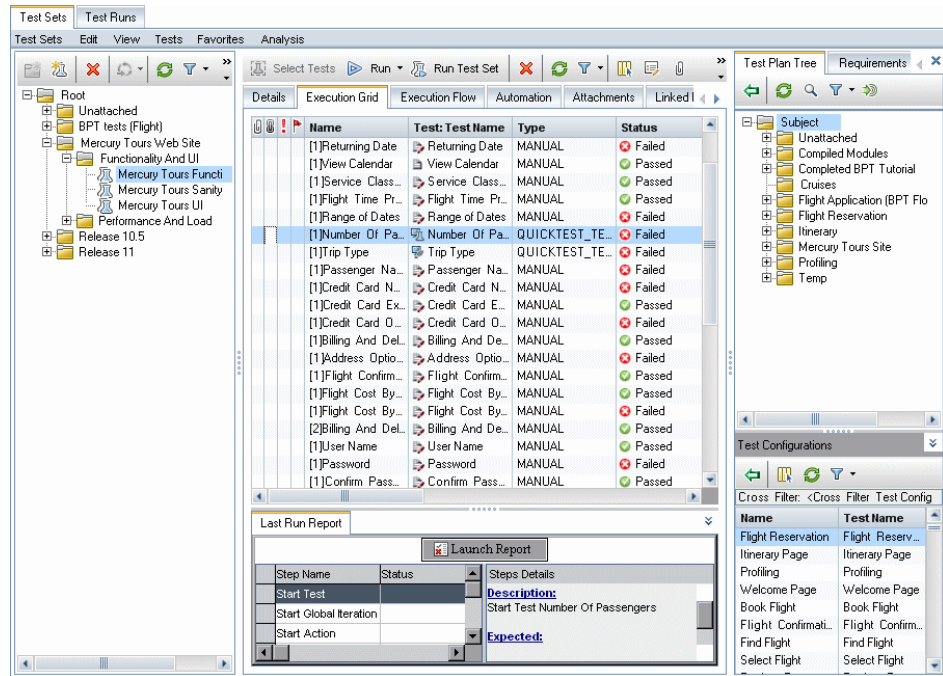
This section includes:

- ▶ Test Lab Module Window on page 721
- ▶ Test Lab Module Menus and Buttons on page 724
- ▶ Test Lab Module Icons on page 742
- ▶ Test Lab Module Fields on page 744



## Test Lab Module Window

This window enables you to create test sets and perform test runs.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the ALM sidebar, under <b>Testing</b> , select <b>Test Lab</b> .  |
| <b>Important information</b> | <p>The Test Lab module contains the following tabs:</p> <ul style="list-style-type: none"> <li>➤ <b>Test Sets.</b> Enables you to create and modify test sets in the test sets tree.</li> <li>➤ <b>Test Runs.</b> Enables you to view all test runs for your project in a grid.</li> </ul> <p><b>Quality Center Starter Edition:</b> Fields and functionality related to release management and baselining are not available in the Test Lab module.</p> |

|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Create Test Sets" on page 752</li> <li>➤ "How to Run Tests in ALM" on page 716</li> </ul> |
| <b>See also</b>       | "Test Execution Overview" on page 714  |

### Test Lab Module Common Elements

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements                          | Description  |
|--------------------------------------|--|
| <Test Lab module common UI elements> | <ul style="list-style-type: none"> <li>➤ <b>Test Lab fields.</b> For field definitions, see "Test Lab Module Fields" on page 744.</li> <li>➤ <b>Test Lab menus and buttons.</b> For command and button descriptions, see "Test Lab Module Menus and Buttons" on page 724.</li> <li>➤ <b>Test Lab icons.</b> For icon descriptions, see "Test Lab Module Icons" on page 742.</li> <li>➤ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu and sidebar, see "ALM Common Areas" on page 41.</li> </ul> |

### Test Sets Tab

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements         | Description  |
|---------------------|--|
| <Test sets tree>    | <p>Located on the left side of the window, organizes and displays your test sets hierarchically. A test set contains a subset of the tests in your project.</p> <p><b>Note:</b> You cannot move items within a folder. When you refresh the tree view, items in a folder are alphabetized.</p> |
| <Filter status bar> | Describes the filter currently applied to the tree. Located directly above the test sets tree.   |

| UI Elements               | Description  |
|---------------------------|--|
| <b>Attachments tab</b>    | Lists attachments that provide additional information about the currently selected test set. For details, see "Attachments Page" on page 90.   |
| <b>Automation tab</b>     | Displays email notification rules and On Failure instructions for the currently selected test set. For details, see "Automation Tab" on page 761.  |
| <b>Description tab</b>    | Describes the currently selected test set or test set folder. Click in the text box to display a toolbar for formatting and spell checking the text.   |
| <b>Details tab</b>        | Displays details of the currently selected test set or folder.<br><b>Note:</b> For a test set folder, click the <b>Show</b> button to view additional information.   |
| <b>Execution Flow tab</b> | Displays test data in a diagram. Enables you to specify conditions for test execution. For details, see "Execution Flow Tab" on page 787.  |
| <b>Execution Grid tab</b> | Displays test data in a grid. For details, see "Execution Grid Tab" on page 757.   |
| <b>History tab</b>        | Lists changes made to the currently selected test set. For details, see "History Tab" on page 85.  |
| <b>Linked Defects tab</b> | Lists the defects linked to the currently selected test set. For user interface details, see "Linked Defects/Entities Page" on page 902.   |
| <b>Live Analysis</b>      | A graphical representation of the test data related to the currently selected test set folder. For details, see "Live Analysis Tab" on page 1060.<br><b>Available from:</b> Test set folder  |
| <b>Select Test Pane</b>   | Displays the Test Plan Tree tab and the Requirements Tree tab, enabling you to select tests to add to the selected test set. For details, see "Select Tests Pane" on page 767.<br><b>Available from:</b> Execution Grid, Execution Flow. To display, click the <b>Select Tests</b> button. |

## Test Runs Tab




For details, see "Test Runs Tab" on page 849.




## Test Lab Module Menus and Buttons

This section describes the menus and buttons available in the Test Lab module.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the ALM sidebar, under Testing, select <b>Test Lab</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>➤ Some menu commands and buttons are not available in all Test Lab tabs.</li> <li>➤ <b>Tip:</b> You can access the Test Lab menu bar from the Test Lab module by pressing the shortcut key Alt. Additionally, you can perform many other ALM operations using shortcut keys. For a list of shortcut keys, see "ALM Keyboard Shortcut Reference" on page 154.</li> <li>➤ The <b>Tests</b> menu is available from the Execution Grid and Execution Flow tabs.</li> <li>➤ <b>ALM Editions:</b> <ul style="list-style-type: none"> <li>➤ <b>Quality Center Starter Edition:</b> Fields and functionality related to release management are not available in the Test Lab module.</li> <li>➤ <b>Quality Center Starter Edition and Performance Center Edition:</b> Sprinter functionality is not available.</li> </ul> </li> </ul> |
| <b>Relevant tasks</b>        | "How to Run Tests in ALM" on page 716  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Test Execution Overview" on page 714</li> <li>➤ "Test Lab Module Window" on page 721</li> <li>➤ "Test Lab Module Icons" on page 742</li> </ul>   |

User interface elements are described below:



| UI Elements (A-Z)  | Menu                                   | Description  |
|--|--|--|
|  <b>Abort Run</b>                   | <right-click menu>                     | <p><b>Performance Center:</b> Stops a currently running performance test.</p> <p><b>Note:</b> Only enabled when the selected test run is in the <b>Initializing</b>, <b>Running</b>, or <b>Stopping</b> states.</p>  |
|  <b>Add Time Dependency to Flow</b> |  | <p>Adds a time dependency icon to the diagram.</p> <p>To create a time dependency for a test, link the arrow from the icon to a test in the Execution Flow. The default time dependency is the ALM Platform server's current date and time. For more details, see "Execution Flow Tab" on page 787.</p> <p><b>Available from:</b> Execution Flow</p> |
| <b>Add to Favorites</b>  | Favorites                              | <p>Opens the Add Favorite dialog box, enabling you to add a favorite view to your private or the public folder. For details, see "Add Favorite Dialog Box" on page 117.</p> <p><b>Available from:</b> Test Sets tab</p>  |
| <b>Alerts</b>  | Tests (Test Sets tab > Execution Grid) | <p>Opens the Alerts dialog box, enabling you to display alerts for the test instance. For details, see "Alerts Dialog Box" on page 109.</p> <p><b>Available from:</b> Test Sets tab &gt; Execution Grid</p>  |
|  <b>Arrange Layout</b>            | Tests                                  | <p>Arranges the tests in the Execution Flow diagram in a hierarchical layout, enabling you to view relationships between different tests.</p> <p><b>Available from:</b> Execution Flow</p>   |

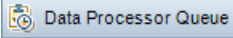

| UI Elements (A-Z)   | Menu  | Description  |
|---|---|--|
|  <b>Assign to Cycle</b>      | Test Sets   | Enables you to assign a test set folder to a cycle. For more details, see "Select Cycles Dialog Box" on page 205.<br><br><b>Available from:</b> Test Sets tab  |
|  <b>Attachments</b>          | <right-click menu>  | Opens the Attachments page inside the Test Instance Details dialog box, enabling you to add an attachment to a test instance. For details, see "Attachments Page" on page 90.<br><br><b>Available from:</b> Execution Grid |
| <b>Clear Alerts</b>   | Tests   | Clears displayed alerts for the module. For more details, see "How to Use Alerts" on page 103.<br><br><b>Available from:</b> Execution Grid  |
|  <b>Clear Assigned Cycle</b> | Test Sets   | Clears the assigned cycle from the test set folder.<br><br><b>Available from:</b> Test Sets tab  |
| <b>Clear Follow Up Flag</b>   | <ul style="list-style-type: none"> <li>▶ Edit (In the Test Runs tab)</li> <li>▶ Tests (In the Test Sets tab &gt; Execution Grid)</li> </ul> | Clears the follow up flag for a selected test instance or test run. For more details, see "Follow Up Flags Overview" on page 102.  |




| UI Elements (A-Z)            | Menu  | Description  |
|------------------------------|---|--|
| <b>Clear Pinned Baseline</b> | Test Sets   | <p>Clears the baseline that is pinned to the test set.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>▶ If the test set includes tests that no longer exist in the Test Plan module, ALM deletes the tests from the test set.</li> <li>▶ Deletes all test runs from the test set.</li> </ul> |
| <b>Collapse</b>              | View  | <p>Collapses the folders in the test sets tree below the selected folder.</p> <p><b>Available from:</b> Test Sets tab</p>  |
| <b>Continue Manual Run</b>   | <ul style="list-style-type: none"> <li>▶ Test Runs (in the Test Runs tab)</li> <li>▶ Tests (in the Test Sets tab &gt; Execution Grid/Flow)</li> </ul> | <p>Continues running the selected tests with the same runner that was used the first time the test was run. For more details, see "How to Run Tests Manually" on page 799.</p>   |



| UI Elements (A-Z)        | Menu  | Description  |
|--------------------------|-------|--|
| <b>Copy/Paste</b>        | Edit  | <p>Copies selected test sets or test set folders and pastes them to another test set folder in the same project or in another project.</p> <p>When you paste test sets to another project, the Paste Test Set Folders To Target Project dialog box opens. For details, see "Paste Test Set Folders To Target Project Dialog Box" on page 778.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>▶ When copying test sets or test set folders, test run information is not copied.</li> <li>▶ To copy test sets or test set folders across projects, both projects must use the same ALM version and patch level.</li> </ul> <p><b>Available from:</b> Test Sets tab</p> |
| <b>Copy to Clipboard</b> | Tests | Copies the Execution Flow diagram to the clipboard as a bitmap.  |
| <b>Copy URL/Paste</b>    | Edit  | <p>Copies a selected test set or test run and pastes its URL as a link. The test set or test run itself is not copied. Instead, you can paste the address into another location, such as an email or a document. Clicking on the link opens ALM and takes you to the test set or test run. If you are not already logged in, ALM first prompts for login details.</p>  |






| UI Elements (A-Z)  | Menu | Description  |
|--|------|--|
| Cut/Paste  | Edit | <p>Moves a selected test set or test set folder to a different location in the test sets tree.</p> <p><b>Tip:</b> You can also move a test set or test set folder to a new location in the test sets tree by dragging it.</p> <p><b>Available from:</b> Test Sets tab</p>  |
|  <b>Delete</b>    | Edit | <p>Deletes a selected test set, test set folder, or test run. You cannot delete the <b>Root</b> folder, the <b>Unattached</b> folder, or the <b>default</b> test set.</p> <p>When deleting a test set folder, opens the Confirm Delete Folder dialog box, enabling you to select one of the following delete options:</p> <ul style="list-style-type: none"> <li>▶ <b>Delete folders only.</b> Deletes the folder and moves all test sets to the <b>Unattached</b> folder. The Unattached folder contains all test sets that are no longer associated with a folder.</li> <li>▶ <b>Delete folders and test sets.</b> Permanently deletes the folder and all its subfolders and test sets.</li> </ul> |
|  <b>Details</b> |      | <p>Opens the corresponding Details dialog box, enabling you to view and update details of the selected test set, test instance, or test run.</p> <p>For more details, see:</p> <ul style="list-style-type: none"> <li>▶ "Test Set Details Dialog Box" on page 773</li> <li>▶ "Test Instance Details Dialog Box" on page 837</li> <li>▶ "Run Details Dialog Box" on page 853</li> </ul>   |



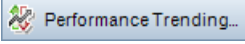
| UI Elements (A-Z)   | Menu  | Description   |
|---|---|---|
| <p><b>DP Queue</b></p>   | <p>&lt;right-click menu&gt;</p>   | <p><b>Performance Center:</b> If you analyze a test run, or recalculate the SLA, or add the test run to a trend report, then the action is added to a data processing queue, enabling you to see when the action will be performed.</p> <p><b>Available from:</b> Test Runs tab</p> |
|  <p><b>Edit Test</b></p> |   | <p><b>Performance Center:</b> Opens the Performance Test Designer, enabling you design the selected performance test. For details, refer to the <i>HP ALM Performance Center Guide</i>.</p>   |
| <p><b>Enable Manual Test Run Confirmation</b></p>   | <p>Tests</p>  | <p>Instructs ALM to display the Manual Test Run dialog box each time you run manual tests. For details, see "Manual Test Run Dialog Box" on page 803.</p> <p><b>Available from:</b> Execution Grid, Execution Flow</p>  |
| <p><b>Expand All</b></p>  | <p>View</p>   | <p>Expands all folders in the test sets tree below the selected folder.</p> <p><b>Available from:</b> Test Sets tab</p>   |
| <p><b>Export</b></p>  | <ul style="list-style-type: none"> <li>▶ Test Sets (Test Sets tab)</li> <li>▶ Edit (Test Runs tab)</li> </ul> | <p>Exports the data in the Test Runs tab as a text file, Microsoft Excel worksheet, Microsoft Word document, HTML document, or text document.</p>   |
| <p><b>Filter</b></p>  | <p>View</p>   | <p>Enables you to filter and sort the runs in the test runs grid. For more details, see "Filter Dialog Box" on page 64.</p> <p><b>Available from:</b> Test Runs tab</p>   |



| UI Elements (A-Z)  | Menu  | Description   |
|--|---|---|
| <b>Find</b>  | <ul style="list-style-type: none"> <li>▶ Edit (In the Test Runs tab)</li> <li>▶ Tests (In the Test Sets tab &gt; Execution Grid)</li> </ul> | <p>Opens the Find dialog box, enabling you to search for a test run in the test runs grid, or a test instance in the Execution Grid. For details, see "Find Dialog Box" on page 78.</p>   |
| <b>Find Folder/Test Set</b>  | Edit  | <p>Opens the Find dialog box, enabling you to search for test sets and test set folders. For details, see "Find Dialog Box" on page 78.</p> <p><b>Note:</b> If you have applied filters to the test sets tree, ALM restricts the search to the test sets currently displayed.</p> <p><b>Available from:</b> Test Sets tab</p>   |
|  <b>Find Test in Flow</b> | <right-click menu>  | <p>Opens the Find Test Instance dialog box, enabling you to search for a test in the Execution Flow diagram.</p> <p>A successful search opens the Find Results dialog box. Click the <b>Keep on Top</b> button  to display the Find Results dialog box on top of all open windows.</p> <p>To display a selected window on top of the Find Results dialog box, click the <b>Not on Top</b> button .</p> <p><b>Available from:</b> Execution Flow</p> |

| UI Elements (A-Z)   | Menu  | Description  |
|---|---|--|
|  <b>Fit in Window</b>      |   | <p>Resizes the Execution Flow diagram to fit the window.</p> <p>Click the arrow to select a magnification option. Options include:</p> <ul style="list-style-type: none"> <li>➤ Magnification level - <b>25%, 50%, 150%, 200%</b>.</li> <li>➤ <b>Normal</b>. Displays the diagram at 100% magnification.</li> <li>➤ <b>Fit in Window</b>. Displays the entire diagram in the window.</li> <li>➤ <b>Custom Zoom</b>. Opens the Custom Zoom dialog box. Type a zoom level and click <b>Zoom</b>.</li> </ul> <p><b>Available from:</b> Execution Flow</p> |
|  <b>Flag for Follow Up</b> | <ul style="list-style-type: none"> <li>➤ Edit (In the Test Runs tab)</li> <li>➤ Tests (In the Test Sets tab &gt; Execution Grid)</li> </ul> | <p>Opens the Flag for Follow Up dialog box, enabling you to add or modify a follow up flag for a selected test instance or test run. For more details, see "Flag For Follow Up Dialog Box" on page 111.</p>  |
| <b>Go to Test in Test Plan Tree</b>   | Tests   | <p>Opens the Test Plan module and highlights the selected test in the test plan tree.</p> <p><b>Available from:</b> Execution Grid</p> <p><b>Tip:</b> You can also right-click a test in the Execution Grid or Execution Flow, and select <b>Go to Test in Test Plan Tree</b>.</p>   |



| UI Elements (A-Z)   | Menu  | Description  |
|---|---|--|
| <b>Go to Test Set</b>   | Test Sets   | <p>Opens the Go to Test Set dialog box, enabling you to type a Test Set ID to find a specific test set in the test sets tree.</p> <p>To locate the <b>Test Set ID</b> for a test set, select the test set in the test sets tree and click the <b>Details</b> tab.</p>  |
|  <b>Go to Timeslot</b> | <right-click menu)  | <p><b>Performance Center:</b> Opens the Timeslots module, displaying the timeslot for the selected test run.</p> <p><b>Available from:</b> Test Runs tab</p>   |
| <b>Graphs</b>   | Analysis  | <p>Lists the graphs you can generate for Test Lab data. Select a predefined graph, or launch the graph wizard.</p> <p>For details on the predefined graph types, see "Graph Types" on page 942.</p>  |
| <b>Grid Filters</b>   | <ul style="list-style-type: none"> <li>▶ View (In the Test Runs tab)</li> <li>▶ Tests (In the Test Sets tab &gt; Execution Grid)</li> </ul> | <p>Displays a grid filter box under each column name, enabling you to define a filter condition for a column.</p> <p>Type directly into the box, or click the box to display the browse button, which opens the Select Filter Condition dialog box. For more details, see "Select Filter Condition Dialog Box" on page 74.</p> |
| <b>Host Manager</b>   | Test Sets   | <p>Opens the Host Manager dialog box, enabling you to define hosts for remote test execution. For details, see "Host Manager Dialog Box" on page 824.</p>  |

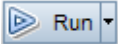
| UI Elements (A-Z)   | Menu      | Description  |
|---|-----------|--|
| <b>Indicator Columns</b>  | Tests     | Displays the following columns on the left-side of the Execution Grid and test runs grid:  . For more details, see "Test Lab Module Icons" on page 742.   |
| <b>Last Run Report</b>  | Tests     | <p>Opens the Last Run Report pane, displaying results of the last test run for the selected test.</p> <p>You can also click the <b>Show</b> arrow to display the Last Run Report pane.</p> <p><b>Performance Center:</b> Opens the Last Run Results pane. For details, refer to the <i>HP ALM Performance Center Guide</i>.</p> <p><b>Available from:</b> Execution Grid</p> |
| <b>Live Analysis</b>  | Analysis  | <p>Lists options for displaying graphs in the Live Analysis tab. Add or delete a graph, or configure its appearance.</p> <p>For details on live analysis, see "Live Analysis Graphs Overview" on page 1056.</p> <p><b>Available from:</b> Test Sets &gt; Live Analysis tab</p>   |
| <b>Most Recently Used</b>   | Analysis  | Displays the reports and graphs most recently viewed in the Test Lab module.   |
|  <b>New Folder</b> | Test Sets | <p>Opens the New Test Set Folder dialog box, enabling you to add a folder under a selected folder.</p> <p><b>Syntax exceptions:</b> A test set folder name cannot include the following characters: \ ^ *</p>  |




| UI Elements (A-Z)  | Menu      | Description  |
|--|-----------|--|
|  <b>New Test Set</b>              | Test Sets | <p>Opens the New Test Set dialog box, enabling you to add a test set to a selected folder. For details, see "New Test Set Dialog Box" on page 765.</p>   |
|  <b>Order Test Instances</b>      | Tests     | <p>Opens the Order Test Instances dialog box, enabling you to change the execution order of the tests in the Execution Grid or Execution Flow. For more details, see "Order Test Instances Dialog Box" on page 827.</p> <p><b>Available from:</b> Execution Grid, Execution Flow</p> |
| <b>Organize Favorites</b>  | Favorites | <p>Opens the Organize Favorites dialog box, enabling you to organize the list of favorite views by changing properties or deleting views. For details, see "Organize Favorites Dialog Box" on page 119.</p> <p><b>Available from:</b> Test Sets tab</p>                              |
| <b>Performance Trending</b><br> |           | <p><b>Performance Center:</b> Opens My Performance Center, displaying the Trend Reports feature. For details, refer to the <i>HP ALM Performance Center Guide</i>.</p> <p><b>Available from:</b> Test Runs tab</p>   |
| <b>Pin to Baseline</b>   | Test Sets | <p>Opens the Select Baseline dialog box, enabling you to pin the test set to a baseline. For more details, see "Select Baseline Dialog Box" on page 303.</p>   |
| <b>Private</b>   | Favorites | <p>Lists the favorite views that are accessible only to the user who created them.</p> <p><b>Available from:</b> Test Sets tab</p>   |



| UI Elements (A-Z)  | Menu                 | Description  |
|--|----------------------|--|
| <b>Public</b>  | Favorites            | Lists the favorite views that are accessible to all users.<br><b>Available from:</b> Test Sets tab   |
| <b>Purge Runs</b>  | Test Sets, Test Runs | Opens the Purge Runs wizard, enabling you to delete old test run results in your project. For details, see "Purge Runs Wizard" on page 859.  |
|  <b>Refresh/Refresh All</b> | View                 | Refreshes the view to display the most up-to-date information.   |
|  <b>Refresh Flow</b>        | Tests                | Refreshes the view to display the most up-to-date information.<br><b>Available from:</b> Execution Flow  |
| <b>Remove all Execution Conditions</b>   | Tests                | Enables you to delete all execution conditions and time dependencies in a selected test set.<br><br>If your test set includes both execution conditions and time dependencies, opens the Remove All Execution Conditions dialog box.<br><br>If your test set includes only execution conditions or time dependencies, a confirm dialog box opens.<br><b>Available from:</b> Execution Flow |
| <b>Remove Execution Condition</b>  | <right-click menu>   | Enables you to delete an execution condition for a selected condition arrow.<br><b>Available from:</b> Execution Flow  |
| <b>Remove Test's Execution Conditions</b>  | <right-click menu>   | Enables you to delete all execution conditions for a selected test instance.<br><b>Available from:</b> Execution Flow  |







| UI Elements (A-Z)  | Menu  | Description  |
|--|---|--|
|  <b>Remove Test Instances from Test Set</b> | Tests   | Removes the selected test instances from the test set.<br><b>Available from:</b> Execution Grid, Execution Flow  |
| <b>Remove Time Dependency</b>  | <right-click menu>  | Right-click a <b>Time Dependency</b>  icon connected to a test and choose <b>Remove Time Dependency</b> to remove the specified time dependency.<br><b>Available from:</b> Execution Flow |
| <b>Rename</b>  | Edit  | Enables you to rename a test set or a test set folder. You cannot rename the <b>Root</b> folder, the <b>Unattached</b> folder, or the <b>default</b> test set.<br><b>Available from:</b> Test Sets tab   |
| <b>Replace</b>   | <ul style="list-style-type: none"> <li>▶ Edit (In the Test Runs tab)</li> <li>▶ Tests (In the Test Sets tab &gt; Execution Grid)</li> </ul> | Opens the Replace dialog box, enabling you to replace a field value in the grid. For details, see "Replace Dialog Box" on page 80.   |
| <b>Report Selected</b>   | <right-click menu>  | Generates a standard report for selected runs. For details, see "View Tab – Standard Reports/Report Window" on page 1051.<br><b>Available from:</b> Test Runs tab  |
| <b>Reports</b>   | Analysis  | Lists the predefined reports you can produce on Test Lab data. For details on the report types, see "Predefined Standard Reports" on page 1042.  |

| UI Elements (A-Z)  | Menu      | Description  |
|--|-----------|--|
| <b>Reset Test Set</b>  | Test Sets | <p>Opens the Confirm Reset Test Set dialog box, enabling you to change the status of all the tests in the test set to <b>No Run</b>.</p> <p>You can also instruct ALM to delete all the test run results in the test set.</p>  |
|  <b>Run</b> | Tests     | <p><b>If you select a manual test:</b> Opens one of the following to run the test:</p> <ul style="list-style-type: none"> <li>▶ If Sprinter is installed on your local machine, Sprinter opens. For details, see "HP Sprinter Overview" on page 796.<br/><b>ALM Editions:</b> Sprinter functionality is not available with Quality Center Starter Edition and Performance Center Edition.</li> <li>▶ If Sprinter is not installed, the Manual Runner dialog box opens. For details, see "Manual Runner Wizard" on page 805.</li> </ul> <p><b>If you select two or more manual tests:</b> Opens the Manual Test Run dialog box. For details, see "Manual Test Run Dialog Box" on page 803.</p> <p><b>If you select automated tests:</b> Opens the Automatic Runner dialog box. For details, see "Automatic Runner Dialog Box" on page 821.</p> <p><b>Available from:</b> Execution Grid, Execution Flow</p> |
| <b>Run with Manual Runner</b>  | Tests     | <p>Runs a manual or automated test manually from the Manual Runner dialog box. For details, see "Manual Runner Wizard" on page 805.</p> <p><b>Available from:</b> Execution Grid, Execution Flow</p>   |

| UI Elements (A-Z)   | Menu               | Description  |
|---|--------------------|--|
|  <b>Run Screen</b>     | <right-click menu> | <p><b>Performance Center:</b> Opens the Performance Test Run screen, enabling you to view and manage the test run. For more information, refer to the <i>HP ALM Performance Center Guide</i>.</p> <p><b>Note:</b> Only enabled when test run is in the <b>Running</b> state.</p> <p><b>Available from:</b> Test Runs tab</p>                               |
| <b>Run with Sprinter</b>  | Tests              | <p>Opens Sprinter to run the selected tests. For details, see "HP Sprinter Overview" on page 796.</p> <p><b>ALM Editions:</b> Sprinter functionality is not available with Quality Center Starter Edition and Performance Center Edition.</p> <p><b>Available from:</b> Execution Grid</p>   |
|  <b>Run Test</b>       | <right-click menu> | <p><b>Performance Center:</b> Enables you to run a selected performance test. For more details on running performance tests, refer to the <i>HP ALM Performance Center Guide</i>.</p>  |
|  <b>Run Test Set</b> | Test Sets          | <p>If the test set includes one or more automated tests, opens the Automatic Runner dialog box to run the currently selected test set. For details, see "Automatic Runner Dialog Box" on page 821.</p> <p>If the test set includes manual tests only, opens the Manual Test Run dialog box. For details, see "Manual Test Run Dialog Box" on page 803.</p> |

| UI Elements (A-Z)   | Menu  | Description   |
|---|---|---|
|  <b>Select Columns</b> | <ul style="list-style-type: none"> <li>▶ View (In the Test Runs tab)</li> <li>▶ Tests (In the Test Sets tab &gt; Execution Grid)</li> </ul> | <p>Opens the Select Columns dialog box, enabling you to determine which columns to display and set the order in which the columns are displayed. For more details, see "Select Columns/Select Fields Dialog Box" on page 94.</p> <p><b>Available from:</b> Test Runs tab, Execution Grid</p>  |
|  <b>Select Tests</b>   | <p>Test Sets</p>  | <p>Enables you to select tests to add to the currently selected test set. Displays the following:</p> <ul style="list-style-type: none"> <li>▶ <b>Test Plan Tree</b> tab. Add tests from the test plan tree to a test set.</li> <li>▶ <b>Requirements Tree</b> tab. Add tests covering requirements from the requirements tree to a test set.</li> </ul> <p>For more details, see "Select Tests Pane" on page 767.</p> <p><b>Available from:</b> Execution Grid, Execution Flow</p> |
| <p><b>Send by Email</b></p>   | <p>Test Runs</p>  | <p>Opens the Send E-mail dialog box, enabling you to send a test run by email to recipients selected from a list, or to the tester. For more details, see "Send E-mail Dialog Box" on page 87.</p>  |

| UI Elements (A-Z)  | Menu   | Description   |
|--|--|---|
|  <b>Set Filter/Sort</b>       | <ul style="list-style-type: none"> <li>➤ View</li> <li>➤ Tests (Execution Grid)</li> </ul> | <p>Enables you to set filter and sort options for the test sets tree or Execution Grid.</p> <p>Includes the following options:</p> <ul style="list-style-type: none"> <li>➤ <b>Set Filter/Sort.</b> Opens the Filter dialog box, enabling you to filter and sort tests.</li> <li>➤ <b>Clear Filter/Sort.</b> Clears any filters or sorting that you have applied.</li> </ul> <p>For more details, see "Filter Dialog Box" on page 64.</p> <p><b>Available from:</b> Test Sets tab</p> |
| <b>Show Full Test Names</b>  | Tests  | <p>Displays full test names in the Execution Flow diagram. By default, long names are truncated.</p> <p><b>Available from:</b> Execution Flow</p>   |
|  <b>Test Instance Details</b> | Tests  | <p>Opens the Test Instance Details dialog box, enabling you to view and update details of the selected test instance. For details, see "Test Instance Details Dialog Box" on page 837.</p> <p><b>Available from:</b> Execution Grid</p>   |
|  <b>Test Set Details</b>    | Test Sets  | <p>Opens the Test Set Details dialog box, enabling you to view and update details of the selected test set. For details, see "Test Set Details Dialog Box" on page 773.</p>   |
| <b>Text Search</b>   | Edit   | <p>Opens the text search pane in the lower part of the Test Lab module window, enabling you to search for records in predefined fields. For details, see "Text Search Pane" on page 82.</p> <p><b>Available from:</b> Test Runs tab</p>   |











| UI Elements (A-Z)   | Menu  | Description  |
|---|-------|--|
| <b>View</b>   | Tests | Lists options for selecting tests in the Execution Grid. Options include: <ul style="list-style-type: none"> <li>▶ <b>Select All</b></li> <li>▶ <b>Deselect All</b></li> <li>▶ <b>Invert Selection</b></li> </ul> <b>Available from:</b> Execution Grid tab  |
|  <b>Zoom</b> | Tests | Changes the magnification level of the Execution Flow. Options include: <p><b>Zoom In.</b> Increases the magnification level so that you can view a section of the Execution Flow more closely.</p> <p><b>Zoom Out.</b> Decreases the magnification level so that you can view more of the Execution Flow.</p> <b>Available from:</b> Execution Flow |

## Test Lab Module Icons

This section describes the icons displayed in the Test Lab module.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under Testing, select <b>Test Lab</b> .   |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> Fields and functionality related to release management are not available in the Test Lab module.             |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "Test Lab Module Menus and Buttons" on page 724</li> <li>▶ "Test Lab Module Window" on page 721</li> </ul> |

User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|    | <green asterisk>. The applicable tab is populated.   |
|    | <p><b>Alerts.</b> Click to view alerts for the test instance or test run.</p> <ul style="list-style-type: none"> <li>➤ <b>Red alert.</b> The alert is new.</li> <li>➤ <b>Gray alert.</b> The alert has already been read.</li> </ul> <p>For more details, see "Alerts Dialog Box" on page 109.</p>                                     |
|    | <p><b>Attachments.</b> Click to view attachments for the specified test instance or test run. For more details, see "Attachments Page" on page 90.</p>   |
|    | <p><b>Follow Up Flags.</b> Click to view follow up flags for the test instance or test run.</p> <ul style="list-style-type: none"> <li>➤ <b>Gray flag.</b> The follow up flag is new.</li> <li>➤ <b>Red flag.</b> The follow up date has arrived.</li> </ul> <p>For more details, see "Flag For Follow Up Dialog Box" on page 111.</p> |
|    | <p><b>Linked Defects.</b> Click to view linked defects for the test instance or test run. For user interface details, see "Linked Defects/Entities Page" on page 902.</p>  |
|  | <p><b>Test Set Folder.</b> A folder for organizing test sets.</p>  |
|  | <p><b>Assigned Test Set Folder.</b> A test set folder that is assigned to a cycle.</p>   |
|  | <p><b>Test Set.</b> A test set in the test sets tree.</p>  |
|  | <p><b>Pinned Test Set.</b> A test set that is pinned to a baseline. For concept details, see "Pinned Test Sets" on page 266.</p>   |
|  | <p><b>Time Dependency.</b> Click to modify the time dependency conditions of a test instance. For more details, see "Time Dependency Page" on page 792.</p>  |

## Test Lab Module Fields

This section describes the Test Lab module fields.


|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under Testing, select <b>Test Lab</b> .   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ The Test Lab module displays test planning, test configuration, and test execution fields.             <ul style="list-style-type: none"> <li>▶ Names of test planning fields displayed in the Test Lab module have the prefix <b>Test:</b> added. For more details on test planning fields, see "Test Plan Module Fields" on page 537.</li> <li>▶ Names of test configuration fields displayed in the Test Lab module have the prefix <b>Configuration:</b> added. For more details on test configuration fields, see "Test Configurations Tab" on page 632.</li> </ul> </li> <li>▶ You can add user-defined fields and change the label of any of the Test Lab module fields. You can also customize project lists. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You can use the Script Editor to restrict and dynamically change the Test Lab module fields and values. For details, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ When you select a column with a user name value, ALM displays a list with the name and full name of each user. You can search for users, sort users, group users by user group, and select users from the users list or a group tree. For more information, see "Users List Dialog Box" on page 76.</li> <li>▶ <b>Quality Center Starter Edition:</b> Fields and functionality related to release management are not available in the Test Lab module.</li> </ul> |
| <b>See also</b>              | "Test Lab Module Window" on page 721  |



The fields are described below:

| UI Elements (A-Z)        | Description   |
|--------------------------|---|
| <b>Assigned to cycle</b> | The cycle to which the selected test set folder is assigned.  |
| <b>Baseline</b>          | The baseline to which the test set is pinned.<br><b>Quality Center Starter Edition:</b> Not available.  |
| <b>Close Date</b>        | The planned closing date for the test set.  |
| <b>Cycle start date</b>  | The date on which the cycle to which the selected test set folder is assigned starts.   |
| <b>Cycle end date</b>    | The date on which the cycle to which the selected test set folder is assigned ends.   |
| <b>Draft Run</b>         | Indicates whether the selected test run is a draft run. For more details, see "Draft Runs" on page 715.<br><b>Default value:</b> N  |
| <b>Duration</b>          | The length of time that a test run continued.   |
| <b>Exec Date</b>         | The date on which the test was last executed.   |
| <b>Exec Time</b>         | The date on which the test step was last executed.  |
| <b>Host</b>              | The name of the machine on which a test was executed.   |
| <b>Iterations Status</b> | <b>Business Process Testing:</b> The statuses of the test iterations. The color represents a status and the number represents the number of iterations with that status.<br><b>Legend:</b><br><ul style="list-style-type: none"> <li>➤ <b>Passed.</b> Green</li> <li>➤ <b>Failed.</b> Red</li> <li>➤ <b>Blocked</b> (and user-defined). White</li> <li>➤ <b>Not Completed.</b> Purple</li> <li>➤ <b>No Run.</b> Orange</li> <li>➤ <b>N/A.</b> Yellow</li> </ul> |
| <b>ITG Request Id</b>    | The IT Governance request ID.<br><b>Note:</b> This field is relevant only when integrating with an IT Governance tool.  |

| UI Elements (A-Z)                      | Description  |
|--|--|
| <b>Modified</b>                        | The date and time of the last change to the test in the Execution Grid.  |
| <b>Open Date</b>                       | The planned opening date for the test set.<br><b>Default:</b> The current database server date when the test set is created.   |
| <b>Operating System</b>                | The operating system running on the host machine on which a test was executed.<br><b>Default value:</b> The operating system on your ALM client machine.   |
| <b>OS Build Number</b>                 | The build number of the operating system running on the host machine on which a test was executed.<br><b>Default value:</b> The operating system build number on your ALM client machine.            |
| <b>OS Service Pack</b>                 | The operating system service pack installed on the host machine on which a test was executed.<br><b>Default value:</b> The operating system service pack on your ALM client machine.                 |
| <b>Planned Exec Date</b>               | The date on which it was planned to execute the test.  |
| <b>Planned Exec Time</b>               | The time at which it was planned to execute the test.  |
| <b>Planned Host Name</b>               | The name or IP address of the machine to run the test.   |
| <b>Remaining days in cycle</b>         | The total number of days remaining in the cycle to which the selected test set folder is assigned.   |
| <b>Remaining test instances to run</b> | The total number of test instances in the selected test set folder that have not yet run.  |
| <b>Responsible Tester</b>              | The user name of the person responsible for running the test.<br><br>When you run a manual test automatically from the Automatic Runner dialog box, ALM notifies this user by email to run the test. |
| <b>Run ID</b>                          | A unique numeric ID for the run, assigned automatically by ALM.  |

| UI Elements (A-Z)                          | Description  |
|--|--|
| <b>Run Name</b>                            | <p>The name of the test run. <b>Fast_run</b> indicates that ALM created this run when a user changed the <b>Status</b> field of the test instance manually without running the test.</p> <p>The icon displayed indicates one of the following:</p> <ul style="list-style-type: none"> <li>▶ The test type. For details, see "Test Types" on page 517.</li> <li>▶ A manual test run with Sprinter . For details on Sprinter, see "HP Sprinter Overview" on page 796.</li> </ul>  |
| <b>State</b>                               | <p>Indicates progress of a test run. Possible values are: Initializing, Running, Stopping, Run Failure, Finished. This is a read-only field.</p>   |
| <b>Status (for a test set)</b>             | <p>In the Details tab of a test set, indicates the status of the test set. Options include: Open, Closed.</p>  |
| <b>Status (for a test instance or run)</b> | <p>Execution status can be one of the following:</p> <ul style="list-style-type: none"> <li>▶ <b>Blocked.</b> One or more steps cannot run. For example, the test is running on a remote machine but cannot continue due to some environmental failure, such as network problems or hardware failure.</li> <li>▶ <b>Failed.</b> One or more steps in the run failed, and none have the status "Blocked".</li> <li>▶ <b>N/A.</b> The current status of the test is not applicable.</li> <li>▶ <b>No Run.</b> No steps have been run.</li> <li>▶ <b>Not Completed.</b> One or more steps were not completed or not run, and none have the status "Blocked" or "Failed".</li> <li>▶ <b>Passed.</b> The run was successful.</li> </ul> |

| UI Elements (A-Z)              | Description   |
|--------------------------------|---|
| <b>Status (for a run step)</b> | Execution status can be one of the following: <ul style="list-style-type: none"> <li>➤ <b>Blocked.</b> The step cannot run. For example, the test is running on a remote machine but cannot continue due to some environmental failure, such as network problems or hardware failure.</li> <li>➤ <b>Failed.</b> The step failed.</li> <li>➤ <b>N/A.</b> The current status of the step is not applicable.</li> <li>➤ <b>No Run.</b> The step has not been run.</li> <li>➤ <b>Not Completed.</b> The step was not completed.</li> <li>➤ <b>Passed.</b> The step was successful.</li> </ul> |
| <b>Target Cycle</b>            | The cycle to which the test is assigned.  |
| <b>Test</b>                    | The name of the test in the Test Plan module associated with the selected test run.   |
| <b>Test Instance</b>           | The name of the test instance associated with the selected test run.  |
| <b>Test Set</b>                | The name of the test set associated with the selected test run.   |
| <b>Test Set ID</b>             | A unique numeric ID for the test set, assigned automatically by ALM.  |
| <b>Tester</b>                  | The user name of the person who last executed the test.   |
| <b>Time</b>                    | The time at which the test was last executed.   |
| <b>Total test instances</b>    | The total number of test instances in the selected test set folder.   |
| <b>Type</b>                    | The test type of the test. For more details, see "Test Types" on page 517. This is a read-only field.   |

# 29

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## Test Set Specification

This chapter includes:

### Concepts

- ▶ Test Set Specification Overview on page 750

### Tasks

- ▶ How to Create Test Sets on page 752

### Reference

- ▶ Test Sets User Interface on page 756

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## Concepts

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### Test Set Specification Overview

After you design tests in the Test Plan module, you organize test execution by creating test sets in the Test Lab module. A **test set** contains a subset of the tests in your project designed to achieve specific test goals. Test sets can include both manual and automated tests.

When defining a test set, ALM adds instances of your selected tests to the test set. Each test instance contains a defined test configuration. A **test configuration** enables you to run the same test under different scenarios. For more details on test configurations, see "Test Configurations Overview" on page 624.

A **test sets tree** enables you to organize your application management process by grouping test sets in folders and organizing them in different hierarchical levels.

To decide which test sets to create, consider the goals you defined at the beginning of the application management process. Consider issues such as the current state of the application and the addition or modification of new features.

Following are examples of general categories of test sets you can create:

| Test Set          | Description   |
|-------------------|---|
| <b>Sanity</b>     | Checks the entire application at a basic level—focusing on breadth, rather than depth—to verify that the application is functional and stable. This set includes fundamental tests that contain positive checks, validating that the application is functioning properly. For example, in the Mercury Tours application, you could test whether the application opens, and enables you to log in. |
| <b>Regression</b> | Tests the system in a more in-depth manner than a sanity set. This set can include both positive and negative checks. Negative tests attempt to fail an application to demonstrate that the application is not functioning properly.  |
| <b>Advanced</b>   | Tests both breadth and depth. This set covers the entire application, and also tests the application's advanced options. You can run this set when there is ample time for testing.   |
| <b>Function</b>   | Tests a subsystem of an application. This could be a single feature or a group of features. For example, in the Mercury Tours application, a function set could test all activities related to booking a flight.  |

After you have created test sets, you assign test set folders to cycles defined in the releases tree in the Releases module. A cycle represents a development and QA cycle based on the project timeline.

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**Quality Center Starter Edition:** Fields and functionality related to release management and baselining are not available in the Test Lab module.

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For details on working with test sets, see "How to Create Test Sets" on page 752.

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# Tasks

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## How to Create Test Sets

This task describes how to create and define test sets in the Test Lab module.

To learn more about test sets, see "Test Set Specification Overview" on page 750.

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**Note:**

- **Higher-level task:** This task is part of a higher-level task. For details, see "How to Run Tests in ALM" on page 716.
  - **Quality Center Starter Edition:** Fields and functionality related to release management and baselining are not available in the Test Lab module.
- 

This task includes the following steps:

- "Define test sets" on page 753
- "Assign test set folders to cycles" on page 754
- "Add tests to test sets" on page 754
- "Configure execution settings for a test instance" on page 754
- "Set notification rules" on page 754
- "Set On Failure rules" on page 755
- "Request test result summary report" on page 755
- "Pin a test set to a baseline - optional" on page 755



## 1 Define test sets

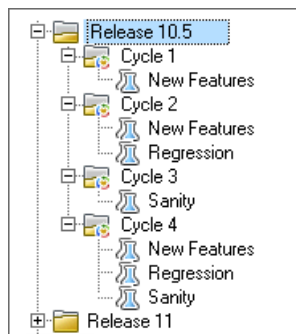
Define a hierarchical framework for your test sets by creating a test sets tree that can contain folders and subfolders.

- a Open the Test Lab module.** On the ALM sidebar, under **Testing**, select **Test Lab**.
- b Create folders.** Right-click the **Root** folder and select **New Folder**. To create a sub-folder, right-click a folder and select **New Folder**.
- c Add test sets to folders.** Right-click a folder and select **New Test Set**. For user interface details, see "New Test Set Dialog Box" on page 765.

### Example:

Suppose you want to test new features added to Release 10.5 of the Mercury Tours application. Release 10.5 consists of four cycles, and you want to test the new features for the release in Cycle 1, Cycle 2, and Cycle 4. Because the tests you need to run to test the new features are the same for each of these cycles, you want to use the same test set as a basis for testing new features in each of the cycles.

In the test sets tree, you can create the folder **Release 10.5** for the release. Under this folder, you create the folder **Cycle 1** for the first cycle of the release. In the **Cycle 1** folder, you create a test set **New Features** containing the tests necessary to test new features for the release. After you create this test set and add its tests, you can copy and paste the **Cycle 1** folder and use it as a basis for the other cycles that test new features.



## 2 Assign test set folders to cycles

Assign test set folders to cycles defined in the releases tree in the Releases module.

Right-click a test set folder and select **Assign to Cycle**. For user interface details on the Select Cycles dialog box, see "Select Cycles Dialog Box" on page 205.

## 3 Add tests to test sets

You can add manual and automated tests to a test set.

In the Test Lab module > Test Sets tab, select a test set and click the **Execution Grid** tab or the **Execution Flow** tab. Then click the **Select Tests** button. Add tests from the following tabs in the Select Tests pane:

- ▶ **Test Plan Tree** tab. Add tests from the test plan tree to the test set.
- ▶ **Requirements Tree** tab. Add tests covering requirements from the requirements tree to the test set.

For user interface details on the Select Tests pane, see "Select Tests Pane" on page 767.

## 4 Configure execution settings for a test instance

You can view or set the test parameter values for a manual or automated test instance. You can also view and edit the On Failure rules for an automated test instance.

- a** In the Execution Grid or the Execution Flow, right-click a test and select **Test Instance Details**.
- b** In the Test Instance Details dialog box, click **Execution Settings** on the sidebar. For user interface details on the Execution Settings view, see "Test Instance Details - Execution Settings View" on page 844.

## 5 Set notification rules

Set notification rules to instruct ALM to send email to a specified user if selected events occur for a test set.

You set notification rules in the **Automation** tab, **Notification** area. For user interface details, see "Automation Tab" on page 761.

## 6 Set On Failure rules

Set On Failure rules which to define what action ALM takes in the event that an automated test in the test set fails.

You set notification rules in the **Automation** tab, **On Automatic Test Failure** area. For user interface details, see "Automation Tab" on page 761.

## 7 Request test result summary report

You can request that a summary of test results is sent in an email to specified users when test set execution completes.

Enter details in the **Automation** tab, **Execution Summary** area. For user interface details, see "Automation Tab" on page 761.

## 8 Pin a test set to a baseline - optional

You can pin a test set to a baseline to associate the test set with the versions of the tests stored in a baseline you select.

- ▶ In the Test Lab module, right-click a test set and select **Pin to Baseline**. For user interface details on the Select Baseline dialog box, see "Select Baseline Dialog Box" on page 303.
- ▶ To clear a pinned baseline, right-click a test set and select **Clear Pinned Baseline**.

For concept details on pinned test sets, see "Pinned Test Sets" on page 266.

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## Reference

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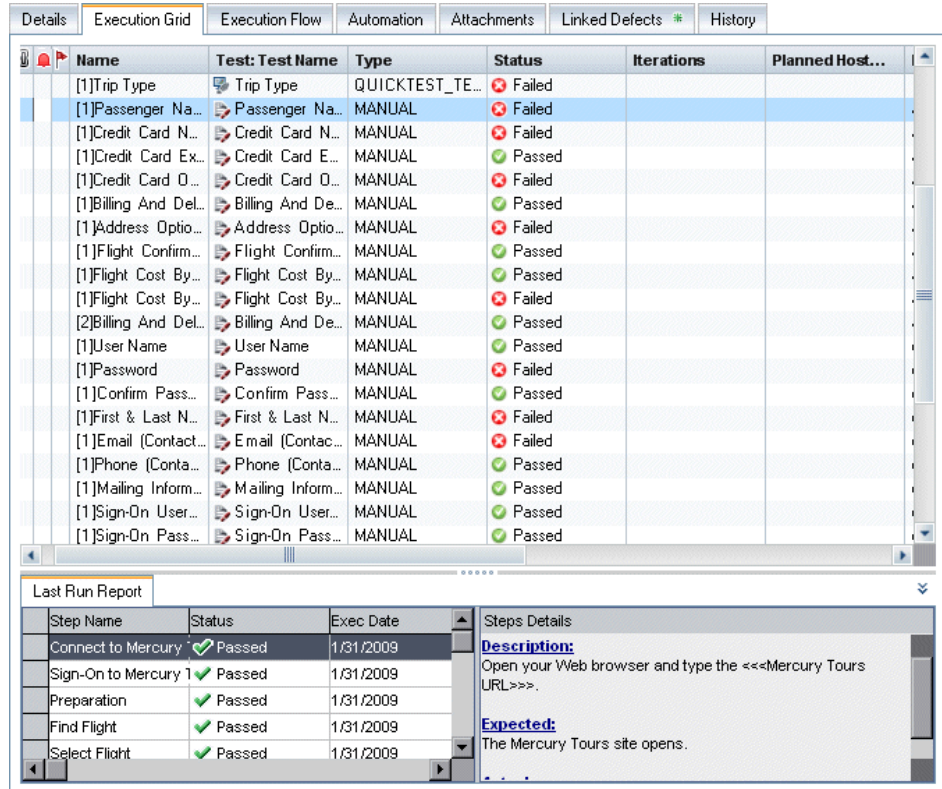
### **Test Sets User Interface**

This section includes:

- ▶ Execution Grid Tab on page 757
- ▶ Automation Tab on page 761
- ▶ New Test Set Dialog Box on page 765
- ▶ Select Tests Pane on page 767
- ▶ Test Set Details Dialog Box on page 773
- ▶ On Test Failure Dialog Box on page 775
- ▶ Paste Test Set Folders To Target Project Dialog Box on page 778

## Execution Grid Tab

This tab displays test instance data in a grid. Each line in the grid displays a separate record. You can run and view tests in the Execution Grid.



| Name                  | Test: Test Name   | Type            | Status | Iterations | Planned Host... |
|-----------------------|-------------------|-----------------|--------|------------|-----------------|
| [1]Trip Type          | Trip Type         | QUICKTEST_TE... | Failed |            |                 |
| [1]Passenger Na...    | Passenger Na...   | MANUAL          | Failed |            |                 |
| [1]Credit Card N...   | Credit Card N...  | MANUAL          | Failed |            |                 |
| [1]Credit Card Ex...  | Credit Card E...  | MANUAL          | Passed |            |                 |
| [1]Credit Card O...   | Credit Card O...  | MANUAL          | Failed |            |                 |
| [1]Billing And Del... | Billing And De... | MANUAL          | Passed |            |                 |
| [1]Address Optio...   | Address Optio...  | MANUAL          | Failed |            |                 |
| [1]Flight Confirm...  | Flight Confirm... | MANUAL          | Passed |            |                 |
| [1]Flight Cost By...  | Flight Cost By... | MANUAL          | Passed |            |                 |
| [1]Flight Cost By...  | Flight Cost By... | MANUAL          | Failed |            |                 |
| [2]Billing And Del... | Billing And De... | MANUAL          | Passed |            |                 |
| [1]User Name          | User Name         | MANUAL          | Passed |            |                 |
| [1]Password           | Password          | MANUAL          | Failed |            |                 |
| [1]Confirm Pass...    | Confirm Pass...   | MANUAL          | Passed |            |                 |
| [1]First & Last N...  | First & Last N... | MANUAL          | Failed |            |                 |
| [1]Email (Contact...  | Email (Contac...  | MANUAL          | Failed |            |                 |
| [1]Phone (Conta...    | Phone (Conta...   | MANUAL          | Passed |            |                 |
| [1]Mailing Inform...  | Mailing Inform... | MANUAL          | Passed |            |                 |
| [1]Sign-On User...    | Sign-On User...   | MANUAL          | Passed |            |                 |
| [1]Sign-On Pass...    | Sign-On Pass...   | MANUAL          | Passed |            |                 |


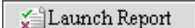
| Step Name            | Status | Exec Date | Steps Details  |
|----------------------|--------|-----------|--|
| Connect to Mercury   | Passed | 1/31/2009 |  |
| Sign-On to Mercury 1 | Passed | 1/31/2009 | <b>Description:</b><br>Open your Web browser and type the <<<Mercury Tours URL>>>. |
| Preparation          | Passed | 1/31/2009 | <b>Expected:</b><br>The Mercury Tours site opens.                                  |
| Find Flight          | Passed | 1/31/2009 |  |
| Select Flight        | Passed | 1/31/2009 |  |

|                       |  |
|-----------------------|--|
| <b>To access</b>      | In the Test Lab module > Test Sets tab, select a test set and click the <b>Execution Grid</b> tab.   |
| <b>Relevant tasks</b> | "How to Create Test Sets" on page 752<br>"How to Run Tests in ALM" on page 716   |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Test Set Specification Overview" on page 750</li> <li>➤ "Test Execution Overview" on page 714</li> <li>➤ "Test Lab Module Window" on page 721</li> </ul> |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements                          | Description  |
|--------------------------------------|--|
| <Test Lab module common UI elements> | <ul style="list-style-type: none"> <li>▶ <b>Test Lab fields.</b> For field definitions, see "Test Lab Module Fields" on page 744.</li> <li>▶ <b>Test Lab menus and buttons.</b> For command and button descriptions, see "Test Lab Module Menus and Buttons" on page 724.</li> <li>▶ <b>Test Lab icons.</b> For icon descriptions, see "Test Lab Module Icons" on page 742.</li> <li>▶ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu and sidebar, see "ALM Common Areas" on page 41.</li> </ul> |
| <Indicator columns>                  | <p>Indicates that the specified test instance has attachments, linked defects, alerts, and follow up flags. For more details, see "Test Lab Module Icons" on page 742.</p> <p>To display these columns, select <b>Tests &gt; Indicator Columns.</b></p>  |
| <Filter status bar>                  | <p>Describes the filter currently applied to the grid. Located directly above the grid.</p>  |
| <Select Tests pane>                  | <p>Displays the Test Plan Tree tab and the Requirements Tree tab, enabling you to select tests to add to the selected test set. For details, see "Select Tests Pane" on page 767.</p>  |

| UI Elements              | Description   |
|--------------------------|---|
| <b>Criterion Results</b> | <p>Displays the statuses of the criteria for the last run of the selected business process test instance using a certain configuration.</p> <p>To display this tab, select <b>Tests &gt; Last Run Result</b> or click the <b>Show</b> arrow.</p> <p><b>Note:</b> Functionality related to test criteria is available only for business process tests. For details, see the <i>HP Business Process Testing User Guide</i>.</p> |

| UI Elements                 | Description  |
|-----------------------------|--|
| <b>Last Run Report pane</b> | <p>Displays the results of the last test run for the selected test instance. To display this pane, select <b>Tests &gt; Last Run Report</b> or click the <b>Show</b> arrow.</p> <p>For a test run with Sprinter, also displays the <b>Launch Sprinter Results Viewer</b> button, which opens and displays the report in the Sprinter Results Viewer. For details, click the help button within the viewer.</p> <p><b>ALM Editions:</b> Sprinter functionality is not available with Quality Center Starter Edition and Performance Center Edition.</p> <p>For automated test instances, also includes one of the following:</p> <ul style="list-style-type: none"> <li>▶  <b>LR Analysis</b> Opens and displays the results in LoadRunner Analysis. Available for the LR-SCENARIO test type.</li> <li>▶  <b>Launch Report</b> Opens and displays the report in QuickTest Professional. Available for the QUICKTEST_TEST test type.</li> </ul> <p>The Launch Report button is enabled only if you have installed the QuickTest Professional Add-in from the HP Application Lifecycle Management Add-ins page. For more details on installing add-ins, refer to the <i>HP Application Lifecycle Management Installation Guide</i>.</p> <ul style="list-style-type: none"> <li>▶ <b>Collected System Info link.</b> Opens the System Information dialog box. Displays the collected system information, such as CPU, memory, and processes running on the machine when the test is run. Available for the SYSTEM-TEST test type.</li> <li>▶ <b>Captured Desktop Image.</b> Opens the captured image of the machine executing the system test. Available for the SYSTEM-TEST test type.</li> </ul> |



## Automation Tab

This tab enables you to set test set notification rules and On Failure rules to define what action ALM takes when selected events occur for a test set run from the Automatic Runner. For example, ALM can send email to specified users, or rerun a test upon failure.

Details
Execution Grid
Execution Flow
Automation
Attachments
Linked Defects \*
History

**- On Automatic Test Failure**

Rerun test

Maximum test reruns:

Cleanup test before rerun:

On final failure:

Maximum test set reruns:

Settings per test...

**- Notification**

Send email in the event of:

Any test in the Automatic Runner finishes with status "Failed"

Environmental failure (network problems, hardware failure, etc.)

All tests in the Automatic Runner that were run have finished

To...

**- Execution Summary**

Send summary of results after test set execution

Select Fields...

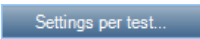
To...

|                       |   |
|-----------------------|---|
| <b>To access</b>      | In the Test Lab module > Test Sets tab, select a test set and click the <b>Automation</b> tab.  |
| <b>Relevant tasks</b> | "How to Create Test Sets" on page 752   |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Test Set Specification Overview" on page 750</li> <li>➤ "Test Lab Module Window" on page 721</li> </ul> |

## On Automatic Test Failure Area

You can set On Failure rules for a test set which instruct ALM in the event that an automated test in the test set fails.

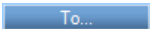
User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | Opens the On Test Failure dialog box, enabling you to change the default failure rules for a specific test in the test set. For details, see "On Test Failure Dialog Box" on page 775.  |
| <b>Maximum test set reruns</b>  | The number of times a test set should be rerun on final failure of any test in the test set.  |
| <b>On final failure</b>   | Specifies the action for ALM to take on the final failure of any test in the test set. Includes the following options: <ul style="list-style-type: none"> <li>➤ <b>Do nothing.</b></li> <li>➤ <b>Stop the test set.</b></li> <li>➤ <b>Rerun the test set.</b> Runs the test set again up to the maximum number of times as specified in the <b>Maximum test set reruns</b> box.</li> </ul>                        |
| <b>Rerun test</b>   | Instructs ALM to rerun an automated test if it fails. If selected, the following options are available: <ul style="list-style-type: none"> <li>➤ <b>Maximum test reruns.</b> Specifies the number of times an automated test should be rerun upon failure.</li> <li>➤ <b>Cleanup test before rerun.</b> Runs a cleanup test before each test rerun.<br/>Click the down arrow to select a cleanup test.</li> </ul> |

## Notification Area

You can instruct ALM to send email to a specified user if certain selected events occur.



User interface elements are described below:

| UI Elements   | Description   |
|---|---|
| <Message area>  | The text for the email ALM sends to the specified user.   |
| <b>Send email in the event of</b>   | <p>Notifies a specified user if any of the selected events occur. Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Any test in the Automatic Runner finishes with status "Failed".</b></li> <li>▶ <b>Environmental failure (network problems, hardware failure, etc.).</b> Environmental failure could include, for example, function calls not returning, access violations, version incompatibility between application components, a missing DLL, inadequate permissions, and many other reasons.</li> <li>▶ <b>All tests in the Automatic Runner that were run have finished.</b></li> </ul> |
|  | <p>The user who should receive the email.</p> <p>Enter a valid email address or user name. Alternatively, click the <b>To</b> button to select users. The Select Recipients dialog box opens. Select the users or user groups to which you want to send the email.</p>  |

### Execution Summary Area

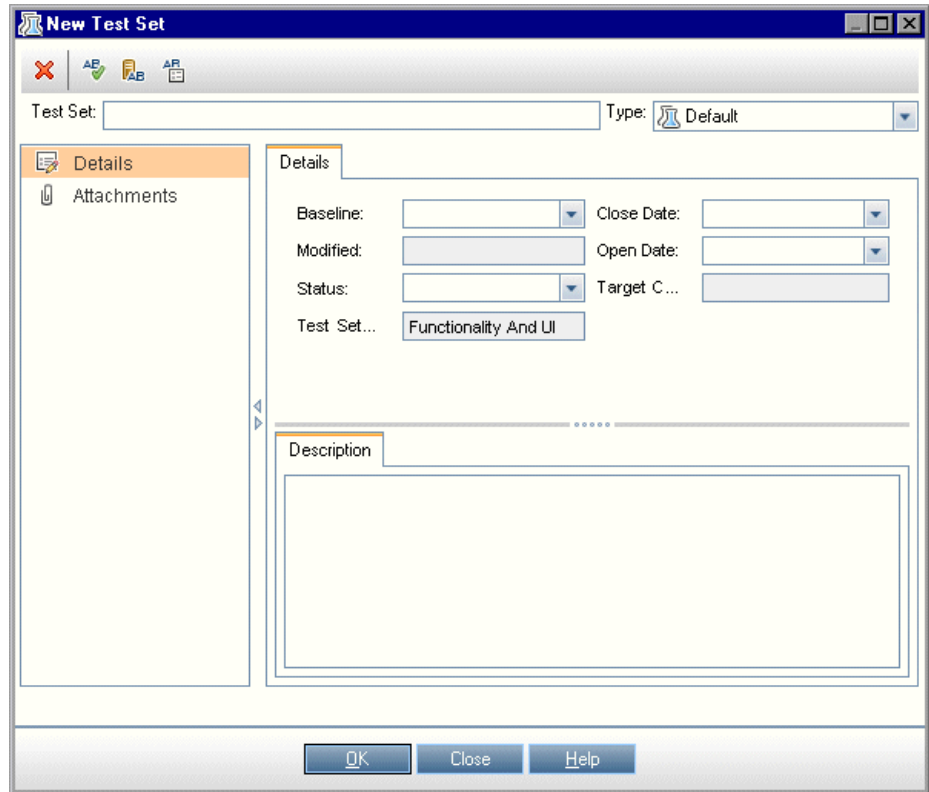
You can instruct ALM to send a summary of test results in an email to specified users when test set execution completes.

User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|  | Opens the Select Columns dialog box, enabling you to specify which test run fields are displayed in the execution summary. |
|  | Enter a valid email address or user name. Alternatively, click the <b>To</b> button to select users.                       |
| <b>Send summary of results after test set execution</b>                           | Sends a summary report of test results in an email to specified users after test set execution is complete.                |

## New Test Set Dialog Box

This page enables you to add a test set to a test set folder.



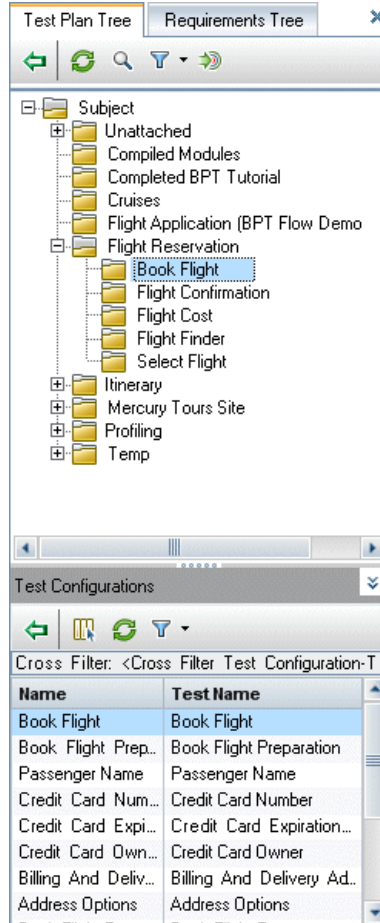
|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Test Lab module > Test Sets tab, right-click a test set folder and select <b>New Test Set</b> .  |
| <b>Important information</b> | You cannot add test sets directly to the <b>Root</b> folder. You must first add a folder under the <b>Root</b> folder.                            |
| <b>Relevant tasks</b>        | "How to Create Test Sets" on page 752   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Test Set Specification Overview" on page 750</li> <li>➤ "Test Lab Module Window" on page 721</li> </ul> |

User interface elements are described below:

| UI Elements (A-Z)      | Description   |
|------------------------|---|
| <b>Attachments</b>     | Enables you to add attachments that provide additional information about the test set. For more details, see "Attachments Page" on page 90.   |
| <b>Details</b>         | Lists test set fields. Required fields are displayed in red. For details on the available fields, see "Test Lab Module Fields" on page 744.<br><br>Tip: Clicking in the Description field on this page displays a toolbar for formatting and spell checking the text.                                 |
| <b>Name</b>            | The name you assign to the new test set.<br><br><b>Syntax exceptions:</b> A test set name cannot include the following characters: \ ^ , " *  |
| <b>Test Set Folder</b> | Displays the preselected folder name.   |
| <b>Type</b>            | The test set type. By default, the test set type is <b>Default</b> and the field is read-only.<br><br><b>Performance Center:</b> Select <b>Performance</b> to create a test set for performance tests. For more details on performance testing, refer to the <i>HP ALM Performance Center Guide</i> . |

## Select Tests Pane

This pane enables you to select tests for inclusion in a test set. ALM adds instances of the selected tests to the test set. Each instance contains a defined test configuration.



The screenshot shows the 'Test Plan Tree' pane in ALM. The tree view displays the following structure:

- Subject
  - Unattached
  - Compiled Modules
  - Completed BPT Tutorial
  - Cruises
  - Flight Application (BPT Flow Demo)
  - Flight Reservation (expanded)
    - Book Flight (selected)
    - Flight Confirmation
    - Flight Cost
    - Flight Finder
    - Select Flight
  - Itinerary
  - Mercury Tours Site
  - Profiling
  - Temp

Below the tree view is the 'Test Configurations' section, which displays a table of test configurations:

| Name                 | Test Name                 |
|----------------------|---------------------------|
| Book Flight          | Book Flight               |
| Book Flight Prep..   | Book Flight Preparation   |
| Passenger Name       | Passenger Name            |
| Credit Card Num...   | Credit Card Number        |
| Credit Card Expi...  | Credit Card Expiration... |
| Credit Card Own...   | Credit Card Owner         |
| Billing And Deliv... | Billing And Delivery Ad.. |
| Address Options      | Address Options           |





|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <p>In the Test Lab module &gt; Test Sets tab, select a test set and click the <b>Execution Grid</b> tab or the <b>Execution Flow</b> tab. Then click the <b>Select Tests</b> button.</p>  |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>➤ You can include instances of the same test in different test sets or add more than one instance to the same test set.</li> <li>➤ If you are adding a folder to the test set, only tests that match the current filter in the Test Plan Tree tab or Requirements Tree tab are added.</li> <li>➤ <b>Performance Center:</b> You can view and add performance tests to a <b>Performance</b> test set type only. For more details, see "New Test Set Dialog Box" on page 765.</li> </ul> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Create Test Sets" on page 752</p>  |
| <p><b>See also</b></p>              | <ul style="list-style-type: none"> <li>➤ "Test Set Specification Overview" on page 750</li> <li>➤ "Test Lab Module Window" on page 721</li> <li>➤ "Test Configurations Overview" on page 624</li> </ul>   |





## Test Plan Tree Tab

Displays the test plan tree, enabling you to select tests to add to the test set.

User interface elements are described below:




| UI Elements   | Description   |
|---|---|
|    | <p><b>Add Tests to Test Set.</b> Adds an instance of the selected test including its associated test configurations to the test set.</p> <p><b>Note:</b> If any of the tests you are adding are already in the test set, the Create Instance dialog box opens. It displays the test configurations that already exist in the test set and how many instances there are. Select the test configurations you still want to add to the test set and click <b>Create</b>.</p> <p><b>Tip:</b></p> <ul style="list-style-type: none"> <li>▶ You can also add tests by double-clicking or dragging a folder or test in the tree to the Execution Grid or Execution Flow.</li> <li>▶ To add selected configurations of a test to the test set, select the test configurations from the Test Configurations pane. For more details, see "Test Configurations Pane" on page 641.</li> </ul> |
|  | <p><b>Refresh All.</b> Refreshes the tree to display the most up to date information.</p>   |
|  | <p><b>Set Filter/Sort.</b> Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Set Filter/Sort.</b> Opens the Filter dialog box, enabling you to filter and sort tests.</li> <li>▶ <b>Clear Filter/Sort.</b> Clears any filters or sorting that you have applied.</li> </ul> <p>For more details, see "Filter Dialog Box" on page 64.</p>   |
|  | <p><b>Find.</b> Searches for a specific test in the tree.</p>   |





| UI Elements   | Description   |
|---|---|
|  | <p><b>Go to Test by ID.</b> Opens the Go to Test dialog box, enabling you to locate the test in the tree according to Test ID.</p>    |
|  | <p><b>Show/Hide.</b> Shows/hides the Test Configurations pane.</p>  |
| <p>&lt;Filter status bar&gt;</p>  | <p>Describes the filter currently applied to the tree. Located directly above the tree.</p>   |
| <p><b>Test Configurations pane</b></p>  | <p>Enables you to add selected test configurations to the test set. For more details, see "Test Configurations Pane" on page 641.</p> |

## Requirements Tree Tab

Displays the requirements tree, enabling you to select tests covering requirements to add to the test set.

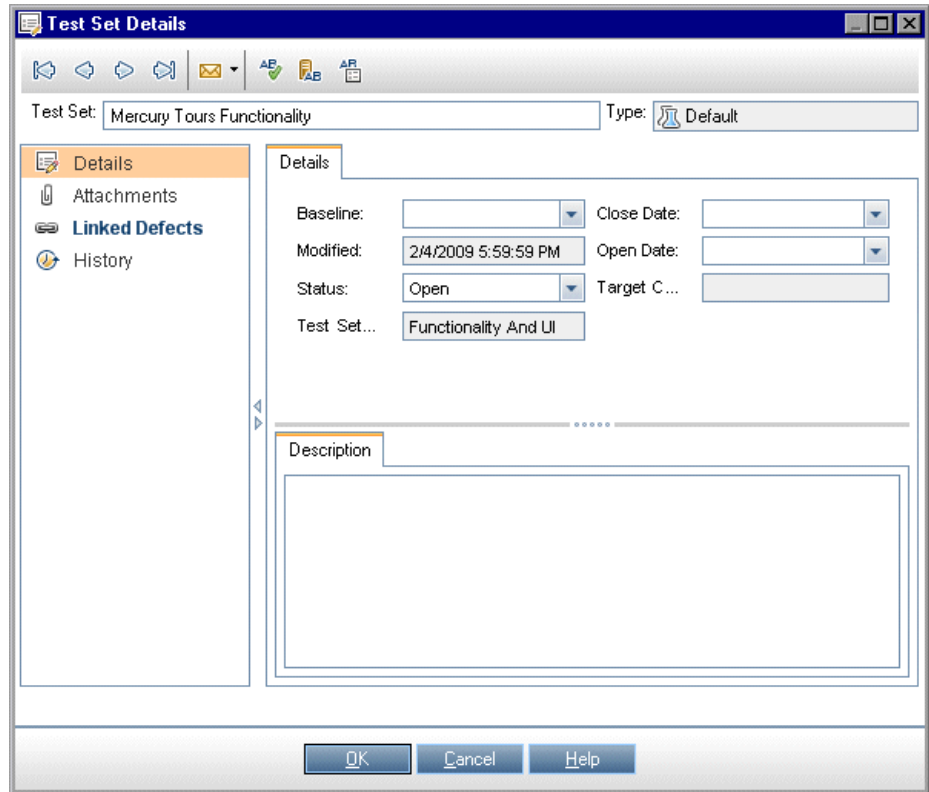
User interface elements are described below:


| UI Elements   | Description   |
|---|---|
|    | <p>Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Add Tests Covering Requirement.</b> Adds all tests that cover a selected requirement. The associated test configurations are added to the test set.</li> <li>▶ <b>Add Tests Covering Requirement and Children.</b> Adds all tests that cover a selected requirement and its children. The associated test configurations are added to the test set.</li> </ul> <p><b>Note:</b> If any of the tests you are adding are already in the test set, the Create Instance dialog box opens. It displays the test configurations that already exist in the test set and how many instances there are. Select the test configurations you still want to add to the test set and click <b>Create</b>.</p> <p><b>Tip:</b></p> <ul style="list-style-type: none"> <li>▶ You can also add tests by double-clicking or dragging a folder or requirement in the tree to the Execution Grid or Execution Flow.</li> <li>▶ To add selected tests that cover a selected requirement to the test set, select a test from the Test Coverage pane.</li> </ul> |
|  | <p><b>Refresh All.</b> Refreshes the tree to display the most up to date information.</p>   |
|  | <p><b>Set Filter/Sort.</b> Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Set Filter/Sort.</b> Opens the Filter dialog box, enabling you to filter and sort tests.</li> <li>▶ <b>Clear Filter/Sort.</b> Clears any filters or sorting that you have applied.</li> </ul> <p>For more details, see "Filter Dialog Box" on page 64.</p>   |

| UI Elements   | Description   |
|---|---|
|  | <p><b>Find.</b> Searches for a specific test in the tree.</p>   |
|  | <p><b>Go to Requirement by ID.</b> Opens the Go to Requirement dialog box, enabling you to locate the requirement in the tree according to Requirement ID.</p>  |
|  | <p><b>Show/Hide.</b> Shows/hides the Test Coverage pane.</p>  |
| <p>&lt;Filter status bar&gt;</p>  | <p>Describes the filter currently applied to the tree. Located directly above the tree.</p>   |
| <p><b>Test Coverage pane</b></p>  | <p>Enables you to add selected tests that cover a selected requirement to the test set.</p> <p>Select a test and click <b>Add Test</b> . The associated test configurations are added to the test set.</p> |

## Test Set Details Dialog Box

This dialog box enables you to view and update details of a test set.



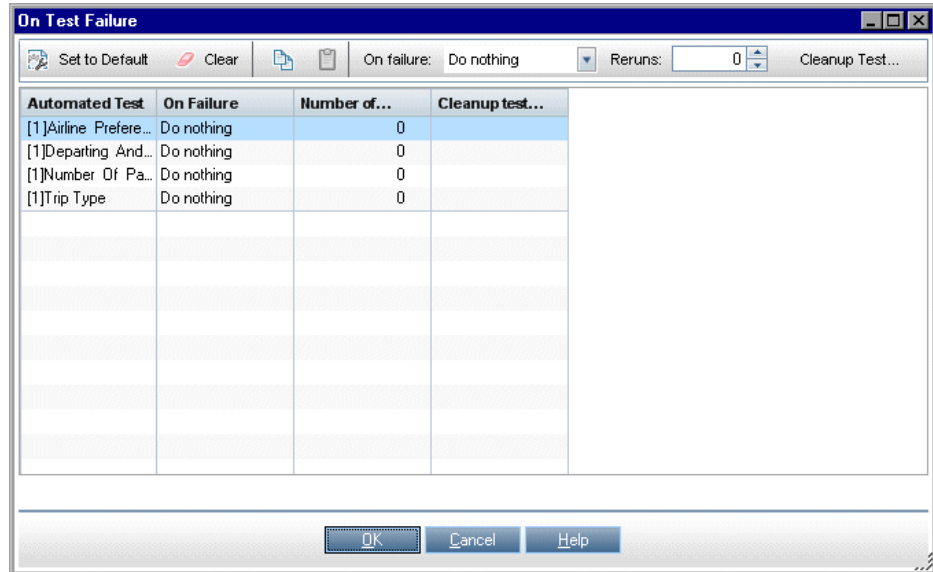
|                       |  |
|-----------------------|--|
| <b>To access</b>      | In the Test Lab module > Test Sets tab, select a test set in the test sets tree and click the <b>Test Set Details</b> button  . |
| <b>Relevant tasks</b> | "How to Create Test Sets" on page 752  |
| <b>See also</b>       | "Test Lab Module Window" on page 721   |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)     | Description   |
|-----------------------|---|
| <b>Attachments</b>    | Lists attachments that provide additional information about the currently selected test set. For details, see "Attachments Page" on page 90.                          |
| <b>Details</b>        | Displays details of the currently selected test set. Required fields are displayed in red. For details on available fields, see "Test Lab Module Fields" on page 744. |
| <b>History</b>        | Lists changes made to the currently selected test set. For details, see "History Tab" on page 85.   |
| <b>Linked Defects</b> | Lists the defects linked to the currently selected test set. For details, see "Linked Defects/Entities Page" on page 902.   |

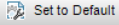


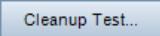
## On Test Failure Dialog Box

This dialog box enables you to change the default failure rules for specific tests in a test set. These rules instruct ALM in the event that an automated test in the test set fails.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the <b>Automation</b> tab, click the <b>Settings per test</b> button. |
| <b>Important information</b> | This dialog box displays only automated tests in the test set.           |
| <b>Relevant tasks</b>        | "How to Create Test Sets" on page 752                                    |
| <b>See also</b>              | "Automation Tab" on page 761   |

User interface elements are described below:

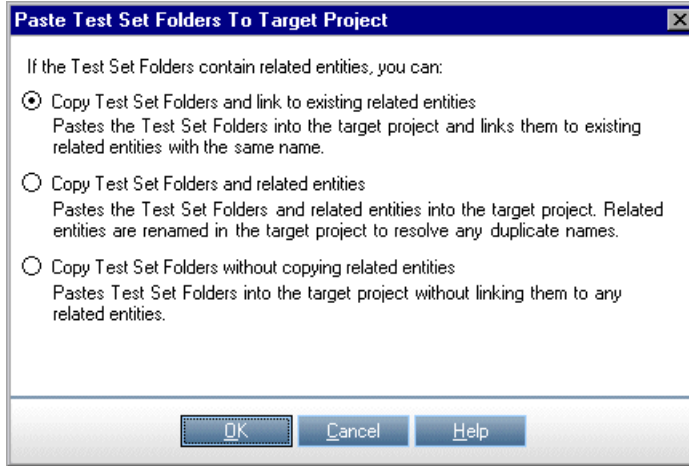
| UI Elements (A-Z)   | Description   |
|---|---|
|  | Resets the default failure rules according to the settings of a selected test. The default failure rules are defined in the <b>Automation</b> tab.  |
|  | Clears the settings for a selected test.  |
|  | <p><b>Copy/Paste Settings.</b> Copies the settings from one test to another.</p> <p>Select a test and click the <b>Copy Settings</b> button. Select another test and click the <b>Paste Settings</b> button.</p>  |
|  | <p><b>Cleanup Test.</b> Opens the Select Test dialog box, enabling you to select a cleanup test. ALM runs the cleanup test before each rerun of the selected test.</p> <p>Select one or more tests in the grid and click the <b>Cleanup Test</b> button.</p> <p>To select a cleanup test for a specific test in the test set, you can also click the down arrow in the <b>Cleanup Test Before Rerun</b> column.</p> |
| <p><b>Automated Test</b></p>  | The Automated Test column displays all automated tests in the selected test set.  |



| UI Elements (A-Z) | Description   |
|-------------------|---|
| <b>On Failure</b> | <p>Specifies the action for ALM to take when a test fails. Options include:</p> <ul style="list-style-type: none"> <li>➤ <b>Do nothing.</b></li> <li>➤ <b>Stop the test set.</b></li> <li>➤ <b>Rerun the test.</b> Runs the test again up to the maximum number of times, as specified in the <b>Reruns</b> column.</li> </ul> <p>Select one or more tests in the grid and then select an option from the <b>On Failure</b> drop-down list on the toolbar.</p> <p>To select an option for a specific test, you can also click the down arrow in the <b>On Failure</b> column.</p> |
| <b>Reruns</b>     | <p>Specifies the number of times an automated test should be rerun upon failure.</p> <p>Select one or more tests in the grid and select a number in the <b>Reruns</b> box on the toolbar.</p> <p>To specify the number of reruns for a specific test, you can also select the number from the <b>Number of Reruns</b> column.</p>   |

## Paste Test Set Folders To Target Project Dialog Box

This dialog box enables you to select the way in which test sets are copied from one project to another project.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the <b>Automation</b> tab, click the <b>Settings per test</b> button.   |
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> In the source project, right-click a test set or a test set folder and select <b>Copy</b>.</li> <li><b>2</b> Open the target project in a separate browser window.</li> <li><b>3</b> In the target project, right-click a test set folder below which you want to insert the copied test set or test set folder, and select <b>Paste</b>.</li> </ol> |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>➤ Test run information is not copied.</li> <li>➤ The source and target projects must use the same ALM version and patch level.</li> </ul>   |
| <b>See also</b>              | "Test Lab Module Window" on page 721   |

User interface elements are described below:

| UI Elements (A-Z)  | Description  |
|--|--|
| <b>Copy Test Set Folders and link to existing related entities</b> | ALM copies the test sets or test set folders and pastes them into the target project. The copied test sets or test set folders are linked to existing test resources and called tests with the same name and path. If a related test resource or a test does not exist in the target project, ALM copies it to the target project. |
| <b>Copy Test Set Folders and related entities</b>                  | ALM copies the test sets or test set folders along with the related test resources and called tests, and pastes them into the target project. If a related test resource or a called test already exists in the target project, the copied related test resource or called test is renamed to resolve the duplicate name.          |
| <b>Copy Test Set Folders without copying related entities</b>      | ALM copies the test sets or test set folders without copying the related test resources or called tests, and pastes them into the target project. The copied items are not linked to any related entities.   |



# 30

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## Test Run Schedules

This chapter includes:

### Concepts

- ▶ Test Run Schedules Overview on page 782

### Tasks

- ▶ How to Schedule Test Runs on page 783

### Reference

- ▶ Test Run Schedules User Interface on page 786

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## Concepts

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### Test Run Schedules Overview

You can control the execution of test instances in a test set. Using the Execution Flow tab of the Test Lab module, you can specify a date and time, and set conditions for executing a test instance. A **condition** is based on the results of another specified test instance in the Execution Flow. By setting conditions, you can instruct the Test Lab module to postpone execution of the current test instance until the other specified test instance has either finished running or passed. You can also set the sequence in which to execute the test instances.

For task details, see "How to Schedule Test Runs" on page 783.

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## Tasks

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### How to Schedule Test Runs

This task describes how to schedule test runs in the Execution Flow tab.

To learn more about scheduling test run, see "Test Run Schedules Overview" on page 782.

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**Note:** This task is part of a higher-level task. For details, see "How to Run Tests in ALM" on page 716.

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This task includes the following steps:

- "Display a test set" on page 783
- "Schedule a test run" on page 783
- "View the execution flow diagram" on page 784

#### 1 Display a test set

In the Test Lab module, select a test set from the test lab tree. Click the **Execution Flow** tab. For user interface details, see "Execution Flow Tab" on page 787.

#### 2 Schedule a test run

- a** In the Execution Flow tab, right-click a test instance and choose **Test Run Schedule**. The Run Schedule dialog box opens.
- b** In the Execution Conditions tab, specify the execution conditions for the test instance. For user interface details, see "Execution Condition Page" on page 789.

- c In the Run Schedule dialog box, click the **Time Dependency** tab. Specify the date and time for running each test instance. For user interface details, see "Time Dependency Page" on page 792.

**Example:**

You can determine that **test\_2** will run only if **test\_1** passed, and **test\_3** will run only if **test\_2** passed. **test\_1** is scheduled to run at 9:00 AM.

### **3 View the execution flow diagram**

You can change the way the Execution Flow is displayed. This includes zooming in and out of the diagram, rearranging the tests in a hierarchical layout, refreshing the diagram, and displaying full test names in the diagram. You can also copy the diagram to the Clipboard.

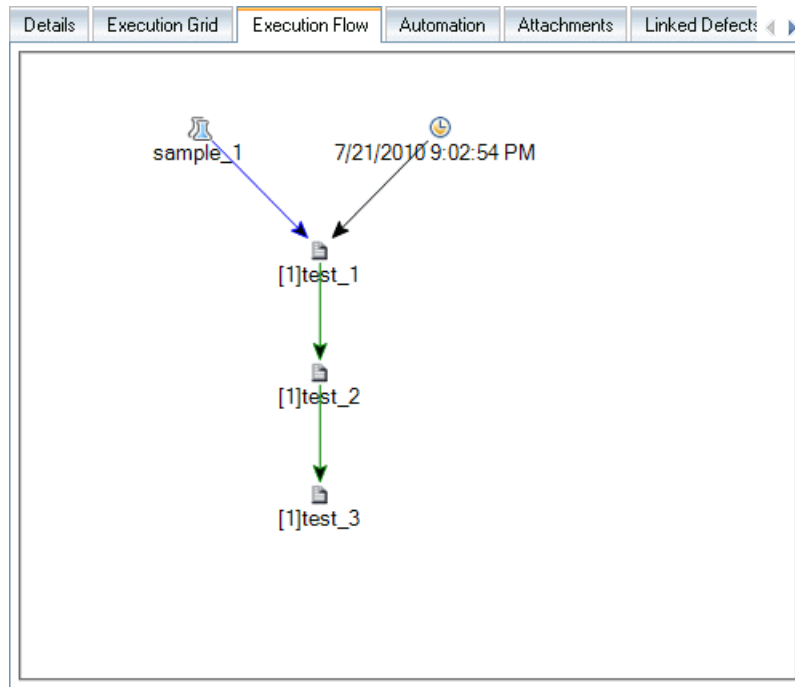
For user interface details on the menus and buttons available in the Execution Flow tab, see "Test Lab Module Menus and Buttons" on page 724.

For user interface details on the various elements in the Execution Flow diagram, see "Execution Flow Tab" on page 787.



**Example:**

The scheduled test run is displayed in the Execution Flow tab.



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## Reference

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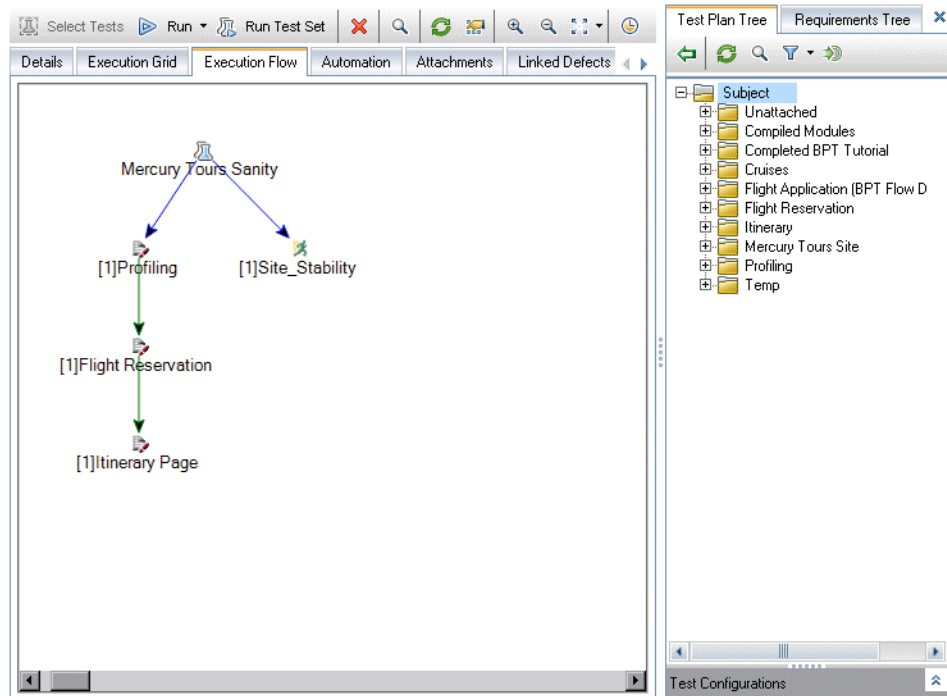
### **Test Run Schedules User Interface**

This section includes:

- ▶ Execution Flow Tab on page 787
- ▶ Execution Condition Page on page 789
- ▶ Time Dependency Page on page 792





## Execution Flow Tab

This tab displays test data in a diagram. You use the Execution Flow to control the way your test instances are executed. You can specify when and under what conditions you want a test to be executed.



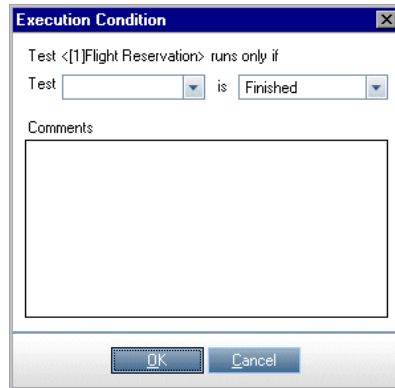
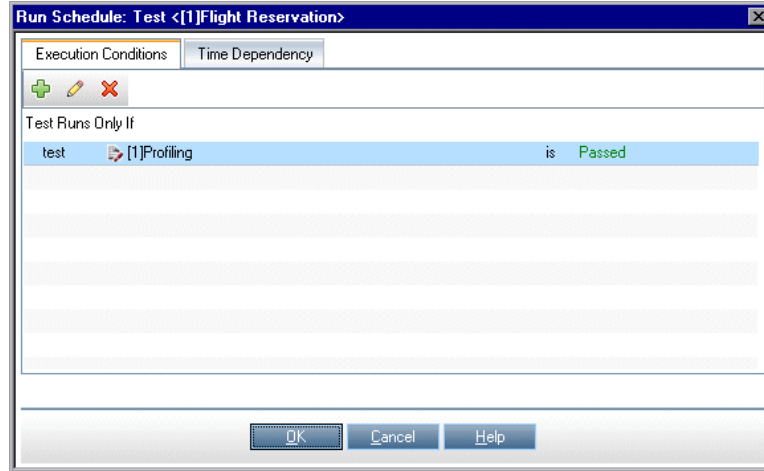
|                       |  |
|-----------------------|--|
| <b>To access</b>      | In the <b>Test Lab</b> module, click the <b>Test Sets</b> tab. Select a test set and click the <b>Execution Flow</b> tab.  |
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Schedule Test Runs" on page 783</li> <li>➤ "How to Run Tests in ALM" on page 716</li> </ul>   |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Test Run Schedules Overview" on page 782</li> <li>➤ "Test Execution Overview" on page 714</li> <li>➤ "Test Lab Module Window" on page 721</li> </ul> |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements                         | Description  |
|-------------------------------------|--|
| <Test Lab module menus and buttons> | For details on the menu options and toolbar buttons available in the Test Lab module, see "Test Lab Module Menus and Buttons" on page 724.   |
| <Test Lab module icons>             | For details on the icons available in the Test Lab module, see "Test Lab Module Icons" on page 742.  |
| <Execution Flow diagram area>       | <p>Displays the test instances with conditions in a diagram.</p> <ul style="list-style-type: none"> <li>▶ A blue line  arrow indicates that the test instance is to be executed after the previous test instance, with no conditions.</li> <li>▶ A green line  arrow indicates that the test instance is to be executed only if the previous test instance has status <b>Passed</b>.</li> <li>▶ A black line  arrow indicates that the test instance is to be executed only if the previous test instance has finished running.</li> <li>▶ When a test instance is time-dependent, a Time Dependency  icon is added to the diagram.</li> </ul> |
| <Select Tests pane>                 | Displays the Test Plan Tree tab and the Requirements Tree tab, enabling you to select tests to add to the selected test set. For details, see "Select Tests Pane" on page 767.   |




## Execution Condition Page

This page enables you to specify under what conditions you want a test instance to be executed.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <p>Use one of the following in the Execution Flow tab:</p> <ul style="list-style-type: none"> <li>▶ Right-click a test instance and choose <b>Test Run Schedule</b>. The Run Schedule dialog box opens and displays the Execution Conditions tab.</li> <li>▶ Right-click a condition arrow and choose <b>Execution Condition</b>. The Execution Condition dialog box opens.</li> </ul> |
| <b>Important information</b> | <p><b>Tip:</b> You can also add a condition directly in the Execution Flow. Click a test icon (not the test name) and drag the arrow to another test. By default, the condition is set to <b>Finished</b>. To change the condition, double-click the condition arrow and select <b>Passed</b>.</p>   |
| <b>Relevant tasks</b>        | "How to Schedule Test Runs" on page 783  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "Time Dependency Page" on page 792</li> <li>▶ "Test Run Schedules Overview" on page 782</li> </ul>  |

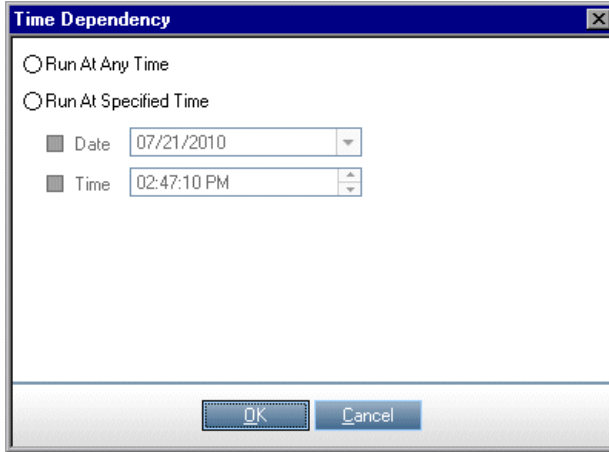
User interface elements are described below:



| UI Elements (A-Z)   | Description.  |
|---|---|
|    | <p><b>New Execution Condition.</b> Opens the New Execution Condition dialog box, enabling you to define a new execution condition.</p> <p><b>Available from:</b> The Run Schedule dialog box &gt; Execution Conditions tab.</p> |
|  | <p><b>Edit Execution Condition.</b> Opens the Execution Condition dialog box, enabling you to edit an execution condition.</p> <p><b>Available from:</b> The Run Schedule dialog box &gt; Execution Conditions tab.</p>         |
|  | <p><b>Delete Execution Condition.</b> Deletes a selected execution condition.</p> <p><b>Available from:</b> The Run Schedule dialog box &gt; Execution Conditions tab.</p>  |

| UI Elements (A-Z)        | Description.   |
|--------------------------|--|
| <b>Comments</b>          | <p>Comments regarding the condition.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p> <p><b>Available from:</b> The Execution Condition dialog box.</p>   |
| <b>is</b>                | <p>Specifies the execution condition. It includes the following options:</p> <p><b>Finished.</b> Executes the current test instance only after the specified test instance has finished executing.</p> <p><b>Passed.</b> Executes the current test instance only if the specified test instance has finished executing and has passed.</p> |
| <b>Test</b>              | The test instance on which you want the current test to be dependent.  |
| <b>Test runs only if</b> | The execution conditions of the specified test instance.   |

## Time Dependency Page

This page enables you to specify when you want a test instance to be executed.



|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <p>Use one of the following in the Execution Flow tab:</p> <ul style="list-style-type: none"> <li>▶ Right-click a test instance and choose <b>Test Run Schedule</b>. Click the Time Dependency tab.</li> <li>▶ Right-click the <b>Time Dependency</b>  icon connected to a test instance. The Time Dependency dialog box opens.</li> </ul> |
| <p><b>Important information</b></p> | <p><b>Tip:</b> You can schedule the test run date and time by clicking the <b>Add Time Dependency To Flow</b>  button, and linking the arrow from the icon to a test instance. Double-click the icon to set the time in the Time Dependency dialog box.</p>   |
| <p><b>Relevant tasks</b></p>        | <p>"How to Schedule Test Runs" on page 783</p>   |
| <p><b>See also</b></p>              | <ul style="list-style-type: none"> <li>▶ "Execution Condition Page" on page 789</li> <li>▶ "Test Run Schedules Overview" on page 782</li> </ul>  |



User interface elements are described below:

| UI Elements (A-Z)            | Description.  |
|------------------------------|---|
| <b>Run at any time</b>       | The test instance runs at a non-specific time.  |
| <b>Run at specified time</b> | The test instance runs at a specific time. You can specify the following: <ul style="list-style-type: none"><li>▶ <b>Date.</b> Indicates the date for running the test instance.</li><li>▶ <b>Time.</b> Indicates the time for running the test instance.</li></ul> |



# 31

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## Manual Test Execution

This chapter includes:

### Concepts

- ▶ Manual Test Execution Overview on page 796
- ▶ HP Sprinter Overview on page 796

### Tasks

- ▶ How to Run Tests Manually on page 799

### Reference

- ▶ Manual Test Execution User Interface on page 803

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## Concepts

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### **Manual Test Execution Overview**

When you run tests manually, you follow the test steps and perform operations on the application under test. You pass or fail each step, depending on whether the actual application results match the expected output. You can run both manual and automated tests manually.

You can execute tests more than once in the same set. Each execution is considered a new test run. You can also resume a manual test run that was paused during execution.

If you decide to modify test steps during a test run, you can choose to save the modifications in the original test and in the test instance. Alternatively, you can save them for the current test run only.

After test execution is complete, you can view a summary of results for all test runs, and view more detailed results for each test instance.

You run tests manually in ALM using HP Sprinter, HP's solution for manual testing. For details, see "HP Sprinter Overview" on page 796.

If you are not working with Sprinter, you run tests manually using Manual Runner.

For task details, see "How to Run Tests Manually" on page 799.

### **HP Sprinter Overview**

You run tests manually from HP Application Lifecycle Management (ALM) using HP Sprinter. Sprinter provides advanced functionality and tools to assist you in the manual testing process. Sprinter is fully integrated with ALM, enabling you to get the maximum benefit from both solutions.

---

**Note:**

- ▶ **ALM Editions:** Sprinter functionality is not available with Quality Center Starter Edition or Performance Center Edition.
  - ▶ If you are not working with Sprinter, you can run tests manually with the Manual Runner.
- 

Manual testing often requires that you leave your testing application to accomplish tasks related to your test. For example, you may need to use graphic software to take a screen capture of your application, you may want to record a movie of the application during the test, and you need to switch to your defect tracking software to report defects.

Sprinter addresses these needs of the manual testing process, and enables you to accomplish these tasks without disrupting your test flow. With Sprinter, you can also perform many of the repetitive and tedious tasks of manual testing automatically. Sprinter includes many tools to help you detect and submit defects. These features ensure that you can perform all the tasks necessary for your manual test with minimum interruptions to your testing work.

With Sprinter you can:

- ▶ create and annotate screen captures
- ▶ capture movies of your run
- ▶ record and run macros on your test application
- ▶ automatically enter data into fields in your application
- ▶ automatically include the list of your steps or user actions in any defect you submit
- ▶ replicate your user actions on multiple machines with different configurations

All this functionality is available from within Sprinter, and can be used without interrupting the flow of your manual test.

For full details on installing and working with Sprinter, refer to the *HP Sprinter Readme* and the *HP Sprinter User Guide*, available on the HP Application Lifecycle Management Add-ins page (select **Help > Add-ins Page**).

For details on customizing ALM default settings for Sprinter, see the *HP Application Lifecycle Management Administrator Guide*.

To run tests manually in ALM using Sprinter, see "How to Run Tests Manually" on page 799.

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## Tasks

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### How to Run Tests Manually

This task describes how to run tests manually. You can run both manual and automated tests manually.

To learn more about running tests manually, see "Manual Test Execution Overview" on page 796.

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#### Note:

- ▶ This task is part of a higher-level task. For details, see "How to Run Tests in ALM" on page 716.
- ▶ **ALM Editions:** Sprinter functionality described in this section is not available with Quality Center Starter Edition or Performance Center Edition.

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This task includes the following steps:

- ▶ "Prerequisites" on page 800
- ▶ "Run tests with Sprinter" on page 800
- ▶ "Edit test steps during a test run" on page 801
- ▶ "Resume a manual test run" on page 802

## 1 Prerequisites

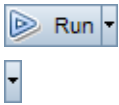
For enhanced functionality and a variety of tools to assist in the manual testing process, run tests with HP Sprinter. To learn more about Sprinter, see "HP Sprinter Overview" on page 796.

To run tests with Sprinter, you must install Sprinter on your client machine. To download and install Sprinter, select **Help > Add-ins Page** to open the HP Application Lifecycle Management Add-ins page, and click the **HP Sprinter** add-in link.

## 2 Run tests with Sprinter

If Sprinter is installed on your computer, you can run tests manually with Sprinter from the Test Lab module.

In the Test Lab module > Test Sets tab, select a test set and click the **Execution Grid** tab or **Execution Flow** tab.



- ▶ To run a single manual test, select the test and click the **Run** button.
- ▶ To run two or more manual tests, select the tests. Click the drop-down arrow next to the **Run** button and select **Run with Sprinter**.

For details on working with Sprinter, refer to the *HP Sprinter User Guide*, available on the HP Application Lifecycle Management Add-ins page.

## 3 Run tests from the Manual Runner dialog box

If you are not working with Sprinter, you can also run tests manually from the Manual Runner dialog box.



- a** In the Test Lab module > Test Sets tab, select a test set and click the **Execution Grid** tab or **Execution Flow** tab. Select the tests, click the drop-down arrow next to the **Run** button, and select **Run with Manual Runner**. For user interface details on the Manual Runner wizard, see "Manual Runner Wizard" on page 805.
- b** Open the application being tested and execute the test steps. Follow the instructions detailed in the test step descriptions.
- c** Compare the actual results with the expected results. When performing the steps, decide whether the application responds according to the expected results.



- d Assign a pass or fail status to each step, depending on whether or not the expected results match the actual results.
- e If a step fails, explain how the application actually responded. A test fails if one or more steps fail.

#### 4 Edit test steps during a test run

While executing a test using the Manual Runner, you can add, delete, or modify test steps. After you finish executing the test, you can save your design steps with the changes you make.

Edit test steps during a manual run from the **Manual Runner: Step Details** page. For user interface details, see "Manual Runner: Step Details Page" on page 809.

##### Example:

You can read and review each step, and also add, delete, or modify test steps.

The screenshot shows the 'Manual Runner: Test Set <Mercury Tours Functionality>, Test <[1]Departing Date>' window. It features a toolbar with various icons and a table of test steps. Below the table is a 'Description' and 'Condition' editor with a text area containing a placeholder for a description. At the bottom, there are 'Expected' and 'Actual' result fields.

| Step Name           | Status | Exec Date | Exec Time  |
|---------------------|--------|-----------|------------|
| Connect to Merc...  | No Run | 7/19/2010 | 7:57:52 PM |
| Sign-On to Merc...  | No Run | 7/19/2010 | 7:57:52 PM |
| Preparation         | No Run | 7/19/2010 | 7:57:52 PM |
| Step 1: Past Dep... | No Run | 7/19/2010 | 7:57:52 PM |
| Step 2: Departin... | No Run | 7/19/2010 | 7:57:52 PM |
| Step 3: Future D... | No Run | 7/19/2010 | 7:57:52 PM |

Description: Open your Web browser and type the <<font face="Arial"><span style="font-size:8pt">ssss</span></font>>.

Expected: The Mercury Tours site opens.

Actual:

## 5 Resume a manual test run

If a manual test run was paused during execution, you can continue the run at a later stage. This continues the run using the same runner that was used the first time the test was run (Sprinter or the Manual Runner).

Use one of the following:

- ▶ In the Execution Grid tab or Execution Flow tab, select the test you want to resume running, and select **Tests > Continue Manual Run**. Alternatively, click the **Run** arrow and choose **Continue Manual Run**.

---

**Note:** This continues the last run of the selected test. If you want to resume running a previous run, click the **Test Instance Details** button, click **Runs** on the sidebar, and select the test run you want to resume. Click the **Continue Manual Run** button.

---

- ▶ In the Test Lab > Test Runs tab, select the test run you want to resume and click the **Continue Manual Run** button.

If you select multiple test instances in the Execution Grid, or multiple runs in the Test Runs tab, all selected runs continue. If, however, the last test selected in the grid was run with Sprinter, only that run continues.

## 6 Results

After test execution is complete, you can view a summary of test results in the Test Lab module:

- ▶ **Test Sets tab.** The updated status for each test run is displayed in the Execution Grid. Results for each test step appear in the **Last Run Report** pane. You can view more detailed results in the Test Instance Details dialog box.
- ▶ **Test Runs tab.** The updated status for each test run in the project is displayed.

For more details on viewing test results, see "How to View Test Results" on page 833.

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## Reference

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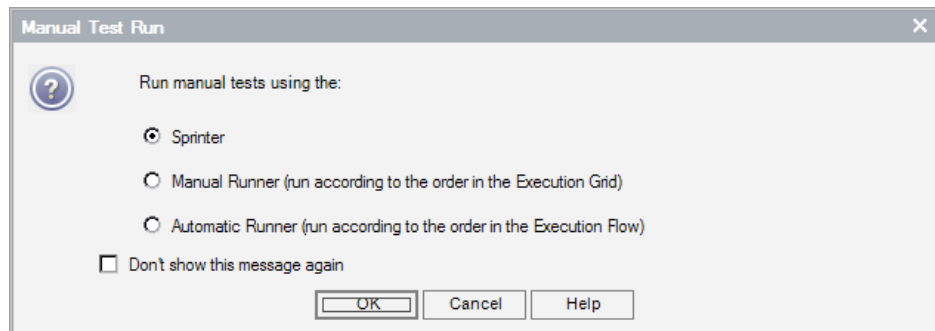
### Manual Test Execution User Interface

This section includes:

- ▶ Manual Test Run Dialog Box on page 803
- ▶ Manual Runner Wizard on page 805

### Manual Test Run Dialog Box

This dialog box enables you to select whether to run tests using Sprinter, the Manual Runner, or the Automatic Runner.



|                       |   |
|-----------------------|---|
| <b>To access</b>      | <p>In the Test Lab module &gt; Test Sets tab, select a test set and use one of the following:</p> <ul style="list-style-type: none"> <li>▶ To run an entire test set that contains only manual tests, click the <b>Run Test Set</b> button.</li> <li>▶ In the <b>Execution Grid</b> tab or <b>Execution Flow</b> tab, select two or more manual tests and click the <b>Run</b> button.</li> </ul> |
| <b>Relevant tasks</b> | "How to Run Tests Manually" on page 799   |
| <b>See also</b>       | "Manual Test Execution Overview" on page 796  |

User interface elements are described below:

| UI Elements                          | Description   |
|--------------------------------------|---|
| <b>Sprinter</b>                      | <p>Opens Sprinter and runs the selected tests manually according to the order displayed in the Execution Grid. For details on Sprinter, see the "HP Sprinter Overview" on page 796.</p> <p>This option is displayed only if Sprinter is installed on your computer. <b>ALM Editions:</b> Sprinter functionality is not available with Quality Center Starter Edition or Performance Center Edition.</p> |
| <b>Manual Runner</b>                 | <p>Runs the selected tests manually from the Manual Runner dialog box according to the order displayed in the Execution Grid. For more details on the Manual Runner, see "Manual Runner Wizard" on page 805.</p>  |
| <b>Automatic Runner</b>              | <p>Runs the selected tests automatically according to conditions defined in the Execution Flow. For more details on running tests automatically, see "Automatic Runner Dialog Box" on page 821.</p>   |
| <b>Don't show this message again</b> | <p>Instructs ALM to run manual tests without first displaying this dialog box. To enable, select <b>Tests &gt; Enable Manual Test Run Confirmation</b>.</p>   |

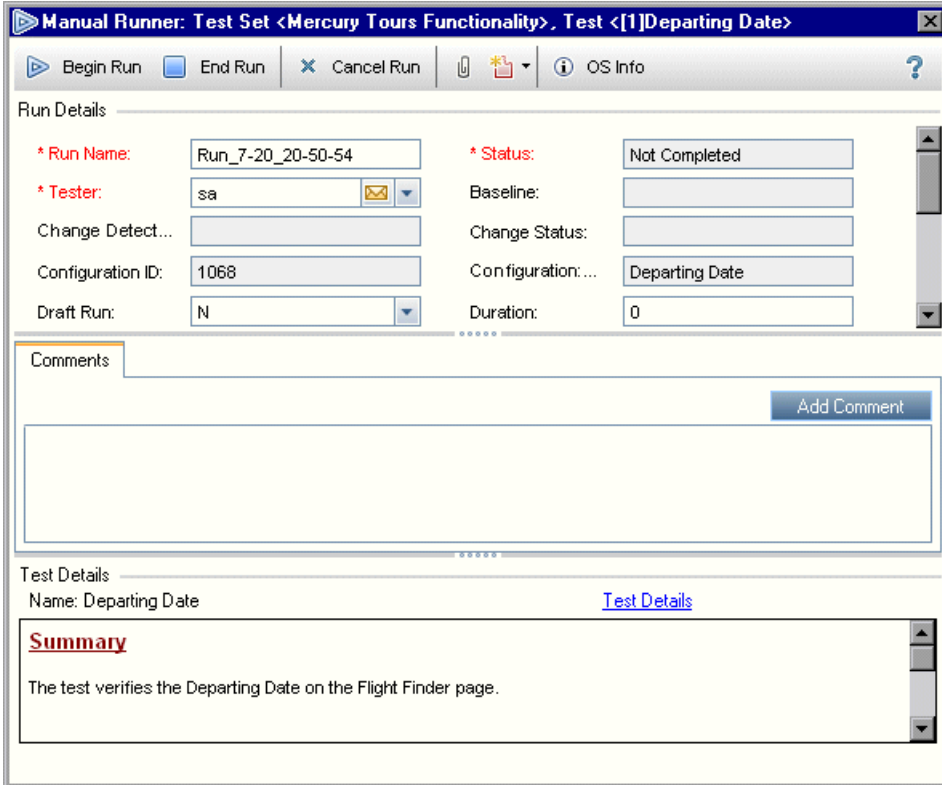
## Manual Runner Wizard

This wizard enables you to run tests manually. You can run both manual and automated tests manually.

|                       |  |
|-----------------------|--|
| <b>To access</b>      | In the Test Lab module > Test Sets tab, select a test set and click the <b>Execution Grid</b> tab or <b>Execution Flow</b> tab. Select one or more tests and select <b>Tests &gt; Run with Manual Runner</b> . |
| <b>Relevant tasks</b> | "How to Run Tests in ALM" on page 716  |
| <b>Wizard map</b>     | This wizard contains:<br>Manual Runner: Run Details Page > Manual Runner: Step Details Page  |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Test Execution Overview" on page 714</li> <li>➤ "Manual Test Execution Overview" on page 796</li> </ul>  |


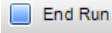
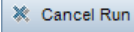


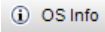
## Manual Runner: Run Details Page

This wizard page enables you to review run details and run tests manually.



|                                     |  |
|-------------------------------------|--|
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ General information about this wizard is available here: "Manual Runner Wizard" on page 805.</li> <li>▶ You can run a test instance as a draft run using the <b>Draft Run</b> field. For more details, see "Draft Runs" on page 715.</li> </ul> |
| <p><b>Wizard map</b></p>            | <p>The Manual Runner Wizard contains:</p> <p><b>Manual Runner: Run Details Page</b> &gt; Manual Runner: Step Details Page</p>  |
| <p><b>See also</b></p>              | <p>"Manual Test Execution Overview" on page 796</p>  |

User interface elements are described below:

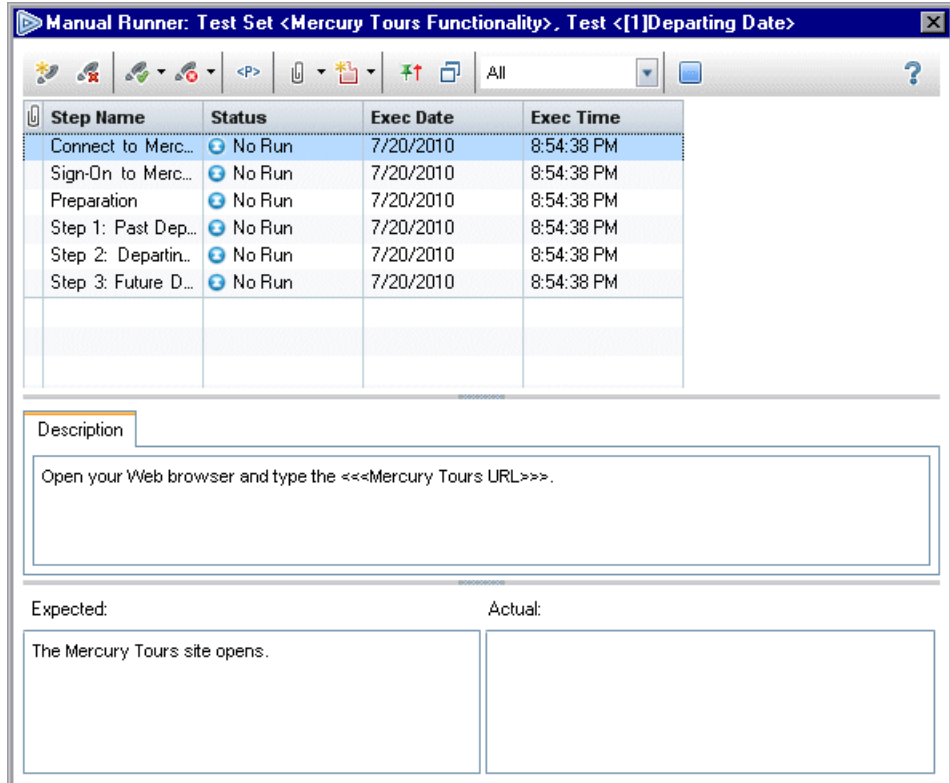
| UI Elements (A-Z)   | Description  |
|---|--|
|    | <p>Starts the test run.</p> <p>If the test you are running has parameters that have not been assigned actual values, the Parameters of Test dialog box opens. Assign actual values for the parameters. For details, see "Called Test Parameters/Parameters of Test Dialog Box" on page 598.</p>  |
|    | <p>Ends the test run. ALM saves the test run.</p>  |
|    | <p>Cancels the test run.</p> <p>To cancel the run completely without saving, click <b>No</b> to confirm.</p>   |
|    | <p><b>Attach to Run.</b> Opens the Attachment page, enabling you to view and add attachments to the test run. For details, see "Attachments Page" on page 90.</p>  |
|    | <p><b>New Defect.</b> Opens the New Defect dialog box, enabling you to add a defect to the test run. For details, see "New Defect Dialog Box" on page 894. ALM automatically creates a link between the test run and the new defect. For details, see "Defect Linkage" on page 867.</p> <p>To view linked defects for a selected test run, click the <b>New Defect</b> arrow and select <b>Linked Defects</b>.</p>   |
|  | <p><b>Operating System Information.</b> Opens the Operating System Information dialog box. You can edit the following:</p> <ul style="list-style-type: none"> <li>▶ <b>Operating System.</b> The operating system on the machine where you perform your test steps. By default, the operating system on your ALM client machine is displayed.</li> <li>▶ <b>OS Service Pack.</b> The operating system service pack.</li> <li>▶ <b>OS Build Number.</b> The operating system build number.</li> </ul> |

| UI Elements (A-Z)   | Description   |
|---------------------|---|
| <b>Comments tab</b> | Comments for the current test run. Click <b>Add Comment</b> to add a comment.   |
| <b>Run Details</b>  | Displays information about the test run. Required fields are displayed in red. For details on the available fields, see "Test Lab Module Fields" on page 744. |
| <b>Test Details</b> | Opens the Test Details dialog box, enabling you to view and update details about the test. For more details, see "Test Plan Module Window" on page 519.       |



## Manual Runner: Step Details Page

This wizard page enables you add, delete, or modify test steps during the test run. After you finish executing the test, you can save your design steps with the changes you make.



| Step Name           | Status | Exec Date | Exec Time  |
|---------------------|--------|-----------|------------|
| Connect to Merc...  | No Run | 7/20/2010 | 8:54:38 PM |
| Sign-On to Merc...  | No Run | 7/20/2010 | 8:54:38 PM |
| Preparation         | No Run | 7/20/2010 | 8:54:38 PM |
| Step 1: Past Dep... | No Run | 7/20/2010 | 8:54:38 PM |
| Step 2: Departin... | No Run | 7/20/2010 | 8:54:38 PM |
| Step 3: Future D... | No Run | 7/20/2010 | 8:54:38 PM |

Description

Open your Web browser and type the <<<Mercury Tours URL>>>.





Expected:







The Mercury Tours site opens.

Actual:

|                                     |   |
|-------------------------------------|---|
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ General information about this wizard is available here: "Manual Runner Wizard" on page 805.</li> <li>▶ If you modify test steps during a test run, you can choose to save the modifications in the original test in the Test Plan module and in the test instance in the Test Lab module. Alternatively, you can save them for the current test run only.</li> <li>▶ The Test Lab module enables you to update changes made to called tests in the current test run only. The called tests are not affected. For more information on called tests, see "Design Steps Tab/Design Step Details Dialog Box" on page 610.</li> <li>▶ If you are running a business process test, refer to the <i>HP Business Process Testing User Guide</i>.</li> </ul> |
| <p><b>Wizard map</b></p>            | <p>The Manual Runner Wizard contains:<br/>Manual Runner: Run Details Page &gt; <b>Manual Runner: Step Details Page</b></p>  |
| <p><b>See also</b></p>              | <p>"Manual Test Execution Overview" on page 796</p>   |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Add Step.</b> A new step with a default step name is added to the test. You can type details about the new step in the <b>Description</b> box.</p>                                  |
|  | <p><b>Delete Selected.</b> Deletes the selected steps.</p>  |
|  | <p><b>Pass Selected.</b> Changes the status of selected test steps to <b>Passed</b>. To pass all test steps at once, click the <b>Pass Selected</b> arrow and select <b>Pass All</b>.</p> |
|  | <p><b>Fail Selected.</b> Changes the status of selected test steps to <b>Failed</b>. To fail all test steps at once, click the <b>Fail Selected</b> arrow and select <b>Fail All</b>.</p> |

| UI Elements (A-Z)   | Description  |
|---|--|
|    | <p><b>Show Parameters.</b> Opens the Parameters of Test Run dialog box, enabling you to view the values of test parameters. For details, see "Parameters Tab/Parameters Dialog Box" on page 593.</p>   |
|    | <p><b>Attach to Step.</b> Opens the Attachment page, enabling you to view and add attachments to the test step. For details, see "Attachments Page" on page 90.</p> <p>To add attachments to the entire test run, click the <b>Attachments</b> arrow and select <b>Attach to Run</b>.</p>  |
|    | <p><b>New Defect.</b> Opens the New Defect dialog box, enabling you to add a defect to the step. ALM automatically creates a link between the test step and the new defect. For details, see "New Defect Dialog Box" on page 894 and "Defect Linkage" on page 867.</p> <p>To view linked defects for a selected test step, click the <b>New Defect</b> arrow and select <b>Linked Defects</b>.</p> |
|    | <p><b>Keep on Top.</b> Displays the Manual Runner: Step Details dialog box on top of all open windows.</p> <p>To display selected windows on top of the Manual Runner: Step Details dialog box, click the <b>Not on Top</b> button.</p>  |
|  | <p><b>Compact View.</b> Opens the compact view display of this dialog box, enabling you to conveniently read each test step and record the results.</p> <p>To return to the steps grid, click the <b>Back to Steps Grid</b> button.</p>  |
|  | <p><b>End Run.</b> Ends the run.</p> <p>If you added, deleted, or modified test steps during the run, a confirmation box opens. Select one of the following:</p> <ul style="list-style-type: none"> <li>➤ <b>Yes.</b> Saves your changes and updates the test in the Test Plan and Test Lab modules.</li> <li>➤ <b>No.</b> Saves your changes in the current test run only.</li> </ul>             |

| UI Elements (A-Z)  | Description   |
|--------------------|---|
| <Filter by>        | Filters the steps in the test according to the <b>Status</b> column.  |
| <Grid fields>      | View or edit details about the test steps. For details on the available fields, see "Test Lab Module Fields" on page 744. |
| <b>Actual</b>      | The actual result of the selected test step.  |
| <b>Description</b> | A description of the selected test step.  |
| <b>Expected</b>    | The expected result of the selected test step.  |

# 32

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## Automatic Test Execution

This chapter includes:

### Concepts

- ▶ Automatic Test Execution Overview on page 814

### Tasks

- ▶ How to Run Tests Automatically on page 816

### Reference

- ▶ Automatic Test Execution User Interface on page 820

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## Concepts

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### Automatic Test Execution Overview

You can run tests automatically, directly from HP Application Lifecycle Management (ALM). You can choose to run tests on your machine or on remote hosts. A **host** is any machine connected to your network on which a testing tool has already been installed.

You can choose to run all of the tests in a test set, or specific tests, including both automated and manual tests.

When you run an automated test, ALM opens the selected testing tool automatically, runs the test on your local machine or on remote hosts, and exports the results to ALM.

When you run a manual test from the Automatic Runner dialog box, ALM notifies a designated tester by email to run the test on a specified host.

You can also run an automated system test to provide system information, capture a desktop image, or restart a machine. For details on system tests, see "System Tests Overview" on page 650.

For task details, see "How to Run Tests Automatically" on page 816.

## QuickTest Professional Test Execution

When running QuickTest Professional tests, consider the following:

- ▶ To enable ALM to run QuickTest Professional tests on a remote host, open the relevant application on the remote host and select the required option. For more information, refer to the *HP QuickTest Professional User Guide*.
- ▶ Before running a QuickTest test, ALM loads the QuickTest add-ins that are associated with the selected test. You must ensure that you run the test on a machine on which the required QuickTest add-ins are installed. For more information on working with add-ins and associated add-in lists in QuickTest, refer to the QuickTest Professional documentation and the relevant QuickTest add-in documentation.
- ▶ When you run QuickTest Professional tests from the Test Lab module, they are automatically run in **Fast** mode. They cannot be run in **Normal** mode.
- ▶ By default, ALM closes QuickTest Professional at the end of a test set run. This ensures that the QuickTest license is released at that point and made available for other QuickTest users. To keep QuickTest open after a test set run, you can edit the **SUPPORT\_TESTSET\_END** parameter in the Site Configuration tab in Site Administration. For details, see the *HP Application Lifecycle Management Administrator Guide*.

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## Tasks

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### How to Run Tests Automatically

This task describes how to run manual and automated tests automatically.

To learn more about running tests automatically, see "Automatic Test Execution Overview" on page 814.

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**Note:** This task is part of a higher-level task. For details, see "How to Run Tests in ALM" on page 716.

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This task includes the following steps:

- "Prerequisites" on page 817
- "Schedule and order test execution" on page 817
- "Run a test concurrently on multiple hosts" on page 818
- "Run tests" on page 818
- "View the execution log" on page 819
- "Results" on page 819



## 1 Prerequisites

Before running tests automatically, you must set up host computers for the remote execution of automated tests, and assign testers for the execution of manual tests.

- ▶ **Set up hosts for remote test execution.** In the Test Lab module, Test Sets tab, select **Test Sets > Host Manager**. For user interface details, see "Host Manager Dialog Box" on page 824.
- ▶ **Designate testers for running manual tests.** When you run a manual test automatically, ALM notifies a designated tester by email to run the test. This notification can be sent only if you have designated a tester for the test with a valid email address.

To designate a tester, locate the test in the Execution Grid tab, and select a user in the **Responsible Tester** column.

## 2 Schedule and order test execution

You can decide how and when tests are run:

**Scheduling.** You can specify the date and time, and set conditions for executing your tests. For task details, see "How to Schedule Test Runs" on page 783.

**Ordering.** You can set the order in which you want your tests to be executed, using the Order Test Instances dialog box. Use one of the following:

- ▶ In the Execution Flow, press the CTRL key and select two or more tests. Right-click a test and select **Order Test Instances**.
- ▶ In the Execution Grid, select **Tests > Order Test Instances**.

For user interface details on the Order Test Instances dialog box, see "Order Test Instances Dialog Box" on page 827.

### 3 Run a test concurrently on multiple hosts

To run the same test concurrently on multiple remote hosts, add multiple instances of the test to your test set. For user interface details on adding test instances to test sets, see "Select Tests Pane" on page 767.

### 4 Run tests

Run manual and automated tests automatically on your machine or on remote hosts using the Automatic Runner.

In the Test Lab module > Test Sets tab, use one of the following:

- ▶ Select a test set that includes one or more automated tests and click the **Run Test Set** button.
- ▶ To run selected tests, select a test set and click the **Execution Grid** tab or **Execution Flow** tab. Select one or more tests and click the **Run** button.
- ▶ To run only manual tests, select the tests and click the **Run** button. In the Manual Test Run dialog box, select **Automatic Runner** and click **OK**.

For user interface details on the Automatic Runner, see "Automatic Runner Dialog Box" on page 821.

## 5 View the execution log

You can view details about the automatic test execution after execution is complete. In the Automatic Runner dialog box, select **Run > View Execution Log**. For user interface details, see "Execution Log Dialog Box" on page 829.

## 6 Results

After the test execution is complete, you can view a summary of test results in the Test Lab module:

- ▶ **Test Sets tab.** The updated status for each test run is displayed in the Execution Grid. Results for each test step appear in the Last Run Result pane. You can view more detailed results in the Test Instance Details dialog box.
- ▶ **Test Runs tab.** The updated status for each test run in the project is displayed

For more details on viewing test results, see "How to View Test Results" on page 833.

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## Reference

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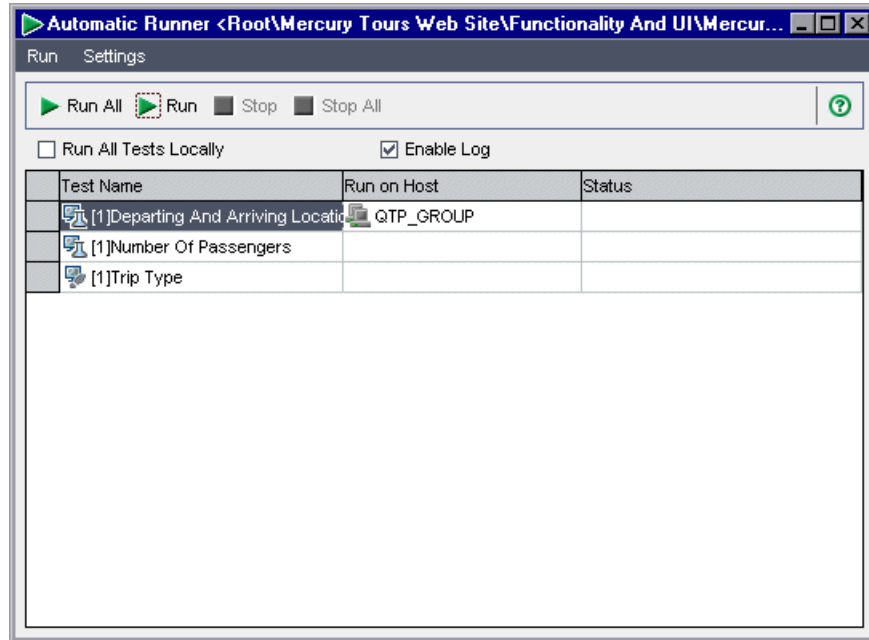
### **Automatic Test Execution User Interface**

This section includes:

- ▶ Automatic Runner Dialog Box on page 821
- ▶ Host Manager Dialog Box on page 824
- ▶ Order Test Instances Dialog Box on page 827
- ▶ Execution Log Dialog Box on page 829

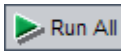

## Automatic Runner Dialog Box


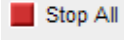
This dialog box enables you to run tests automatically. You can run an entire test set or specific tests, including both automated and manual tests.



|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <p>In the Test Lab module &gt; Test Sets tab, use one of the following:</p> <ul style="list-style-type: none"> <li>➤ Select a test set that includes one or more automated tests and click the <b>Run Test Set</b> button.</li> <li>➤ To run selected tests, select a test set and click the <b>Execution Grid</b> tab or <b>Execution Flow</b> tab. Select one or more tests and click the <b>Run</b> button.</li> <li>➤ To run only manual tests, select the tests and click the <b>Run</b> button. In the Manual Test Run dialog box, select <b>Automatic Runner</b> and click <b>OK</b>.</li> </ul>  |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>➤ For an automated test, ALM opens the selected testing tool automatically and runs the test. Test execution commences only when the selected host becomes available to run tests.</li> <li>➤ For a manual test, ALM notifies a designated tester by email to run the test. This notification can be sent only if you designate a tester for the test in the <b>Responsible Tester</b> field in the Execution Grid.</li> <li>➤ To run several test sets concurrently on multiple remote hosts, open a new Automatic Runner dialog box instance for each test set.</li> <li>➤ For additional considerations when running QuickTest Professional tests, see "QuickTest Professional Test Execution" on page 815.</li> </ul> |
| <p><b>Relevant tasks</b></p>        | <p>"How to Run Tests in ALM" on page 716</p>   |
| <p><b>See also</b></p>              | <ul style="list-style-type: none"> <li>➤ "Test Execution Overview" on page 714</li> <li>➤ "Automatic Test Execution Overview" on page 814</li> <li>➤ "Test Lab Module Window" on page 721</li> </ul>   |

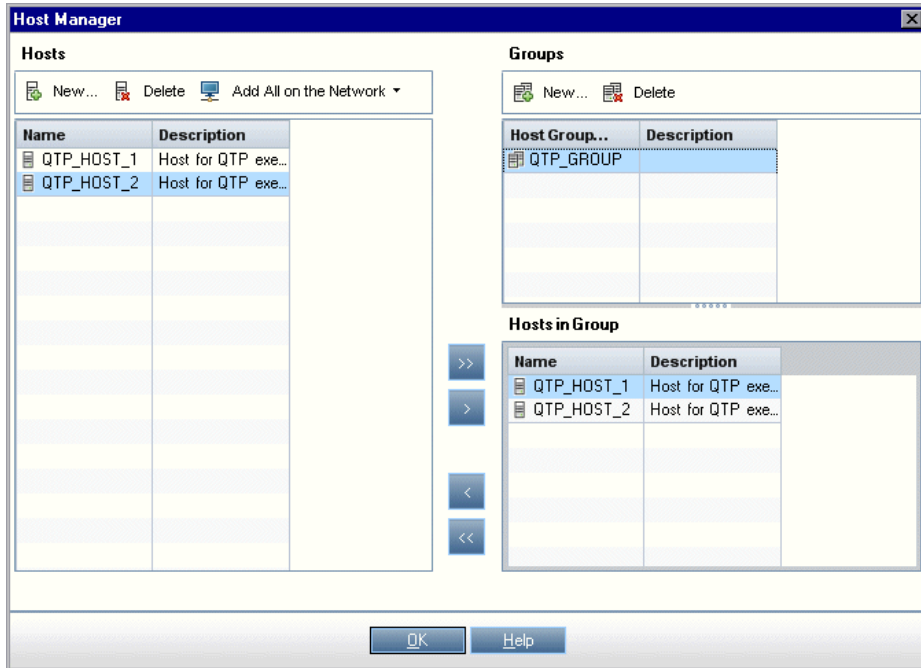
User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Run All Tests.</b> Runs all the tests in the Automatic Runner dialog box.</p> |
|  | <p><b>Run Selected Tests.</b> Runs the selected tests.</p>                          |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Stop the Run.</b> Terminates text execution before it completes.  |
|  | <b>Stop All Runs.</b> Terminates all tests that are running in the Automatic Runner dialog box.  |
| <b>Deselect All</b>   | Clears selection of all tests in the Automatic Runner dialog box.<br><b>Available from:</b> Run menu   |
| <b>Enable Log</b>   | Creates an execution log file during the test run.<br>To view the execution log after text execution, select <b>Run &gt; View Execution Log</b> . For more details, see "Execution Log Dialog Box" on page 829.  |
| <b>Invert Selection</b>   | Selects or clears the selection of all tests in the Automatic Runner dialog box.<br><b>Available from:</b> Run menu  |
| <b>Run All Tests Locally</b>  | Executes all tests on your local machine.  |
| <b>Run on Host</b>  | The host machine designated to remotely run the test.<br>To execute tests remotely, select a host machine for each test. You must first clear the <b>Run All Tests Locally</b> check box.<br>Click the <b>Run on Host</b> grid box, and click the browse button. The Select Host dialog box opens. Under <b>&lt;Any Host&gt;</b> , select a host or host group to run the test.<br>If you select a host group, ALM runs the test on the first available host in the group, not on every host in the group. |
| <b>Run Selected</b>   | Runs selected tests in the Automatic Runner dialog box.<br><b>Available from:</b> Run menu   |
| <b>Select All</b>   | Selects all tests in the Automatic Runner dialog box.<br><b>Available from:</b> Run menu   |
| <b>Status</b>   | Displays text execution progress.  |
| <b>Test Name</b>  | The name of the test to be run.  |

## Host Manager Dialog Box



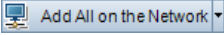




This dialog box enables you to create a list of available hosts for remote test execution. You can also organize hosts into groups to be used for a specific project.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Test Lab module, Test Sets tab, select <b>Test Sets &gt; Host Manager</b> .   |
| <b>Important information</b> | If you specify a host group for remote test execution, ALM runs the test on the first available host, and not on every host in the host group. |
| <b>Relevant tasks</b>        | "How to Run Tests Automatically" on page 816   |
| <b>See also</b>              | "Automatic Test Execution Overview" on page 814  |



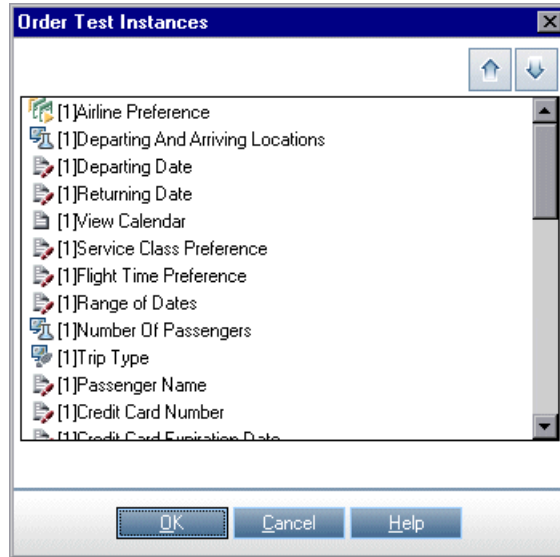
User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|    | <b>New Host.</b> Opens the New Host dialog box, enabling you to add a host to the <b>Hosts</b> list.  |
|    | <b>Delete Host.</b> Deletes a selected host from the Hosts list.  |
|    | <p><b>Add All on the Network.</b> Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Add All on the Network.</b> ALM scans the Network Neighborhood directory and inserts each host found into the <b>Hosts</b> list.</li> <li>▶ <b>Synchronize Hosts in the Project with Hosts on Net.</b> Synchronizes the hosts in the <b>Hosts</b> list with the hosts in the Network Neighborhood directory. ALM adds hosts found in the Network Neighborhood directory and deletes hosts that were not found in the Network Neighborhood directory.</li> </ul> |
|    | <b>New Host Group.</b> Opens the New Host Group dialog box, enabling you to create a new host group.  |
|    | <b>Delete Host Group.</b> Deletes a selected group from the Groups list.  |
|   | <p>Adds hosts to a host group.</p> <p>Select a group from the Groups list. Then select a host from the Hosts list. To select multiple hosts, press the CTRL key and select the hosts. Click the <b>Add Host to Host Group</b> button.</p> <p>To add all hosts to a host group, select a group from the Groups list and click the <b>Add All Hosts to Host Group</b> button.</p>   |
|  | <p>Removes a host from a host group.</p> <p>Select a group from the Groups list. Then select a host from the Hosts in Group list and click the <b>Remove Host From Host Group</b> button.</p> <p>To remove all hosts from a host group, select a group from the Groups list and click the <b>Remove All Hosts to Host Group</b> button.</p>   |

| UI Elements (A-Z)     | Description                                  |
|-----------------------|--|
| <b>Description</b>    | A description of the selected host or group. |
| <b>Groups</b>         | The host groups for the project.             |
| <b>Hosts</b>          | The available hosts for the project.         |
| <b>Hosts in Group</b> | The hosts included in the selected group.    |
| <b>Name</b>           | The name of the host.                        |


## Order Test Instances Dialog Box

This dialog box enables you to change the execution order of the tests in the Execution Grid or Execution Flow.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <p>In the Test Lab module, Test Sets tab, use one of the following:</p> <ul style="list-style-type: none"> <li>▶ In the Execution Flow, press the CTRL key and select two or more tests. Right-click a test and select <b>Order Test Instances</b>.</li> <li>▶ In the Execution Grid, select <b>Tests &gt; Order Test Instances</b>.</li> </ul>  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ When determining the order for running tests, ALM first checks the Execution Flow. The order you define in the Execution Grid is only used if there are no conditions set in the Execution Flow.</li> <li>▶ In the Execution Grid, ALM runs the tests according to the specified order, grouped by host type. For example, if you have your tests ordered as <b>test1</b>, <b>test2</b>, and <b>test3</b>, ALM runs <b>test1</b> and <b>test3</b> first if they are set to run on the same host, followed by <b>test2</b> on a different host.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Run Tests Automatically" on page 816   |
| <b>See also</b>              | "Test Execution Overview" on page 714  |

User interface elements are described below (unlabeled elements are shown in angle brackets):


| UI Elements   | Description  |
|---|--|
|  | <p><b>Move Selected Up/Down.</b> Enables you to set the execution order by moving the selected test up or down in the list.</p>  |
| <Test pane>   | <p>In the Execution Grid, displays the tests in the selected test set.</p> <p>In the Execution Flow, displays the tests that you selected.</p> <p>Select a test from the list and click the up or down arrow to change the position of the test in the sequence. Alternatively, you can drag the tests up or down.</p> |

## Execution Log Dialog Box

This dialog box enables you to view details about tests executed by the Automatic Runner.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Automatic Runner dialog box, select <b>Run &gt; View Execution Log</b> .  |
| <b>Important information</b> | You can view the Execution Log only if you selected <b>Enable Log</b> in the Automatic Runner dialog box before you executed the test. |
| <b>Relevant tasks</b>        | "How to Run Tests Automatically" on page 816   |
| <b>See also</b>              | "Automatic Runner Dialog Box" on page 821  |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description  |
|---|--|
|  | Refreshes the details of a selected test.  |
| <Test details pane>   | Displays execution details of the test selected in the <b>Test</b> box, including name, date and time of run, and remote host. |
| <Results pane>  | Displays a description of the run. May indicate cause of run failure.  |
| <b>Database</b>   | The project in which the executed tests are located.   |
| <b>Delete</b>   | Deletes the execution log.<br><b>Available from:</b> Log menu  |
| <b>Exit</b>   | Closes the Execution Log dialog box.<br><b>Available from:</b> Log menu  |
| <b>Host</b>   | Filters the tests displayed by the selected host.<br>To filter, select a host and click the <b>Refresh</b> button.             |

| UI Elements (A-Z) | Description  |
|-------------------|--|
| <b>Open</b>       | Enables you to select another execution log to display.<br><b>Available from:</b> Log menu |
| <b>Test</b>       | The test for which execution details are displayed.  |
| <b>Test Set</b>   | The test set in which the executed tests are located.                                      |
| <b>User name</b>  | The user who ran the tests.  |

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## Test Results

This chapter includes:

### Concepts

- ▶ Test Results Overview on page 832

### Tasks

- ▶ How to View Test Results on page 833

### Reference

- ▶ Test Results User Interface on page 836

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## Concepts

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### Test Results Overview

After running tests, you can view the results in HP Application Lifecycle Management (ALM).

- ▶ Manual test results consist of the overall pass/fail status of a test instance and the pass/fail status of each step in a test instance.
- ▶ The results available for automatic tests vary depending on the test type.

These results help you determine whether a defect was detected in your application. In some cases, you may decide that a step failed because the expected results are no longer valid and need to be updated.

Following the execution of manual, automated, and system tests, you can view results and general test information for a test instance. You can view test run details, compare the results of the most recent test run with previous runs, manage attachments, view and edit test run configuration information, manage linked defects, and view a history of test run changes.

You can also view and compare the results of all runs in your project displayed in a grid. You can then filter the grid to display only those runs that meet the criteria that you define.

In addition, you can analyze the progress of a test set or of overall test execution in your project by periodically generating execution reports and graphs. For details, see "How to Analyze Data in ALM" on page 911.

For related task details, see "How to View Test Results" on page 833.



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## Tasks

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### How to View Test Results

This task describes how to view test results.

To learn more about test results, see "Test Results Overview" on page 832.

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**Note:** This task is part of a higher-level task. For details, see "How to Run Tests in ALM" on page 716.

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This task includes the following steps:

- "View results for a test set" on page 833
- "View results for all project runs" on page 834
- "Manage linked defects" on page 834
- "Purge test runs - optional" on page 835

#### **View results for a test set**

After running tests, you can analyze the test results to determine which test instances in a test set failed, and which steps caused the failure.

- 1** In the Test Lab module > Test Sets tab, select a test set and click the **Execution Grid** tab.

Select a test and view results in the **Last Run Report** pane.

For a test run with Sprinter, click **Launch Sprinter Results Viewer** to open and display the report in the Sprinter Results Viewer. For details, click the help button within the viewer.

For user interface details on the Execution Grid tab, see "Execution Grid Tab" on page 757.

- 2 In the Execution Grid, double-click a test instance to view detailed run results. For user interface details on the Test Instance Details dialog box, see "Test Instance Details Dialog Box" on page 837.

### **View results for all project runs**

You can view all the runs in your project displayed in a grid.

- 1 In the Test Lab module, click the **Test Runs** tab. For user interface details on the Test Runs tab, see "Test Runs Tab" on page 849.

Filter and sort the grid to display only those runs that meet your criteria. For example, you can define filters to display:

- tests that are currently running
- failed runs
- runs executed this month

For user interface details on filtering data, see "Filter Dialog Box" on page 64.

- 2 Double-click a run to view detailed run results. For user interface details on the Run Details dialog box, see "Run Details Dialog Box" on page 853.

### **Manage linked defects**

You can view, add, and remove defect links for test instances, test runs, and test run steps. In the Test Instance Details dialog box, the Run Details dialog box, or the Run Step Details dialog box, click the **Linked Defects** button on the sidebar.

For user interface details on linking defects, see "Linked Defects/Entities Page" on page 902.

For user interface details on the Test Instance Details dialog box, see "Test Instance Details Dialog Box" on page 837.

For user interface details on the Run Details dialog box, see "Run Details Dialog Box" on page 853.

For user interface details on the Run Step Details dialog box, see "Run Step Details Dialog Box" on page 857.

### **Purge test runs - optional**

You can delete old test runs from test sets in your project. The Purge Runs wizard enables you to select one or more test sets from which to delete old runs.

Use one of the following:

- ▶ In the Test Sets tab, select **Test Sets > Purge Runs**.
- ▶ In the Test Runs tab, select **Test Runs > Purge Runs**.

For user interface details on the Purge Runs wizard, see "Purge Runs Wizard" on page 859.

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## Reference

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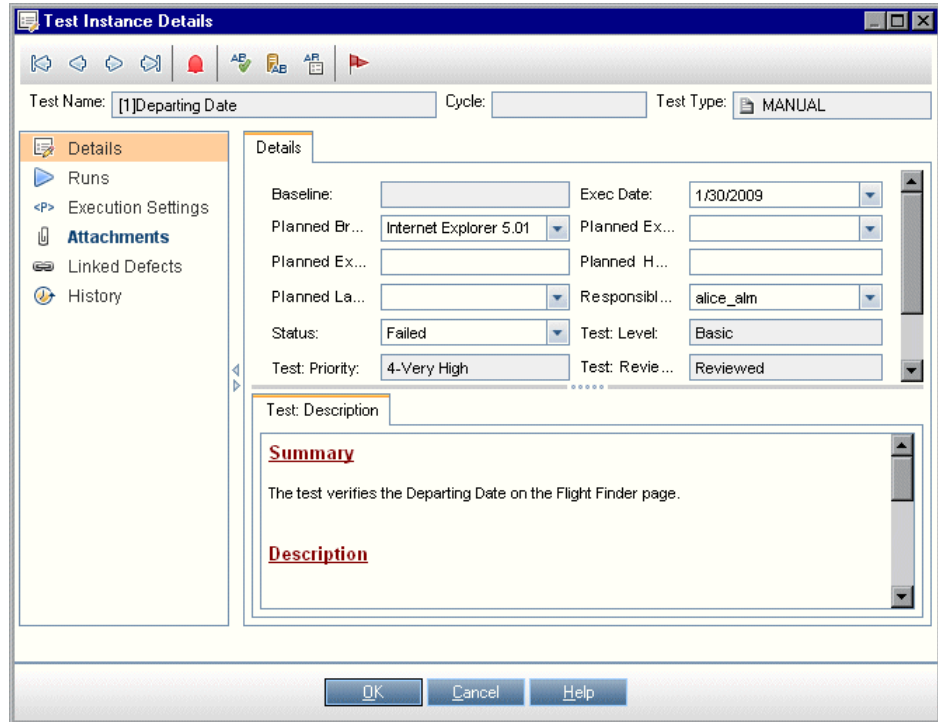
### **Test Results User Interface**

This section includes:

- ▶ Test Instance Details Dialog Box on page 837
- ▶ Test Runs Tab on page 849
- ▶ Run Details Dialog Box on page 853
- ▶ Run Step Details Dialog Box on page 857
- ▶ Purge Runs Wizard on page 859

## Test Instance Details Dialog Box







This dialog box enables you to view run details and results for a test instance. You can also view and set test run configuration information.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Execution Grid or the Execution Flow, right-click a test and select <b>Test Instance Details</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ If you edit the test information, the changes you make are reflected in the Execution Grid.</li> <li>▶ You can change the label of any of the fields in the Details tab. You can also add user-defined fields to the Details tab. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> </ul> |

|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | "How to View Test Results" on page 833   |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Test Lab Module Fields" on page 744</li> <li>➤ "Test Results Overview" on page 832</li> <li>➤ "System Tests Overview" on page 650</li> </ul> |

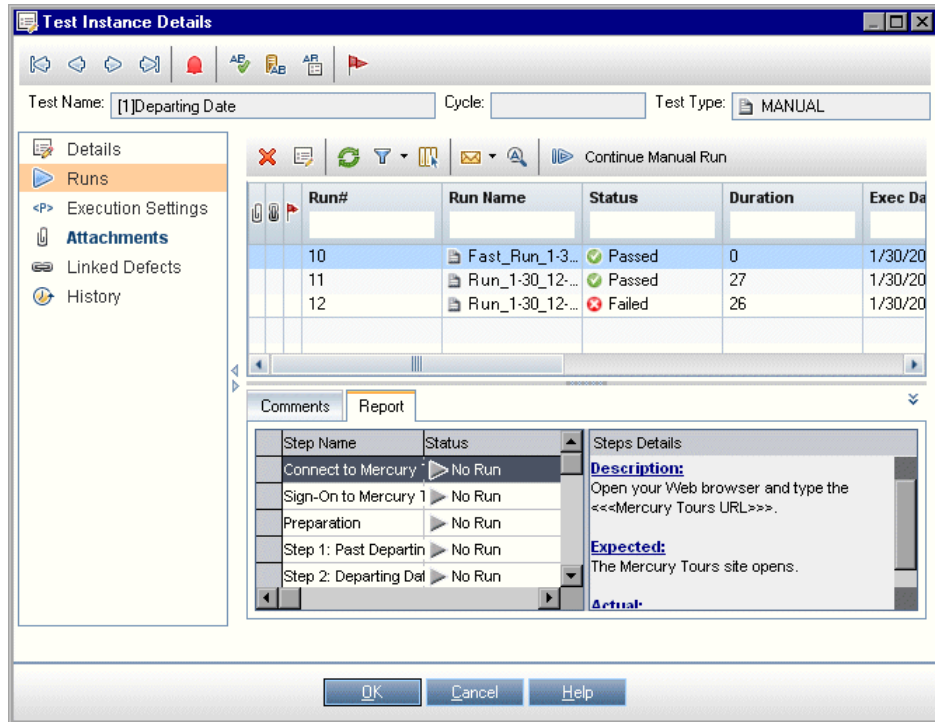
User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|    | <p><b>First/Previous Next/Last Entity.</b> Allows you to browse through the test instances in the Execution Grid.</p> <p><b>Available from:</b> This element is available when you open the Test Instance Details dialog box from the Execution Grid.</p> |
|    | <p><b>Flag for Follow Up.</b> Opens the Flag For Follow Up dialog box, enabling you to define a follow up flag for the test instance. For more details, see "Flag For Follow Up Dialog Box" on page 111.</p>  |
|    | <p><b>Alerts.</b> Opens the Alerts dialog box, enabling you to display alerts for the test instance. For details, see "Alerts Dialog Box" on page 109.</p>  |
|   | <p><b>Spell Check.</b> Checks the spelling for the selected word or text box.</p>   |
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p>   |
|  | <p><b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.</p>  |
| <b>Attachments</b>  | <p>Lists attachments that provide additional information about the currently selected test instance. For more details, see "Attachments Page" on page 90.</p>   |
| <b>Details</b>  | <p>Displays run details of a test instance. For details on the available fields, see "Test Lab Module Fields" on page 744.</p>  |
| <b>Execution Settings</b>   | <p>Displays run configuration information for the test instance. For details, see "Test Instance Details - Execution Settings View" on page 844.</p>  |

| UI Elements (A-Z)     | Description   |
|-----------------------|---|
| <b>History</b>        | Lists changes made to the currently selected test instance. For more details, see "History Tab" on page 85.   |
| <b>Linked Defects</b> | Lists the defects linked to the currently selected test instance. You can view, add, and remove defect links. For more details, see "Linked Defects/Entities Page" on page 902.                       |
| <b>Runs</b>           | Displays the results of all runs for the test instance. For details, see "Test Instance Details - Runs View" on page 840.<br><br>Double-click a run in the grid to view detailed results for the run. |

## Test Instance Details - Runs View

This view enables you to compare the results of a test run with the results of previous runs. You can view run details and step results for all the runs of a selected test instance.








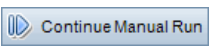


|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Test Instance Details dialog box, click the <b>Runs</b> button on the sidebar.   |
| <b>Important information</b> | <b>Default filter:</b> By default, the grid is filtered to show test runs from the current calendar month only, in reverse chronological order (most recent first). To clear this filter, clear the value <b>ThisMonth</b> from the <b>Exec Date</b> field. For more details on filtering, see the "Select Filter Condition Dialog Box" on page 74. |


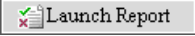


|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | "How to View Test Results" on page 833         |
| <b>See also</b>       | "Test Instance Details Dialog Box" on page 837 |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

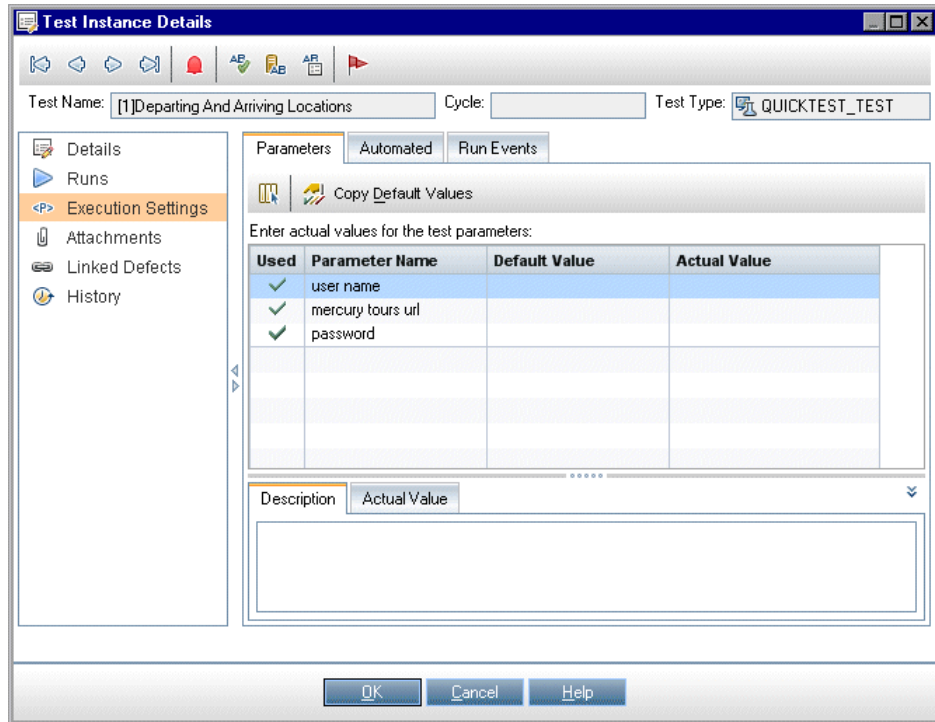
| UI Elements (A-Z)   | Description  |
|---|--|
|    | <b>Delete.</b> Deletes the selected runs from the grid.  |
|    | <b>Details.</b> Opens the Run Details dialog box, enabling you to view and edit additional details for the selected run. For more details, see "Run Details Dialog Box" on page 853.   |
|    | <b>Refresh.</b> Refreshes the grid so that it displays the most up-to-date runs based on the filters you have selected.  |
|    | <b>Filter.</b> Enables you to filter, sort, or group the run records. For more details, see "Filter Dialog Box" on page 64.  |
|    | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which columns to display and set the order in which the columns are displayed. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |
|  | <b>Send by Email.</b> Opens the Send E-mail dialog box, enabling you to send a selected test run by email to recipients selected from a list, or to the tester. For more details, see "Send E-mail Dialog Box" on page 87.                       |
|  | <b>Text Search.</b> Opens the text search pane in the lower part of the dialog box, enabling you to search for records in predefined fields. For more details, see "Text Search Pane" on page 82.  |
|  | <b>Continue Manual Run.</b> Resumes a manual test run. For more details, see "How to Run Tests Manually" on page 799.  |

| UI Elements (A-Z)   | Description  |
|---------------------|--|
| <Filter status bar> | <p>Describes the filter currently applied to the grid. Located directly above the grid.</p> <p><b>Showing &lt;x&gt; results.</b> Indicates the number of records currently displayed out of the total records.</p> <p><b>Retrieve all &lt;x&gt; results.</b> Click to display all records.</p>   |
| <Grid filter box>   | <p>Located below the column names. Displays the filter that is currently applied to a column. If the filter box is empty, no filter is currently applied to the column.</p> <p>Type directly into the box, or click the box to display the browse button, which opens the Select Filter Condition dialog box. For more details, see "Select Filter Condition Dialog Box" on page 74.</p> |
| <b>Comments</b>     | Comments about the currently selected run.   |

| UI Elements (A-Z)        | Description   |
|--------------------------|---|
| <b>Criterion Results</b> | <p>Displays the statuses of the criteria for the last run of the selected business process test instance using a certain configuration.</p> <p><b>Business Process Testing:</b> Functionality related to test criteria is available only for business process tests. For details, see the <i>HP Business Process Testing User Guide</i>.</p>  |
| <b>Report</b>            | <p>Displays results and test step details of the selected run. For automated test instances, also includes one of the following:</p> <ul style="list-style-type: none"> <li>▶  <b>LR Analysis</b> Opens and displays the results in LoadRunner Analysis. Available for the LR-SCENARIO test type.</li> <li>▶  <b>Launch Report</b> Opens and displays the report in QuickTest Professional. Available for the QUICKTEST_TEST test type.</li> </ul> <p>The Launch Report button is only enabled if you have installed the QuickTest Professional Add-in from the HP Application Lifecycle Management Add-ins page. For more details on installing add-ins, refer to the <i>HP Application Lifecycle Management Installation Guide</i>.</p> <ul style="list-style-type: none"> <li>▶ <b>Collected System Info link.</b> Opens the System Information dialog box. Displays the collected system information, such as CPU, memory, and processes running on the machine when the test is run. Available for the SYSTEM-TEST test type.</li> <li>▶ <b>Captured Desktop Image.</b> Opens the captured image of the machine executing the system test. Available for the SYSTEM-TEST test type.</li> </ul> |

## Test Instance Details - Execution Settings View

This view enables you to view or set the test parameter values for a manual test instance or an automated test instance. You can also view and edit the On Failure rules for an automated test instance.



|                       |   |
|-----------------------|---|
| <b>To access</b>      | In the Test Instance Details dialog box, click the <b>Execution Settings</b> button on the sidebar. |
| <b>Relevant tasks</b> | "How to View Test Results" on page 833  |
| <b>See also</b>       | "Test Instance Details Dialog Box" on page 837  |


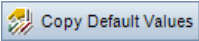
## Parameters Tab

This tab enables you to view or set actual parameter values for manual test instances. The Parameters tab shows all the test parameters that are used in the test steps, including parameters of called tests that have not already been assigned actual values. Actual values that you assign for parameters in the test instance are used for all test runs of the test instance.

**Business Process Testing:** To view and edit additional parameters for business process test instances, see "Test Iterations Tab" on page 847.

|                 |  |
|-----------------|--|
| <b>See also</b> | "Test Parameters Overview" on page 588 |
|-----------------|--|

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which columns to display and set the order in which the columns are displayed. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |
|  | Uses a parameter's default value as its actual value. Select a parameter and click the <b>Copy Default Values</b> button.  |
| <b>Actual Value</b>   | The value that is used for the parameter during the test run.<br>To add or modify the actual value, type the value in the <b>Actual Value</b> column.  |
| <b>Default Value</b>  | The default value of the selected parameter.   |
| <b>Description</b>  | A description of the parameter.  |
| <b>Parameter Name</b>   | The parameter name.  |

## Automated Tab

This tab enables you to set parameter values and other configuration options for automated test instances.

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)                      | Description   |
|--|---|
| <Automated test configuration options> | You may be able to set additional configuration options, depending on the type of automated test you are running. For details, refer to the user guide for your automated test. |
| Parameter Value                        | Displays the value of each parameter.<br><br>Under <b>Value</b> , you can edit parameter values. Your changes are implemented in the next test run.                             |

## Run Events Tab

This tab enables you to view and edit the On Failure rules for an automated test instance.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | If you change the failure rules, your changes are implemented in the next test run. |
| <b>See also</b>              | To set default On Failure rules for a test set, see "Automation Tab" on page 761.   |

User interface elements are described below:

| UI Elements (A-Z)         | Description   |
|---------------------------|---|
| Cleanup test before rerun | Specifies the cleanup test ALM runs before each rerun of the selected test. |


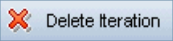
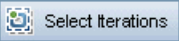
| UI Elements (A-Z)          | Description   |
|----------------------------|---|
| <b>Maximum test reruns</b> | Specifies the number of times an automated test should be rerun upon failure.   |
| <b>On failure</b>          | Specifies the action for ALM to take when a test run fails. Options include: <ul style="list-style-type: none"> <li>▶ <b>Do nothing.</b></li> <li>▶ <b>Stop the test set.</b></li> <li>▶ <b>Rerun the test.</b> Runs the test again up to the maximum number of times, as specified in the <b>Maximum test reruns</b> box.</li> </ul> |

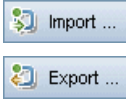
### Test Iterations Tab

This tab enables you to view and edit the run-time values for each parameter of each iteration of a business process test instance.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | This tab is available for Business Process Testing only.             |
| <b>See also</b>              | For details, see the <i>HP Business Process Testing User Guide</i> . |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

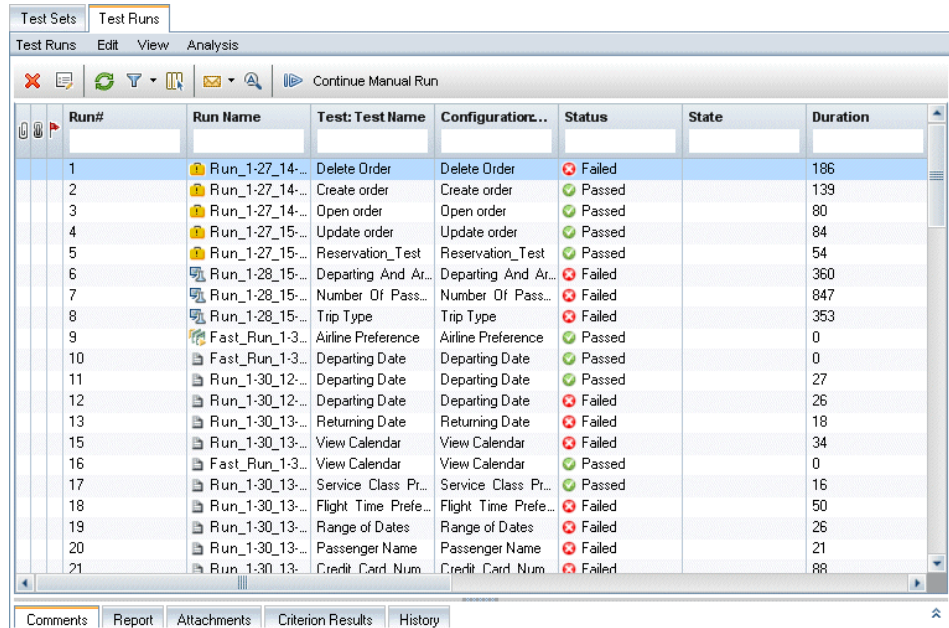
| UI Elements (A-Z)   | Description  |
|---|--|
|  Add Iteration     | <b>Add Iteration.</b> Adds an iteration for the entity (component, group, test, or flow).  |
|  Delete Iteration  | <b>Delete Iteration.</b> Deletes the selected iteration for the entity (component, group, test, or flow).  |
|  Select Iterations | <b>Select Iterations.</b> Opens the Select Iterations dialog box, which enables you to select which of the defined iterations you want to run during the test run. You can specify one, all, or a range of iterations. |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Import/Export.</b> Enables you to import component parameter values for iterations from a <b>.csv</b> (comma separated value) file, and to save component parameter values to a <b>.csv</b> file.</p>  |
| <p><b>&lt;run-time values&gt;</b></p>   | <p>Displays the run-time value of the input parameter. You can modify the run-time value by clicking the arrow in the relevant cell, which opens the Set Value dialog box.</p> <p>If no run-time value is specified, the default value for that parameter is used. If no default value is specified, no value is displayed and the entity may not run correctly.</p> <p>Run-time values are saved and compared as strings, but can be specified according to different value types.</p> <p>Test or flow parameters (parameters whose values are to be taken from the business process test or flow), are shown in { } brackets. This instructs ALM to treat the parameter as a parameter and not as a fixed value.</p> |
| <p><b>&lt;parameter columns&gt;</b></p>   | <p>Displays the names for each parameter in the displayed iteration.</p>   |
| <p><b>Iteration # columns/ rows</b></p>   | <p>Displays the current run-time values for each parameter in each iteration.</p>  |
| <p><b>Parameter Description</b></p>   | <p>Displays the description for the parameter and its original source entity (business component, test, or flow).</p> <p>Parameter descriptions are initially entered in the module in which they were created (the Business Components module or the Test Plan module), or in QuickTest for automated components.</p>   |
| <p><b>Value columns</b></p>   | <p>Displays the run-time value for each parameter in the displayed iteration.</p>  |



## Test Runs Tab


This tab enables you to view all test runs for your project in a grid.





| Run# | Run Name         | Test: Test Name      | Configurati...       | Status | State | Duration |
|------|------------------|----------------------|----------------------|--------|-------|----------|
| 1    | Run_1-27_14-...  | Delete Order         | Delete Order         | Failed |       | 186      |
| 2    | Run_1-27_14-...  | Create order         | Create order         | Passed |       | 139      |
| 3    | Run_1-27_14-...  | Open order           | Open order           | Passed |       | 80       |
| 4    | Run_1-27_15-...  | Update order         | Update order         | Passed |       | 84       |
| 5    | Run_1-27_15-...  | Reservation_Test     | Reservation_Test     | Passed |       | 54       |
| 6    | Run_1-28_15-...  | Departing And Ar...  | Departing And Ar...  | Failed |       | 360      |
| 7    | Run_1-28_15-...  | Number Of Pass...    | Number Of Pass...    | Failed |       | 847      |
| 8    | Run_1-28_15-...  | Trip Type            | Trip Type            | Failed |       | 353      |
| 9    | Fast_Run_1-3-... | Airline Preference   | Airline Preference   | Passed |       | 0        |
| 10   | Fast_Run_1-3-... | Departing Date       | Departing Date       | Passed |       | 0        |
| 11   | Run_1-30_12-...  | Departing Date       | Departing Date       | Passed |       | 27       |
| 12   | Run_1-30_12-...  | Departing Date       | Departing Date       | Failed |       | 26       |
| 13   | Run_1-30_13-...  | Returning Date       | Returning Date       | Failed |       | 18       |
| 15   | Run_1-30_13-...  | View Calendar        | View Calendar        | Failed |       | 34       |
| 16   | Fast_Run_1-3-... | View Calendar        | View Calendar        | Passed |       | 0        |
| 17   | Run_1-30_13-...  | Service Class Pr...  | Service Class Pr...  | Passed |       | 16       |
| 18   | Run_1-30_13-...  | Flight Time Prefe... | Flight Time Prefe... | Failed |       | 50       |
| 19   | Run_1-30_13-...  | Range of Dates       | Range of Dates       | Failed |       | 26       |
| 20   | Run_1-30_13-...  | Passenger Name       | Passenger Name       | Failed |       | 21       |
| 21   | Run_1-30_13-...  | Credit Card Num      | Credit Card Num      | Failed |       | 88       |

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under Testing, select <b>Test Lab</b> . Then click the <b>Test Runs</b> tab.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ <b>Quality Center Starter Edition:</b> Fields and functionality related to release management and baselining are not available in the Test Lab module.</li> <li>▶ <b>Default filter:</b> By default, the grid is filtered to show test runs from the current calendar month only, in reverse chronological order (most recent first). To clear this filter, clear the value <b>ThisMonth</b> from the <b>Exec Date</b> field. For more details on filtering, see the "Select Filter Condition Dialog Box" on page 74.</li> </ul> |
| <b>Relevant tasks</b>        | "How to View Test Results" on page 833  |
| <b>See also</b>              | "Test Results Overview" on page 832   |

User interface elements are described below (unlabeled elements are shown in angle brackets):

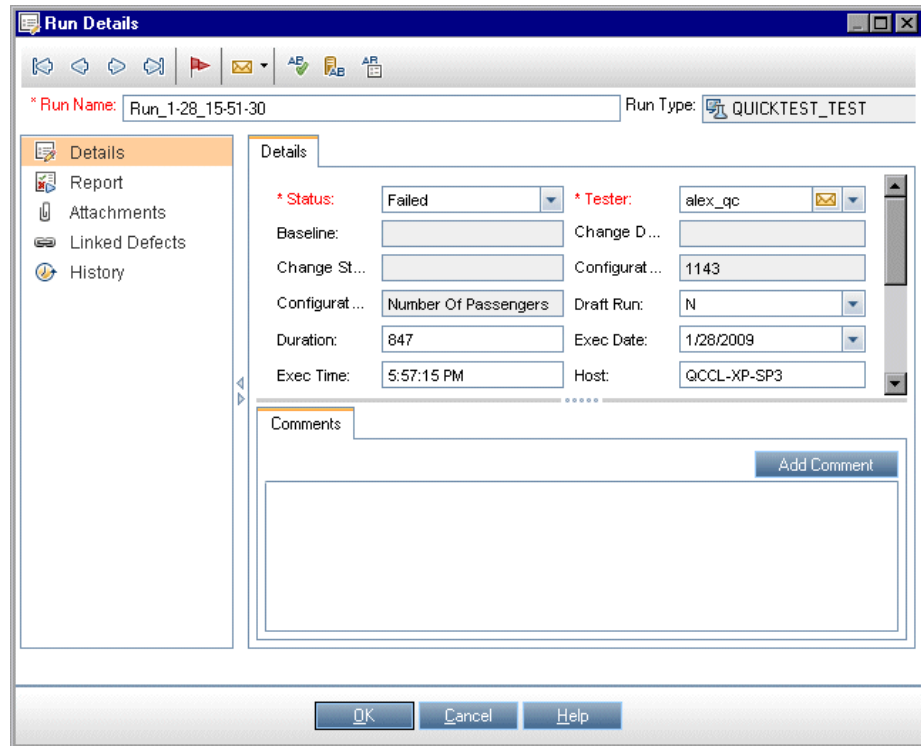
| UI Elements   | Description  |
|---|--|
| <Test Lab module common UI elements>  | <ul style="list-style-type: none"> <li>▶ <b>Test Lab fields.</b> For field definitions, see "Test Lab Module Fields" on page 744.</li> <li>▶ <b>Test Lab menus and buttons.</b> For command and button descriptions, see "Test Lab Module Menus and Buttons" on page 724.</li> <li>▶ <b>Test Lab icons.</b> For icon descriptions, see "Test Lab Module Icons" on page 742.</li> <li>▶ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu and sidebar, see "ALM Common Areas" on page 41.</li> </ul> |
| <Filter status bar>   | <p>Describes the filter currently applied to the grid. Located directly above the grid.</p> <p><b>Showing &lt;x&gt; results.</b> Indicates the number of records currently displayed out of the total records.</p> <p><b>Retrieve all &lt;x&gt; results.</b> Click to display all records.</p>   |
| <Grid filters>  | <p>Displays a grid filter box under each column name, enabling you to define a filter condition for a column.</p> <p>Type directly into the box, or click the box to display the browse button, which opens the Select Filter Condition dialog box. For more details, see "Select Filter Condition Dialog Box" on page 74.</p>   |
|  | <p><b>Show/Hide.</b> Displays or hides additional tabs in the lower pane of the window.</p>  |
| <b>Attachments</b>  | <p>Lists attachments that provide additional information about the currently selected run. For details, see "Attachments Page" on page 90.</p>   |
| <b>Comments</b>   | <p>Comments about the currently selected run.</p> <p>Click in the text box to display a toolbar for formatting and spell checking the text.</p>  |

| UI Elements              | Description  |
|--------------------------|--|
| <b>Criterion Results</b> | Displays the results of the last test criteria run for the selected business process test.<br><b>Business Process Testing:</b> Functionality related to test criteria is available only for business process tests. For details, see the <i>HP Business Process Testing User Guide</i> . |
| <b>Event Log</b>         | <b>Performance Center:</b> Displays a list of the events that were logged during the selected run. For details, refer to the <i>HP ALM Performance Center Guide</i> .  |
| <b>History</b>           | Lists changes made to the currently selected run. For details, see "History Tab" on page 85.   |

| UI Elements    | Description   |
|----------------|---|
| <b>Report</b>  | <p>Displays results and test step details of the selected run.</p> <p>For a test run with Sprinter, also displays the <b>Launch Sprinter Results Viewer</b> button, which opens and displays the report in the Sprinter Results Viewer. For details, click the help button within the viewer.</p> <p><b>ALM Editions:</b> Sprinter functionality is not available with Quality Center Starter Edition and Performance Center Edition.</p> <p>For automated test instances, also includes one of the following:</p> <ul style="list-style-type: none"> <li>▶  <b>LR Analysis</b> Opens and displays the results in LoadRunner Analysis. Available for the LR-SCENARIO test type.</li> <li>▶  <b>Launch Report</b> Opens and displays the report in QuickTest Professional. Available for the QUICKTEST_TEST test type.</li> </ul> <p>The Launch Report button is only enabled if you have installed the QuickTest Professional Add-in from the HP Application Lifecycle Management Add-ins page. For more details on installing add-ins, refer to the <i>HP Application Lifecycle Management Installation Guide</i>.</p> <ul style="list-style-type: none"> <li>▶ <b>Collected System Info link.</b> Opens the System Information dialog box. Displays the collected system information, such as CPU, memory, and processes running on the machine when the test is run. Available for the SYSTEM-TEST test type.</li> <li>▶ <b>Captured Desktop Image.</b> Opens the captured image of the machine executing the system test. Available for the SYSTEM-TEST test type.</li> </ul> |
| <b>Results</b> | <p><b>Performance Center:</b> Enables you to manage result files generated during the selected test run. For details, refer to the <i>HP ALM Performance Center Guide</i>.</p>  |







## Run Details Dialog Box

This dialog box displays test and step details for a test run.

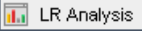
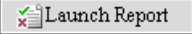


|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Test Lab module, use one of the following: <ul style="list-style-type: none"> <li>▶ <b>Test Sets tab:</b> In the Test Instance Details dialog box — Runs view, right-click a run and select <b>Details</b>.</li> <li>▶ <b>Test Runs tab:</b> Right-click a run and select <b>Details</b>.</li> </ul> |
| <b>Important information</b> | The buttons and options available may vary according to test type or runner.  |
| <b>Relevant tasks</b>        | "How to View Test Results" on page 833  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "Test Lab Module Fields" on page 744</li> <li>▶ "Test Results Overview" on page 832</li> </ul>   |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>First/Previous Next/Last Entity.</b> Allows you to browse through the runs in the grid.</p>  |
|  | <p><b>Flag for Follow Up.</b> Opens the Flag for Follow Up dialog box, enabling you to define a follow up flag for the run. For more details, see "Flag For Follow Up Dialog Box" on page 111.</p>   |
|  | <p><b>Send by Email.</b> Opens the Send E-mail dialog box, enabling you to send a run by email to recipients selected from a list. For more details, see "Send E-mail Dialog Box" on page 87.</p>  |
|  | <p><b>Spell Check.</b> Checks the spelling for the selected word or text box.</p>  |
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p>  |
|  | <p><b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.</p>   |
| <p><b>Attachments</b></p>   | <p>Lists attachments that provide additional information about the run. For details, see "Attachments Page" on page 90.</p>  |
| <p><b>Criterion Results</b></p>   | <p>Displays the results of the last test criteria run for the selected business process test.</p> <p><b>Business Process Testing:</b> Functionality related to test criteria is available only for business process tests. For details, see the <i>HP Business Process Testing User Guide</i>.</p> |
| <p><b>Details</b></p>   | <p>Displays details of the run. For details on the available fields, see "Test Lab Module Fields" on page 744.</p> <p>Click in the <b>Comments</b> box to display a toolbar for formatting and spell checking the text.</p>  |
| <p><b>History</b></p>   | <p>Displays a list of changes made to the run. For more details, see "History Tab" on page 85.</p>   |

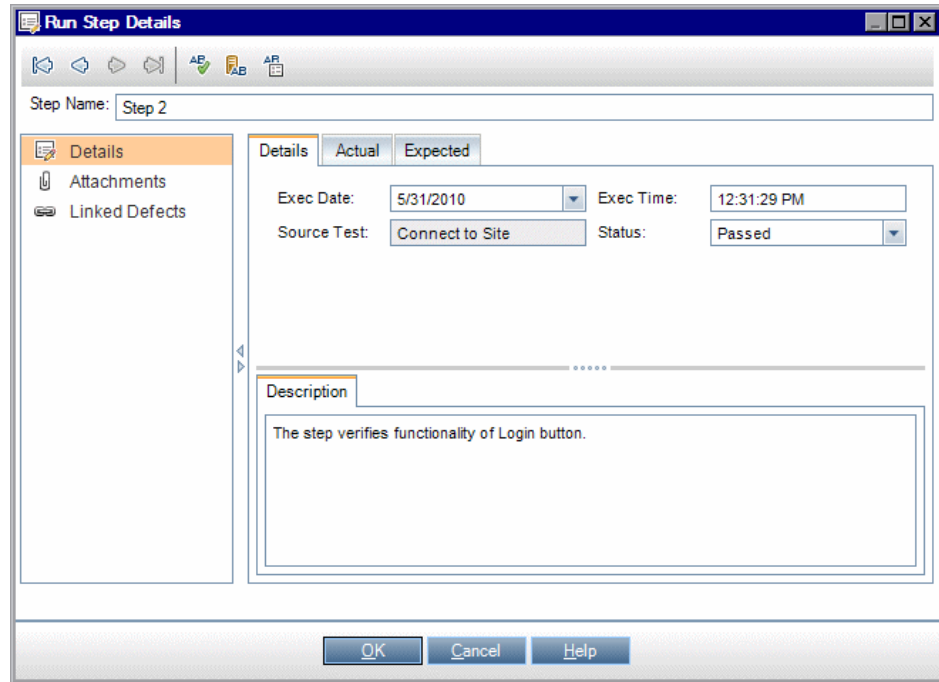
| UI Elements (A-Z)     | Description  |
|-----------------------|--|
| <b>Iterations</b>     | Displays the status of each iteration for the selected business process test.<br><b>Business Process Testing:</b> Functionality related to iterations is available only for business process tests. For details, see the <i>HP Business Process Testing User Guide</i> . |
| <b>Linked Defects</b> | Lists the defects linked to the run. You can view, add, and remove defect links. For more details, see "Linked Defects/Entities Page" on page 902.   |
| <b>Parameters</b>     | Displays the manual test parameters that are used in the test steps. For details on the available fields, see "Test Lab Module Fields" on page 744 and "Test Plan Module Fields" on page 537.  |


| UI Elements (A-Z)    | Description   |
|----------------------|---|
| <p><b>Report</b></p> | <p>Displays results and test step details of the run.</p> <p>For automated test instances, also includes one of the following:</p> <ul style="list-style-type: none"> <li>▶  <b>LR Analysis</b> Opens and displays the results in LoadRunner Analysis. Available for the LR-SCENARIO test type.</li> <li>▶  <b>Launch Report</b> Opens and displays the report in QuickTest Professional. Available for the QUICKTEST_TEST test type.</li> </ul> <p>The Launch Report button is only enabled if you have installed the QuickTest Professional Add-in from the HP Application Lifecycle Management Add-ins page. For more details on installing add-ins, refer to the <i>HP Application Lifecycle Management Installation Guide</i>.</p> <ul style="list-style-type: none"> <li>▶ <b>Collected System Info link.</b> Opens the System Information dialog box. Displays the collected system information, such as CPU, memory, and processes running on the machine when the test is run. Available for the SYSTEM-TEST test type.</li> <li>▶ <b>Captured Desktop Image.</b> Opens the captured image of the machine executing the system test. Available for the SYSTEM-TEST test type.</li> </ul> |
| <p><b>Steps</b></p>  | <p>Displays test step details and results for the run.</p> <p>Double-click a step in the grid to view detailed results for the step. For more details, see "Run Step Details Dialog Box" on page 857.</p> <p><b>Note:</b> Not available for runs of some test types and runners.</p>  |







## Run Step Details Dialog Box

This dialog box displays test step details for the run.



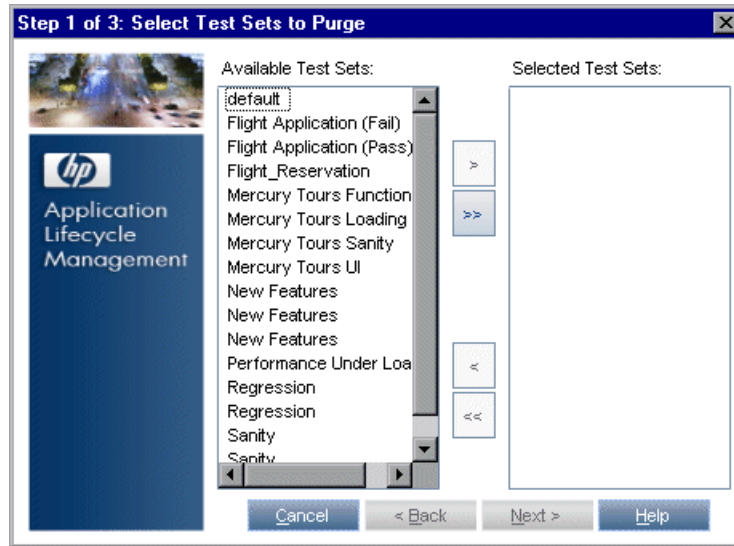
|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Run Details dialog box — Steps view, select a step and click the <b>Details</b> button  . |
| <b>Important information</b> | This dialog box is not available for Sprinter runs.   |
| <b>Relevant tasks</b>        | "How to View Test Results" on page 833  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Test Lab Module Fields" on page 744</li> <li>➤ "Test Results Overview" on page 832</li> </ul>   |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>First/Previous Next/Last Entity.</b> Allows you to browse through the steps in the run.</p>   |
|  | <p><b>Spell Check.</b> Checks the spelling for the selected word or text box.</p>   |
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p>   |
|  | <p><b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.</p>  |
| <p><b>Attachments</b></p>   | <p>Lists attachments that provide additional information about the step. For details, see "Attachments Page" on page 90.</p>  |
| <p><b>Details</b></p>   | <p>Displays details of the step. For details on the available fields, see "Test Lab Module Fields" on page 744.</p> <p>Click in the <b>Description</b> box to display a toolbar for formatting and spell checking the text.</p> <p>Click the other tabs to view additional details of the step, such as expected results, actual results, and run conditions.</p> |
| <p><b>Linked Defects</b></p>  | <p>Lists the defects linked to the step. You can view, add, and remove defect links. For more details, see "Linked Defects/Entities Page" on page 902.</p>  |

## Purge Runs Wizard

This wizard enables you to delete old test run results in your project.





|                       |  |
|-----------------------|--|
| <b>To access</b>      | In the Test Lab module, use one of the following: <ul style="list-style-type: none"> <li>▶ In the Test Sets tab, select <b>Test Sets &gt; Purge Runs</b>.</li> <li>▶ In the Test Runs tab, select <b>Test Runs &gt; Purge Runs</b>.</li> </ul> |
| <b>Relevant tasks</b> | "How to Create Test Sets" on page 752  |
| <b>Wizard map</b>     | This wizard contains:<br>Select Test Sets to Purge Page > Choose Type of Purge Page > Confirm Purge Request Page   |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>▶ "Test Results Overview" on page 832</li> <li>▶ "Test Lab Module Window" on page 721</li> </ul>  |

## **Select Test Sets to Purge Page**

This wizard page enables you to select test sets to purge.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | General information about this wizard is available here: "Purge Runs Wizard" on page 859.   |
| <b>Wizard map</b>            | The Purge Runs Wizard contains:<br><b>Select Test Sets to Purge Page</b> > Choose Type of Purge Page > Confirm Purge Request Page |
| <b>See also</b>              | "Test Results Overview" on page 832   |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | Moves selected test sets between <b>Available Test Sets</b> and <b>Selected Test Sets</b> .<br><b>Tip:</b> You can also drag the test set names between panes or double-click a test sets name to move it across to the other pane. |
|  | Moves all test sets between <b>Available Test Sets</b> and <b>Selected Test Sets</b> .  |
| <b>Available Test Sets</b>  | Lists all test sets in your project that are not currently selected to purge.   |
| <b>Selected Test Sets</b>   | Lists the test sets that you have selected to purge.  |

## Choose Type of Purge Page

This wizard page enables you to select the purge type and define the purge conditions.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | General information about this wizard is available here: "Purge Runs Wizard" on page 859.   |
| <b>Wizard map</b>            | The Purge Runs Wizard contains:<br>Select Test Sets to Purge Page > <b>Choose Type of Purge Page</b> > Confirm Purge Request Page |
| <b>See also</b>              | "Test Results Overview" on page 832   |

User interface elements are described below:

| UI Elements (A-Z)                      | Description  |
|--|--|
| <b>Delete</b>                          | Includes the following options:<br><b>Runs.</b> Deletes test run results.<br><b>Run Steps Only.</b> Deletes run steps but keeps the overall run details. |
| <b>From runs older than</b>            | The period of time before which you want to delete the selected run data.  |
| <b>Number of runs per test to keep</b> | The number of test run results to keep for each test.  |
| <b>Purge draft runs only</b>           | Purges only runs marked as <b>Draft Run</b> . For details on draft runs, see "Draft Runs" on page 715.   |

## **Confirm Purge Request Page**

This wizard page enables you to review a summary of your request and confirm the purge.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | General information about this wizard is available here: "Purge Runs Wizard" on page 859.   |
| <b>Wizard map</b>            | The Purge Runs Wizard contains:<br>Select Test Sets to Purge Page > Choose Type of Purge Page > <b>Confirm Purge Request Page</b> |
| <b>See also</b>              | "Test Results Overview" on page 832   |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| <b>UI Elements</b>     | <b>Description</b>   |
|------------------------|--|
| <Request details area> | Summarizes the deletions you chose to make.                |
| <b>Finish</b>          | Deletes the test run results according to your selections. |

# Part VI

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## Defects





# 34

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## Defect Tracking

This chapter includes:

### Concepts

- ▶ Defect Tracking Overview on page 866

### Tasks

- ▶ How to Track Defects in ALM on page 869
- ▶ How to Search for Defects on page 878
- ▶ How to Link Defects on page 879

### Reference

- ▶ Defects User Interface on page 880

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## Concepts

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### Defect Tracking Overview

Locating and repairing application defects efficiently is essential to the development process. Using the HP Application Lifecycle Management (ALM) Defects module, you can report design flaws in your application and track data derived from defect records during all stages of the application management process.

You use the Defects module to:

- ▶ Create application defects for an ALM project.
- ▶ Track defects until application developers and testers determine that the defects are resolved.

Defect records inform members of the application development and quality assurance teams of new defects discovered by other members. As you monitor the progress of defect repair, you update the information in your ALM project.

You can share defects across multiple ALM projects. You share and synchronize defects using the *HP Quality Center Synchronizer*. For more information, see the *HP Quality Center Synchronizer User Guide*, available from the HP Application Lifecycle Management Adds-ins Page.

**ALM Editions:** Sharing defects across multiple ALM projects is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.

This section also includes "Defect Linkage" on page 867.

For task details about working with defects, see "How to Track Defects in ALM" on page 869.

## Defect Linkage

You can link a defect to the following ALM entities: requirements, tests, test sets, business process tests, flows, test instances, runs, run steps, and other defects.

Examples of when defect linkage is useful include:

- A new test is created specifically for a defect. By creating a link between the test and the defect, you can determine if the test should be run based on the status of the defect.
- During a manual test run, if you add a defect, ALM automatically creates a link between the test run and the new defect.

You can link defects directly to other defects or entities. When you add a defect link to an entity, ALM adds a direct link to the entity and indirect links to related entities.

Indirect linkage is a one-directional flow; ALM indirectly links higher-level related entities only.

The diagram below shows the indirect links that ALM creates if a defect is linked to a run step.



To learn more about defects, see "Defect Tracking Overview" on page 866.

For task details, see "How to Link Defects" on page 879.

**Example:**

If you link a defect to a run:

- ▶ The defect is indirectly linked to the run, the run's test instance, the test set, and the test.
- ▶ If the corresponding test is covered by a requirement, an indirect link is also added to the requirement.
- ▶ The defect is not indirectly linked to the run's steps, because the run steps are lower-level related entities.

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**Note:** Only direct links to defects from an entity can be deleted.

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## Tasks

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### How to Track Defects in ALM

This task describes how to track application defects during the development process.

To learn more about defects, see "Defect Tracking Overview" on page 866.

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#### Note:

- **Use-case:** For a use-case scenario related to this task, see "Track Defects - Use-Case Scenario" on page 871.
  - **Higher-level task:** This task is part of a higher-level task. For details, see "Application Lifecycle Management Roadmap" on page 27.
- 

This task includes the following steps:

- "Create defects" on page 869
- "Import defects - optional" on page 870
- "Link defects and other entities" on page 870
- "Search for defects" on page 870
- "Assign, repair, and update defects" on page 870
- "Analyze defects" on page 871

#### 1 Create defects

- a** On the ALM sidebar, select **Defects**.
- b** Click **New Defect** in the Defects grid toolbar. In the New Defect dialog box, fill in the fields. For user interface details on the New Defect dialog box, see "New Defect Dialog Box" on page 894.

## 2 Import defects - optional

In addition to creating defects directly in ALM, you can also import defects to your ALM project from Microsoft Word or Microsoft Excel. To import defects, you must first install the appropriate add-in. For details on add-ins, see the *HP Application Lifecycle Management Installation Guide*.

## 3 Link defects and other entities

You can link defects to requirements, tests, test sets, test instances, runs, run steps, business process tests, flows, and other defects.

For task details on how to link defects, see "How to Link Defects" on page 879.

## 4 Search for defects

In the Defects module, you can search for defects from:

- ▶ The Defects grid, for example, to find defects related to a specific issue, or to modify a specific defect.
- ▶ In the New Defect dialog box, for example, to avoid creating duplicate defects.

For task details on how to search for defects, see "How to Search for Defects" on page 878.

## 5 Assign, repair, and update defects

Periodically review defects in the project, decide which ones to fix, and modify defect statuses, target releases, target cycles, and other fields accordingly.

In the Defects module, double-click a defect in the Defects grid. In the Defect Details dialog box, fill in the fields. For user interface details on the Defect Details dialog box, see the "Defect Details Dialog Box" on page 896.

Among other tasks, you can:

- ▶ Change the status of defects that are candidates to be fixed to **Open**, and assign the defects to members of the development team.
- ▶ In the **Target Release** and **Target Cycle** fields, assign the open defects to the releases and cycles in which they are targeted to be fixed.

- Fix the open defects. This involves identifying the cause of the defects, modifying and rebuilding the application, and rerunning your tests. For example, if a defect does not recur, you can assign the defect the status **Closed**. If a defect is detected again, you can reassign the defect the status **Open**. When a defect is repaired, you can assign it the status **Fixed**.

## 6 Analyze defects

Analyze defect data by generating reports and graphs.

Use one of the following:

- **View defect data in a graph.** On the Defects module menu, select **Analysis > Graphs**. For task details on generating graphs, see "How to Generate a Graph" on page 936.
- **Create a report of defect data.** On the Defects module menu, select **Analysis > Reports**. For task details on creating reports, see "How to Generate Standard Reports" on page 1037.

For task details on additional analysis tools in ALM, see "How to Analyze Data in ALM" on page 911.



### Track Defects - Use-Case Scenario

This use-case scenario provides an example of how to track defects.

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**Note:** For a task related to this scenario, see "How to Track Defects in ALM" on page 869.

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This scenario includes the following steps:

- "Create defects" on page 869
- "Search for duplicate defects" on page 874
- "Link defects and other entities" on page 870

- ▶ "Assign and repair defects while testing new application builds" on page 875
- ▶ "Analyze defects" on page 876

## 1 Create defects

You are working on a flight reservation application. In four months, you plan on releasing version 10.5. Your release includes four cycles: Cycle 1, Cycle 2, Cycle 3, and Cycle 4. Throughout the development process, you need to track and fix defects for each cycle.

Defects, when created, automatically are assigned a unique defect ID and the status **New**.

---

### Tip:

- ▶ When a defect is first detected in your application, you generally know only basic information about the defect, such as the defect summary, description, category, and severity. You can edit the defect as you continue tracking the defect.
  - ▶ You can associate a defect with the cycle and release in which it was detected. For task details on releases and cycles, see "How to Use Releases and Cycles in ALM" on page 174.
  - ▶ While keeping your defect summary short, try to use relevant and specific keywords to facilitate efficient searches later. For example, a summary whose text is **Empty password problem** might not be specific enough to produce meaningful results when searching; **User profile is registered when Password is empty** could produce better search results.
-



Suppose, after running the **Password** test in the **Mercury Tours Functionality** test set, you discover that a user profile was registered even though no password was supplied. You might supply the following basic information when creating the new defect:

**New Defect**

\* Summary: User profile is registered when Password is empty

**Details**

|                      |           |                      |           |
|----------------------|-----------|----------------------|-----------|
| * Detected By:       | alex_alm  | * Detected on Da...  | 10/3/2010 |
| * Severity:          | 3-High    | Actual Fix Time:     |           |
| Assigned To:         | alice_alm | Closed in Version:   |           |
| Closing Date:        |           | Detected in Cycle:   |           |
| Detected in Rele ... |           | Detected in Versi... |           |
| Estimated Fix Ti...  |           | Modified:            |           |
| Planned Closing ...  |           | Priority:            |           |

**Description:**

B I U A ab [Rich Text Editor Icons]

Test set: Mercury Tours Functionality  
 Test: [1]Password  
 Run: Run\_10\_25\_11-44-37  
 Step: Step 5: Empty


Description:  
 1. Skip the Password and Confirm Password fields.  
 2. Click the Submit button.  
 3. Check the results on the next page.

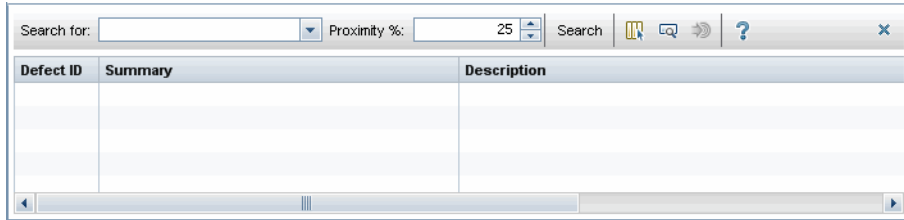
Submit Close Help

You can assign the **Detected in Release** field to the **Release 10.5** release, and the **Detected in Cycle** field to the **Cycle 1** cycle, and click **Submit**.

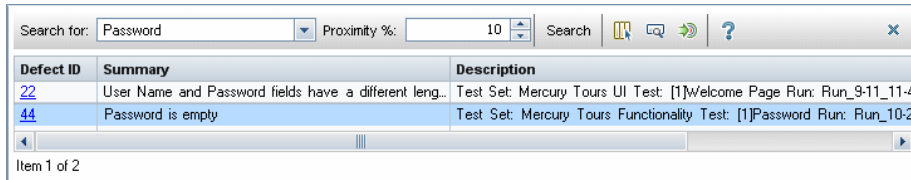
## 2 Search for duplicate defects

Suppose you are among several quality assurance testers who test the same application. To avoid duplicate defects, it is good practise to search for similar defects.

From the Defects grid, click the **Find Similar Defects**  button and select **Find Similar Text**. The Similar Defects pane opens.



To search for the word **Password** to see all defects related to password issues. If you limit your results to 10 percent, the search may return the following results:




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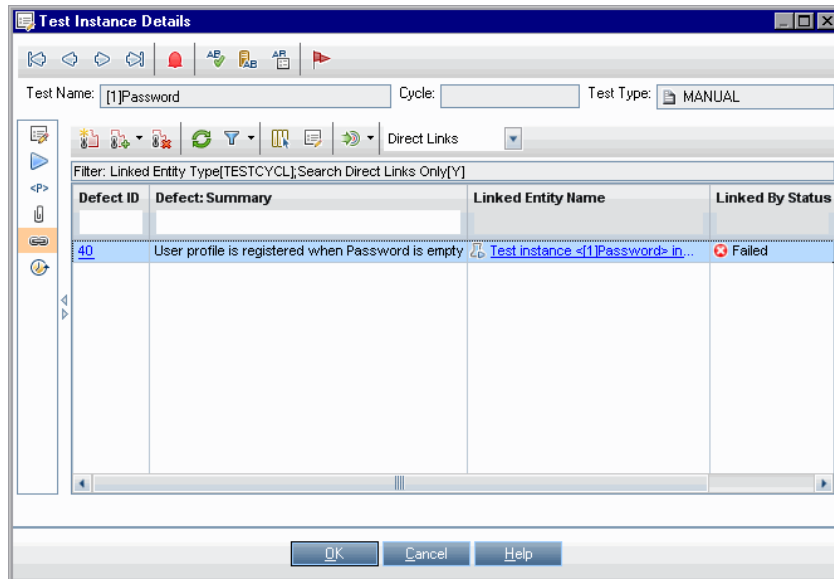
**Note:** If you limit your results to 100%, the search is likely to return no results because there is no 100% match for the single word **Password**.

---

In this case, there is no duplicate defect among the similar defects listed. If duplicate defects did appear in the project, you could change their status to either **Closed** or **Rejected**, or delete them from the project in the Defects grid.

### 3 Link defects and other entities

The following example demonstrates how, in the Test Lab module, you can link a defect to a test instance using the Linked Defects tab in the Test Instance Details dialog box:



### 4 Assign and repair defects while testing new application builds

You, as a quality assurance manager, review a defect, determine a repair priority, change the defect's status to **Open**, and assign it to a member of the development team.

If the defect is planned to be fixed in the next cycle, assign the **Target Release** field and the **Target Cycle** field, for example, to **Release 10.5** and **Cycle 2** respectively.

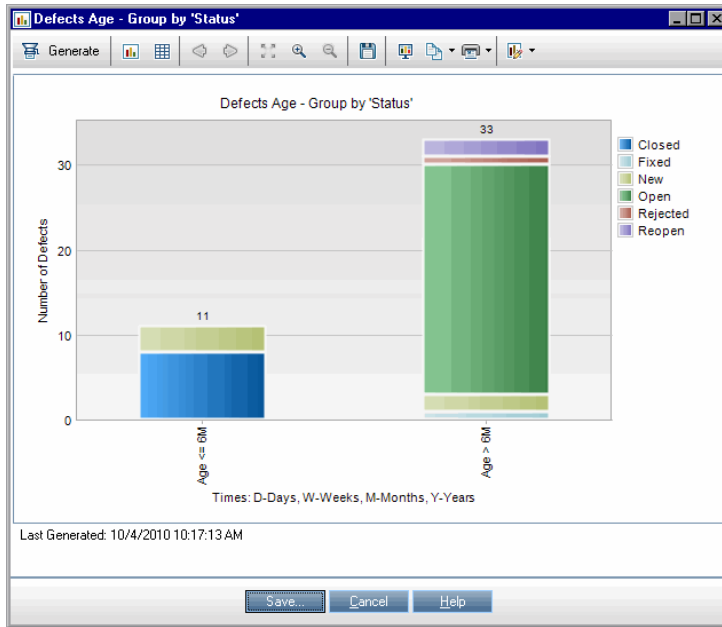
A developer repairs the defect in a new application build and updates the defect status to **Fixed**. The developer retests the application, making sure that the defect does not recur. You determine that the defect is actually repaired and assign it the status **Closed**.

At any point in the process, the managers or the developers can add comments and send emails regarding the defect.

## 5 Analyze defects

Using various reports and graphs available in the Defects module, you can analyze the defects and their rate of repair.

The following graph shows a summary of defects by age:



The following report lists the defects that the current user, in this case, **peter\_alm**, has open.

**Opened Defects Assigned to Current User**

Generate 1 - 5 of [9]

**Defects Report**

Filter: Status["Open" OR "Reopen"];Assigned To[[CurrentUser]]; Sort By: Priority[Descending];Defect ID[Ascending]

**Defect ID (17) - The Itinerary is booked when Credit Card Number field contains illegal values**

|                       |   |
|-----------------------|---|
| Defect ID: 17         | <b>Summary:</b> The itinerary is booked when Credit Card Number field contains illegal values |
| Status: Open          | <b>Detected By:</b> alice_alm ()  |
| Severity: 4-Very High | <b>Assigned To:</b> peter_alm ()  |
| Priority: 4-Very High |   |

**Description:**

Test Set: Mercury Tours Functionality  
 Test: [1]Credit Card Number  
 Run: Run\_9-10\_10-43-47  
 Step: Step 2: Zero

**Description:**  
 1. Type 16 digits in the Credit Card Number field. All digits must be 0 (zero).  
 2. Click the Secure Purchase button.  
 3. Check the results on the next page.

**Expected Result:**  
 The Itinerary should not be booked.  
 An error message should appear indicating that you must enter a valid credit card number.

**Actual Result:**  
 The Itinerary is booked.  
 The same result when the value is less than 16 digits.

**Defect ID (29) - The Itinerary is booked when Billing Address is empty**

|                       |   |
|-----------------------|---|
| Defect ID: 29         | <b>Summary:</b> The Itinerary is booked when Billing Address is empty |
| Status: Open          | <b>Detected By:</b> alice_alm ()                                      |
| Severity: 4-Verv High |   |

Last Generated: 10/4/2010 10:20:07 AM

Save... Cancel Help

## How to Search for Defects

This task describes how to search for defects using the Similar Defects Dialog Box/Pane. You can search for defects at any time from the Defects grid, for example, to find defects related to a specific issue, or to modify a specific defect. When creating a new defect, you can search for similar defects, for example, to avoid creating duplicate defects.

For user interface details on the Similar Defects Dialog Box/Pane, see "Similar Defects Dialog Box/Pane" on page 899.

### 1 Display the defect

Display the defect for which you want to find similar defects by doing one of the following:

- ▶ Select a defect from the Defects grid.
- ▶ While creating a new defect in the New Defect dialog box, enter descriptive information in the **Summary** and **Description** fields.

### 2 Start the search



Click the **Find Similar Defects** button.

- ▶ Select **Find Similar Defects** to find defects similar to the current defect.
- ▶ Select **Find Similar Text** to find defects whose summary or description is similar to a specified text string.

## How to Link Defects

The following steps describe how to link defects to ALM entities (requirements, tests, test sets, test instances, runs, run steps and other defects).

For user interface details on the Linked Defects/Entities page, see the "Linked Defects/Entities Page" on page 902.

### 1 Link the defect

From the module of the entity to which you want to link a defect, select the Linked Defects or Linked Entities page, and do one of the following:




















- **Add new defect:** Create the defect to which to link.
- **Select existing defect:** Select an existing defect to which to link.

### 2 View results

You can view the linked entity from the corresponding defect, and you can view the linked defect from the corresponding entity.



In grid views, when an entity is linked to a defect, ALM adds the **Linked Defects** icon to the entity.

|  |   |  |  | Name                           | Direct Cover Status   | Author    | Req ID |
|---|---|---|---|--------------------------------|---|-----------|--------|
|   |   |   |   | Requirements                   | ---   |           | 0      |
|   |  |   |   | Mercury Tours Application      | ---   | alex_qc   | 133    |
|   |  |   |   | Online Travel Booking Services | ---   | alex_qc   | 134    |
|   |  |   |  | Products/Services On Sale      |  Not Covered | shelly_qc | 135    |
|   |  |   |   | Flight Tickets                 |  Failed      | shelly_qc | 136    |
|   |  |   |   | Flight Search                  |  Failed      | robert_qc | 141    |
|   |  |   |   | Search Conditions              |  Not Covered | shelly_qc | 142    |
|   |  |   |   | Origin And Destination         |  Failed      | peter_qc  | 143    |
|   |  |   |   | One-Way Trip                   |  Failed      | robert_qc | 149    |

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## Reference

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### Defects User Interface

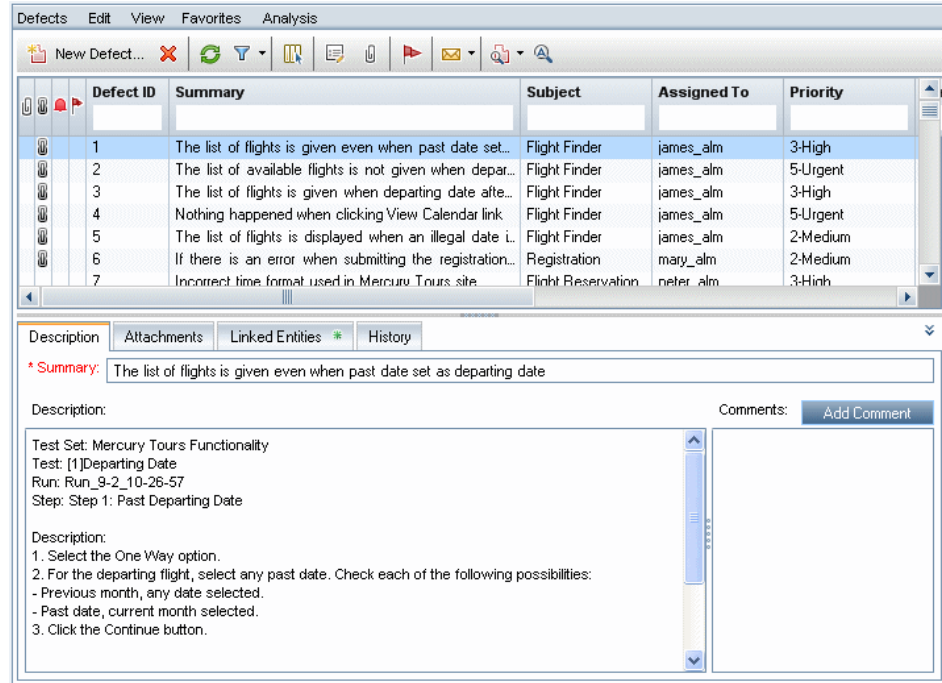
This section includes:

- ▶ Defects Module Window on page 881
- ▶ Defects Module Menus and Buttons on page 883
- ▶ Defects Module Icons on page 889
- ▶ Defects Module Fields on page 891
- ▶ New Defect Dialog Box on page 894
- ▶ Defect Details Dialog Box on page 896
- ▶ Similar Defects Dialog Box/Pane on page 899
- ▶ Linked Defects/Entities Page on page 902



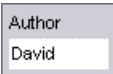

## Defects Module Window

This window enables you to define and maintain ALM defects. ALM organizes and displays defect data in the Defects grid.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, select <b>Defects</b> .   |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> Not all release management fields and functionality are available in the Defects module. |
| <b>Relevant tasks</b>        | "How to Track Defects in ALM" on page 869   |
| <b>See also</b>              | "Defect Tracking Overview" on page 866  |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements   | Description  |
|---|--|
| <p>&lt;Defects module common UI elements&gt;</p>  | <ul style="list-style-type: none"> <li>▶ <b>Defect fields.</b> For field definitions, see "Defects Module Fields" on page 891.</li> <li>▶ <b>Defect menus and buttons.</b> For command and button descriptions, see "Defects Module Menus and Buttons" on page 883.</li> <li>▶ <b>Defect icons.</b> For icon descriptions, see "Defects Module Icons" on page 889.</li> <li>▶ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu, and sidebar, see "ALM Common Areas" on page 41.</li> </ul> |
| <p>&lt;filter status bar&gt;</p>  | <p>Describes the filter currently applied to the grid. Located directly under the toolbar.</p> <ul style="list-style-type: none"> <li>▶ <b>Showing &lt;x&gt; results.</b> Indicates the number of records currently displayed out of the total records.</li> <li>▶ <b>Retrieve all &lt;x&gt; results.</b> Click to display all records.</li> </ul>   |
| <p>&lt;grid filters&gt;</p>  | <p>Displays a grid filter box under each column name, enabling you to define a filter condition for a column.</p> <p>Type directly into the box, or click the box to display the browse button, which opens the Select Filter Condition dialog box. For user interface details, see "Select Filter Condition Dialog Box" on page 74.</p>   |
| <p>&lt;similar defects pane&gt;</p>   | <p>Enables you to check for similar defects from the Defects grid. For user interface details, see "Similar Defects Dialog Box/Pane" on page 899.</p> <p><b>Available:</b> After selecting the <b>Find Similar Defects</b>  button in the Defects grid.</p>   |
| <p><b>Attachments tab</b></p>   | <p>Lists attachments that provide additional information about the currently selected defect. For user interface details, see "Attachments Page" on page 90.</p>   |


| UI Elements                | Description  |
|----------------------------|--|
| <b>Description tab</b>     | Describes the currently selected defect.<br>Click in the <b>Description</b> or <b>Comments</b> text boxes in this tab to display a toolbar for formatting and spell checking the text. |
| <b>History tab</b>         | Lists changes made to the currently selected defect. For user interface details, see "History Tab" on page 85.   |
| <b>Linked Entities tab</b> | Lists the defects and other entities linked to the currently selected defect. For user interface details, see "Linked Defects/Entities Page" on page 902.                              |




## Defects Module Menus and Buttons





This section describes the menus and buttons available in the Defects module.

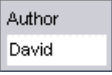
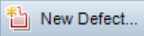
|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the ALM sidebar, select <b>Defects</b> .  |
| <b>Important information</b> | <p><b>Tip:</b> You can access the Defects menu bar from the Defects module by pressing the shortcut key ALT. Additionally, you can perform many other ALM operations using shortcut keys. For a list of shortcut keys, see "ALM Keyboard Shortcut Reference" on page 154.</p> <p><b>Quality Center Starter Edition:</b> Not all menus and buttons are available.</p> |
| <b>Relevant tasks</b>        | "How to Track Defects in ALM" on page 869  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Defects Module Icons" on page 889</li> <li>➤ "Defect Tracking Overview" on page 866</li> </ul>   |




User interface elements are described below:

| UI Elements (A-Z)  | Menu      | Description   |
|--|-----------|---|
| <b>Add to Favorites</b>  | Favorites | Opens the Add Favorite dialog box, enabling you to add a favorite view to your private or the public folder. For user interface details, see "Add Favorite Dialog Box" on page 117.   |
| <b>Alerts</b>  | Edit      | Opens the Alerts dialog box, enabling you to display alerts for the defect. For user interface details, see "Alerts Dialog Box" on page 109.  |
|  <b>Attachments</b> | <toolbar> | Opens the Attachments page, enabling you to view attachments for, and add attachments to, the selected defect. For user interface details, see "Attachments Page" on page 90.   |
| <b>Clear Alerts</b>  | Edit      | Clears displayed alerts for the module. For user interface details, see "How to Use Alerts" on page 103.  |
| <b>Clear Follow Up Flag</b>  | Edit      | Clears a follow up flag of a selected defect. For concept details, see "Follow Up Flags Overview" on page 102.  |
| <b>Copy URL/Paste</b>  | Edit      | Copies a selected defect and pastes its URL as a link. The defect itself is not copied. Instead, you can paste the address into another location, such as an email or a document. Clicking the link opens ALM and takes you to the defect. If you are not already logged in, ALM first prompts for login details. |


| UI Elements (A-Z)   | Menu    | Description   |
|---|---------|---|
| <b>Copy/Paste</b>   | Edit    | Copies selected defects within the same project or across projects.<br><b>Note:</b> To copy defects across projects, both projects must use the same ALM version and patch level.   |
|  <b>Defect Details</b> | Defects | Opens the Defect Details dialog box, displaying the details of the selected defect. For user interface details, see "Defect Details Dialog Box" on page 896.  |
|  <b>Delete</b>         | Edit    | Deletes the selected defect. When you delete a defect, ALM does not reuse the Defect ID.  |
| <b>Export</b>   | Defects | Opens the Export Grid Data dialog box, enabling you to export the defects in a grid as a text file, Microsoft Excel worksheet, Microsoft Word document, or HTML document.<br><br>Select one of the following options:<br><ul style="list-style-type: none"> <li>▶ <b>All.</b> Exports all defects in the grid.</li> <li>▶ <b>Selected.</b> Exports selected defects in the grid.</li> </ul> |
|  <b>Filter/Sort</b>  | View    | Enables you to filter and sort the defects in the grid. Any currently applied filters or sorting orders are displayed below the toolbar. For user interface details, see "Filter Dialog Box" on page 64.  |
| <b>Find</b>   | Edit    | Opens the Find dialog box, enabling you to search for a defect in the Defects module. For user interface details, see "Find Dialog Box" on page 78.   |

| UI Elements (A-Z)   | Menu     | Description   |
|---|----------|---|
| <b>Find Next</b>  | Edit     | Searches for the next item in the Defects grid that meets the previously-defined search criteria.   |
|  <b>Find Similar Defects</b> | Edit     | Search keywords in the <b>Summary</b> and <b>Description</b> fields for defects similar to the selected defect. Similar defects are displayed according to the percentage of similarity in the pane at the bottom of the window. For user interface details, see the "Similar Defects Dialog Box/Pane" on page 899. |
|  <b>Find Similar Text</b>    | Edit     | Search keywords in the <b>Summary</b> and <b>Description</b> fields for defects similar to a text string. For user interface details, see the "Similar Defects Dialog Box/Pane" on page 899.  |
|  <b>Flag for Follow Up</b>   | Edit     | Opens the Flag For Follow Up dialog box, enabling you to define a follow up flag for the selected defect. For user interface details, see "Flag For Follow Up Dialog Box" on page 111.  |
|  <b>Go to Defect</b>       | Defects  | Opens the Go To Defect dialog box, enabling you to find a specific defect by Defect ID.   |
| <b>Graphs</b>   | Analysis | Lists the graphs you can generate for defects data. Select a predefined graph, or launch the graph wizard. For details on the predefined graph types, see "Graph Types" on page 942.  |

| UI Elements (A-Z)  | Menu      | Description  |
|--|-----------|--|
| <b>Grid Filters</b><br> | View      | <p>Displays a grid filter box under each column name, enabling you to define a filter condition for a column.</p> <p>Type directly into the box, or click the box to display the browse button, which opens the Select Filter Condition dialog box. For more details, see "Select Filter Condition Dialog Box" on page 74.</p> |
| <b>Indicator Columns</b>   | View      | <p>Display indicators on the left-side of the Defects grid. For user interface details, see "Defects Module Icons" on page 889.</p>  |
| <b>Information Panel</b>   | View      | <p>Displays information panel tabs on the bottom of the Defects grid. For more details, see "Defects Module Window" on page 881.</p>   |
| <b>Invert Selection</b>  | Edit      | <p>Unselects all previously selected defects in the grid and selects all previously unselected defects.</p>  |
| <b>Most Recently Used</b>  | Analysis  | <p>Lists the most recently viewed reports and graphs in the Defects module.</p>  |
|  <b>New Defect</b>    | Defects   | <p>Opens the Create New Defect dialog box, enabling you to add a defect. For user interface details, see "New Defect Dialog Box" on page 894.</p>  |
| <b>Organize Favorites</b>  | Favorites | <p>Organizes your favorite views. For user interface details, "Organize Favorites Dialog Box" on page 119.</p>   |
| <b>Private</b>   | Favorites | <p>Lists the favorite views that are accessible only to the user who created them.</p>   |

| UI Elements (A-Z)   | Menu               | Description   |
|---|--------------------|---|
| <b>Public</b>   | Favorites          | Lists the favorite views that are accessible to all users.  |
|  <b>Refresh All</b>      | View               | Refreshes the Defects grid so that it displays the most up-to-date defects based on the filters you have selected.  |
| <b>Replace</b>  | Edit               | Opens the Replace dialog box, enabling you to replace a field value. For user interface details, see "Replace Dialog Box" on page 80.   |
| <b>Report Selected</b>  | Analysis > Reports | Displays a report of the selected defects.  |
| <b>Reports</b>  | Analysis           | Lists the predefined reports you can produce on defects data. For details on the report types, see "Predefined Standard Reports" on page 1042.  |
| <b>Select All</b>   | Edit               | Selects all defects in the grid.  |
|  <b>Select Columns</b>   | View               | Opens the Select Columns dialog box, enabling you to determine which fields to display in the grid and their order. For user interface details, see "Select Columns/Select Fields Dialog Box" on page 94. |
|  <b>Send by E-mail</b> | Defects            | Opens the Send E-mail dialog box, enabling you to send a defect by email to recipients selected from a list. For user interface details, see "Send E-mail Dialog Box" on page 87.                         |
| <b>Standard Defect Report</b>   | Analysis > Reports | Lists the defects that appear in the Defects grid. For details, see Chapter 40, "Standard Reports."   |








| UI Elements (A-Z)  | Menu | Description  |
|--|------|--|
|  <b>Text Search</b> | Edit | Opens the text search pane in the lower part of the Defects module window, enabling you to search for records in predefined fields. For user interface details, see "Text Search Pane" on page 82. |
| <b>Update Selected</b>   | Edit | Opens the Update Selected dialog box, enabling you to update a field value for multiple selected defects in the grid. For user interface details, see "Update Selected Dialog Box" on page 96.     |

## Defects Module Icons

This section describes the icons available in the Defects module.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, select <b>Defects</b> .   |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> Not all icons are available.   |
| <b>Relevant tasks</b>        | "How to Track Defects in ALM" on page 869   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Defect Tracking Overview" on page 866</li> <li>➤ "Defects Module Menus and Buttons" on page 883</li> <li>➤ "Defects Module Fields" on page 891</li> </ul> |

The icons are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | < <b>green asterisk</b> >. The applicable tab is populated.   |
|  | <p><b>Alerts.</b> Click to view alerts for the defect.</p> <ul style="list-style-type: none"> <li>➤ <b>Red alert.</b> The alert is new.</li> <li>➤ <b>Gray alert.</b> The alert has already been read.</li> </ul> <p>For user interface details, see "Alerts Dialog Box" on page 109.</p>                                     |
|  | <p><b>Attachments.</b> Click to view attachments for the specified defect. For user interface details, see "Attachments Page" on page 90.</p>   |
|  | <p><b>Follow Up Flags.</b> Click to view follow up flags for the defect.</p> <ul style="list-style-type: none"> <li>➤ <b>Gray flag.</b> The follow up flag is new.</li> <li>➤ <b>Red flag.</b> The follow up date has arrived.</li> </ul> <p>For user interface details, see "Flag For Follow Up Dialog Box" on page 111.</p> |
|  | <p><b>Linked Entities.</b> Click to view linked entities for the defect in the Defect Details dialog box. For user interface details, see "Linked Defects/Entities Page" on page 902.</p>   |

## Defects Module Fields

This section describes the Defects module fields.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, select <b>Defects</b> .   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You can add user-defined fields and change the label of any of the fields in the Defects module. You can also customize project lists. For details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You can use the Script Editor to restrict and dynamically change the fields and values in the Defects module. For details, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ When you select a defects column with a user name value (including user-defined fields), ALM displays a list with the name and full name of each user. You can search for users, sort users, group users by user group, and select users from the users list or a group tree. For user interface details, see "Users List Dialog Box" on page 76.</li> <li>▶ <b>Quality Center Starter Edition:</b> Not all release management fields are available.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Track Defects in ALM" on page 869   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "Defect Tracking Overview" on page 866</li> <li>▶ "Defects Module Menus and Buttons" on page 883</li> <li>▶ "Defects Module Window" on page 881</li> </ul>   |

User interface elements are described below:

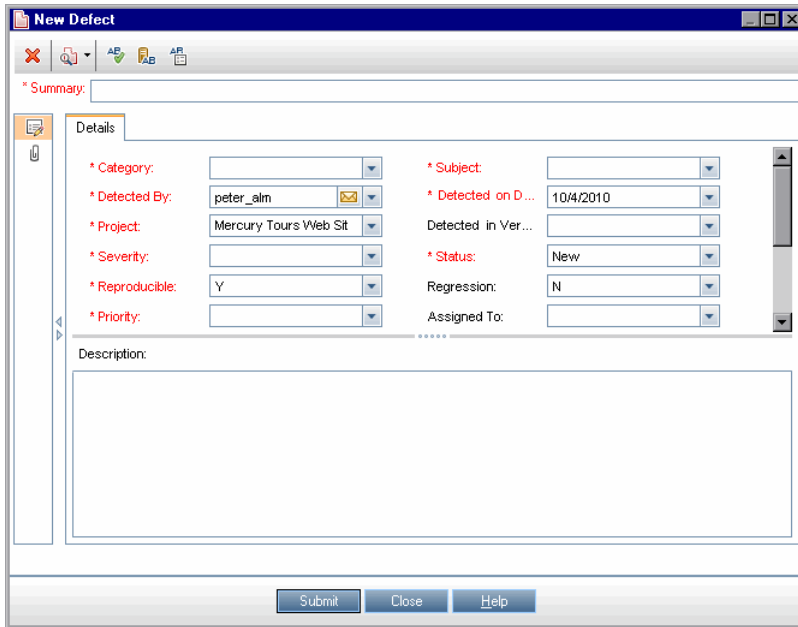
| UI Elements (A-Z) | Description  |
|-------------------|--|
| <b>Defect ID</b>  | A unique numeric ID for the defect, assigned automatically by ALM. The Defect ID is read-only. |
| <b>Summary</b>    | A brief summary of the defect.   |
| <b>Subject</b>    | The subject folder.  |


| UI Elements (A-Z)              | Description   |
|--------------------------------|---|
| <b>Assigned To</b>             | The user name of the person who is assigned to fix the defect.  |
| <b>Severity</b>                | The severity of the defect, ranging from low (level 1) to urgent (level 5).   |
| <b>Priority</b>                | The priority of the defect, ranging from low priority (level 1) to urgent priority (level 5).   |
| <b>Actual Fix Time</b>         | The actual number of days needed to fix the defect. If this field is left blank, ALM automatically calculates the Actual Fix Time as <b>Closing Date–Detected on Date</b> .                                 |
| <b>Closed in Version</b>       | The application version in which the defect was closed.   |
| <b>Closing Date</b>            | The date on which the defect was closed.  |
| <b>Comments</b>                | Comments about the defect. To add a new comment, click the <b>Add Comment</b> button. A new section is added to the Comments box, displaying your user name and the database's current date.                |
| <b>Description</b>             | Describes the defect in detail.   |
| <b>Detected By</b>             | The user name of the person who submitted the defect.   |
| <b>Detected in Cycle</b>       | The cycle in which the defect was detected.<br><br>When assigning a defect to a cycle in the <b>Detected in Cycle</b> field, ALM automatically assigns its release to the <b>Detected in Release</b> field. |
| <b>Detected in Release</b>     | The release in which the defect was detected.   |
| <b>Detected in Version</b>     | The application version in which the defect was detected.   |
| <b>Detected on Date</b>        | The date on which the defect was detected.<br><br><b>Default:</b> The current database server date.   |
| <b>Estimated Fix Time</b>      | The estimated number of days required for fixing the defect.  |
| <b>Modified</b>                | The date and time when this defect was last changed.  |
| <b>Planned Closing Version</b> | The version in which the defect is planned to be fixed.   |

| UI Elements (A-Z)     | Description  |
|-----------------------|--|
| <b>Project</b>        | The name of the project where the defect occurs.   |
| <b>Reproducible</b>   | Whether the defect can be recreated under the same conditions by which it was detected.<br><b>Default: Y</b>   |
| <b>Status</b>         | The current status of the defect. Defect status can be one of the following: <b>Closed, Fixed, New, Open, Rejected, Reopen.</b><br><b>Default: New</b>   |
| <b>Target Cycle</b>   | The cycle in which the defect is targeted to be fixed.<br>When assigning a defect to a cycle in the <b>Target Cycle</b> field, ALM automatically assigns its release to the <b>Target Release</b> field. |
| <b>Target Release</b> | The release in which the defect is targeted to be closed.  |






## New Defect Dialog Box

This dialog box enables you to create defects.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | Use one of the following: <ul style="list-style-type: none"> <li>➤ From the Defects module, click  <b>New Defect...</b></li> <li>➤ From any module, select <b>Tools &gt; New Defect.</b></li> </ul> |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> Not all fields and functionality are available.   |
| <b>Relevant tasks</b>        | "How to Track Defects in ALM" on page 869  |
| <b>See also</b>              | "Defect Tracking Overview" on page 866   |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <b>Clear All Fields.</b> Clears the data.  |
|  | <b>Find Similar.</b> Opens the Similar Defects dialog box, enabling you to find: <ul style="list-style-type: none"> <li>▶ Defects similar to the new defect.</li> <li>▶ Defects similar to a text string.</li> </ul> For user interface details, see "Similar Defects Dialog Box/ Pane" on page 899. |
|  | <b>Check Spelling.</b> Checks the spelling for the selected word or text box.  |
|  | <b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.  |
|  | <b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.   |
| <b>Attachments</b>  | Enables you to add attachments that provide additional information about the new defect. For user interface details, see "Attachments Page" on page 90.  |
| <b>Details</b>  | Lists the defect fields. For details on defect fields, see "Defects Module Fields" on page 891.  |








## Defect Details Dialog Box



This dialog box enables you to update defect details, add attachments, view defect history, and link to other defects. You can also view other entities that are linked to the defect.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | Right-click a defect in the Defects grid and select <b>Defect Details</b> .   |
| <b>Important information</b> | <b>Quality Center Starter Edition:</b> Not all fields and functionality are available.  |
| <b>Relevant tasks</b>        | "How to Track Defects in ALM" on page 869   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Defect Tracking Overview" on page 866</li> <li>➤ "Defects Module Fields" on page 891</li> </ul> |



User interface elements are described below:

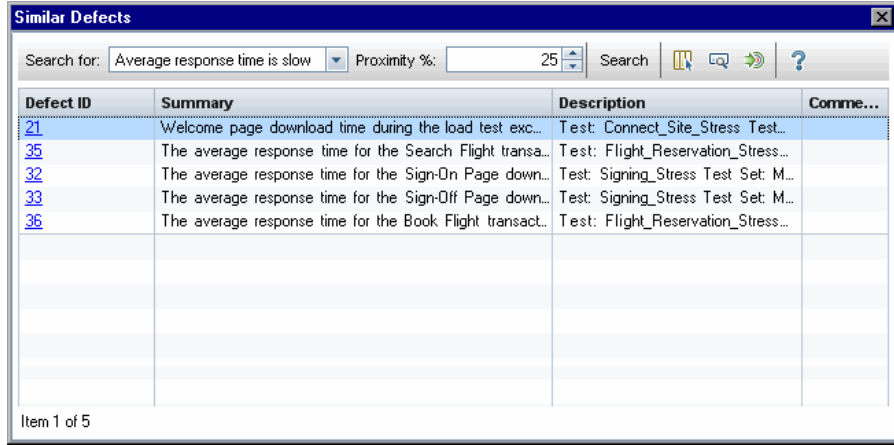
| UI Elements (A-Z)   | Description  |
|---|--|
|    | <p><b>First/Previous/Next/Last Entity.</b> Allows you to browse through the defects.</p>   |
|    | <p><b>Go to Defect.</b> Opens the Go To Defect dialog box, enabling you to find a specific defect by Defect ID. You can only go to defects that are in the current filter. After specifying the defect ID, click one of the following:</p> <ul style="list-style-type: none"> <li>▶ <b>Open Details.</b> Opens the defect in the Defects Details dialog box.</li> <li>▶ <b>Show in Grid.</b> Highlights the defect in the Defects grid, after you close the Defects Details dialog box.</li> </ul> |
|    | <p><b>Flag for Follow Up.</b> Opens the Flag For Follow Up dialog box, enabling you to define a follow up flag for selected defects. For user interface details, see "Flag For Follow Up Dialog Box" on page 111.</p>  |
|    | <p><b>Alerts.</b> Opens the Alerts dialog box, enabling you to display alerts for the defect. For user interface details, see "Alerts Dialog Box" on page 109.</p> <p><b>Available when:</b> The selected defect has an alert associated with it.</p>  |
|  | <p><b>Standard Defect Report.</b> Select one of the following reports:</p> <ul style="list-style-type: none"> <li>▶ <b>Execution Report.</b> Displays detailed information about the linked test run.<br/><b>Available:</b> If the defect is linked to a test run.</li> <li>▶ <b>Standard Defect Report.</b> A standard defect report for the selected defect.</li> </ul>  |
|  | <p><b>Send by E-mail.</b> Opens the Send E-mail dialog box, enabling you to send a defect by email to recipients selected from a list. For user interface details, see "Send E-mail Dialog Box" on page 87.</p>  |
|  | <p><b>Spell Check.</b> Checks the spelling for the selected word or text box.</p>  |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Spelling Options.</b> Enables you to configure the way ALM checks spelling.</p>  |
|  | <p><b>Thesaurus.</b> Displays a synonym, antonym, or related word for the selected word.</p>   |
| <p><b>Details</b></p>   | <p>Lists the defect fields. For details on defect fields, see "Defects Module Fields" on page 891.</p>   |
| <p><b>Attachments</b></p>   | <p>Lists attachments that provide additional information about the currently selected defect. For user interface details, see "Attachments Page" on page 90.</p> |
| <p><b>Linked Entities</b></p>   | <p>Lists the entities linked to the currently selected defect. For user interface details, see "Linked Defects/Entities Page" on page 902.</p>                   |
| <p><b>History</b></p>   | <p>Lists changes made to the currently selected defect. For user interface details, see "History Tab" on page 85.</p>  |

## Similar Defects Dialog Box/Pane

The Similar Defects dialog box enables you to check for similar defects before submitting a new defect. The Similar Defects pane enables you to check for similar defects at any time from the Defects grid.

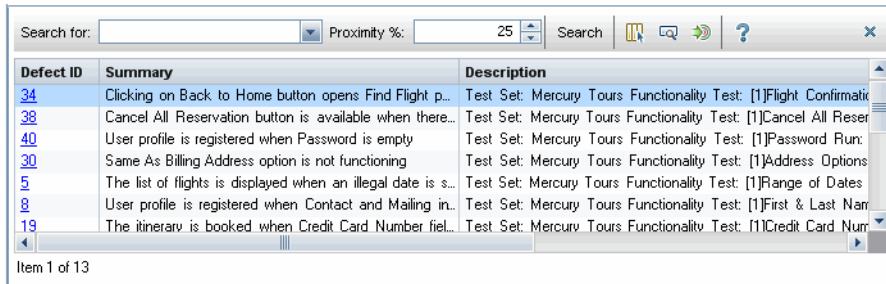
### Similar Defects Dialog Box




| Defect ID          | Summary   | Description                         | Comme... |
|--------------------|---|-------------------------------------|----------|
| <a href="#">21</a> | Welcome page download time during the load test exc...    | Test: Connect_Site_Stress Test...   |          |
| <a href="#">35</a> | The average response time for the Search Flight transa... | Test: Flight_Reservation_Stress...  |          |
| <a href="#">33</a> | The average response time for the Sign-On Page down...    | Test: Signing_Stress Test Set: M... |          |
| <a href="#">36</a> | The average response time for the Sign-Off Page down...   | Test: Signing_Stress Test Set: M... |          |
|                    | The average response time for the Book Flight transact... | Test: Flight_Reservation_Stress...  |          |
|                    |   |                                     |          |
|                    |   |                                     |          |
|                    |   |                                     |          |
|                    |   |                                     |          |
|                    |   |                                     |          |




Item 1 of 5

## Similar Defects Pane



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Defects grid or the New Defect dialog box, select a defect and click the <b>Find Similar Defects</b>  button. Select either <b>Find Similar Defects</b> or <b>Find Similar Text</b> .  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ Checking for similar defects is done by comparing a selected defect with other defects in your project or by comparing defects to a text string.</li> <li>▶ When performing a Find Similar operation, results are displayed with the most likely candidates on top. If no similar defects are found, a message is displayed.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Search for Defects" on page 878  |
| <b>See also</b>              | "Defect Tracking Overview" on page 866   |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

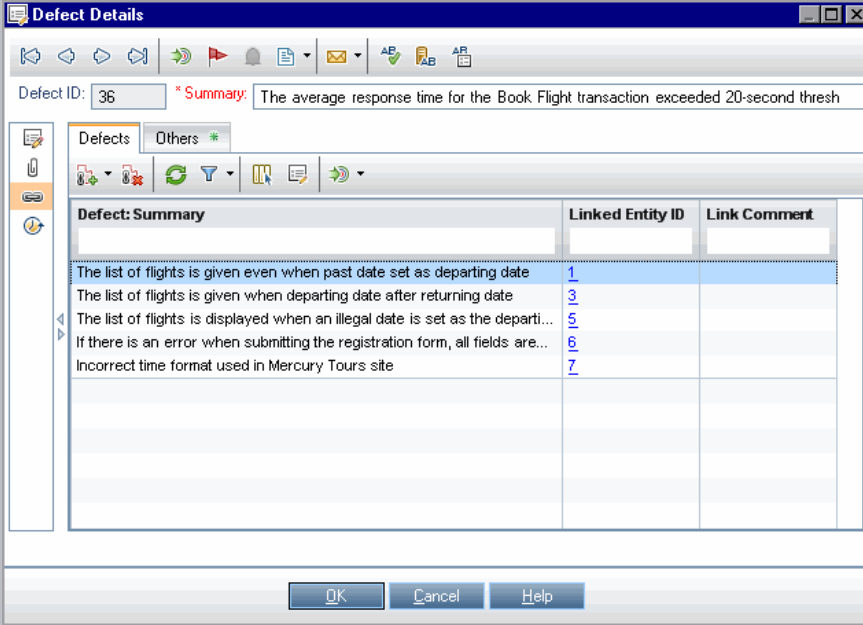
| UI Elements   | Description  |
|---|--|
|  | <b>Select columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the grid and their order. For user interface details, see "Select Columns/Select Fields Dialog Box" on page 94. |
|  | <b>Searchable Fields.</b> The fields used to find similar defects. The fields are read-only.   |
|  | <b>Go To.</b> Locates the selected defect in the Defects grid.   |

| UI Elements        | Description  |
|--------------------|--|
| <defects>          | List of similar defects. For details of the fields displayed for the similar defects, see "Defects Module Fields" on page 891.   |
| <b>Item</b>        | The number of the current defect in relation to the total number of similar defects found.<br>Example: <b>Item 2 of 10</b>   |
| <b>Proximity %</b> | When searching for similar text, ALM limits the results of defects found to those with a minimum similarity according to this percentage.<br><b>Default:</b> ALM returns defects with a similarity of at least 25 percent.   |
| <b>Search</b>      | Start search.  |
| <b>Search for:</b> | Text string to find.<br>Letter case does not affect the results.<br>The following are ignored: <ul style="list-style-type: none"> <li>▶ articles (a, an, the);</li> <li>▶ coordinate conjunctions (and, but, for, nor, or);</li> <li>▶ boolean operators (and, or, not, if, then);</li> <li>▶ wildcards (?, *, [ ])</li> </ul> |

## Linked Defects/Entities Page

This page enables you to define and maintain links to defects from defects and other entities.

### Linked Defects Tab

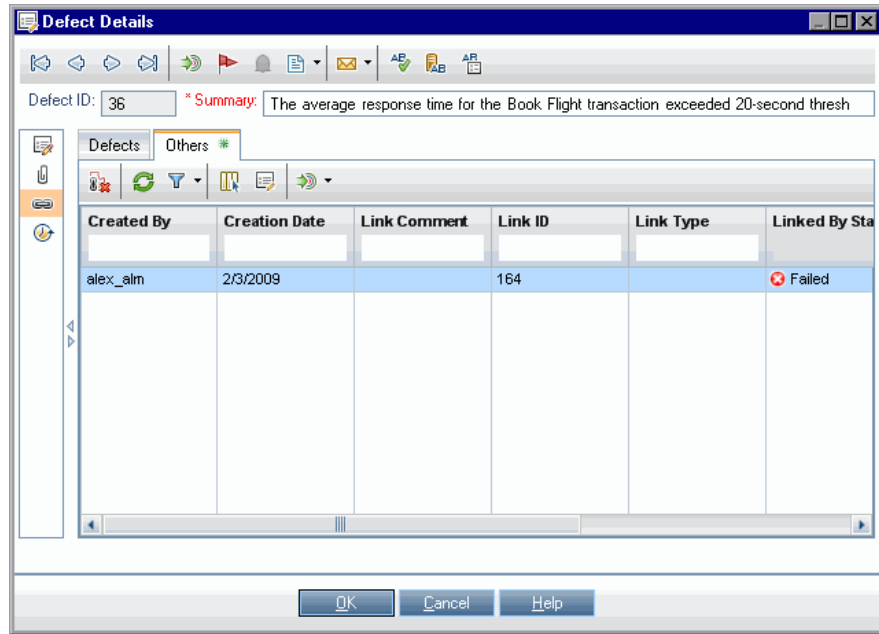


Defect ID: 36 \* Summary: The average response time for the Book Flight transaction exceeded 20-second thresh

| Defect: Summary   | Linked Entity ID | Link Comment |
|---|------------------|--------------|
| The list of flights is given even when past date set as departing date        | 1                |              |
| The list of flights is given when departing date after returning date         | 3                |              |
| The list of flights is displayed when an illegal date is set as the depart... | 5                |              |
| If there is an error when submitting the registration form, all fields are... | 6                |              |
| Incorrect time format used in Mercury Tours site                              | 7                |              |

Buttons: OK, Cancel, Help








## Linked Entities Tab





|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ <b>From the Defects module:</b> On the Defect Details dialog box sidebar, select <b>Linked Entities</b>. Click the <b>Defects</b> tab for linked defects or the <b>Others</b> tab for linked entities that are not defects.</li> <li>▶ <b>From other modules and dialog boxes:</b> Click <b>Linked Defects</b> on the sidebar or the <b>Linked Defects</b> tab.</li> </ul> |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ You can link defects to the following ALM entities: requirements, business, tests, test sets, business process tests, flows, test instances, runs, run steps, and other defects.</li> <li>▶ From within the Defects module, you can link to other defects.</li> <li>▶ To link a defect to other ALM entities, go to the module or Details dialog box for that entity.</li> </ul>                            |

|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | "How to Link Defects" on page 879      |
| <b>See also</b>       | "Defect Tracking Overview" on page 866 |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)   | Description   |
|---|---|
|    | <b>First/Previous/Next/Last Entity.</b> Allows you to browse through the entities.<br><b>Available from:</b> Linked Defects tab.  |
|    | <b>Link Existing Defect.</b> Enables you to add a link to an existing defect:<br><ul style="list-style-type: none"> <li>▶ <b>By ID.</b> In the Link Existing Defect dialog box, select a defect by typing the defect ID.</li> <li>▶ <b>Select.</b> In the Defects to Link dialog box, select a defect from the grid.</li> </ul> |
|    | <b>Add and Link Defect.</b> Opens the New Defect dialog box, enabling you to add a defect link by submitting a new defect. For user interface details, see "New Defect Dialog Box" on page 894.<br><b>Available from:</b> All modules except the Defects module.  |
|   | <b>Remove Link.</b> Removes the selected defect's link.   |
|  | <b>Refresh All.</b> Refreshes the list of linked defects or entities so that it displays the most up-to-date defects based on the filters you have selected.  |
|  | <b>Filter/Sort.</b> Enables you to filter and sort the list of linked defects and entities. Any currently applied filters or sorting orders are displayed below the toolbar. For user interface details, see "Filter Dialog Box" on page 64.  |
|  | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the grid and their order. For user interface details, see "Select Columns/Select Fields Dialog Box" on page 94.  |



| UI Elements (A-Z)   | Description   |
|---|---|
|                              | <p><b>Defect Details.</b> Opens the Defect Details dialog box, displaying the details of the selected defect. For user interface details, see "Defect Details Dialog Box" on page 896.</p>  |
| <Defects module fields>   | <p>For user interface details, see "Defects Module Fields" on page 891.</p>   |
| <filter status bar>   | <p>Describes the filters currently applied to the grid. Located directly above the grid filter boxes.</p>   |
| <p>&lt;grid filters&gt;</p>  | <p>Displays a grid filter box under each column name, enabling you to define a filter condition for a column.</p> <p>Type directly into the box, or click the box to display the browse button, which opens the Select Filter Condition dialog box. For user interface details, see "Select Filter Condition Dialog Box" on page 74.</p>                |
| <b>Created By</b>   | <p>The user name of the person who created the link.</p>  |
| <b>Creation Date</b>  | <p>The date on which the link was created.</p>  |
| <b>Defects</b>  | <p>A list of defects linked to the current defect.</p>  |
| <b>Direct Links/All Links</b>   | <p>Select an option:</p> <ul style="list-style-type: none"> <li>▶ <b>Direct links.</b> Displays direct links only.</li> <li>▶ <b>All links.</b> Displays all links.</li> </ul> <p>For information about direct and indirect links, see "Defect Tracking Overview" on page 866.</p> <p><b>Available from:</b> All modules except the Defects module.</p> |
| <b>Link Comment</b>   | <p>Enables you to add comments about the link.</p>  |
| <b>Link Entity Type</b>   | <p>The linked entity type (for example: step, test, test set).</p>  |
| <b>Link ID</b>  | <p>A unique numeric ID for the link, assigned automatically by ALM. The Link ID is read-only.</p>   |
| <b>Link Type</b>  | <p>A value of the Link Type customized list. For more information on lists, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</p>   |
| <b>Linked By Status</b>   | <p>The current status of the linked entity.</p>   |

| UI Elements (A-Z)         | Description   |
|---------------------------|---|
| <b>Linked Entity ID</b>   | A unique numeric ID for the linked entity, assigned automatically by ALM. The Linked Entity ID is read-only.  |
| <b>Linked Entity Name</b> | The linked entity name. For example, the requirement name.  |
| <b>Others</b>             | A list of other entities linked to the current defect.  |
| <b>Show Links for</b>     | <p>Determines which links to display:</p> <ul style="list-style-type: none"> <li>▶ <b>Current Req Links.</b> Defect links added to the current requirement only.</li> <li>▶ <b>Including Children's Links.</b> Defect links added to the current requirement and its children.</li> </ul> <p><b>Available from:</b> Requirements module</p> |

# Part VII

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## Analysis



# 35

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## Introducing Analysis

This chapter includes:

### Concepts

- ▶ Analysis Overview on page 910

### Tasks

- ▶ How to Analyze Data in ALM on page 911

### Reference

- ▶ Dashboard User Interface on page 913

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## Concepts

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### Analysis Overview

HP Application Lifecycle Management (ALM) provides you with analysis tools enabling you to analyze and display ALM data in various formats.

#### **Dashboard Modules**

In the Dashboard modules, you analyze ALM data by creating graphs, standard reports, and Excel reports. You can also create dashboard pages that display multiple graphs side-by-side.

Dashboard contains two modules: The Analysis View module and the Dashboard View module.

The **Analysis View** module contains the analysis tree in which you organize all of your analysis items. Analysis items can be any of the following analysis types: graphs, project reports, Excel reports, and standard reports.

The **Dashboard View** module contains the dashboard tree in which you organize dashboard pages. In **dashboard pages** you arrange multiple graphs that you created in the analysis tree, and display them in a single view.

#### **Additional Analysis Tools**

- ▶ **Live Analysis graphs.** Enables you to create and display a dynamic graphic representation of data related to test plans and test sets. For more details, see Chapter 41, "Live Analysis Graphs."
- ▶ **Document Generator.** Enables you to create a Microsoft Word document containing a project's requirements, test plans, test set folders, and defect tracking data. For more details, see Chapter 42, "Project Documents."

For task details, see "How to Analyze Data in ALM" on page 911.

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**Note:** Run step information of runs executed in Sprinter are not included in any of the reporting tools.

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## Tasks

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### **How to Analyze Data in ALM**

This task describes how to analyze data in ALM using various analysis tools.

To learn more about data analysis, see "Analysis Overview" on page 910.

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**Note:** This task is part of a higher-level task. For details, see "Application Lifecycle Management Roadmap" on page 27.

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This task includes the following steps:

- "Generate a graph" on page 911
- "Generate a dashboard page" on page 912
- "Generate a project report" on page 912
- "Generate an Excel report" on page 912
- "Manage analysis items and dashboard pages" on page 912
- "Generate a Live Analysis graph" on page 912
- "Generate a project document" on page 912

#### **Generate a graph**

- View selected data in a graph format. For task details, see "How to Generate a Graph" on page 936.
- View selected Project Planning and Tracking data in a graph format. For task details, see "How to Generate a PPT Graph" on page 981.

### **Generate a dashboard page**

Group together selected graphs and view them in a single display.

For task details, see "How to Generate a Dashboard Page" on page 940.

### **Generate a project report**

Produce a project report of selected data.

For task details, see "How to Create Project Reports" on page 993.

### **Generate an Excel report**

Extract data from the project database with SQL queries, and format the data in Microsoft Excel.

For task details, see "How to Generate an Excel Report" on page 1014.

### **Manage analysis items and dashboard pages**

Organize analysis items and dashboard pages in the analysis and dashboard trees. Create folders, move, copy, rename, and delete items.

For user interface details, see "Analysis View Menus and Buttons" on page 919.

### **Generate a Live Analysis graph**

Live Analysis graphs enable you to create and display dynamic graphs related to test plan subjects and test sets.

For task details, see "How to Generate Live Analysis Graphs" on page 1057.

### **Generate a project document**

Project Documents enable you to create a Microsoft Word document containing selected project data.

For task details, see "How to Generate a Project Document" on page 1067.



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## Reference

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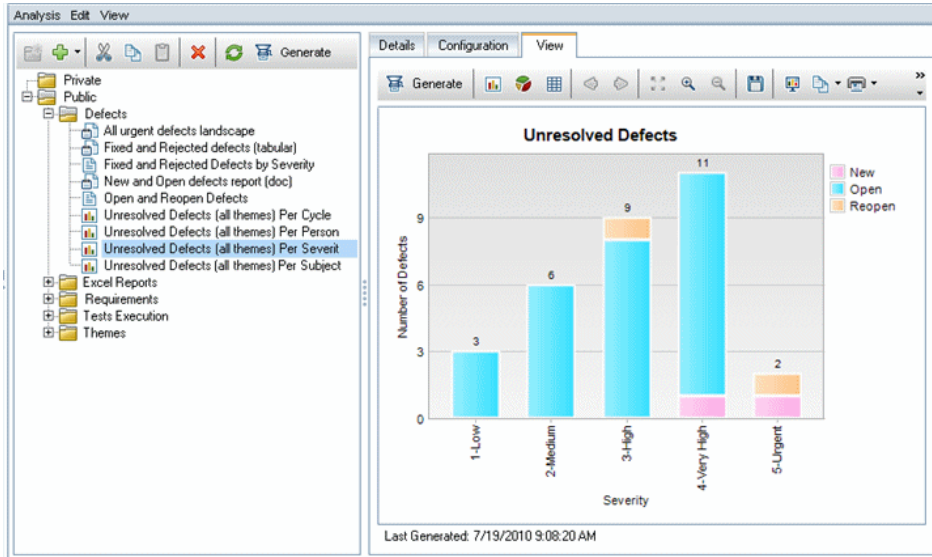
### **Dashboard User Interface**

This section includes:

- ▶ Analysis View Window on page 914
- ▶ Dashboard View Window on page 917
- ▶ Analysis View Menus and Buttons on page 919
- ▶ Dashboard View Menus and Buttons on page 925
- ▶ Dashboard Icons on page 928
- ▶ Details Tab on page 929
- ▶ Share Analysis Item Dialog Box on page 931

## Analysis View Window

This window enables you to create, manage and view analysis items. Analysis items include graphs, project reports, Excel reports and standard reports.



|                       |  |
|-----------------------|--|
| <b>To access</b>      | On the ALM sidebar, under <b>Dashboard</b> , select <b>Analysis View</b> . |
| <b>Relevant tasks</b> | "How to Analyze Data in ALM" on page 911                                   |
| <b>See also</b>       | "Analysis Overview" on page 910  |

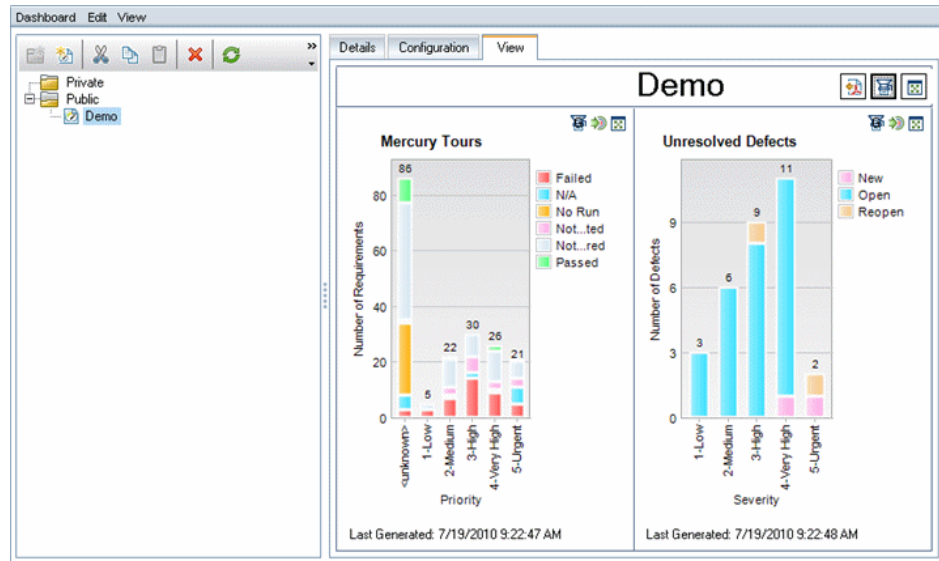
User interface elements are described below:

| UI Elements (A-Z)                  | Description   |
|------------------------------------|---|
| <Analysis View common UI elements> | <ul style="list-style-type: none"> <li>▶ <b>Analysis View menus and buttons.</b> For command and button descriptions, see "Analysis View Menus and Buttons" on page 919.</li> <li>▶ <b>Dashboard icons.</b> For icon descriptions, see "Dashboard Icons" on page 928.</li> <li>▶ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu and sidebar, see "ALM Common Areas" on page 41.</li> </ul>  |
| <analysis tree>                    | <p>Organizes analysis items under public and private root folders.</p> <ul style="list-style-type: none"> <li>▶ Analysis items that you create in a public folder are accessible to all users.</li> <li>▶ Analysis items that you create in a private folder are accessible only to the user that created them.</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ Analysis items in public folders may show different results for different users, depending on the data hiding definitions for the user group. For more information on data permissions, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You cannot move items within a folder. When you refresh the tree view, folder items are alphabetized.</li> </ul> |
| <b>Details tab</b>                 | <p>Displays details of the selected analysis item or folder. For more details, see "Details Tab" on page 929.</p>   |

| UI Elements (A-Z)               | Description  |
|---------------------------------|--|
| <p><b>Configuration tab</b></p> | <p>Enables you to configure the selected analysis item. For user interface details, see:</p> <ul style="list-style-type: none"> <li>➤ <b>Graphs:</b> "Configuration Tab – Graphs" on page 948</li> <li>➤ <b>Project reports:</b> "Configuration Tab – Project Reports" on page 1000</li> <li>➤ <b>Excel reports:</b> "Configuration Tab – Excel Reports" on page 1018</li> <li>➤ <b>Standard reports:</b> "Configuration Tab – Standard Reports" on page 1047</li> </ul> |
| <p><b>View tab</b></p>          | <p>Displays the selected graph or standard report. For user interface details, see:</p> <ul style="list-style-type: none"> <li>➤ <b>Graphs:</b> "View Tab – Graphs/Graph Window" on page 952</li> <li>➤ <b>Standard reports:</b> "View Tab – Standard Reports/Report Window" on page 1051</li> </ul> <p><b>Note:</b> Project reports and Excel reports are viewed in external applications, such as Microsoft Excel and Word.</p>  |

## Dashboard View Window

This window enables you to create, manage and view dashboard pages.



|                       |   |
|-----------------------|---|
| <b>To access</b>      | On the ALM sidebar, under <b>Dashboard</b> , select <b>Dashboard View</b> . |
| <b>Relevant tasks</b> | "How to Generate a Dashboard Page" on page 940                              |
| <b>See also</b>       | "Analysis Overview" on page 910   |

User interface elements are described below:





| UI Elements (A-Z)                   | Description  |
|-------------------------------------|--|
| <Dashboard View common UI elements> | <ul style="list-style-type: none"> <li>▶ <b>Dashboard View menus and buttons.</b> For command and button descriptions, see "Dashboard View Menus and Buttons" on page 925.</li> <li>▶ <b>Dashboard icons.</b> For icon descriptions, see "Dashboard Icons" on page 928.</li> <li>▶ <b>ALM main menu and sidebar.</b> For details on the Tools menu, Help menu and sidebar, see "ALM Common Areas" on page 41.</li> </ul>   |
| <dashboard tree>                    | <p>Organizes dashboard pages under public and private root folders.</p> <ul style="list-style-type: none"> <li>▶ Dashboard pages that you create in a public folder are accessible to all users.</li> <li>▶ Dashboard pages that you create in a private folder are accessible only to the user that created them.</li> <li>▶ Public dashboard pages can include only public graphs.</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ Dashboard pages in public folders may show different results for different users, depending on the data hiding definitions for the user group. For more information on data permissions, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ You cannot move dashboard pages within a folder. When you refresh the tree view, dashboard pages in a folder are alphabetized.</li> </ul> |
| <b>Configuration tab</b>            | Enables you to configure the selected dashboard page. For user interface details, see "Configuration Tab – Dashboard Pages" on page 958.   |
| <b>Details tab</b>                  | Displays details of the selected dashboard page or folder. For more details, see "Details Tab" on page 929.  |
| <b>View tab</b>                     | Displays the selected dashboard page. For user interface details, see "View Tab – Dashboard Pages" on page 960.  |

## Analysis View Menus and Buttons


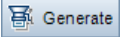
This section describes the menus and buttons available in the Analysis View module.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | On the ALM sidebar, under <b>Dashboard</b> , select <b>Analysis View</b> .   |
| <b>Important information</b> | <b>Tip:</b> You can access the menu bar from the Analysis View module by pressing the shortcut key ALT. Additionally, you can perform many other ALM operations using shortcut keys. For a list of shortcut keys, see "ALM Keyboard Shortcut Reference" on page 154. |
| <b>Relevant tasks</b>        | "How to Analyze Data in ALM" on page 911   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Dashboard Icons" on page 928</li> <li>➤ "Analysis View Window" on page 914</li> </ul>  |

User interface elements are described below:


| UI Elements (A-Z)  | Menu | Description  |
|--|------|--|
| Copy URL/Paste   | Edit | Copies a selected analysis item or folder and pastes its URL as a link. The item itself is not copied. Instead, you can paste the address into another location, such as an email or a document. Clicking the link opens ALM and takes you to the item. If you are not already logged in, ALM first prompts for login details.   |
|   <b>Copy/Paste</b>    | Edit | <p>Copies selected analysis items or folders within the same project or across projects.</p> <p><b>Note:</b> You can copy a project report to another project under the following conditions:</p> <ul style="list-style-type: none"> <li>▶ The name, type, and category of project templates used by the report are the same in both projects.</li> <li>▶ The report is not based on a baseline.</li> <li>▶ All entities covered in the report are defined in the target project.</li> </ul> |
|   <b>Cut/Paste</b> | Edit | <p>Moves selected analysis items or folders to a different location in the tree.</p> <p>When you move an analysis item from a public folder to a private folder, it is removed from public dashboard pages in which it is included.</p> <p><b>Tip:</b> You can also move an analysis item by dragging it to a new location in the tree.</p>  |



| UI Elements (A-Z)   | Menu     | Description  |
|---|----------|--|
|  <b>Delete</b>   | Edit     | <p>Deletes selected analysis items or folders. You cannot delete the root folders.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ Deleting a folder deletes all the items included in it.</li> <li>▶ Deleting a graph removes it from dashboard pages that contain it.</li> </ul>   |
| <b>Expand/Collapse</b>  | View     | Expands/collapses all the nodes under the selected folder.   |
| <b>Export Excel Report Definition</b>   | Edit     | Enables you to export the selected Excel report definition to an XML file. You can then import the Excel report definition to another project.   |
|  <b>Generate</b> | Analysis | <p>Generates the selected analysis item.</p> <p><b>Graphs and Standard Reports:</b> The results are displayed in the View tab. If the View tab is already selected, the analysis item is refreshed with the most up-to-date data.</p> <p><b>Project Reports and Excel Reports:</b> The results are displayed in an external application.</p> |
| <b>Graph Wizard</b>   | Analysis | Opens the graph wizard, enabling you to create and configure a graph. For more details, see "Graph Wizard" on page 962.  |
| <b>Import Excel Report Definition</b>   | Edit     | Enables you to import an Excel report definition that was previously exported to an XML file. The report definition is added to the selected analysis tree folder.   |

| UI Elements (A-Z)   | Menu     | Description   |
|---|----------|---|
| <b>New Excel Report</b>   | Analysis | Opens the New Excel Report dialog box, enabling you to create a new Excel report in the analysis tree. For more details, see "New Excel Report Dialog Box" on page 1031.  |
|  <b>New Folder</b> | Analysis | <p>Opens the New Folder dialog box, enabling you to add a folder under a selected folder in the analysis tree.</p> <p>Folders you create under the <b>Private</b> root folder are available to the owner only. Folders you create under the <b>Public</b> root folder are available to all users.</p> <p><b>Syntax exceptions:</b> The folder name cannot include the following characters: \ ^ *</p> |
| <b>New Graph</b>  | Analysis | Opens the New Graph dialog box, enabling you to create a new graph in the analysis tree. For more details, see "New Graph Dialog Box" on page 968.  |
|  <b>New Item</b>  | Toolbar  | Enables you to launch the graph wizard, or add a new graph, project report, Excel report, or standard report to the analysis tree.  |
| <b>New Project Report</b>   | Analysis | Opens the New Project Report dialog box, enabling you to create a new project report in the analysis tree. For more details, see "New Project Report Dialog Box" on page 1005.  |

| UI Elements (A-Z)  | Menu     | Description   |
|--|----------|---|
| <b>New Release Analysis &gt;<br/>Release Scorecard</b>   | Analysis | <p>Opens the New Graph dialog box, enabling you to create a new Release Scorecard graph in the analysis tree. For more details, see "New Graph Dialog Box" on page 968.</p> <p><b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p> |
| <b>New Release Analysis &gt;<br/>KPI Over Time Graph</b> | Analysis | <p>Opens the New Graph dialog box, enabling you to create a new KPI Over Time graph in the analysis tree. For more details, see "New Graph Dialog Box" on page 968.</p> <p><b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p>     |
| <b>New Release Analysis &gt;<br/>KPI Breakdown Graph</b> | Analysis | <p>Opens the New Graph dialog box, enabling you to create a new KPI Breakdown graph in the analysis tree. For more details, see "New Graph Dialog Box" on page 968.</p> <p><b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p>     |


| UI Elements (A-Z)  | Menu     | Description   |
|--|----------|---|
| <b>New Release Analysis &gt; KPI Breakdown Over Time Graph</b>                                   | Analysis | <p>Opens the New Graph dialog box, enabling you to create a new KPI Breakdown Over Time graph in the analysis tree. For more details, see "New Graph Dialog Box" on page 968.</p> <p><b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</p> |
| <b>New Standard Report</b>   | Analysis | <p>Opens the New Standard Report dialog box, enabling you to create a new standard report in the analysis tree. For more details, see "New Standard Report Dialog Box" on page 1053.</p>  |
|  <b>Refresh</b> | View     | <p>Refreshes the analysis tree so that it displays the most up-to-date information.</p>   |
| <b>Rename</b>  | Edit     | <p>Enables you to rename the selected analysis item or folder.</p>  |
| <b>Share Analysis Item</b>   | Edit     | <p>Enables others to view the selected graph outside ALM. For more details, see "Share Analysis Item Dialog Box" on page 931.</p> <p><b>Available from:</b> Graphs</p>  |



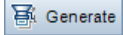
## Dashboard View Menus and Buttons




This section describes the menus and buttons available in the Dashboard View module.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under <b>Dashboard</b> , select <b>Dashboard View</b> .   |
| <b>Important information</b> | <b>Tip:</b> You can access the menu bar from the Dashboard View module by pressing the shortcut key ALT. Additionally, you can perform many other ALM operations using shortcut keys. For a list of shortcut keys, see "ALM Keyboard Shortcut Reference" on page 154. |
| <b>Relevant tasks</b>        | "How to Generate a Dashboard Page" on page 940  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Dashboard Icons" on page 928</li> <li>➤ "Dashboard View Window" on page 917</li> </ul>  |

User interface elements are described below:

| UI Elements (A-Z)   | Menu | Description   |
|---|------|---|
| <b>Copy URL/Paste</b>   | Edit | Copies a selected dashboard page or folder and pastes its URL as a link. The item itself is not copied. Instead, you can paste the address into another location, such as an email or a document. Clicking the link opens ALM and takes you to the item. If you are not already logged in, ALM first prompts for login details. |
|  <b>Copy/Paste</b> | Edit | Copies selected dashboard pages or folders within the same project or across projects.<br><br>When you paste a dashboard page, you choose how ALM copies the graphs included in the dashboard page.   |

| UI Elements (A-Z)  | Menu      | Description   |
|--|-----------|---|
|  <b>Cut/Paste</b> | Edit      | <p>Moves selected dashboard pages or folders to a different location in the tree.</p> <p>When you move a dashboard page from a private folder to a public folder, ALM removes any private graphs from the dashboard page.</p> <p><b>Tip:</b> You can also move a dashboard page by dragging it to a new location in the tree.</p>   |
|  <b>Delete</b>    | Edit      | <p>Deletes selected dashboard pages or folders. You cannot delete the root folders.</p> <p><b>Note:</b> Deleting a folder deletes all the items included in it.</p>   |
| <b>Expand/Collapse</b>   | View      | <p>Expands/collapses all the nodes under the selected folder.</p>   |
| <b>Export</b>  | Dashboard | <p>Saves the selected dashboard page as a PDF file, enabling you to print the dashboard page.</p> <p>The following options are available:</p> <p><b>Dashboard Page Layout.</b> The dashboard page is saved in its original format.</p> <p><b>One Item Per Page Layout.</b> Each graph on the dashboard page is saved on a separate page.</p> <p><b>Available from:</b> View tab</p> |
|                 | Dashboard | <p>Generates the selected dashboard page, and displays it in the View tab.</p> <p>If the View tab is already selected, the dashboard page is refreshed with the most up-to-date data.</p>   |











| UI Elements (A-Z)   | Menu      | Description  |
|---|-----------|--|
|  <b>New Folder</b> | Dashboard | <p>Opens the New Folder dialog box, enabling you to add a folder under a selected folder in the dashboard tree.</p> <p>Folders you create under the <b>Private</b> root folder are available to the owner only. Folders you create under the <b>Public</b> root folder are available to all users.</p> <p><b>Syntax exceptions:</b> The folder name cannot include the following characters: \ ^ *</p> |
|  <b>New Page</b>   | Dashboard | <p>Opens the New Dashboard Page dialog box, enabling you to create a new dashboard page. For more details, see "New Dashboard Page Dialog Box" on page 969.</p>  |
|  <b>Refresh</b>    | View      | <p>Refreshes the dashboard tree so that it displays the most up-to-date information.</p>   |
| <b>Rename</b>   | Edit      | <p>Enables you to rename the selected dashboard page or folder.</p>  |

## Dashboard Icons

This section describes the icons displayed in the Dashboard modules.

|                       |   |
|-----------------------|---|
| <b>To access</b>      | On the ALM sidebar, under <b>Dashboard</b> , select <b>Analysis View</b> or <b>Dashboard View</b> . |
| <b>Relevant tasks</b> | "How to Analyze Data in ALM" on page 911  |

User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|    | <b>Analysis Folder.</b> A folder for organizing analysis items or dashboard pages.                     |
|    | <b>Dashboard Page.</b> A dashboard page in the dashboard tree.   |
|    | <b>Excel Report.</b> An Excel report in the analysis tree.   |
|    | <b>Graph.</b> A graph in the analysis tree.  |
|    | <b>KPI Breakdown Graph.</b> A project planning and tracking (PPT) graph in the analysis tree.          |
|   | <b>KPI Breakdown Progress Graph.</b> A project planning and tracking (PPT) graph in the analysis tree. |
|  | <b>KPI Progress Graph.</b> A project planning and tracking (PPT) graph in the analysis tree.           |
|  | <b>Project Report.</b> A project report in the analysis tree.  |
|  | <b>Release Scorecard Graph.</b> A project planning and tracking (PPT) graph in the analysis tree.      |
|  | <b>Standard Report.</b> A standard report in the analysis tree.  |



## Details Tab

This tab displays details of the selected analysis item, dashboard page, or folder.

Details
Configuration
View

|           |   |              |   |
|-----------|---|--------------|---|
| Entity:   | <input type="text" value="Unspecified Entity"/>   | Type:        | <input type="text" value="Project Report"/>           |
| Sub Type: | <input type="text" value="Project Report"/>       | * Name:      | <input type="text" value="Requirements with Traced"/> |
| Modified: | <input type="text" value="7/18/2010 1:32:09 AM"/> | Modified By: | <input type="text" value="sa"/>                       |
| Owner:    | <input type="text" value="alice_alm"/>            |              |   |

---

Description

**Project report options**

1. Created by user templates are used for the requirements and Requirements traced from reports
  - Not default table color is used
  - Not default list of fields
  - Rich Text is included
2. Attachments are embedded to text
3. Table of content is included by default

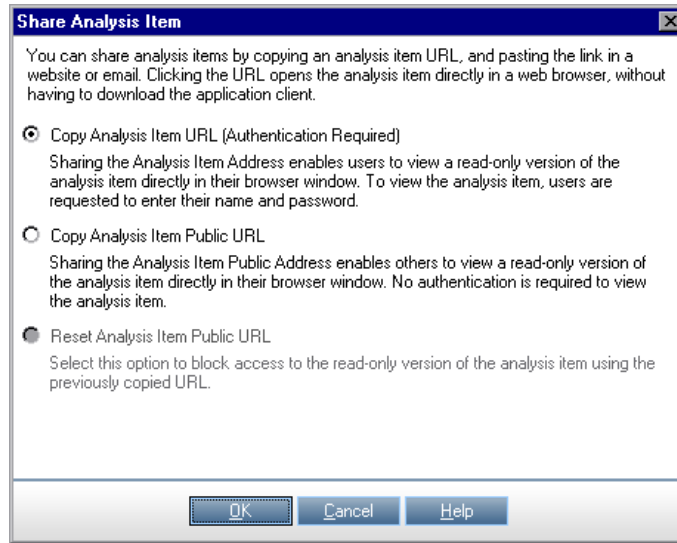
|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the ALM sidebar, under <b>Dashboard</b> , select <b>Analysis View</b> or <b>Dashboard View</b> , and select an item or folder.   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You can edit the <b>Name</b> and <b>Title</b> fields. Other fields in this dialog box are read-only.</li> <li>▶ Clicking in the <b>Description</b> field in this tab displays a toolbar for formatting and spell checking the text.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Analyze Data in ALM" on page 911  |
| <b>See also</b>              | "Analysis View Window" on page 914  |

User interface elements are described below:

| UI Elements (A-Z)       | Description  |
|-------------------------|--|
| <b>Entity</b>           | The data set sampled by the analysis item.<br><b>Available from:</b> Analysis items  |
| <b>Modified</b>         | The date and time on which the analysis item or dashboard page was last modified.  |
| <b>Modified By</b>      | The user who last modified the analysis item or dashboard page.  |
| <b>Name</b>             | The tree display name of the analysis item, dashboard page, or folder.<br>In graphs, the default title displayed above the graph.        |
| <b>Owner/Page Owner</b> | The user that created the analysis item, dashboard page, or folder. Permissions to modify public items may be limited to the owner only. |
| <b>Sub Type</b>         | The type of graph or standard report.  |
| <b>Title</b>            | The title displayed in the header of the dashboard page.<br><b>Available from:</b> Dashboard pages                                       |
| <b>Type</b>             | The analysis item type.<br><b>Available from:</b> Analysis items   |

## Share Analysis Item Dialog Box

This dialog box enables you to share a graph for viewing outside ALM client.



|                       |  |
|-----------------------|--|
| <b>To access</b>      | In the analysis tree, right-click a graph, and select <b>Share Analysis Item</b> . |
| <b>Relevant tasks</b> | "How to Generate a Graph" on page 936  |
| <b>See also</b>       | "Analysis View Window" on page 914   |

User interface elements are described below:

| UI Elements   | Description   |
|---|---|
| <b>Copy Analysis Item URL (Authentication Required)</b> | Copies a URL of the selected graph to the clipboard.<br>You are required to enter a ALM user name and password to view the graph. |

| UI Elements                           | Description  |
|---------------------------------------|--|
| <b>Copy Analysis Item Public URL</b>  | Copies a URL of the selected graph to the clipboard.<br>No authentication is required to view the graph.   |
| <b>Reset Analysis Item Public URL</b> | If you previously selected <b>Copy Analysis Item Public URL</b> , selecting this option blocks access to the public read-only version of the selected graph. |

# 36

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## Graphs and Dashboard Pages

This chapter includes:

### Concepts

- ▶ Graphs and Dashboard Pages Overview on page 934

### Tasks

- ▶ How to Generate a Graph on page 936
- ▶ How to Generate a Dashboard Page on page 940

### Reference

- ▶ Graph Types on page 942
- ▶ Graphs and Dashboard Pages User Interface on page 947

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## Concepts

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### **Graphs and Dashboard Pages Overview**

HP Application Lifecycle Management (ALM) graphs help you analyze and view the relationships between different types of data. You can create graphs for data in the Requirements, Test Plan, Test Lab, Defects, and Business Components modules.

There are three options for creating graphs:

- ▶ **Predefined Graphs.** While working in one of the modules listed above, choose from a list of predefined graphs to quickly analyze data related to that module. Predefined graphs display data from the existing module filter. You can save predefined graphs in the Analysis View module for future reference.
- ▶ **Analysis View Graphs.** Create and customize graphs in the Analysis View module, relating to data in any of the above modules. Creating graphs in the Analysis View module enables you to filter the data, set various configurations, and organize the graphs in folders.
- ▶ **Graph Wizard.** The graph wizard guides you through the stages of creating and configuring a graph. You can launch the graph wizard from either any of the above modules, or from the Analysis View module.

In each module you can use several graph types. For more information on available graph types, see "Graph Types" on page 942.

When viewing graphs, you can drill down to the records represented by each bar or segment.

After you have created graphs in the Analysis View module, you can select and arrange multiple graphs, and view them side-by-side in a **dashboard page**.

You can create graphs that include data from multiple ALM projects.

**ALM Editions:** Cross-project graphs are not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or for Performance Center Edition.

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For related tasks, see "How to Generate a Graph" on page 936 and "How to Generate a Dashboard Page" on page 940.

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## Tasks

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### **How to Generate a Graph**

This task describes how to analyze data in ALM using graphs.

- "Launch the Graph Wizard" on page 936
- "Create a predefined graph" on page 937
- "Create a graph in Analysis View" on page 937
- "Configure a graph" on page 937
- "View a graph" on page 938
- "Edit graph categories" on page 938
- "Drill down to graph data" on page 938
- "Share a graph outside ALM" on page 939
- "Create a dashboard page" on page 939

#### **1 Launch the Graph Wizard**

The Graph Wizard guides you through the steps involved in creating a graph and configuring its settings. You launch the graph wizard either from the Analysis View module, or while working in one of the other ALM modules.

**In the Analysis View module.** On the ALM sidebar, under **Dashboard**, select **Analysis View**, right-click a folder, and select **Graph Wizard**.

**In other modules.** In the Requirements, Business Components, Test Plan, Test Lab, or Defects module, select **Analysis > Graphs > Graph Wizard**.

For user interface details, see "Graph Wizard" on page 962.



## 2 Create a predefined graph

While working in the Requirements, Business Components, Test Plan, Test Lab, or Defects module, generate an impromptu graph to analyze the module data.

In any of the above modules, select **Analysis > Graphs** and select one of the predefined graphs. For user interface details, see "View Tab – Graphs/Graph Window" on page 952.

## 3 Create a graph in Analysis View

Create a graph in the Analysis View module.

- a Open the Analysis View module.** On the ALM sidebar, under **Dashboard**, select **Analysis View**.
- b Add a folder to the analysis tree.** Right-click a folder under the Private or Public root folder, and select **New Folder**.
- c Create a new graph.** Right-click a folder, and select **New Graph**. Fill in the fields in the New Graph dialog box. For user interface details, see "New Graph Dialog Box" on page 968.

## 4 Configure a graph

Configure graph settings, such as data filtering, grouping, and x-axis values.

Click the **Configuration** tab. For user interface details, see "Configuration Tab – Graphs" on page 948.

**Available from:** Analysis View module

## 5 View a graph


Use one of the following:

- **In the Analysis View module.** Click the **View** tab.
- **In other modules.** On the module menu, select **Analysis > Most Recently Used** and select a recently used graph. The selected graph opens in the Analysis View module.

For user interface details, see "View Tab – Graphs/Graph Window" on page 952.

## 6 Edit graph categories

You can group together values in the grouped-by or x-axis field, and display the combined data as a single category.

- a** In the View tab or graph window, click the **Edit Categories** arrow , and select one of the available options.
- b** Create or change existing categories. For user interface details, see "Edit <Type> Categories Dialog Box" on page 973.

### Example:

Suppose the **Priority** field is selected in the graph **Grouped By** field, and the **Priority** field has five values: Low, Medium, High, Very High, and Urgent. You might combine the values Medium and High into a category Important, and the values Very High and Urgent into a category Critical. The graph would then display data divided into three categories: Low, Important, and Critical.

## 7 Drill down to graph data

In bar and pie charts, you can drill down to the records represented by a selected bar or segment, and view details of individual records.

**ALM Editions:** Cross-project graphs are not supported in Quality Center Starter Edition or Quality Center Enterprise Edition.

- a** In the View tab or graph window, click a segment or bar in the graph.
- b** If the segment or bar represents records from multiple projects, the Project Selection dialog box opens. Select a project.

- c** If you selected to view data from another project, or if the segment or bar represents records from only another project, the project opens in a separate browser window. If applicable, you are prompted to log in. The records are displayed in the relevant ALM module.
- d** If the segment or bar represents records from only the current project, or if you selected to view data from the current project, the records are displayed in the Drill Down Results dialog box. For user interface details, see "Drill Down Results Dialog Box" on page 977.

## 8 Share a graph outside ALM

Allow ALM users or others to view read-only versions of graphs outside ALM.

- a** In the analysis tree, right-click a graph, and select **Share Analysis Item**.
- b** In the Share Analysis Item dialog box, select a share option. For details of the options, see "Share Analysis Item Dialog Box" on page 931.

A URL of the selected graph is copied to the clipboard.

- c** Paste the URL in a website or email.
- d** Click the URL to open a read-only version of the graph in a Web browser. Each time you access the graph, after set intervals, it displays the most up-to-date information.

**Note:** You can change the frequency at which graph data is updated by adding and configuring the `ANALYSIS_ITEM_RESULT_LIFESPAN` site configuration parameter. For more details, refer to the *HP Application Lifecycle Management Administrator Guide* "ANALYSIS\_ITEM\_RESULT\_LIFESPAN" on page 193.

**Available from:** Analysis View module

## 9 Create a dashboard page

View several graphs together in a dashboard page. For task details, see "How to Generate a Dashboard Page" on page 940.

## **How to Generate a Dashboard Page**

This task describes how to generate a dashboard page in which you can arrange multiple graphs in a single view.

This task includes the following steps:

- "Prerequisites" on page 940
- "Create a dashboard page" on page 940
- "Configure a dashboard page" on page 940
- "View a dashboard page" on page 941

### **1 Prerequisites**

Graphs are defined in the Analysis View module. For task details on how to create graphs, see "How to Generate a Graph" on page 936.

### **2 Create a dashboard page**

Add a dashboard page to a folder in the dashboard tree.

- a Open the Dashboard View module.** On the ALM sidebar, under **Dashboard**, select **Dashboard View**.
- b Add a folder to the dashboard tree.** Right-click a folder under the Private or Public root folder, and select **New Folder**.
- c Create a new dashboard page.** Right-click a folder, and select **New Page**. Type a name for the dashboard page. For user interface details, see "New Dashboard Page Dialog Box" on page 969.
- d Click the Details tab,** and add a description of the dashboard page. For user interface details, see "Details Tab" on page 929.

### **3 Configure a dashboard page**

Arrange the graphs you want to include on a dashboard page.

In the Dashboard View module, select a dashboard page, and click the **Configuration** tab. For user interface details, see "Configuration Tab – Dashboard Pages" on page 958.

#### **4 View a dashboard page**

Generate and view dashboard pages.

In the Dashboard View module, select a dashboard page, and click the **View** tab. For user interface details, see "View Tab – Dashboard Pages" on page 960.

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## Reference

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### Graph Types

ALM enables you to generate graphs for requirements, tests, test instances, test runs, defects, and business components. For each entity, different graph types are available.

This section includes:

- "Requirements Graphs" on page 943
- "Test Plan Graphs" on page 944
- "Test Lab Graphs" on page 945
- "Defects Graphs" on page 946
- "Business Component Module Graphs" on page 947

## Requirements Graphs

You can generate the following graphs for requirements:

| Graph                              | Description   |
|------------------------------------|---|
| <b>Requirements Coverage Graph</b> | <p>Shows how many requirements are currently in an ALM project, according to their test coverage status.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ Available from the Requirements module only.</li> <li>▶ The Coverage Graph is a specific type of the Requirements Summary Graph. If you select a different x-axis value, a regular Summary Graph is displayed.</li> </ul>  |
| <b>Requirements Progress Graph</b> | <p>Shows how many requirements accumulated in an ALM project at specific points during a period of time.</p> <p>Specify the time interval displayed along the x-axis, and the requirement information by which ALM groups the data. Specify whether you want to view the number of requirements or the change in the number of requirements.</p>  |
| <b>Requirements Summary Graph</b>  | <p>Shows how many requirements are currently in an ALM project.</p> <p>Specify the type of data displayed along the x-axis, and the requirement information by which ALM groups the data.</p>   |
| <b>Requirements Trend Graph</b>    | <p>Shows the history of changes to specific requirement fields in an ALM project, for each time interval displayed.</p> <p>Specify the field for which you want to view the number of changes, and the time period for which you want to view data.</p> <p>Each status change is only recorded once for the purpose of this graph. For example, if a field was changed from Not Completed to Passed to Not Completed, the Not Completed status change will only be recorded once in this graph.</p> |

## Test Plan Graphs

You can generate the following graphs for tests:

| Graph                           | Description   |
|---------------------------------|---|
| <b>Test Plan Progress Graph</b> | <p>Shows how many tests accumulated in an ALM project at specific points during a period of time.</p> <p>Specify the time interval displayed along the x-axis and the test plan information by which ALM groups the data. Specify whether you want to view the number of tests or the change in the number of tests.</p>  |
| <b>Test Plan Summary Graph</b>  | <p>Shows how many tests are currently in an ALM project.</p> <p>Specify the type of data displayed along the x-axis, and the test plan information by which ALM groups the data.</p>  |
| <b>Test Plan Trend Graph</b>    | <p>Shows the history of changes to specific Test Plan fields in an ALM project, for each time interval displayed.</p> <p>Specify the field for which you want to view the number of changes, and the time period for which you want to view data.</p> <p>Each status change is only recorded once for the purpose of this graph. For example, if a field was changed from Ready to Repair to Ready, the Ready status change will only be recorded once in this graph.</p> |



## Test Lab Graphs

You can generate the following graphs for test instances and runs:

### Test Set Graphs

| Graph                          | Description   |
|--------------------------------|---|
| <b>Test Set Progress Graph</b> | <p>Shows how many tests accumulated in test sets at specific points during a period of time.</p> <p>Specify the time interval displayed along the x-axis, and the test information by which ALM groups the data. Specify whether you want to view the number of tests or the change in the number of tests.</p> <p><b>Note:</b> If you create the graph in the Test Lab module, you can choose whether to include only the current test set or all test sets.</p> |
| <b>Test Set Summary Graph</b>  | <p>Shows how many tests in an ALM project belong to test sets.</p> <p>Specify the type of data displayed along the x-axis, and the test plan and test in test set information by which ALM groups the data.</p> <p><b>Note:</b> If you create the graph in the Test Lab module, you can choose whether to include only the current test set or all test sets.</p>   |

### Test Run Graphs

| Graph                         | Description   |
|-------------------------------|---|
| <b>Test Run Summary Graph</b> | Shows the status of runs in the project, grouped by Tester. |

## Defects Graphs

You can generate the following graphs for defects:

| Graph                         | Description  |
|-------------------------------|--|
| <b>Defects Age Graph</b>      | <p>Shows the lifetime of defects in an ALM project. The lifetime of a defect begins when it is reported, and ends when it is closed.</p> <p>Specify the defect information by which ALM groups the data, and the data displayed along the y-axis. Specify the time interval that you want to use to divide the data.</p> <p>The age of a <b>Closed</b> defect is the difference between the date on which it was reported and the date on which it was closed. After a defect is closed, its age remains static.</p> |
| <b>Defects Progress Graph</b> | <p>Shows the accumulation of defects in an ALM project, or the estimated/actual amount of time taken to fix these defects, at specific points during a period of time.</p> <p>Specify the time interval displayed along the x-axis, the defect information by which ALM groups the data, and the data displayed along the y-axis. Specify whether you want to view the number of defects or the change in the number of defects.</p>   |
| <b>Defects Summary Graph</b>  | <p>Shows a summary of the number of defects in an ALM project, or the estimated/actual amount of time taken to fix these defects.</p> <p>Specify the type of data displayed along the x-axis, the type of data displayed along the y-axis, and the defect information by which ALM groups the data.</p>  |
| <b>Defects Trend Graph</b>    | <p>Shows the history of changes to specific defect fields in an ALM project, for each time interval displayed.</p> <p>Specify the field for which you want to view the number of changes, and the time period for which you want to view data. Each priority change is only recorded once for the purpose of this graph. For example, if a field was changed from <b>Urgent</b> to <b>Very High</b> to <b>Urgent</b>, the <b>Urgent</b> priority change will only be recorded once in this graph.</p>                |

## Business Component Module Graphs

For a list of quick graphs available from the Business Components module, see the *HP Business Process Testing User Guide*.

## Graphs and Dashboard Pages User Interface

This section includes:

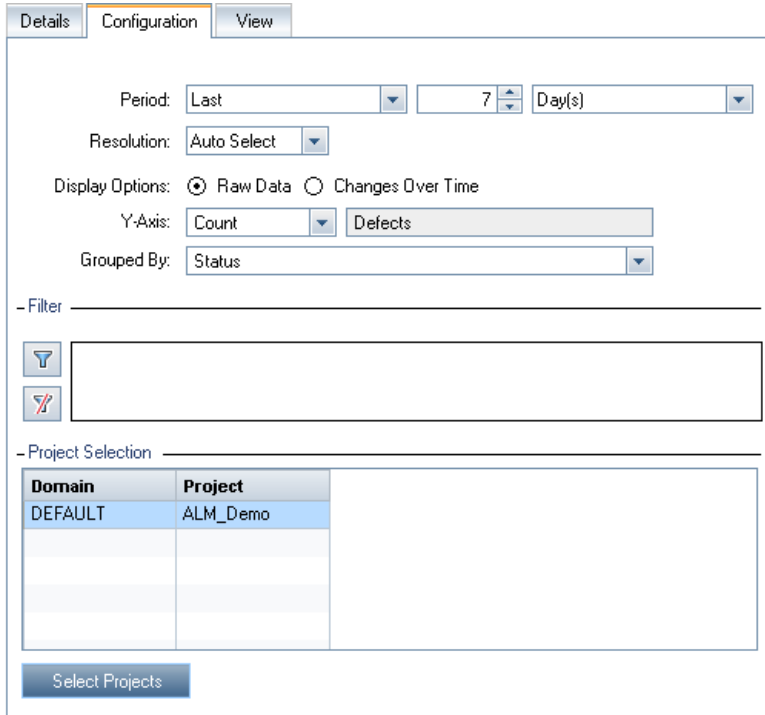
- Configuration Tab – Graphs on page 948
- View Tab – Graphs/Graph Window on page 952
- Configuration Tab – Dashboard Pages on page 958
- View Tab – Dashboard Pages on page 960
- Graph Wizard on page 962
- New Graph Dialog Box on page 968
- New Dashboard Page Dialog Box on page 969
- Select Projects Dialog Box on page 971
- Edit <Type> Categories Dialog Box on page 973
- Graph Appearance Dialog Box on page 975
- Drill Down Results Dialog Box on page 977

## Configuration Tab – Graphs

This tab enables you to select data to be included in a graph, and set graph display options.

You can include multiple projects in the graph data.

**ALM Editions:** Cross-project graphs are not supported in Quality Center Starter Edition or Quality Center Enterprise Edition.



Details Configuration View

Period: Last 7 Day(s)



Resolution: Auto Select

Display Options:  Raw Data  Changes Over Time

Y-Axis: Count Defects

Grouped By: Status

- Filter

- Project Selection



| Domain  | Project  |
|---------|----------|
| DEFAULT | ALM_Demo |
|         |          |
|         |          |
|         |          |

Select Projects

|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li>1 On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li>2 Expand the analysis tree, and select a graph.</li> <li>3 Click the <b>Configuration</b> tab.</li> </ol> |
| <b>Important information</b> | The available configuration options depend on the graph type.  |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Generate a Graph" on page 936</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul>       |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Graphs and Dashboard Pages Overview" on page 934</li> <li>➤ "Analysis View Window" on page 914</li> </ul> |

User interface elements are described below:

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Set/Clear Filter.</b> Enables you to filter the data according to the criteria you choose. For details, see "Select Filter Condition Dialog Box" on page 74.</p> <p>The current filter is displayed in the filter box.</p>   |
|  | <p>Opens the Select Projects dialog box, enabling you to change the list of projects in the Cross Project Selection grid. For details, see "Select Projects Dialog Box" on page 971.</p>   |
| <b>Age Grouping</b>   | <p>You can group all defects older than a certain period (for example, older than six months) in one column, and all defects more recent than that period in a second column. Alternatively, you can group the defects by all available periods.</p> <ul style="list-style-type: none"> <li>➤ Select a period to group the defects in two columns.</li> <li>➤ Select <b>No grouping</b> to view all of the available periods.</li> </ul> |
| <b>Display Options</b>  | <ul style="list-style-type: none"> <li>➤ Select <b>Raw Data</b> to view the number of requirements, tests, or defects over the period of time you selected.</li> <li>➤ Select <b>Changes over Time</b> to view the change in the number of requirements, tests, or defects over the period of time you selected. Each record begins at 0.</li> </ul> <p><b>Available from:</b> Requirements graphs</p>                                   |
| <b>Grouped By</b>   | <p>Select a field to determine the information by which ALM groups data in the graph. You can group the data only by string or list fields.</p> <p><b>Tip:</b> For cross-project graphs, select <b>QC Projects</b> to group the data by project.</p>   |

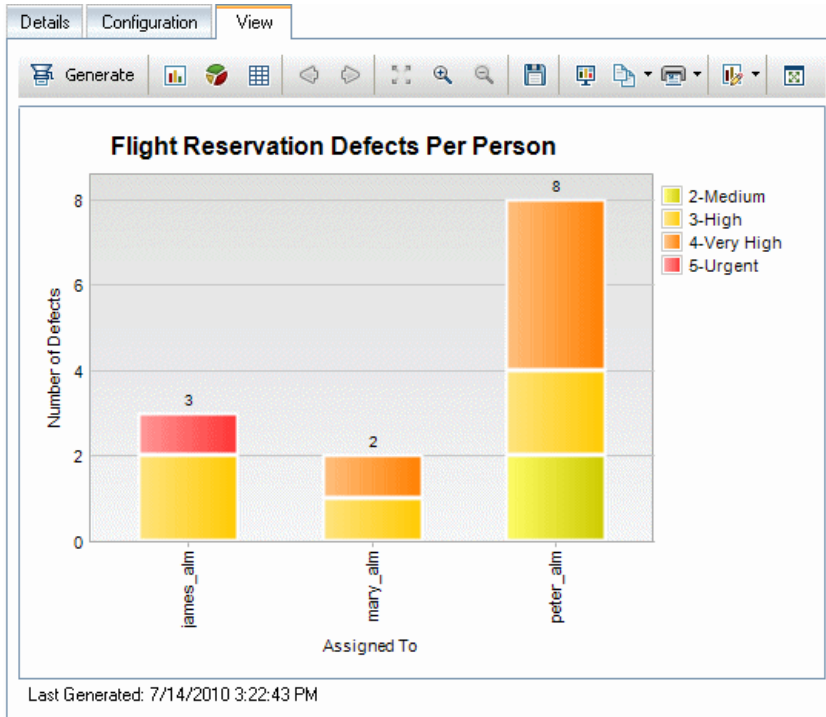
| UI Elements (A-Z)        | Description   |
|--------------------------|---|
| <b>Period</b>            | <p>In progress and trend graphs, the time period covered by the graph. Select a time period from the drop-down list:</p> <p><b>Custom.</b> A time period between any two dates. Set the start and end dates.</p> <p><b>Week/Month/Quarter/Year.</b> A fixed time period any time in the past. Use the arrows to jump to the next or previous period, or set the start or end date of the period in the drop-down calendars.</p> <p><b>Last.</b> A time period ending at the current date. Select a time unit (day, week, month, quarter, or year) and set the number of time units you want to cover in the graph.</p> <p><b>All days.</b> Includes all time periods from the beginning of the project until the current date.</p>  |
| <b>Project Selection</b> | <p>Projects included in the graph.</p> <p>To change the list of projects included in the graph, click the <b>Select Projects</b> button.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ Every time you add or remove projects in your graph, ALM updates the fields in the Filter dialog box and the drop-down lists of the following boxes: <b>X-Axis</b>, <b>Y-Axis</b> and <b>Grouped By</b>. The lists contain only fields that are identical in all the selected projects. Identical fields are fields that have the same field name, label and data type. For more information on customizing fields, see the <i>HP Application Lifecycle Management Administrator Guide</i>.</li> <li>▶ If you defined a filter condition using a field that becomes unavailable, that condition is removed.</li> <li>▶ If you selected a field in the <b>X-Axis</b>, <b>Y-Axis</b> and <b>Grouped By</b> boxes that becomes unavailable, the first field in the drop-down list is selected.</li> </ul> |
| <b>Resolution</b>        | <p>In progress and trend graphs, the time interval at which data is grouped on the x-axis.</p>  |

| UI Elements (A-Z)                 | Description  |
|-----------------------------------|--|
| <b>Show full path</b>             | In summary graphs, if you select <b>Subject</b> or <b>Plan: Subject</b> in the <b>X-Axis</b> field, instructs ALM to display the full path of the test subject folder.   |
| <b>Show 'Not Covered' parents</b> | In Requirements graphs, choose whether to include parent requirements with a Not Covered status.   |
| <b>X-Axis</b>                     | <p>In summary graphs, the information displayed along the x-axis of the graph.</p> <p><b>Tip:</b> In cross-project graphs, select <b>QC Projects</b> to display the data by project.</p>   |
| <b>Y-Axis</b>                     | <p>In Defects graphs, select the data that displays on the y-axis.</p> <ul style="list-style-type: none"> <li>▶ Select <b>Count</b> to display the total number of items (for example, a count of open defects).</li> <li>▶ Select <b>Sum of</b> and choose a numerical field. For example, choose <b>Estimated Fix Time</b> to display the estimated time required for fixing the defects. Choose <b>Actual Fix Time</b> to display the actual time spent on fixing the defects.</li> </ul> |

## View Tab – Graphs/Graph Window

The **View tab** enables you to view saved graphs in the Analysis View module, and analyze the graph data.





The **graph window** in the Requirements, Business Components, Test Plan, Test Lab and Defects modules enables you to view predefined graphs to analyze data during your work in those modules.

















|                       |  |
|-----------------------|--|
| <b>To access</b>      | <p><b>View tab:</b><br/>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ In the Analysis View module, select a graph, and click the <b>View</b> tab.</li> <li>▶ In the Requirements, Test Plan, Test Lab, Defects, or Business Components module, choose <b>Analysis &gt; Recently Used</b>, and select a graph.</li> </ul> <p><b>Graph window:</b><br/>In the Requirements, Test Plan, Test Lab, Defects, or Business Components module, choose <b>Analysis &gt; Graphs</b>, and select a graph type.</p> |
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>▶ "How to Generate a Graph" on page 936</li> <li>▶ "How to Analyze Data in ALM" on page 911</li> </ul>  |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>▶ "Graphs and Dashboard Pages Overview" on page 934</li> <li>▶ "Analysis View Window" on page 914</li> </ul>  |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements  | Description   |
|--|---|
|  Generate | <p><b>Generate.</b> Refreshes the graph so that it displays the most up-to-date information.</p>  |
|         | <p><b>Bar Chart.</b> In summary, trend and age graphs, switches the chart format to a bar chart.</p>  |
|         | <p><b>Pie Chart.</b> In summary graphs, switches the chart format to a pie chart.</p> <p>In pie charts, the x-axis categories are displayed as pie segments. The y-axis quantities are represented by the size of the segments.</p> <p><b>Note:</b> Pie charts do not display the Grouped By field.</p> |
|         | <p><b>Line Chart.</b> In progress graphs, switches the chart format to a line chart.</p>  |

| UI Elements   | Description   |
|---|---|
|    | <p><b>Data Grid.</b> The grid creates a matrix of the graph's x-axis and Grouped By categories. A <b>Total</b> row is added that displays the total of each Grouped By category. Available in all graph types.</p>  |
|    | <p><b>Show/Hide Total Values.</b> In progress graphs, shows/hides a &lt;total&gt; category to the graph, representing the sum of all the other Grouped By categories.</p> <p><b>Tip:</b> After showing the &lt;total&gt; category, click its label in the legend to hide the category.</p>  |
|    | <p><b>Scroll to the Left/Right.</b> Scrolls the graph to the left or right. These buttons are enabled when the Zoom In and Zoom Out buttons are in use.</p>   |
|    | <p><b>Show All.</b> Restores the graph to its normal size. This button is enabled when the Zoom In and Zoom Out buttons are in use.</p>   |
|    | <p><b>Zoom In/Out.</b> Changes the magnification of the graph.</p>  |
|    | <p><b>Save Graph Image.</b> When viewing a graph as a bar, pie chart, or line chart, saves the graph image. You can select from a variety of graphic file formats.</p> <p><b>Save Graph Data.</b> When viewing a data grid, saves the graph data. You can save the data as an Excel spreadsheet, a Word file, an HTML document, or a text file.</p> |
|  | <p><b>Set Graph Appearance.</b> Opens the Graph Appearance dialog box, enabling you to customize the graph title, graph color, and graph display. For more details, see "Graph Appearance Dialog Box" on page 975.</p>  |

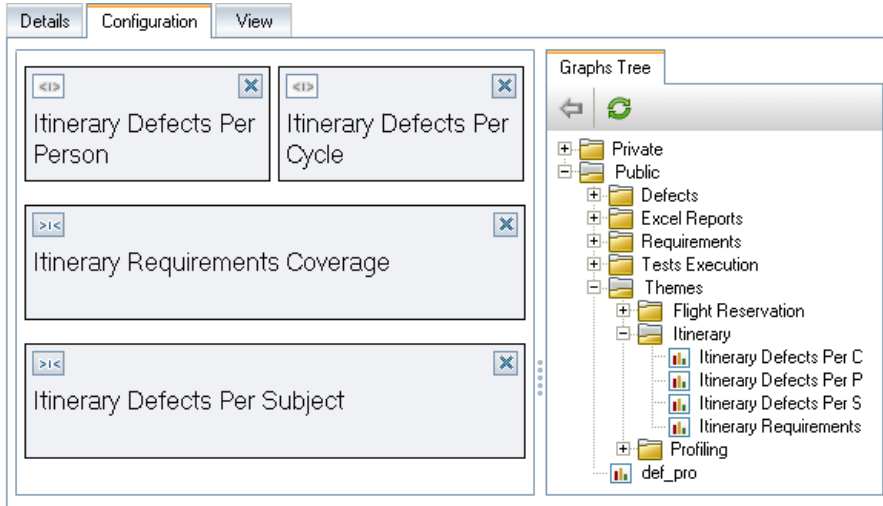
| UI Elements   | Description   |
|---|---|
|  | <p><b>Copy Graph to Clipboard.</b> Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Copy Graph (Color).</b> Copies the graph in color to the Clipboard.</li> <li>▶ <b>Copy Graph (Monochrome).</b> Copies the graph in monochrome to the Clipboard.</li> <li>▶ <b>Copy Full Screen Graph (Color).</b> Copies the graph in color to the Clipboard, enlarged to fit full screen.</li> <li>▶ <b>Copy Full Screen Graph (Monochrome).</b> Copies the graph in monochrome to the Clipboard, enlarged to fit full screen.</li> </ul> |
|  | <p><b>Print Graph.</b> Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Print Graph (Color).</b> Prints the graph in color. This is the default button option.</li> <li>▶ <b>Print Graph (Monochrome).</b> Prints the graph in monochrome.</li> <li>▶ <b>Print Graph and Details (Color).</b> Prints the graph and its description in color.</li> <li>▶ <b>Print Graph and Details (Monochrome).</b> Prints the graph and its description in monochrome.</li> </ul>  |

| UI Elements   | Description   |
|---|---|
|    | <p><b>Edit Categories.</b> Enables you to combine <b>X-Axis</b> and <b>Grouped By</b> field values into categories. The following options are available:</p> <ul style="list-style-type: none"> <li>▶ <b>Edit X-Axis Categories.</b> Opens the Edit X Axis Categories dialog box, enabling you to display combined x-axis values as a single category in the graph. This option is available only for summary graphs and Requirements Coverage graphs. This is the default button option. For details, see "Edit &lt;Type&gt; Categories Dialog Box" on page 973.</li> <li>▶ <b>Reset X-Axis Categories.</b> Removes combined categories of x-axis values, and resets the graph display.</li> <li>▶ <b>Edit Group by Categories.</b> Opens the Edit 'Group By' Categories dialog box, enabling you to display combined grouped-by values as a single category in the graph. For details, see "Edit &lt;Type&gt; Categories Dialog Box" on page 973.</li> <li>▶ <b>Reset Group by Categories.</b> Removes combined categories of grouped-by values, and resets the graph display.</li> </ul> <p>For more details, see "Edit &lt;Type&gt; Categories Dialog Box" on page 973.</p> |
|  | <p><b>Full Screen.</b> Opens the graph in a new window and maximizes its display.</p> <p><b>Note:</b> The toolbar remains visible in full-screen mode.</p> <p><b>Tip:</b> To return to the standard view, click the <b>Close</b> button in the top-right corner of the window.</p> <p><b>Available from:</b> View tab</p>   |
|  | <p>In the graph window, opens the New Graph dialog box, enabling you to save the graph to a folder in the Analysis View module.</p> <p><b>Available from:</b> Graph window</p>  |

| UI Elements   | Description   |
|---------------|---|
| <graph area>  | <p>You can perform the following actions in the graph area:</p> <ul style="list-style-type: none"> <li>▶ In bar or pie charts, to further analyze the data, drill down to the graph's data by clicking on a segment in the graph.</li> <li>▶ Right-click an area in the chart to change its color.</li> <li>▶ Hover over a bar or segment to view a tooltip containing the area's category, x-axis, and y-axis values.</li> </ul> |
| <graph title> | <p>Click a graph title to change the graph's titles and appearance. For user interface details, see "Graph Appearance Dialog Box" on page 975.</p>  |
| <legend>      | <p>In line or bar charts, displays the chart categories and their corresponding color.</p> <p>You can perform the following actions in the legend box:</p> <ul style="list-style-type: none"> <li>▶ In progress and trend graphs, click a category checkbox to show or hide the category in the graph.</li> <li>▶ Right-click a category to change its color.</li> </ul>  |





## Configuration Tab – Dashboard Pages

This tab enables you to design a dashboard page by selecting and arranging graphs on the page.



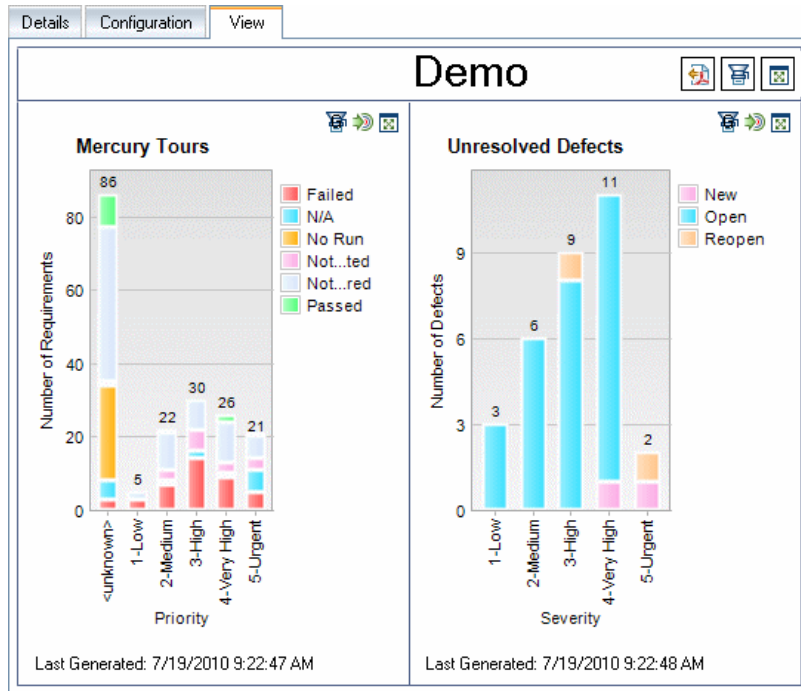
|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Dashboard View</b>.</li> <li><b>2</b> Expand the dashboard tree, and select a dashboard page.</li> <li><b>3</b> Click the <b>Configuration</b> tab.</li> </ol> |
| <b>Important information</b> | In public dashboard pages you can include only public graphs.  |
| <b>Relevant tasks</b>        | <ul style="list-style-type: none"> <li>➤ "How to Generate a Dashboard Page" on page 940</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul>   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Graphs and Dashboard Pages Overview" on page 934</li> <li>➤ "Analysis View Window" on page 914</li> </ul>  |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements   | Description  |
|---|--|
|  | <b>Add Graph to Dashboard Page.</b> Adds the selected graph to the configuration pane. A placeholder representing the graph is created in the next vacant row.   |
|  | <b>Refresh.</b> Refreshes the graph tree so that it includes the most up-to-date information.  |
|  | <b>Expand.</b> Maximizes the size of the graph to cover a whole row.<br><b>Contract.</b> Reduces the size of the graph to cover half a row.  |
|  | <b>Remove.</b> Removes the graph from the dashboard page.  |
| <configuration pane>  | Contains placeholders representing graphs selected for the current dashboard page.<br>Rearrange the graphs on the page: <ul style="list-style-type: none"> <li>▶ Drag the placeholders to new positions.</li> <li>▶ Expand or reduce the placeholders.</li> </ul> <b>Note:</b> The maximum number of graphs that a dashboard page can display is limited by the <b>DASHBOARD_PAGE_ITEM_LIMIT</b> site parameter. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i> . |
| <Graphs Tree pane>  | This pane displays graphs in the analysis tree.<br>Expand the tree and drag graphs to the configuration pane.  |

## View Tab – Dashboard Pages

This tab enables you to view a dashboard page, and drill down to the graph data.







|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <ol style="list-style-type: none"> <li>1 On the ALM sidebar, under <b>Dashboard</b>, select <b>Dashboard View</b>.</li> <li>2 Expand the dashboard tree, and select a dashboard page.</li> <li>3 Click the <b>View</b> tab.</li> </ol> |
| <p><b>Important information</b></p> | <p>The View tab displays two rows of the dashboard page. Use the vertical scroll bar to scroll up or down the dashboard page.</p>  |



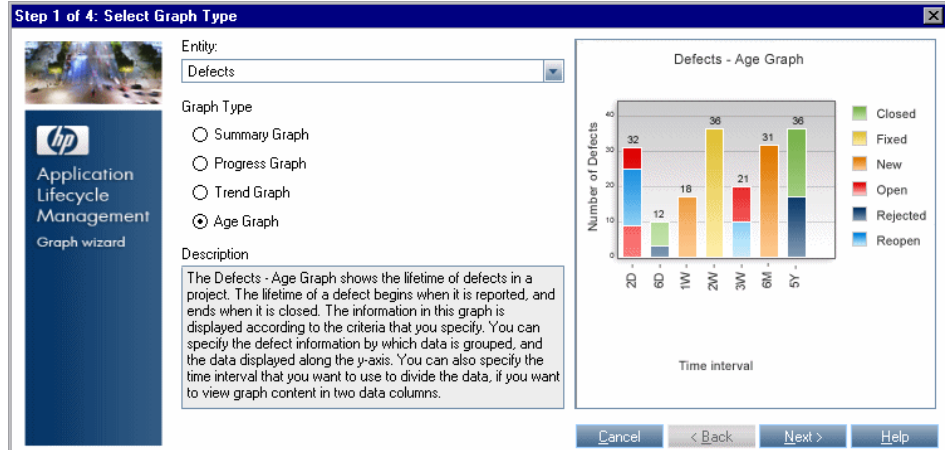
|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Generate a Dashboard Page" on page 940</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul> |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Graphs and Dashboard Pages Overview" on page 934</li> <li>➤ "Analysis View Window" on page 914</li> </ul>    |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements   | Description  |
|---|--|
|  | <b>Export to PDF.</b> Enables you to save the dashboard page as a PDF file.  |
|  | <b>Generate All Graphs in Page/Generate Graph.</b> Refreshes all the graphs on the page, or the selected graph, so that they display the most up-to-date information. ALM updates the Last Generated time and date.  |
|  | <b>Go To Graph in Analysis Tree.</b> Navigates to the selected graph in the analysis tree, enabling you to configure the graph data, or change the graph viewing settings.   |
|  | <p><b>View Page in Full Screen.</b> Displays the dashboard page in full-screen mode.</p> <p><b>View Graph in Full Screen.</b> Displays the graph in full-screen mode. You can use the toolbar buttons to adjust the graph's display, save or print the graph. The adjustments you make to the graph's display are reset when you regenerate the graph. For more details on viewing the graph, see "View Tab – Graphs/Graph Window" on page 952.</p> <p><b>Tip:</b> To return to the standard view, click the <b>Close</b> button, located in the upper-right corner of the page.</p> |
| <chart area>  | In bar or pie charts, drill down to the graph's data by clicking on a segment in the graph.  |
| <legend>  | In bar or pie charts, displays the chart categories and their corresponding color.   |

## Graph Wizard

This wizard enables you to create and configure a new graph in the Analysis View module.



|                       |   |
|-----------------------|---|
| <b>To access</b>      | <p>Use one of the following:</p> <ul style="list-style-type: none"> <li>▶ On the menu of the Requirements, Test Plan, Test Lab, or Defects module, select <b>Analysis &gt; Graphs &gt; Graph Wizard</b>.</li> <li>▶ On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>, and select <b>Analysis &gt; Graph Wizard</b>.</li> </ul> |
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>▶ "How to Generate a Graph" on page 936</li> <li>▶ "How to Analyze Data in ALM" on page 911</li> </ul>   |
| <b>Wizard map</b>     | <p>This wizard contains:</p> <p>Select Graph Type Page &gt; Select Projects Page &gt; (Select Test Set Option Page) &gt; Select Filter Page &gt; Select Graph Attributes Page &gt; (Select Coverage Page)</p>   |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>▶ "Graphs and Dashboard Pages Overview" on page 934</li> <li>▶ "Analysis View Window" on page 914</li> </ul>   |

## Select Graph Type Page

This wizard page enables you to set the graph entity and type.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | General information about this wizard is available here: "Graph Wizard" on page 962.  |
| <b>Wizard map</b>            | The Graph Wizard contains:<br><b>Select Graph Type Page</b> > Select Projects Page > (Select Test Set Option Page) > Select Filter Page > Select Graph Attributes Page > (Select Coverage Page) |

User interface elements are described below:


| UI Elements        | Description   |
|--------------------|---|
| <b>Entity</b>      | The ALM entity covered by the graph.<br><b>Note:</b> Applicable only if you launched the graph wizard from the Analysis View module.  |
| <b>Graph Type</b>  | The type of graph that you want to create. The available types of graph depend on the graph. For a description of the available graph types, see "Graph Types" on page 942. |
| <b>Description</b> | Describes the selected entity/graph type.   |

## Select Projects Page

This wizard page enables you to select the projects that are included in the graph.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ General information about this wizard is available here: "Graph Wizard" on page 962.</li> <li>▶ <b>ALM Editions:</b> Not available in Quality Center Starter Edition or Quality Center Enterprise Edition.</li> </ul> |
| <b>Wizard map</b>            | The Graph Wizard contains:<br>Select Graph Type Page > <b>Select Projects Page</b> > (Select Test Set Option Page) > Select Filter Page > Select Graph Attributes Page > (Select Coverage Page)  |

User interface elements are described below:

| UI Elements   | Description  |
|---|--|
| <b>Use Current Project</b>  | Includes only the current project in the graph.  |
| <b>Use Selected Projects</b>  | Includes the projects listed in the project grid in the graph. To change the selection of the projects, click the <b>Select</b> button.                    |
|  | Opens the Select Projects dialog box, enabling you to change the projects in the projects grid. For details, see "Select Projects Dialog Box" on page 971. |

### **Select Test Set Option Page**

This wizard page enables you to choose which test sets are included in the graph.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | General information about this wizard is available here: "Graph Wizard" on page 962.<br><b>Available from:</b> Test Lab module  |
| <b>Wizard map</b>            | The Graph Wizard contains:<br>Select Graph Type Page > Select Projects Page > <b>(Select Test Set Option Page)</b> > Select Filter Page > Select Graph Attributes Page > (Select Coverage Page) |

User interface elements are described below:

| UI Elements                  | Description                                      |
|------------------------------|--|
| <b>Show Current Test Set</b> | Includes only the current test set in the graph. |
| <b>Show all Test Sets</b>    | Includes all test sets in the graph.             |

 **Select Filter Page**

This wizard page enables you to set the filter that is applied to the graph data.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ General information about this wizard is available here: "Graph Wizard" on page 962.</li> <li>▶ If your graph includes multiple projects, you can filter using only fields that are in all the selected projects.<br/><b>ALM Editions:</b> Including multiple projects in graphs is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.</li> </ul> |
| <b>Wizard map</b>            | <p>The Graph Wizard contains:</p> <p>Select Graph Type Page &gt; Select Projects Page &gt; (Select Test Set Option Page) &gt; <b>Select Filter Page</b> &gt; Select Graph Attributes Page &gt; (Select Coverage Page)</p>  |

User interface elements are described below:

| <b>UI Elements</b>         | <b>Description</b>  |
|----------------------------|---|
| <b>Use current filter</b>  | Available if you launched the graph wizard from the Requirements, Test Plan, Test Lab, or Defects modules. Uses the current filter applied to the data.   |
| <b>Do not use a filter</b> | Includes all records of the selected entity.  |
| <b>Define a new filter</b> | Enables you to define a new filter or cross-filter. Click the <b>Filter</b> button to open the Filter dialog box, and define the filter. For user interface details, see "Select Filter Condition Dialog Box" on page 74. |

## Select Graph Attributes Page

This wizard page enables you to set the **Group By** and **X-Axis** attributes in the graph.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | General information about this wizard is available here: "Graph Wizard" on page 962.  |
| <b>Wizard map</b>            | The Graph Wizard contains:<br>Select Graph Type Page > Select Projects Page > (Select Test Set Option Page) > Select Filter Page > <b>Select Graph Attributes Page</b> > (Select Coverage Page) |

User interface elements are described below:

| UI Elements           | Description   |
|-----------------------|---|
| <b>Group By field</b> | <p>The field by which you want data to be grouped in the graph. For progress and trend graphs, you can only select a field for which history is enabled. For more information on enabling history for a field, refer to the <i>HP Application Lifecycle Management Administrator Guide</i>.</p> <p>If your graph includes multiple projects, you can only select from fields that are in all the selected projects. To group the data by project, select the <b>QC Project</b> value.</p> <p><b>ALM Editions:</b> Including multiple projects in graphs is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.</p> |
| <b>X-axis field</b>   | <p>If you are creating a summary graph, the field that you want to use for the x-axis.</p> <p>If your graph includes multiple projects, you can only select from fields that are in all the selected projects. To list the projects along the x-axis, select the <b>QC Project</b> value.</p> <p><b>ALM Editions:</b> Including multiple projects in graphs is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.</p>   |

## Select Coverage Page

This wizard page enables you to choose whether to display requirements with no coverage.

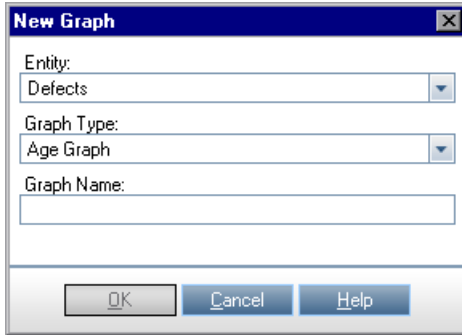
|                              |  |
|------------------------------|--|
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ General information about this wizard is available here: "Graph Wizard" on page 962.</li> <li>▶ For details on requirements coverage, see "Requirement and Test Coverage Overview" on page 552.</li> </ul> <p><b>Available from:</b> Requirements graphs.</p> |
| <b>Wizard map</b>            | <p>The Graph Wizard contains:</p> <p>Select Graph Type Page &gt; Select Projects Page &gt; (Select Test Set Option Page) &gt; Select Filter Page &gt; Select Graph Attributes Page &gt; <b>(Select Coverage Page)</b></p>  |

User interface elements are described below:

| UI Elements                              | Description  |
|--|--|
| <b>Do not show 'Not Covered' Parents</b> | Excludes parent requirements with a 'Not Covered' status from the graph. |
| <b>Show 'Not Covered' Parents</b>        | Includes all requirements in the graph.                                  |

## **New Graph Dialog Box**

This dialog box enables you to add a new graph to the analysis tree.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Right-click the folder under which you want to add a graph, and select <b>New Graph</b>.</li> </ol> |
| <b>Important information</b> | <p>Graphs you create under private folders are available to the owner only. Graphs you create under public folders are available to all users.</p>   |
| <b>Relevant tasks</b>        | <ul style="list-style-type: none"> <li>➤ "How to Generate a Graph" on page 936</li> <li>➤ "How to Generate a PPT Graph" on page 981</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul>   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Graphs and Dashboard Pages Overview" on page 934</li> <li>➤ "PPT Graphs Overview" on page 980</li> <li>➤ "Analysis View Window" on page 914</li> </ul>   |

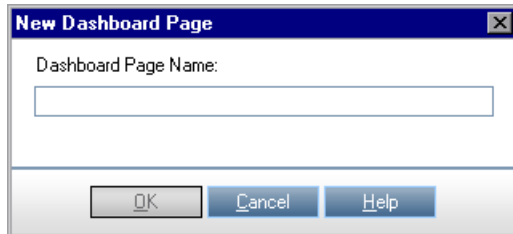


User interface elements are described below:

| UI Elements       | Description   |
|-------------------|---|
| <b>Entity</b>     | The ALM entity covered by the graph.<br><b>Note:</b> This field is not available for the project planning and tracking (PPT) graph type.  |
| <b>Graph Name</b> | The graph's display name in the analysis tree. By default, the Graph Name is used as the graph's title.   |
| <b>Graph Type</b> | The type of graph you want to create. For details, see "Graph Types" on page 942.<br><b>Note:</b> This field is not available for the project planning and tracking (PPT) graph type. |

## New Dashboard Page Dialog Box

This dialog box enables you to add a new dashboard page to the dashboard tree.



|                              |   |
|------------------------------|---|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Dashboard View</b>.</li> <li><b>2</b> Right-click the folder under which you want to add a page, and select <b>New Page</b>.</li> </ol> |
| <b>Important information</b> | Dashboard pages you create under private folders are available to the owner only. Dashboard pages you create under public folders are available to all users.   |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "How to Generate a Dashboard Page" on page 940    |
| <b>See also</b>       | "Graphs and Dashboard Pages Overview" on page 934 |

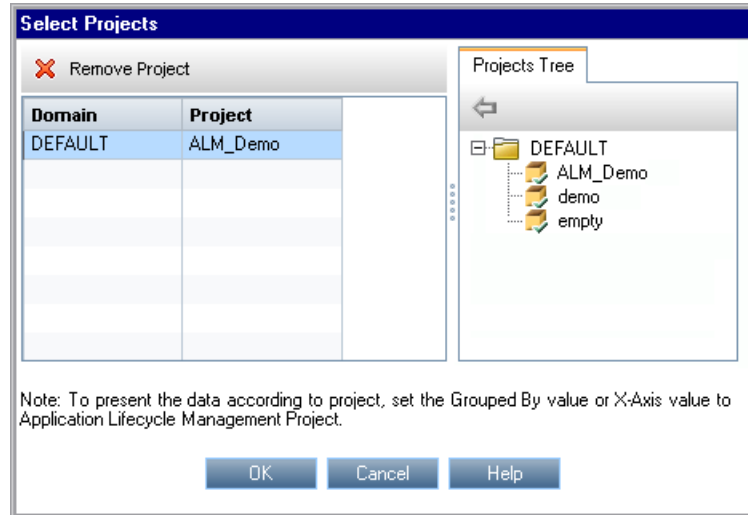
User interface elements are described below:

| <b>UI Elements</b>         | <b>Description</b>  |
|----------------------------|---|
| <b>Dashboard Page Name</b> | <p>The dashboard page display name in the dashboard tree. By default, the Dashboard Page Name is displayed as the dashboard page's title.</p> <p><b>Syntax exceptions:</b> A dashboard page name cannot include the following characters: \ ^ *</p> |

## Select Projects Dialog Box

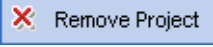

This dialog box enables you to select projects that are included in cross-project graphs.

**ALM Editions:** This dialog box is not available for Quality Center Starter Edition or Quality Center Enterprise Edition.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <p><b>In the graph wizard:</b> Proceed to the Select Projects dialog box, and click the <b>Select</b> button.</p> <p><b>In the graph Configuration tab:</b> Click the <b>Select Projects</b> button.</p>   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ You can select only projects in which you are listed as a user.</li> <li>▶ You can change the maximum number of projects that ALM allows you to include in a graph, by setting the <b>PROJECT_SELECTION_MAX_PROJECTS</b> site parameter. For more information, refer to the <i>HP Application Lifecycle Management Administrator Guide</i></li> </ul> |
| <b>Relevant tasks</b>        | "How to Generate a Graph" on page 936  |

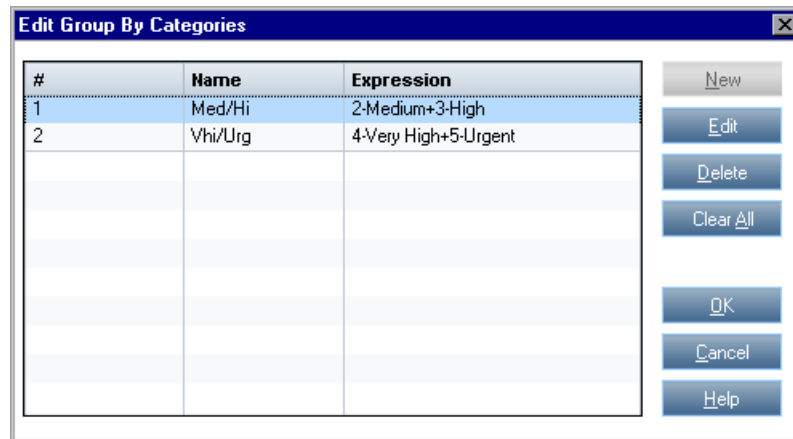
User interface elements are described below:


| UI Elements (A-Z)  | Description   |
|--|---|
|  <p>A blue rectangular button with a red 'X' icon on the left and the text 'Remove Project' to its right.</p> | <p>Removes the selected project from the grid.</p> <p><b>Note:</b> You cannot remove a project if it is the only project in the grid.</p>   |
|  <p>A blue square button with a green double-headed arrow icon.</p>   | <p><b>Add.</b> Adds the selected project or domain to the grid. If you selected a domain, all the domain's projects are added to the grid.</p> <p><b>Tip:</b> Drag or double-click a project or domain to add it to the grid.</p> |
| <p><b>Domain/Project</b></p>   | <p>A list of projects and their domains selected to be included in the graph.</p>   |
| <p><b>Projects Tree</b></p>  | <p>A list of domains and projects in which you are listed as a user.</p>  |

## Edit <Type> Categories Dialog Box


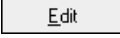

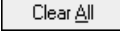
The Edit Group By Categories dialog box enables you to group together values of the field selected in the **Grouped By** field, and display the combined data as one category.

The Edit X Axis Categories dialog box enables you to group together values of the field selected in the **X-axis** field, and display the combined data as one category.



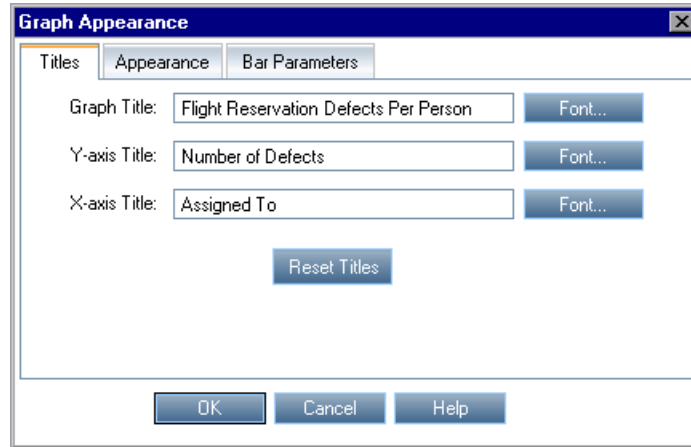
|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the View tab or graph window toolbar, click <b>Edit Categories</b>  . |
| <b>Important information</b> | The Edit X Axis Categories dialog box is available only for summary graphs and Requirements Coverage graphs.  |
| <b>Relevant tasks</b>        | "How to Generate a Graph" on page 936   |


User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|  | <p>Opens the New Category dialog box, enabling you to create a new category.</p> <p>In the <b>Category Name</b> box, type a name for the category.</p> <p>To choose which field values are included in the category, select field values and click the arrow buttons (&gt; and &lt;) to move them between <b>Available groups</b> and <b>Groups in new category</b>. Click the double arrow buttons (&gt;&gt; and &lt;&lt;) to move all the field values from one list to the other. You can also drag field values between lists. You cannot include a field value in more than one category.</p> |
|  | <p>Opens the Edit Category dialog box, enabling you to edit the selected category.</p>   |
|  | <p>Deletes the selected category.</p>  |
|  | <p>Deletes all categories.</p>   |

## Graph Appearance Dialog Box

This dialog box enables you to change a graph's titles and appearance. For a bar chart, you can specify the display parameters for the bars. For a line chart, you can specify the display parameters for the lines.



|                       |  |
|-----------------------|--|
| <b>To access</b>      | On the View tab or graph window toolbar, click <b>Set Graph Appearance</b>  or click the graph title. |
| <b>Relevant tasks</b> | "How to Generate a Graph" on page 936<br>"How to Generate Live Analysis Graphs" on page 1057   |

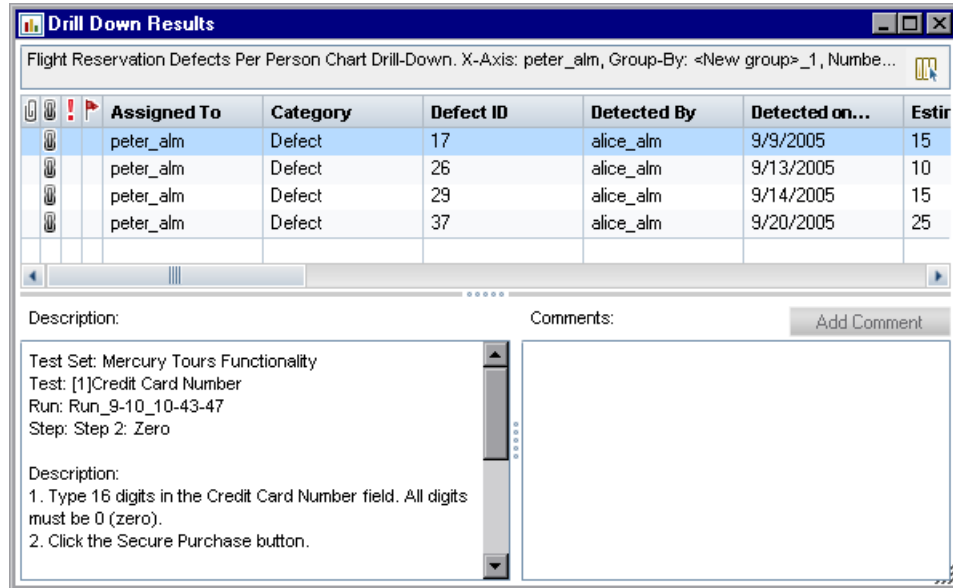
User interface elements are described below:

| UI Elements (A-Z)          | Description  |
|----------------------------|--|
| <b>Appearance tab</b>      | Enables you to set the default format of your graph, modify the orientation of the labels at the base of the graph (for a bar chart and a line chart only), determine the format in which dates are displayed on the x-axis, display the graph with a 3D effect, or change the colors of the various components in your graph. |
| <b>Bar Parameters tab</b>  | In bar charts, enables you to specify whether you want the values for each bar to be displayed. You can also adjust the bar width. If you specify that the values of each bar are to be displayed, you can change the data that is displayed for each bar, or its position relative to the bar.                                |
| <b>Line Parameters tab</b> | In line charts, enables you to specify whether you want the line frame to be displayed.  |
| <b>Titles tab</b>          | <p>Enables you to change the titles of the graph, the y-axis, or the x-axis.</p> <p><b>Font.</b> Enables you to change a title's font or color.</p> <p><b>Reset Titles.</b> Enables you to restore the original titles.</p> <p><b>Note:</b> For a pie chart, you can only change the title of the graph.</p>                   |




## Drill Down Results Dialog Box

This dialog box enables you to view the records that constitute a graph bar or segment.



|                  |                                      |
|------------------|--------------------------------------|
| <b>To access</b> | Click a bar or segment on the graph. |
|------------------|--------------------------------------|

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements   | Description  |
|---|--|
|  | <b>Select Columns.</b> Opens the Select Columns dialog box, enabling you to determine which fields to display in the data grid, and their order. For more details, see "Select Columns/Select Fields Dialog Box" on page 94. |
| <Segment parameters>  | Located above the data grid, displays parameters of the selected graph area, and the number of records displayed.  |

| UI Elements | Description  |
|-------------|--|
| <Data grid> | <p>A list of the records that are included in the selected graph area.</p> <p>To open a particular record, double-click a record. The &lt;Module&gt; Details dialog box opens, enabling you to view or edit the record. Use the navigation buttons to browse through the drill down results.</p> |
| Export      | <p>Right-click a record in the data grid to export the record to an html or text file.</p>   |

# 37

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## Project Planning and Tracking (PPT) Graphs

This chapter includes:

### Concepts

- ▶ PPT Graphs Overview on page 980

### Tasks

- ▶ How to Generate a PPT Graph on page 981

### Reference

- ▶ PPT Graphs User Interface on page 983

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## Concepts

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### PPT Graphs Overview

When working with PPT, you can create and customize graphs in the Analysis View module, relating to KPI data in the Releases module. Creating graphs in the Analysis View module enables you to filter the data, set various configurations, and organize the graphs in folders.

When viewing graphs, you can drill down to the records represented by each bar or segment.

After you have created graphs in the Analysis View module, you can select and arrange multiple graphs, and view them side-by-side in a **dashboard page**.

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**ALM Editions:** Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.

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For related tasks, see "How to Generate a PPT Graph" on page 981 and "How to Generate a Dashboard Page" on page 940.

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## Tasks

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### How to Generate a PPT Graph

This task describes how to generate PPT data in ALM using graphs.

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**ALM Editions:** Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.

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This task includes the following steps:

- "Prerequisites" on page 982
- "Create a graph in Analysis View" on page 982
- "Configure a graph" on page 982
- "View a graph" on page 982
- "Share a graph outside ALM" on page 982
- "Create a dashboard page" on page 982

## 1 Prerequisites

Under **Management**, select **Releases**. Define a release, release scope items, milestones, and KPIs. For task details, see "How to Work with PPT" on page 213.

## 2 Create a graph in Analysis View

Create a graph in the Analysis View module.

- a Open the Analysis View module.** On the ALM sidebar, under **Dashboard**, select **Analysis View**.
- b Add a folder to the analysis tree.** Right-click a folder under the Private or Public root folder, and select **New Folder**.
- c Create a new graph.** Right-click a folder. Select **New Release Analysis** and choose a PPT graph. The New Graph dialog box opens. For user interface details, see "New Graph Dialog Box" on page 968.

## 3 Configure a graph

In the Analysis View module, select a graph, and click the **Configuration** tab. For user interface details, see "Configuration Tab – PPT Graphs" on page 984.

## 4 View a graph

Select a graph in the analysis tree, and click the **View** tab. For user interface details, see "View Tab – PPT Graphs" on page 987.

## 5 Share a graph outside ALM

Allow ALM users or others to view read-only versions of graphs outside ALM. For task details, see "How to Generate a Graph" on page 936.

## 6 Create a dashboard page

View several graphs together in a dashboard page. For task details, see "How to Generate a Dashboard Page" on page 940.

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## Reference

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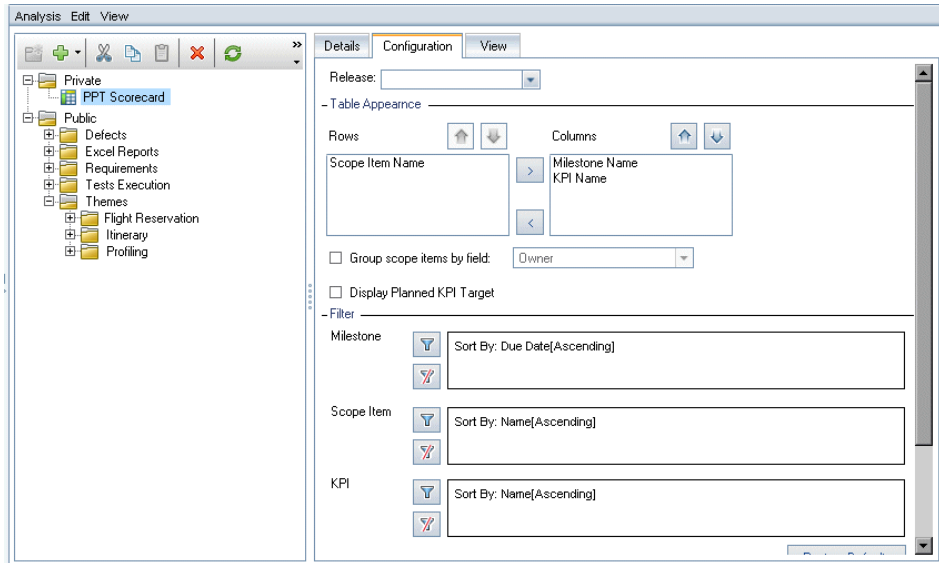
### PPT Graphs User Interface

This section includes (in alphabetical order):

- ▶ Configuration Tab – PPT Graphs on page 984
- ▶ View Tab – PPT Graphs on page 987

## Configuration Tab – PPT Graphs

This tab enables you to select project planning and tracking (PPT) data to be included in a graph, and set graph display options.



|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Expand the analysis tree, and select a PPT graph.</li> <li><b>3</b> Click the <b>Configuration</b> tab.</li> </ol>   |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>➤ The available configuration options depend on the graph type.</li> <li>➤ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> </ul> |



|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Generate a PPT Graph" on page 981</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul>                                  |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "PPT Graphs Overview" on page 980</li> <li>➤ "PPT Releases Overview" on page 212</li> <li>➤ "Analysis View Window" on page 914</li> </ul> |

## Configuring KPI Graphs






|                              |  |
|------------------------------|--|
| <b>Important information</b> | Some fields are not available in all graphs. |
|------------------------------|--|

User interface elements are described below:

| UI Elements (A-Z)           | Description  |
|-----------------------------|--|
| <b>Aggregation Function</b> | The aggregation function used in grouping the data by time resolution. Possible values are <b>last</b> , <b>average</b> , <b>max</b> , and <b>min</b> .                              |
| <b>Breakdown</b>            | Select a field to determine the information by which ALM groups data in the graph.   |
| <b>Data updated to</b>      | Displays data results based on selected date.  |
| <b>KPI</b>                  | The KPI name.  |
| <b>Milestone</b>            | The milestone name.  |
| <b>Period</b>               | The time period for which you want to view data.   |
| <b>Release</b>              | The release name.  |
| <b>Resolution</b>           | The time resolution of the data. Possible values are <b>day</b> , <b>week</b> , <b>month</b> , <b>year</b> , <b>auto select</b> (the server determines the optimal time resolution). |
| <b>Scope Item</b>           | The scope item name.   |
| <b>Show Last Result</b>     | Displays data results based on last run date.  |

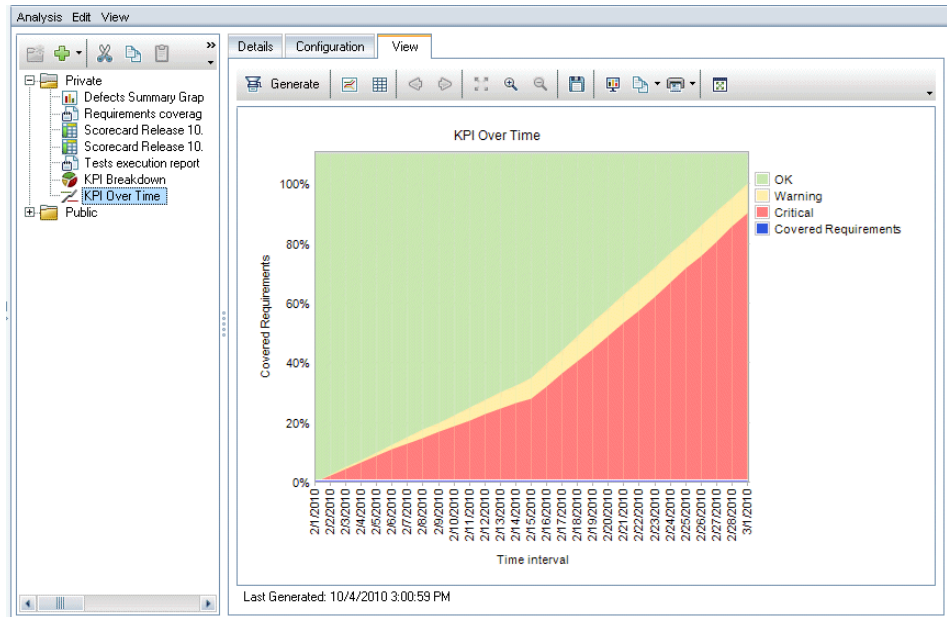
## Configuring Scorecard Graph

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)   | Description  |
|---|--|
|  | Sets the order in which row or column names appear in scorecard table.   |
|  | Moves selected fields between <b>Rows</b> and <b>Columns</b> .   |
|  | <b>Set Filter/Sort.</b> Enables you to narrow and sort the <b>Milestone</b> , <b>Scope Item</b> , or <b>KPI</b> data according to your chosen criteria. For more details on filtering, see "Filter Dialog Box" on page 64. |
|  | <b>Clear Filter.</b> Clears the defined filter.  |
|  | Restores default filter definitions.   |
| <b>Columns</b>  | Lists columns that are currently displayed in the scorecard table.   |
| <b>Data Updated to</b>  | Displays data results based on selected date.  |
| <b>Display Planned KPI Target</b>   | Displays the acceptable threshold value for each KPI in the <b>Planned</b> column of the scorecard table.<br><b>Note:</b> The <b>Planned</b> column is displayed only when this option is enabled.                         |
| <b>Group Scope Item by Field</b>  | Groups according to a specified scope item field.  |
| <b>Release</b>  | The release name.  |
| <b>Rows</b>   | Lists rows that are currently displayed in the scorecard table.  |
| <b>Show Last Results</b>  | Displays data results based on last run date.  |

## View Tab – PPT Graphs








This tab enables you to view project planning and tracking (PPT) graphs.










|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Expand the analysis tree, and select a PPT graph.</li> <li><b>3</b> Click the <b>View</b> tab.</li> </ol>   |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>➤ The available view options depend on the graph type.</li> <li>➤ <b>ALM Editions:</b> Functionality related to PPT is not available for Quality Center Starter Edition, Quality Center Enterprise Edition, or Performance Center Edition.</li> </ul> |

|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Generate a PPT Graph" on page 981</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul>                                  |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "PPT Graphs Overview" on page 980</li> <li>➤ "PPT Releases Overview" on page 212</li> <li>➤ "Analysis View Window" on page 914</li> </ul> |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)  | Description   |
|--|---|
|  Generate | <b>Generate.</b> Refreshes the graph so that it displays the most up-to-date information.   |
|           | <b>Bar Chart.</b> Switches the chart format to a bar chart.   |
|           | <p><b>Pie Chart.</b> Switches the chart format to a pie chart. In pie charts, the x-axis categories are displayed as pie segments. The y-axis quantities are represented by the size of the segments.</p> <p><b>Note:</b> Pie charts do not display the Grouped By field.</p> |
|           | <b>Line Chart.</b> Switches the chart format to a line chart.   |
|         | <b>Data Grid.</b> The grid creates a matrix of the graph's x-axis and Grouped By categories. A <b>Total</b> row is added that displays the total of each Grouped By category.   |
|         | <p><b>Show/Hide Total Values.</b> Shows/hides a &lt;total&gt; category to the graph, representing the sum of all the other Grouped By categories.</p> <p><b>Tip:</b> After showing the &lt;total&gt; category, click its label in the legend to hide the category.</p>        |
|         | <b>Scroll to the Left/Right.</b> Scrolls the graph to the left or right. These buttons are enabled when the Zoom In and Zoom Out buttons are in use.  |

| UI Elements (A-Z)   | Description   |
|---|---|
|    | <b>Show All.</b> Restores the graph to its normal size. This button is enabled when the Zoom In and Zoom Out buttons are in use.  |
|    | <b>Zoom In/Out.</b> Changes the magnification of the graph.   |
|    | <p><b>Save Graph Image.</b> Saves the graph image. You can select from a variety of graphic file formats.</p> <p><b>Save Graph Data.</b> When viewing a data grid, saves the graph data. You can save the data as an Excel spreadsheet, a Word file, an HTML document, or a text file.</p>  |
|    | <b>Set Graph Appearance.</b> Opens the Graph Appearance dialog box, enabling you to customize the graph title, graph color, and graph display. For more details, see "Graph Appearance Dialog Box" on page 975.   |
|    | <p><b>Copy Graph to Clipboard.</b> Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Copy Graph (Color).</b> Copies the graph in color to the Clipboard.</li> <li>▶ <b>Copy Graph (Monochrome).</b> Copies the graph in monochrome to the Clipboard.</li> <li>▶ <b>Copy Full Screen Graph (Color).</b> Copies the graph in color to the Clipboard, enlarged to fit full screen.</li> <li>▶ <b>Copy Full Screen Graph (Monochrome).</b> Copies the graph in monochrome to the Clipboard, enlarged to fit full screen.</li> </ul> |
|  | <p><b>Print Graph.</b> Includes the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>Print Graph (Color).</b> Prints the graph in color. This is the default button option.</li> <li>▶ <b>Print Graph (Monochrome).</b> Prints the graph in monochrome.</li> <li>▶ <b>Print Graph and Details (Color).</b> Prints the graph and its description in color.</li> <li>▶ <b>Print Graph and Details (Monochrome).</b> Prints the graph and its description in monochrome.</li> </ul>  |

| UI Elements (A-Z)   | Description  |
|---|--|
|  | <p><b>Full Screen.</b> Opens the graph in a new window and maximizes its display.</p> <p><b>Note:</b> The toolbar remains visible in full-screen mode.</p> <p><b>Tip:</b> To return to the standard view, click the <b>Close</b> button in the top-right corner of the window.</p>   |
| <graph area>  | <p>You can perform the following actions in the graph area:</p> <ul style="list-style-type: none"> <li>▶ Hover over a graph segment to view a tooltip containing additional information.</li> <li>▶ Click the <b>Break Over Time</b> link to drill down to the graph's data and show specific points during a period of time. Opens a breakdown over time graph. For more details, see "Breakdown Over Time Graph" on page 255. <b>Available from:</b> View tab - KPI Breakdown</li> </ul> |
| <KPI cell>  | <p>You can perform the following actions in a KPI cell:</p> <ul style="list-style-type: none"> <li>▶ Click a KPI cell to display a graph representation of this cell. For more details, see "KPI Drill Down Graph" on page 253.</li> <li>▶ Hover over a KPI cell to view a tooltip containing the KPI's threshold values.</li> </ul> <p><b>Available from:</b> View tab - Release Scorecard</p>  |
| <legend>  | <p>Displays the chart categories and their corresponding color. Click a category to show or hide the category in the graph.</p>  |

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## Project Reports

This chapter includes:

### Concepts

- ▶ Project Reports Overview on page 992

### Tasks

- ▶ How to Create Project Reports on page 993
- ▶ How to Create a Custom Report Template on page 998

### Reference

- ▶ Project Reports User Interface on page 999

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## Concepts

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### Project Reports Overview

Project reports enable you to design and generate comprehensive reports containing information from your HP Application Lifecycle Management (ALM) project.

In a project report, you define sections and sub-sections, each listing records of a specified ALM entity. You can choose to display data of a selected baseline.

To each report section, you assign a template that determines the fields and layout of the section. You also assign document and style templates that determine the overall report appearance.

---

**Note:** Report templates are managed in Project Customization. For more details, refer to the *HP Application Lifecycle Management Administrator Guide*.

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You can generate project reports in HTML, Microsoft Word, or PDF formats.

For details on creating project reports, see "How to Create Project Reports" on page 993.

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**Note:** You can also create reports using standard reports, or the Document Generator. For more details, see "Standard Reports Overview" on page 1036, and "Project Documents Overview" on page 1066.

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# Tasks

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## How to Create Project Reports

This task describes how to create project reports.

To learn more about project reports, see "Project Reports Overview" on page 992.

This task includes the following steps:

- "Create a project report" on page 993
- "Define sections" on page 993
- "Configure document-level settings" on page 994
- "Configure sections" on page 995
- "Preview a template report" on page 996
- "Generate a template report" on page 996

### 1 Create a project report

- a Open the Analysis View module.** On the ALM sidebar, under **Dashboard**, select **Analysis View**.
- b Add a folder to the analysis tree.** Right-click a folder under the Private or Public root folder, and select **New Folder**.
- c Create a new project report.** Right-click a folder, and select **New Project Report**. Fill in the New Project Report dialog box.

### 2 Define sections

- a Select a project report.** In the Analysis View module, select a project report, and click the **Configuration** tab.
- b Add a section.** Right-click the **Document** root node, and select **Add Report Section**. Select an ALM entity to include in the report.

- c Add a sub-section.** You can add a sub-section of related information. For example, add a sub-section of defects linked to requirements, or a sub-section of defect attachments.

Each section can have multiple sub-sections and, where applicable, you can add further sub-sections to sub-sections.

Right-click a section in the report tree, and select **Add Report Section**.


---

**Note:** You can add sub-sections only to sections that are assigned a full-page template. For more details on full-page templates, refer to the *HP Application Lifecycle Management Administrator Guide*.

---

### 3 Configure document-level settings

At the **Document** root level, you assign templates and define settings that apply to the overall design and content of the project report.

- a** In the Configuration tab, select the **Document** root node. For user interface details, see "Configuration Tab – Project Reports" on page 1000.
- b** Set the document output format.
- c** Assign document, style and history templates, or keep the default templates. For details on the template types, refer to the *HP Application Lifecycle Management Administrator Guide*.
- d** Click **Edit Document Field Values**  to type values for custom fields in areas such as the title page, headers and footers, as defined in the document template.
- e** To create a baseline report, select **Select a Baseline**, and select a baseline.

---

**Note:** To create a baseline report, all report sections must support baselines.

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- f** Select **Embed Text and Image Attachments**, to embed text and image attachments in the report. Otherwise, links to text and image attachments are inserted in the report, that open the files in a separate window.
- 

**Note:** To display attachments, you must add attachment sub-sections to the report.

---

- g** Select **Auto-Update Table of Contents** to instruct ALM to update table of contents entries in the report output.
- 

**Note:** To display a table of contents, the document template must include a **TOC** field.

---

#### 4 Configure sections

- a** In the Configuration tab, select a section or sub-section in the report tree. For user interface details, see "Configuration Tab – Project Reports" on page 1000.
  - b** Optionally, rename the section title.
  - c** Assign a project template, or keep the default template.
- 

**Note:** Depending on your user group permissions, you can assign a custom template. For details on creating a custom template, see "How to Create a Custom Report Template" on page 998.

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- d** Define a data filter, where applicable, to define the records that are included in the section.
- e** For top-level sections that include entities that are listed hierarchically (for example, requirements, tests), select whether records are ordered hierarchically in the report.

## 5 Preview a template report

Click **Preview** to display a preview of your report.

A preview contains up to five records of each section in the report. The preview is displayed in the output format you selected for the **Document** root node.

## 6 Generate a template report

Click **Generate**. The report generation process begins.

When the report generation is complete, it is displayed in the output format you selected for the **Document** root node.

The report is saved on the client machine, under the following directory:

**%Temp%\TD\_80\<<ALM\_Platform>\<Project\_id>\Reports**

Where <Project\_id> is a string representing your ALM project.

**Example:****1 Models****1.1 Model ID : 1001 - Internal Order Master**

| Field Label    | Field Value                          | Field Label         | Field Value           |
|----------------|--------------------------------------|---------------------|-----------------------|
| Created By:    | sa                                   | Imported File Name: | ARISAMLExport.xml     |
| Creation Date: | 6/20/2010 3:50:25 PM                 | Model Author:       | is38972               |
| Guid:          | 92fb8120-6888-11dd-53ac-005056a61fbb | Model ID:           | 1001                  |
| Import Date:   | 6/20/2010 3:50:25 PM                 | Name:               | Internal Order Master |
| Imported By:   | sa                                   | Prototype           |                       |

| Description |
|-------------|
|             |

| Comments |
|----------|
|          |

**1.1.1 Model Activities****1.1.1.1 Activity ID : 1005 - Determine Which Internal Order Type fulfill the needed**

| Field Label               | Field Value          | Field Label  | Field Value  |
|---------------------------|----------------------|--------------|--|
| Created By:               | sa                   | Imported By: | sa   |
| Creation Date:            | 6/20/2010 3:50:27 PM | Activity ID: | 1005   |
| Guid of referenced model: |                      | Name:        | Determine Which Internal Order Type fulfill the needed |
| Import Date:              | 6/20/2010 3:50:27 PM |              |  |

| Description |
|-------------|
|             |



| Comments |
|----------|
|          |

## **How to Create a Custom Report Template**


This task describes how to create a custom template for your personal use. Depending on your user group permissions, you can assign custom templates to report sections and sub-sections.

- "Create a copy of an existing report template" on page 998
- "Create a new custom report template" on page 998

### **Create a copy of an existing report template**

- 1** In the report tree, select a report section, and click the **Download Template** button  next to the project or custom template that you want to modify. A copy of the template is saved on your computer file system, and opens in Microsoft Word.
- 2** Modify the template in Microsoft Word using commands in the **Template Creator** tab. For details on the **Template Creator** tab, refer to the *HP Application Lifecycle Management Administrator Guide*.
- 3** Save and close the template file.
- 4** To assign the new custom template to a report section, select a report section. Then select **Custom Template** or click **Upload Custom Template** , and select the template file.

### **Create a new custom report template**

- 1** In the report tree, select a report section for which you want to create a custom template.
- 2** Click **Template Creator**. Microsoft Word opens with the **Template Creator** tab. Design a new template file for the selected report section. For details on working with the **Template Creator**, refer to the *HP Application Lifecycle Management Administrator Guide*.
- 3** Save and close the template file.
- 4** To assign the new custom template to a report section, select a report section. Then select **Custom Template** or click **Upload Custom Template** , and select the template file.

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## Reference

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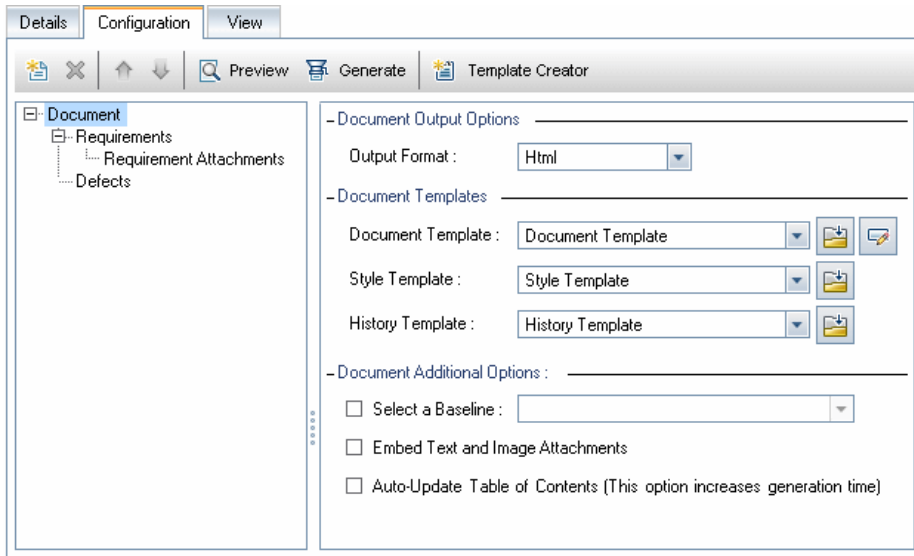
### **Project Reports User Interface**

This section includes:

- Configuration Tab – Project Reports on page 1000
- New Project Report Dialog Box on page 1005
- Add Report Section Dialog Box on page 1006
- Edit Document Template Field Values Dialog Box on page 1008

## Configuration Tab – Project Reports





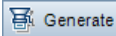

This tab enables you to define document-level settings, and configure report sections.







|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Expand the analysis tree, and select a project report.</li> <li><b>3</b> Click the <b>Configuration</b> tab.</li> </ol> |
| <b>Important information</b> | The available configuration options depend on the selected section in the report tree.   |
| <b>Relevant tasks</b>        | <ul style="list-style-type: none"> <li>➤ "How to Create Project Reports" on page 993</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul>  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Project Reports Overview" on page 992</li> <li>➤ "Analysis View Window" on page 914</li> </ul>   |



User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements (A-Z)   | Description  |
|---|--|
|    | <p><b>Add Report Section.</b> Opens the Add Report Section dialog box, enabling you to add a section to the report. For user interface details, see "Add Report Section Dialog Box" on page 1006.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ You can add a sub-section only to sections that are assigned full-page templates.</li> <li>▶ Where applicable, you can add additional layers of sub-sections to sub-sections.</li> <li>▶ At each level you can include multiple sub-sections.</li> </ul> |
|    | <p><b>Delete Report Section.</b> Deletes the selected section.</p> <p><b>Note:</b> When you delete a section, all its sub-sections are deleted too.</p>  |
|    | <p><b>Download &lt;Type&gt; Template.</b> Opens the Download Report Template file dialog box, enabling you to view and edit a copy of the selected template file.</p> <p>In report sections, you can assign the edited template as a custom template.</p>  |
|  | <p><b>Edit Document Field Values.</b> Opens the Edit Document Template Field Values dialog box, enabling you to type values for fields in areas such as the title page, headers and footers, as defined in the document template. For user interface details, see "Edit Document Template Field Values Dialog Box" on page 1008.</p> <p><b>Available from:</b> Document root node</p>  |
|  | <p>Generates the report in the selected report output format.</p>  |
|  | <p><b>Move Up/Move Down.</b> Enables you to move the selected report section higher or lower in the project report.</p> <p><b>Note:</b> The selected section moves in relation to sections on the same level.</p>  |

| UI Elements (A-Z)  | Description   |
|--|---|
|  Preview          | <p>Generates a preview of the report that includes the first five records of each of the report sections.</p> <p>The preview is generated in the selected report output format.</p>   |
|  Template Creator | <p>Opens Microsoft Word with the Template Creator tab, enabling you to design a custom template file.</p> <p>After creating a custom template, assign it to a report section in the <b>Custom Template</b> field.</p> <p><b>Note:</b> To enable the Template Creator, you must first allow macros in Microsoft Word. In Word, click the <b>Office Button</b>, and then click <b>Word Options</b>. Select <b>Trust Center &gt; Trust Center Settings &gt; Macro Settings</b>. Select <b>Enable all macros</b>.</p> |
|                   | <p><b>Set Filter/Sort.</b> Enables you to filter and sort the data according to the criteria you choose. For details, see "Select Filter Condition Dialog Box" on page 74.</p> <p><b>Clear Filter.</b> Clears all filters and sorting priorities.</p> <p>The current filter is displayed in the filter box.</p> <p><b>Available from:</b> Section nodes</p>   |
|                  | <p><b>Upload Custom Template.</b> Opens the Upload Custom Template file dialog box, enabling you to change the custom template file assigned to the currently selected section of the report.</p> <p><b>Available from:</b> Section nodes</p>   |
| <p>&lt;report section tree&gt;</p>   | <p>Displays the sections and sub-sections included in the report. The <b>Document</b> root node contains settings that apply to the overall report design and content.</p>  |

| UI Elements (A-Z)                    | Description  |
|--------------------------------------|--|
| <b>Auto-Update Table of Contents</b> | <p>Instructs ALM to update table of contents entries in the report output.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>▶ To display a table of contents, the document template must include a <b>TOC</b> field.</li> <li>▶ If this option is not selected, and if you selected the <b>Doc</b> or <b>Docx</b> output format, you can manually update the table of contents in Microsoft Word after the report is generated.</li> </ul>  |
| <b>Document Output Options</b>       | <p>The file format in which the report is generated. Select one of the following:</p> <ul style="list-style-type: none"> <li>▶ <b>HTML.</b> To view the report in a Web browser.</li> <li>▶ <b>Docx.</b> To view the report in Microsoft Word 2007.</li> <li>▶ <b>Doc.</b> To view the report in Microsoft Word 2003.</li> <li>▶ <b>PDF.</b> To view the report in PDF readers.</li> </ul> <p><b>Available from:</b> Document root node</p>  |
| <b>Document Templates</b>            | <p>Templates assigned to the report, that affect the overall appearance of the report.</p> <ul style="list-style-type: none"> <li>▶ <b>Document Template.</b> Defines fields on the title page, headers and footers, page orientation, and other document layout settings.</li> <li>▶ <b>Style Template.</b> Defines formatting (for example, tables, headings, and paragraph) applied to Microsoft Word styles. The Style template styles override styles defined in the templates used in the report sections.</li> <li>▶ <b>History Template.</b> Defines the style in which history information is displayed in report sections.</li> </ul> <p><b>Available from:</b> Document root node</p> |

| UI Elements (A-Z)                              | Description   |
|--|---|
| <p><b>Embed Text and Image Attachments</b></p> | <p>Embeds plain text and image attachments in the report.</p> <p>If this option is not selected, links to plain text and image attachments are inserted in the report, that open the files in a separate window.</p> <p>Other attachment types (for example, document or video files) are always displayed as links.</p> <p><b>Note:</b> To display attachments, you must add attachment sub-sections to the report.</p> <p><b>Available from:</b> Document root node</p> |
| <p><b>Keep Hierarchical</b></p>                | <p>Instructs ALM to list records in hierarchical order in the report.</p> <p><b>Available from:</b> Top-level sections that contain entities that are listed hierarchically in ALM (for example, requirements, test folders).</p>   |
| <p><b>Report Section Details</b></p>           | <p><b>Name.</b> The name of the section title in the report.</p> <p><b>Entity.</b> The ALM entity that is included in the section.</p> <p><b>Relationship Type.</b> Describes the relationship between the entity in the selected section and the entity in the parent section.</p> <p><b>Available from:</b> Section nodes</p>   |

| UI Elements (A-Z)        | Description   |
|--------------------------|---|
| <b>Select a Baseline</b> | <p>Select this option to generate a report of a selected baseline data.</p> <p>Clear this option to include current data in your report.</p> <p><b>Note:</b> You can create a baseline report only if all sections and sub-sections of the report support baselines.</p> <p><b>Available from:</b> Document root node</p>   |
| <b>Template Details</b>  | <p>The template assigned to the currently selected section of the report. Select one of the following:</p> <ul style="list-style-type: none"> <li>▶ <b>Project Template.</b> A template managed in Project Customization by the project administrator.</li> <li>▶ <b>Custom Template.</b> A template designed specifically for the current report.</li> </ul> <p>A template can be either in a full-page or tabular layout. You can only add sub-sections to sections that are assigned full-page templates. For more details on report templates, refer to <i>HP Application Lifecycle Management Administrator Guide</i>.</p> <p><b>Available from:</b> Section nodes</p> |

## **New Project Report Dialog Box**

This dialog box enables you to add a new project report to the analysis tree.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Right-click the folder under which you want to add a report, and select <b>New Project Report</b>.</li> </ol> |
| <b>Important information</b> | <p>Reports you create under private folders are available to the owner only. Reports you create under public folders are available to all users.</p>   |

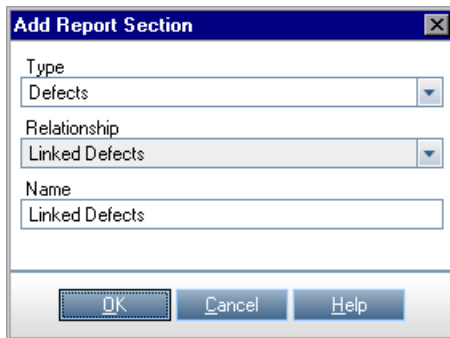
|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Create Project Reports" on page 993</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul> |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Project Reports Overview" on page 992</li> <li>➤ "Analysis View Window" on page 914</li> </ul>            |

User interface elements are described below:

| UI Elements                 | Description   |
|-----------------------------|---|
| <b>Template Report Name</b> | The report's display name in the analysis tree and in the report title. |

## Add Report Section Dialog Box

This dialog box enables you to add a new section to a project report.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | In a project report, right-click the root node or a section node, and select <b>Add Report Section</b> . |
| <b>Important information</b> | You can add a sub-section only to sections that are assigned a full-page template.                       |

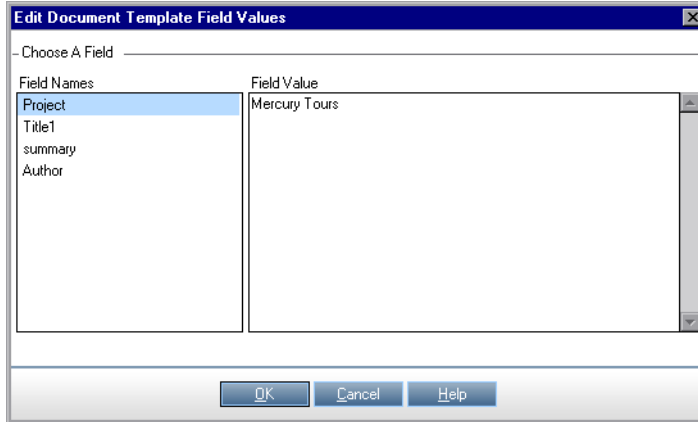
|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Create Project Reports" on page 993</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul> |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Project Reports Overview" on page 992</li> <li>➤ "Analysis View Window" on page 914</li> </ul>            |


User interface elements are described below:

| <b>UI Elements (A-Z)</b> | <b>Description</b>   |
|--------------------------|--|
| <b>Type</b>              | The entity that is included in the new section. For sub-sections, the available types depend on the entity in the parent section.              |
| <b>Relationship</b>      | Describes the relationship between the entity in the new section and the entity in the parent section.<br><b>Available from:</b> Section nodes |
| <b>Name</b>              | The name of the new section. This field is used as the section title in the report.  |

## Edit Document Template Field Values Dialog Box

This dialog box enables you to type actual values for custom merge fields as defined in the assigned document template.



|                       |   |
|-----------------------|---|
| <b>To access</b>      | In a template report, select the <b>Document</b> root node, and click <b>Edit Document Field Values</b>  . |
| <b>Relevant tasks</b> | "How to Create Project Reports" on page 993   |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Project Reports Overview" on page 992</li> <li>➤ "Analysis View Window" on page 914</li> </ul>  |

User interface elements are described below:

| UI Elements        | Description  |
|--------------------|--|
| <b>Field Names</b> | A list of the custom merge fields defined in the assigned document template. |
| <b>Field Value</b> | The text that is displayed in the report in place of the selected field.     |



# 39

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## Excel Reports

This chapter includes:

### Concepts

- ▶ Excel Reports Overview on page 1010

### Tasks

- ▶ How to Generate an Excel Report on page 1014

### Reference

- ▶ Excel Reports User Interface on page 1017

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## Concepts

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### Excel Reports Overview

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**Performance Center Edition:** Excel reports are not available for Performance Center entities.

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You can export HP Application Lifecycle Management (ALM) data to Microsoft Excel. This enables you to analyze your data using any of the capabilities available in Excel. An Excel report consists of a set of data defined by SQL queries on the project database. You can also run a Visual Basic script on the extracted data to process and analyze the data.

For example, create a pivot table to summarize Defects module data, such as to display in tabular format the number of defects assigned to different users with different statuses.

| Count of STATUS | STATUS ▼ |      |        |             |
|-----------------|----------|------|--------|-------------|
| ASSIGNED TO ▼   | Closed   | Open | Reopen | Grand Total |
| james_qc        | 3        | 6    | 1      | 10          |
| mary_qc         |          | 13   | 1      | 14          |
| peter_qc        | 5        | 9    |        | 14          |
| Grand Total     | 8        | 28   | 2      | 38          |

You can also create a report with parameters. This enables you to create a more flexible report that you only need to create once but can be used in a number of different contexts.

---

**Caution:** Users who belong to groups that have data-hiding filters, are able to access the restricted data through Excel reports. To overcome this, you can exclude user groups from performing Excel report tasks. For more information on user groups and permissions, refer to the *HP Application Lifecycle Management Administrator Guide*.

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For task details, see "How to Generate an Excel Report" on page 1014.

This section also includes:

- "Protecting the Database" on page 1011
- "Parameters in SQL Queries" on page 1012
- "Guidelines for Creating a Post-Processing Script" on page 1013

For task details, see "How to Generate an Excel Report" on page 1014.



## Protecting the Database

To ensure the integrity of the database, you should run only queries that extract data from the project database. You should not run queries that alter the project database by adding, modifying, or deleting database records.

By default, to ensure that your queries are valid and do not alter the project database, ALM checks that the following conditions are fulfilled:

- The query starts with the command **SELECT**.
- The query contains only one SQL statement.

- ▶ The query does not contain any of the following commands (except in comments): **INSERT, DELETE, UPDATE, DROP, CREATE, COMMIT, ROLLBACK, ALTER, EXEC, EXECUTE, MERGE, GRANT, REVOKE, SET, INTO,** or **TRUNCATE.**

You can customize whether this verification is performed, and how it is performed, using the **SQL\_QUERY\_VALIDATION\_ENABLED** and **SQL\_QUERY\_VALIDATION\_BLACK\_LIST** parameters in Site Administration. For more information, see the *HP Application Lifecycle Management Administrator Guide*.

### **Parameters in SQL Queries**

You can include parameters in the SQL queries for your Excel reports. For each query parameter, you can assign a default value. When you generate the report, you are prompted to enter the value of the parameter, or confirm the default value. Alternatively, you can choose to always use the default value, without being prompted by ALM each time you generate the report.

For example, suppose you want to create a report that displays a graph of the number of requirements added to your project over a period of time. You might want to run the report several times, each time for a different period of time. You can avoid the need to create multiple reports by creating a single report with query parameters for the start date and end date of the period. Each time you generate the report, you are prompted to enter the start and end dates for the period.

You first add query parameters to the parameters list. You can add global parameters that are accessible to all queries in a report, or you can add parameters that can only be used in particular queries. After you add parameters to the parameters list, you insert parameters into the query.

---

#### **Caution:**

- ▶ You cannot use parameters for SQL identifiers, such as a table name or a column name.
  - ▶ Parameter values cannot include an SQL statement.
-

## Guidelines for Creating a Post-Processing Script

When writing a post-processing script, consider the following guidelines:

- ▶ Your post-processing script must contain a sub-procedure named **QC\_PostProcessing**. This procedure serves as the entry point to your script. This procedure cannot return a value and cannot take any arguments.
- ▶ Before you can work with the report data in Excel, you must first define the range containing the report data. You define this range in two steps:
  - ▶ You first define the worksheet containing the report data by creating a worksheet object containing the data. For example, if the worksheet is named Query1, you can use the statement `Set MainWorksheet = ActiveWorkbook.Worksheets("Query1")`.
  - ▶ After you define the worksheet containing the report data, you define the range containing the data by creating a range object containing the data. For example, you if defined the worksheet object with name MainWorksheet, you can use the statement `Set DataRange = MainWorksheet.UsedRange`.

After you define this range, you can manipulate the data contained in it using Visual Basic code.

- ▶ Before you run a post-processing script, you must configure your Microsoft Excel security settings so that Excel can run the script.

**Office 2007:** In Excel, click the Microsoft Office Button, and then click **Excel Options**. Select **Trust Center > Trust Center Settings > Macro Settings**. Select **Trust access to the VBA project object model**. Close Excel.

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**Caution:** Enabling macros in Excel allows access to core Microsoft Visual Basic objects, methods and properties, and represents a potential security hazard.

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## Tasks

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### How to Generate an Excel Report

This task describes how to analyze data in ALM using Excel reports.

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**Tip:** The ALM Demo Project contains sample Excel reports. You can use the SQL queries and post-processing scripts in those reports as a basis for developing your own queries and scripts.

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To learn more about Excel reports, see "Excel Reports Overview" on page 1010.

This task includes the following steps:

- "Prerequisites" on page 1015
- "Add an Excel report to the analysis tree" on page 1015
- "Create an SQL query" on page 1015
- "Create a post-processing script" on page 1016
- "Generate an Excel report" on page 1016

## 1 Prerequisites

To verify supported versions of Microsoft Excel, refer to the *HP Application Lifecycle Management Readme*.

## 2 Add an Excel report to the analysis tree

Add an Excel report to a folder in the analysis tree.

- a Open the Analysis View module.** On the ALM sidebar, under **Dashboard**, select **Analysis View**.
- b Add a folder to the analysis tree.** Right-click a folder under the Private or Public root folder, and select **New Folder**.
- c Create a new Excel report.** Right-click a folder, and select **New Excel Report**. Enter a name for the Excel report in the New Excel Report dialog box.

## 3 Create an SQL query

Define the project data that you want to include in the report. You define this data by creating SQL queries. You can create multiple queries in an Excel report. When you generate the report, the results of each query are displayed in separate Excel worksheets.

- a Open the Query Builder.** In the Configuration tab, click the **Query** tab, and click **Query Builder**. For user interface details, see "Excel Report Query Builder Dialog Box" on page 1023.
- b Write an SQL query.** Type a query in the SQL editor.
- c Add ALM entities to an SQL query.** Select ALM entities in the Entities pane.
- d Define parameters in an SQL query.** Use parameters in SQL queries to modify the results of an Excel report, based on parameter values that you enter. In the Query Builder dialog box, use the buttons in the Query Parameters tab.

#### 4 Create a post-processing script

You can create a Visual Basic script to run after the data is exported to Excel. You use this script to manipulate the data in Excel.

For example, you can present requirements data in Excel as a pivot table, you could perform calculations on defects data to calculate the average time an open defect takes to be fixed, or you could create a graph based on exported data.

In the Configuration tab, click the **Post-processing** tab. Write a Visual Basic script. For user interface details, see "Post-processing Tab" on page 1027.

#### 5 Generate an Excel report

Generating an Excel report extracts the data you specified in the SQL queries from the project database, saves the data in an Excel workbook, and runs the post-processing script.

- a** In the Configuration tab, click the **Generation Settings** tab. Set options for running an Excel report. For user interface details, see "Generation Settings Tab" on page 1029.
- b** Click **Generate**.



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## Reference

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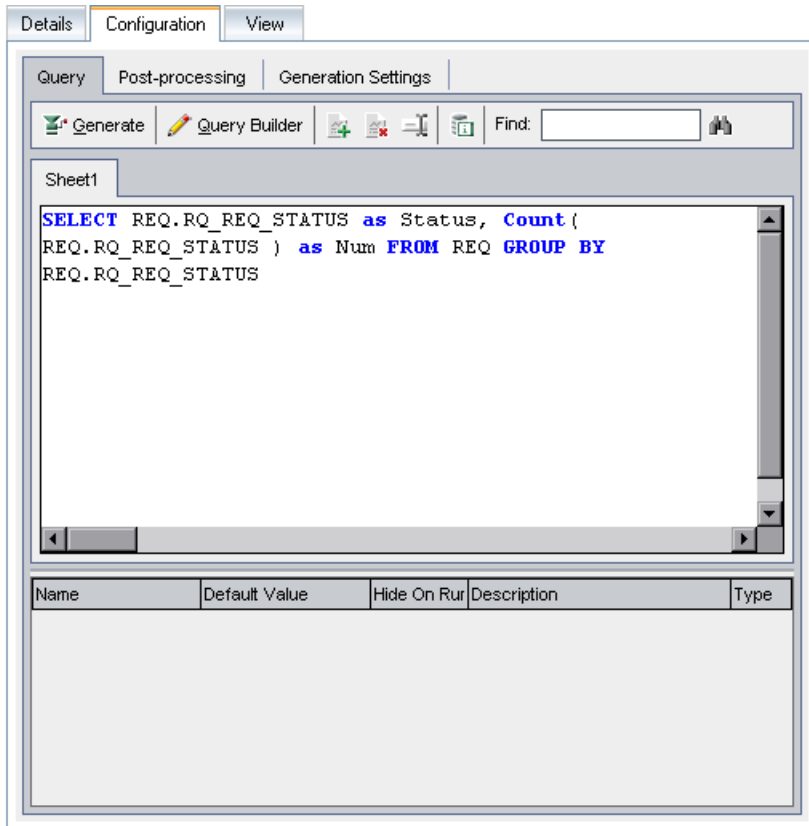
### Excel Reports User Interface

This section includes:

- ▶ Configuration Tab – Excel Reports on page 1018
- ▶ Query Tab on page 1020
- ▶ Excel Report Query Builder Dialog Box on page 1023
- ▶ Post-processing Tab on page 1027
- ▶ Generation Settings Tab on page 1029
- ▶ New Excel Report Dialog Box on page 1031
- ▶ New Query Parameter/Edit Query Parameter Dialog Box on page 1032

## Configuration Tab – Excel Reports

This tab contains tabs that enable you to configure Excel reports.



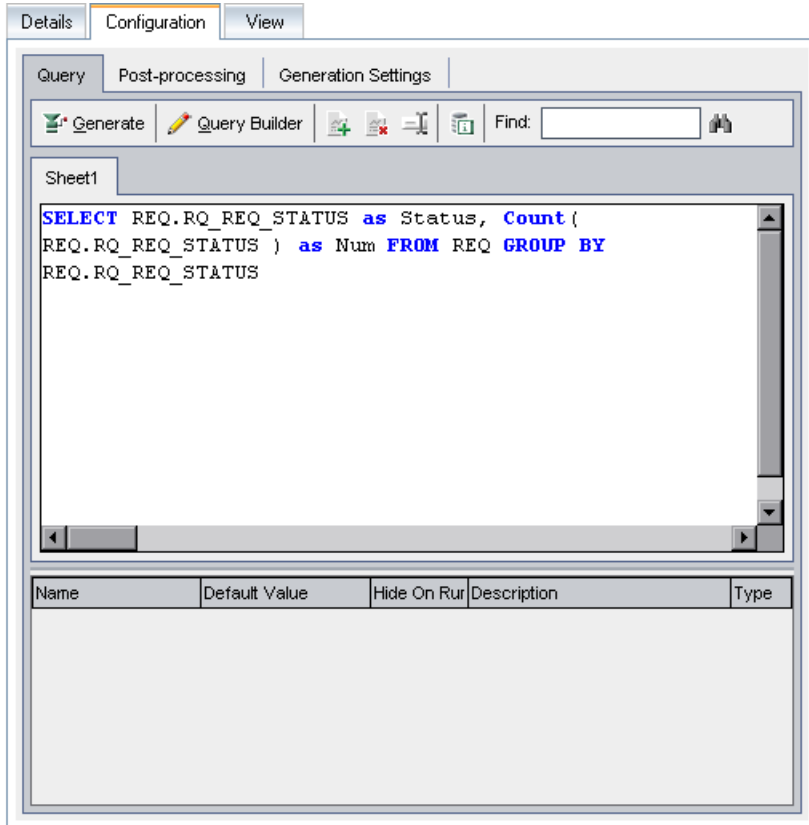
|                       |   |
|-----------------------|---|
| <b>To access</b>      | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Expand the analysis tree, and select an Excel report.</li> <li><b>3</b> Click the <b>Configuration</b> tab.</li> </ol> |
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Generate an Excel Report" on page 1014</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul>  |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Excel Reports Overview" on page 1010</li> <li>➤ "Analysis View Window" on page 914</li> </ul>   |

User interface elements are described below:

| UI Elements (A-Z)              | Description   |
|--------------------------------|---|
| <b>Generation Settings tab</b> | Enables you to set options for running the Excel report. For more details, see "Generation Settings Tab" on page 1029.  |
| <b>Post-processing tab</b>     | Enables you to write a Visual Basic script that runs in Excel after the report data is exported to Excel. For more details, see "Post-processing Tab" on page 1027. |
| <b>Query tab</b>               | Enables you to write an SQL query that defines the data that is exported to Excel. For more details, see "Query Tab" on page 1020.                                  |


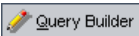


## Query Tab




This tab enables you to create an SQL script that defines the data that is exported to Excel.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Expand the analysis tree and select an Excel report.</li> <li><b>3</b> Under the Configuration tab, click the <b>Query</b> tab.</li> </ol>  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ To ensure the integrity of the database, you should run only queries that extract data from the project database. For more details, see "Protecting the Database" on page 1011.</li> <li>▶ The query builder provides enhanced functionality for creating SQL queries. For more details, see "Excel Report Query Builder Dialog Box" on page 1023.</li> </ul> |
| <b>Relevant tasks</b>        | <ul style="list-style-type: none"> <li>▶ "How to Generate an Excel Report" on page 1014</li> <li>▶ "How to Analyze Data in ALM" on page 911</li> </ul>   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "Excel Reports Overview" on page 1010</li> <li>▶ "Analysis View Window" on page 914</li> </ul>  |

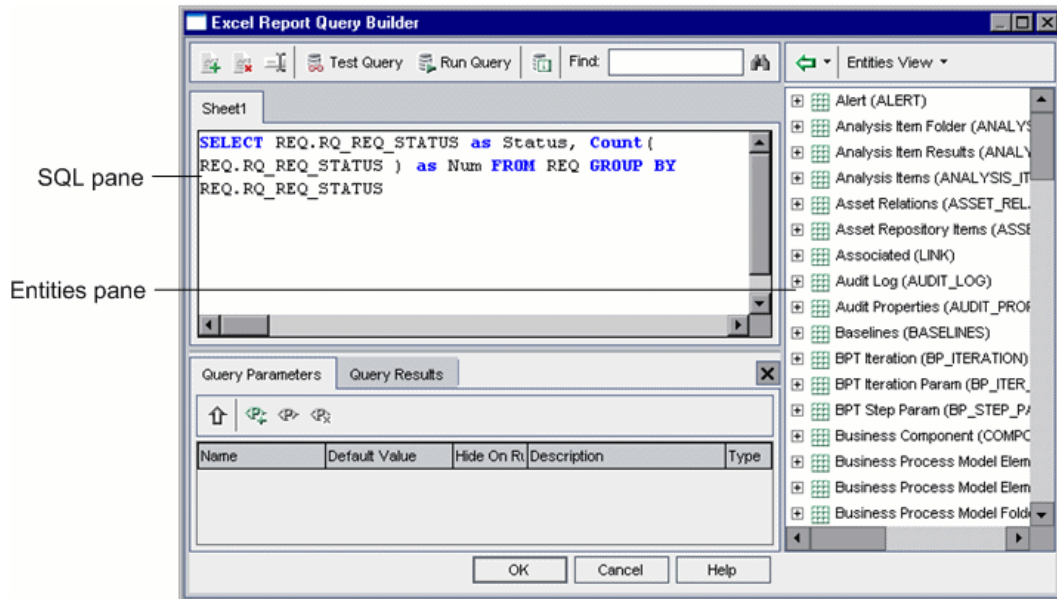
User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements   | Description  |
|---|--|
|    | <b>Generate.</b> Generates the Excel report.   |
|  | <b>Query Builder.</b> Opens the Excel Report Query Builder dialog box, offering extended functionality for creating SQL queries, including testing the query and adding parameters to the query. For more details, see "Excel Report Query Builder Dialog Box" on page 1023. |
|  | <p><b>Add Query.</b> Enables you to create a new query. A new tab is added to the query builder with the default name <b>Query&lt;number&gt;</b>.</p> <p>When you generate the report, the results of each query are displayed in separate Excel worksheets.</p>             |
|  | <b>Delete.</b> Deletes the selected query.   |

| UI Elements   | Description  |
|---|--|
|  | <p><b>Rename Query.</b> Enables you rename the current query.</p> <p><b>Note:</b> The Excel worksheet containing the data extracted by the query will have the same name as the query.</p>   |
|  | <p><b>Database Type.</b> Displays the type of database used for your project database.</p> <p>You must write the SQL query using the syntax used by the project database type.</p>   |
|  | <p><b>Find.</b> Searches the query for text that you entered in the find box.</p> <p><b>Tip:</b> Click the <b>Find</b> button again to find the next occurrence of the text.</p>   |
| <p>&lt;Query Parameters grid&gt;</p>  | <p>Contains a list of parameters available for use in the queries.</p> <p><b>Note:</b> To add and edit query parameters, work in the Excel Report Query Builder. For more details, see "Excel Report Query Builder Dialog Box" on page 1023.</p>   |
| <p>&lt;SQL pane&gt;</p>   | <p>Contains the SQL query that defines the data set that is extracted to the Excel report.</p> <p><b>Syntax exception:</b> The @ and \ characters have a special meaning and are not read literally when running SQL queries on the project database. If you want these characters to be read literally, you should replace @ by \@ and \ by \\. For example, if you want the statement <code>SELECT * FROM BUG WHERE BUG.BG_SUMMARY = '@parameter@'</code> to be run literally on the ALM database, type <code>SELECT * FROM BUG WHERE BUG.BG_SUMMARY = '\@parameter\@'</code>.</p> |

## Excel Report Query Builder Dialog Box






This dialog box enables you to create an SQL query.





|                              |   |
|------------------------------|---|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Expand the analysis tree and select an Excel report.</li> <li><b>3</b> Under the Configuration tab, click the <b>Query</b> tab, and then click the <b>Query Builder</b> button.</li> </ol>                     |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ To ensure the integrity of the database, you should run only queries that extract data from the project database. For more details, see "Protecting the Database" on page 1011.</li> <li>▶ You can include parameters in SQL queries. For more details, see "Parameters in SQL Queries" on page 1012.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Generate an Excel Report" on page 1014  |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>▶ "Excel Reports Overview" on page 1010</li> <li>▶ "Parameters in SQL Queries" on page 1012</li> </ul>   |

## SQL Editor Area

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements  | Description   |
|--|---|
| <SQL editor>   | <p>Contains the SQL query that defines the data set that is extracted to the Excel report.</p> <p><b>Note:</b> Separate project entities with commas.</p> <p><b>Syntax exception:</b> The @ and \ characters have a special meaning and are not read literally when running SQL queries on the project database. If you want these characters to be read literally, you should replace @ by \@ and \ by \\. For example, if you want the statement <code>SELECT * FROM BUG WHERE BUG.BG_SUMMARY = '@parameter@'</code> to be run literally on the ALM database, type <code>SELECT * FROM BUG WHERE BUG.BG_SUMMARY = '\@parameter\@'</code>. Contains the SQL query that defines the data set that is used for the Excel report.</p> |
|               | <p><b>Add Query.</b> Enables you to create a new query. A new tab is added to the query builder with the default name <b>Query&lt;number&gt;</b>.</p> <p>When you generate the report, the results of each query are displayed in separate Excel worksheets.</p>  |
|             | <p><b>Delete.</b> Deletes the selected query.</p>   |
|             | <p><b>Add Query.</b> Enables you rename the current query.</p> <p><b>Note:</b> The Excel worksheet containing the data extracted by the query will have the same name as the query.</p>   |
|  Test Query | <p><b>Test Query.</b> Displays the first ten results of the query in the Query Results tab. If your query contains parameters, ALM uses the default values for the parameters.</p>  |
|  Run Query  | <p><b>Run Query.</b> Displays results of the query in the Query Results tab. If your query contains parameters, ALM prompts you for values.</p>   |


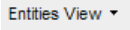


| UI Elements   | Description  |
|---|--|
|  | <p><b>Database Type.</b> Displays the type of database used for your project database.</p> <p>You must write the SQL query using the syntax used by the project database type.</p> |
|  | <p><b>Find.</b> Searches the query for text that you entered in the find box.</p> <p><b>Tip:</b> Click the <b>Find</b> button again to find the next occurrence of the text.</p>   |
| <b>Copy/Paste</b>   | <p>Copies selected text from one place in the SQL editor to another.</p> <p><b>Available from:</b> Query editor right-click menu</p>   |
| <b>Cut/Paste</b>  | <p>Moves selected text from one place in the SQL editor to another.</p> <p><b>Available from:</b> Query editor right-click menu</p>  |

## Entities Pane

Contains a list of ALM database fields and entities that you can add to the query.





User interface elements are described below:

| UI Elements   | Description   |
|---|---|
|  | <p><b>Add Entity to Query.</b> Adds the selected project entity to the SQL query. The entity is inserted at the cursor position.</p> <p>To add a project entity with the column alias defined by the entity title, click the <b>Add Entity to Query</b> arrow and select <b>Add Entity to Query with Entity Title as Alias</b>.</p> <p><b>Available from:</b> Entities pane</p> |
|  | <p><b>Entities View.</b> Enables you to view fields and entities in the Entities pane by their name, their database column name, or both.</p> <p><b>Available from:</b> Entities pane</p>   |

## Query Parameters Tab

Contains a list of parameters available for use in the queries.

User interface elements are described below:

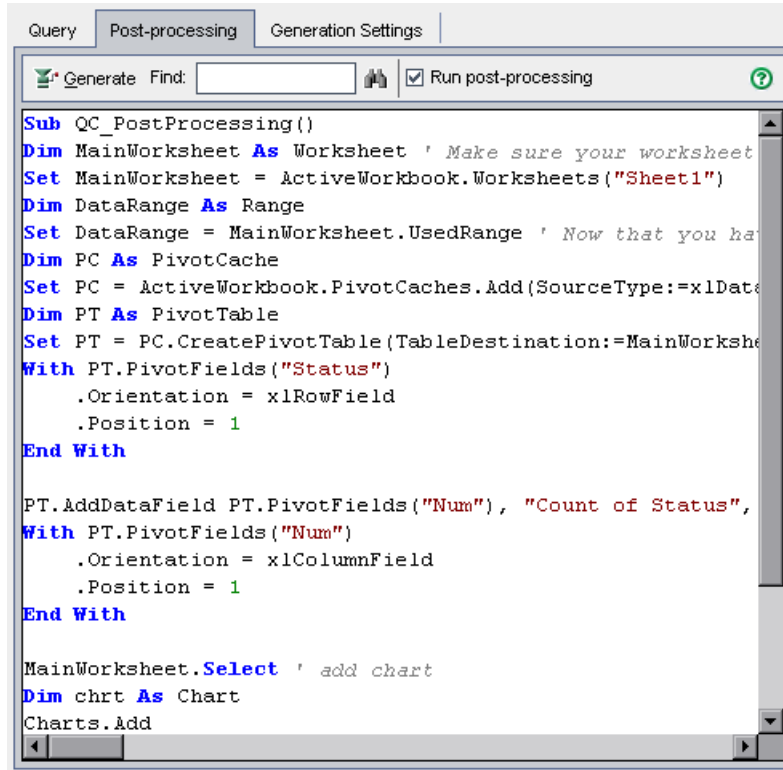
| UI Elements   | Description  |
|---|--|
|    | <p><b>Add Parameter to Query.</b> Adds the selected parameter to the SQL query. The parameter is added at the cursor position.</p> <p><b>Note:</b> For a parameter representing a text value, you must manually add single quotes (') around the parameter in the SQL pane. For example, if the SQL pane contains the phrase WHERE BUG.BG_DETECTED_BY = @name@, you must replace the text @name@ with '@name@'.</p> <p><b>Available from:</b> Query Parameters tab</p> |
|    | <p><b>New Query Parameter.</b> Opens the New Query Parameter dialog box, enabling you to add a parameter to the parameters grid. For more details, see "New Query Parameter/Edit Query Parameter Dialog Box" on page 1032.</p> <p><b>Available from:</b> Query Parameters tab</p>  |
|    | <p><b>Edit Query Parameter.</b> Opens the Edit Query Parameter dialog box, enabling you to edit the selected parameter. For more details, see "New Query Parameter/Edit Query Parameter Dialog Box" on page 1032.</p> <p><b>Available from:</b> Query Parameters tab</p>   |
|  | <p><b>Delete Query Parameter.</b> Deletes the selected parameter from the parameters grid.</p> <p><b>Caution:</b> If you delete a parameter that is in use in a report query, queries containing the parameter will not be valid.</p> <p><b>Available from:</b> Query Parameters tab</p>   |

## Query Results Tab

Displays preview results of an SQL query.

## Post-processing Tab

This tab enables you to create a Visual Basic script that runs after the extracted data is exported to Excel.



```

Sub QC_PostProcessing()
Dim MainWorksheet As Worksheet ' Make sure your worksheet
Set MainWorksheet = ActiveWorkbook.Worksheets("Sheet1")
Dim DataRange As Range
Set DataRange = MainWorksheet.UsedRange ' Now that you ha
Dim PC As PivotCache
Set PC = ActiveWorkbook.PivotCaches.Add(SourceType:=xlData
Dim PT As PivotTable
Set PT = PC.CreatePivotTable(TableDestination:=MainWorkshe
With PT.PivotFields("Status")
.Orientation = xlRowField
.Position = 1
End With

PT.AddDataField PT.PivotFields("Num"), "Count of Status",
With PT.PivotFields("Num")
.Orientation = xlColumnField
.Position = 1
End With



MainWorksheet.Select ' add chart
Dim chrt As Chart
Charts.Add

```

|                                     |   |
|-------------------------------------|---|
| <p><b>To access</b></p>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Expand the analysis tree and select an Excel report.</li> <li><b>3</b> Under the Configuration tab, click the <b>Post-processing</b> tab.</li> </ol> |
| <p><b>Important information</b></p> | <p>When writing a post-processing script, consider important guidelines. For more details, see "Guidelines for Creating a Post-Processing Script" on page 1013.</p>   |

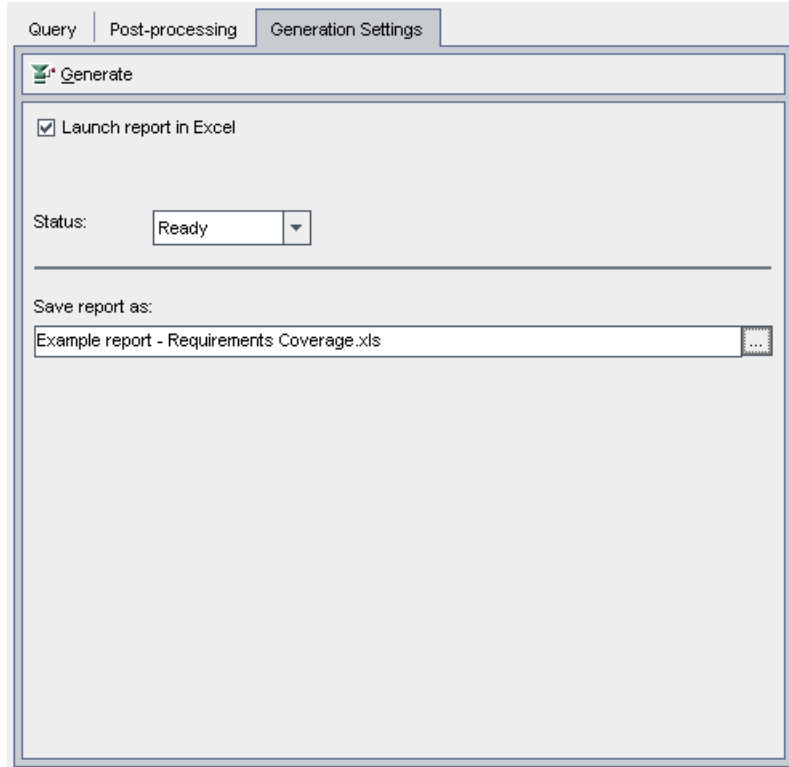
|                       |  |
|-----------------------|--|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Generate an Excel Report" on page 1014</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul> |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Excel Reports Overview" on page 1010</li> <li>➤ "Analysis View Window" on page 914</li> </ul>                |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements  | Description  |
|--|--|
|  Generate | <b>Generate.</b> Generates the Excel report  |
|           | <p><b>Find.</b> Searches the post-processing script for text that you entered in the find box.</p> <p><b>Tip:</b> Click the <b>Find</b> button again to find the next occurrence of the text.</p>            |
| <b>Run post-processing</b>   | Instructs ALM to run the post-processing script after the data is exported to Excel. Clear this option if you do not want to run the script when you generate the report.                                    |
| <script editor box>  | <p>Contains the Visual Basic script that runs in Excel after the report data is exported to Excel.</p> <p><b>Tip:</b> Base the script on the template script already displayed in the Script Editor box.</p> |

## Generation Settings Tab


This tab enables you to define settings for generating the Excel report.



The screenshot shows the 'Generation Settings' tab in the ALM interface. It features a 'Generate' button with a green plus icon. Below it is a checked checkbox labeled 'Launch report in Excel'. A 'Status:' label is followed by a dropdown menu currently showing 'Ready'. A horizontal line separates this from the 'Save report as:' section, which contains a text field with the filename 'Example report - Requirements Coverage.xls' and a small file selection icon on the right.

|                       |   |
|-----------------------|---|
| <b>To access</b>      | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Expand the analysis tree and select an Excel report.</li> <li><b>3</b> Under the Configuration tab, click the <b>Generation Settings</b> tab.</li> </ol> |
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Generate an Excel Report" on page 1014</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul>  |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Excel Reports Overview" on page 1010</li> <li>➤ "Analysis View Window" on page 914</li> </ul>   |

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
|  | <p><b>Generate.</b> Generates the Excel report.</p> <p>If the status of the report is <b>Not Ready</b>, a warning displays.</p> <p>If the report query contains parameters, the Report Parameters dialog box opens. Type the parameter values in the <b>Value</b> column.</p> <p>The report is saved in the location you define. If you selected <b>Launch report in Excel</b>, Excel opens and displays the report. If not, a confirmation message displays.</p> |
| <p><b>Launch report in Excel</b></p>  | <p>Instructs ALM to open the report in Excel after the report is generated. If this option is not selected, you can load the saved report in Excel at a later stage.</p>  |
| <p><b>Save report as</b></p>  | <p>The location and name of the Excel file to which the data is exported.</p> <p><b>Tip:</b> Click the browse button to select a folder.</p>  |
| <p><b>Status</b></p>  | <p>Informs other users whether the report is ready to be generated. The following options are available for the report status:</p> <ul style="list-style-type: none"> <li>➤ <b>Ready.</b> Indicates that the report is ready to be generated.</li> <li>➤ <b>Not Ready.</b> Indicates that the report is not ready to be generated. If a user tries to generate a report with this status, a warning message displays.</li> </ul>                                  |

## New Excel Report Dialog Box

This dialog box enables you to add a new Excel report to the analysis tree.

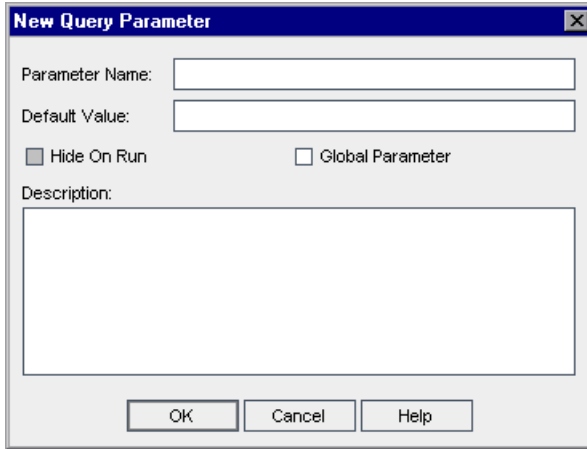
|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Right-click the folder under which you want to add a report, and select <b>New Excel Report</b>.</li> </ol> |
| <b>Important information</b> | Excel reports you create under private folders are available to the owner only. Excel reports you create under public folders are available to all users.  |
| <b>Relevant tasks</b>        | <ul style="list-style-type: none"> <li>➤ "How to Generate an Excel Report" on page 1014</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul>   |
| <b>See also</b>              | <ul style="list-style-type: none"> <li>➤ "Excel Reports Overview" on page 1010</li> <li>➤ "Analysis View Window" on page 914</li> </ul>  |

User interface elements are described below:

| UI Elements              | Description                                     |
|--------------------------|---|
| <b>Excel Report Name</b> | The report's display name in the analysis tree. |

## New Query Parameter/Edit Query Parameter Dialog Box

This dialog box enables you to edit or create a new query parameter.



|                       |  |
|-----------------------|--|
| <b>To access</b>      | <ol style="list-style-type: none"> <li><b>1</b> In an Excel report, under the Configuration tab, click the <b>Query</b> tab, and then click the <b>Query Builder</b> button.</li> <li><b>2</b> In the Query Parameters tab, right-click and select <b>New Parameter</b> or <b>Edit Parameter</b>.</li> </ol> |
| <b>Relevant tasks</b> | "How to Generate an Excel Report" on page 1014   |
| <b>See also</b>       | "Parameters in SQL Queries" on page 1012   |

User interface elements are described below:

| <b>UI Elements (A-Z)</b> | <b>Description</b>  |
|--------------------------|---|
| <b>Default Value</b>     | The value that the parameter uses by default.   |
| <b>Description</b>       | An extended description of the parameter.   |
| <b>Global Parameter</b>  | Indicates that the parameter is available to all queries in the current Excel report. |



| UI Elements (A-Z)     | Description  |
|-----------------------|--|
| <b>Hide On Run</b>    | Instructs ALM to use the default value every time you generate the report. Clear this option if you want to be prompted to keep or change the default value when you generate the report.  |
| <b>Parameter Name</b> | The parameter name.<br><b>Note:</b> If you rename a parameter, the change is automatically applied to the parameter wherever it is used in the SQL query.<br><b>Syntax exception:</b> A parameter name cannot include special characters, except the underscore character. |



# 40

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## Standard Reports

This chapter includes:

### Concepts

- ▶ Standard Reports Overview on page 1036

### Tasks

- ▶ How to Generate Standard Reports on page 1037

### Reference

- ▶ Standard Report Types on page 1039
- ▶ Standard Reports User Interface on page 1046

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## Concepts

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### **Standard Reports Overview**

Standard reports enable you to customize and produce reports on HP Application Lifecycle Management (ALM) data. You can create reports for data in the Requirements, Test Plan, Test Lab, Defects, and Business Components modules.

There are two options for creating standard reports:

**Predefined Reports.** While working in one of the modules listed above, choose from a list of predefined reports to quickly analyze data related to that module. You can save predefined reports in the Analysis View module for future reference. For details on the predefined reports available in each module, see "Predefined Standard Reports" on page 1042.

**Analysis View Reports.** Create and customize reports in the Analysis View module, relating to data in any of the above modules. Creating reports in the Analysis View module enables you to filter the data and organize the reports in folders, and define various configurations. You can also add sub-reports that add an extra layer of information related to the parent report. For example, if you create a report of defects, you can add a sub-report of linked requirements. The report then displays the requirements that are linked to each defect. For details on the standard reports available in the Analysis View module, see "Standard Reports in the Analysis View Module" on page 1040.

For task details, see "How to Generate Standard Reports" on page 1037.

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## Tasks

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### **How to Generate Standard Reports**

This task describes how to produce reports of ALM data.

To learn more about standard reports, see "Standard Reports Overview" on page 1036.

- "Create a predefined report" on page 1037
- "Create a report in Analysis View" on page 1037
- "Configure a standard report" on page 1038
- "View a standard report" on page 1038

#### **1 Create a predefined report**

While working in the Requirements, Business Components, Test Plan, Test Lab, or Defects module, create an impromptu report of the module data.

In any of the above modules, select **Analysis > Reports** and select one of the predefined reports. For user interface details, see "View Tab – Standard Reports/Report Window" on page 1051.

#### **2 Create a report in Analysis View**

Create a standard report in the Analysis View module.

- a Open the Analysis View module.** On the ALM sidebar, under **Dashboard**, select **Analysis View**.
- b Add a folder to the analysis tree.** Right-click a folder under the Private or Public root folder, and select **New Folder**.
- c Create a new standard report.** Right-click a folder, and select **New Standard Report**. Fill in the fields in the New Standard Report dialog box. For user interface details, see "New Standard Report Dialog Box" on page 1053.

### 3 Configure a standard report

Add sub-reports, and define standard report settings, such as data filtering and page layout.

Click the **Configuration** tab. For user interface details, see "Configuration Tab – Standard Reports" on page 1047.

**Available from:** Analysis View module

### 4 View a standard report

Use one of the following:

- ▶ **In the Analysis View module.** Click the **View** tab.
- ▶ **In other modules.** On the module menu, select **Analysis > Most Recently Used** and select a recently used report. The selected report opens in the Analysis View module.

For user interface details, see "View Tab – Standard Reports/Report Window" on page 1051.

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## Reference

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### **Standard Report Types**

The following tables list the types of standard reports you can create in ALM.

This section includes:

- "Standard Reports in the Analysis View Module" on page 1040
- "Available Sub-Reports" on page 1041
- "Predefined Standard Reports" on page 1042

 **Standard Reports in the Analysis View Module**

The following reports are available in the Analysis View module.

| Report                           | Entity                | Description   |
|----------------------------------|-----------------------|---|
| <b>Components Report</b>         | <b>Components</b>     | Lists the components in the Business Components module.                               |
| <b>Subject Components Report</b> | <b>Components</b>     | Lists the hierarchy of component folders in the Business Components module.           |
| <b>Defects Report</b>            | <b>Defects</b>        | Lists the defects in the Defects module.  |
| <b>Requirements Report</b>       | <b>Requirements</b>   | Lists the requirements in the Requirements module.                                    |
| <b>Cross Test Set Report</b>     | <b>Test Instances</b> | Lists the tests sets that appear in the Test Lab module, without listing their tests. |
| <b>Execution Report</b>          | <b>Test Instances</b> | Lists the test instances with their testing status.                                   |
| <b>Test Set Hierarchy Report</b> | <b>Test Instances</b> | Lists the hierarchy of test set folders in the Test Lab module.                       |
| <b>Business Process Tests</b>    | <b>Tests</b>          | Lists the business process tests and flows in the Test Plan module.                   |
| <b>Subject Test Report</b>       | <b>Tests</b>          | Lists the hierarchy of test subjects in the Test Plan module.                         |
| <b>Test Plan Report</b>          | <b>Tests</b>          | Lists the tests in the Test Plan module.  |



## Available Sub-Reports

The following sub-reports are available depending on the type of parent report:

| Report                                  | Description  |
|---|--|
| <b>Component Steps</b>                  | Lists the steps for a component.                                 |
| <b>Components Used By</b>               | Lists the business process tests and flows that use a component. |
| <b>Components with Application Area</b> | Lists the application area associated with a component.          |
| <b>Contained Test Sets</b>              | Lists the test sets in a test set folder.                        |
| <b>Contained Tests</b>                  | Lists the test instances in a test set.                          |
| <b>Coverage Requirements</b>            | Lists information for requirements covered by a test.            |
| <b>Design Steps</b>                     | Lists the design steps for a test.                               |
| <b>Linked Defects</b>                   | Lists the defects that are linked to an entity.                  |
| <b>Linked Entities</b>                  | List all entities that are linked to a defect.                   |
| <b>Parent Test</b>                      | Lists the parent test instance of a test run.                    |
| <b>Related Requirements</b>             | Lists the requirements that are linked to a defect.              |
| <b>Requirements Coverage</b>            | Lists the tests that cover a requirement.                        |
| <b>Run Steps</b>                        | Lists the run steps for a test run.                              |
| <b>Runs</b>                             | Lists all runs of a test instance.                               |
| <b>Source Execution Test</b>            | Lists the executed test instances that are linked to a defect.   |
| <b>Source Run</b>                       | Lists the test runs that are linked to a defect.                 |
| <b>Source Test</b>                      | Lists the tests that are linked to a defect.                     |
| <b>Trace To</b>                         | Lists the requirements traced to a requirement.                  |
| <b>Trace From</b>                       | Lists the requirements traced from a requirement.                |

## **Predefined Standard Reports**

The following predefined reports are available in the Requirements, Test Plan, Test Lab, Defects, and Business Components modules.

This section includes:

- "Requirements Module Reports" on page 1042
- "Test Plan Module Reports" on page 1043
- "Test Lab Module Reports" on page 1044
- "Defects Module Reports" on page 1045
- "Business Component Module Reports" on page 1045

### **Requirements Module Reports**

The following reports are available for the Requirements module:

| Report  | Description   |
|---|---|
| <b>Standard Requirement Report</b>                | Lists the requirements that appear in the current requirements view.  |
| <b>Tabular Report</b>                             | Displays the requirements that appear in the current requirements view, in a grid format.   |
| <b>Requirements with Coverage Tests</b>           | Lists the requirements that appear in the current requirements view, with their test coverage information.  |
| <b>Requirements with Coverage Tests and Steps</b> | Lists the requirements that appear in the current requirements view, with their test coverage information. It also displays the test steps for each tests coverage. |
| <b>Requirements with Linked Defects</b>           | Lists the requirements that appear in the current requirements view, with their linked defects.   |
| <b>Requirements with Traceability</b>             | Lists the requirements that appear in the current requirements view, with their associated traced to and traced from requirements.                                  |

| Report                               | Description   |
|--------------------------------------|---|
| <b>Report Selected</b>               | Lists the requirements currently selected in the requirements tree or grid.                               |
| <b>Report Selected with Children</b> | Lists the requirements currently selected in the requirements tree or grid, including child requirements. |

### Test Plan Module Reports

The following reports are available for the Test Plan module:

| Report                                    | Description  |
|---|--|
| <b>Standard Test Planning Report</b>      | Lists the tests in the current test plan view.   |
| <b>Subject Tree Report</b>                | Lists the tests in the current test plan view by subject.  |
| <b>Tests with Design Steps</b>            | Lists the tests that appear in the current test plan view, including their design steps.                                       |
| <b>Tests with Covered Requirements</b>    | Lists the tests that appear in the current test plan view, with their requirement coverage information.                        |
| <b>Tests with Linked Defects</b>          | Lists the tests that appear in the current test plan view, with their linked defects.  |
| <b>Report Selected</b>                    | Lists the tests currently selected in the test plan tree or grid.  |
| <b>Business Process Tests with Script</b> | Lists business process tests and flows. For details about this report, see the <i>HP Business Process Testing User Guide</i> . |

## Test Lab Module Reports

The following reports are available for the Test Lab module:

### Test Set Reports

| Report  | Description   |
|---|---|
| <b>Current Test Set</b>                       | Lists the tests that appear in the current test set.  |
| <b>Cross Test Set</b>                         | Lists the test sets that appear in the Test Sets list, without listing their tests.                 |
| <b>Test Set Hierarchy with Tests</b>          | Lists the test sets hierarchically, as well as the status of each of the test sets.                 |
| <b>Cross Test Set with Tests</b>              | Lists the test sets that appear in the Test Sets list, including their tests.                       |
| <b>Current Test Set with Failed Test Runs</b> | Lists tests from the current test set, with “Failed” test run status.                               |
| <b>Cross Test Set with Failed Test Runs</b>   | Lists tests from all test sets, with “Failed” test run status.                                      |
| <b>Execution Notification</b>                 | Lists the tests that are displayed in the current test set with the results of their last test run. |
| <b>Report Selected</b>                        | Displays an execution report of the test instances currently selected in the execution grid.        |

### Test Run Reports

| Report                      | Description   |
|-----------------------------|---|
| <b>Cross Run</b>            | Lists the runs matching the current filter in the Test Runs tab.                      |
| <b>Cross Run with Steps</b> | Lists the runs matching the current filter in the Test Runs tab with their run steps. |
| <b>Runs by Test</b>         | Lists the runs in the Test Runs tab under their tests.                                |

| Report                  | Description  |
|-------------------------|--|
| <b>Runs by Test Set</b> | Lists the runs in the Test Runs tab under their test sets and tests.             |
| <b>Report Selected</b>  | Displays a runs report of the test runs currently selected in the Test Runs tab. |

### Defects Module Reports

The following reports are available for the Defects module:

| Report  | Description   |
|---|---|
| <b>Standard Defect Report</b>                             | Lists the defects that appear in the defects grid.                                      |
| <b>Tabular Report</b>                                     | Displays the defects that appear in the defects grid, in a grid format.                 |
| <b>Defects with Linked Tests and Runs</b>                 | Lists the defects with their linked tests and test run results.                         |
| <b>Fixed or Rejected Defects</b>                          | Lists defects with “fixed” or “rejected” status.  |
| <b>Fixed or Rejected Defects Detected by Current User</b> | Lists defects with “fixed” or “rejected” status that were detected by the current user. |
| <b>Opened Defects Assigned to Current User</b>            | List defects with “open” status that are assigned to the current user.                  |
| <b>Report Selected</b>                                    | Lists defects currently selected in the defects grid.                                   |

### Business Component Module Reports

For a list of reports available from the Business Components module, see the *HP Business Process Testing User Guide*.

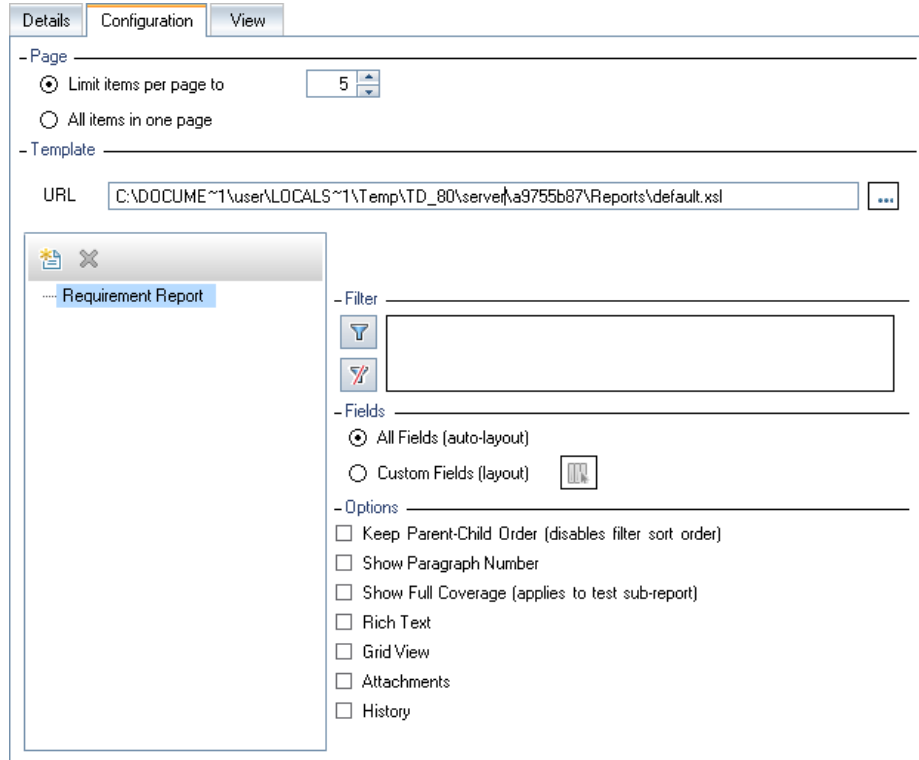
## **Standard Reports User Interface**

This section includes:

- ▶ Configuration Tab – Standard Reports on page 1047
- ▶ View Tab – Standard Reports/Report Window on page 1051
- ▶ New Standard Report Dialog Box on page 1053

## Configuration Tab – Standard Reports

This tab enables you to select the data and fields to be included in a standard report, add sub-reports, and set the report's layout.



Details Configuration View

- Page

Limit items per page to

All items in one page

- Template


URL  ...

Requirement Report

- Filter

- Fields

All Fields (auto-layout)

Custom Fields (layout) 

- Options

Keep Parent-Child Order (disables filter sort order)

Show Paragraph Number

Show Full Coverage (applies to test sub-report)

Rich Text

Grid View




Attachments

History


|                              |   |
|------------------------------|---|
| <b>To access</b>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li><b>2</b> Expand the analysis tree, and select a standard report.</li> <li><b>3</b> Click the <b>Configuration</b> tab.</li> </ol> |
| <b>Important information</b> | The available configuration options depend on the selected report type in the reports pane.   |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Generate Standard Reports" on page 1037</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul> |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Standard Reports Overview" on page 1036</li> <li>➤ "Analysis View Window" on page 914</li> </ul>              |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements (A-Z)   | Description   |
|---|---|
|    | <p><b>Set Filter/Sort.</b> Enables you to filter and sort the data according to the criteria you choose. For details, see "Select Filter Condition Dialog Box" on page 74.</p> <p><b>Clear Filter.</b> Clears all filters and sorting priorities. The current filter is displayed in the filter box.</p> <p><b>Note:</b> This option applies to the report selected in the reports pane.</p>                                |
|    | <p><b>Add Sub Report.</b> Opens the Add Sub-Report dialog box, enabling you to select a sub-report to add to the currently selected report. For details on available sub-reports, see "Available Sub-Reports" on page 1041.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>➤ To each sub-report you can add further sub-reports.</li> <li>➤ At each level you can include multiple sub-reports.</li> </ul> |
|  | <p><b>Delete Sub Report.</b> Deletes the selected sub-report.</p> <p><b>Note:</b> When you delete a parent report, all its sub-reports are deleted too.</p>   |
| <reports pane>  | <p>Displays a tree of reports and sub-reports. The top level is the report type of the current report.</p> <p>Select a report and configure its filter, fields and options.</p>   |
| <b>Attachments</b>  | <p>Displays a list of associated attachments.</p>   |



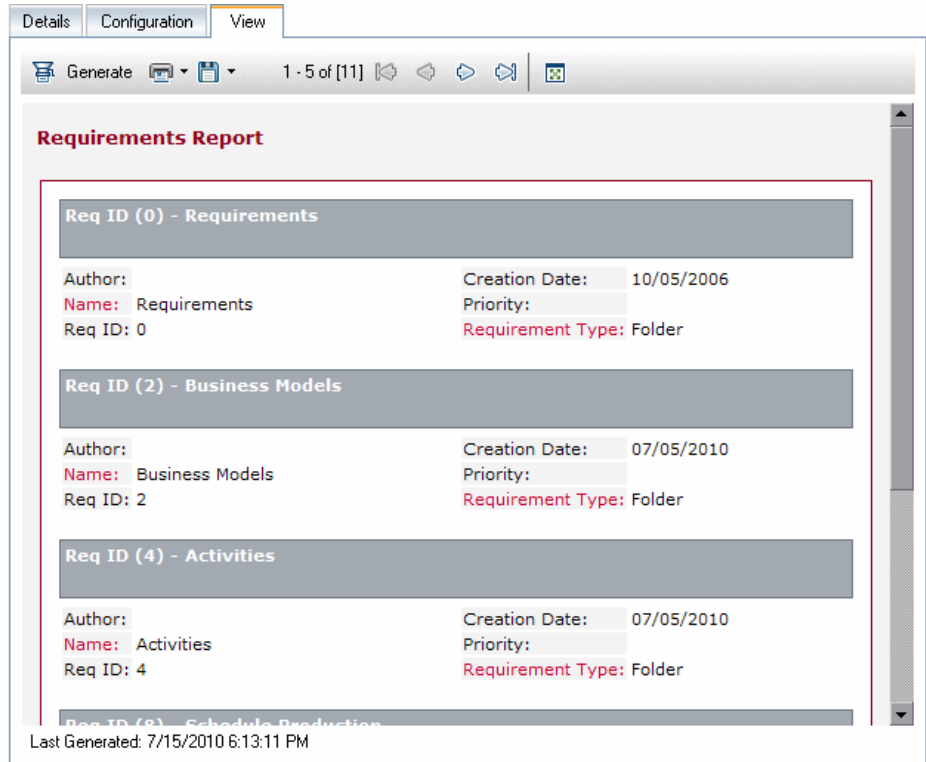
| UI Elements (A-Z)              | Description   |
|--------------------------------|---|
| <b>Fields</b>                  | <p>Enables you to set the fields that are included in the report and their order.</p> <ul style="list-style-type: none"> <li>▶ Select <b>All Fields (auto layout)</b> to display all fields in the report.</li> <li>▶ Select <b>Custom Fields (layout)</b> and click <b>Select Fields</b>  to choose fields and set their order. For details, see "Select Columns/Select Fields Dialog Box" on page 94.</li> </ul> <p><b>Note:</b> This option applies to the report selected in the reports pane.</p> |
| <b>Grid View</b>               | Displays the report as a grid.  |
| <b>History</b>                 | Displays a list of all the changes made to a requirement, test, or defect.  |
| <b>Keep Parent-Child Order</b> | <p>Displays the requirement topic with the child requirement below it. Selecting this option deactivates your defined filters and sorting priorities.</p> <p><b>Available from:</b> Requirements reports</p>  |
| <b>Page</b>                    | <p>Enables you to set the number of items from the main report that are displayed in each page:</p> <ul style="list-style-type: none"> <li>▶ To limit the number of items per page, select <b>Limit items per page to</b> and specify the number of items per page.</li> <li>▶ To display all items in one page, select <b>All items in one page</b>.</li> </ul>  |
| <b>Rich Text</b>               | <p>Includes rich text for requirements in the report.</p> <p><b>Available from:</b> Requirements reports</p>  |
| <b>Show Full Coverage</b>      | <p>Displays the test coverage for each requirement in the tree.</p> <p><b>Available from:</b> Requirements reports</p>  |
| <b>Show Paragraph Number</b>   | <p>Displays the assigned hierarchical numbers to each requirement in the tree.</p> <p><b>Note:</b> These numbers are not related to the unique Req ID assigned to each requirement.</p> <p><b>Available from:</b> Requirements reports</p>  |

| UI Elements (A-Z)                               | Description  |
|---|--|
| <p><b>Show Steps only for “Failed” Runs</b></p> | <p>If you add a Run Steps sub-report, displays steps only for failed runs. To display steps for all runs, clear this selection.</p> <p><b>Available from:</b> Test run reports</p>   |
| <p><b>Template</b></p>                          | <p>Enables you to choose a template for the selected standard report.</p> <p>In the <b>URL</b> field, select the ALM default report template, or a customized template.</p> <p><b>Tip:</b> Click the browse button to select a template in a different folder.</p> |

## View Tab – Standard Reports/Report Window

The **View tab** enables you to view standard reports in the Analysis View module.

The **report window** in the Requirements, Business Components, Test Plan, Test Lab and Defects modules enables you to create predefined reports during your work in those modules.



The screenshot shows a software application window titled "Requirements Report" under the "View" tab. The window has a toolbar with "Generate", "Print", "Save", and navigation icons. The main content area displays a list of requirements, each with a header bar and a table of details. The details table includes fields for Author, Name, Req ID, Creation Date, Priority, and Requirement Type. The bottom of the window shows a timestamp: "Last Generated: 7/15/2010 6:13:11 PM".

| Req ID (0) - Requirements |                           |
|---------------------------|---------------------------|
| Author:                   | Creation Date: 10/05/2006 |
| Name: Requirements        | Priority:                 |
| Req ID: 0                 | Requirement Type: Folder  |

| Req ID (2) - Business Models |                           |
|------------------------------|---------------------------|
| Author:                      | Creation Date: 07/05/2010 |
| Name: Business Models        | Priority:                 |
| Req ID: 2                    | Requirement Type: Folder  |





| Req ID (4) - Activities |                           |
|-------------------------|---------------------------|
| Author:                 | Creation Date: 07/05/2010 |
| Name: Activities        | Priority:                 |
| Req ID: 4               | Requirement Type: Folder  |



Req ID (8) - Schedule Production

Last Generated: 7/15/2010 6:13:11 PM

|                              |  |
|------------------------------|--|
| <p><b>To access</b></p>      | <p><b>View tab:</b><br/>Use one of the following:</p> <ul style="list-style-type: none"> <li>➤ In the Analysis View module, select a standard report, and click the <b>View</b> tab.</li> <li>➤ In the Requirements, Test Plan, Test Lab, Defects, or Business Components module, choose <b>Analysis &gt; Recently Used</b>, and select a standard report.</li> </ul> <p><b>Report window:</b><br/>In the Requirements, Test Plan, Test Lab, Defects or Business Components module, choose <b>Analysis &gt; Reports</b>, and select a predefined report.</p> |
| <p><b>Relevant tasks</b></p> | <ul style="list-style-type: none"> <li>➤ "How to Generate Standard Reports" on page 1037</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul>  |
| <p><b>See also</b></p>       | <ul style="list-style-type: none"> <li>➤ "Standard Reports Overview" on page 1036</li> <li>➤ "Analysis View Window" on page 914</li> </ul>   |

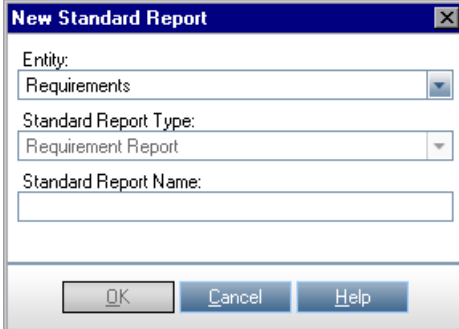
User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|    | <p><b>Generate.</b> Refreshes the report so that it displays the most recent data.</p>   |
|   | <p><b>Print Report.</b> Prints the standard report. Select one of the following options:</p> <ul style="list-style-type: none"> <li>➤ <b>Current Page.</b> Prints the current report page.</li> <li>➤ <b>All Pages.</b> Prints all the report pages.</li> </ul>  |
|  | <p><b>Save Report.</b> Saves the standard report. Select one of the following options:</p> <ul style="list-style-type: none"> <li>➤ <b>Current Page.</b> Saves the current report page.</li> <li>➤ <b>All Pages.</b> Saves all the report pages.</li> </ul> <p>The Save Web Page dialog box opens, enabling you to save the standard report as a Web page or a text file. Select the format in the <b>Save as type</b> list.</p> |
|  | <p><b>First/Previous/Next/Last Page.</b> Enables you to browse through the report pages.</p>   |

| UI Elements   | Description   |
|---|---|
|  | <p><b>Full Screen.</b> In the View tab, enables you to view the report in full-screen.</p> <p><b>Note:</b> The toolbar remains visible in full-screen mode.</p> <p><b>Tip:</b> To return to the standard view, click the <b>Close</b> button in the top-right corner of the window.</p> |
|  | <p>In the report window, opens the New Standard Report dialog box, enabling you to save the quick report to a folder in the Analysis View module.</p> <p><b>Available from:</b> Report window</p>   |

## New Standard Report Dialog Box

This dialog box enables you to add a new standard report to the analysis tree.



The dialog box titled "New Standard Report" contains the following fields and buttons:

- Entity:** A dropdown menu with "Requirements" selected.
- Standard Report Type:** A dropdown menu with "Requirement Report" selected.
- Standard Report Name:** An empty text input field.
- Buttons:** "OK", "Cancel", and "Help" buttons at the bottom.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li>1 On the ALM sidebar, under <b>Dashboard</b>, select <b>Analysis View</b>.</li> <li>2 Right-click the folder under which you want to add a standard report, and select <b>New Standard Report</b>.</li> </ol> |
| <b>Important information</b> | <p>Standard reports you create under private folders are available to the owner only. Standard reports you create under public folders are available to all users.</p>   |

|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Generate Standard Reports" on page 1037</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul> |
| <b>See also</b>       | <ul style="list-style-type: none"> <li>➤ "Standard Reports Overview" on page 1036</li> <li>➤ "Analysis View Window" on page 914</li> </ul>              |

User interface elements are described below:

| <b>UI Elements (A-Z)</b>    | <b>Description</b>   |
|-----------------------------|--|
| <b>Entity</b>               | The ALM entity covered by the report.  |
| <b>Standard Report Name</b> | The report's display name in the analysis tree.  |
| <b>Standard Report Type</b> | The type of report you want to create. For details, see "Standard Reports in the Analysis View Module" on page 1040. |

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## Live Analysis Graphs

This chapter includes:

### Concepts

- ▶ Live Analysis Graphs Overview on page 1056

### Tasks

- ▶ How to Generate Live Analysis Graphs on page 1057

### Reference

- ▶ Live Analysis Graphs User Interface on page 1059

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## Concepts

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### **Live Analysis Graphs Overview**

Live analysis enables you to create and display dynamic charts illustrating:

- ▶ Test subject data in the Test Plan module;
- ▶ Test set folder data in the Test Lab module;
- ▶ Business component subject folders in the Business Components module.

In each module you can create up to two live analysis graphs.

Live Analysis graphs differ from the graphs described in Chapter 36, "Graphs and Dashboard Pages," in that you do not have to re-generate a graph to view data that has changed. In addition, the layout and settings of the graph are preserved for all the folders in the same module. This enables you to view the same graphical analysis of different folders without the need to redesign the graphs.

For task details, see "How to Generate Live Analysis Graphs" on page 1057.



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## Tasks

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### How to Generate Live Analysis Graphs

This task describes how to create and view auto-generated graphs for test subjects, test sets, and business components.

To learn more about Excel reports, see "Live Analysis Graphs Overview" on page 1056.

This task includes the following steps:

- "Prerequisites" on page 1057
- "Create Live Analysis graphs" on page 1057
- "View Live Analysis graphs" on page 1058

#### 1 Prerequisites

For test plan Live Analysis graphs, test subject folders are defined in the Test Plan module.

For test lab Live Analysis graphs, test set folders are defined in the Test Lab module.

For business component Live Analysis graphs, component subject folders are defined in Business Components module.

#### 2 Create Live Analysis graphs

- a** On the sidebar, under **Testing**, select **Test Plan**, **Test Lab**, or **Business Components**.
- b** Select a folder in the module tree.
- c** Click the **Live Analysis** tab.
- d** Click the **Add Graph** link in the pane in which you want to display a graph. Follow the wizard to design a live analysis graph. For user interface details, see "Live Analysis Graph Wizard" on page 1062.

### 3 View Live Analysis graphs

You can change the way a Live Analysis graph is displayed. This includes maximizing the graph to full-screen view, changing the graph appearance, and drilling down to the graph data.

- a** On the sidebar, under **Testing**, select **Test Plan** or **Test Lab**.
- b** On the module menu, select **View > Test Plan Tree** or **View > Test Sets Tree**.
- c** Select a test subject folder or test set folder.
- d** Click the **Live Analysis** tab. For user interface details, see "Live Analysis Tab" on page 1060.

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## Reference

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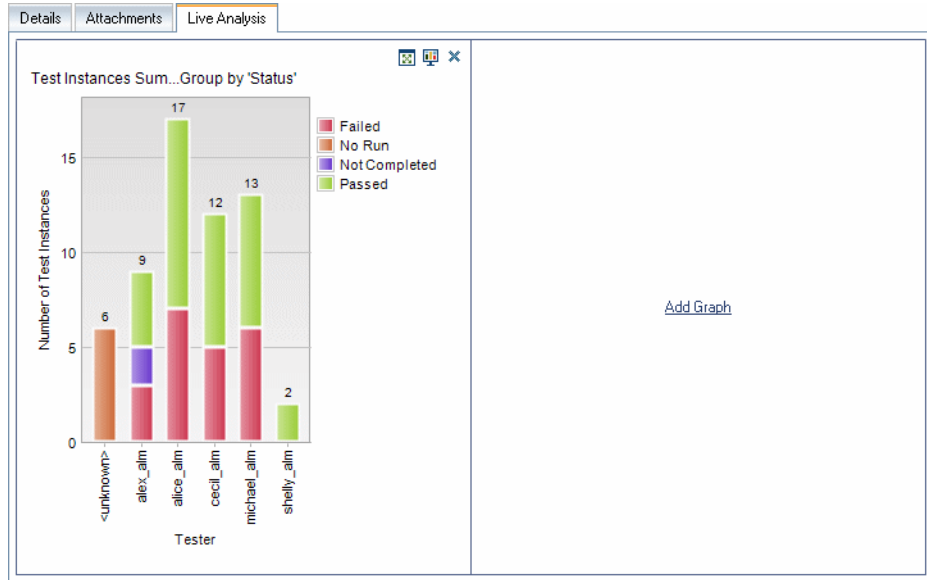
### **Live Analysis Graphs User Interface**

This section includes:

- ▶ Live Analysis Tab on page 1060
- ▶ Live Analysis Graph Wizard on page 1062

## Live Analysis Tab




This tab enables you to create and display Live Analysis graphs for test subjects, test set folders, and business component subjects.



|                                     |  |
|-------------------------------------|--|
| <p><b>To access</b></p>             | <ol style="list-style-type: none"> <li><b>1</b> On the ALM sidebar, under <b>Testing</b>, select <b>Test Plan</b>, <b>Test Lab</b>, or <b>Business Components</b>.</li> <li><b>2</b> Select a folder in the module tree, and click the <b>Live Analysis</b> tab.</li> </ol>  |
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ The Live Analysis graphs that you create are unique for your user login. Each project user can create Live Analysis graphs which will be visible only to that user but will not be visible to other users.</li> <li>▶ Live Analysis graphs represent only nodes that are located directly below the selected folder. They do not include tests, test sets, or business components located at a lower hierarchical level in child folders of the selected folder.</li> <li>▶ The data displayed in the graph reflects the filters that you have set for the module.</li> </ul> |

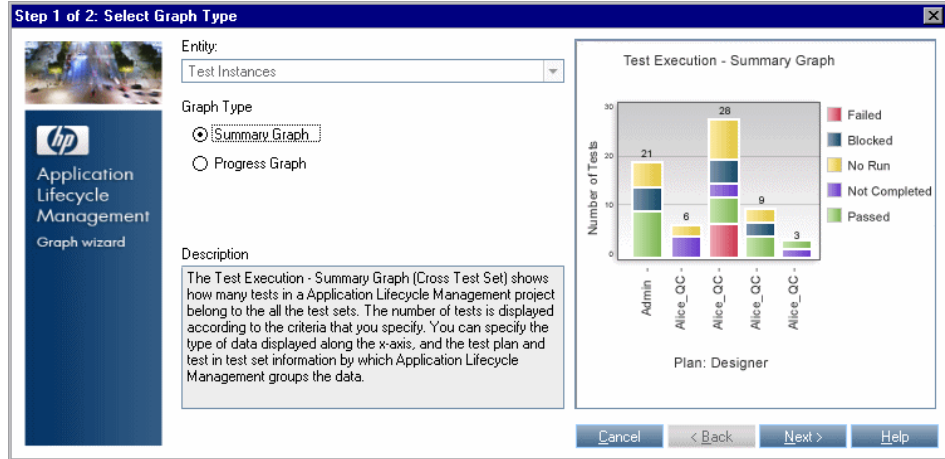
|                       |   |
|-----------------------|---|
| <b>Relevant tasks</b> | "How to Generate Live Analysis Graphs" on page 1057 |
| <b>See also</b>       | "Live Analysis Graph Wizard" on page 1062           |

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements   | Description   |
|---|---|
| <b>Add Graph</b>  | Launches the Live Analysis Graph Wizard, enabling you to design a Live Analysis graph. For user interface details, see "Live Analysis Graph Wizard" on page 1062.   |
|  | <b>View Graph in Full Screen.</b> Maximizes the current graph to full-screen view.<br><b>Tip:</b> To return to the normal view, click the <b>Close</b> button.  |
|  | <b>Set Graph Appearance.</b> Opens the Graph Appearance dialog box, enabling you to change the current graph's title, color, and display. For more details, see "Graph Appearance Dialog Box" on page 975.  |
|  | <b>Delete Graph.</b> Removes the current Live Analysis graph from the Live Analysis tab.<br><b>Note:</b> If you have two Live Analysis graphs displayed for a folder and you want to create a new graph, you must first delete one of the existing graphs.  |
| <graph area>  | You can perform the following actions in the chart area:<br><b>Drill Down.</b> To further analyze your data, click a bar or segment in the graph. The Drill Down Results dialog box opens. For user interface details, see "Drill Down Results Dialog Box" on page 977.<br><b>Set Colors.</b> To change the graph colors, right-click a bar or line. In the Color dialog box that opens, select the new color from one of the color palettes. |
| <legend>  | Displays the chart categories and their corresponding color.<br><b>Set Colors.</b> Right-click a category to change its color. In the Color dialog box that opens, select the new color from one of the color palettes.   |

## Live Analysis Graph Wizard

This wizard enables you to create Live Analysis graphs for test subjects, test set folders, and business component subjects.



|                              |  |
|------------------------------|--|
| <b>To access</b>             | <ol style="list-style-type: none"> <li>1 On the ALM sidebar, under <b>Testing</b>, select <b>Test Plan</b>, <b>Test Lab</b>, or <b>Business Components</b>.</li> <li>2 Select a folder in the module tree, and click the <b>Live Analysis</b> tab.</li> <li>3 Click the <b>Add Graph</b> link in the pane in which you want to display the graph.</li> </ol> |
| <b>Important information</b> | After you define the data that you want to display, the graphs are automatically updated each time the data changes in the tests or test sets in the folder for which you created the graph.   |
| <b>Relevant tasks</b>        | "How to Generate Live Analysis Graphs" on page 1057  |
| <b>Wizard map</b>            | This wizard contains:<br>Select Graph Type Page > Select Graph Attributes Page   |
| <b>See also</b>              | "Live Analysis Tab" on page 1060   |

## Select Graph Type Page

This wizard page enables you to select the Live Analysis graph type.

|                              |   |
|------------------------------|---|
| <b>Important information</b> | General information about this wizard is available here: "Live Analysis Graph Wizard" on page 1062.             |
| <b>Wizard map</b>            | The <b>Live Analysis Graph Wizard</b> contains:<br><b>Select Graph Type Page</b> > Select Graph Attributes Page |

User interface elements are described below:

| UI Elements (A-Z)  | Description   |
|--------------------|---|
| <b>Description</b> | A description of the selected graph type.   |
| <b>Entity</b>      | The ALM entity covered by the graph.  |
| <b>Graph Type</b>  | Select the type of graph that you want to display:<br><br><b>Summary Graph.</b> Shows the number of tests in a test subject; the number of tests in test sets in a folder; or the number of components in a business component subject.<br><br><b>Progress Graph.</b> Shows how many tests accumulated in a test subject, in the test sets in a folder, or components in a business component subject, at specific points during a period of time.<br><br><b>Trend Graph.</b> In the Test Plan module, shows the history of changes to specific Test Plan fields in the selected test subject folder, for each time interval displayed. In the Business Components module, shows the history of changes to specific Business Components fields in a project, at each point during a period of time. |

 **Select Graph Attributes Page**

This wizard page enables you to set attributes for the Live Analysis graph.

|                              |  |
|------------------------------|--|
| <b>Important information</b> | General information about this wizard is available here: "Live Analysis Graph Wizard" on page 1062.                |
| <b>Wizard map</b>            | The <b>Live Analysis Graph Wizard</b> contains:<br><b>Select Graph Type Page &gt; Select Graph Attributes Page</b> |

User interface elements are described below:

| UI Elements (A-Z)     | Description  |
|-----------------------|--|
| <b>Group By field</b> | The field by which tests or components are grouped in the graph.<br><br><b>Note:</b> For progress graphs, you can select only fields for which history has been enabled. For more information on enabling history for a field, refer to the <i>HP Application Lifecycle Management Administrator Guide</i> . |
| <b>X-axis field</b>   | In summary graphs, the field whose values are displayed along the x-axis.  |



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## Project Documents

This chapter includes:

### Concepts

- ▶ Project Documents Overview on page 1066

### Tasks

- ▶ How to Generate a Project Document on page 1067

### Reference

- ▶ Document Generator User Interface on page 1070

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## Concepts

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### **Project Documents Overview**

You can generate a hard copy of the data contained in an HP Application Lifecycle Management (ALM) project by using the Document Generator. The Document Generator enables you to create a Microsoft Word document containing a project's requirements, test plans, test set folders, defect tracking, and business process testing data.

For task details, see "How to Generate a Project Document" on page 1067.

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## Tasks

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### **How to Generate a Project Document**

This task describes how to create project documents using the Document Generator.

This task includes the following steps:

- "Prerequisites" on page 1067
- "Set document formats" on page 1068
- "Specify document content" on page 1068
- "Generate a document" on page 1068
- "Result" on page 1069

#### **1 Prerequisites**

- The Document Generator can only be run if Microsoft Word has been enabled to run macros. If you receive a security message while using the Document Generator, you must set the security level of Microsoft Word to medium or low.
- To verify supported versions of Microsoft Word, refer to the *HP Application Lifecycle Management Readme*.

## 2 Set document formats

Set formatting instructions to determine how your project document will look.

For example, you can print a company logo on each page of the document, create a table of contents and an index, and place test scripts and file attachments in the text of your document.

- a Open the Document Generator.** On the ALM menu, select **Tools > Document Generator**.
- b** In the Document Generator tree, click the **Document** link. For user interface details, see "Document Page" on page 1076.

## 3 Specify document content

Specify the project data that will be presented in your document. You can select information from the ALM modules.

For example, you can choose which folders and tests to include from the test plan tree, sort the data alphabetically or in a custom sort order, and display the data as lists or tables.

- a Open the Document Generator.** On the ALM menu, select **Tools > Document Generator**.
- b Open an entity page.** Expand the Document Generator tree, and click a link for an entity that you want to include in the document. For user interface details, see "Document Generator Tree" on page 1073.

## 4 Generate a document

- a** Use the buttons on the Document Generator toolbar to preview, generate, and save a document. For user interface details, see "Document Generator Window" on page 1071.
- b** Alternatively, reload a saved document by selecting a favorite view.

## 5 Result

After document generation is complete, you can view and edit the document in Microsoft Word. The information for each module that you select is printed in a separate chapter of the project document.

### Example:

Below is a sample page from a Microsoft Word project document generated by the Document Generator.

|  |  |             |          |  |
|--|--|-------------|----------|--|
|  |  | HP Software |          |  |
| Chapter 1. Track Defects   |  |             |          |  |
| <b>1.1. Defect ID: 1</b>   |  |             |          |  |
| <b>Status:</b> Fixed   |  |             |          |  |
| <b>Assigned To:</b> james_gc   |  |             |          |  |
| <b>Project:</b> Mercury Tours (HTML Edition)   |  |             |          |  |
| <b>Subject:</b> Flight Finder  |  |             |          |  |
| <b>Summary:</b> The list of flights is given even when past date set as Departing date |  |             |          |  |
| <b>Reproducible:</b> Y   |  |             |          |  |
| <b>Severity:</b> 3-High  |  |             |          |  |
| <b>Priority:</b> 3-High  |  |             |          |  |
| <b>Detected By:</b> alice_gc   |  |             |          |  |
| <b>Detected on Date:</b> 09/01/05  |  |             |          |  |
| <b>Detected in Version:</b> Version 1.0  |  |             |          |  |
| <b>Planned Closing Version:</b> Version 1.01   |  |             |          |  |
| <b>Estimated Fix Time:</b> 5   |  |             |          |  |
| <b>Actual Fix Time:</b> 0  |  |             |          |  |
| <b>Description:</b> Test Set: Mercury Tours Functionality                              |  |             |          |  |
| Test: [1]Departing Date  |  |             |          |  |
| Run: Run_9-2_10-26-07  |  |             |          |  |
| Step: Step 1: Past Departing Date  |  |             |          |  |
| Description:   |  |             |          |  |
| 1. Select the One Way option.  |  |             |          |  |
| 2. In Departing Date, select any past date. Check each of the following possibilities: |  |             |          |  |
| - Previous month, any date selected.   |  |             |          |  |
| - Past date, current month selected.   |  |             |          |  |
| 3. Click the Continue button.  |  |             |          |  |
| Expected result:   |  |             |          |  |
| The list of flights should not be given.   |  |             |          |  |
| You should be requested to insert valid departing date.                                |  |             |          |  |
| Actual Result:   |  |             |          |  |
|  |  | 3           | 04/10/07 |  |

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## Reference

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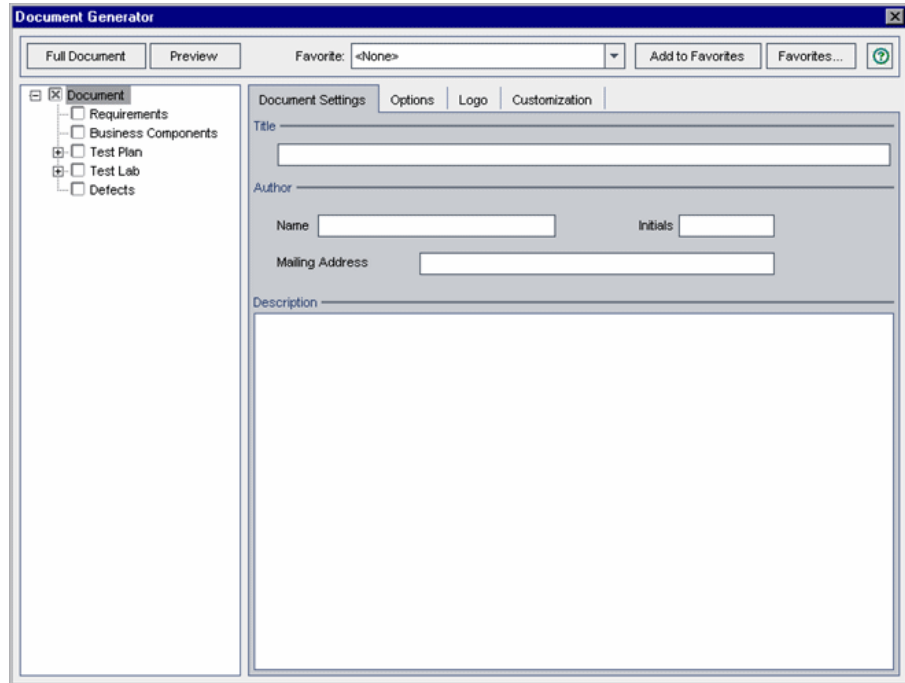
### **Document Generator User Interface**

This section includes:

- ▶ Document Generator Window on page 1071
- ▶ Document Generator Tree on page 1073
- ▶ Document Page on page 1076
- ▶ Requirements Page on page 1080
- ▶ Business Components Page on page 1083
- ▶ Subject Tree Page on page 1084
- ▶ Subject Tests Page on page 1086
- ▶ Test List Page on page 1088
- ▶ Test Lab Page on page 1092
- ▶ Test Sets Page on page 1093
- ▶ Tests Page on page 1094
- ▶ Runs Page on page 1096
- ▶ Defects Page on page 1098
- ▶ Add Favorite Dialog Box on page 1101
- ▶ Organize Favorites Dialog Box on page 1102

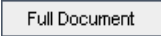

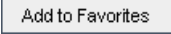
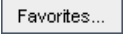
## Document Generator Window

The Document Generator enables you to create a Microsoft Word document containing data from a project's requirements, test plans, test set folders, business components, and defects.



|                       |   |
|-----------------------|---|
| <b>To access</b>      | On the masthead, select <b>Tools &gt; Document Generator</b> .  |
| <b>Relevant tasks</b> | <ul style="list-style-type: none"> <li>➤ "How to Generate a Project Document" on page 1067</li> <li>➤ "How to Analyze Data in ALM" on page 911</li> </ul> |

User interface elements are described below (unlabeled elements are shown in angle brackets>):

| UI Elements   | Description   |
|---|---|
|    | <p><b>Full Document.</b> Opens the Save as dialog box, enabling you to generate the project document.</p> <p>If there are open project document files from previous runs of the Document Generator, first close the files.</p> <p>After you assign a document name, ALM begins generating the document.</p> <p>When the process is complete, Microsoft Word opens and displays the document.</p> <p><b>Note:</b> If the generated document contains links to attachments, a folder is created in the same location as the document, and the attachment files are copied to this folder. The name of the attachment folder is the name of the document with the suffix “_Attachments”. If you send the document to someone, you can send the attachment folder along with it so that the recipient can access the attachments by using the links</p> |
|    | <p><b>Preview.</b> Enables you to quickly see how the document will look, without all the details included. ALM opens Microsoft Word and displays the preview project document.</p>   |
|  | <p><b>Add to Favorites.</b> Opens the Add Favorite dialog box, enabling you to add a favorite view to your private or the public folder. For details, see "Add Favorite Dialog Box" on page 1101.</p>   |
|  | <p><b>Favorites.</b> Opens the Organize Favorites dialog box, enabling you to organize saved project documents. For more details, see "Organize Favorites Dialog Box" on page 1102.</p>   |



| UI Elements               | Description  |
|---------------------------|--|
| Favorite                  | Enables you to reload a view from a drop-down list of existing favorite views.<br><b>Tip:</b> Save changes to a favorite view by clicking the <b>Add to Favorites</b> button.            |
| <Document Generator tree> | Lists links to pages in which you configure the document template, and specify project content to include in the document. For more details, see "Document Generator Tree" on page 1073. |

## Document Generator Tree

This area enables you to specify project data to include in your project document, and design the document template.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | On the masthead, select <b>Tools &gt; Document Generator</b> .                                  |
| <b>Important information</b> | Select the check box next to the appropriate nodes to include the data in the project document. |
| <b>Relevant tasks</b>        | "How to Generate a Project Document" on page 1067   |

User interface elements are described below:

| UI Elements  | Description   |
|--------------|---|
| Document     | Enables you to set formatting instructions that control how the document will look and what is included in the cover page. For details, see "Document Page" on page 1076.   |
| Requirements | Enables you to specify which requirements, traced requirements, test coverage, and linked defects from the Requirements module are included in the project document. For details, see "Requirements Page" on page 1080. |

| UI Elements                       | Description   |
|-----------------------------------|---|
| <p><b>Business Components</b></p> | <p>Enables you to specify which components from the Business Components module are included in the project document. For additional details, see the <i>HP Business Process Testing User Guide</i>.</p>   |
| <p><b>Test Plan</b></p>           | <p>Enables you to specify which test subject folders and which tests from the Test Plan module are included in the project document.</p> <p>Expand to select which subject folders and tests to include.</p> <p>Click <b>Subject Tree</b> to specify which test subject folders from the test plan tree are included in the project document. For details, see "Subject Tree Page" on page 1084.</p> <p>Click <b>Subject Tests</b> to specify which tests from the selected subject folders are included in the project folder. For details, see "Subject Tests Page" on page 1086.</p> <p>Click <b>Test List</b> to specify which tests from the test grid are included in the project document. For details, see "Test List Page" on page 1088.</p> |

| UI Elements     | Description  |
|-----------------|--|
| <b>Test Lab</b> | <p>Enables you to specify which test set folders from the Test Lab module are included in the project document. For details, see "Test Lab Page" on page 1092.</p> <p>Expand to select which test sets, tests and test runs to include.</p> <p>Click <b>Test Sets</b> to specify which test sets are included in the project document. For details, see "Test Sets Page" on page 1093.</p> <p>Click <b>Tests</b> to specify which tests from the selected test sets are included in the project document. For details, see "Tests Page" on page 1094.</p> <p>Click <b>Runs</b> to specify which test runs from the selected tests in a test set are included in the project document. For details, see "Runs Page" on page 1096.</p> |
| <b>Defects</b>  | <p>Enables you to specify which defects from the Defects module are included in the project document. For more details, see "Defects Page" on page 1098.</p>   |

## Document Page

This page enables you to set formatting instructions that control how the document appears and what is included in the cover page.

|                       |   |
|-----------------------|---|
| <b>To access</b>      | In the Document Generator tree, click the <b>Document</b> link. |
| <b>Relevant tasks</b> | "How to Generate a Project Document" on page 1067               |
| <b>See also</b>       | "Document Generator Window" on page 1071                        |

### Document Settings Tab

User interface elements are described below:

| UI Elements (A-Z)  | Description   |
|--------------------|---|
| <b>Author</b>      | Details of the document author that are displayed on the document cover page. |
| <b>Description</b> | A description of the document.  |
| <b>Title</b>       | A title that is displayed on the document cover page.                         |

## Options Tab

User interface elements are described below:

| UI Elements (A-Z)   | Description   |
|---|---|
| <b>Attachment Embedding Options</b>   | Choose whether the project document contains the data from attachments as a linked icon or as embedded text: <ul style="list-style-type: none"> <li>▶ <b>As Icons.</b> Places a link to the attachment in the document as an icon.</li> <li>▶ <b>As expanded text.</b> Adds the attachment to the document as expanded text.</li> </ul> |
| <b>Attachment Placement Options</b>   | Choose where attachments will appear in the document: <ul style="list-style-type: none"> <li>▶ <b>In text.</b> Displays attachments in the main text of the document.</li> <li>▶ <b>In appendix.</b> Places attachments in a separate appendix.</li> </ul>  |
| <b>Do not generate a paragraph if there is no corresponding project information</b> | Instructs ALM to not include empty data fields in the project document.   |
| <b>Graph Options</b>  | Choose where graphs will appear in the document: <ul style="list-style-type: none"> <li>▶ <b>In text.</b> Displays graphs in the main text of the document.</li> <li>▶ <b>In appendix.</b> Places graphs in a separate appendix.</li> </ul>   |

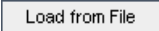
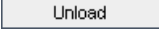
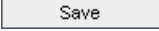
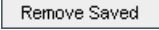
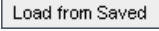
| UI Elements (A-Z)                   | Description   |
|-------------------------------------|---|
| <p><b>Include with Document</b></p> | <p>Select additional sections to include in the project document:</p> <ul style="list-style-type: none"> <li>▶ <b>First Page.</b> The cover page of the project document. This displays the title of the document, the date the document was created, and the name of the document's author. You specify this information in the Document Settings tab.</li> <li>▶ <b>Table of contents.</b> A list of all sections in the project document.</li> <li>▶ <b>Index.</b> An alphabetical list of all the information in the project document. The index appears at the end of the document.</li> </ul> |
| <p><b>Test Script Options</b></p>   | <p>Choose where test scripts will appear in the document:</p> <ul style="list-style-type: none"> <li>▶ <b>In text.</b> Displays test scripts in the main text of the document.</li> <li>▶ <b>In appendix.</b> Places test scripts in a separate appendix.</li> </ul>  |

### Logo Tab

This tab enables you to set the image that is placed at the top of each page of the project document.

|                                     |  |
|-------------------------------------|--|
| <p><b>Important information</b></p> | <ul style="list-style-type: none"> <li>▶ The logo is placed at the top of each page of the project document.</li> <li>▶ If you do not define a logo, the Document Generator uses the HP logo in the project document.</li> </ul> |
|-------------------------------------|--|

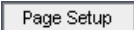
User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|  | <p><b>Load from File.</b> Opens the Open dialog box, enabling you to select an image in your file system to use as a logo in the project document. The image is displayed in the Logo tab.</p> |
|  | <p><b>Unload.</b> Removes the displayed logo.</p>  |
|  | <p><b>Save.</b> Saves the displayed image in the current project.</p>  |
|  | <p><b>Remove Saved.</b> Deletes the saved image from the current project.</p> <p><b>Note:</b> To remove the displayed logo, click the <b>Unload</b> button.</p>                                |
|  | <p><b>Load from Saved.</b> Displays the image that was saved to the project, and uses it as a logo in the project document.</p>  |

### Customization Tab

This tab enables you to set the document paper properties.

User interface elements are described below:

| UI Elements   | Description  |
|---|--|
|  | <p><b>Page Setup.</b> Opens the Page Setup dialog box, enabling you to set the measurement units, margins, orientation, and paper size to be used for project documents.</p> |

## Requirements Page

This page enables you to specify the requirement information from the Requirements module that should appear in the Requirements section of the project document.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Document Generator tree, click the <b>Requirements</b> link.   |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ Select the check box next to the <b>Requirements</b> link to include the data in the project document.</li> <li>▶ Microsoft Word is limited to nine header levels in the table of contents. If the requirements tree has more than nine hierarchical levels, these levels will not appear in the table of contents of the generated project document.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Generate a Project Document" on page 1067   |
| <b>See also</b>              | "Document Generator Window" on page 1071  |

User interface elements are described below:

| <b>UI Elements (A-Z)</b> | <b>Description</b>  |
|--------------------------|---|
| <b>Attachment</b>        | <p>Includes requirement attachments in the document. Requirement attachments are files that have been associated with the requirement, such as text files, images, or URLs.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Requirements Layout.</p>  |
| <b>Coverage</b>          | <p>Includes test coverage for the requirements in the document. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the coverage table. Use the Tabular Layout dialog box to choose the columns that will appear in the table, and set the column order, width, and captions.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Requirements Layout.</p> |



| UI Elements (A-Z)                        | Description   |
|--|---|
| <b>Graphs</b>                            | <p>Enables you to include graphs in the project document. Select graphs from the graph list located at the bottom of the page.</p> <p><b>Note:</b> Only graphs that are saved in the Dashboard module are included in the list.</p>   |
| <b>Linked defects</b>                    | <p>Includes linked defects in the document. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the linked defects table. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions. You can also specify whether to display only defects that have been directly linked to requirements or to include indirectly-linked defects as well.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Requirements Layout.</p> |
| <b>Page break after each requirement</b> | <p>Inserts page breaks in the project document after each requirement.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Requirements Layout.</p>   |
| <b>Requirements</b>                      | <p>Select one of the following options:</p> <ul style="list-style-type: none"> <li>▶ <b>All.</b> Includes all the requirements from the requirements tree.</li> <li>▶ <b>By status.</b> Includes only requirements with the selected status.</li> <li>▶ <b>Selected.</b> Includes only selected requirements. To include child requirements, click <b>First Selected with Children</b>.</li> </ul> <p>Click the <b>Filter &amp; Sort</b> button to specify the criteria for selecting requirements. For more details, see "Filter Dialog Box" on page 64.</p> |

| UI Elements (A-Z)          | Description   |
|----------------------------|---|
| <b>Requirements Layout</b> | <p>Select one of the following options:</p> <ul style="list-style-type: none"> <li>➤ <b>Full page.</b> Displays a list of the selected requirements. Click the <b>Customize</b> button to choose the information to appear in the document.</li> <li>➤ <b>Tabular.</b> Displays the requirements as a table. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the table. Use the Tabular Layout dialog box to choose the columns that will appear in the table, and set the column order, width, and captions.</li> <li>➤ <b>Coverage Analysis.</b> Displays a graphical breakdown of the direct cover status for each requirement. Click the <b>Customize</b> button to open the Coverage Analysis dialog box to choose whether to display the analysis in color or black and white, the number of hierarchical levels to display, and whether to display a legend.</li> </ul> |
| <b>Rich text</b>           | <p>Includes Microsoft Word content for each requirement.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Requirements Layout.</p>   |
| <b>Trace from</b>          | <p>Includes traced from requirements in the document. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the traceability table. Use the Tabular Layout dialog box to choose the columns that will appear in the table, and set the column order, width, and captions.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Requirements Layout.</p>   |
| <b>Trace to</b>            | <p>Includes traced to requirements in the document. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the traceability table. Use the Tabular Layout dialog box to choose the columns that will appear in the table, and set the column order, width, and captions.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Requirements Layout.</p>   |

## Business Components Page

This page enables you to specify the component information from the Business Components module that should appear in the Business Components section of the project document.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Document Generator tree, click the <b>Business Components</b> link.                                    |
| <b>Important information</b> | Select the check box next to the <b>Business Components</b> link to include the data in the project document. |
| <b>Relevant tasks</b>        | "How to Generate a Project Document" on page 1067   |
| <b>See also</b>              | "Document Generator Window" on page 1071  |

User interface elements are described below:

| UI Elements (A-Z)                      | Description  |
|--|--|
| <b>Components</b>                      | Select one of the following options: <ul style="list-style-type: none"> <li>▶ <b>All components.</b> Includes all the components from the components tree.</li> <li>▶ <b>Selected.</b> Includes only selected components.</li> </ul> Click the <b>Filter &amp; Sort</b> button to specify the criteria for selecting components. For more details, see "Filter Dialog Box" on page 64. |
| <b>Full Page Layout</b>                | <b>Full page.</b> Displays a list of all the components in the components tree.<br>Click the <b>Customize</b> button to choose the information to appear in the document.  |
| <b>Page break after each component</b> | Inserts page breaks in the project document after each test.   |
| <b>Snapshot</b>                        | Include business component's snapshots in the document.  |

| UI Elements (A-Z)                   | Description  |
|-------------------------------------|--|
| <b>Steps</b>                        | Includes steps from the business component in the document.            |
| <b>Tests that use the component</b> | Include business process tests that use the component in the document. |

## Subject Tree Page

This page enables you to specify the information from the test plan tree view of the Test Plan module that should appear in the project document.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Document Generator tree, expand the <b>Test Plan</b> node, and click the <b>Subject Tree</b> link.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>➤ Select the check box next to the <b>Subject Tree</b> link to include the data in the project document.</li> <li>➤ Microsoft Word is limited to nine header levels in the table of contents. If the test plan tree has more than nine hierarchical levels, these levels will not appear in the table of contents of the generated project document.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Generate a Project Document" on page 1067  |
| <b>See also</b>              | "Document Generator Window" on page 1071   |

User interface elements are described below:

| UI Elements (A-Z) | Description  |
|-------------------|--|
| <b>Attachment</b> | Includes test subject attachments in the document. Test subject attachments are files that have been associated with the test subject, such as text files, images, or URLs.  |
| <b>Folders</b>    | Specify which test plan tree folders you want to include in the document: <ul style="list-style-type: none"> <li>▶ <b>All.</b> Includes all the folders in the test plan tree.</li> <li>▶ <b>Selected.</b> Includes only the folders you choose from the test plan tree. You select the folders from the test plan tree displayed on the right side of the Subject Tree page.</li> </ul> |
| <b>Graphs</b>     | Enables you to include graphs in the project document. Select graphs from the graph list located at the bottom of the page.<br><br><b>Note:</b> Only graphs that are saved in the Dashboard module are included in the list.   |

| UI Elements (A-Z)                   | Description  |
|-------------------------------------|--|
| <b>Page break after each folder</b> | Inserts page breaks in the project document after each test subject folder.  |
| <b>Tree Sort</b>                    | <p>Determine the order of the test plan tree information in the document:</p> <ul style="list-style-type: none"> <li>▶ <b>Alphabetical:</b> The contents of the folders will be organized according to the alphabetical order of the folders in the test plan tree. For example, suppose the test plan tree contains two folders, Automated Tests and Manual Tests. The tests in the Automated Tests folder will be printed before the tests in the Manual Tests folder.</li> <li>▶ <b>Custom.</b> The contents of the folders will be organized according to the custom sort order you set for displaying test plan tree folders. By default, subject folders in the test plan tree appear in alphabetical order (by name). For example, suppose the test plan tree contains two folders, Automated Tests and Manual Tests. You can create a sort order that prints the tests in the Manual Tests folder before the tests in the Automated Tests folder. For user interface details on creating a custom sort order for the test plan tree, see "Sort Folders in Test Plan Tree Dialog Box" on page 546.</li> </ul> |

## Subject Tests Page

This page enables you to include test data in the project document.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Document Generator tree, expand the <b>Test Plan &gt; Subject Tree</b> node, and click the <b>Subject Tests</b> link. |
| <b>Important information</b> | Select the check box next to the <b>Subject Tests</b> link to include the data in the project document.                      |
| <b>Relevant tasks</b>        | "How to Generate a Project Document" on page 1067  |
| <b>See also</b>              | "Document Generator Window" on page 1071   |

User interface elements are described below:

| UI Elements (A-Z)                  | Description   |
|------------------------------------|---|
| <b>Attachments (Subject Tests)</b> | Include test attachments in the document.   |
| <b>Components detailed layout</b>  | <p>If you use Business Process Testing, includes the layout of the components defined in the tests. Choose what to include in the detailed layout:</p> <ul style="list-style-type: none"> <li>▶ <b>Component steps.</b> Includes component steps. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the component steps table. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions.</li> <li>▶ <b>Iterations list.</b> Includes the iteration list.</li> </ul> |
| <b>Design Steps</b>                | Includes design steps from the test.  |
| <b>History</b>                     | Display a list of all the changes made to the tests, and which user made each change.   |
| <b>Layout</b>                      | <p>Specify how design steps will be organized:</p> <ul style="list-style-type: none"> <li>▶ <b>Full page.</b> Displays a list of all the design steps in a test. Click the <b>Customize</b> button to choose the information to appear in the document.</li> <li>▶ <b>Tabular.</b> Displays all the design steps in a test as a table. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the table. Use the Tabular Layout dialog box to choose the columns that will appear in the table, and set the column order, width, and captions.</li> </ul>     |
| <b>Linked defects</b>              | Includes a table of linked defects. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the linked defects table. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions. You can also specify whether to display only defects that have been directly linked to tests or to include indirectly-linked defects as well.   |

| UI Elements (A-Z)                 | Description   |
|-----------------------------------|---|
| <b>Page break after each test</b> | Inserts page breaks in the project document after each test.  |
| <b>Properties</b>                 | Specify what to include from the design steps: <ul style="list-style-type: none"> <li>▶ <b>Recursive.</b> Includes called tests from the design steps.</li> <li>▶ <b>Attachments (Design Steps).</b> Includes all design step attachments.</li> </ul>   |
| <b>Test Scripts</b>               | Includes test scripts in the document.  |
| <b>Tests</b>                      | Specify which tests you want to include in the document: <ul style="list-style-type: none"> <li>▶ <b>All tests.</b> Includes all the tests from the selected test plan tree folders.</li> <li>▶ <b>Selected.</b> Includes only selected tests. Click the <b>Filter &amp; Sort</b> button to specify the criteria for selecting tests. For more details, see "Select Filter Condition Dialog Box" on page 74.</li> </ul> |

## Test List Page

This page enables you to specify the tests from the Test Grid that should appear in the project document.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Document Generator tree, expand the <b>Test Plan</b> node, and click the <b>Test List</b> link. |
| <b>Important information</b> | Select the check box next to the <b>Test List</b> link to include the data in the project document.    |
| <b>Relevant tasks</b>        | "How to Generate a Project Document" on page 1067  |
| <b>See also</b>              | "Document Generator Window" on page 1071   |



User interface elements are described below:

| UI Elements (A-Z)                 | Description   |
|-----------------------------------|---|
| <b>Attachments</b>                | <p>Includes test attachments in the document.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Test Layout.</p>  |
| <b>Components detailed layout</b> | <p>If you use Business Process Testing, you can include the detailed layout of the components included in the tests. Choose what to include in the detailed layout:</p> <ul style="list-style-type: none"> <li>▶ <b>Component steps.</b> Includes component steps. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the component steps table. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions.</li> <li>▶ <b>Iterations list.</b> Includes the iteration list.</li> </ul> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Test Layout.</p> |
| <b>Design steps</b>               | <p>Includes design steps from the test.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Test Layout.</p>  |
| <b>Graphs</b>                     | <p>Enables you to include graphs in the project document. Select graphs from the graph list located at the bottom of the page.</p> <p><b>Note:</b> Only graphs that are saved in the Dashboard module are included in the list.</p>   |
| <b>History</b>                    | <p>Displays a list of all the changes made to the tests, and who made them.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Test Layout.</p>  |

| UI Elements (A-Z)                 | Description  |
|-----------------------------------|--|
| <b>Layout</b>                     | <p>If you selected <b>Design steps</b>, specify how design steps will be organized:</p> <ul style="list-style-type: none"> <li>➤ <b>Full Page.</b> Displays a list of all the design steps in a test. Click the <b>Customize</b> button to choose the information to appear in the document.</li> <li>➤ <b>Tabular.</b> Displays all the design steps in a test as a table. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the table. Use the Tabular Layout dialog box to choose the columns that will appear in the table, and set the column order, width, and captions.</li> </ul> |
| <b>Linked defects</b>             | <p>Includes a table of linked defects. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the linked defects table. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions. You can also specify whether to display only defects that have been directly linked to tests or to include indirectly-linked defects as well.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Test Layout.</p>  |
| <b>Page break after each test</b> | <p>Inserts page breaks in the project document after each test.</p>  |
| <b>Properties</b>                 | <p>If you selected <b>Design steps</b>, specify what to include from the design steps:</p> <ul style="list-style-type: none"> <li>➤ <b>Recursive.</b> Includes called tests from the design steps.</li> <li>➤ <b>Attachments.</b> Includes all design step attachments.</li> </ul>   |

| UI Elements (A-Z)   | Description   |
|---------------------|---|
| <b>Test Layout</b>  | <p>Specify how the tests will be organized:</p> <ul style="list-style-type: none"> <li>▶ <b>Full Page.</b> Displays a list of all the tests in the project. Click the <b>Customize</b> button to choose the information to appear in the document.</li> <li>▶ <b>Tabular.</b> Displays all the tests as a table. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the table. Use the Tabular Layout dialog box to choose the columns that will appear in the table, and set the column order, width, and captions.</li> </ul> |
| <b>Test scripts</b> | <p>Includes test scripts in the document.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Test Layout.</p>  |
| <b>Tests</b>        | <p>Specify which tests you want to include in the document:</p> <ul style="list-style-type: none"> <li>▶ <b>All tests.</b> Includes all the tests from the Test Grid.</li> <li>▶ <b>Selected.</b> Includes only selected tests. Click the <b>Filter &amp; Sort</b> button to specify the criteria for selecting tests. For more details, see "Select Filter Condition Dialog Box" on page 74.</li> </ul>  |

## Test Lab Page

This page enables you to specify the information from the Test Lab module that should appear in the project document.

|                              |  |
|------------------------------|--|
| <b>To access</b>             | In the Document Generator tree, click the <b>Test Lab</b> link.  |
| <b>Important information</b> | <ul style="list-style-type: none"> <li>▶ Select the check box next to the <b>Test Lab</b> link to include the data in the project document.</li> <li>▶ Microsoft Word is limited to nine header levels in the table of contents. If the test plan tree has more than nine hierarchical levels, these levels will not appear in the table of contents of the generated project document.</li> </ul> |
| <b>Relevant tasks</b>        | "How to Generate a Project Document" on page 1067  |
| <b>See also</b>              | "Document Generator Window" on page 1071   |

User interface elements are described below:

| <b>UI Elements (A-Z)</b>                     | <b>Description</b>   |
|--|--|
| <b>Attachment</b>                            | Includes test set attachments in the document.   |
| <b>Folders</b>                               | Specify which test lab folders you want to include in the document: <ul style="list-style-type: none"> <li>▶ <b>All.</b> Includes all the folders in the test set tree.</li> <li>▶ <b>Selected.</b> Includes only the folders you choose from the test set tree. You select the folders from the test set tree displayed under Folders.</li> </ul> |
| <b>Graphs</b>                                | Includes graphs in the project document. Select graphs from the graph list located at the bottom of the page.<br><b>Note:</b> Only graphs that are saved in the Dashboard module are included in the list.   |
| <b>Page break after each test set folder</b> | Inserts page breaks in the project document after each test set folder.  |

## Test Sets Page

This page enables you to include test set data in the project document.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Document Generator tree, expand the <b>Test Lab</b> node, and click the <b>Test Sets</b> link. |
| <b>Important information</b> | Select the check box next to the <b>Test Sets</b> link to include the data in the project document.   |
| <b>Relevant tasks</b>        | "How to Generate a Project Document" on page 1067   |
| <b>See also</b>              | "Document Generator Window" on page 1071  |

User interface elements are described below:

| UI Elements (A-Z)          | Description   |
|----------------------------|---|
| <b>Available Test Sets</b> | Specify which test sets you want to include in the document: <ul style="list-style-type: none"> <li>▶ <b>All.</b> Includes all the test sets in the selected test set folder.</li> <li>▶ <b>Selected.</b> Includes only selected test sets. Click the <b>Filter &amp; Sort</b> button to specify the criteria for selecting the test sets. For more details, see "Filter Dialog Box" on page 64.</li> </ul> |
| <b>Graphs</b>              | Includes graphs in the project document. Select graphs from the graph list.<br><b>Note:</b> Only graphs that are saved in the Dashboard module are included in the list.  |

| UI Elements (A-Z)                     | Description   |
|---------------------------------------|---|
| <b>Linked defects</b>                 | Includes linked defects.<br>Click the <b>Customize</b> button to customize the linked defects. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions. You can also specify whether to display only defects that have been directly linked to test sets or to include indirectly-linked defects as well. |
| <b>Page break after each test set</b> | Inserts page breaks in the project document after each test set.  |

## Tests Page

This page enables you to include test data in the project document.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Document Generator tree, expand the <b>Test Lab &gt; Test Sets</b> nodes, and click the <b>Tests</b> link. |
| <b>Important information</b> | Select the check box next to the <b>Tests</b> link to include the data in the project document.                   |
| <b>Relevant tasks</b>        | "How to Generate a Project Document" on page 1067   |
| <b>See also</b>              | "Document Generator Window" on page 1071  |

User interface elements are described below:

| UI Elements (A-Z)                 | Description   |
|-----------------------------------|---|
| <b>Attachments</b>                | <p>Includes test attachments in the document.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Test Layout.</p>  |
| <b>Components detailed layout</b> | <p>If you use Business Process Testing, you can include the detailed layout of the components included in the tests. Choose what to include in the detailed layout:</p> <ul style="list-style-type: none"> <li>▶ <b>Component steps.</b> Includes component steps. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the component steps table. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions.</li> <li>▶ <b>Iterations list.</b> Includes the iteration list.</li> </ul> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Test Layout.</p> |
| <b>History</b>                    | <p>Displays a list of all the changes made to the tests, and who made them.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Test Layout.</p>  |
| <b>Linked defects</b>             | <p>Includes a table of linked defects. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the linked defects table. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions. You can also specify whether to display only defects that have been directly linked to tests or to include indirectly-linked defects as well.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Test Layout.</p>   |
| <b>Page break after each test</b> | <p>Inserts page breaks in the project document after each test.</p>   |

| UI Elements (A-Z)   | Description  |
|---------------------|--|
| <b>Test Layout</b>  | <p>Specify how the tests will be organized:</p> <ul style="list-style-type: none"> <li>▶ <b>Full Page.</b> Displays test information as a list. Click the <b>Customize</b> button to choose the information to appear in the document.</li> <li>▶ <b>Tabular.</b> Displays test information as a table. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the table. Use the Tabular Layout dialog box to choose the columns that will appear in the table, and set the column order, width, and captions.</li> </ul> <p><b>Note:</b> If you select <b>Tabular</b>, you cannot include test runs in the document.</p> |
| <b>Test scripts</b> | <p>Includes test scripts in the document.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Test Layout.</p>   |
| <b>Tests</b>        | <p>Specify which tests you want to include in the document:</p> <ul style="list-style-type: none"> <li>▶ <b>All tests.</b> Includes all the tests in the selected test set.</li> <li>▶ <b>Selected.</b> Includes only selected tests. Click the <b>Filter &amp; Sort</b> button to specify the criteria for selecting tests. For more details, see "Select Filter Condition Dialog Box" on page 74.</li> </ul>   |

## **Runs Page**

This page enables you to include run data in the project document.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Document Generator tree, expand the <b>Test Lab &gt; Test Sets &gt; Tests</b> nodes, and click the <b>Runs</b> link. |
| <b>Important information</b> | Select the check box next to the <b>Runs</b> link to include the data in the project document.                              |
| <b>Relevant tasks</b>        | "How to Generate a Project Document" on page 1067   |
| <b>See also</b>              | "Document Generator Window" on page 1071  |



User interface elements are described below:

| UI Elements (A-Z)              | Description  |
|--------------------------------|--|
| <b>Attachments (Run Steps)</b> | Includes run step attachments in the document.<br><b>Note:</b> Available if you selected the <b>Full page</b> Run Layout.  |
| <b>Attachments (Runs)</b>      | Includes test run attachments in the document.   |
| <b>Defects</b>                 | Includes a table of defects linked with run steps.<br>Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the linked defects table. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions. You can also specify whether to display only defects that have been directly linked to run steps or to include indirectly-linked defects as well.  |
| <b>Layout</b>                  | If you are including run steps in the document, choose one of the following options:<br><br><ul style="list-style-type: none"> <li>▶ <b>Full Page.</b> Displays a list of all the steps in a run. Click the <b>Customize</b> button to choose the information to appear in the document.</li> <li>▶ <b>Tabular.</b> Displays all the steps in a run as a table. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the table. Use the Tabular Layout dialog box to choose the columns that will appear in the table, and set the column order, width, and captions.</li> </ul> |
| <b>Linked defects</b>          | Includes a table of linked defects. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the linked defects table. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions. You can also specify whether to display only defects that have been directly linked to tests or to include indirectly-linked defects as well.<br><br><b>Note:</b> Available if you selected the <b>Full page</b> Run Layout.   |

| UI Elements (A-Z) | Description  |
|-------------------|--|
| <b>Run Layout</b> | Specify how the runs will be organized: <ul style="list-style-type: none"> <li>➤ <b>Full Page.</b> Displays a list of all the test runs. Click the <b>Customize</b> button to choose the information to appear in the document.</li> <li>➤ <b>Tabular.</b> Displays all the test runs as a table. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the table. Use the Tabular Layout dialog box to choose the columns that will appear in the table, and set the column order, width, and captions.</li> </ul> |
| <b>Run steps</b>  | Includes a list of run steps in the document.<br><b>Note:</b> Available if you selected the <b>Full page</b> Run Layout.   |
| <b>Runs</b>       | Choose one of the following options: <ul style="list-style-type: none"> <li>➤ <b>Last run.</b> Includes only the last run of the test.</li> <li>➤ <b>All runs.</b> Includes all runs of the test.</li> <li>➤ <b>Selected.</b> Includes only selected runs in the document. Click the <b>Filter &amp; Sort</b> button to specify the criteria for selecting tests. For more details, see "Select Filter Condition Dialog Box" on page 74.</li> </ul>  |

## Defects Page

This page enables you to specify the defects information from the Defects module that should appear in the Defects section of the project document.

|                              |   |
|------------------------------|---|
| <b>To access</b>             | In the Document Generator tree, click the <b>Defects</b> link.                                    |
| <b>Important information</b> | Select the check box next to the <b>Defects</b> link to include the data in the project document. |
| <b>Relevant tasks</b>        | "How to Generate a Project Document" on page 1067   |
| <b>See also</b>              | "Document Generator Window" on page 1071  |

User interface elements are described below:

| UI Elements (A-Z)     | Description  |
|-----------------------|--|
| <b>Attachments</b>    | Includes defect attachments in the document.<br><b>Note:</b> Available if you selected <b>Full page</b> as the Defects Layout.   |
| <b>Defects</b>        | Select one of the following options:<br><ul style="list-style-type: none"> <li>▶ <b>All defects.</b> Includes all the defects from the defects grid.</li> <li>▶ <b>Selected.</b> Includes only selected defects. Click the <b>Filter &amp; Sort</b> button to specify the criteria for selecting defects. For more details, see "Select Filter Condition Dialog Box" on page 74.</li> </ul>  |
| <b>Defects Layout</b> | Select one of the following options:<br><ul style="list-style-type: none"> <li>▶ <b>Full page.</b> Displays the selected defects as a list. Click the <b>Customize</b> button to choose the information to appear in the document.</li> <li>▶ <b>Tabular.</b> Displays the selected defects as a table. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the table. Use the Tabular Layout dialog box to choose the columns that will appear in the table, and set the column order, width, and captions.</li> </ul> |
| <b>Graphs</b>         | Enables you to include graphs in the project document. Select graphs from the graph list.<br><b>Note:</b> Only graphs that are saved in the Dashboard module are included in the list.   |
| <b>History</b>        | Displays a list of all the changes made to the defects.  |

| UI Elements (A-Z)                               | Description   |
|---|---|
| <p><b>Linked defects</b></p>                    | <p>Includes linked defects as a table. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the linked defects table. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions. You can also specify whether only direct links will be displayed.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Defects Layout.</p>      |
| <p><b>Linked entities</b></p>                   | <p>Includes linked entities as a table. Click the <b>Customize</b> button to open the Tabular Layout dialog box to customize the linked entities table. Use the Tabular Layout dialog box to choose the defect columns that will appear in the table, and to set the column order, width and captions. You can also change the captions and the width of the table columns.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Defects Layout.</p> |
| <p><b>Page break after each requirement</b></p> | <p>Inserts page breaks in the project document after each defect.</p> <p><b>Note:</b> Available if you selected <b>Full page</b> as the Defects Layout.</p>   |

## Add Favorite Dialog Box

This dialog box enables you to add a favorite view to your private folder or to a public folder.

|                  |  |
|------------------|--|
| <b>To access</b> | In the Document Generator, click the <b>Add to Favorites</b> button. |
|------------------|--|

User interface elements are described below:



| UI Elements (A-Z)         | Description  |
|---------------------------|--|
| <b>Existing Favorites</b> | Displays the favorite views that already exist in the selected location.   |
| <b>Location</b>           | Folders for storing your favorite views: <ul style="list-style-type: none"> <li>▶ <b>Private.</b> Favorite views in this folder can only be accessed by you.</li> <li>▶ <b>Public.</b> Favorite views in this folder can be accessed by all users of the project.</li> </ul> |
| <b>Name</b>               | The name of the favorite view.   |

## Organize Favorites Dialog Box

This dialog box enables you to organize the list of favorite views in the private and public folders by changing the properties of a view and by deleting views.

|                  |   |
|------------------|---|
| <b>To access</b> | In the Document Generator, click the <b>Favorites</b> button. |
|------------------|---|

User interface elements are described below (unlabeled elements are shown in angle brackets):

| UI Elements   | Description  |
|---|--|
|  | Opens the Properties dialog box, enabling you to change the following properties of the selected favorite view:<br><b>Name.</b> The name of the favorite view.<br><b>Location.</b> The folder in which you store the favorite view, private or public. |
|  | Deletes the selected favorite view.  |
| <favorite views tree>   | Displays the list of favorite views alphabetically by location.  |

---

# Glossary

This glossary lists terminology that is used throughout HP Application Lifecycle Management (ALM).

---

See also:

► *HP Business Process Testing User Guide*

---

## A

### activity

A business process model entity that represents a function, task, or sub-process. Activities are imported to ALM together with their parent business process model.

### alert

A notification that informs specified users of changes in requirements, tests or defects. An alert can be triggered as a result of automatic notification rules or as a follow up reminder that you set up for yourself.

## ALM Editions

HP Application Lifecycle Management (ALM) is also available in three editions which provide subsets of ALM functionality — HP ALM Quality Center Starter Edition, HP ALM Quality Center Enterprise Edition, and HP ALM Performance Center Edition.

**ALM Quality Center Starter Edition:** For application management teams managing small releases with a maximum of five concurrent users.

**ALM Quality Center Enterprise Edition:** For application teams managing medium to large releases.

**ALM Performance Center Edition:** For managing all aspects of large-scale performance testing projects.

## associated libraries

Two libraries in the same project or in different projects, in which one library, the **source library**, was used as the basis for creating the other, **imported library**. You can compare associated libraries to track changes over time, or synchronize libraries to update one library with changes made to the other library.

## B

### baseline

A snapshot of a **library** at a specific point in time. It includes all the entities defined in the library and the relationships between them, such as **coverage** and **requirements traceability**. You can compare baselines to track changes in a project over time, or use a baseline to reuse or share the entities in a library.

### Business Components module

Functional area of ALM accessible by selecting Business Components on the ALM sidebar under Testing. This module enables subject matter experts to work with Business Process Testing (BPT), the HP test automation solution. You use reusable business process components and flows to create business process tests. You can also combine manual components to manually test your application. Access to this module is dependent on your ALM license.



**business criticality**

A **risk-based quality management (RBQM)** category that measures how crucial a requirement is for the business. Risk is calculated based on the combined results of the Business Criticality and the Failure Probability assessment.

**Business Models module**

Functional area of ALM accessible by selecting Business Models on the ALM sidebar under Requirements. This module enables you to import business process models, and test the quality of the models and their components. Access to this module is dependent on your ALM license.

**business process model**

A diagram that represents the activities and workflows that take place in an organization. Business process models are imported to ALM for testing in the **Business Models module**.

Alternatively, an ALM entity in the Business Models module that represents a business process model as a whole.

**C****check in**

When using **version control**, the process in which a new, updated version of an entity is created and made available to other users. After you **check out** the entity and make changes, you check in a new version of the entity.

**check out**

When using **version control**, the process in which you lock an entity to make changes, preventing other users from overwriting your changes. The checked out version of an entity is not visible to other users.

### coverage

The links you create to keep track of the relationship between your requirements and tests. In the Test Plan module, you create **requirements coverage** by selecting requirements to link to a test. Alternatively, in the Requirements module, you create **test coverage** by selecting tests to link to a requirement. A test can cover more than one requirement, and a requirement can be covered by more than one test.

### cross filter

An advanced, second-level filter on an associated item, such as requirements, tests, test sets, or defects. For example, in the Requirements module, you can define a cross filter to exclude requirements whose covering tests have the **Passed** status.

### cross project customization

The process of customizing a template project to define and maintain a common set of project customizations for multiple ALM projects. You link a template project to one or more other projects. You then customize the template and apply customization to the linked projects. Template customization applied to linked projects can include user groups and permissions, project entities, requirement types, lists, and workflow.

### cycle

A set of development and quality assurance efforts performed to achieve a common goal based on the release timeline. After you define a **release**, you add cycles to the release. You can then assign requirements, defects, and test set folders to the cycles.

## D

### Dashboard module

Functional area of ALM accessible by selecting Dashboard on the ALM sidebar. This module enables you to analyze ALM data by creating, viewing and managing graphs, standard reports, and Excel reports. You also create dashboard pages that display multiple graphs side-by-side.

**dashboard page**

A selection of graphs that you view in a single display. You design and view dashboard pages in the Dashboard View tab of the Dashboard module.

**defect**

A problem detected in the project application during any phase of the application management process. You can link defects to other project entities, such as requirements, tests, or other defects. A defect can be linked directly or indirectly to other entities. When you add a defect link to an entity, ALM adds a direct link to this entity and indirect links to other related entities.

**Defects module**

Functional area of ALM accessible by selecting the Defects button in the sidebar. This module enables you to submit and track defects, determine repair priorities, and analyze the data.

**domain**

ALM projects are grouped by domain. A domain contains a group of related ALM projects and assists you in organizing and managing a large number of projects. Each domain contains a Projects folder and a Template Projects folder to organize your ALM projects and template projects.

**draft run**

A test run whose outcome does not impact test statistics such as execution status or coverage. You can set a test run as a draft before or after the run, enabling you to try out tests while they are in development, or after they have been modified. When you change the draft run value, ALM recalculates tests statistics and updates status fields.

## **E**

### **entity**

A data set in an ALM project that works as a unit, such as the requirement entity which stores data on all ALM requirements. Entities contain data entered by users for a specific application management process and the data is stored in tables. Each entity can contain system fields and user-defined fields.

Alternatively, an individual record containing unique data, such as a single requirement in the Requirements module. You can create and modify an entity, mail an entity, maintain a history of changes made to an entity, or create links between entities.

### **Excel add-in**

You can import requirement, test plan, or defect data from a Microsoft Excel worksheet to an ALM project. To import from Excel, you first install the HP ALM Microsoft Excel Add-in on your client machine.

## **F**

### **failure probability**

A **risk-based quality management (RBQM)** category that indicates how likely a test based on the requirement is to fail. Risk is calculated based on the combined results of the Failure Probability and the Business Criticality assessment.

### **functional complexity**

A **risk-based quality management (RBQM)** category that indicates the complexity of the requirement's implementation.

## **I**

### **imported library**

You can create a new **library** by importing an existing library. An imported library is a library that you create by importing an existing library from the same project or from a different project.

**K****key performance indicator (KPI)**

You define a KPI in a project planning and tracking (PPT) milestone. A KPI is a quantifiable measure designed to track a critical performance variable over time, and measure the essential outcome of a release scope item. For each KPI, you define threshold limits for allowable deviations.

**L****Libraries module**

Functional area of ALM accessible by selecting Libraries on the ALM sidebar under Management. This module enables you to define and create libraries and baselines to track changes in your project, reuse entities in a project, or share entities across multiple projects.

**library**

A defined set of entities in a project and the relationships between them, such as **coverage** and **requirements traceability**. The entities in a library can include requirements, tests, test resources, and business components. After you define a library, you then create a **baseline**, enabling you to track changes in a project over time, reuse the entities in a project, or share entities across multiple projects.

**linked project**

A project connected to a **template project**. You apply template customization updates to the linked project as a part of **cross project customization**.

**M****Management module**

Functional area of ALM accessible by selecting Management on the sidebar. This module includes two sub-modules: **Releases module** and **Libraries module**.

**milestone**

To measure the progress of a project planning and tracking (PPT) release scope item, you associate it with milestones. A milestone is a point in the time-line of a release that signifies the completion of a deliverable. It enables you to validate the progress of the release. A milestone can be associated with one or more release scope items.

**P**

**path**

A business process model entity that represents a series of transitions between activities. You define paths in ALM that are critical for quality testing.

**pinned test set**

A test set that is linked to a **baseline**. In the Test Lab module, after you create a test set, you can link the test set to a baseline that you specify. When you run the test set, ALM runs only the versions of the test stored in the baseline.

**project**

Collects and stores data relevant to the application lifecycle management process, including requirements, tests, defects, and additional resources. Projects are stored in the ALM project repository on the application server's file system.

**project customization**

The process of adapting a project to meet the specific needs of your organization. Using the Project Customization window, you can control access to a project by defining the users who can access the project, determining the types of tasks each user can perform, and adding and modifying fields.

**project planning and tracking (PPT)**

A feature that enables quality assurance managers to track application readiness by defining goals and activities involved in the quality assurance process of an application release. This feature is accessed from the Releases module and it includes the following tabs: Release Scope, Master Plan, and Scorecard.

**R****release**

A group of changes to the application that will be available for distribution at the same time. You can divide a release into cycles. You can then assign requirements and defects to the release and cycles.

**release scope item**

A subdivided section of a project planning and tracking (PPT) release. For each release scope item you define the related requirements, tests, and defects. To measure the progress of a release scope item, you associate it with a milestone.

**Releases module**

Functional area of ALM accessible by selecting Releases on the ALM sidebar under Management. This module allows you to organize and track your upcoming releases by defining releases and cycles for the application management process.

**representative requirement**

A **requirement** that corresponds to a **business process model, activity, or path**. Representative requirements link model entities to their associated requirements, tests, and defects.

**requirement**

A detailed description of a specific objective of your application under development. You organize your requirements in a requirements tree, a hierarchical structure in which you can group your application's requirements according to function or objective. You can link a requirement to releases and cycles in the Releases module. You can also create links between a requirement and other requirements, tests, and defects.

**requirements coverage**

The links you create to keep track of the relationship between your requirements and tests. In the Test Plan module, you create requirements coverage by selecting requirements to link to a test. Requirements coverage assists you in assessing the impact of a change in the test or requirement. A test can cover more than one requirement. The direct cover status of a requirement reflects the execution status of the tests covering the requirement.

**Requirements module**

Functional area of ALM accessible by selecting Requirements on the ALM sidebar under Requirements. This module enables you to create, manage and analyze requirements in a hierarchical tree-structure. You can also create links between requirements and other requirements, tests, or defects.

**requirements traceability**

A link you create to establish a relationship between requirements. When analyzing the impact of a proposed change in a requirement, traceability identifies other requirements that may be affected by the change. You define traceability relationships in the Requirements Traceability tab of the Requirements module. You can add traceability links to and from a selected requirement.

**requirement type**

A category for a requirement that describes the purpose of the requirement, such as a functional requirement, or a testing requirement. You assign each requirement to one of the ALM default requirement types, or to a customized requirement type that the project administrator can create.

**risk-based quality management (RBQM)**

A feature that assists you in determining a testing strategy for your requirements, based on risk and functional complexity, testing time, and the resources you have available. You work with risk-based quality management in the Risk Analysis and Risk Assessment tabs of the Requirements module.



**S****source library**

You can create a new **library** by importing an existing library from the same project or from a different project. A source library is a library used as the basis for creating another library.

**Sprinter**

HP's manual testing solution, providing advanced functionality and a variety of tools to assist in the manual testing process. Sprinter is fully integrated with ALM, enabling you to run tests manually from the Test Lab module using Sprinter.

**system field**

An ALM default field for entering data in an ALM project. System fields cannot be added or deleted, only modified.

**T****template project**

A customized project used to apply a common set of project customizations to other projects as a part of **cross project customization**. Enables you to standardize policies and procedures across projects in your organization.

**template test**

A test that includes common steps you often want to perform as part of other tests. You can mark a manual test in the test plan tree as a template test so that you can easily select it for calling from another test.

**test**

One or more steps you define to verify a specific function or requirement of your application. You can create manual tests, or automated tests that are executed by a testing tool. You organize your tests in a test plan tree, a hierarchical structure that divides your application into testing units, or subjects. A test can contain multiple **test configurations**.

**test configuration**

A data set that describes a specific use-case of a **test**. For example, a test configuration can specify a subset of data or a run-time environment that the test should use. A test configuration is contained in a **test instance**.

**test coverage**

The links you create to keep track of the relationship between your requirements and tests. In the Requirements module, you create test coverage by linking tests to a requirement. Test coverage assists you in assessing the impact of a change in the test or requirement. A requirement can be covered by more than one test, or by selected configurations of different tests.

**test instance**

An occurrence of a test in a **test set**. Each test instance contains a defined **test configuration**.

**test criteria**

When creating **coverage** between requirements and business process tests, instead of covering each requirement only at the level of a test, test criteria enables coverage by defined business components of a test.

**Test Lab module**

Functional area of ALM accessible by selecting Test Lab on the ALM sidebar under Testing. This module enables you to create and manage test sets, and perform test runs. You can schedule tests to run either manually or automatically.

**Test Plan module**

Functional area of ALM accessible by selecting Test Plan on the ALM sidebar under Testing. This module enables you to develop and manage tests in a hierarchical tree-structure. Tests can be linked to requirements and defects.

**test resource**

Test resources are files or folders stored in the ALM repository that are used by tests. A test resource can be used by one or more tests. For example, a test resource can be a data file containing data needed as input for a number of tests.

**Test Resources module**

Functional area of ALM accessible by selecting Test Resources on the ALM sidebar under Testing. This module enables you to manage test resources in a hierarchical tree-structure. Test resources can be associated with tests.

**test run**

The execution of a **test instance** in a **test set**. You run tests in the Test Lab module. You can run tests manually or automatically, schedule the date and time of test runs, and set the conditions for when a test can be run. You can view results for a single test run, or view and compare details of all the runs for a selected test instance.

**test set**

A group of tests in an ALM project designed to achieve a specific testing goal, such as sanity or regression testing. Grouping the tests in your project into test sets helps you organize test execution to meet your testing goals. You can assign test set folders to cycles.

**test step**

Detailed instructions on how to execute a test. Can include the action to perform on your application, the input to enter, or the expected outcome.

**traceability matrix**

Determines the extent of relationships between requirements and other requirements, and between requirements and tests.

**U****user-defined field (UDF)**

Data fields that you can add to an ALM project. You can customize user-defined fields to meet the specific needs of your organization.

## **V**

### **version control**

Tracks changes made to entities in your project, by maintaining previous versions of entities. In a version control enabled project, version history is maintained for entities, including requirements, tests, test resources, and business components. You can view and compare previous versions of an entity, or restore a previous version.

## **W**

### **Word add-in**

You can import requirement or test plan data from a Microsoft Word document to an ALM project. To import from Word, you first install the HP ALM Microsoft Word Add-in on your client machine.

### **workflow**

A feature that offers tools to generate or edit scripts used to customize fields and values of the ALM modules, and to control the actions that users can perform. You can customize workflow from the Workflow page, available from the Project Customization window.



