



**MERCURY
QUALITY CENTER™**

Mercury Quality Center™
Tutorial

MERCURY™

Mercury Quality Center Tutorial, Version 8.2

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Welcome to the Mercury Quality Center Tutorial

Welcome to the Mercury Quality Center Tutorial, a self-paced guide that teaches you how to use Mercury Quality Center (formerly TestDirector), the Mercury Web-based test management tool.

This tutorial instructs you on how to use Quality Center to manage the application testing process. It familiarizes you with specifying testing requirements, planning tests, executing tests, and tracking defects. It also shows you how to monitor the testing process by creating reports and graphs.

Before You Begin

To do this tutorial, you must have access to these components from your machine:

- ✓ Quality Center 8.2—Mercury’s Web-based test management tool. You must have access to these modules: Requirements, Test Plan, Test Lab, and Defects.
- ✓ QualityCenter_Demo—a demonstration project that helps introduce you to Quality Center and includes sample requirements, tests, test sets, test runs, and defects.

Note: It is highly recommended that you work on a new copy of the **QualityCenter_Demo** project. For more information, contact your Quality Center administrator.

- ✓ Mercury Tours—a sample application that simulates a Web-based site for reserving flights, hotel rooms, car rentals, cruises, and vacation deals.

Note: To access the **QualityCenter_Demo** project and Mercury Tours, you must install these components while installing Quality Center. For more information, refer to the *Mercury Quality Center Installation Guide*.

- ✓ QuickTest Professional or WinRunner—testing tools to run the automated tests used in this tutorial. Make sure that you enable your testing tool to work with other Mercury tools. For more information, refer to the user guide for your testing tool.

Note:

- To integrate Quality Center with QuickTest Professional, you must install the QuickTest Professional Add-in and the Mercury Quality Center Connectivity Add-in from the Mercury Quality Center Add-ins page.
- To integrate Quality Center with WinRunner, you must install the Mercury Quality Center Connectivity Add-in from the Mercury Quality Center Add-ins page.

For more information, refer to the *Mercury Quality Center Installation Guide*.

Using This Tutorial

This tutorial contains the following lessons:

Lesson 1 Introducing Quality Center

Introduces you to the Quality Center testing process, and familiarizes you with the Quality Center user interface and the sample Mercury Tours Web site.

Lesson 2 Specifying Testing Requirements

Shows you how to define requirements, view and modify the requirements tree, and convert requirements.

Lesson 3 Planning Tests

Shows you how to create a test plan tree, design test steps, copy test steps, call a test with parameters, link tests to requirements, and automate your manual tests.

Lesson 4 Running Tests

Shows you how to define test sets, schedule test runs, and run manual and automated tests.

Lesson 5 Adding and Tracking Defects

Shows you how to add new defects, search for similar defects, update defects, e-mail defects, associate defects with tests, trace changes, and create favorite views.

Lesson 6 Tracing Changes

Shows you how to keep track of changes made to your requirements, tests, and defects as you perform your project testing.

Lesson 7 Analyzing the Testing Process

Shows you how to monitor the testing process by creating reports and graphs.

Lesson 8 Where Do You Go from Here?

Shows you how to start testing your own application and where to find more information about Quality Center.

Documentation Updates

Mercury Interactive is continuously updating its product documentation with new information. You can download the latest version of this document from the Customer Support Web site (<http://support.mercury.com>).

To download updated documentation:

- 1** In the Customer Support Web site, click the **Documentation** link.
- 2** Under **Please Select Product**, select Mercury Quality Center.
Note that if Quality Center does not appear in the list, you must add it to your customer profile. Click **My Account** to update your profile.
- 3** Click **Retrieve**. The Documentation page opens and lists the documentation available for the current release and for previous releases. If a document was recently updated, **Updated** appears next to the document name.
- 4** Click a document link to download the documentation.

Typographical Conventions

This book uses the following typographical conventions:

1, 2, 3	Bold numbers indicate steps in a procedure.
►	Bullets indicate options and features.
>	The greater than sign separates menu levels (for example, File > Open).
Stone Sans	The Stone Sans font indicates names of interface elements in a procedure that you perform actions upon (for example, “Click the Run button.”).
Bold	Bold text indicates function names.
<i>Italics</i>	<i>Italic</i> text indicates variable names, or introduces a new term.
Arial	The Arial font is used for examples and statements that are to be typed in literally.
<>	Angle brackets enclose a part of a URL address that needs to be typed in.
...	In a line of syntax, an ellipsis indicates that more items of the same format may be included.

Welcome

1

Introducing Quality Center

Application testing is a complex process. Quality Center helps you organize and manage all phases of the application testing process, including specifying testing requirements, planning tests, executing tests, and tracking defects.

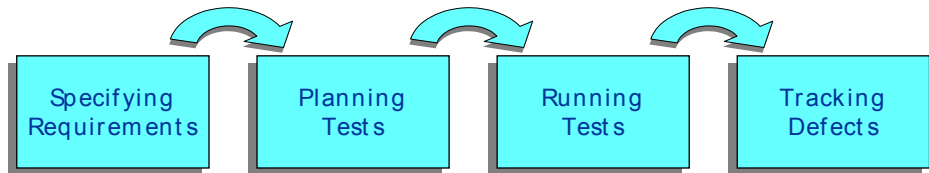
In this lesson, you will learn about:

- The Quality Center Testing Process
- Starting Quality Center
- The Quality Center Window
- The Mercury Tours Sample Web Site

The Quality Center Testing Process

Quality Center offers an organized framework for testing applications before they are deployed. Because test plans evolve with new or modified application requirements, you need a central data repository for organizing and managing the testing process. Quality Center guides you through the requirements specification, test planning, test execution, and defect tracking phases of the testing process.

The Quality Center testing process includes four phases:



Specifying Requirements

You begin the application testing process by specifying testing requirements. In this phase you perform these tasks:

Task	Description
Define Testing Scope	Examine application documentation to determine your testing scope—test goals, objectives, and strategies.
Create Requirements	Build a <i>requirements tree</i> to define your overall testing requirements.
Detail Requirements	For each requirement topic in the requirements tree, create a list of detailed testing requirements. Describe each requirement, assign it a priority level, and add attachments if necessary.
Analyze Requirements Specification	Generate reports and graphs to assist in analyzing your testing requirements. Review your requirements to ensure that they meet your testing scope.

Planning Tests

You create a test plan based on your testing requirements. In this phase you perform these tasks:

Task	Description
Define Testing Strategy	Examine your application, system environment, and testing resources to determine your testing goals.
Define Test Subjects	Divide your application into subjects or functions to be tested. Build a <i>test plan tree</i> to hierarchically divide your application into testing units, or <i>subjects</i> .
Define Tests	Determine the types of tests you need for each subject. Add a basic definition of each test to the test plan tree.
Create Requirements Coverage	Link each test with a testing requirement(s).

Task	Description
Design Test Steps	Develop manual tests by adding steps to the tests in your test plan tree. <i>Test steps</i> describe the test operations and the expected outcome of each test. Decide which tests to automate.
Automate Tests	For tests that you decide to automate, create test scripts with a Mercury testing tool, or a custom or third-party testing tool.
Analyze Test Plan	Generate reports and graphs to assist in analyzing test planning data. Review your tests to determine their suitability to your testing goals.

Running Tests

After you build a test plan tree, you run your tests to locate defects and assess quality. In this phase you perform these tasks:

Task	Description
Create Test Sets	Define groups of tests to meet the various testing goals in your project. These might include, for example, testing a new version or a specific function in an application. Determine which tests to include in each test set.
Schedule Runs	Schedule test execution and assign tasks to testers.
Run Tests	Execute the tests in your test set automatically or manually.
Analyze Test Results	View the results of your test runs to determine whether a defect has been detected in your application. Generate reports and graphs to help analyze these results.

Tracking Defects

Locating and repairing application defects efficiently is essential to the testing process. Defects can be detected and added during all stages of the testing process. In this phase you perform these tasks:

Task	Description
Add Defects	Report new defects detected in your application. Quality assurance testers, developers, project managers, and end users can add defects during any phase in the testing process.
Review New Defects	Review new defects and determine which ones should be fixed.
Repair Open Defects	Correct the defects that you decided to fix.
Test New Build	Test a new build of your application. Continue this process until defects are repaired.
Analyze Defect Data	Generate reports and graphs to assist in analyzing the progress of defect repairs, and to help determine when to release the application.

Starting Quality Center

You start Quality Center from your Web browser, using the Mercury Quality Center URL.

To start Quality Center:

1 Open the Mercury Quality Center Options window.

In your Web browser, type your Mercury Quality Center URL:
`http://<Mercury Quality Center server name>/<virtual directory name>/default.htm`

The Mercury Quality Center Options window opens.



Note: If you cannot start Quality Center, contact your system administrator to ensure that Quality Center has been installed on your company Web server.

2 Open Quality Center.

Click the Mercury Quality Center link.

The first time you run Quality Center, the application is downloaded to your computer. Then, each time you open Quality Center, it automatically carries out a version check. If Quality Center detects a newer version, it downloads the latest version to your machine.

The Mercury Quality Center Login window opens.

• [Customize](#)
• [Site Administrator](#)
• [Add-ins Page](#)
• [Help](#)

Mercury Quality Center

Powered By TestDirector

Optimize Application Quality

Domain:
DEFAULT

Project:
QualityCenter_Demo

User ID: admin **Password:**

3 Select a domain.

In the **Domain** list, select **DEFAULT**.

4 Select a project.

In the **Project** list, select **QualityCenter_Demo**.

Note: If more than one **QualityCenter_Demo** project is listed, contact your Quality Center administrator to determine which project to use.

5 Log on to the project as a QA tester.

In the **User ID** box, type one of these user names: **alice_qc**, **cecil_qc**, or **michael_qc**.

Skip the **Password** box. A password was not assigned to any of the above user names.



Click the **Login** button.

Quality Center opens and if you were working before, displays the module in which you were last working. In the title bar, your project name and your user name are displayed.

The Quality Center Window

In this exercise, you will explore the Quality Center modules and their common elements.

To explore the Quality Center window:

1 Explore the Quality Center modules.



- ▶ Click the **Requirements** button on the sidebar. The Requirements module enables you to specify your testing requirements. This includes defining what you are testing, defining requirement topics and items, and analyzing the requirements.



- ▶ Click the **Test Plan** button on the sidebar. The Test Plan module enables you to develop a test plan based on your testing requirements. This includes defining goals and strategies, dividing your plan into categories, developing tests, automating tests where beneficial, and analyzing the plan.



- ▶ Click the **Test Lab** button on the sidebar. The Test Lab module enables you to run tests on your application and analyze the results.



- ▶ Click the **Defects** button on the sidebar. The Defects module enables you to add defects, determine repair priorities, repair open defects, and analyze the data.

Note: Depending on your Quality Center license, you may also have access to additional modules:



- ▶ Click the **Business Components** button on the sidebar. The Business Process Testing module enables subject matter experts to drive the quality optimization process. For more information, refer to the *Mercury Business Process Testing User's Guide*.



- ▶ Click the **Dashboard** button in the sidebar. The Application Delivery Dashboard enables IT teams to track application readiness in real-time and manage project risk. For more information, refer to the *Mercury Application Delivery Dashboard* documentation set.

2 Explore the common Quality Center elements.

All the Quality Center modules have common elements. For example, click the **Requirements** button on the sidebar.

The screenshot shows the Mercury Quality Center interface. The top navigation bar includes 'Mercury Quality Center' and 'Powered By TestDirector'. Below the navigation bar, there are tabs for 'Requirements', 'View', 'Tools', and 'Analysis'. The main content area is titled 'Document View' and contains a table of requirements. The table has columns for 'ReqID', 'Name', 'Author', 'Creation ...', 'Creation Ti...', and 'Reviewed'. The requirements listed are:

ReqID	Name	Author	Creation ...	Creation Ti...	Reviewed
[RQ0003]	Mercury Tours Application	alex_qc	1/9/2003	9:07:29 AM	Reviewed
[RQ0020]	Application Security	alex_qc	1/9/2003	1:15:09 PM	Not Reviewed
[RQ0042]	Application Client System	shelly_qc	1/15/2003	11:23:56 AM	Reviewed
[RQ0045]	Application Usability	shelly_qc	1/15/2003	11:33:15 AM	Reviewed
[RQ0046]	Application Performance	shelly_qc	1/15/2003	11:34:29 AM	Reviewed
[RQ0047]	Application Reliability	shelly_qc	1/15/2003	11:35:06 AM	Reviewed
[RQ0008]	Profile Management	alex_qc	1/9/2003	9:20:33 AM	Reviewed
[RQ0007]	Booking System	alex_qc	1/9/2003	9:19:19 AM	Reviewed

Below the table, there are tabs for 'Description' and 'History'. The 'Description' tab is active, showing the text: 'Web-based application (site) for travelers.'

Each of the Quality Center modules contains these key elements:



- ▶ The *Quality Center toolbar* is located directly above the project name. If the toolbar is not visible, click the **Show Toolbar** button. The common Quality Center toolbar is accessible from all Quality Center modules and contains these buttons:

Button	Description
	Back: Navigates back to your previous location in Quality Center.
	Forward: If you navigated back, enables you to navigate forward.
	Check Spelling: Checks the spelling for the selected word 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.
	Spelling Options: Opens the Spelling Options dialog box, enabling you to configure the way Quality Center checks spelling.
	Thesaurus: 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.
	Add Defect: Opens the Add Defect dialog box, enabling you to add a new defect.
	Trace All Changes: Opens the Trace All Changes dialog box, enabling you to view traceability alerts.
	Help: Opens the Online Help and displays the help topic for the current context.

- ▶ The *menu bar*, located directly below the Quality Center project name, displays the names of menus from which you select commands.
- ▶ The *module toolbar*, located below the menu bar, contains buttons for frequently-used commands in the current Quality Center module.

Lesson 1 • Introducing Quality Center

TOOLS ▼

- The **Tools** button, located on the upper-right side of the window, enables you to change your user password and other user properties, open the Document Generator, and view version information for each Quality Center client component.

HELP ▼

- The **Help** button, located on the upper-right side of the window, enables you to access Quality Center's online resources.

LOGOUT

- The **Logout** button, located on the upper-right side of the window, enables you to exit and return to the Mercury Quality Center Login window.

The Mercury Tours Sample Web Site

Mercury Tours is the sample Web application used in this tutorial. It simulates a Web-based application for reserving flights, hotel rooms, car rentals, cruises, and vacation deals. You should now familiarize yourself with this application.

To explore Mercury Tours:

1 Open the Mercury Tours application.

Open a separate instance of your Web browser, and type this URL:
<http://<Quality Center server name>/mtours/index.html>

The Mercury Tours home page opens.

The screenshot shows the Mercury Tours website with the following elements:

- Header:** Mercury Tours logo, "one cool summer" banner with an ARUBA logo, and navigation links: SIGN-ON, REGISTER, SUPPORT, CONTACT.
- Left Sidebar:**
 - Home
 - Flights
 - Hotels
 - Car Rentals
 - Cruises
 - Destinations
 - Vacations
 - HTML VERSION (Use Java Version)
 - SAVINGS! Rent A Car (CLICK HERE)
- Main Content:**
 - Featured Destination:** ARUBA. Includes a globe icon, a photo of a beach, and text: "This island is surrounded by coral reefs, offers guaranteed sunshine and is blessed with beautiful beaches. Luxury resorts have taken up residence along most of the beachfronts on the southern coast, but there are still undeveloped areas on the exposed northern coast, and much of the interior is inhabited by nothing more substantial than goats."
 - Sign-in:** Date: May 20, 2002. "Find A Flight" button. Text: "Registered users can **sign-in here** to find the lowest fare on participating airlines." Fields for User Name and Password, and a "Sign-in" button.
 - Destinations:** "Find detailed information about [your destination](#)."
 - Vacations:** "Read about our [featured vacation destinations](#)."
 - Register:** "Register here to join Mercury Tours!"
 - Links:** (Empty button)
- Specials Table:**

Specials	
Atlanta to Las Vegas	\$398
Boston to San Francisco	\$513
Los Angeles to Chicago	\$168
New York to Chicago	\$198
Phoenix to San Francisco	\$213

2 Subscribe to Mercury Tours.

Click **Register here**. The Register page opens.

REGISTER

To create your account, we'll need some basic information about you. This information will be used to send reservation confirmation emails, mail tickets when needed and contact you if your travel arrangements change. Please fill in the form completely.

Note: Please fill all fields bellow to complete the registration.

Contact Information

First Name:

Last Name:

Phone:

Email:

Mailing Information

Address:

City:

State/Province:

Postal Code:

Country:

User Information

User Name:

Password:

Confirm Password:

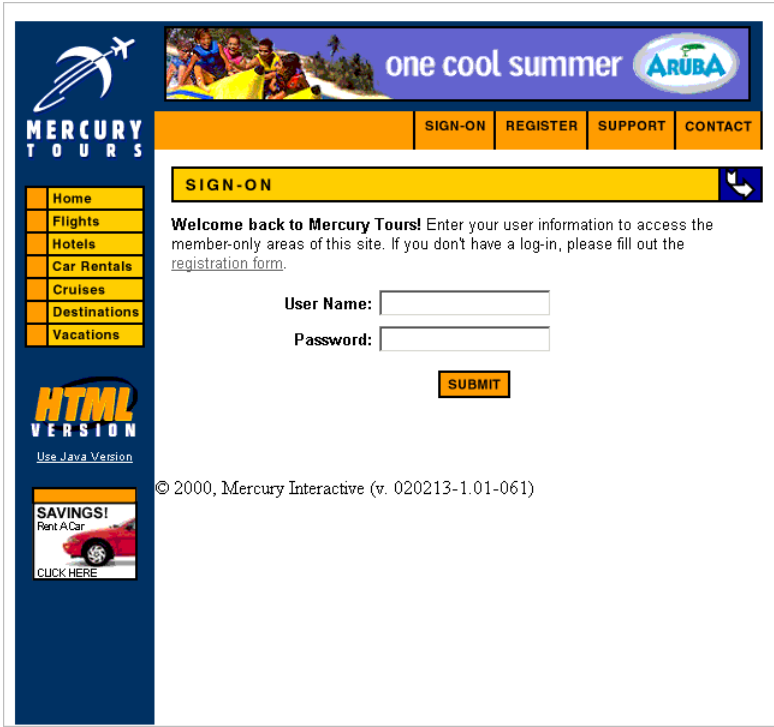
SUBMIT

Type your **Contact Information**, **Mailing Information**, and **User Information**, in the relevant fields.

Click **Submit**. A confirmation of your registration is displayed in the Register page.

3 Log on to Mercury Tours.

Click the **sign-in** link. The Sign-on page opens.



In the **User Name** and **Password** boxes, type your user name and password. Click **Submit**.

The Flight Finder page opens.

The screenshot shows the Mercury Tours website's Flight Finder interface. At the top, there's a banner for 'one cool summer ARUBA' with a photo of people on a beach. Below the banner is a navigation bar with links: SIGN-OFF, ITINERARY, PROFILE, SUPPORT, and CONTACT. The main heading is 'FLIGHT FINDER' with a small airplane icon. A text block explains the tool: 'Use our Flight Finder to search for the lowest fare on participating airlines. Once you've booked your flight, don't forget to visit the Mercury Tours Hotel Finder to reserve lodging in your destination city.' The 'Flight Details' section has a 'Type' dropdown set to 'Round Trip' (selected) and 'One Way'. 'Passengers' is set to '1'. 'Departing From' is 'Acapulco'. 'On' is 'May 20' with a 'View Calendar' button. 'Arriving In' is 'Zurich'. 'Returning' is 'May 21' with a 'View Calendar' button. The 'Preferences' section has 'Service Class' set to 'Economy class' (selected) and 'Airline' set to 'No Preference'. A 'CONTINUE' button is at the bottom.

4 Reserve a flight.

Follow the on-screen instructions to reserve a flight.

5 Explore other options.

Explore these options: **Hotels, Car Rentals, Cruises, Destinations, and Vacations.**

6 End your Mercury Tours session.

Click **Sign-off** to log off.



Now that you are familiar with the Quality Center testing process, the Quality Center modules, and the Mercury Tours sample Web site, you can proceed to Lesson 2, “Specifying Testing Requirements”.

2

Specifying Testing Requirements

You begin the testing process by specifying testing requirements in the Requirements module. Requirements describe in detail what needs to be tested in your application and provide the test team with the foundation on which the entire testing process is based.

You define the requirements in Quality Center by creating a *requirements tree*. This is a graphical representation of your requirements specification, displaying your requirements hierarchically. You can group and sort requirements in the tree, monitor task allocation, monitor the progress in meeting requirements, and generate detailed reports and graphs.

After you create tests in the Test Plan module, you can link requirements to tests (see “Planning Tests” on page 27). Later, after you begin logging defects, you can also associate requirements with defects (see “Adding and Tracking Defects” on page 79). In this way, you can keep track of your testing needs at all stages of the testing process. If a testing requirement changes, you can immediately identify which tests and defects are affected, and who is responsible for them.

In this lesson, you will learn about:

- Defining Requirements
- Viewing Requirements
- Modifying Requirements
- Converting Requirements

Defining Requirements

In this exercise, you will define requirements for testing the functionality of reserving cruises in Mercury Tours.

To define a requirement:

1 Open the QualityCenter_Demo project.

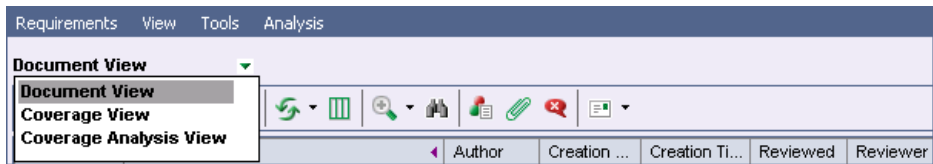
If the **QualityCenter_Demo** project is not already open, log on to the project. For more information, see “Starting Quality Center” on page 5.

2 Display the Requirements module.

Click the **Requirements** button on the sidebar to display the requirements tree.

3 Display the requirements tree in Document View.

Make sure the **Document View** of the requirements tree is displayed.



Note: This lesson uses the **Document View**. For more information on the other views, see “Creating and Viewing Requirements Coverage” on page 41.

4 Create a new requirement.



Click the **New Requirement** button. The New Requirement dialog box opens.

Type or select the following:

Name: Cruise Reservation

Product: Mercury Tours (HTML Edition)

Priority: 4-Very High

Type: Functional

Click **OK**. The **Cruise Reservation** requirement is added to the requirements tree.

5 Add a child requirement.

In the requirements tree, make sure that the new **Cruise Reservation** requirement is selected.



Click the **New Child Requirement** button to add a requirement below **Cruise Reservation**, at a lower hierarchical level. The New Requirement dialog box opens.

Type or select the following:

Name: Cruise Search

Product: Mercury Tours (HTML Edition)

Priority: 4-Very High

Type: Functional

Click **OK**. The **Cruise Search** requirement is added as a child of the **Cruise Reservation** requirement.

6 Add an additional child requirement.

In the requirements tree, select **Cruise Reservation**.

Repeat step 5. This time in the **Name** box, type **Cruise Booking**.

The **Cruise Booking** requirement is added as a child of the **Cruise Reservation** requirement.

ReqID	Name	Author	Creation ...	Creation Ti...	Reviewed	Reviewer
[RQ0003]	Mercury Tours Application	alex_qc	1/9/2003	9:07:29 AM	Reviewed	robert_qc
[RQ0140]	Cruise Reservation	michael_qc	5/18/2004	5:31:31 PM	Not Revie...	
[RQ0141]	Cruise Search	michael_qc	5/18/2004	5:31:58 PM	Not Revie...	
[RQ0142]	Cruise Booking	michael_qc	5/18/2004	5:32:27 PM	Not Revie...	
[RQ0020]	Application Security	alex_qc	1/9/2003	1:15:09 PM	Not Revie...	robert_qc
[RQ0042]	Application Client System	shelly_qc	1/15/2003	11:23:56 AM	Reviewed	alex_qc

Viewing Requirements

You can change the way requirements are displayed in the requirements tree. In this exercise, you will learn how to zoom in and out of the tree and display numeration.

To view requirements:

1 Make sure the Requirements module is displayed.

If the Requirements module is not displayed, click the **Requirements** button on the sidebar to display the requirements tree.

Make sure the requirements tree is displayed in **Document View**.

2 Zoom in and out of the requirement.

Select **Cruise Reservation** in the requirements tree.



To zoom in, click the **Zoom In** button on the toolbar. The requirements tree displays only the child requirements of **Cruise Reservation**.

Requirements View Tools Analysis						
Document View						
Zoomed in to: Cruise Reservation						
ReqID	Name	Author	Creation ...	Creation Ti...	Reviewed	Reviewer
[RQ0141]	2.1 - Cruise Search	michael_qc	5/18/2004	5:31:58 PM	Not Revie...	
[RQ0142]	2.2 - Cruise Booking	michael_qc	5/18/2004	5:32:27 PM	Not Revie...	

To reverse the zoom in action and display the entire requirements tree, click the **Zoom In** arrow and choose **Zoom Out To Root**.

3 Display numeration in the requirements tree.

To assign hierarchical numbers to each requirement in the tree, choose **View > Numeration**. As you make changes to the tree, the requirements are automatically renumbered. Note that the numbers are not related to the unique ReqID assigned to each requirement.

Requirements View Tools Analysis						
Document View						
ReqID	Name	Author	Creation ...	Creation Ti...	Reviewed	Reviewer
[RQ0003]	1 - Mercury Tours Application	alex_qc	1/9/2003	9:07:29 AM	Reviewed	robert_qc
[RQ0140]	2 - Cruise Reservation	michael_qc	5/18/2004	5:31:31 PM	Not Revie...	
[RQ0141]	2.1 - Cruise Search	michael_qc	5/18/2004	5:31:58 PM	Not Revie...	
[RQ0142]	2.2 - Cruise Booking	michael_qc	5/18/2004	5:32:27 PM	Not Revie...	
[RQ0020]	3 - Application Security	alex_qc	1/9/2003	1:15:09 PM	Not Revie...	robert_qc
[RQ0042]	4 - Application Client System	shelly_qc	1/15/2003	11:23:56 AM	Reviewed	alex_qc

4 Remove the numeration from the requirements tree.

To remove the hierarchical numbering, choose **View > Numeration**.

Modifying Requirements

You can modify the requirements in the requirements tree. In this exercise, you will learn how to copy, rename, move, or delete requirements.

To modify requirements:

1 Make sure the Requirements module is displayed.

If the Requirements module is not displayed, click the **Requirements** button on the sidebar to display the requirements tree.

2 Copy a requirement.



In the requirements tree, select **Cruise Reservation** and click the **Copy** button.



Click the **Paste** button.

A warning box opens because you are duplicating the requirement name. Click **OK**. The requirement is pasted below the selected requirement, at the same hierarchical level. `_Copy_` is added to the end of the requirement's name.

3 Rename the Cruise Reservation_Copy_ requirement.

Right-click the **Cruise Reservation_Copy_** requirement and choose **Rename**.

Edit the requirement name to **Hotel Reservation** and press **Enter**.

4 Move the Hotel Reservation requirement to a different location in the requirements tree.

Select **Hotel Reservation**.



Click the **Cut** button.

Select **Reservations Management**.



To paste **Hotel Reservation** below the selected requirement, click the **Paste** arrow and choose **Paste as Child**.

Click **Yes** to confirm.

[RQ0071]	[-] ● Reservations Management	robert_qc	1/25/2003	12:59:44 PM	Reviewed	alex_qc	3-High
[RQ0072]	○ View Reservations	robert_qc	1/25/2003	1:10:13 PM	Reviewed	alex_qc	3-High
[RQ0073]	○ Cancel Reservations	robert_qc	1/25/2003	1:10:44 PM	Reviewed	alex_qc	3-High
[RQ0146]	[-] ● Hotel Reservation	michael_qc	5/19/2004	10:57:01 AM	Not Revie...		4-Very High
[RQ0147]	○ Cruise Search	michael_qc	5/19/2004	10:57:01 AM	Not Revie...		4-Very High
[RQ0148]	○ Cruise Booking	michael_qc	5/19/2004	10:57:01 AM	Not Revie...		4-Very High



Tip: You can also drag requirements to a new location in the requirements tree.

5 Delete the Hotel Reservation requirement.

Select **Hotel Reservation**.



Click the **Delete** button.

Click **Yes** to confirm. The requirement and its children are deleted.

Converting Requirements

After you create the requirements tree, you use the requirements as a basis for defining your *test plan tree* in the Test Plan module. For more information, see Lesson 3, “Planning Tests” on page 27.

You can use the Convert to Tests wizard to assist you when designing your test plan tree. The wizard enables you to convert selected requirements or all requirements in the requirements tree to tests or subjects in the test plan tree.

In this exercise, you will convert the **Cruise Reservation** requirement to a subject in the test plan tree, and the child requirements of **Cruise Reservation** to tests.

To convert a requirement:

1 Make sure the Requirements module is displayed.

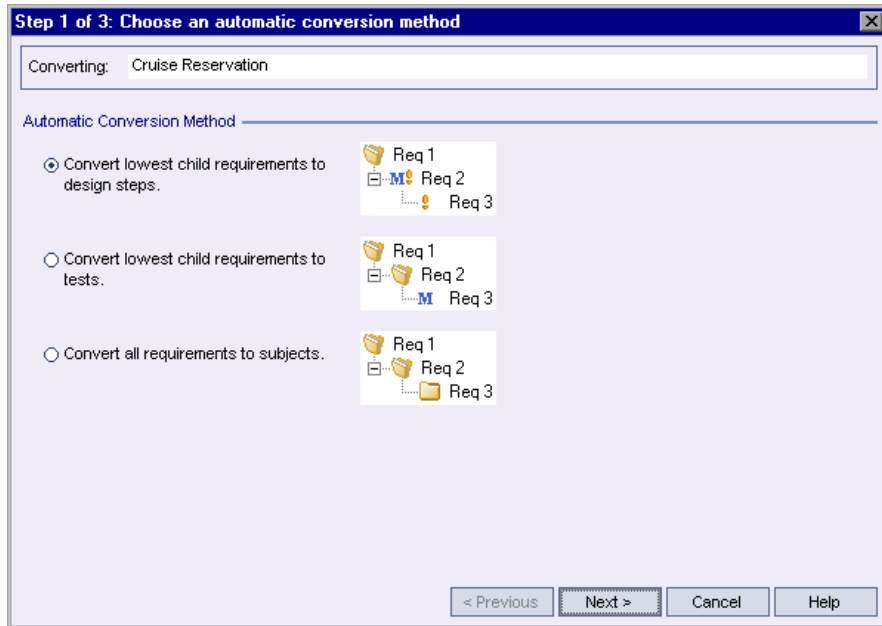
If the Requirements module is not displayed, click the **Requirements** button on the sidebar to display the requirements tree.

2 Select a requirement.

In the requirements tree, select **Cruise Reservation**.

3 Open the Convert to Tests wizard.

Choose **Tools > Convert to Tests > Convert Selected**. The Step 1 dialog box opens.

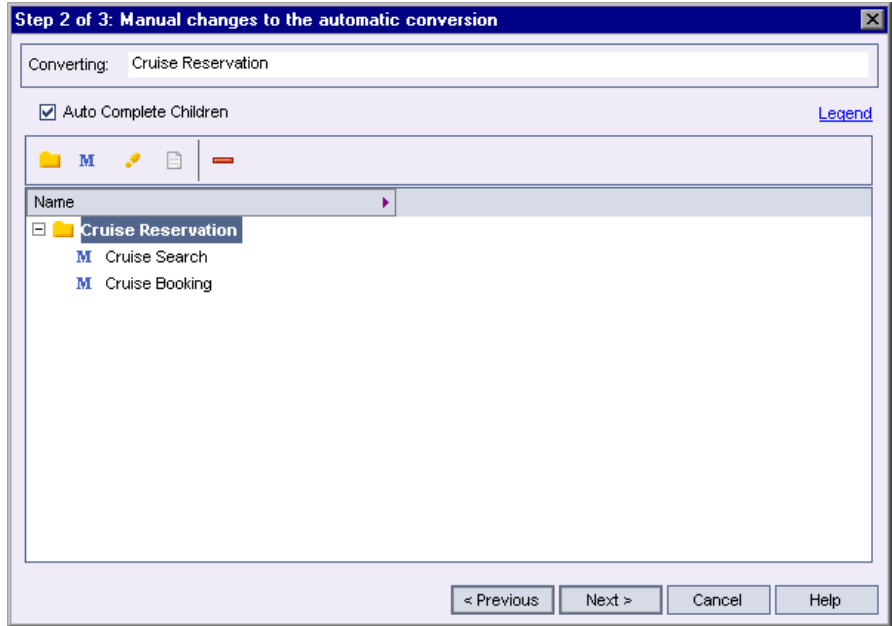


4 Choose an automatic conversion method.

Select the second option, **Convert lowest child requirements to tests**, to convert the selected requirements to tests.

5 Start the conversion process.

Click **Next** to begin converting the requirements. When the conversion process is complete, the results are displayed in the Step 2 dialog box.



6 Convert Cruise Search to a step and restore it.

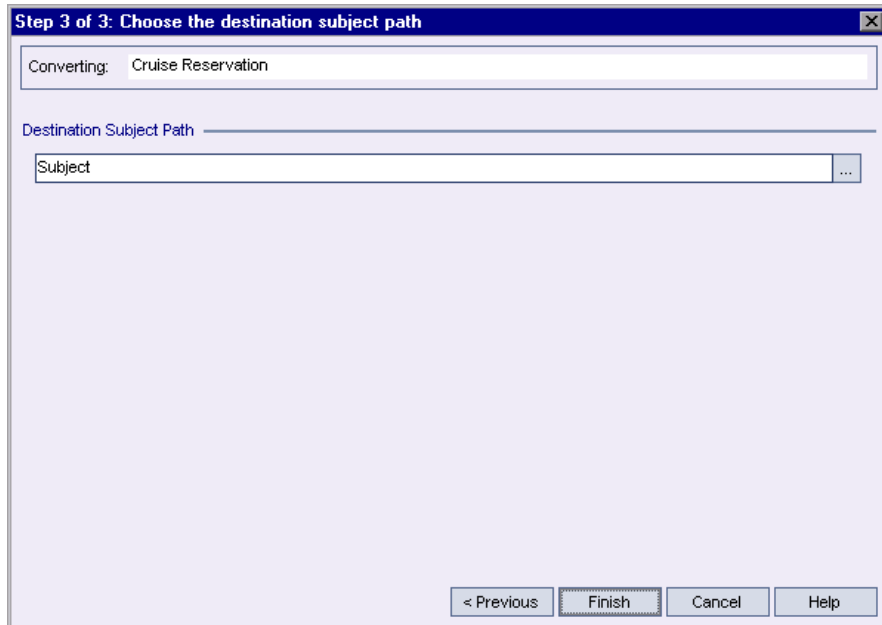


Select **Cruise Search** and click the **Convert to Step** button. The **Cruise Search** test is converted to a step.



With **Cruise Search** selected, click the **Convert to Test** button. The **Cruise Search** step is converted back to a test.

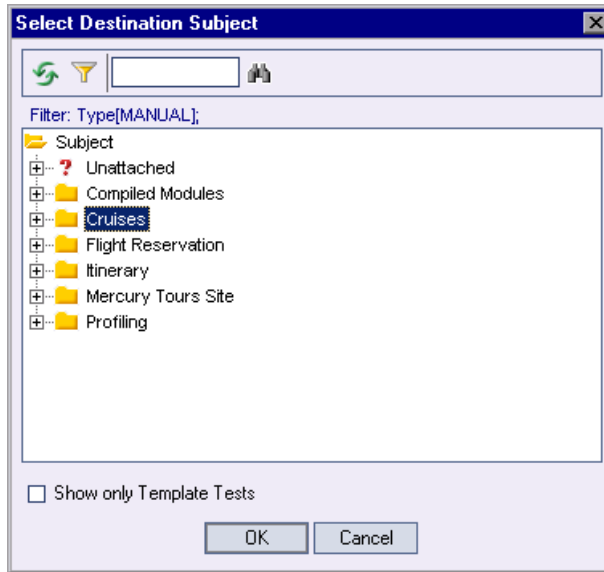
Click **Next**. The Step 3 dialog box opens.



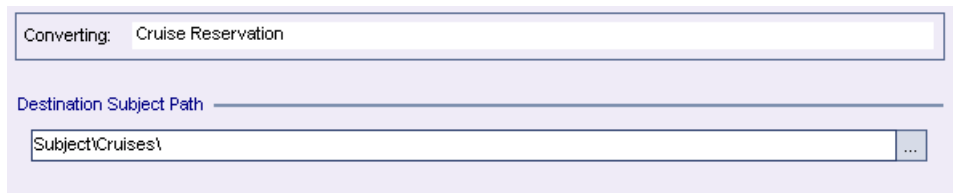
7 Choose the destination subject path.

In the **Destination Subject Path** box, click the browse button. The Select Destination Subject dialog box opens.

In the test plan tree, select the **Cruises** subject.



Click **OK** to close the Select Destination Subject dialog box. The **Destination Subject Path** box now indicates this path:



8 Finalize the conversion process.

Click **Finish**.

Click **OK** to confirm.

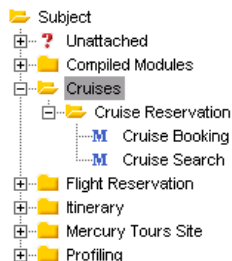
9 View the tests in the test plan tree.

Click the **Test Plan** button on the sidebar to display the Test Plan module.



In the test plan tree, select **Cruises** and click the **Refresh Selected** button. The test plan tree displays **Cruise Reservation** under **Cruises**.

Expand **Cruise Reservation**. The test plan tree displays the **Cruise Booking** and **Cruise Search** manual tests.



Now that you are familiar with defining requirements, viewing and modifying the requirements tree, and converting requirements, you can proceed to Lesson 3, “Planning Tests”. In Lesson 3, you will learn how to define your test plan tree.

3

Planning Tests

After you define your requirements, you need to determine your testing goals. To do this, examine your application, system environment, and testing process to outline the testing strategy for achieving your goals.

After you determine your testing goals, you build a *test plan tree*, which hierarchically divides your application into testing units, or *subjects*. For each subject in the test plan tree, you define tests that contain steps.

For each test step, you specify the actions to be performed on your application and the expected result. You can increase the flexibility of a test step by adding parameters.

To keep track of the relationship between your tests and your requirements, you can add links between them. By creating links, you ensure compliance with your requirements throughout the testing process.

After you design your tests, you can decide which tests to automate. When you automate a test, you can generate a test script and then complete it using other Mercury testing tools (for example, QuickTest Professional or WinRunner).

In this lesson, you will learn about:

- ▶ Developing a Test Plan Tree
- ▶ Designing Test Steps
- ▶ Copying Test Steps
- ▶ Calling Tests with Parameters
- ▶ Creating and Viewing Requirements Coverage
- ▶ Generating Automated Test Scripts

Developing a Test Plan Tree

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 a *test plan tree*. The test plan tree 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.

In Lesson 2, you converted the **Cruise Reservation** requirement and its child requirements to subjects and tests in the test plan tree (see “Converting Requirements” on page 21). In this exercise, you will add a subject and a test to the test plan tree in the Test Plan module.

To develop a test plan tree:

1 Open the QualityCenter_Demo project.

If the **QualityCenter_Demo** project is not already open, log on to the project. For more information, see “Starting Quality Center” on page 5.

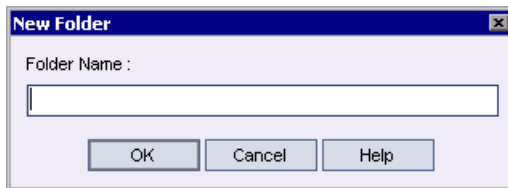
2 Display the Test Plan module.

Click the **Test Plan** button on the sidebar.

3 Add a subject folder to the test plan tree.



Select the **Cruises** subject folder and click the **New Folder** button. The New Folder dialog box opens.



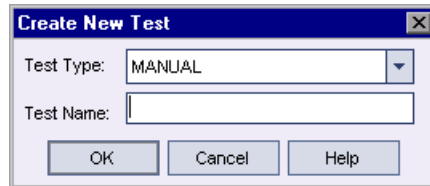
In the **Folder Name** box, type Cruise Cancellation. Click **OK**. The new subject folder appears under the **Cruises** subject folder in the test plan tree.

In the **Description** tab in the right pane, type a description of the subject:
This folder contains tests that verify the Cancel Reservation functionality.

4 Add a test to the subject folder.



Select **Cruise Cancellation** and click the **New Test** button. The Create New Test dialog box opens.



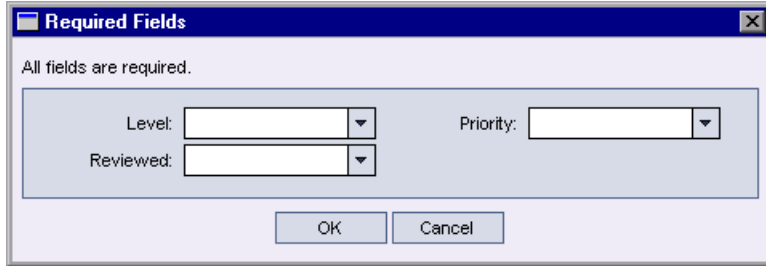
In the **Test Type** box, select **QUICKTEST_TEST** to create a QuickTest Professional test, or select **WR-AUTOMATED** to create a WinRunner test.

Notes:

- ▶ The **QUICKTEST_TEST** test type is only available if you have installed the QuickTest Professional Add-in from the Mercury Quality Center Add-ins page. For more information on installing the add-in, refer to the *Mercury Quality Center Installation Guide*.
 - ▶ If you selected **QUICKTEST_TEST** from the **Test Type** list, the **Template** box is available. You can create your new test based on another QuickTest Professional test, defined as a template test. Quality Center copies the template test to your new test without the test results.
-

In the **Test Name** box, type a name for the test: Cancel All Reservations.

Click **OK**. The Required Fields dialog box opens.



Select the following:

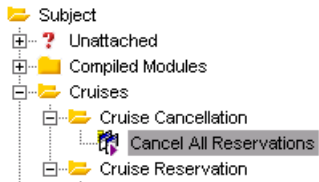
Level: Basic

Reviewed: Not Reviewed

Priority: 4-Very High

Click **OK**.

The new test is added to the test plan tree under the **Cruise Cancellation** subject folder.



5 Add a test description.

In the **Details** tab, you can see the test name, test designer, creation date, test status, and other information.

In the **Description** box, type a description for the test: The test verifies cancellation of cruise reservations in the Itinerary page.

Designing Test Steps

After you add a test to the test plan tree and define basic test information, you define test steps—detailed, step-by-step instructions that specify how to execute a test. A step includes the actions to be performed on your application and the expected results.

You can create test steps for both manual and automated tests. For manual tests, you complete test planning by designing the test steps. Using your plan, you can begin test execution immediately. For automated tests, you create an automated test script using a Mercury testing tool, a custom testing tool, or a third-party testing tool.

In this exercise, you will create the **Cruise Booking** test. This test verifies the process of booking a cruise through the Mercury Tours site.

To design a test step:

1 Make sure the Test Plan module is displayed.

If the Test Plan module is not displayed, click the **Test Plan** button on the sidebar.

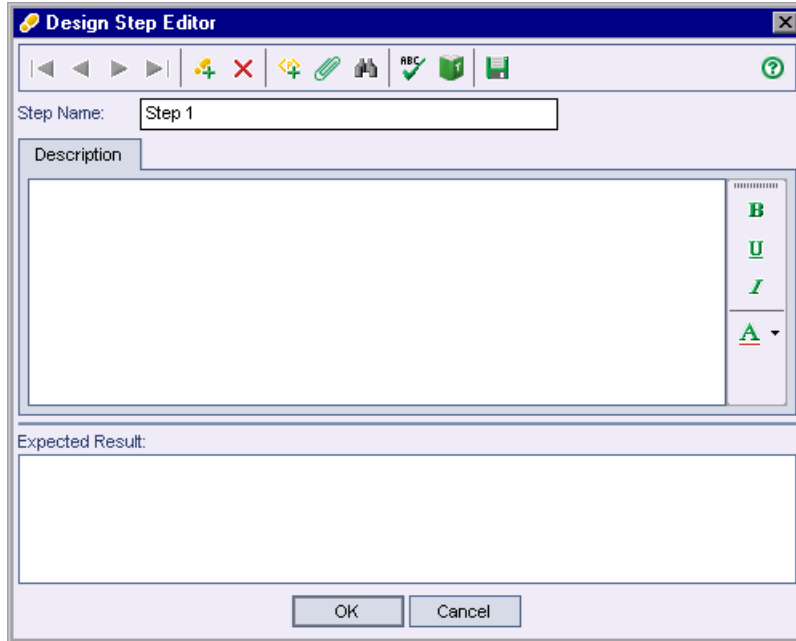
2 Display the Cruise Booking test.

Under the **Cruise Reservation** folder, select the **Cruise Booking** test.

3 Open the Design Step Editor.

Click the **Design Steps** tab.

Click the **New Step** button. The Design Step Editor opens.



In the **Step Name** box, a step name is displayed. The default name is the sequential number of the test step (**Step 1** if you are adding steps to a test for the first time).

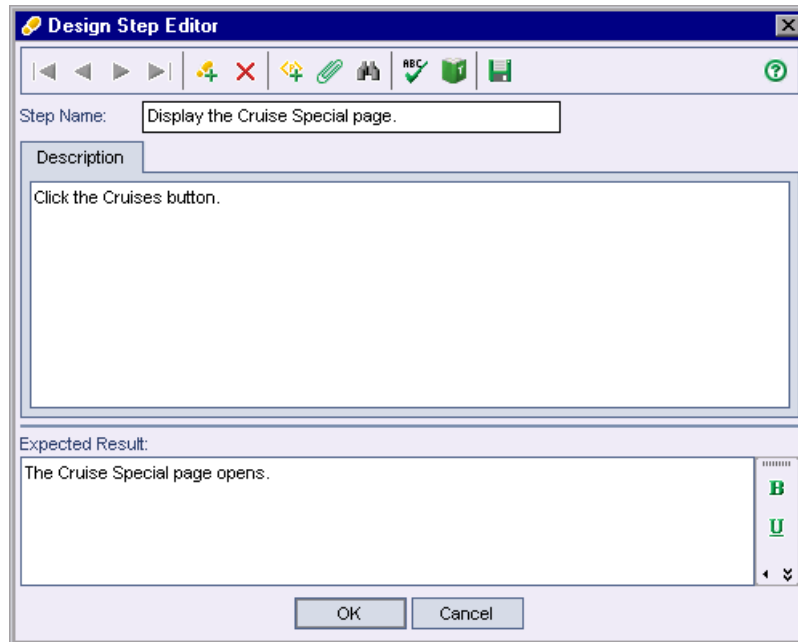
4 Define a step for displaying the Cruise Special page.

In the Design Step Editor, type the following:

Step Name: Display the Cruise Special page.

Description: Click the Cruises button.

Expected Result: The Cruise Special page opens.



5 Define a step for reserving the cruise.



In the Design Step Editor, click the **New Step** button. The **Step Name** box displays **Step 2**.

Type the following:

Step Name: Display the Cruise Reservation page.

Description: Click the Now Accepting Reservations button.

Expected Result: The Cruise Reservation page opens.

6 Define a step for booking the cruise.



In the Design Step Editor, click the **New Step** button. The **Step Name** box displays **Step 3**.

Type the following:

Step Name: Book the cruise.

Description: Enter passenger name, credit card information, and address. Click OK.

Expected Result: The Cruise Confirmation page opens.

7 Define a step for printing the cruise confirmation information.



In the Design Step Editor, click the **New Step** button. The **Step Name** box displays **Step 4**.

Type the following:

Step Name: Print cruise confirmation.

Description: Click the Print button.

Expected Result: A confirmation page is printed.

8 Define a step for logging off the Mercury Tours site.



In the Design Step Editor, click the **New Step** button. The **Step Name** box displays **Step 5**.

Type the following:

Step Name: Log off.

Description: Click the Sign-Off button.

Expected Result: Returns to the Sign-On page.

9 Close the Design Step Editor.

Click **OK**. The Design Steps tab displays the design steps.

Details * Design Steps Test Script Attachments * Reqs Coverage			
	Step Name	Description	Expected Result
	Display the Cruise Special page.	Click the Cruises button.	The Cruise Special page opens.
	Display the Cruise Reservation page.	Click the Now Accepting Reservations button.	The Cruise Reservation page opens.
	Book the cruise.	Enter passenger name, credit card information, and address. Click OK.	The Cruise Confirmation page opens.
	Print cruise confirmation.	Click the Print button.	A confirmation page is printed.
	Log off.	Click the Sign-Off button.	Returns to the Sign-On page.

Copying Test Steps

You can copy steps from another test in the same project or from a different project. In this exercise, you will copy the test steps from the **Cruise Booking** test and paste them into the **Cruise Search** test.


To copy a test step:


1 Display the Design Steps tab for the Cruise Booking test.

In the test plan tree, under **Cruise Reservation**, select the **Cruise Booking** test.

Click the **Design Steps** tab.

2 Select the steps that you want to copy.

Position the mouse pointer in the gray sidebar on the left. The mouse pointer changes to . Press the **Shift** or **Ctrl** key and select all the steps.

Details * Design Steps Test Script Attachments * Reqs Coverage			
			
	Step Name	Description	Expected Result
	Display the Cruise Special page.	Click the Cruises button.	The Cruise Special page opens.
	Display the Cruise Reservation page.	Click the Now Accepting Reservations button.	The Cruise Reservation page opens.
	Book the cruise.	Enter passenger name, credit card information, and address. Click OK.	The Cruise Confirmation page opens.
	Print cruise confirmation.	Click the Print button.	A confirmation page is printed.
	Log off.	Click the Sign-Off button.	Returns to the Sign-On page.

3 Copy the selected steps.



Click the **Copy Steps** button.

4 Paste the steps in the Cruise Search test.

In the test plan tree, under **Cruise Reservation**, select the **Cruise Search** test.



In the **Design Steps** tab, click the **Paste Steps** button. The test steps are copied to the Design Steps tab.

Calling Tests with Parameters

When you design test steps, you can include a call to a manual test. When you run the test, the test steps include the steps from the called test as part of the test. The test that you call is a *template* test. This is a reusable test that can be called by other tests. A template test can include *parameters*. A parameter is a variable that replaces a fixed value. You can modify the value of a parameter according to the test that is calling it, or for various instances of the same test.

For example, suppose you have a test that logs in a user with a specific password when you start your application. You need to call this test at the beginning of each test. In some cases, you may want to log on as a regular user while in other cases, you may want to log on as the administrator. To accomplish this, you create two parameters, <<<user name>>> and <<<password>>>, and modify the value of each parameter according to the type of test that is calling your template test.

In “Designing Test Steps” on page 31, you created a test for booking a cruise. In this exercise, you will enhance your test by calling the **Connect And Sign-On** test. This template test includes parameters for the Mercury Tours URL address and for the user name and password used to log on to the site.

To call a test with parameters:

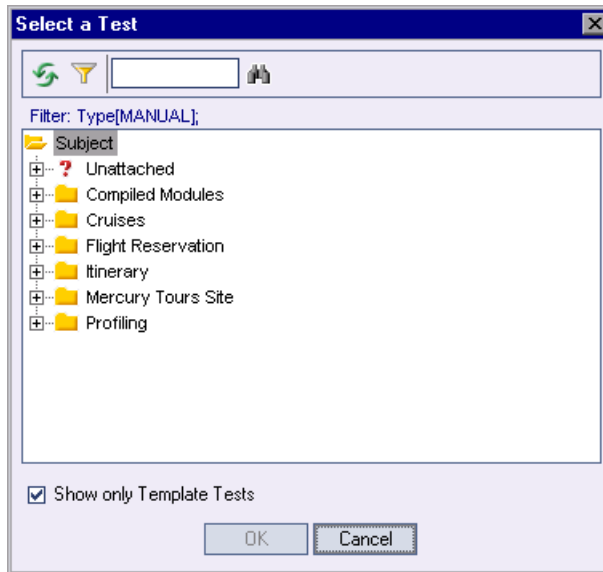
1 Display the Design Steps tab for the Cruise Booking test.

In the test plan tree, under **Cruise Reservation**, select the **Cruise Booking** test.

Click the **Design Steps** tab.

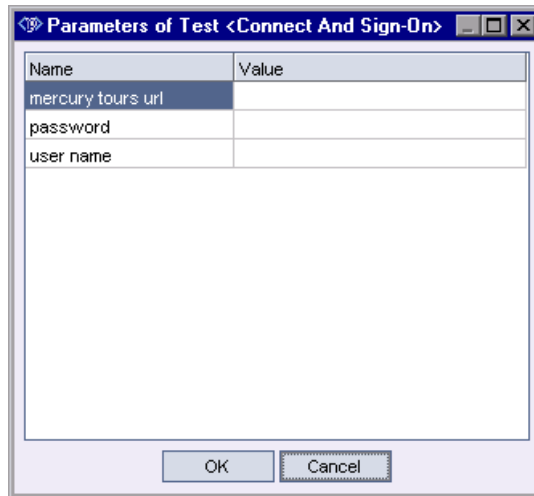
2 Select the test with parameters that you want to call.

Click the **Call to Test** button. The Select a Test dialog box opens.



In the **Find** box, type **Connect**, and click the **Find** button. The **Connect And Sign-On** test is highlighted.

Click **OK**. The Parameters of Test dialog box opens and displays the parameters contained in the called test.



3 Assign values to the parameters.

In the **Value** column, type the following:

mercury tours url: http://<Quality Center server name>/mtours/index.html

password: Leave blank. You will assign a value to this parameter when you run your test (see “Running Tests Manually” on page 66).

user name: your user name (use the same name as the one used in Mercury Tours on page 11).

Note: You can also assign values to parameters when you create a test that calls your test, when you add your test to a test set, or when you run your test.

Click **OK**. The **Call Connect And Sign-On** step is added to your design steps.

4 Reorder the steps.

Position the mouse pointer on the gray sidebar to the left of the **Call Connect And Sign-On** step. The mouse pointer changes to ➡. Click and drag the step to the top row.

Details				* Design Steps				Test Script				Attachments				* Reqs Coverage			
u	Step Name	Description	Expected Result																
	Call <Connect And Sign-On>	Call <Connect And Sign-On> with the following parameters: mercury_tours.url: password=?, user_name='mikedoe'																	
	Display the Cruise Special page.	Click the Cruises button.	The Cruise Special page opens.																
	Display the Cruise Reservation page.	Click the Now Accepting Reservations button.	The Cruise Reservation page opens.																
	Book the cruise.	Enter passenger name, credit card information, and address. Click OK.	The Cruise Confirmation page opens.																
	Print cruise confirmation.	Click the Print button.	A confirmation page is printed.																
	Log off.	Click the Sign-Off button.	Returns to the Sign-On page.																

5 Adjust the size of the rows.



Click the **Adjust Rows Height** button. Quality Center expands the size of the rows in which the text is too long to view. Note that if you close and reopen the Design Steps tab, the default row size is restored.

Creating and Viewing Requirements Coverage

It is essential that the tests in your test plan comply with your testing requirements. To help ensure compliance throughout the testing process, you can add links between your tests in the Test Plan module and your requirements in the Requirements module.

In the Test Plan module, you create *requirements coverage* by selecting requirements to link to a test. Alternatively, in the Requirements module, you create *tests 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.

To further ensure compliance with your testing requirements, after you log defects, you can link your tests to defects (see “Associating Defects with Tests” on page 89). This ensures that if a requirement changes, you can identify which tests and defects are affected, and who is responsible for them.

In these exercises, you will create requirements coverage and tests coverage. You will also view a graphic representation of tests coverage.

Linking Requirements to a Test

In this exercise you will view existing requirements coverage for the **Cruise Booking** test and create new requirements coverage by linking the **View Reservations** requirement to the **Cruise Booking** test.

To link a requirement to a test:

1 Make sure that the Test Plan module is displayed.

If the Test Plan module is not displayed, click the **Test Plan** button on the sidebar.

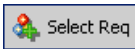
2 Display the Cruise Booking test.

Under the **Cruise Reservation** folder, select the **Cruise Booking** test.

3 Display the Reqs Coverage tab.

In the right pane, click the **Reqs Coverage** tab. The existing requirements coverage is displayed in the coverage grid. Note that the **Cruise Booking** requirement is already linked to the **Cruise Booking** test because you converted the requirement to a test (see “Converting Requirements” on page 21).

4 Display the requirements tree.



Click the **Select Req** button to show the requirements tree on the right.

Requirement	Reviewed
Cruise Booking	Not Reviewed

- Mercury Tours Application
- Cruise Reservation
- Application Security
- Application Client System
- Application Usability
- Application Performance
- Application Reliability
- Profile Management
- Booking System
- Flights Reservation Service
- Reservations Management

5 Search for the View Reservations requirement in the requirements tree.



In the **Find** box, type View and click the **Find** button. The **View Reservations** requirement is highlighted in the tree.

6 Add the requirement to the coverage grid.



Click the **Add to Coverage (Include Children)** button. The **View Reservations** requirement is added to the coverage grid.



Tip: You can also drag a requirement or requirement topic in the requirements tree to the coverage grid.

7 Hide the requirements tree.



Click the **Close** button.

Linking Tests to a Requirement

In this exercise, you will create tests coverage by linking the **Cruise Search** test to the **Cruise Booking** requirement.

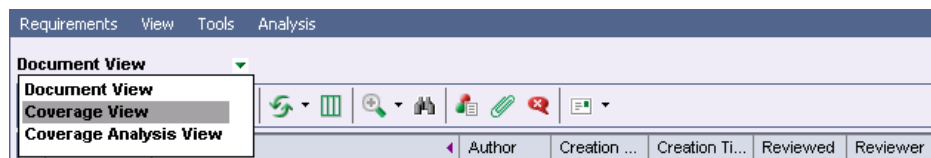
To link a test to a requirement:

1 Display the Requirements module.

Click the **Requirements** button on the sidebar.

2 Display the requirements tree in Coverage View.

Select the **Coverage View** of the requirements tree.



The Test Coverage tab is displayed in the right pane.

3 Display the Cruise Booking requirement.

In the requirements tree, under **Cruise Reservation**, select the **Cruise Booking** requirement. The existing tests coverage is displayed in the coverage grid. Note that the **Cruise Booking** test is already linked to the **Cruise Booking** requirement because you generated the test from the requirement (see “Converting Requirements” on page 21).

Analyzing Tests Coverage

After you create tests coverage, you can use the *Coverage Analysis View* in the Requirements module to analyze the breakdown of child requirements according to tests coverage.

In this exercise, you will analyze the **Mercury Tours Application** requirement. In the Coverage Analysis View, you will see that five of the requirement's children have a "Failed" status (one or more of the tests covered by the requirement failed) and seven have a "Not Covered" status (the requirement has not been linked to a test). You will then analyze the failed requirements in more detail.

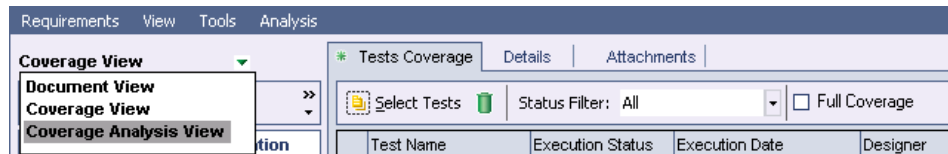
To analyze tests coverage:

1 Make sure that the Requirements module is displayed.

If the Requirements module is not displayed, click the **Requirements** button on the sidebar.

2 Display the requirements tree in Coverage Analysis View.

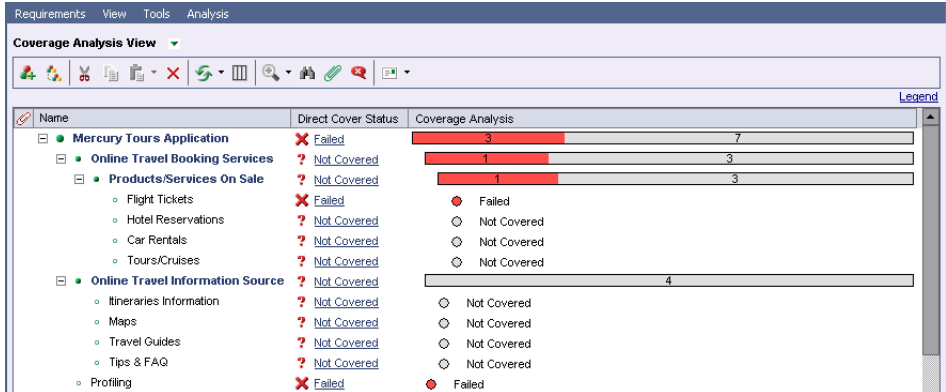
Select the **Coverage Analysis View** of the requirements tree.



The Coverage Analysis View is displayed.

3 Display the Mercury Tours Application requirement in Coverage Analysis View.

Expand the **Mercury Tours Application** requirement and its children.

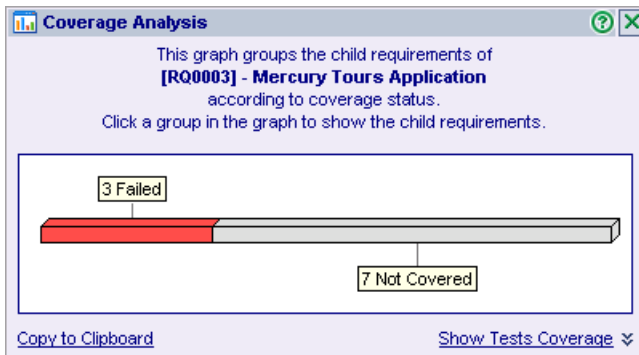


You can see that this requirement has a **Direct Cover Status** of “Failed”. In the Coverage Analysis column, you can see graphically that of the 10 children, only three have “Failed” and seven are not yet covered.

4 Display coverage analysis for the Mercury Tours Application requirement.



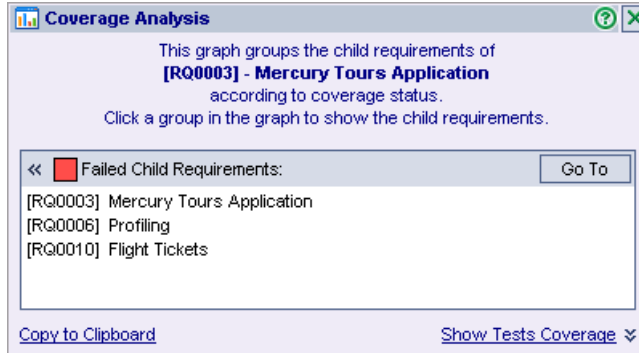
Select the **Mercury Tours Application** requirement and click the **Coverage Analysis** button. The Coverage Analysis dialog box opens.



This graph displays the three “Failed” requirements in red and the seven “Not Covered” requirements in gray.

5 Display the child requirements with a “Failed” status.

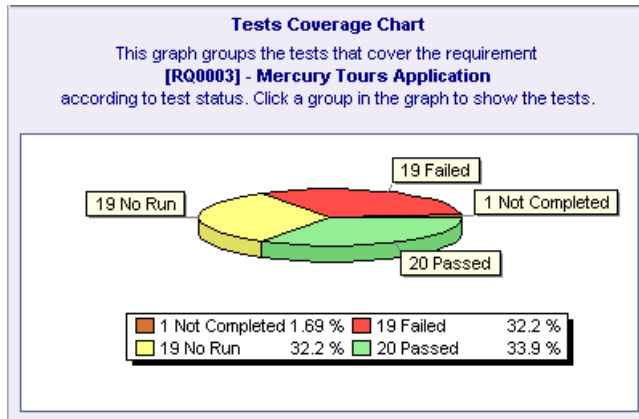
Click the red **Failed** area of the graph. The child requirements with a “Failed” status are listed.



Note that you can select a requirement and click **Go To** to highlight the requirement in the requirements tree.

6 Display tests coverage for the requirement.

Click the **Show Tests Coverage** link to extend the Coverage Analysis dialog box and display the Tests Coverage Chart.



You can see, for example, that 19 of the tests associated with the **Mercury Tours Application** requirement have a “Failed” status. The **Mercury Tours**

Application requirement has a direct cover status of “Failed” because 32.2% of the tests associated with this requirement failed.

Note that you can click a section of the chart to open the Tests Coverage dialog box and display the list of tests with the selected status.

7 Close the Coverage Analysis dialog box.



Click the **Close** button.

Generating Automated Test Scripts

Test planning involves deciding which tests to automate. If you choose to perform tests manually, the tests are ready for execution as soon as you define the test steps. If you choose to automate tests, you can generate test scripts and complete them using other Mercury testing tools (for example, QuickTest Professional or WinRunner).

Consider these issues when deciding whether to automate a test.

Do automate:	<ul style="list-style-type: none">• Tests that will run with each new version of your application to check the stability of basic functionality across the entire application (regression test).• Tests that use multiple data values for the same operation (data-driven tests).• Tests that are run many times (stress tests) and tests that check a multi-user client/server system (load tests).
Do not automate:	<ul style="list-style-type: none">• Tests that will be executed only once.• Tests that require immediate execution.• Tests that check how easy the application is to use (usability tests).• Tests that do not have predictable results.

In this exercise, you will generate an automated test script for the **Cruise Search** test.

To generate an automated test script:

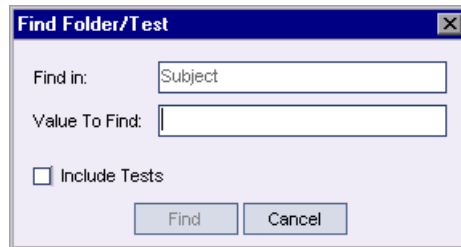
1 Display the Test Plan module.

Click the **Test Plan** button on the sidebar.

2 Locate the Cruise Search manual test to automate.



Select the **Subject** folder at the root of the test plan tree and click the **Find Folder/Test** button. The Find Folder/Test dialog box opens.



Do the following:

Value To Find: Type Cruise.

Include Tests: Select this checkbox to search for folders and tests.

Click **Find**. The Search Results dialog box opens and displays a list of possible matches.

Select **Cruises\Cruise Reservation\Cruise Search** and click the **Go To** button to highlight the test in the test plan tree.

3 Display the Design Steps tab.

In the right pane, click the **Design Steps** tab.

4 Generate a test script.



Click the **Generate Script** button.

Choose **QUICKTEST_TEST** to generate a QuickTest Professional test, or choose **WR-AUTOMATED** to generate a WinRunner test.

Note: The **QUICKTEST-TEST** test type is only available if you have installed the **QuickTest Professional** add-in from the Mercury Quality Center Add-ins page. For more information on installing the add-in, refer to the *Mercury Quality Center Installation Guide*.

The steps in the **Cruise Search** test are used to create an automated test script. In the test plan tree, note that the manual test icon **M** next to the test is now replaced with the automated test icon.

5 View the test script.

Click the **Test Script** tab.

To display and modify your test script in the testing tool in which it was created, click the **Launch** button.



Now that you are familiar with creating a test plan tree, designing test steps, copying test steps, calling a test with parameters, linking tests to requirements, analyzing tests coverage, and automating your manual tests, you can proceed to Lesson 4, “Running Tests”. In Lesson 4, you will learn how to run your manual and automated tests.

4

Running Tests

Running tests is the core of the testing process. As your application changes, you run manual and automated tests in your project to locate defects and assess quality.

You start by creating *test sets* and choosing which tests to include in each set. A test set is a group of tests in a Quality Center project designed to achieve specific testing goals. Quality Center enables you to control the execution of tests in a test set by setting conditions and scheduling the date and time for executing your tests.

After you define test sets, you can begin to execute your tests. When you run a test manually, you execute the test steps you defined in test planning. You pass or fail each step, depending on whether the actual results match the expected output. When you run a test automatically, Quality Center opens the selected testing tool, runs the test, and exports the test results to Quality Center.

In this lesson, you will learn about:

- ▶ Defining Test Sets
- ▶ Adding Tests to a Test Set
- ▶ Scheduling Test Runs
- ▶ Running Tests Manually
- ▶ Running Tests Automatically

Defining Test Sets

After you design tests in the Test Plan module, you create a *test sets tree*. A test sets tree enables you to organize your testing process by grouping *test sets* in folders and organizing them in different hierarchical levels in the Test Lab module. Test sets can include both manual and automated tests. You can also include the same test in different test sets.

To decide which test sets to create, think about the testing goals you defined at the beginning of the testing 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
Sanity	Tests the entire application at a basic level to check that it is functional and stable.
Normal	Tests the system in a more in-depth manner than the sanity test. A Normal test set can contain both positive and negative checks. Positive checks test that the application responds to input as expected. Negative tests attempt to crash an application to demonstrate that the application is not functioning properly.
Advanced	Checks the entire application, including its most advanced features.
Regression	Verifies that a change to one part of the application does not prevent the rest of the application from functioning.
Function	Tests a specific feature or a group of features in the application.

In this exercise, you will define the **Mercury Tours Site** test set.

To define a test set:

1 Open the QualityCenter_Demo project.

If the **QualityCenter_Demo** project is not already open, log on to the project. For more information, see “Starting Quality Center” on page 5.

2 Display the Test Lab module.

Click the **Test Lab** button on the sidebar.

3 Add a folder to the test sets tree.

In the test sets tree in the left pane, select the **Root** folder.

Click the **New Folder** button. The New Folder dialog box opens.



In the **Folder Name** box, type Mercury Tours 1.01 and click **OK**.

4 Add a test set to the Test Sets list.

Click the **New Test Set** button. The New Test Set dialog box opens.



Type the following:

Test Set Name: Mercury Tours Site

Description: This test set includes tests that verify the functionality of the Mercury Tours site.

Click **OK**. The **Mercury Tours Site** test set is added to the test sets tree in the left pane.

5 Define the test set details.

Click the **Test Set Properties** tab and select the **Details** link.

The screenshot shows the 'Test Set Properties' dialog box with the 'Details' tab selected. The 'Test Set Information' section contains a description: 'This test set includes tests that verify the functionality of the Mercury Tours site.' Below this, there are four fields: 'Close Date' (empty), 'Open Date' (5/20/2004), 'ITG Request Id' (empty), and 'Status' (Open). At the bottom, there is a 'User Defined Fields' section with a 'Level' dropdown menu.

By default, the **Status** indicates that the test set is **Open**.

Do the following:

Open Date: Select a date from the calendar. By default, Quality Center displays the current date.

Close Date: Select the planned closing date for the test set.

6 Set rules for the automated tests in the test set in the event of a test failure.

Click the **On Failure** link.

The screenshot shows the 'Test Set Properties' dialog box with the 'On Failure' tab selected. The 'On automated test failure' section contains the following options:

- If an automated test fails, rerun the test up to times
- Run cleanup test before each rerun of the test

Below these options is a 'Settings per test...' button. The 'On final test failure' section contains the following options:

- Do nothing
- Stop the test set
- Rerun the test set
 - Maximum number of times the test set can be rerun is

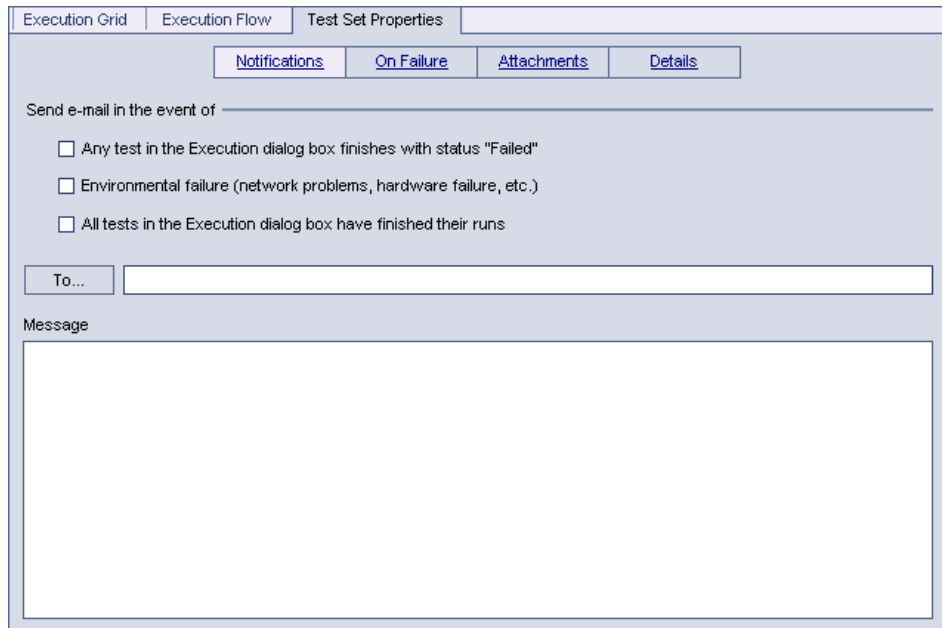
Do the following:

On automated test failure: Select the first check box and make sure that the number of times an automated test can be rerun is set to **1**.

On final test failure: Make sure that the **Do nothing** option is selected.

7 Instruct Quality Center to send an e-mail to specified users if certain events occur.

Click the **Notifications** link.



The screenshot shows the 'Test Set Properties' dialog box with the 'Notifications' tab selected. The 'On Failure' sub-tab is also active. Under the heading 'Send e-mail in the event of', there are three unchecked checkboxes: 'Any test in the Execution dialog box finishes with status "Failed"', 'Environmental failure (network problems, hardware failure, etc.)', and 'All tests in the Execution dialog box have finished their runs'. Below these is a 'To...' field with an empty text box. At the bottom is a large 'Message' text area.

Do the following:

Send e-mail in the event of: Select the first check box to send an e-mail notification if any test in the test set fails.

To: Type your e-mail address.

Message: Type the following:

This test failed. Please review the test results and submit a defect.

Note: If any filters are applied, it is recommended that you clear them:



► In the test plan tree, click the **Set Filter** button. In the Filter dialog box, click the **Clear Filter** button.



► In the Execution Grid, click the **Clear Filter/Sort** button and click **Yes** to confirm.

4 Add the Cruises folder to the test set.



Select the **Cruises** folder and click the **Add Tests to Test Set** button.

Click **Yes** to confirm. The Parameters of Test dialog box opens because you are adding a test with an unassigned parameter value to a test set. Click **Cancel** to close the dialog box. You will assign this parameter value when you run the Cruise Booking test (see “Running Tests Manually” on page 66).

The tests are added to the test set.

5 Add the Airline Preference test to the test set.



To search for the test, in the **Find** box, type **airline** and click the **Find** button. The **Airline Preference** test is highlighted in the test plan tree.



Click the **Add Tests to Test Set** button. The test is added to the test set.

6 Add the Number of Passengers test to the test set.



To search for the test, in the **Find** box, type **Number of Passengers** and click the **Find** button. The **Number of Passengers** test is highlighted in the test plan tree.



Click the **Add Tests to Test Set** button. The test is added to the test set.



Tip: You can also add tests by dragging a folder or test in the test plan tree to the Execution Grid or Execution Flow.

7 Close the test plan tree pane.

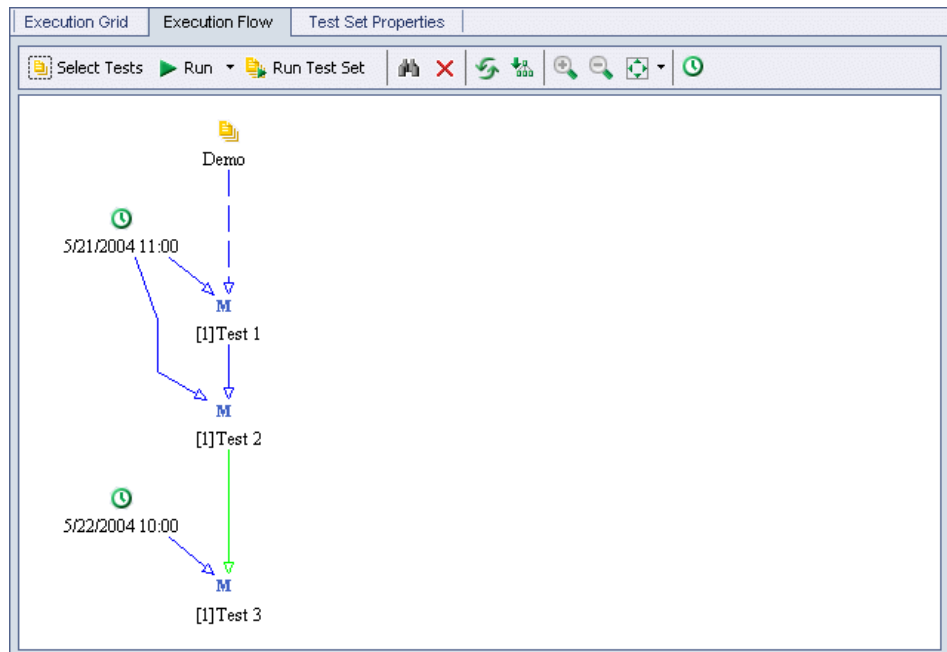


Click the **Close** button.




Scheduling Test Runs

The Execution Flow tab enables you to specify a date and time to execute a test and set conditions for it. A *condition* is based on the results of another specified test in the Execution Flow. By setting conditions, you can postpone the execution of the current test until another specified test finishes running or passes. You can also set the sequence in which to execute the tests.

For example, you can schedule *Test 2* to run only after *Test 1* finishes, and *Test 3* to run only if *Test 2* passes. You can also schedule *Test 1* and *Test 2* to run a day before *Test 3*. The Execution Flow displays the tests and their conditions in a diagram.



Note:

- ▶ A **dashed line**  arrow indicates a test with no conditions.
 - ▶ A **solid line**  arrow indicates a condition and can be blue or green. If the solid line is blue, it indicates that the condition status is set to “Finished”. If the solid line is green, it indicates that the condition is set to “Passed”.
 - ▶ A **Time Dependency**  icon is displayed for time dependent tests.
-

In this exercise, you will create a new test set and add to it three tests that verify the login procedure on the Sign-On page of the Mercury Tours site. Then, you will set the conditions for each test and specify when each test is to be executed.

To schedule a test run:

1 Make sure the Test Lab module is displayed.

If the Test Lab module is not displayed, click the **Test Lab** button on the sidebar.

2 Create a new test set.

In the Test Lab module, click the **Execution Flow** tab.



In the test sets tree, choose the **Mercury Tours 1.01** folder and click the **New Test Set** button. The New Test Set dialog box opens.

The screenshot shows a dialog box titled "New Test Set". It has three input fields: "Test Set Folder" with the text "Mercury Tours 1.01", "Test Set Name" which is empty, and "Description" which is a large empty text area. At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help".

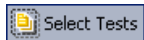
Type the following:

Test Set Name: Test Run Schedule

Description: This test set is used to explain how to schedule a test run.

Click **OK**. The **Test Run Schedule** test set is added to the test sets tree in the left pane.

3 Add a test from the Sign-On/Sign-Off folder to the Test Run Schedule test set.



Click the **Select Tests** button. The test plan tree is displayed in the right pane.



In the **Find** box in the test plan tree, type **sign** and click the **Find** button to search for the **Sign-On/Sign-Off** folder. The **Sign-On/ Sign-Off** folder is highlighted in the test plan tree.

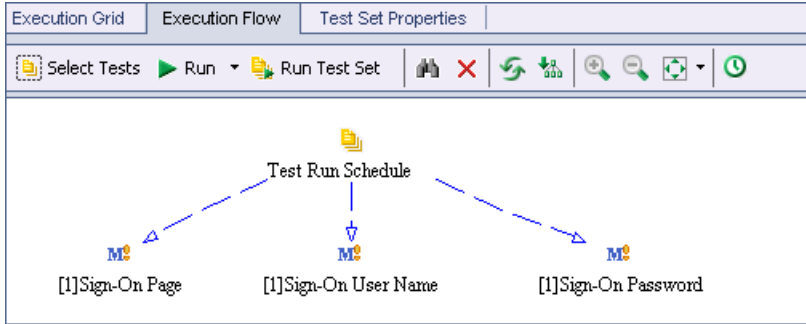


Select the **Sign-On Page** test. Click the **Add Tests to Test Set** button. The test is added to the test set.

4 Add two additional tests to the test set.

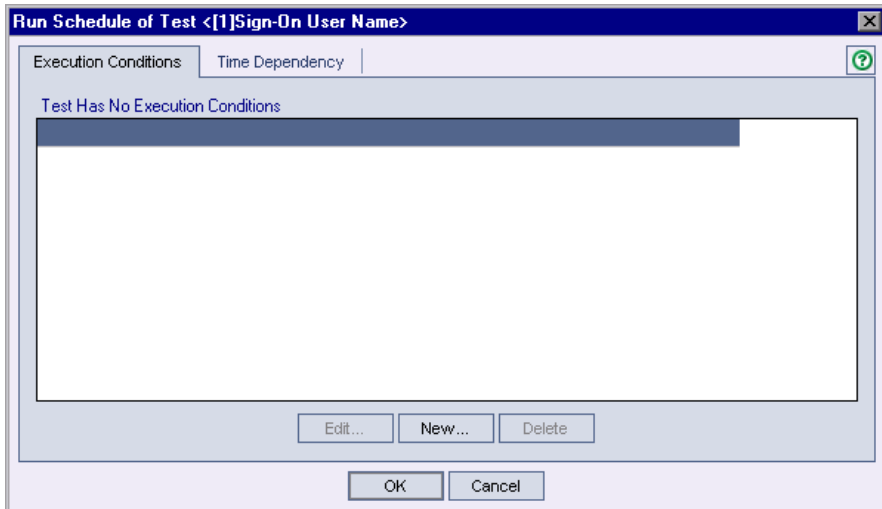
Drag the **Sign-On User Name** test to the Execution Flow area.

Double-click the **Sign-On Password** test to add it to the Execution Flow.

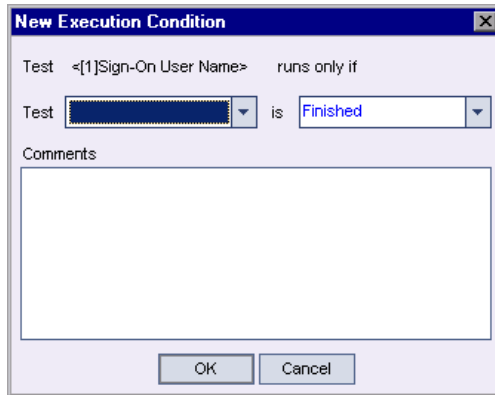


5 Add an execution condition to the Sign-On User Name test.

Right-click the **Sign-On User Name** test and choose **Test Run Schedule**. The Run Schedule of Test dialog box opens and displays the Execution Conditions tab.



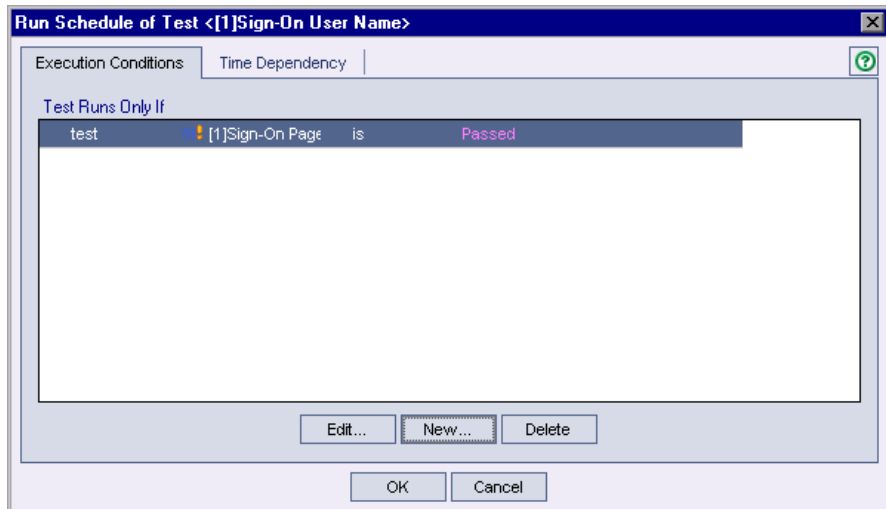
Click **New**. The New Execution Condition dialog box opens.



In the **Test** box, select <[1]Sign-On Page>.

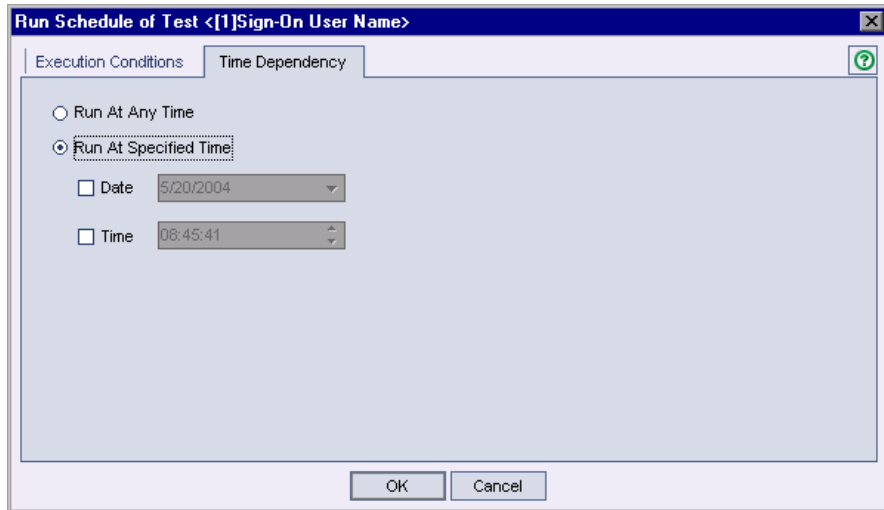
Select **Passed** to instruct Quality Center to execute the **Sign-On User Name** test only if the **Sign-On Page** test finishes executing and passes.

Click **OK**. The condition is added to the Run Schedule of Test dialog box.



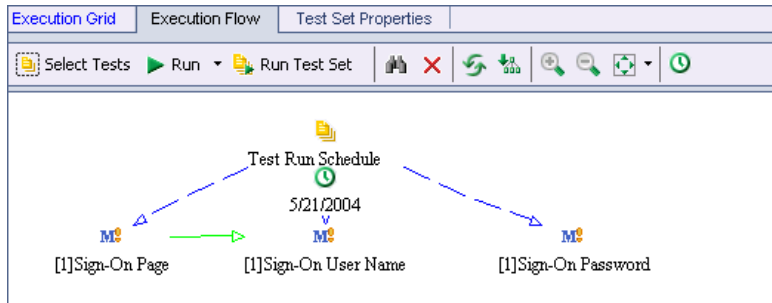
6 Add a time dependency condition to the Sign-On User Name test.

Click the **Time Dependency** tab.



Under **Run At Specified Time**, select the **Date** check box and select tomorrow's date.

Click **OK** to close the Run Schedule of Test dialog box. Your conditions are displayed in the Execution Flow diagram.



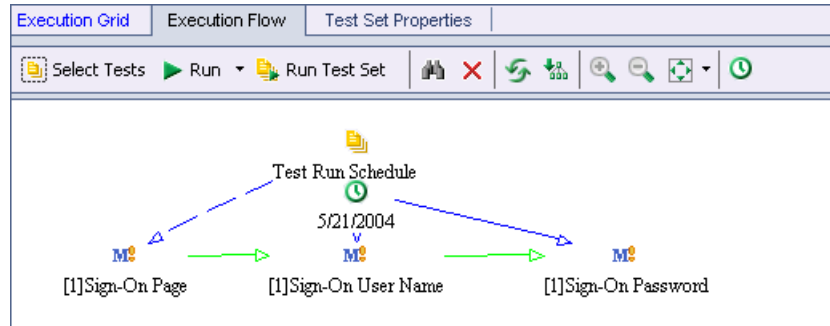
7 Add an execution condition to the Sign-On Password test.

Add the same execution condition as described in Step 5 on page 62 for the **Sign-On Password** test. This time select **Sign-On User Name** from the **Test** box in the New Execution Condition dialog box.

8 Add a time dependency condition to the Sign-On Password test.

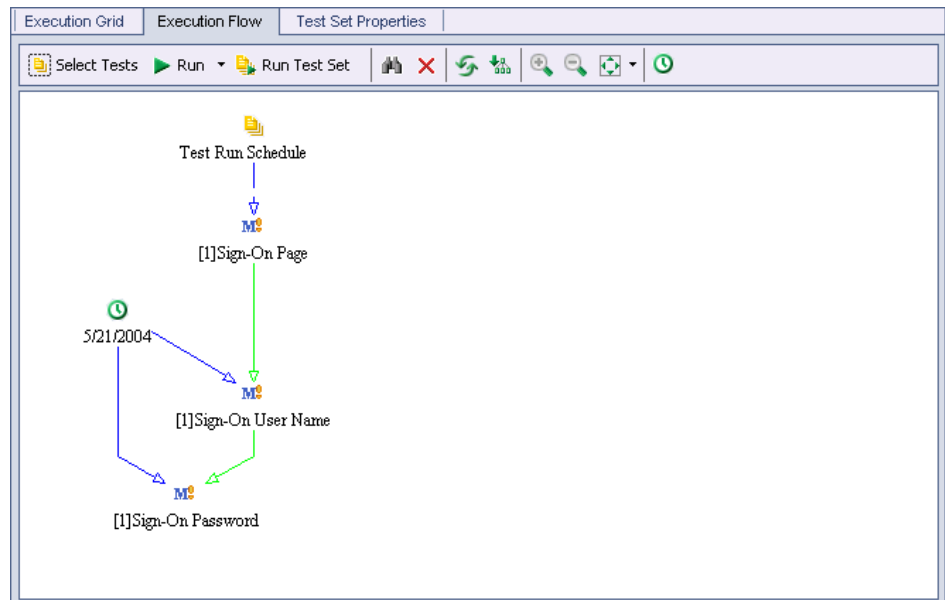
Add the same execution condition as described in Step 6 on page 64 for the **Sign-On Password** test.

Click **OK** to close the Run Schedule of Test dialog box. Your conditions are displayed in the Execution flow diagram.



9 Rearrange the tests in a hierarchical layout.

Click the **Perform Layout** button to clearly view dependencies between the tests.



Running Tests Manually

When you run a test manually, you follow the test steps and perform operations on your application. Then, you compare the expected results with the actual outcome and record the results. You can execute a manual test as many times as needed. The results are stored separately for each run.

Note that you can run both manual and automated tests manually. You can also choose to run a single test or to run an entire test set.

In this exercise, you will run the **Cruise Booking** test.

To run a test manually:

1 Make sure the Test Lab module is displayed.

If the Test Lab module is not displayed, click the **Test Lab** button on the sidebar.

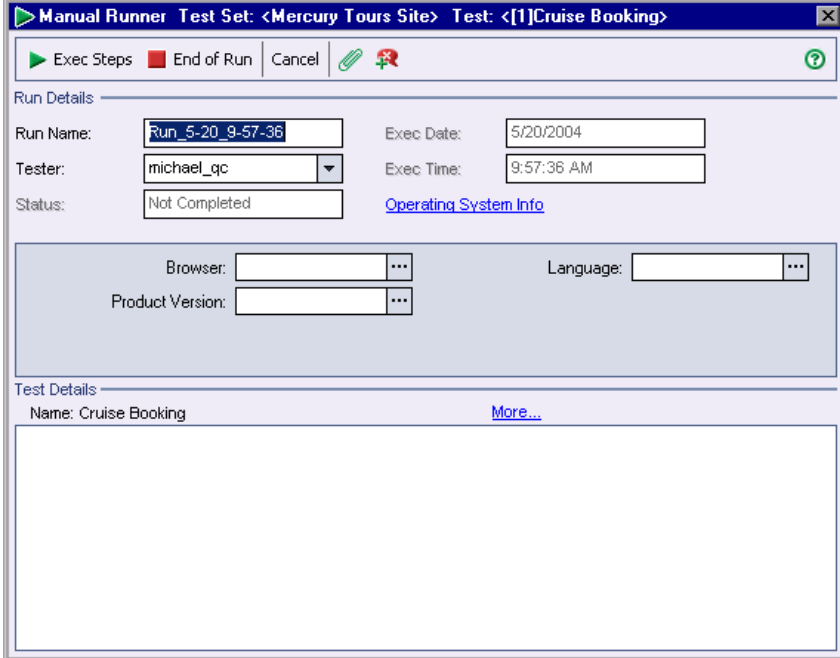
2 Select the Mercury Tours Site test set.

In the test sets tree, select the **Mercury Tours Site** test set.

3 Select the Cruise Booking test from the Execution Grid.

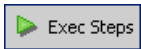
In the Execution Grid tab, select the **Cruise Booking** test.

Click the **Run** button. The Manual Runner dialog box opens.

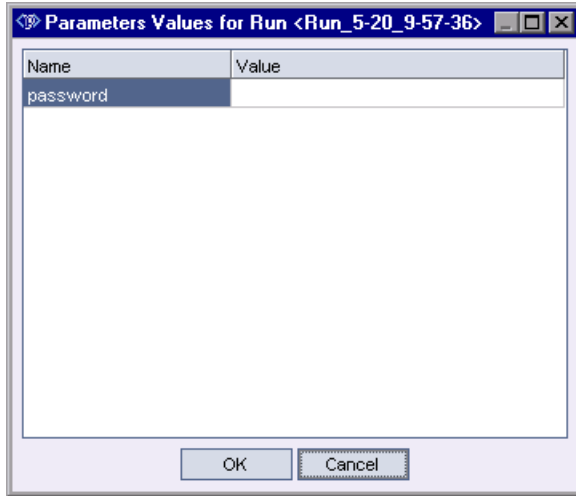


The Manual Runner dialog box is titled "Manual Runner Test Set: <Mercury Tours Site> Test: <[1]Cruise Booking>". It features a toolbar with "Exec Steps", "End of Run", "Cancel", a clipboard icon, and a help icon. The "Run Details" section includes fields for "Run Name" (Run_5-20_9-57-36), "Exec Date" (5/20/2004), "Tester" (michael_qc), "Exec Time" (9:57:36 AM), and "Status" (Not Completed). There is a link for "Operating System Info". Below this are fields for "Browser", "Language", and "Product Version", each with a dropdown arrow. The "Test Details" section shows "Name: Cruise Booking" and a "More..." link. The bottom half of the dialog is a large empty text area.

4 Start the test run.



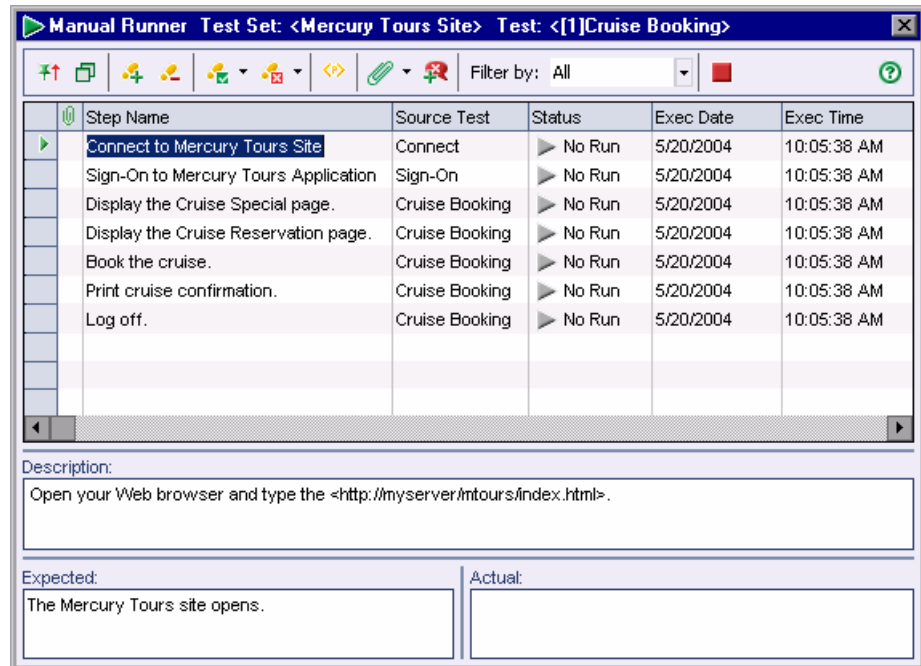
Click the **Exec Steps** button. The Parameters Values for Run dialog box opens because you have an unassigned parameter in the test.



5 Assign a value for the password parameter.

Click the **Value** box for **password** and type the same password you used in “The Mercury Tours Sample Web Site” on page 11.

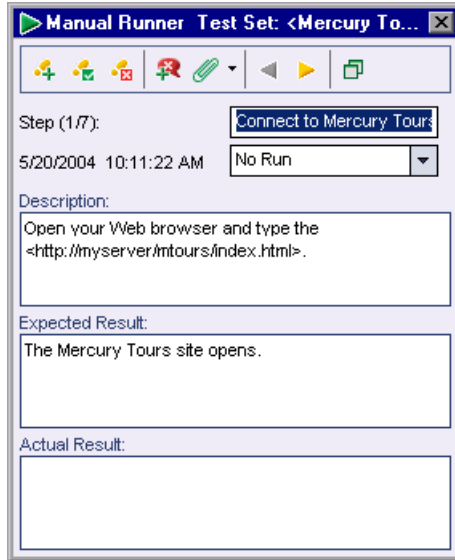
Click **OK**. The Manual Runner: Step Details dialog box opens.



6 Display the Manual Runner dialog box in a compact view.



Click the **Compact View** button. This enables you to conveniently read each step and record the results.



7 Perform the first step.

Perform the procedure described in the **Description** box.

If the actual result is the same as the expected result, in the **Actual** box, type: The Mercury Tours site opens.



Click the **Pass selected** button. Step 2 is displayed.

8 Perform the second step.

Perform the procedure described in the **Description** box.

If the actual result is the same as the expected result, in the **Actual** box, type: The Flight Finder page opens.



Click the **Pass selected** button. Step 3 is displayed.

9 Perform the third step.

Perform the procedure described in the **Description** box.

If the actual result is the same as the expected result, in the **Actual** box, type: The Cruise Special page opens.



Click the **Pass selected** button. Step 4 is displayed.

10 Perform the fourth step.

Perform the procedure described in the **Description** box.

If the actual result is different than the expected result, in the **Actual** box, type: The Flight Finder page opens instead of the Cruise Reservation page.



Click the **Fail selected** button.

Note: When you detect an application flaw while running the test, you can click the **Add Defect** button to open the Add Defect dialog box and add a defect. For the purpose of this exercise, you will submit this defect in “Adding New Defects” on page 81.

11 Return to the default display of the Manual Runner.

Click the **Back to Steps Grid** button. The default display of the Manual Runner: Step Details dialog box is displayed.

12 End the test run.

Click the **End of Run** button to end your test run.

13 View the test run results in the Execution Grid.

Following the execution of your test, you can view the test run results of your last run in the Execution Grid. Note that the test run status is updated from “No Run” to “Failed”.

Execution Grid						
		Execution Flow	Test Set Properties			
Select Tests Run Run Test Set						
		Plan: Test Name	Plan: Type	Status	Planned Host Name	Responsible Tester
		[1]Cruise Search	WR-AUTOMATED	▶ No Run		
		[1]Cruise Booking	MANUAL	✖ Failed		
		[1]Cancel All Reservations	WR-AUTOMATED	▶ No Run		
		[1]Airline Preference	WR-AUTOMATED	▶ No Run		
		[1]Number Of Passengers	QUICKTEST_TEST	▶ No Run		

14 View the results of each test step in the Last Run Result pane.



If the Last Run Result pane is not displayed, click the **Show Last Run Result** button on the bottom of the pane. The Last Run Result pane is displayed below the Execution Grid.

Last Run Result			
Step Name	Status	Exec Date	Steps Details
Connect to Mercury Tours Site	✔ Passed	5/20/2004	Description: Open your Web browser and type the .
Sign-On to Mercury Tours Application	✔ Passed	5/20/2004	
Display the Cruise Special page.	✔ Passed	5/20/2004	Expected: The Mercury Tours site opens.
Display the Cruise Reservation page.	✖ Failed	5/20/2004	Actual: The Mercury Tours site opens.
Book the cruise.	▶ No Run	5/20/2004	
Print cruise confirmation.	▶ No Run	5/20/2004	
Log off.	▶ No Run	5/20/2004	

Click each step to view the step's description, as well as the expected and actual results.

Note that you can view more detailed results in the Test Run Properties dialog box (see “Running Tests Automatically” on page 73).

Running Tests Automatically

When you run an automated test, Quality Center opens the selected testing tool automatically, runs the test on your local machine or on remote hosts, and exports the results to Quality Center.

Note that you can run all tests in a test set or run specific tests. You can run tests from the Execution Grid tab or the Execution Flow tab.

In this exercise, you will run an automated test from the Mercury Tours Site test set. After the test run is complete, you will view the test results from the Test Run Properties dialog box.

Note: To perform this exercise, you must have one of these tools installed on your computer:

- ▶ QuickTest Professional
- ▶ WinRunner

To integrate Quality Center with QuickTest Professional, you must install the QuickTest Professional Add-in and the Mercury Quality Center Connectivity Add-in from the Mercury Quality Center Add-ins page. To integrate Quality Center with WinRunner, you must install the Mercury Quality Center Connectivity Add-in from the Mercury Quality Center Add-ins page. For more information, refer to the *Mercury Quality Center Installation Guide*.

To run a test automatically:

1 Make sure the Test Lab module is displayed.

If the Test Lab module is not displayed, click the **Test Lab** button on the sidebar.

2 Display the Mercury Tours Site test set in the Execution Grid.

Click the **Execution Grid** tab.

In the test sets tree, select the **Mercury Tours Site** test set.

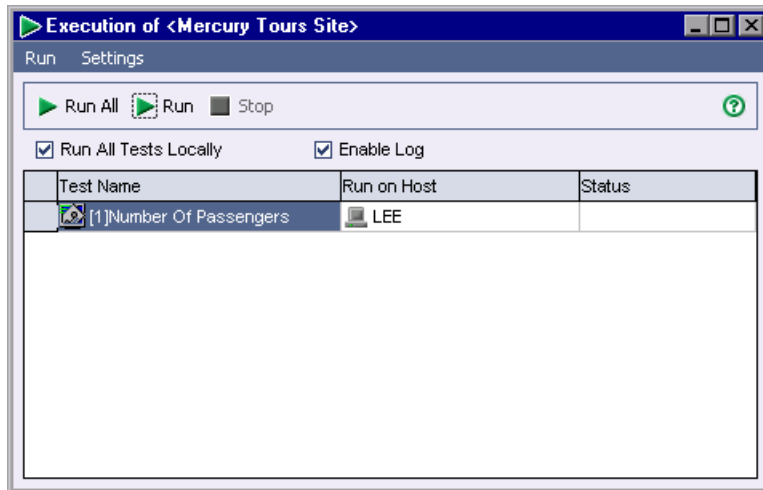
3 Select a test.

To run a WinRunner test, select the **Airline Preference** test.

To run a QuickTest Professional test, select the **Number of Passengers** test.



Click the **Run** button. The Execution dialog box opens and displays the selected test.



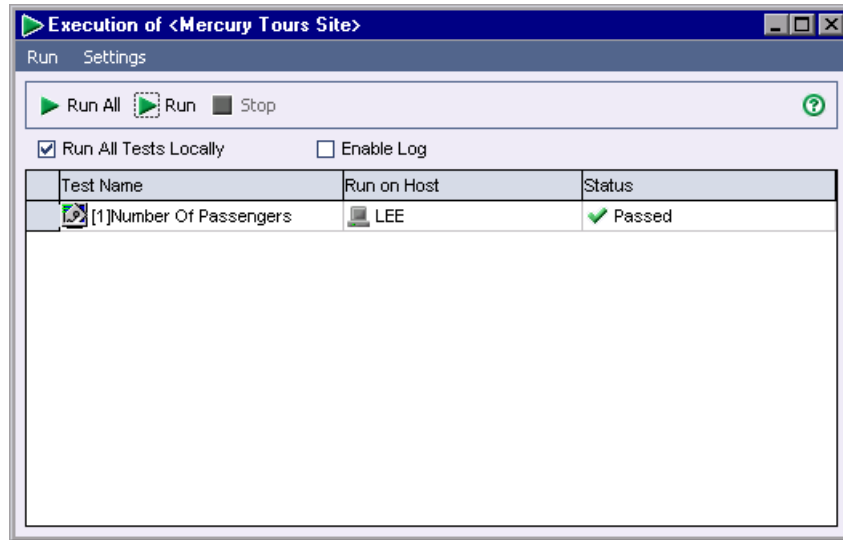
4 Set the test run settings.

Select the **Run All Tests Locally** check box to run the test on your local computer.

5 Run the test.



Click the **Run** button. Quality Center opens the selected testing tool automatically and runs the test. You view the test execution progress in the **Status** column.



6 Close the Execution dialog box.

After the test run is complete, choose **Run > Exit**.

7 View a summary of test results in the Execution Grid.

The Execution Grid displays the updated status for the test run. Results for each test step appear in the Last Run Result pane.

The screenshot shows the 'Execution Grid' interface with the following data:

Plan: Test Name	Plan: Type	Status	Planned Host Name	Responsible Tester
[1]Cruise Search	WR-AUTOMATED	No Run		
[1]Cruise Booking	MANUAL	Failed		
[1]Cancel All Reservations	WR-AUTOMATED	No Run		
[1]Airline Preference	WR-AUTOMATED	No Run		
[1]Number Of Passengers	QUICKTEST_TEST	Passed		

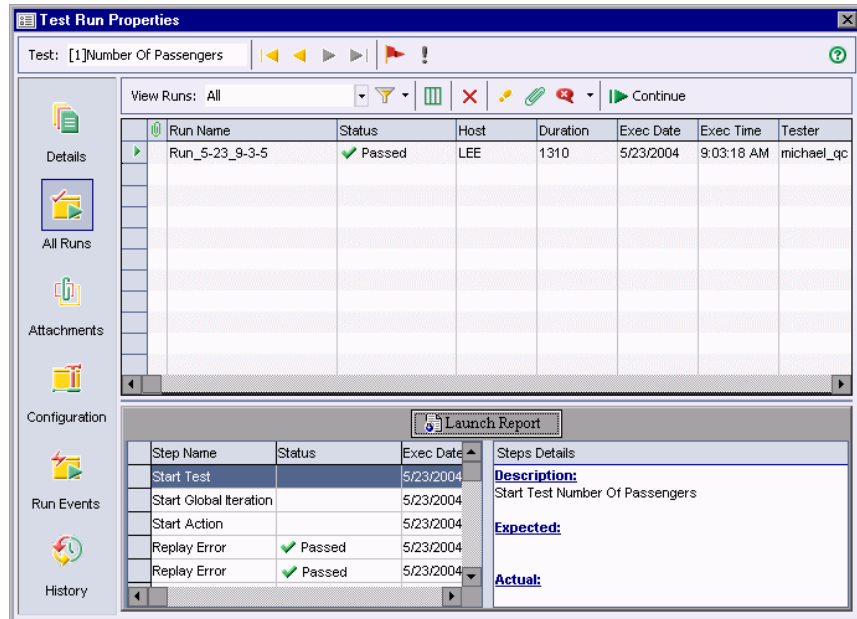
The 'Last Run Result' pane shows the following details:

Step Name	Status	Exec Date	Steps Details
Start Test		5/23/2004	Description: Start Test Number Of Passengers
Start Global Iteration		5/23/2004	
Start Action		5/23/2004	Expected:
Replay Error	✓ Passed	5/23/2004	Actual:
Replay Error	✓ Passed	5/23/2004	
Replay Warning	✓ Passed	5/23/2004	

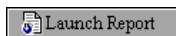
8 View detailed test results from the Test Run Properties dialog box.



In the Execution Grid, make sure your test is selected. Click the **Test Run Properties** button. The Test Run Properties dialog box opens and displays the All Runs view.



9 View the test results in your selected testing tool.



► To view the test results in QuickTest Professional, click the **Launch Report** button.



► To view the test results in WinRunner, click the **View Report** button.

10 View other test run information in the Test Run Properties dialog box.

- To view run details of the test, in the sidebar, click **Details**.
- To view any attachments to a test, in the sidebar, click **Attachments**.
- To view the parameters for a manual or WinRunner test, in the sidebar, click **Configuration**. Note that any changes that you make will be implemented in the next test run.

- ▶ To view the on failure rules for an automated test, in the sidebar, click **Run Events**. This view also enables you to change your rules. Note that any changes that you make will be implemented in the next test run.
- ▶ To view a list of changes made to the test run fields, in the sidebar, click **History**.

11 Close the Test Run Properties dialog box.

Choose **Run > Exit**.

12 Close your selected testing tool.

In QuickTest Professional or WinRunner, choose **File > Exit**.



Now that you are familiar with how to define and build test sets, schedule test runs, and run tests manually or automatically, you can proceed to Lesson 5, “Adding and Tracking Defects”. In Lesson 5, you will learn how to add and track defects.

5

Adding and Tracking Defects

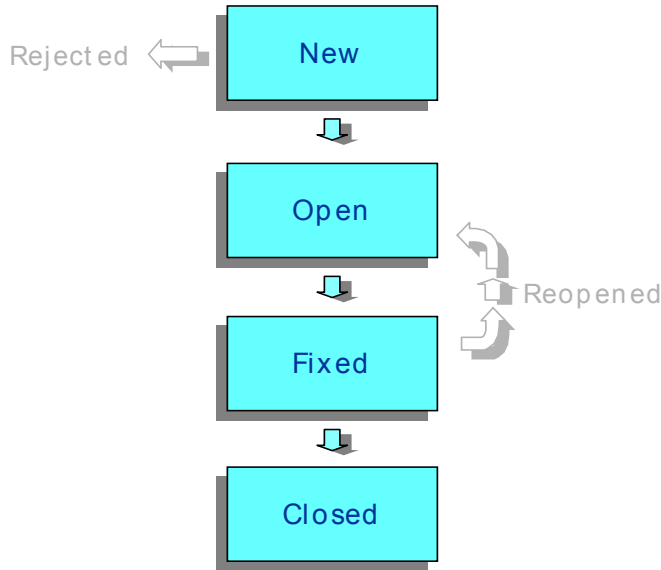
Locating and repairing defects is an essential phase in application development. Defects can be detected and submitted by developers, testers, and end users in all stages of the testing process. Using Quality Center, you can submit defects detected in the application and track them until they are repaired.

In this lesson, you will learn about:

- How to Track Defects
- Adding New Defects
- Matching Defects
- Updating Defects
- Mailing Defects
- Associating Defects with Tests
- Creating Favorite Views

How to Track Defects

When you submit a defect to a Quality Center project, it is tracked through these stages: *New*, *Open*, *Fixed*, and *Closed*. A defect may also be *Rejected* or it may be *Reopened* after it is fixed.



When you initially report the defect to the Quality Center project, it is assigned the status *New*, by default. A quality assurance or project manager reviews the defect and determines whether or not to consider the defect for repair. If the defect is refused, it is assigned the status *Rejected*. If the defect is accepted, the quality assurance or project manager determines a repair priority, changes its status to *Open*, and assigns it to a member of the development team. A developer repairs the defect and assigns it the status *Fixed*. You retest the application, making sure that the defect does not recur.

If the defect recurs, the quality assurance or project manager assigns it the status *Reopened*. If the defect is actually repaired, the quality assurance or project manager assigns it the status *Closed*.

Adding New Defects

You can add a new defect to a Quality Center project at any stage of the testing process. In this exercise you will submit the defect that was detected while running the **Cruise Booking** test.

To add a new defect:

1 Open the **QualityCenter_Demo** project.

If the **QualityCenter_Demo** project is not already open, log on to the project. For more information, see “Starting Quality Center” on page 5.

2 Display the **Defects** module.

Click the **Defects** button on the sidebar. The Defects Grid displays defect data in a grid. Each row in the grid displays a separate defect record.

3 Open the Add Defect dialog box.



Click the **Add Defect** button. The Add Defect dialog box opens. Note that fields in red are required.

Add Defect

Defect Information:

* Summary

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* Category:

* Detected By: michael_gc

* Project: Mercury Tours (HT)

* Severity:

* Reproducible: Y

* Subject:

* Detected on Date: 5/20/2004

* Detected in Version:

* Status: New

Regression: N

Description

Submit Close

4 Describe the defect.

Type or select the following:

Summary: Unable to reserve a cruise from the Cruise page.

Category: Defect

Severity: 2-Medium

Subject: Cruises

Detected in Version: Version 1.01

Description: The defect was detected in the Cruise Booking test. When you click the Now Accepting Reservations button, the Flight Finder page opens instead of the Cruise Reservation page.

5 Attach the URL address for the Mercury Tours page where the defect was detected.



Click the **Attach URL** button. The Attach URL dialog box opens.

Type the URL address of the Mercury Tours page:

`http://<server name>/mtours/servlet/com.mercurytours.servlet.CruisesServlet`

Click **OK**. The URL is displayed above the **Description** box.

6 Spell check your text.



Place the cursor in the **Description** box and click the **Check Spelling** button. If there are no errors, a confirmation message box opens. If errors are found, the Spelling dialog box opens and displays the word together with replacement suggestions.

7 Add the defect to the Quality Center project.

Click the **Submit** button.

8 Close the Add Defect dialog box.

Click **Close**. The defect is added to the Defects Grid.

Matching Defects

Matching defects enables you to eliminate duplicate or similar defects in your project. Each time you add a new defect, Quality Center stores lists of keywords from the **Summary** and **Description** fields. When you search for similar defects, keywords in these fields are matched against other defects.

Note that keywords are more than two characters and letter case does not affect your results. Quality Center ignores these articles (a, an, the); coordinate conjunctions (and, but, for, nor, or); boolean operators (and, or, not, if, or then); and wildcards (?, *, []).

In this exercise, you will match defects by comparing a selected defect with all other existing defects in the **QualityCenter_Demo** project.

To match defects:

1 Make sure that the Defects module is displayed.

If the Defects module is not displayed, click the **Defects** button on the sidebar.

2 Select Defect ID 37.

In the Defects Grid, select **Defect ID 37**.



Note: If you cannot find **Defect ID 37**, click the **Clear Filter/Sort** button to clear the filter that is applied to the grid.

3 Find similar defects.



Click the **Find Similar Defects** button.

The results are stored in the Similar Defects dialog box, sorted by the percentage of detected similarity.

Defect ID	Status	Similar	Summary
3	Open	40%	The list of flights is given when Departing date after Returning
39	Open	40%	There is no confirmation message on Cancel Reservations
38	Closed	41%	Cancel All Reservation button is available when there are no reservations
1	Open	42%	The list of flights is given even when past date set as Departing date
34	Closed	44%	Clicking on Back to Home button opens Find Flight page
2	Reopen	46%	The list of available flights is not given, when Departing and Returning dates
14	Closed	48%	All flight are shown when time preference is set to NOON

Description:
Test Set: Mercury Tours Functionality
Test: [1]Returning Date
Run: Run_9-2_10-51-7
Step: Step 3: Departing Date After Returning Date
Description:

Comments:

Close Help

Close the Similar Defects dialog box.

Updating Defects

Tracking the repair of defects in a project requires that you periodically update defects. You can do so directly in the Defects Grid or in the Defect Details dialog box. Note that the ability to update some defect fields depends on your permission settings.

In this exercise, you will update your defect information by assigning the defect to a member of the development team, changing the severity of the defect, and adding a comment.

To update a defect:

1 Make sure that the Defects module is displayed.

If the Defects module is not displayed, click the **Defects** button on the sidebar.

2 Update the defect directly in the Defects Grid.

In the Defects Grid, select the defect you added in “Adding New Defects” on page 81.

To assign the defect to a member of the development team, in the **Assigned To** box in the defect record, click the down arrow and select **james_qc** from the list.

3 Open the Defect Details dialog box.



Click the **Defect Details** button. The Defect Details dialog box opens.

Defect: 44 Unable to reserve a cruise from the Cruise page.

Page 1 Page 2

* Category: Defect * Status: New

* Project: Mercury Tours (HT) * Detected in Version: Version 1.01

* Subject: Cruises * Detected on Date: 5/20/2004

* Reproducible: Y Regression: N

* Detected By: michael_gc * Severity: 2-Medium

Assigned To: james_gc Priority:

ITG Request Id:

Planned Actual

Planned Closing Version: Closed in Version:

Estimated Fix Time: (Hours) Actual Fix Time: (Hours)

Closing Date:

OK Cancel

4 Change the severity level of the defect.

In the **Severity** box, select **5-Urgent**.



5 Add a new comment to explain the change in the severity level.

Click **Description** in the sidebar.

Add Comment

Click the **Add Comment** button. A new section is added to the **Comments** box, displaying your user name and the current date.

Type: This defect also occurs in Mercury Tours version 1.0.



6 View the Attachments.

Click **Attachments** in the sidebar. Note that the URL attachment is listed.



7 View the History.

Click **History** in the sidebar to view the history of changes made to the defect. For each changed field, Quality Center displays the date of the change, the name of the person who made the change, and the new value.

8 Close the Defect Details dialog box.

Click **OK** to exit the dialog box and save your changes.

Mailing Defects

You can send an e-mail about a defect to another user. This enables you to routinely inform development and quality assurance personnel about defect repair activity. Quality Center includes a **Go To Defect** link in the e-mail, which enables the recipient to go directly to the defect.

In this exercise, you will e-mail your defect to your mailbox.

To mail a defect:

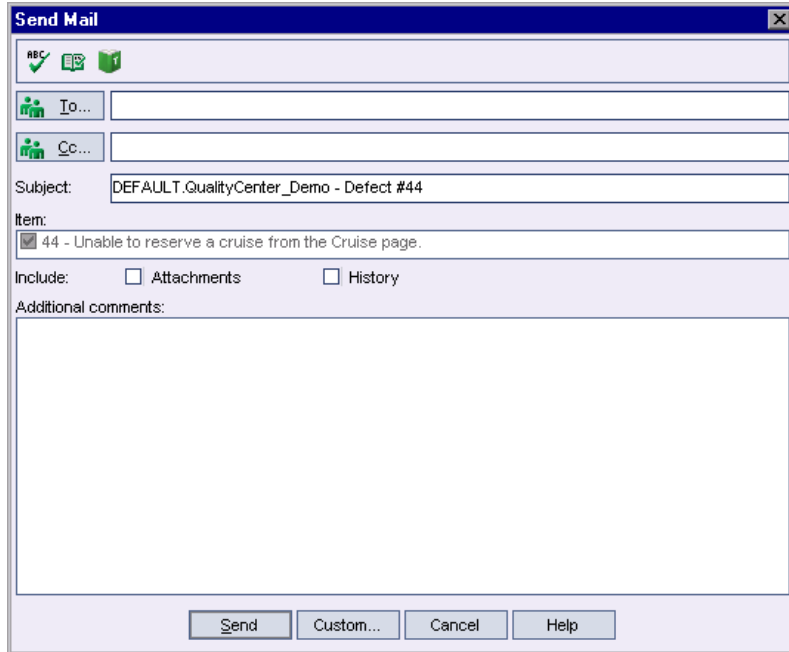
1 Make sure that the Defects module is displayed.

If the Defects module is not displayed, click the **Defects** button on the sidebar.

2 Select a defect.



Select the defect you added in “Adding New Defects” on page 81, and click the **Mail Defects** button. The Send Mail dialog box opens.



3 Type a valid e-mail address.

In the **To** box, type your e-mail address.

4 Include the attachments and history of the defect.

In the **Include** box, select **Attachments** and **History**.

5 Add your comments.

Under **Additional comments**, type: I will send you more information tomorrow.

6 E-mail the defect.

Click **Send**. A message box opens. Click **OK**.

7 View the e-mail.

Open your mailbox and view the defect you sent.

Associating Defects with Tests

You can associate a test in your test plan with a specific defect in the Defects Grid. This is useful, for example, when a new test is created specifically for a known defect. By creating an association, you can determine if the test should be run based on the status of the defect. Note that any requirements covered by the test are also associated with the defect.

You can also create an association during a manual test run. When you submit a defect, an association is created automatically between the test run and the new defect.

In this exercise, you will associate your defect with the **Cruise Booking** test in the Test Plan module, and view the associated test in the Defects Grid.

To associate a defect with a test:

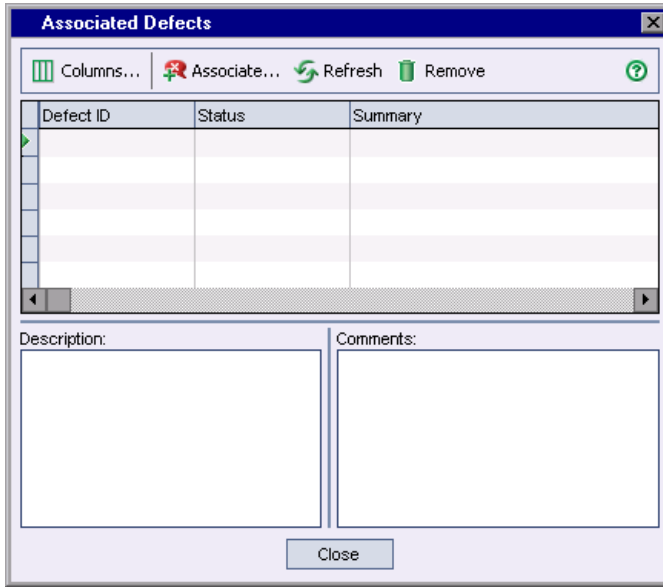
1 Display the Test Plan module.

Click the **Test Plan** button on the sidebar.

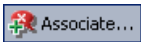
2 Select the Cruise Booking test.

In the test plan tree, under **Cruises**, expand **Cruise Reservation** and right-click the **Cruise Booking** test. Choose **Associated Defects**.

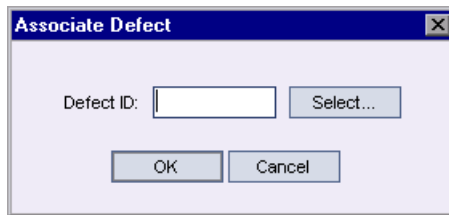
The Associated Defects dialog box opens.



3 Add an associated defect.



Click the **Associate** button. The Associate Defect dialog box opens.



Click the **Select** button. The Associate Defect dialog box opens.

Select your defect and click the **Associate** button.



Note: If you cannot find your defect in the Associated Defect grid, click the **Clear Filter/Sort** button to clear the filter that is applied to the grid.

Click **OK** to confirm. Click **Close** to close the Associate Defect dialog box. Your defect is added to the Associated Defects grid.

Click **Close** to close the Associated Defects dialog box.

4 View the associated test in the Defects Grid.

Click the **Defects** button on the sidebar.

Select your defect in the Defects Grid, and choose **View > Associated Test**. The Associated Test dialog box opens.

- ▶ The **Details** tab displays a description of the test.
- ▶ The **Design Steps** tab lists the test steps.
- ▶ The **Test Script** tab displays the test script if the test is automated.
- ▶ The **Attachments** tab lists any attachments.
- ▶ The **Reqs Coverage** tab displays the requirements covered by the test.

Creating Favorite Views

A *favorite view* is a view of a Quality Center window with the settings you applied to it. For example, in the Defects Grid, you may want to apply a filter to display only the defects that were detected by you, are assigned to you, or have the status “Not Closed”.

Note: You can save a favorite view of the Test Grid, Execution Grid, Defects Grid, and all Quality Center reports and graphs.

In this exercise, you will create a favorite view in the Defects Grid.

To create a favorite view:

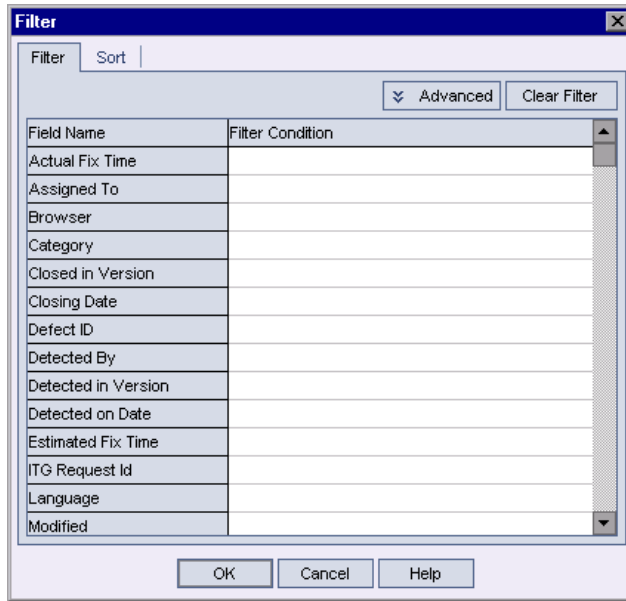
1 Make sure that the Defects module is displayed.

If the Defects module is not displayed, click the **Defects** button on the sidebar.

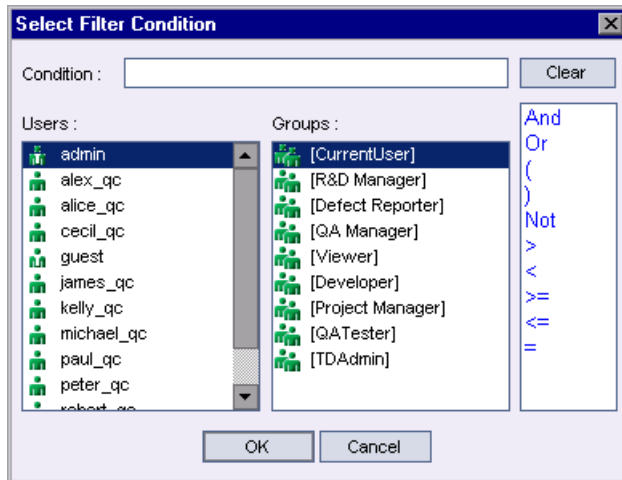
2 Define a filter to view defects you detected that are not closed.



Click the **Set Filter/Sort** button. The Filter dialog box opens.



Click the **Filter Condition** box that corresponds to **Detected By**. Click the **Browse** button. The Select Filter Condition dialog box opens.



Under **Users**, select your Quality Center login user name (**alice_qc**, **cecil_qc**, or **michael_qc**). Click **OK** to close the Select Filter Condition dialog box.

For the **Status** field, click the **Filter Condition** box. Click the **Browse** button. The Select Filter Condition dialog box opens.

In the right pane, select the logical expression **Not**.

In the left pane, select **Closed**.



Click **OK** to close the Select Filter Condition dialog box.

Click **OK** to close the Filter dialog box. The Defects Grid displays the defects you detected that are not closed.

3 Add a favorite view.



Click the **Add to Favorites** button and choose **Add to Favorites**. The Add Favorite dialog box opens.

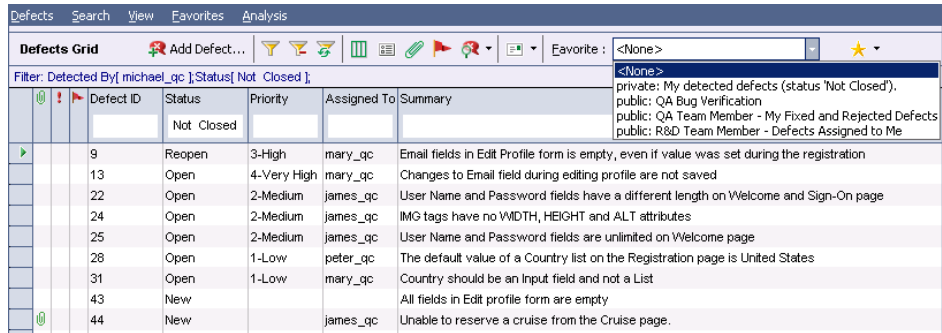


In the **Name** box, type: My detected defects (status 'Not Closed').

You can add a favorite view to either a *public* folder or a *private* folder. Views in the public folder are accessible to all users. Views in the private folder are accessible only to the person who created them. For the purpose of this exercise, select **Private**.

Lesson 5 • Adding and Tracking Defects

Click **OK**. The new view name is added to the **Favorite** list.



The screenshot shows the 'Defects Grid' application window. The title bar includes 'Defects', 'Search', 'View', 'Favorites', and 'Analysis'. Below the title bar is a toolbar with icons for 'Add Defect...', search, and other functions. A 'Filter' bar shows 'Detected By[michael_gc];Status[Not Closed]'. The main area contains a table with columns: Defect ID, Status, Priority, Assigned To, and Summary. To the right of the table is a 'Favorite' list with a dropdown menu showing '<None>' and a star icon. The table contains the following data:

Defect ID	Status	Priority	Assigned To	Summary
9	Reopen	3-High	mary_gc	Email fields in Edit Profile form is empty, even if value was set during the registration
13	Open	4-Very High	mary_gc	Changes to Email field during editing profile are not saved
22	Open	2-Medium	james_gc	User Name and Password fields have a different length on Welcome and Sign-On page
24	Open	2-Medium	james_gc	IMG tags have no VWIDTH, HEIGHT and ALT attributes
25	Open	2-Medium	james_gc	User Name and Password fields are unlimited on Welcome page
28	Open	1-Low	peter_gc	The default value of a Country list on the Registration page is United States
31	Open	1-Low	mary_gc	Country should be an Input field and not a List
43	New			All fields in Edit profile form are empty
44	New		james_gc	Unable to reserve a cruise from the Cruise page.



Now that you are familiar with how to add new defects, search for similar defects, update defects, e-mail defects, associate defects with tests, and create favorite views, you can proceed to Lesson 6, “Tracing Changes”. In Lesson 6, you will learn how to trace changes made to your requirements, tests, and defects.

6

Tracing Changes

You can instruct Quality Center to create alerts automatically and send e-mails to notify those responsible when changes occur in your project that may impact the testing process. You can also add your own follow up alerts.

To generate automatic *traceability alerts*, your Quality Center administrator can activate traceability notification rules, which are based on associations you make in Quality Center between requirements, tests, and defects. When an entity in your project changes, you are notified of any associated entities that may be impacted by the change.

Quality Center also enables you to add your own *follow up flag* to a specific test, test instance, or defect to remind yourself to follow up on an issue. When the follow up date arrives, Quality Center sends you an e-mail.

In this lesson, you will learn about:

- ▶ Triggering a Traceability Alert
- ▶ Viewing the Traceability Alert
- ▶ Creating Follow Up Alerts

Triggering a Traceability Alert

When changes are made to a requirement, test, or defect in your project, Quality Center notifies you by adding a trace changes flag to the changed entity and/or sending you an e-mail notification.

Quality Center can generate traceability alerts for these changes:

- ▶ When a requirement changes (excluding change of status), the designers of the associated tests are notified.
- ▶ When a requirement changes and it has associated tests, all project users are notified.
- ▶ When the status of a defect changes to “Fixed”, the responsible tester of the associated test instance is notified.
- ▶ When a test runs successfully, the users assigned to the associated defects are notified.

In this exercise, you will generate a traceability alert for a test by changing the associated requirement. To do this, you will log on as a different user and make a change to the **Cruise Booking** requirement. Later, when you log on again as yourself, you will see the associated **Cruise Booking** test flagged.

To trigger a traceability alert:

1 Log on to the QualityCenter_Demo project as a different user.

LOGOUT

If the **QualityCenter_Demo** project is already open, log off by clicking the **Logout** button on the right side of the window.

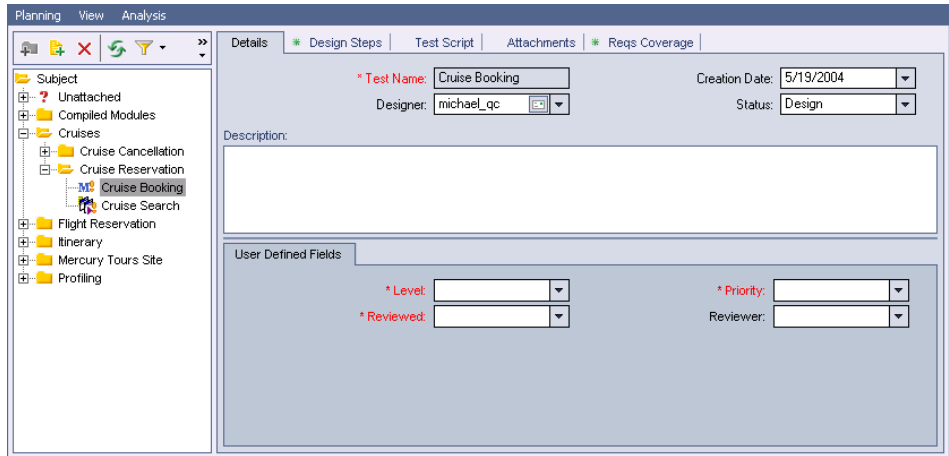
Login

Log on to the **QualityCenter_Demo** project using a different user name than you used in the previous lessons. You can log on as: **alice_qc**, **cecil_qc**, or **michael_qc**.

For more information on opening the **QualityCenter_Demo** project, see “Starting Quality Center” on page 5.

2 Display the Test Plan module and view the designer.

Click the **Test Plan** button on the sidebar. The Test Plan module displays the test plan tree. Expand the **Cruises** and **Cruise Reservation** subject folders and select the **Cruise Booking** test.



In the Details tab in the right pane, the **Designer** box displays the user name you used to design the **Cruise Booking** test. Note that when an associated requirement changes, the designer is the one who sees the traceability notification.

3 Display the requirements tree.

Click the **Requirements** button on the sidebar and make sure that the **Document View** of the requirements tree is displayed.

4 Select the requirement that you want to change.

Under **Cruise Reservation**, select the **Cruise Booking** requirement.

The screenshot shows the 'Requirements' application window with the 'Document View' selected. The table below displays the requirements tree.

ReqID	Name	Direct Cover Status	Author	Reviewed	Creation Time
[RQ0003]	Mercury Tours Application	Failed	alex_qc	Reviewed	9:07:29 AM
[RQ0140]	Cruise Reservation	Not Covered	michael_qc	Not Reviewed	5:31:31 PM
[RQ0141]	o Cruise Search	No Run	michael_qc	Not Reviewed	5:31:58 PM
[RQ0142]	o Cruise Booking	Failed	michael_qc	Not Reviewed	5:32:27 PM

5 Change the priority of the requirement.

Click the **Priority** down arrow and select **5-Urgent**.

ReqID	Name	Direct Cover Status	Author	Reviewed	Creation Time	Creation Date	Priority
[RQ0003]	Mercury Tours Application	Failed	alex_qc	Reviewed	9:07:29 AM	1/9/2003	5-Urgent
[RQ0140]	Cruise Reservation	Not Covered	michael_qc	Not Reviewed	5:31:31 PM	5/18/2004	4-Very High
[RQ0141]	Cruise Search	No Run	michael_qc	Not Reviewed	5:31:58 PM	5/18/2004	4-Very High
[RQ0142]	Cruise Booking	Failed	michael_qc	Not Reviewed	5:32:27 PM	5/18/2004	5-Urgent
[RQ0020]	Application Security	Not Covered	alex_qc	Not Reviewed	1:15:09 PM	1/9/2003	1-Low
[RQ0042]	Application Client System	Not Covered	shelly_qc	Reviewed	11:23:56 AM	1/15/2003	2-Medium
[RQ0045]	Application Usability	Not Covered	shelly_qc	Reviewed	11:33:15 AM	1/15/2003	3-High
[RQ0046]	Application Performance	Not Covered	shelly_qc	Reviewed	11:34:29 AM	1/15/2003	4-Very High
							5-Urgent

This change causes Quality Center to generate a traceability alert for the test associated with this requirement. Quality Center also sends an e-mail to the designer of the test. In the next exercise, you will log on as the designer and view the traceability alert.

6 Log off the QualityCenter_Demo project.

LOGOUT

Click the **Logout** button on the right side of the window.

Viewing the Traceability Alert

You can view traceability changes for a single entity or for all changed entities in your project. An entity can be a test, a test instance, or a defect.

In this exercise, you will view the traceability alert for the **Cruise Booking** test that was generated as a result of the change you made to the **Cruise Booking** requirement.

To view the traceability alert:

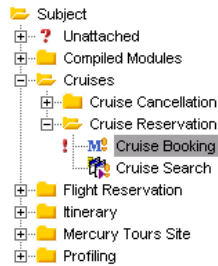
1 Log on to the QualityCenter_Demo project as the designer of the Cruise Booking test.

Login


Log on to the **QualityCenter_Demo** project. Make sure you use the same name you used in previous lessons as the designer of the **Cruise Booking** test.

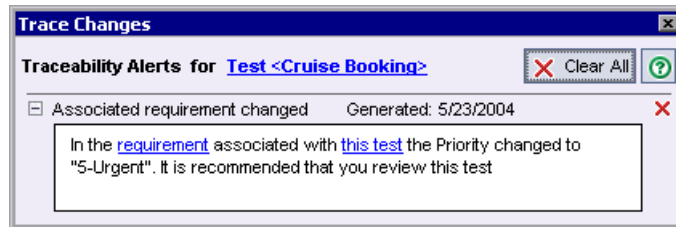
2 Display the Test Plan module and view the traceability flag.

Click the **Test Plan** button on the sidebar. In the test plan tree, under **Cruises**, expand **Cruise Reservation** to display the **Cruise Booking** test. The **Cruise Booking** test has a trace changes flag, indicating that a change was made to an associated requirement.



3 View the traceability alert.

Click the **Trace Changes** flag  for the **Cruise Booking** test. The Trace Changes dialog box opens.



Click the **requirement** link. The **Cruise Booking** requirement is highlighted in the Requirements module.


4 View all traceability alerts.



In the common Quality Center toolbar, click the **Trace All Changes** button. The Trace All Changes dialog box opens and displays a list of all traceability changes in your Quality Center project. For this exercise, Quality Center displays the same change as above.

Close the Trace All Changes dialog box.

Creating Follow Up Alerts

Quality Center enables you to add your own alerts to remind yourself to follow up on outstanding issues. In this exercise, you will add a *follow up* flag to a defect whose status you want to check one week from today. A follow up flag is a gray flag icon  that is added to the record.

When you add a follow up flag, Quality Center also adds an information bar that reminds you about the follow up alert. When the follow up date arrives, Quality Center sends you an e-mail and changes the flag icon to red.

Note that follow up flags are specific to your user name, meaning that only you can see your follow up alerts.

To create a follow up alert:

1 Display the Defects module.

Click the Defects button on the sidebar.

2 Select the defect that you want to flag with a follow up reminder.

In the Defects Grid, select a defect.

3 Create the follow up alert.




Click the **Flag for Follow Up** button. The Flag For Follow Up dialog box opens.



Do the following:

Follow up by: Select the date one week from today.

Description: Type: Remind me about this defect on this date.

Click **OK**. The flag icon  is added to the defect record.

follow up flag

Defect ID	Status	Priority	Assigned To	Summary
	Not Closed			
9	Reopen	3-High	mary_qc	Email fields in Edit Profile form is empty, even if value was set during the registration
13	Open	4-Very High	mary_qc	Changes to Email field during editing profile are not saved
22	Open	2-Medium	james_qc	User Name and Password fields have a different length on Welcome and Sign-On page
24	Open	2-Medium	james_qc	IMG tags have no WIDTH, HEIGHT and ALT attributes
25	Open	2-Medium	james_qc	User Name and Password fields are unlimited on Welcome page
28	Open	1-Low	peter_qc	The default value of a Country list on the Registration page is United States
31	Open	1-Low	mary_qc	Country should be an Input field and not a List
43	New			All fields in Edit profile form are empty
44	New		james_qc	Unable to reserve a cruise from the Cruise page.

4 Display the information bar for your follow up alert.

Double-click the defect with the follow up flag. The Defect Details dialog box opens and displays an information bar with your follow up alert.

follow up alert information bar

Defect Details

Defect: 44 Unable to reserve a cruise from the Cruise page.

Follow Up by Sunday, May 30, 2004

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* Category: Defect * Status: New

* Project: Mercury Tours (HT) * Detected in Version: Version 1.01

* Subject: Cruises * Detected on Date: 5/20/2004

* Reproducible: Y Regression: N

* Detected By: michael_qc * Severity: 2-Medium

Assigned To: james_qc Priority:

ITG Request Id:

Planned Actual

Planned Closing Version: Closed in Version:

Estimated Fix Time: (Hours) Actual Fix Time: (Hours)

Closing Date:

OK Cancel

Click **Cancel** to close the dialog box.

Lesson 6 • Tracing Changes



Now that you are familiar with tracing changes, you can proceed to Lesson 7, “Analyzing the Testing Process” In Lesson 7, you will learn how to generate reports and graphs to help you analyze the testing process.

7

Analyzing the Testing Process

Quality Center reports and graphs help you assess the progress of requirements, the test plan, test runs, and defect tracking. You can generate reports and graphs at any time during the testing process from each Quality Center module, using default or customized settings. When customizing a report or graph, you can apply filters and sort conditions, and display information according to your specifications. You can also save your settings as favorite views and reload them as needed.

In this lesson, you will learn about:

- Generating Reports
- Generating Graphs

Generating Reports

You can generate a report from any Quality Center module. Each Quality Center module contains various report options. After you generate a report, you can customize report properties to display information according to your specifications.

In this exercise, you will generate a standard requirements report, customize the report for a specific user name, and add it to your favorites list.

To generate a report:

1 Open the QualityCenter_Demo project.

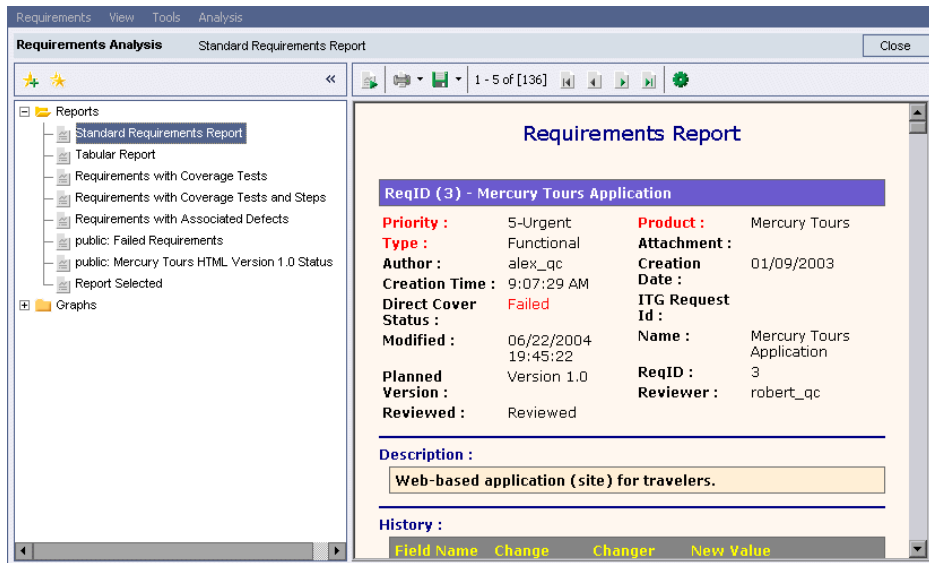
If the **QualityCenter_Demo** project is not already open, log on to the project. For more information, see “Starting Quality Center” on page 5.

2 Display the Requirements module.

Click the **Requirements** button on the sidebar to display the requirements tree.

3 Choose a report.

Choose **Analysis > Reports > Standard Requirements Report**. The report opens, displaying default data.



4 Display the customization options.



Click the **Configure Report and Sub-Reports** button. The Report Customization page opens with the default options selected.

Page

Limit items per page to 5

All items in one page

Template

URL:

Filter

Fields

All Fields (auto-layout)

Custom Fields (layout)

Keep Parent-Child Order (disables filter sort order)

Show Paragraph Number

Show Full Coverage (applied to test sub-report)

Grid View

Attachments

History

Apply

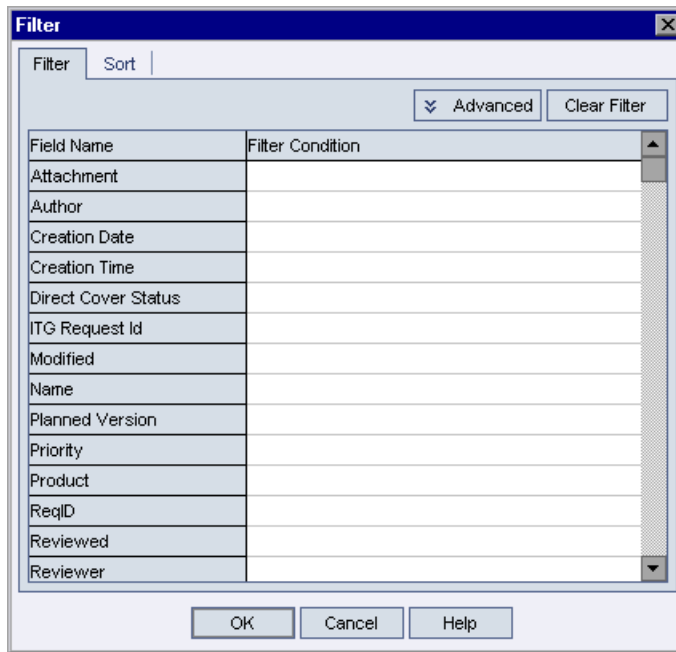
5 Set the number of items per display page.

Select **All items in one page** to display all items in one page.

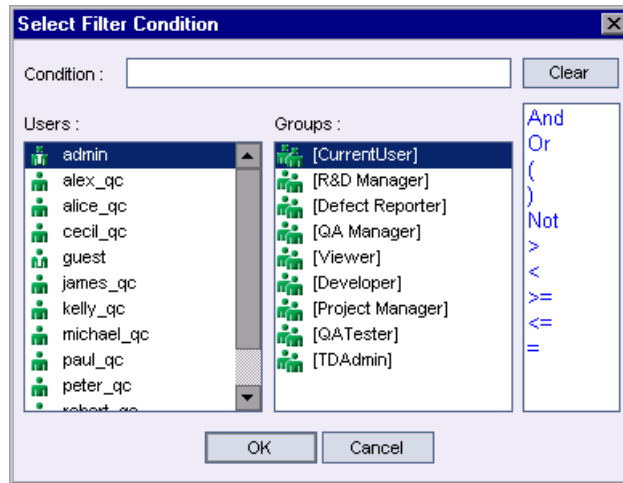
6 Define a filter to view requirements created by a specific user name.



Click the **Set Filter/Sort** button. The Filter dialog box opens.



For the **Author** field, click the **Filter Condition** box. Click the **Browse** button. The Select Filter Condition dialog box opens.



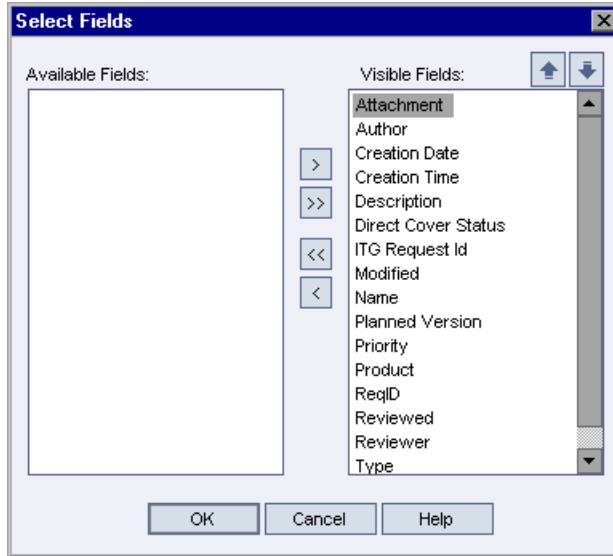
Under **Users**, select your Quality Center login user name (**alice_qc**, **cecil_qc**, or **michael_qc**). Click **OK** to close the Select Filter Condition dialog box.

Click **OK** to close the Filter dialog box.

7 Specify the fields and the order in which they are displayed.



Under **Fields**, select **Custom Fields (layout)** and click the **Select Fields** button. The Select Fields dialog box opens.



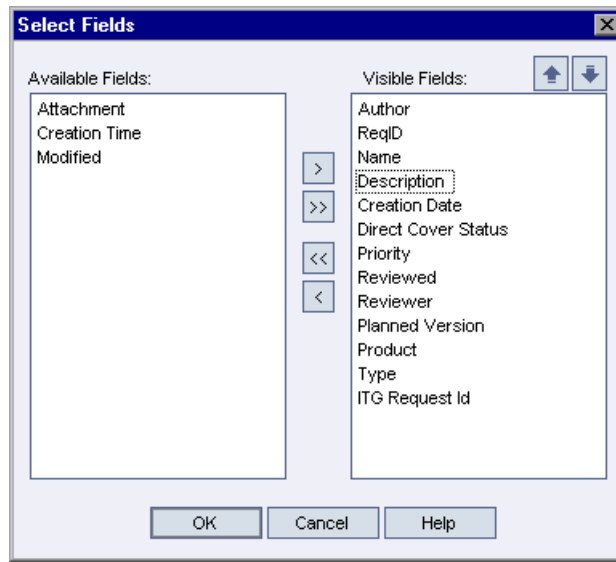
The **Available Fields** box lists fields that are not currently displayed. The **Visible Fields** box lists fields that are currently displayed.



In the **Visible Fields** box, select **Attachment** and click the left arrow button to move the field to **Available Fields**. Move **Creation Time** and **Modified** to **Available Fields**.



To set the appearance order of the visible fields, select **ReqID** and use the up arrow button to move the field under **Author**. Move **Name** and **Description** so that they appear below **ReqID**.



Tip: You can also use a drag-and-drop operation to specify visible fields and the order in which they are displayed.

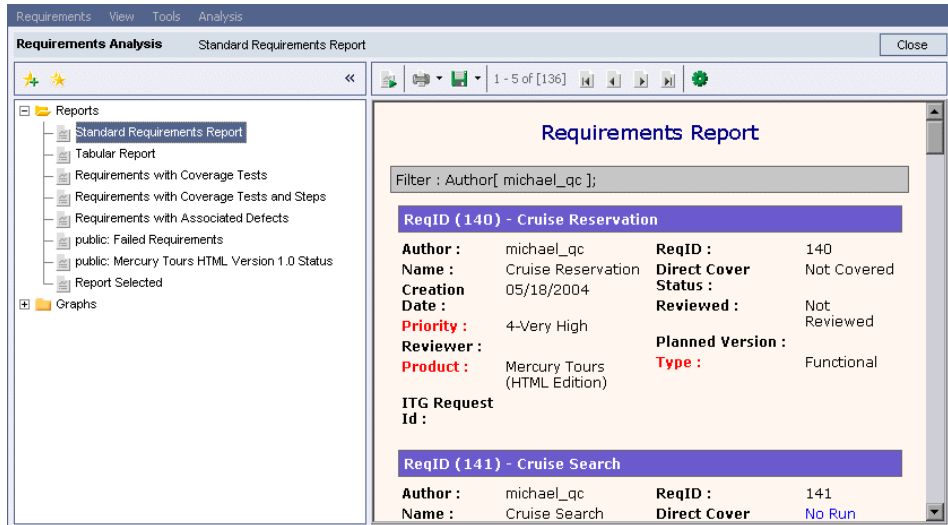
Click **OK** to close the dialog box and apply the new field order.

8 Clear the Attachments and History options.

Under **Fields**, clear the **Attachments** and **History** check boxes.

9 Generate a new report.

Click the **Apply** button. The customized Requirements Report is displayed.



10 Add the report as a favorite view.



Click the **Add to Favorites** button. The Add Favorite dialog box opens.

In the **Name** box, type: Standard Requirements by Author. Click **OK**. The report is added to the Reports list in the left pane.

11 Close the report.



Click the **Close** button. The Requirements module is displayed.



Tip: You can generate a quick report for a single node in a tree or row in a grid. Select the requirement, test, or defect, and choose **Analysis > Report Selected**.

Generating Graphs

Quality Center graphs help you analyze the relationships between different types of data in a project. Each Quality Center module contains various graph options. After you generate a graph, you can customize graph properties to display information according to your specifications.

In this exercise, you will generate a defects graph to summarize the defects by status and priority level.

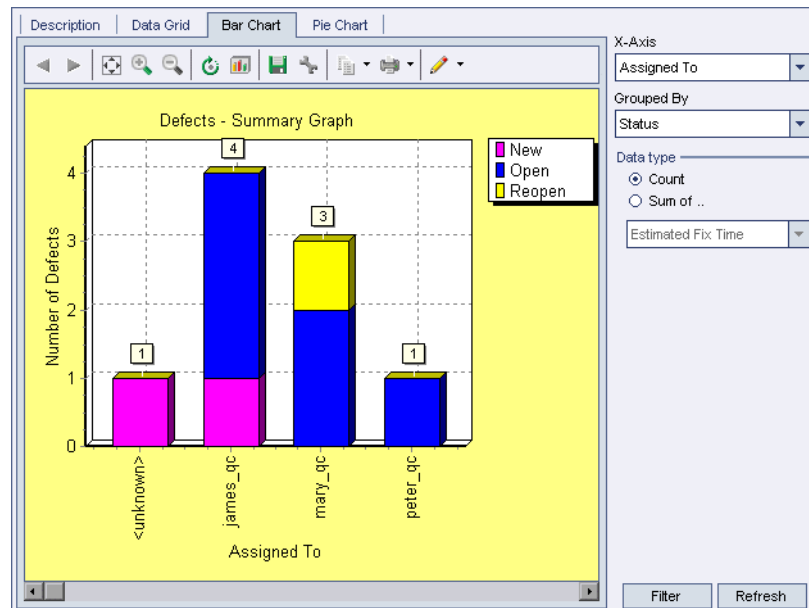
To generate a graph:

1 Display the Defects module.

Click the **Defects** button on the sidebar. The Defects module displays the Defects Grid.

2 Choose a graph.

Choose **Analysis > Graphs > Summary - Group by 'Status'**. The Defects - Summary Graph opens. By default, the graph is grouped by **Status**.



3 Clear the default filter.

Filter

Click the **Filter** button. The Filter dialog box opens.

Field Name	Filter Condition
Actual Fix Time	
Assigned To	
Browser	
Category	
Closed in Version	
Closing Date	
Defect ID	
Detected By	michael_qc
Detected in Version	
Detected on Date	
Estimated Fix Time	
ITG Request Id	
Language	
Modified	

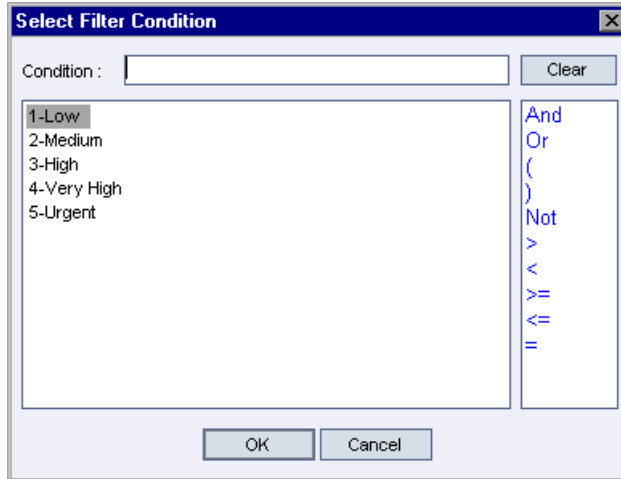
By default, the **Detected By** field is set to the current user name—your Quality Center login user name (**alice_qc**, **cecil_qc**, or **michael_qc**).

Clear Filter

Click the **Clear Filter** button. The applied filter is removed.

4 Define a filter to view defects with high to urgent priority.

In the Filter dialog box, for the **Priority** field, click the **Filter Condition** box. Click the **Browse** button. The Select Filter Condition dialog box opens.



In the right pane, select the logical expression \geq .

In the left pane, select **3-High**.



Click **OK** to close the Select Filter Condition dialog box.

5 Define a filter to view defects that are not closed.

For the **Status** field, click the **Filter Condition** box. Click the **Browse** button. The Select Filter Condition dialog box opens.

In the right pane, select the logical expression **Not**.

In the left pane, select **Closed**.



Click **OK** to close the Select Filter Condition dialog box.

Click **OK** to close the Filter dialog box.

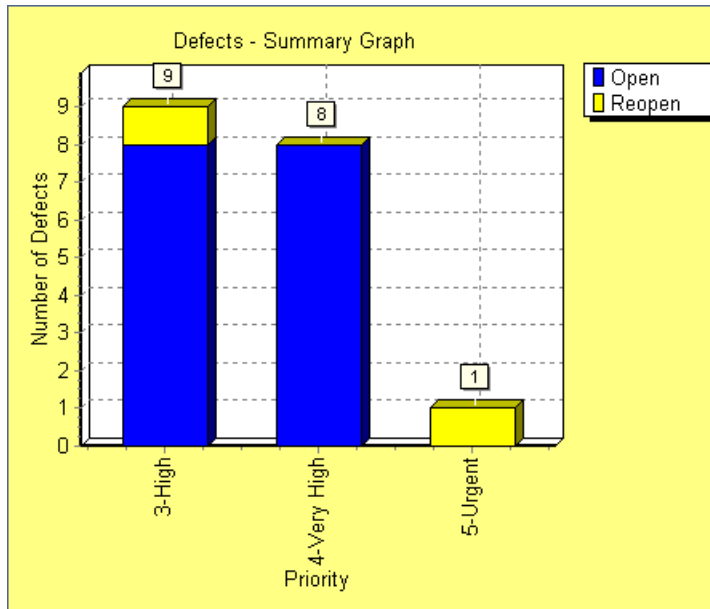
6 Set the X-axis of the graph.

From the **X-Axis** list on the right side of the window, select **Priority** to view the number of defects by priority.

7 Refresh the graph.

Refresh

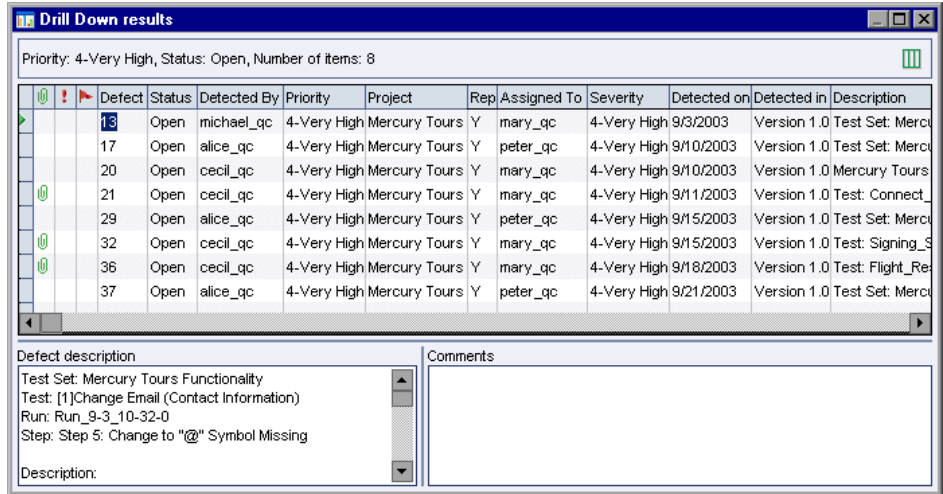
Click the **Refresh** button. A new graph is displayed.



In this exercise, nine defects are assigned **3-High**; eight defects are assigned **4-Very High**; and one defect is assigned **5-Urgent**.

8 Display additional defect details.

Click a bar segment in the graph. The Drill Down Results dialog box opens and displays the defects that define the bar segment.



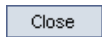
Close the Drill Down Results dialog box.

9 Display other graph views.

Click the **Pie Chart** tab to display the graph as a pie graph.

Click the **Data Grid** tab to display the graph as a grid.

10 Close the graph.



Click the **Close** button. The Defects module is displayed.



Now that you are familiar with generating reports and graphs, you can proceed to Lesson 8, "Where Do You Go from Here?". In Lesson 8, you will apply the Quality Center concepts and skills you learned to your own application.

8

Where Do You Go from Here?

Now that you have completed the tutorial, you are ready to apply the Quality Center concepts and skills you learned to your own application.

In this lesson, you will learn about:

- ▶ Getting Started
- ▶ Getting Additional Information

Getting Started

Test management with Quality Center includes four phases: specifying requirements, planning tests, running tests, and tracking defects. Throughout each phase, you can analyze data by generating detailed reports and graphs.

To get started:

1 Analyze your application and determine your testing requirements.

To specify your testing requirements, consider these steps:

- ▶ Examine the application documentation to determine your testing scope—test goals, objectives, and strategies.
- ▶ Build a requirements tree to define your overall testing requirements.
- ▶ For each requirement topic in the requirements tree, create a list of detailed testing requirements. Describe each requirement, assign it a priority level, and add attachments if necessary.

- ▶ Generate reports and graphs to assist you in analyzing your testing requirements. Review your requirements to ensure they meet your testing scope.

2 Create a test plan, based on your testing requirements.

To create a test plan, consider these steps:

- ▶ Examine your application, system environment, and testing resources to determine your testing goals.
- ▶ Divide your application into modules or functions to be tested. Build a test plan tree to hierarchically divide your application into testing units, or subjects.
- ▶ Determine the types of tests you need for each module. Add a basic definition of each test to the test plan tree.
- ▶ Link each test to a testing requirement(s).
- ▶ Develop manual tests by adding steps to the tests in your test plan tree. Test steps describe the test operations and the expected outcome of each test. Decide which tests to automate.
- ▶ Create test scripts for tests that you want to automate. You can automate tests using a Mercury testing tool, a custom testing tool, or a third-party testing tool.
- ▶ Generate reports and graphs to assist in analyzing test planning data. Review your tests to determine their suitability to your testing goals.

3 Create test sets and perform test runs.

- ▶ Define groups of tests to meet the various testing goals in your project. These might include, for example, testing a new application version or a specific function in an application. Decide which tests to include in each test set.
- ▶ Schedule test execution and assign tasks to application testers.
- ▶ Execute the tests in your test set automatically or manually.
- ▶ View the results of your test runs to determine if a defect was detected in your application. Generate reports and graphs to help analyze these results.

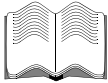
4 Submit defects detected in your application and track the progress of defect fixes.

- ▶ Submit new defects detected in your application. Quality assurance testers, developers, project managers, and end users can add defects during any phase of the testing process.
- ▶ Review new defects and determine which ones should be fixed.
- ▶ Correct the defects that you decide to fix.
- ▶ Test a new build of your application. Repeat this process until defects are fixed.
- ▶ Generate reports and graphs to assist in analyzing the progress of defect fixes and to help determine when to release the application.

Getting Additional Information

For more information on Quality Center, refer to the documentation set and online resources.

Mercury Quality Center Documentation Set



In addition to this guide, Quality Center comes with the following printed documentation:

Mercury Quality Center Installation Guide explains how to install Quality Center on a server machine in a cluster environment or as a stand-alone application.

Mercury Quality Center User's Guide explains how to use Quality Center to organize and execute all phases of the testing process. It describes how to define requirements, plan tests, run tests, and track defects.

Mercury Quality Center Administrator's Guide explains how to create and maintain projects using the Site Administrator, and how to customize projects using Project Customization.

Mercury Quality Center Open Test Architecture Guide explains how to use the Quality Center open test architecture to integrate your own configuration management, defect tracking, and home-grown testing tools with a Quality Center project. It includes a complete reference to the Quality Center COM-based API.

Mercury Quality Center Site Administrator Client API Guide explains how to use the Site Administrator Client API to enable your application to organize, manage, and maintain all users, projects, domains, connections, and site configuration parameters. It includes a complete reference of all the Site Administrator Client functions.

Mercury Business Process Testing User's Guide explains how to use Business Process Testing to create business process tests.

Online Resources



Quality Center includes the following online resources:

Readme provides last-minute news and information about Quality Center.

What's New describes the newest features in the latest versions of Quality Center.

Books Online displays the complete documentation set in .PDF format. Online books can be read and printed using Adobe Reader which can be downloaded from the Adobe Web site (<http://www.adobe.com>).

Quality Center Online Help provides immediate answers to questions that arise as you work with Quality Center. It describes menu commands and dialog boxes, and shows you how to perform Quality Center tasks. Check the Mercury Interactive Customer Support Web site (<http://support.mercury.com>) for updates to Quality Center help files.

Customer Support Online uses your default Web browser to open the Mercury Interactive Customer Support Web site. This site enables you to browse the Mercury Support Knowledge Base and add your own articles. You can also post to and search user discussion forums, submit support requests, download patches and updated documentation, and more. The URL for this Web site is <http://support.mercury.com>.

Mercury Interactive on the Web uses your default Web browser to open Mercury Interactive's home page. This site provides the most up-to-date information on Mercury Interactive and its products. This includes new software releases, seminars and trade shows, customer support, educational services, and more. The URL for this Web site is <http://www.mercury.com>.

Lesson 8 • Where Do You Go from Here?