

HP Quality Center

TalenTech

Introduction

- ▶ Quality Center is a web based test management system. It allows the user to control the major facets of the testing process
 - ▶ Requirement Management
 - ▶ Test Planning
 - ▶ Test Execution
 - ▶ Defect Tracking, and
 - ▶ Test Reporting
- ▶ All are controlled through a single browser-based application



Quality Center

- ▶ Quality Center uses four modules as below
 - ▶ Requirements
 - ▶ Test Plan
 - ▶ Test Lab
 - ▶ Defects
 - ▶ Dashboard
- ▶ The Requirements Module is used to develop requirements that link test cases
- ▶ The testing group will utilize the Test Plan Module to design test cases and detail test steps
- ▶ The Test Lab Module is used to execute tests and Defect for test failure, and Dashboard for real time reporting



Signing on to Quality Center

- ▶ QC is accessible from any web browser using the appropriate URL.
- ▶ Test QC server URL:
<http://gp5081/qcbin>
- ▶ Enter Username and Password
- ▶ Click Authenticate
- ▶ Ensure that the proper Domain is selected
- ▶ Select the required project from the project drop-down list
- ▶ Click “Login”



The screenshot shows the Quality Center login interface. It includes a 'User Name' field with the value 'mahbub', a 'Password' field, a checkbox for 'Automatically log in to my last domain and project on this machine', an 'Authenticate' button, a 'Domain' dropdown menu with 'MY_DOMAIN' selected, a 'Project' dropdown menu with 'My_Test' selected, and a 'Login' button.

User Name: mahbub

Password:

☐ Automatically log in to my last domain and project on this machine

Authenticate

Domain: MY_DOMAIN

Project: My_Test

Login

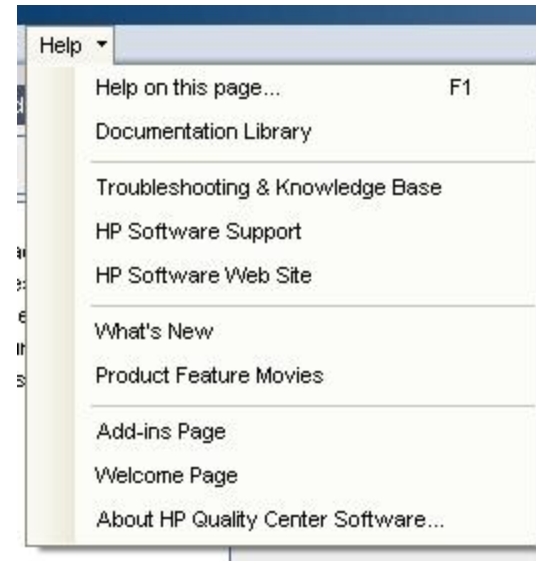
Change Password

- ▶ The initial password can be changed following the steps below
 1. Login to Quality Center
 2. Click “Tools” menu and select “Customize”
 3. Click the “Change User Properties” link
 4. On the bottom right of the screen you will see the “Change password” button
 5. Click the button and enter your old password and a new password
 6. Click the Save button



Quality Center Help Function

- ▶ Quality Center has a number of help files that are accessible by clicking the “Help” button.

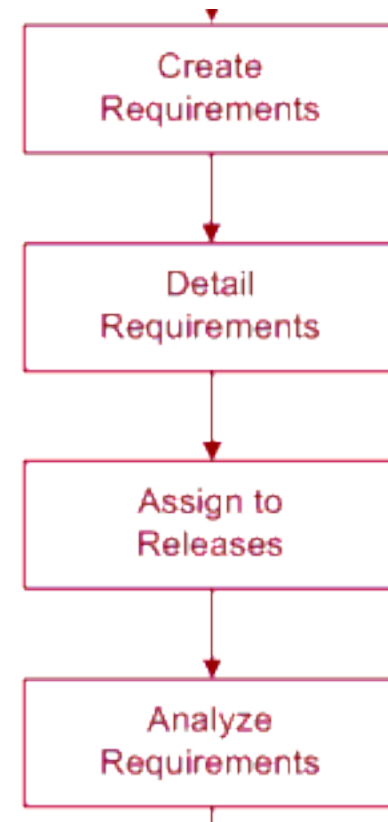


Working with Requirements

Quality Center

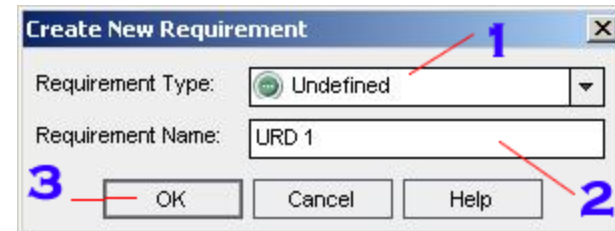
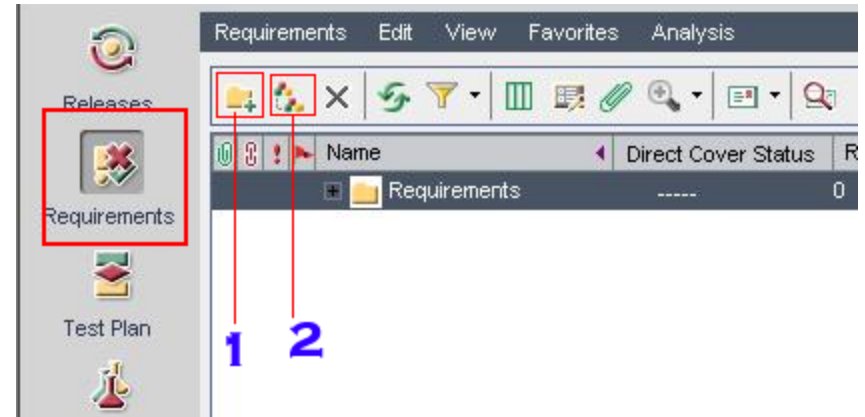
Requirement Work Flow

- ▶ Create/ Export Requirements
- ▶ Detail Requirements
- ▶ Assign to Release
- ▶ Analyze Requirements



Create Requirement

- ▶ Create a requirement Folder by clicking the “Add Folder” icon (1)
- ▶ Select the folder, and click “New Requirement” (ALT +New) to write a requirement (2)
- ▶ Enter the requirement Type, Requirement name on the new window, and click “OK”
- ▶ Enter requirement details on the “New Requirement Window”. (see next slide)



Requirement Details

- ▶ Enter the followings
 - ▶ Name
 - ▶ Author
 - ▶ Modified
 - ▶ Priority
 - ▶ RBQM Date of Last Analysis
 - ▶ Target Cycle
 - ▶ Product
 - ▶ Reviewed
 - ▶ Target Release
 - ▶ Description
 - ▶ Comments (if any)

The screenshot shows a 'New Requirement' dialog box with a title bar and standard window controls. The 'Name' field contains 'JRD 1' and the 'Requirement Type' is set to 'Undefined'. The 'Details' tab is active, showing fields for 'Author' (msiddique), 'Modified', 'Priority', 'RBQM Date of last Analysis', 'Target Cycle', 'Direct Cover Status', 'Old Type (obsolete)', 'Product', 'Reviewed' (Not Reviewed), and 'Target Release'. The 'Description' tab is also visible, showing a large text area for the description. At the bottom are 'Submit', 'Close', and 'Help' buttons.

New Requirement

Clear Attach: [Icons]

Name: * Requirement Type:

Details

Author: Direct Cover Status:

Modified: Old Type (obsolete):

Priority: Product:

RBQM Date of last Analysis: Reviewed:

Target Cycle: Target Release:

Description Comments Rich Text

Description:

Submit Close Help

Export Requirements

	B	C	D	E	F
1	Requirement Name	Requirement Type	Author	Description	Path
2	URD-3	Functional	Msiddique	Upgraded Accident Forgiveness	\Plan Item REVO
3	URD-17	Functional	Msiddique	eBanking Discount	\Plan Item REVO
4	URD-22	Functional	Msiddique	Associate Discount	\Plan Item REVO
5	URD-24	Functional	Msiddique	Emergency Deployment Discount	\Plan Item REVO
6	URD-28	Functional	Msiddique	Credit Discount	\Plan Item REVO
7	URD-35	Functional	Msiddique	Model Year Rating And Vehicle Age Rating	\Plan Item REVO
8	URD-45	Functional	Msiddique	Excess Vehicle Discount	\Plan Item REVO
9	URD-46	Functional	Msiddique	Vehicle Count Discount	\Plan Item REVO
10	URD-50	Functional	Msiddique	FCRA Notices	\Plan Item REVO
11	URD-52	Functional	Msiddique	Converting Current Book to New Rating Structure	\Plan Item REVO

► Preparation

- Written requirements in MS Excel as shown above
- Install Quality Center MS Excel add-ins from add-in page

Export Requirements from Excel

1. Open the requirement file in Excel
2. Highlight the requirements you want to export to QC
3. Select Tools> Export to Quality Center
4. Enter the Quality Center URL
5. Click Next and enter your user name and password
6. On the next screen, enter the domain and project name.
7. Select “Requirement” radio button, and click Next
8. Select or Type a new map name from the window
9. Select the requirement type

Map Requirement to QC

Modifying Requirements

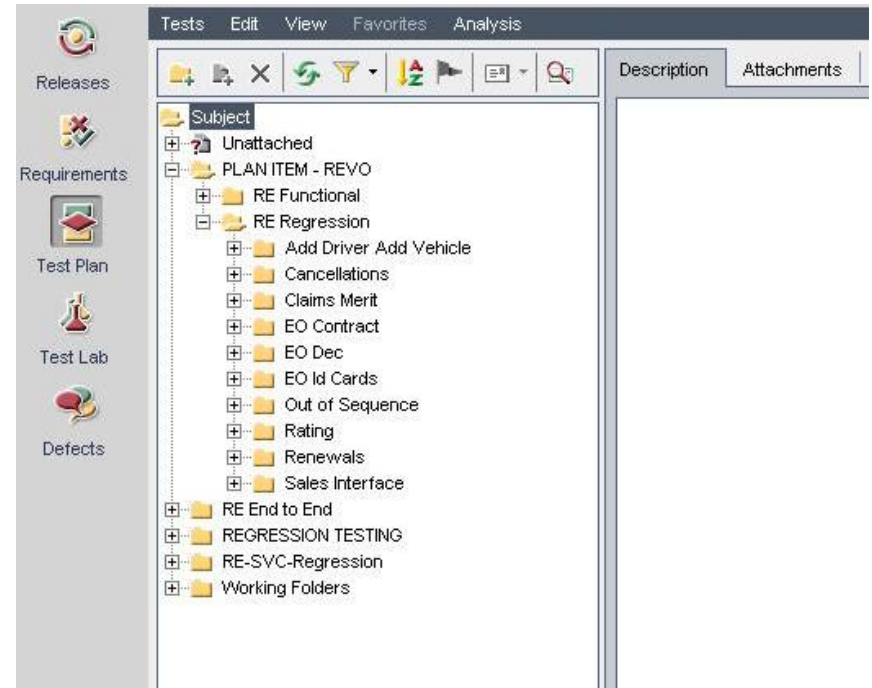
Assign to a Release

Working with Test Plan

HP Quality Center

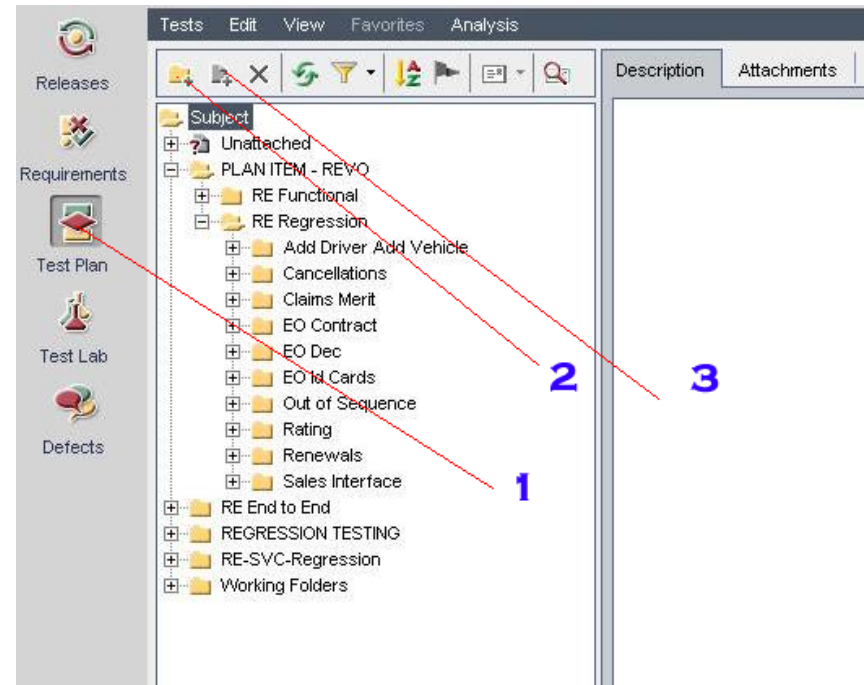
Introduction

- ▶ Quality Center Test Plan section is dedicated to have test cases.
- ▶ Test Plan section offers the followings
 - ▶ Develop test cases
 - ▶ Export existing test cases written in MS Word or Excel.
 - ▶ Modify/ Update test cases
 - ▶ Export test cases to excel or word
 - ▶ Requirement Coverage



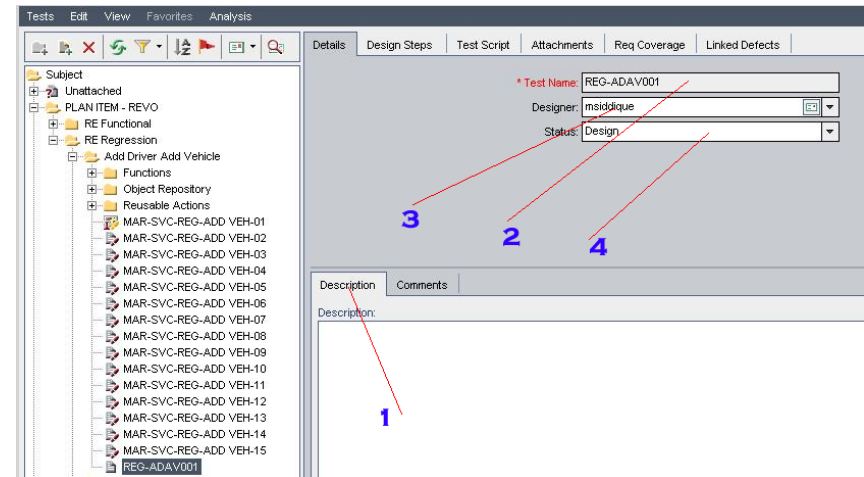
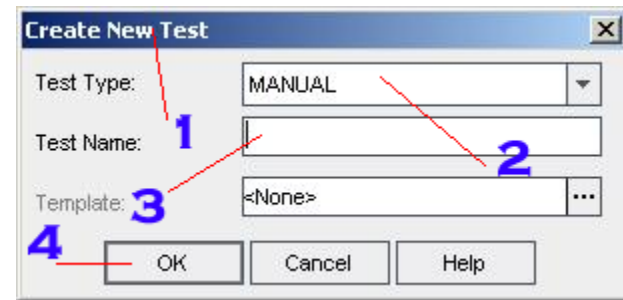
Develop a Test Case – Create Folder

- ▶ To develop a test case in Test Plan section follow the following steps
 - ▶ Click on the Test Plan icon from the left sidebar (1)
 - ▶ Create a Folder/ Sub-folder as necessary by clicking New Folder icon (2)
 - ▶ Create a New Test clicking “New Test” icon (3)



Develop a Test Case –Cont'd

- ▶ Clicking on New Test icon will open Create New Test dialog box.
- ▶ Enter the test name on the Test Name edit box, and click OK
- ▶ Enter test case description in the Details tab
- ▶ Set the following fields
 - ▶ Designer
 - ▶ Status, and
 - ▶ Creation Date



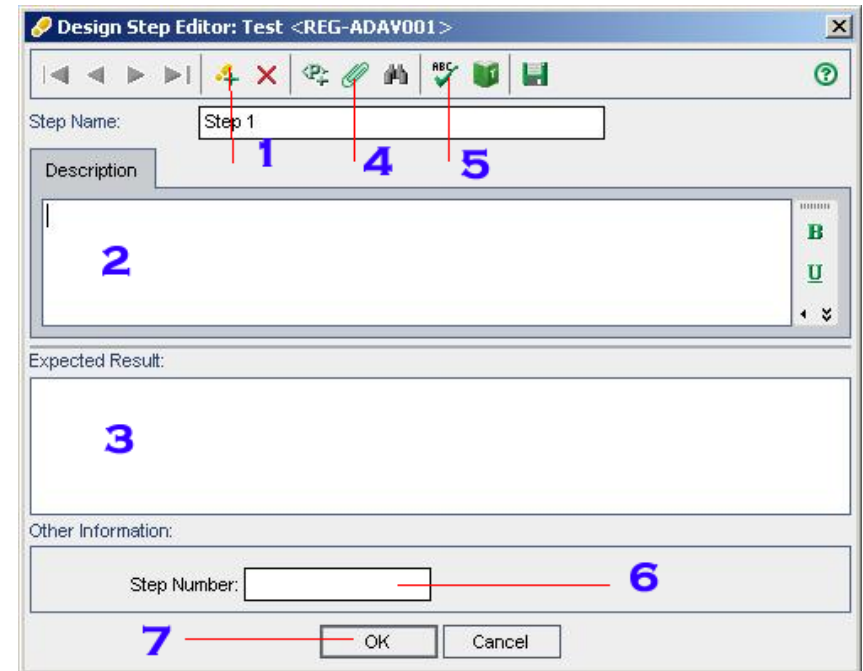
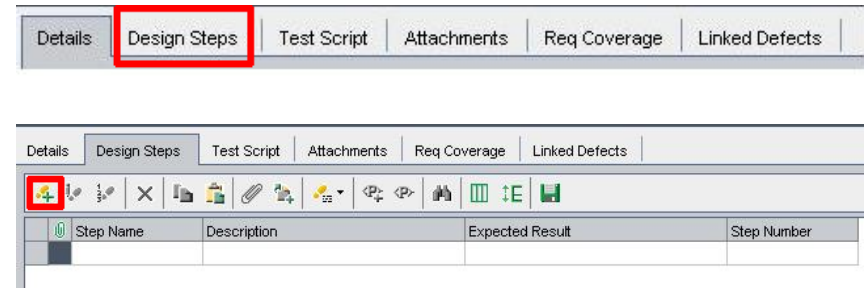
Explore Test Plan Toolbar

The screenshot shows a software interface for managing test plans. At the top, there is a horizontal toolbar with six tabs: 'Details', 'Design Steps', 'Test Script', 'Attachments', 'Req Coverage', and 'Linked Defects'. Below the tabs, the 'Details' tab is active, displaying a form with the following fields: '* Test Name:' (value: REG-ADAVC01), 'Designer:' (value: msiddique), and 'Status:' (value: Design). To the right of these fields, there are three more fields: 'Creation Date:' (value: 3/25/2009), 'Exec Status:' (empty), and 'Test ID:' (value: 519). Six red vertical lines with blue numbers 1 through 6 are overlaid on the image, pointing to the tabs and their corresponding sections: 1 points to the 'Details' tab, 2 to 'Design Steps', 3 to 'Test Script', 4 to 'Attachments', 5 to 'Req Coverage', and 6 to 'Linked Defects'.

- ▶ Details:
- ▶ Design Steps:
- ▶ Test Scripts:
- ▶ Attachment:
- ▶ Req Coverage:
- ▶ Linked defect:

Develop a Test Case –Design Step

- ▶ To write a test case click on the design steps tab
- ▶ From the Design Step toolbar click on the “Add Step” icon
- ▶ Enter the description, and Expected results.
- ▶ You may add more steps clicking on “Add Steps” icon or click on OK button to complete this.
- ▶ You may add new steps any time starting over from the second step.



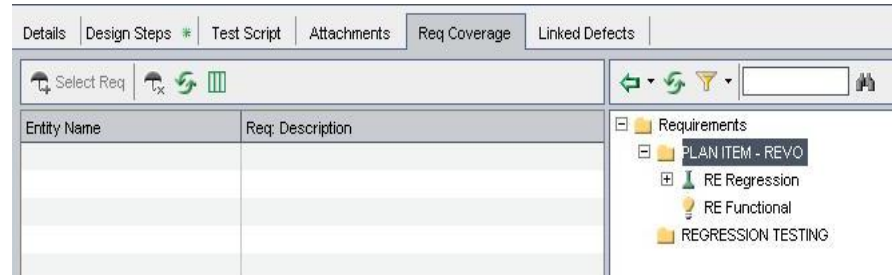
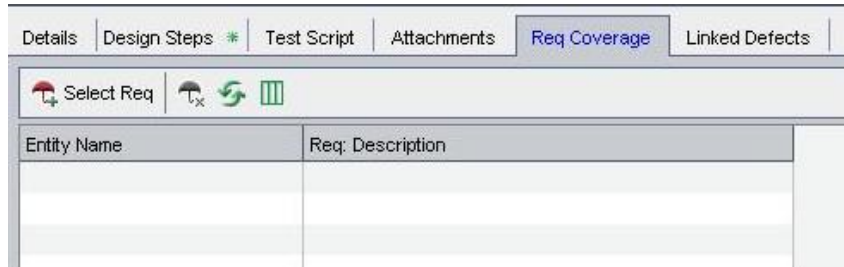
Design Step –Cont'd

The screenshot shows the 'Design Step Editor: Test <REG-ADAV001>' dialog box. It contains several fields and buttons, with blue numbers 1 through 7 and red lines pointing to specific elements:

- 1** points to the 'Add' icon (a yellow star) in the toolbar.
- 2** points to the 'Description' text area.
- 3** points to the 'Expected Result' text area.
- 4** points to the 'Remove' icon (a red X) in the toolbar.
- 5** points to the 'Save' icon (a green floppy disk) in the toolbar.
- 6** points to the 'Step Number' text box.
- 7** points to the 'OK' button.

The dialog box includes a 'Step Name' field containing 'Step 1', a 'Description' field, an 'Expected Result' field, and an 'Other Information' section with a 'Step Number' field. At the bottom are 'OK' and 'Cancel' buttons. The toolbar at the top contains icons for navigation, adding/removing steps, saving, and help.

Requirement Coverage



- ▶ Requirement coverage links a requirement to the corresponding test cases.
- ▶ To perform Requirement Coverage, follow the steps below
 - ▶ Click on Req Coverage Tab from Test Plan
 - ▶ Click Select Req icon
 - ▶ Select the Requirement from the right side tree

Requirement Coverage

The screenshot displays the 'Requirement Coverage' tab in a software tool. The interface includes a top navigation bar with tabs: 'Details', 'Design Steps', 'Test Script', 'Attachments', 'Req Coverage' (active), and 'Linked Defects'. Below the navigation bar is a toolbar with icons for 'Select Req', 'Cancel', 'Refresh', and 'Filter'. The main area is divided into two panes. The left pane contains a table with two columns: 'Entity Name' and 'Req: Description'. The right pane shows a tree view of requirements.

Entity Name	Req: Description
URD-16	Change to Vehicle Use Categories

The tree view on the right shows the following structure:

- Requirements
 - PLAN ITEM - REVO
 - RE Regression
 - URD-16
 - URD-20
 - URD-21
 - RE Functional
 - REGRESSION TESTING

- ▶ Add all the requirements covered by the test case

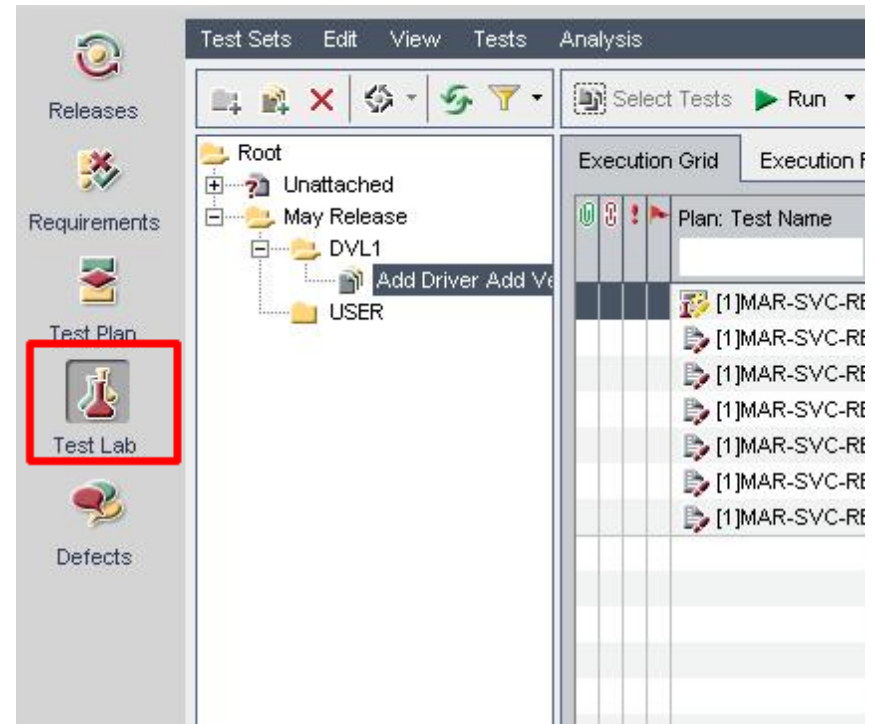


Working with Test Lab

HP Quality Center

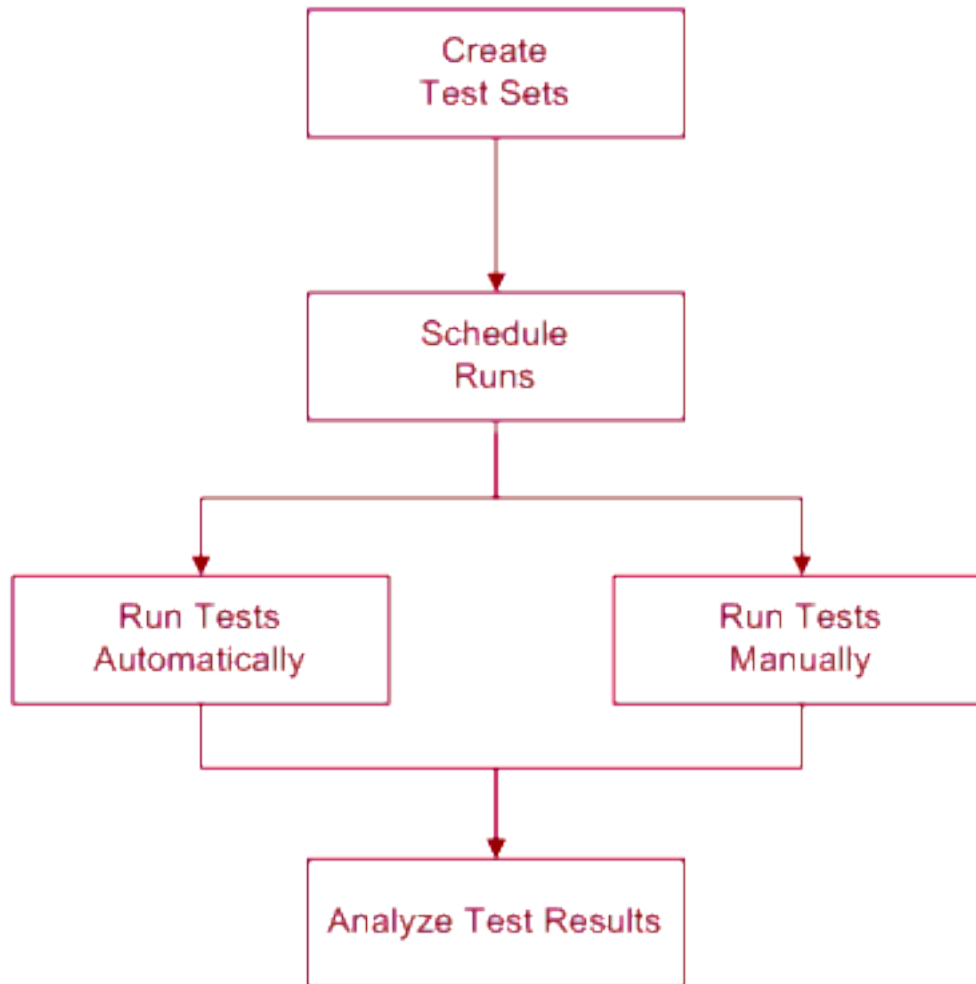
Test Lab Introduction

- ▶ Quality Center Test Lab section is developed to execute Manual and Automation test cases.
- ▶ Test Lab helps to organize test case execution
- ▶ Application Defects can be submitted from Test Lab which does not fit Geico's process until today.

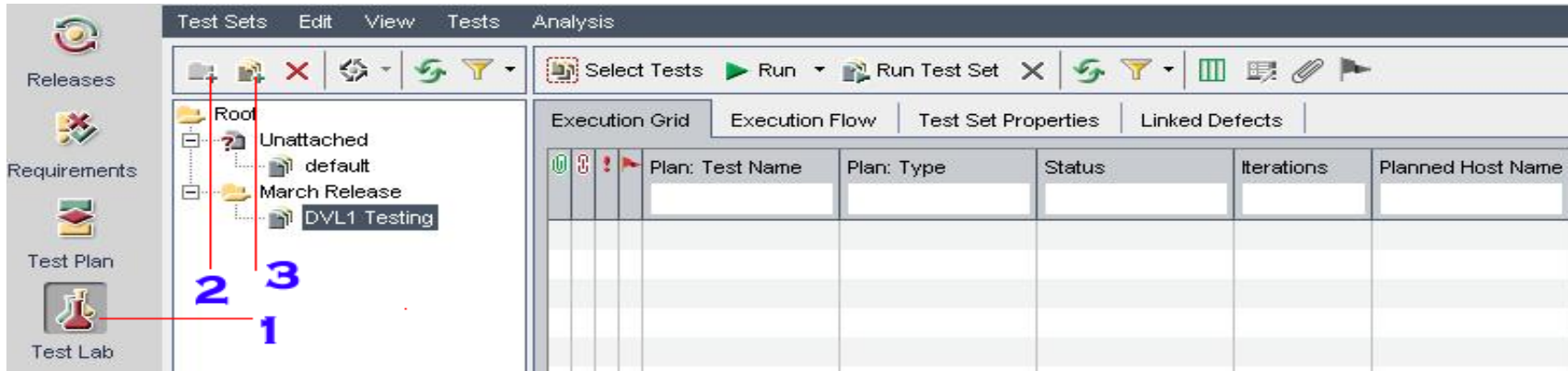


Test Lab Work Flow

1. Create Test Sets:
2. Schedule Runs
3. Run Tests Automatically
4. Run Tests Manually
5. Analyze Test Results

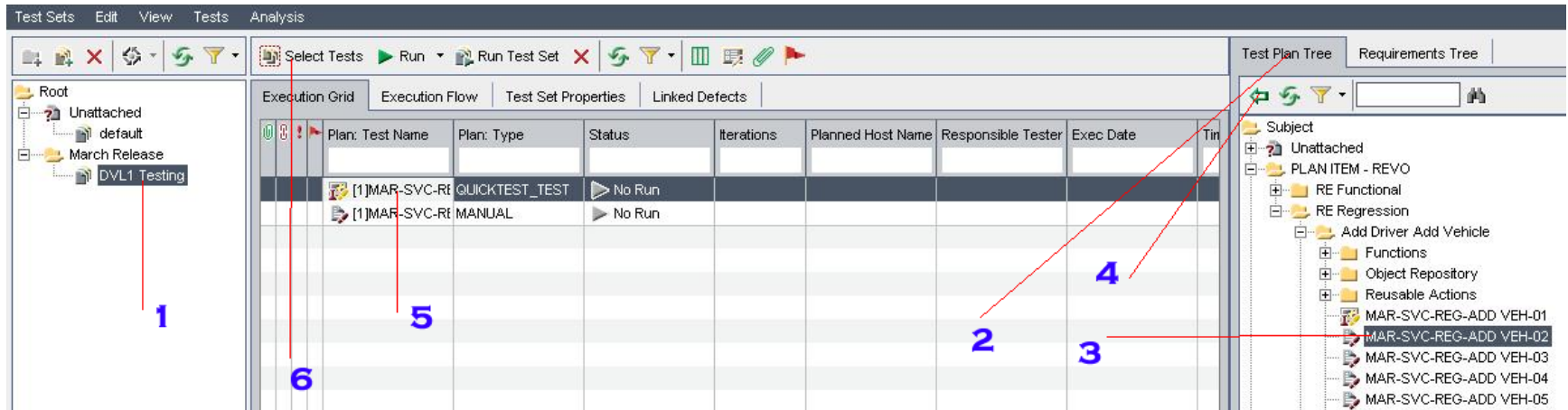


Create Test Sets



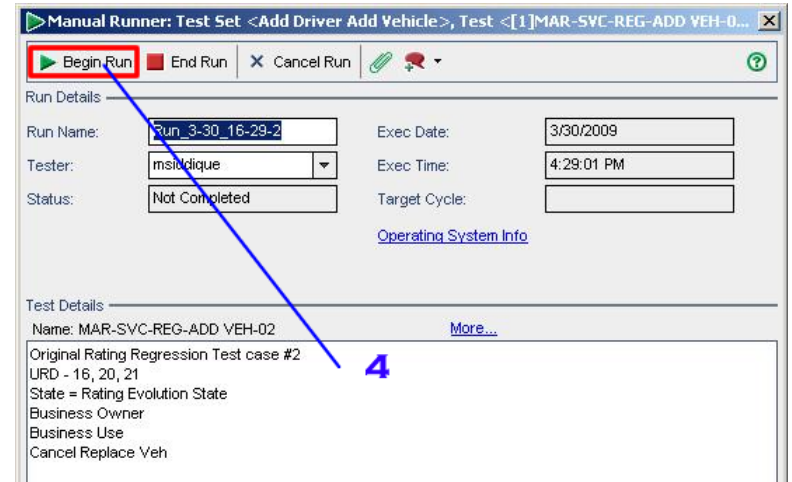
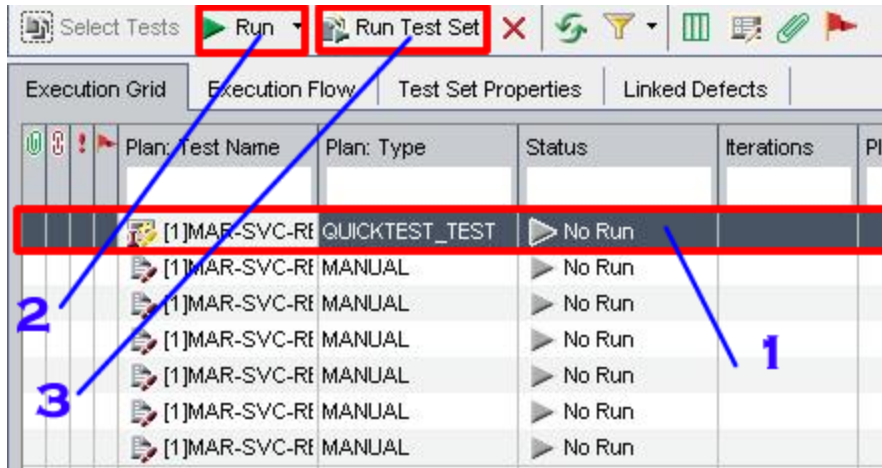
- ▶ Click on the Test Lab icon from the left side in Quality Center (1)
- ▶ Create folders by clicking “New Folder” icon (2)
- ▶ Enter the name of the folder, and click “OK”
- ▶ Select the folder, and click on the “New Test Set” (ALT+N) to create a new test. (3)

Schedule Tests



- ▶ Add tests to the test sets selecting from the right side
- ▶ The test lab folders could be arranged by the releases, and test sets could be arranged by environments and specific functional areas

Run Tests Manually



- ▶ Test Lab section can be used to run a manual test case. You may run test cases one by one or the total test suite
- ▶ To execute a test case, select the test case (1) and click on the “Run” icon (2) or to run the entire test suite choose “Run Test Suite” icon (3)
- ▶ This will bring Manual Runner window, and you have to click on the “Begin Run” button (4).

Manual Execution - Recording Steps

- ▶ Follow the steps(1), execute and record the results (2)
- ▶ Enter Actual Results on the Actual edit box (3)
- ▶ Change the status to Pass or Fail under Status Column (2)
- ▶ After completing all the steps, click

Manual Runner: Test Set <Add Driver Add Vehicle>, Test <[1]MAR-SVC-REG-4

Step Name	Status	Exec Date	Exec Time	Step Number
ss or find policy	No Run	3/30/2009	4:34:33 PM	1
Add vehicle end	No Run	3/30/2009	4:34:33 PM	2
Add vehicle	No Run	3/30/2009	4:34:33 PM	3
Alternate Index	No Run	3/30/2009	4:34:33 PM	4
Cont adding veh	No Run	3/30/2009	4:34:33 PM	5
Pop-up	No Run	3/30/2009	4:34:33 PM	6
Add Business N	No Run	3/30/2009	4:34:33 PM	7
Add'l Details	No Run	3/30/2009	4:34:33 PM	8
Usage	No Run	3/30/2009	4:34:33 PM	9
Verify Discounts	No Run	3/30/2009	4:34:33 PM	10
Replace Vehicle	No Run	3/30/2009	4:34:33 PM	11
Vehicle #1 replac	No Run	3/30/2009	4:34:33 PM	12

Description **1**

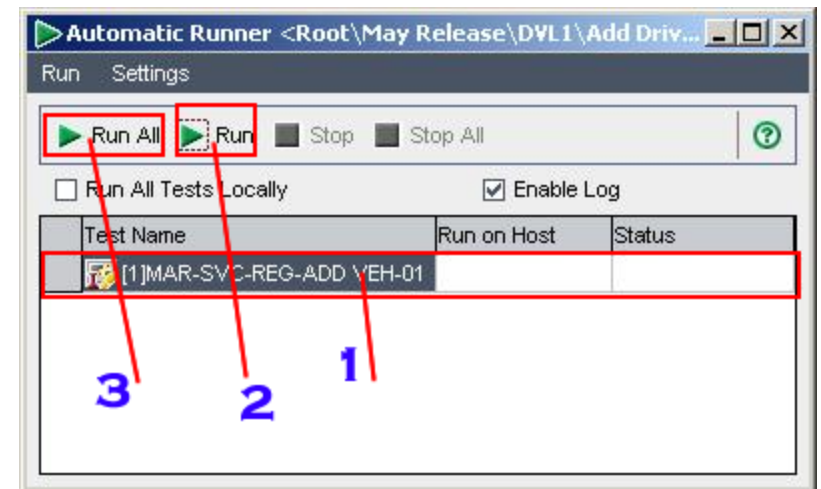
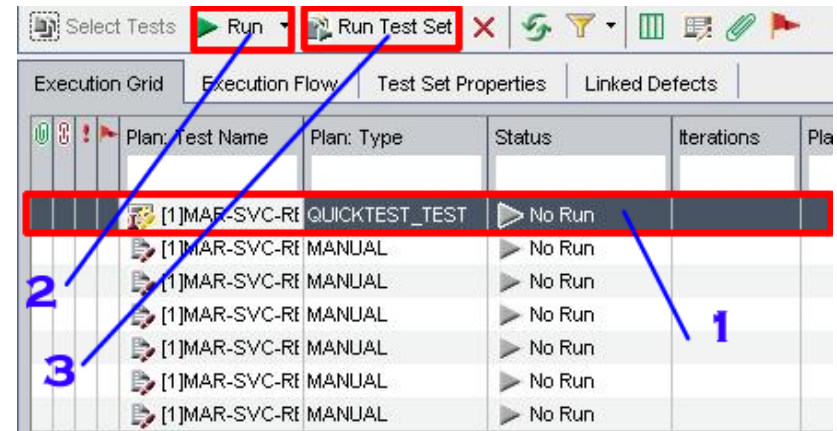
No current activity

Expected: Policy will rate and policy number assigned if using NBUS

Actual: **3**

Run Tests Automatically

- ▶ You may run test cases one by one or the total test suite
- ▶ To execute a test case, select the test case and click on the “Run” icon or “Run Test Suite” icon
- ▶ From the Automatic Runner Window:
 - ▶ Click Run to execute single script
 - ▶ Choose Run All to execute all the test scripts



Analyze Test Results



Working with Defects

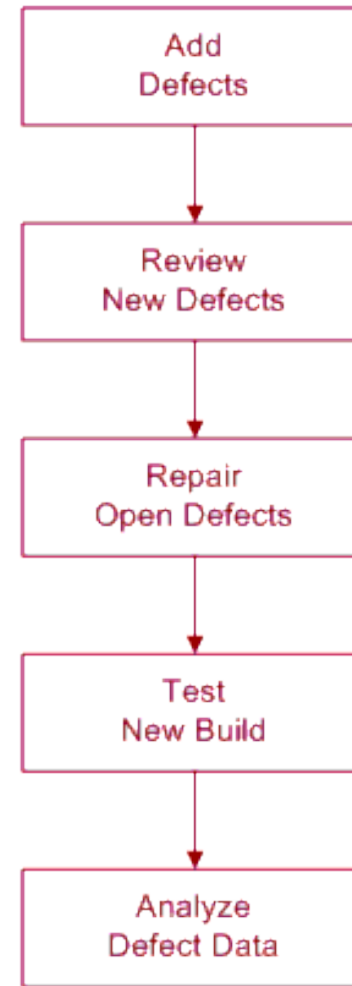
HP Quality Center

Introduction

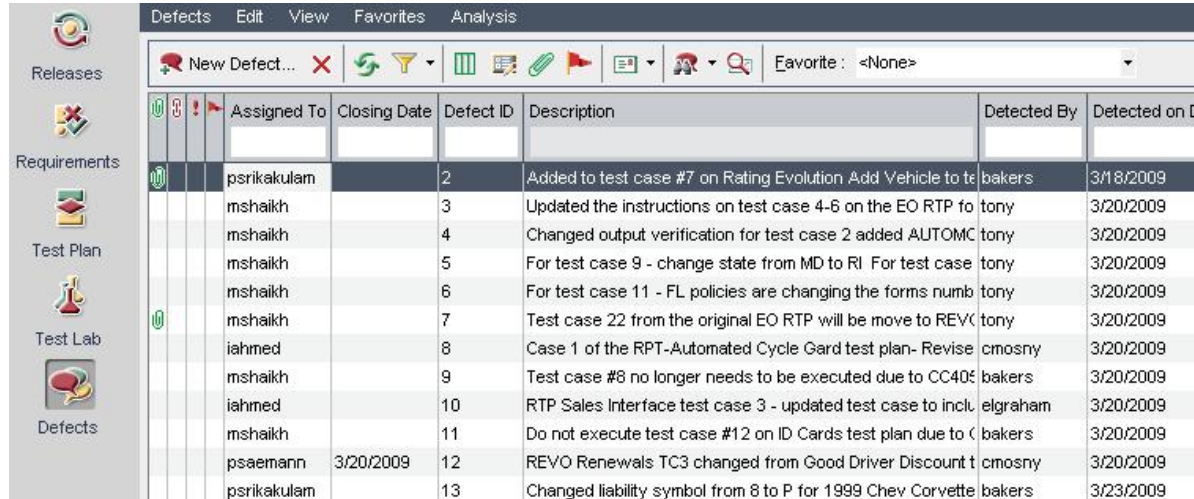
- ▶ Defect Management is performed in HP Quality Center
- ▶ Defects can be logged from the Defect section or Test Lab section while executing test cases
- ▶ Defects that are found during test case execution must be logged from Test Lab section to establish traceability between the defects and the test case. This also populates additional information from the test case into the defect that would otherwise not be available.

Work Flow: Defects

- ▶ Add Defects:
- ▶ Review New Defects:
- ▶ Repair Open Defects:
- ▶ Test New Build:
- ▶ Analyze Defect Data:



Add Defects



Assigned To	Closing Date	Defect ID	Description	Detected By	Detected on
psrikakulam		2	Added to test case #7 on Rating Evolution Add Vehicle to te	bakers	3/18/2009
mshaikh		3	Updated the instructions on test case 4-6 on the EO RTP fo	tony	3/20/2009
mshaikh		4	Changed output verification for test case 2 added AUTOMC	tony	3/20/2009
mshaikh		5	For test case 9 - change state from MD to RI For test case	tony	3/20/2009
mshaikh		6	For test case 11 - FL policies are changing the forms numb	tony	3/20/2009
mshaikh		7	Test case 22 from the original EO RTP will be move to REV	tony	3/20/2009
iahmed		8	Case 1 of the RPT-Automated Cycle Gard test plan- Revise	cmosny	3/20/2009
mshaikh		9	Test case #8 no longer needs to be executed due to CC40	bakers	3/20/2009
iahmed		10	RTP Sales Interface test case 3 - updated test case to incl	elgraham	3/20/2009
mshaikh		11	Do not execute test case #12 on ID Cards test plan due to	bakers	3/20/2009
psaemann	3/20/2009	12	REVO Renewals TC3 changed from Good Driver Discount t	cmosny	3/20/2009
psrikakulam		13	Changed liability symbol from 8 to P for 1999 Chev Corvette	bakers	3/23/2009

- ▶ To start Defect section, click on the Defect icon from the left sidebar in Quality Center (QC)
- ▶ Click on “New Defect” button or Press ALT+N which brings the New defect submission window.

Add Defect - Cont'd

- ▶ Enter defect details on the New Defect windows.
- ▶ Red labeled fields are mandatory.
- ▶ Assign the defects to appropriate user.
- ▶ Click Submit button to add the defect.

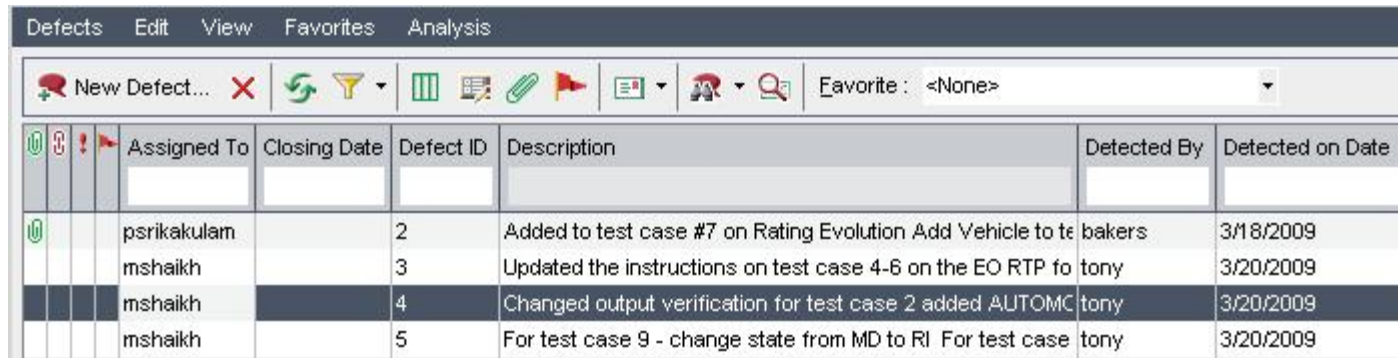
The screenshot shows a 'New Defect' window with a blue title bar. Below the title bar is a toolbar with icons for Clear, Attach, and various file operations. The main form area is divided into sections. The 'Summary' section has a single text field. The 'Details' section contains two columns of fields. The left column includes: '* Detected By:' (dropdown with 'msiddique'), '* Severity:' (dropdown), 'Detected in Cycle:' (dropdown with '...'), 'Detected in Version:' (dropdown with '...'), 'Priority:' (dropdown), 'Reproducible:' (dropdown with 'Y'), 'Subject:' (dropdown with '...'), and 'Target Release:' (dropdown with '...'). The right column includes: '* Detected on Date:' (dropdown with '3/30/2009'), 'Assigned To:' (dropdown), 'Detected in Release:' (dropdown with '...'), 'Modified:' (text field), 'Project:' (dropdown with '...'), 'Status:' (dropdown with 'New'), and 'Target Cycle:' (dropdown with '...'). Below the details section is a 'Description:' section with a large text area. At the bottom of the window are three buttons: 'Submit', 'Close', and 'Help'.

Defect Life Cycle

- ▶ New
- ▶ Open
- ▶ Fixed
- ▶ Re-open
- ▶ Rejected

Review New Defects

Customize Defect View



The screenshot shows a software interface for managing defects. At the top is a menu bar with 'Defects', 'Edit', 'View', 'Favorites', and 'Analysis'. Below the menu is a toolbar with icons for 'New Defect...', a close button, a refresh button, a filter button, a list view button, a print button, a flag button, a calendar button, a user selection button, a search button, and a 'Favorite' dropdown menu currently set to '<None>'. The main area contains a table with the following columns: 'Assigned To', 'Closing Date', 'Defect ID', 'Description', 'Detected By', and 'Detected on Date'. The table has five rows of data.

	Assigned To	Closing Date	Defect ID	Description	Detected By	Detected on Date
	psrikakulam		2	Added to test case #7 on Rating Evolution Add Vehicle to test	bakers	3/18/2009
	mshaikh		3	Updated the instructions on test case 4-6 on the EO RTP for	tony	3/20/2009
	mshaikh		4	Changed output verification for test case 2 added AUTOMC	tony	3/20/2009
	mshaikh		5	For test case 9 - change state from MD to RI For test case	tony	3/20/2009

- ▶ Filter/Sort:
- ▶ Select Columns:
- ▶ Defect Details:
- ▶ Attachments:
- ▶ Flag for follow up:
- ▶ Send Email:
- ▶ Find similar defects:



Working with Dashboard

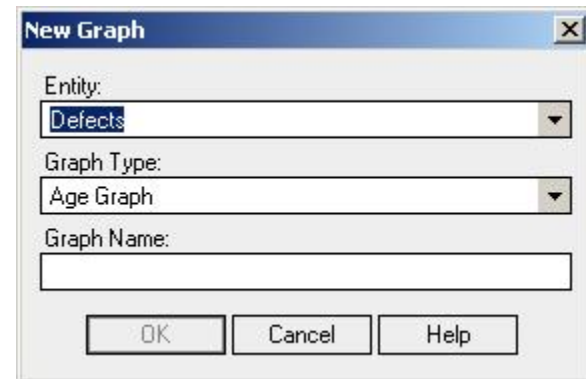
Real time Reporting

Dashboard Module

- ▶ In the Dashboard module, you create, view and manage graphs, standard reports, and Excel reports, for analyzing Quality Center data.
- ▶ The Dashboard module includes two tabs: The Analysis View tab and the Dashboard View tab.
 - ▶ The **Analysis View** tab contains a tree in which you organize all of your analysis items. Analysis items can be any of the following analysis types: graphs, standard reports, and Excel reports.
 - ▶ The **Dashboard View** tab contains a tree in which you organize dashboard pages. In **Dashboard pages** you arrange multiple graphs that you created in the analysis tree, and display them in a single view.

Creating Graphs

- ▶ In the Dashboard module, click the **Analysis View** tab.
- ▶ In the analysis tree, select the folder under which you want to add a graph.
- ▶ Click the **New Item** button , and select **New Graph**.The New Graph dialog box opens.
- ▶ Under **Entity**, select the entity for which you want to create a graph.
- ▶ Under **Graph Type**, select the type of graph you want to create. For more information on graph types, see Quality Center Graph Types.
- ▶ Under **Graph Name**, type a name for the graph.
- ▶ Click **OK**.The graph is added to the analysis tree.
- ▶ Click the **Details** tab.
- ▶ Under **Entity**, select the entity for which you want to create a graph.
- ▶ Under **Graph Type**, select the type of graph you want to create. For more information on graph types, see Quality Center Graph Types.
- ▶ Under **Graph Name**, type a name for the graph.
- ▶ Click **OK**.The graph is added to the analysis tree.
- ▶ Click the **Details** tab



Configuring Graphs

- ▶ In the analysis tree, select the graph you want to configure.
- ▶ Click the **Configuration** tab.
- ▶ To apply a filter or cross-filter to the graph content, click the **Set Filter** button .

The screenshot shows a software interface with three tabs: 'Details', 'Configuration' (selected), and 'View'. The 'Configuration' tab contains the following settings:

- X-Axis: Application
- Y-Axis: Count (dropdown) and Defects (text input)
- Grouped By: Status

Below these settings is a section labeled '- Filter' with a filter expression: 'Filter: Application[Oasis Or "InSite I" Or "InSite C" Or CAU/CARMA Or Service];Assigned To [avenkat Or mshaikh Or msiddique Or rallam Or mgangadhara Or dstahl Or vmessner Or Ifelder];Defects [Automated Script Execution (ACE) Or Test Script Change Request (TSCR)]'. There are two funnel icons to the left of the filter text.

Below the filter section is a section labeled '- Cross Project Selection' with a table:

Domain	Project
TESTING_MET...	Enterprise_Testing

Quality Center Graph Types

- ▶ Quality Center enables you to generate graphs for the following module
 - ▶ Requirements,
 - ▶ Test Plan,
 - ▶ Test Lab, and
 - ▶ Defects
- ▶ For each module, different graph types are available

Requirements Module Graphs

Graph	Description
Requirements - Summary Graph	Shows how many requirements are currently in a Quality Center project. For more information, see Requirements - Summary Graph.
Requirements - Progress Graph	Shows how many requirements accumulated in a Quality Center project at specific points during a period of time. For more information, see Requirements - Progress Graph.
Requirements - Trend Graph	Shows the history of changes to specific requirement fields in a Quality Center project, for each time interval displayed. For more information, see Requirements - Trend Graph.
Requirements - Coverage Graph (Available from the Requirements module only.)	Shows how many requirements are currently in a Quality Center project, according to their test coverage status. For more information, see Requirements - Coverage Graph.

Test Plan Module Graphs

Graph	Description
Test Planning - Summary Graph	Shows how many tests are currently in a Quality Center project. For more information, see Test Planning - Summary Graph.
Test Planning - Progress Graph	Shows how many tests accumulated in a Quality Center project at specific points during a period of time. For more information, see Test Planning - Progress Graph.
Test Planning - Trend Graph	Shows the history of changes to specific Test Plan fields in a Quality Center project, for each time interval displayed. For more information, see Test Planning - Trend Graph.

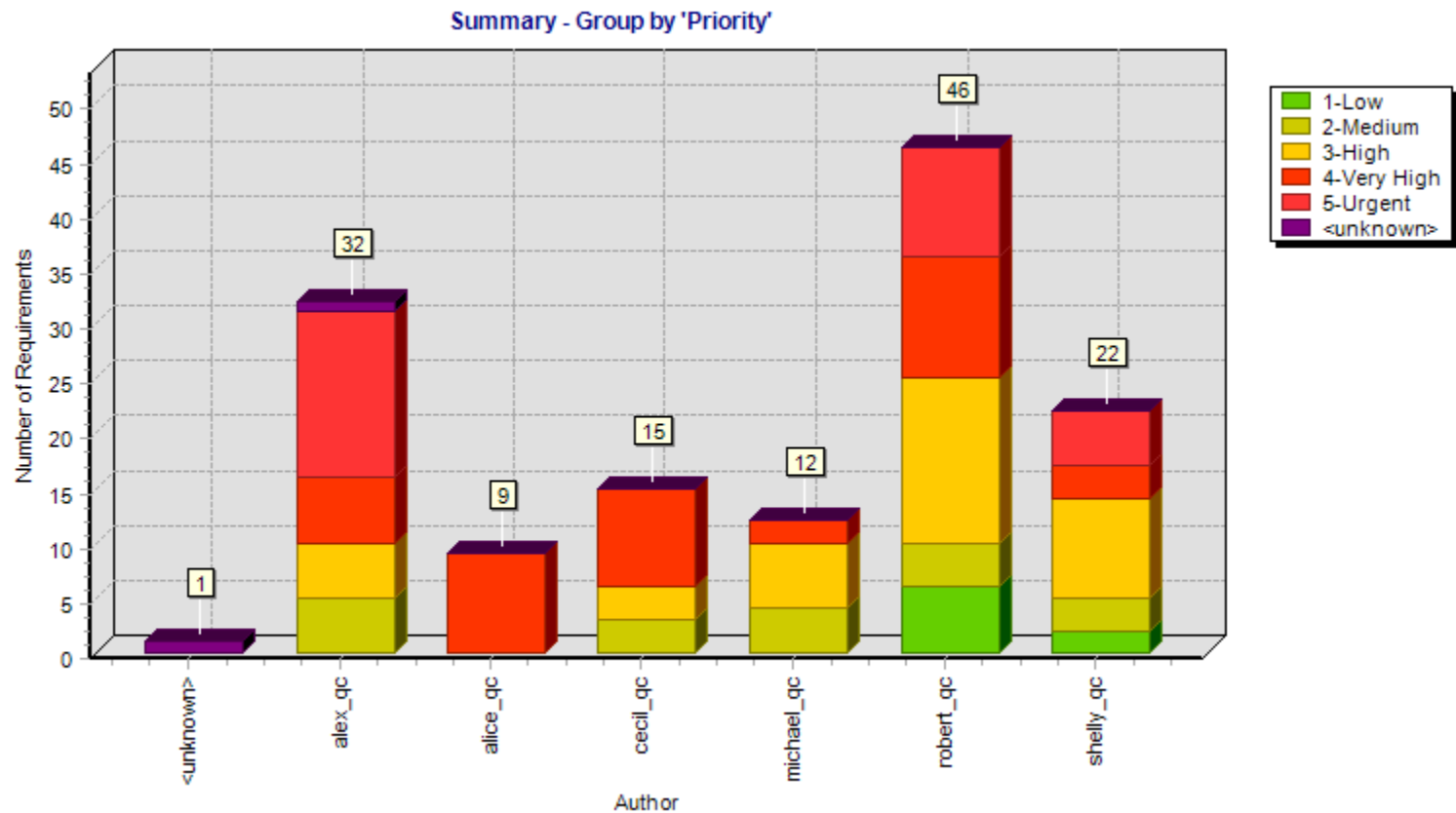
Test Lab Module Graphs

Graph	Description
Test Execution - Summary Graph	Shows how many tests in a Quality Center project belong to the current test set, or to all test sets. For more information, see Test Execution - Summary Graph .
Test Execution - Progress Graph	Shows how many tests accumulated in the current test set, or in all test sets, at specific points during a period of time. For more information, see Test Execution - Progress Graph .

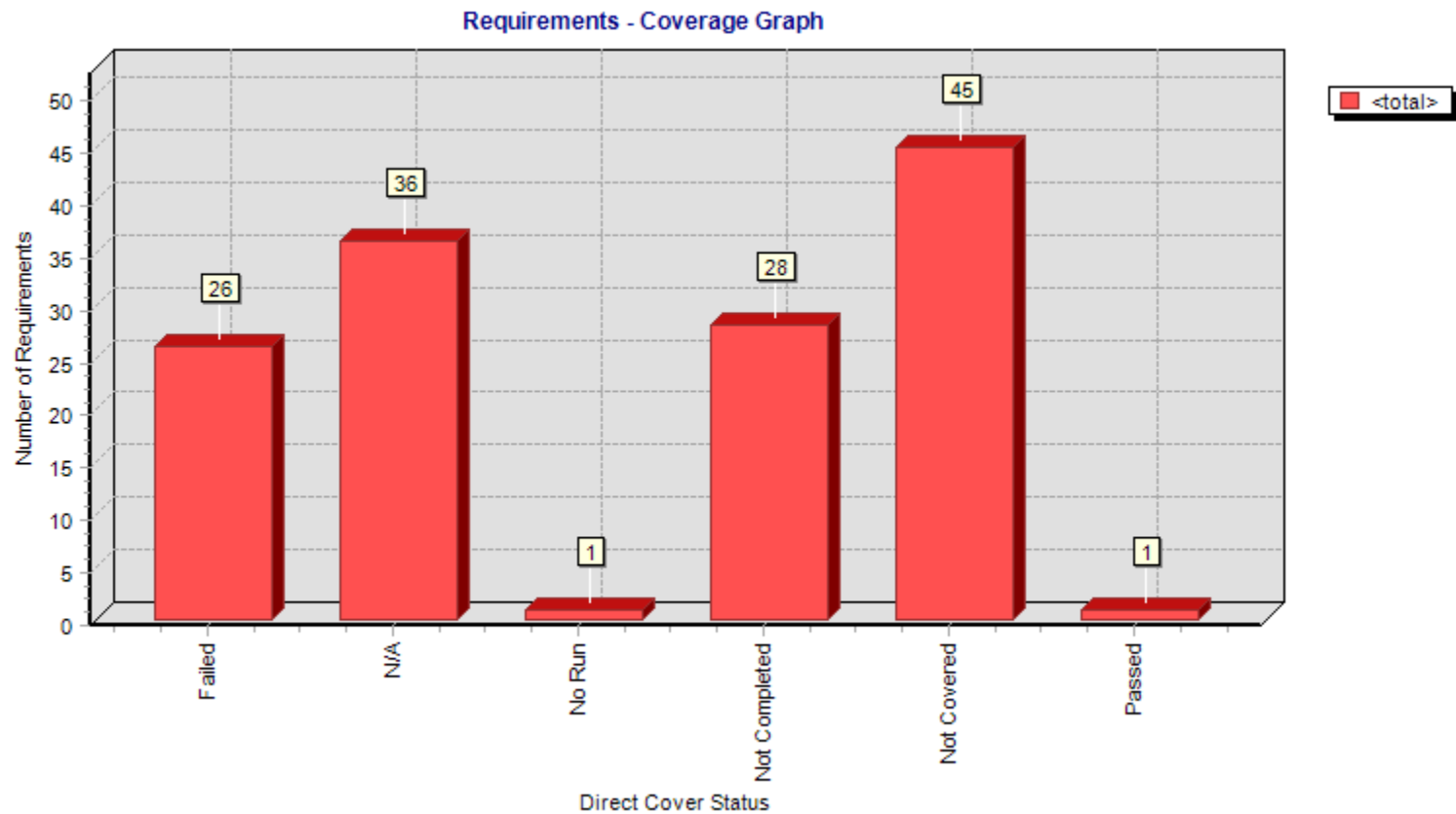
Defects Module Graphs

Graph	Description
Defects - Summary Graph	Shows a summary of the number of defects in a Quality Center project, or the estimated/actual amount of time taken to fix these defects. For more information, see Defects - Summary Graph.
Defects - Progress Graph	Shows the accumulation of defects in a Quality Center project, or the estimated/actual amount of time taken to fix these defects, at specific points during a period of time. For more information, see Defects - Progress Graph.
Defects - Age Graph	Shows the lifetime of defects in a Quality Center project. For more information, see Defects - Age Graph.
Defects - Trend Graph	Shows the history of changes to specific defect fields in a Quality Center project, for each time interval displayed. For more information, see Defects - Trend Graph.

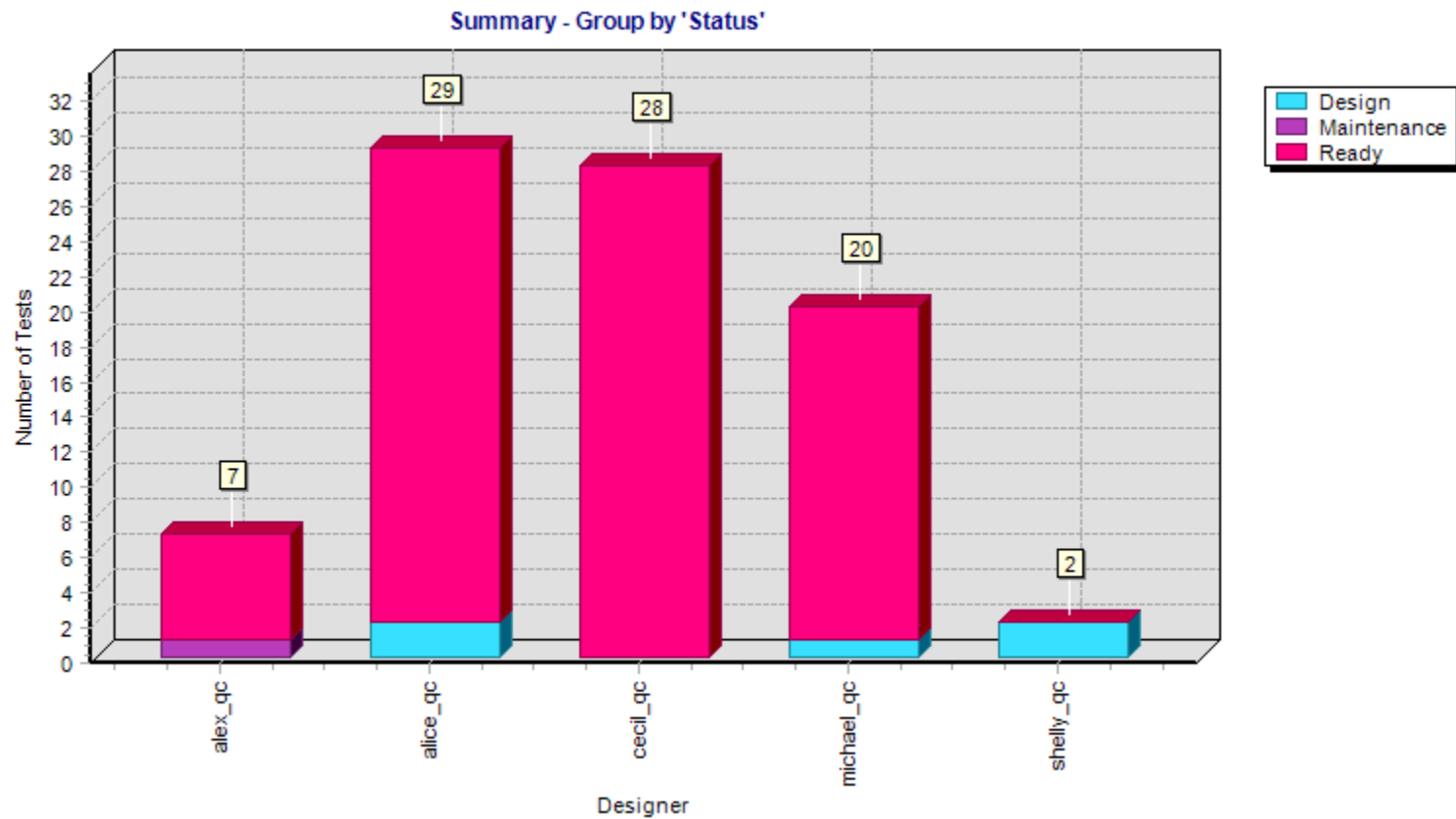
Requirements - Summary Graph



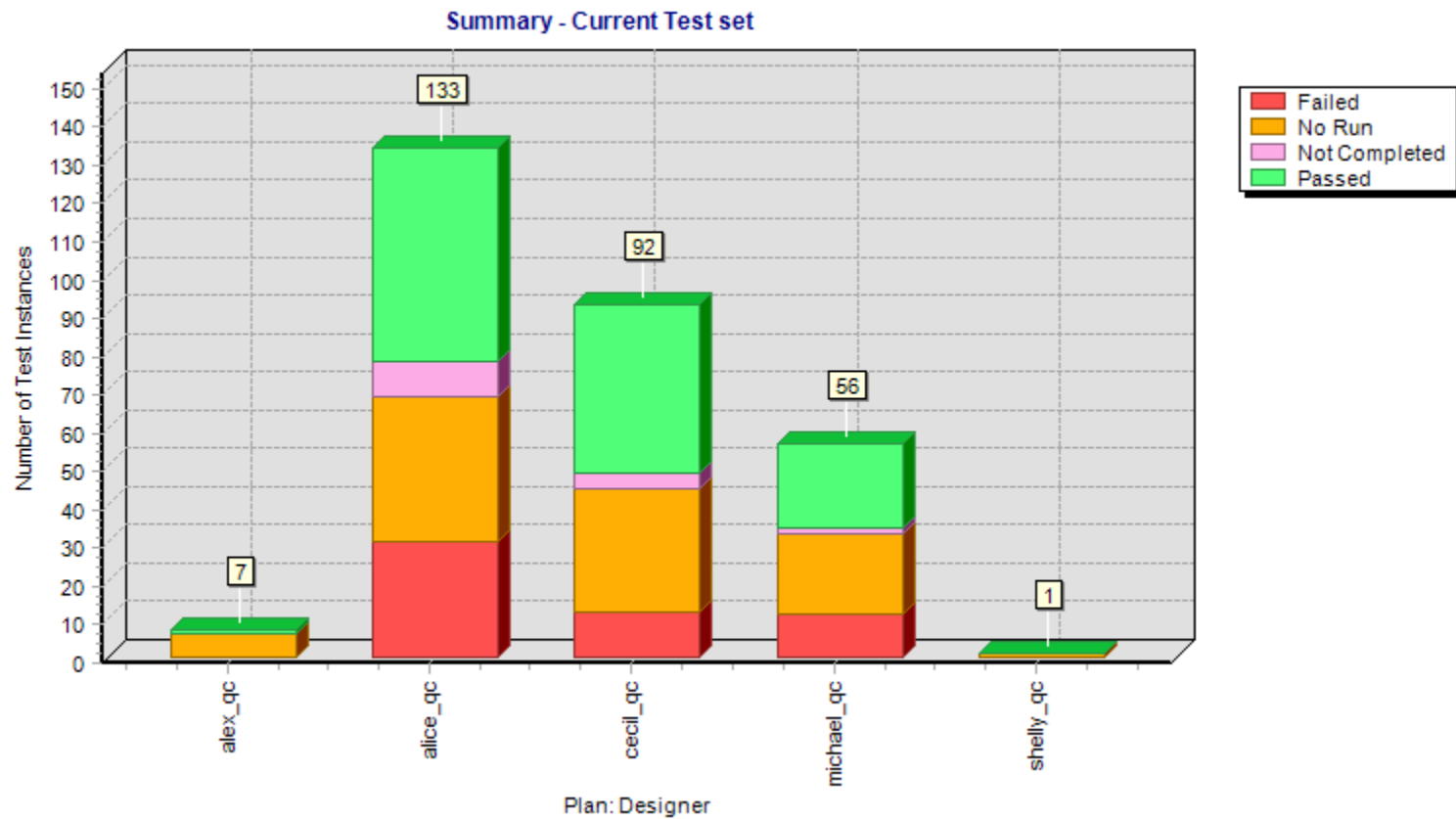
Requirements - Coverage Graph



Test Planning - Summary Graph



Test Execution - Summary Graph



Defects - Summary Graph

