

QUALITY CENTER - INTRODUCTION

What is Quality Center?

HP Quality Center, a test management tool is now popularly known as **Application Life Cycle Management Tool** *ALM* as it is no longer just a test management tool but it supports various phases of the software development life cycle.

HP-ALM helps us to manage project milestones, deliverables, resources and keeping track of project health, standards that allows Product owners to gauge the current status of the product. It is important to understand history, architecture and Quality Center Workflow.

History of QC

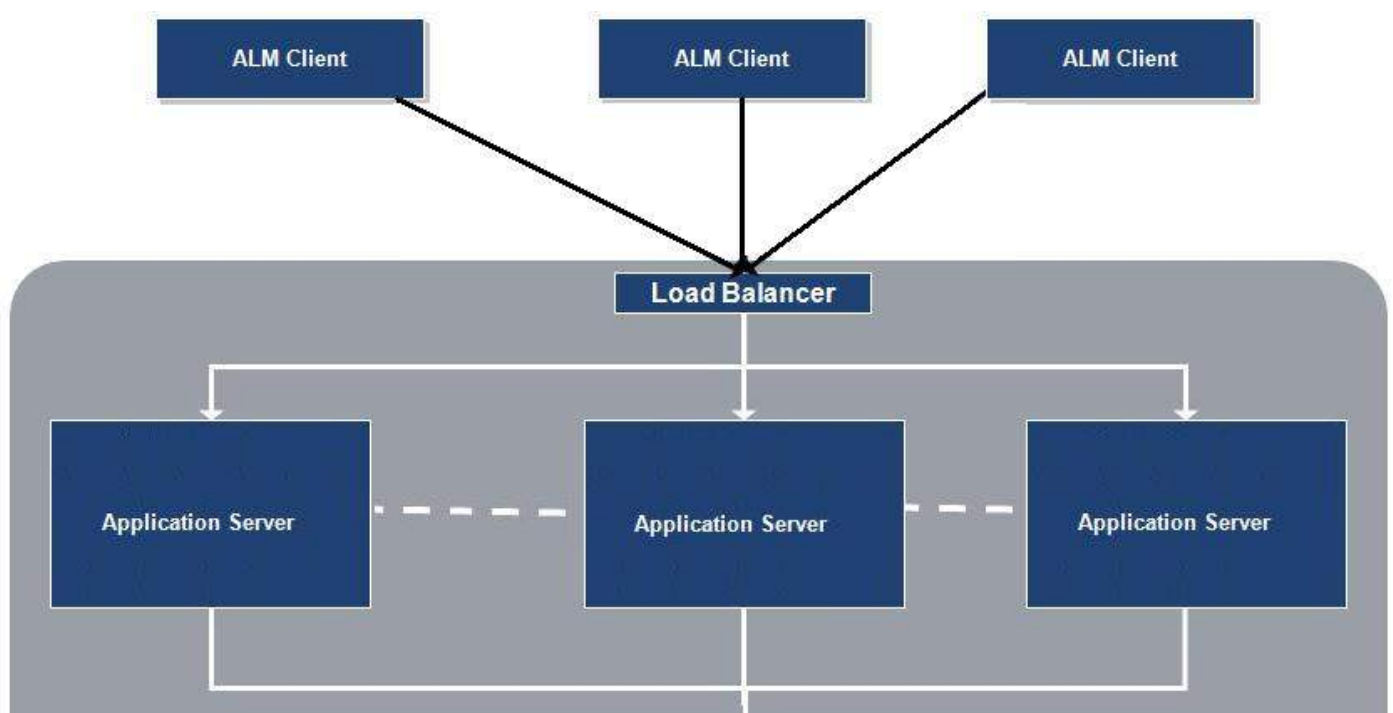
Quality Center was formerly known as Test Director, a product of mercury interactive. The below table provides us a better insights about the version history of QC.

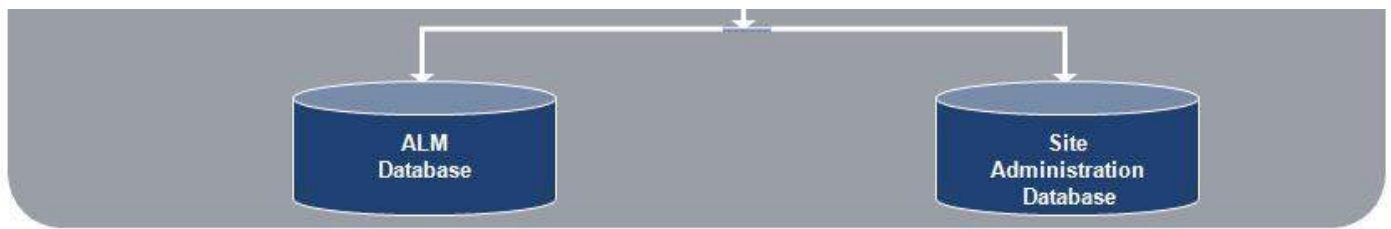
S.No#	Commercial Name	Version Numbers	Owned By
1.	Test Director	v1.52 to v8.0	Mercury Interactive
2.	Quality Center	v8.0 to v9.0	Mercury Interactive
3.	Quality Center	v9.2 to v10.0	Hp
4.	ALM	v11.0 to v11.5x	Hp

Architecture of QC

HP-ALM, an enterprise-wide application that is based on Java 2 Enterprise Edition *J2EE* technology and uses MS SQL Server or Oracle as its back end. There is also a load balancer to ensure to effectively cater user's requests.

Site Administration Database is hosted on a standalone Database server while other projects data are stored on a separate Database server. A typical installation of Quality Center is shown below:





HP ALM Editions:

HP ALM is a commercial licensed tool and HP deploys it in 4 different editions that are listed below:

- HP ALM
- HP ALM Essentials
- HP Quality Center Enterprise Edition
- HP ALM Performance Center Edition

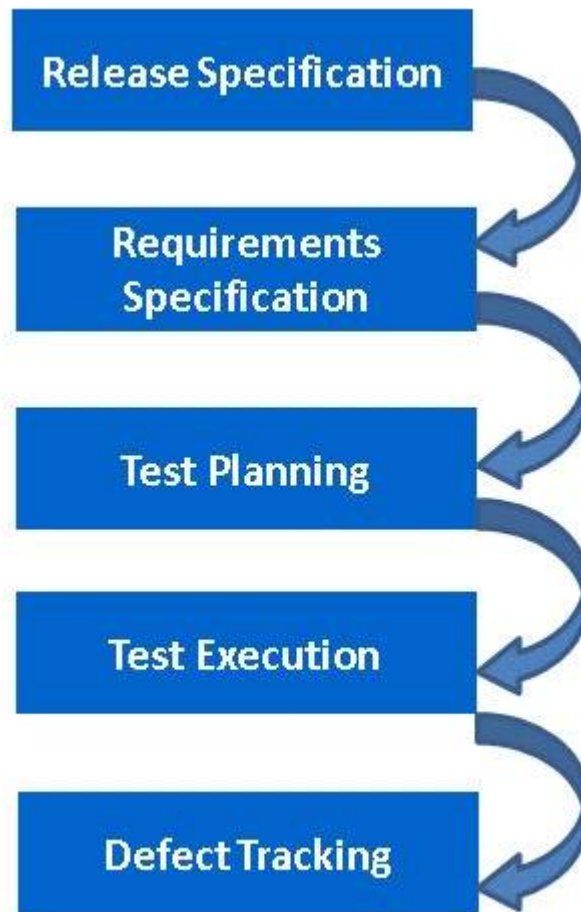
ALM Edition Feature Comparison

Each one of the above said edition has its own limitation in terms of ALM functionalities. Based on below table one can decide which license is required for their project purposes.

Feature	HP ALM	HP ALM Essentials	HP QC Enterprise Edition	HP ALM Performance Center Edition
Release Management	Yes	Yes	Yes	Yes
Project Planning and Tracking	Yes	No	No	No
Risk Based Quality Management	Yes	No	Yes	No
Test Authoring and Execution	Yes	Yes	Yes	Yes
Test Resources	Yes	Yes	Yes	Yes
Test Configurations	Yes	No	Yes	Yes
Hp Sprinter	Yes	No	Yes	No
Lab Management	Yes	No	No	Yes
Versioning	Yes	No	Yes	Yes
Baselining	Yes	No	Yes	Yes
Cross Project Customization	Yes	Yes	No	Yes
Sharing Defects	Yes	No	No	No

Quality Center Workflow

Quality Center workflow is represented using a simple diagram as shown below:



Hp-Quality Center Set up

HP Quality Center Environment Set up is a complicated process and it is NOT a typical installation that we perform on a windows operating system.

Enterprise installation would be distributed, however for learning/evaluating purposes one can install the trial version of Hp-ALM 11.5x and also need to take care of the prerequisites carefully for successful installation.

Prerequisites for Installing QC

For Evaluating purposes both client and Server can reside on the same system and in this chapter we will do the installation of same kind.

Supported Windows Operating Systems:

Only the following list of Windows OS are supported hence one has to ensure that HP-ALM is installed on one of the below mentioned Windows OS only

- Microsoft Windows Server 2008 Enterprise SP2 32 Bit/64 Bit
- Microsoft Windows Server 2008 R2 Enterprise SP1 64 Bit
- Microsoft Windows Server 2012 Standard 64 Bit
- Microsoft Windows Server 2012 R2 Standard 64 Bit

Supported Databases:

Ensure that you have one of the databases installed before proceeding to install HP-ALM.

- Oracle 10.2.0.5
- Oracle 11.2.0.3
- Oracle 11.2.0.4
- Microsoft SQL Server 2005 SP4
- Microsoft SQL Server 2008 R2 SP1
- Microsoft SQL Server 2008 R2 SP2

Supported AppServers:

- Apache 2.2
- Microsoft IIS 7.0
- Microsoft IIS 7.5
- Microsoft IIS 8.0
- Microsoft IIS 8.5

Supported Browsers:

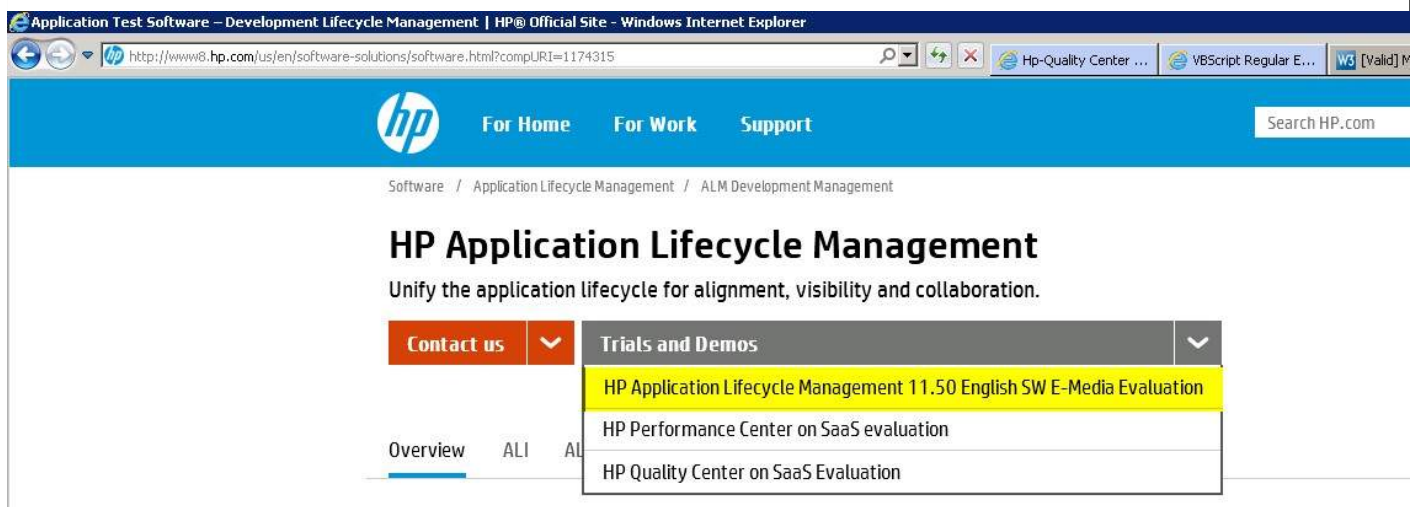
- Microsoft Internet Explorer 8
- Microsoft Internet Explorer 9
- Microsoft Internet Explorer 10
- Microsoft Internet Explorer 11

Downloading Hp-ALM

Following are the steps for downloading the 30 day trial version of Hp-ALM from HP website.

Step 1: Launch IE with URL - <http://www8.hp.com/us/en/software-solutions/software.html?compURI=1174315>

Step 2: Click on "Trials and Demos" and Select "HP Application LifeCycle Management 11.50 English SW E-Media Evaluation" as shown below



Step 3: Fill in all the necessary details and click on "NEXT" as shown below

Software / Application Lifecycle Management / ALM Development Management

HP Application Lifecycle Management 11.50 English SW E-Media Evaluation

About yourself

First Name *

Last Name *

Email *

May HP contact you via email? *[?]

Yes No

What are your plans for using this software? *

About your company

Company *

Phone *

Country *

Area

Phone *

Country *

Address1 *

Address 2

City/town *

State/province *

Zip/postal code *

Required *

[Privacy Statement](#)

Cancel

Next

Step 4: Accept the Software terms and click on "NEXT" as shown below

1 About yourself > 2 Terms of service > 3 Download

HP Application Lifecycle Management 11.50 English SW E-Media Evaluation

Software Download Terms of Use

READ CAREFULLY BEFORE DOWNLOADING THE SOFTWARE.

1. This license agreement (the "Agreement") states the terms between you ("You" or "Your") and Hewlett-Packard Company and its subsidiaries ("HP") for the software that You download from HP's website (the "Software"). **By downloading, copying, or using the Software You agree to this Agreement. If You do not agree to be bound by the terms of this Agreement, do not click on "I Agree" below and do not download, install, copy, or use the Software.**
2. **Terms.** This Agreement includes supporting terms and information referenced by HP, which may be software license information, additional license authorizations, software specifications, published warranties, supplier terms, open source software licenses and similar content ("Supporting Material"). Additional license authorizations are available at: www.hp.com/go/SWlicensing.
3. **Authorization.** If you agree to this Agreement on behalf of another person or entity, you warrant you have authority to do so. This Agreement will be enforceable against You and any entity for which you download, install or use the Product.
4. **Consumer Rights.** If you obtained the Software as a consumer, nothing in this Agreement affects your statutory rights.
5. **License Grant.** As long as you comply with this Agreement, HP grants You a non-exclusive non-transferable license to use one copy of the version or release of the Software only for Your organization's internal purposes; such use is subject to any specific software licensing information located in

BY CLICKING I AGREE AND USING THE SOFTWARE YOU INDICATE YOUR ACCEPTANCE OF THE HP SOFTWARE DOWNLOAD AGREEMENT. IF YOU CLICK I DISAGREE AND DO NOT ACCEPT THE HP SOFTWARE DOWNLOAD AGREEMENT, THEN YOU ARE NOT GRANTED ACCESS TO THE SOFTWARE, YOU ARE NOT AUTHORIZED TO USE THE SOFTWARE, AND YOU MAY NOT DOWNLOAD THE SOFTWARE.

I DISAGREE

I AGREE

Step 5: Download link appears and select the appropriate edition you want to install
windows/Unix

1 About yourself > 2 Terms of service > 3 Download

HP Application Lifecycle Management 11.50 English SW E-Media Evaluation

Please review this first:

[Ltr, HP ALM 11.50 Welcome](#)

PDF 0.08 MB

You may now download your software and supporting materials.

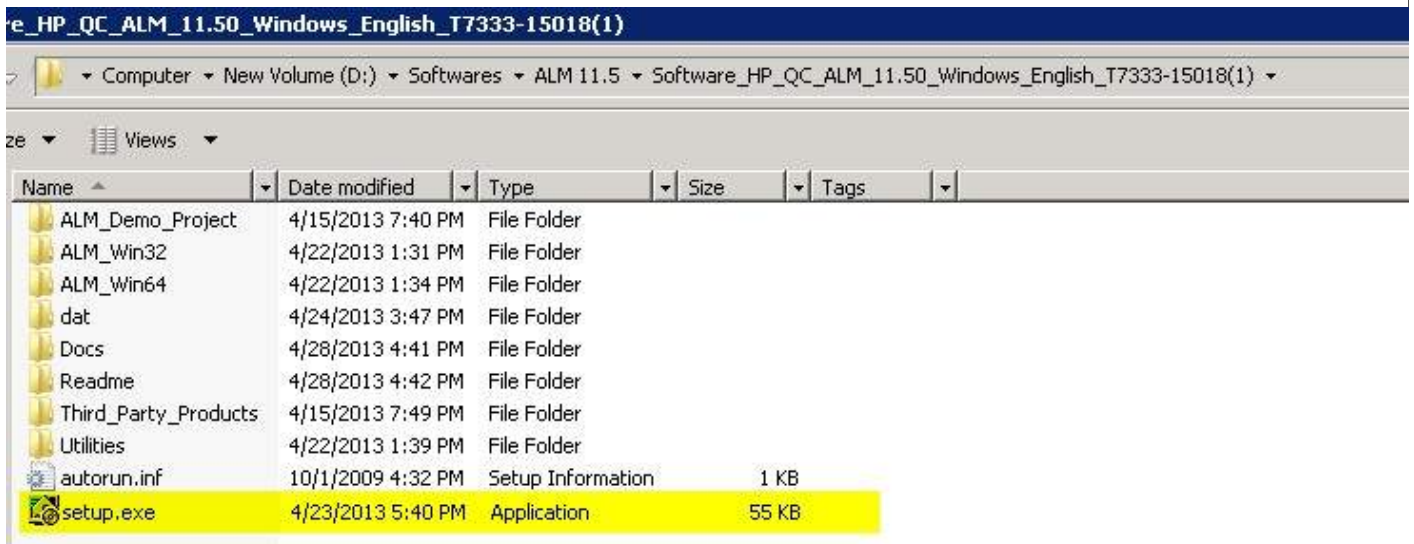
For License keys or to download content again, please refer to our download confirmation email sent to Admin@Tutorialspoint.com.

Review our [FAQ](#) for more helpful information.

Name	File Size	Using HP Download Manager ▼ ?
Software, HP QC/ALM 11.50 + SP2 Windows English (T7333-15018.ISO)	PDF 2542 MB	Download
Software, HP QC/ALM 11.50 + SP2 Unix English (T7333-15019.ISO)	PDF 1917 MB	Download
Ltr, HP ALM 11.50 Welcome	PDF 0.08 MB	Download

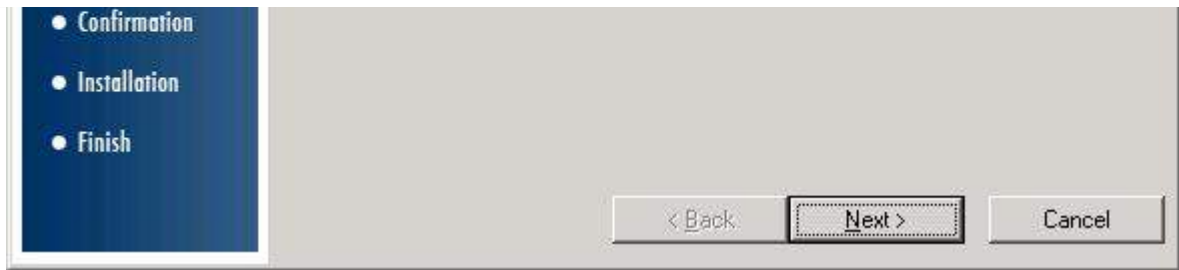
Installing HP-ALM

Step 1 : After downloading the ISO file, unzip the contents and after unzipping, the folder structure would be as shown below:

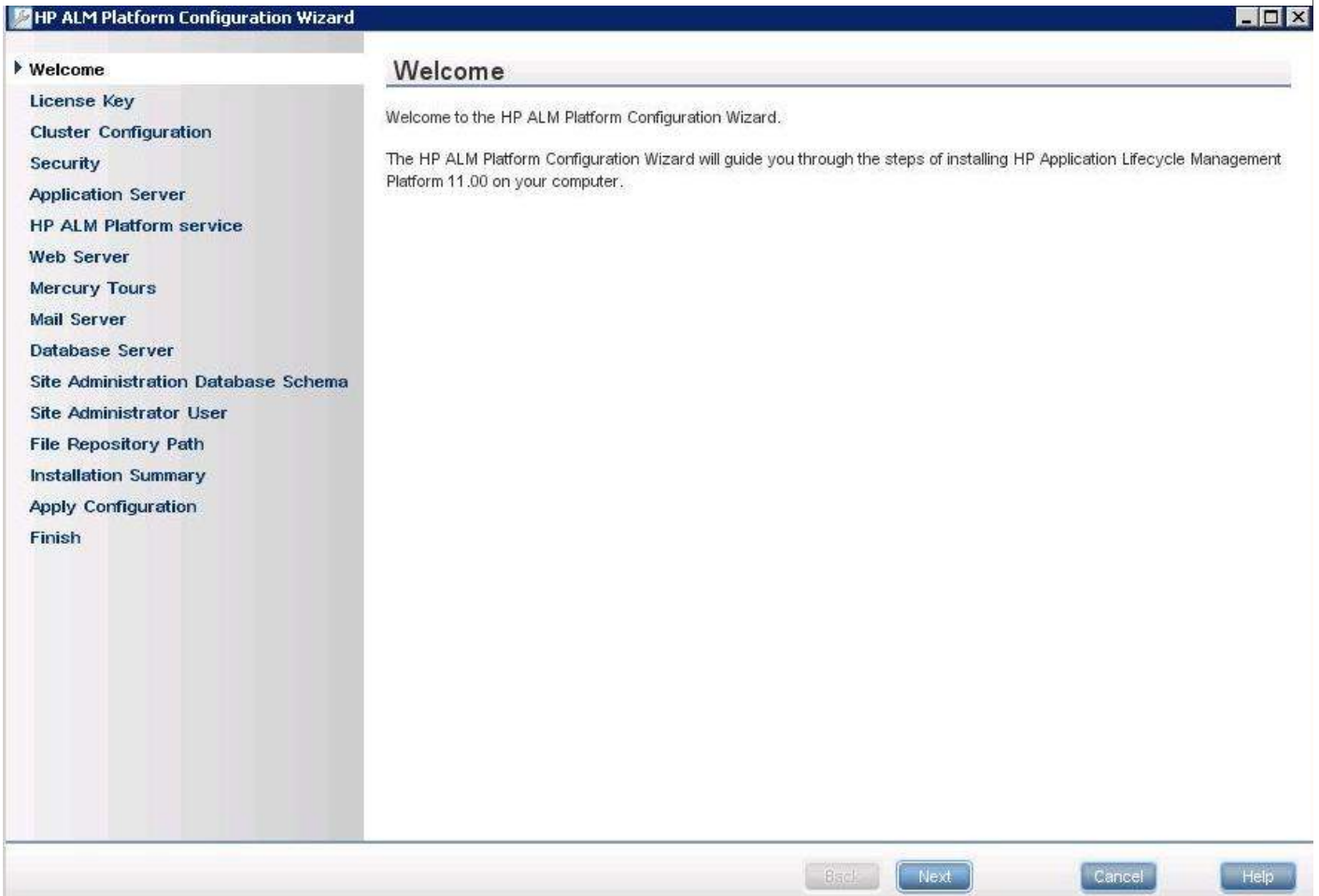


Step 2 : After welcome screen opens up click on "NEXT" button as shown. Continue to Click Next button until you reach Finish Screen.

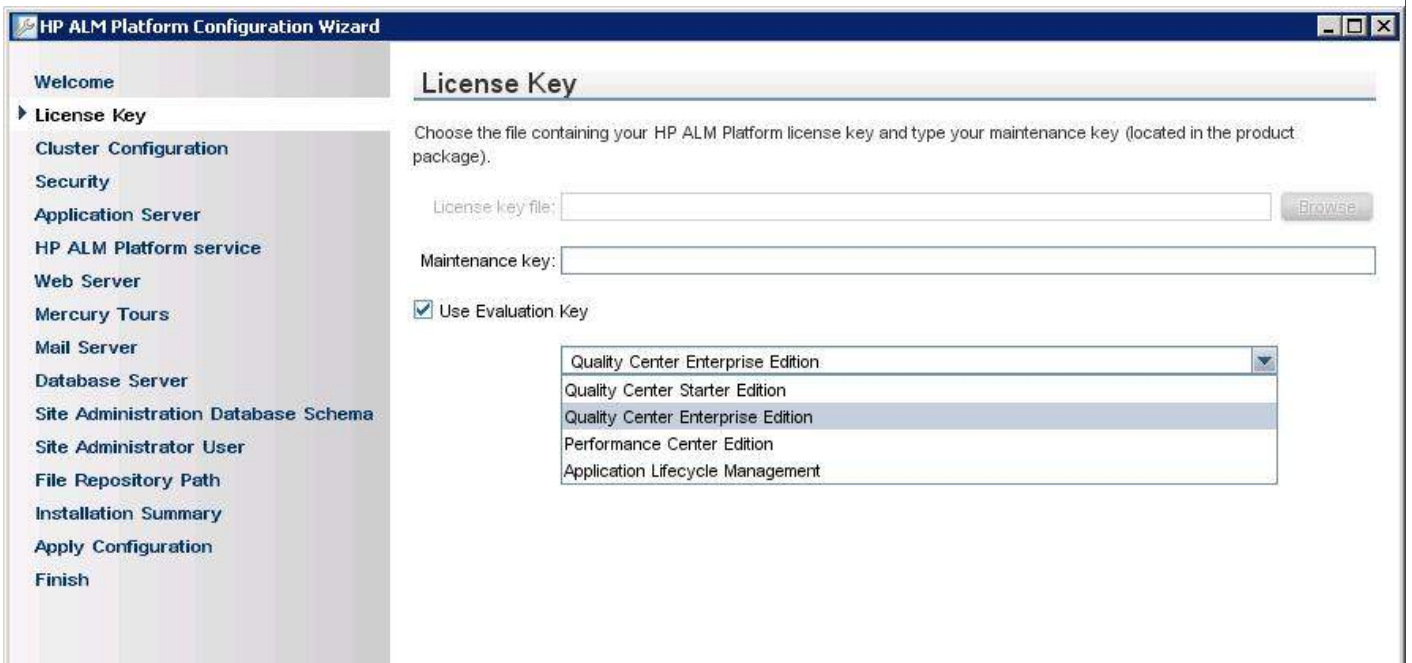


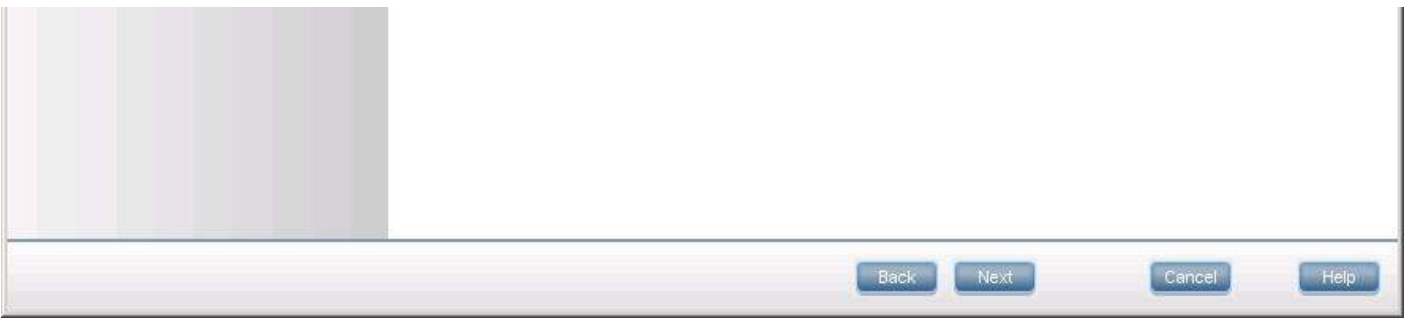


Step 3 : Upon Finishing, the HP ALM Platform Configuration Wizard Opens as shown below.

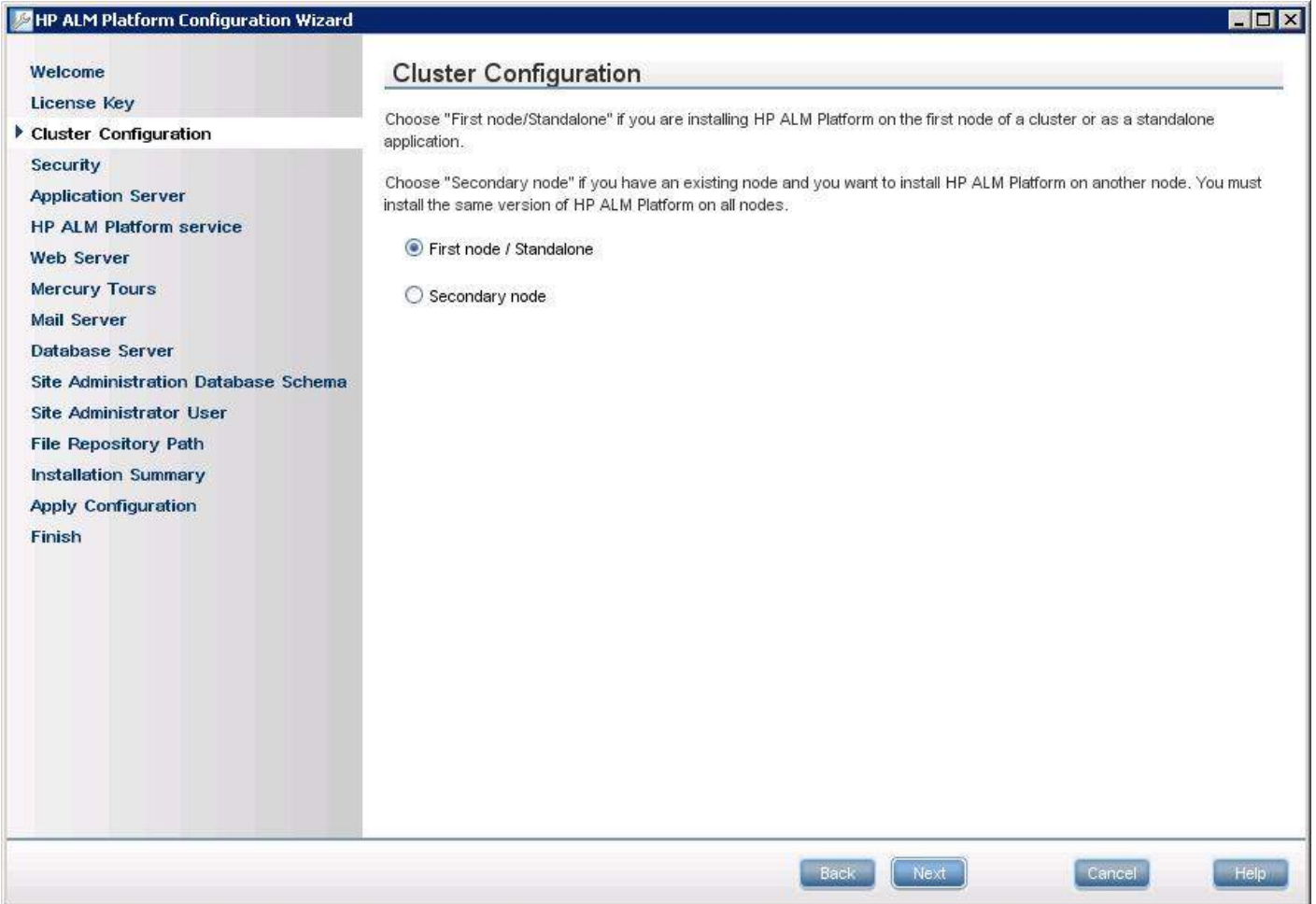


Step 4 : License Key Tab opens and user need to select "Application Life Cycle Management" so that we can access all the features of the package.



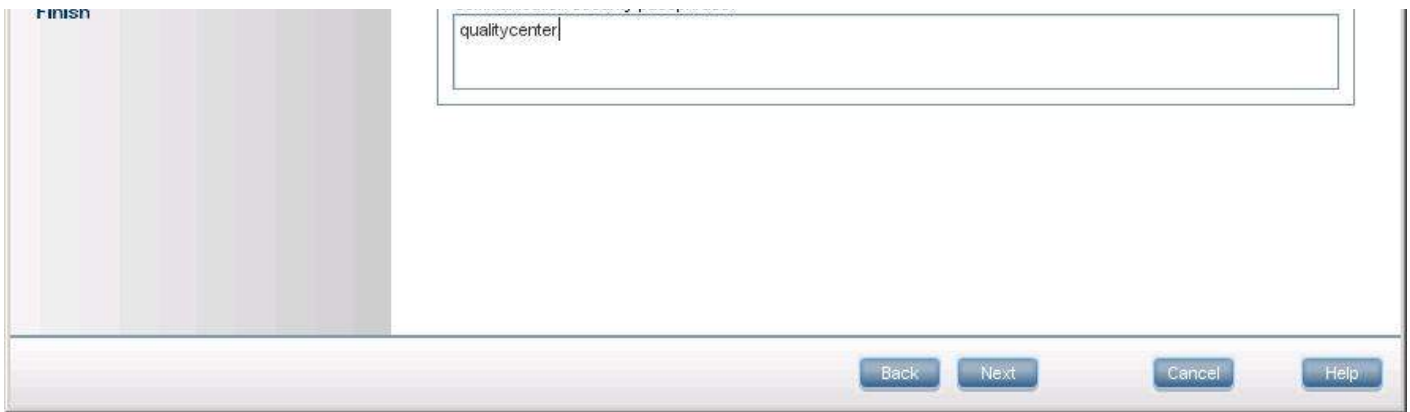


Step 5 : Cluster Configuration Tab opens and choose Standalone as we will install all services in a standalone host and NOT as a distributed system.

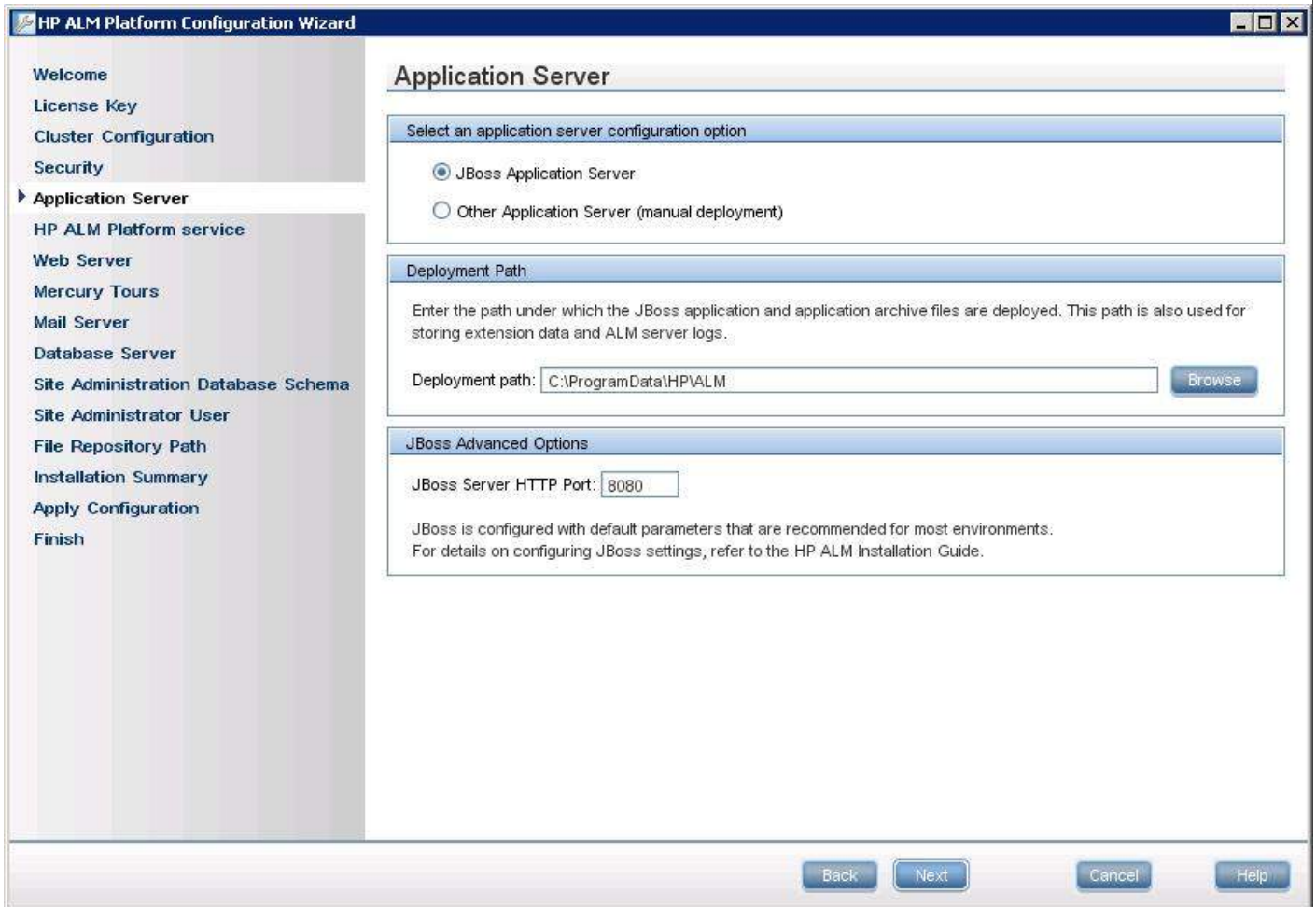


Step 6 : Security Tab opens and key in the passphrase such that there is a minimum of 12 characters.

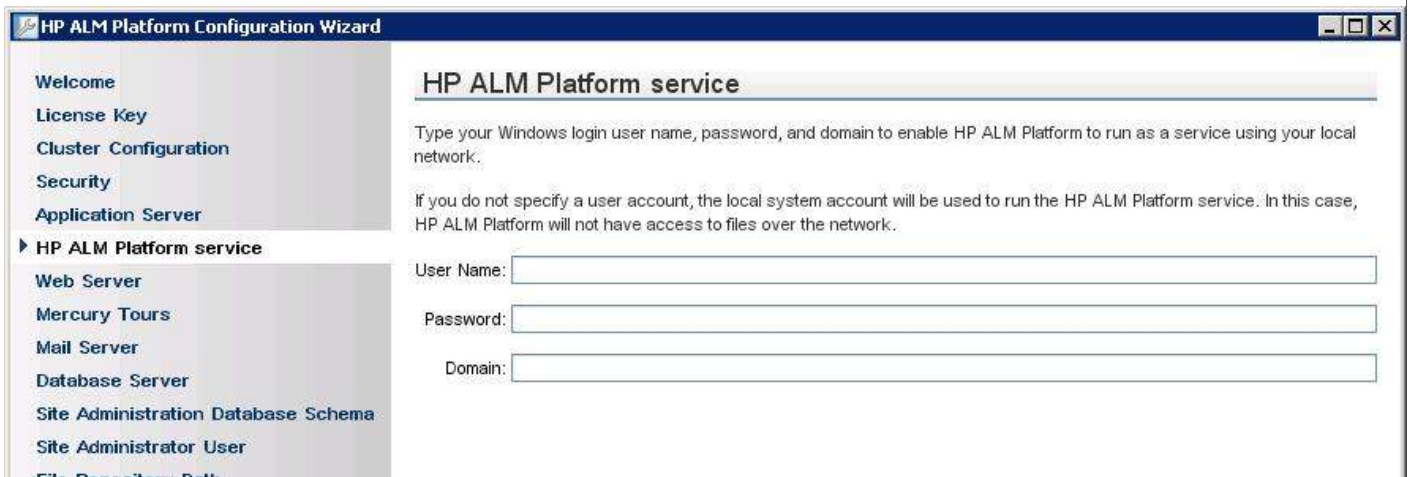


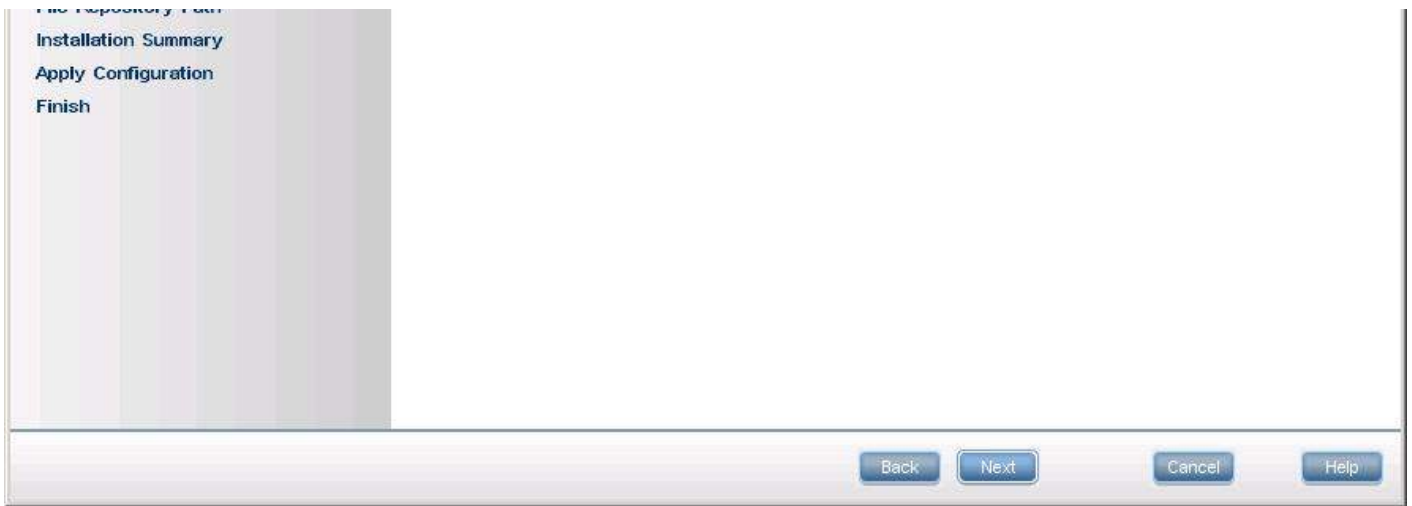


Step 7 : Application Server Tab Opens and choose "Jboss Application Server" and allow all others as default values.

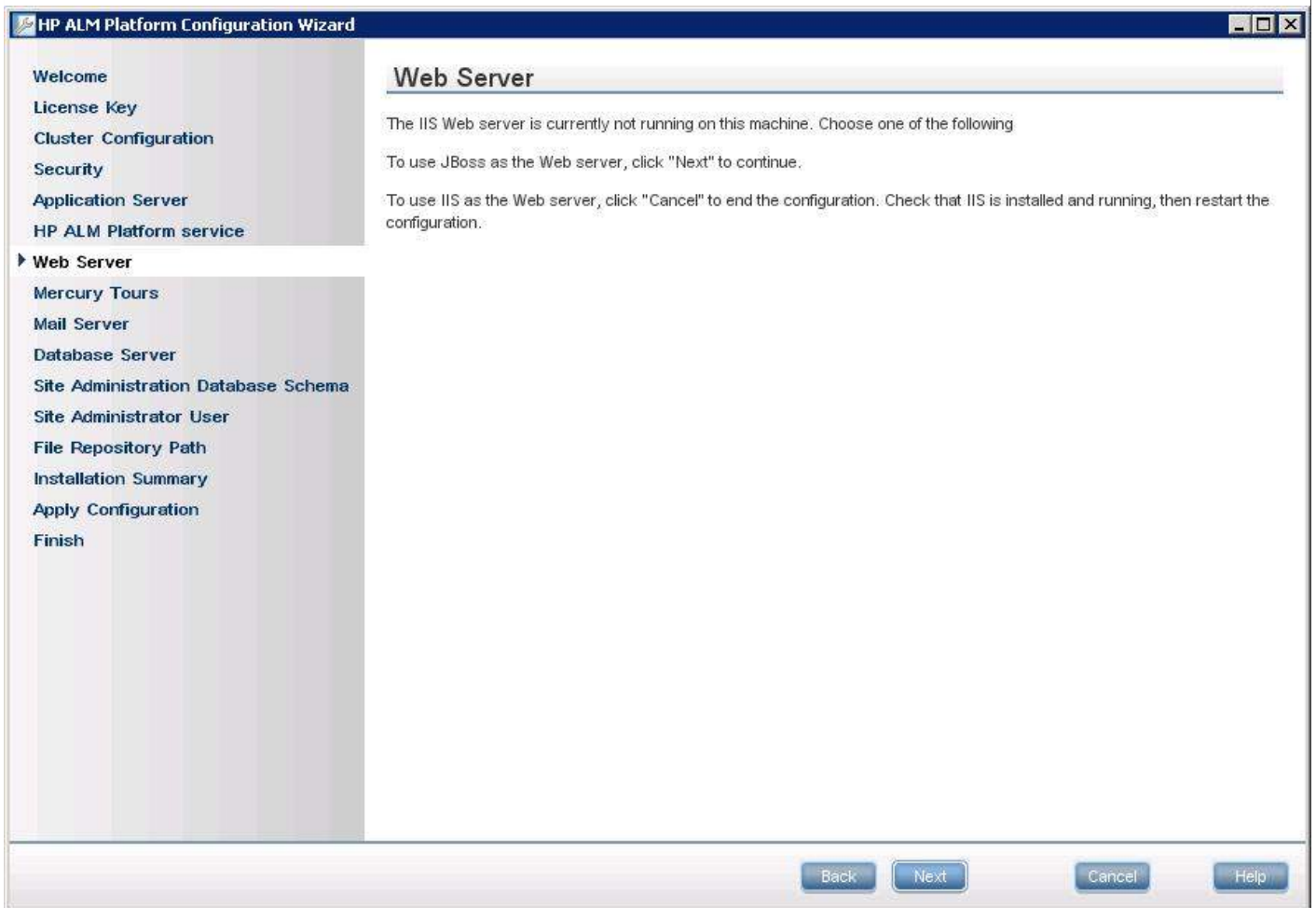


Step 8 : HP ALM Platform Service tab opens. Leave it empty so that your Windows login is used as the userid for starting the ALM Services.



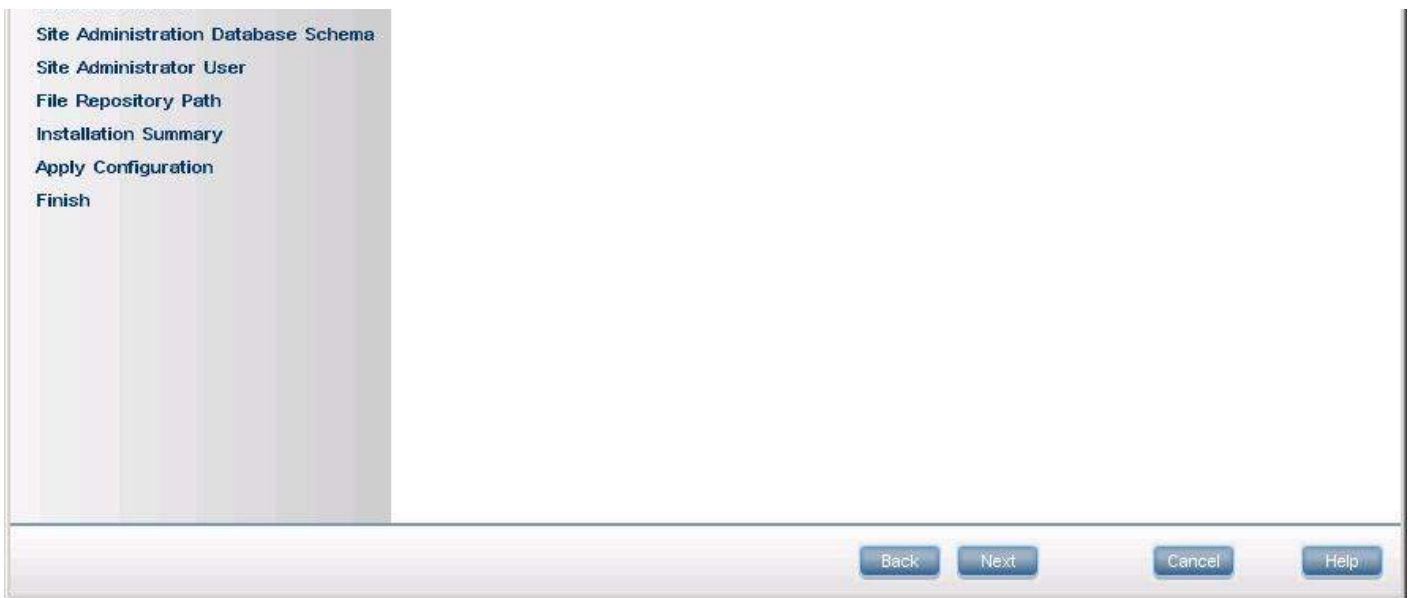


Step 9 : Web Server selection window opens. We will use JBOSS as the Webserver. Hence we need NOT select anything but just click on "NEXT" button.

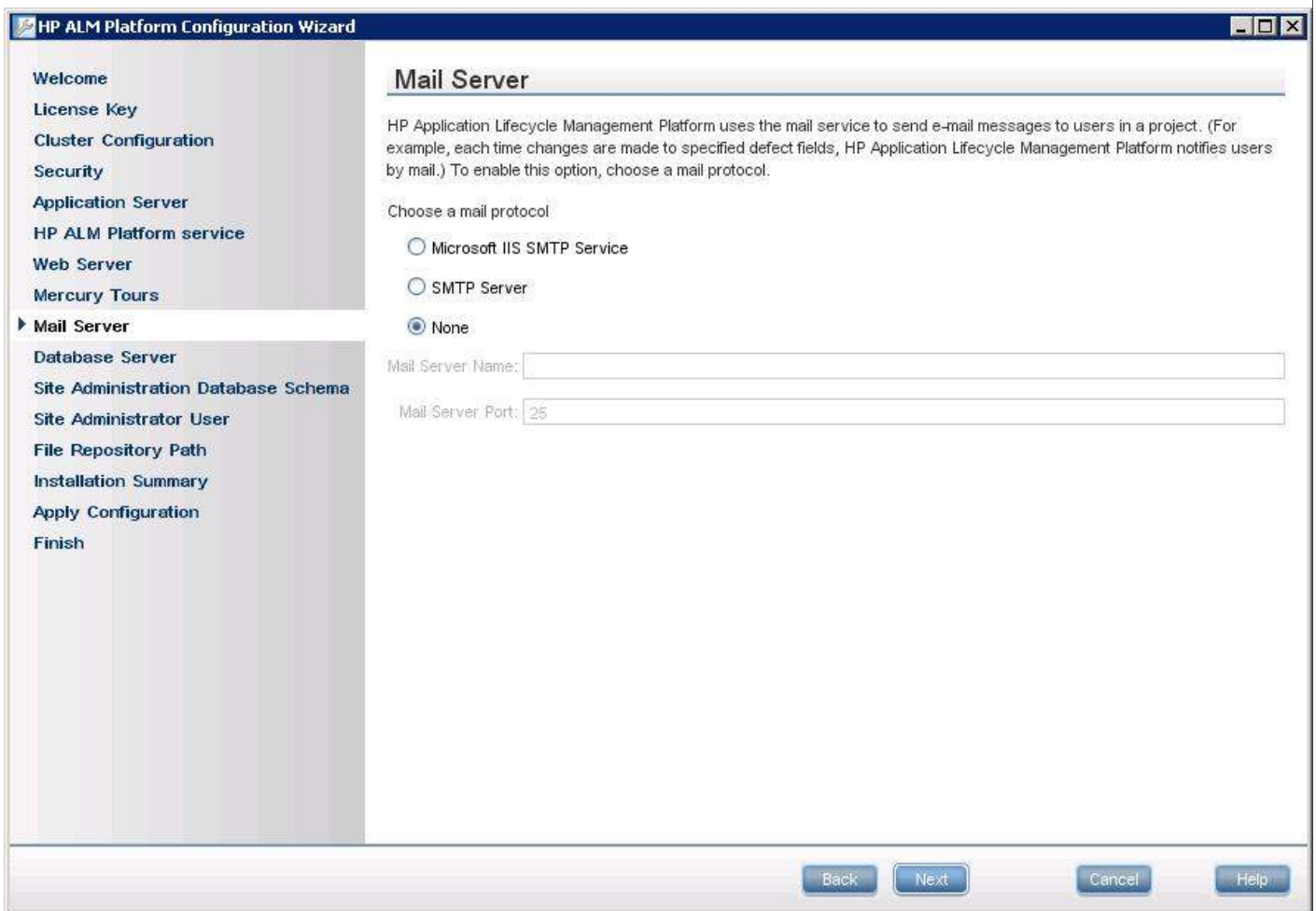


Step 10 : If you would like to install the sample application "Mercury Tours", Please select and click "NEXT".



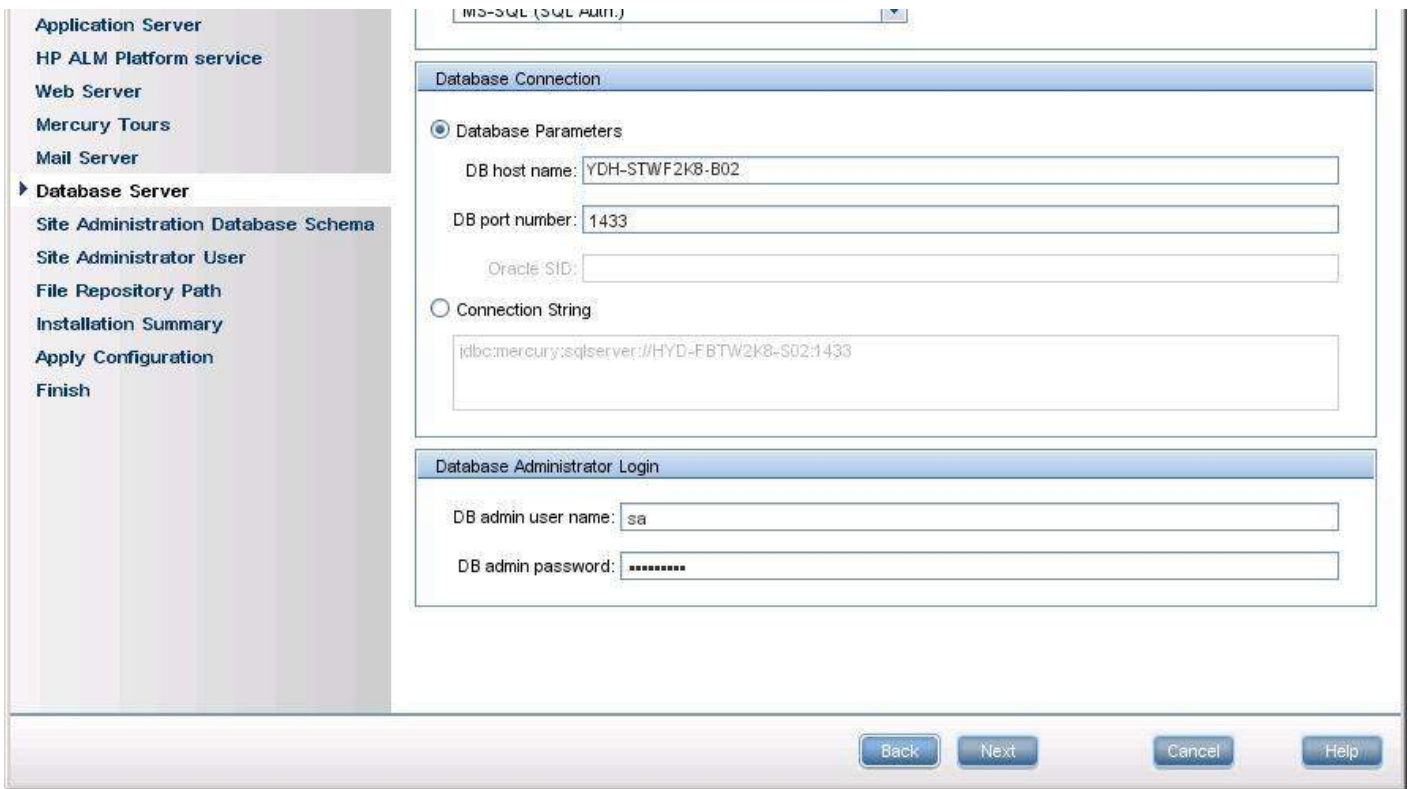


Step 11 : For Mail Server Configuration, add your SMTP or MS IIS SMTP server name or Select None and Click "NEXT". This server setting will enable you to interact with other QC users via Email or it triggers an email based on the settings.

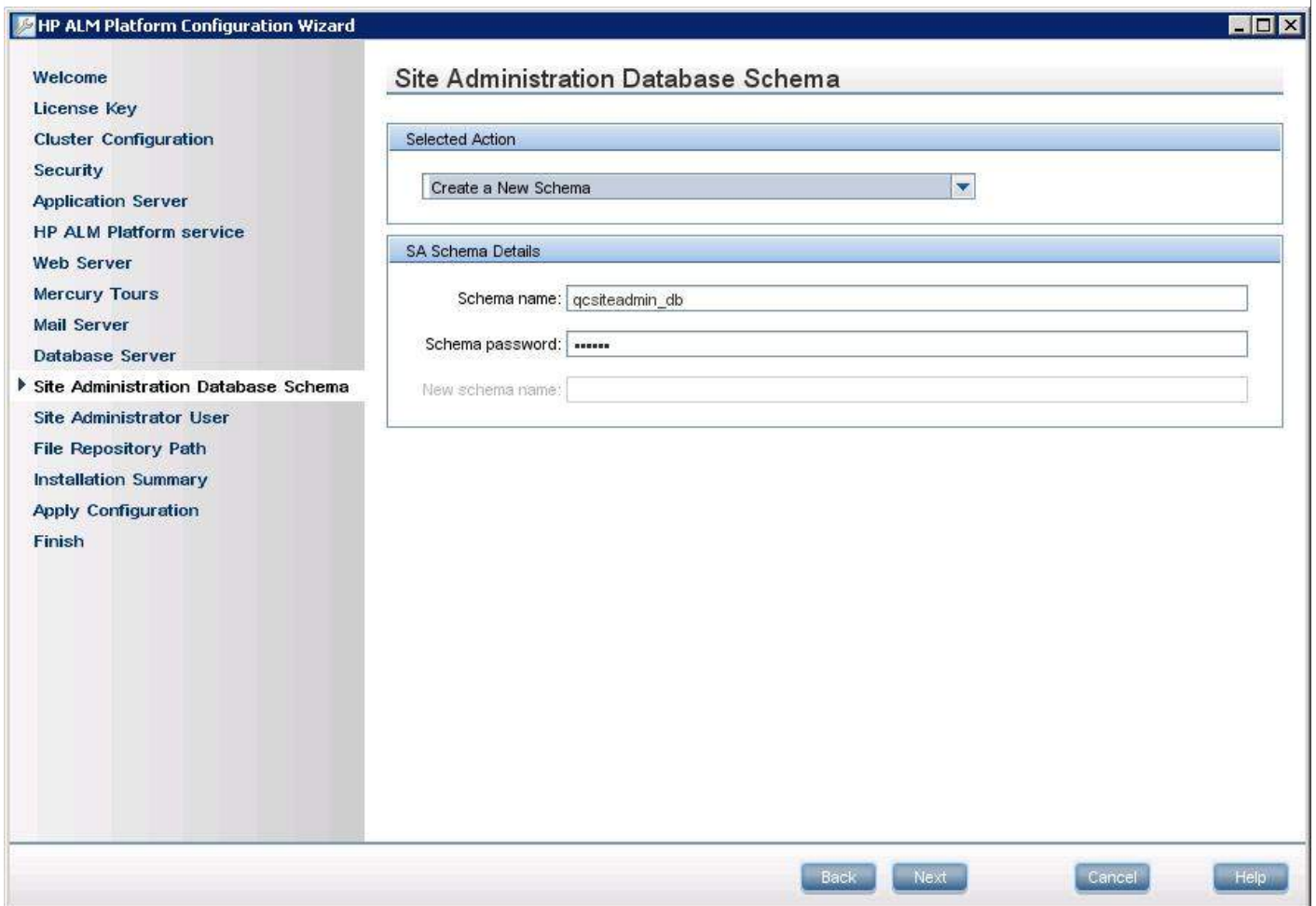


Step 12 : Choose the correct database Server Configuration. Please note that the database corresponds to the one that is already installed on the server. The user credentials should have privileges to create Database on the server. Only if all the field values are correct it moves on to the next screen.





Step 13 : The Site Administration Database Schema configuration window Opens. Ensure that you give a unique DB Schema name where all the Admin data of QC will be stored.



Step 14 : Enter the Site Administrator user credentials. DONOT forget to remember these credentials so that you can log into QC using these credentials after successful installation.



License Key
 Cluster Configuration
 Security
 Application Server
 HP ALM Platform service
 Web Server
 Mercury Tours
 Mail Server
 Database Server
 Site Administration Database Schema
 ▶ Site Administrator User
 File Repository Path
 Installation Summary
 Apply Configuration
 Finish

Type user name and password to be used when logging in to Site Administration. This is not the same as the Site Administration database schema name and password.

User name:

Password:

Retype password:

Back Next Cancel Help

Step 15 : File Repository Path is given where all the QC related assets which we create would be saved in the location that we update during installation.

HP ALM Platform Configuration Wizard

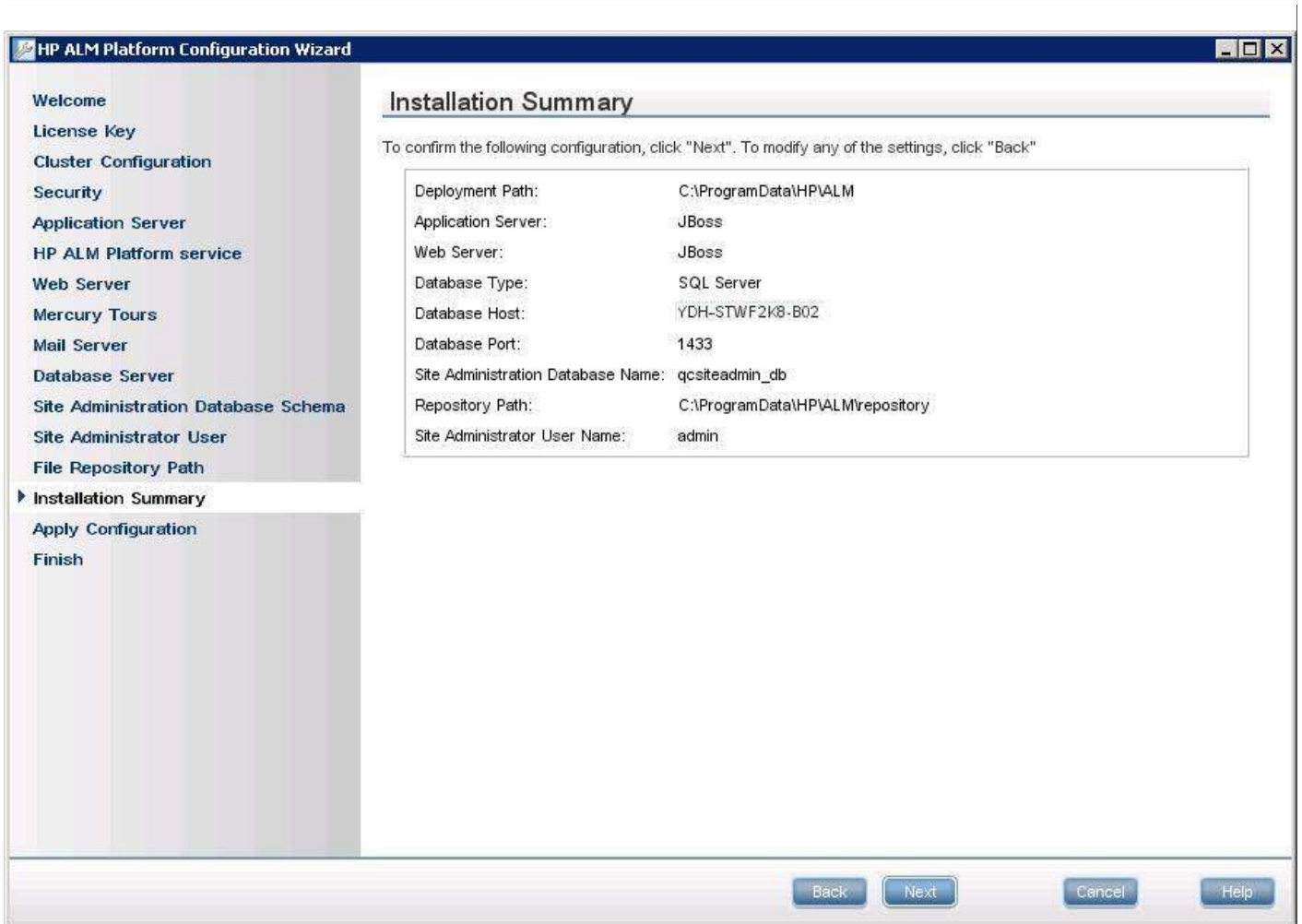
Welcome
 License Key
 Cluster Configuration
 Security
 Application Server
 HP ALM Platform service
 Web Server
 Mercury Tours
 Mail Server
 Database Server
 Site Administration Database Schema
 Site Administrator User
 ▶ File Repository Path
 Installation Summary
 Apply Configuration
 Finish

File Repository Path

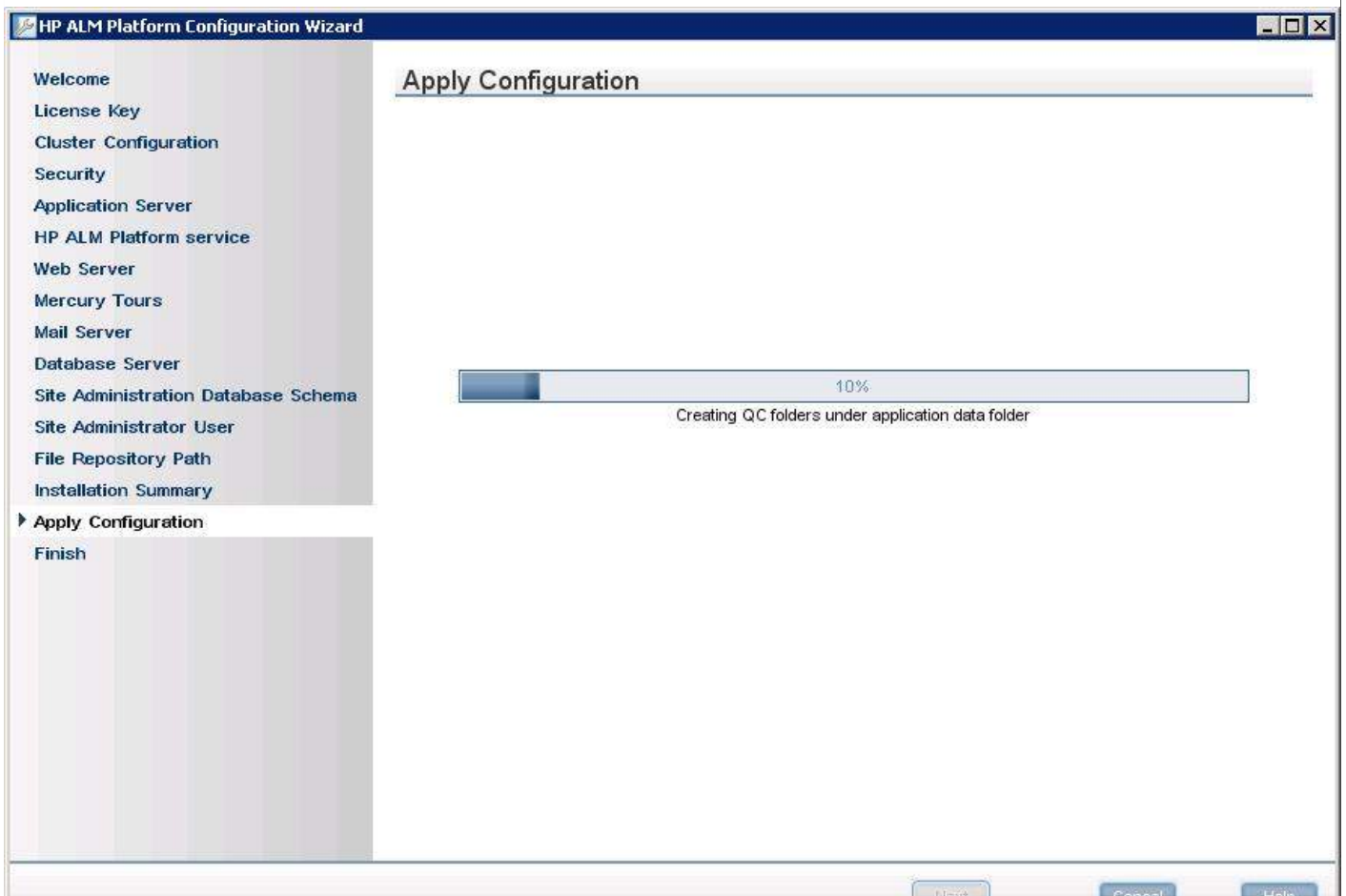
File repository path: Browse

Back Next Cancel Help

Step 16 : The Installation Summary Window Opens up which shows the complete summary of the selected configuration. If the user wishes to make any change this is the stage one can make the changes by going back to the previous window.

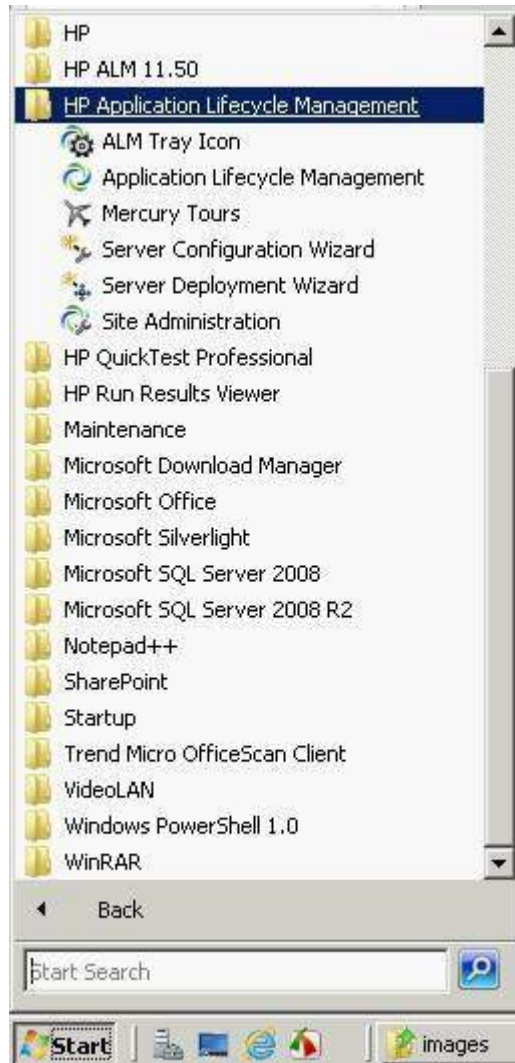


Step 17 : Apply Configuration shows that the selected components will be installed with the selected configuration. Upon Completion the message is thrown to the user if the installation is successful.

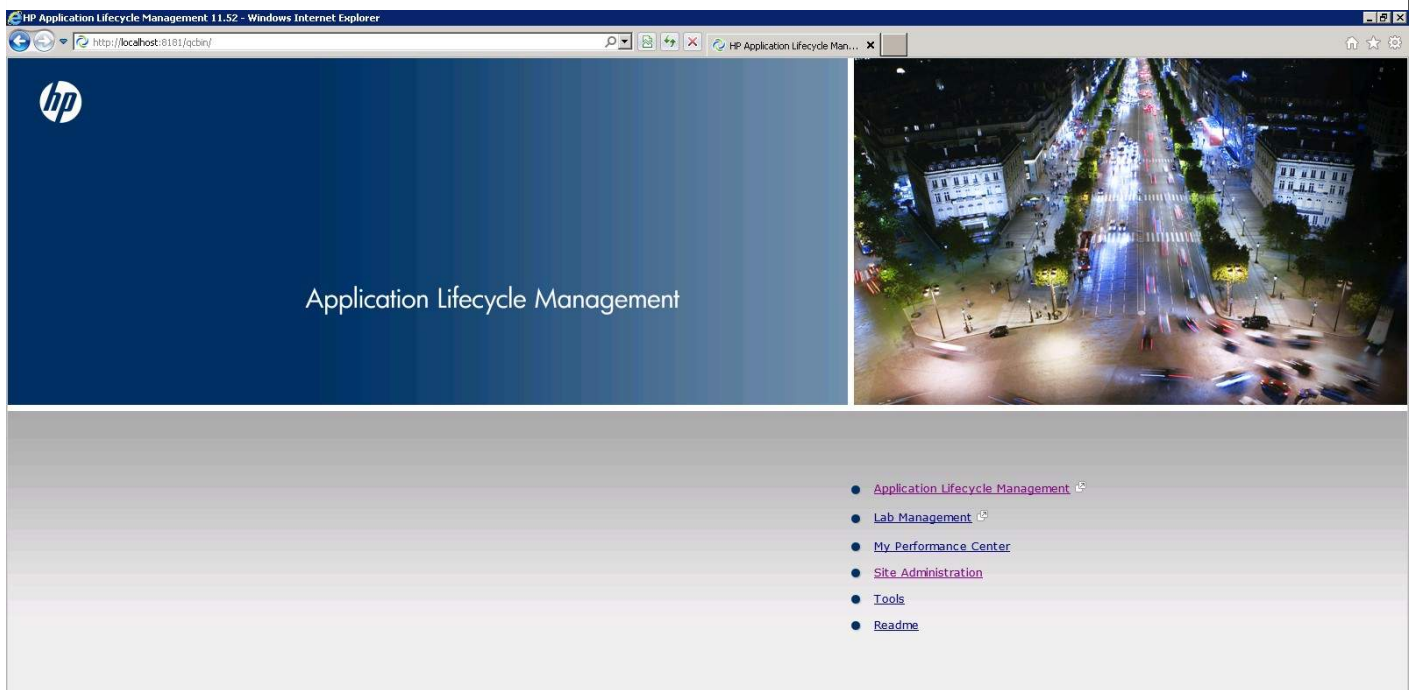


Launching Hp-ALM

Step 1 : Upon installing HP-ALM successfully, the ALM can be launched from the Start menu as shown below.



Step 2 : After Installing we can also launch ALM by giving the following URL in Internet Explorer and ALM would be opened as shown below. URL : <http://localhost:8181/qcbin/>

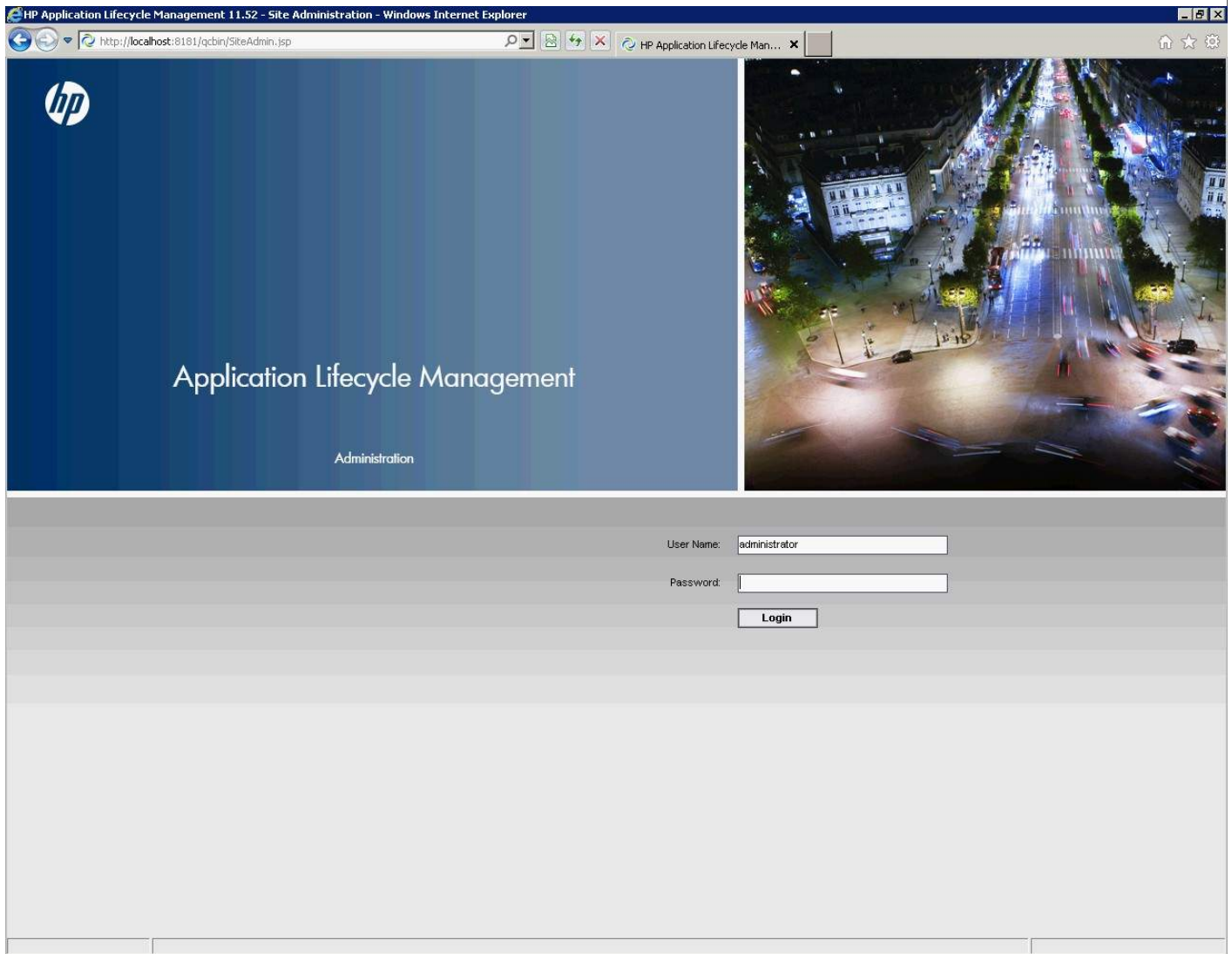


Server Side Configurations

Once the Hp-ALM is installed, we can continue to work with ALM only after creating domain, project and users. Below are the Steps to create Project, Domain and Users.

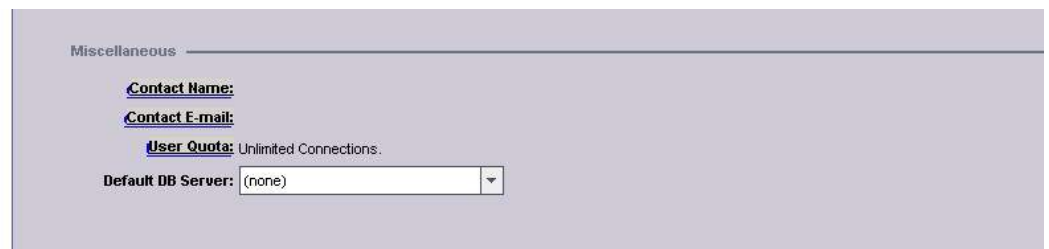
Creating Domain:

Step 1 : For Creating Domain, first step is to get into Site Administrator Page. Launch QC using the URL - <http://localhost:8181/qcbin/SiteAdmin.jsp> and enter the Admin credentials that was set up while installing QC.

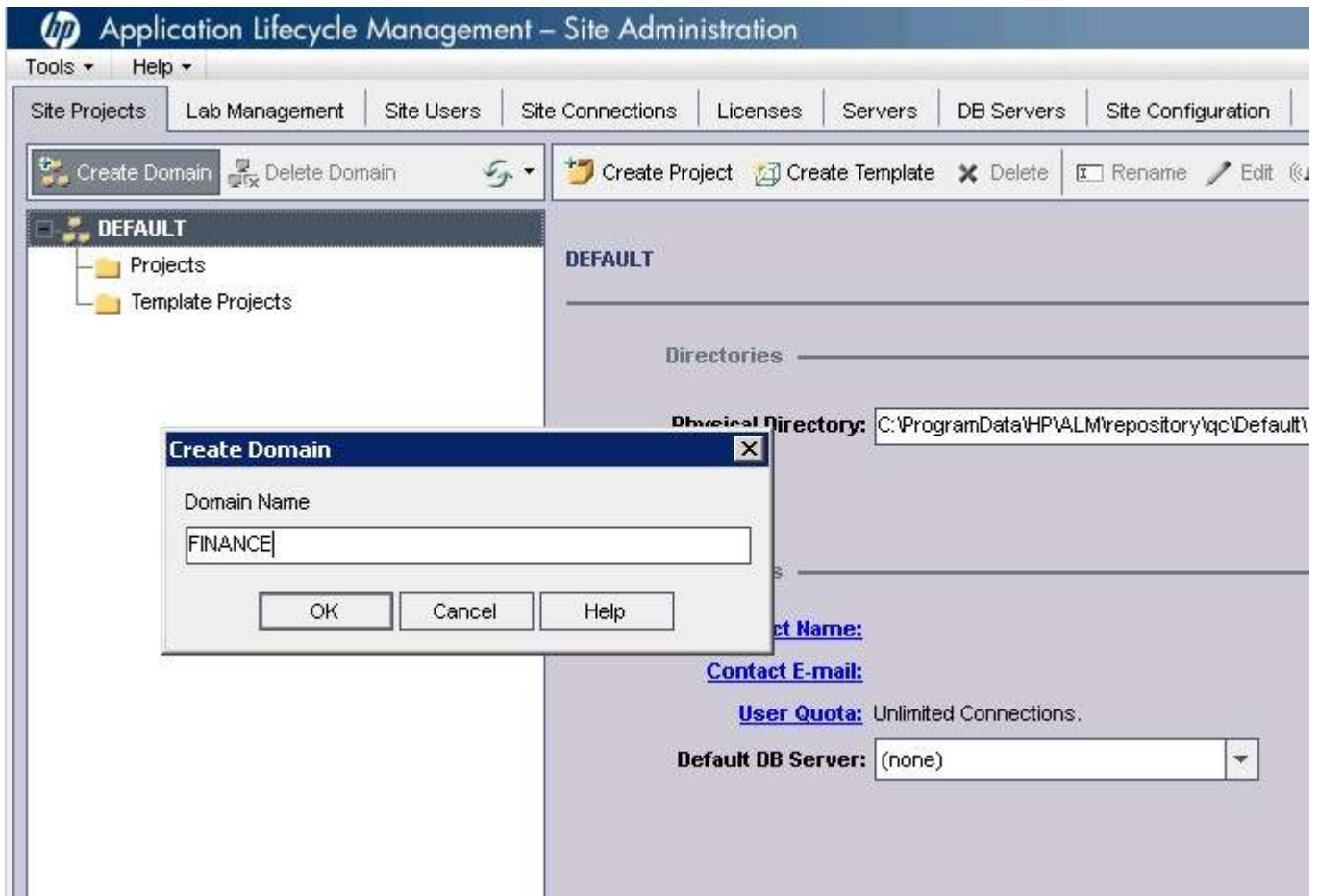


Step 2 : After Logging into Site Admin page, we will land in Site Projects Tab as shown below and Next step is to create a Domain.

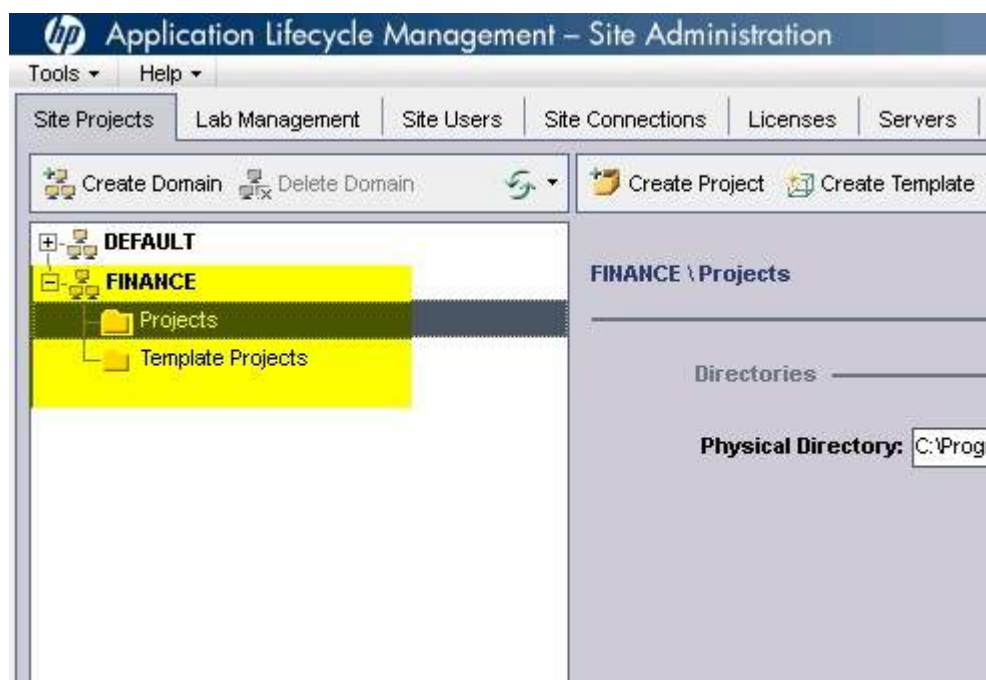




Step 3 : Click on 'Create Domain' Button on Top Left Corner and Enter Domain Name and Click OK.



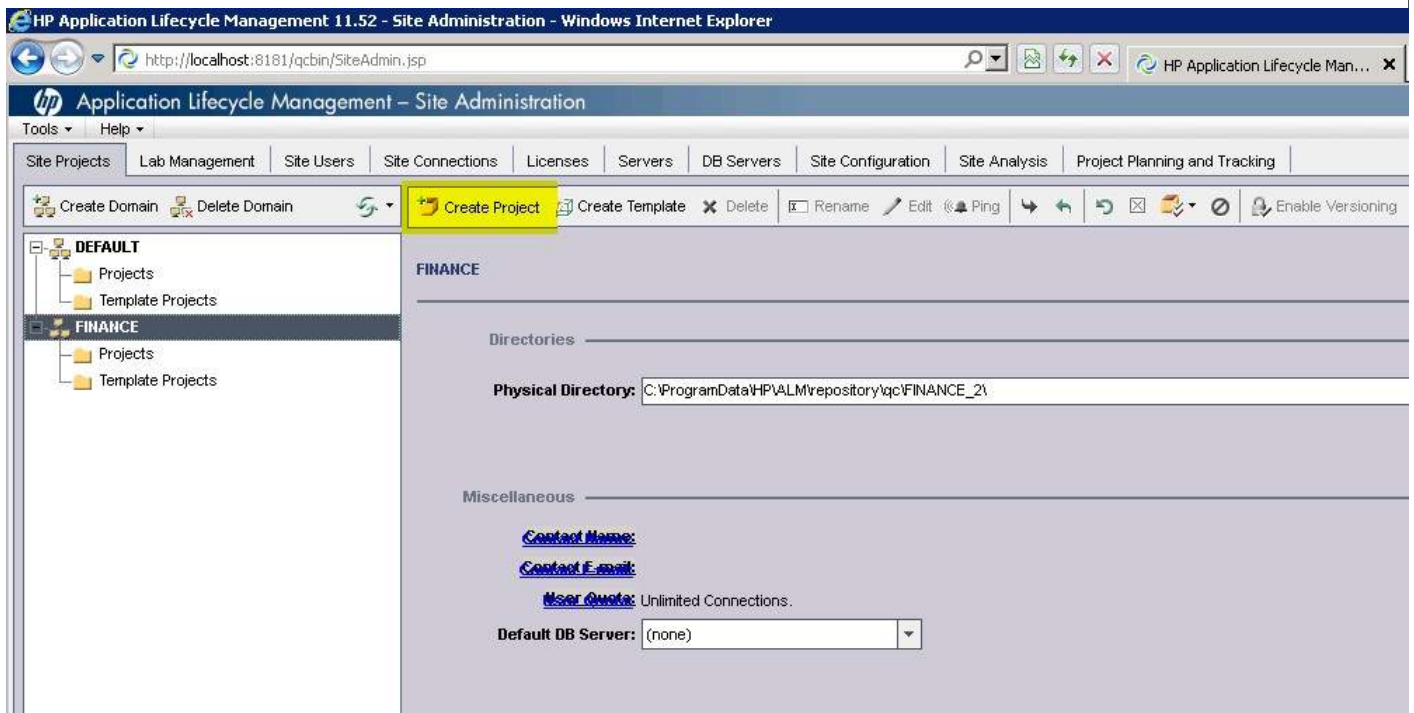
Step 4 : Domain would be Created as shown below.



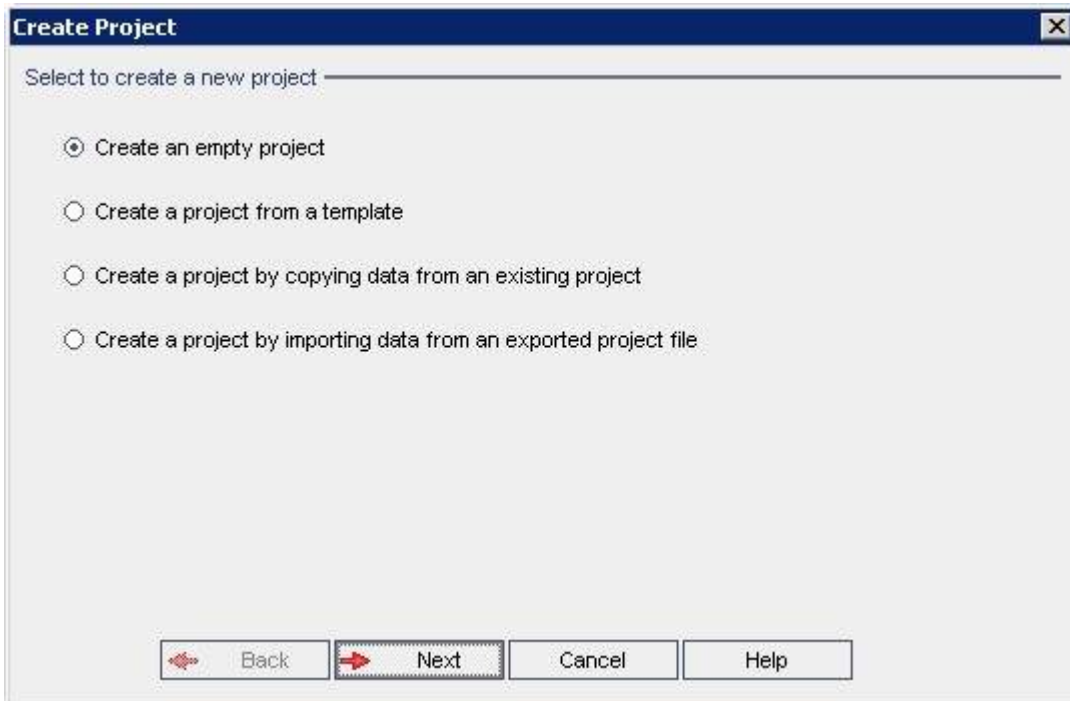
Creating Projects:

Once Domain is Created, the next step is to create 'Projects'. Creating Project takes us through a wizard and one should follow the below steps to create 'Projects'

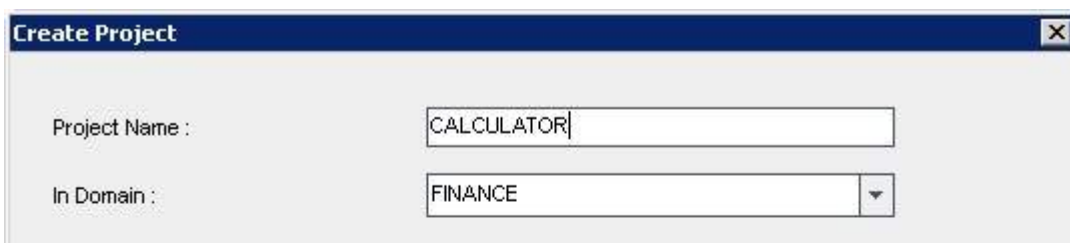
Step 1 : Select the Domain under which the project needs to be created and then click "Create Projects" button as shown below.



Step 2 : The Create Project Wizard opens. Select "Create an Empty Project" and click "Next".

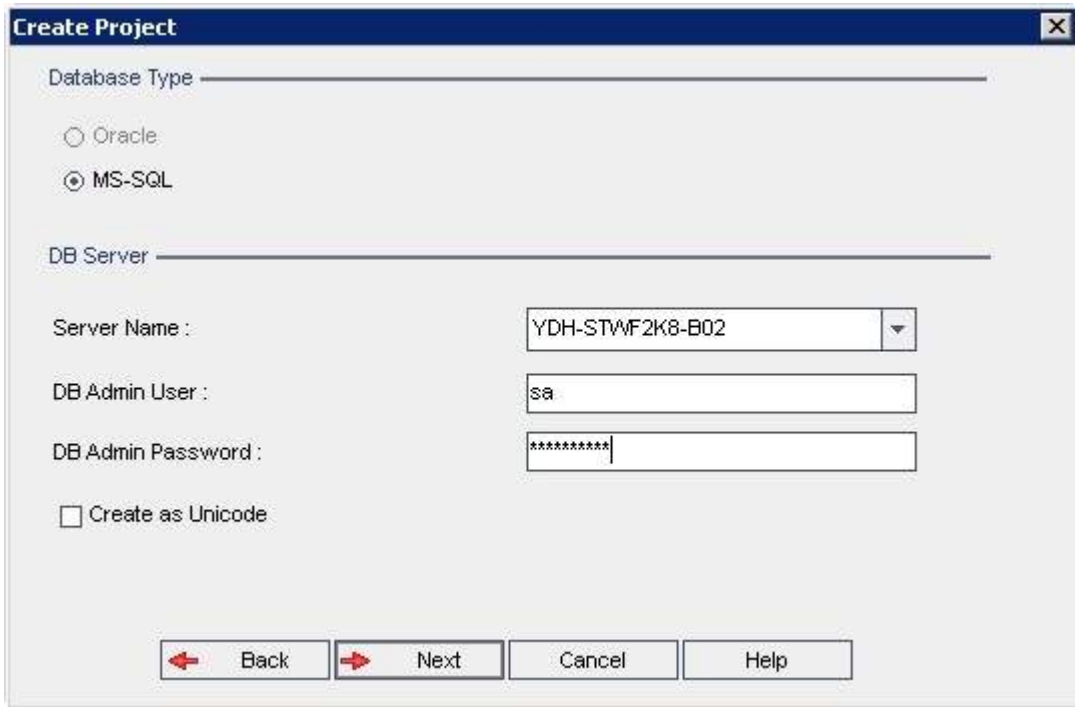


Step 3 : Enter the "Project Name" and Select Domain and click "Next".

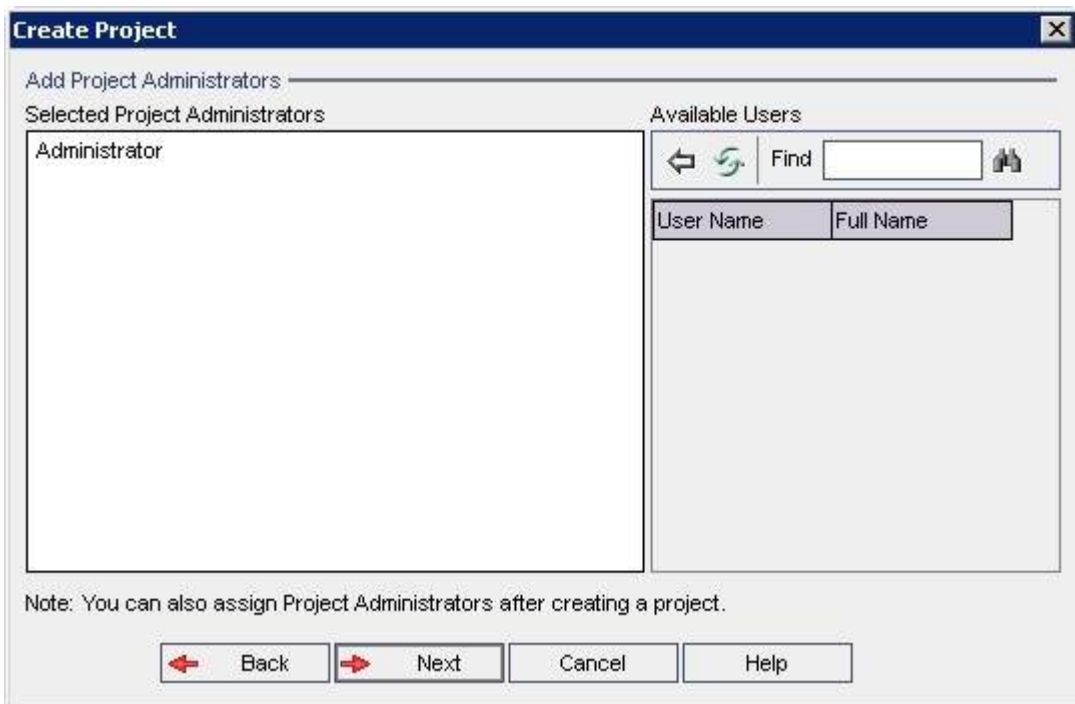




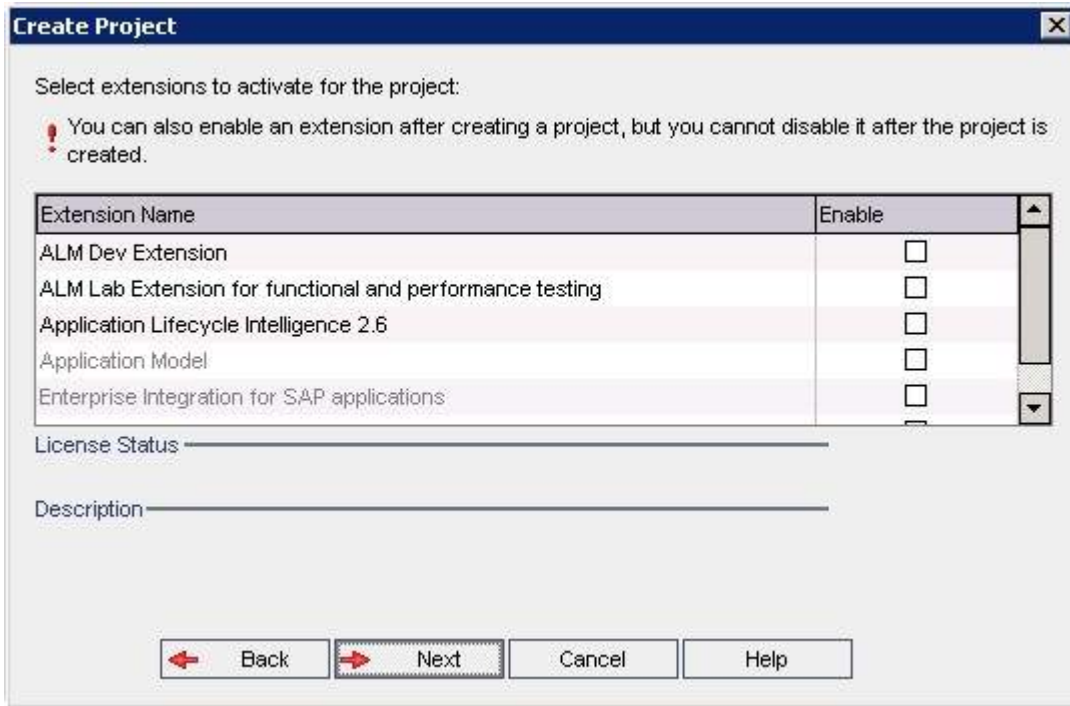
Step 4 : Enter the Database Credentials and click "NEXT".



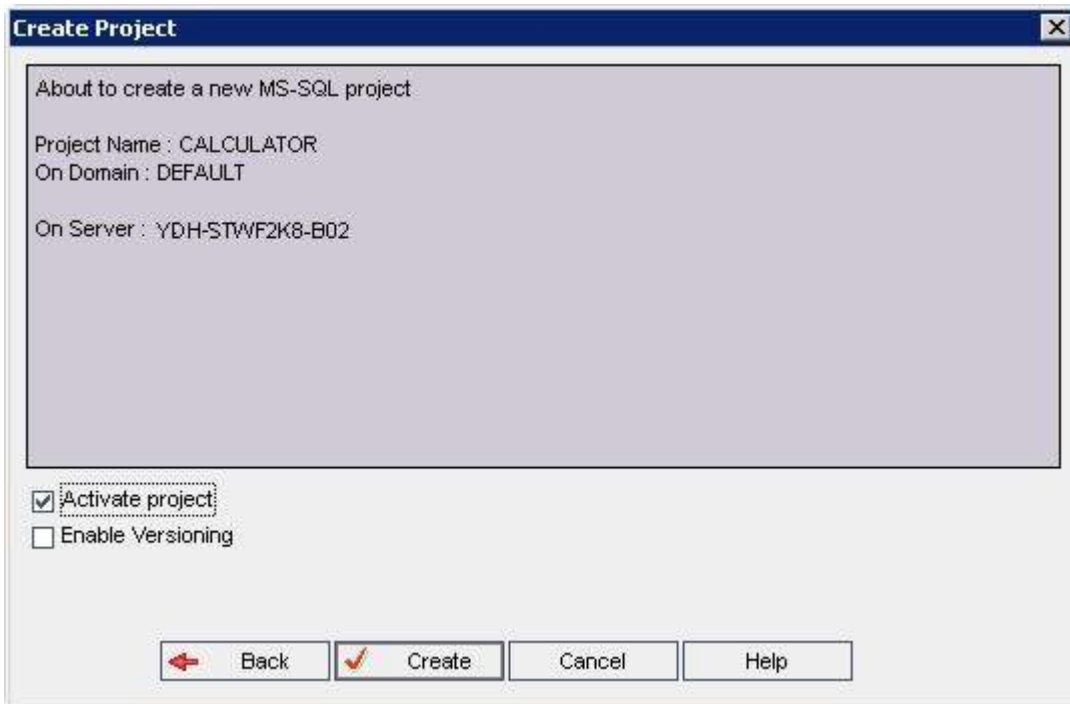
Step 5 : Select the Project Administrator user ID and click "NEXT".



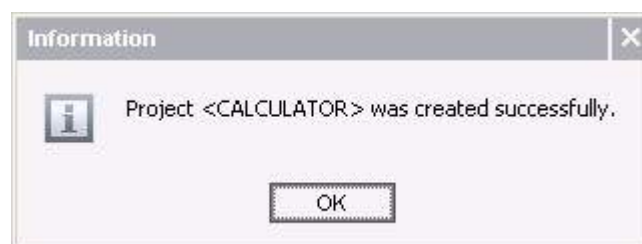
Step 6 : Select the extensions to activate the project and click "NEXT".



Step 6 : check the Activate check box and Enable Version controlling if you want and click "NEXT".



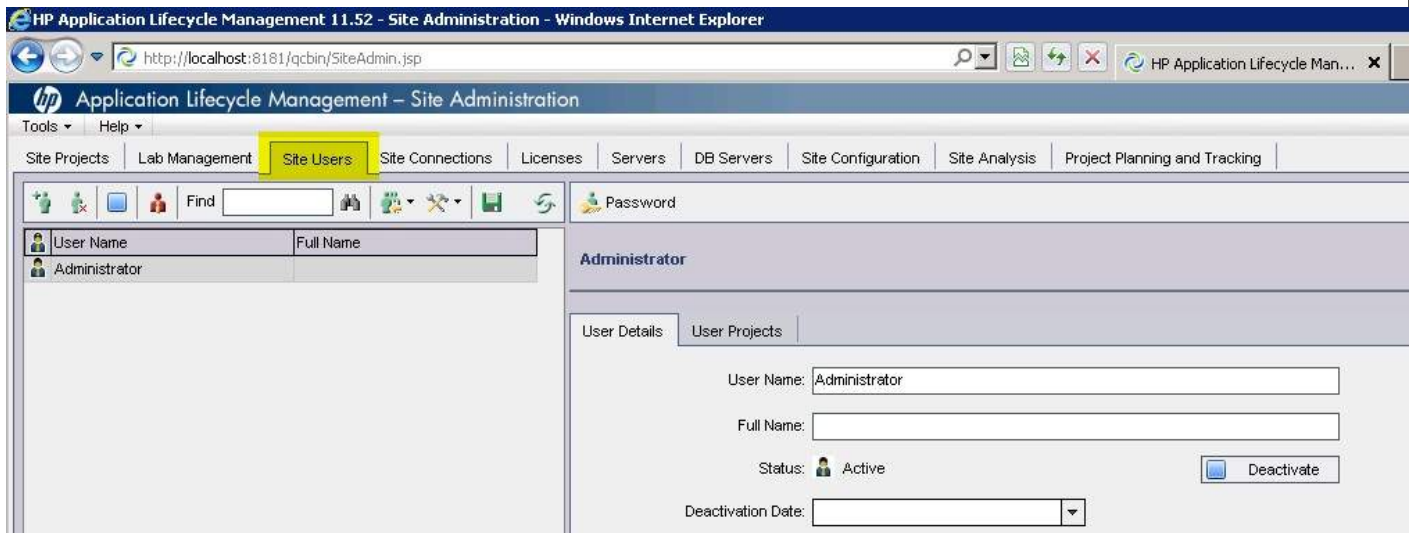
Step 7 : Upon Clicking "Next", the project "Calculator" is created Successfully. Click "OK" to see the created project in the Project Pane.



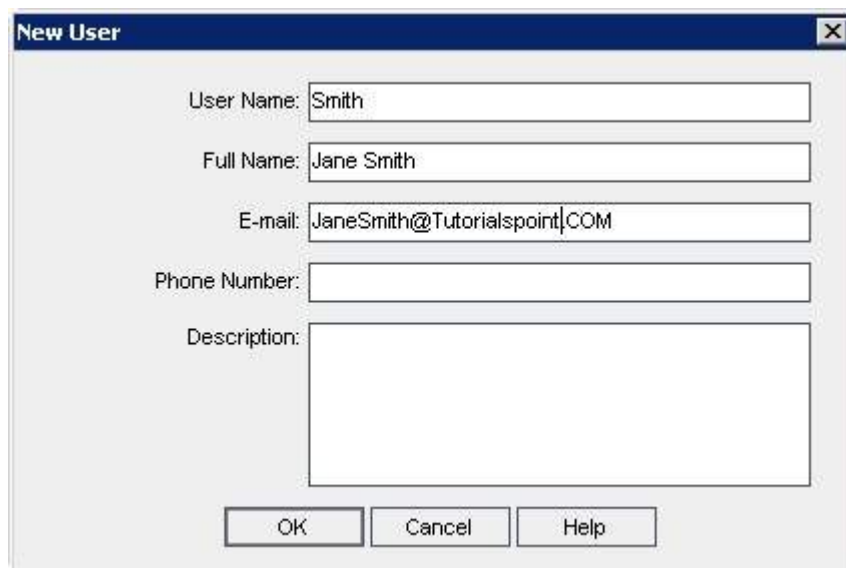
Creating Users:

Step 1 : Select the Site Users Tab in "Site Admin" Page as shown below and click on "Add New

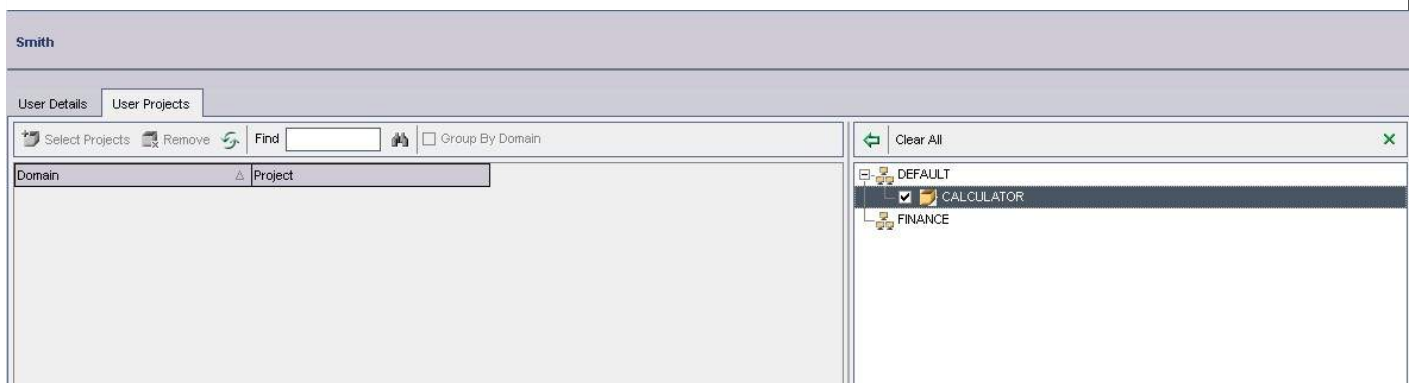
User" Button.



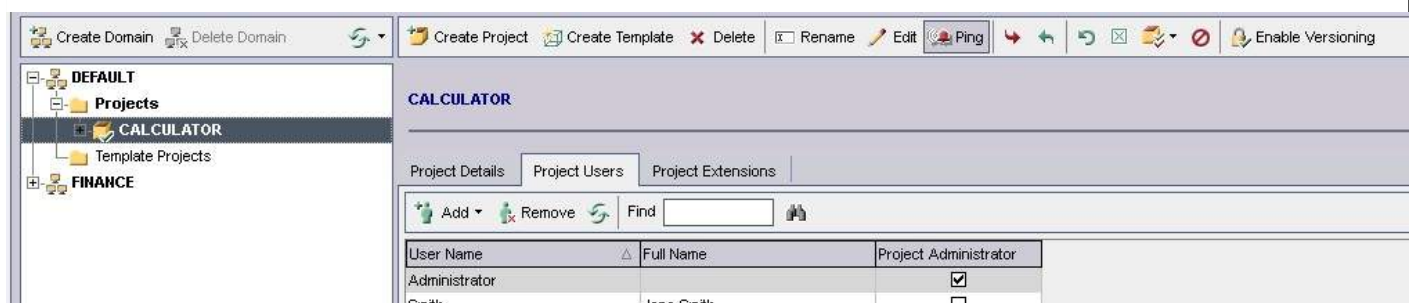
Step 2 : The New User window opens up. Fill the User details and click "OK".



Step 3 : After Creating the user, give the user the project access that they need.



Step 4 : Verify the user list in "Project Users" Tab after giving the user to access to the project.



Commonly used Functionalities:

HP Application Lifecycle Management *ALM* displays data in infragistics grid view or in a tree structure and users can manipulate the data in various ways, such as rearranging columns, filtering, sorting, and grouping.

One can also attach files to those grid records, search for specific text in records, and view history of various entities. The following features are to be understood to ensure that users are able to work with Quality center seamlessly.

Click on each one of those links to know more about the common functionalities.

Common Functionality	Description
Filter Dialog Box	Dialog box enables user to perform operations such as filter, sort, and group ALM data based on defined criteria.
Users Dialog Box	Enables users to choose a user name from the list of users.
Find Dialog Box	enables users to search for a particular record in a tree view or grid view
Replace Dialog Box	Enables user to find and replace a specific field value in a tree or grid.
History Tab	Enables user to view a list of changes made to the currently selected workitem.
Send Email Dialog	Enables quality center users to send an email about an entity to other users.
Attachments Dialog	Enables users to add and manage attachments to a specific record.
Snapshot Dialog	Enables user to capture and attach images of your application under test to an quality center.
Column chooser Dialog	Enables user to specify which columns are displayed in ALM.
Set Defaults Dialog	Enables user to set default values for certain fields in ALM.
Alerts and Flags Dialog	Enables user to view a list of alerts for a selected record and also allows user to create, view, and modify follow up flags to remind yourself to follow up on an issue
Favorites Dialog	Allows user to create and organize favorites.

Management Tab:

This area helps us to create and manage releases and cycles and also to helps us make project planning and tracking. Management tab helps us to work with the following areas in ALM:

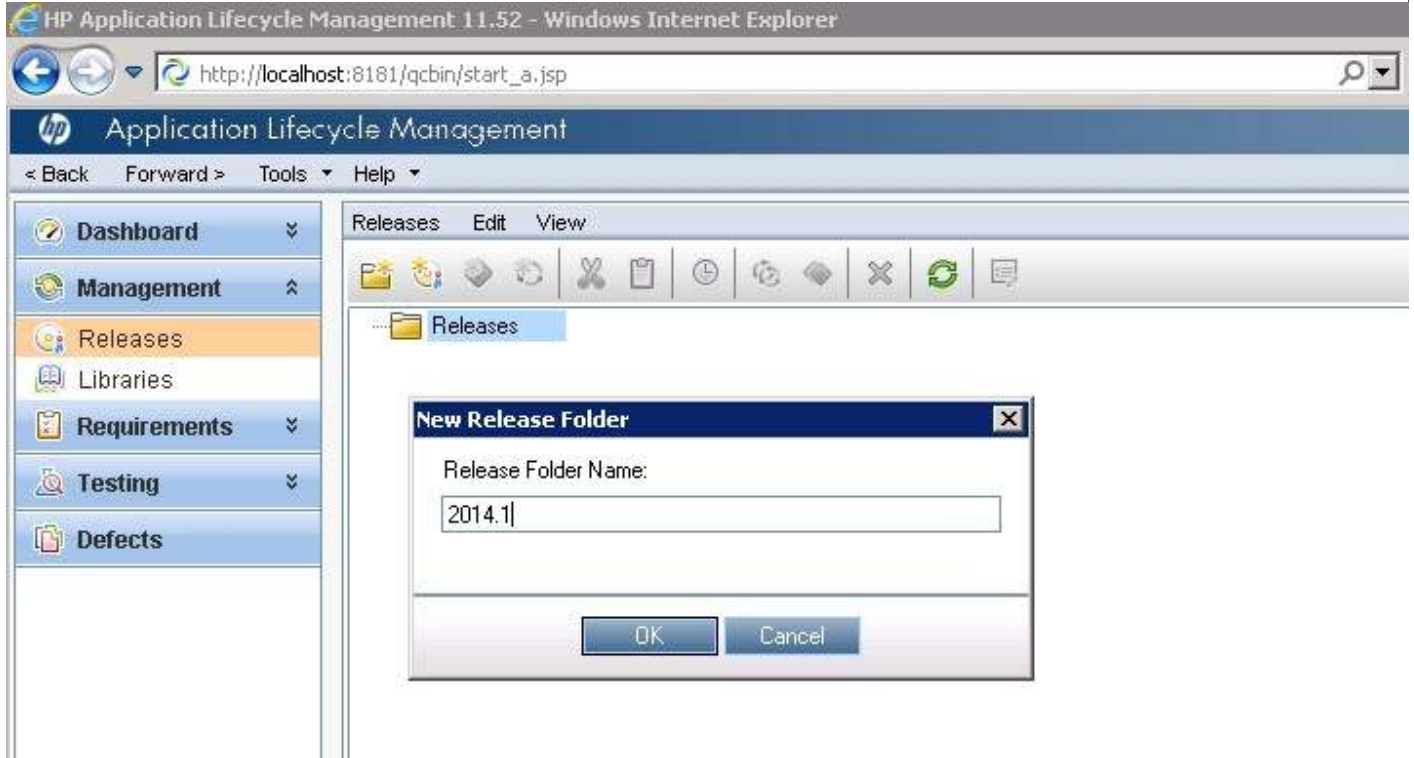
- Creating Releases
- Creating Cycles
- Release Scope and Milestone
- Master Plan and Status
- Libraries

- Baselining

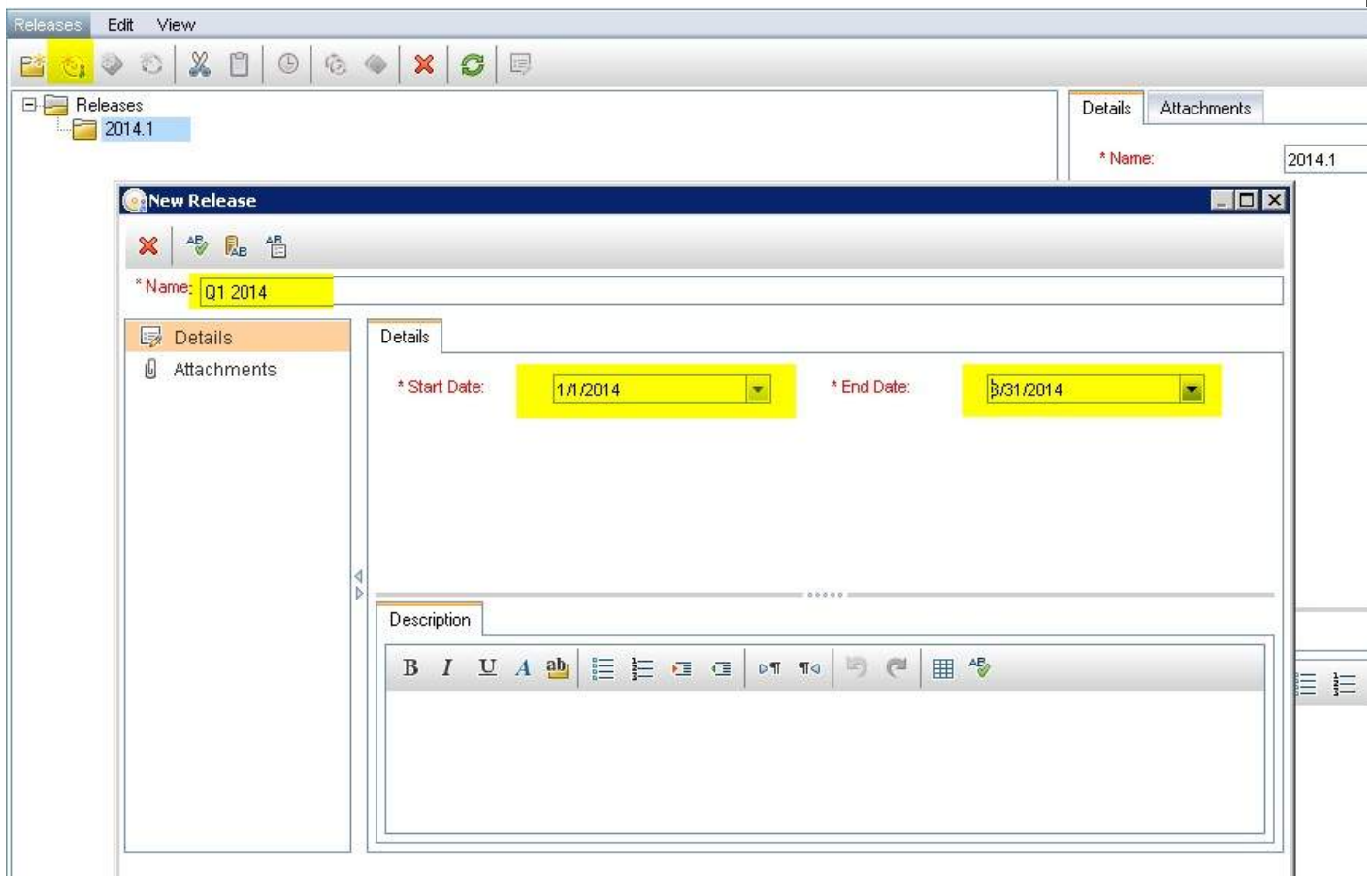
Releases

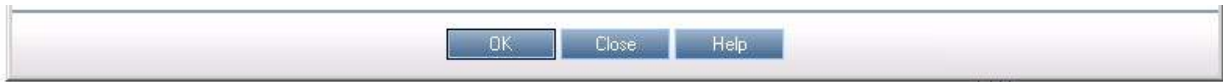
Creating releases is the first step in Quality Center. All the work item such as libraries, test execution and defects are tracked based on the release.

Before creating a release, one can create a container/folder for the same by clicking on a new folder icon as shown below.

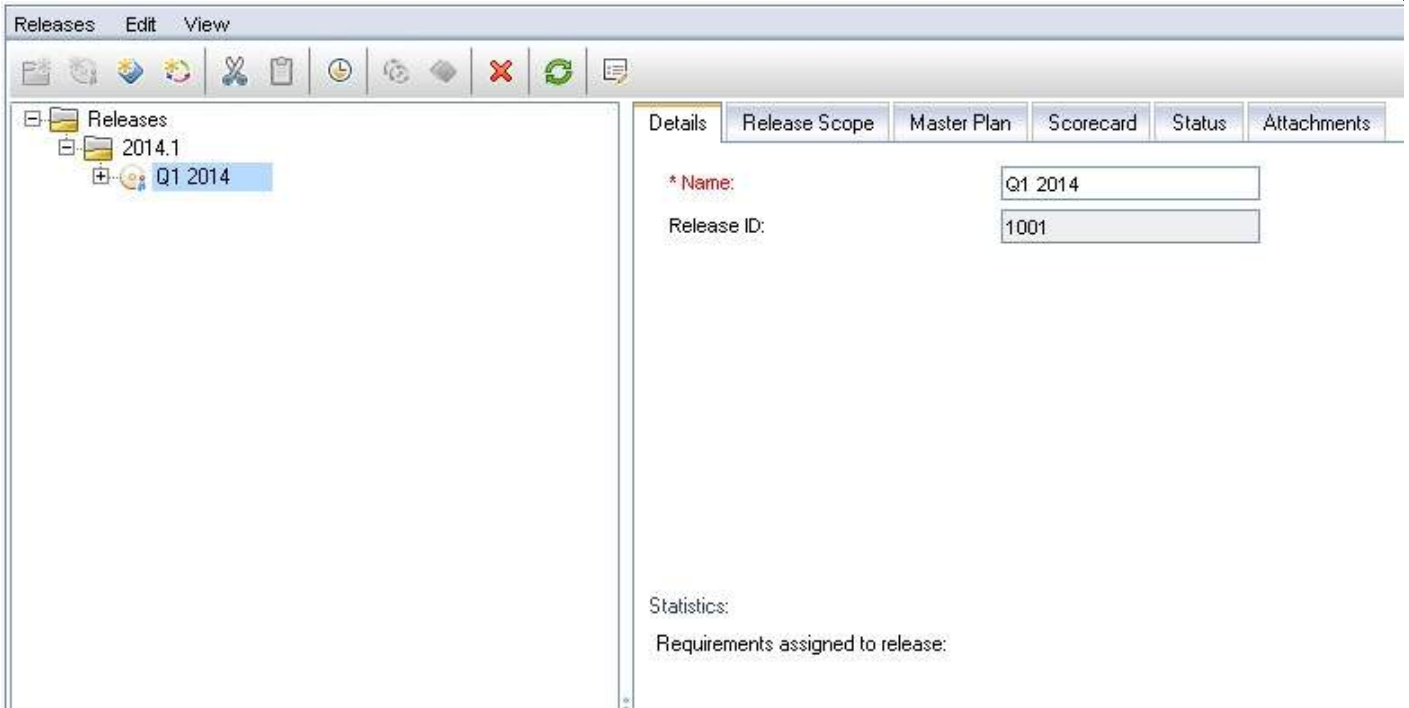


Click on New Releases button and the New Release dialog opens. Enter the name of the release and Click ok. The Release will be created as shown below





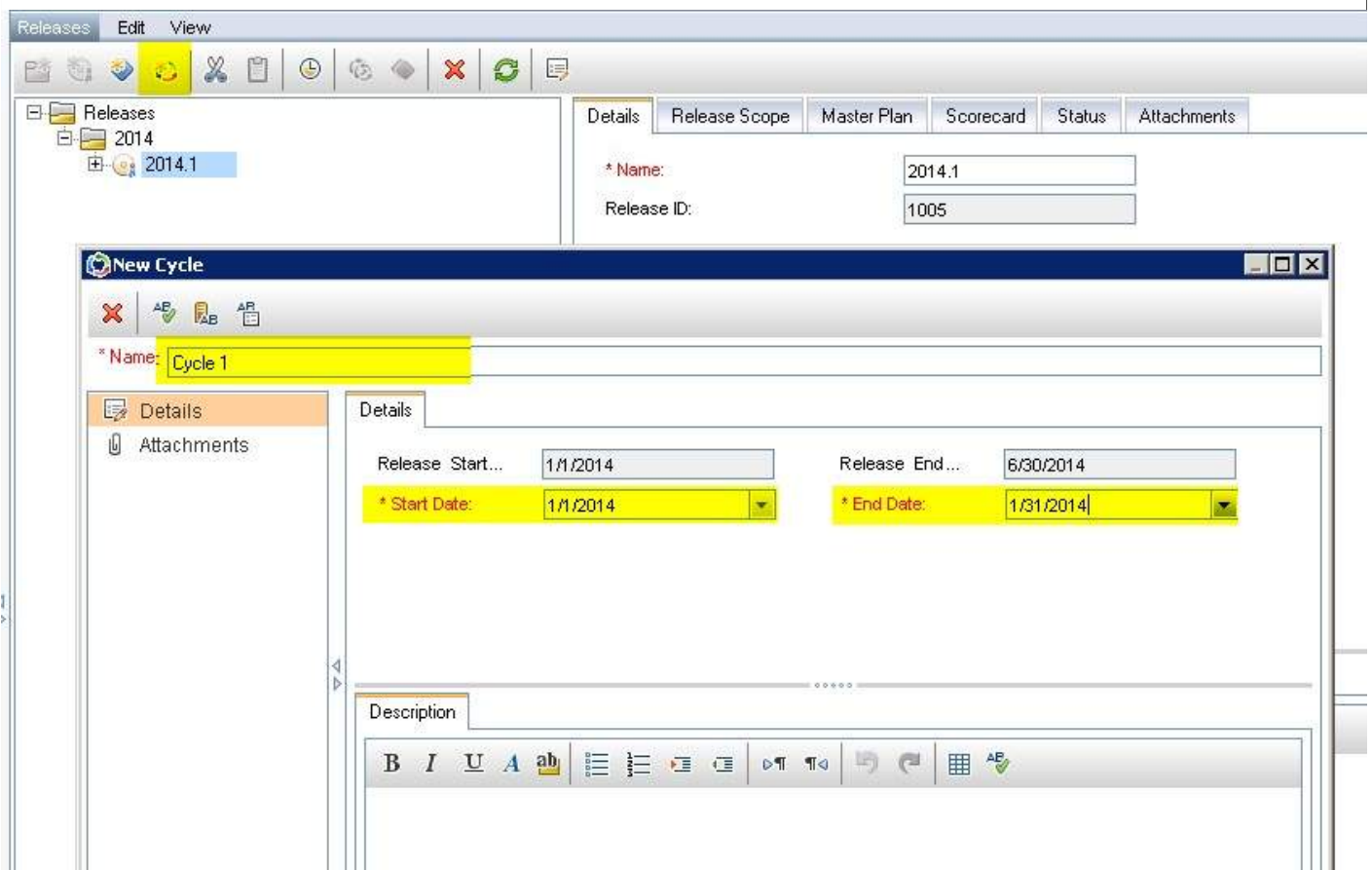
Select the created release one can notice that the tabs - Details, release scope, master plan, scorecard, status and attachments are generated.



Cycles

Each release is further divided into cycles and let us see how to create cycles in Quality Center.

Select the Release under which one would like to create cycles and click on New cycles button and the New cycles dialog opens as shown below. User has to enter the start date and end date of the cycle. User can create as many cycles as they can under a release.



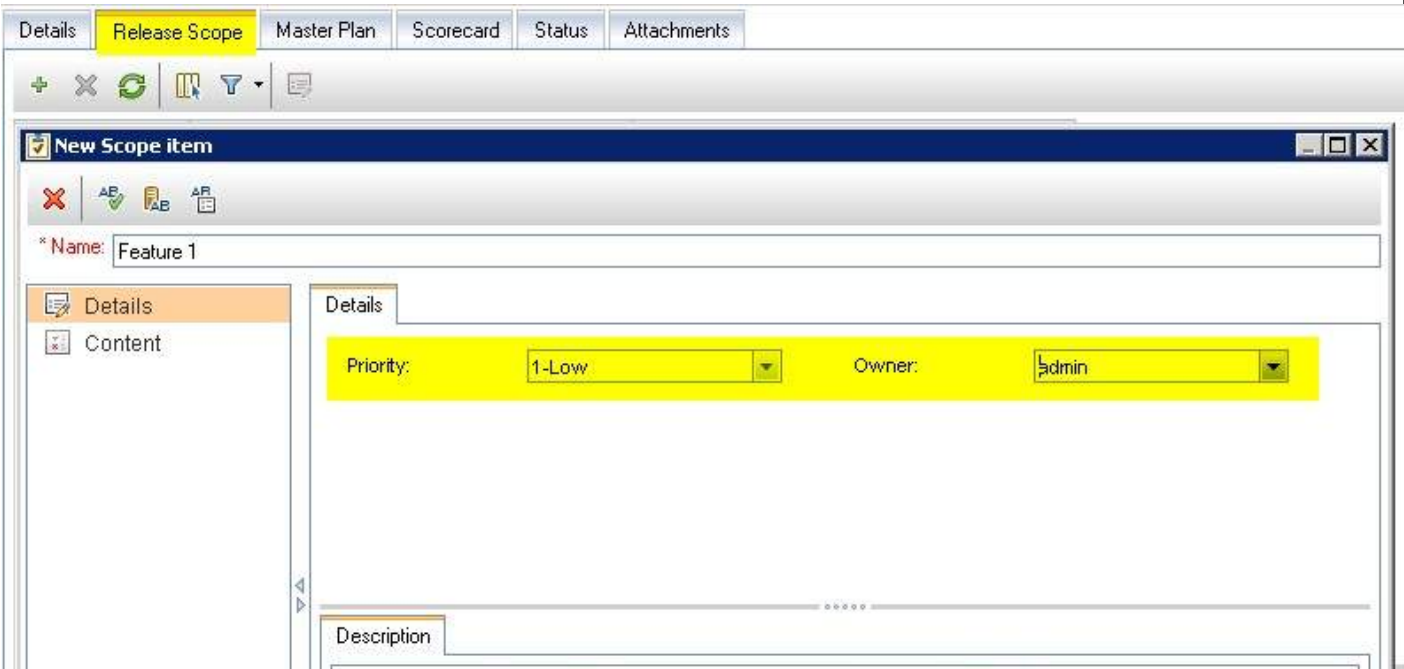


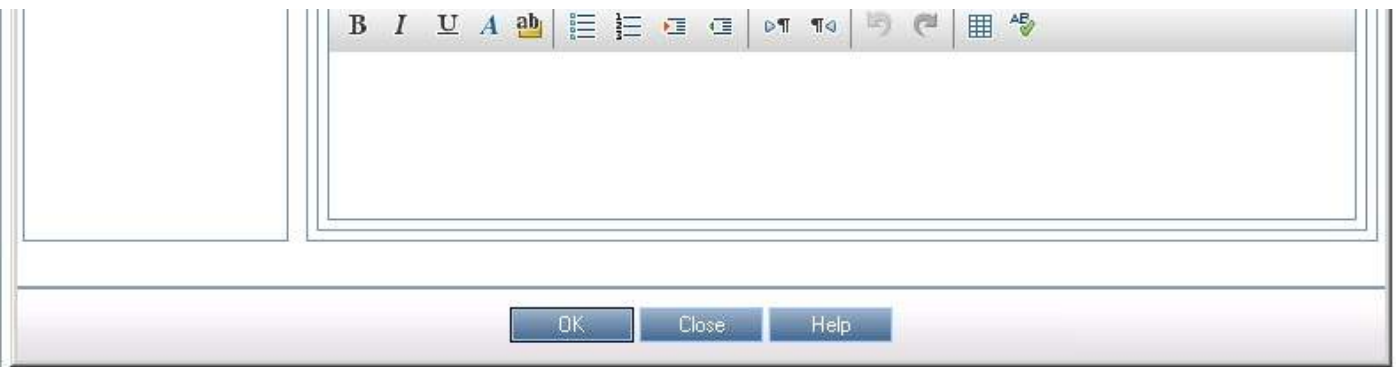
Under Cycle, one can see the progress and Quality. The Progress is shown in a pictorial representation.



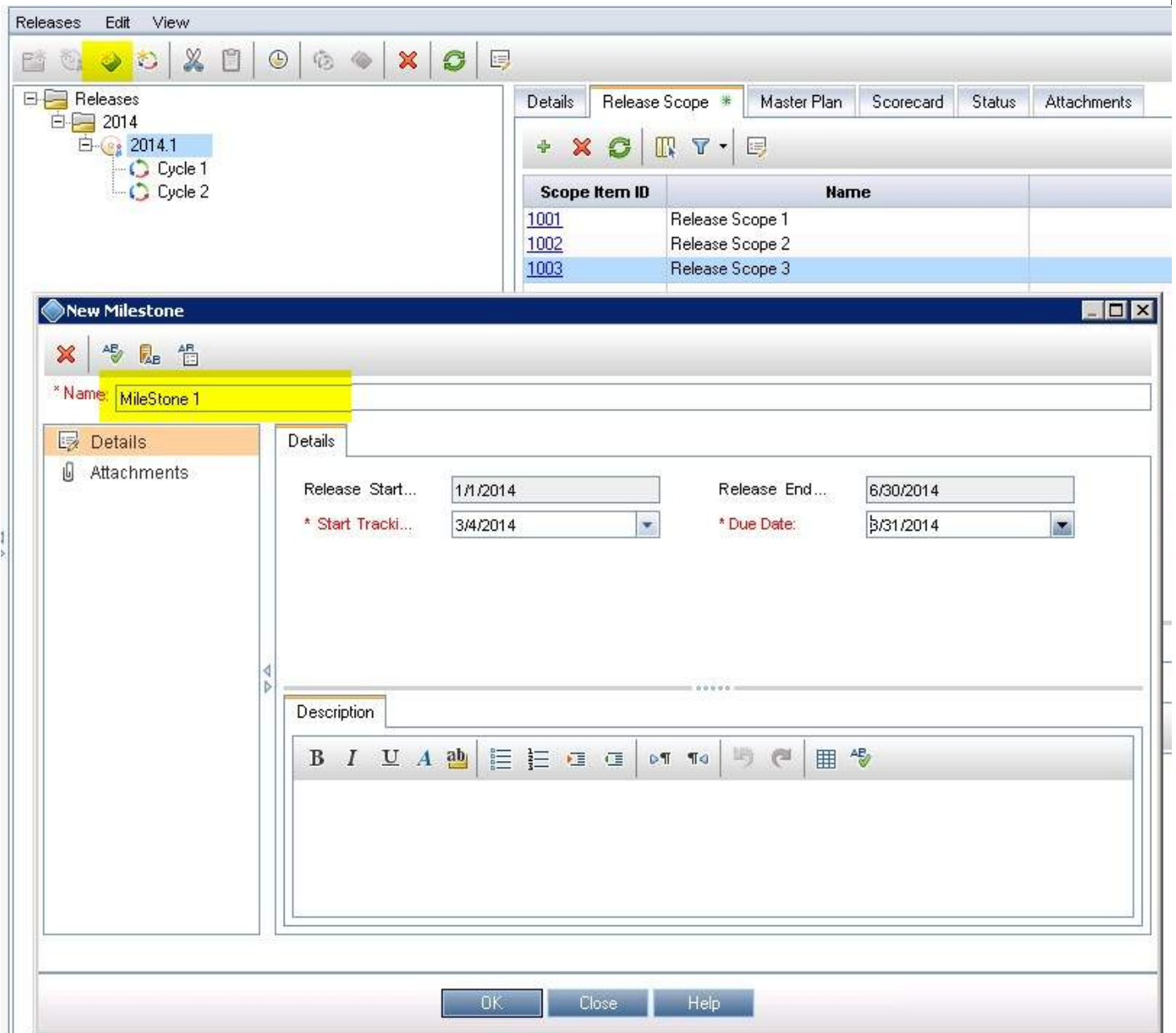
Release Scope and Milestone:

Each Release has a scope and scope can be added under "Release Scope" Tab under Releases as shown below.





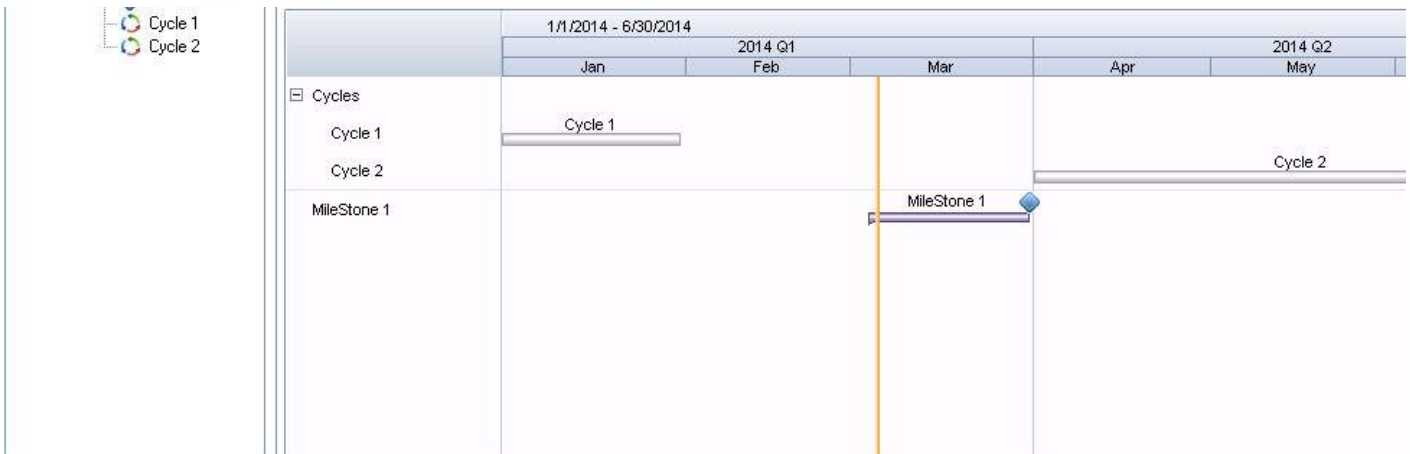
Each Release has also a milestone associated with it and a release can be added using the Milestone icon under Releases as shown below.



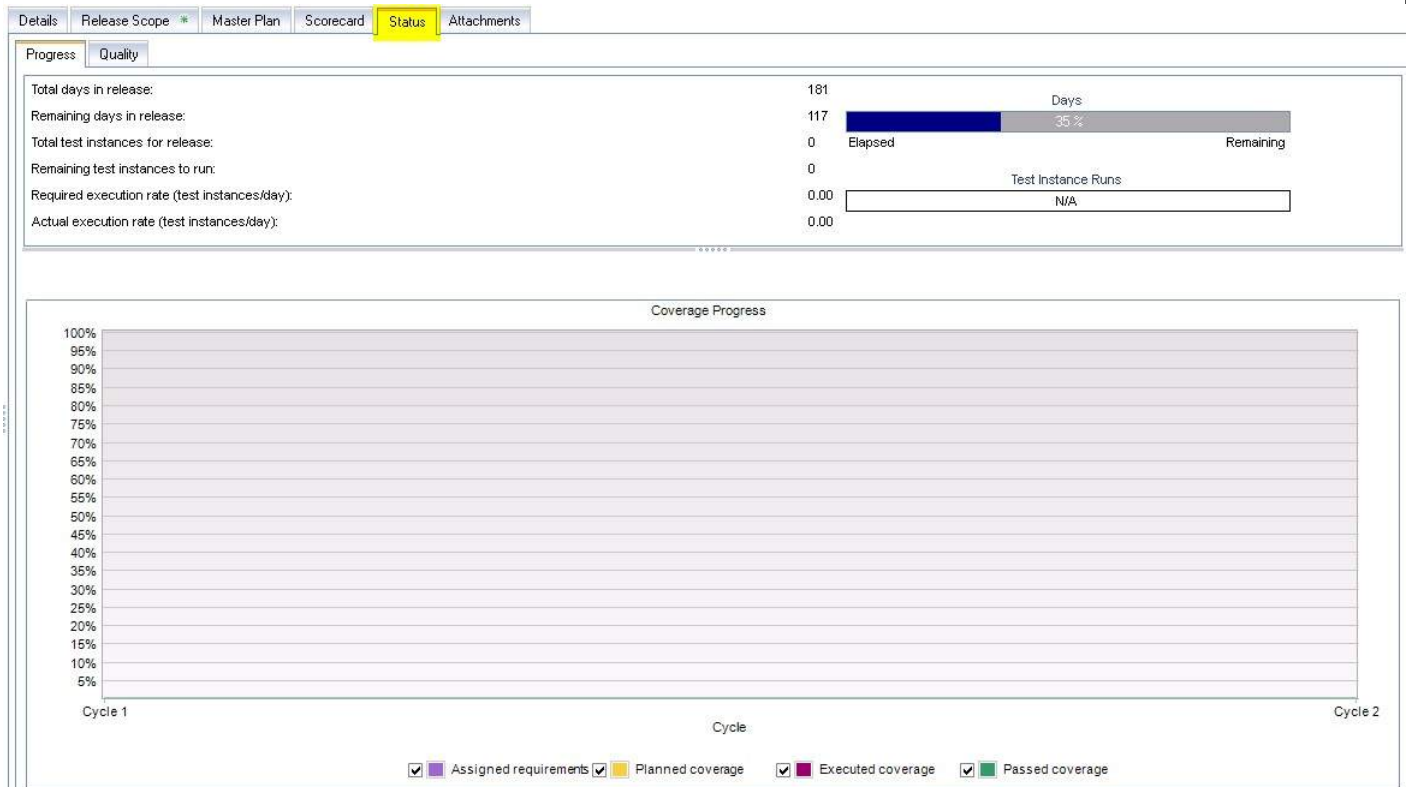
Master Plan and Status

Master plan can be accessed under "Releases" Tab which displays the cycles and milestone timelines as shown below.





Status shown the pictorial representation of the progress and Quality.



Libraries

A library represents a set of entities in a project and the relationships between them which consists of requirements, tests, test resources, and business components

A New Library can be created by clicking on "New Library" Icon in Library Navigation bar. A New window would be as shown below and one can name the library and add resources such as requirements, test plan, components.





Baseline

Once Libraries are created, the libraries can be baselined which is a snapshot of the library at a specific point in time. Users can compare baselines at any stage of the development phase. A baseline includes all the entities defined in the library, including requirements, tests, and test resources.

A New Baseline can be created by clicking on New Baseline button under "Libraries" Navigation bar. Users can also compare baselines and export to CSV format.

Requirements

Defining and Capturing Requirements is one of the key criteria for any software development process. Describing Requirements refers to what needs to be done to meet the objectives during development. Defining requirements Clearly and correctly upfront so that there is minimal/no rework after UAT.

The Requirements module enables users to define, manage and track requirements at all stages of the software lifecycle. The following are the key functionalities in requirements module and click on each link to know about that particular module.

Functionality	Description
Creating Requirements	Create requirements, assign to releases/cycles.
Uploading Requirement	Uploading requirements using ALM-MS Excel Addins
Requirement Traceability	Enables how to define traceability links between requirements and dependencies that exist between the requirements.
Traceability Matrix	Enables user to view the traceability matrix that lists source requirements and their associated requirements and tests.

Test Plan

The crucial step in testing any application is developing a clear and a precise test plan. A good test plan enables the team to assess the quality of the application under test at any point in the software development life cycle.

Following functionalities are very important in order to understand in the test plan module better. Click on each one of the functionalities to know more about it.

Functionality	Description
Creating Tests	This module describes how to create folders of test subjects in the test plan tree and also to add tests.

[Uploading Tests](#)

Uploading Tests using ALM-MS Excel Addins

[Requirement and Test Coverage](#)

Enables how to define the relationship between the requirements and tests.

[Test Configuration](#)

Specifies the subset of data or a run-time environment that the test should use.

Test Lab

This module helps the testers to execute the created tests. One can schedule, run and analyze, post defects using this module.

The Following functionalities in Test Lab module helps us to understand it indetail. Click on each one of those functionalities to understand in detail.

Functionality	Description
Creating Test Set	This functionality describes how to create and define test sets in the Test Lab module.
Test Run Schedules	Helps the testers to control the execution of test instances in a test set.
Test Execution	Enables testers to execute the test/test set.
Test Results	This Functionality enables testers to analyze the test results.

QTP-QC Integration:

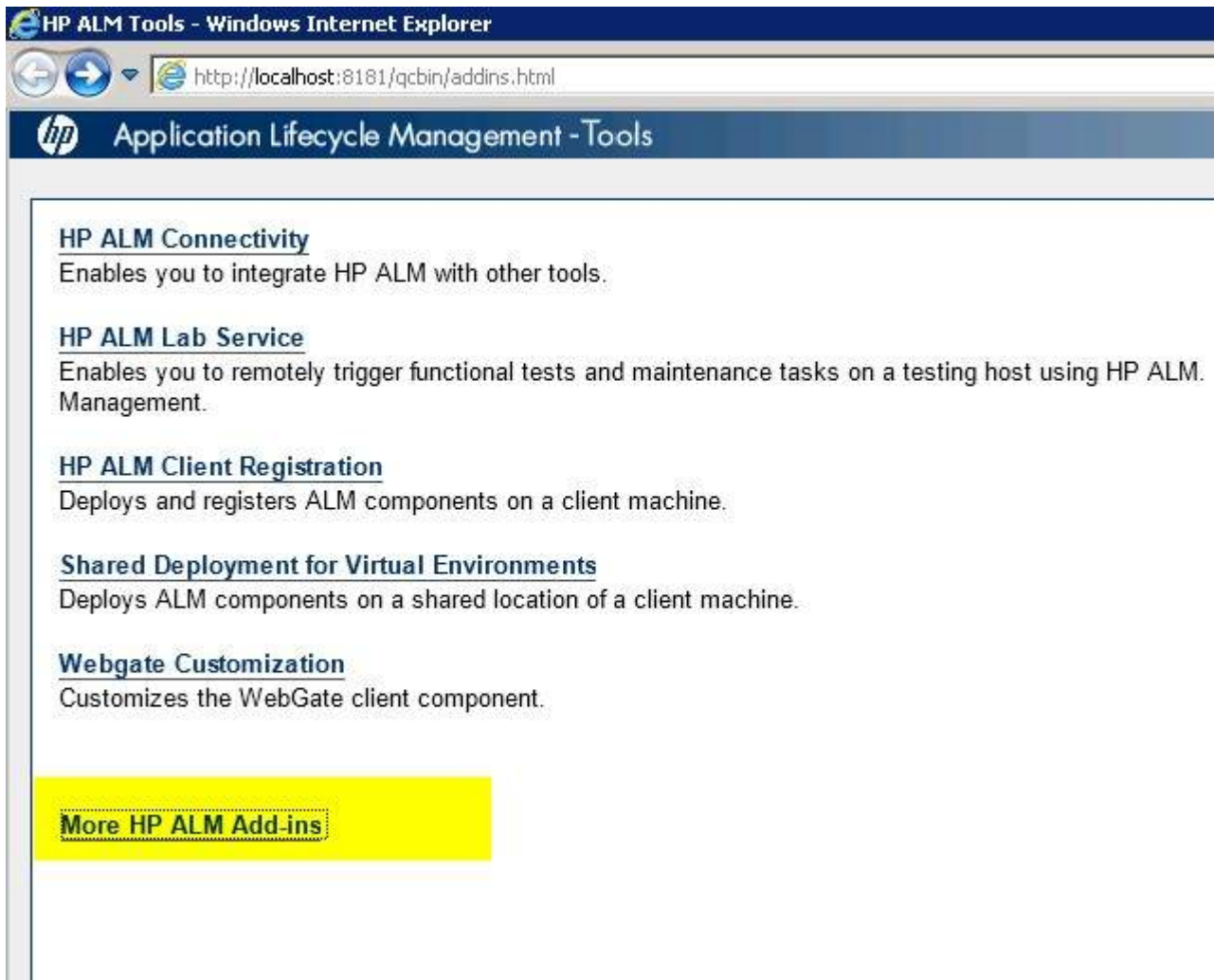
In this section, we are going to learn how to integrate QTP and QC. By Integrating, the QTP automation scripts can be executed right from Quality Center. For establishing a connection, first step is to install the required Addins. We will understand how to integrate by taking a sample QTP script and execute it from QC.

Step 1: Navigate to ALM home page and click on "Tools" from the list of links.

hp
Application Lifecycle Management

- [Application Lifecycle Management](#)
- [Lab Management](#)
- [My Performance Center](#)
- [Site Administration](#)
- [Tools](#)
- [Readme](#)

Step 2: Click on "More HP ALM Addins" Link from the addins page as shown below.



Step 3: In the Addins page, select "Addins for HP applications" and choose "Quick Test Professional". In case of "Unified Functional testing" *UFT*, choose the options appropriately and install the addins. The Installation is similar to HP-MS Office Addins.

HP Application Lifecycle Management Resources



Add-ins

HP ALM provides a unified platform for managing and automating processes, activities, and assets that organizations use to build, test, deliver, and ma

To enhance the overall, end-to-end experience and collaboration between business analysts, development and testing teams, HP Application Lifecycle Management (ALM) and third-party tools. Add-ins provide solutions for driving consistent processes, incorporating shared best-practices, and sharing assets across proj

Add-ins for HP Applications (12)

Add-ins for Microsoft Applications (3)

Utility Add-ins (13)

Add-ins for HP Applications

HP Sprinter ▶

HP Sprinter provides a suite of advanced features and tools that make manual testing more efficient and effective.

HP Application Lifecycle Intelligence (ALI) ▶

Enables you to aggregate information from multiple ALM tools to establish complete traceability.

QuickTest Professional ▶

Enables you to work with QuickTest Professional in an HP ALM project.

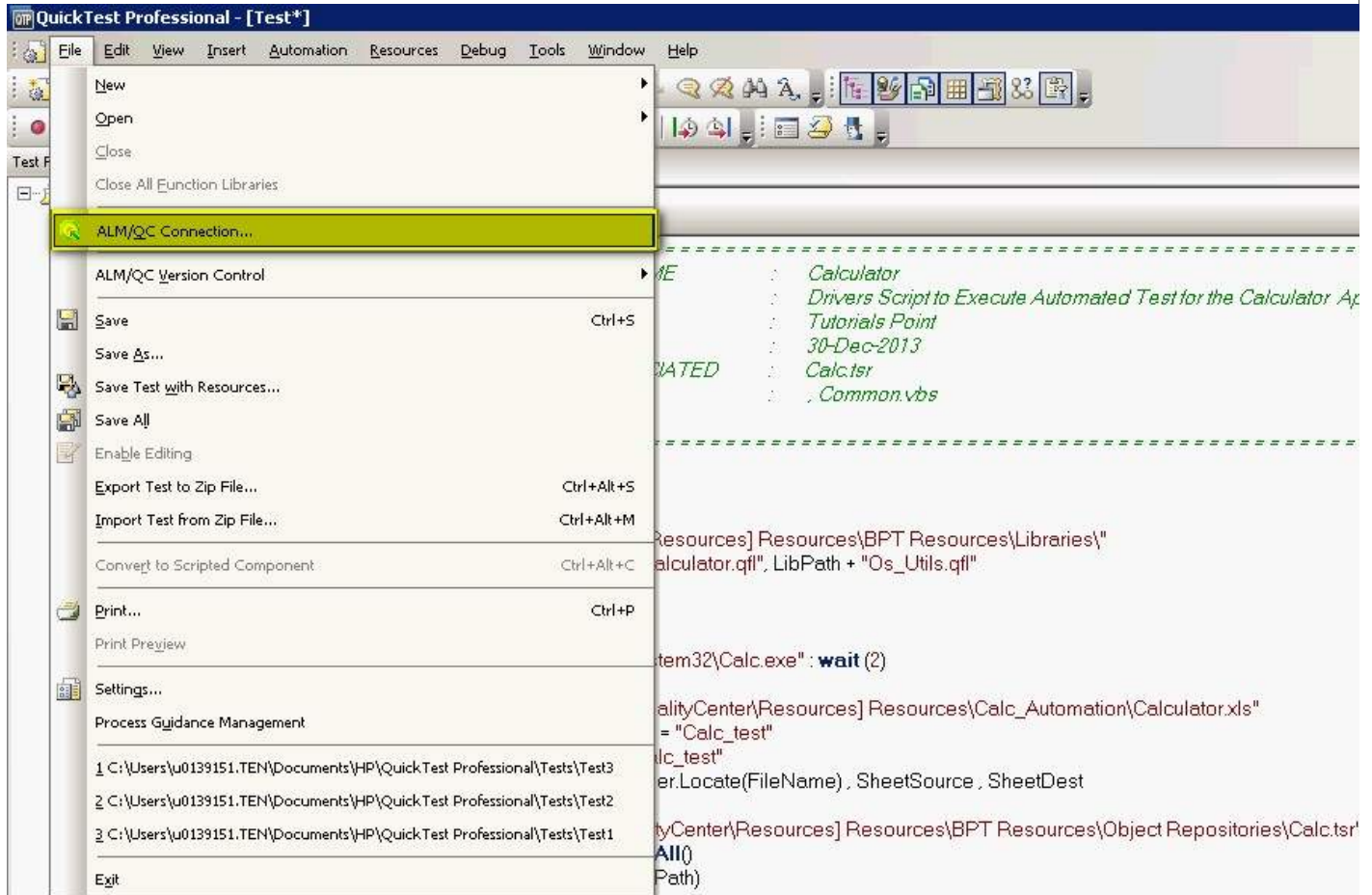
QuickTest Professional for Business Process Testing ▶

Enables you to work with business process tests automated with QuickTest Professional in an HP ALM project.

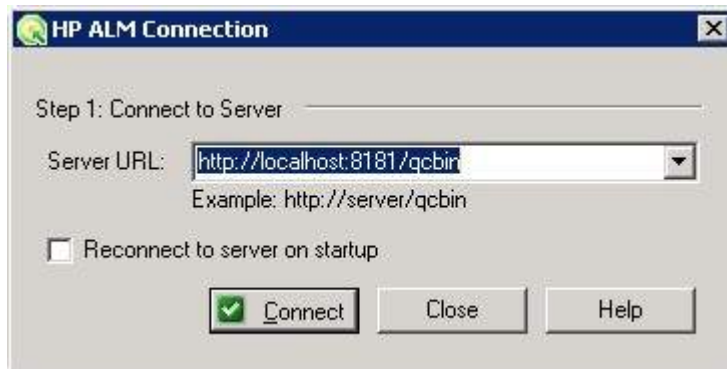
Unified Functional Testing ▶

Enables you to work with Unified Functional Testing (UFT) in an HP ALM project.

Step 4: Establish a connection between QTP and QC by Navigating to "File" >> "ALM/QC Connection".

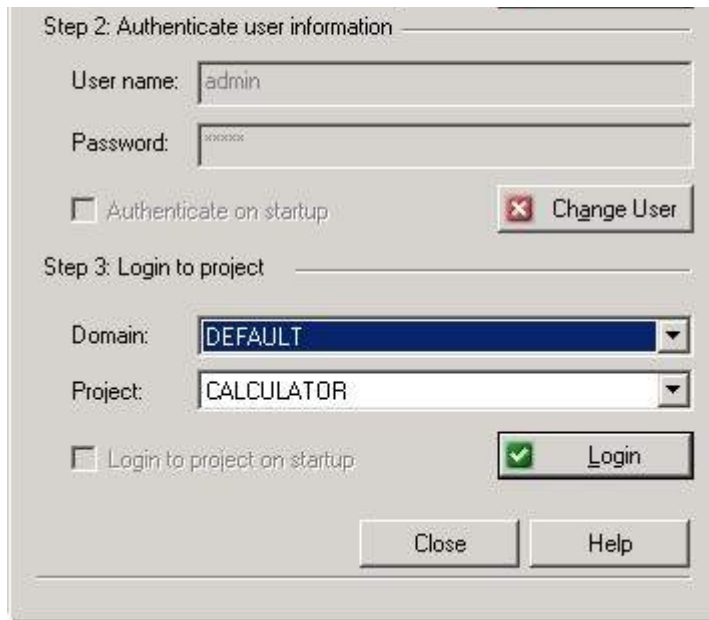


Step 5: HP ALM Connection dialog opens. Enter the Server URL as shown in the below example.

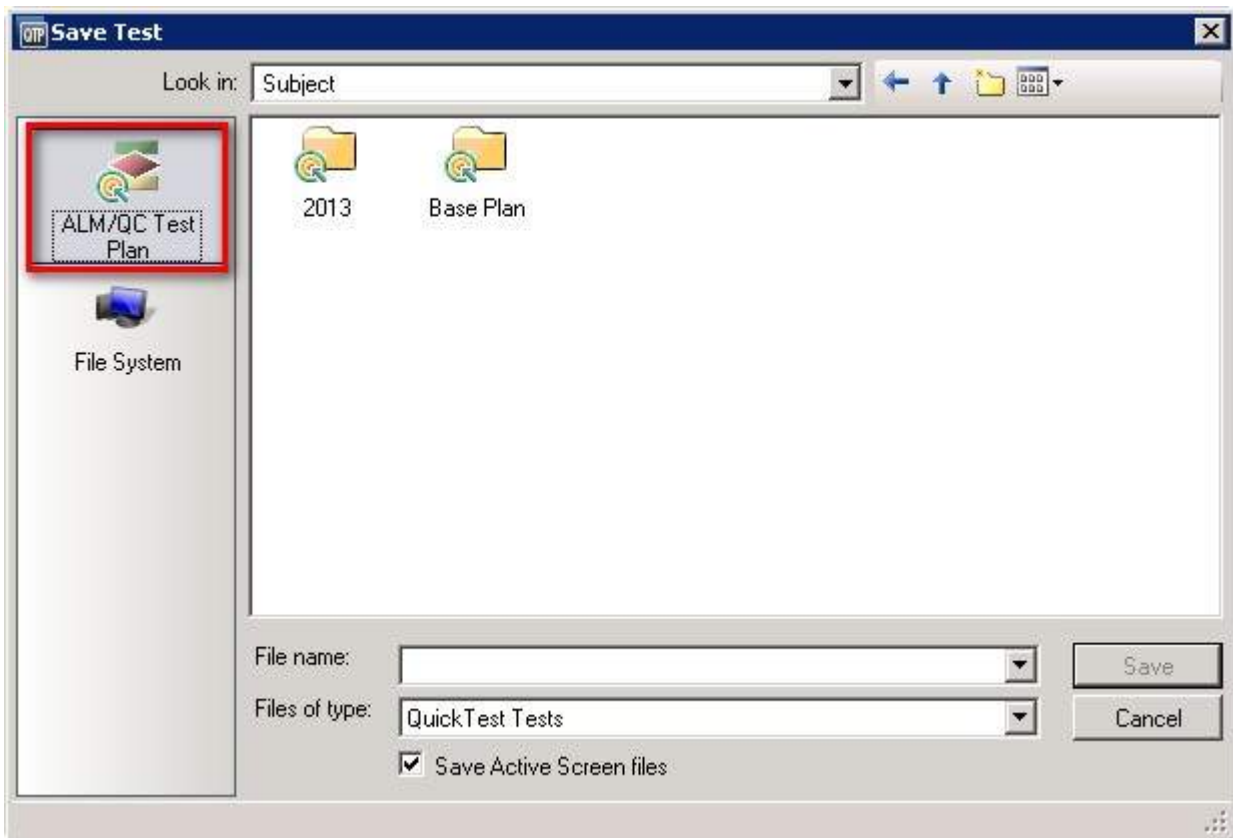


Step 6: Once the URL is correct, the credentials dialog opens. Tester has to connect to the relevant project area.

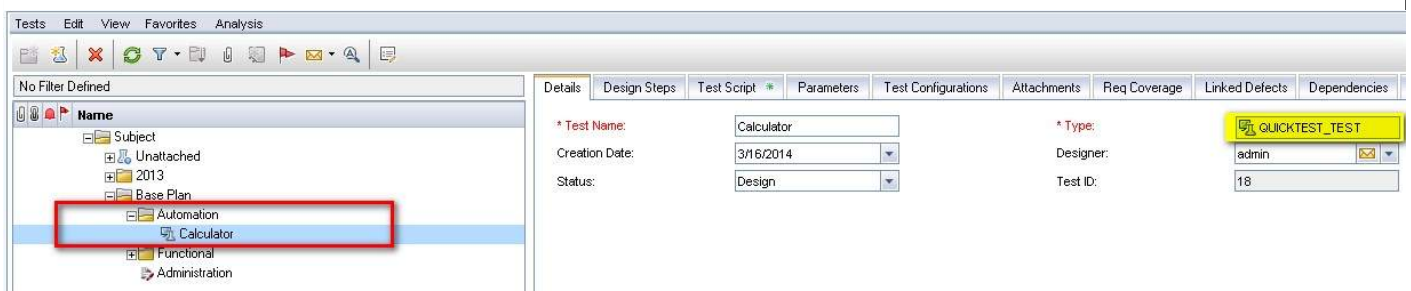




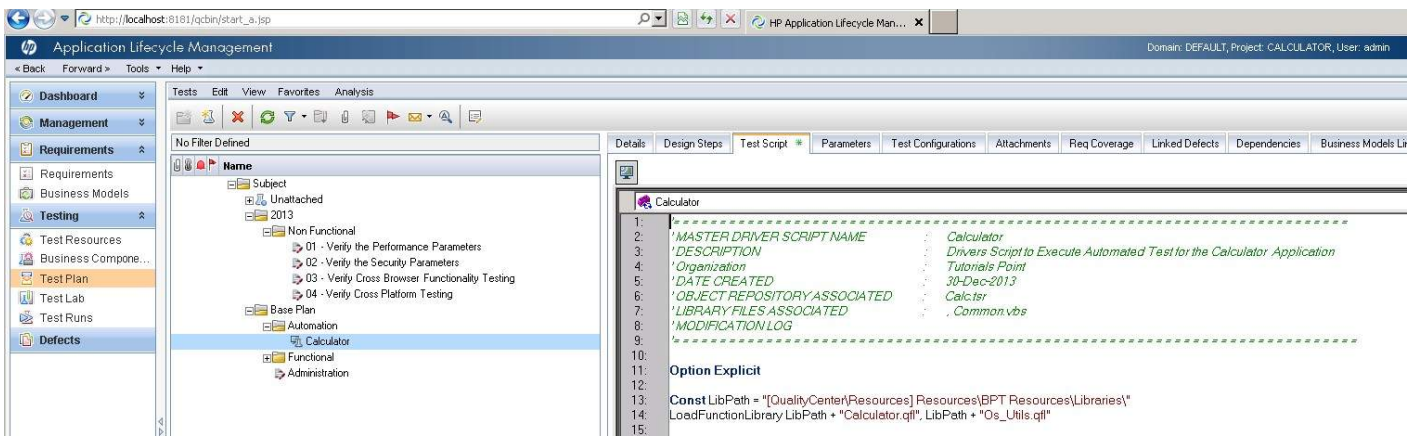
Step 7: Once ALM Connection is successful, we need save the Driver Script in Quality Center. Select ALM/QC Plan as shown below.



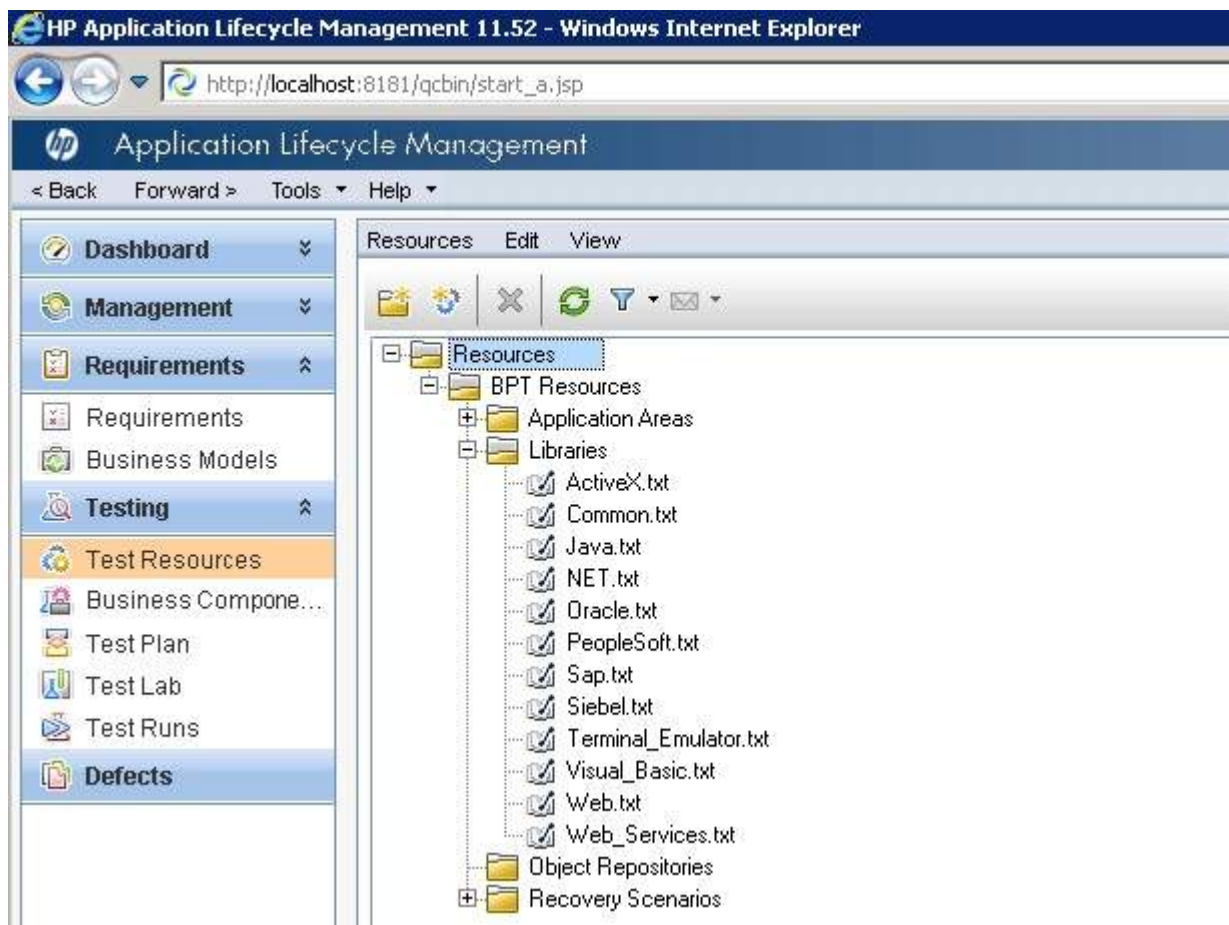
Step 8: Once the test is saved, we can see the in ALM where the test type is shown as "Quick Test".



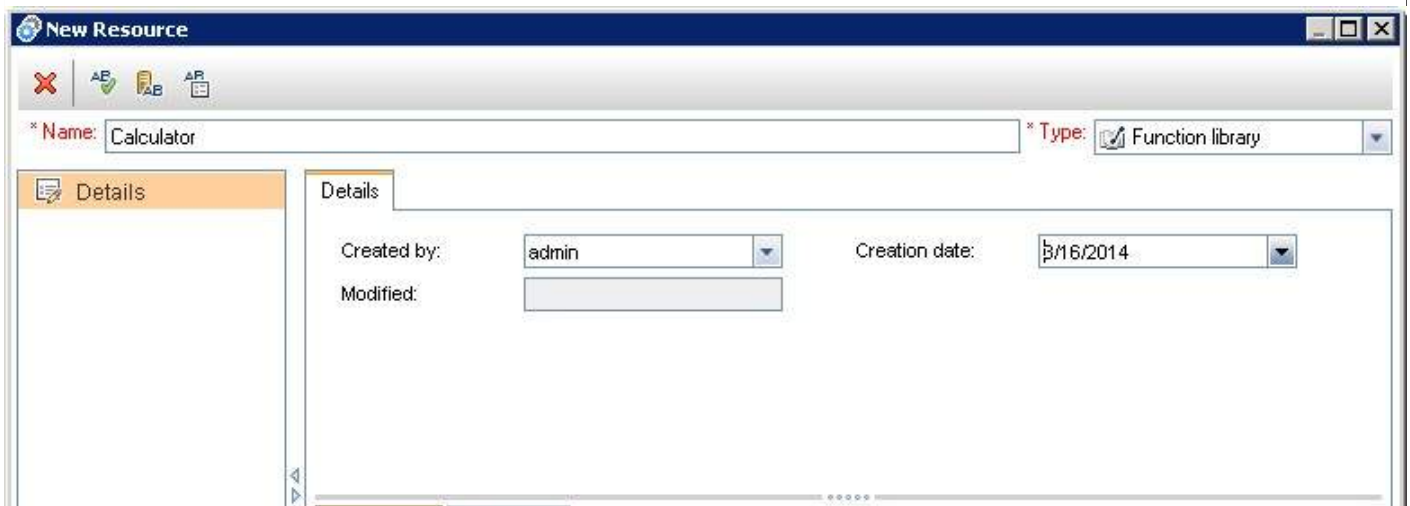
Step 9: Upon Navigating to "Test Script" Tab which appears only if the test type is of "Quick Test". The same script shown in QTP screen would be displayed in Quality Center as well.

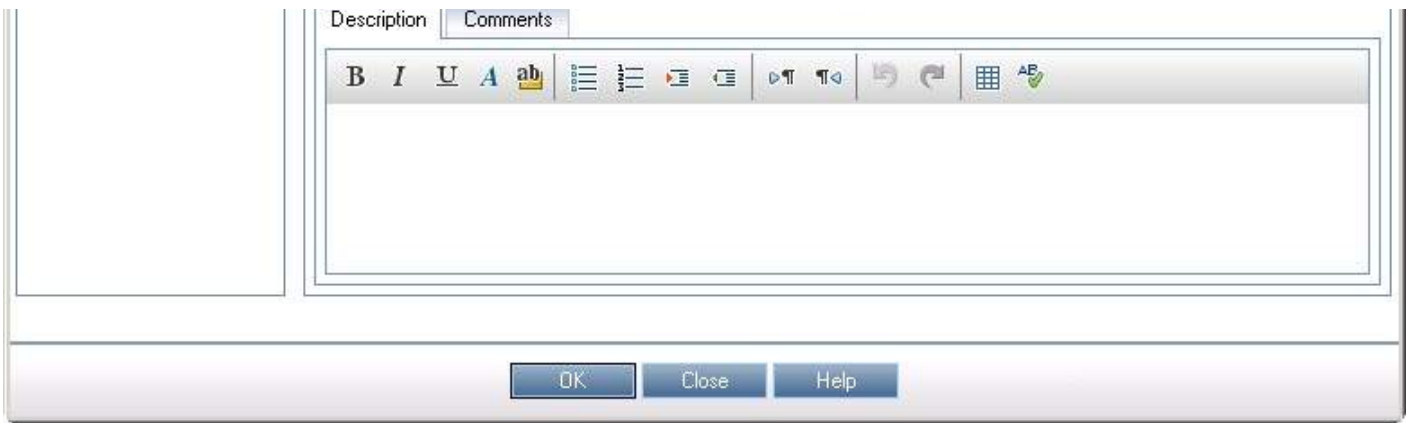


Step 10: The other necessary component that is required for script execution is Library files which can be placed under "Test Resources" Folder.

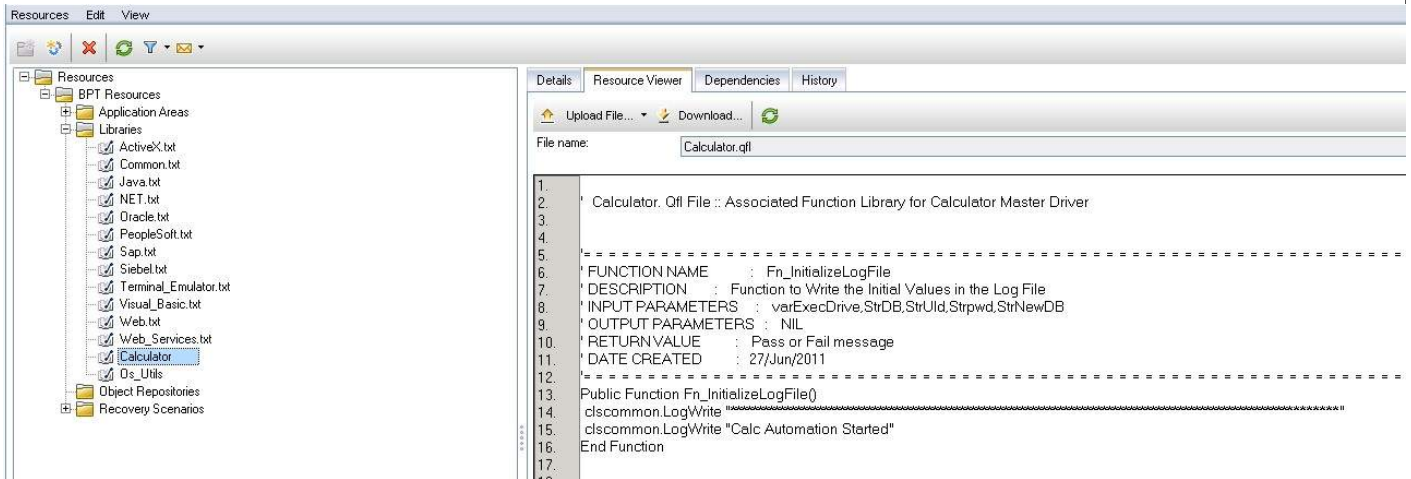


Step 11: The Function Library file can be added by creating a new resource of type ".qfl" or ".vbs"

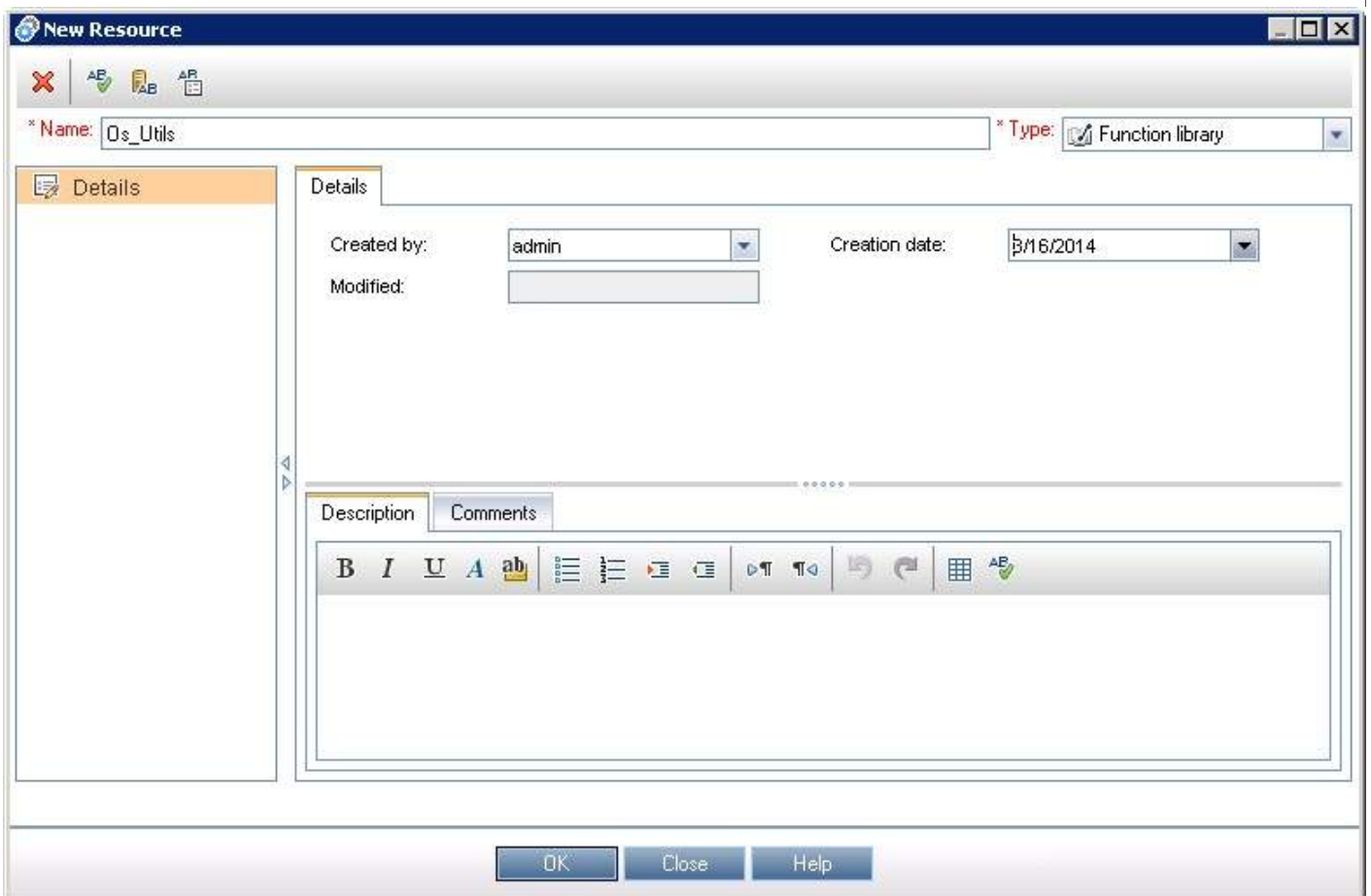




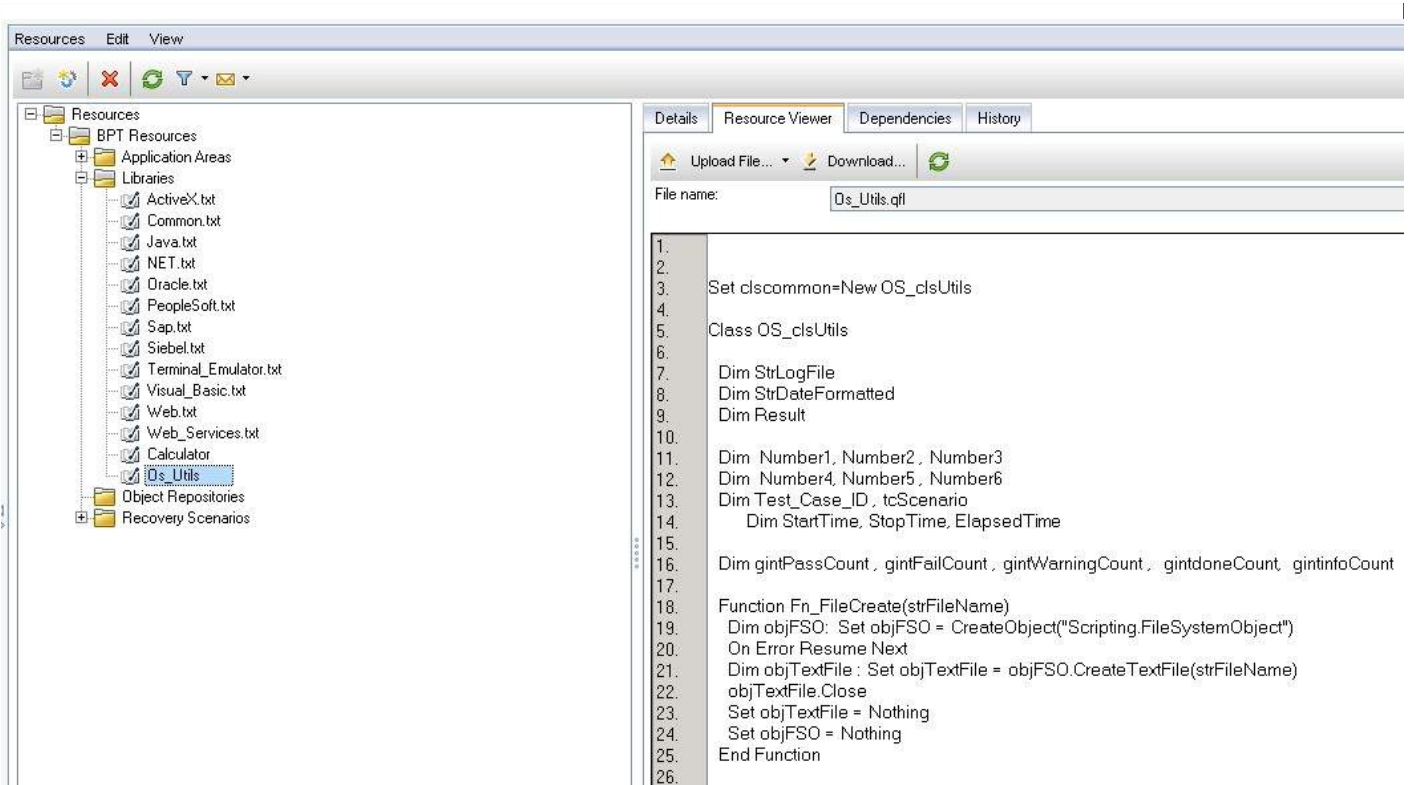
Step 12: The Added library file can be accessed in quality Center using resource Viewer.



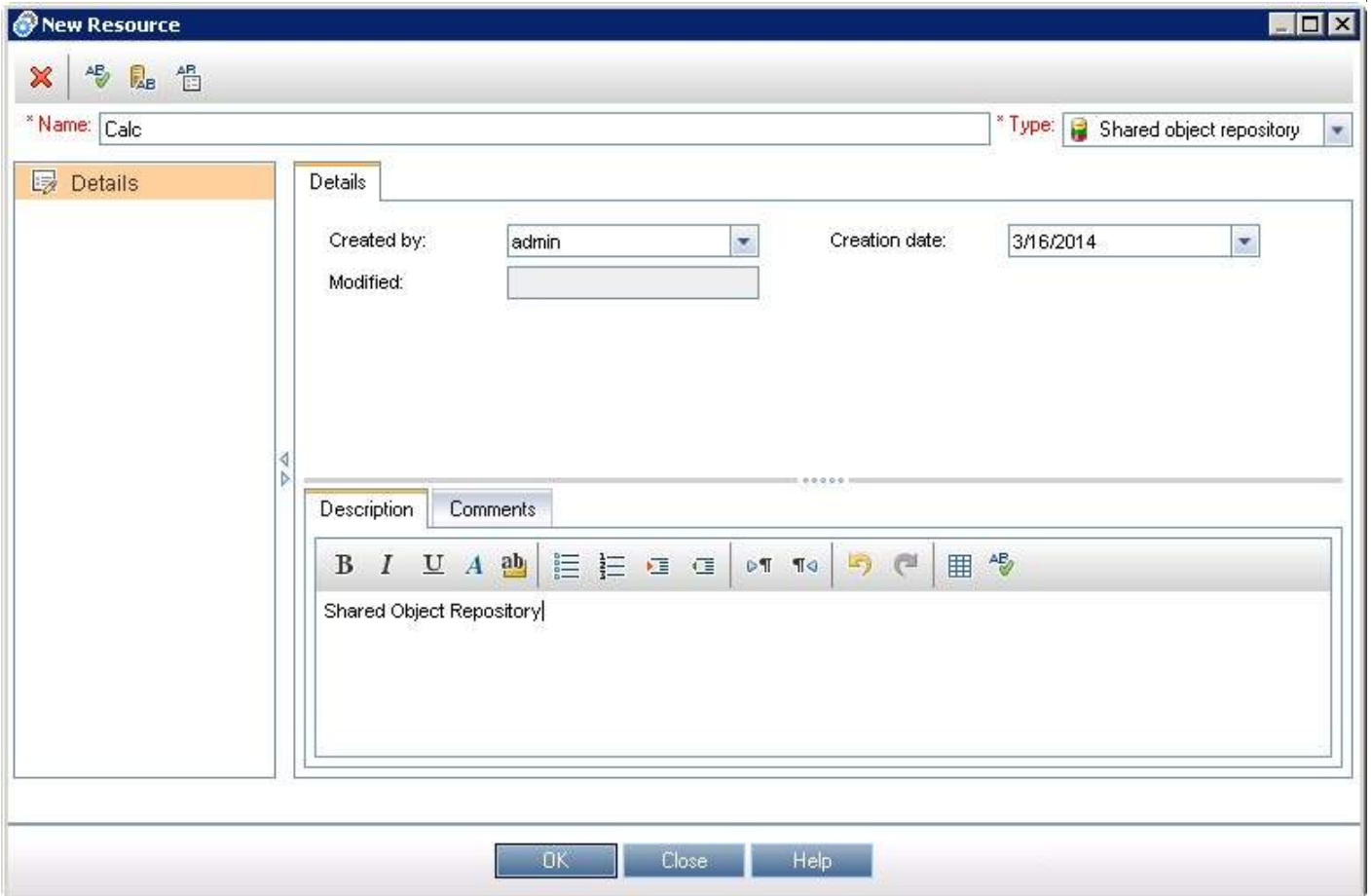
Step 13: If there are more library files, the same is added by creating a new resource of type ".qfl" or ".vbs".



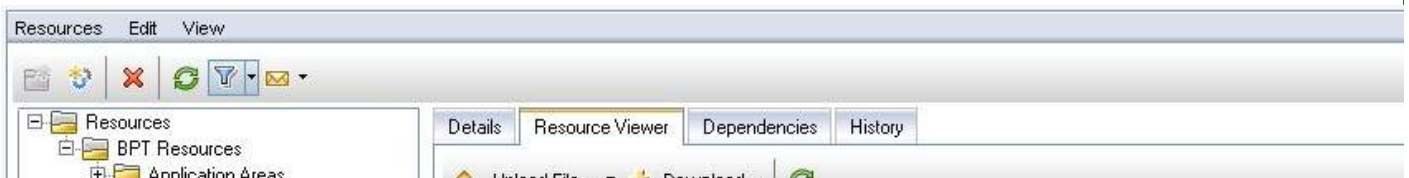
Step 14: Once again, Added library file can be accessed in quality Center using resource Viewer.

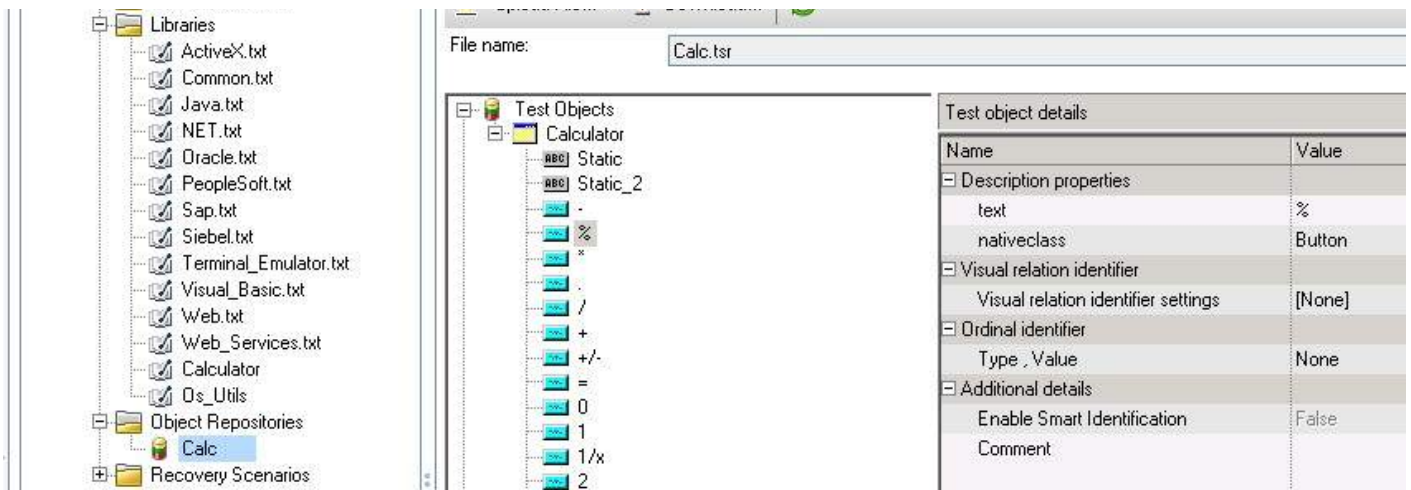


Step 15: The Next dependant component for any script execution is "Object Repository" which is again placed under "Resources" section.

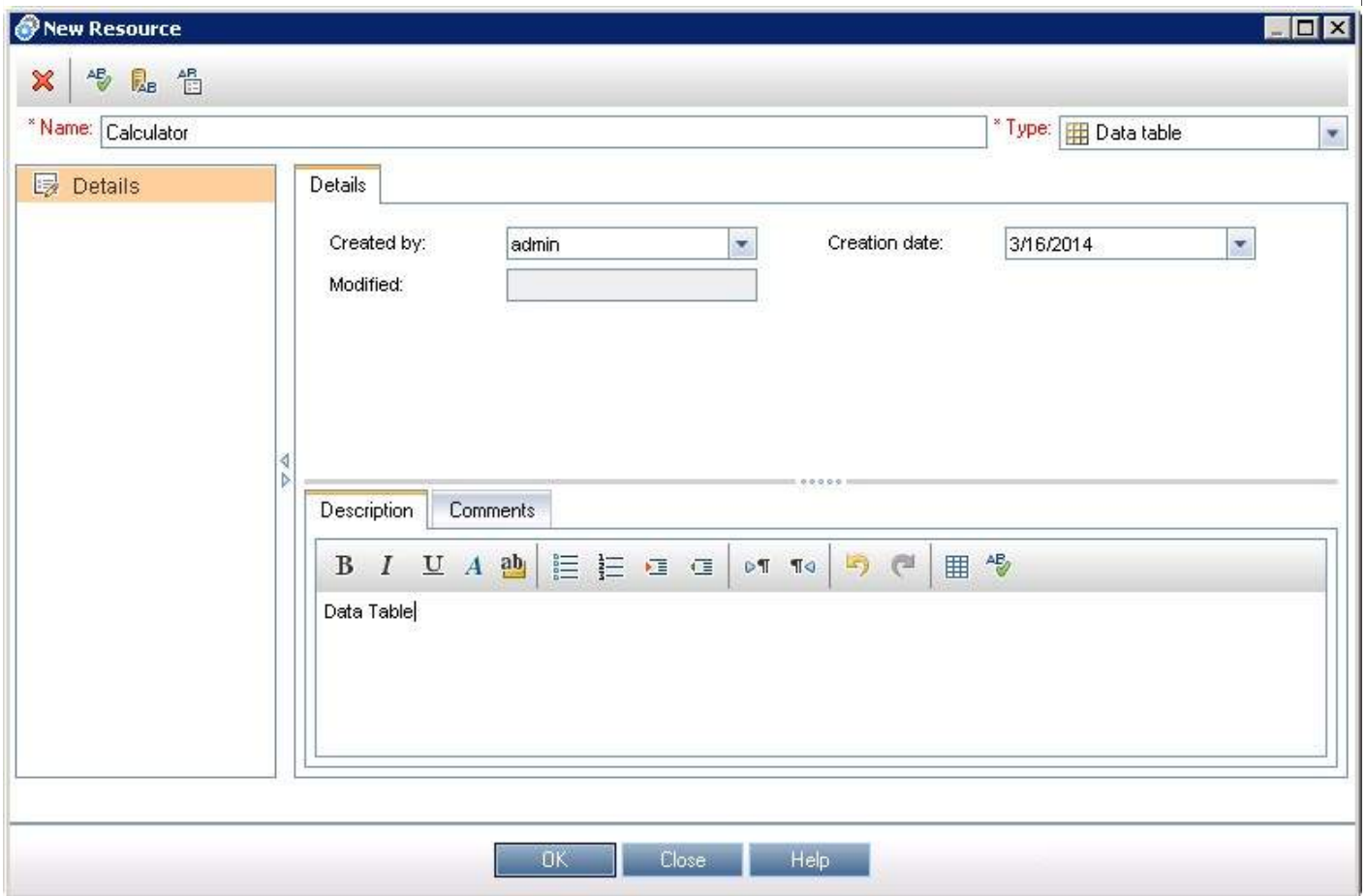


Step 16: The added Object Repository and its properties can be viewed using "Resource Viewer".

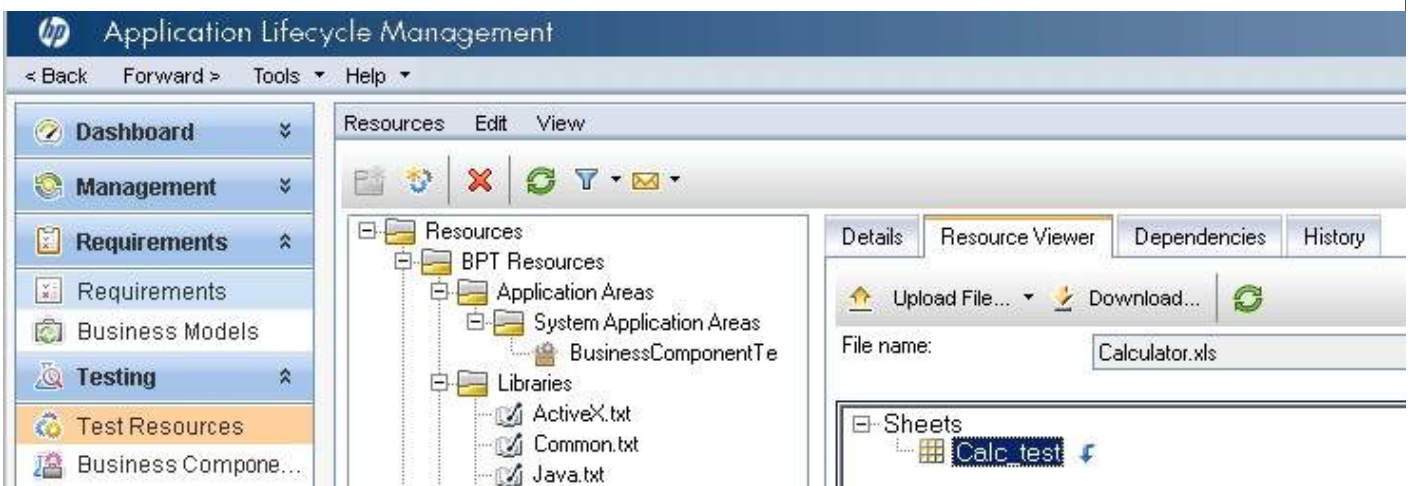


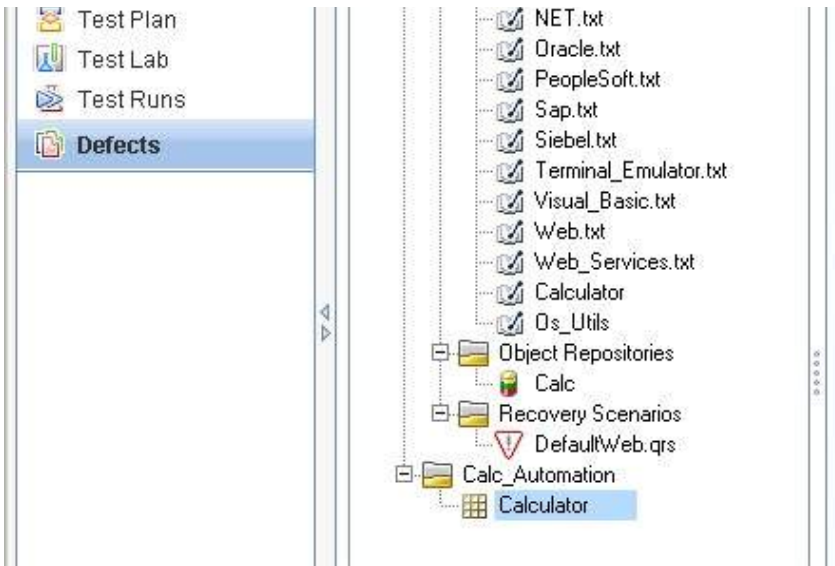


Step 17: The Datable, parameterized table also be placed in Quality Center under "Test Resources" section.

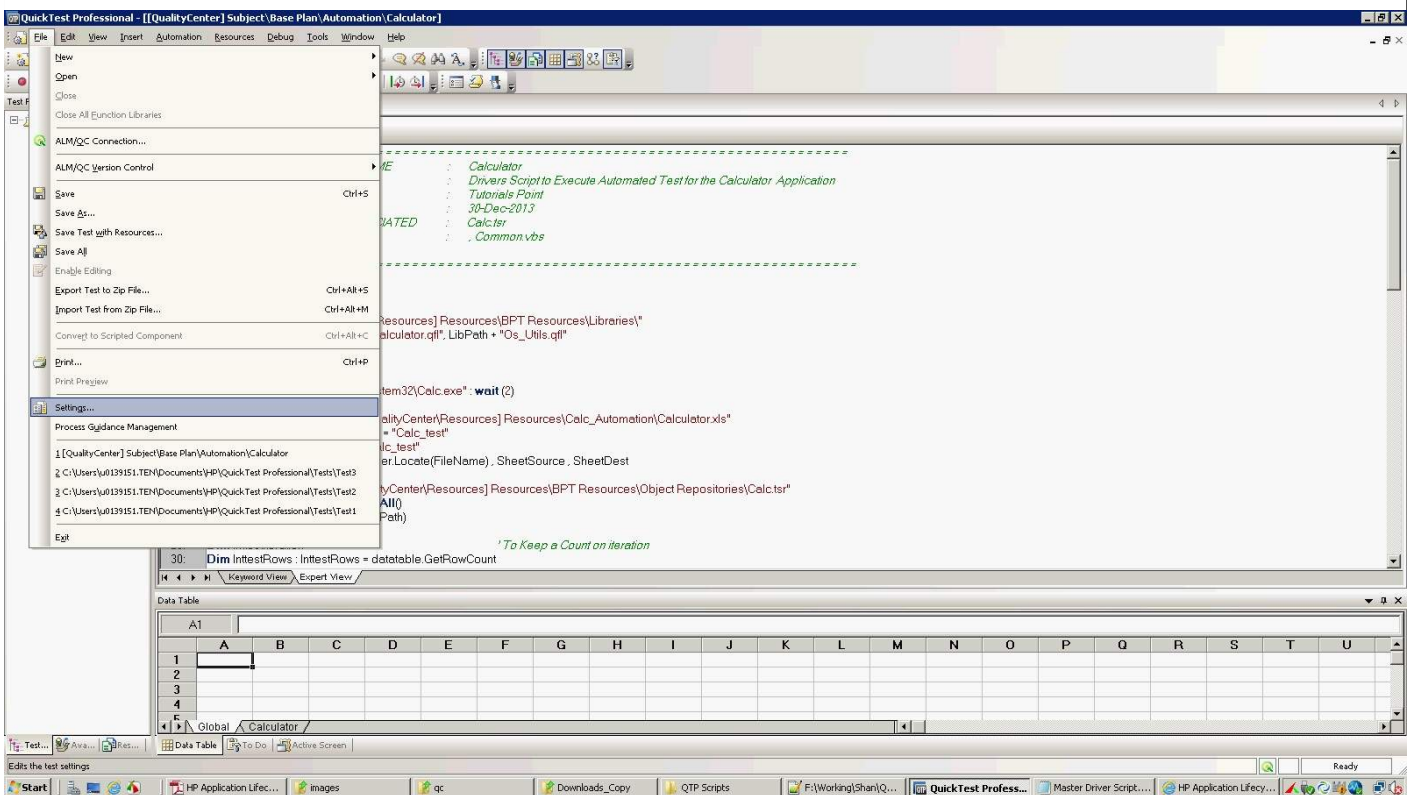


Step 18: The added data Table can be viewed using in "Resource Viewer".

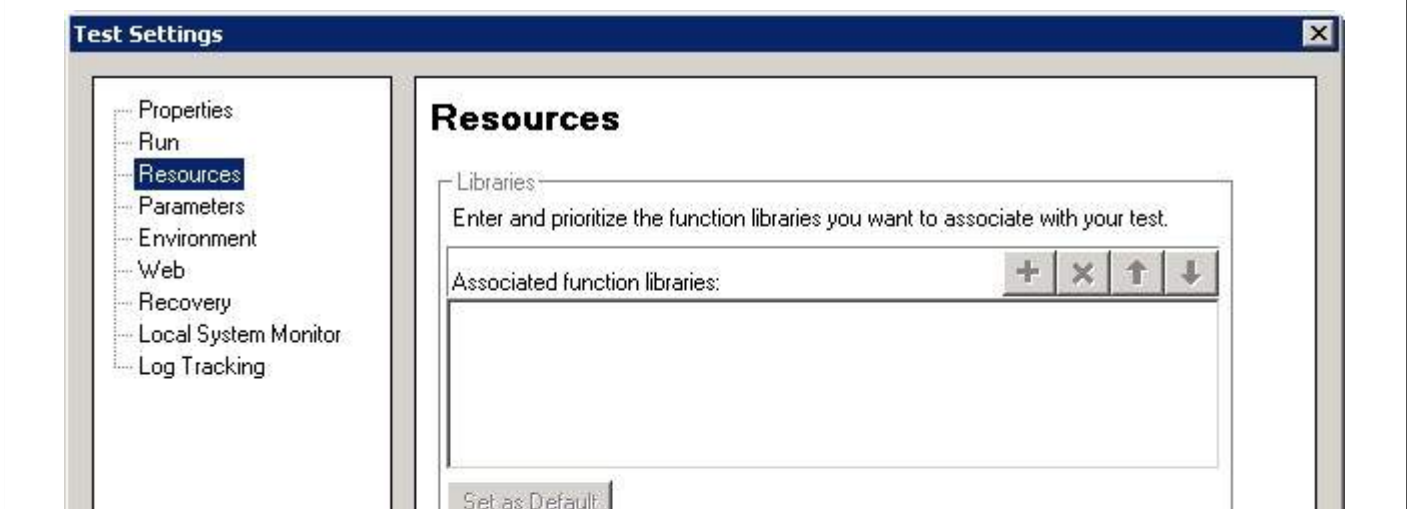


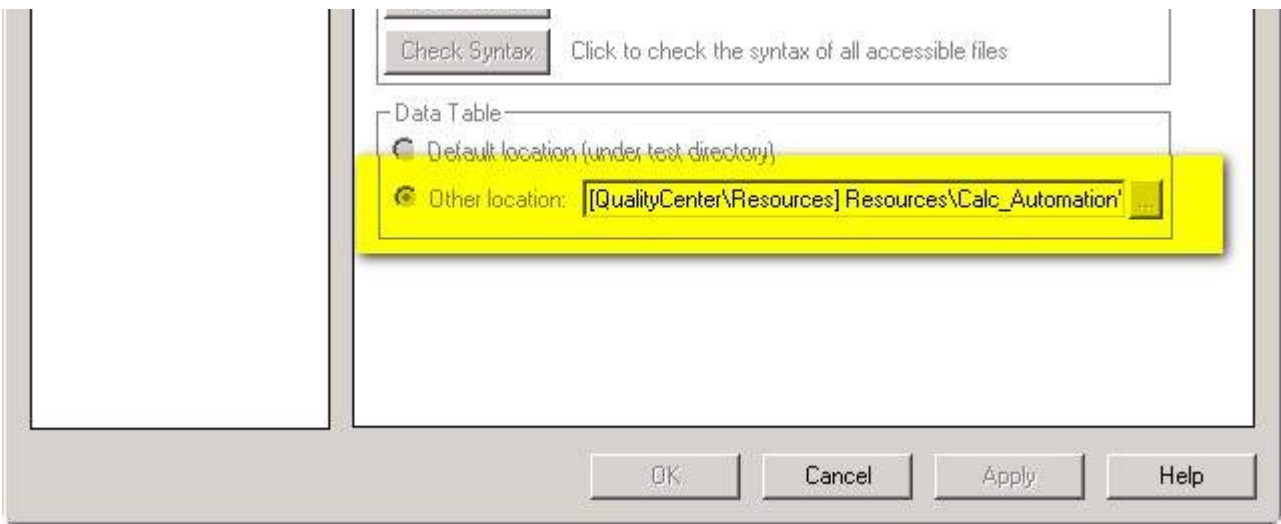


Step 19: The Datable should now also be mapped to the test settings so that they can be picked while execution. The same can be done using "Settings" of "File" Menu.

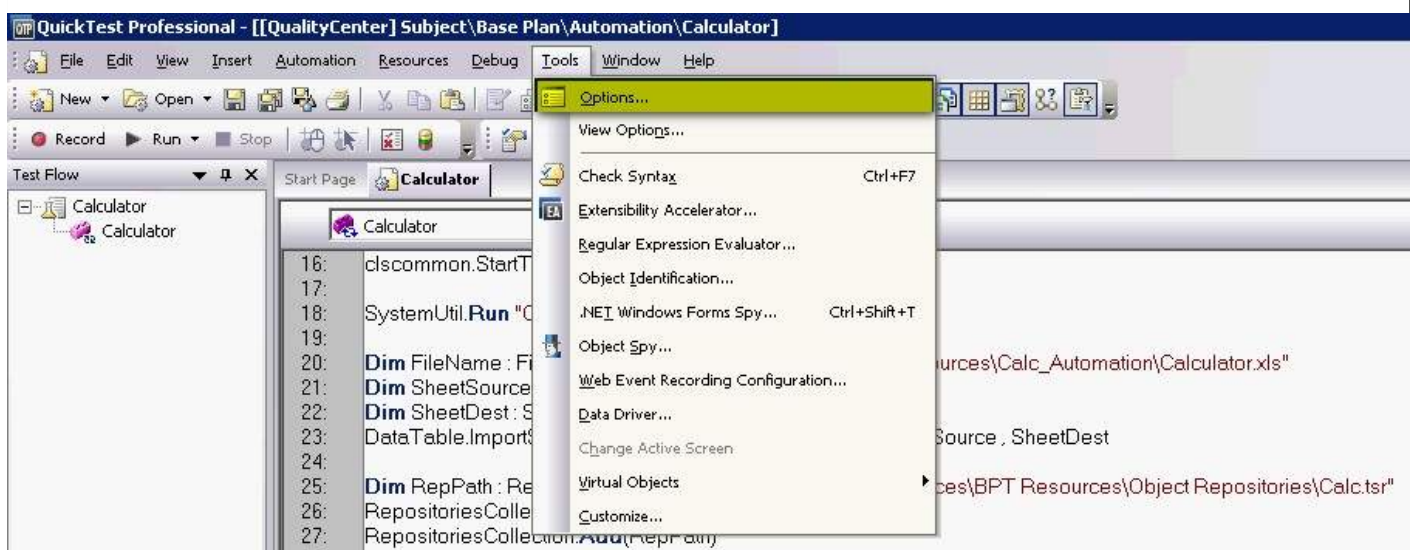


Step 20: The Test Settings dialog opens. Navigate to Resources Tab and select the Datable that we added in Step 16.

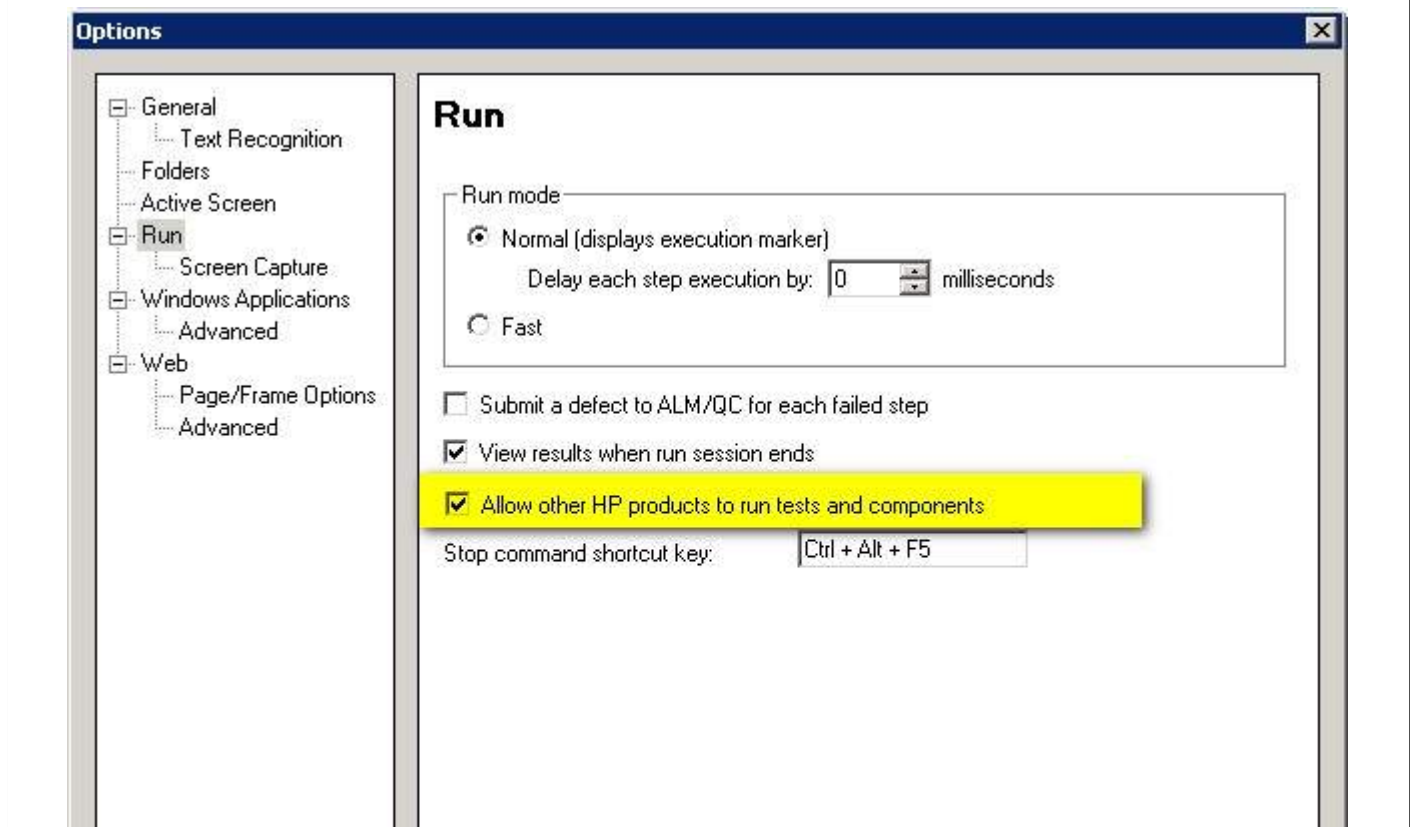




Step 21: Now, we should allow QTP to interact with other Hp Products. This will allow QTP to interact with Quality Center. Goto "Tools" >> "Options"

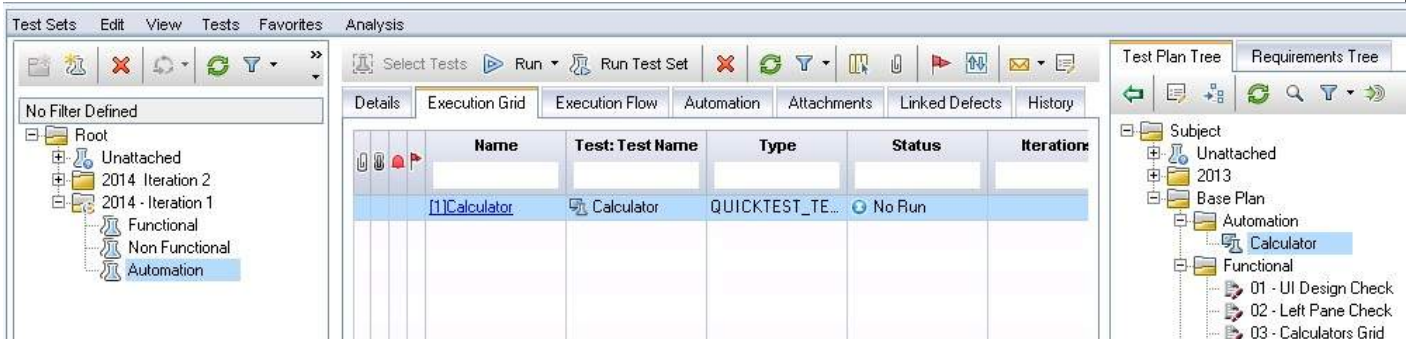


Step 22: Now, enable "Allow other HP products to run tests and components" as shown below.

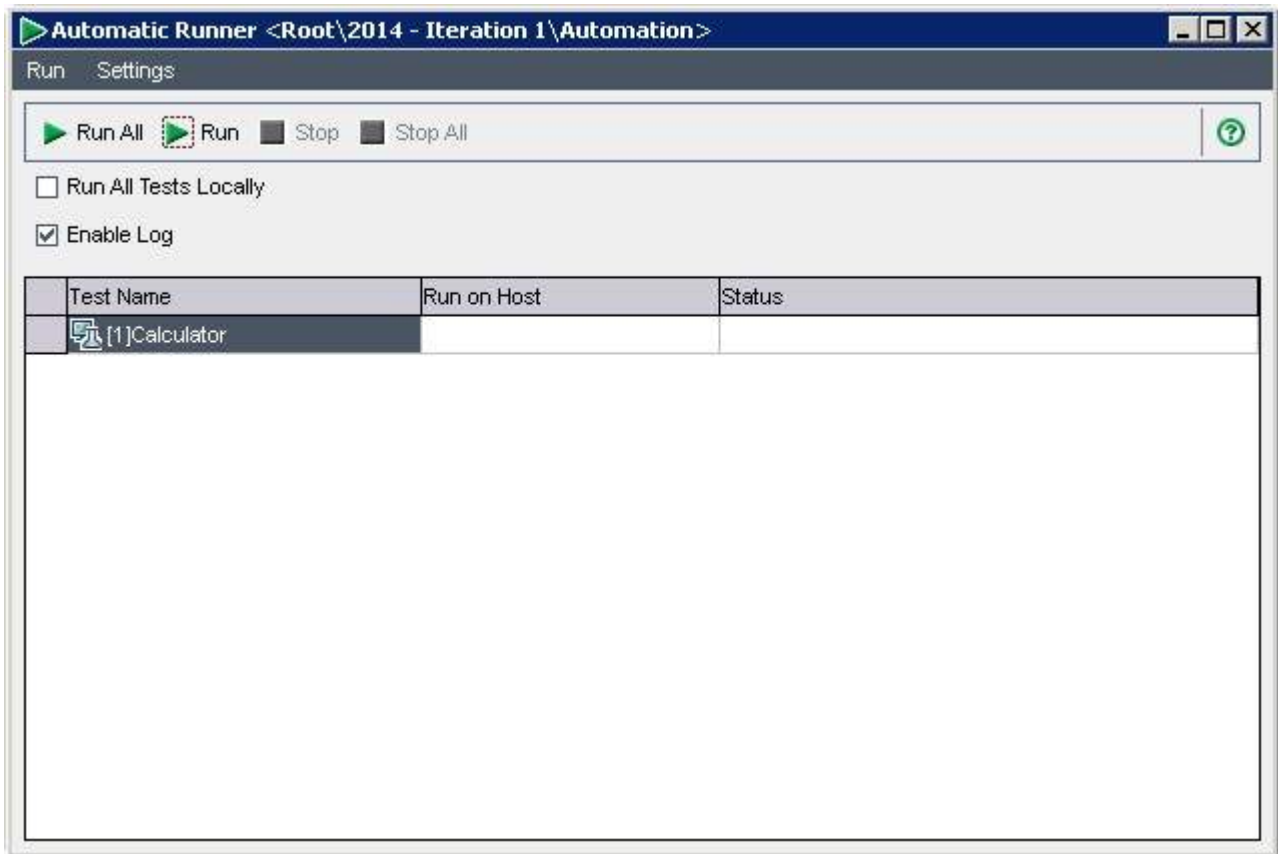




Step 23: The Next Step is to add the test in "Test Lab" and execute the test. The Procedure to Add tests into Test Lab remains the same as that of manual tests.

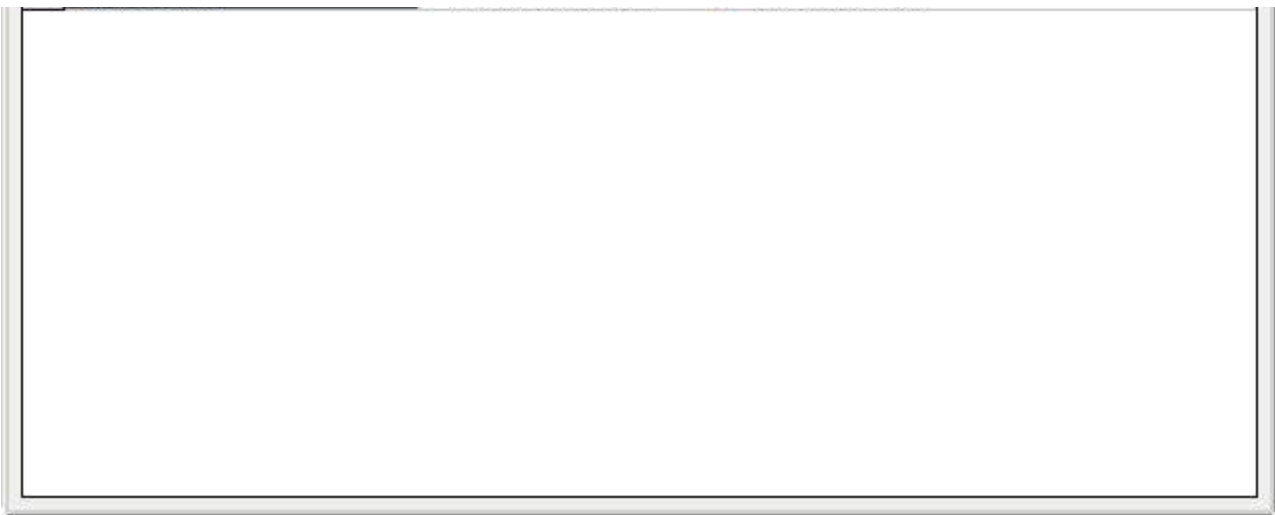


Step 24: Upon Clicking on "Run", the automatic runner opens and enable "Run all tests locally" and hit "Run".

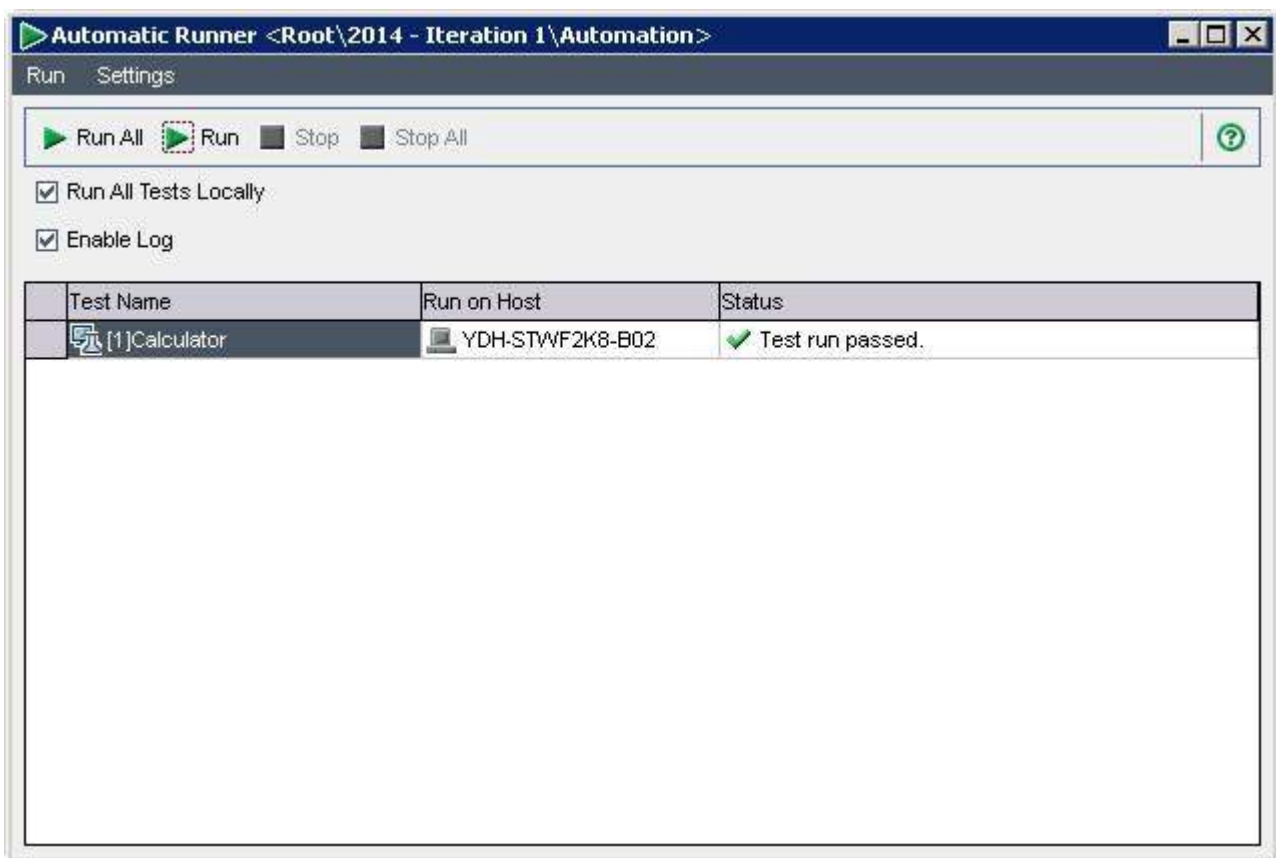


Step 25: Once execution is complete, the test result is displayed on the the same "Automatic Runner" dialog.





Step 26: In Test Lab QTP report is loaded automatically. User can click on "Launch report" to get to know about more details of the execution.



Defects

During test execution, when expected result doesnot match with actual result, a defect should be logged. Now Let us focus various functionalities associated with defects.

Navigate to defects Tab in Quality Center and Click on "New Defects".



	Actual Fix Time	Assigned To	Closed in...	Closing Date	Comments

Fill in the mandatory parameters such as defect summary, detected by, Severity and Description.

New Defect

* Summary: Unable to Login to Application

Details

* Detected By: admin

* Severity: 4-Very High

Assigned To:

Closing Date:

Detected in Release:

Estimated Fix Time:

Planned Closing Version:

Project:

Status: New

Target Cycle: Cycle 1

* Detected on Date: 3/16/2014

Actual Fix Time:

Closed in Version:

Detected in Cycle:

Detected in Version:

Modified:

Priority:

Reproducible: Y

Subject:

Target Release: 2014.1

Description:

Unable to Login to Application

Submit Close Help

Once a defect is posted, the same be accessed in Defects Tab as shown below.

HP Application Lifecycle Management 11.52 - Windows Internet Explorer

http://localhost:8181/qcbin/start_a.jsp

Application Lifecycle Management

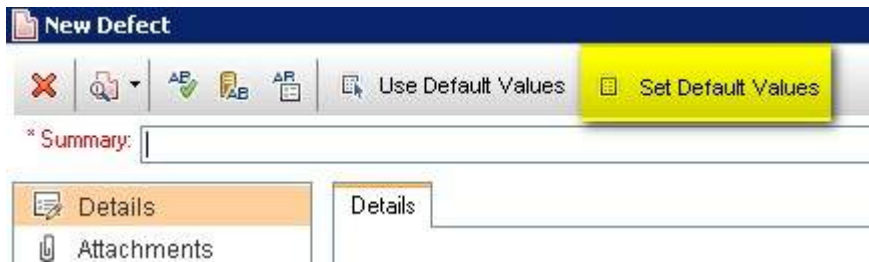
Defects Edit View Favorites Analysis

No Filter Defined

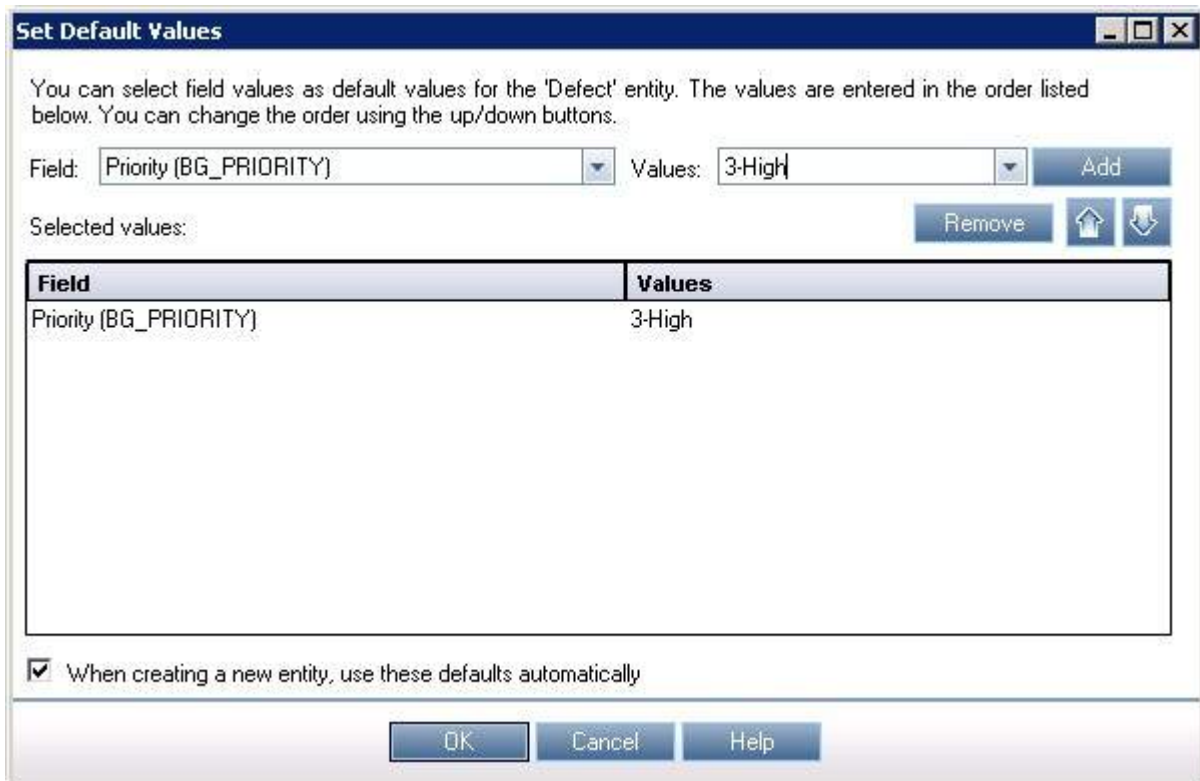
Defect ID	Description	Detected By	Detected in...	Detected in...	Severity	Detected in...	Detected on...
1	Test Set: Functio...	admin	Cycle 1	2014.1	4-Very High		3/13/2014
2	Unable to Login t...	admin			4-Very High		3/16/2014

If the defects are logged during the test execution the step and description would be autopopulated from test case where as If a defect is logged by clicking on "New Defect" in defect module the steps, description and summary needs to be entered manually by the user.

Many a times testers will NOT be in a position to enter all field values in "New Defect" Window. Instead they can make use of "Set Default Values" Option. It can be accessed from "New Defect" Window as shown below.



The "Set Default Values" dialog opens. We will be able to set a default value for each one of the fields in "Defects" Section which would be prepopulated once we click on "New Defect" button. We can also add/remove Default values using the appropriate button in this dialog box.



Defects can also be uploaded from Excel to Quality Center and the procedure remains the same as that of uploading "Requirements" and "Test Cases" using HP-MS Excel plugin utility.

All the defects are displayed by default, hence user has to use filter functionalities to display only those that are filtered by user.

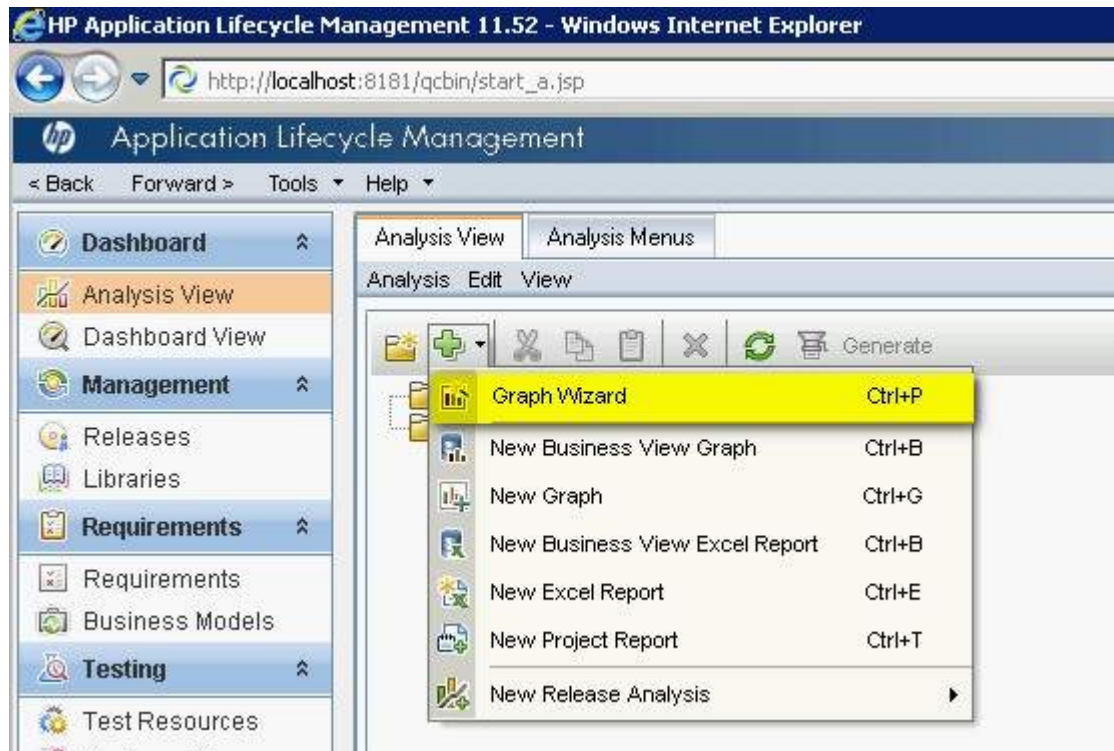
Dashboard Analysis:

Dashboard Tab contains "Analysis View" and "Dashboard View" enabling user to analyze and display ALM data in various formats. Let us understand the importance of each one of them in briefly.

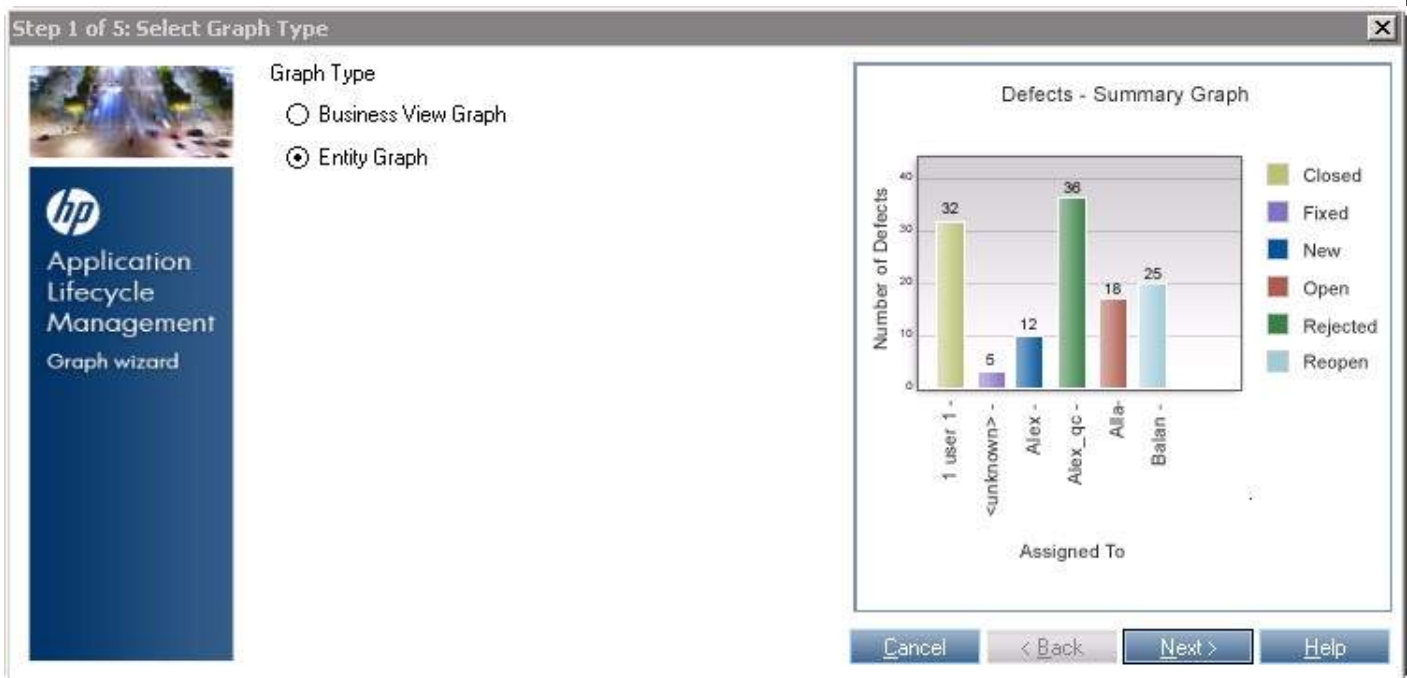
- **Analysis View :** It Contains the analysis tree using which project managers/QA can organize all of their analysis items which can be any one of the following viz - graphs, project reports, and Excel reports.
- **Dashboard View :** It Contains the dashboard tree in which managers/testers organize dashboard pages that can arrange multiple graphs that was created in the analysis tree, and display them in a single view.

Analysis View

Step 1 : Goto "Analysis View" and click on "+" button and select "Graph wizard". The "Graph Wizard" dialog opens.



Step 2 : Select "Entity Graph" and click "Next" as shown below.



Step 3 : Select the kind of Entity *Defects, TestCase, runs, Test Configuration* against which the graph needs to be generated.



Description

The Defects - Summary Graph shows a summary of the number of defects in a project, or the estimated/actual amount of time taken to fix these defects. The information is displayed according to the criteria that you specify. You can specify the type of data displayed along the x-axis, the type of data displayed along the y-axis, and the defect information by which data is grouped.

Cancel < Back Next > Help

Step 4 : One can choose all projects that they have got access to or they can choose just the current project.

Step 3 of 5: Select Projects

Project Selection

Use Current Project

Use Selecte*d* Projects **Select...**

Domain	Project
DEFAULT	CALCULATOR

Cancel < Back Next > Help

Step 5 : One can filter based on release/cycle and ensure that only the relevant data is displayed.

Step 4 of 5: Select Filter

Filter Selection

Do not use a filter

Define a new filter **Filter...**

Cancel < Back Next > Help

Step 6 : We can also "group by" based on a particular field and choose what needs to be mapped against X-Axis.

Step 5 of 5: Select Graph Attributes

Group By field: _____

Defects - Summary Graph

Application Lifecycle Management
Graph wizard

<None>

X-axis field:
Assigned To

Number of Defects

Assigned To	Closed	Fixed	New	Open	Rejected	Reopen
1 user 1	32	0	0	0	0	0
<unknown>	0	5	0	0	0	0
Alex	0	0	12	0	0	0
Alex_qc	0	0	0	0	36	0
Aller	0	0	0	18	0	0
Balan	0	0	0	0	0	25

Cancel < Back Finish Help

Step 6 : Once Finish button is clicked, the graph is generated based on the users choice/settings.

Defects Summary Graph - by 'Assigned To'

Number of Defects

Assigned To	Total
<unknown>	2
admin	2
james	3
smith	3

Last Generated (Local Time): 3/16/2014 3:18:37 PM

Add to Analysis Tree Cancel Help

Step 7 : The generated graph can be named and saved either as public or private.

New Graph

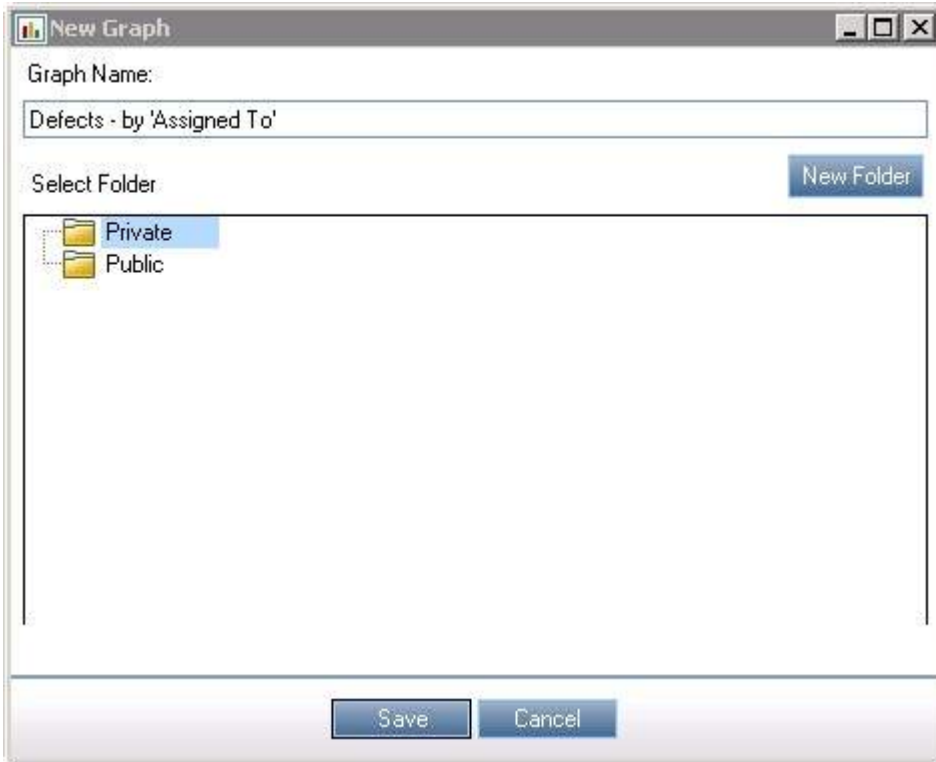
Graph Name:
Defects - by 'Assigned To'

Select Folder
New Folder

- Private
- Public

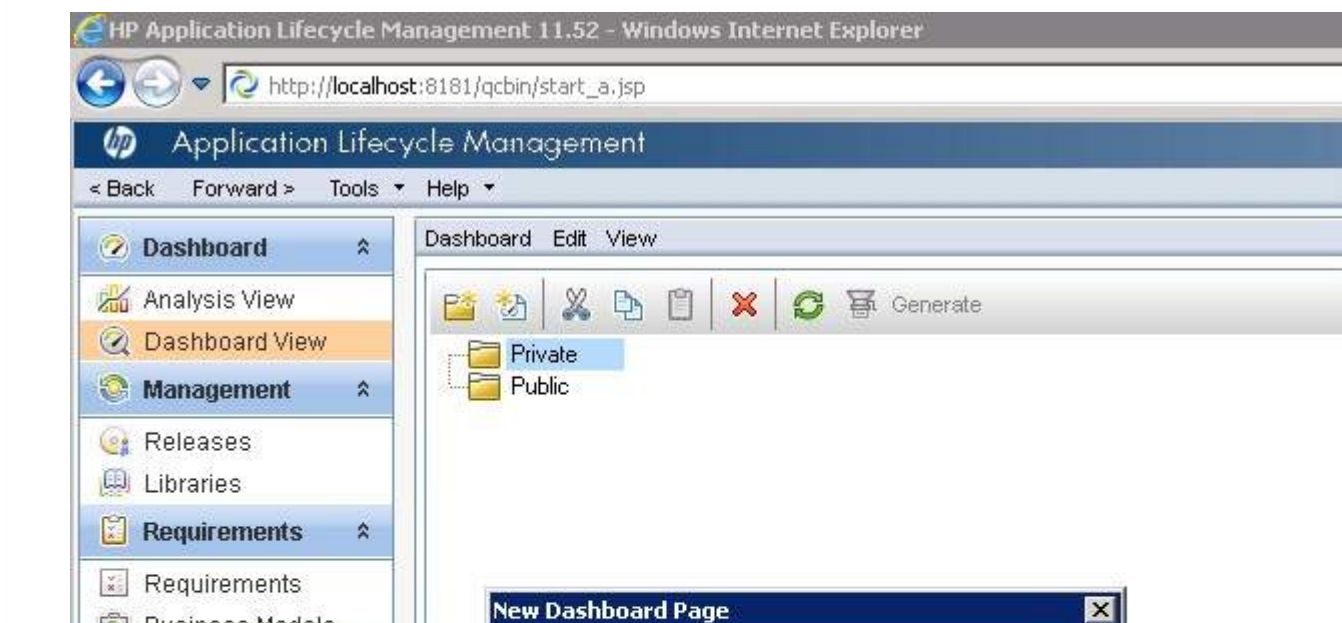


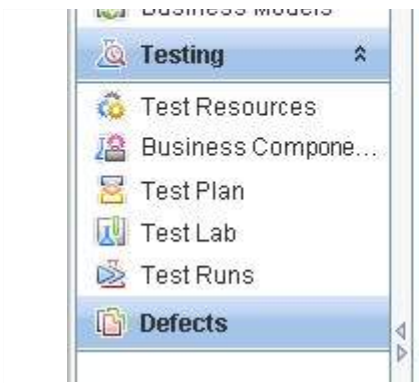
Step 8 : The added graph is can now be accessed from "Dashboard" >> "Analysis View".



Dashboard View:

Step 1 : Goto "Dashboard View" and create a "New Folder" if you wish to or create a "New Dashboard" page straight away.





Step 2 : Upon creating a "New Dashboard" Page, various tabs are generated. "Configuration" tab is one of them in which users can add those graphs which can be added to the dashboard.



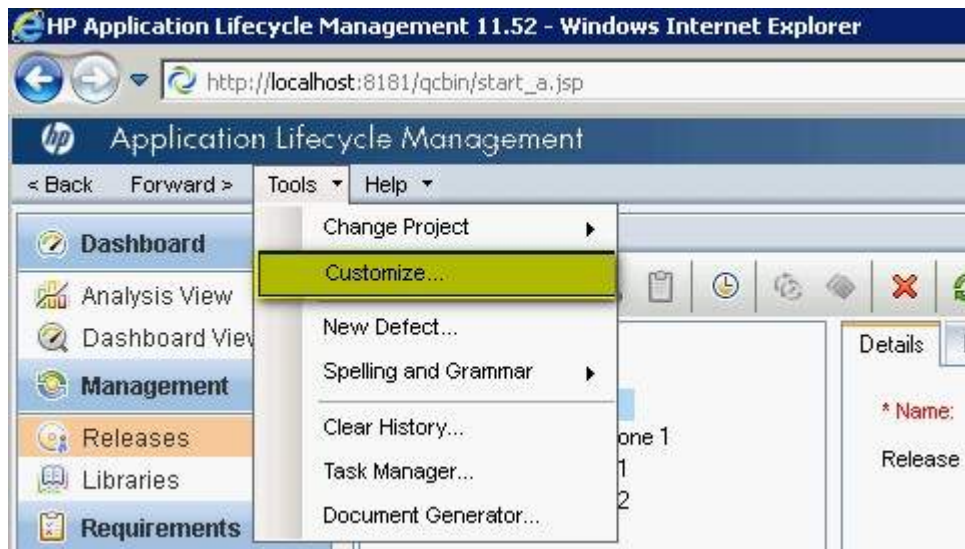
Step 3 : Users should use "View" Tab to view the added dashboard and hit refresh to get the latest data.



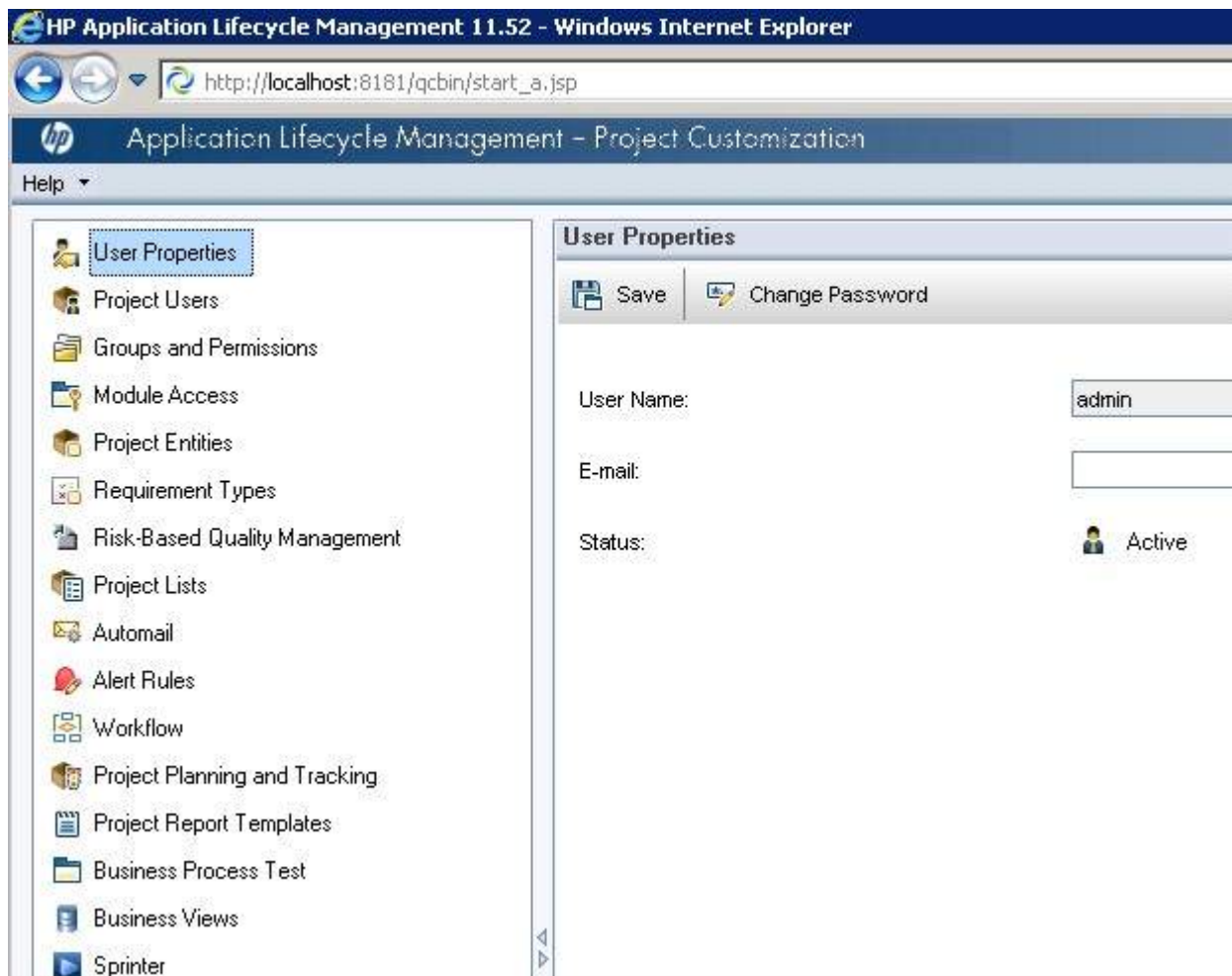
Project Customization

Sometimes we are in a situation to customize the project. Below are the modules which will help us

in customizing the project. Click on each one of these links to understand the functionalities in detail. Project Customization module can be accessed by navigating to "tools" >> "Customize" as shown below:



When a project administrator accesses project Customization then following modules would be shown to the user for customization.



Functionality	Description
User Properties	Helps user to update profile details.
Project Users	Add/Remove user and user roles.
Groups and Permissions	Add/Remove group privileges.

<u>Module Access</u>	Edit Module Level Access.
<u>Project Entities</u>	Add/Edit/Delete Project Fields
<u>Requirement Type</u>	Create,Edit,delete requirement Type
<u>Project Lists</u>	Add,Edit,Delete all project list box fields.
<u>Automail</u>	Send mail based on specific settings.
<u>Alert Rules</u>	Alert users based on specific changes.
<u>WorkFlow</u>	Defect Fields Customization.