

Introduction to HP ALM

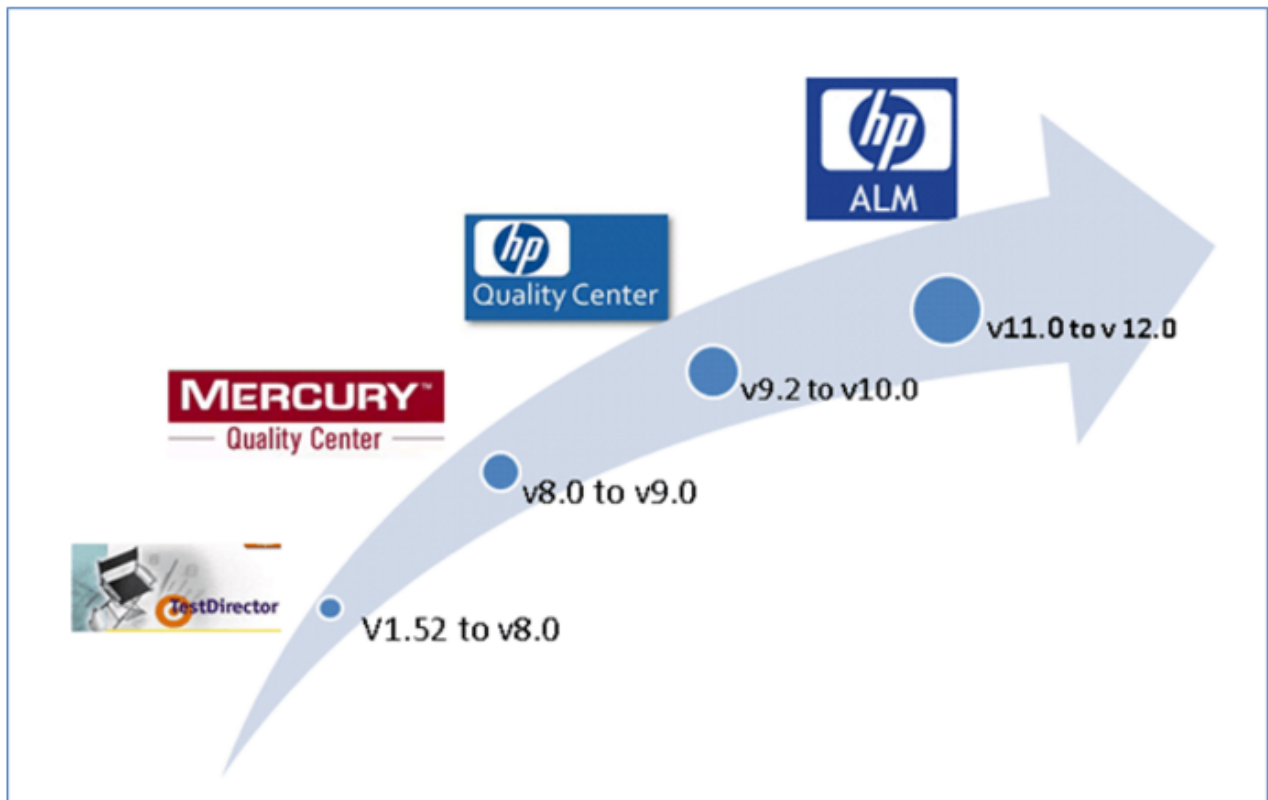
The various stakeholders involved in a typical project are –

- Developer
- Tester
- Business Analysts
- Project Managers
- Product Owners

These stakeholders perform diverse set of activities that need to be communicated to all concerned team members.



ALM evolution



Architecture of QC

Now let us understand the technology part of HP-ALM. ALM is an enterprise application developed using Java 2 Enterprise Edition (J2EE) that can have MS SQL Server or Oracle as its back end. ALM has 3 components – Client, Application Server and Database Server.

1.**HP ALM client:** when an end user/tester accesses the URL of ALM, the client components are downloaded on the client's system. ALM client components help the user to interact with the server using .NET and COM technologies over a secured connection (HTTPS).

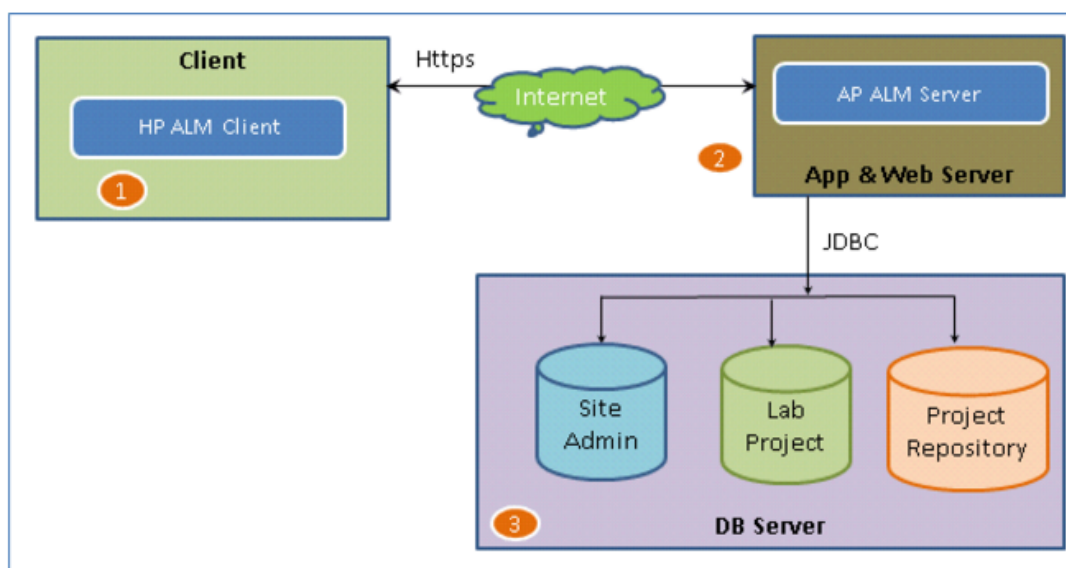
2.**ALM server/Application server:** Application server usually runs on a Windows or Linux platform which caters to the client requests. App server makes use of the Java Database Connectivity (JDBC) driver to communicate between the application server and database servers.

3.**Database servers:** The Database layer stores three schemas.

- Site Administration schema:** It Stores information related to the domains, users, and site parameters.

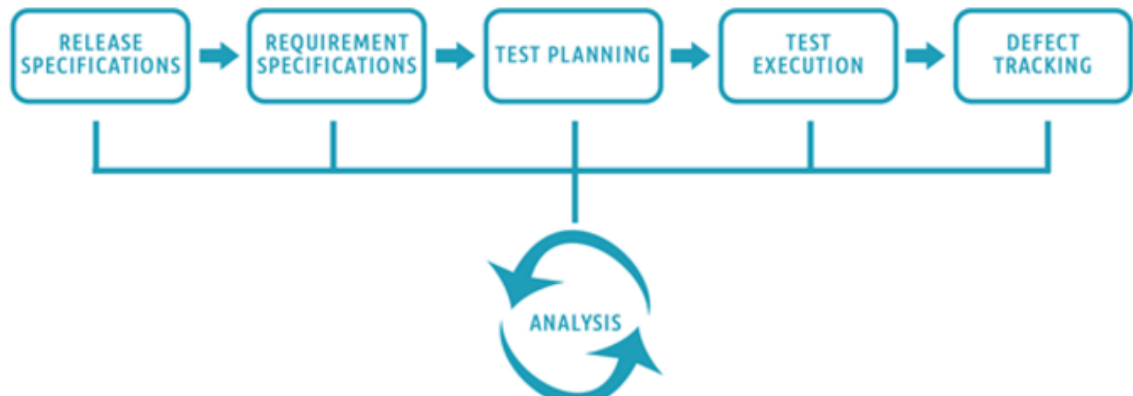
- Lab Project:** This schema stores lab information related to functional and performance testing on remote hosts, Performance Center server data.

- Project schema:** Stores project information, such as work item/data created by the user under the project area. Each project has its own schema and they are created on the same database server as the Site Administration schema.



ALM WORKFLOW

HP ALM WORKFLOW



How to install HP ALM

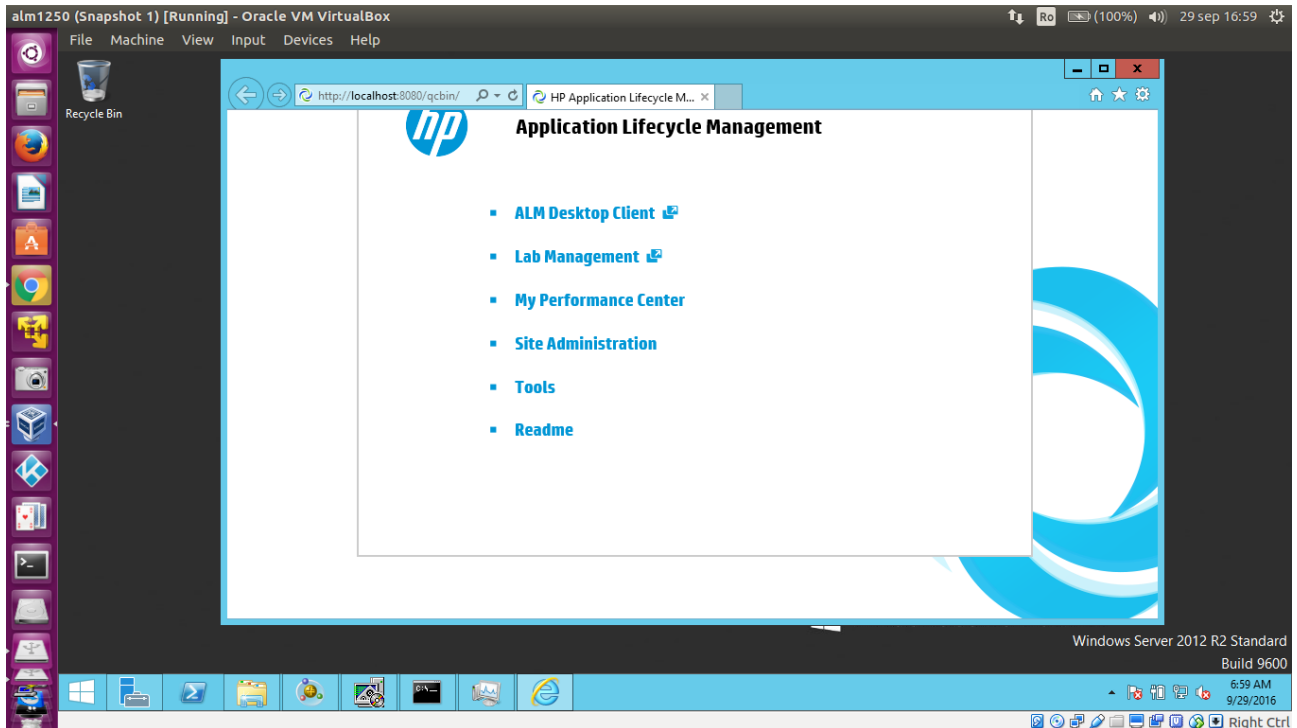
Installation process



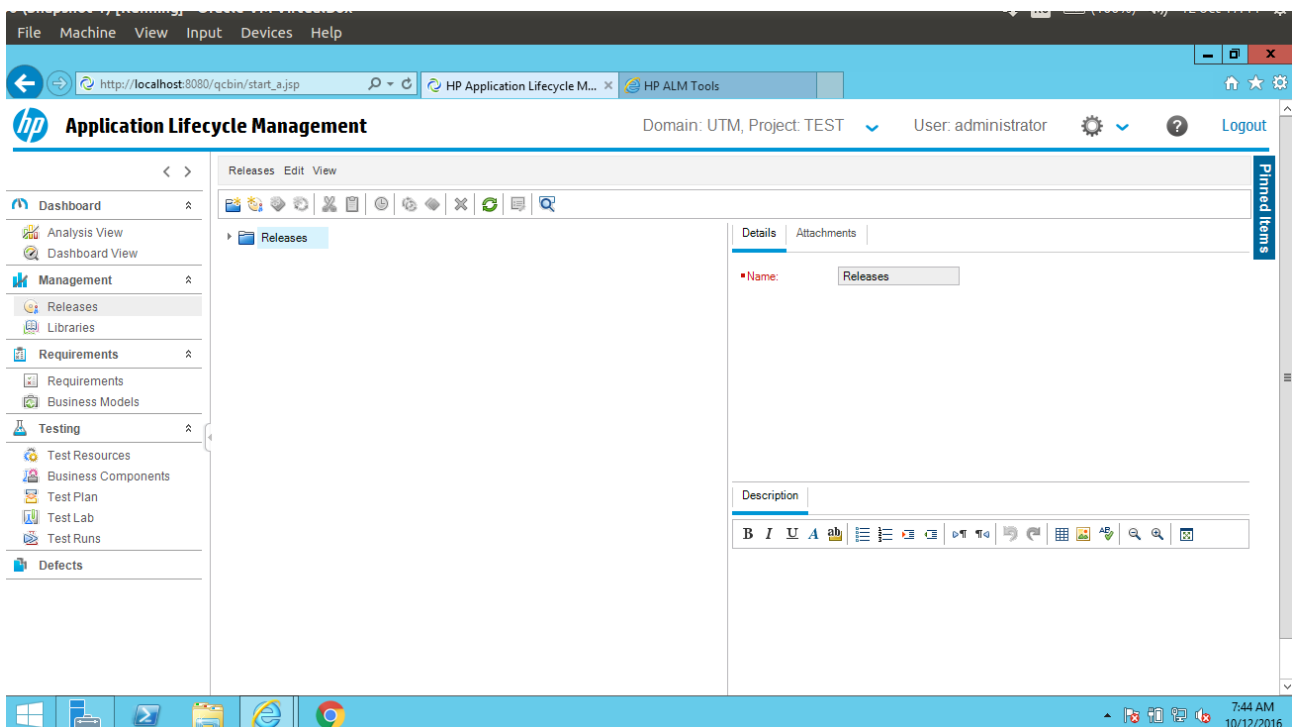
<http://www8.hp.com/us/en/software-solutions/alm-software-development-testing/try-now.html>

Create a Domain, Project, User in HP ALM

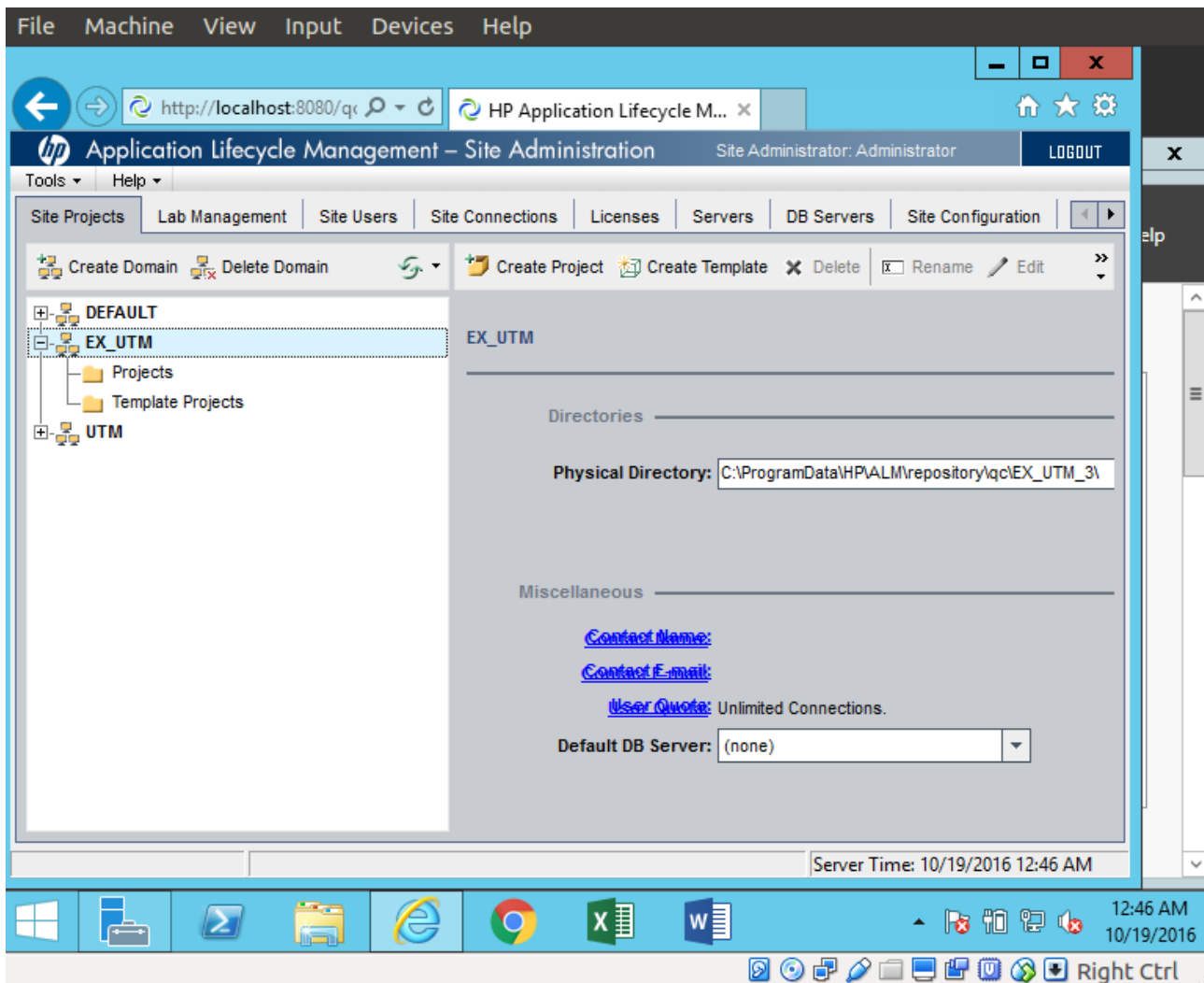
ALM client launch from IE



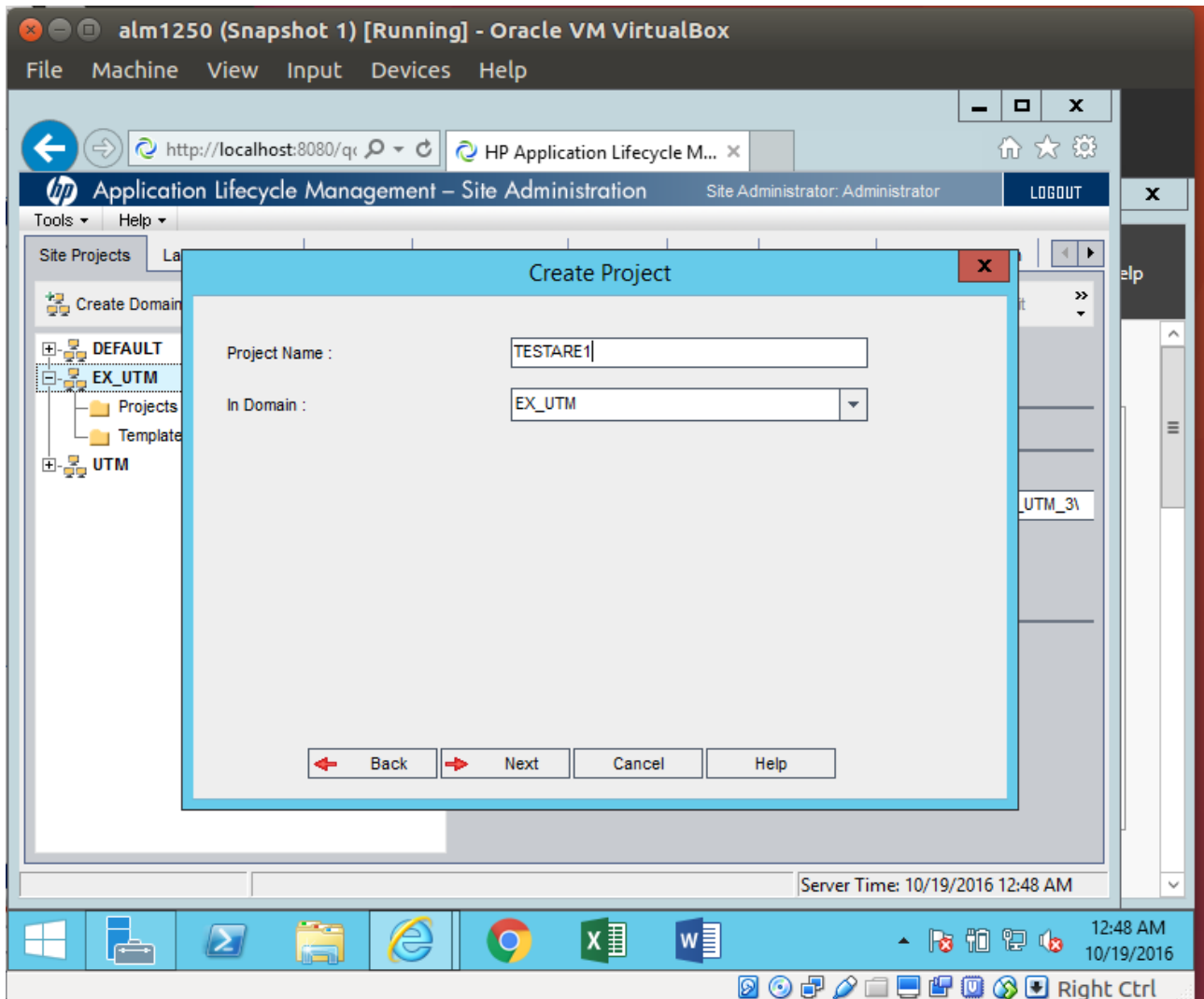
Client interface

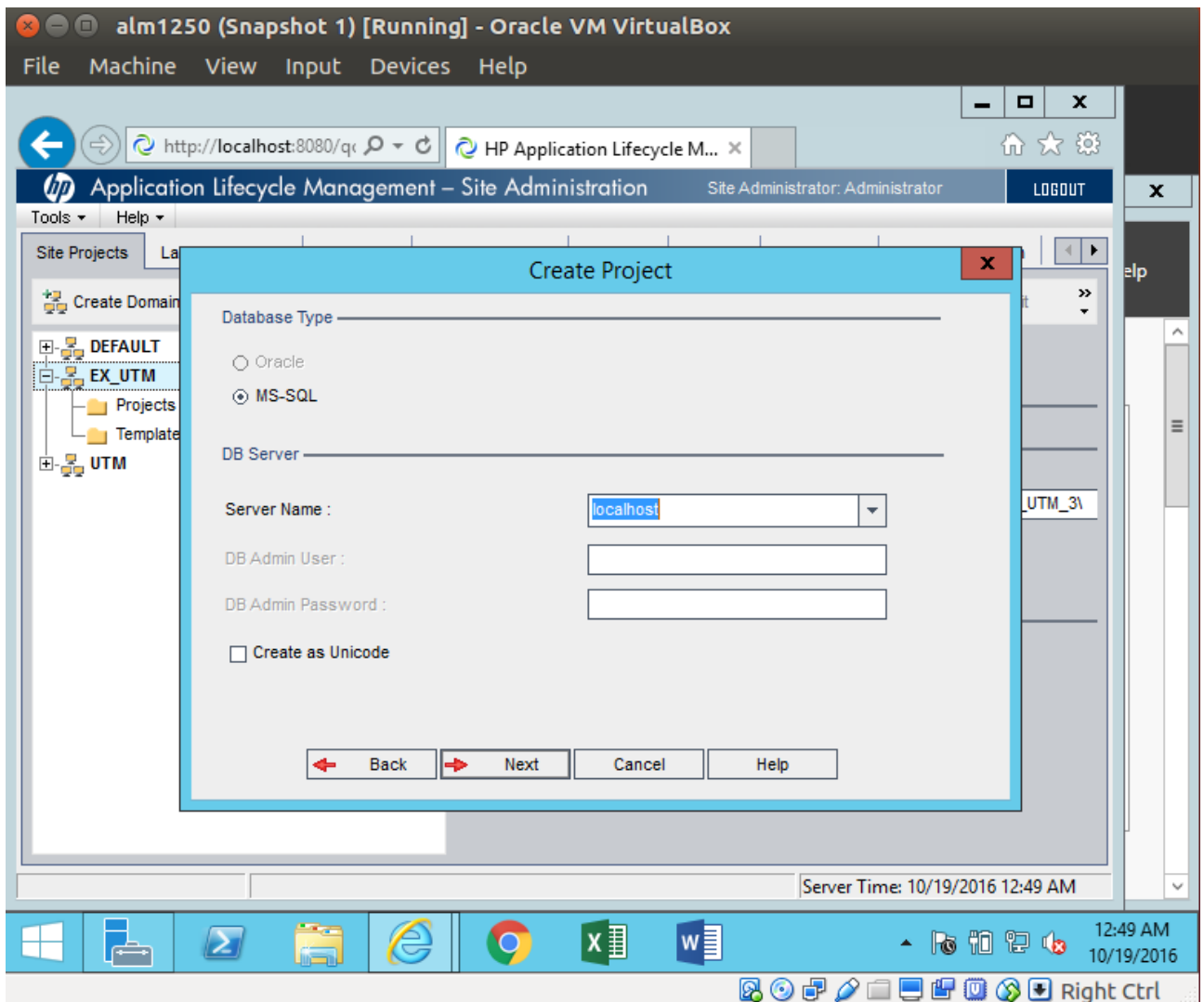


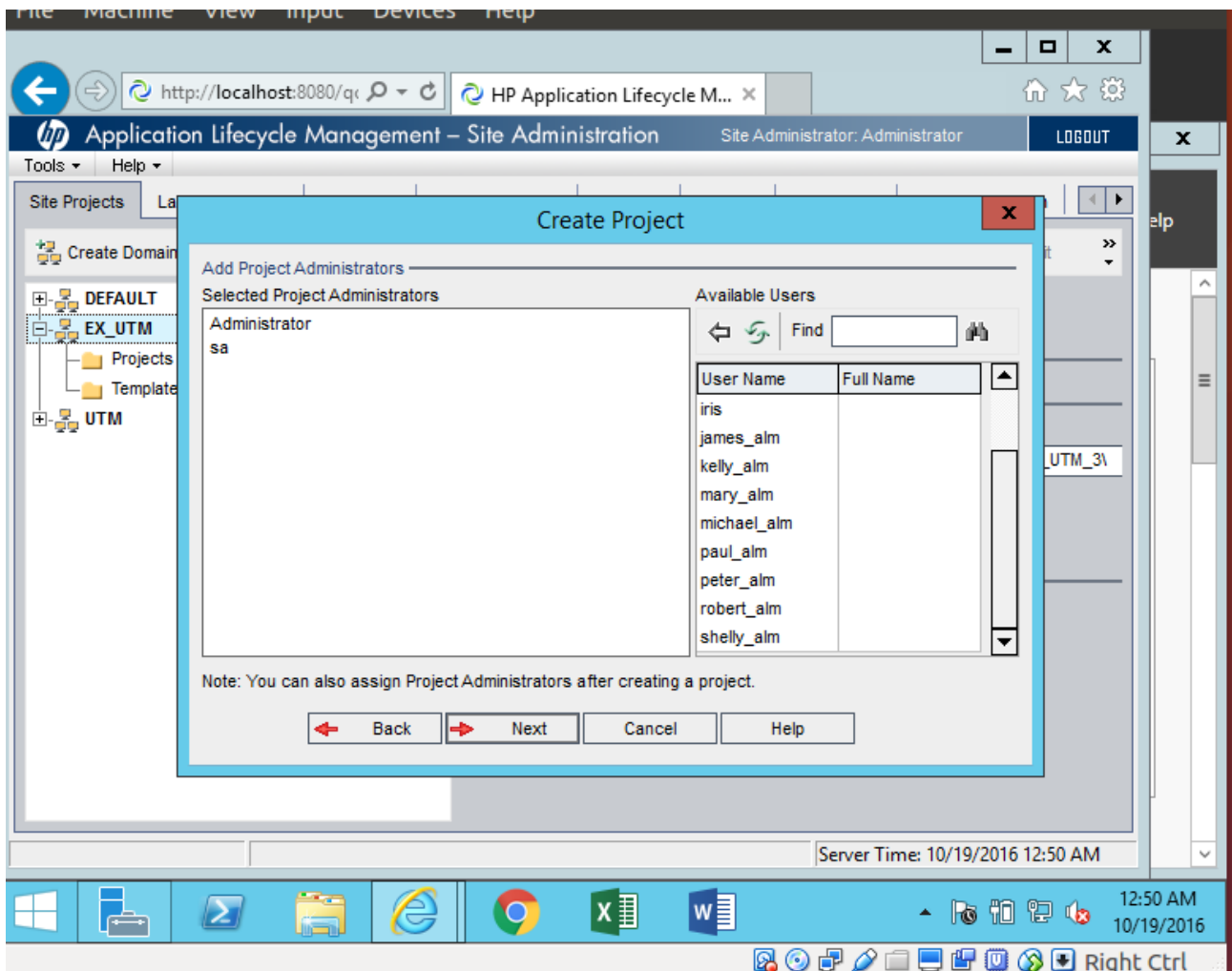
How to create EX_UTM domain

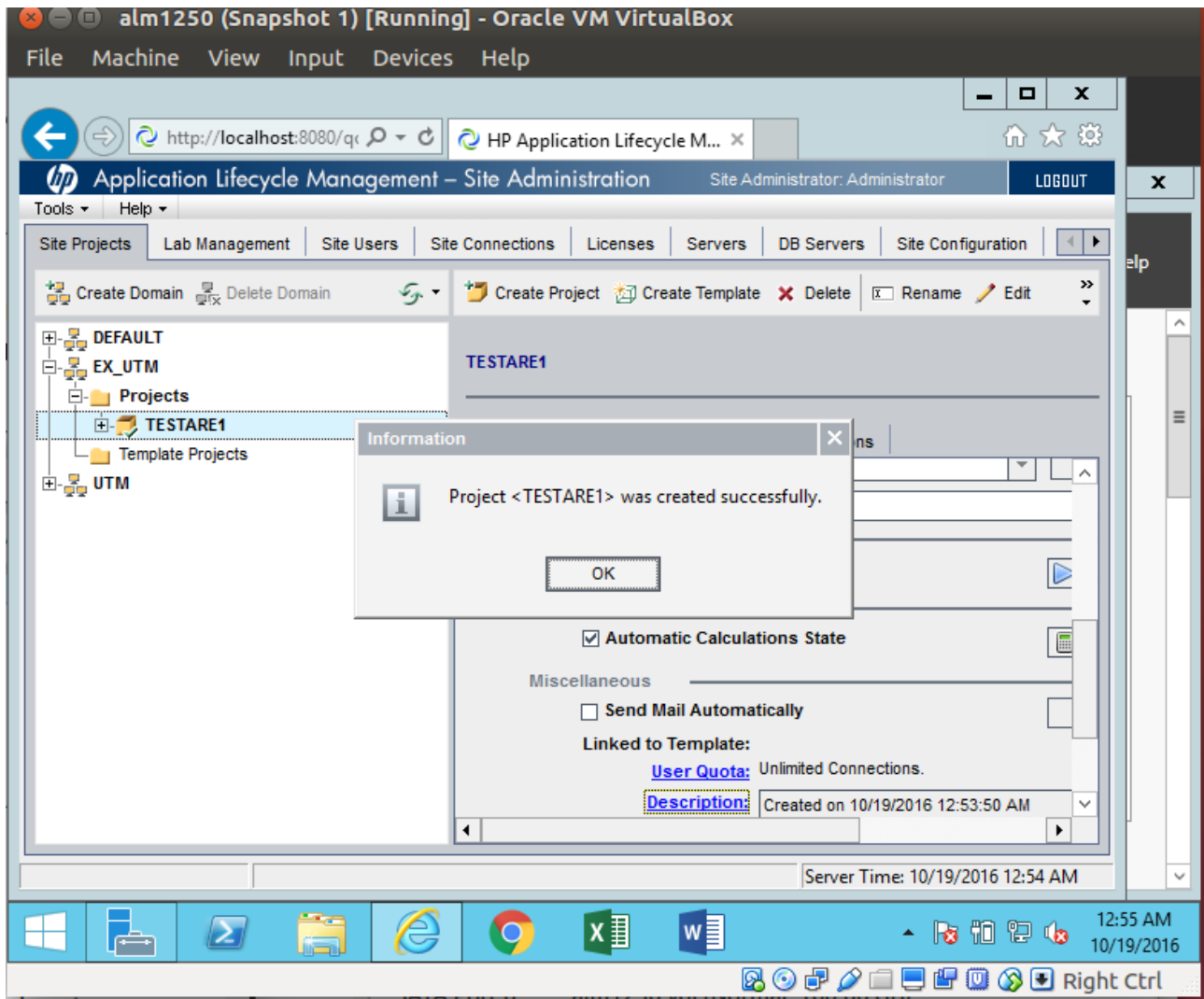


How to create project TESTARE1

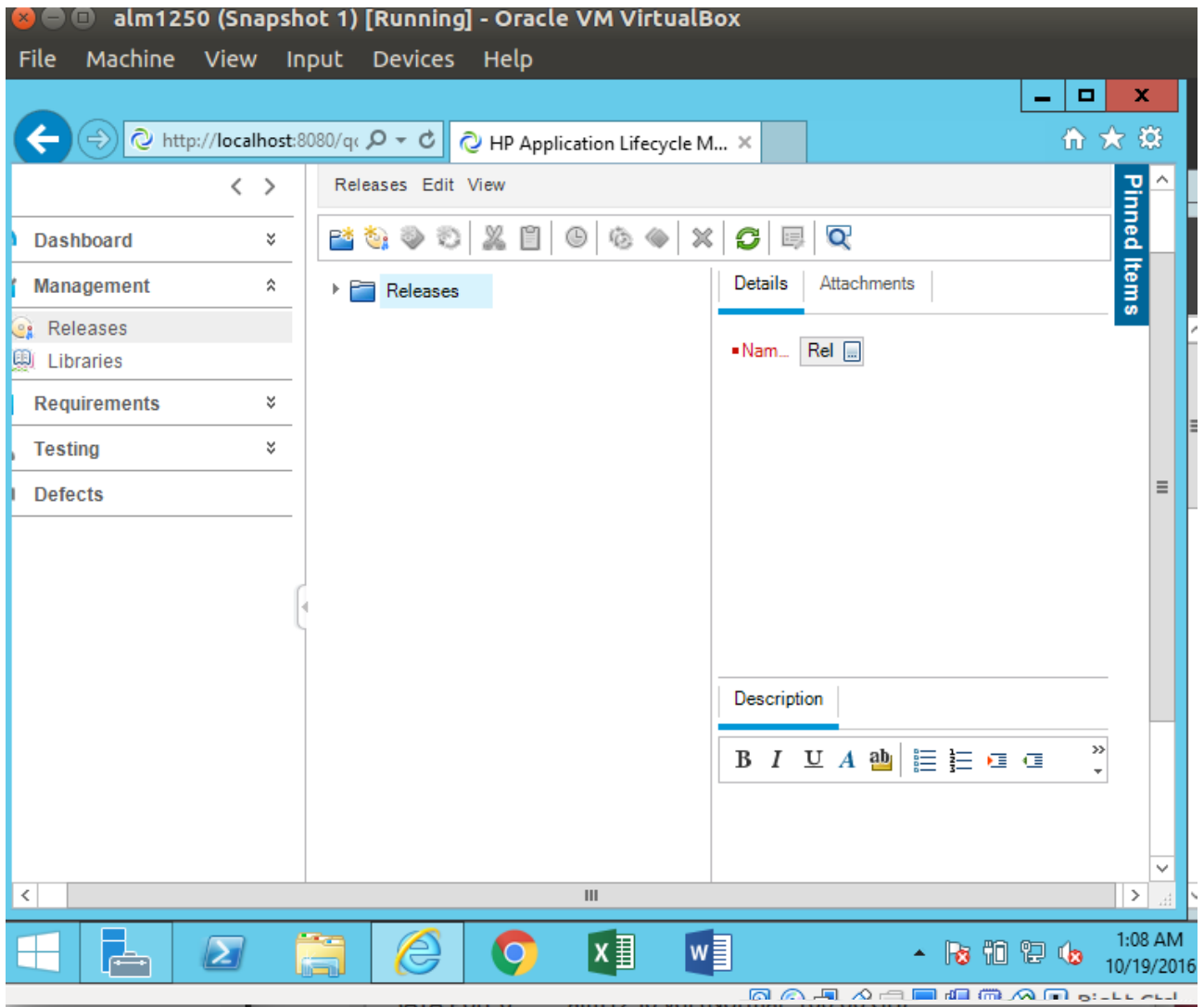


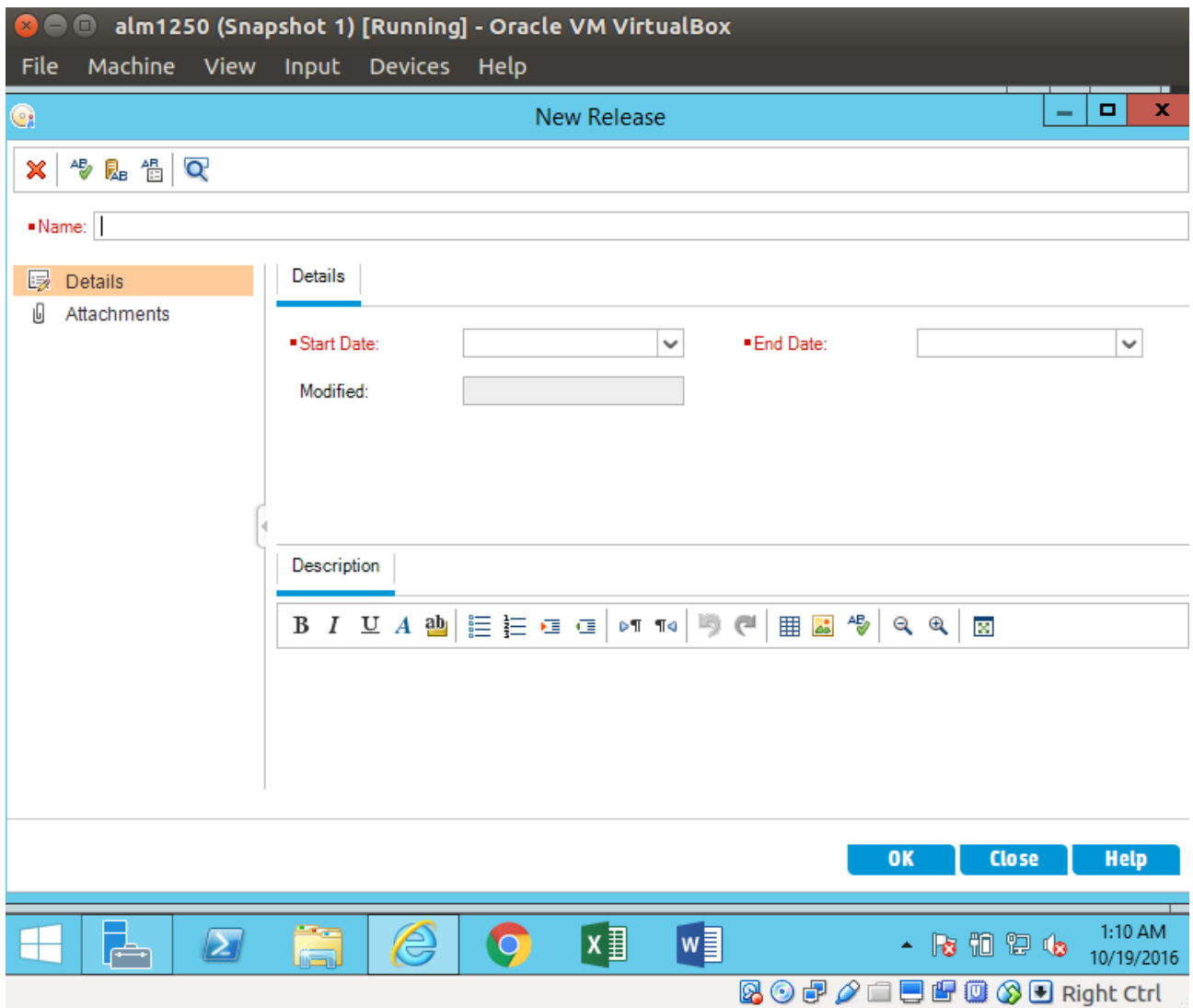


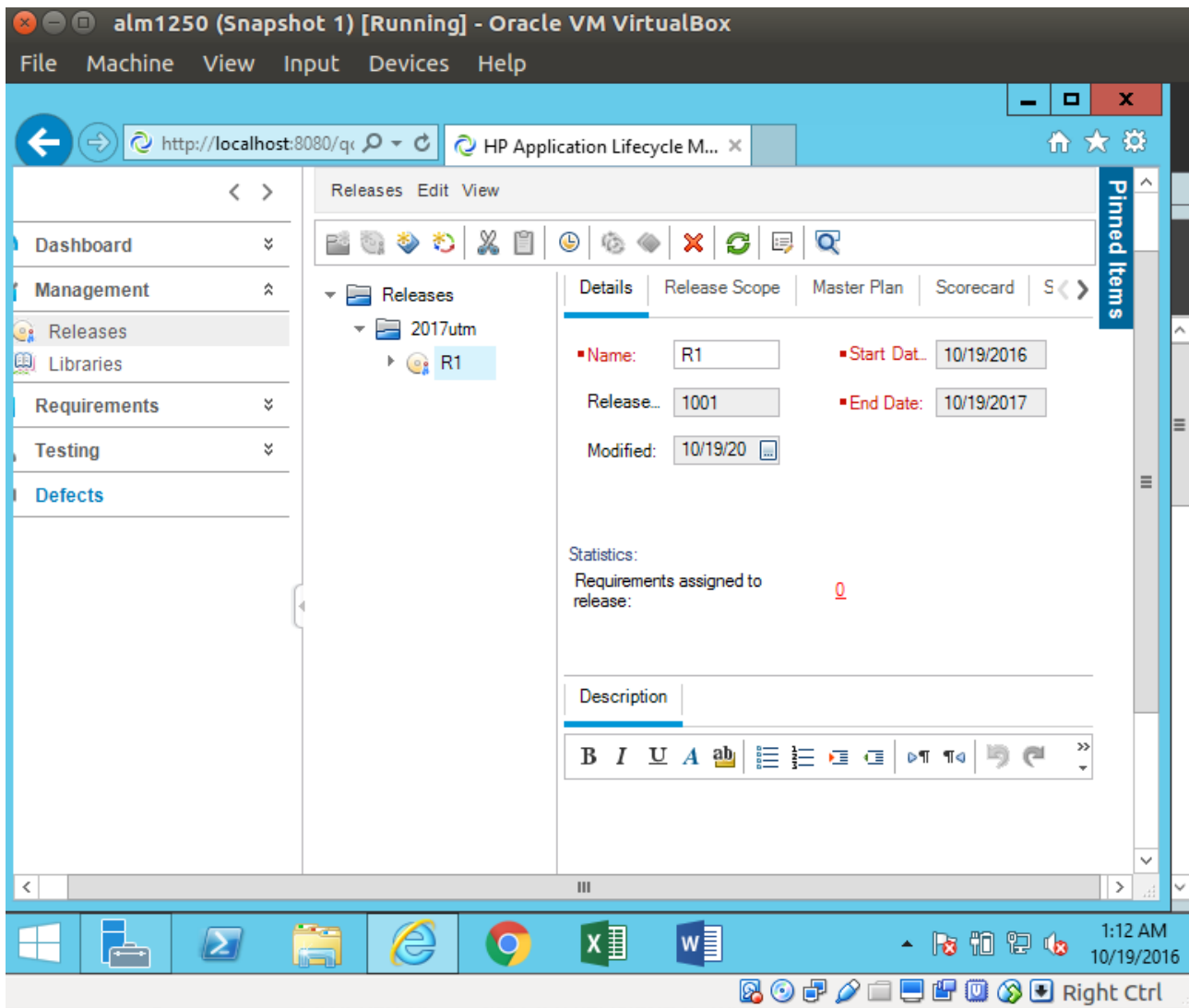




Release Specifications: Understanding the Management Tab in HP ALM





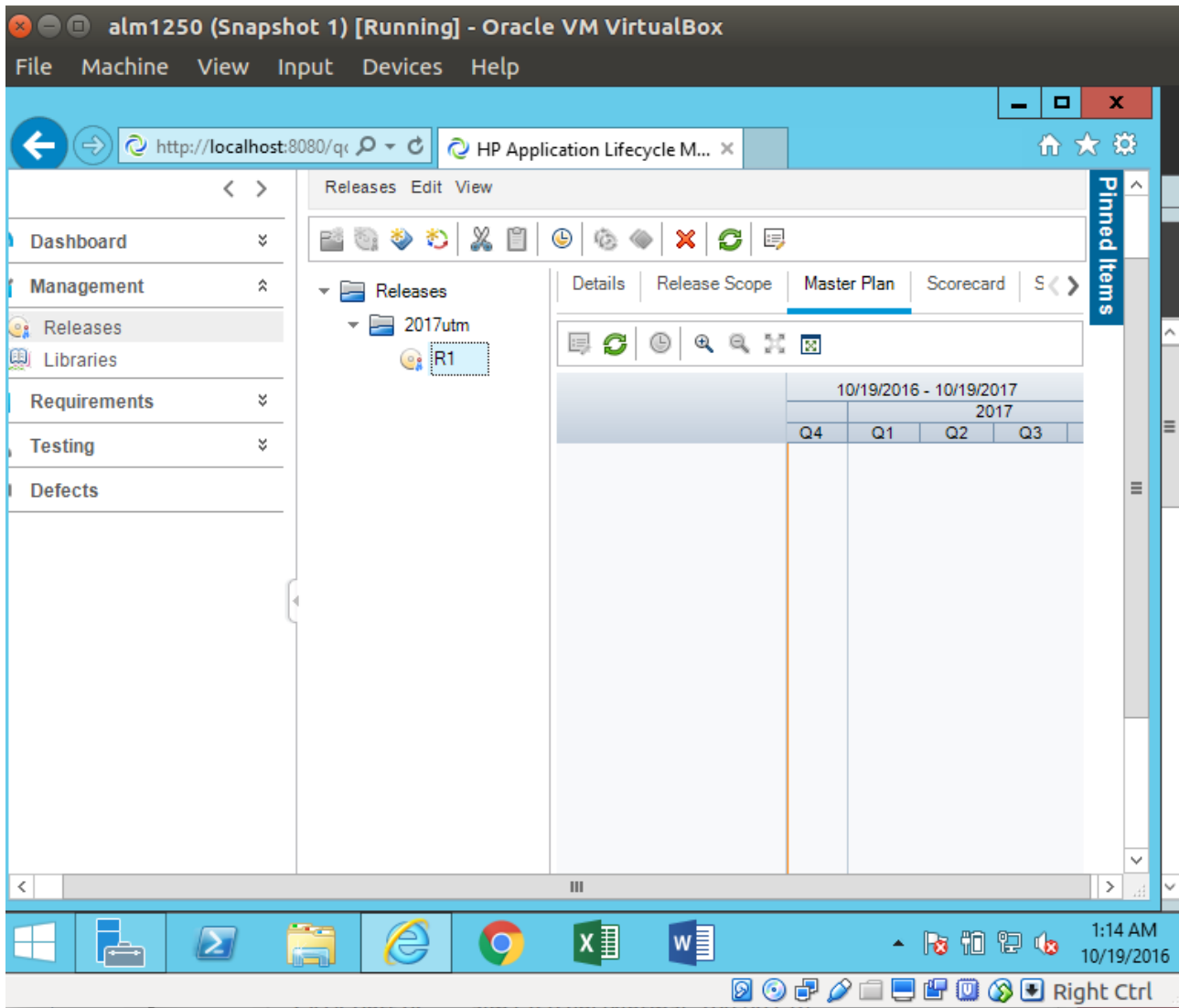


Requirements Specifications module in HP ALM

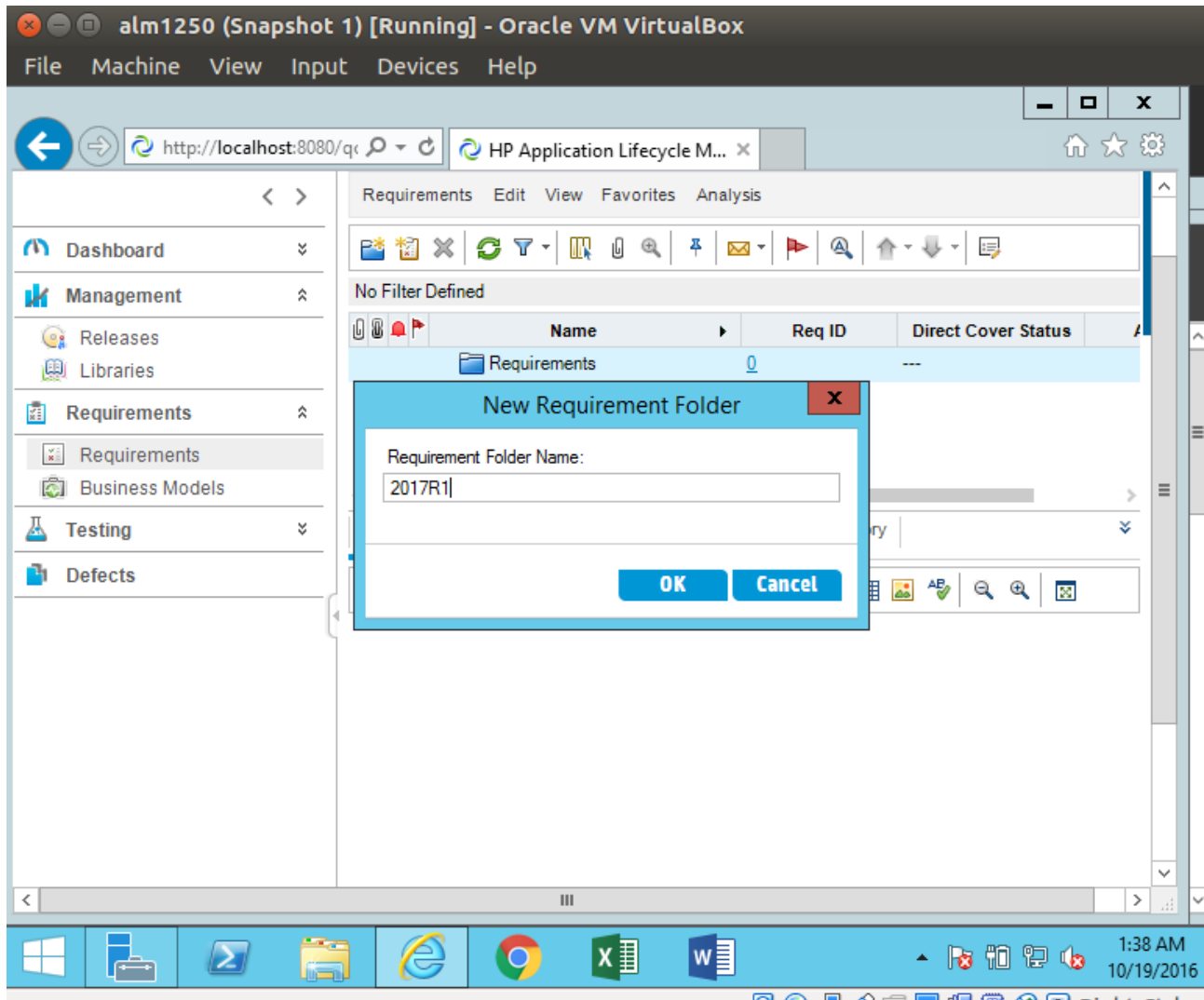
Test Plan Module in HP ALM

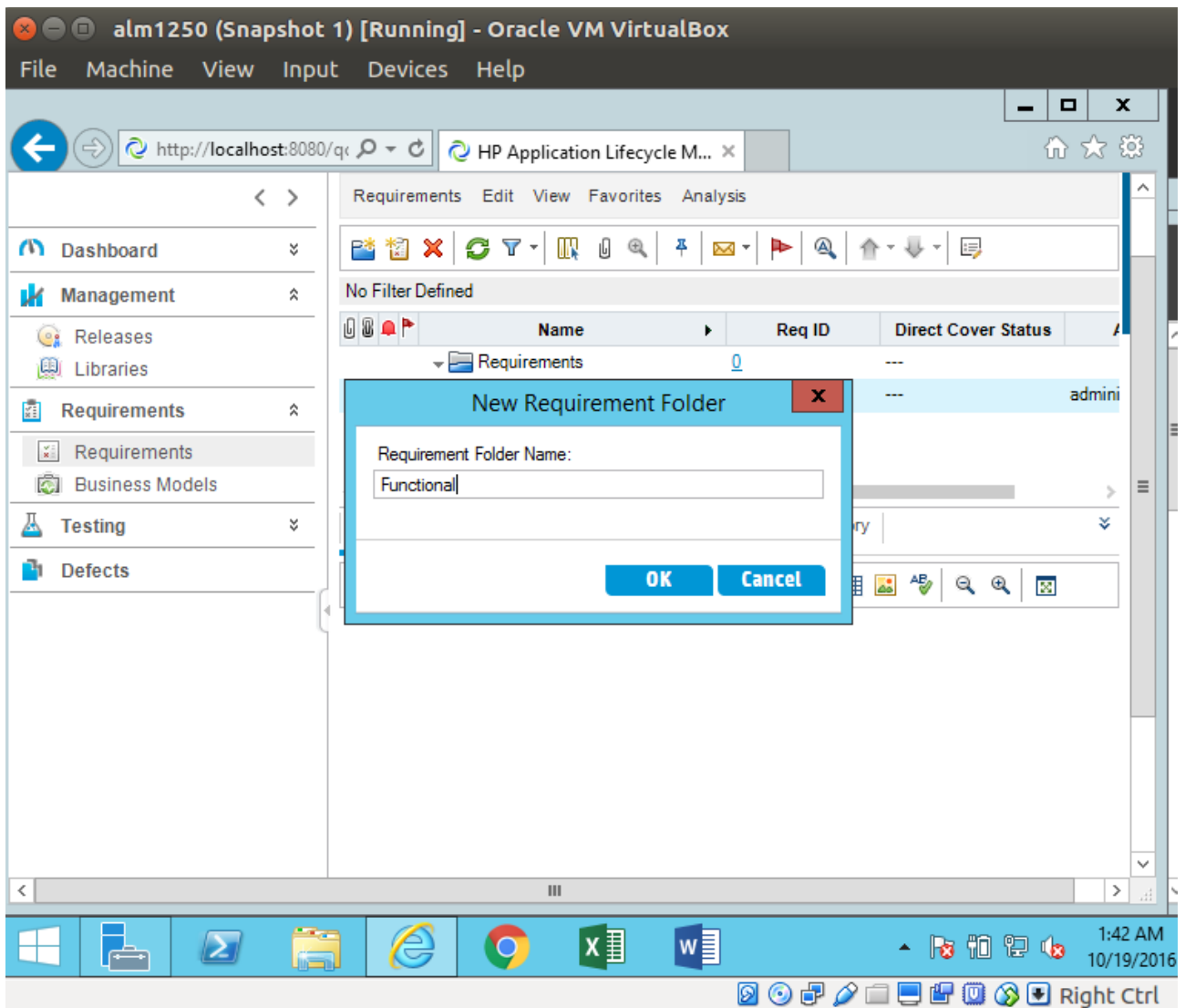
Test Lab in HP ALM

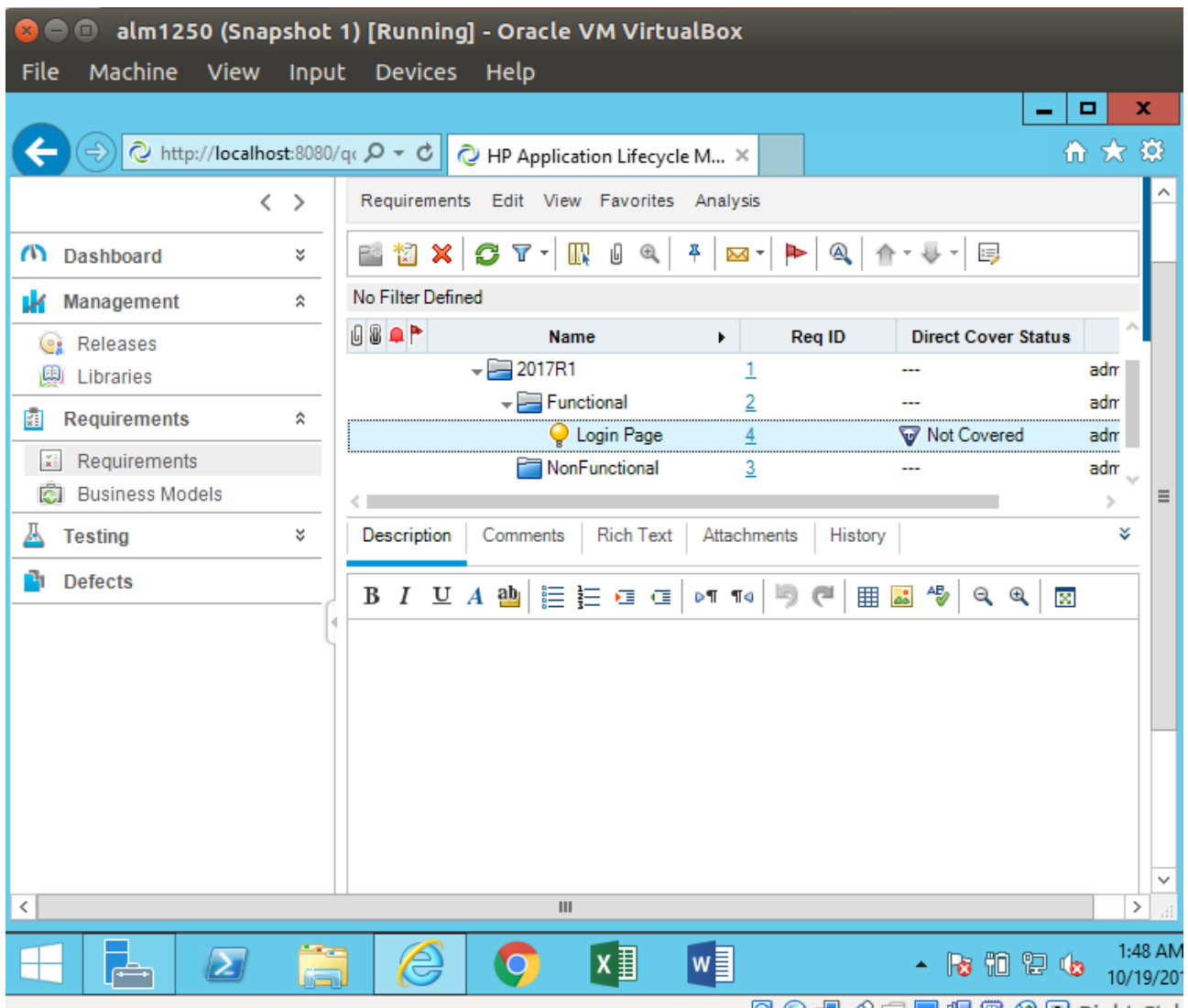
How to integrate UFT(QTP) with ALM

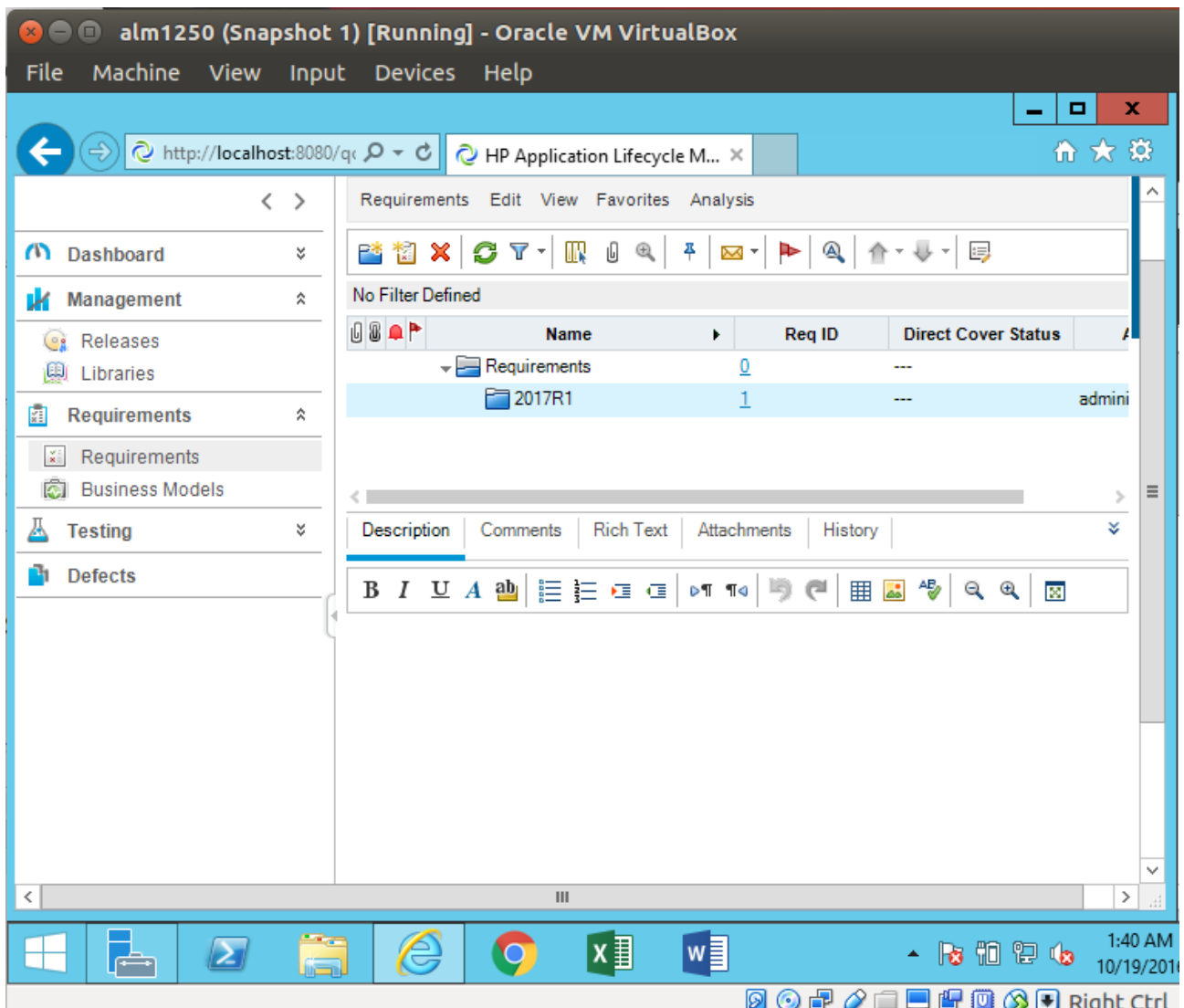


Requirements Specifications module in HP ALM

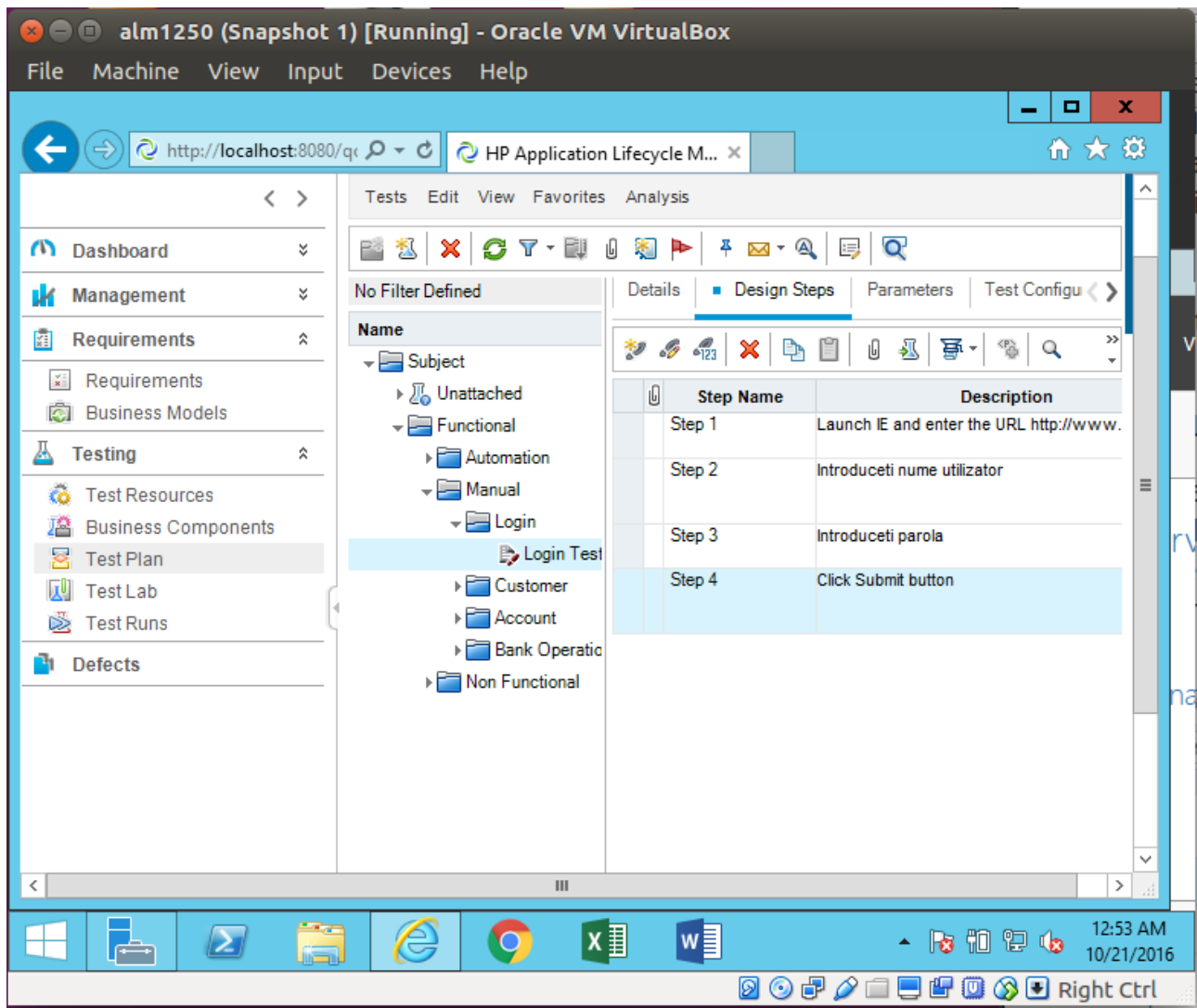








Test Plan Module in HP ALM



alm1250 (Snapshot 1) [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

http://localhost:8080/qc HP Application Lifecycle M...

Tests Edit View Favorites Analysis

No Filter Defined

Name

- Subject
 - Unattached
 - Functional
 - Automation
 - Manual
 - Login
 - Login
 - Customer
 - Account
 - Bank Ope
 - Non Functioni

Details Design Steps Parameters Test Configurati

New Parameter

Sort By: Order[Ascending]

Used	Parameter Name	Default Value	Description
	UserName	vionesc@gmail.com	

Description Default Value

1:00 AM 10/21/2016

Right Ctrl

http://localhost:8080/qcbin/start_a.jsp HP Application Lifecycle M...

Test Sets Edit View Tests Favorites Analysis

No Filter Defined

- Root
 - Unattached
 - 2017R1 - Cycle 1
 - Sample
 - Demo

Details Execution Grid Execution Flow Automation Attachment

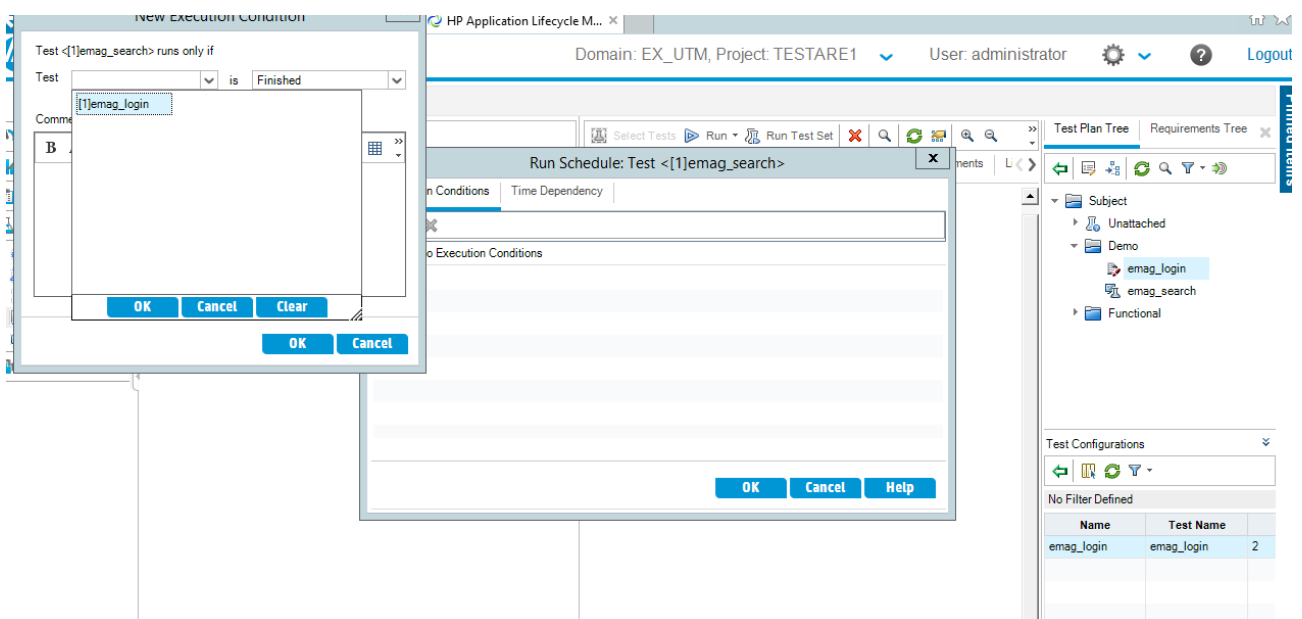
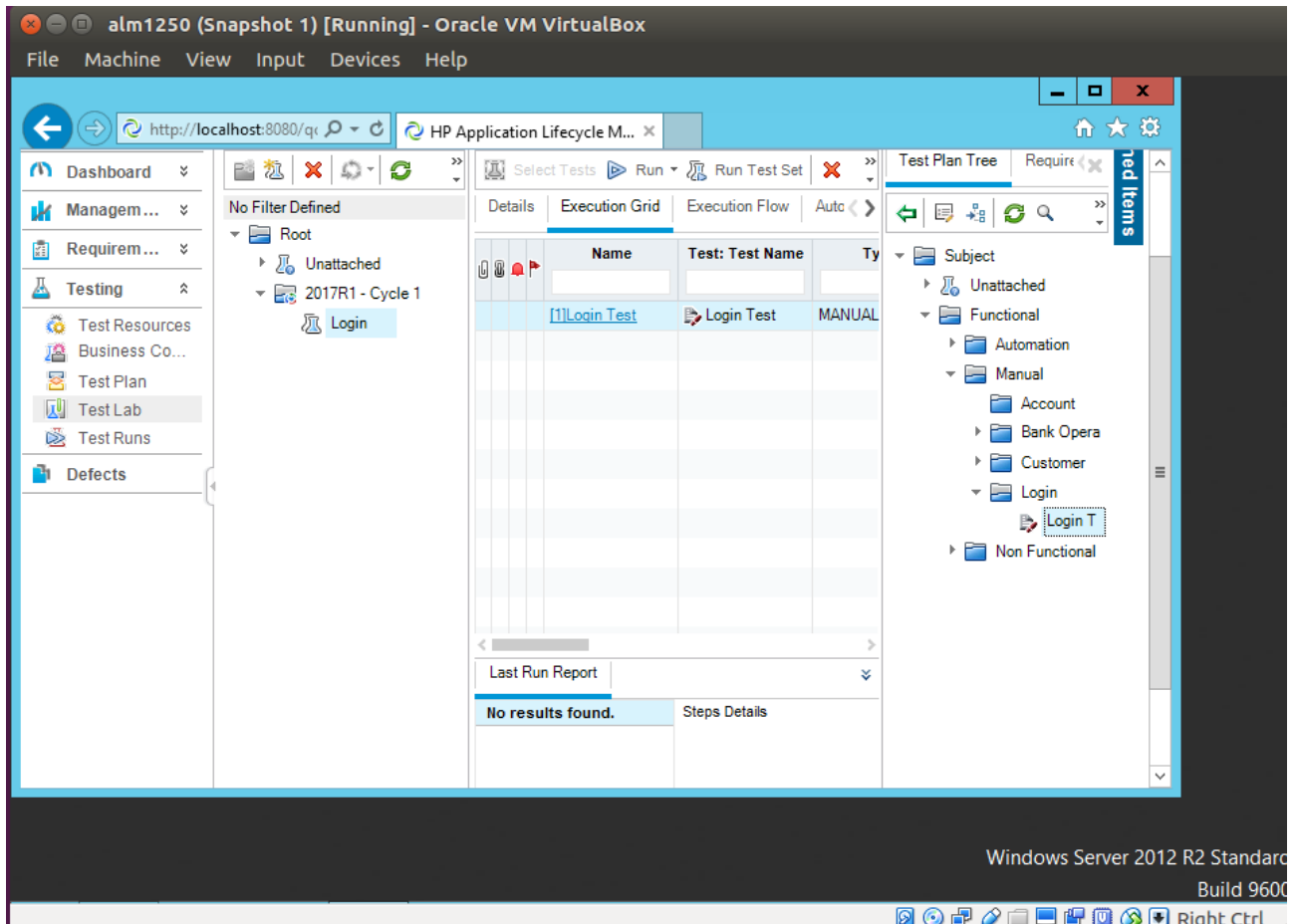
Test Plan Tree Requirements Tre

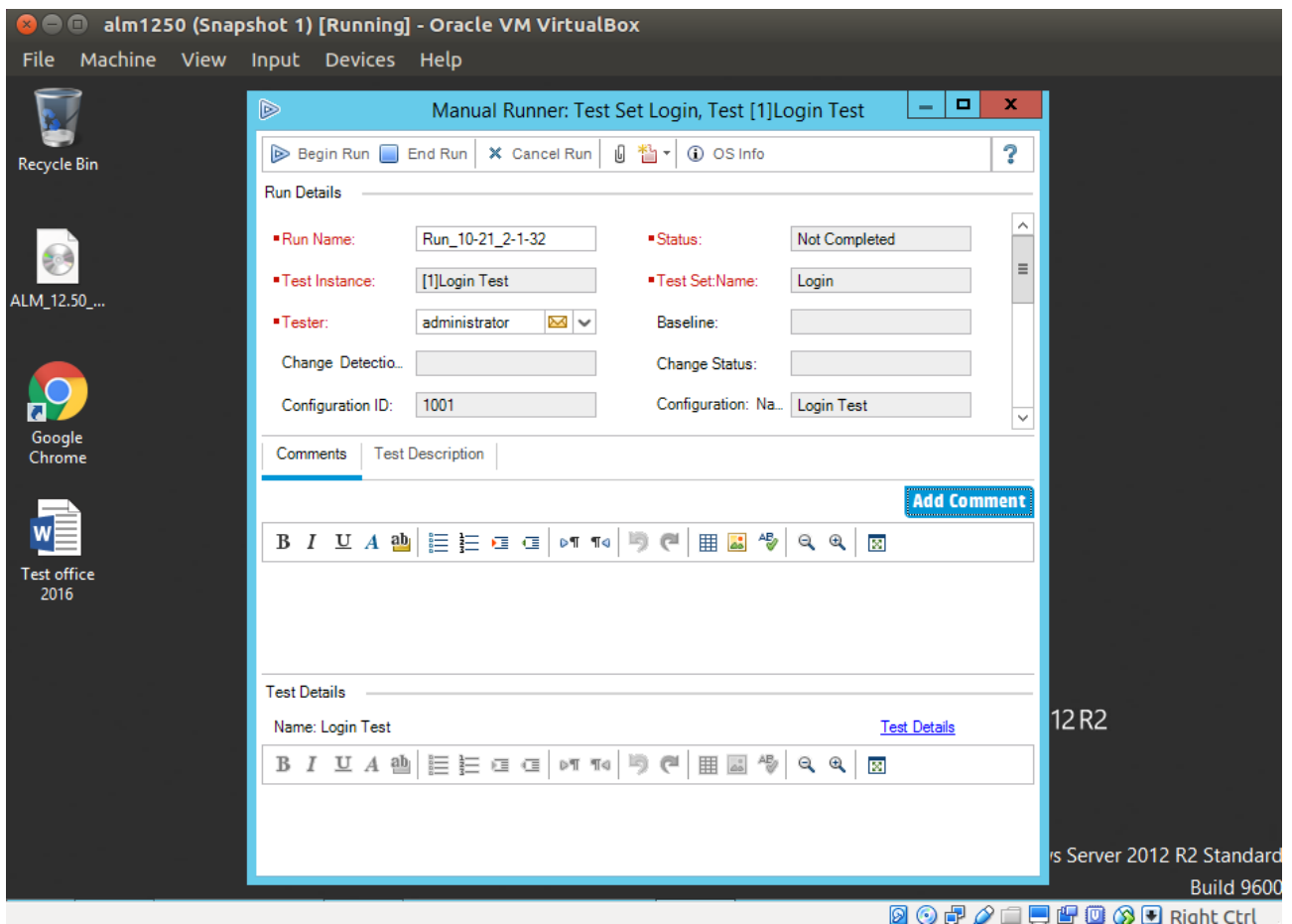
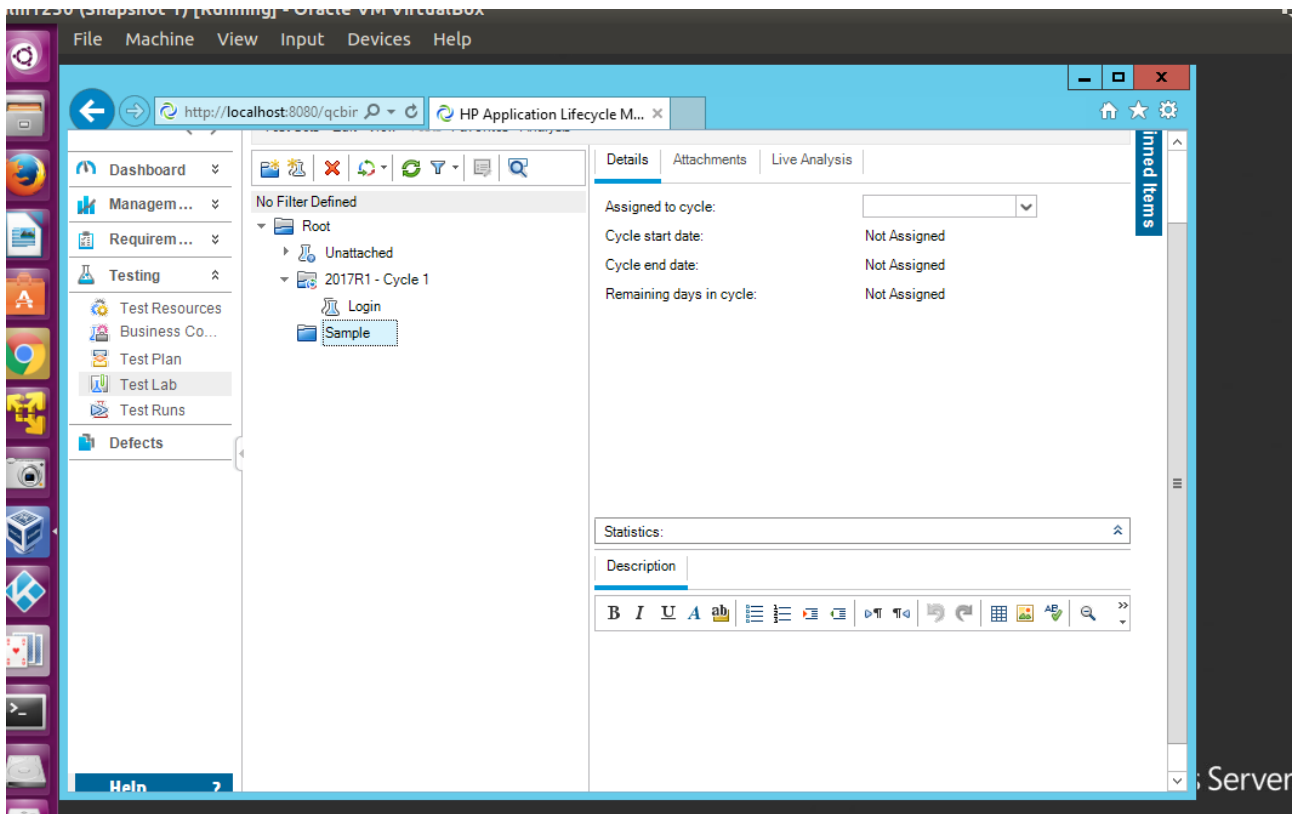
Subject

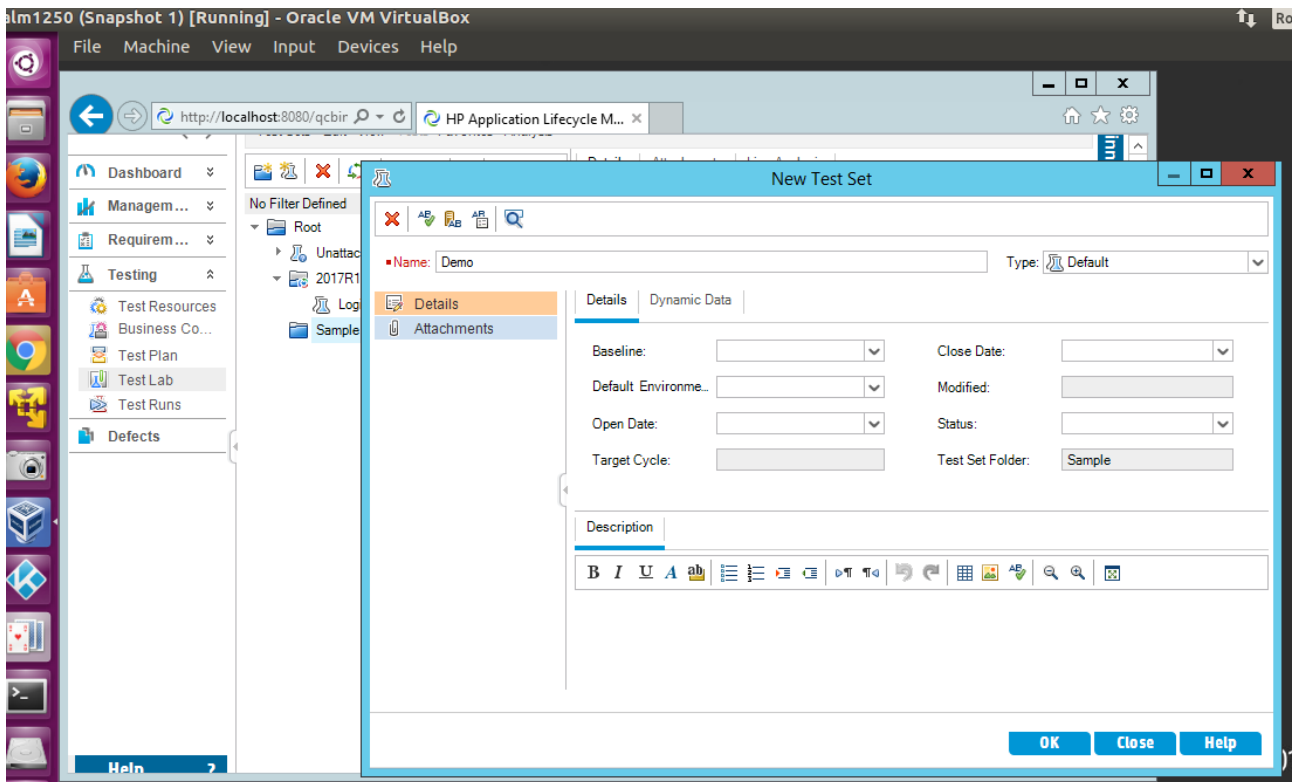
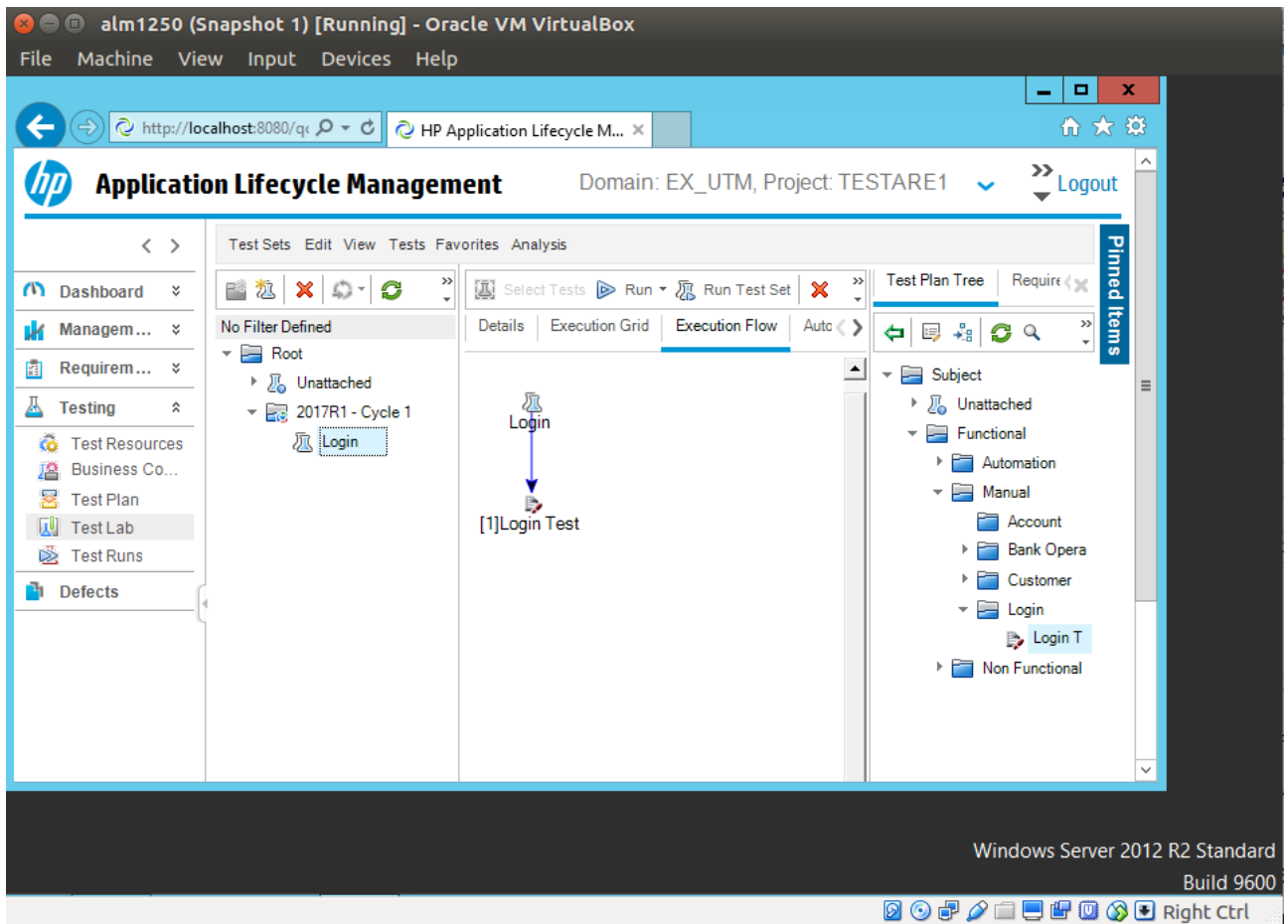
- Unattached
- Demo
 - emag_login
 - emag_search
- Functional

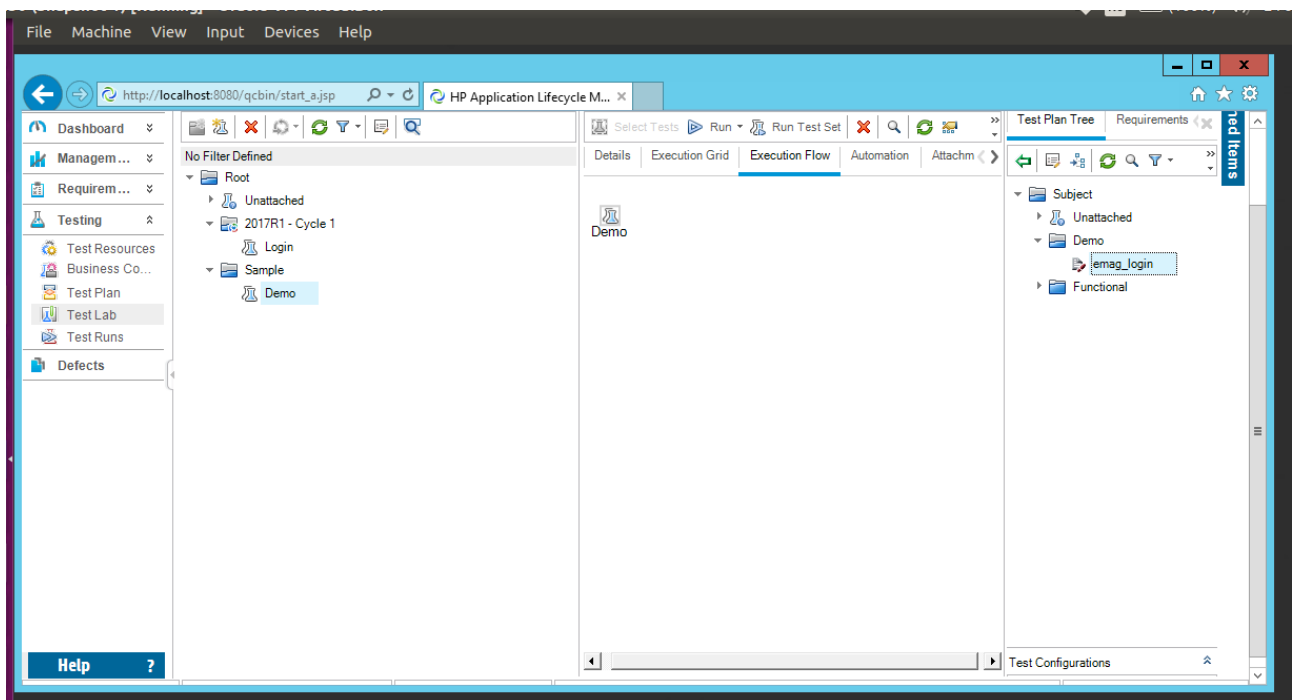
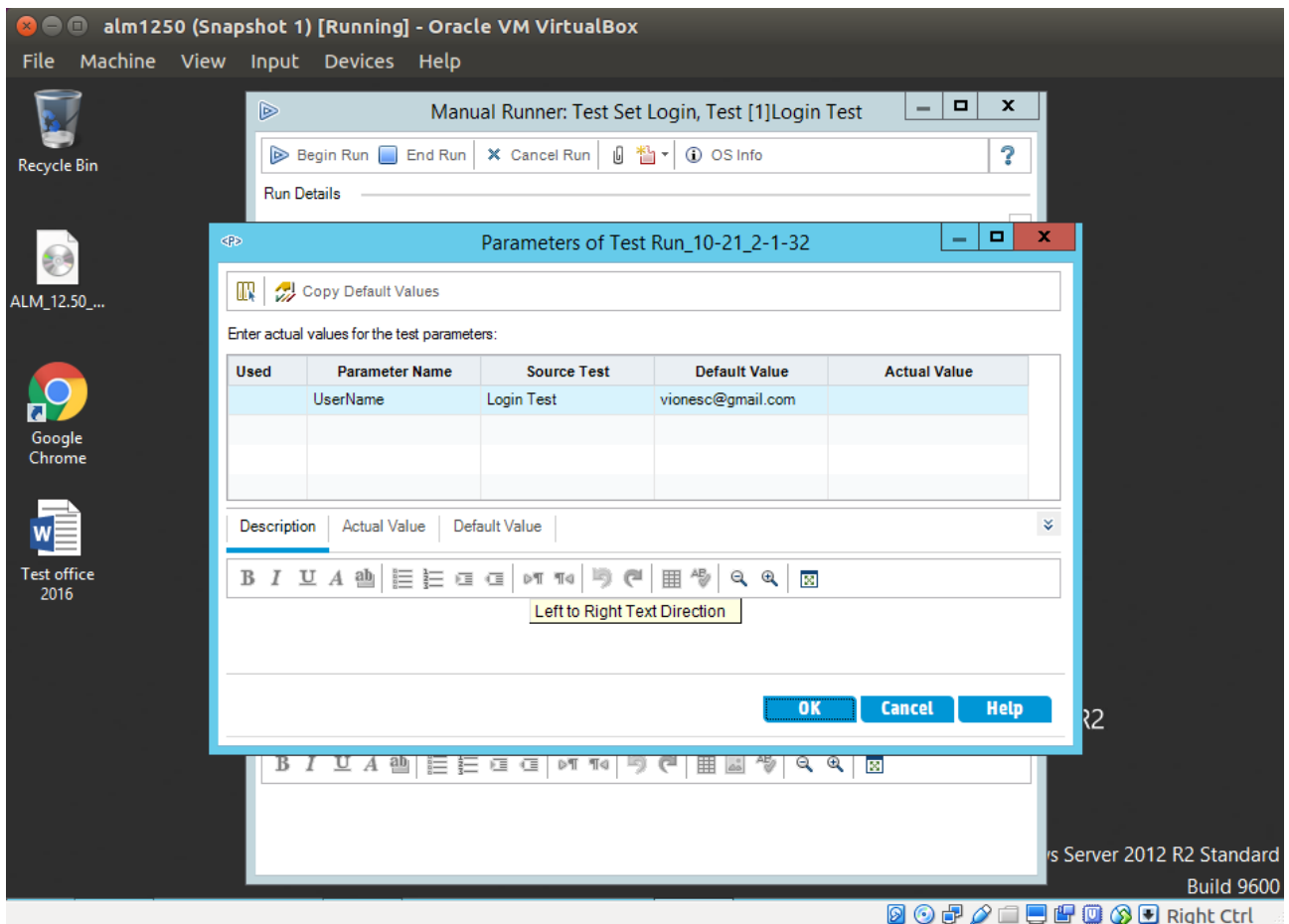
[1]emag_login [1]emag_search

Working with Test Lab in HP ALM









Manual Runner: Test Set Login, Test [1]Login Test

File Machine view Input Devices Help

http://localhost:8080/qcl HP Application Lifecycle M...

Test Runs Edit View Analysis

Continue Manual Run Goto Test Instance

Legend

Sort By: Run ID[Ascending]

Run ID	Run Name	Test: Test Name	Configuration:...	Status	State
5	Run_10-21_3-47-32	Login Test	Helpdesk	Passed	
6	Run_10-21_3-57-29	Login Test	Cluster head	Failed	
7	Run_10-21_3-59-4	Login Test	Manager	Failed	

Comments Report Attachments History Test Description

ALM Test

Windows

http://localhost:8080/qcl HP Application Lifecycle M...

Testing

Test Resources Business Co... Test Plan Test Lab Test Runs

Defects

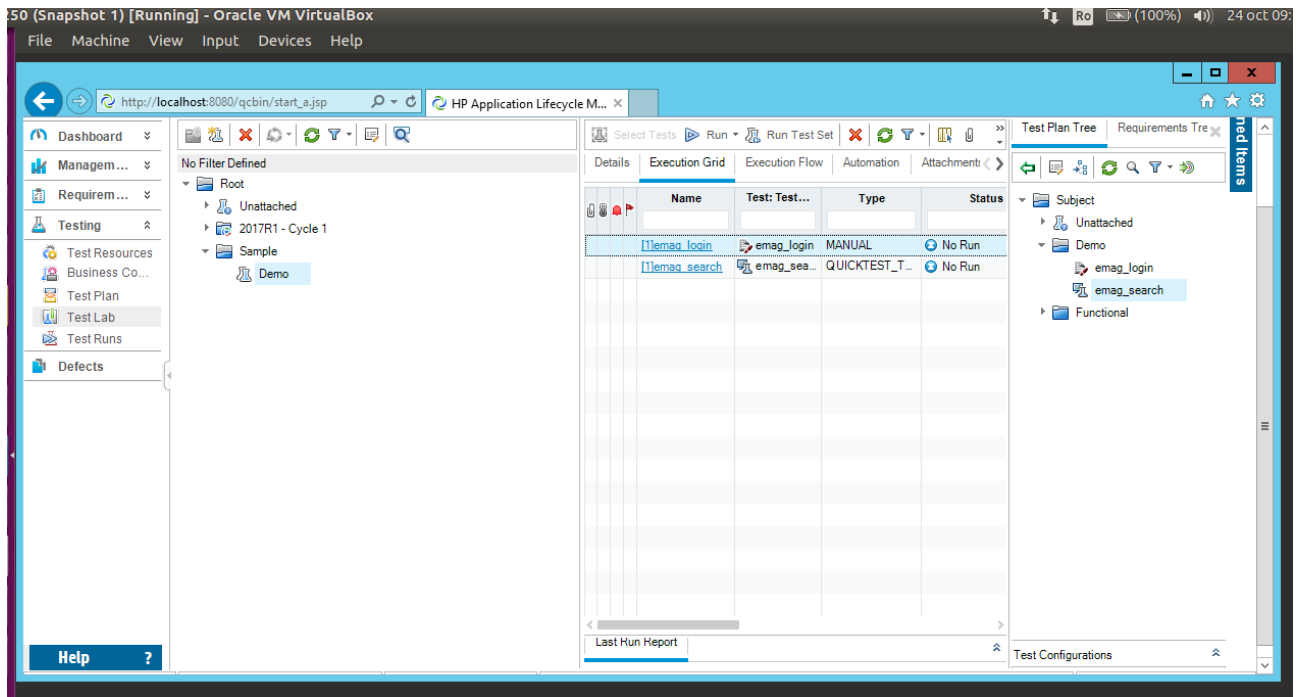
Run ID	Run Name	Test: Test Name	Configuration:...	Status	State
1	Run_10-21_2...	Login Test	Login Test	Not Completed	514

Comments Report Attachments History Test Description

Add Comment

Help ?

Run 1 of 1 Server Time: 10/21/2016 2:10 AM



Advantages of Cucumber over other tools?

Cucumber	HP ALM (QTP)	Selenium
<ul style="list-style-type: none">• It is free	<ul style="list-style-type: none">• QTP is expensive	<ul style="list-style-type: none">• It is free
<ul style="list-style-type: none">• It's a behavior driven development tool	<ul style="list-style-type: none">• It's a Functional Automation Tool	<ul style="list-style-type: none">• It's a Functional and Performance (Selenium Grid) test tool
<ul style="list-style-type: none">• Plugin in cucumber works faster	<ul style="list-style-type: none">• Plugin are slower compare to Cucumber and Selenium	<ul style="list-style-type: none">• Plugins are slower than cucumber
<ul style="list-style-type: none">• Cucumber supports other language as well beyond Ruby like Java, Scala, Groovy etc.	<ul style="list-style-type: none">• QTP supports only VB script	<ul style="list-style-type: none">• Selenium supports Java, .Net and many other languages
<ul style="list-style-type: none">• Writing automation steps are joint effort of testers and developer	<ul style="list-style-type: none">• In QTP only tester writes automation steps	<ul style="list-style-type: none">• Like Cucumber, writing automation steps are joint effort of testers and developer
<ul style="list-style-type: none">• Cucumber supports only web environment	<ul style="list-style-type: none">• Support web, desktop and any client server application	<ul style="list-style-type: none">• Supports only web environment