Summary

This example demonstrates how to launch an ALM Test Set from a VB Script for running automation testing at a schedule time. Using Window Task Scheduler can aid to schedule execution of the VBscript.

This example was verified with QuickTest Professional (QTP) 11 and ALM 11 patch 4. Currently this script will not work with 64 bit OS.

The following is example code will run ALM/Q C Test Set on a remote testing machine as long as the variables have been set within the script (not covered in this example are other ways of setting these variables). This script will open a connection and login to the ALM/QC server. Once logged in the script will open the path to the Test Set and parse thru all of the Test Sets to find the correct one to run. The 'Test Run Scheduler' will be loaded with the Test Set and the machine to run the Test Set. The 'Test Run Scheduler' must run on the machine that is running the Vbscript. The script will enter a sleep routine to wait for the Test Set to complete and report completion. After the Test Set has completed, the script will check each test to see if there was a failures and set the error code flag.

This example assumes you are a Project Administrator with programming skills, proficient in vbscript and Quality Center objects and methods. **It is necessary to read and follow the 'Disclaimer' section at the end of this document.**

In addition, the following environment was used to make this document:

1. Knowledge of ALM Open Test Architecture (OTA)
2. The scripting language is vbscript.
3. The OS is Windows Server 2003 SP2
4. Using Windows Task Scheduler included in Windows Server 2003.
5. You are proficient in the use of Microsoft Windows Task Scheduler.

Business Rules

1) When the Task Scheduler launches the vbscript, the specified Test Set is launched.

Implementation

STEP 1 – Create the vbscript

1) Open Notepad
2) Copy the script below into the notepad.
3) In Notepad save the file type as VBS. Example runTestsetRemote.vbs

```vbscript
'#########################
'
' Script : Run the ALM/QC Test Sets
'
'#########################
Dim objTDCon, objTreeMgr, objTestSetFolder, objTestSetList
Dim objTestSet, objScheduler, objExecStatus, objTestExecStatus
Dim strTestSetFolderPath, strTestSetName, strReportStatus, intCounter

'Declare the Test Folder, Test and Host you wish to run the test on

'Enter the URL to QC server
strQCURL = "http://almdemo/qcbin"

'Enter Domain to use on QC server
strQCDomain = "DEFAULT"

'Enter Project Name
strQCProject = "ALM_Demo_Project"

'Enter the User name to log in and run test
strQCUser = "alex_Tester"

'Enter user password for the account above.
strQCPassword = "password"

'Enter the path to the Test set folder
strTestSetFolderPath = "Root\Auto Test"

'Enter the test set to be run
strTestSetName = "Test One"

'Enter the target machine to run test
strHostName="ALMDEMO"

'Connect to Quality Center and  login.
Set objTDCon = CreateObject("TDApiOle80.TDConnection")


'Make connection to QC server
objTDCon.InitConnectionEx strQCURL
'Login in to QC server
objTDCon.Login strQCUser, strQCPassword
'select Domain and project
objTDCon.Connect strQCDomain, strQCProject


'Select the test to run
Set objTreeMgr = objTDCon.TestSetTreeManager
Set objTestSetFolder = objTreeMgr.NodeByPath(strTestSetFolderPath)
Set objTestSetList = objTestSetFolder.FindTestSets (strTestSetName)
intCounter = 1

'find test set object
While intCounter <= objTestSetList.Count
```

```
        Set objTestSet = objTestSetList.Item( intCounter)

        If objTestSet.Name = strTestSetName  Then
              intCounter = objTestSetList.Count + 1
        End If
        intCounter = intCounter + 1
Wend


'Set the Host name to run on and run the test.
set objScheduler = objTestSet.StartExecution ("")
'  Set this empty to run local for automation run agent
objScheduler.TdHostName = strHostName
objScheduler.Run

'Wait for the test to run to completion.
Set objExecStatus = objScheduler.ExecutionStatus
While objExecStatus.Finished = False
        objExecStatus.RefreshExecStatusInfo "all", True
If objExecStatus.Finished = False Then
     WScript.sleep 5
End If
Wend


'Below is example to determine if execution failed for error reporting.
strReportStatus = "Passed"
 For intCounter = 1 To objExecStatus.Count
         Set objTestExecStatus = objExecStatus.Item(intCounter )
         'msgbox  intCounter & " " & objTestExecStatus.Status
         If Not ( Instr (1, Ucase( objTestExecStatus.Status ), Ucase ( "Passed" ) ) > 0 )
Then
             strReportStatus = "Failed"
             testsPassed = 0
             Exit For
     Else
             testsPassed = 1
     End If
Next

objTDCon.DisconnectProject


If (Err.Number > 0) Then
      'MsgBox "Run Time Error.  Unable to complete the test execution !! " &
Err.Description
      WScript.Quit 1
ElseIf  testsPassed >0 Then
      'Msgbox  "Tests Passed !!"
      WScript.Quit 0
Else
      'Msgbox  "Tests Failed !!"
      WScript.Quit 1
End If
```

STEP 2 – Configure the vbscript for running

1) Open the vbscript file created above in Notepad.
2) Change the variables listed below in the script for your own environment. Note there are other methods to set variables that are outside the scope of this example.

Variable	Description
strQCURL	URL to ALM/QC server
strQCDomain	Domain to use on ALM/QC server
strQCProject	Project Name
strQCUser	User name to log in and run test
strQCPassword	Password for the account
strTestSetFolderPath	Path to the Test set folder
strTestSetName	Test Set to run
strHostName	Target machine to run Test Set

STEP 3 – Configure ALM/QC Client

1) Start Internet Explorer
2) Navigate to the ALM/QC server.
3) Go to the Add in page (http://<insert QC Server>/qcbin/addins.html).
4) Select the 'HP Quality Center Connectivity' link
5) Follow instruction provided
6) Go to the Add in page (http://<insert QC Server>/qcbin/addins.html).
7) Select the 'HP ALM Client Registration' link
8) Follow instruction provided
9) Go to the Add in page (http://<insert QC Server>/qcbin/addins.html).
10) Select the 'More HP ALM Add-ins ' link.
11) Under "HP Tool Add-ins"
12) Select the 'QuickTest Professional Add-in' link
13) Follow instruction provided
14) Once the above items are install close all instances of IE.

STEP 4 – Configure Windows Task scheduler

1) The following is setup is for Windows 2003 Windows Task Schedule and your task schedule tool may be different.
2) Go to Start > Control Panel > Scheduled Task > Add schedule Task

3) New window labeled "Scheduled Task Wizard" will appear.

4) Click on the 'Next' button.

5) Click on the 'Browse...' button and find the location of the VBscript created above.

6) Provide a name for this task.
7) Determine the interval that the script should run (Daily, Weekly, Monthly, and...)
8) Click on the 'Next' button.

9) Enter the 'Start time'.
10) Determine when to execute the task.
11) Enter the 'Start Date'.

12) Click on the 'Next' button.

13) Enter user name and password for the account to have this VBscript run against.
14) Click on the 'Next' button

15) Click the 'Finish' button.

Test

Run from command prompt or double clicking and use Microsoft Task Scheduler to run at designated times.

Keywords

QTP, Test Set, ALM, QC, Automation, VBscript, schedule, remote, launch

Disclaimer

While this example may meet the needs of your organization, the sole responsibility for modification and maintenance of the logic is yours and **NOT** that of the Support Organization.

The decision to use the information contained herein is done at your own risk.

The support organization is **NOT** responsible for any issues encountered as a result of implementing all or any part of the information contained or inferred herein.

The intent of the information provided here is for educational purposes only. As such, the topics in this document are only guidelines **NOT** a comprehensive solution, as your own environment will be different.

This example **DOES NOT** state or in any way imply that the information conveyed herein provides the solution for your environment.

The appropriate system technical resources for your enterprise should perform all customization activities.

Best Practice dictates **NO direct changes** to be made to any production environment. It is imperative to perform and thoroughly validate ALL modifications in a Test Environment. Use the results and knowledge garnered from the Test Environment experience to create a customized Production Deployment Plan for your own environment.

Always ensure you have a current backup before implementing any solution.