# RunTestSetSchedulerScheduler

(QC/ALM 11.x,ALM12.x)

## Note:

The following utility is provided for example purposes only. It is not supported by Micro Focus.

The example software is experimental and is provided as a courtesy, free of charge, "AS-IS" by Micro Focus, L.P. ("Micro Focus"). MICRO FOCUS shall have no obligation to maintain or support this software. MICRO FOCUS MAKES NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND REGARDING THIS SOFTWARE. MICRO FOCUS SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON CONTRACT, TORT OR ANY OTHER LEGAL THEORY, IN CONNECTION WITH OR ARISING OUT OF THE FURNISHING, PERFORMANCE OR USE OF THIS SOFTWARE

## **Introduction**

### Problem

**ALM** enables users to create sets of tests (test sets) and plan their execution: start time, planed host or host group, dependency. But there is no option to schedule these test sets to run periodically. **ALM** today does not have built in test set scheduler.

### Solution

The existing OTA API enables to run external tool that can execute any test set on any host. As example **RunTestSetScheduler** application (with VB.Net 2010 source code) is supplied as part of proposed solution.

Any scheduler application can be used to launch **RunTestSetScheduler** application, for example Microsoft Scheduler (part of Windows installation).

## RunTestSetScheduler Application

RunTestSetScheduler is windows console program that can be executed from command line. This program can execute specified test set. All parameters needed to specify a test set RunTestSetScheduler reads from command line.

Here is the command line syntax for RunTestSetScheduler tool:

RunTestSetScheduler/s:Server /d:Project /u:User /p:Password /f:Test setFolder [/t:Test set] [/h:Host] | [/g:HostGroup]

Where:

- /s: ALM server name
- **/n:** ALM Domain
- /d: ALM Project
- /u: User name
- **/p**: User password
- /f: Test set Folder Path
- /t: [optional] Test set name
- **/h**: [optional] Host name
- **/g**: [optional] HostGroup name
- /m: [optional] User Name who will receive a notification mail if the Test set Failed
- /I [optional] run Test set locally

#### Note:

- 1- If **/h**, **/g** and **/I** switches are omitted, the test set will be executed as planned in execution tab.
- 2- If only Test set Folder path is specify then it will run all the test sets under this folder by looping through all test sets one by one.
- 3- If user wants to run only one test set, user needs to specify both the Test set Folder path and the Test set name of the test set user wants to run.

#### Examples:

RunTest setscheduler\_ALM.exe /s:http://localhost:8080/qcbin /n:DEFAULT /d:ALM\_Demo /u:alex\_alm /f:Root\Demo\Scheduler\Pinned /t:Pinned /m:alex\_alm@zyzygy.com

RunTest setscheduler\_ALM.exe /s:http://localhost:8080/qcbin /n:DEFAULT /d:ALM\_Demo /u:alex\_alm /f:Root\Demo\Scheduler /t:RunTestSetScheduler/h:alex\_alm1 /m:alex\_alm@zyzygy.com > output.html

RunTest setscheduler\_ALM.exe /s:http://localhost:8080/qcbin /n:DEFAULT /d:ALM\_Demo /u:alex\_alm /f:Root\Demo /t:Scheduler /h:16.98.70.178 /m:alex\_alm@zyzygy.com

RunTest setscheduler\_ALM.exe /s:http://localhost:8080/qcbin /n:DEFAULT /d:ALM\_Demo /u:alex\_alm /f:Root\Demo\Scheduler /t:RunTestSetScheduler/h:TM-QTP11Host-A /m:alex\_alm@zyzygy.com

RunTest setscheduler\_ALM.exe /s:http://localhost:8080/qcbin /n:DEFAULT /d:ALM\_Demo /u:alex\_alm /f:Root\Demo\Scheduler\Pinned /t:Pinned /h:"" /m:alex\_alm@zyzygy.com

RunTest setscheduler\_ALM.exe /s:http://localhost:8080/qcbin /n:DEFAULT /d:ALM\_Demo /u:alex\_alm /f:Root\Demo\Scheduler /t:RunTestSetScheduler/h:TM-QTP11Host-A /m:alex\_alm@zyzygy.com

RunTest setscheduler\_ALM.exe /s:http://localhost:8080/qcbin /n:DEFAULT /d:ALM\_Demo /u:alex\_alm /f:Root\Demo\Scheduler /t:RunTestSetScheduler/h:TM-QTP11Host-B /m:alex\_alm@zyzygy.com

RunTest setscheduler\_ALM.exe /s:http://localhost:8080/qcbin /n:DEFAULT /d:ALM\_Demo /u:alex\_alm /f:Root\Demo\Scheduler /t:RunTestSetScheduler/h:TM-QTP11Host-C /m:alex\_alm@zyzygy.com

### Implementation:

In Windows Vista or Windows 7...

- Click Start>Run, then type the following... taskschd.msc
- 2) Click OK, the Task Scheduler should appear

					Ac	tions	
17.161.11					Ta	sk Scheduler (Local)	
Overview of Task Scheduler						Connect to Another Computer Create Basic Task Create Task Import Task Import Task Coll Display All Running Tasks Coll Display All Running Tasks Coll Display All Running Tasks	
isk Status					•	AT Service Account Configuration	
Status of tasks that have started in the	following time pariod			Last 24 hours	-	View	3
					- a	Refresh	
Summary: 117 total - 1 running, 116 s	ucceeded, 0 stopped, 0 faile	id				Help	
		0.1.1 T.	10				
Filesk Name	nun nesult nun start	Run End Ing	Igered by		÷		
E Abbe Hash Hayer Opdater (las							
E Consolidator llast run surceede							
Extractor Definitions Update Ta							
HotStart (last run succeeded at							
IDA[07A2D605-F561-11D1-BEE5							
IDA(5894005F-0A3F-1102-9585							
IDA(5894005F-0A3F-1102-9585							
D IDAITSD344DD ATDE 1007 0DE					-		
ctive Tasks							
Active tasks are tasks that are current	ly enabled and have not exp	pired.					
Summary: 43 total							
Tark Name	Next Run Time	Trippers	Location		-		
	5/25/2012 1-01-00 PM	At S(01 PM every day - A	1				
Adobe Flash Player Updater	5/25/2012 1:01:00 PM	At 7:31 AM every day	N N		-		
Adobe Flash Player Updater IDA/58940D5F-0A3F-11D2-9585-08.	and the second se	At 7:04 AM every day	N N				
Adobe Flash Player Updater IDA(58940D5F-0A3F-11D2-9585-08 IDA(E182A4DD-AE06-4897-9855-8	5/25/2012 1:04:00 PM	a second a second se	The second secon				
Adobe Flash Player Updater IDA(5894005F-0A3F-11D2-9585-08 IDA(582A4DD-AE06-4897-9855-8 RacTask	5/25/2012 1:04:00 PM 5/25/2012 1:12:45 PM	Multiple triggers defined	(wiicrosoft/wiindows/ruk)				
Adobe Flash Player Updater IDA(5894005F-0A3F-11D2-9585-08 IDA(58240D-AE06-4897-9655-8 RacTask Consolidator	5/25/2012 1:04:00 PM 5/25/2012 1:12:45 PM 5/25/2012 10:00:00 PM	Multiple triggers defined At 12:00 AM on 1/2/200	\Microsoft\Windows\C				
Adobe Flash Player Updater IDA(58940D5F-0A3F-11D2-9585-08. IDA(E182A4DD-AE06-4897-9855-8 RacTask Consolidator SR	5/25/2012 1:04:00 PM 5/25/2012 1:12:45 PM 5/25/2012 10:00:00 PM 5/26/2012 12:00:00 AM	Multiple triggers defined At 12:00 AM on 1/2/200 Multiple triggers defined	\microsoft\Windows\C \Microsoft\Windows\C \Microsoft\Windows\Sy				
Adobe Flash Player Updater IDA(5894005F-0.43F-11.02-9585-08. IDA(E182440D-AE06-4897-9655-8 RacTask Consolidater SR ProgramDataUpdater	5/25/2012 1:04:00 PM 5/25/2012 1:12:45 PM 5/25/2012 10:00:00 PM 5/25/2012 12:00:00 AM 5/26/2012 12:30:00 AM	Multiple triggers defined At 12:00 AM on 1/2/200 Multiple triggers defined At 12:30 AM every day	VMicrosoft/Windows/C /Microsoft/Windows/Sy /Microsoft/Windows/A				

3) Click "Create Task..." in the far right column, the "Create Task" window will appear

🕒 Create Task						
General Trig	gers Actions Conditions Settings					
Na <u>m</u> e:	Task - RunTestSet Scheduler					
Location:	N N					
Author:	AMERICAS\trostel					
<u>D</u> escription:	Task to execute RunTestSet Scheduler					
Security opt	ions ing the task, use the following user account:					
AMERICAS	AMERICAS\trostel Change User or Group					
Run only	<u>R</u> un only when user is logged on					
🔘 Run <u>w</u> he	Run whether user is logged on or not					
🗌 Do n	Do not store password. The task will only have access to local computer resources.					
Run w <u>i</u> th	Run w <u>i</u> th highest privileges					
🔲 Hidd <u>e</u> n	<u>C</u> onfigure for: Windows Vista <sup>™</sup> , Windows Server <sup>™</sup> 2008					
	OK Cancel					

- 4) Populate the Name, in this case "Task RunTestSetScheduler"
- 5) Optional, populate the Description, in this case "Task to execute RunTestSetScheduler"
- 6) Make sure the "Run only when user is logged on" is selected as this is a requirement for tests to be executed on the client machine. It must be logged in, not at a password protected screen saver. (refer to page 1560 of the QTP 10 User guide, page 1762 of the QTP 11 User Guide)
- 7) Click the "Triggers" tab, this allows you to define the schedule.
- 8) Click "New" to recreate a new Trigger, in this example we use the following settings...

New Trigger						x
Begin the task: O Settings	n a schedule			•		
One time	<u>S</u> tart: 5/25	/2012 🔍 🔻	12:59:28 PM	🚔 🔳 Synchro	ni <u>z</u> e across time zones	
○ <u>D</u> aily						n H
© <u>W</u> eekly						
○ <u>M</u> onthly						
- Advanced settings	5					
Delay tas <u>k</u> for	up to (random	delay): 1 h	iour 👻			
👿 Repeat task ev	/ery: <mark>5 minut</mark>	es 🔻		for a duration of:	1 day 👻	
📃 Stop all	running tasks a	t end of repe	tition durat <u>i</u> on			
Stop task if it	runs <u>l</u> onger tha	n: 3 d	lays 👻			
Expire: 5/25	/2013 🔍 🕇	12:59:29 PM		Synchroniz <u>e</u> a	cross time zones	
<b>⊽</b> Ena <u>b</u> led						
					OK Cance	

- 9) Click OK.
- 10) Click the "Actions" tab
- 11) Click "New", this allows us to add a new action

New Action	×
You must specify what action this task will perform.	
Act <u>i</u> on: Start a program	•
<u>P</u> rogram/script:	
E:\Temp\RunTestSetScheduler_ALM\RunTestSetS	chedule B <u>r</u> owse
<u>A</u> dd arguments (optional): S <u>t</u> art in (optional):	/s:http://localhost:8080/
	OK Cancel

- 12) Click the "Browse" button and navigate to the "RunTest setscheduler\_ALM.exe" in the utility. This could be in the "Release" or "Debug" folders of the compile application, for example...
  - a. E:\Temp\RunTestSetScheduler\_ALM\RunTestSetScheduler\_ALM\bin\Debug Or
  - b. E:\Temp\RunTest setscheduler\_ALM\RunTest setscheduler\_ALM\bin\Release
- 13) In the "Add arguments" add the desired switches for the utility, in this example we've populated the field with the following...

/s:http://localhost:8080/qcbin /n:DEFAULT /d:ALM\_Demo /u:alex\_alm

/f:Root\Phil\Scheduler\Pinned /t:Pinned /h:"" /m:alex\_alm@xyzygy.com

- 14) Click OK
- 15) In the "Create Task" main dialog, configure the "Conditions" and "Settings" as necessary; these are not touched in this example
- 16) Click OK to close the "Create Task". The task will run at the defined time based on the Trigger settings.