Configuring JMeter tests on Jenkins

This page will detail how you can setup a CI/CD pipeline for JMeter performance Tests.

View a short demo on this topic.

Pre-Requisites

- · Access to the host where JMeter is installed
- A working .jmx file that has the performance tests that you want to run

Steps to follow

To Setup Project in the Performance Testing Host

- 1. Login to the Performance Test VM (hostname: hglashjmtr01)
- 2. Copy your .jmx file to a newly created project folder inside the bin folder of JMeter in the host

/data/perftest/apache-jmeter-5.2.1/bin/<<Project Folder Name>>

- 3. Navigate to /home/svc_automation
- 4. Create a folder with the Name of the test/project that you want to store your log files, reports and shell scripts
- 5. Inside the folder that you have created the following items should be created (E.g.: /home/svc_automation/<</p>
 - a. The following folders
 - i. archive
 - logs
 - reports
 - ii. reports
 - iii. logs
 - b. A shell script that Jenkins can use to run your performance tests (Refer to Step 6)
 - c. A shell script to archive logs and reports from the previous run (Refer to Step 7)
- 6. Modify the variables and details given in the below to create a shell script to run your tests in the .jmx file (Sample shell script attached below)

#!/bin/bash

set -euo pipefail

OUT=jmeter.save.saveservice.output_format

#Location of the JMX file

JMX=/data/perftest/apache-jmeter-5.2.1/bin/<<Project Folder Name>>/<<name of the .jmx file>>

#Location where the JTL report will be generated

JTL=/home/svc_automation/<<Project Folder Name>>/reports/<<name of the jtl folder>>

#Location where the log files will be generated

LOG=/home/svc_automation/<<Project Folder Name>>/logs/log.csv

#Script that will run jmeter tests

/data/perftest/apache-jmeter-5.2.1/bin/jmeter.sh -n -t \$JMX -I \$LOG -e -o \$JTL

7. Modify the variables and details given in the below to setup archiving of the logs and reports generated (Sample shell script attached below)

```
#!/bin/bash
#VARIABLES
#Path of your project location
PROJ_ROOT=/home/svc_automation/<<Project Folder Name>>
#Date Time used to archive logs and reports
DATE=$(date +%d%m%y)
TIME=$(date +%H%M)
#Location where the log files will be archived
LOGARCHIVE="$PROJ_ROOT/archive/logs"
#Location where the jtl report will be archived
RPTARCHIVE="$PROJ ROOT/archive/reports"
#Location where the log files will be generated
LOG="$PROJ ROOT/logs"
#Location where the jtl will be generated
REPORT="$PROJ ROOT/reports"
#Move and rename the generated log file to the log archive location
mv $LOG/log.csv $LOGARCHIVE/log$DATE-$TIME.csv
#Move and rename the generated jtl report to the report archive location
```

To Setup Project in Jenkins

echo \$LOGARCHIVE echo \$RPTARCHIVE

1. Login to Jenkins and select 'New Item' - (https://jenkins.corporate.local/view/all/newJob)

mv \$REPORT/<<jtl folder name>> \$RPTARCHIVE/test.report\$DATE-\$TIME.jtl

- 2. Enter a project name and select "Freestyle Project"
- 3. Click on OK

echo \$LOG

- 4. New configuration dashboard will be displayed
- 5. Scroll down to "Build" and click on the "Add build step" drop down and select "Execute Shell"
- 6. In the text box provided modify and add the following commands to point and run the shell script to run the JMeter test, archiving script and the location for Jenkins to access the generated report

ssh -oBatchMode=true -oLogLevel=ERROR svc_automation@hglashjmtr01 /bin/bash /home/svc_automation/<<Project Folder Name>>/archive.sh

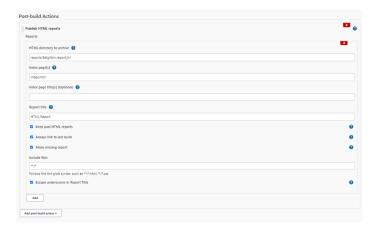
ssh -oBatchMode=true -oLogLevel=ERROR svc_automation@hglashjmtr01 /bin/bash /home/svc_automation/<<Project Folder Name>>/<<Name of the shell script that runs your test>>

 $scp-r-oBatch Mode = true-oLog Level = ERROR\ svc_automation @hglashjmtr01:/home/svc_automation/<<Project\ Folder\ Name>>/reportsection = true-oLog Level = ERROR\ svc_automation @hglashjmtr01:/home/svc_automation/<<Project\ Folder\ Name>>/reportsection = true-oLog Level = ERROR\ svc_automation @hglashjmtr01:/home/svc_automation/<<Project\ Folder\ Name>>/reportsection = true-oLog Level = ERROR\ svc_automation @hglashjmtr01:/home/svc_automation/<<Project\ Folder\ Name>>/reportsection = true-oLog Level = ERROR\ svc_automation @hglashjmtr01:/home/svc_automation/<<Project\ Folder\ Name>>/reportsection = true-oLog Level = ERROR\ svc_automation @hglashjmtr01:/home/svc_automation/<<Pre>$

E.g.:



7. Under Post-Build Actions, select Publish HTML reports, and include the following details.



8. Click on the Save button to save the project

You are now ready to run the your JMeter performance test through Jenkins!!!

Sample Resources

- Sample in Jenkins Projects
 - https://jenkins.corporate.local/job/JMeter%20Test/
 - https://jenkins.corporate.local/job/EightDigitBins Performance Testing/

Sample Shell Scripts

· Shell script to run the JMeter Test -



· Shell script to archive logs and reports -



Sample JMX file for Payment and refund (capture and pass 2 variables- ponum and txnid from payment to refund)

