Running Tests from Command Line Interface (CLI)

Command Line Interface (CLI)

- The GUI mode should be used for recording, building, and running preliminary tests, but it is not recommended to use for large scale testing since GUI mode consumes some resources. For large scale testing, the Command Line Interface (CLI) should be used.
- All listeners should be disabled for running tests from CLI in order to use the resources effectively.

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Don't use GUI mode for load testing !, only for Test creation and Test debugging.
For load testing, use CLI Mode (was NON GUI):
   jmeter -n -t [jmx file] -l [results file] -e -o [Path to web report folder]
& increase Java Heap to meet your test requirements:
   Modify current env variable HEAP="-Xms1g -Xmx1g -XX:MaxMetaspaceSize=256m" in the jmeter batch file
Check : https://jmeter.apache.org/usermanual/best-practices.html
================================================================================
```

CLI Commands for Windows

- Use following command to run JMeter Test Script from CLI:

  jmeter -n –t [path to test JMX file] -l [path to result file]

  -n: non-GUI mode

  -t: specifies the path to test script (.jmx)

  -l: specifies the path to the test results (.jtl)

  Example:

  jmeter -n -t C:\jmeter\gen-report.jmx -l C:\jmeter\gen-report.jtl

- Summary Report listener can be used to view the test results (jtl) file from the GUI.
- To create **HTML Dashboard** at CLI and get the results as html statistics.

  jmeter -n -t [path to test JMX file] -l [path to test result file] -e -o [Path to output folder]

  Or if test results exist

  jmeter -g [path to result file] -o [path to report output folder]

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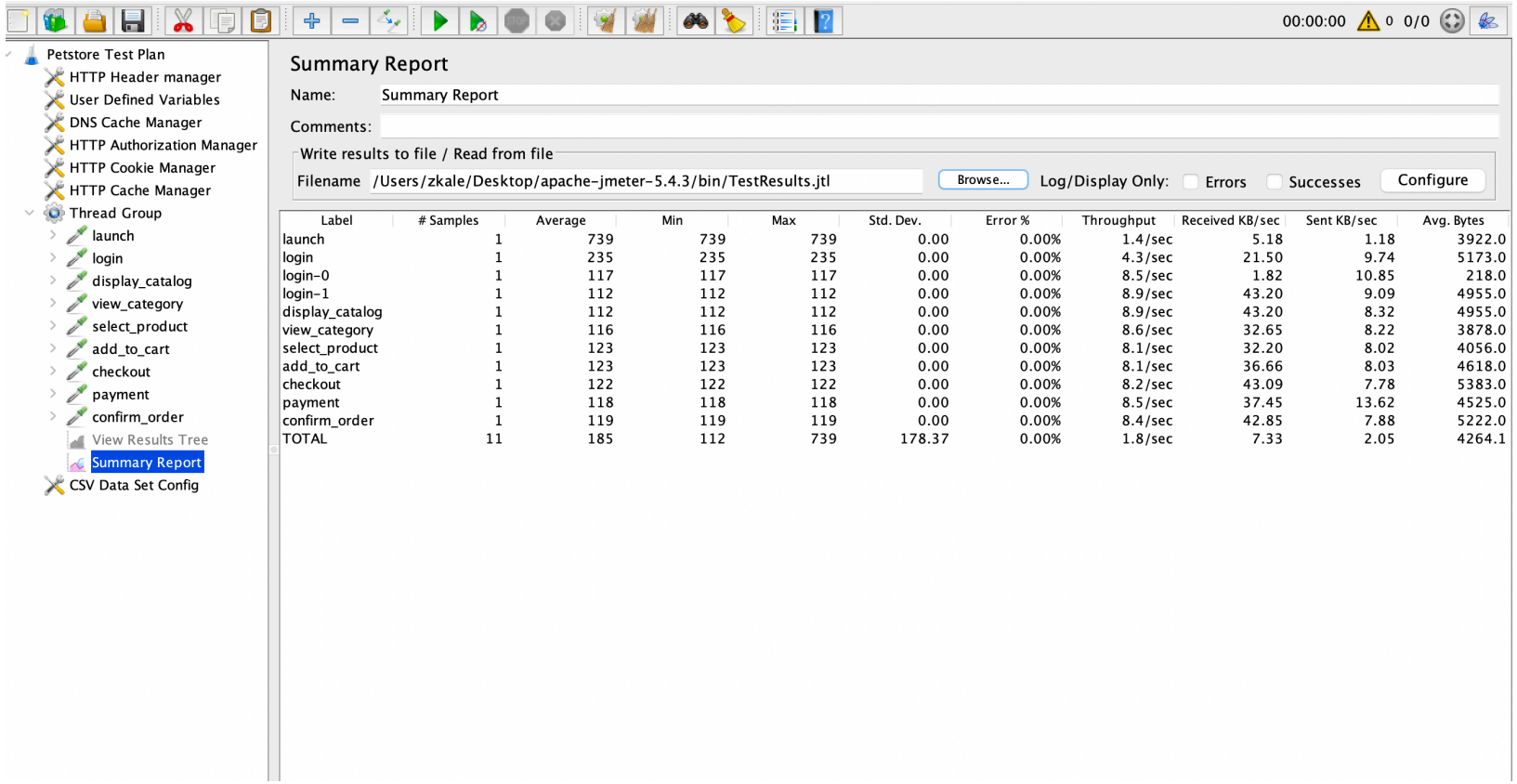
Viewing Test Results - Summary Report Listener

- Open the Test Script and add a Summary Report.
- Browse the Test Results file and select.



Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
launch	1	739	739	739	0.00	0.00%	1.4/sec	5.18	1.18	3922.0
login	1	235	235	235	0.00	0.00%	4.3/sec	21.50	9.74	5173.0
login-0	1	117	117	117	0.00	0.00%	8.5/sec	1.82	10.85	218.0
login-1	1	112	112	112	0.00	0.00%	8.9/sec	43.20	9.09	4955.0
display_catalog	1	112	112	112	0.00	0.00%	8.9/sec	43.20	8.32	4955.0
view_category	1	116	116	116	0.00	0.00%	8.6/sec	32.65	8.22	3878.0
select_product	1	123	123	123	0.00	0.00%	8.1/sec	32.20	8.02	4056.0
add_to_cart	1	123	123	123	0.00	0.00%	8.1/sec	36.66	8.03	4618.0
checkout	1	122	122	122	0.00	0.00%	8.2/sec	43.09	7.78	5383.0
payment	1	118	118	118	0.00	0.00%	8.5/sec	37.45	13.62	4525.0
confirm_order	1	119	119	119	0.00	0.00%	8.4/sec	42.85	7.88	5222.0
TOTAL	11	185	112	739	178.37	0.00%	1.8/sec	7.33	2.05	4264.1

CLI Commands for Mac

- Use following command to run JMeter Test Script from CLI:

  ./jmeter.sh -n -t [path to test JMX file] -l [path to result file]

  Example:

  ./jmeter.sh -n -t /Users/user/jmeter/gen-report.jmx -l /Users/user/jmeter/gen-report.jtl

- To create **HTML Dashboard** at CLI to get the results as html statistics.

  ./jmeter.sh -n -t [path to test JMX file] -l [path to test result file] -e -o [Path to output folder]

  or if test results exist

  ./jmeter.sh -g [path to result file] -o [path to report output folder]

HTML Dashboard

Apache JMeter Dashboard

- Dashboard
- Charts
- Customs Graphs

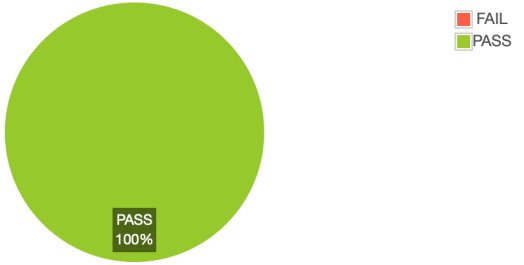
Test and Report information

Source file	"petstore-results.jtl"
Start Time	"5/12/22 10:10 PM"
End Time	"5/12/22 10:10 PM"
Filter for display	""

APDEX (Application Performance Index)

Apdex	T (Toleration threshold)	F (Frustration threshold)	Label
0.955	**500 ms**	**1 sec 500 ms**	**Total**
0.500	500 ms	1 sec 500 ms	launch
1.000	500 ms	1 sec 500 ms	display_catalog
1.000	500 ms	1 sec 500 ms	select_product
1.000	500 ms	1 sec 500 ms	confirm_order
1.000	500 ms	1 sec 500 ms	login-1
1.000	500 ms	1 sec 500 ms	payment
1.000	500 ms	1 sec 500 ms	login-0
1.000	500 ms	1 sec 500 ms	login
1.000	500 ms	1 sec 500 ms	checkout

Requests Summary



Changing Thread Parameters from CLI

- Windows:

  Example:

  ```
  jmeter -n -t C:\jmeter\my-test-plan.jmx ^
  -l C:\jmeter\my-test-plan-result.jtl ^
  -j C:\jmeter\my-test-plan-result.log ^
  -DTHREADS=500 ^
  -DRAMP_UP=60 ^
  -DDURATION=300
  ```

- MacOS:

  Example:

  ```
  ./jmeter.sh -n -t /Users/user/jmeter/my-test-plan.jmx \
  -l /Users/user/jmeter/my-test-plan-result.jtl \
  -j /Users/user/jmeter/my-test-plan-result.log \
  -DTHREADS=500 \
  -DRAMP_UP=60 \
  -DDURATION=300
  ```