

Apache JMeter HTTP(S) Test Script Recorder

This tutorial attempts to explain the exact steps for recording HTTP/HTTPS. For those new to JMeter, one easy way to create a test plan is to use the Recorder.

Jmeter configuration

Since JMeter 2.10, recording has been improved to better handle embedded resources and creation of certificates on the fly.

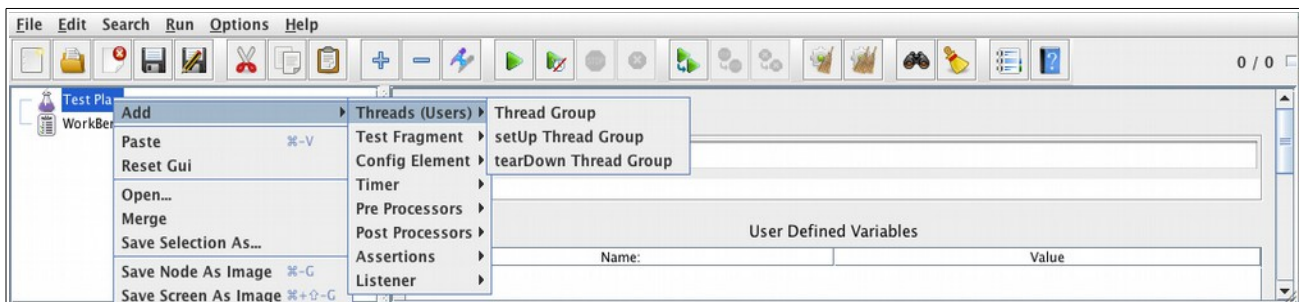
To enable these features, JMeter uses keytool utility (available in JRE/JDK) so you need to ensure your configuration is correct, read this wiki page before starting:

- <https://wiki.apache.org/jmeter/TestRecording210>

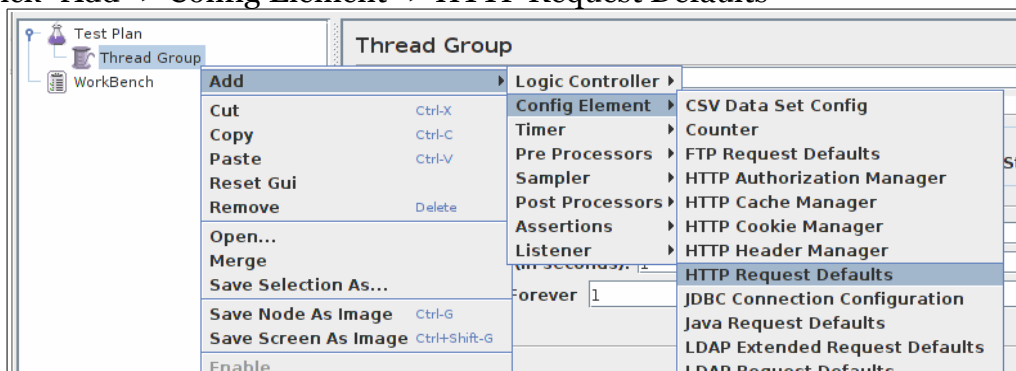
Note that recording is more powerful with a Java 7.

Basic Instructions

1. Go to `JMETER_HOME/bin` and start JMeter with `jmeterw.cmd` on Windows and `jmeter` on Linux/Unix
2. Select “Test Plan” on the tree
3. Right click on the “Test Plan” and add a new thread group: *Add > Threads (Users) > Thread Group*



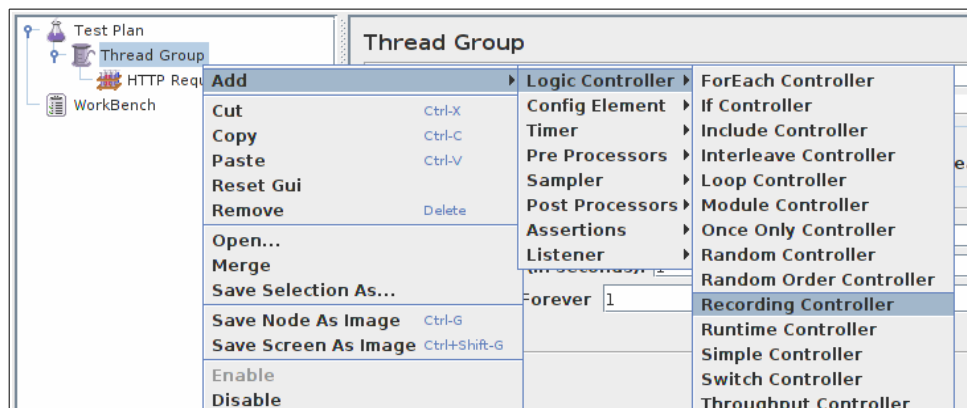
4. Select the Thread Group
5. Right click “Add -> Config Element -> HTTP Request Defaults”



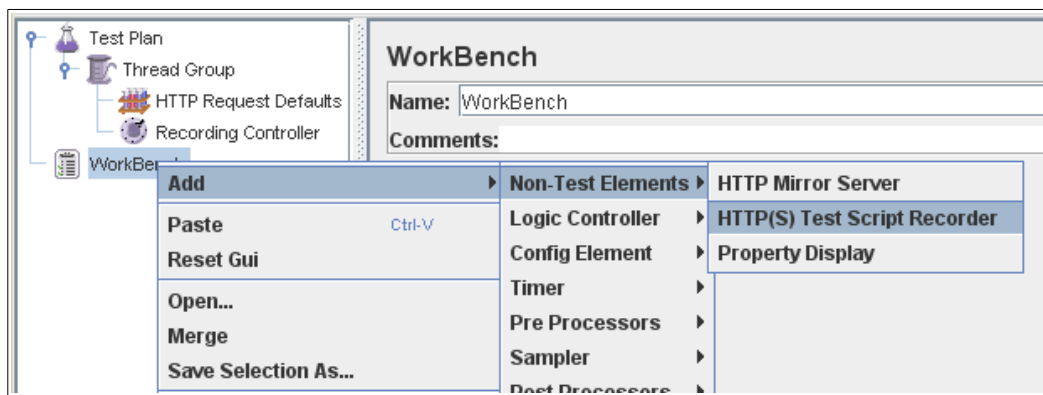
6. In new HTTP Request Defaults element: Server name – enter “jmeter.apache.org”
7. Path – leave blank

The screenshot shows the 'HTTP Request Defaults' configuration window. The 'Name' field is set to 'HTTP Request Defaults'. The 'Web Server' section has 'Server Name or IP' set to 'jmeter.apache.org'. The 'Timeouts (milliseconds)' section has 'Connect' and 'Response' fields. The 'HTTP Request' section has 'Implementation' set to 'HTTP/1.1' and 'Protocol [http]' set to 'http'. The 'Path' field is empty. The 'Parameters' section is expanded, showing a table with columns 'Name', 'Value', 'Encode?', and 'Include Equals?'. Below the table are buttons for 'Detail', 'Add', 'Add from Clipboard', 'Delete', 'Up', and 'Down'. The 'Proxy Server' section has fields for 'Server Name or IP', 'Port Number', 'Username', and 'Password'. The 'Embedded Resources from HTML Files' section has a checkbox for 'Retrieve All Embedded Resources' and a field for 'Use concurrent pool. Size' set to '4'.

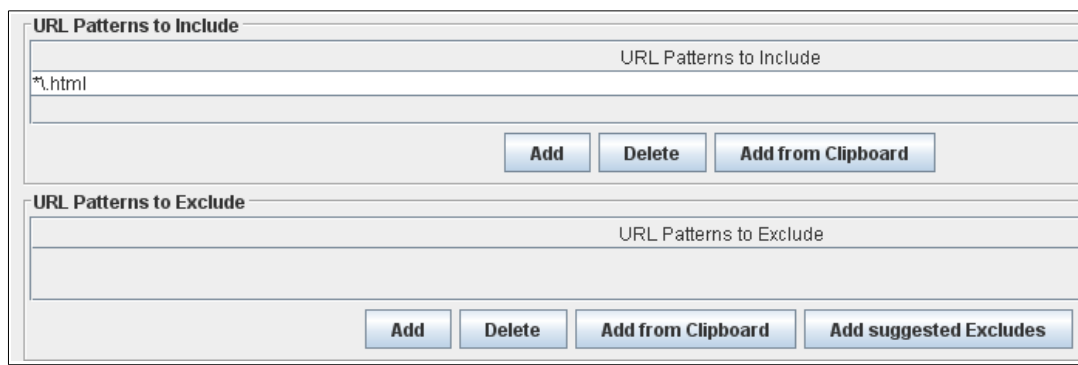
8. Right click on the “Thread Group” and add a recording controller: Add > Logic Controller > Recording Controller



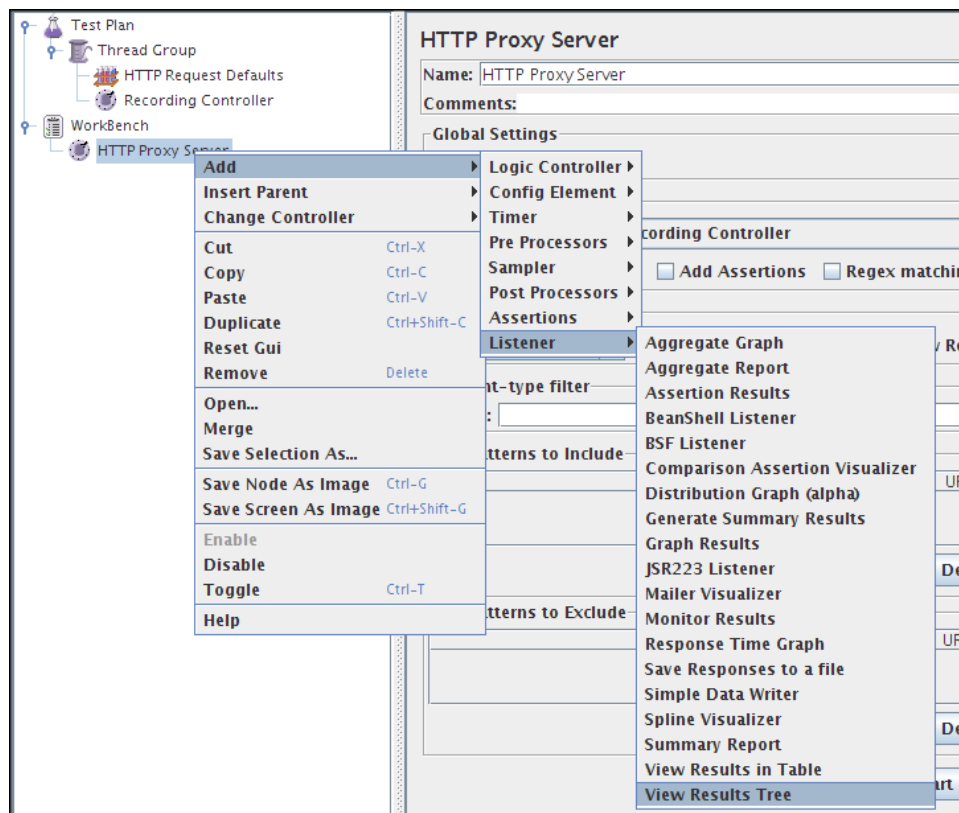
9. Next, select WorkBench
10. Right click on WorkBench and add the recorder: Add -> Non-Test Elements -> HTTP(S) Test Script Recorder



11. On HTTP(S) Test Script Recorder, click the “Add” button in “URL Patterns to Include”. This will create a blank entry; enter “.*\..html”.



12. Right click on “HTTP(S) Test Script Recorder” and add a listener: Add -> Listener -> View Results Tree



13. Return to HTTP(S) Test Script Recorder, and click the “Start” button at the bottom.

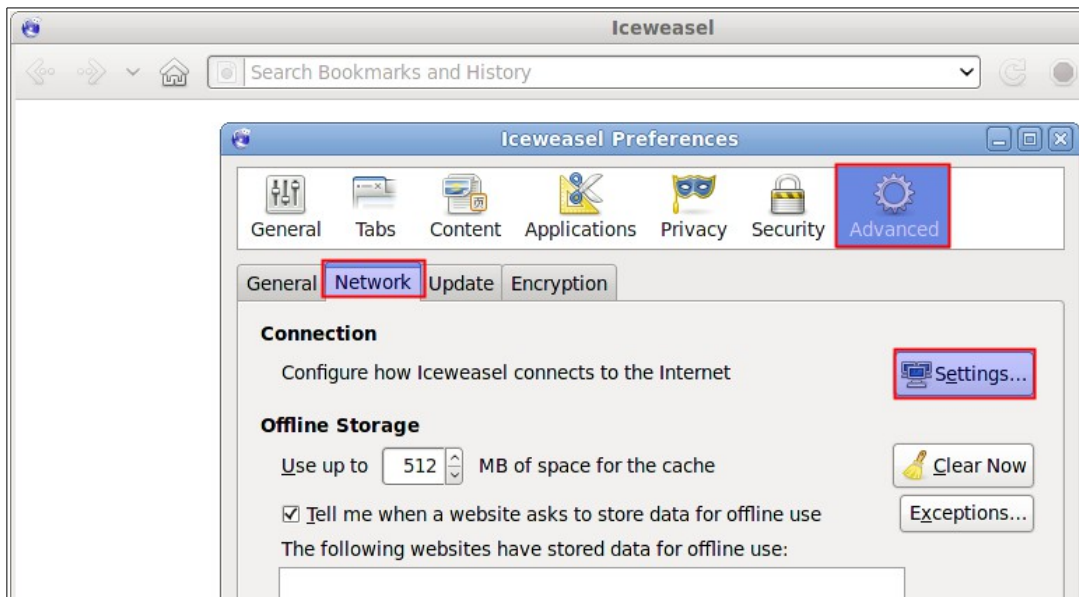
This will start the JMeter proxy server which is used to intercept the browser requests. A file called ApacheJMeterTemporaryRootCA.crt will be generated in jmeter/bin folder. Install this certificate in your browser, if you don't know how to do it, read “**Installing the JMeter CA certificate for HTTPS recording**” in :

- http://jmeter.apache.org/usermanual/component_reference.html#HTTP%28S%29_Test_Script_Recorder

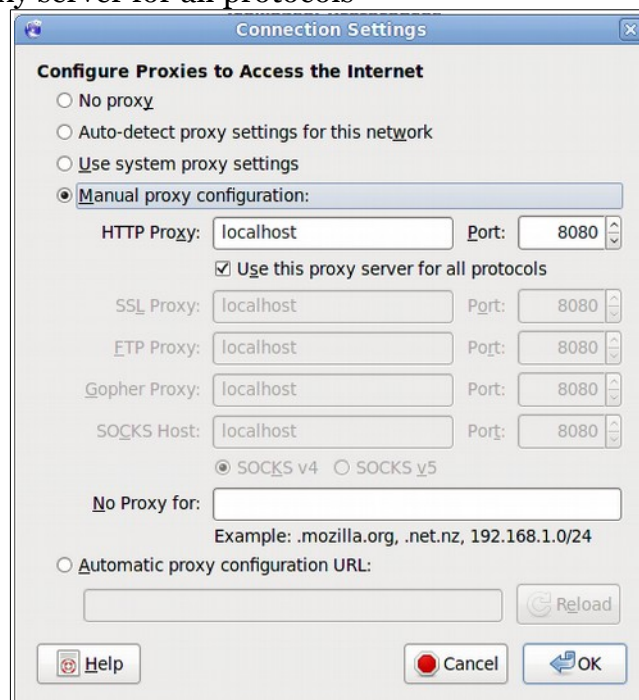
Configure your browser to use the JMeter Proxy

At this point, JMeter's proxy is running. For this exercise, we will use Icedweasel/Firefox to view some pages on the JMeter website.

13. Start Icedweasel/Firefox, but do not close JMeter.
14. From the tool bar, click “Edit -> Preferences” (or “Tools > Preferences”). This should bring up the options.
15. Select the “Advanced” tab, and “Network” tab
16. Click “Settings” button near the bottom.



17. On the new pop-up, check “Manual proxy configuration”. The address and port fields should be enabled now.
18. Address – enter “localhost” or the IP address of your system
19. Port – enter “8080”.
20. Check “Use this proxy server for all protocols”



21. Click “OK” button
22. Click “OK” button again. This should return you to the browser

Record your navigation

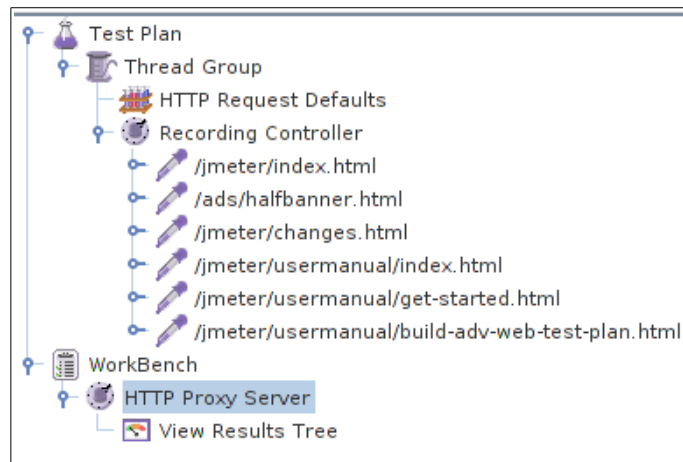
23. With your browser, in the “Address” bar at the top, enter

“<http://jmeter.apache.org/index.html>” and hit the “enter” key.

24. Click on a few links on JMeter's pages.

25. Close your browser and bring up the JMeter window.

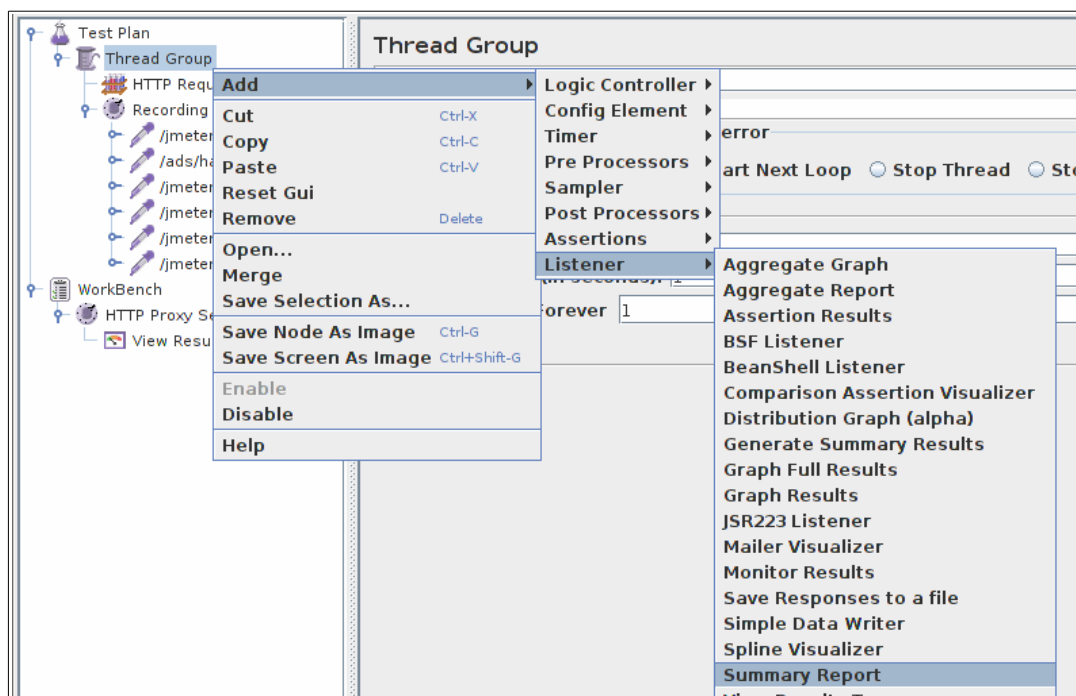
Expand the thread group and there should be several samplers. At this point, the test plan can be saved as is. If you forget to add default HTTP Request settings, you will have to manually delete the server name, and port.



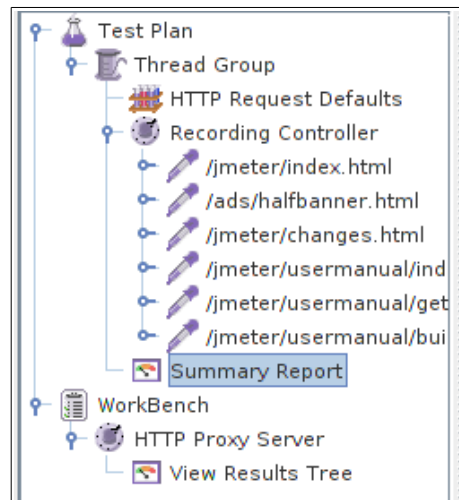
In this sample, there aren't any default request parameters. If a particular request parameter is required by all pages, the request defaults is where one would add the entries.

25. Select “Thread Group”

26. Right click “Add -> Listener -> Summary Report” to add an summary listener.



27. The summary listener will show some basic statistics.



27. Select “Thread Group”
28. Number of Threads – enter “5”
29. Ramp up Period – do not change
30. Loop Count – enter 100

Thread Group

Name: Thread Group

Comments:

Action to be taken after a Sampler error

☒ Continue ☐ Start Next Loop ☐ Stop

Thread Properties

Number of Threads (users): 5

Ramp-Up Period (in seconds): 1

Loop Count: ☐ Forever 100

☐ Scheduler

Start the test

At this point, we are ready to run our test plan and see what happens. Save the test plan. When you're ready to run the test, there's two ways:

1. Run -> Start
2. Ctrl-R

Before you start the test, select “Summary Report”. As the test runs, the statistics will change until the test is done. At the end of the test, the summary report should look like this.

Summary Report

Name:

Comments:

Write results to file / Read from file

Filename
Browse...

Log/Display Only:
☐ Errors
☐ Successes
Configure

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	kB/sec	Avg. Bytes
/jmeter/ind...	500	260	236	1071	66.47	0.00%	3.1/sec	10.90	3635.9
/ads/halfba...	500	252	231	761	50.06	0.00%	3.1/sec	2.03	677.0
/jmeter/cha...	500	277	242	1408	102.13	0.00%	3.1/sec	20.06	6675.0
/jmeter/use...	500	267	239	1017	95.51	0.00%	3.1/sec	14.58	4851.9
/jmeter/use...	500	285	249	1519	105.40	0.00%	3.1/sec	31.11	10351.9
/jmeter/use...	500	266	238	1106	94.11	0.00%	3.1/sec	10.45	3469.9
TOTAL	3000	268	231	1519	88.61	0.00%	18.3/sec	88.22	4943.6

While the test is running, in the upper right-hand corner, there should be a green square. When the test is done, the box should be grey.

