# JMeter proxy Step-by-step

This tutorial attempts to explain the exact steps for JMeter's proxy. For those new to JMeter, one easy way to create a test plan is to use the Proxy. What the proxy does is it records the requests sent to the server.

### **Basic Proxy 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*

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— 笊 Test Pla		i si				
Wash Da	Add 🕨	Threads (Users) ▶	Thread Group			
WORKBE	Paste #-V	Test Fragment 🕨	setUp Thread Group			
	Reset Gui	Config Element 🕨	tearDown Thread Group			
	Onen	Timer 🕨				
	Morgo	Pre Processors >				
	Gene Calantian An	Post Processors >		User Define	ed Variables	
	Save Selection As	Assertions >	Name:		Value	
	Save Node As Image #-G	Listener b				
]	Save Screen As Image #+&-G					-

- 4. Select the Thread Group
- 5. Right click "Add -> Config Element -> Http Request Defaults"

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	← 👗 Test Plan └─ 🎼 Thread Group	Thre	ad Group	)		
	WorkBench	Add	Þ	Logic Controller )		
		Cut	Ctrl-X	Config Element 🕨	CSV Data Set Config	
		Copy	Ctrl-C	Timer )	Counter	-
		Paste	Ctrl-V	Pre Processors	FTP Request Defaults	St.
		Reset Gui		Sampler 🔹	HTTP Authorization Manager	30
		Remove	Delete	Post Processors	HTTP Cache Manager	
		0000		Assertions	HTTP Cookie Manager	-
		Morgo		Listener 🔹	HTTP Header Manager	
		Merge Save Selection Ac		tin seconday. ±	HTTP Request Defaults	
ш		Save Selection As		Forever 1	JDBC Connection Configuration	
		Save Node As Image	Ctrl-G		Java Request Defaults	
		Save Screen As Image	Ctrl+Shift-G		LDAP Extended Request Defaults	_
		Enable			LDAB Request Defaults	

- 6. In new HTTP Request Defaults element: Server name enter "jmeter.apache.org"
- 7. Path leave blank

HTTP Request Defaults								
Name: HTTP Request Defaults	Name: HTTP Request Defaults							
Comments:								
Web Server								
Server Name or IP: http://jmeter.apache.org/	Port Number:							
HTTP Request								
Implementation: 🗨 Protoco	I [http]: Content end							
Path:								
Parameters								
Send	Parameters With the Request:							
Name:	Value							

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

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	← 🏝 Test Plan ় ि 💽 Thread Group	, Tł	nread Group	þ		
	- 🚟 HTTP Req	Add	•	Logic Controller	ForEach Controller	
	🖵 🗊 WorkBench	Cut	Ctrl-X	Config Element	If Controller	
		Сору	Ctrl-C	Timer	Include Controller	
		Paste	Ctrl-V	Pre Processors	Interleave Controller	ea
		Reset Gui		Sampler	Loop Controller	
		Remove	Delete	Post Processors	Module Controller	-
		Open		Assertions	Once Only Controller	
		Merge		Listener	Random Controller	
		Save Selection As			Random Order Controller	Þ
		Save Made As Inc.		Forever 1	Recording Controller	
		Save Node As Imag	e Ctri-G		Runtime Controller	
		Save Screen As Ima	age Ctri+Shift-G		Simple Controller	
		Enable			Switch Controller	
		Disable			Throughput Controller	

- 9. Next, select WorkBench
- 10. Right click on WorkBench and add the Http proxy: Add -> Non-test elements -> Http Proxy Server

P ♣ Test Plan P ➡ Threa HT B Re ■ ₩orkBenc	d Group TP Request Defaults cording Controller h	WorkBench Name: WorkBench Comments:				
	Add	•	Non-Test Elements 🕨	HTTP Mirror Server		
	Paste	Ctrl-V	Logic Controller 🔷 🕨	HTTP Proxy Server		
	Reset Gui		Config Element	Property Display		
	Open Merge Save Selection As		Timer Pre Processors Sampler			

- 11. On HTTP Proxy Server, click the "Add" button in "URL Patterns to Include". This will create a blank entry.
- 12. Enter ".\*\.html"
- 13. Click 3 times, the "Add" button in "URL Patterns to Exclude". This will create 3 blank entries.
- 14. Enter ".\*\.png" pattern, ".\*\.gif" pattern and ".\*\.ico" pattern

URL Patterns to Include	
	URL Patterns to Include
.*\.html	
	Add Delete
URL Patterns to Exclude	
	URL Patterns to Exclude
.*\.png	
.*\.gif	
.*\.ico	
	Add Delete

15. Right click on "HTTP Proxy Server" and add a listener: Add -> Listener -> View Results Tree

← Å Test Plan	HTTP Proxy Se	erver						
WITTE Request Defaults	Name: HTTP Proxy	Name: HTTP Provy Server						
Recording Controller	Comments:	001101						
WorkBench	cominenta.	_						
HTTP Prove Server	Port: 8080	Attempt HTTPS S	poofing Only spoof URLs matching:					
Add	×1 •	Logic Controller )	]					
Insert Parer	it 🕨	Config Element →	ntroller 🗸 Grouping					
Cut	Ctrl-X	Timer 🕨						
Conv	ctrl-c	Pre Processors >	sertions Regex matching					
Paste	Ctrl-V	Sampler >						
Reset Gui	Gurv	Post Processors >	Automatically					
Remove	Delete	Assertions >	aconatically ronow Redirects					
0		Listener 🔹 🕨	Aggregate Graph					
Mosta			Aggregate Report					
Favo Salacti	on Ac	- duda	Assertion Results					
Save Select	UII AS	iciude	BSF Listener					
Save Node A	Image Ctrl-G		BeanShell Listener					
Save Screen	As Image Ctrl+Shift-G		Comparison Assertion Visualizer					
Enable			Distribution Graph (alpha)					
Disable			Generate Summary Results					
Help			Graph Full Results					
			Graph Results					
			JSR223 Listener					
			Mailer Visualizer					
	URL Patterns to	Exclude	Monitor Results					
			Save Responses to a file					
			Simple Data Writer					
			Spline Visualizer					
			Summary Report					
			View Results Tree					
			View Results in Table					

#### 16. Return to HTTP Proxy Server, and click the "Start" button at the bottom

HTTP Proxy Server
Name: HTTP Proxy Server
Comments:
Port: 8080 Attempt HTTPS Spoofing Only spoof URLs matching:
Test plan content
Target Controller: Use Recording Controller 🛛 🔽 Grouping: Do not group si
Capture HTTP Headers 🔲 Add Assertions 🔛 Regex matching
HTTP Sampler settings
Type: Java 🔽 🗖 Redirect Automatically 🗹 Follow Redirects 🗹 Use KeepAlive
Content-type filter
Include: Exclude:
URL Patterns to Include
URL Patterns to Include
, • ntmi
Add Delete
URL Patterns to Exclude
URL Patterns to Exclude
. *), png
.*ico
Add Delete
Start Stop Restart

# Configure your brower to use the JMeter HTTP Proxy

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

- 13. Start Iceweasel/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.

0	Iceweasel								
See - See [	Search Bookmarks and History								
	lceweasel Preferences								
	General Tabs Content Applications Privacy Security Advanced								
	General Network Update Encryption								
	Connection Configure how Iceweasel connects to the Internet								
	Offline Storage								
	Use up to 512 💭 MB of space for the cache								
	✓ <u>T</u> ell me when a website asks to store data for offline use Exceptions								
	The following websites have stored data for offline use:								
	Configure how Iceweasel connects to the Internet       Image Settings         Offline Storage       Image Settings         Use up to       512  Image Settings         Image Tell me when a website asks to store data for offline use       Image Settings         The following websites have stored data for offline use:       Image Settings								

- 17. On the new popup, 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"

3	Connection Settings		(					
Configure Proxies to Access the Internet								
O No proxy								
<ul> <li>Use system pro</li> </ul>	xy settings							
Manual proxy control	onfiguration:							
HTTP Pro <u>x</u> y:	localhost	Port:	8080					
	Use this proxy server for	all proto	cols					
SS <u>L</u> Proxy:	localhost	Port:	8080 🖯					
<u>F</u> TP Proxy:	localhost	Po <u>r</u> t:	8080					
<u>G</u> opher Proxy:	localhost	Port:	8080					
SO <u>C</u> KS Host:	localhost	Por <u>t</u> :	8080 🗍					
<u>N</u> o Proxy for:								
Automatic prov	Example: .mozilla.org, .net.r	z, 192.1	68.1.0/24					
O Automatic proxy configuration URL:								
			C Reload					
elp <u>H</u> elp		Cancel	е					

21. Click "ok" button

22. Click "ok" button again. This should return you to the browser

## **Record your navigation**

- 23. With your brower, in the "Address" bar at the top, enter "<u>http://jmeter.apache.org/index.html</u>" 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 servername, 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. 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 🔷 Sto
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: Summary Report									
Comments	:								
Write resu	ults to file / F	lead from file	e						
Filename	Filename Browse Log/Display Only: Errors Successes Configure								
Label	# Samples	Average	Min	Мах	Std. Dev.	Error %	Throughput	KB/sec	Avq. 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.

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