JMeter Distributed Testing Step-by-step

This short tutorial explains how to use multiple systems to perform stress testing. Before we start, there are a couple of things to check.

1. the firewalls on the systems are turned off.
2. all the clients are on the same subnet.
3. the server is in the subnet, if 192.x.x.x or 10.x.x.x ip addresses are used. If the server doesn't use 192 or 10 ip address, there shouldn't be any problems.
4. Make sure jmeter can access the server.
5. Make sure you use the same version of Jmeter on all the systems. Mixing versions may not work correctly.

Once you've made sure the systems are ready, it's time to setup the systems. The tutorial assumes you already have jmeter installed on all the systems. The way Jmeter works is 1 controller initiates the test on multiple systems.

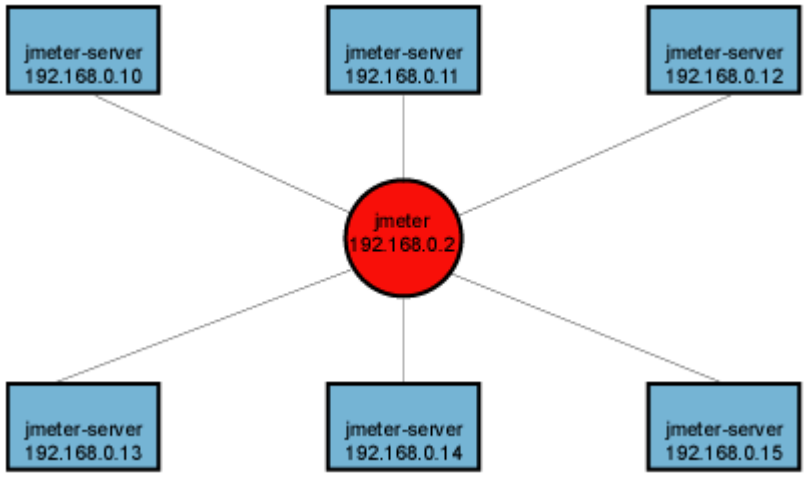


Diagram 1

1. On the systems you plan to use to send requests to the webserver. Go to jmeter/bin directory and execute jmeter_server.bat (jmeter_server on unix). On windows, you should see a dos window appear with "jre\[version]\bin\rmiregistry.exe". If this doesn't happen, it means there are multiple JRE installed on the system. Note: [version] would be the jre version installed on the system.
    1. Open jmeter-server.bat in a text editor
    2. go to line 44 and find ":setCP"
    3. edit "START rmiregistry" to the full path. Example: "START C:\j2sdk1.4.2\jre\bin\rmiregistry"
2. On the system acting as the console, open windows explorer and go to jmeter/bin directory
3. open jmeter.properties in notepad or wordpad
4. edit the line "remote_hosts=127.0.0.1"
5. add the IP address. For example, if I have jmeter server running on 192.168.0.10, 11, 12,

13, and 14, the entry would like like this:
remote_hosts=192.168.0.10,192.168.0.11,192.168.0.12,192.168.0.13,192.168.0.14

6. Start jmeter.
7. Open the test plan you want to use

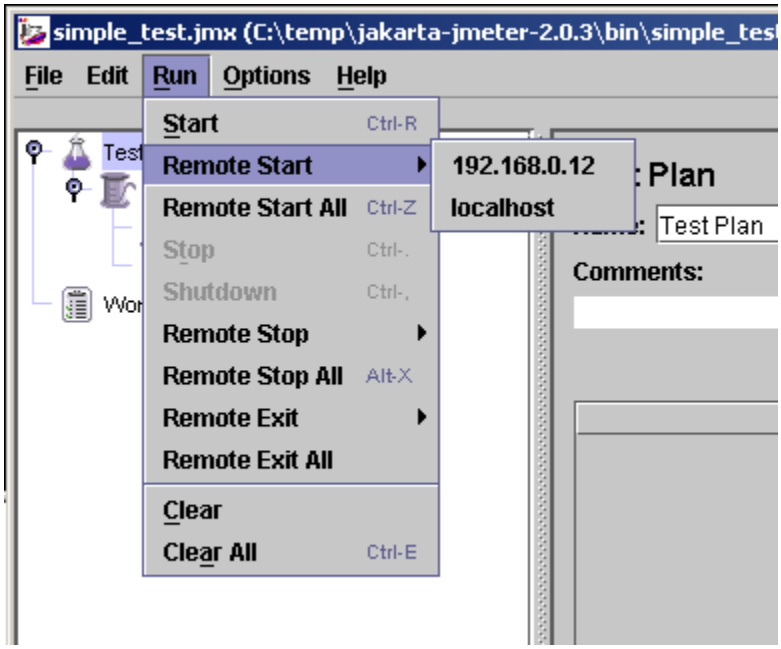
Starting the Test

At this point, you are ready to start load testing. If you want to double check, open jmeter.log in notepad. You should see the following in the log.

```
Jmeter.engine.RemoteJMeterEngineImpl:  Starting backing engine
```

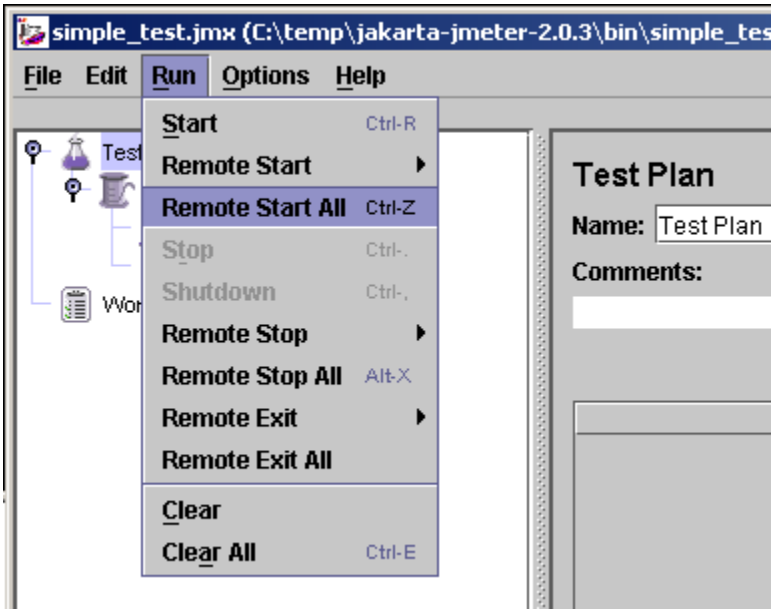
If you do not see this message, it means jmeter-server did not start correctly. For tips on debugging the issue, go to the tips section. There are two ways to initiate the test: a single system and all systems.

Start a single clients



1. click Run at the top
2. select Remote start
3. select the IP address

Start all clients



1. click Run at the top
2. select Remote start all or use CRTL-Z

Additional resources

http://wiki.apache.org/jakarta-jmeter/JMeterFAQ#head-395d6caa3e6b4b10e23eaa68dca1d1ce6685e693

http://jakarta.apache.org/jmeter/usermanual/remote-test.html

Tips

In some cases, the firewall may still be blocking RMI traffic.

Symantec Anti Virus and Firewall

In some cases, Symantec firewall needs to be stopped from windows services.
1. open control panel
2. open administrative tools
3. double click services
4. Go to down to symantec anti virus, right click and select stop

Windows firewall

1. open network connections
2. select the network connection

3. right click and select properties
4. select advanced tab
5. uncheck internet connection firewall

Linux

On Suse linux, ipchains is turned on by default. For instructions, please refer to the "remote testing" in the user manual.