# SET UP JMETER MASTER SLAVE :-

Create two ec2 instance t2.medium as t2.micro will not work in this scenerio

1) Install java and apache-j-meter on both the server, the version of java and apache-j-meter should be similar on both server

   To install java execute the below command:-

```
sudo apt-get update -y && sudo apt-get install openjdk-8-jdk -y
```

   To install apache-j-meter follow the link below

```
http://jmeter.apache.org/download_jmeter.cgi
```

2) Untar your apache-j-meter tar file using

```
tar -zxf <package-name>
```

3) Now choose one of the instances that have created as a master for jmeter

**Master Configuration**

a) **The following changes need to be done for the master setup:**

   **Open jmeter.properties present in the bin directory on the Master machine and mention all the slave ips in as remote hosts with the ports assigned in the above slave configuration – remote_hosts=localhost: 1099,<slave-ip>:2010**

   **Localhost need not be mentioned if you do not want to use the Master machine to be a part of remote testing to put the load on the application.**

b) **Set the server port in the same jmeter.properties file -server_port=1099**

```
#------------------------------------------------------------------------
-------
# Remote hosts and RMI configuration
#------------------------------------------------------------------------
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# Remote Hosts - comma delimited
#remote_hosts=127.0.0.1
remote_hosts=localhost:1099,172.31.91.177:2010

# RMI port to be used by the server (must start rmiregistry with same
port)
server_port=1099

# To change the port to (say) 1234:
# On the server(s)
# - set server_port=1234
# - start rmiregistry with port 1234
# On Windows this can be done by:
# SET SERVER_PORT=1234
```

c) After making the above changes, execute jmeter-server on your linux master machine which will be present in the bin directory.

NOTE:-
AFTER EXECUTING jmeter-server IF YOU SEE ANY ERROR LIKE

```
Server failed to start: java.rmi.server.ExportException: Listen
failed on port: 0; nested exception is:
     java.io.FileNotFoundException: rmi_keystore.jks (No such file
or directory)
An error occurred: Listen failed on port: 0; nested exception is:
     java.io.FileNotFoundException: rmi_keystore.jks (No such file
or directory)
```

FOLLOW THE LINK BELOW TO RESOLVE THIS ERROR:-
https://www.perfmatrix.com/server-failed-to-start-java-rmi-server-exportexception/

**Slave Configuration**

After having a similar copy of JMeter in the slaves, follow the below steps for all the Slave machines:

a) Open jmeter-server file present in the bin directory of jmeter and uncomment the below line –

RMI_HOST_DEF=-Djava.rmi.server.hostname=xxx.xxx.xxx.xxx

Also instead of xxx.xxx.xxx.xxx, give the ip of the linux machine you have opened.

b) Give a specific rmi port no. in the below line of the same jmeter-server file –

${DIRNAME}/jmeter ${RMI_HOST_DEF}

-Dserver_port=${SERVER_PORT:-2010} -s -j jmeter-server.log “$@”

This port will be further used in the master configuration, hence give different ports for all the different slave machines.

```
DIRNAME=`dirname $0`

# If the client fails with:
# ERROR - jmeter.engine.ClientJMeterEngine:
java.rmi.ConnectException: Connection refused to host: 127.0.0.1
# then it may be due to the server host returning 127.0.0.1 as its
address

# One way to fix this is to define RMI_HOST_DEF below
RMI_HOST_DEF=-Djava.rmi.server.hostname=172.31.91.177
${DIRNAME}/jmeter ${RMI_HOST_DEF} -Dserver_port=${SERVER_PORT:-2010}
-s -j jmeter-server.log "$@"
```

c) After making the above changes, execute JMeter-server on all the slaves

Now check your connection by executing telnet from master to slave on port no 2010

It should establish proper connection