

## F5-LTM useful commands to Troubleshoot: --

### Basic Definitions:-

**Pool:** Means collection of Servers, to which User requests can be sent

**Pool Member:** Server in the Pool is referred as Pool Member

**Host / Node:** Which means the IP Address assigned to the Physical Server ( Host 1 or Host 2). Example - [192.168.1.10](#)

**Services:** Which means the combination of IP Address and Port. Example - [192.168.1.10:80](#)

### Basic troubleshooting in LTM to check Client-Server Connections:--

#### Step1:

```
root@rakesh(Active)(/Common)(tmsh)#ping <Server ip address> -I <source_self_IP>
```

#### Step2:

```
root@rakesh(Active)(/Common)(tmsh)#telnet <Server ip address> <portnumber>
```

#### Step3:

Try to access server directly from your local PC using direct server/Node ip address, this is just to check if there is any issue with the server or not.

#### Step4:

Test access to servers from LTM CLI, do 'quit' to exit from tmsh shell mode

```
[root@rakesh:Active:Standalone] log #curl -v http://<Virtual Server IP>
```

```
[root@rakesh:Active:Standalone] log #curl -v https://<Virtual Server IP>
```

#### Step5:

check the list of Active connections, if require you can also delete Existing/old connections using

below commands.

```
root@rakesh(Active)(/Common)(tmos)# show /sys connection cs-server-addr <VIRTUAL-SERVER-IP-ADDRESS>
```

```
root@rakesh(Active)(/Common)(tmos)# delete /sys connection cs-server-addr <VIRTUAL-SERVER-IP-ADDRESS>
```

```
root@rakesh(Active)(/Common)(tmos)#show /sys connection cs-client-addr <CLIENT-IP-ADDRESS>
```

```
tmsh show /sys connection ss-server-addr <NODE-IP-ADDRESS> ss-server-port <NODE-PORT-NUMBER>
```

for Example:

```
client--->VIP(LTM)Selfip----->SERVER
```

```
cs-client-addr----->client pc ip address
```

```
cs-server-addr----->LTM Virtual Server IP address
```

```
ss-client-addr----->LTM Self IP
```

```
ss-server-addr----->Server IP address
```

```
cs-client-port---->Client source port number
```

```
cs-server-port----->Client Destination port number
```

```
ss-client-port----->LTM source port
```

```
ss-server-port----->LTM destination port
```

#### Step6:

```
root@rakesh(Active)(/Common)(tmos)#tcpdump -i <vlanname> host <ipaddress> and port <portnumber> -w /var/tmp/capture1.pcap
```

OR

```
root@rakesh(Active)(/Common)(tmos)#tcpdump src host <ipaddress> and dst host <ipaddress> and dst port <portnumber>
```

#### Optional:-

```
-i <interface number> --->Interface such as 1:1 ,2:1
```

```
-i <vlan name>
```

```
-i 0.0 ---->captures on all interfaces.
```

```
-ni ---->disables name resolution
```

```
-w <capture1.pcap>----->captures the traffic to a file.
```

#### Step7:

Check LTM logs you can find it in System>>Logs : Local Traffic or

[root@rakesh:Active:Standalone] log [#cd](#) /var/log/

[root@rakesh:Active:Standalone] log [#cat](#) ltm

or

root@rakesh(Active)/(Common)(tmos)[#show](#) /sys log ltm

or

root@rakesh(Active)/(Common)(tmos)[#show](#) /sys log <log> range <date range>

For example, to view ltm logs from three days ago until now, type the following command:

root@rakesh(Active)/(Common)(tmos)[#show](#) /sys log ltm range now-3d

For example, to view all ltm logs from 2022-03-05, type the following command:

root@rakesh(Active)/(Common)(tmos)[#show](#) /sys log ltm range 2022-03-05

For example, to view ltm logs from two to four days ago, type the following command:

root@rakesh(Active)/(Common)(tmos)[#show](#) /sys log ltm range now-2d--now-4d

For example, to view ltm logs from 2022-03-02 through 2022-03-05, type the following command:

root@rakesh(Active)/(Common)(tmos)[#show](#) /sys log ltm range 2022-03-02--2022-03-05