

Exp. No. 1

Date : 16/07/24

Practical - 01

Aim:

Study of various Network commands used in Linux and Windows.

Basic Networking commands :

arp -a

Interface : 192.168.26.1 --- 0xd

| Internet address | Physical Address | Type |
|------------------|-------------------|---------|
| 192.168.26.254 | 00-50-56-f9-8b-27 | dynamic |
| 192.168.26.254 | FF-FF-FF-FF-FF-FF | static |
| 224.0.0.2 | 01-00-5e-00-00-02 | static |
| 224.0.0.22 | 01-00-5e-00-00-16 | static |
| 224.0.0.252 | 01-00-5e-00-00-fb | static |

2) hostname

Desktop Desktop -AT1UL08

3) ipconfig/all

Windows IP configuration

Host Name : DESKTOP-AT1UL08

Primary DNS suffix :

Node Type : Mixed

IP Routing Enabled : No

WINS Proxy Enabled : No

4) nbtstat -a

O/P:

nbtstat -a Desktop-AT1UL08

Ethernet 3:

Node IP address : [0.0.0.0] Scope ID: 0

Host Not Found.

5) netstat

O/P:

Active connections

| Proto | Local address | Foreign Address | state |
|-------|---------------|-----------------|-------|
|-------|---------------|-----------------|-------|

| | | | |
|-----|-----------------|-----------------|-------------|
| TCP | 127.0.0.1:49678 | DESKTOP-AT1ULD8 | Established |
|-----|-----------------|-----------------|-------------|

| | | | |
|-----|-----------------|-----------------|-------------|
| TCP | 127.0.0.1:49679 | DESKTOP-AT1ULD8 | Established |
|-----|-----------------|-----------------|-------------|

| | | | |
|-----|--------------|--|--|
| TCP | 172.16.78.28 | | |
|-----|--------------|--|--|

6) nslookup www.google.com

O/P:

Server: unknown

Address: 172.16.72.1

Non-authoritative answer:

Name: www.google.com

Address: 216.68.0.1:4007:81e:12004

172.250.163.228

7) Path ping -g Desktop-AT1ULD8

O/P:

Tracing route to 172.16.78.28 over max of 30 hops:

0

172.16.78.28

↑

172.16.75.28

Page

8) ping www.rajalakshmi.edu.in

pinging www.rajalakshmi.edu.in [172.28.19.23]
with 32 bytes of data:

ip:

IP address show

1: los <loopback, up, lower-up> mtu 65536
qdisc no queue state unknown group
default qlen 1000

2: enp2s0: <Broadcast,Multicast,Up,Lower-
up> mtu 1500 qdisc fq codele state
UP group default qlen 1000

2) ntr:

a) ntr www.rajalakshmi.in

O/P: My traceroute (v0.8)

local host, local domain (0.0.0.0)

Keys : Help Quit

Hort

Poekis

Rings

| | Loss | 1. | Sent | Left | Aug | Best | Worst |
|--------|------|-----|------|------|-----|------|-------|
| 0.0.1. | 208 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | |

1. 118.185-187.146

b) mtr - g twitter.com

No CRTK support. Sorry.

c) mtr - b google.com

same output as a

3) Puig:

puig www.google.com

4) tcptrace:

dnf install -y tcptrace

package tcptrace-14.4.9.0-2.fc26.i686 is
already installed, completed.

5) # nmap connection modify "word connection"

6) cat /etc/relov.conf

O/P:

generated by Network Manager
namechanger (72.16.8.)

RESULT:

Thus the basic commands are executed successfully.

→ no traffic error

B \rightarrow B
 \rightarrow Tx Txn