

Experiment -

16/7/24

Aim:

Study of various Network commands used in Linux and windows

Basic Networking commands in Windows

exp - 2

Interface : 192.168.26.14 --- 0 x 0

Internal Address	Physical Address	Type
------------------	------------------	------

192.168.26.254	00-50-56-F9-86-27	dyn
----------------	-------------------	-----

192.168.26.254	ff-ff-ff-ff-ff-ff	Sta
----------------	-------------------	-----

224.0.0.2	01-00-5e-00-00-02	Sta
-----------	-------------------	-----

224.0.0.22	01-00-5e-00-00-16	Sta
------------	-------------------	-----

224.0.0.251	01-00-5e-00-00-f6	Sta
-------------	-------------------	-----

224.0.0.252	01-00-5e-00-00-fc	Sta
-------------	-------------------	-----

239.255.255.256	01-00-5e-7f-ff-fe	Sta
-----------------	-------------------	-----

255.255.255.255	ff-ff-ff-ff-ff-ff	Sta
-----------------	-------------------	-----

Host name

Desktop · DESKTOP - A710L08

3)

ipconfig /all

Windows IP Configuration

Host Name · DESKTOP A710L08

Primary Dns suffix ·

Node Type · Mixed

IP Routing Enabled · NO

WINS Proxy Enabled · NO

4)

nbtstat -a

nbtstat -a DESKTOP - A710L08

Ethernet 310

Node IP Address · [0.0.0.0] Scope Id

Host Not found

Bluetooth Network Connection 2

Node IP Address · [0.0.0.0] Scope Id

Host Not found

5) net stat

Active Connections

Proto	Local Address	Foreign Address	State
TCP	127.0.0.1:49678	DESKTOP-A71ULD8:49679	Established
TCP	127.0.0.1:49679	DESKTOP-A71ULD8:49678	Established
TCP	172.16.75.28:62144	20.42.73.26:80	close-wait
TCP	172.16.75.28:62150	223.11.215.25:80	close-wait

6) nslookup www.google.com

Server: Unknown

Address: 172.16.72.1

Non-Authoritative answer

Name: www.google.com

Address: 2404:6800:4007:810:2004

142.150.163.228

7) Path Ping - g DESKTOP-A71ULD8

Tracing route to 172.16.75.28 maximum of 3 hops:

0	172.16.75.28
1	17.16.75.28

Computing statistics for 25 seconds

Source to Here This node / link

HOP RTT Lost / Sent - Pct Lost / Sent = Pct

0 Desktop
P / 100 = 0% [172.16.75.23]

1 0 / 100 = 0% 0 / 100 = 0% Desktop
VLOS
[172.16.75.23]

Trace Complete.

8) Ping www.regalabshmi.edu.in

Pinging www.regalabshmi.edu.in [162.255.119.253]

with 32 bytes of data

Reply from 162.255.119.253 bytes = 32 time
= 243 ms

TTL = 55

Reply from 162.255.119.253: bytes = 32

time = 317 ms TTL = 55

Reply from 162.255.119.253: bytes = 32

time = 254 ms TTL = 55

Ping statistics for 162.255.119.253

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)

Approximate round trip times in milliseconds

minimum = 243 ms maximum = 317 ms, Average = 269 ms

Route - Ping 157 *

Interface list

18 ---- 20 80 10 86 05 61 ... Intel (E)

Ethernet connection

I219-LM

(2) ... 4082 9979 1F 25 ... Microsoft WiFi

Direct Virtual adapter

I P U 4 Route table

Active Routes

None

Persistent Route:

None

I P U 6 Route Table

Active Route

None

Persistent Route

None

tcpdump -p

1. of 250 [up-running]
2. only, pseudo device that captures all interfaces. [up-running]
3. lo [up, running, loopback]
- 4) with 350

Ping

Usage: Ping [-aAbBd.fhLnOqR+eo

[-c count] [-I interface] [-m mode]

[-H print details - option] [-d Preload]

[-P pattern]

[-a .as] [-S packet size] [-s size] [-t ttl]

Question up Answer

Ping to find reachability

net < web address >

IP address to show IP configuration

netstat

ifconfig

net google.com

my tracert [V088]

local host . local domain (0.0.0.0) Sat Jul 11:27:36

keys: help Display Mode Restart
Statistics Order of fields quit
packets

host

1.072.16.8-1

Loss % int lost Avg Best host %

0.0% 196 03 02 0.108 0

x) ifconfig

enr250: flags = 4163 <UP, BROADCAST,

RUNNING, MULTICAST> MTU 1500

inet 172.16.8.102 netmask 255.255.255.0
broadcast 172.16.8.255

inet 172.16.8.102 netmask 255.255.255.0
broadcast 172.16.8.255
preference 64 Scope 0x20 link

Result:

Thus the study of various
network commands used in Linux
and windows is successful