

Ex. No.
Date: 16/7/24

Commands

Aim:

To study the various network commands used in Linux & Windows.

(i) `arp -a`

(172.16.9.23) at 7c:57:38:35:00:31

[ether] on emp250

gateway (172.16.8.1) at 7c:5a:1c:54:bc:45 [ether] on emp250

(172.16.10.60) at d3:bb:c1:c5:ca:34 [ether]
On emp250

(ii) `hostname`

localhost.localdomain

(iii) `netstat`

Active internet connections (w/o servers)

Proto	Recv-Q	Send-Q	Local addr	Foreign addr	State
tcp	0	0	127.0.0.1:6027		Desktop ATERDUB
tcp	0	0	127.0.0.1:6028		Desktop ATERDUB

(iv) ~~ipconfig~~ /all

Windows IP configuration

HOSTNAME DESKTOP-ATERDUB

v) nbtstat -a

Displays protocol statistics a current TCP/IP connection using NBT

NBTSTAT [-a Remote Name] [-A] IP address]
[-c] [-A] [-r] [-R] [-RR] [-s] [-S] [interval]

vi) nslookup www.vajalabshmi.org

default server: unknown

address: 172.16.8.1

Non-authoritative answer:

Name: www.vajalabshmi.org

Address: 14.99.10.232

vii) pathping

usage: pathping [-g host-list] [-h maximum

host]

[-i address] [-n] [-p period]

[-q num-queries] [-w timeout]

[-u] [-b] target-name

viii) ping www.vajalabshmi.org

Ping ww.vajalabshmi.org [14.99.10.232]

with byte of data

Reply from 14.99.10.232: bytes = 32 time < 1ms
TTL = 125

Reply from 14.99.10.232: bytes = 32 time = 9 ms TTL = 125

ix) ~~erase~~

manipulate network routing tables

ROUTE [-f] [-p] [-u] [-b] Command [destination]
[MASK] netmask [gateway] [metric metric]
[if interface]

x) ip

Usage: ip [options] OBJECT { command | help }

ip [-force] -batch filename

where OBJECT := { link | address | addrlabel | route |

route | height | table | tunnel |

tun tap | macaddress | macrule | macrule |

monitor | xfrm | netns | stp |

for | massec | top-rules | token |

netconf | i | u | v | s }

~~(xi) ipconfig~~

emp 250 - flags = 41632 UP, BROADCAST,

RUNNING, MULTICASTS mtu 1500

net 172.16.8.102 network 225.225.252.0
broadcast 172.16.11.255

unit b f e 80 : : 27 db: aa 04: 85 43: 53 54
prefix den b4 scope id 0x202 denb)

xii) on the google.com

my trace route [v0.8+]

localhost . local domain (0.0.0.0) set

Jul 11 : 27:36 ;

keys : help Display Mode Restart statistics on,
of fields just

host	Loss %	Packets	PMAP
1.172.16.8.1	0.0%	Snt Rcv	Seq Len
		146 0.5	0.2 0.1

host	Stdev
0.8	0.1

tcpdump -D

1) enp 250 [up - running]

2) any (Pseudo : device that captures on all
interfaces [up - running])

3) lo (up, running, loopback)

4) wtp 3 30

ping :

Usage : ping [-aAbBdDfHhLnOqVRUx
v64] [-c count] [-i interval]
[-I interface] [-m mask]
[-M pmtdisc - option] [-d prebad]
[-p pattern] [-q los] [-s packetize] [-s sndy]
[-t ttl]

Question & Answer

- 1) ping to find reachability
- 2) enter <web address>
- 3) ip address to show IP configuration
- 4) 'netstat'
- 5) 'ifconfig'

Result:

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Thus the various networking command used
in linux & windows are studied

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