

Ex. NO.: 1

9/7/25

BASIC COMMANDS IN WINDOWS/LINUX OPERATING SYSTEM.

Aim:

To study the various network command used in windows operating system.

Commands:

1. arp -a

arp (address resolution Protocol) will shows the IP address of device along with the mac address.

O/P : Interface - 172.16.50.231 --- 0x8

Internet Address	Physical Address	Type
172.16.50.1	7c-5a-1c-cf-be-3e	dynamic
172.16.50.7	3c-52-91-10-55-47	dynamic

2. HostName

hostname is used to display the names of the devices

O/P : DESKTOP - 27MC9V2

3. ipconfig:

ipconfig display the configuration of TCP / IP connection .

O/P : Windows IP configuration
Ethernet Adapter Ethernet

connection specific DNS suffix :

~~IPV4 Address 172.16.50.231~~
~~Subnet Mask 255.255.255.0~~

4. nslookup

~~nsloop (name server lookup) used for
DNS lookup.~~

O/P: Default server : unknown

Address : 172.16.50.1

> google.com

Server : unknown

Address : 172.16.50.1

Non-authorised answer

Name : google.com

Address : 2404:6800:4001:815:2009

142.250.183.174

6. Pathping :

Pathping is basically used for network troubleshoot that completes the function of ping / tracert. It gives the report of each router.

O/P : Usage: pathping [-ghost-list] [-h maximum-hops]
[-4] [-6] target-name.

7. Ping :

Ping (Packet Internet Grouper) used to test the connectivity between two node.

O/P:

> ping google.com

ping attribute for 142.250.183.174

packets : sent = 4, received = 4, lost = 0 (0% loss)

Approximate round trip times in milli-seconds

Minimum = 3ms, Max = 4ms, average = 3ms.

8. Route Print - 4

Route is used to display the IP-routing table its like a roadmap to define the IP range, destination, netmask, gateway.

O/P : IPV4 Route table

Active route

Network	Destination	Gateway Addressing on-link	Metric
127.0.0.0	255.0.0.0		127.0.0.1

Persistent Route

Network Address	Netmask	Gateway Address	Metric
0.0.0.0	0.0.0.0	192.168.0.1	Default

Result

Thus the basic command in windows/linux operating system was studied.