Let’s continue with some more commands

ARP

ARP stands for Address Resolution Protocol. Arp, command displays and manipulates the System’s ARP cache. It also allows a complete dump of the ARP cache.

For using this arp command to display all the IP and MAC pairs for all the interfaces.

Use the command “arp –a” .

For Deleting all the entries from the ARP table.

Use the command arp- d to flush out all the entries from the ARP table.

Using arp command in Linux

In Linux there are some more options available.

arp -v

This option shows the verbose information.

arp -n

This option shows numerical addresses instead of symbolic host, port, or usernames.

The next command is NETSTAT

The netstat command displays the network status and status of TCP and UDP endpoints in the table format.

Run the netstat command with the o option to show all active TCP connections

Netstat -o

To see the connected computers in FQDN format instead of a simple IP address, use the -f option.

netstat -f

Show Protocol-Specific Stats: To display the stats of a specific protocol such as the TCP use -p option.

netstat -p tcp

Show ethernet network statistics:

Ethernet network statistics can be displayed using the -e option of the netstat command.

Displaying kernel routing table

Using the netstat command with the -r option lists the kernel routing information in the same way as with the route command.

netstat -r

Displaying all the ports related to tcp connections

To display the ports/protocols associated with the connections, the -o option is used.

netstat -o

To display the ports, associated with the application layer protocols, use the -n option, along with option -o.

netstat -on

To display the executable involved in creating each connection or listening port, the -b option may be used. this option requires admin privileges.

netstat -b

Netstat command in Linux

Sixth command is nslookup which stands for name server lookup this command is used to perform DNS queries and receive: domain names or IP addresses, or any other specific DNS Records. To use the Windows version of nslookup, open Command Prompt and type nslookup to get a result similar to this one with your network's DNS server and your computer's IP address:

It can display the results related to your name server, mail server, or any other website.

So Getting name server information.

Type nslookup into Command Prompt:

It will prompt you to enter some information.

>set type=ns

An authoritative address lookup can also be performed by specifying one of the domain's registered nameservers. Nslookup then uses that server instead of the default DNS server information of the local system.

Getting mail server information.

type C:\>nslookup in command prompt

for Mail Server Lookup type

set type=mx

here we use domain as cdac.in

> cdac.in

Getting details of any external website.

nslookup can also provide the IP addresses of an external domain name by querying the dns server.

Type the domain name as argument for getting the result of a desired website.

nslookup <domain name>

next command is hostname

hostname command in Linus and windows machines is used to display the hostname of the computer or to change it.

For Displaying the Hostname

Use the hostname command without any additional options which displays the computer's hostname.

For changing Hostname Permanently

User can use the hostnamectl command to permanently change the hostname:

The command is sudo hostnamectl set-hostname [new hostname]

Here we use cdac1

The 8th networking command is pathping

Pathping is one of the best network troubleshooting tools that are available with Windows. It provides information about network latency and network loss at intermediate hops between a source and a destination. This command sends multiple Echo Request messages to each router between a source and destination, over a period of time, and then computes results based on the packets returned from each router. Because this command displays the degree of packet loss at any given router or link, you can determine which routers or subnets might be having network problems.

The command is pathping 172.31.103.2(with respective IP address)

Next command is Net command

NET command is used to see the network statistics. There are various options may be used to display different outcomes.

Using the net command with accounts option displays the network statistics of your computer.

The command is net accounts.

Thank You!