Cycle 2

/ / NETWORK CONFIGURATION COMMANDS 06

AIM

To study basic network command and Network configuration commands

a. ping
b. traceroute
c. arp
d. route
e. netstat
f. About /etc folder
g. Setting up hostname/ setting local name resolution

THEORETICAL BACKGROUND

Network configuration commands delves into essential commands for network troubleshooting configuration, and management, covering fundamental tools and configuration files.

Ping

Ping is a utility that sends Internal control Menage Protocol (ICMP) ~~Request~~ Echo Request Host Menages to a destination to check network connectivity

Example command

ping <hostname or IP address>

Traceroute

Traceroute is used to trace the route that packets take to reach a destination, displaying the IP address of routers in the path.

* Example command

traceroute <hostname or IP address>

ARP (Address Resolution Protocol):

'ARP' is used to display and manipulate the ARP cache, which translates IP addresses to MAC address.

Example command:

arp -a

Route:

'route' is a command that shows and manipulates the IP routing table, allowing the configuration of static ~~routes~~ routes

Example command

route -n

2. Netstat:

'Netstat' displays network-related information such as active connections, routing tables and interface statistics

Example command

netstat -an

About/etc folder:

The '/etc' folder in Unix-like systems contain configuration files for various applications and services, providing a centralized location for system

wide configurations.

Example command

ls /etc

Setting up hostname / setting local name resolution:

'hostnamectl' is used to set the system hostname and modifying the '/etc/hosts' file allows local name resolution

Example command

hostnamectl ~~set~~ set-hostname <new-hostname>

sudo nano /etc/hosts

(Add a line like '127.0.0.1' localhost <your-hostname>)

CONCLUSION

familiarised with basic network and network configuration commands and applied them. Output received successfully.