Linux Networking Commands

1. ifconfig

- Display network interface information.

```
Ifconfig
```

2. ip

- Show/manipulate routing, devices, policy routing, and tunnels.

```
ip address show
```

3. route

- Display or manipulate the IP routing table.

```
route -n
```

4. ping

- Send ICMP ECHO_REQUEST to network hosts.

```
ping google.com
```

5. traceroute

   - Print the route packets trace to network host.

```
traceroute google.com
```

6. netstat

   - Print network connections, routing tables, interface statistics, masquerade connections, and multicast memberships.

```
netstat -an
```

7. ss

   - Display socket statistics.

```
ss -tulpn
```

8. hostname

   - Show or set the system's host name.

```
Hostname
```

9. dig

- DNS lookup utility.

```
dig google.com
```


10. nslookup

- Query Internet name servers interactively.

```
nslookup google.com
```


11. route

- Manipulate routing tables.

```
route add default gw 192.168.1.1
```


12. iptables

- Administration tool for IPv4 packet filtering and NAT.

```
iptables -L
```


13. tcpdump

- Dump traffic on a network.

```
tcpdump -i eth0
```

14. sshd

- OpenSSH daemon.

```
service sshd restart
```

15. telnet

- User interface to the TELNET protocol.

```
telnet google.com 80
```

16. scp

- Secure copy (remote file copy program).

```
scp file.txt user@remote:/path/to/destination
```

17. wget

- Non-interactive network downloader.

```
wget http://example.com/file.zip
```

18. curl

- Command line tool for transferring data with URL syntax.

```
curl http://example.com/api
```

19. iptraf

- Interactive color IP LAN monitor.

```
Iptraf
```

20. iftop

- Display bandwidth usage on an interface.

```
Iftop
```

21. nmap

- Network exploration tool and security scanner.

```
nmap -sP 192.168.1.0/24
```

22. lsof

- List open files.

```
lsof -i :80
```

23. ethtool

- Display or change ethernet card settings.

```
ethtool eth0
```

24. arp

- Display or modify the ARP cache.

```
arp -a
```

25. route

- Display or modify the IP routing table.

```
Route
```

26. ss

- Display socket statistics.

```
ss -s
```

27. hostnamectl

- Control the system hostname and related settings.

```
hostnamectl status
```

28. resolvconf

- Manage DNS information.

```
resolvconf -u
```

29. mtr

- Network diagnostic tool.

```
mtr google.com
```

30. iwconfig

- Configure a wireless network interface.

```
Iwconfig
```

31. nc

- Arbitrary TCP and UDP connections and listens.

```
nc -l 8080
```

32. scp

- Copy files between hosts on a network.

```
scp file.txt user@host:/path/to/destination
```

33. ssh-keygen

- Generate, manage, and convert authentication keys for ssh.

```
ssh-keygen -t rsa
```

34. ss

- Show socket statistics.

```
ss -t -a
```

35. tcpdump

- Capture and display packets on a network.

```
tcpdump -i eth0 tcp port 80
```

36. route

- Add a new route.

```
route add -net 192.168.2.0 netmask
255.255.255.0 gw 192.168.1.1
```

37. nmcli

- Command-line client for NetworkManager.

```
nmcli connection show
```

38. dig

- Perform DNS lookups.

```
dig +short A google.com
```

39. nload

- Visual representation of incoming and outgoing traffic.

`Nload`

40. iperf

- Tool for measuring TCP and UDP bandwidth performance.

`iperf -c server_ip`

41. fping

- Quickly ping multiple hosts.

`fping -a -g 192.168.1.1 192.168.1.254`

42. iftop

- Real-time console-based network bandwidth monitoring tool.

`iftop -n`

43. route

- Delete a route.

```
route del -net 192.168.2.0 netmask
255.255.255.0
```

44. tcpdump

- Capture and display packets in ASCII.

```
tcpdump -A -i eth0
```

45. netcat

- Utility for reading from and writing to network connections.

```
nc -zv 192.168.1.1 22
```

46. nmtui

- Text User Interface for controlling NetworkManager.

```
Nmtui
```

47. ethtool

- Change the speed/duplex settings of an Ethernet device.

```
ethtool -s eth0 speed 100 duplex full
```

48. ss

- Show listening sockets.

```
ss -l
```

49. host

- DNS lookup utility.

```
host google.com
```

50. nmcli

- List available Wi-Fi networks.

```
nmcli device wifi list
```