ls -l

owner group.

drwxrwxrwx 1 root root file1

u g o

linknumber

chmod 777 file_name

r-4
w-2
x-1

671

rw_ rwx _ _ x

r: → Primary group

chmod 671 file1

chown — change owner & group

chown owner name or uId : group name or gID file1 {file2 ...}

chown chinnu file1

change owner username

drw _ rwx _ _ x 1 chinnu root file1

change group

chown :chinnu file1

groupname

change both ownername & groupname

chown username:groupname file1

umask — number (0 000)

stickybit u g o

special permissions

to see umask permissions

umask

root — 0

system user - 1 - 200

system Process users - 201 - 999

100 — ∞ → Normal users.

umask directory (777) → full permissions

files (666) → full permission

no execute permission
If we get execut we will
increase 1 permission

000 rwx	--x	001	1
	-w-	010	2
	-wx	011	3
	r--	100	4
	r-x	101	5
	rw-	110	6
	rwx	111	7

umask 537

directory 777 - 537 = 240 → -w-r-----

files 666 - 537 = 126 → 9 → modified

setfacl → set special user or group permission
getfacl → see the permissions

setfacl -m u:username:rw filename
-m g:groupname:rwx filename

systemctl

- status
- start
- stop
- restart
- reload
- enable
- disable
- mask / unmask
- is-active
- is-failed
- is-enabled

service name

Services
↓
rsyslog
sshd
httpd

systemctl list-units
- --type = service
- = socket
- = path
- = service -all
- = socket -all
- = path -all

list-unit-files --type =
list-dependencies servicename.

ssh → connect
ssh-keygen → key generator
ssh-agent → Non password atendication
ssh-copy-id → cop id

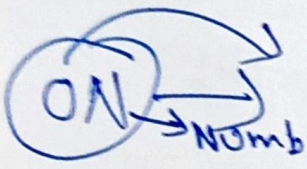
~/.ssh/ Kdc
id_rsa.pub

journalctl & journalctl --since "1 hour"
↓
to view journal file.
↓
Includes extra information about log events & binary file index.

/var/log/secure

Networking Interface

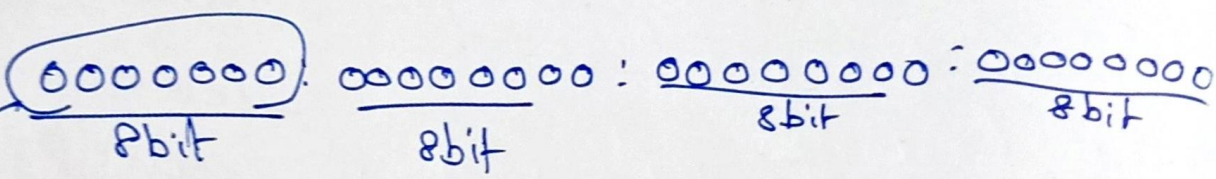
en → ethernet
wl → wlan (wireless local area network)
ww → wwam (wireless wide area network)



PN → Number.
↳ Port

SN → Number
↳ slot

IPV4 → 32 bit



0 - 255

192.168.0.1

IPV6 → 128 bit

To test the IP

Ping (IP (or) google.com)
↳ IPV4

Ping6 IP (or) google.com
↳ IPV6

Ping -c3 IP
only send 3 packets

Ping6 -c3 IP

→ To see the list of interfaces available on your system

ip link show

→ To see about particular interface

ip link show interface_name

→ To see the interface stastatics

IP -s link show

→ To see the interface stastics about particular interface

ip -s link show interface_name.

→ To see the routeing information of IPV4

ip route

→ To see the routeing information of IPV6

ip -6 route

→ To trace the route where our system signal go while contacting particular webpage

Tracepath google.com → IPV4

Tracepath6 google.com → IPV6

nmcli → Network Manager command line & Interface.

nmcli → creat connection
modify "
delete "
up "
down "

| type ethernet
| ifname enp0s3
| device name

nmcli con add con-name connection_name
mod connection_name
del
up
down

Note: while adding the connection you need connection_name, type, ifnam (ifname) enp0s3
device
type → ethernet
enp0s3 → en p0 port 0 etc

→ to display all the network devices status
enp0s3 Interface (ifname)
enp0s3
↓
→ To display all the connection name
nmcli con show
nmcli connection show

To see the connections which are active

nmcli con show --active
nmcli connection show --active

nmcli connection show connection-name
nmcli con show connection-name

---

ipv4.addresses ipaddress/...
ipv4.gateway gateway-number
ipv4.dns dns_number
↳ nameserver

ipv4.method auto → autostart at time of system start
manual → manually start

+ipv4.addresses ipaddress/...
add second ipaddress

↓
ipv6..

→ all the connection will store at
/etc/sysconfig/network-scripts/

ifcfg-K20pg

→ To see disconnected devices
nmcli dev dis (device name)

delete the network connection

nmcli con del k20pg

To make connection active

nmcli con up k20pg

To disconnect the network connection.

nmcli con dis k20ng

type ethernet ifname enp0s

nmcli con add con-name k20pg ifname.

address 192.168.9.4/24 ipv4.gateway 192.168.0.1

~~ipv4.method auto~~ ipv4.~~method~~ dns 192.168.0.1

ipv4.method auto.

~~nmcli con~~

→ To see the ip address of particular connect

~~nmcli~~ ip addr show ~~dev~~ device_name

nmcli con reload

tarfiles

tar → achive

tar option tarfilename.tar

files you want to make

-cf -create

-xf - extract

-tf → list

-rf - append → Imp

-pf → to save the permissions

-czf

-cjf

-cJf

gzip conversion (-tar.gz)

bzip bett compression than (.tar.bz2)

- xz compression (tar.xz)

gzip