

Networking, Linux Kernel and Linux BootingNetwork commands:

ipconfig  
ifconfig  
ip a  
ip r

} to the IP address

hostname  
host ipaddress  
nslookup ipaddress or  
nslookup hostname

} to check Domain name (DNS)

→ also "dig hostname"

→ /etc/hosts

APT:

→ Advanced packaging tool

→ yum (yellow dog updater modifier)

apt install `httpd` <package-name>

apt remove <package-name>

[∴ to remove package]

apt update

apt-cache search <package-name>

[∴ to get cache information about the package]

apt purge <package-name>

[∴ to remove packages along with configuration files]

apt clean <package-name>

[∴ to remove all the cached package]

apt list <package-name>

[∴ to get the detailed architecture]

### Linux kernel:

→ Android smartphones

→ ATM machine

→ GNU/Linux OS like ubuntu or fedora

→ Modern Internet

## kernel versions:

- \* `uname` or `uname -s` (to get the kernel)
- \* `uname -r` (to get the kernel version)
- \* `uname -n` (to get the host name)
- \* `uname -m` `uname -p` `uname -i` (to get the machine)
- \* `uname -a` (to get all the details)

## Linux Booting:

- \* BIOS - Basic Input/output System
- \* MBR - Master Boot Record execute GRUB
- \* GRUB - Grand unified Bootloader executes kernel
- \* kernel - kernel executes `/sbin/init`
- \* init - init executes runlevel programs
- \* Runlevel - Runlevel programs are executed from `/etc/rc.d` `/rc*.d/`

## 110 - Linux loader

init:

- 0 - Halt (shutdown)
- 1 - Single-user mode
- 2 - Multi-user mode without networking
- 3 - Multi-user mode with networking
- 4 - Customizable (undefined by default)
- 5 - Graphical Mode (GUI)
- 6 - Reboot the system

python -m speedtest → personal

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