

# COSA

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- ☐ What is Server?
- ☐ Booting Process
- ☐ What is OS?
- ☐ Why we use Server OS?
- ☐ How to format a Windows Machine
  - ☐ Windows 11 Installation
  - ☐ Disk Management
- ☐ What is Virtualization? and Types of Virtualization
- ☐ Installation of Virtualbox
- ☐ Windows Server Installation
  - ☐ Windows Server 2025 - Datacenter (Desktop Experience)
- ☐ Networking
  - ☐ Five Elements of Communication
- ☐ IPv4 Addressing
  - ☐ Classes of IPv4
  - ☐ Static IP and Dynamic IP
  - ☐ Private Network and Public Network
  - ☐ Public Network, Private Network
  - ☐ Private Network IP Range
  - ☐ APIPA
  - ☐ Loopback
  - ☐ What is netmask?
  - ☐ What is Gateway?
  - ☐ What is DNS Server?

- ☐ Purpose of netmask, Gateway and DNS Server is
- ☐ Network Address Translation (NAT)
- ☐ Classful and classless
- ☐ Networking Commands
  - ☐ ping
- ☐ Linux History
- ☐ Linux Distributions
- ☐ Package Manager (apt)
- ☐ Service Manager (systemctl)
- ☐ Virtualbox Adapters
  - ☐ Bridge
  - ☐ NAT
  - ☐ NAT Network
  - ☐ Internal
  - ☐ Host Only
- ☐ How to import Virtual Machines?
- ☐ SSH Service
- ☐ PuTTY
- ☐ Login, package manager update
- ☐ nano (editor)
- ☐ /etc/apt/sources.list
- ☐ Commands
  - ☐ whoami
  - ☐ pwd
  - ☐ hostname
  - ☐ clear
  - ☐ history

- ☐ su
- ☐ exit
- ☐ man
- ☐ whatis
- ☐ ip a
- ☐ ls
- ☐ cat
- ☐ tac
- ☐ head
- ☐ tail
- ☐ wc
- ☐ poweroff
- ☐ reboot
- ☐ # - One line comment
- ☐ cd
- ☐ which
- ☐ mkdir
- ☐ rm
- ☐ rmdir
- ☐ curl
- ☐ echo
- ☐ chmod
- ☐ chown
- ☐ chgrp
- ☐ adduser
- ☐ deluser
- ☐ usermod
- ☐ addgroup

- ☐ delgroup
- ☐ links
- ☐ curl
- ☐ cp
- ☐ mv
- ☐ sudo
- ☐ members
- ☐ passwd
- ☐ Network Configuration in Linux
  - ☐ /etc/network/interfaces
  - ☐ How to assign static and dynamic IP address
    - ☐ auto
    - ☐ allow-hotplug
- ☐ FHS (Filesystem Hierarchy Standard)
- ☐ Absolute Path & Relative Path
- ☐ cd .
- ☐ cd ..
- ☐ cd ~
- ☐ \$, # -> Terminal
- ☐ cd -
- ☐ Apache2
- ☐ What is sudo? Why we use sudo?
  - ☐ sudoers file
  - ☐ sudo group
- ☐ File Permission
  - ☐ What is file permission?
  - ☐ How we can change the file permission?

- ☐ Change File owner, Change File group
- ☐ User & Group Management
  - ☐ /etc/group
  - ☐ /etc/passwd
  - ☐ Primary Group and Secondary Group
  - ☐ How to add, delete, modify Users and groups?
  - ☐ How to modify existing user
    - ☐ shell
    - ☐ primary group
    - ☐ Append into secondary group
    - ☐ Login Name
- ☐ DHCP Server in Linux
- ☐ How to change root password in Linux (if you have forgot the root password through GRUB)
- ☐ Output Redirection [ > , >>]