

Ubuntu Installation

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- Agenda
 - Hardware config
 - Pre-requisites
 - BIOS settings
 - Booting options in BIOS
 - Partitioning
 - MBR Partitioning
 - GPT Partitioning
 - Ubuntu Installation steps
 - Software Installation

Min Hardware config

- Core-i3
- 8 GB RAM
- Windows: 100 GB
- Ubuntu: 100 GB
- On-board Graphics card

Pre-requisites

- 100 GB reserved partition/drive
- Ideally last partition
- Disk layout should be Basic (not Dynamic)

BIOS settings

- UEFI or Legacy (BIOS)
- Secure Boot
- Booting sequence
- Select Boot device (F12)

MBR Partitioning

- Max disk size 2 TB
- Max 4 partitions - "Primary".
- One of the partition can be "Extended".
 - It contain multiple "Logical" partitions.

GPT Partitioning

- Max disk size 8 ZB
- Max 128 Primary partitions

ESP

- UEFI + GPT

Ubuntu Software Installation

- Lot of software -- Available online.
 - Need internet connection
 - Ubuntu repo are configured in `/etc/apt/sources.list`
- Ubuntu software installer -- "apt" or "apt-get"
 - Open terminal
 - `sudo apt-get update`
 - `sudo apt-get install vim gcc g++ vlc openjdk-8-jdk`
- At Sunbeam, created a custom local repository -- subuntu.

Windows

```
This PC
|- C:
    |- Windows
        |- System files & programs
    |- Program Files
        |- Installed programs
    |- Users
        |- administrator
        |- Nilesh
            |- Documents
            |- Downloads
            |- Pictures
            |- Music
            |- ...
|- D:
|- E:
```

Linux

```
/ (root)
|- bin -- user programs
|- sbin -- system (super-user) programs
|- lib -- libraries (.so & .ko)
|- boot -- kernel (vmlinuz), bootloader (grub), ...
|- usr -- installed programs
|- var -- system logs, ...
|- opt
|- home -- user home directories
    |- nilesh -- nilesh's home directory
        |- Documents
        |- Downloads
        |- Pictures
        |- Music
        |- ...
|- root -- superuser's home directory
|- dev --
|- sys --
|- proc --
|- etc -- config files, ...
|- tmp -- temp files
```