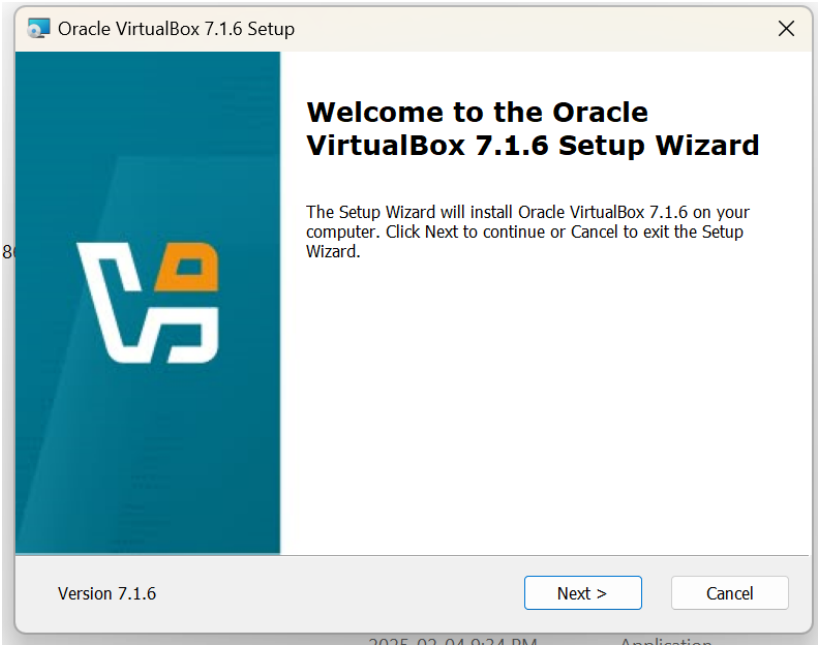
Virtual Machines Setup

1. Installing VirtualBox and Windows 10 virtual machine

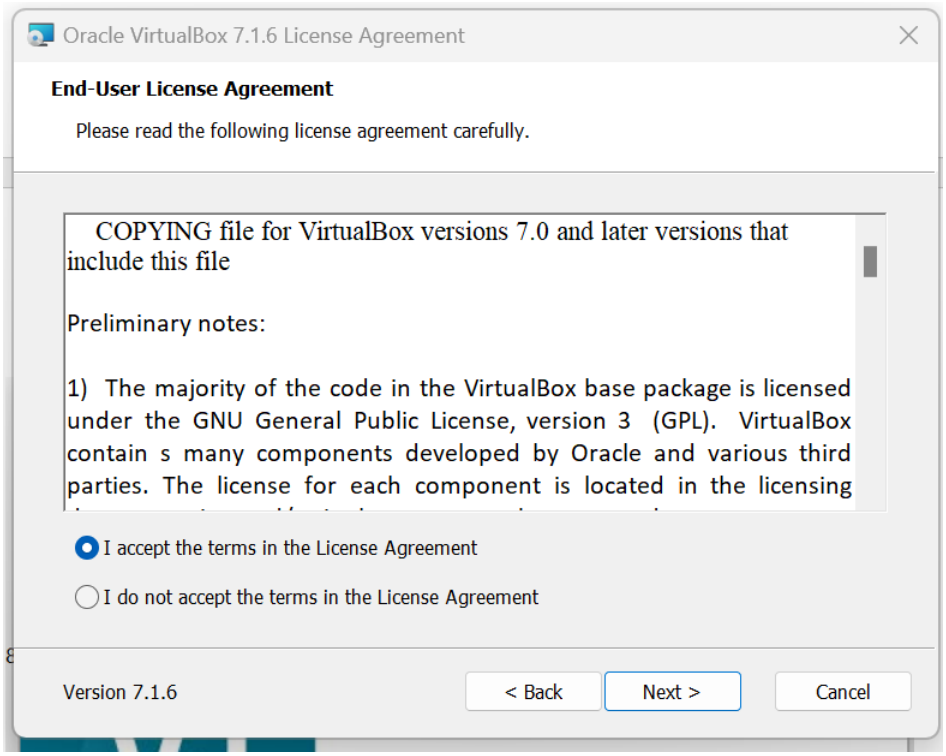
- Naivagte to VirtualBox.org website - https://www.virtualbox.org/wiki/Downloads.

- After Downloading the Windows hosts, It will show a win file. Click on it and you will see a prompt to make changes on your device.

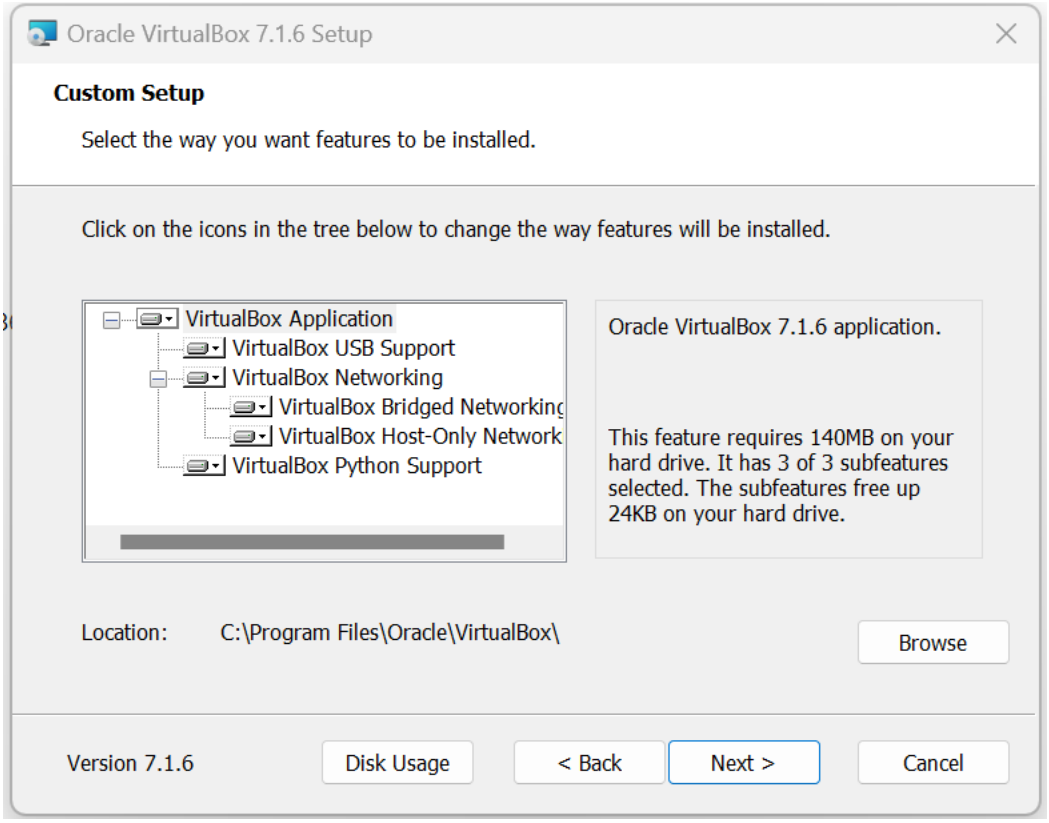
- Setup screen will be shown click Next as shown in below snapshot.



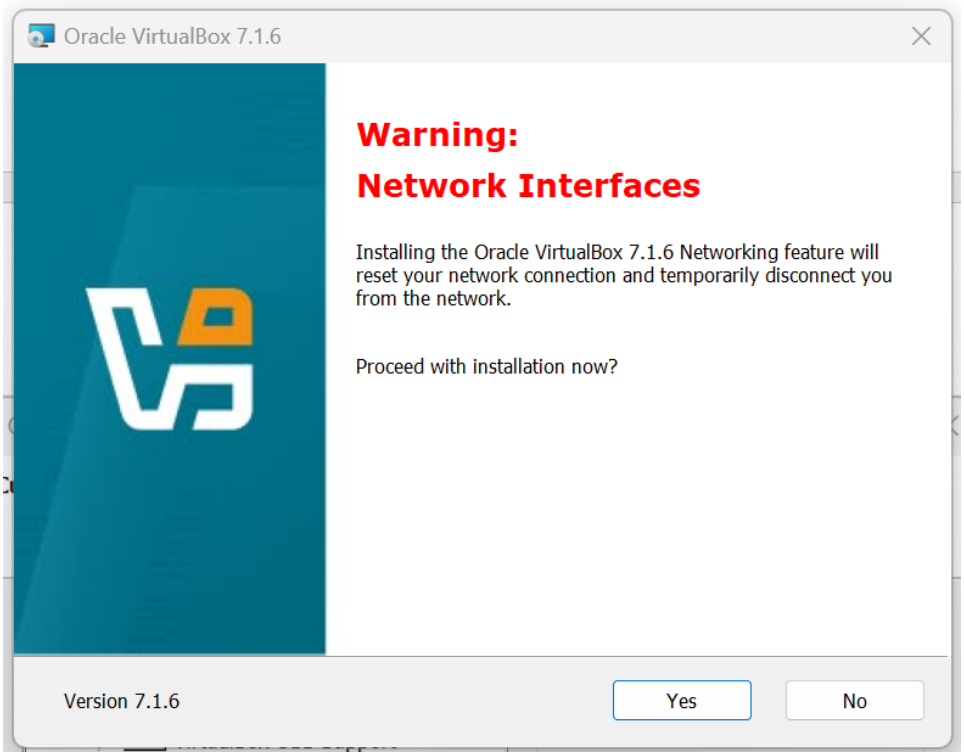
- In the Agree the License agreement screen, Click Next.

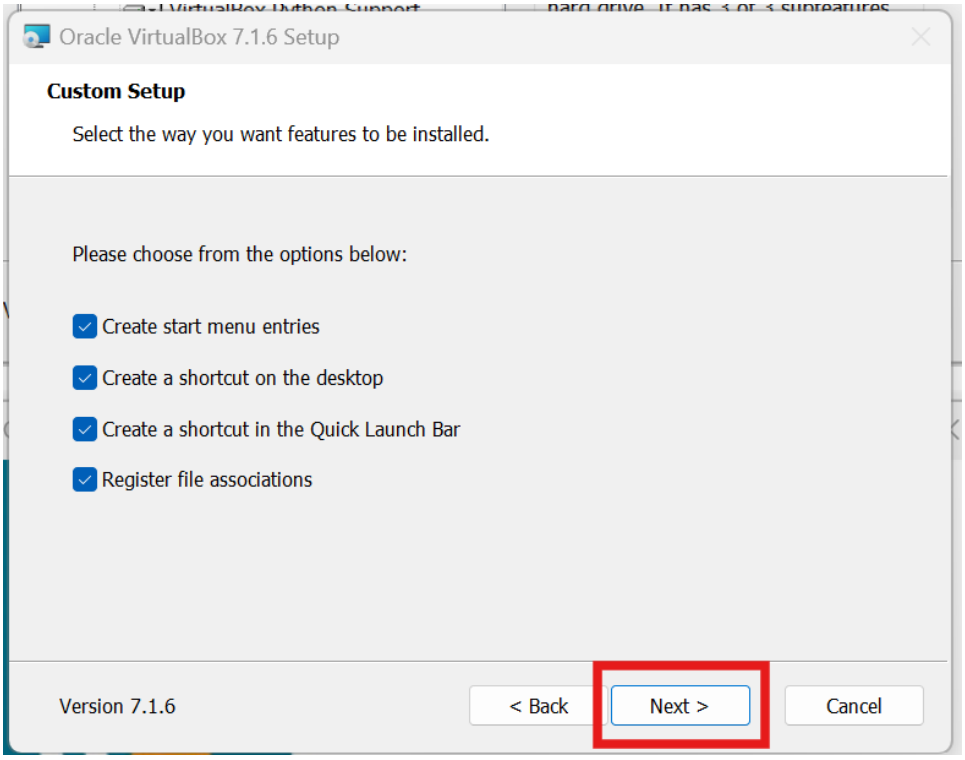


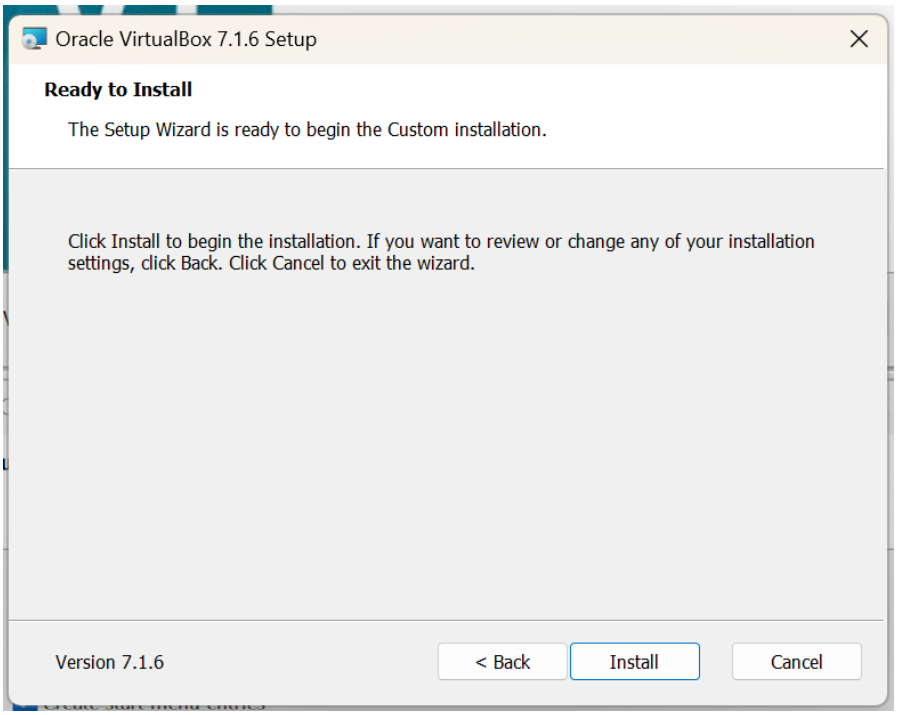
- In the custom setup click next.



- Click Next and Finish the installation →VirtualBox setup will be installed successfully.



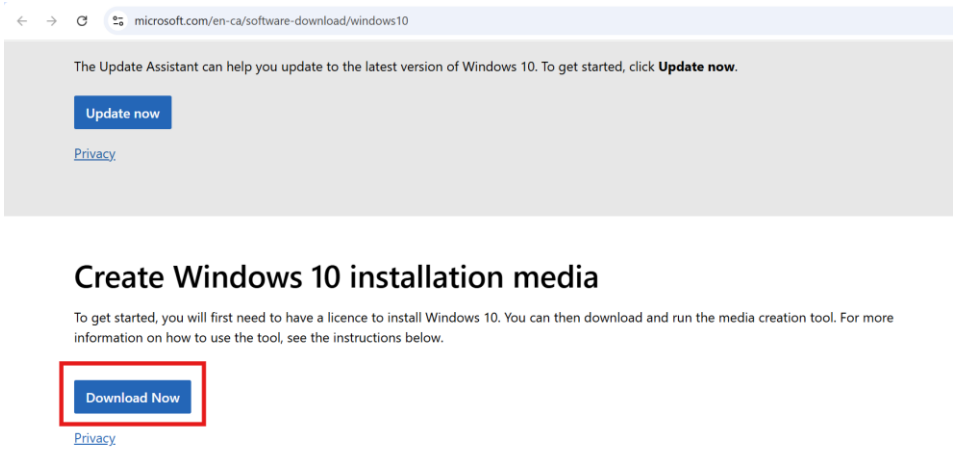




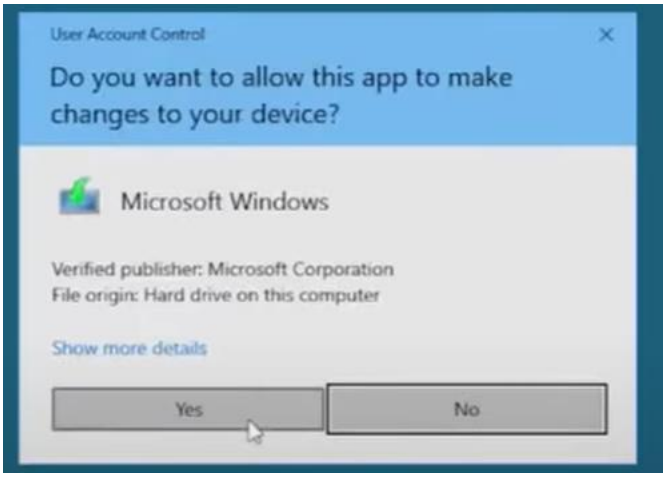
- VirtualBox will be installed successfully.

2. Installing Windows 10 Machine

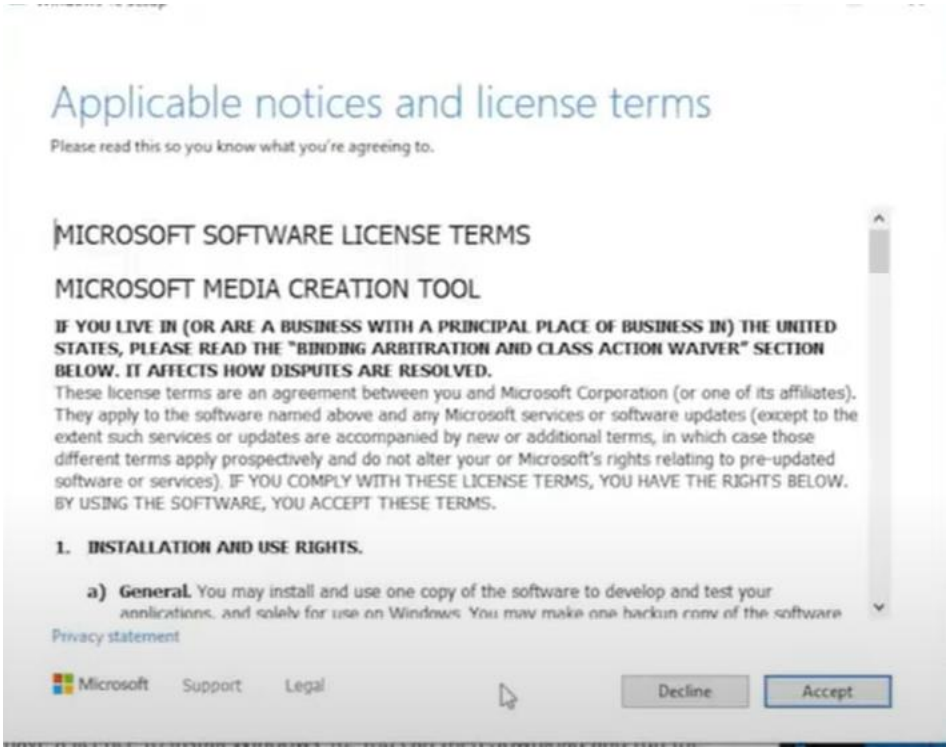
- Naivagate to (https://www.microsoft.com/en-ca/software-download/windows10) Windows 10 website.
- Click Download Now.



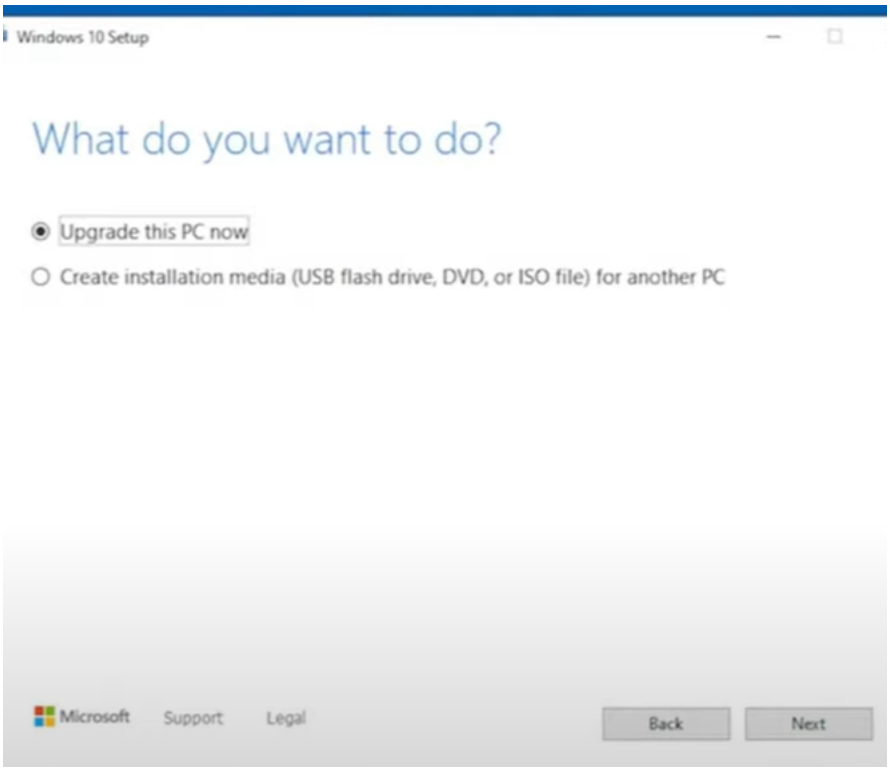
- Double click to open the downloaded file name: MediaCreationTool_22H2. Click yes when prompted the below dialog box.



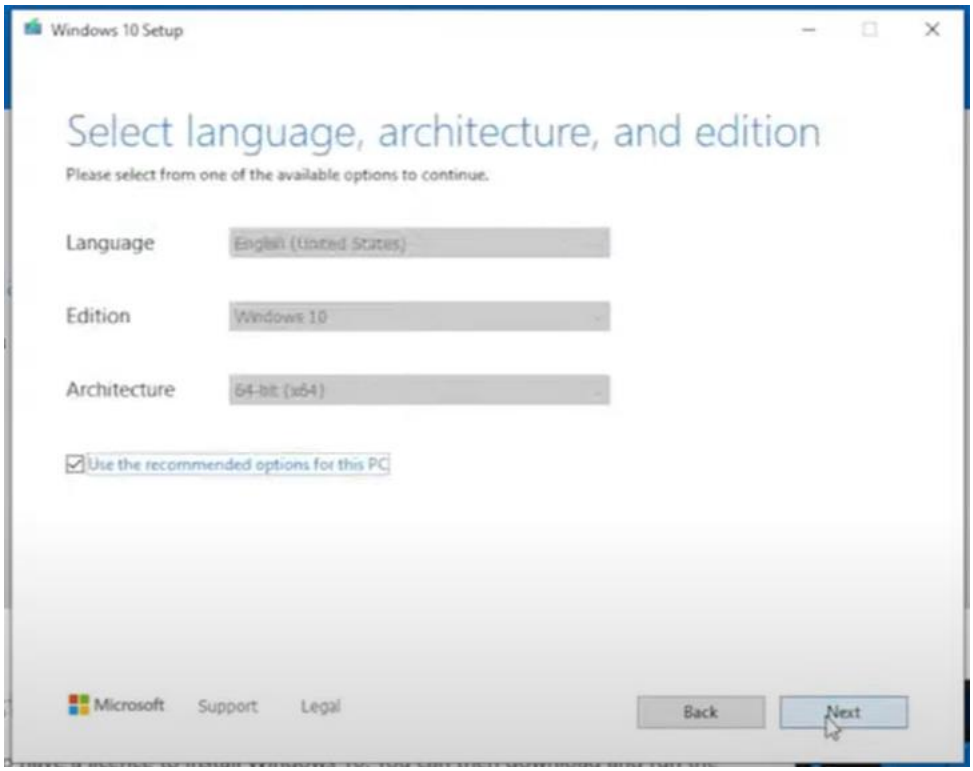
- Click on Accept term in Applicable notices and license terms.



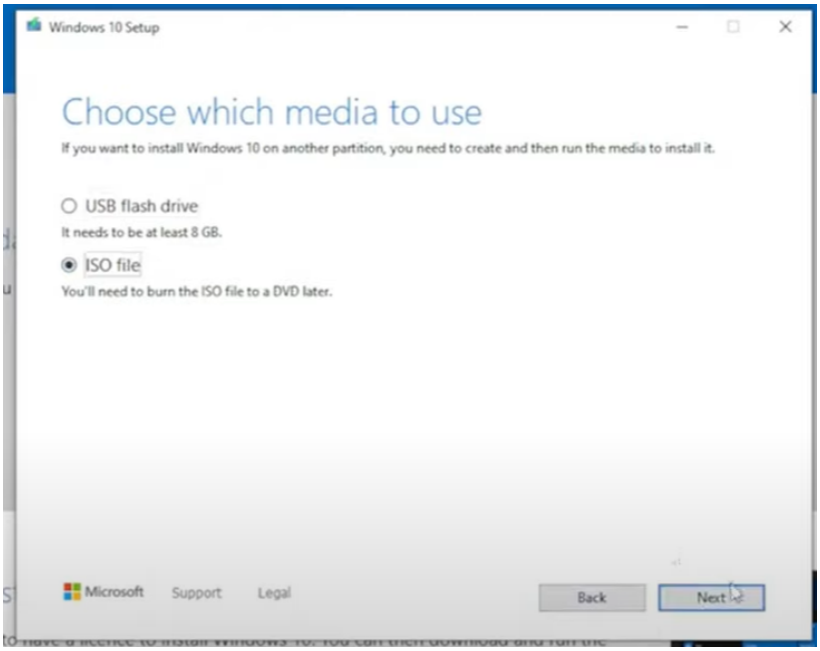
- In below wizard in What do you want to do click on create installation media.



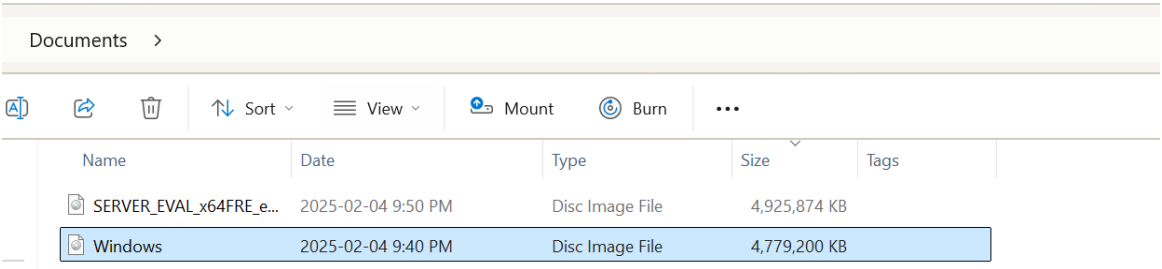
- In select language click next.



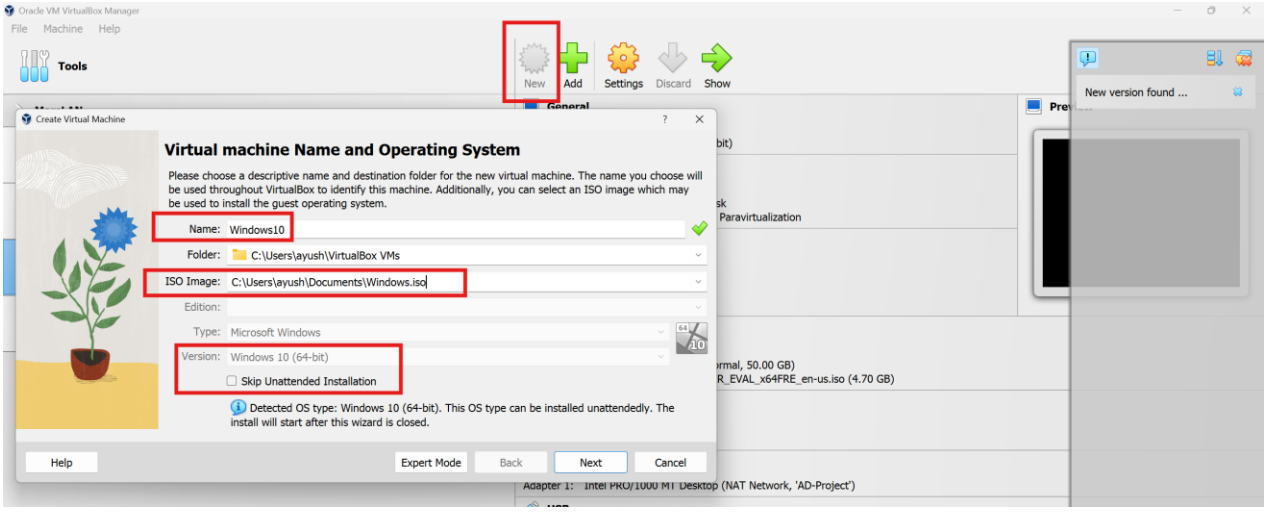
- Select the iso file in choose which media to use screen as shown below.



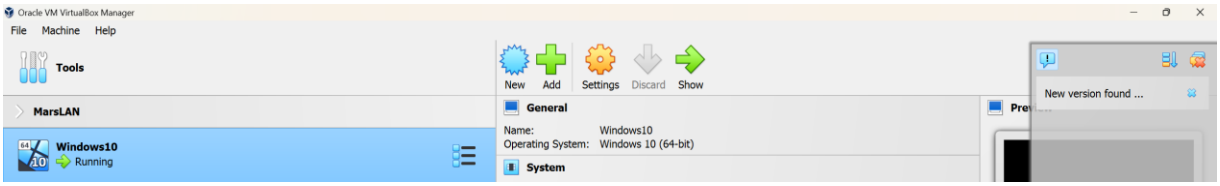
- Iso image would be downloaded as Windows as shown in below snippet as Disc image file.



- Click on New in VirtualBox → Give name as Windows10 → Select the ISO image downloaded → Select the skip unattended installation.

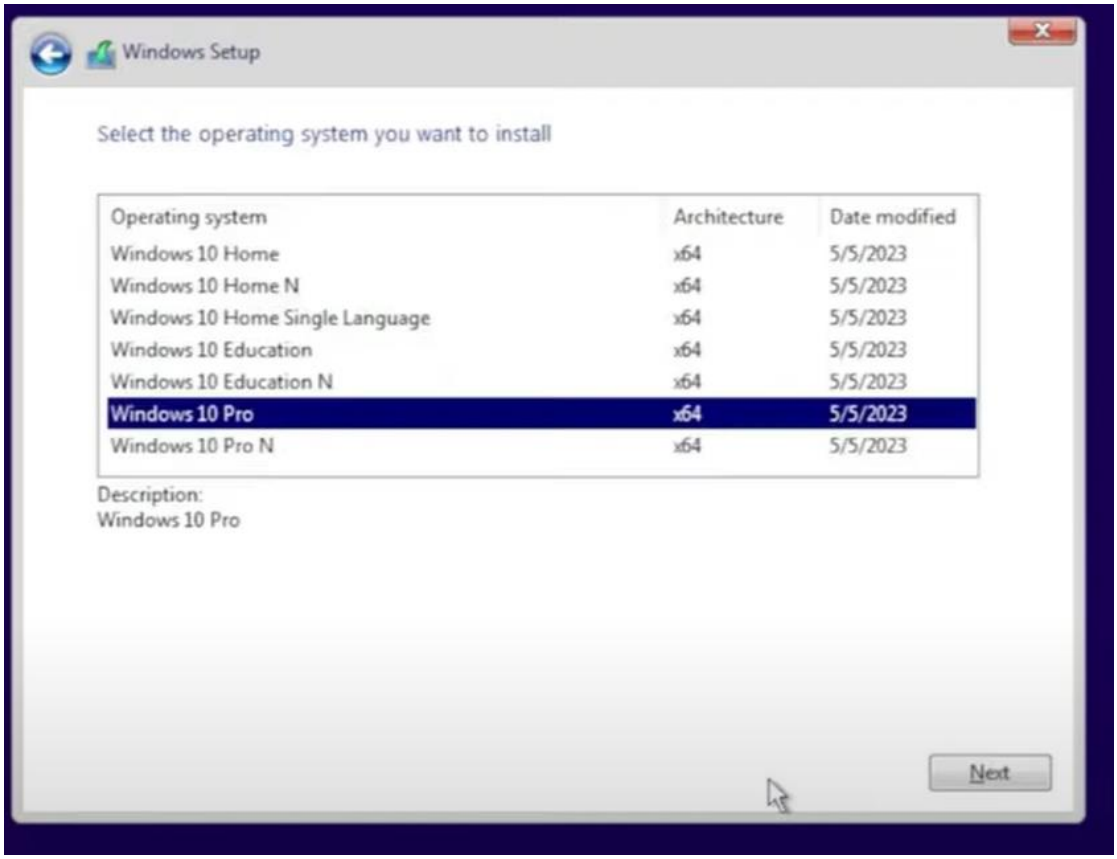


- Next screen will be shown of Hardware and and Virtual Hard Disk which vary according to machine. Provide details or leave as it is and click next.
- Windows 10 machine will be shown in VirtualBox and to power it on, click Show.

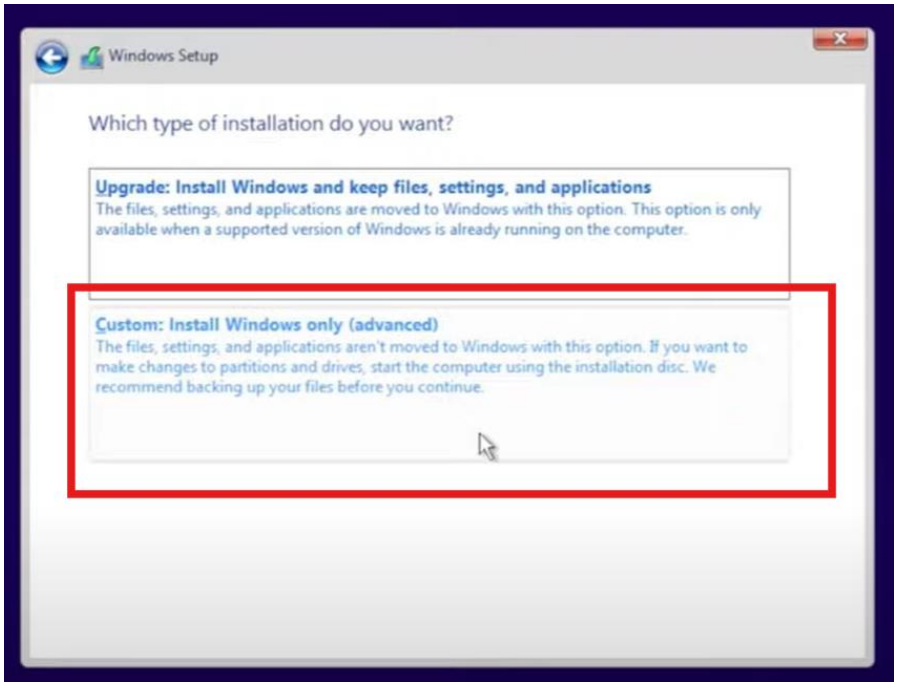


- After starting, Windows Setup screen would be shown click Next → Hit Install now → Activation windows screen shows → Click on I don't have a product key.

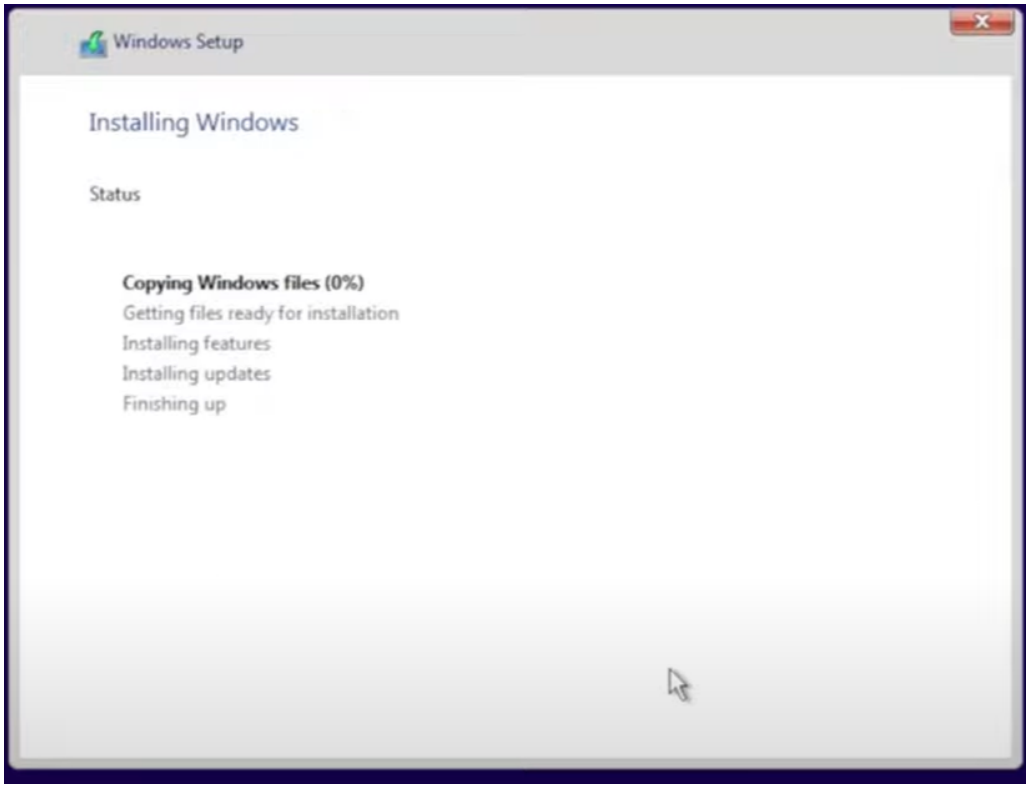
- Once you click on I don't have a product key → select operating system screen shows → select Windows 10 Pro.



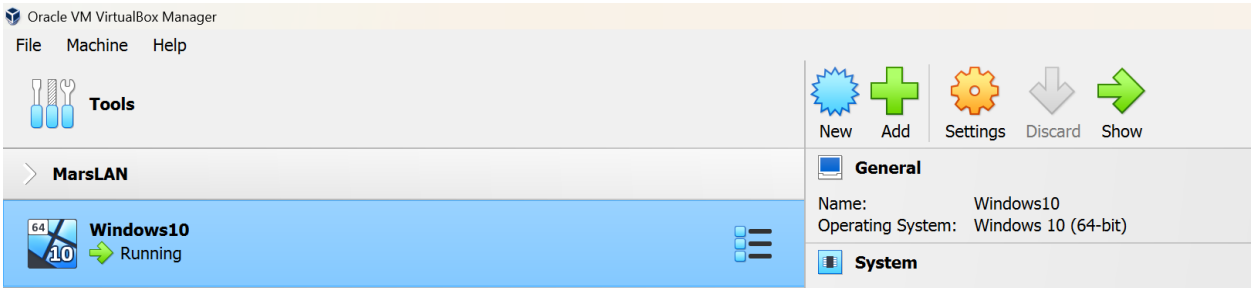
- Click Next→ click on Custom Install Windows only option.



- It will show Installing Windows as shown in below screenshot.

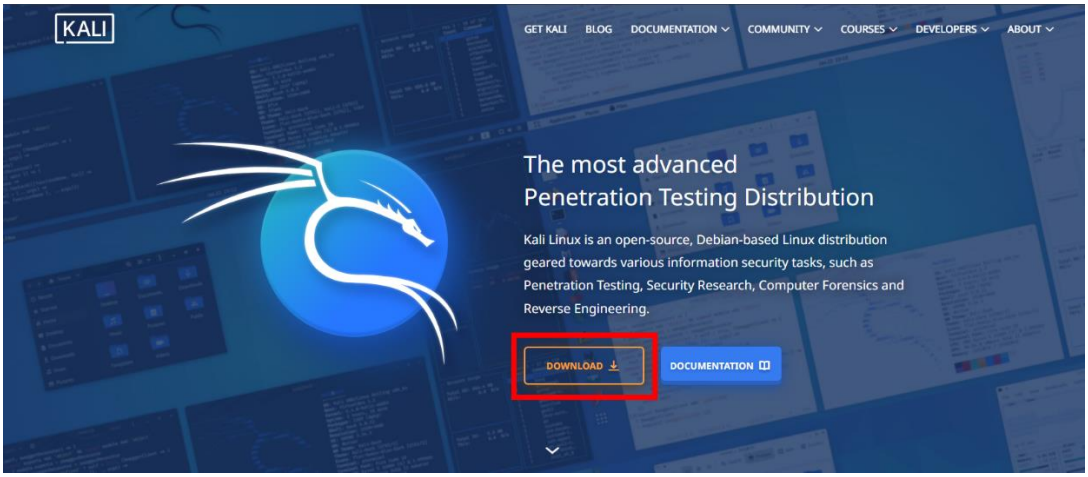


- Windows 10 is succesfully installed. To power on the machine click Show.

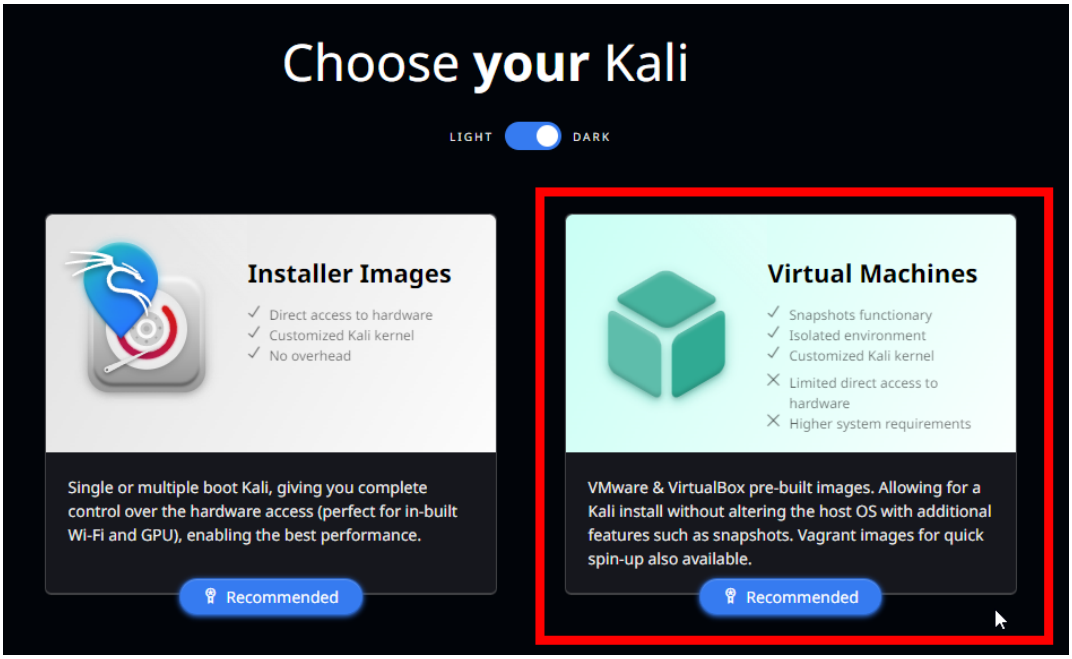


3. Installing Kali Linux

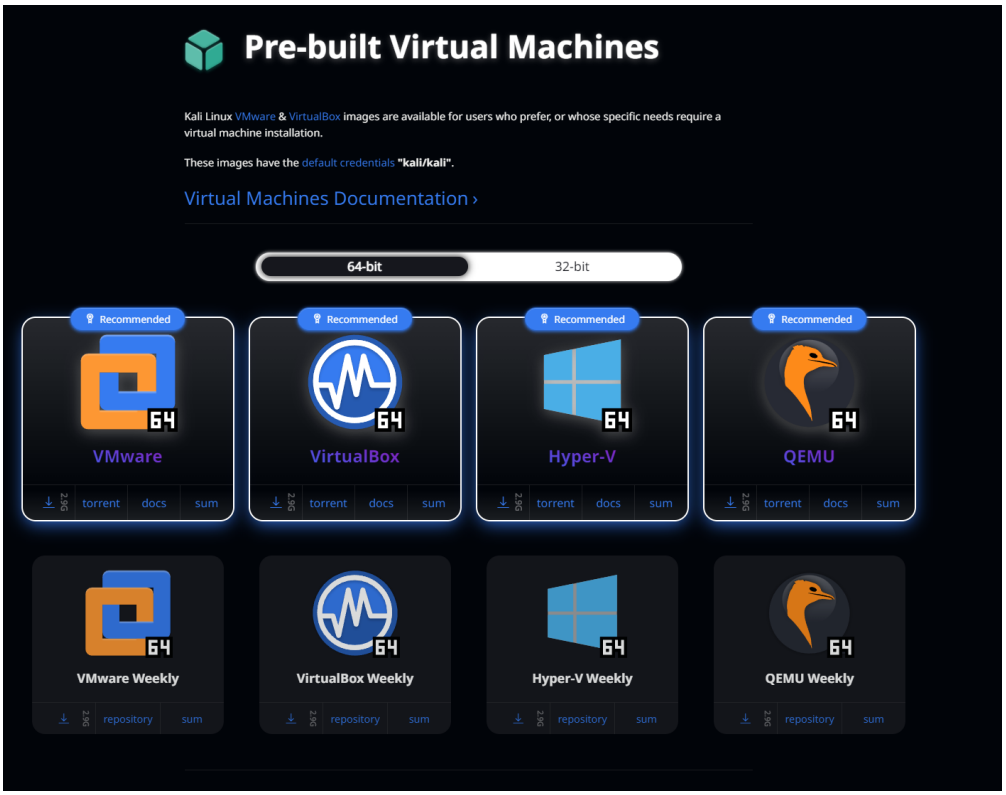
- Go to https://kali.org, and click on "Download".



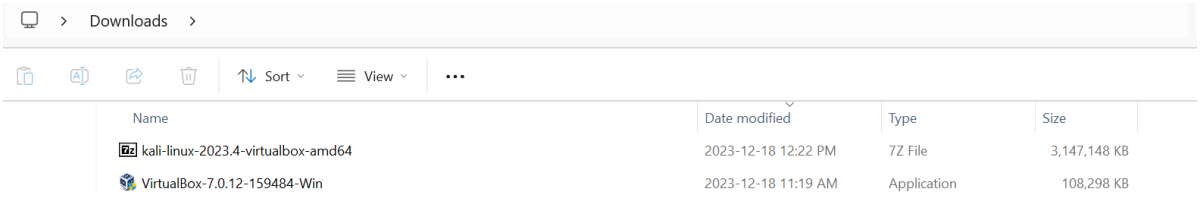
- Choose the **Virtual Machines** option.



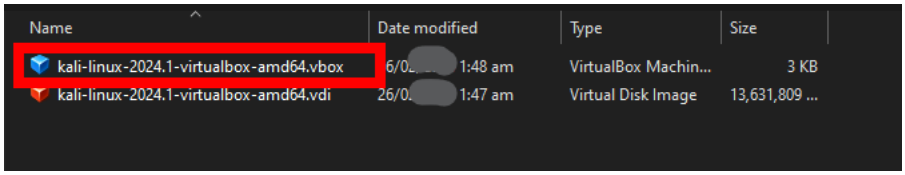
- Choose the 32-bit or 64-bit VirtualBox option, according to your PC specs.



- Extract the downloaded **kali-linux-2023.4-virtualbox-amd64** zip file.

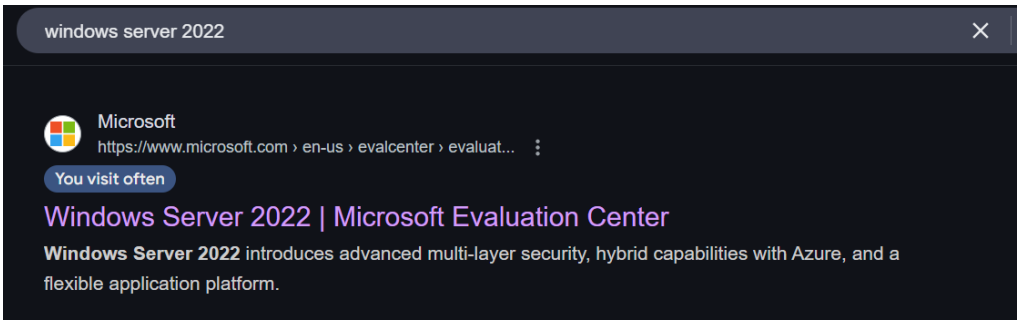


- Once you extract the download → double click the vbox file it will automatically get exported in Kali.

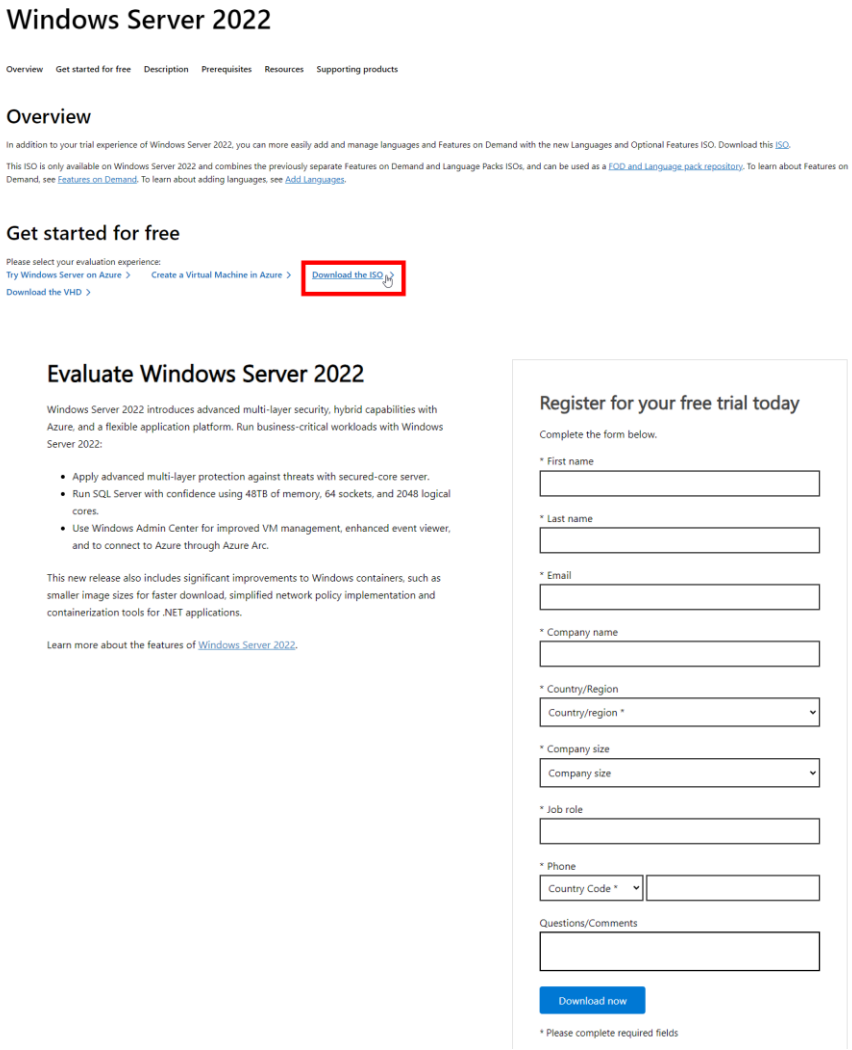


4. Installing Windows Server

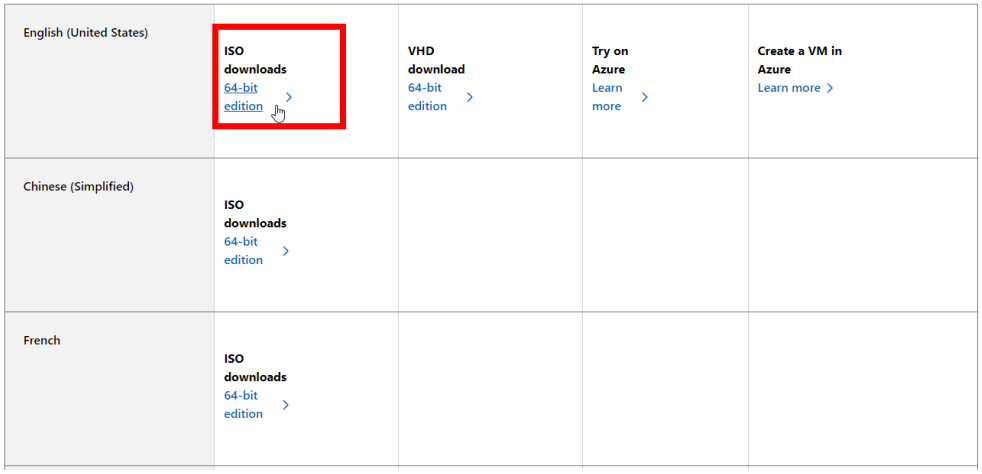
- Go to (https://www.microsoft.com/en-us/evalcenter/evaluate-windows-server-2022) website.



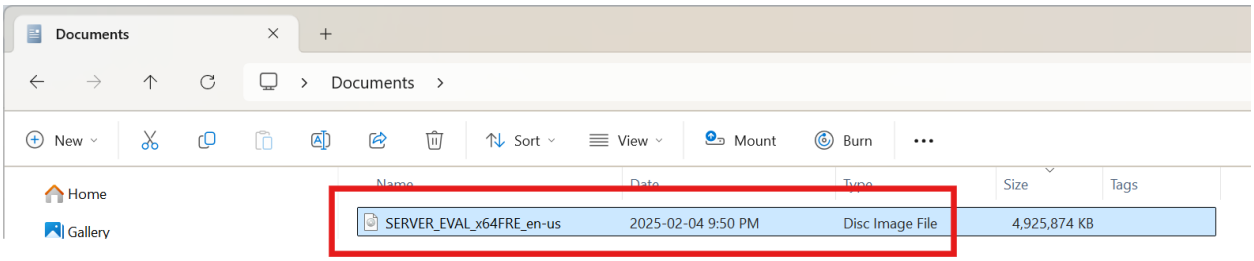
- Click on Download the ISO. → User will be asked to fill a free trial form → Click download.



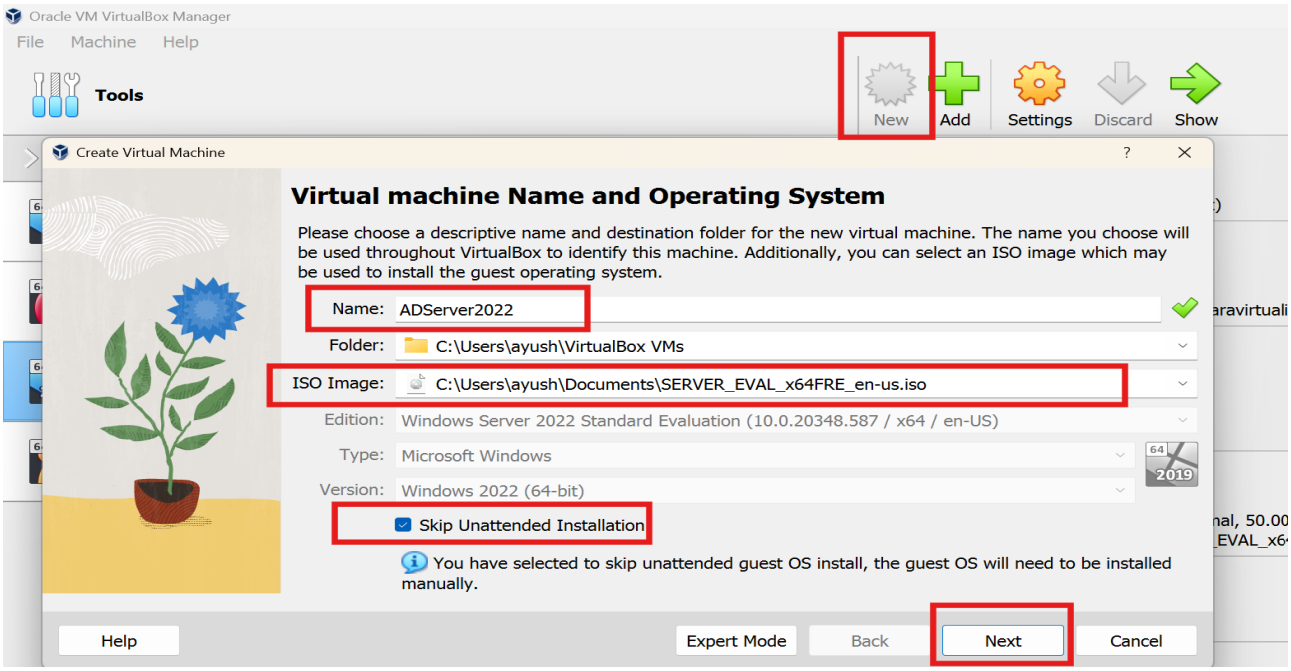
- Select the ISO downloads 64-bit.



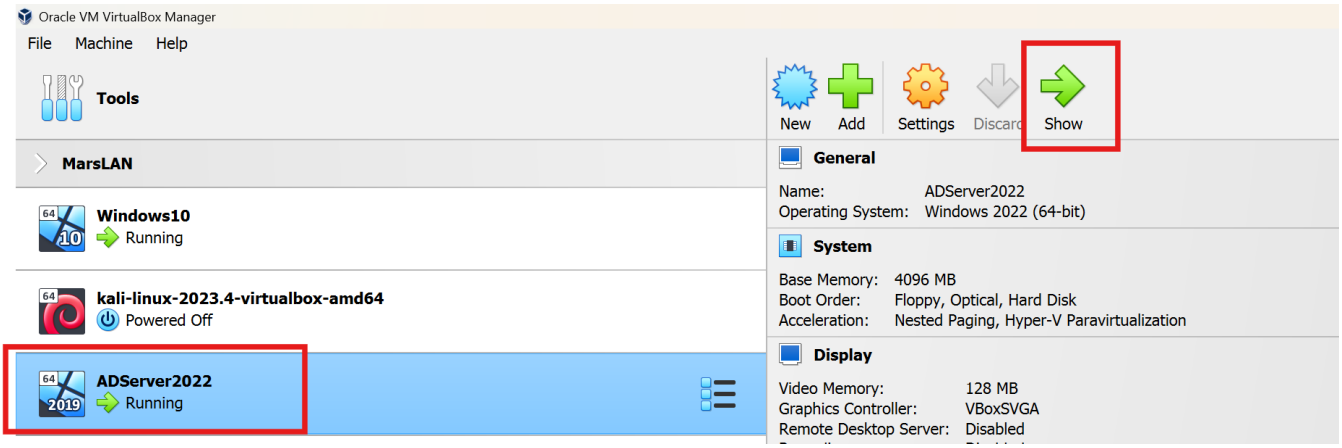
- The iso file gets downloaded as shown below.



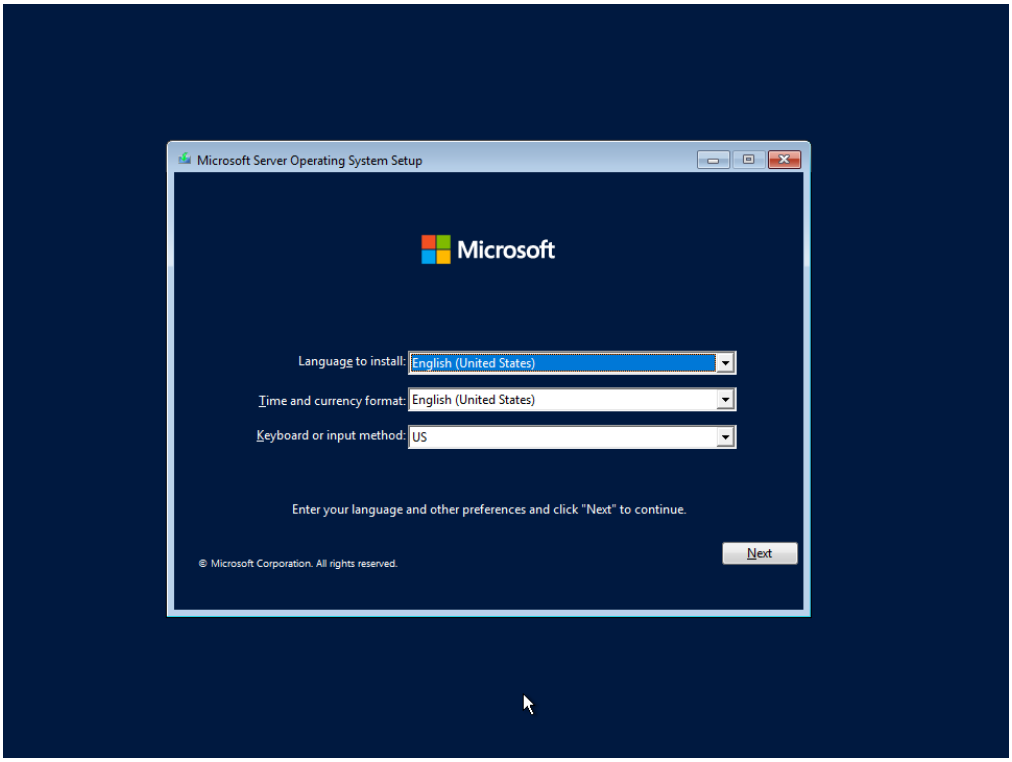
- Click on New icon in VirtualBox to add the Windows Server 2022 → Name the server ADServer2022 → Select the iso file downloaded → Skip unattended installation → click finish.



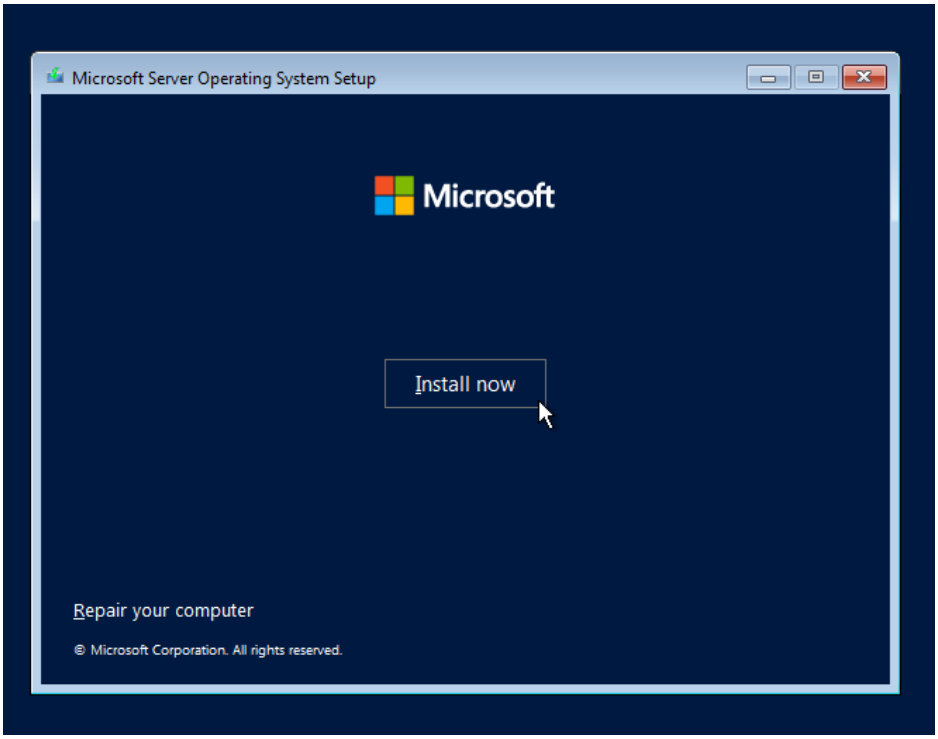
- To power on the Windows Server 2022 click on Show.



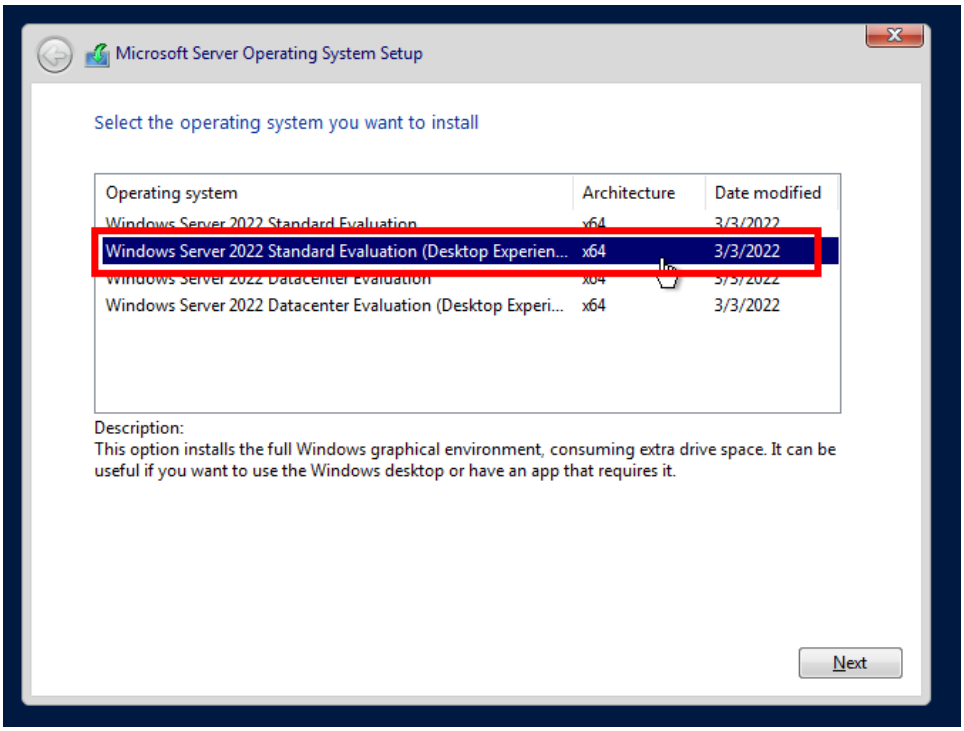
- Once the machine is started → click next as shown below screenshot.



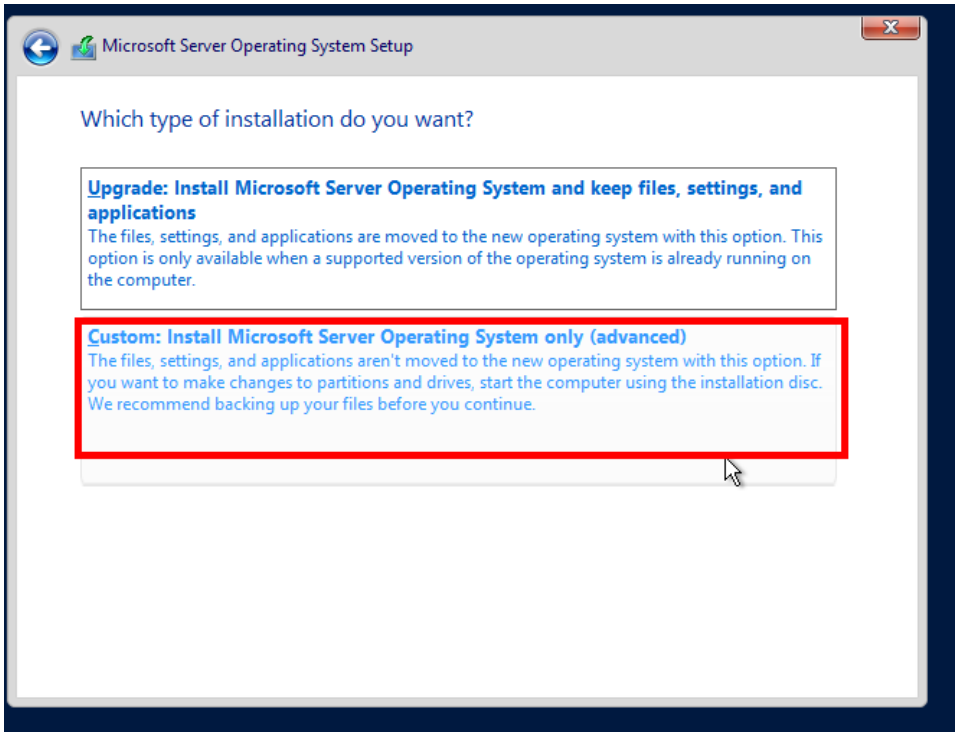
- Click Install now on the Setup screen.



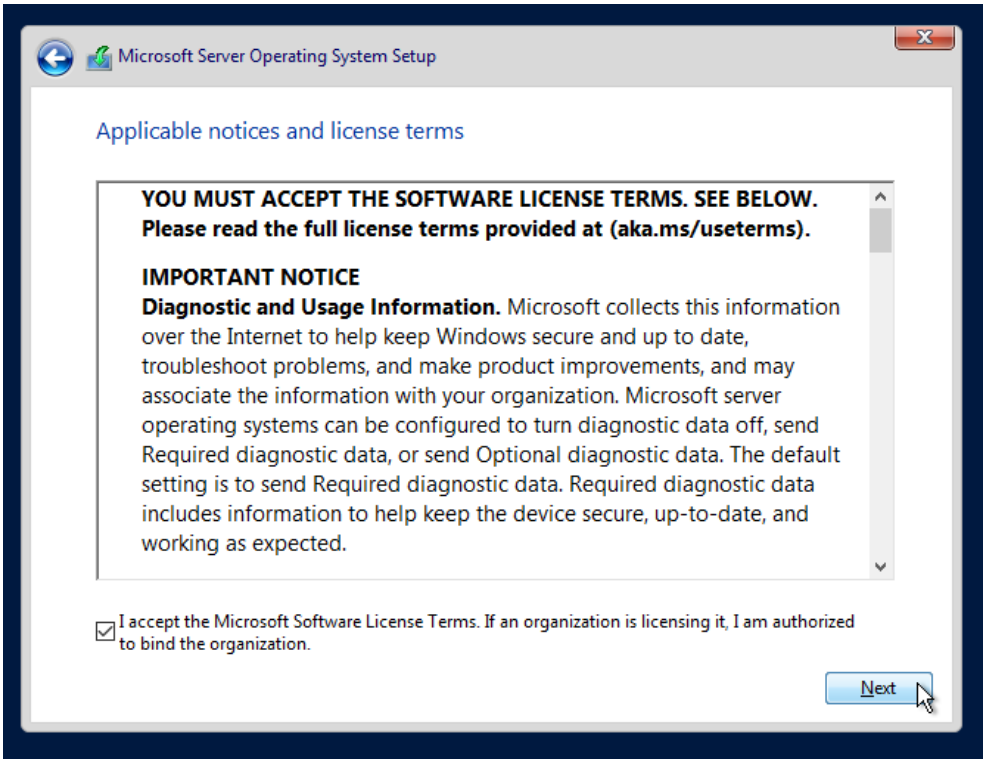
- Select the Windows Server 2022 as shown below. Click Next.



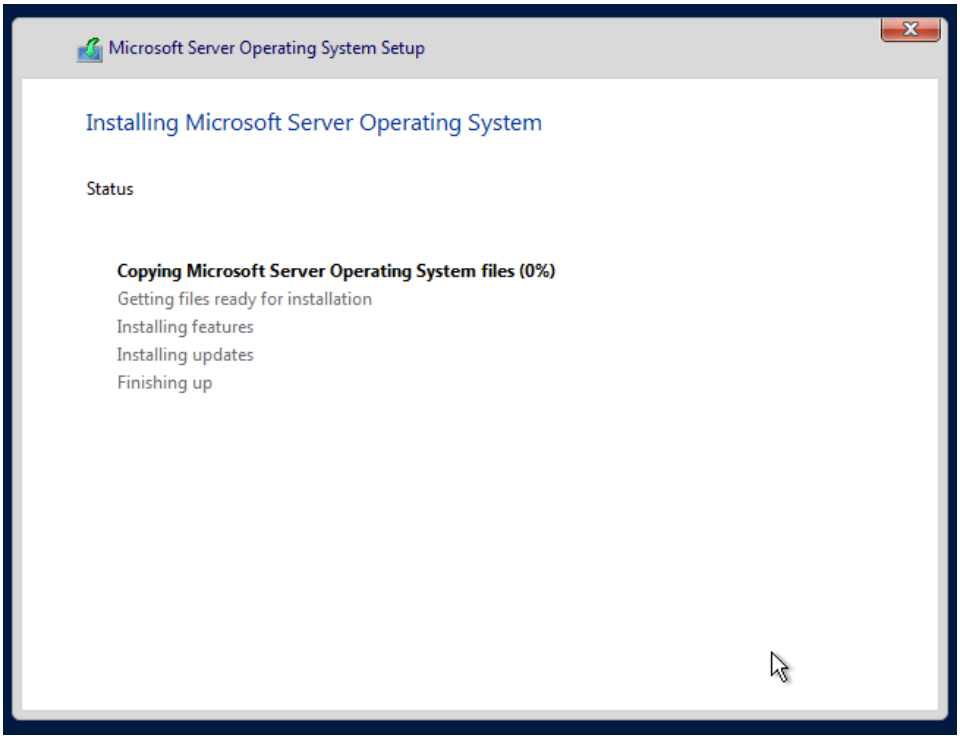
- Click on custom: Install Microsoft Server as shown below.



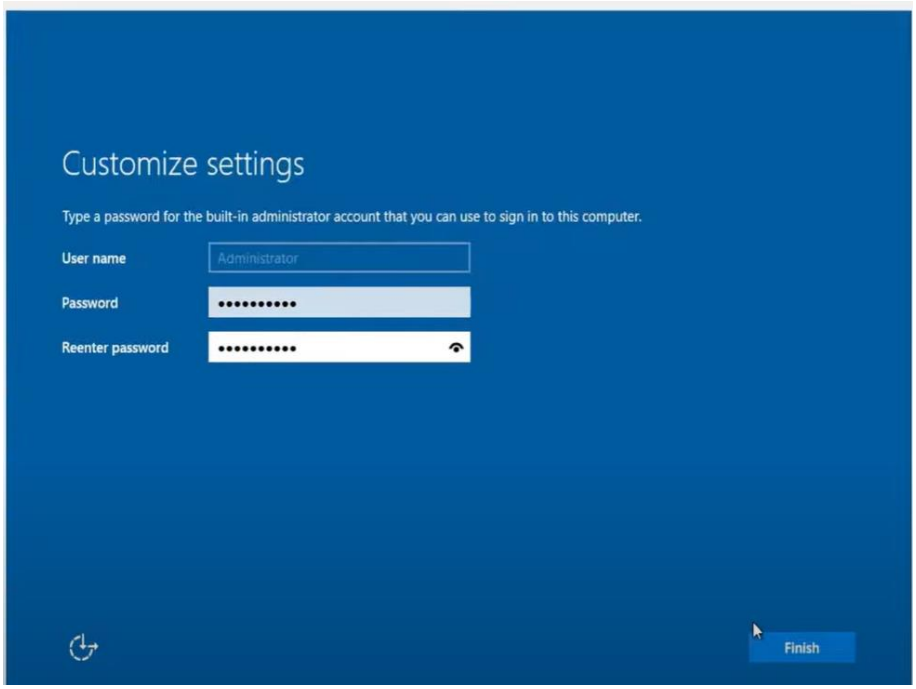
- Accept the License term agreement. Click Next.



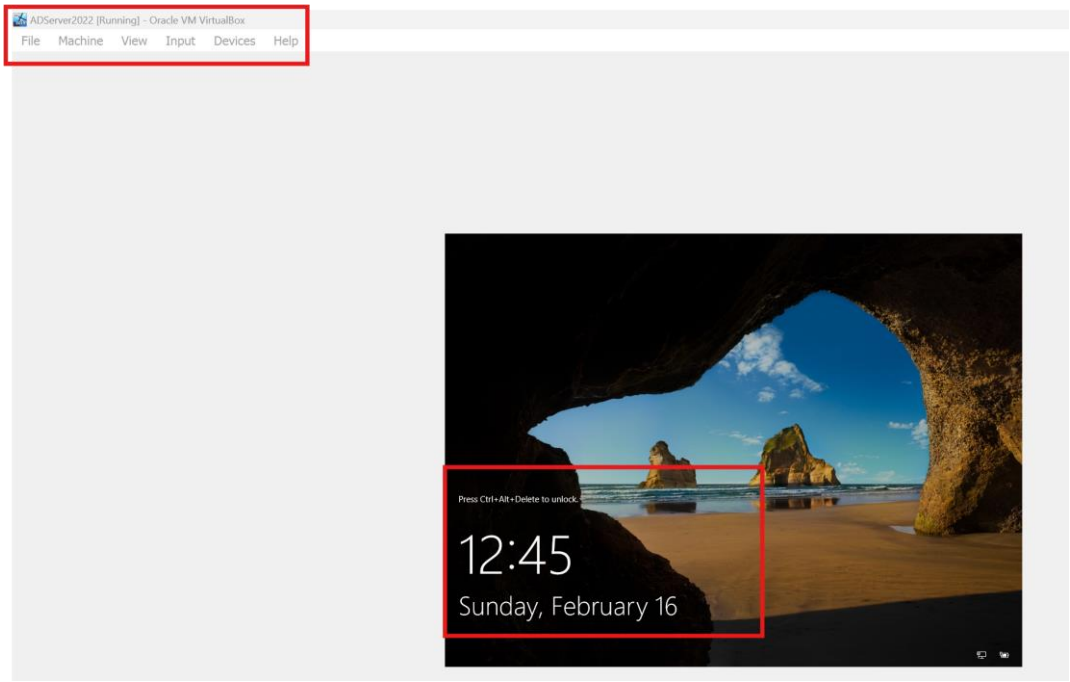
- Windows Server will start to install.



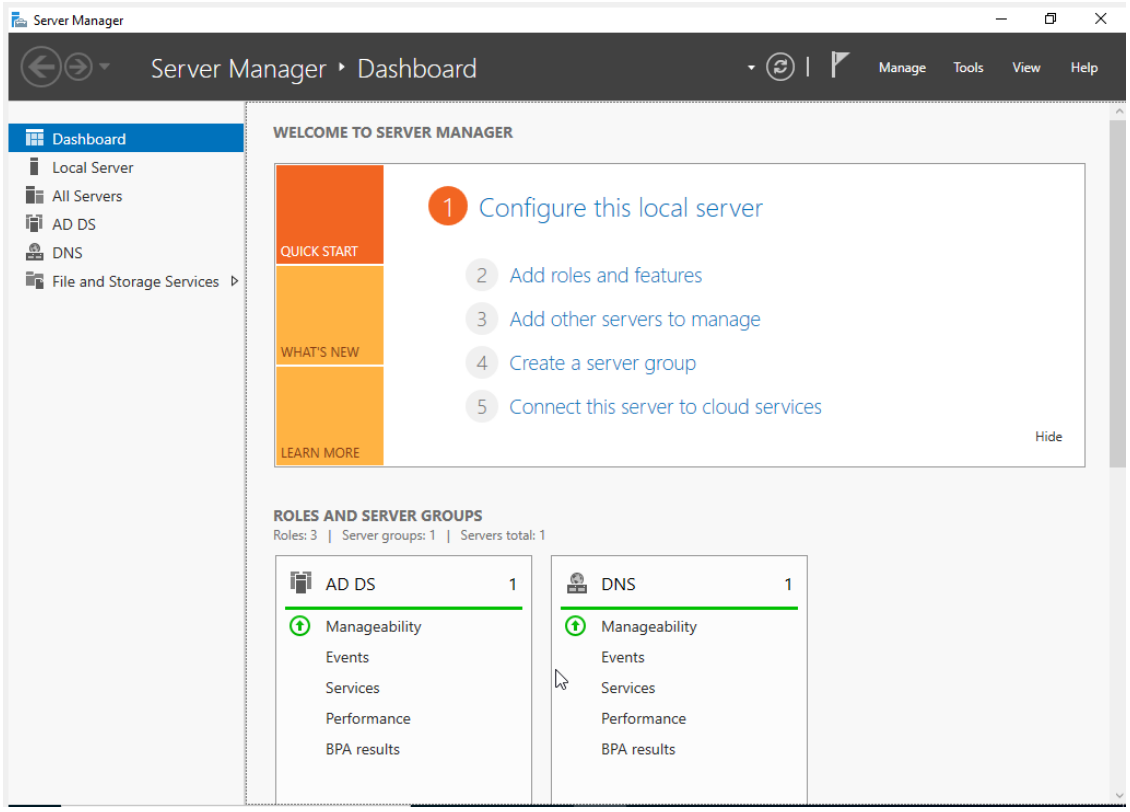
- Provide the password for Administrator account and click Finish.



- Windows Server is installed as shown in below snippet.

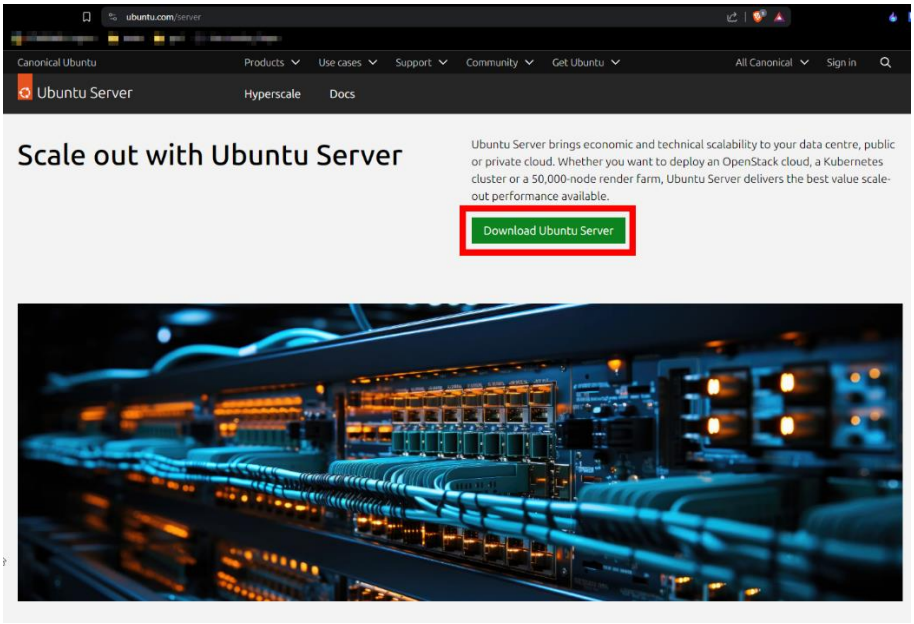


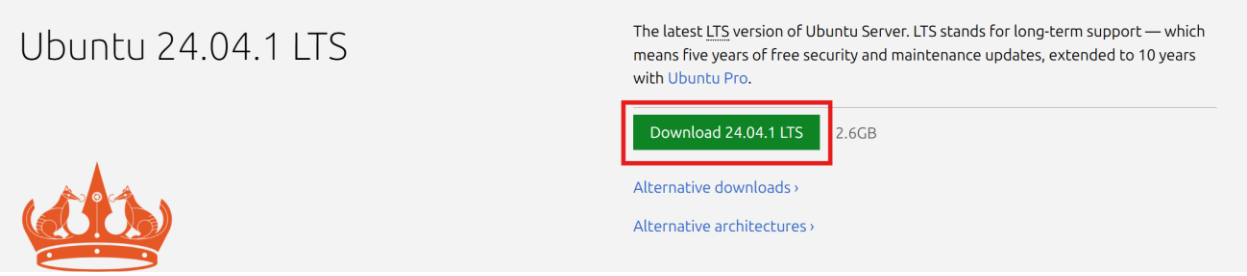
- Server Manager is shown which is used to install Active Directory.



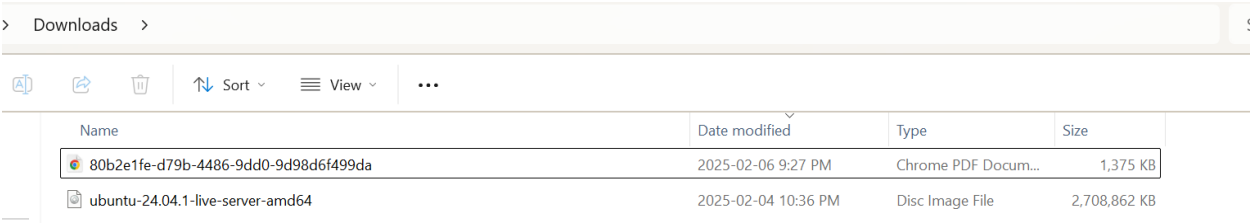
5. Installing Ubuntu 22.04 Server for Splunk

- Go to https://ubuntu.com/server and click the download button.

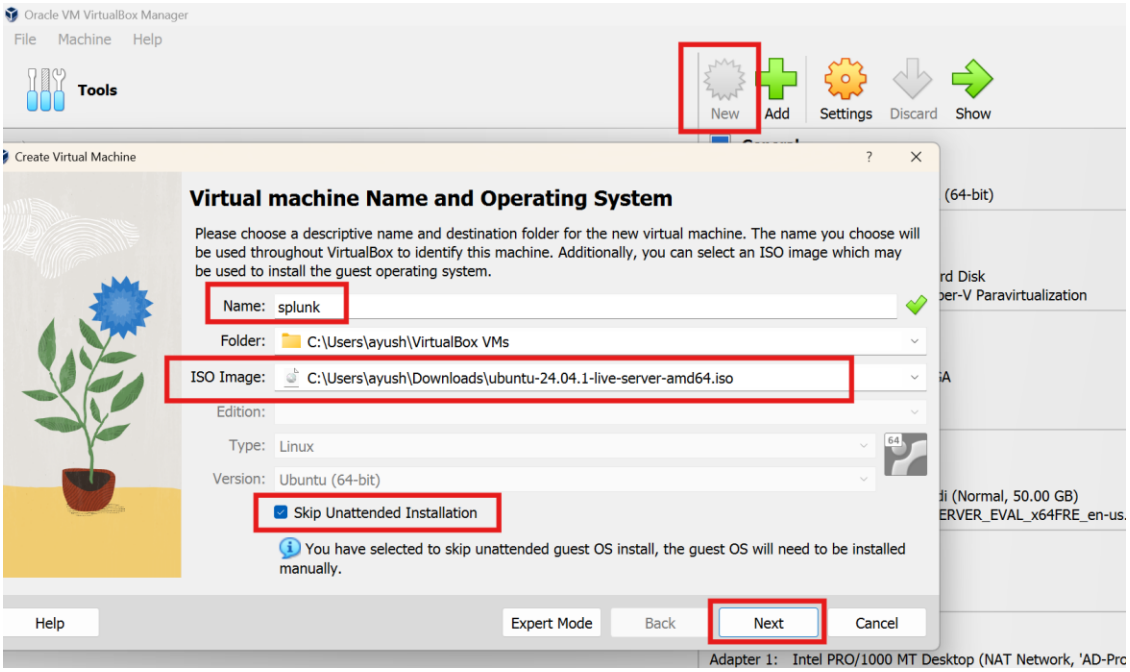




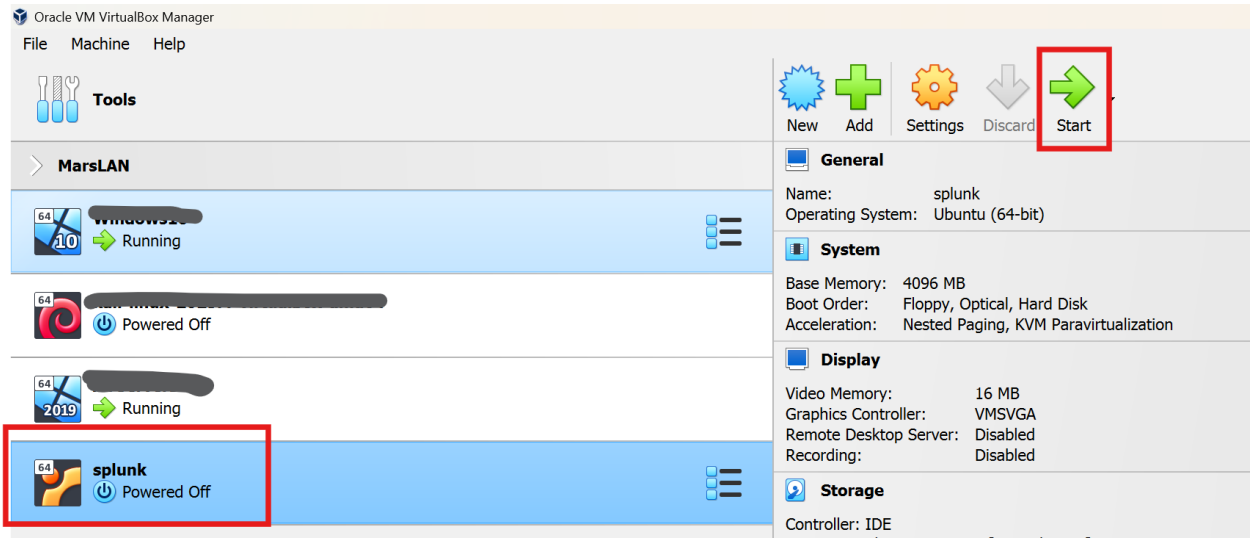
- In VirtualBox, click the **New** button and name the new machine as "Splunk". Choose the destination folder and select the ISO file we downloaded earlier.
- Keep the "Skip Unattended Installation" checked.



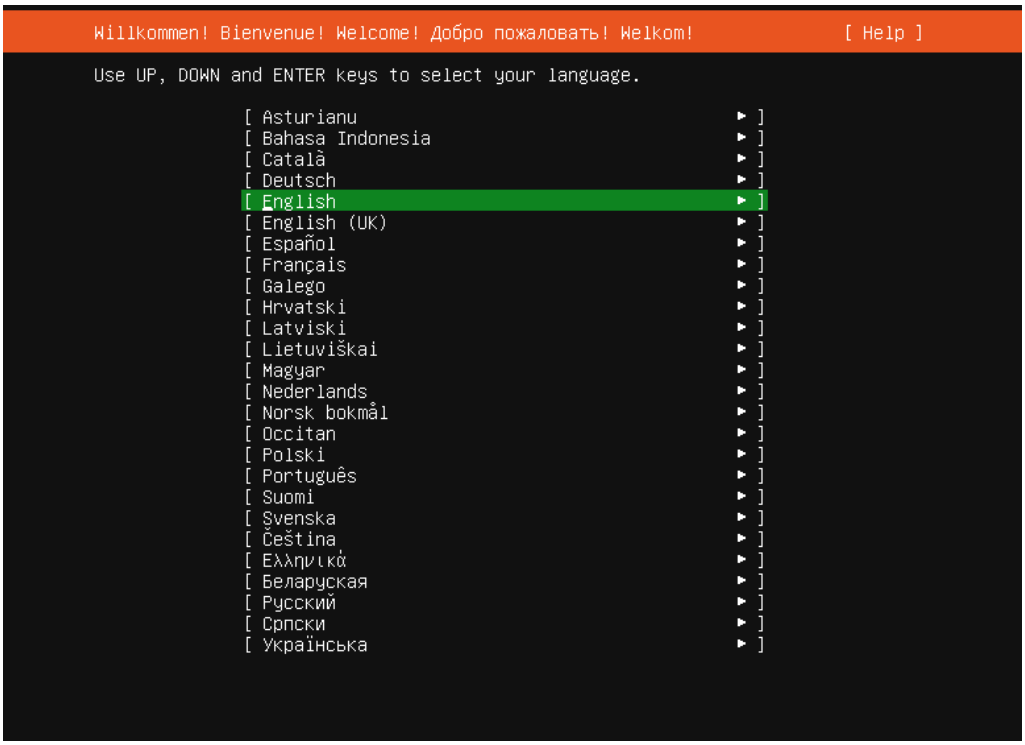
- Click on New in VirtualBox → provide Name “splunk” → Provide iso image which we downloaded and click skip attended installation → click Next.

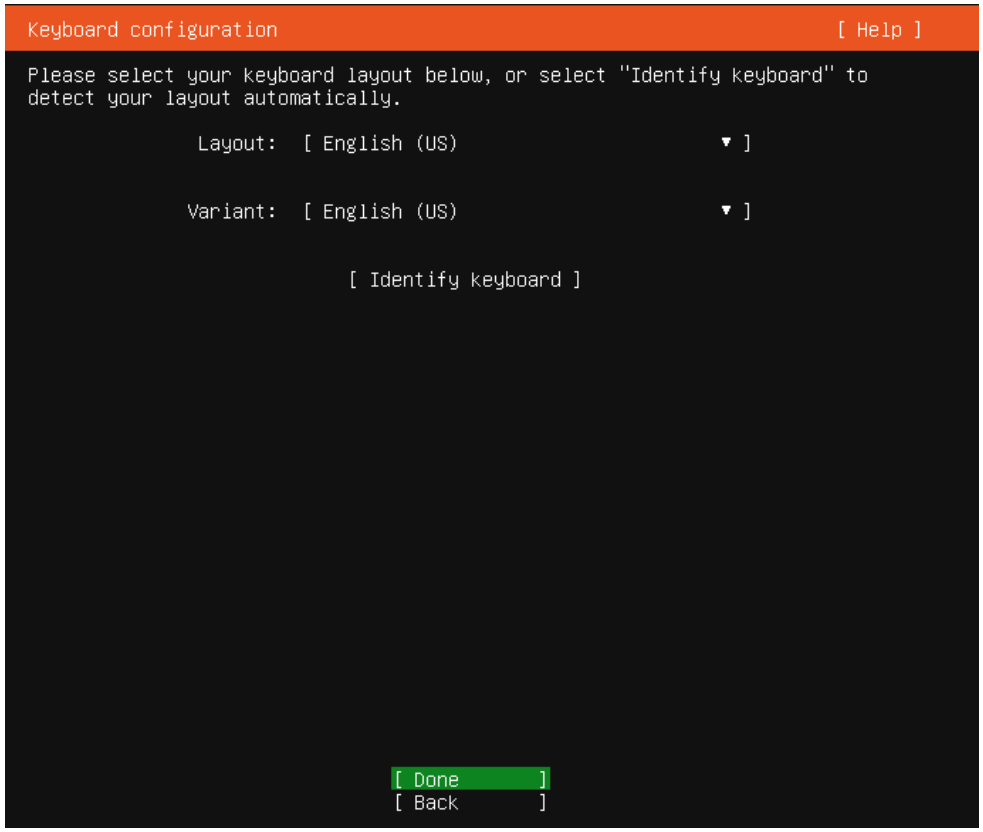


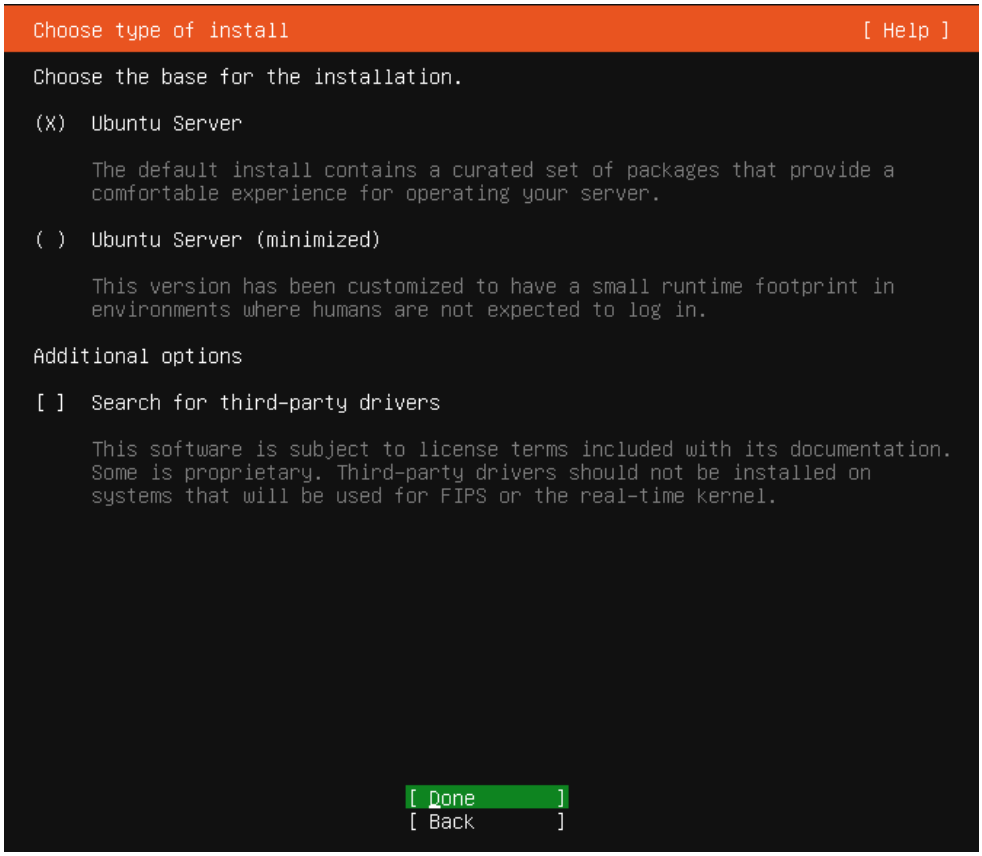
- Ubuntu machine is showing in VitrualBox → To power on the machine click start.

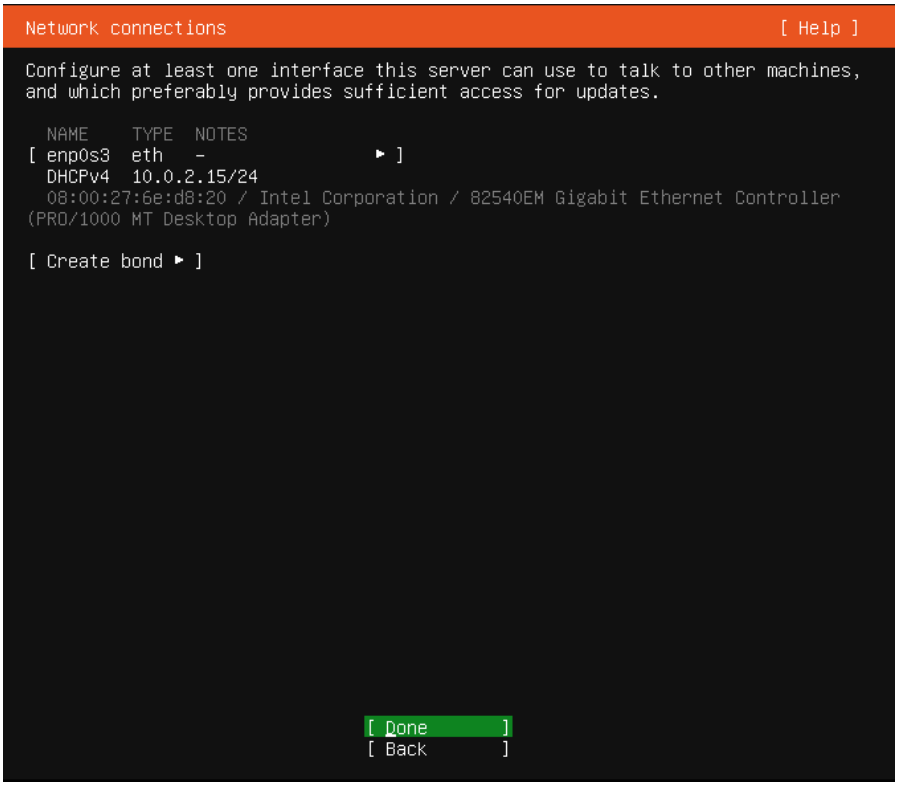


- Select "**Try or Install Ubuntu Server**" and press Enter.

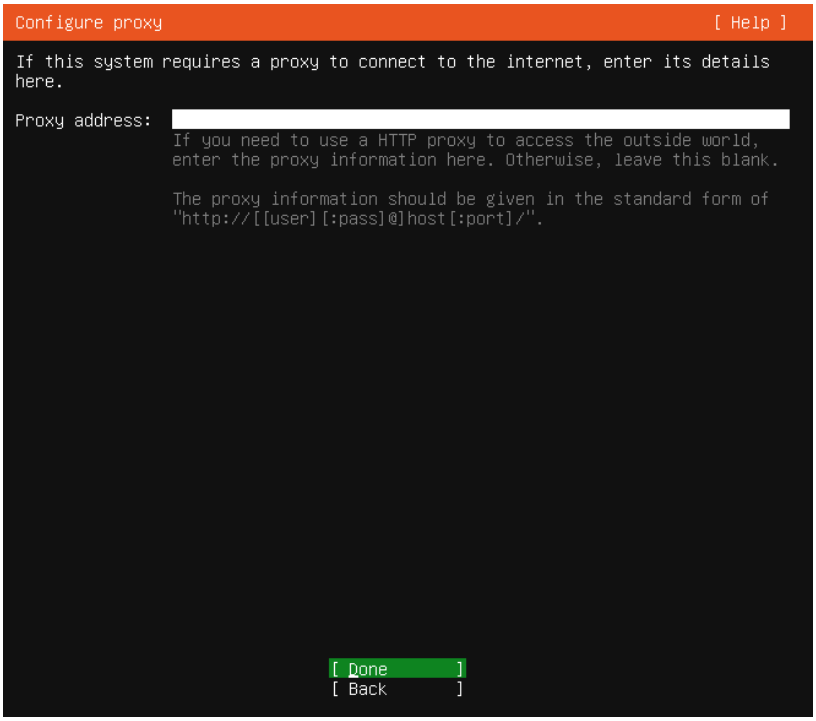

Willkommen! Bienvenue! Welcome! Добро пожаловать! Welkom!
[Help]
Use UP, DOWN and ENTER keys to select your language.
[Asturianu ▸]
[Bahasa Indonesia ▸]
[Català ▸]
[Deutsch ▸]
[English ▸]
[English (UK) ▸]
[Español ▸]
[Français ▸]
[Galego ▸]
[Hrvatski ▸]
[Latviski ▸]
[Lietuviškai ▸]
[Magyar ▸]
[Nederlands ▸]
[Norsk bokmål ▸]
[Occitan ▸]
[Polski ▸]
[Português ▸]
[Suomi ▸]
[Svenska ▸]
[Čeština ▸]
[Ελληνικά ▸]
[Беларуская ▸]
[Русский ▸]
[Српски ▸]
[Українська ▸]

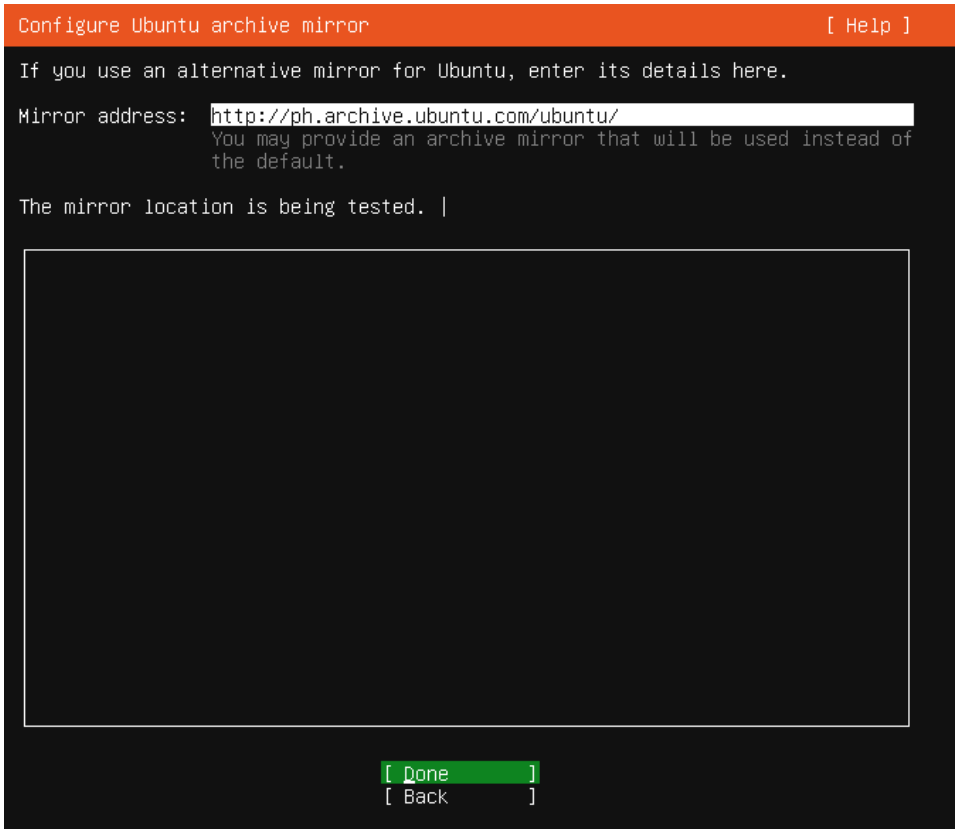

Keyboard configuration
[Help]
Please select your keyboard layout below, or select "Identify keyboard" to detect your layout automatically.
Layout: [English (US) ▾]
Variant: [English (US) ▾]
[Identify keyboard]
[Done]
[Back]

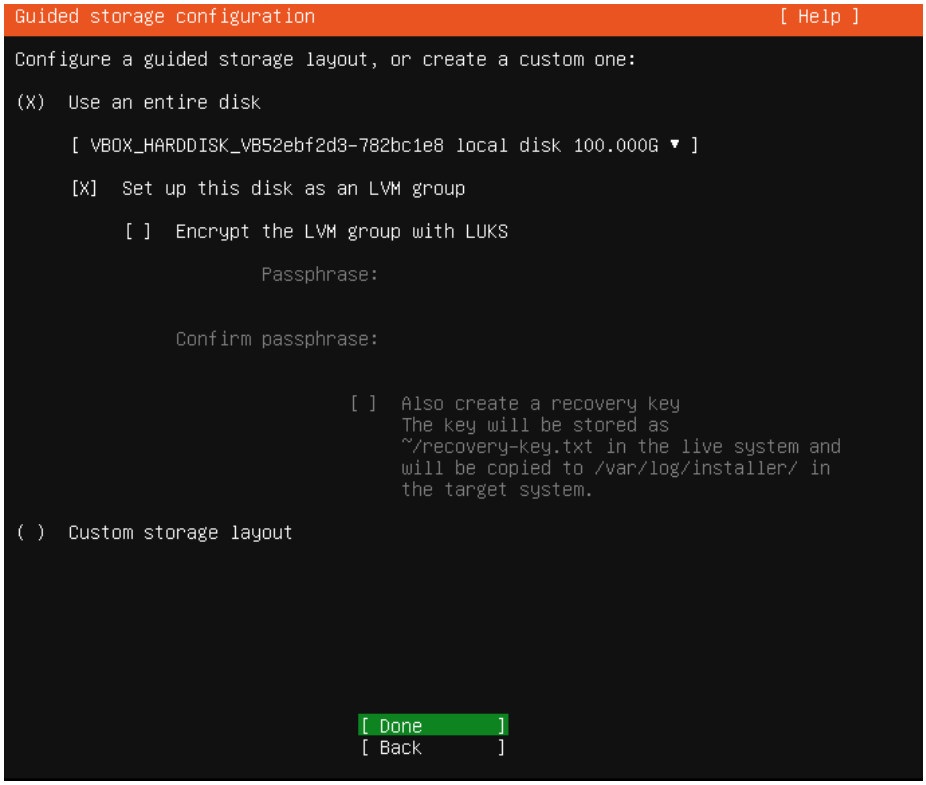

Choose type of install
[Help]
Choose the base for the installation.
(X) Ubuntu Server
The default install contains a curated set of packages that provide a comfortable experience for operating your server.
( ) Ubuntu Server (minimized)
This version has been customized to have a small runtime footprint in environments where humans are not expected to log in.
Additional options
[ ] Search for third-party drivers
This software is subject to license terms included with its documentation. Some is proprietary. Third-party drivers should not be installed on systems that will be used for FIPS or the real-time kernel.
[Done]
[Back]

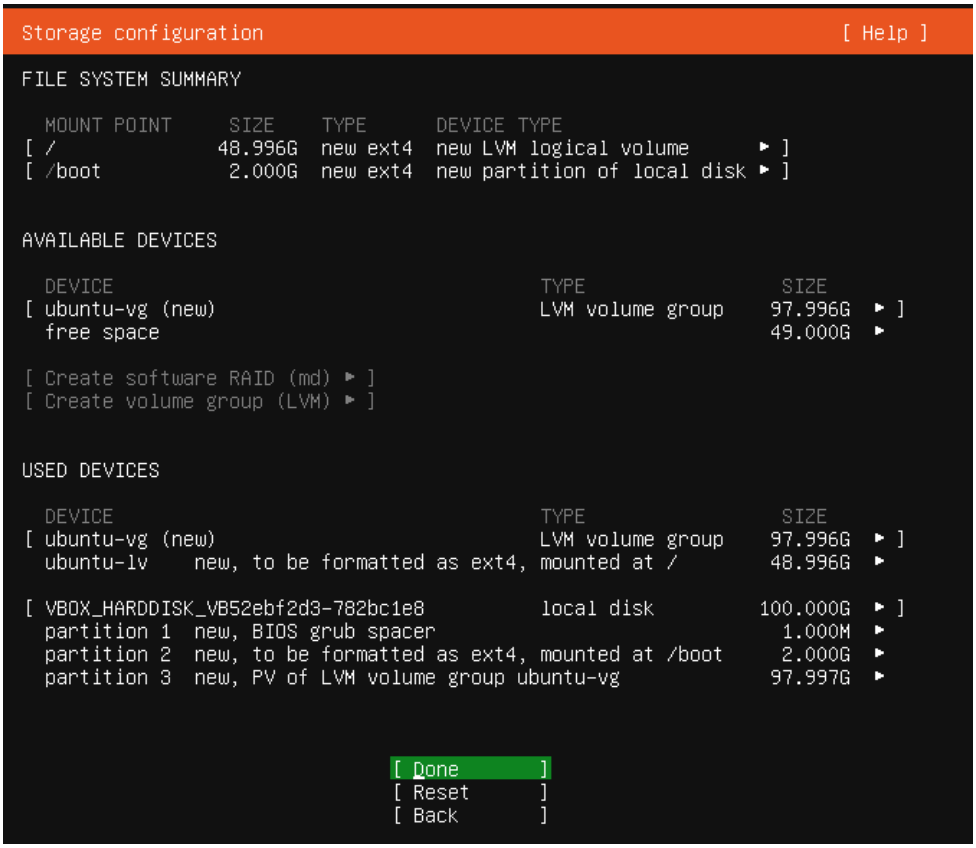

Network connections
[Help]
Configure at least one interface this server can use to talk to other machines, and which preferably provides sufficient access for updates.
NAME TYPE NOTES
[enp0s3 eth - ▸]
DHCPv4 10.0.2.15/24
08:00:27:6e:d8:20 / Intel Corporation / 82540EM Gigabit Ethernet Controller (PRO/1000 MT Desktop Adapter)
[Create bond ▸]
[Done]
[Back]

- Leave the Proxy address field blank and press Enter.

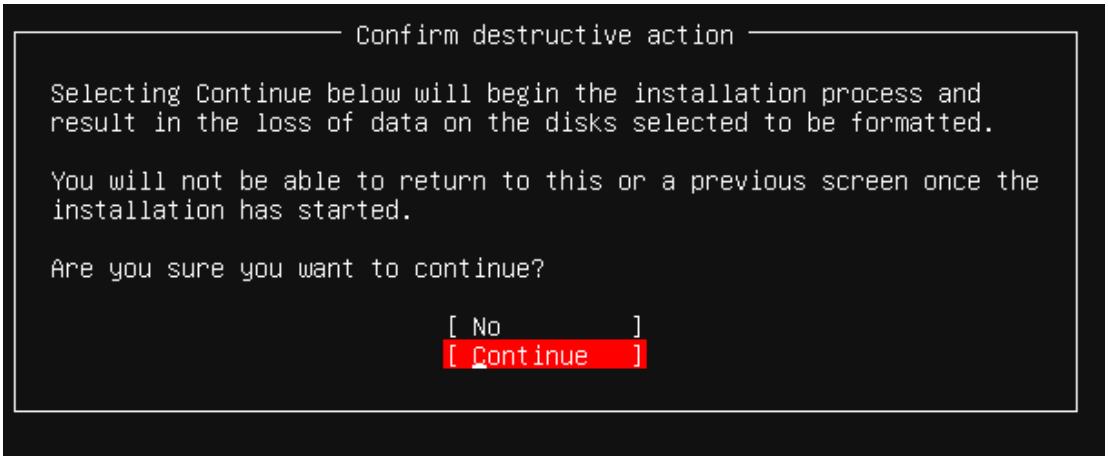




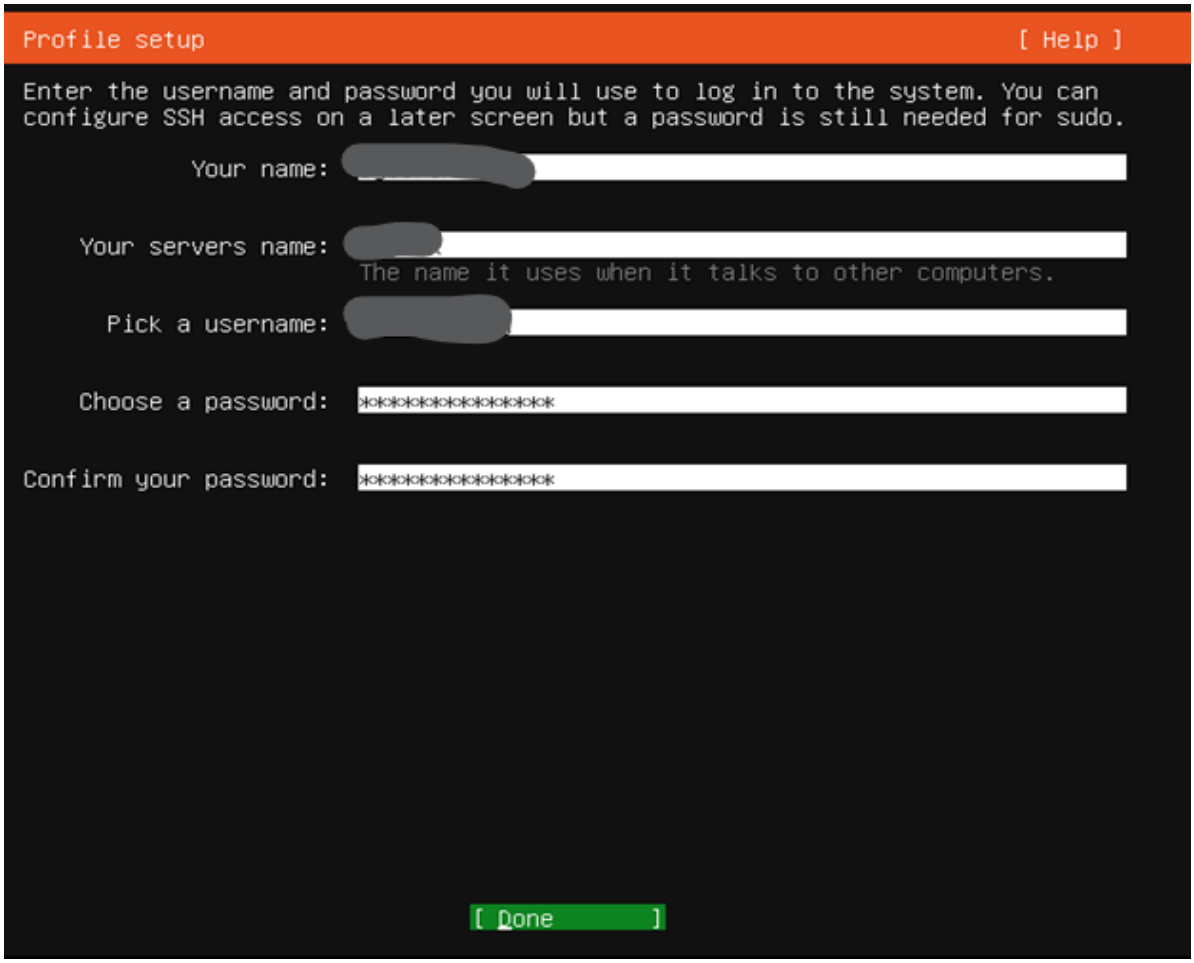

Guided storage configuration
[Help]
Configure a guided storage layout, or create a custom one:
(X) Use an entire disk
[VBOX_HARDDISK_VB52ebf2d3-782bc1e8 local disk 100.000G ▾]
[X] Set up this disk as an LVM group
[ ] Encrypt the LVM group with LUKS
Passphrase:
Confirm passphrase:
[ ] Also create a recovery key
The key will be stored as
~/recovery-key.txt in the live system and
will be copied to /var/log/installer/ in
the target system.
( ) Custom storage layout
[Done]
[Back]

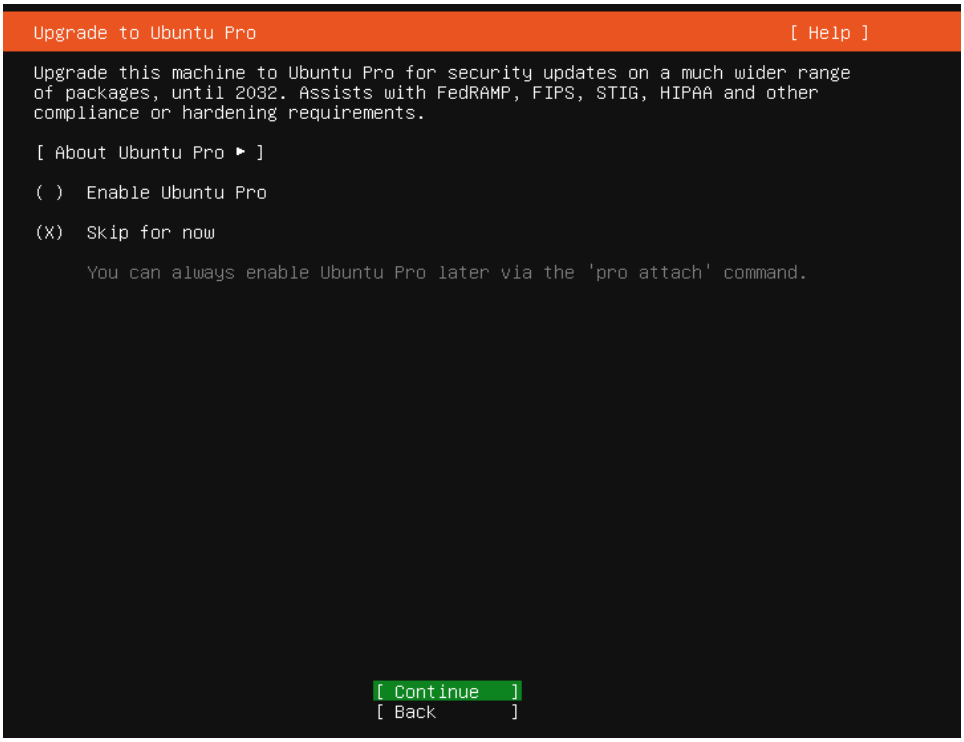

Storage configuration
[Help]
FILE SYSTEM SUMMARY
MOUNT POINT SIZE TYPE DEVICE TYPE
[/ 48.996G new ext4 new LVM logical volume ▸]
[/boot 2.000G new ext4 new partition of local disk ▸]
AVAILABLE DEVICES
DEVICE TYPE SIZE
[ubuntu-vg (new) LVM volume group 97.996G ▸]
free space 49.000G ▸
[Create software RAID (md) ▸]
[Create volume group (LVM) ▸]
USED DEVICES
DEVICE TYPE SIZE
[ubuntu-vg (new) LVM volume group 97.996G ▸]
ubuntu-lv new, to be formatted as ext4, mounted at / 48.996G ▸
[VBOX_HARDDISK_VB52ebf2d3-782bc1e8 local disk 100.000G ▸]
partition 1 new, BIOS grub spacer 1.000M ▸
partition 2 new, to be formatted as ext4, mounted at /boot 2.000G ▸
partition 3 new, PV of LVM volume group ubuntu-vg 97.997G ▸
[Done]
[Reset]
[Back]

- Navigate to Continue option with down arrow key

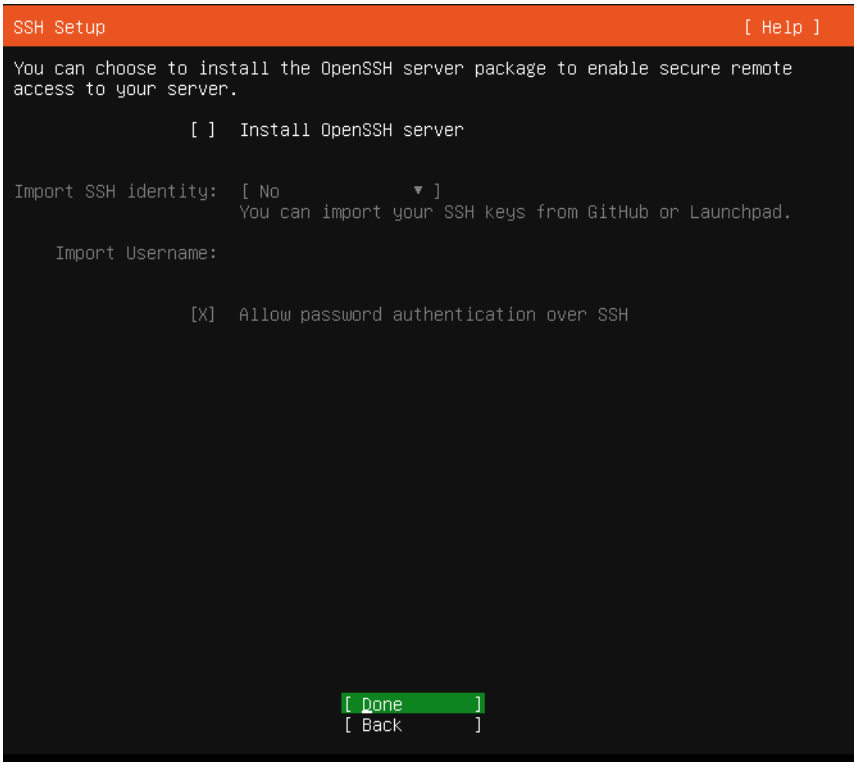


- Provide the name, server name, username, password and confirm password and press done.

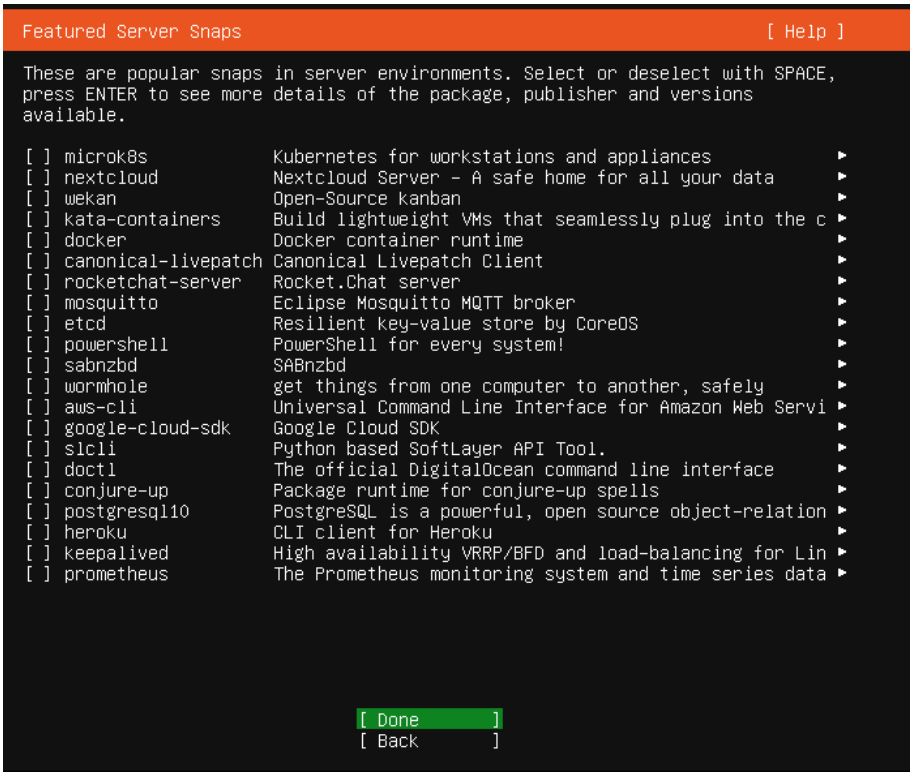




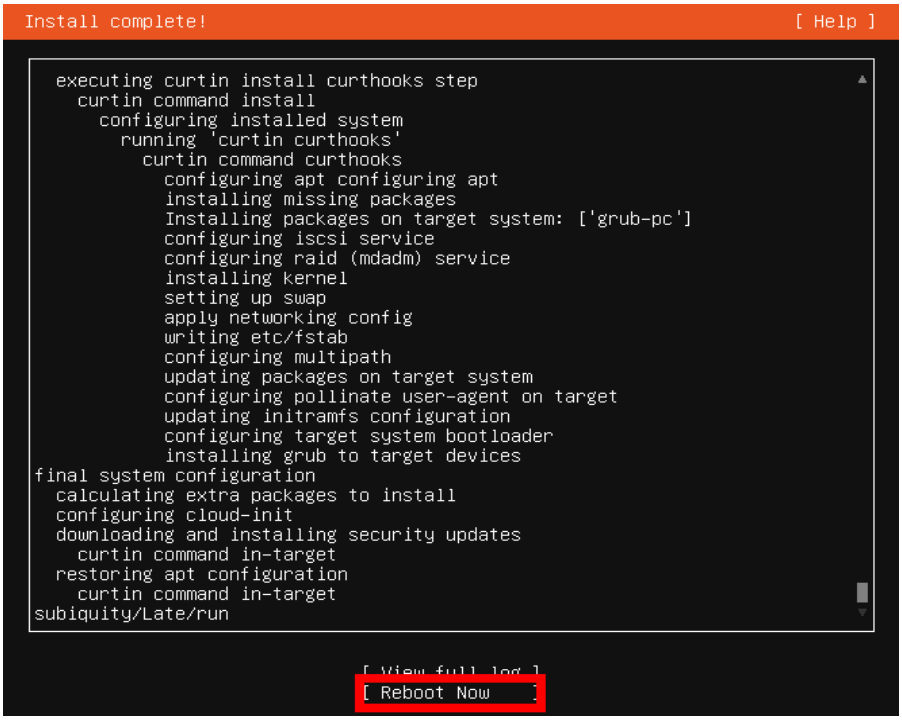
- Leave the Install OpenSSH Server and press Enter.



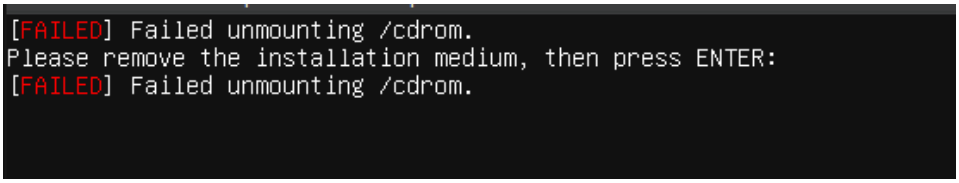
- Leave these options unchecked, select "Done" with the down arrow key and press Enter.



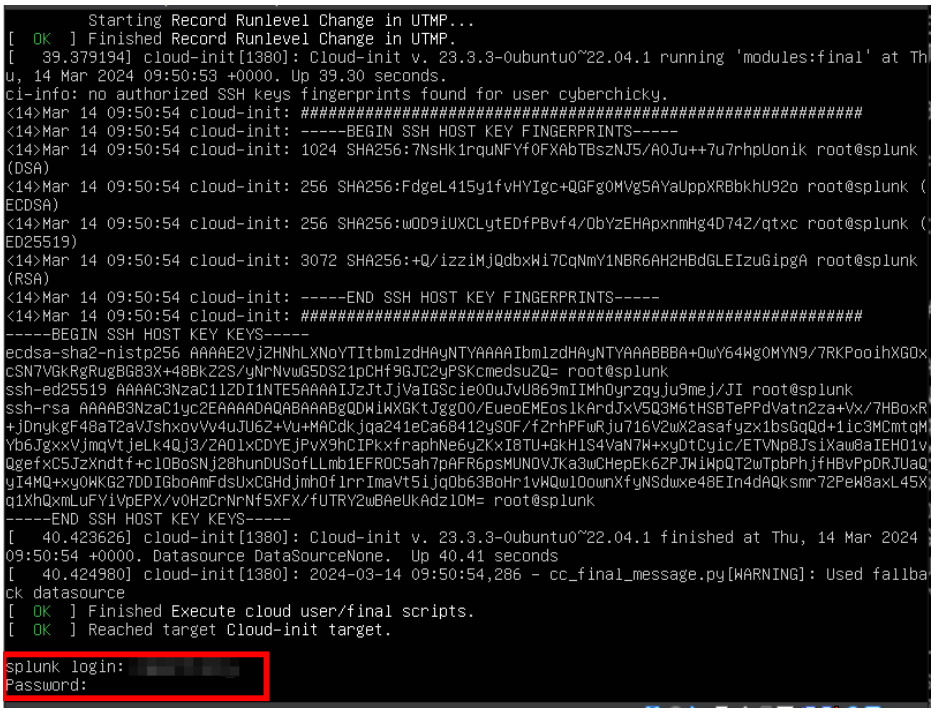
- When you see the "**Reboot Now**" option → it means that the server has finished installing.
- Select "Reboot Now" with the down button → press Enter.

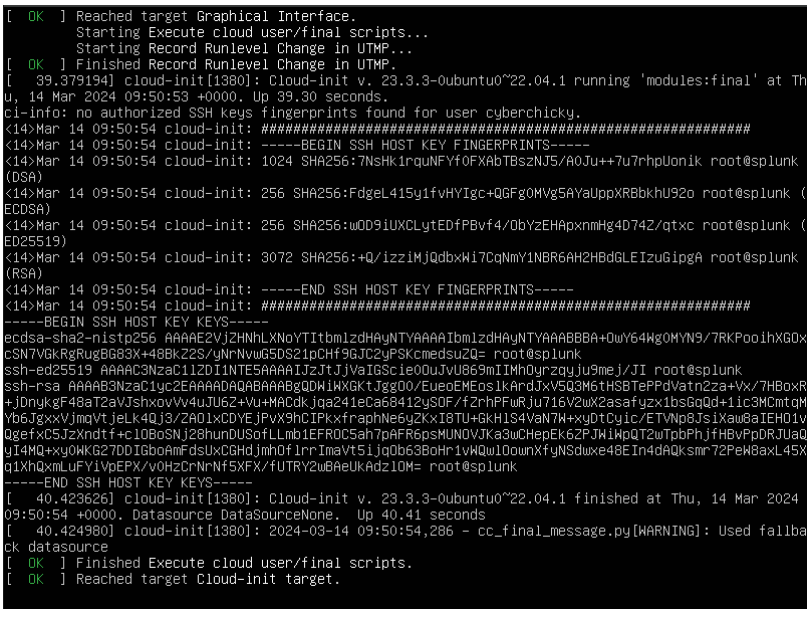


- Just press Enter when you encounter this screen.

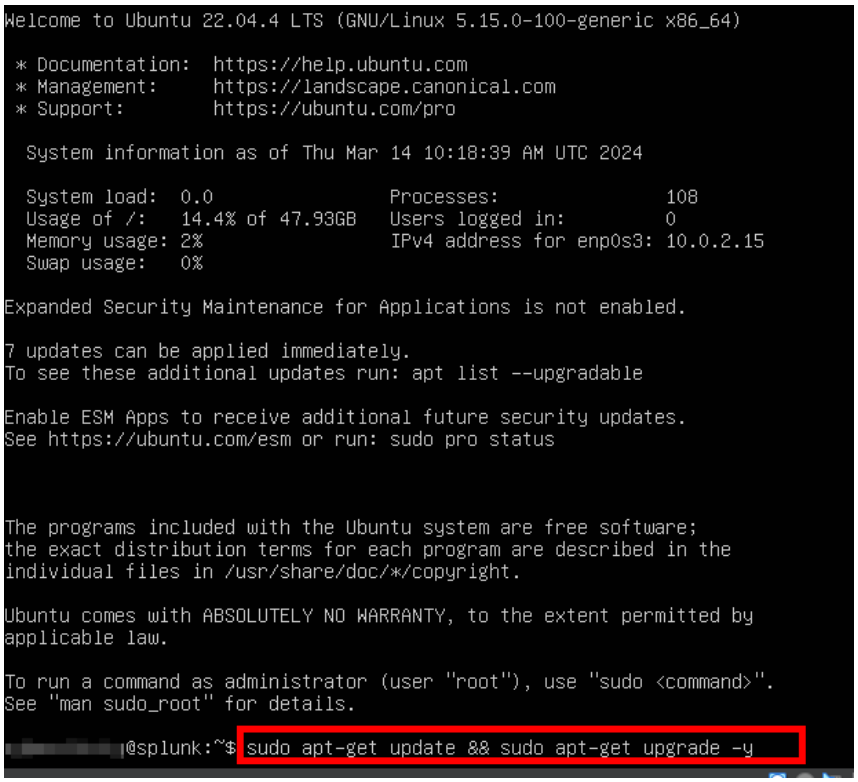


- Provide the Login and password as shown below snippet.

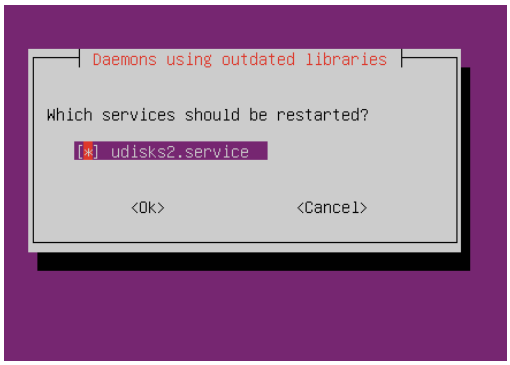




- After logging in, we will be updating the files and dependencies with sudo apt-get update && apt-get upgrade -y.



- Just press Enter when you encounter this screen. After that, the setup is now complete.



- The Ubuntu Server is successfully running.