# OPERATING SYSTEMS

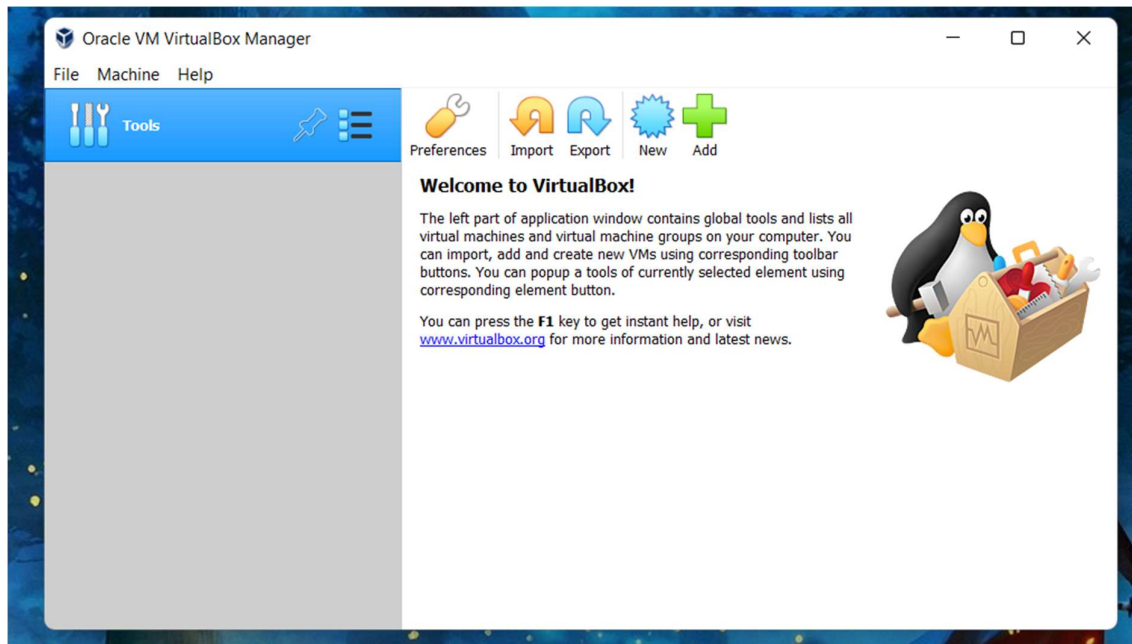## Lab-2: VM CREATION, CLONING, IMPORT EXPORT, SNAPSHOT

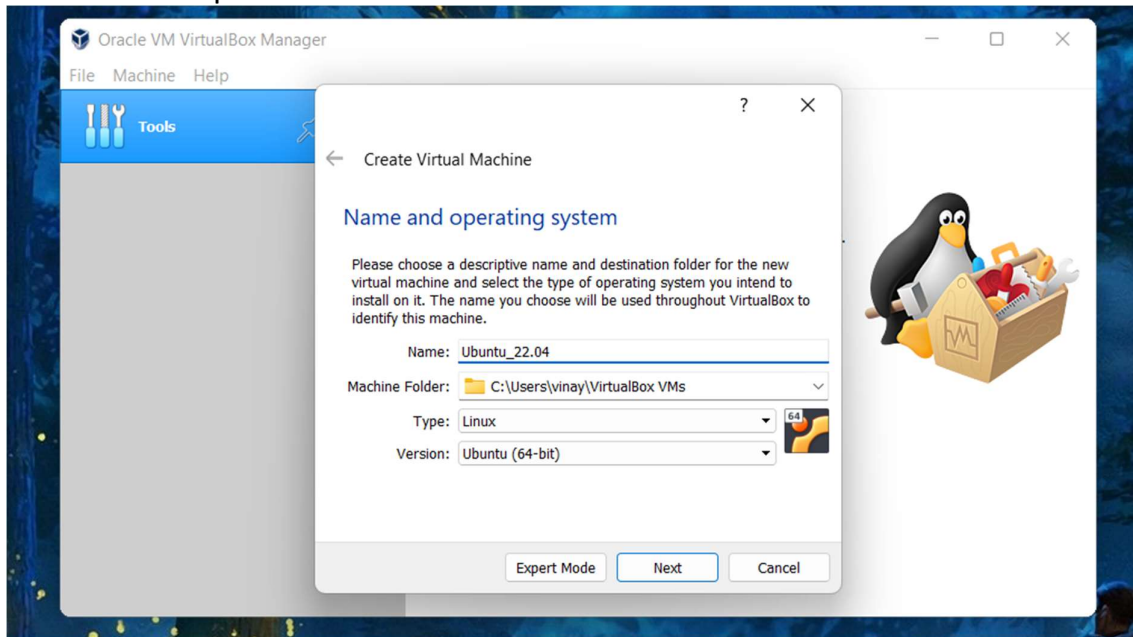Name – Vinay Santosh Menon
Registration Number - 20BAI1103
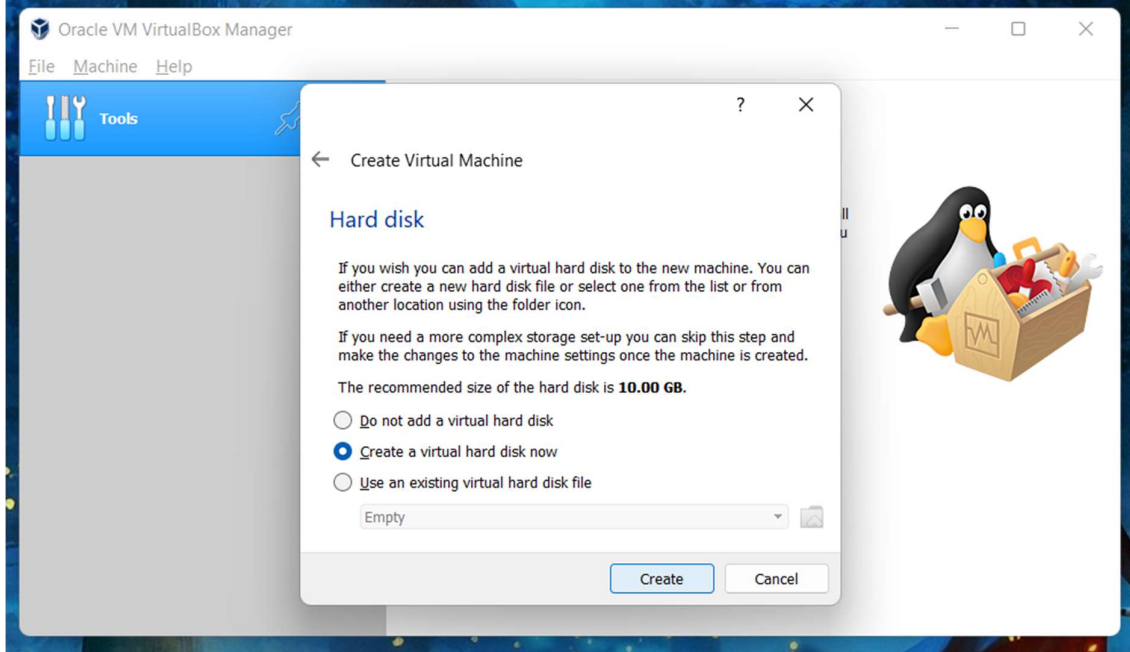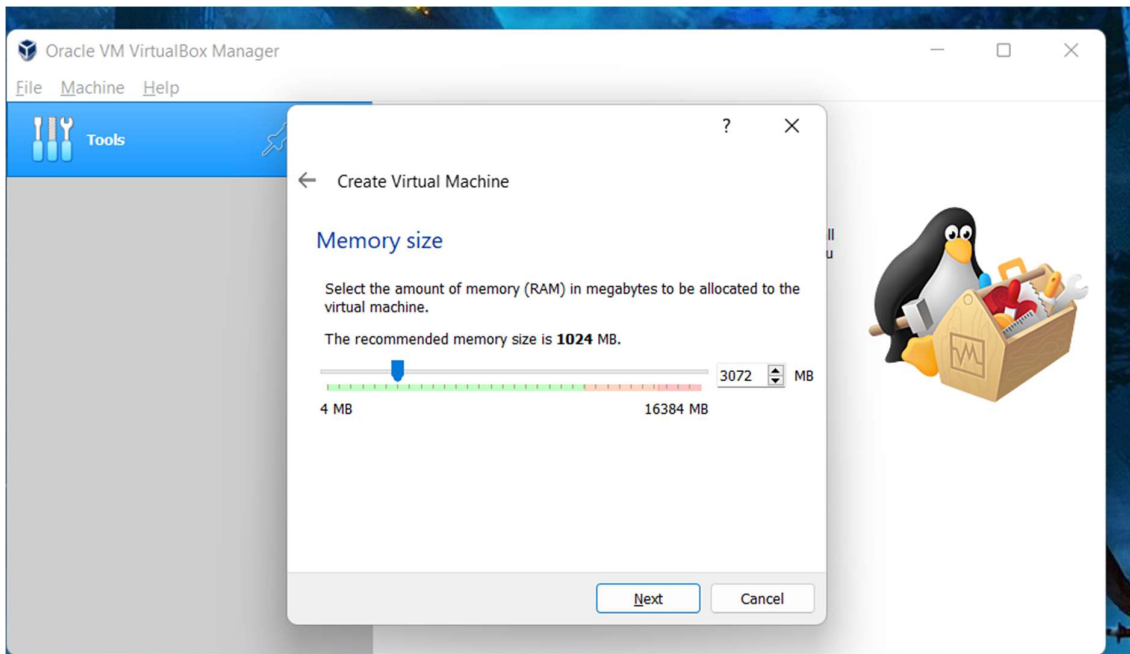
## TASK:
To demonstrate VirtualBox Virtual Machine Creation, Cloning, Import, Export and snapshots
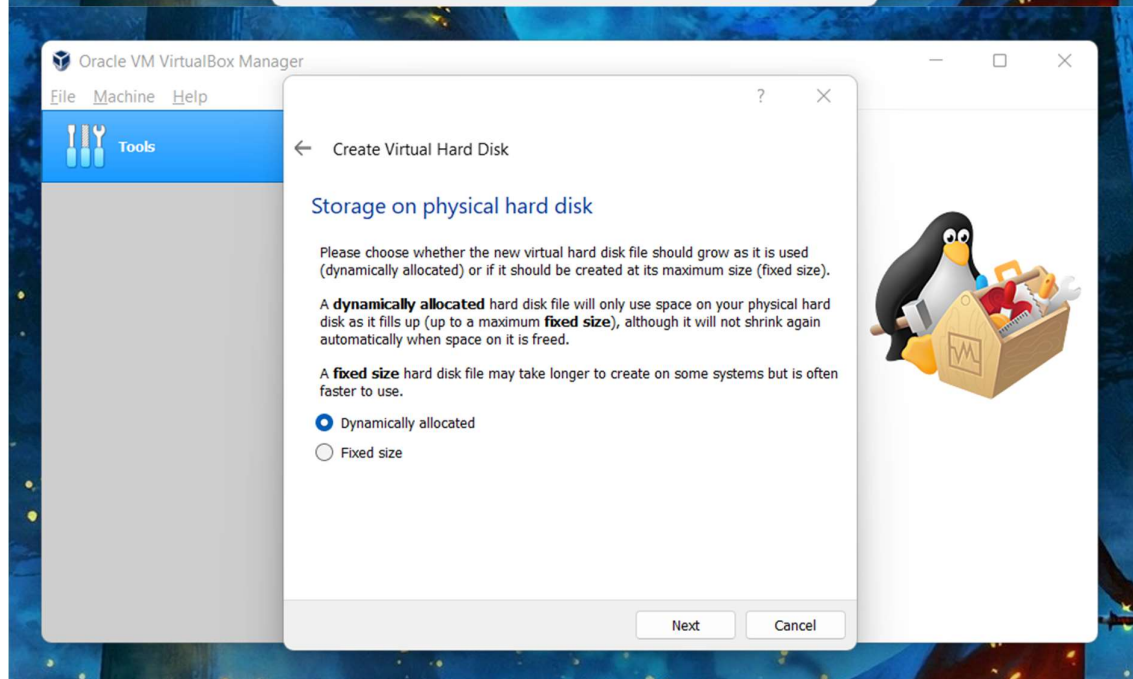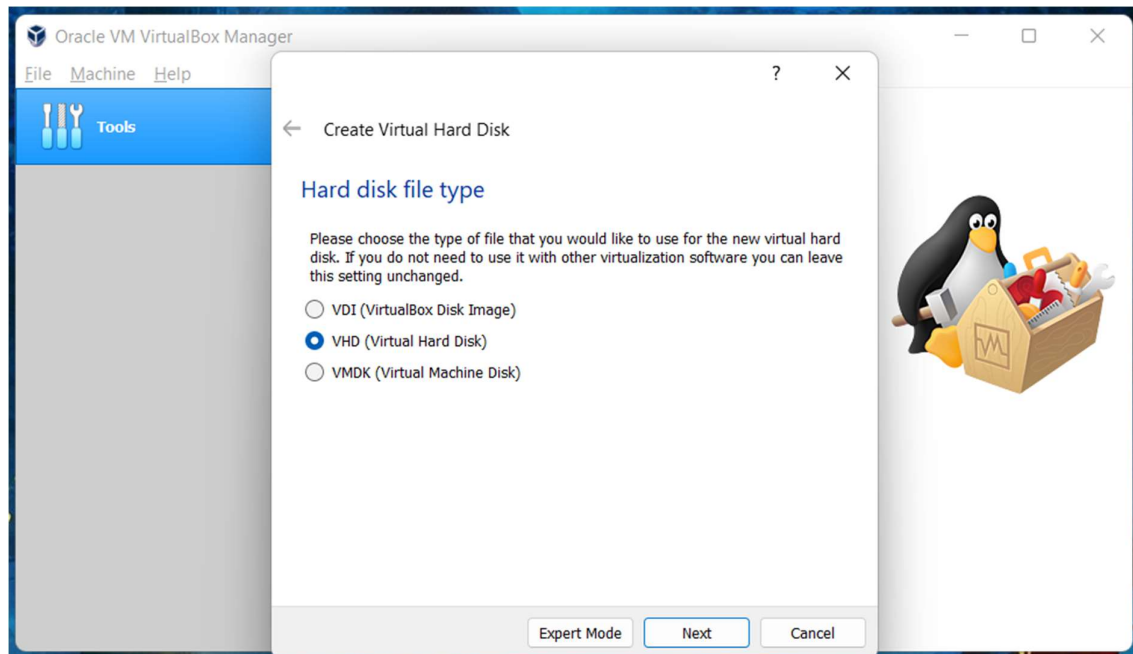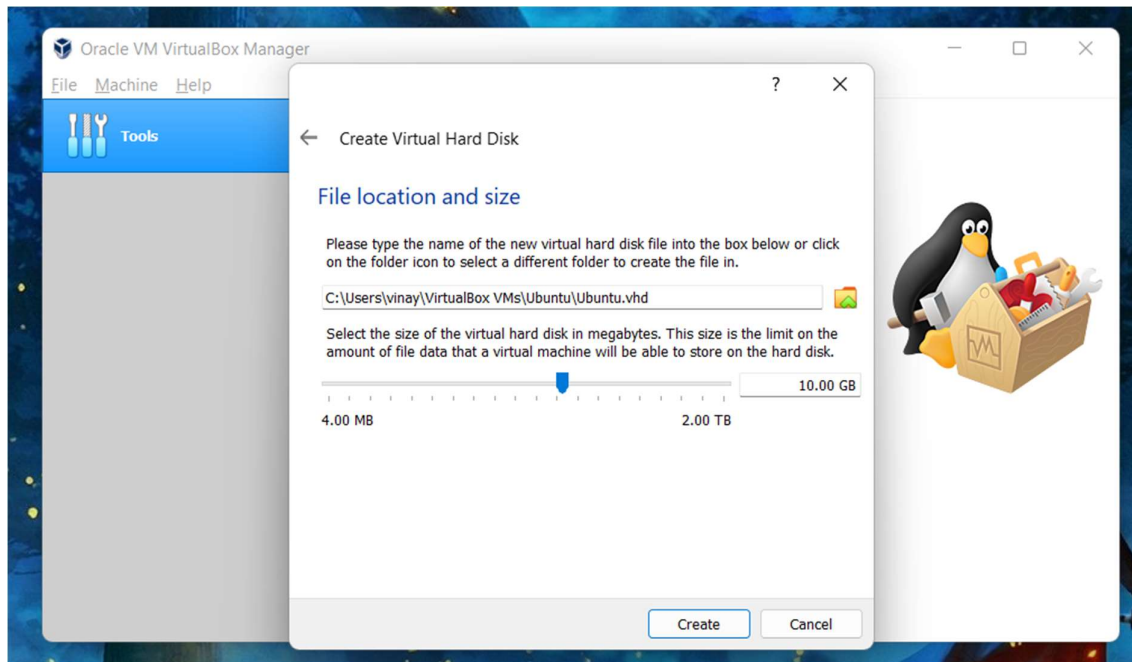
# Creating Virtual Machine:



- Click on New to start creating a new Virtual Machine.
- Follow this procedure to **Create** a Ubuntu22.04 Virtual Machine:
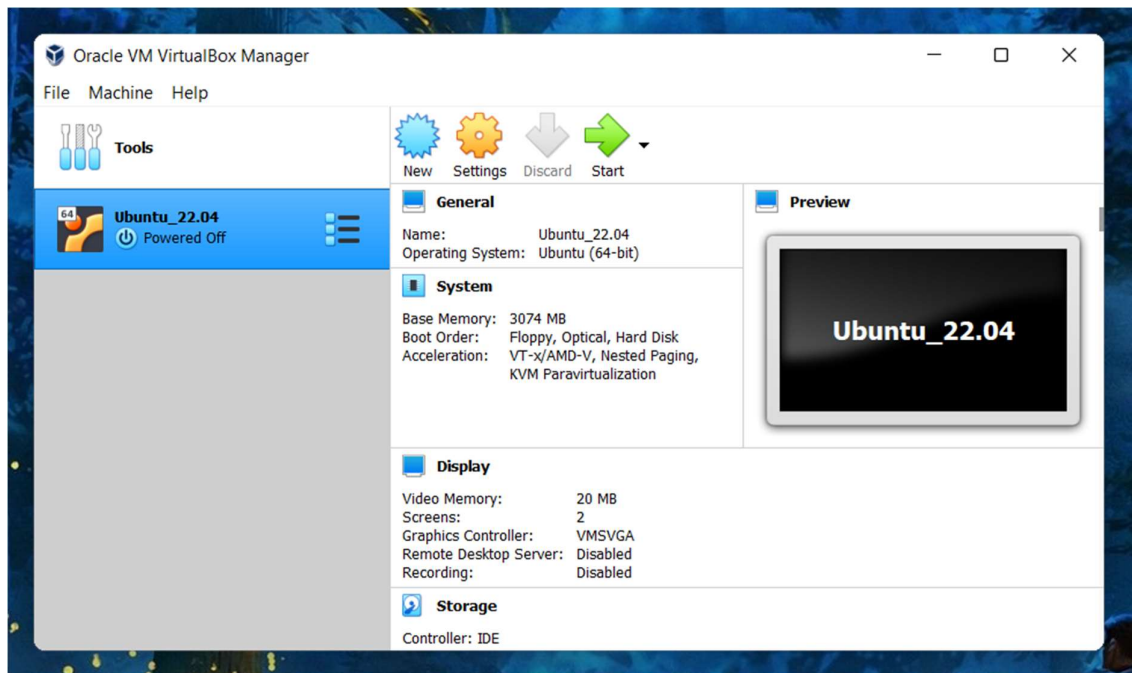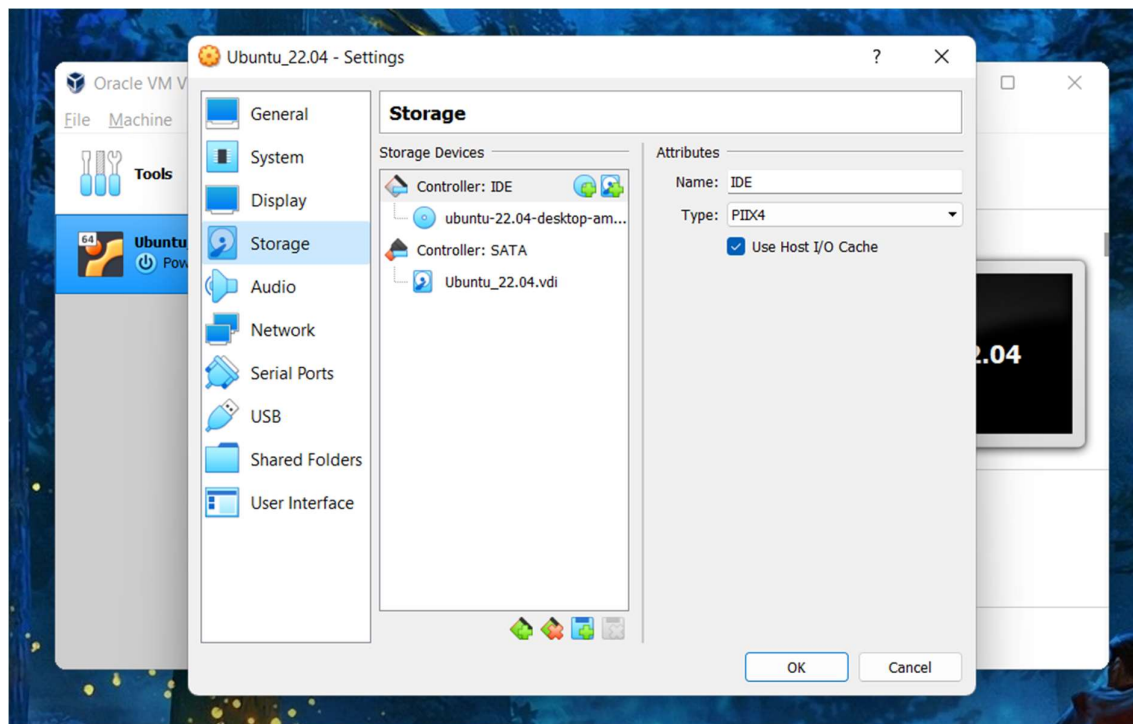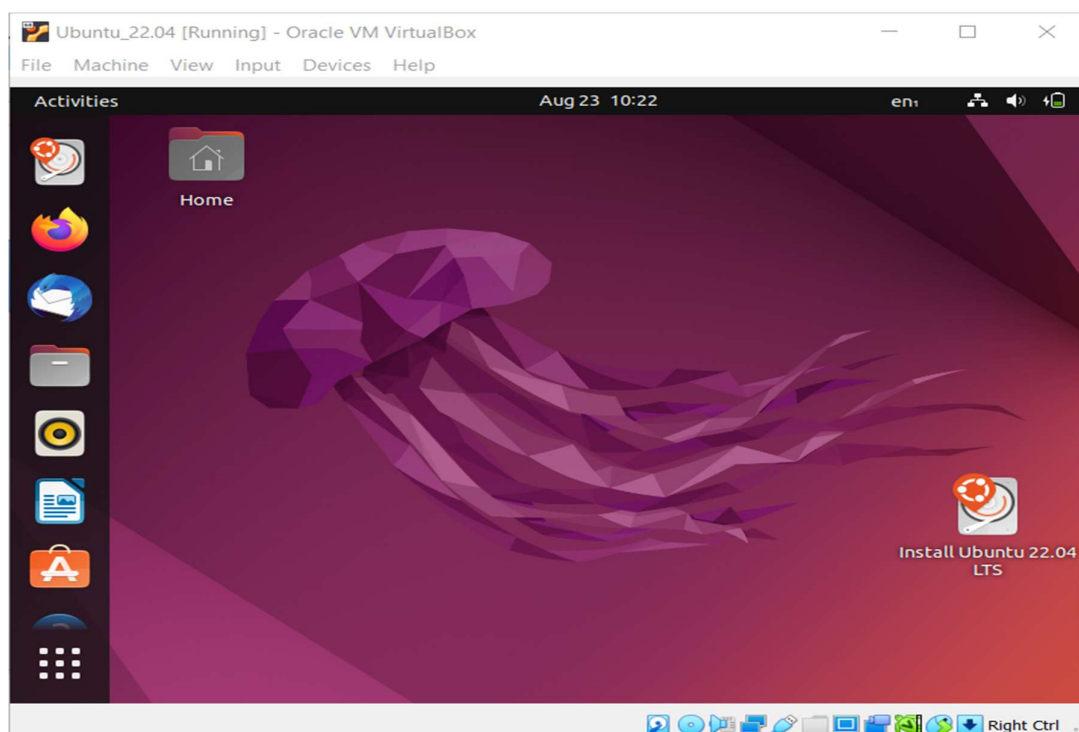
**Oracle VM VirtualBox Manager**

File   Machine   Help

**Tools**

?   X

← Create Virtual Machine

**Memory size**

Select the amount of memory (RAM) in megabytes to be allocated to the virtual machine.

The recommended memory size is **1024** MB.

4 MB                                        16384 MB

3072 MB

Next   Cancel

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**Oracle VM VirtualBox Manager**

File   Machine   Help

**Tools**

?   X

← Create Virtual Machine

**Hard disk**

If you wish you can add a virtual hard disk to the new machine. You can either create a new hard disk file or select one from the list or from another location using the folder icon.

If you need a more complex storage set-up you can skip this step and make the changes to the machine settings once the machine is created.

The recommended size of the hard disk is **10.00 GB**.

○ Do not add a virtual hard disk
● Create a virtual hard disk now
○ Use an existing virtual hard disk file

Empty

Create   Cancel

## Oracle VM VirtualBox Manager

**File   Machine   Help**

**Tools**

### Create Virtual Hard Disk

## Hard disk file type

Please choose the type of file that you would like to use for the new virtual hard disk. If you do not need to use it with other virtualization software you can leave this setting unchanged.

- ◯ VDI (VirtualBox Disk Image)
- ⦿ VHD (Virtual Hard Disk)
- ◯ VMDK (Virtual Machine Disk)

[Expert Mode]   [Next]   [Cancel]

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## Oracle VM VirtualBox Manager

**File   Machine   Help**

**Tools**

### Create Virtual Hard Disk

## Storage on physical hard disk

Please choose whether the new virtual hard disk file should grow as it is used (dynamically allocated) or if it should be created at its maximum size (fixed size).

A **dynamically allocated** hard disk file will only use space on your physical hard disk as it fills up (up to a maximum **fixed size**), although it will not shrink again automatically when space on it is freed.

A **fixed size** hard disk file may take longer to create on some systems but is often faster to use.

- ⦿ Dynamically allocated
- ◯ Fixed size

[Next]   [Cancel]

- Virtual Machine is now created.



- Go to settings to add the ISO image of Ubuntu22.04.

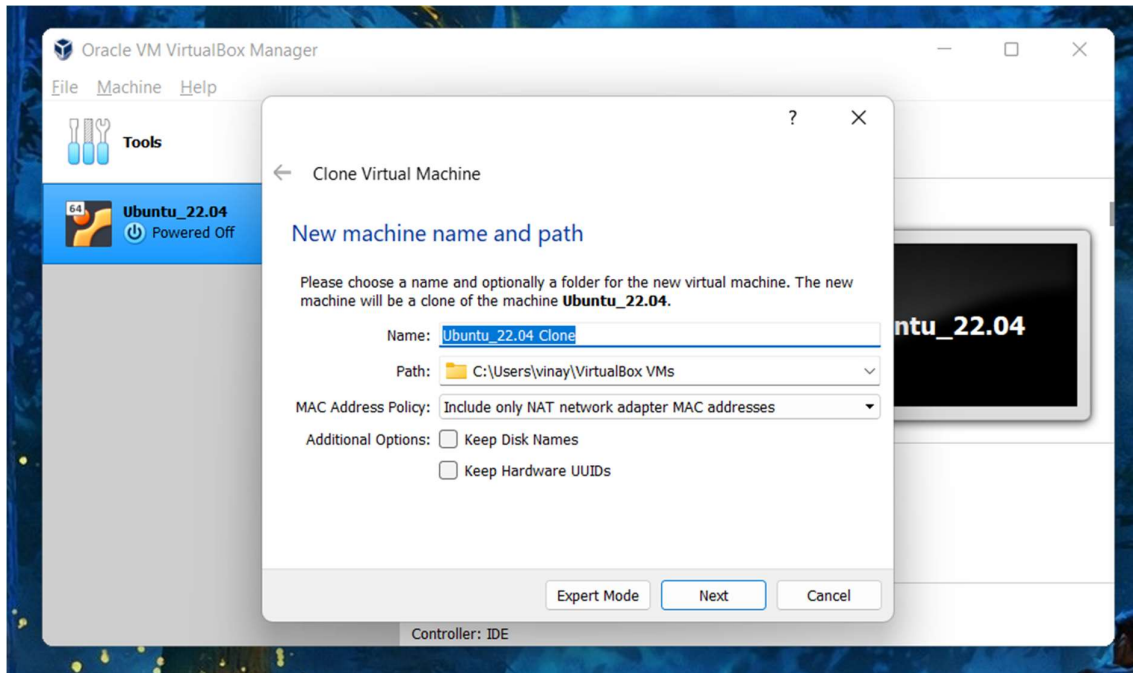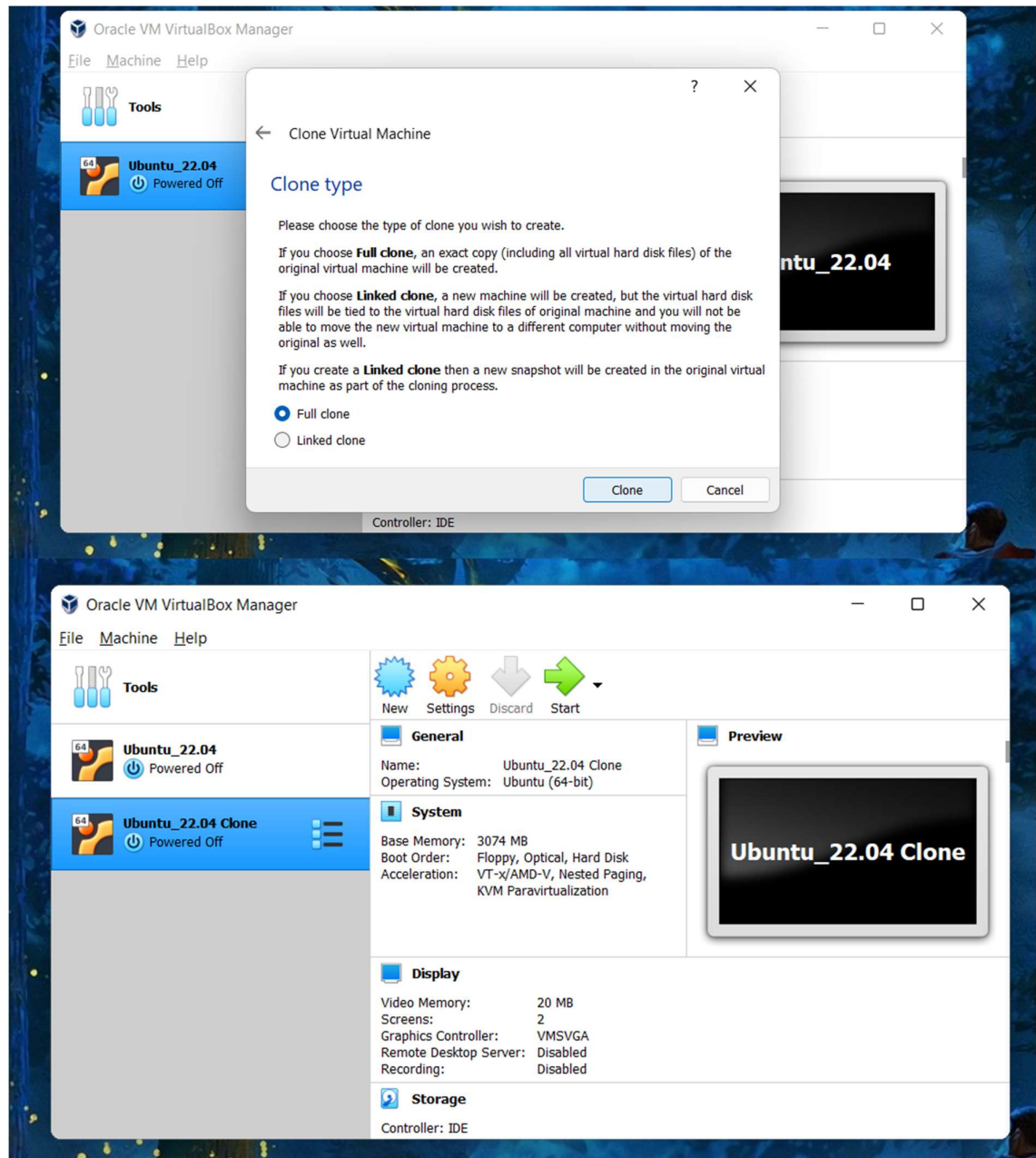Ubuntu is up and running.



## Cloning Virtual Machine:

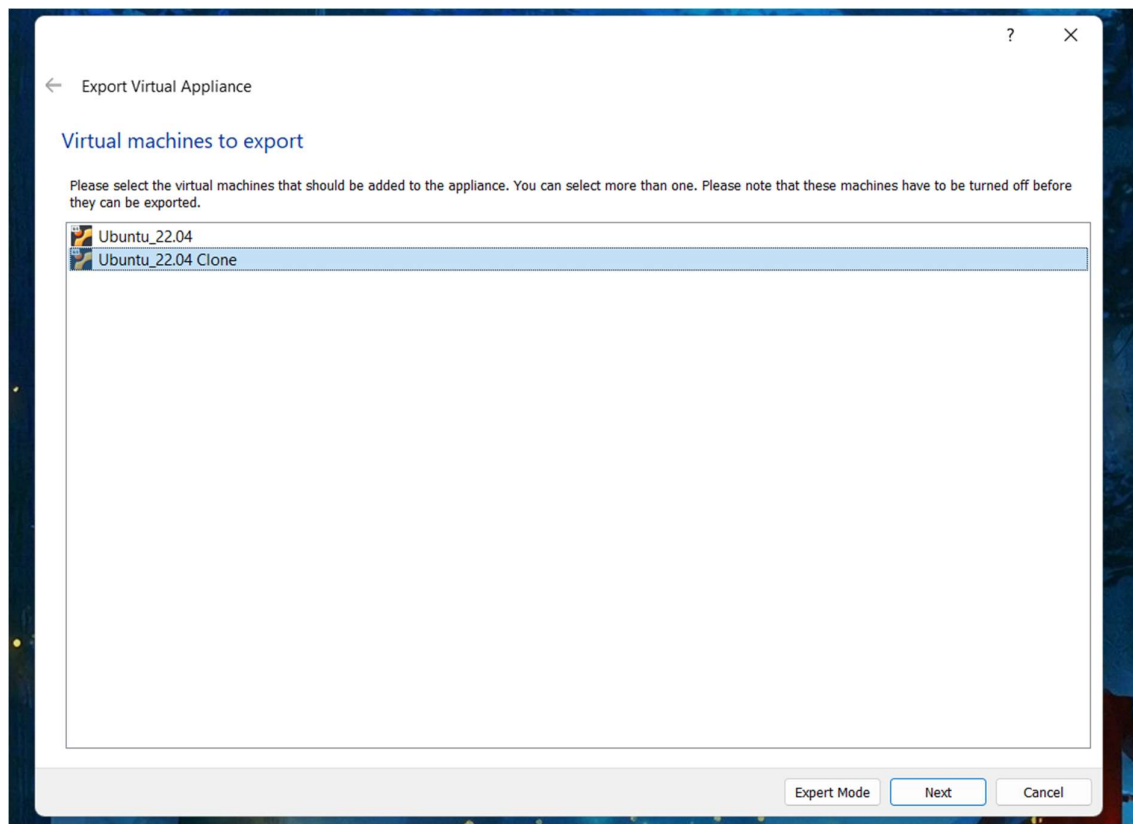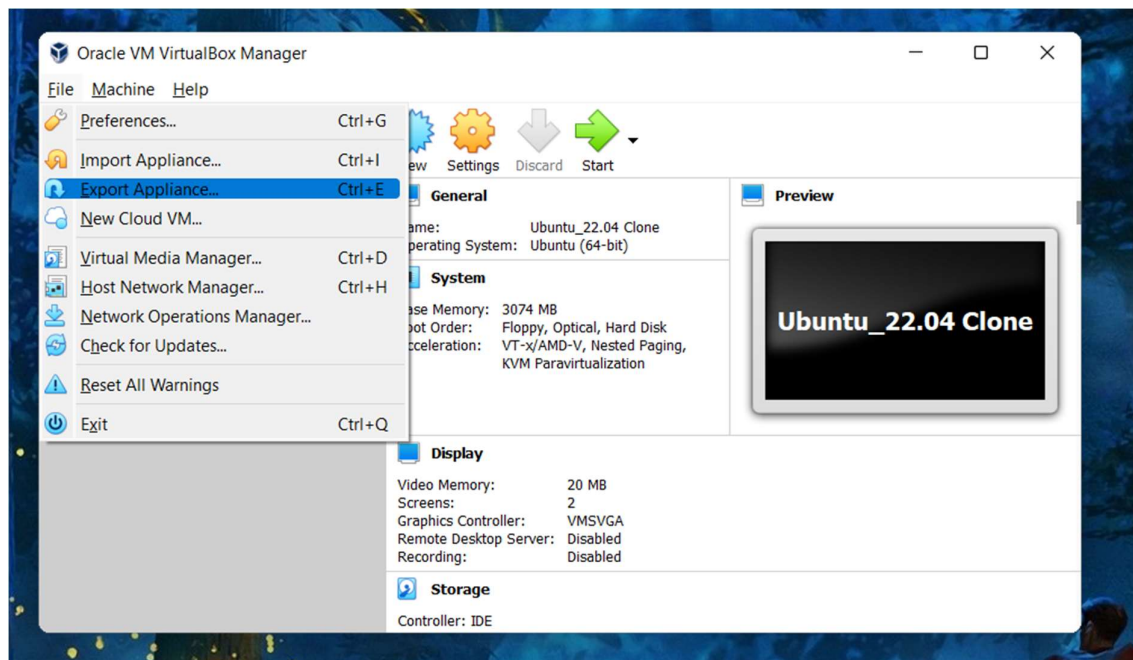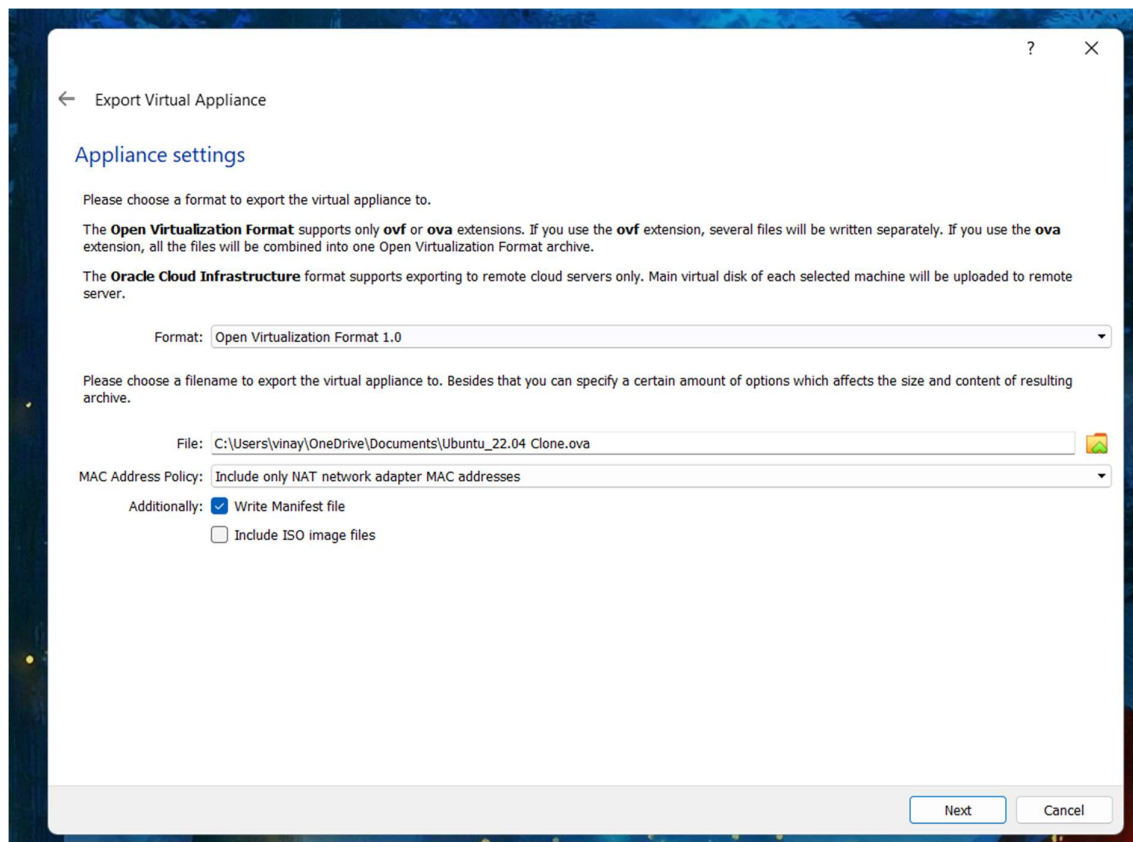- Right Click on VM and click clone
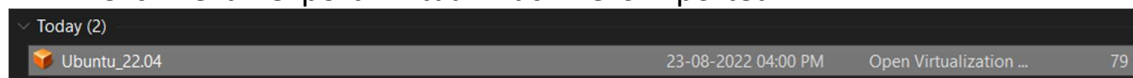


- Set details:

Export Virtual Machine:

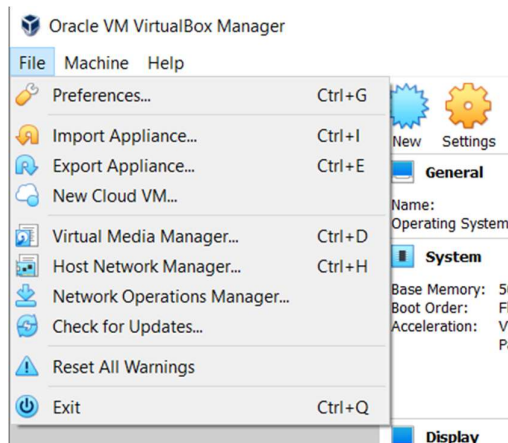- Click on File > export appliance:

- Set the details.

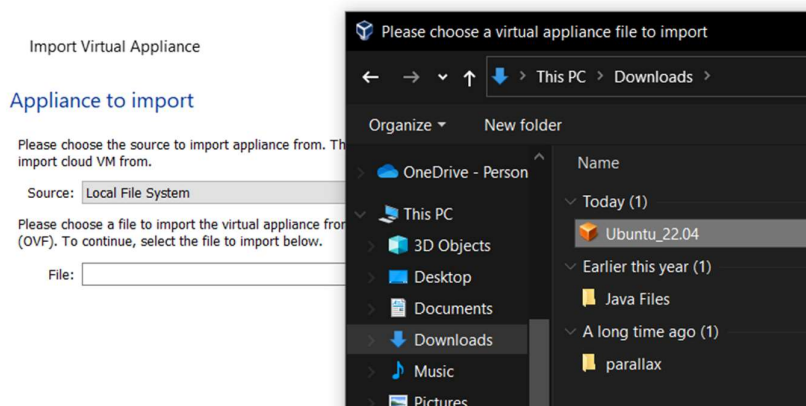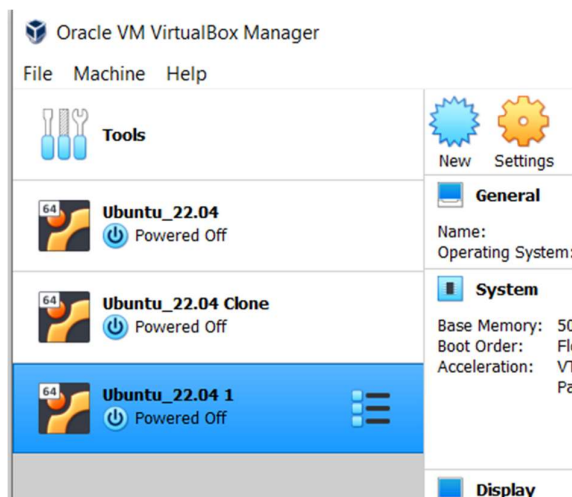- Click next > export. Virtual Machine is Exported.



## Importing Virtual Machine:
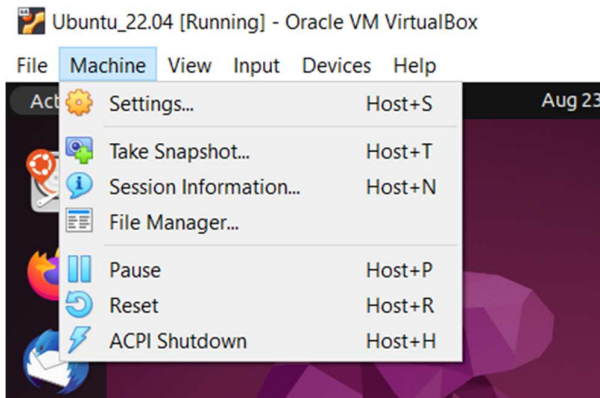
- Click on File > import appliance.

- Select file.
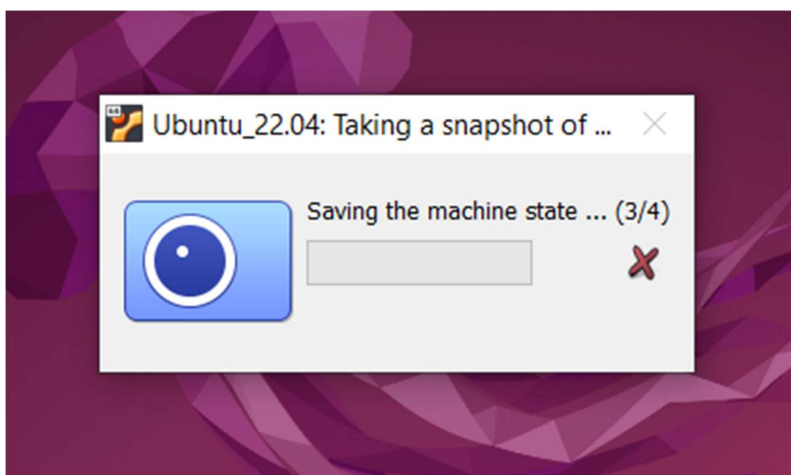


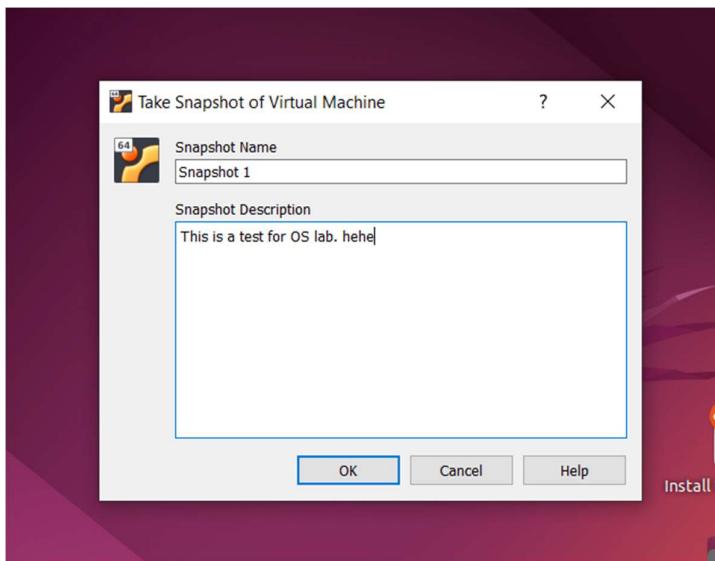- Click next > import. Virtual Machine is imported.



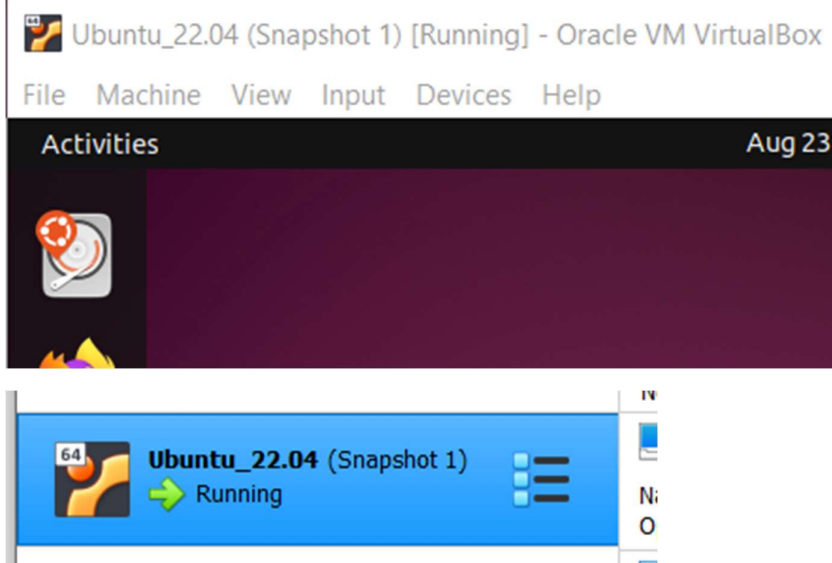**Creating Snapshot of Virtual Machine:**

- First start up the Virtual machine.

- Inside the VM, Go to Machine > take snapshot.
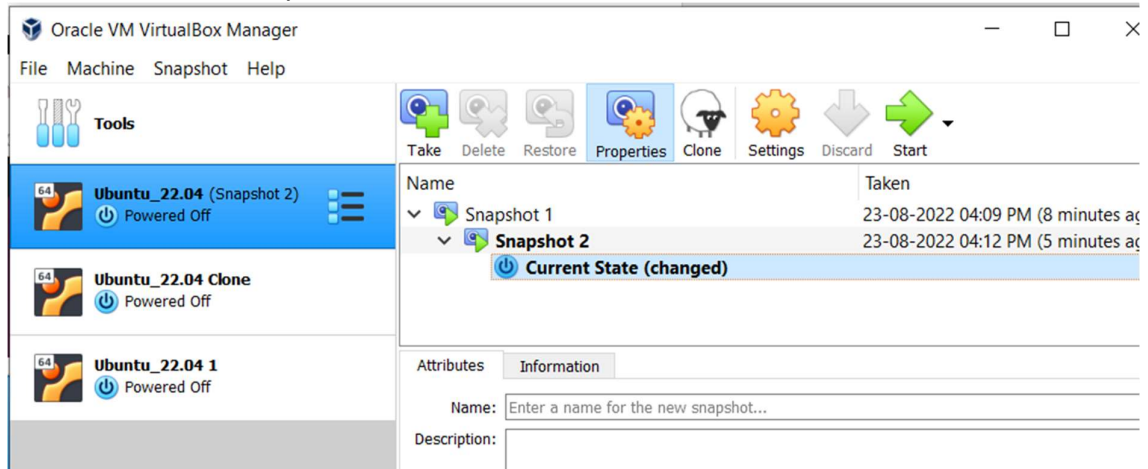


- Fill the details.
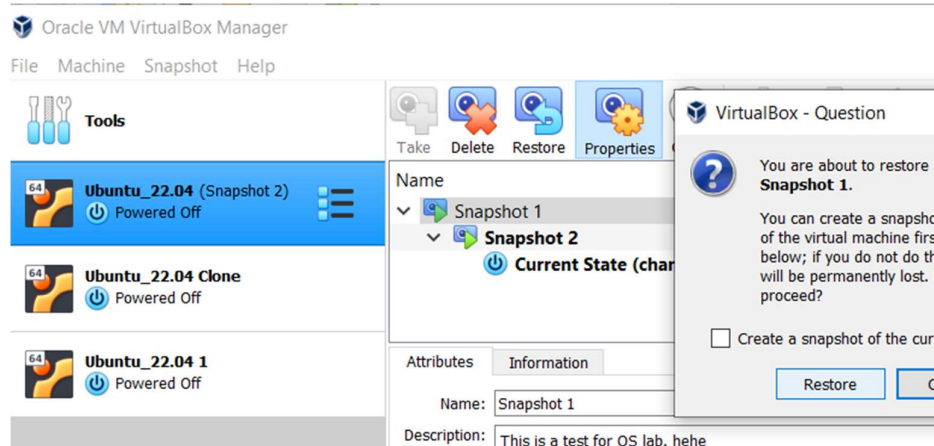
- Snapshot has been created and is running.



**Restoring a snapshot:**

- Available snapshots:



- Select snapshot you would like > click restore.

- Snapshot 1 has become the current state of VM.