ST. XAVIER'S COLLEGE

(Affiliated to Tribhuvan University)
Maitighar, Kathmandu

OS Lab Assignment #1

Virtual box and OS Installing in Ubuntu

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2nd Year/4th Sem

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Installing Linux using VirtualBox

Windows users looking to use Linux for the first time will find it beneficial to try it out in a virtual machine. There is plenty of great virtual machine software available on the market. The pros for installing Linux in a virtual machine include:

- The ability to try a version of Linux without affecting the Windows host machine
- The virtual Linux operating system will perform the same way as it would when install to the physical hard drive
- Software installed into the virtual machine remains intact and can be used even after a reboot.
- The virtual machines can be backed up and restored easily so if you mess up it isn't so much of an issue

For this, we have chosen Ubuntu as it is one of the most popular and easy to use Linux distributions.

1. Install Oracle Virtual Box:

   Go to the website of Oracle Virtual Box and get the latest stable version.

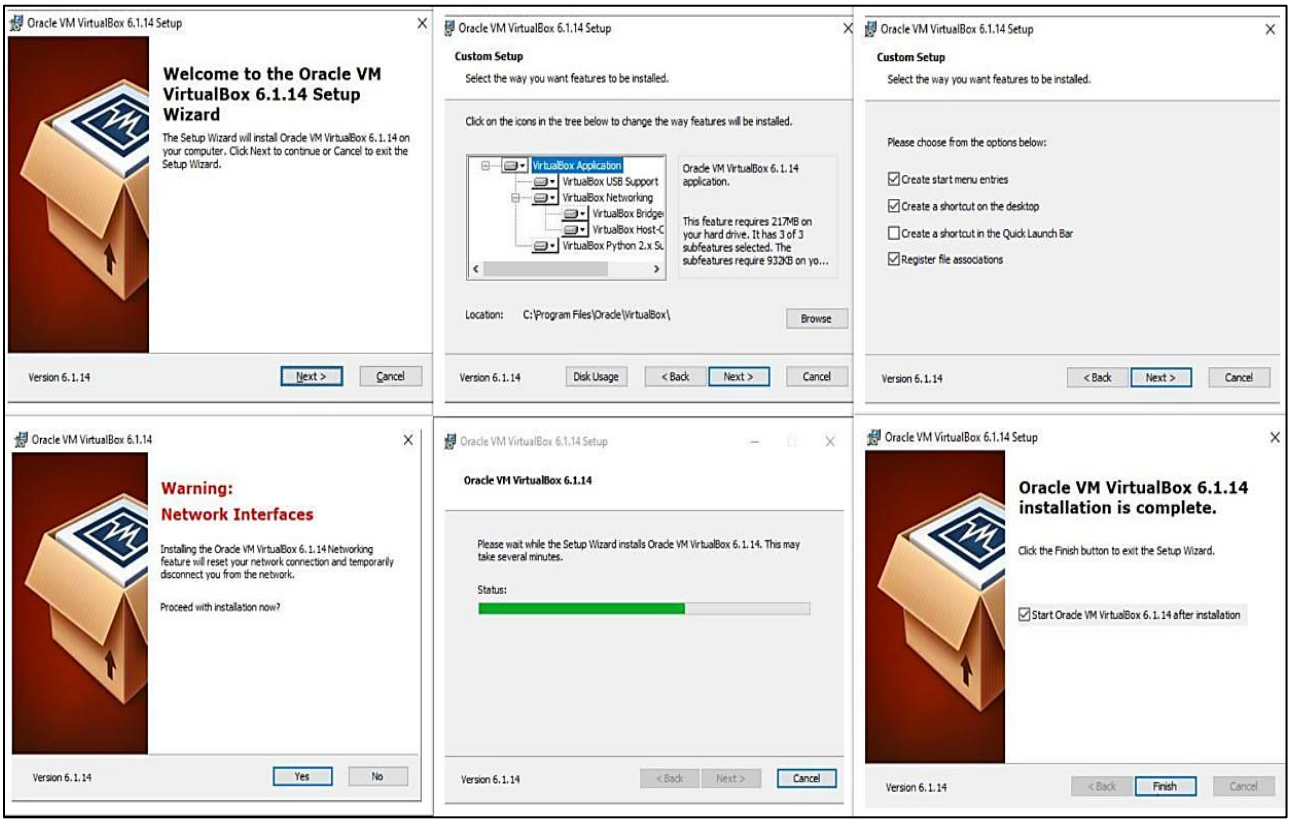


Fig: Installation of Oracle Virtual Box

2. Download Linux ISO

   Next, the user need to download the ISO file of the Linux distribution. One can get Ubuntu from the official website of the Linux distribution.

3. Install Linux using VirtualBox

   After installing VirtualBox and downloading the ISO for Linux. The users now set to install Linux in VirtualBox. Start VirtualBox, and click on the New symbol. Give the virtual OS a relevant name.

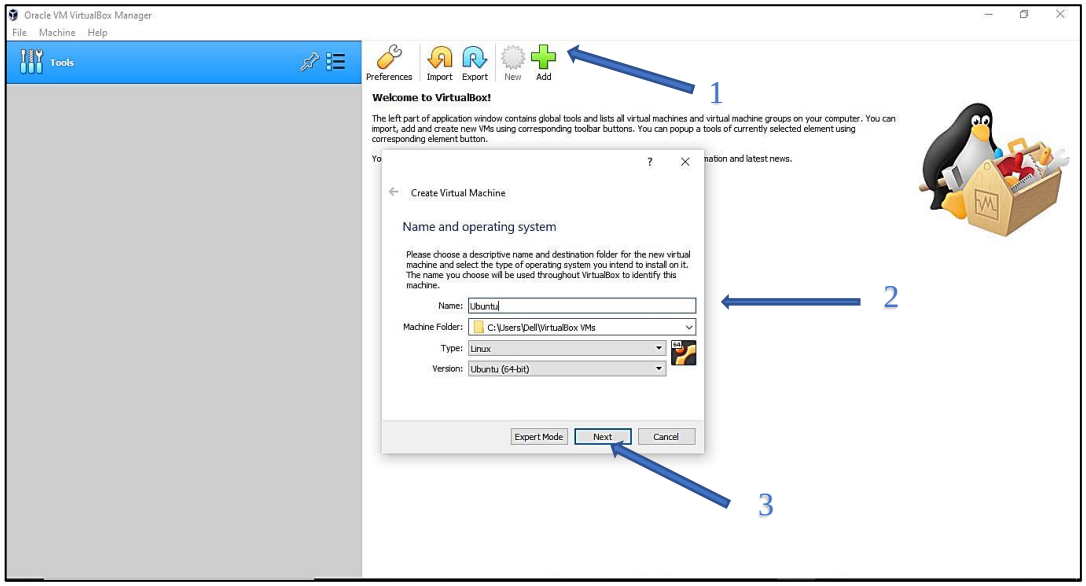


Fig: Creating a virtual Machine

4. Allocate RAM to the virtual OS.

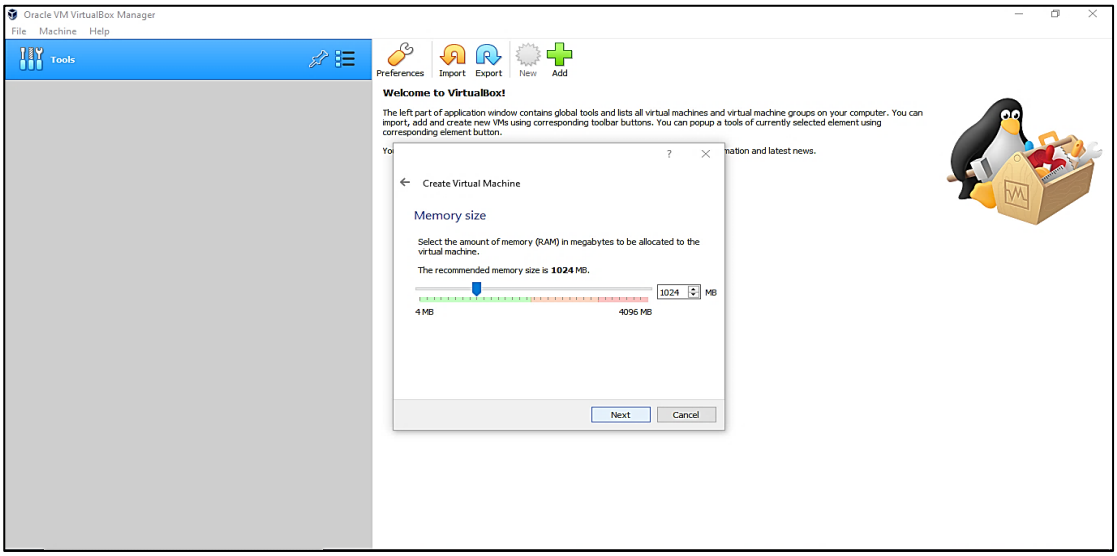


Fig 3: Allocation of RAM

5. Create a virtual disk. This works as the hard disk of the virtual Linux system. This is where the virtual system will store its file

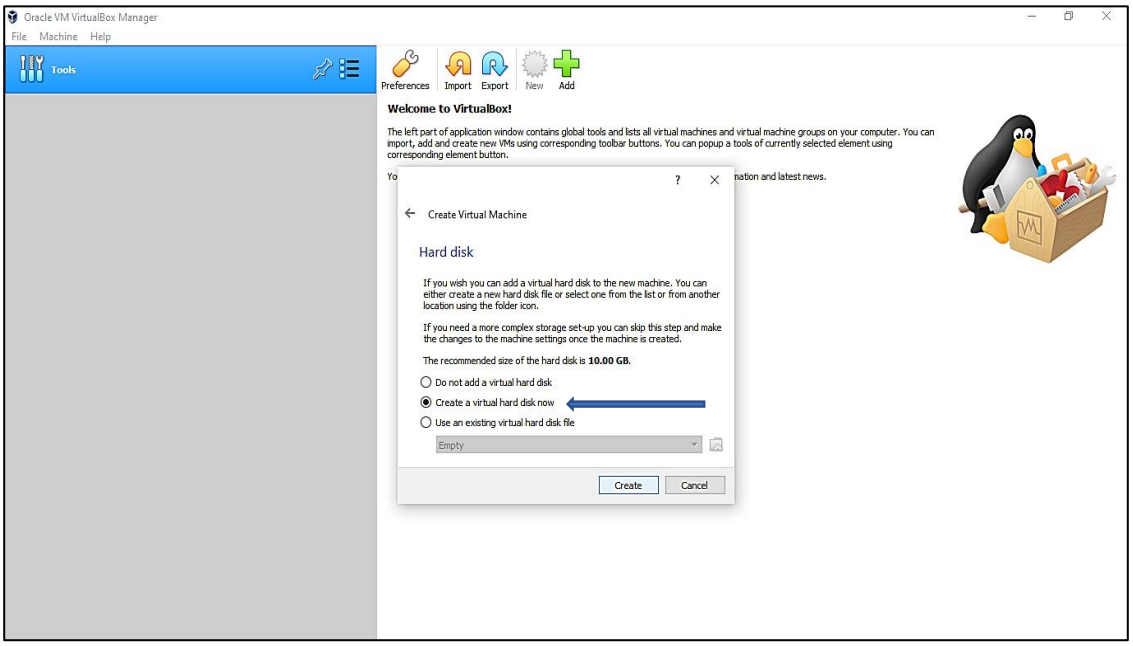


Fig: Creating a Virtual Disk Image

6. Choose the file type.

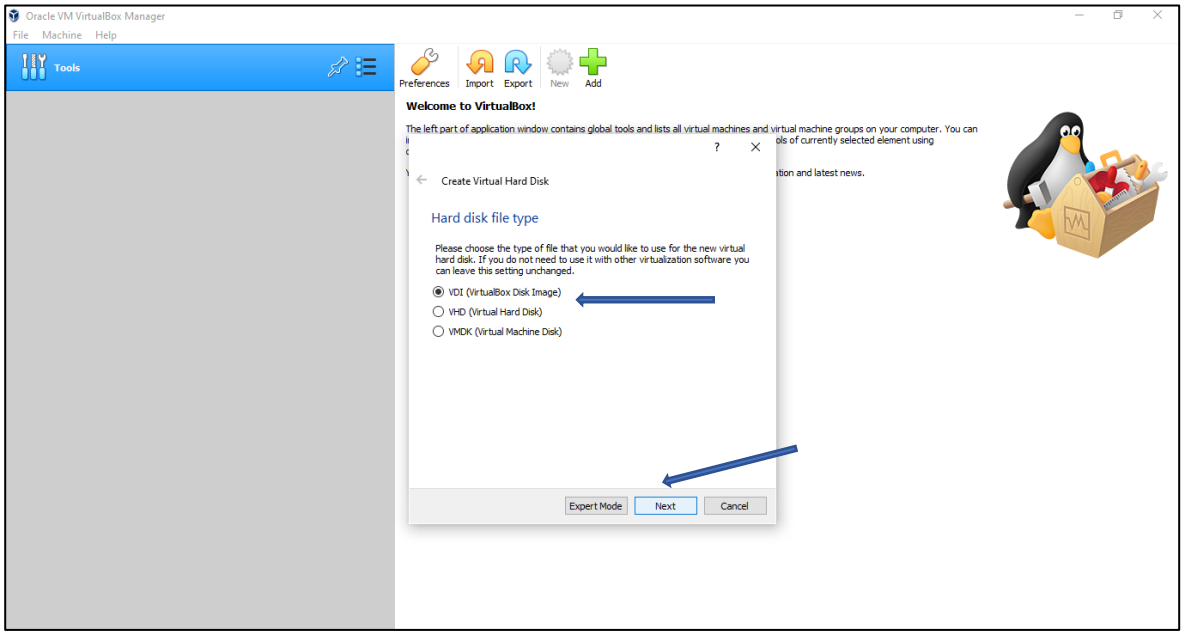


Fig: Choosing the hard disk file type

7. Option for creating the virtual hard disk.

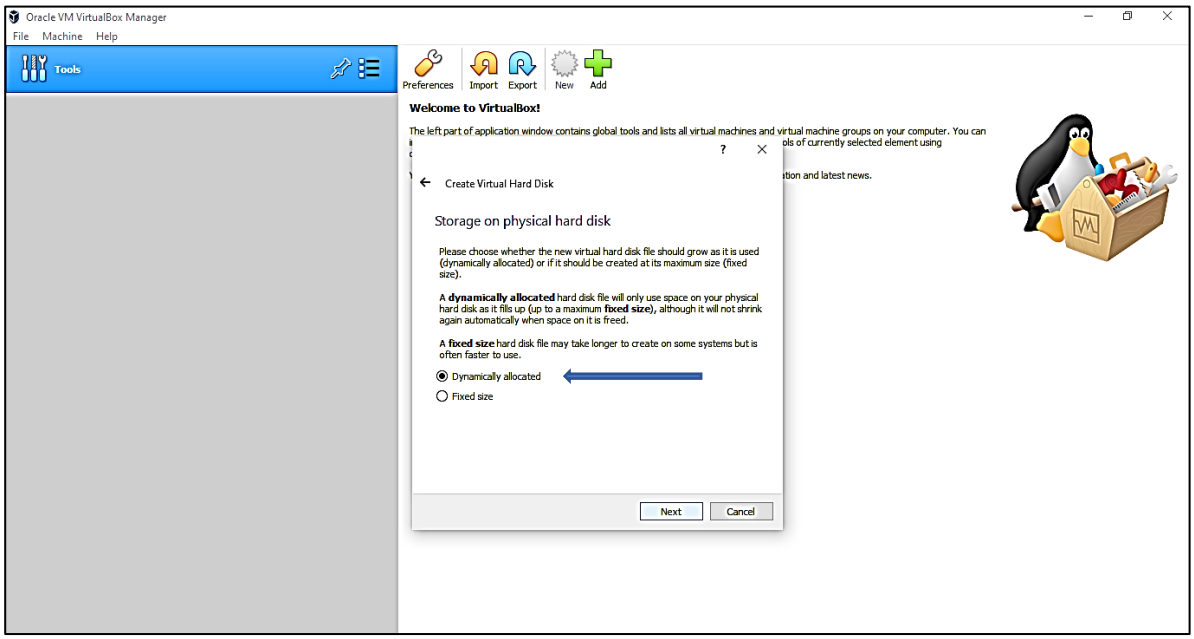


Fig: Storage on Physical Hard Disk

8. Optimizing File Location and Size.

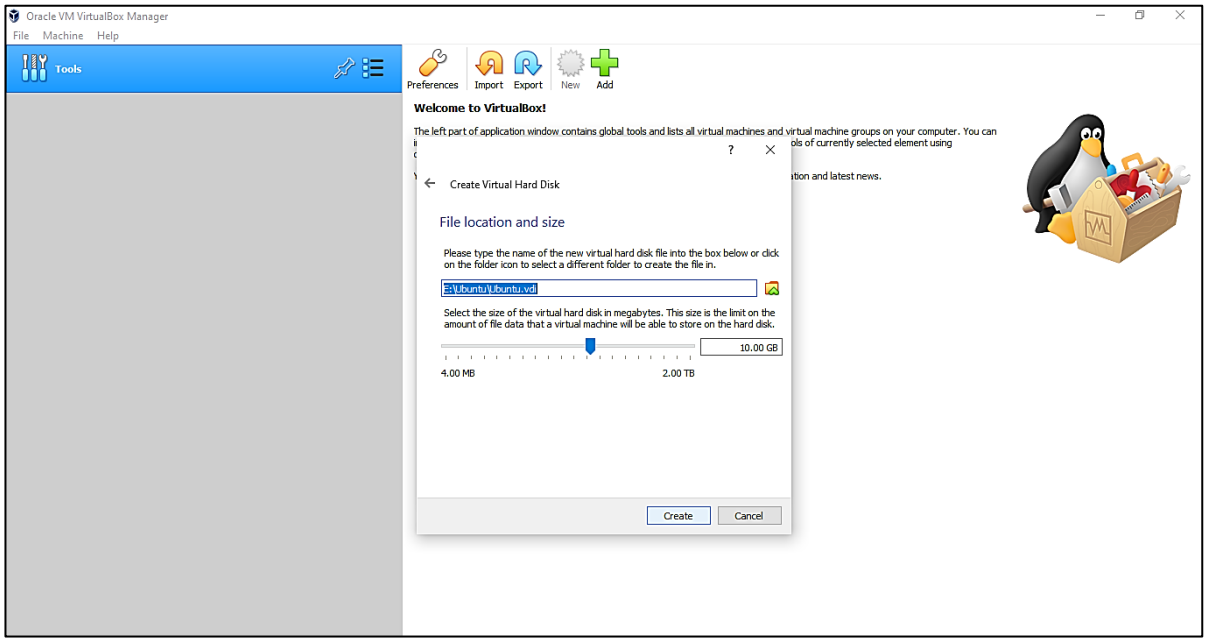


Fig: Optimizing File Location and Size

9. Go to settings

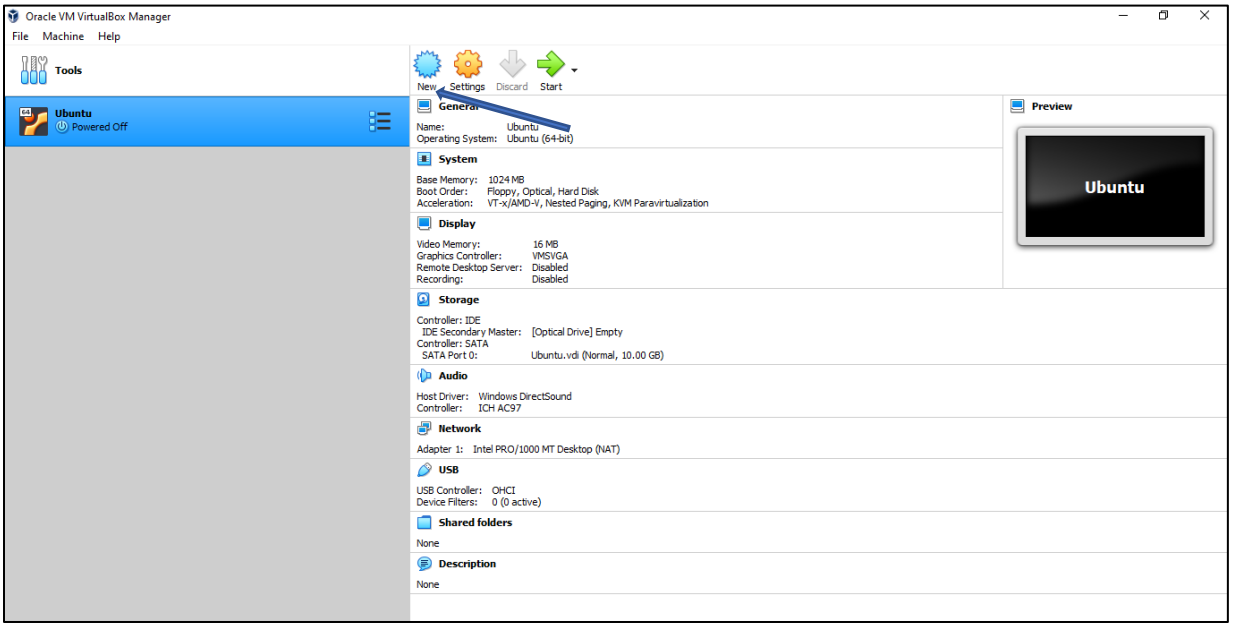


Fig: Booting Linux ISO

10. Under setting go to storage device and choose the Virtual Optical Disk Image

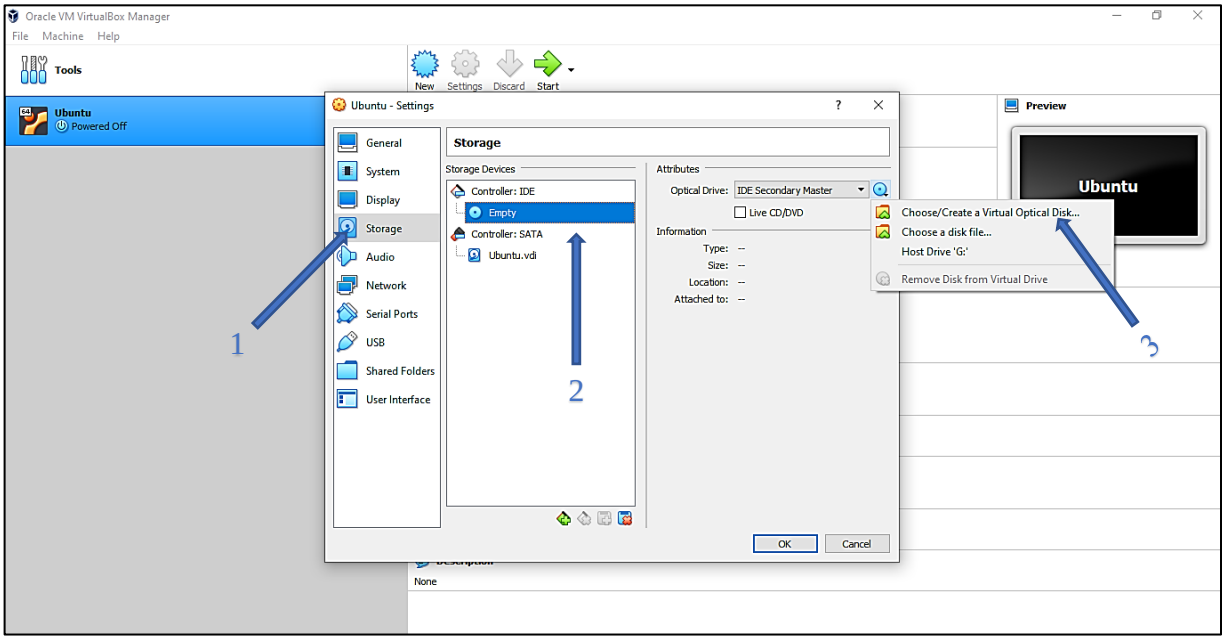


Fig: Choosing the Virtual Optical Disk Image

11. Click Ok after choosing the Virtual Box Disk Image

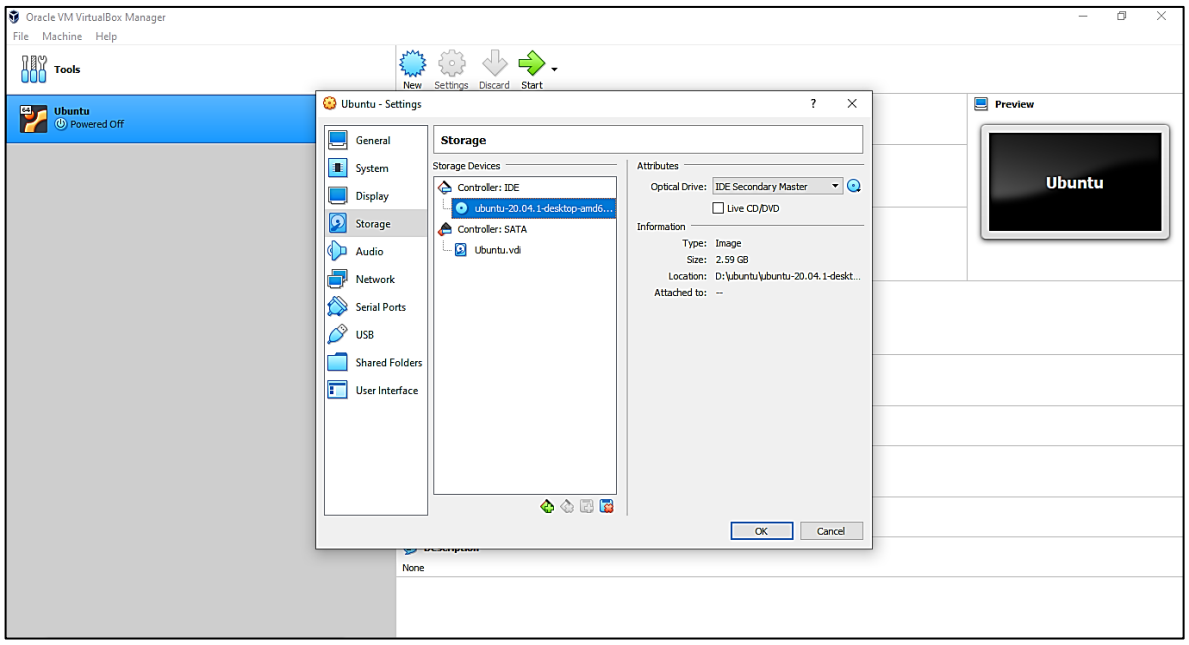


Fig: Virtual Box Image confirm

12. Boot the ISO and install Linux as a virtual operating system.

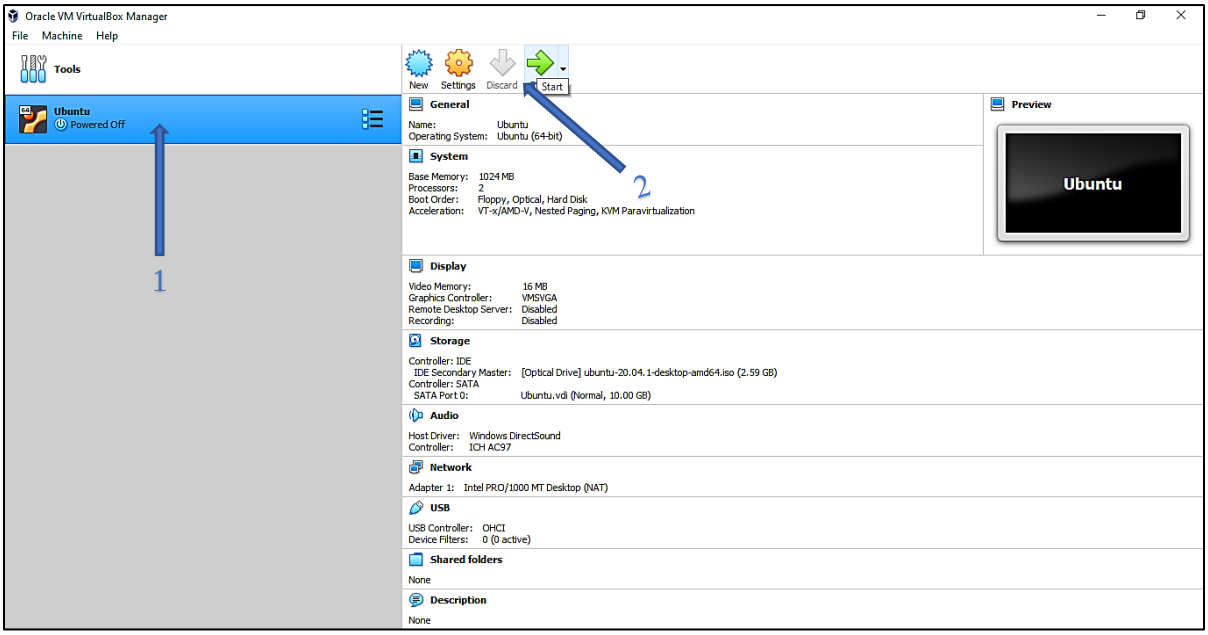


Fig: Booting Linux ISO

13. As soon as the computer boots the welcome window is seen.

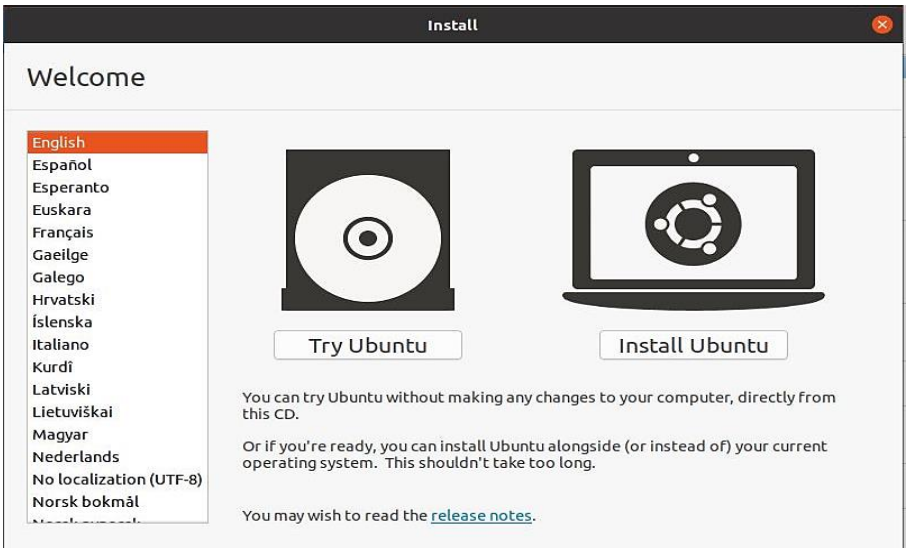


Fig: Welcome Screen

Select the second option, Install Ubuntu, and press return to launch the desktop installer automatically.

14. Prepare to install Ubuntu

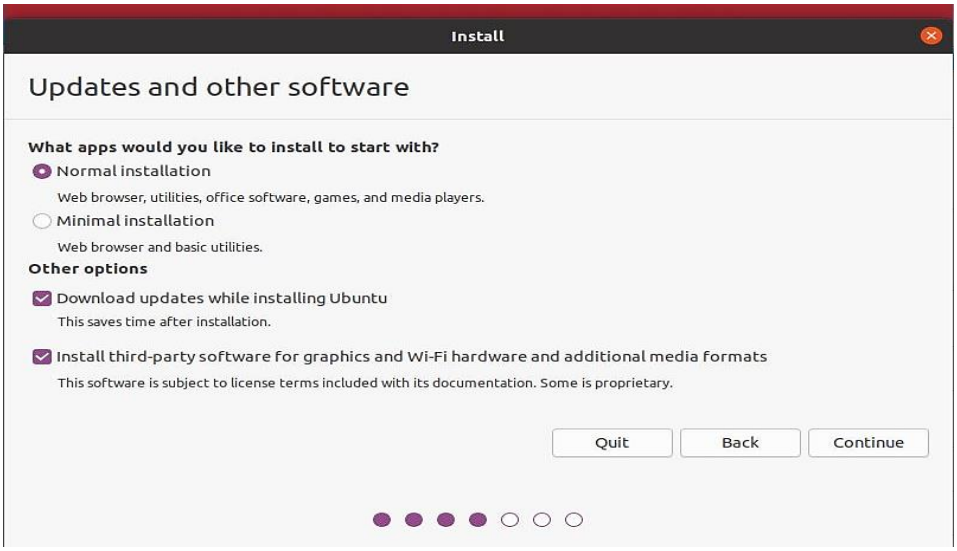


Fig: Installation Process

The two options are Normal installation and Minimal installation. The first is the equivalent to the old default bundle of utilities, applications, games and media players - a great Launchpad for any Linux installation. The second takes considerably less storage space and allows you to install only what you need.
Beneath the installation-type question are two checkboxes; one to enable updates while installing and another to enable third-party software.

15. Allocate drive space

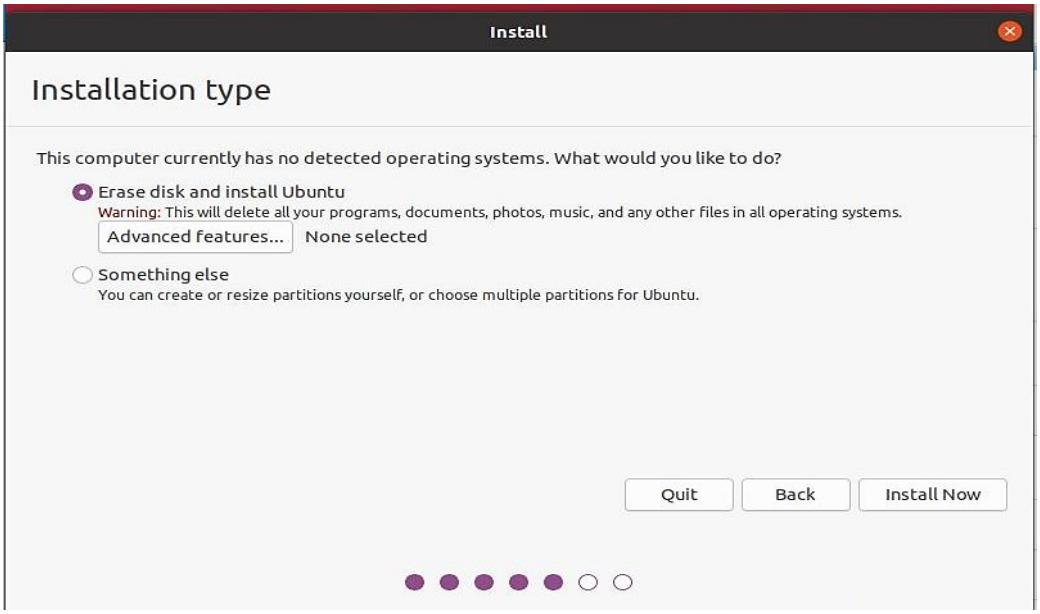


Fig: Allocating Drive Space

Use the checkboxes to choose whether the user would like to install Ubuntu alongside another operating system, delete the existing operating system and replace it with Ubuntu.

16. Begin installation

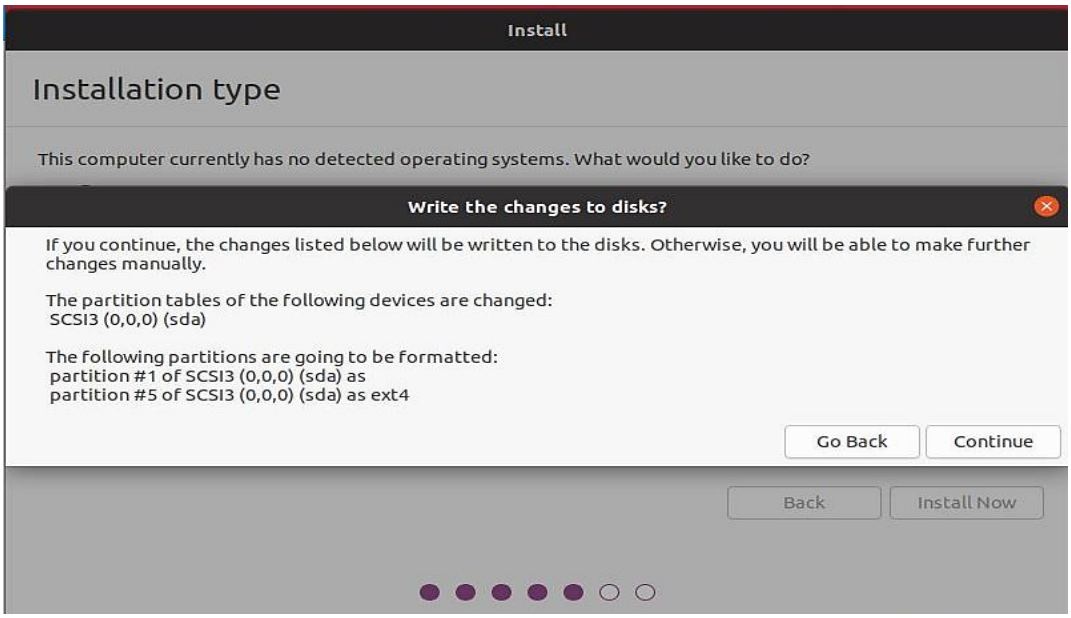


Fig: Installation

After configuring storage, click on the Install Now button. A small pane will appear with an overview of the storage options you've chosen, with the chance to go back if the details are incorrect. Click “Continue” to fix those changes in place and start the installation process.

17. Select the location

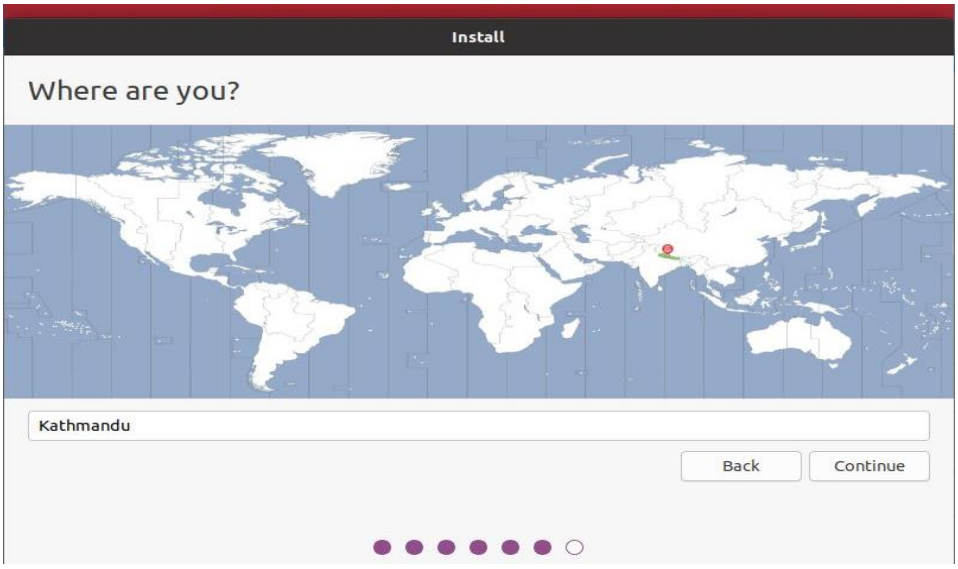


Fig: Selection of Location

If the user is connected to the internet, the location will be detected automatically. Check if the location is correct and click 'Forward' to proceed.

18. Login Details

Enter the name and the installer will automatically suggest a computer name and username. These can easily be changed if you prefer. The computer name is how the computer will appear on the network, while your username will be your login and account name. Next, enter a strong password. The installer will let the user know if it's too weak.
The user can also choose to enable automatic login and home folder encryption. If the machine is portable, we recommend keeping automatic login disabled and enabling encryption. This should stop people accessing user's personal files if the machine is lost orstolen.

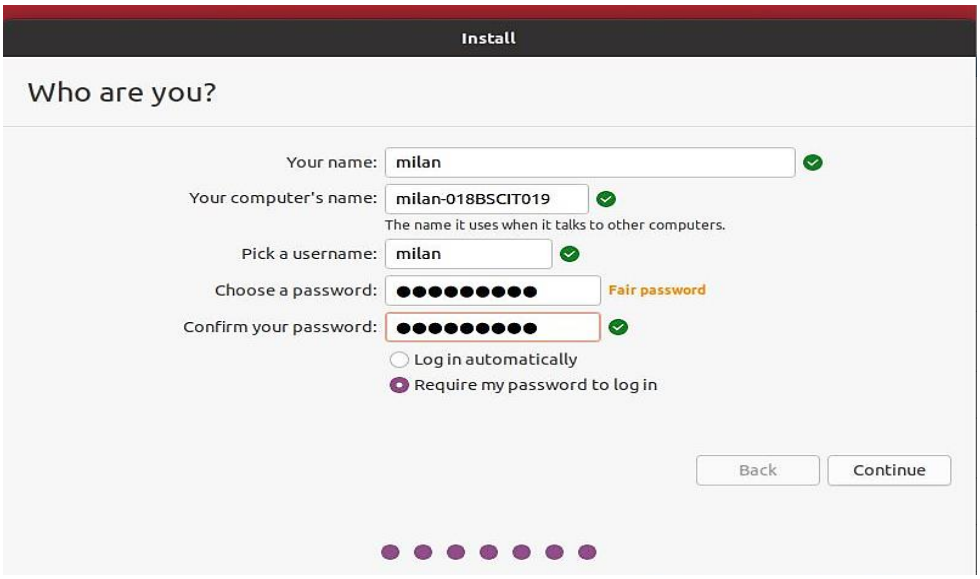


Fig: Login Detail

19. Background Installation

The installer will now complete in the background while the installation window teaches you a little about how awesome Ubuntu is. Depending on the speed of your machine and network connection, installation should only take a few minutes.

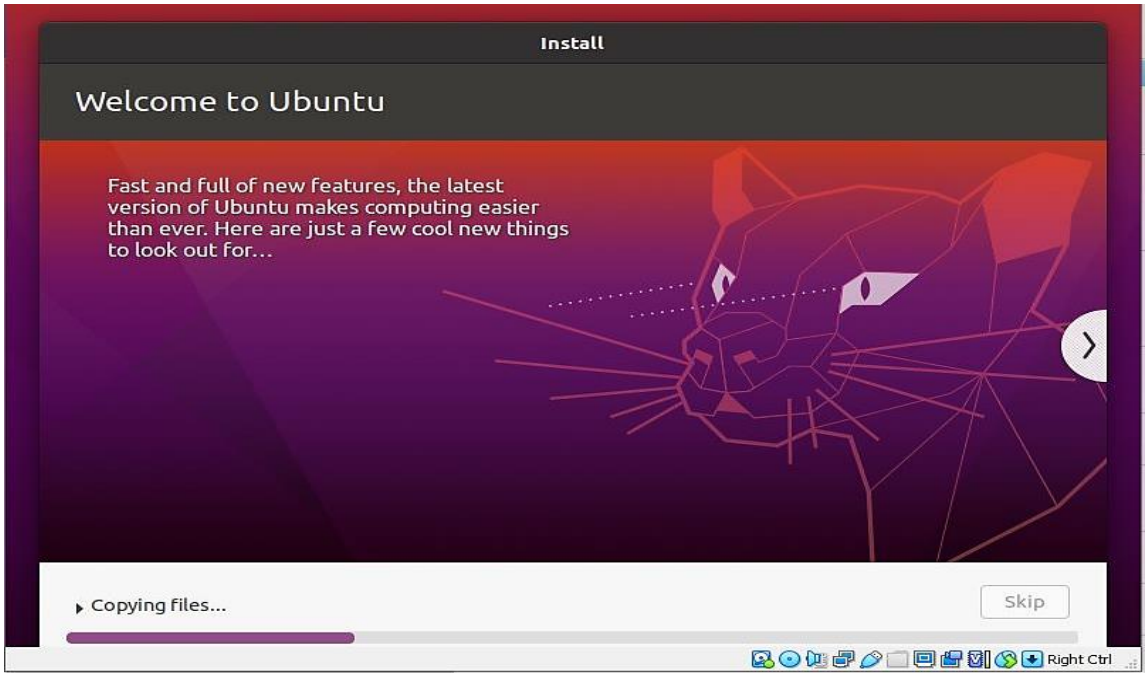
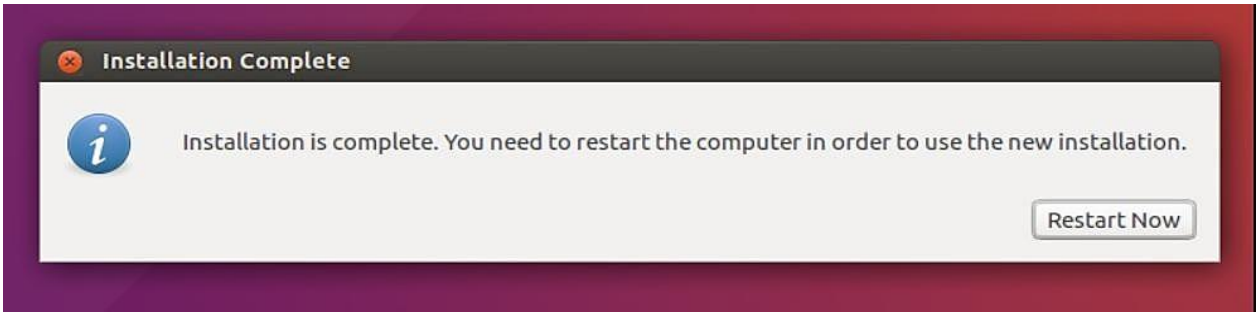


Fig: Background Installation

20. Installation complete.

After everything has been installed and configured, a small window will appear asking the user to restart the machine



21. Open Ubuntu

Since, Ubuntu is successfully Install, the user can now open and start working on Ubuntu

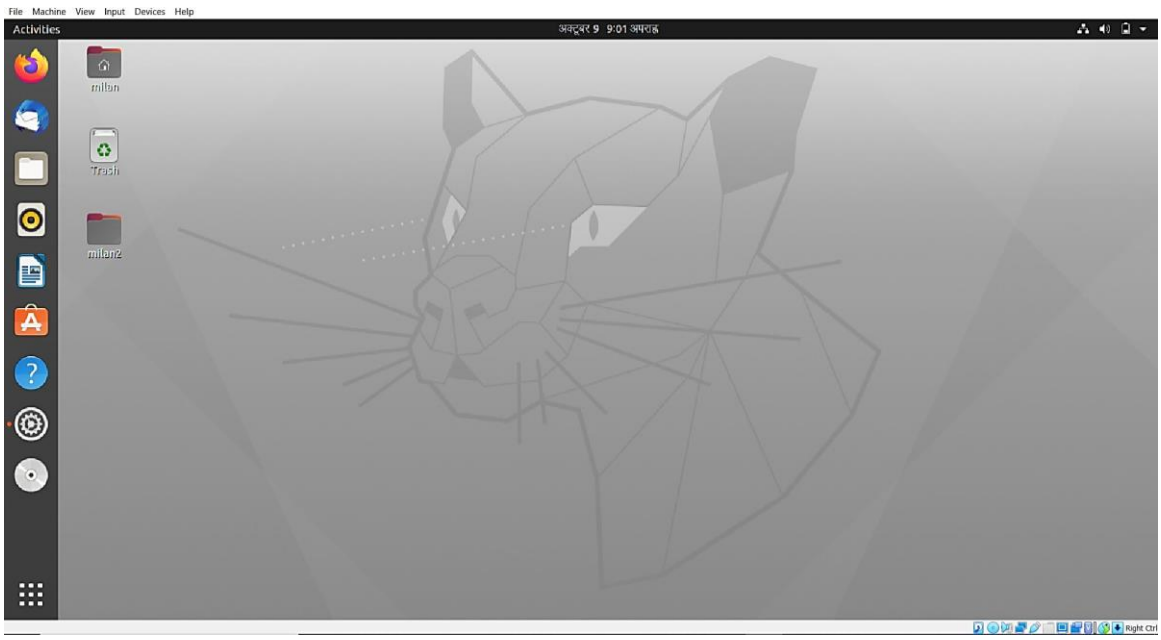


Fig: Ubuntu

Conclusion:

In this way, Linux OS can be installed using VirtualBox