## **Installation of ROS on Ubuntu 18.04**

ROS (Robot Operating System) only can be run on Ubuntu Machines. So, we need to install Ubuntu OS on laptop.

For that we have two option

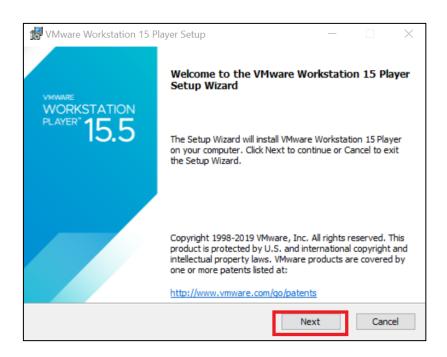
- 1. Using Virtual Machine
- 2. Dual Boot

If you have already Ubuntu 18.04 running device then skip the installation step.

### **Ubuntu installation using Virtual Machine**

First of all, download the latest version of VMware-player from given link below. https://my.vmware.com/en/web/vmware/free#desktop\_end\_user\_computing/vmware\_workstation\_player/15\_0

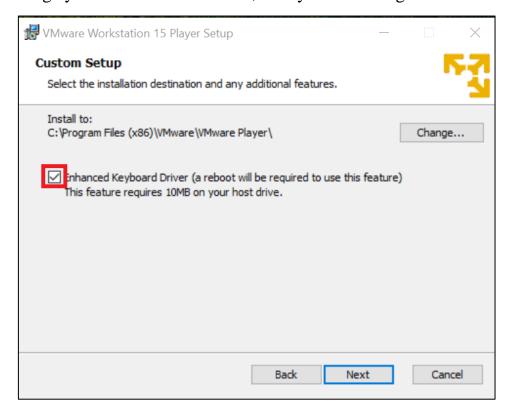
Navigate to your download location at run the VMware-player.exe file... (\*Sometime it demands for reboot your device)



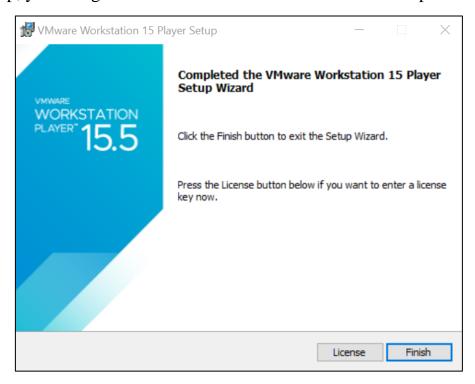
Follow some basic instruction and agree Terms and condition.



If you want change your installation location, then you can change from here.



After some step, you will get the window which show the installation process is completed.





#### **Ubuntu Installation**

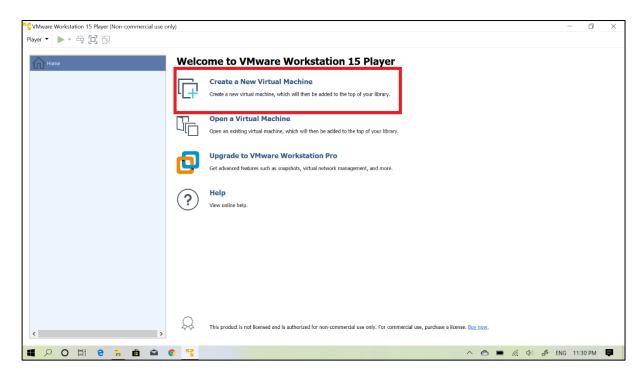
Download Ubuntu 18.04LTS from link given below.

http://mirrors.manchester.m247.com/ubuntu-releases/18.04.3/ubuntu-18.04.3-desktop-amd64.iso

After successfully installation, run the VMware Player.

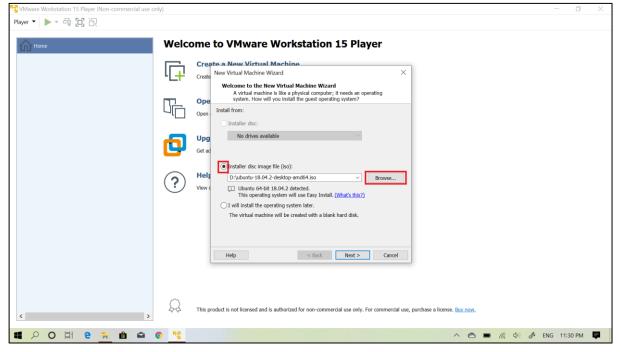
You will get this type of window showing home page of VMware player.

Select the Create a New Virtual Machine.

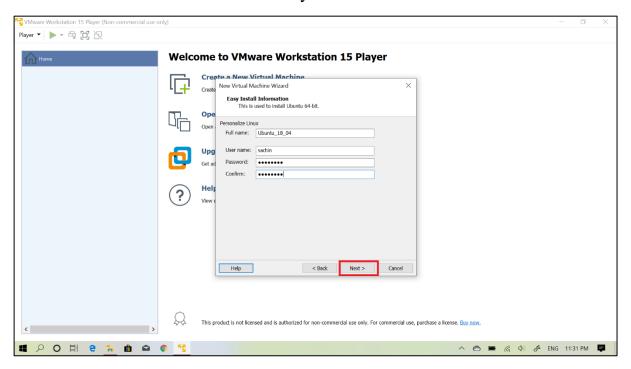


Select the Installer disc image file.

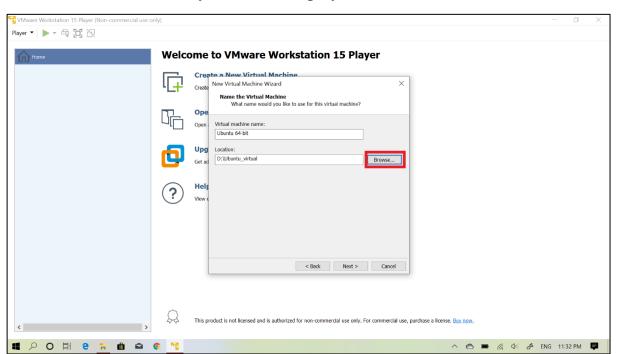
Browse the your Ubuntu\_18\_04.iso file



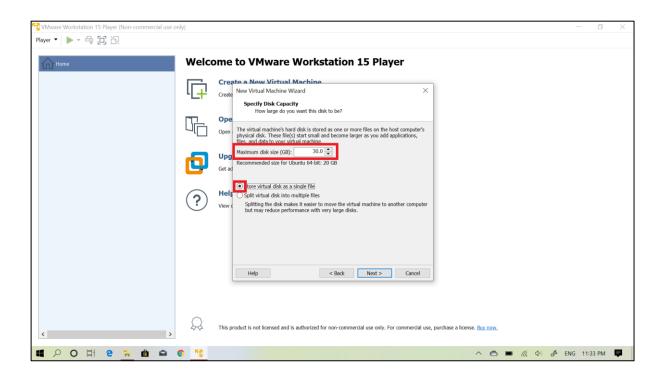
Provide the Name and other details of your choice.



Select the location where your VMware player install the OS.

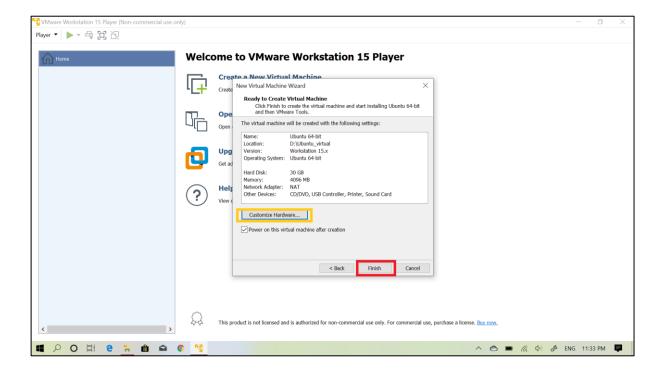


Now it's time to free up some space on device. Provide the disk size for Ubuntu. It's better to provide more space (approximate 30-35 GB).

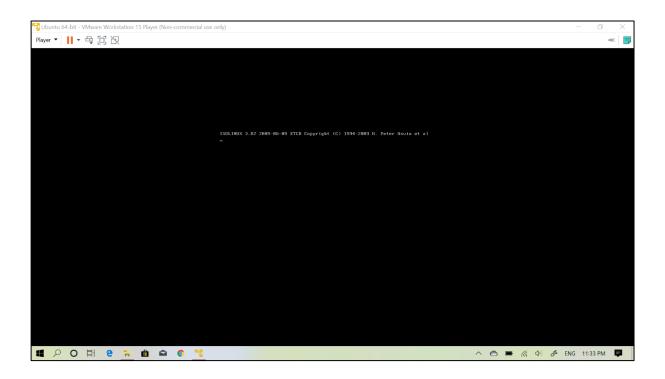


All steps are done successfully.

(If you want to change the size of provide RAM and other stuff, you can using customize Hardware)

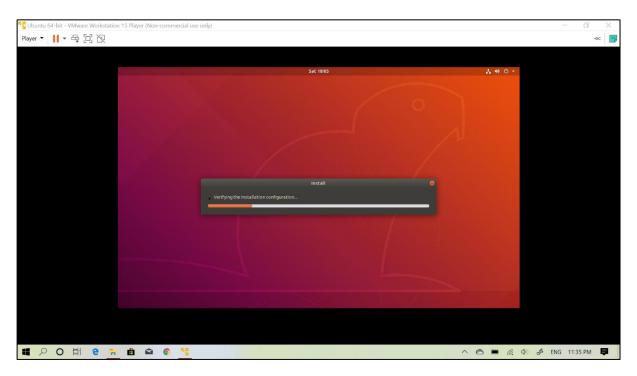


After press select button, you will this type of windows.



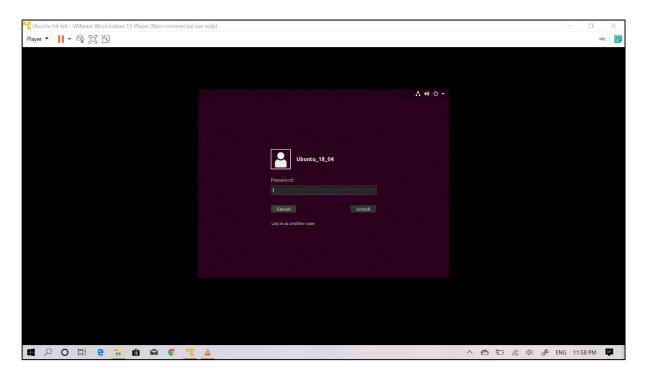


It will little bit more time depending on your device specifications. So, keep patient.

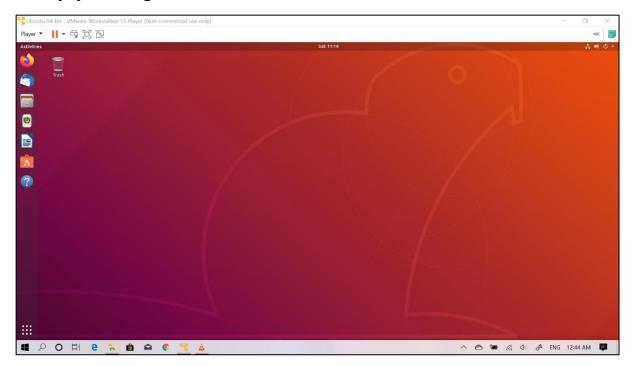


After successfully completing the installation process, you will automatically navigate to Ubuntu login page.

Login through your password and press Unlock button.



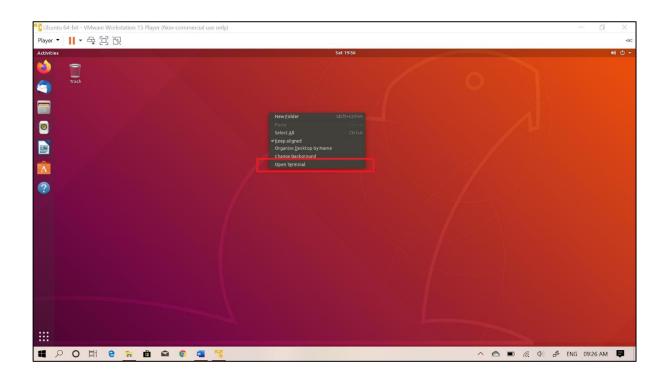
Finally, you will get the Ubuntu home screen...



Before installing any package or application, update you Ubuntu using following commands in terminal.

You can open terminal window two way.

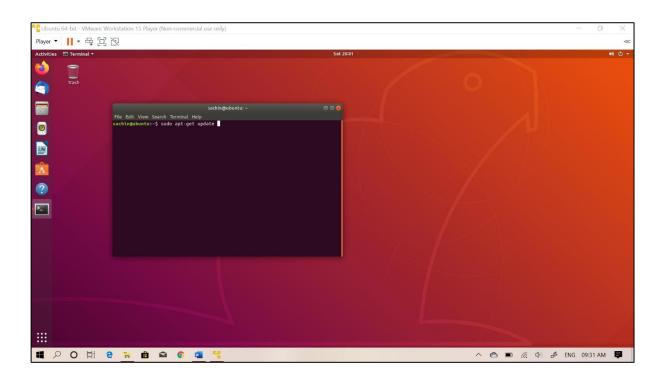
- 1. Press Alt+Clt+T from keyboard
- 2. Right click on desktop and select open in terminal.
- (\* Sometime Right click doesn't work, use two finger tap for right click)



#### Commands,

### sudo apt-get update sudo apt-get upgarde

It will take little bit more time depending your network connection.



# **Installing ROS (Melodic) in Ubuntu**

Now it's time to come on Main course.

For installation of ROS follow the link given below.

(\* For Copy and paste any text in terminal you need to use extra shift key.

Eg. Copy 
$$\rightarrow$$
 Ctrl + shift + C  
Paste  $\rightarrow$  Ctrl + shift + V )

 $\underline{http://wiki.ros.org/melodic/Installation/Ubuntu}$