

# Task1: Install ROS on Ubuntu 16.04.7

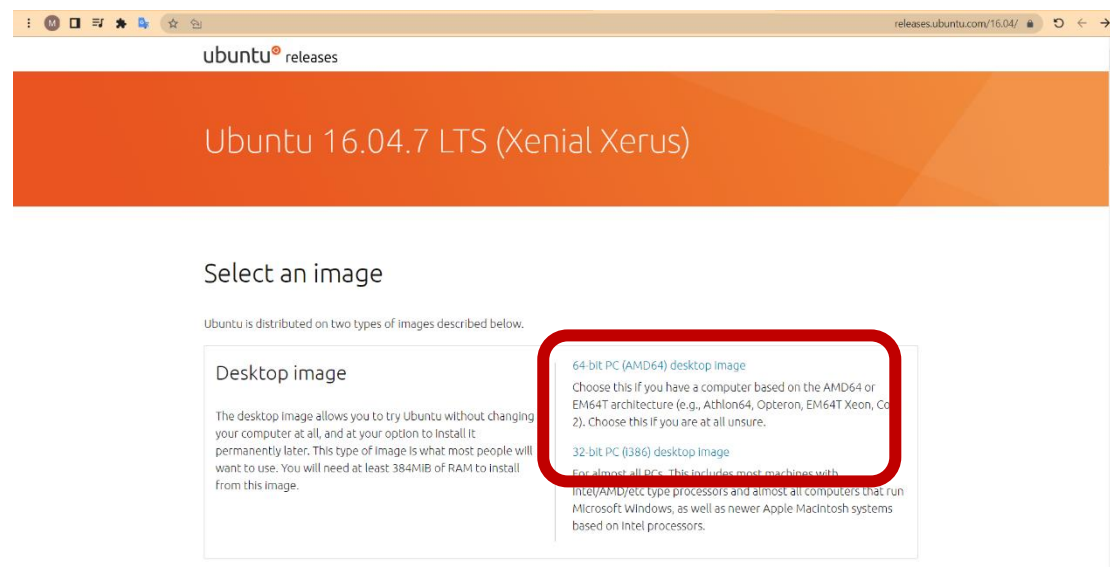
## To install ROS melodic need:

- Install ubuntu 16.04.7
- Install VirtualBox.
- Install ROS melodic.

## Download ubuntu 16.04.7:

Go to this link to install ubuntu 16.04.7:

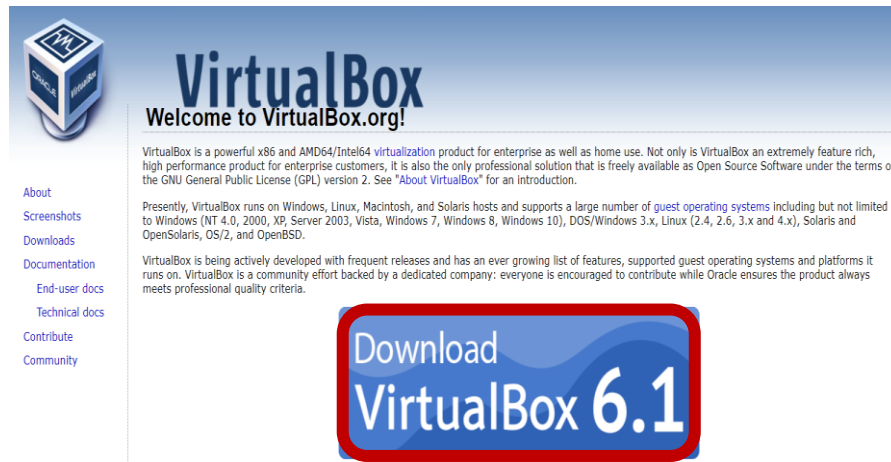
<https://releases.ubuntu.com/16.04/>



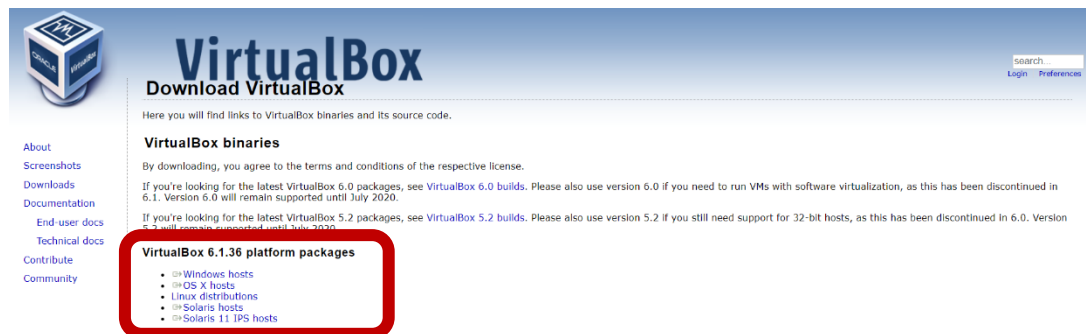
Choice one of these ( **for my computer I use 64-bit** )

# Install VirtualBox:

Going to this link to install VirtualBox: <https://www.virtualbox.org/>

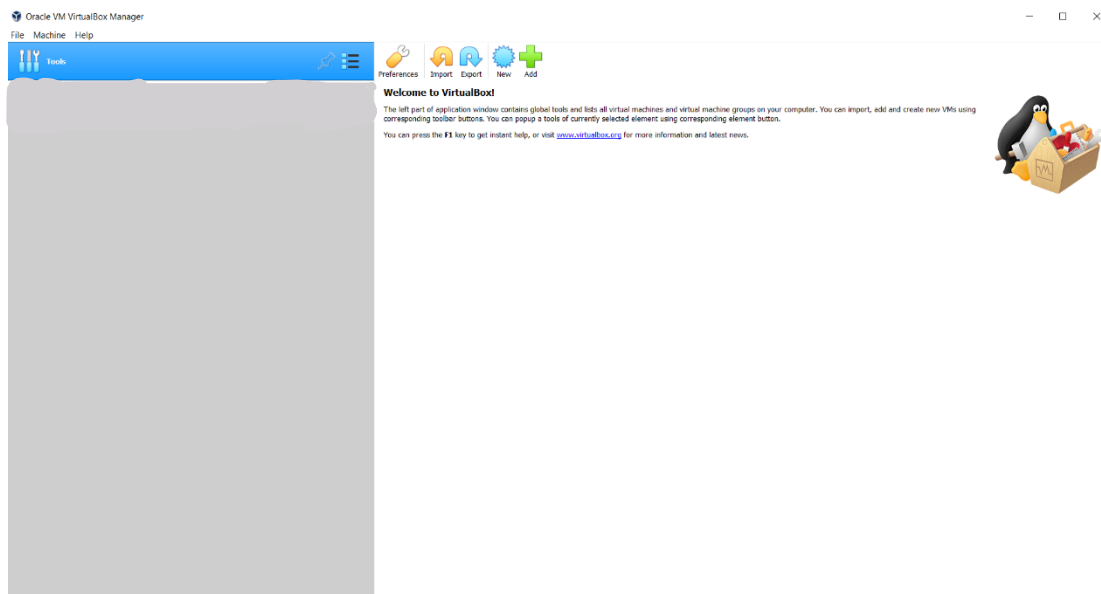


Click on **Download VirtualBox 6.1**

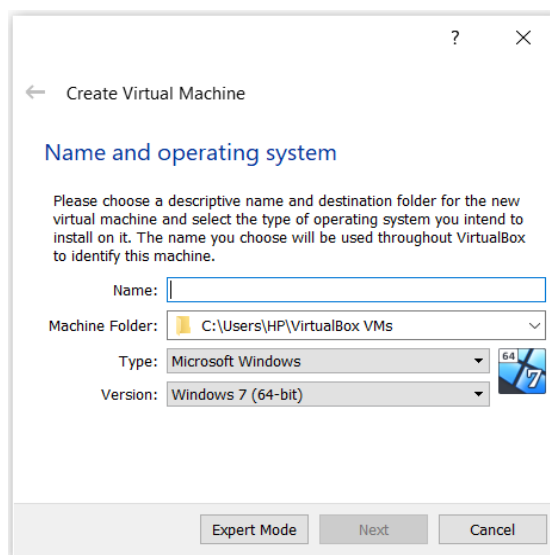


Choice your Operating system ( **In my case I use Windows** )

After fixing VirtualBox 6.1 will appear in this windows:



Press new to get these windows:



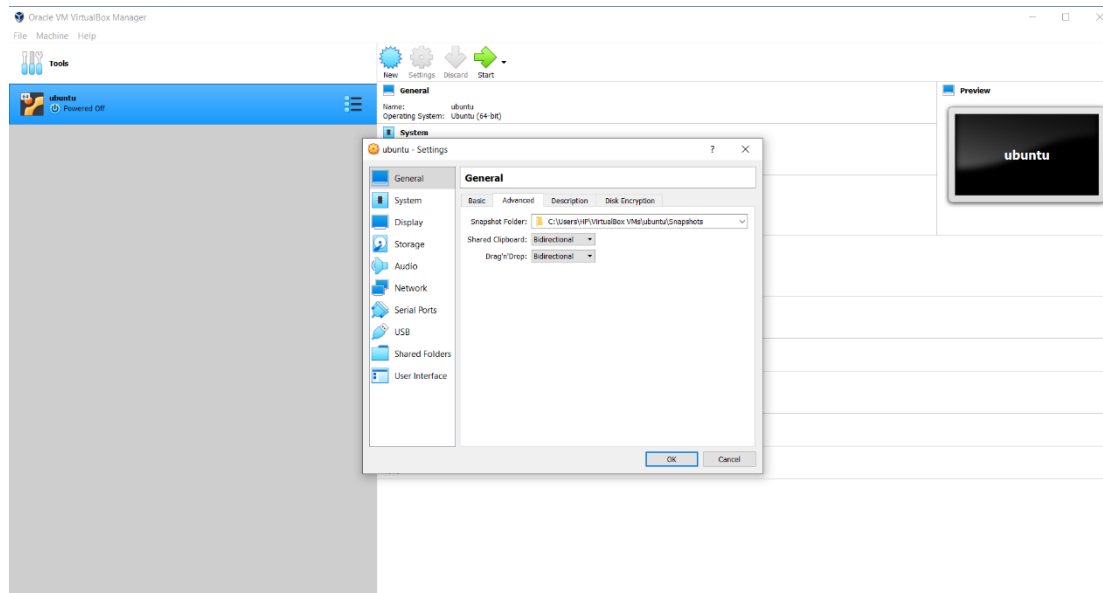
You can write in Name place: **Ubuntu**

And choose the version that fits your personal device (**In my computer ubuntu (64-bit)**) then press the **next button**.

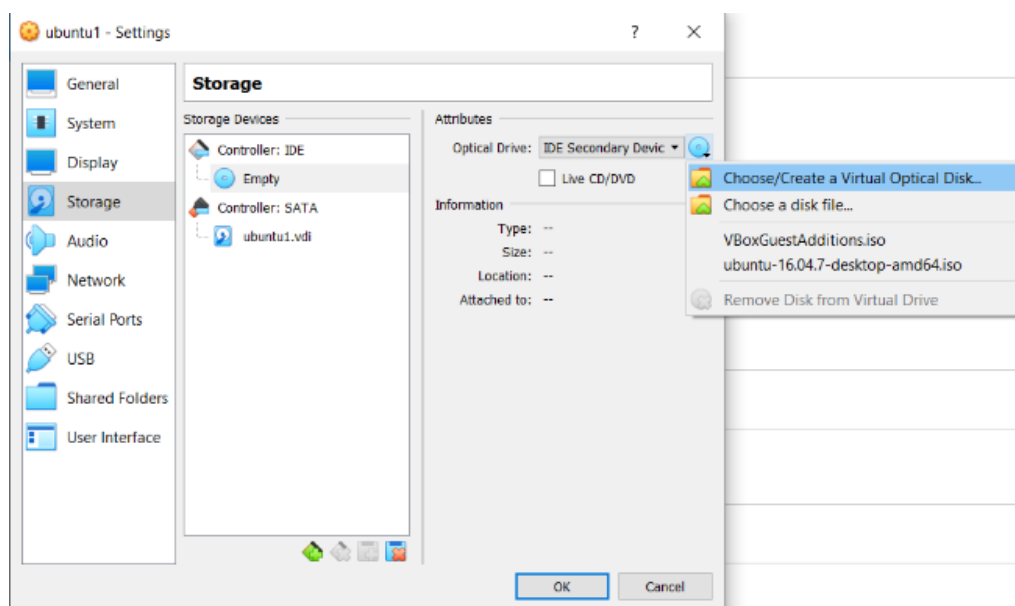
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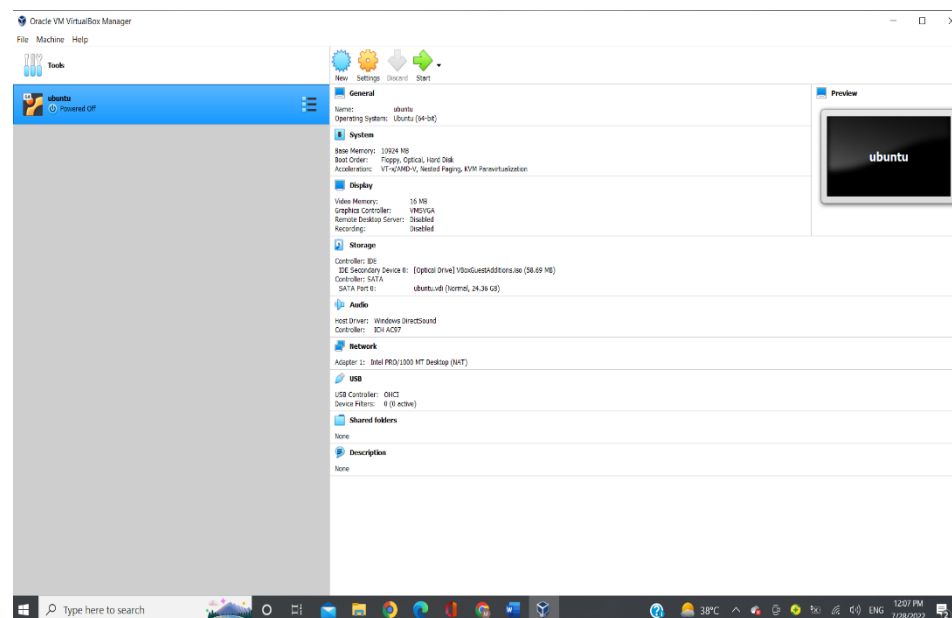
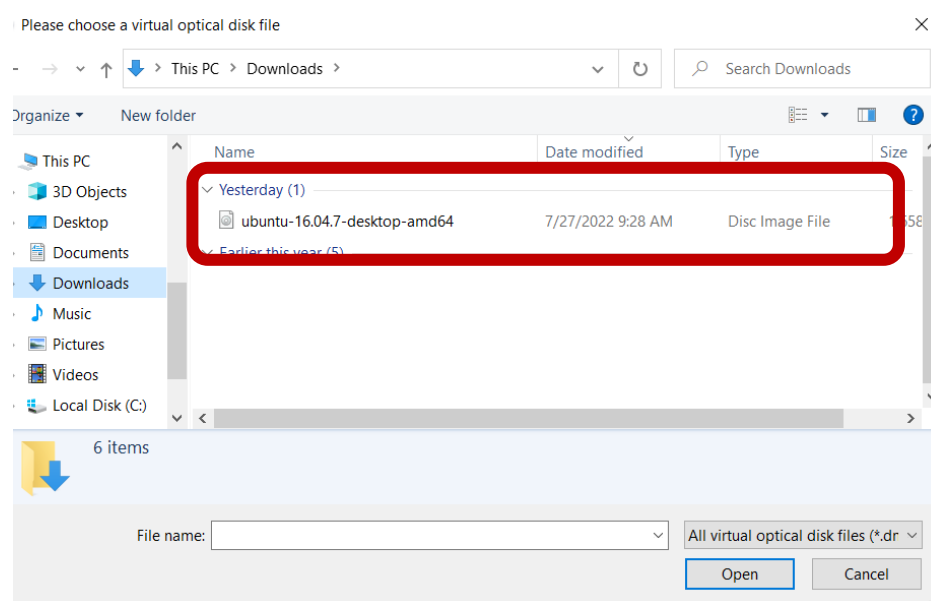
Press **Setting > General > Advance > Bidirectional** on both places. This command is used to copy and baste from windows to ubuntu and vice versa.



Going to **Storage > Empty > CD mark > choose/Create a Virtual Optical Disk..**

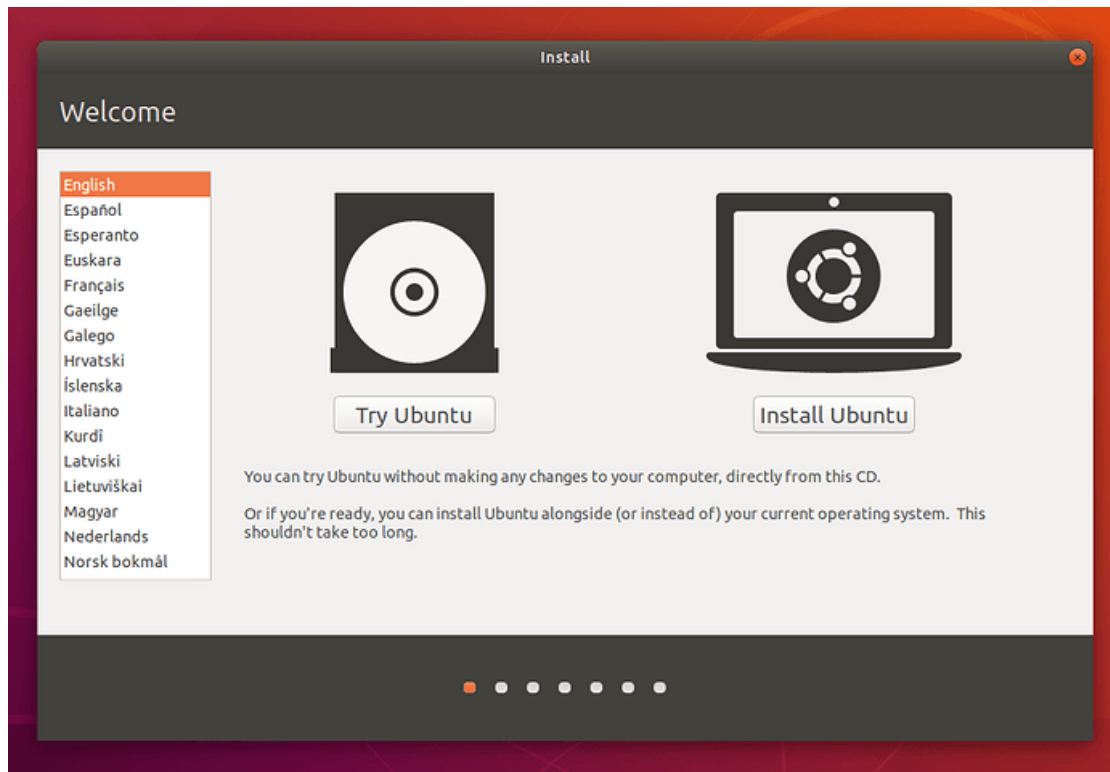


Press **Add** then choose the ubuntu file you download

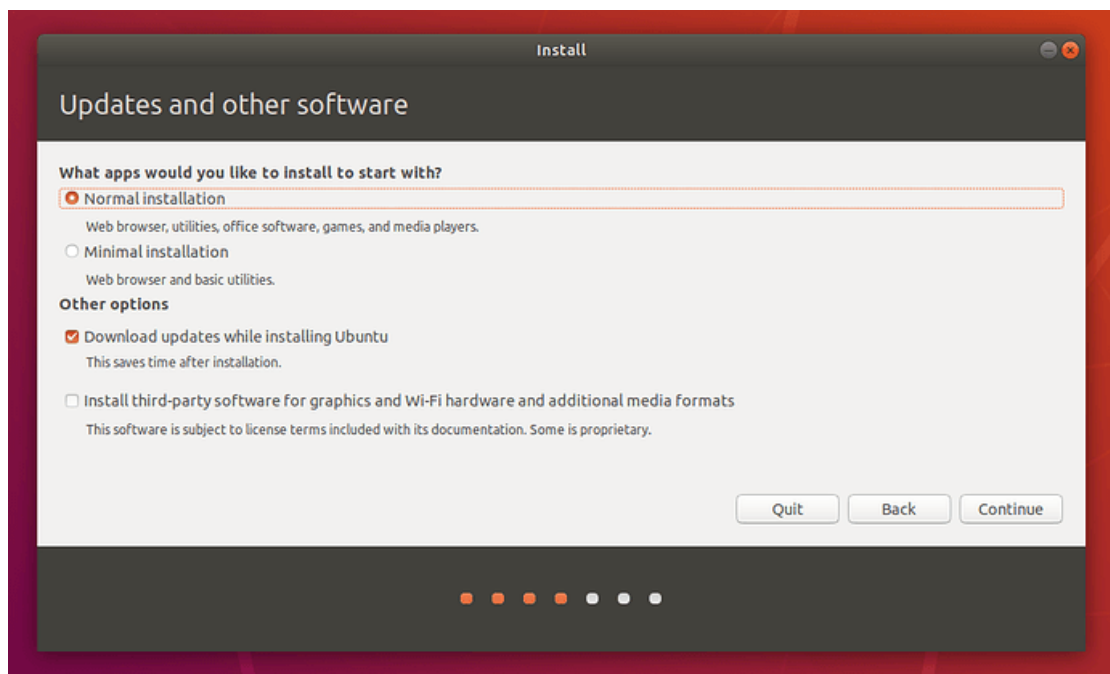


Now press **Start**.

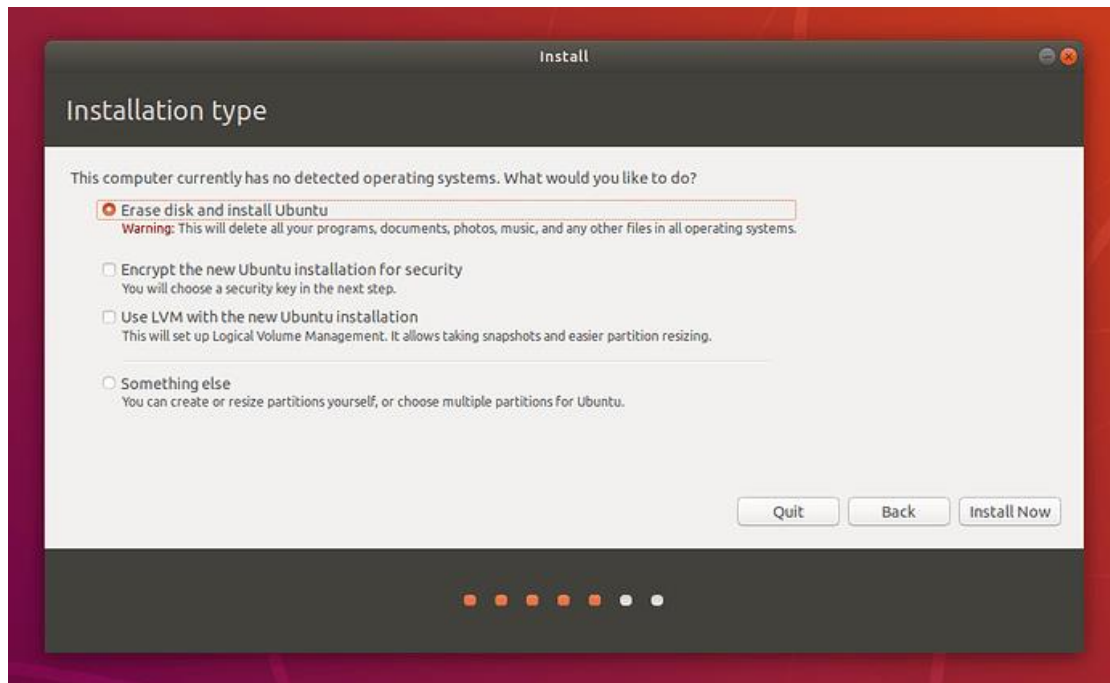
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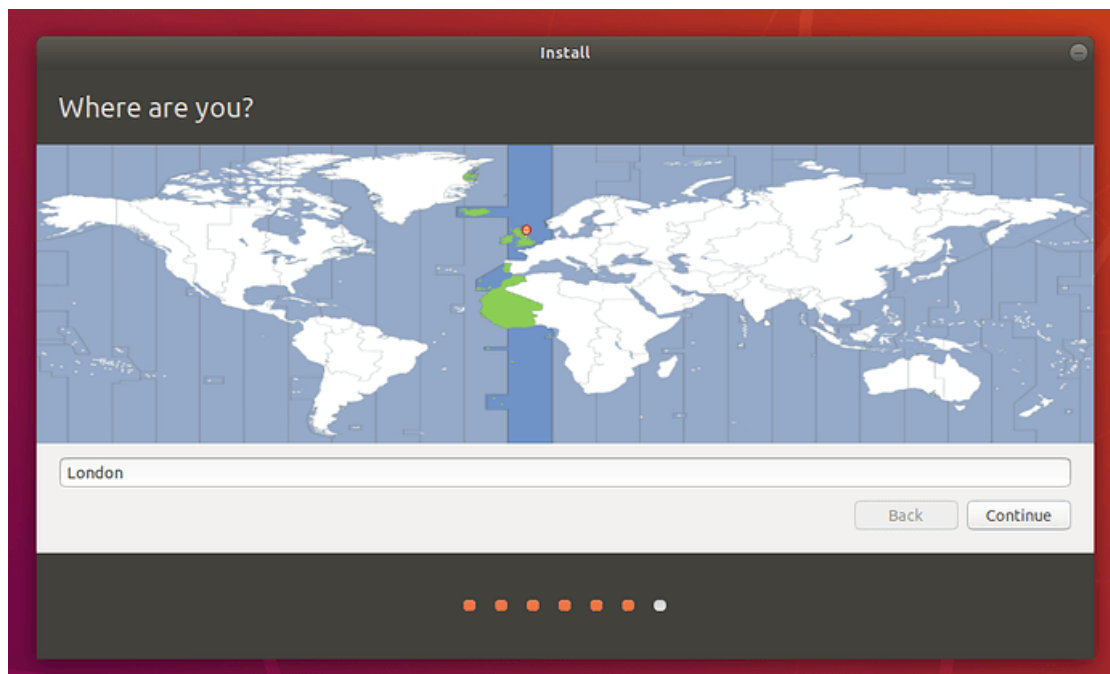
Select the language and press **install Ubuntu**.



Select **Download updates while installing Ubuntu** then press **Continue**.

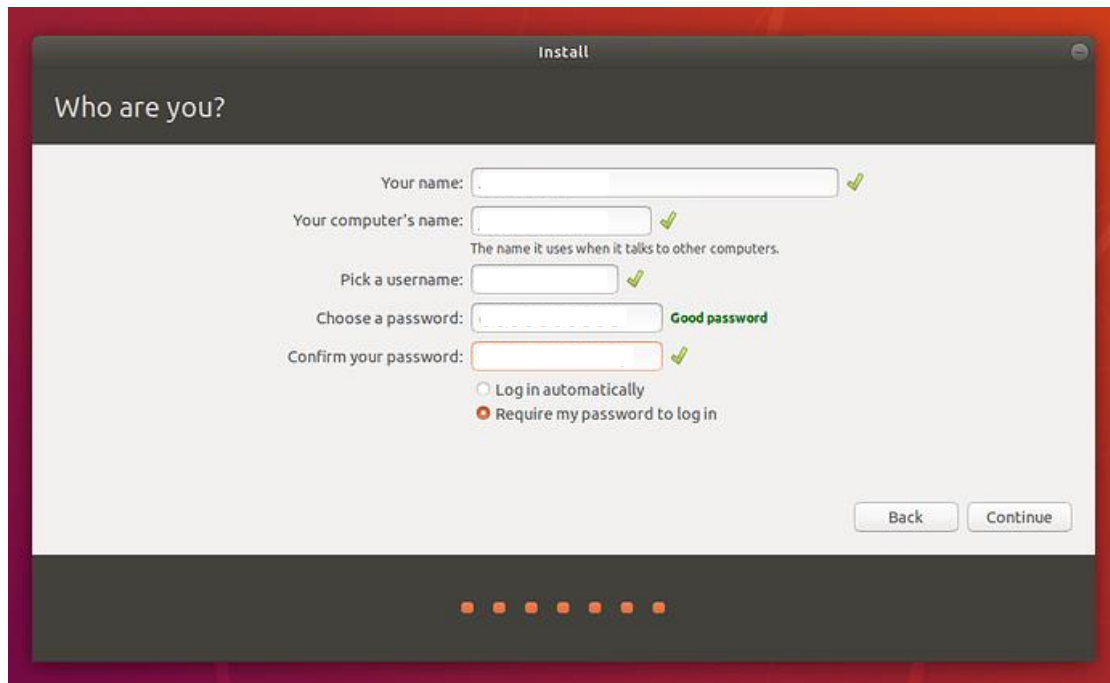


Select the **first option** and press **Install Now** then press **Continue**.

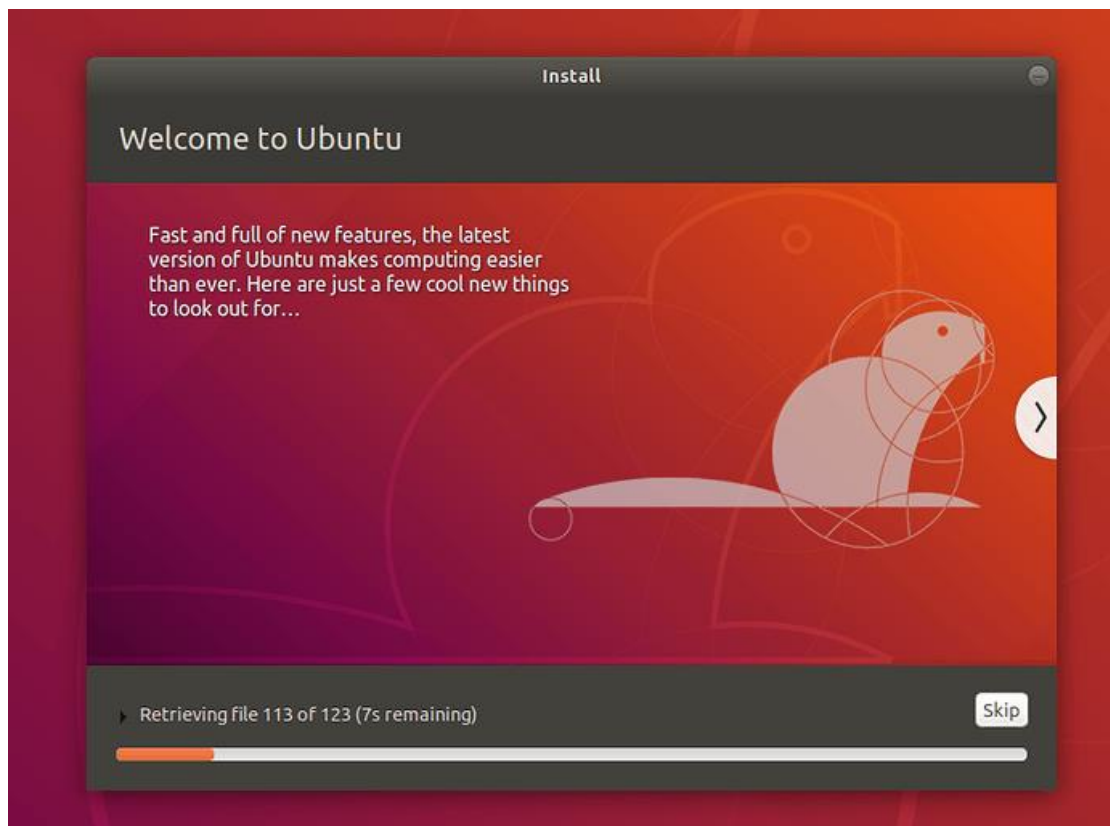


Select your area and press **Continue**.





Complete all information and press **Continue**.

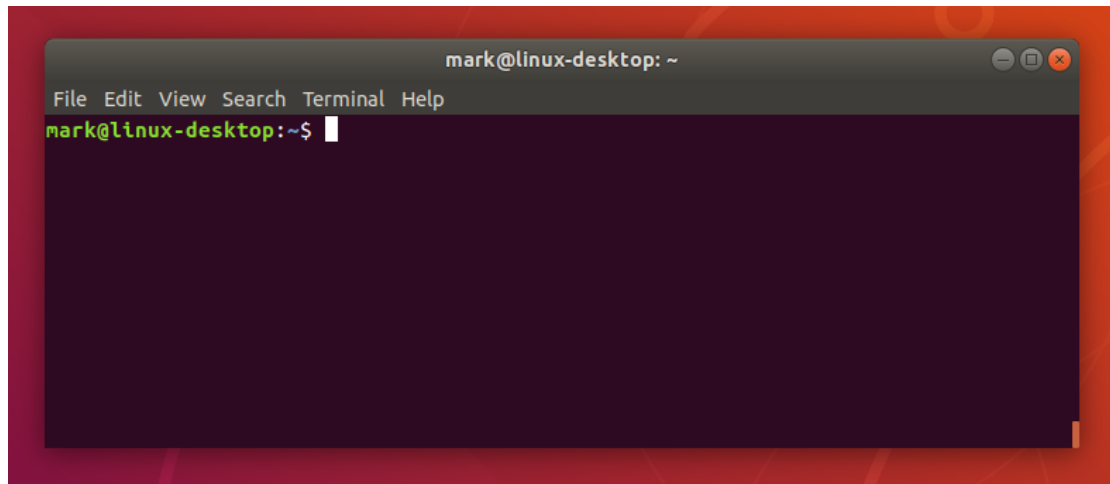


Now, wait until finish it then press **Restart Now**.

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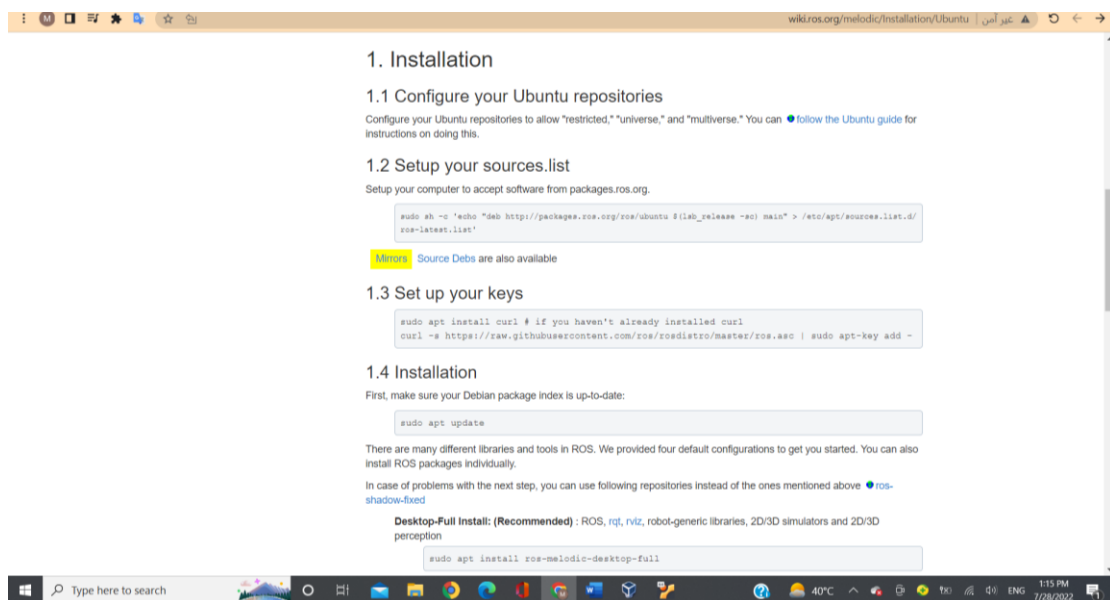
# Install ROS melodic:

## Open Terminal windows on Ubuntu



From this link:

<http://wiki.ros.org/melodic/Installation/Ubuntu>



Now we will copy each command from the window operating system and paste it onto the terminal on ubuntu

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-During the selection avoid windows and choose LINUX instead

Instructions on the melodic arm is linked and they were taken from the smart methods :

[https://github.com/smart-methods/arduino\\_robot\\_arm](https://github.com/smart-methods/arduino_robot_arm)

NOTES ON THE ( `sudo nano ~/.bashrc` )

COMMAND: Scroll to the end of the page and name your system I want mine Mayar so mine will look like this :

`source /home/Mayar/catkin_ws/devel/setup.bash` Once you finish press the following buttons

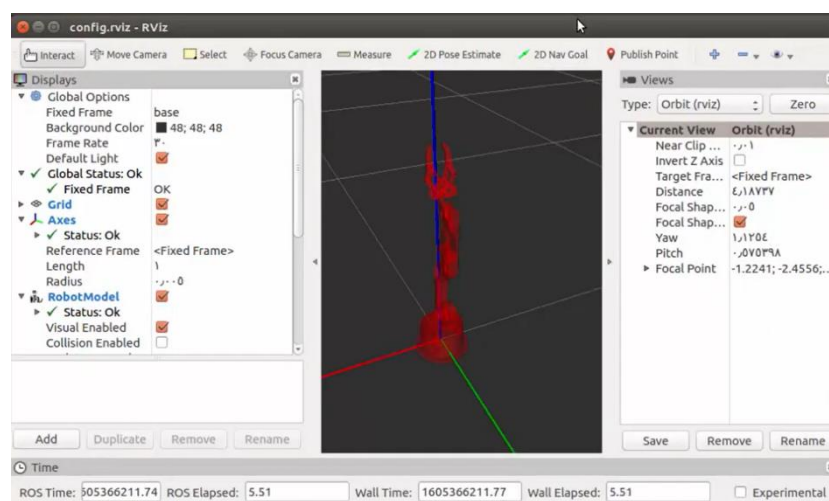
1)CTRL+O

2)ENTER

3)CTRL + X Then write the source command :

`source ~/.bashrc` to launch the ROS use this command :

`roslaunch robot_arm_pkg check_motors.launch` in the end:



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## Reference:

<https://github.com/Mayar-Ayman/ROS-melodic/new/main>

<https://youtu.be/fr6TXEd2rXI>

This report was written by:

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