

How to install ubuntu and ROS using virtual box

Step 1: we have to download the virtual box in order to run another operating system in your laptop, from the link below

<https://www.virtualbox.org/wiki/Downloads>

Step2: now we can download Ubuntu OS version 16.04 from this link

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

you can choose any version , follow the illustration please



Select an image

Ubuntu is distributed on two types of images described below.

Desktop image

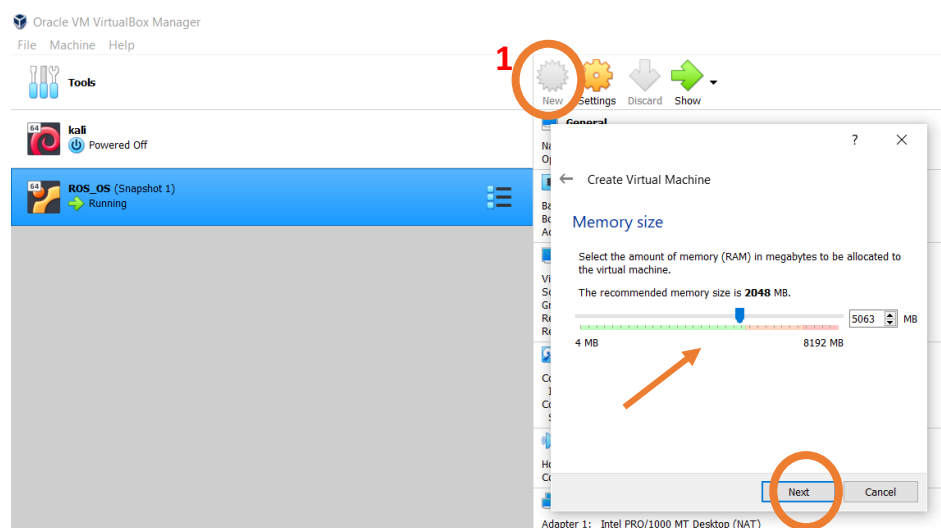
The desktop image allows you to try Ubuntu without changing your computer at all, and at your option to install it permanently later. This type of image is what most people will want to use. You will need at least 384MiB of RAM to install from this image.

[64-bit PC \(AMD64\) desktop image](#)

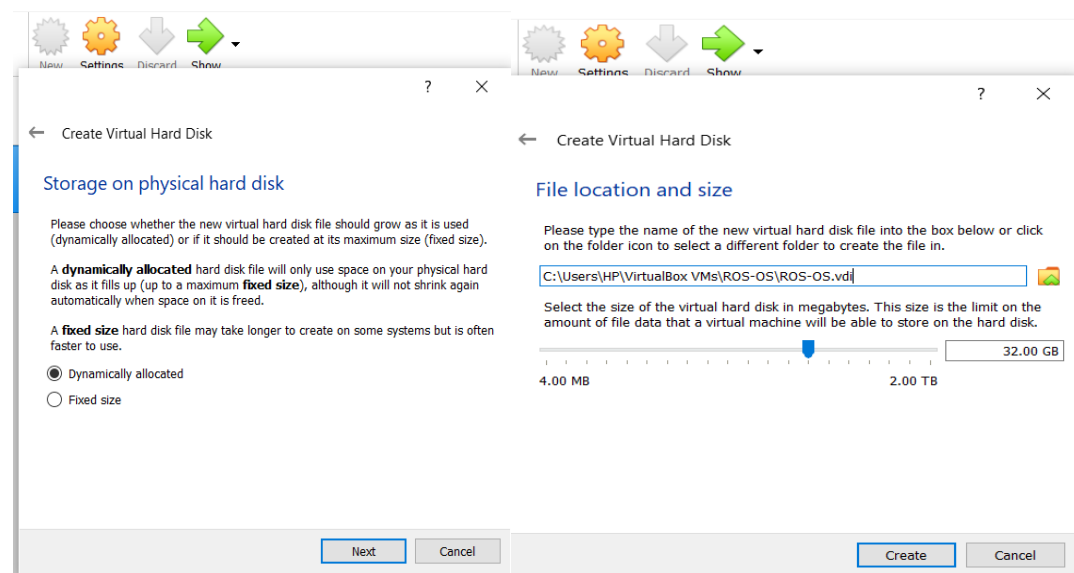
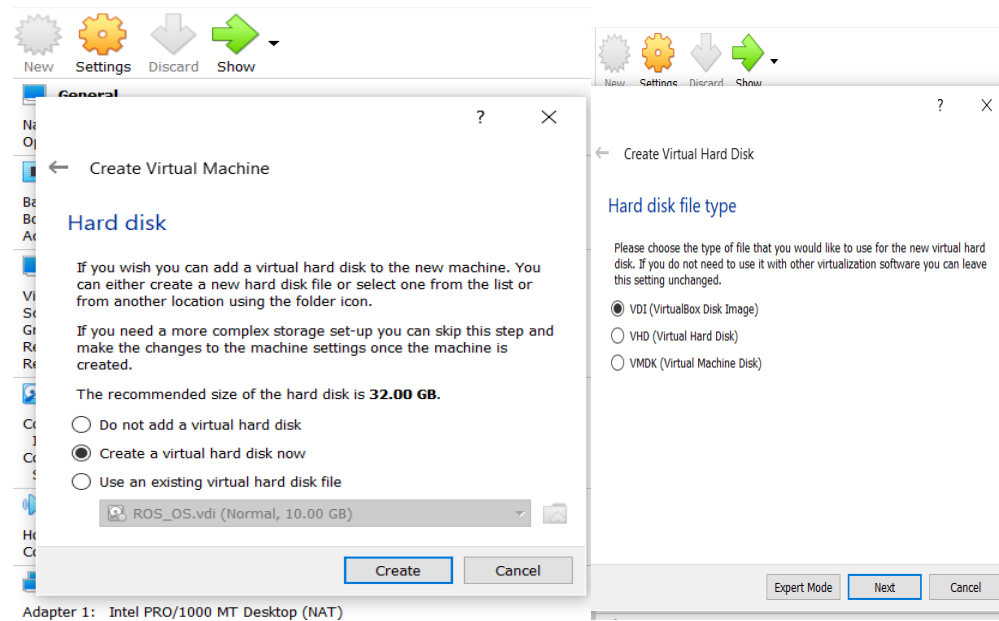
Choose this if you have a computer based on the AMD64 or EM64T architecture (e.g., Athlon64, Opteron, EM64T Xeon, Core 2). Choose this if you are at all unsure.

[32-bit PC \(i386\) desktop image](#)

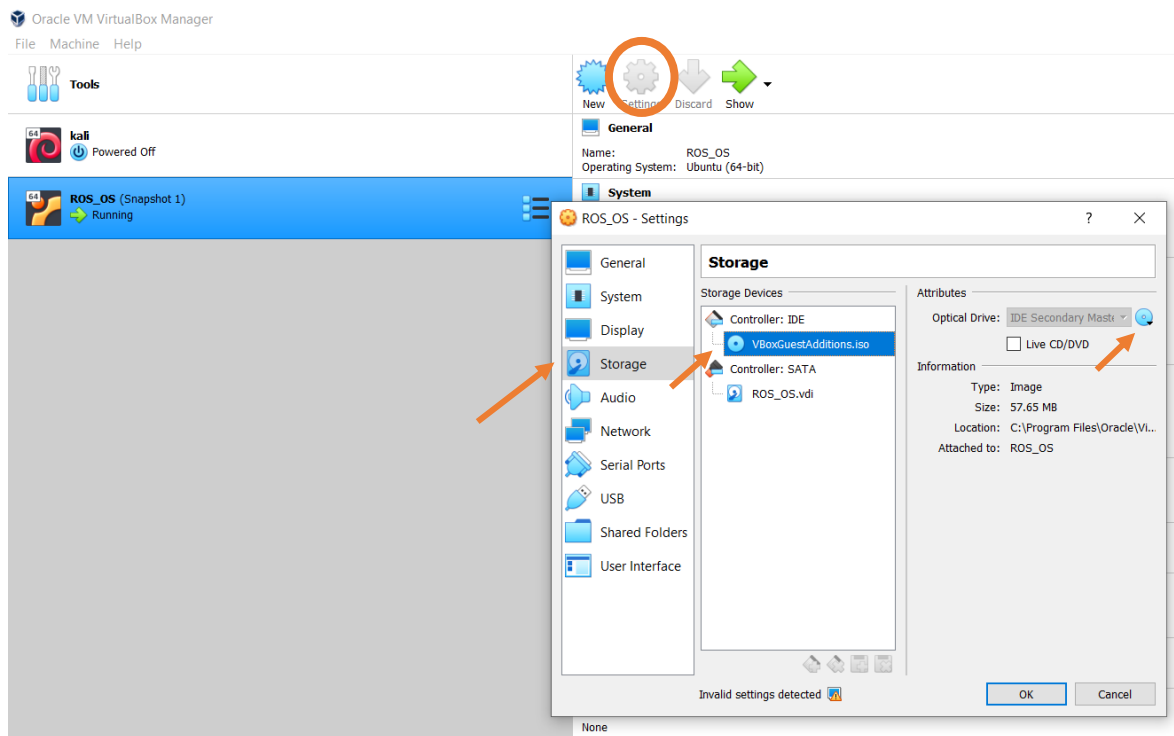
For almost all PCs. This includes most machines with Intel/AMD/etc type processors and almost all computers that run Microsoft Windows, as well as newer Apple Macintosh systems based on Intel processors.



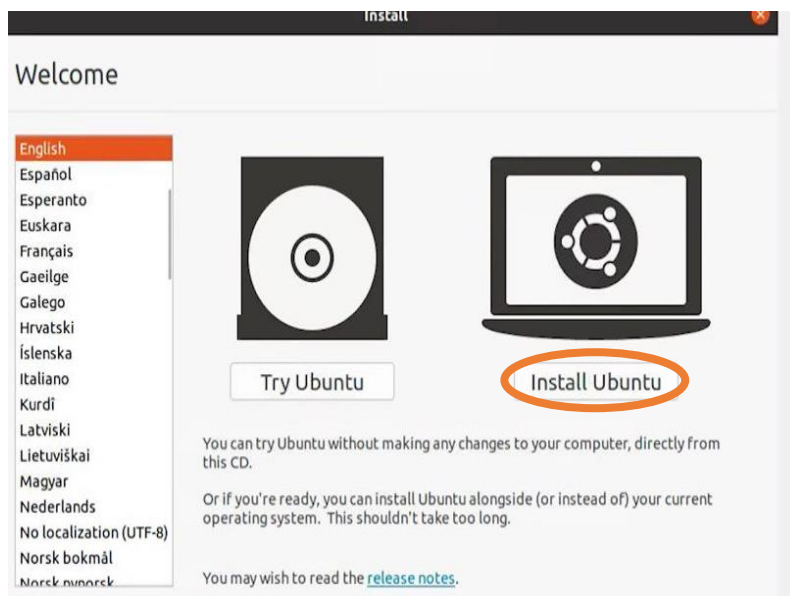
You can press next button and leave them as default



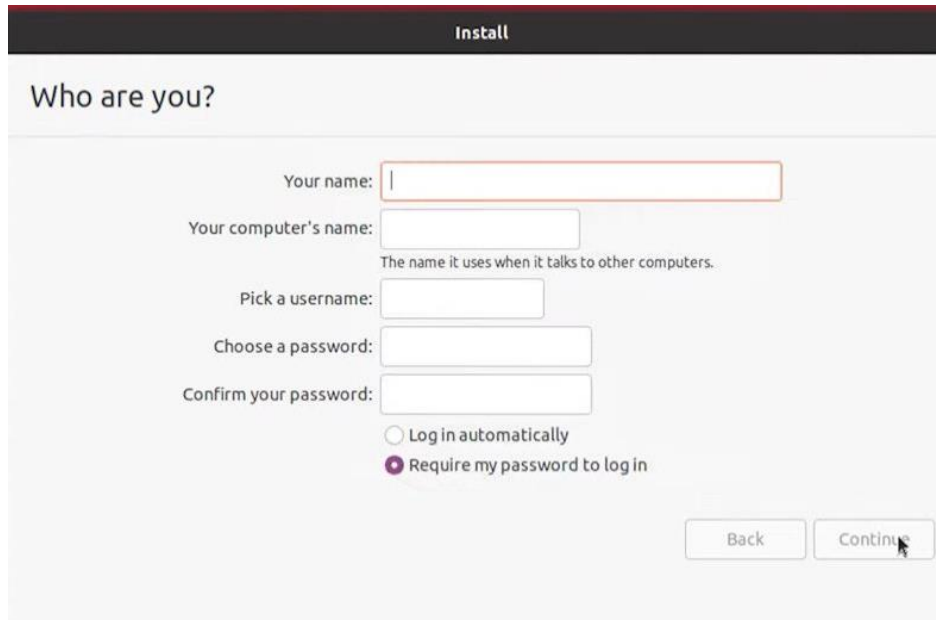
As shown in the picture you have to put your Ubuntu file that you download (.iso) from **Setting>storage>** then follow the steps in the picture



Step 3: press start to run the Ubuntu and to complete your installation.

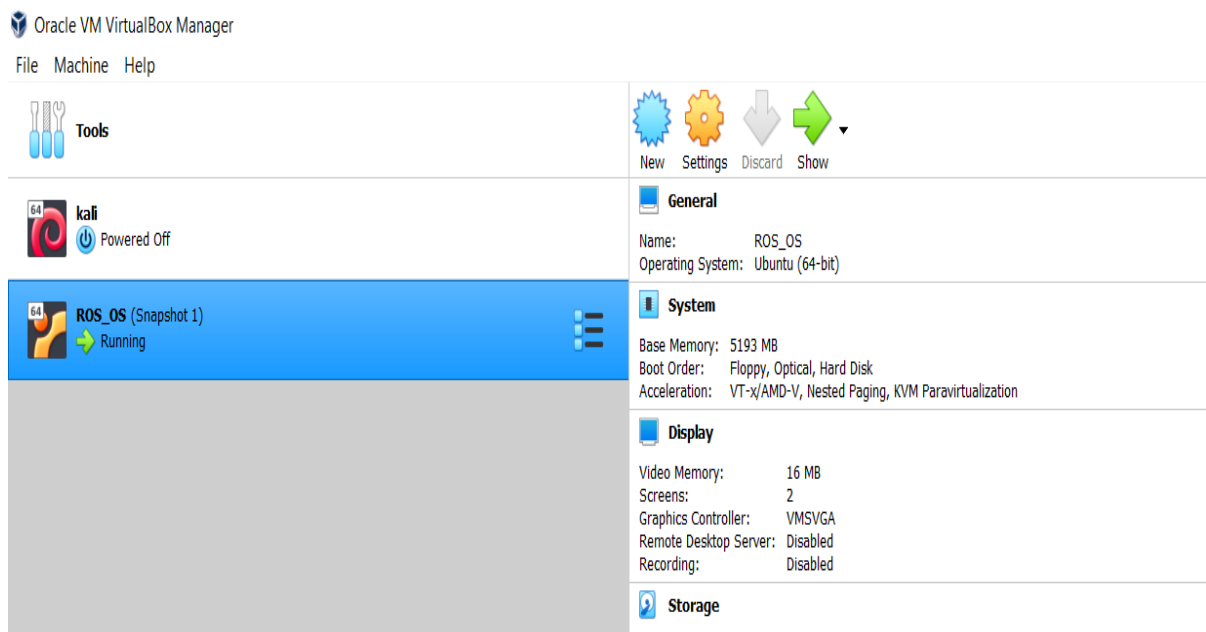


Then press continue for the rest steps, Write your name, for username and set a password and make sure you remember it because you are going to use it as a permission key on Ubuntu.



The image shows the 'Who are you?' screen from the Ubuntu installer. It has a dark header with the word 'Install'. Below the header, the title 'Who are you?' is displayed. The form contains several input fields: 'Your name:' (highlighted with a red border), 'Your computer's name:', 'Pick a username:', 'Choose a password:', and 'Confirm your password:'. Below these fields are two radio buttons: 'Log in automatically' and 'Require my password to log in' (which is selected). At the bottom right, there are 'Back' and 'Continue' buttons. A mouse cursor is pointing at the 'Continue' button.

Press continue and we are almost done, I downloaded successfully



Step 4: after the restart, to install ROS on Ubuntu we have to write some command in the terminal which are in this link:

<https://s-m.com.sa/ros.txt>

note that:

- after writing some command it's going to ask for your password that you have assigned.
- write "Y" if it asked to allow to continue the operation

you can also visit this link and follow the steps:

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

As it is shown it works correctly and launch the project!

