Dual boot ubuntu guide

A short Guide to installing Ubuntu 18.04 alongside windows 10 on your PC.

Pre-Setup
It is highly recommended that you backup your important files before proceeding, even though this method has been tested multiple times.
Create a Windows Bootable pendrive (Failsafe) using the Microsoft Tool Here.
Disable Fast Startup
(Using Search, Open Power Options) Power Options > System Settings > Choose what the power buttons do and uncheck the Turn on fast startup box.

Source
Disable Secure Boot
- Search Advanced Startup Options
- Click on Restart Now
- Select TroubleShoot>Advanced Options>UEFI Firmware Option Settings>Restart
- Next BIOS Settings will open, this will vary depending on your setup
- Navigate to Boot Tab
- Disable Secure Boot
- You may need to Turn Legacy Support On/Off

Source
Create “Free Space” for Ubuntu
This is the Total amount of Space that you want to allocate to Ubuntu
Using Search, Open “Create and Format Hard Disk Partitions”

Select the Partition from where you want to allocate Space.
Click “Shrink Partition”
You would see Free Space.
Create Installer
Download the Latest Image of Ubuntu 18.04 from Here.
You will need a Memory Stick of ≥4GB.
If you’re using Windows, use This Tool for a quick setup.
If you have access to an Ubuntu System, use the inbuilt Startup Disk Creator.
On the Target PC, Restart and Enter BIOS and Enable Boot from USB.
Restart and Enter Windows.
Navigate to Advanced Startup Options.
Click on Restart.
Select the USB(UEFI) or USB(UBUNTU) or USB option.
You will find this screen.

Select Install Ubuntu.
Installing Ubuntu
Select the Language

Source
Ignore the Update while Installing (It slows down the installation if your internet is slow)
Select Language.

Source
Select Something Else
Find the “Free Space” you had created earlier.
Click on “+”
Next you need to allocate space to your OS and to SWAP.
Give Most of the space to /
(I prefer allocating one single space to / and /home. Reason: Some Installations, specially CUDA might cross the size allocated to /)

Source
Give 2x The Space of your RAM to SWAP.
Personally, I have a 16GB RAM and allocate 64GB just to give me extra room to work with Huge Datasets.

Source
Setup your login credentials

Source
Finally Click Install

Source
Finally, Reboot.
That’s it, you’re done.++

Ubuntu through single boot

Virtual machine is a free and open source virtualization software from Oracle. It enables you to install other operating systems in virtual machines. It is advised that your systems should have at least 4GB RAM to get a decent performance from the virtual operating system.

Requirements

- Good internet connection to download software and Linux ISO. You can also use some other computer with internet connection to download these files.
- Windows system with at least 12 GB of free space.
- Windows system with 4GB of recommended RAM. It can work with less RAM as well, but your system will start to lag while using Linux in the virtual machine.

I am installing Ubuntu 17.10 in this tutorial, but the same steps apply to any other Linux distribution. If you prefer videos, you can watch the one below from our YouTube channel:

Step 1: Download and install VirtualBox

Go to the website of Oracle VirtualBox and get the latest stable version from here:

Download VirtualBox

Installing VirtualBox is no rocket science. Just double-click on the downloaded exe file and follow the instructions on the screen. It is like installing the regular software on Windows.

Step 2: Download Linux ISO

Next, you need to download the ISO file of the Linux distribution. You can get this image from the official website of the Linux distribution you are trying to use.

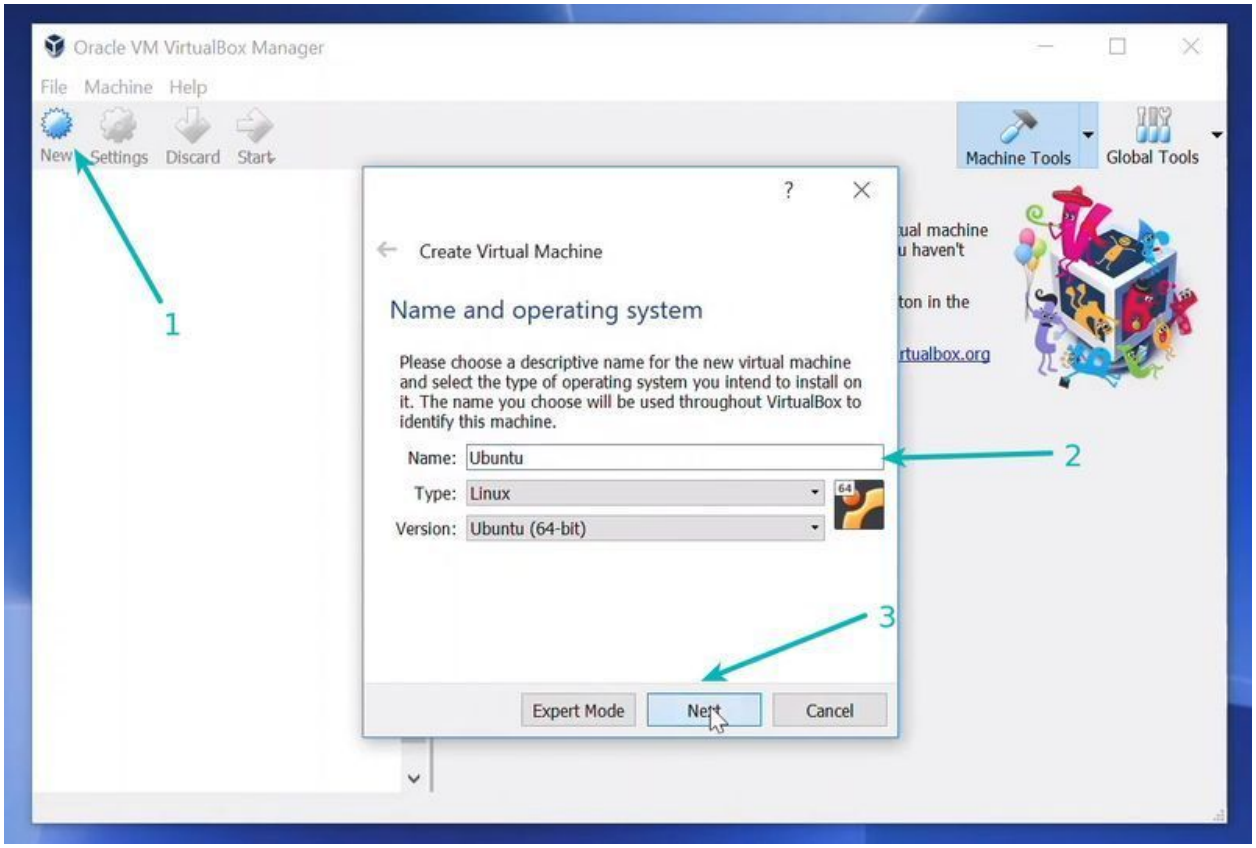
I am using Ubuntu in the example, and you can download ISO images for Ubuntu from the link below:

Download Ubuntu Linux

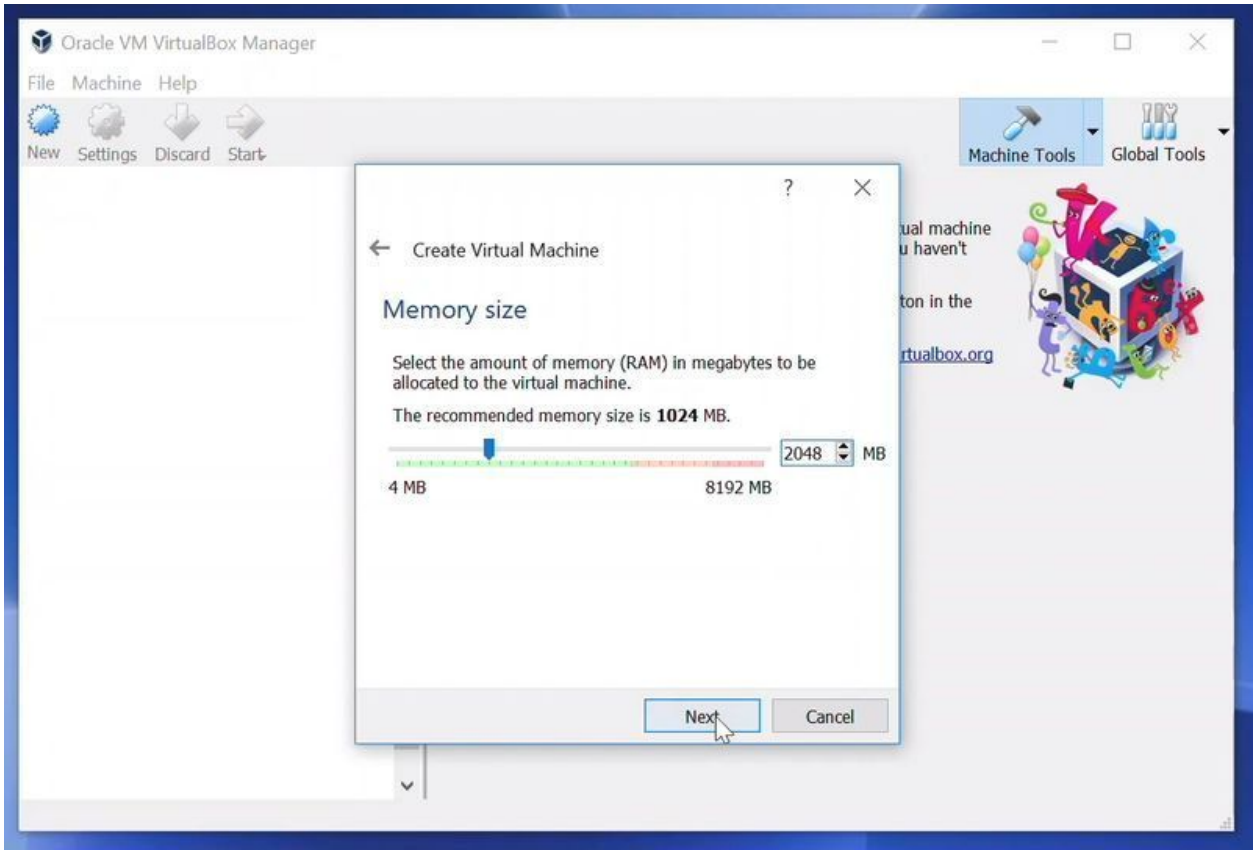
Step 3: Install Linux using VirtualBox

You have installed VirtualBox and you have downloaded the ISO for Linux. You are now set to install Linux in VirtualBox.

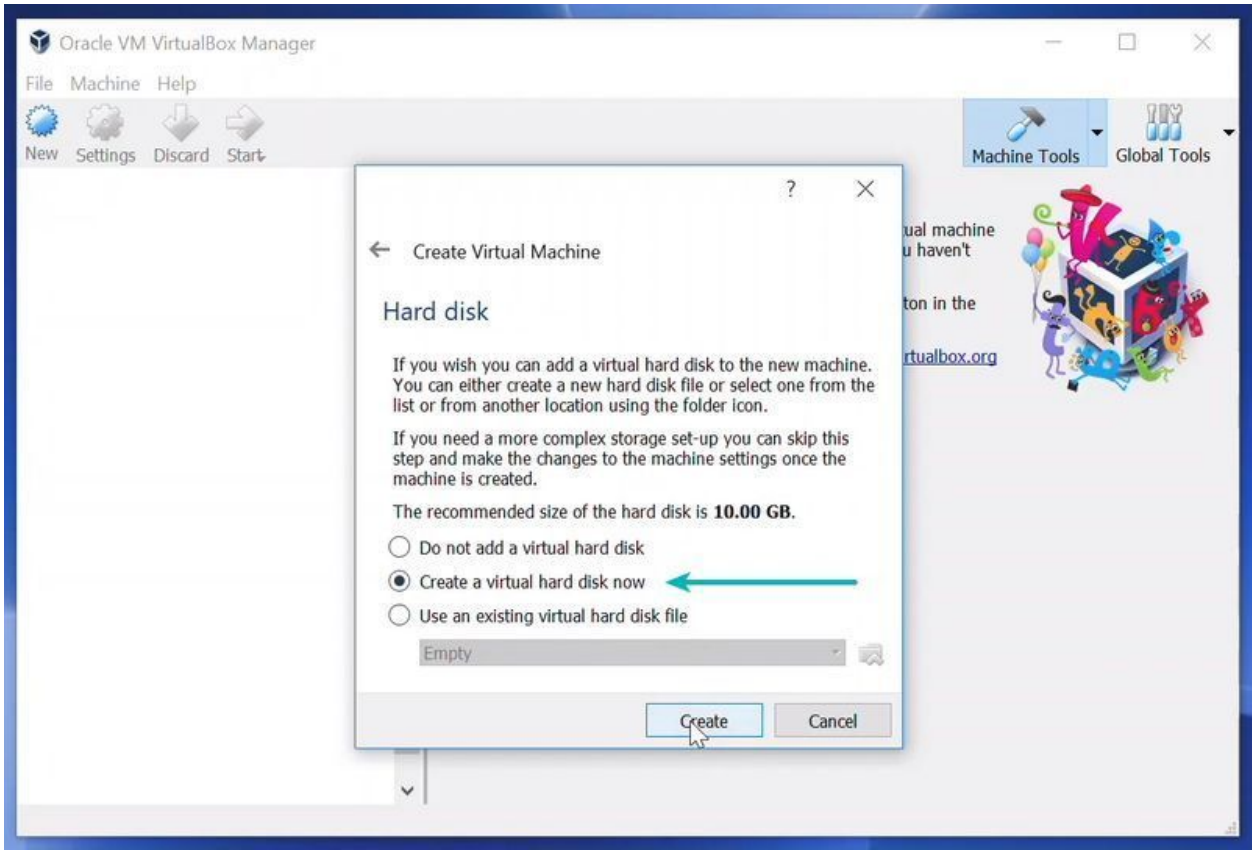
Start VirtualBox, and click on the New symbol. Give the virtual OS a relevant name.



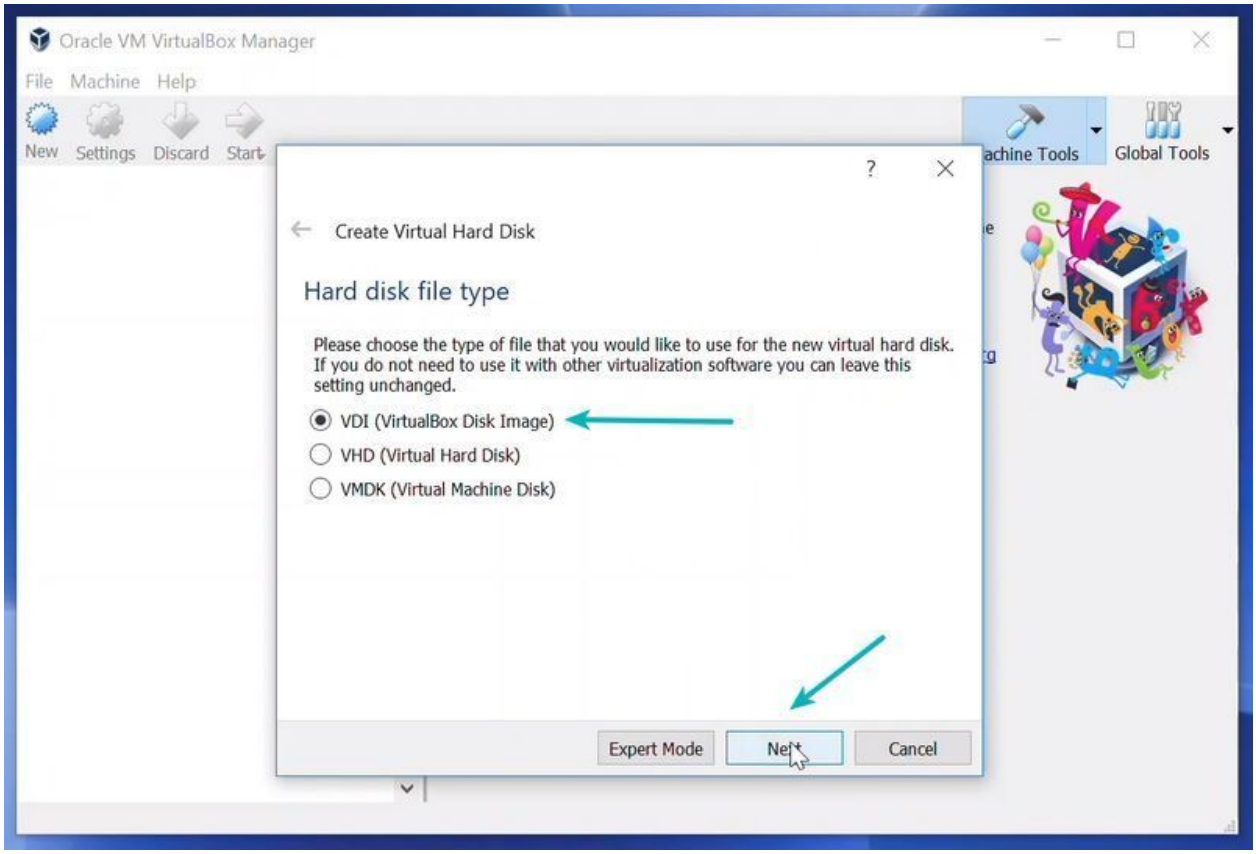
Allocate RAM to the virtual OS. My system has 8GB of RAM and I decided to allocate 2GB of RAM to it. You can use more RAM if your system has enough extra RAM.



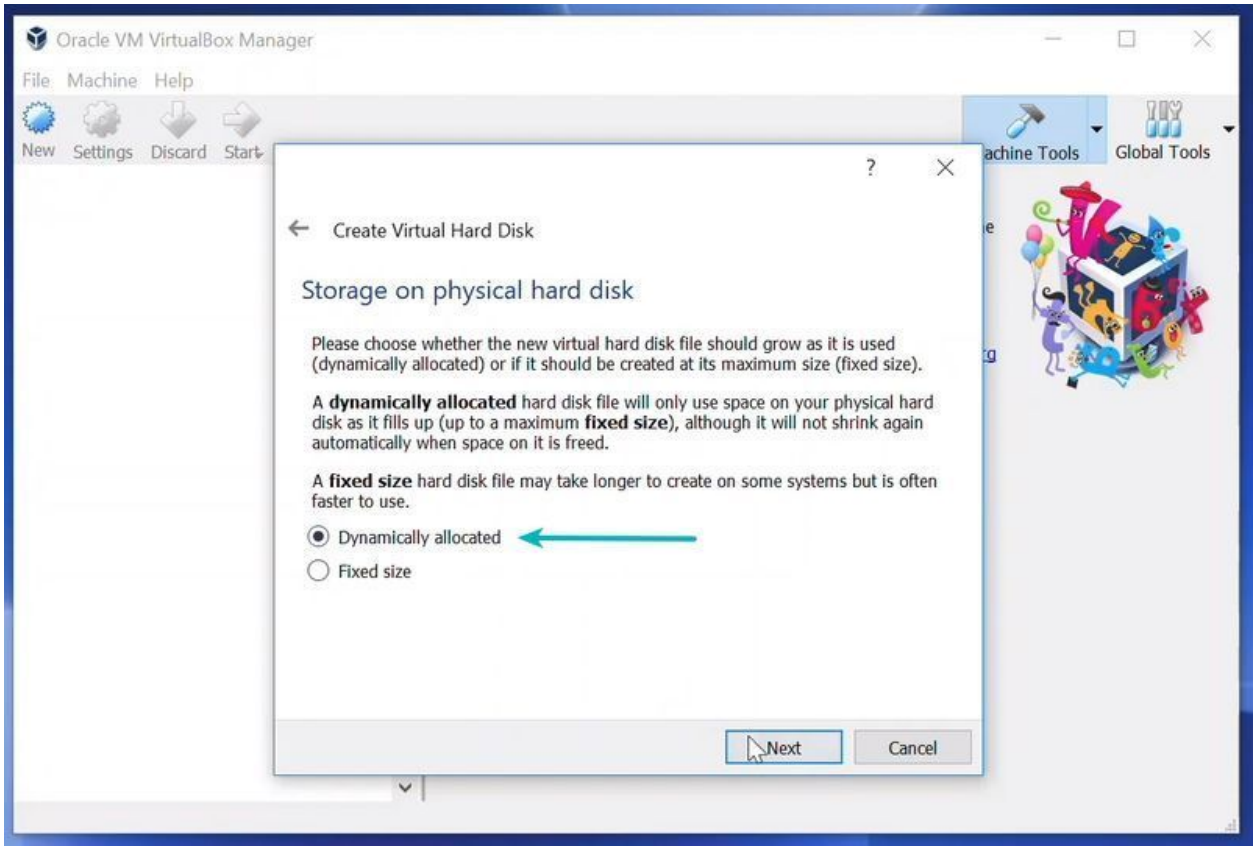
Create a virtual disk. This works as the hard disk of the virtual Linux system. This is where the virtual system will store its files.



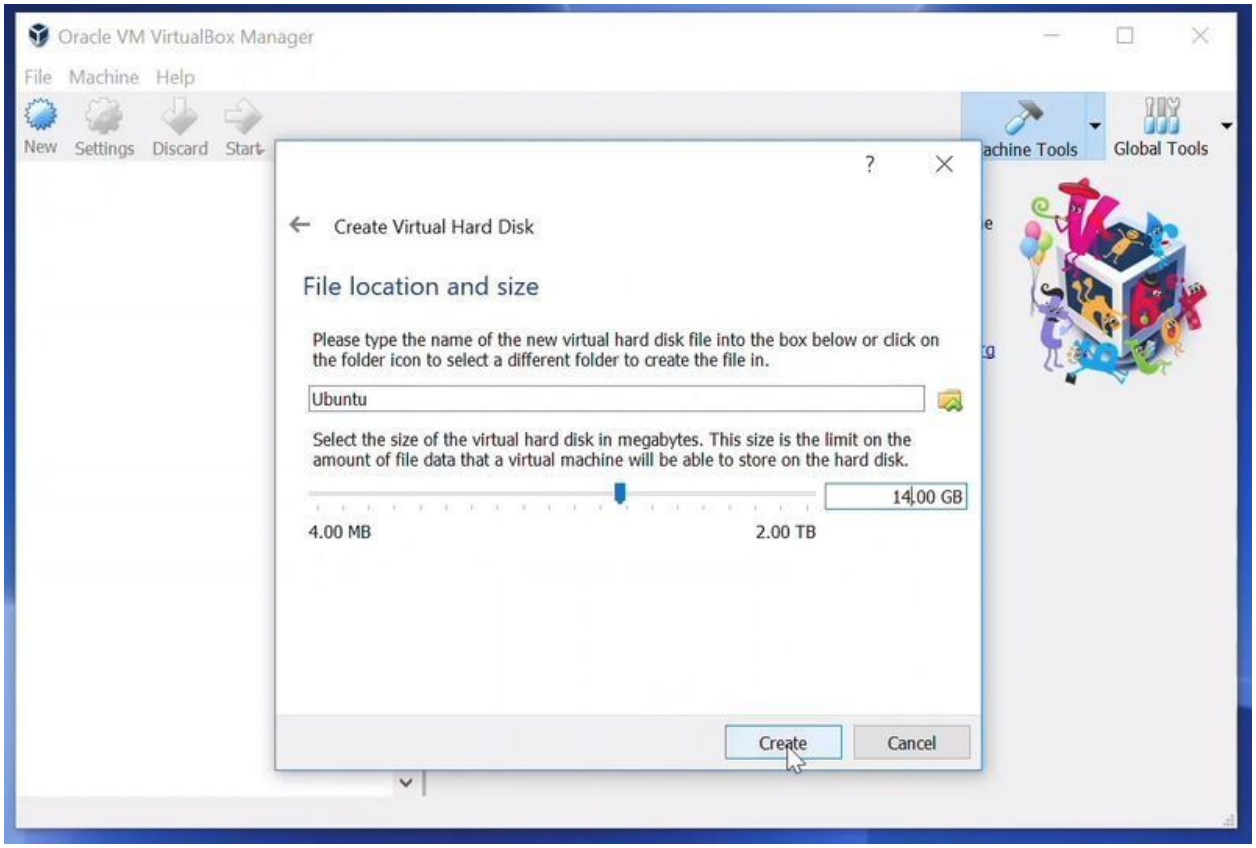
I recommend using VDI file type here.



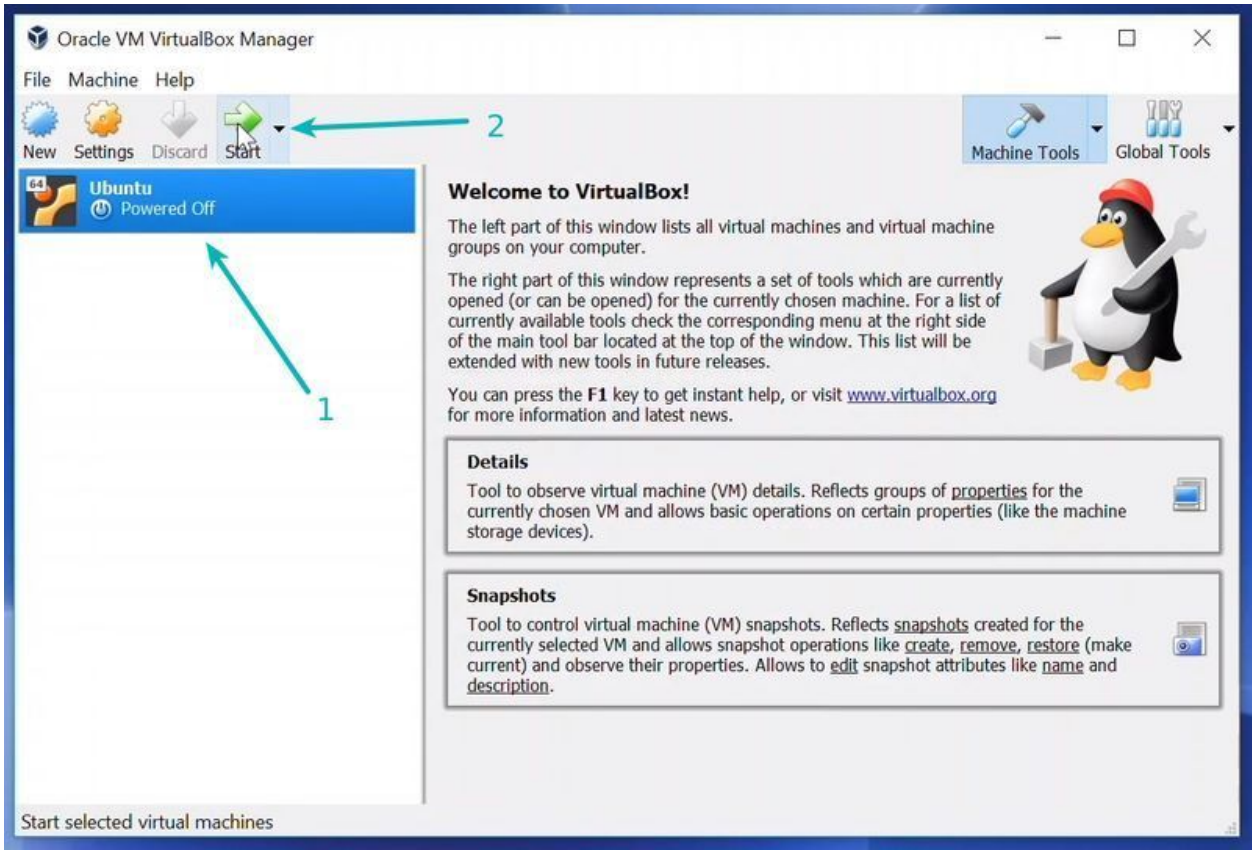
You can choose either of Dynamically allocated or Fixed size option for creating the virtual hard disk.



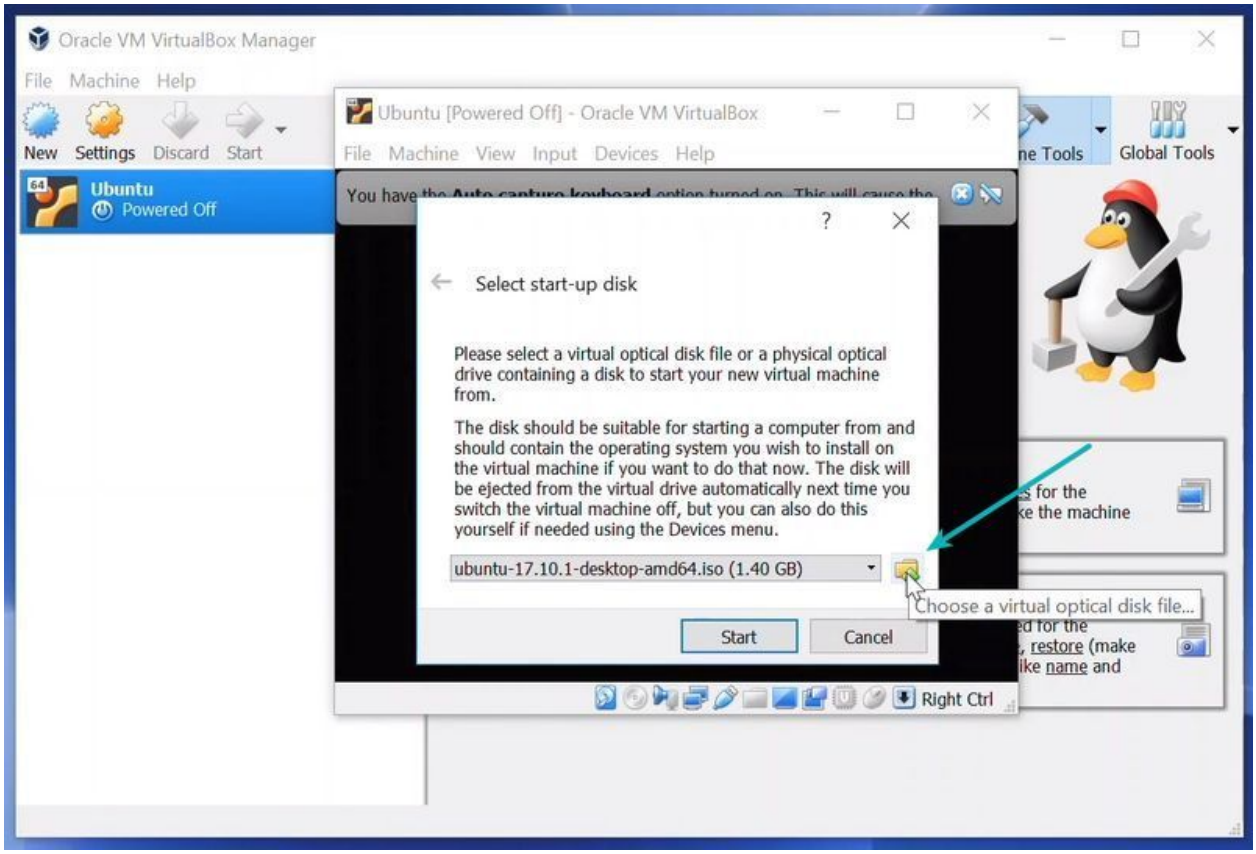
The recommended size is 10 GB. However, I suggest giving it more space if possible. 15-20 GB is more ideal.



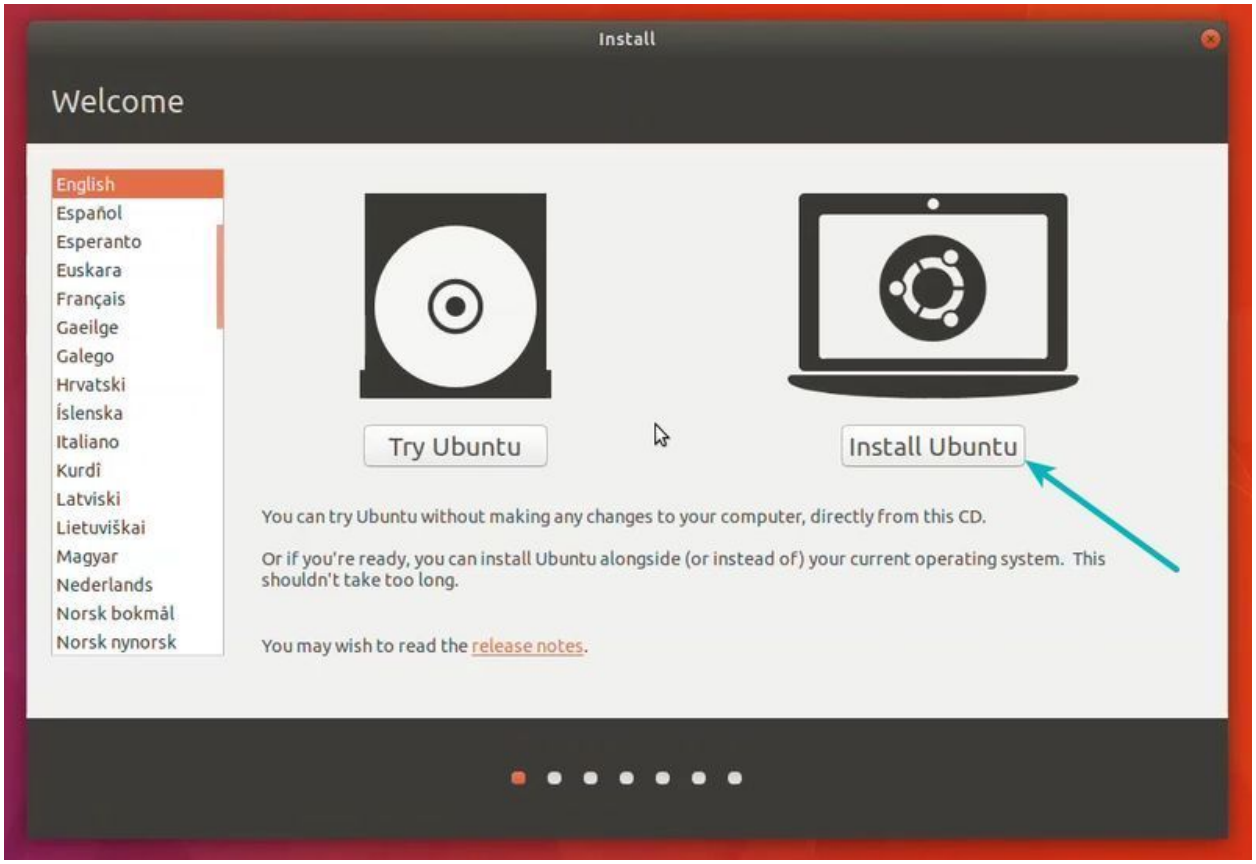
Once everything is in place, it’s time to boot that ISO and install Linux as a virtual operating system.



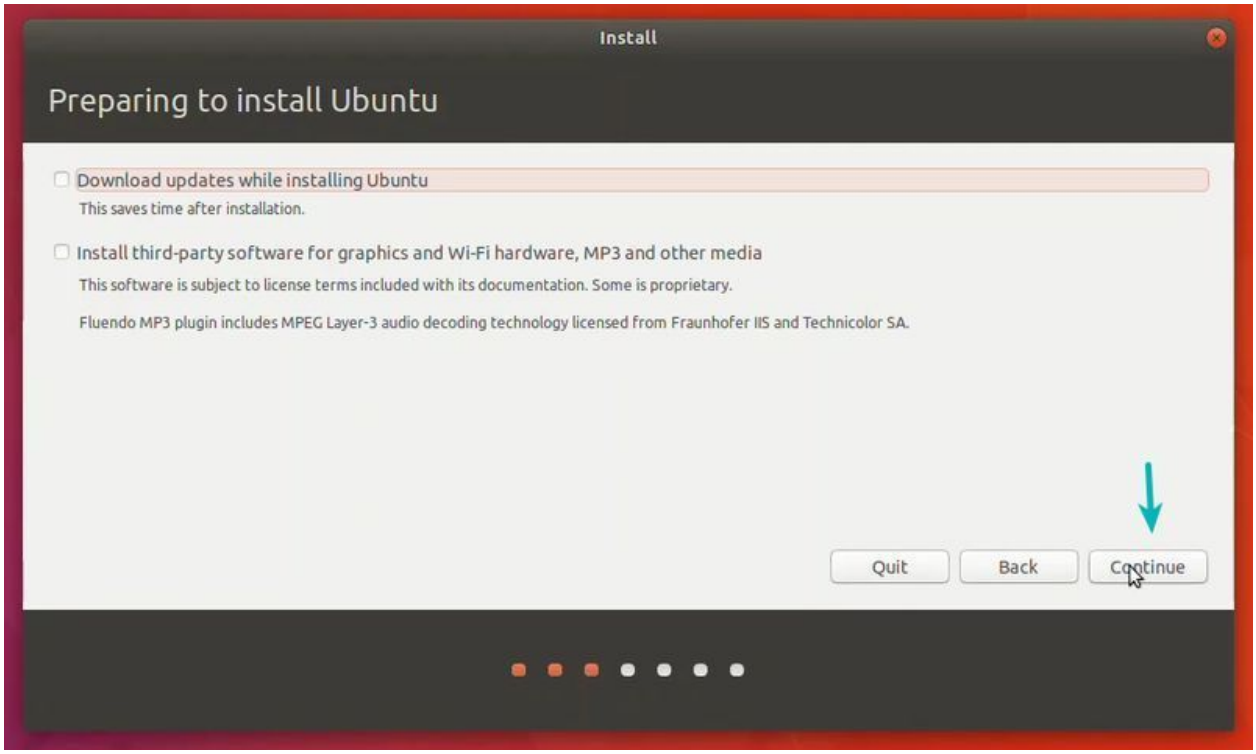
If VirtualBox doesn’t detect the Linux ISO, browse to its location by clicking the folder icon as shown in the picture below:



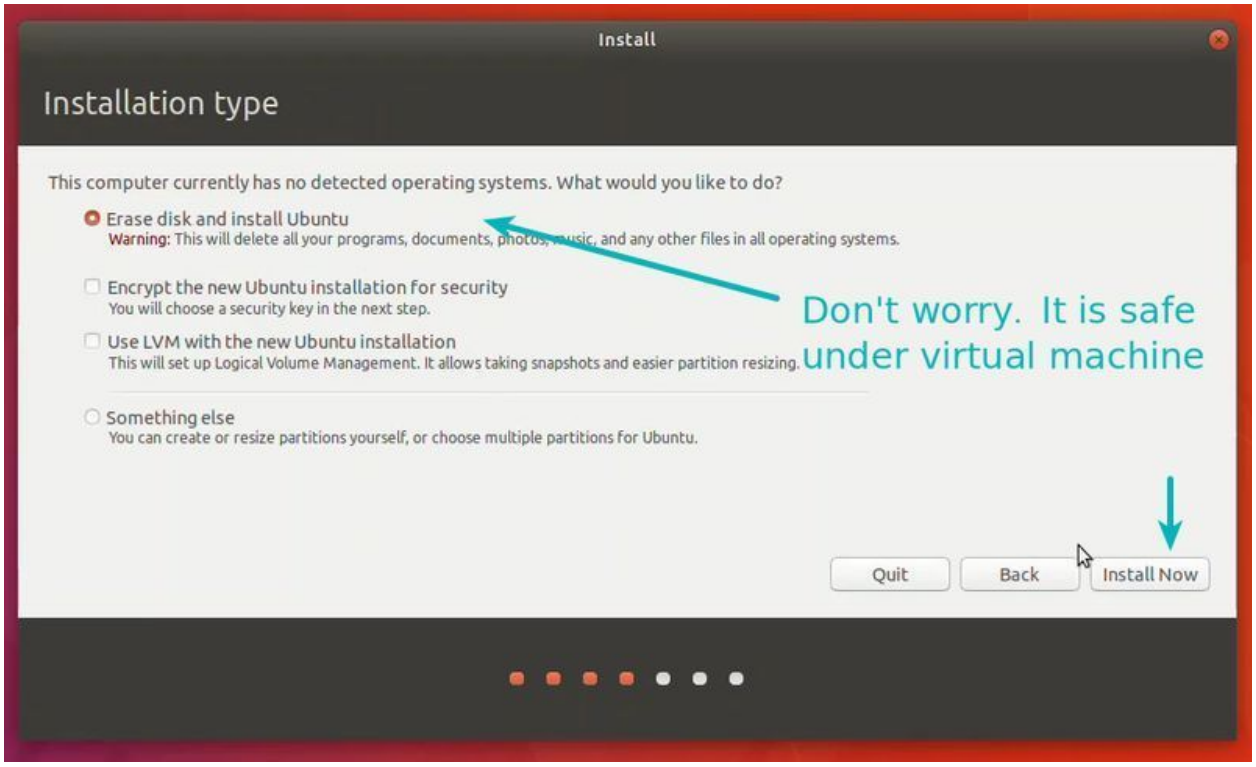
Soon you'll find yourself inside Linux. You should be presented with the option to install it. Things from here are Ubuntu specific. Other Linux distributions may have slightly different looking steps but it won't be complicated at all.



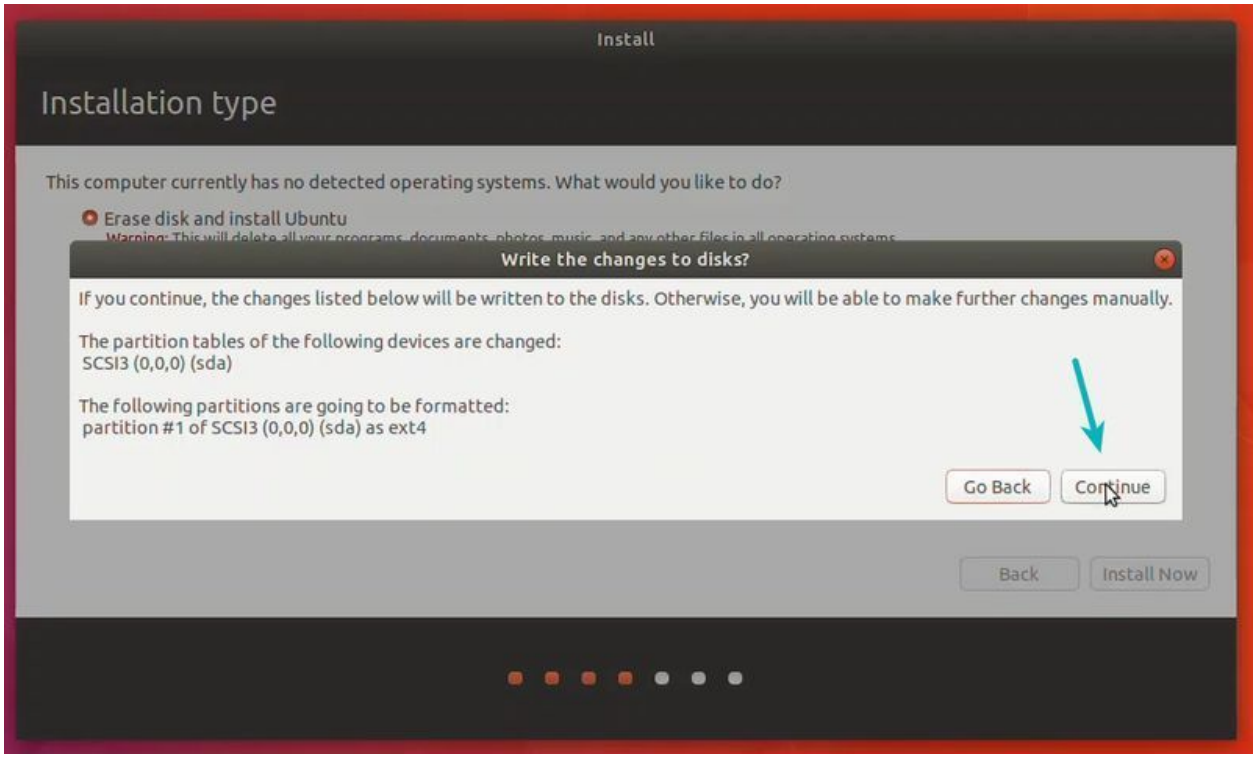
You can skip to Continue.



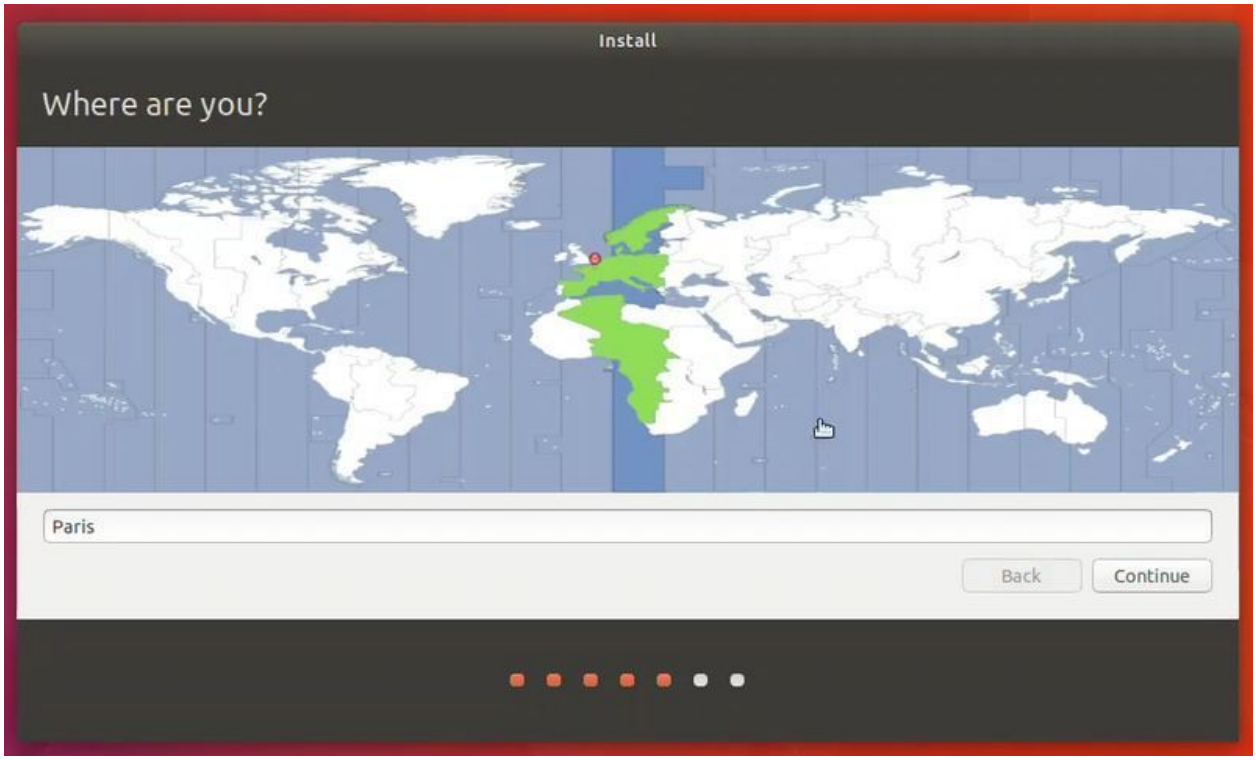
Select ‘Erase disk and install Ubuntu’. Don’t worry. It won’t delete anything on your Windows operating system. You are using the virtual disk space of 15-20GB that we created in previous steps. It won’t impact the real operating system.



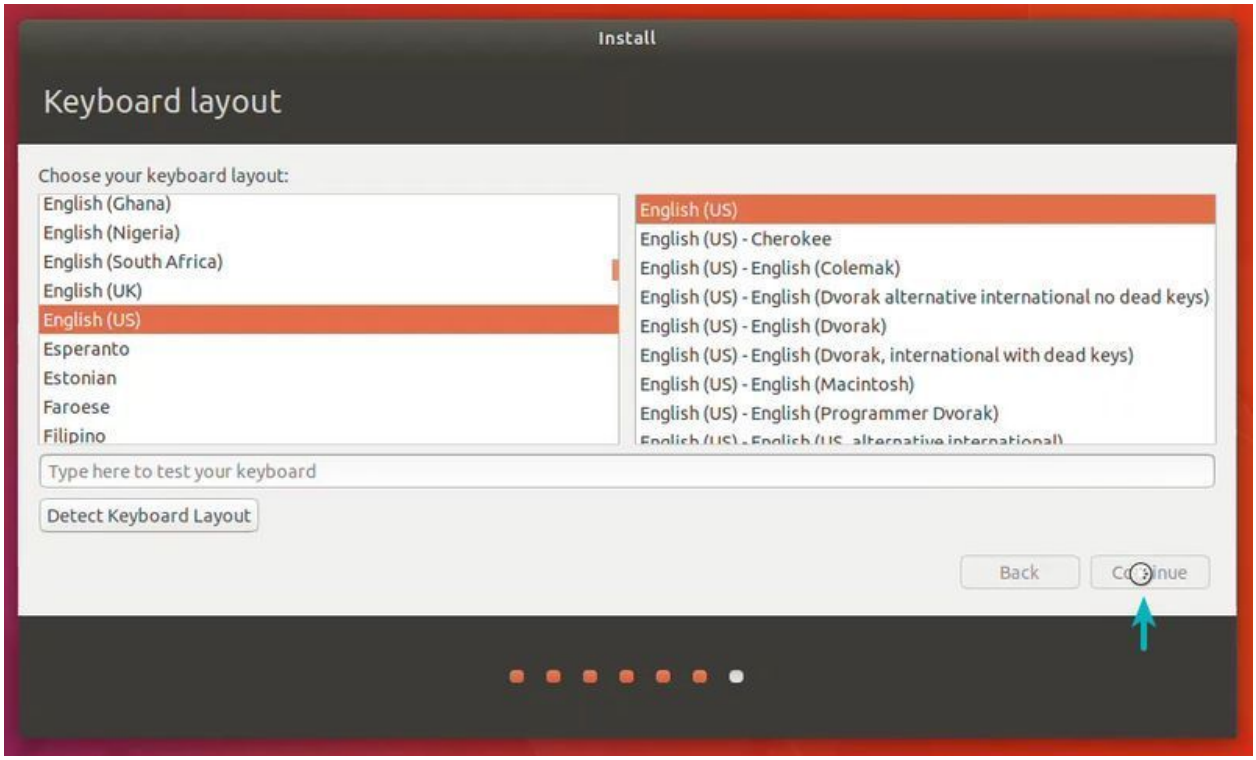
Just click on Continue.



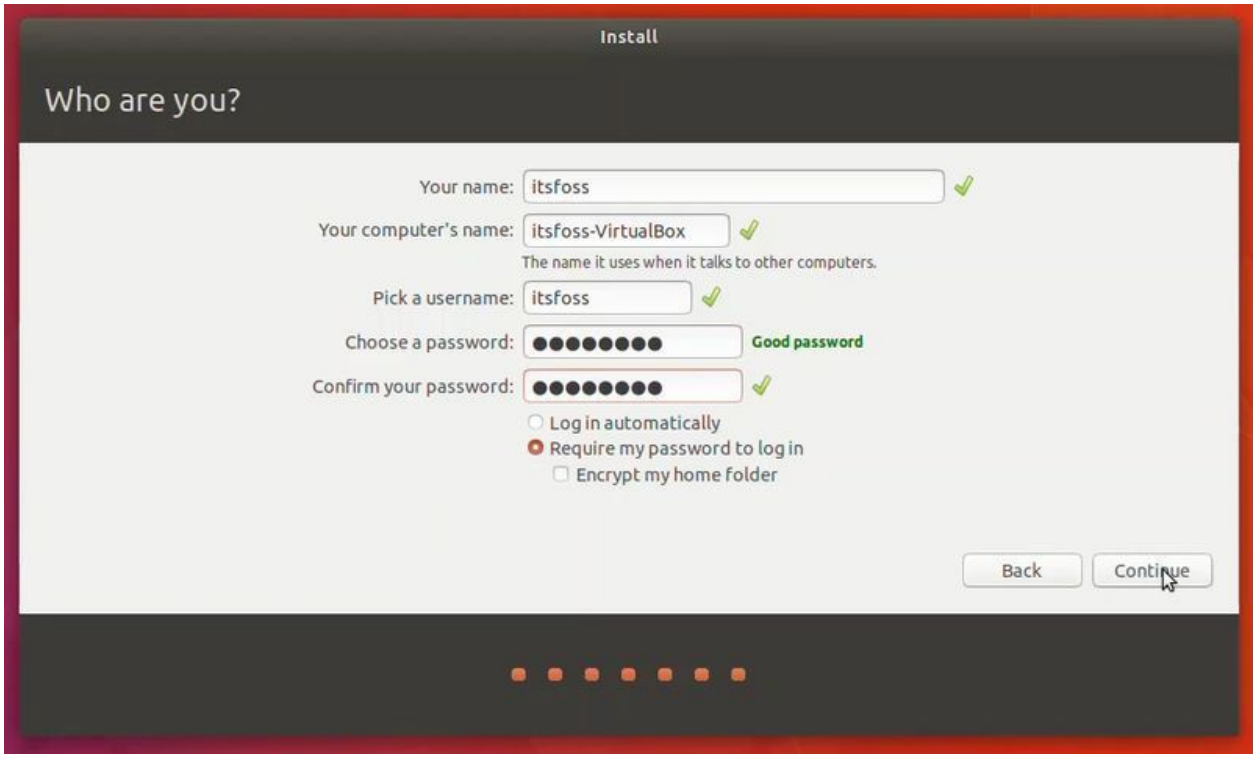
Things are pretty straightforward from here.



Self explanatory.

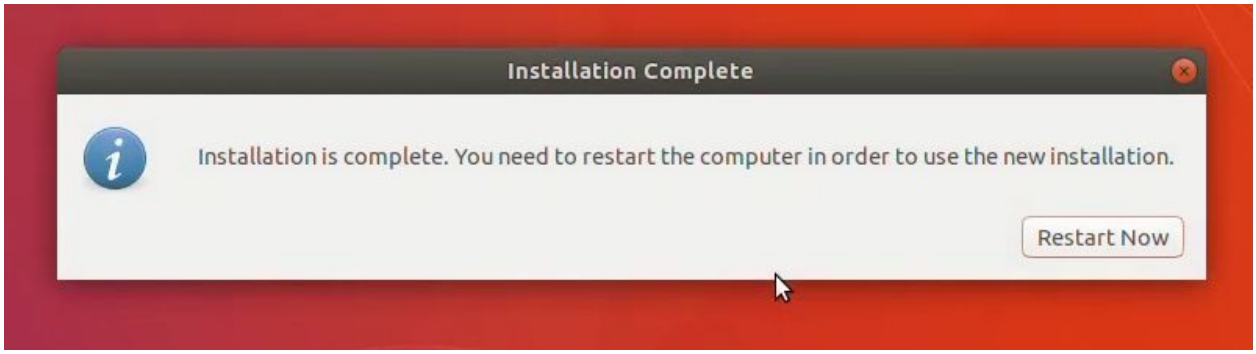


Try to choose a password that you can remember. You can also [reset the password in Ubuntu if you forget it](#).



You are almost done. It should take 10-15 minutes to complete the installation.

Once the installation finishes, restart the system.



If it gets stuck on the screen below, you may close the VirtualBox.

And that’s all. From now onwards, just click on the installed Linux virtual machine. You’ll be able to use it directly. The installation is a one time process only. You can even delete the Linux ISO that you had downloaded earlier.