

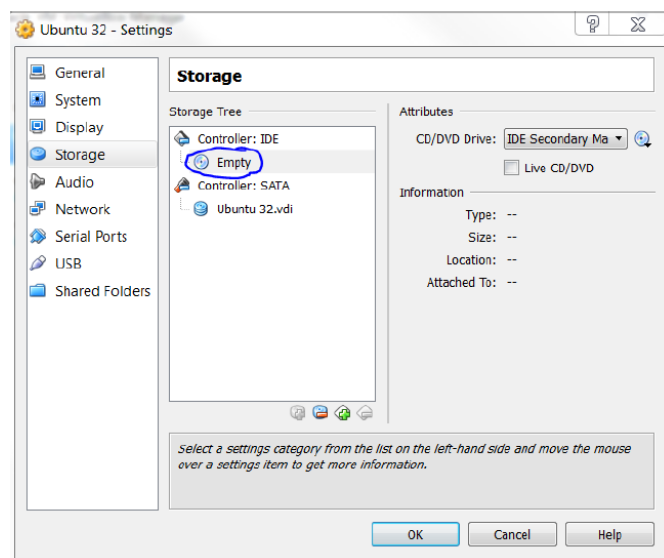
To install Ubuntu on a VM on your laptop

First, install virtualbox

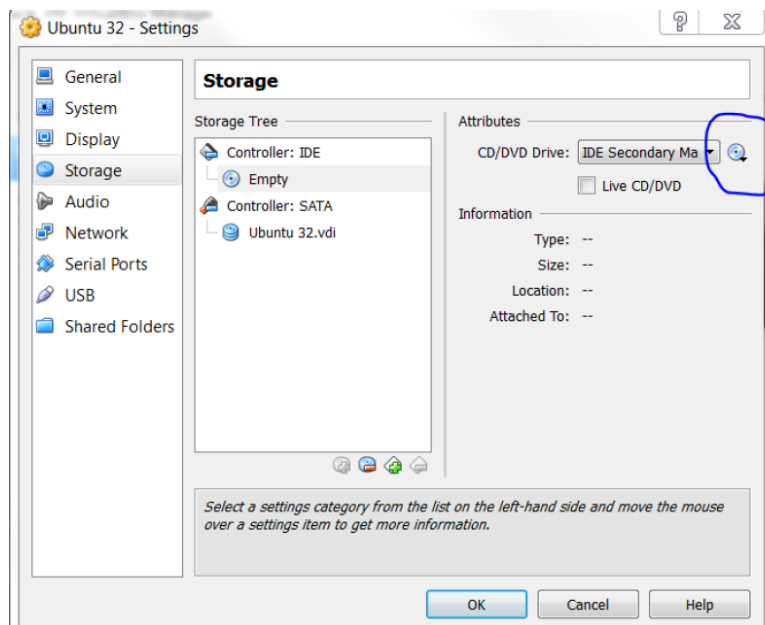
1. Go to www.virtualbox.org/wiki/Downloads and download the platform package for your laptop's OS.
2. Follow the instructions to install virtualbox

Next, get Ubuntu installed and ROS working

1. Go to <http://mirror.pnl.gov/releases/20.04/> and download the disk image for Ubuntu 20.04 LTS (my recommendation). You can choose either 32 or 64 bit, it just has to match the virtual machine you create
2. Once the Ubuntu disk image has downloaded, open up VirtualBox.
3. Select new, in the upper left corner. Follow the steps to set up your virtual machine. You will want to make sure that you select "Ubuntu" or "Ubuntu-64" as the operating system, to match which disk image you downloaded. For memory, try to allocate as much space as your system will reasonably support. This will depend on your laptop's memory and what it can support.
4. Once you have created the Virtual machine, it should show up on your VirtualBox Manager. You should select it and then see all of the details of the system displayed to the right.
5. Select Settings -> Storage, for your virtual machine, then click on the CD, it should be underneath "Controller: IDE". [your version of virtualbox might look slightly different]



6. Under Attributes, there is a picture of a CD with a dropdown. Select it. Then select "Choose a virtual CD/DVD disk file". Then browse to the Ubuntu disk image you downloaded and select it.



7. Now exit out of settings, select your virtual machine, and click on “Start”.

8. At this point, your virtual machine is just like a new computer with the Ubuntu CD in the disk drive. It should boot from the CD, and you can follow the prompts to install Ubuntu on the virtual machine, including account set up and passwords.

Once this process is finished, you now have Ubuntu running on a VM and you can proceed with Lab 1, installing ROS.