Local Virtual Labs Installation to run the Simulations

Virtual Labs
An MHRD Govt of India Initiative

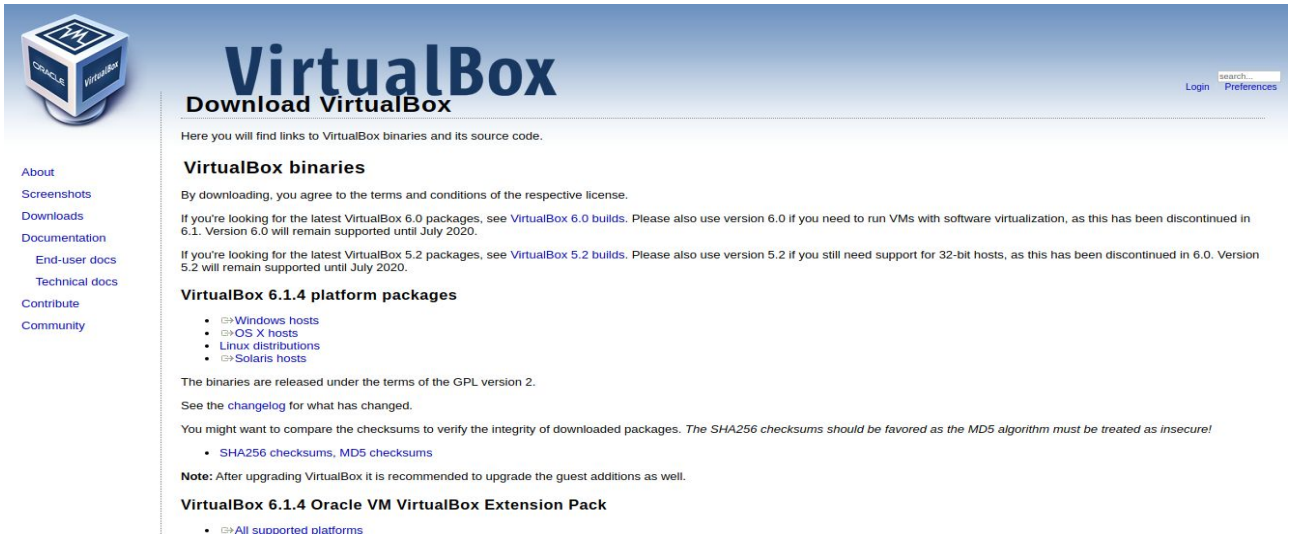
This document contains the instructions to run the simulations. A laptop/desktop should have Virtualbox running the customized Ubuntu OS which has all the required software dependencies to run the simulations. So please follow the below steps:

1. Download and install virtualbox in your OS
    a. Click for Windows installation steps
    b. Click for CentOS installation steps
    c. Click for Ubuntu installation steps
    d. Click for Mac OS installation steps
2. Import our customised Ubuntu OS in virtualbox.

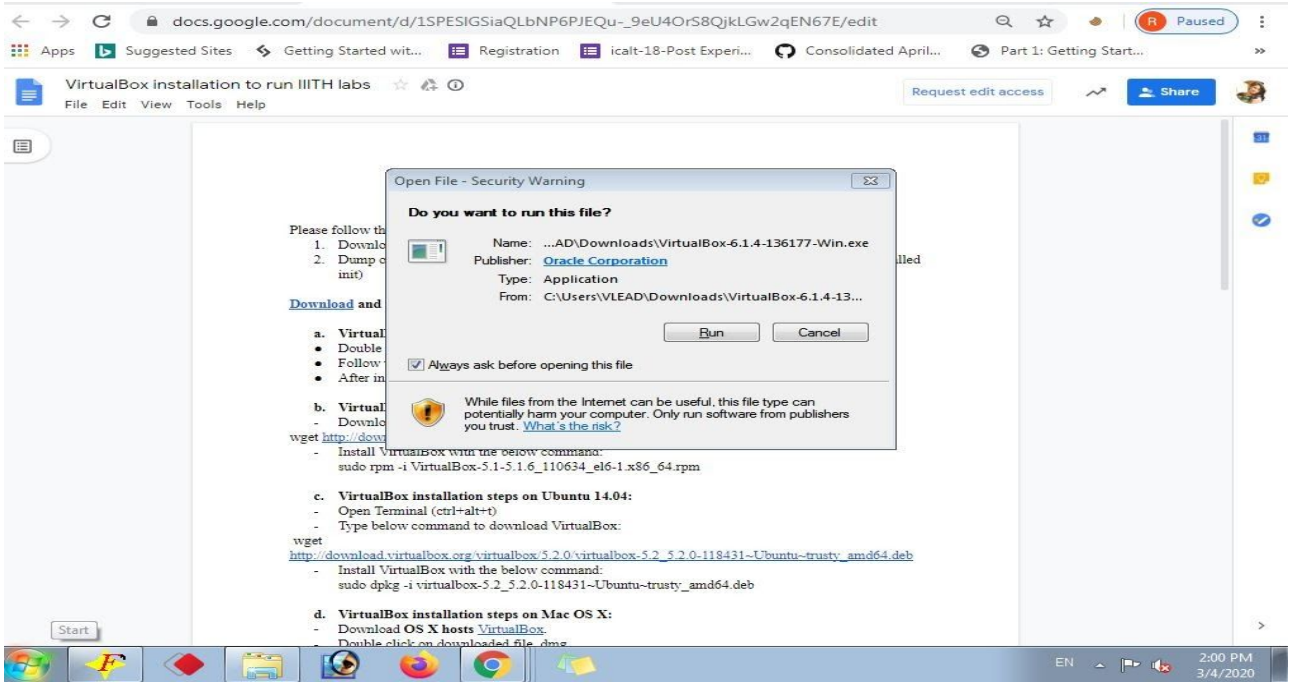
Download and install virtualbox in your OS

1. Installation steps for Windows

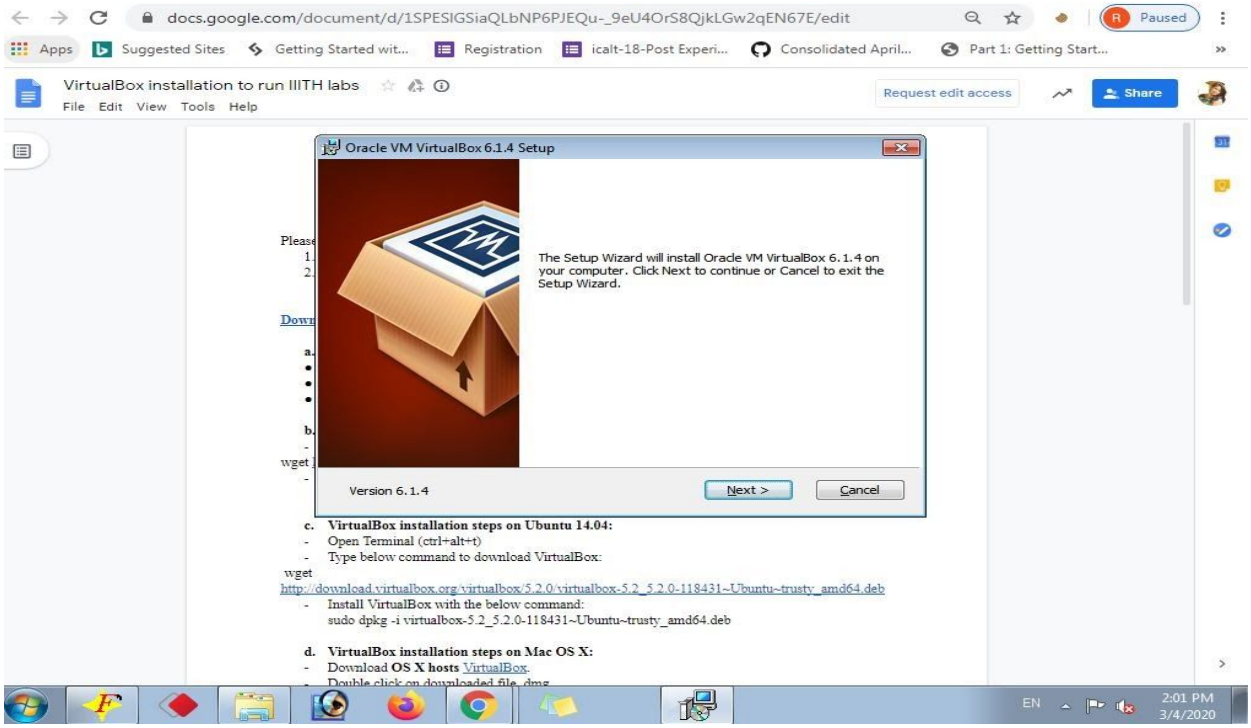
1. Download VirtualBox from the link https://www.virtualbox.org/wiki/Downloads



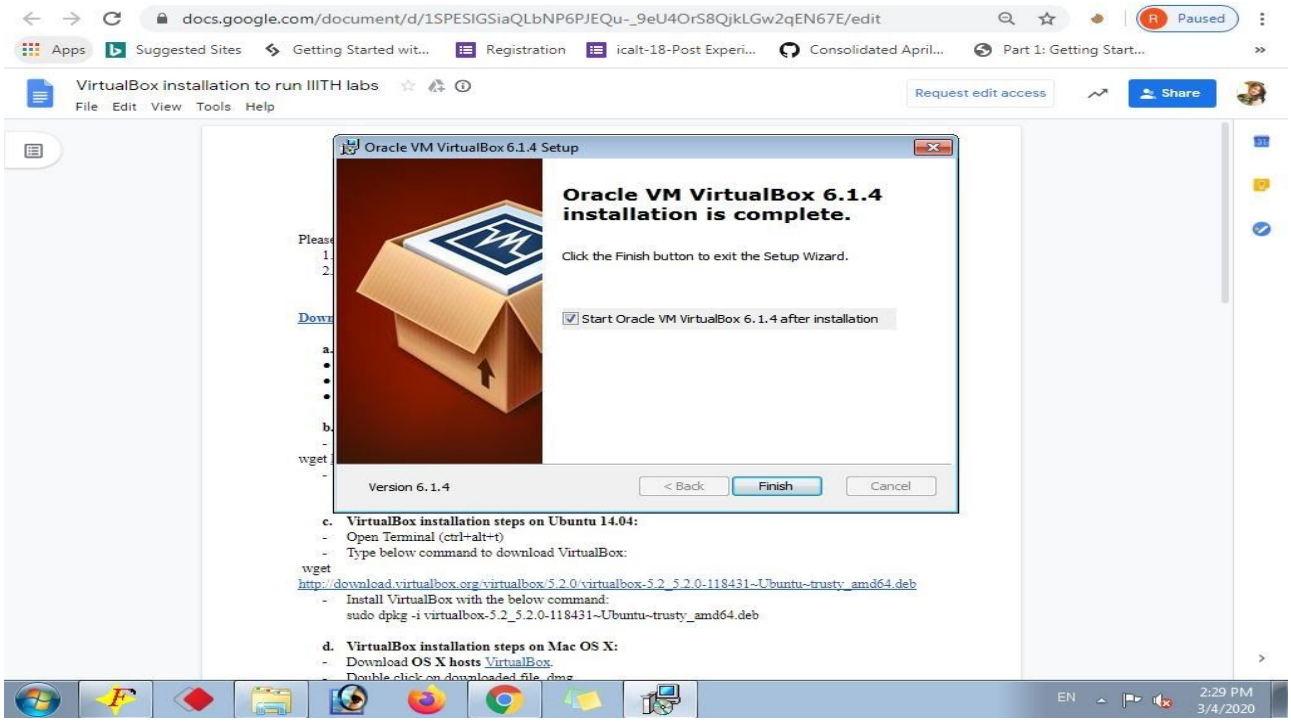
2. Wait for the .exe file to be downloaded, then double click on it to install.
3. Setup Window will appear, click on Run button to install



4. Click on the Next button to install the application.



5. Click on Next button and follow the instructions to complete the installation
6. After the installation, final window will be



7. After installation, ensure that a VirtualBox icon is created on the desktop.
8. Steps to import Ubuntu OS

2. Installation steps for CentOS

1. Open Terminal (ctrl+alt+t)
2. Download RPM package with the below command:

wget
http://download.virtualbox.org/virtualbox/5.1.6/VirtualBox-5.1-5.1.6_110634_el6-1.x86_64.rpm

3. Install VirtualBox with the below command:
   sudo rpm -i VirtualBox-5.1-5.1.6_110634_el6-1.x86_64.rpm
4. Make sure virtualbox is installed with the command:
   Virtualbox -V
5. Steps to import Ubuntu OS

3. Installation steps for Ubuntu

1. Open Terminal (ctrl+alt+t)
2. Type below command to download VirtualBox:

wget
http://download.virtualbox.org/virtualbox/5.2.0/virtualbox-5.2_5.2.0-118431~Ubuntu~trusty_amd64.deb

3. Install VirtualBox with the below command:
   sudo dpkg -i virtualbox-5.2_5.2.0-118431~Ubuntu~trusty_amd64.deb
4. Use the below command to check whether a virtualbox is installed or not.
   Virtualbox -V
5. Steps to import Ubuntu OS

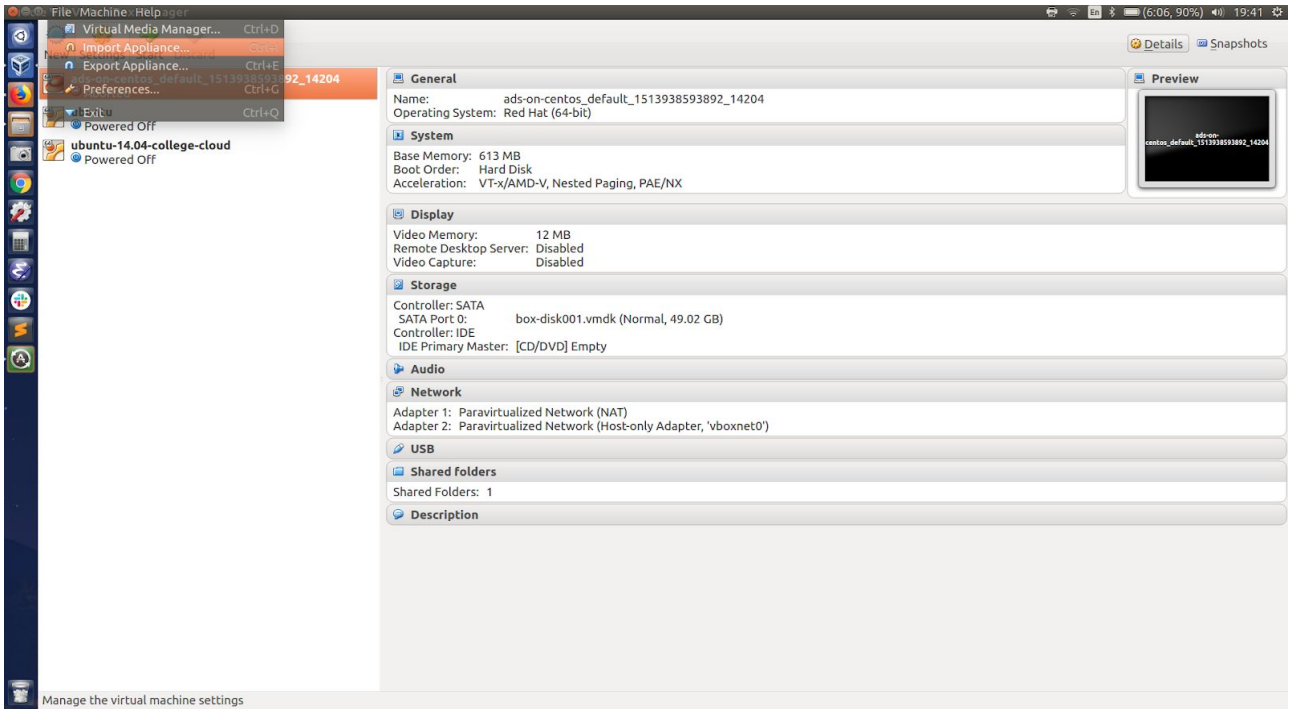
4. Installation steps for Mac OS

1. Download **OS X hosts** VirtualBox.
2. Double click on downloaded file .dmg.
3. Follow the instructions and install it.
4. Steps to import Ubuntu OS

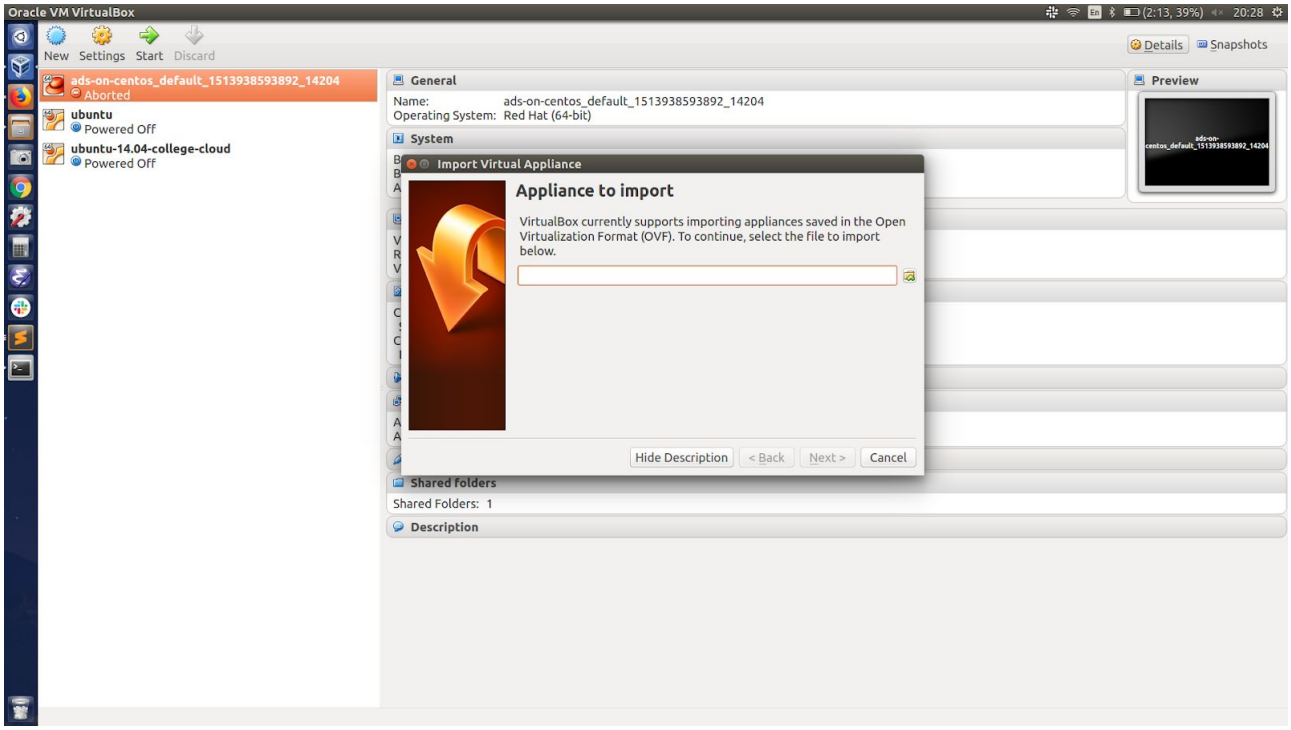
Import custom Virtual labs OS image in VirtualBox

Steps to import Ubuntu (.ova file)in VirtualBox :

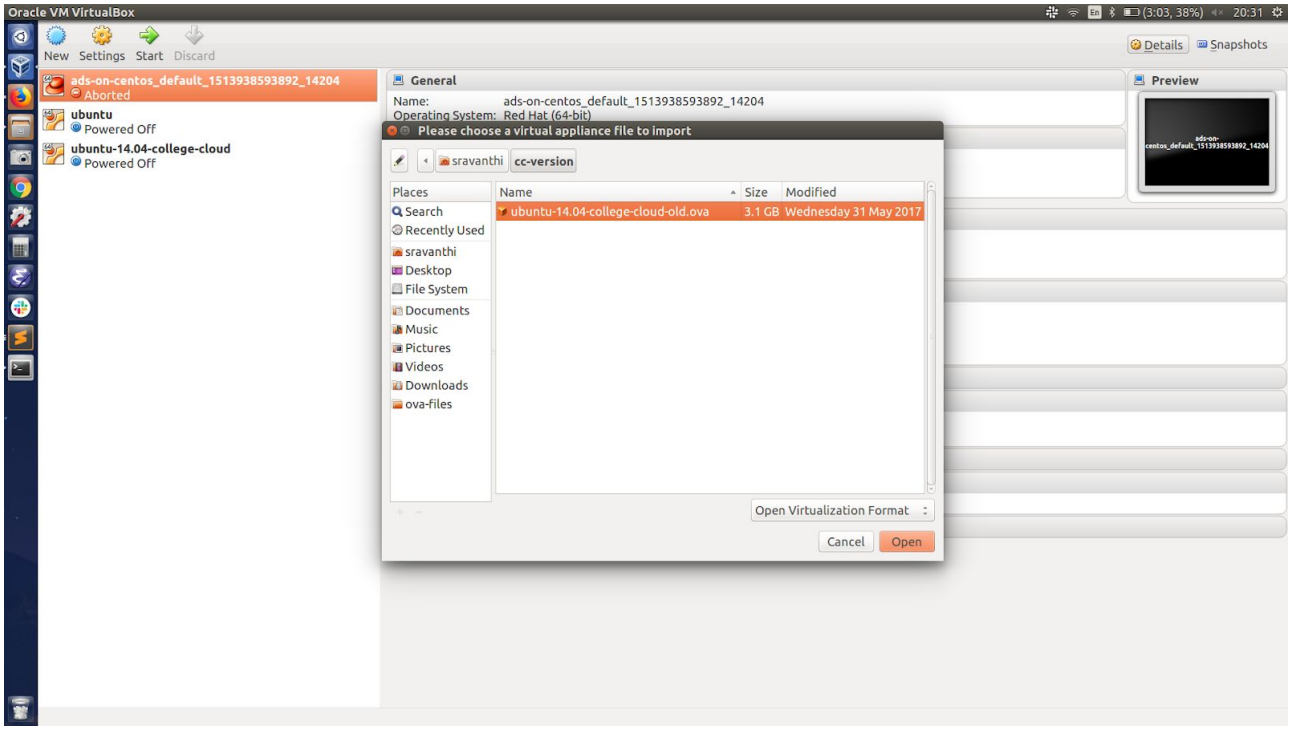
1. Click on the link to download the Ubuntu OS and save the ubuntu-14.04-college-cloud.ova in your machine.
2. Please note that import steps need to be done only once.
3. Click on the VirtualBox Icon to open.
4. Open Virtualbox.
5. click on File → Import Appliances



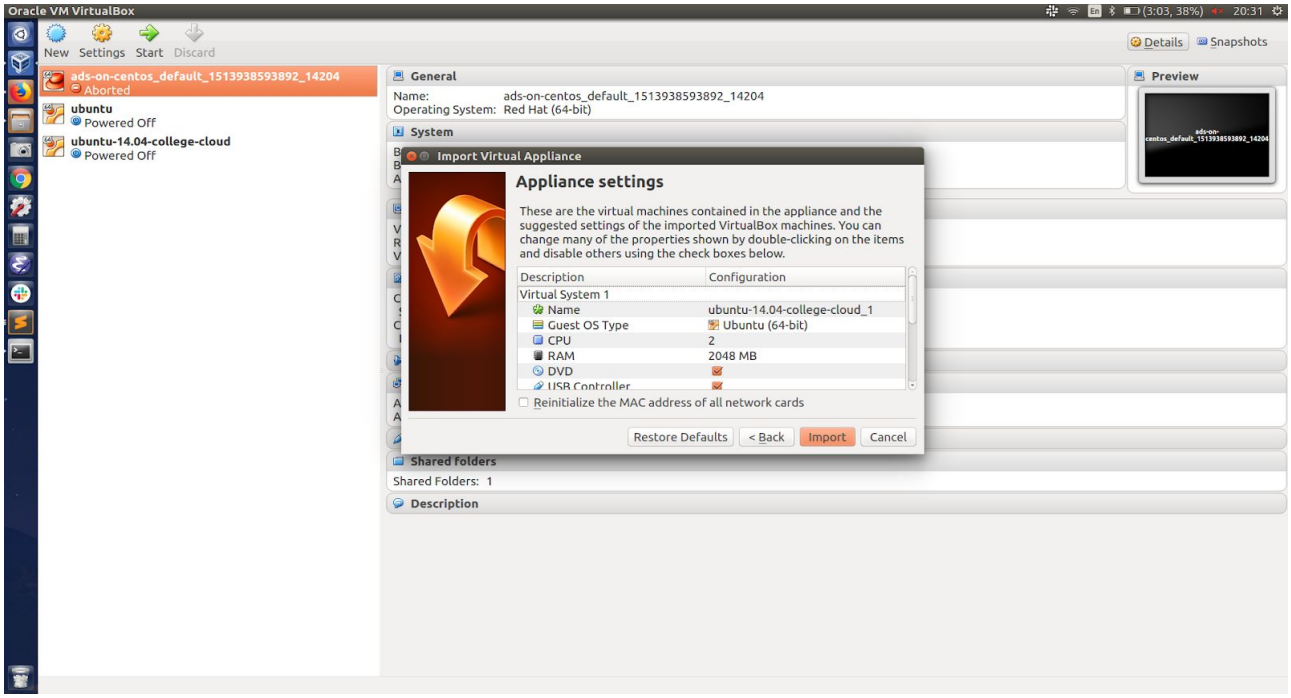
6. Browse the file window is displayed



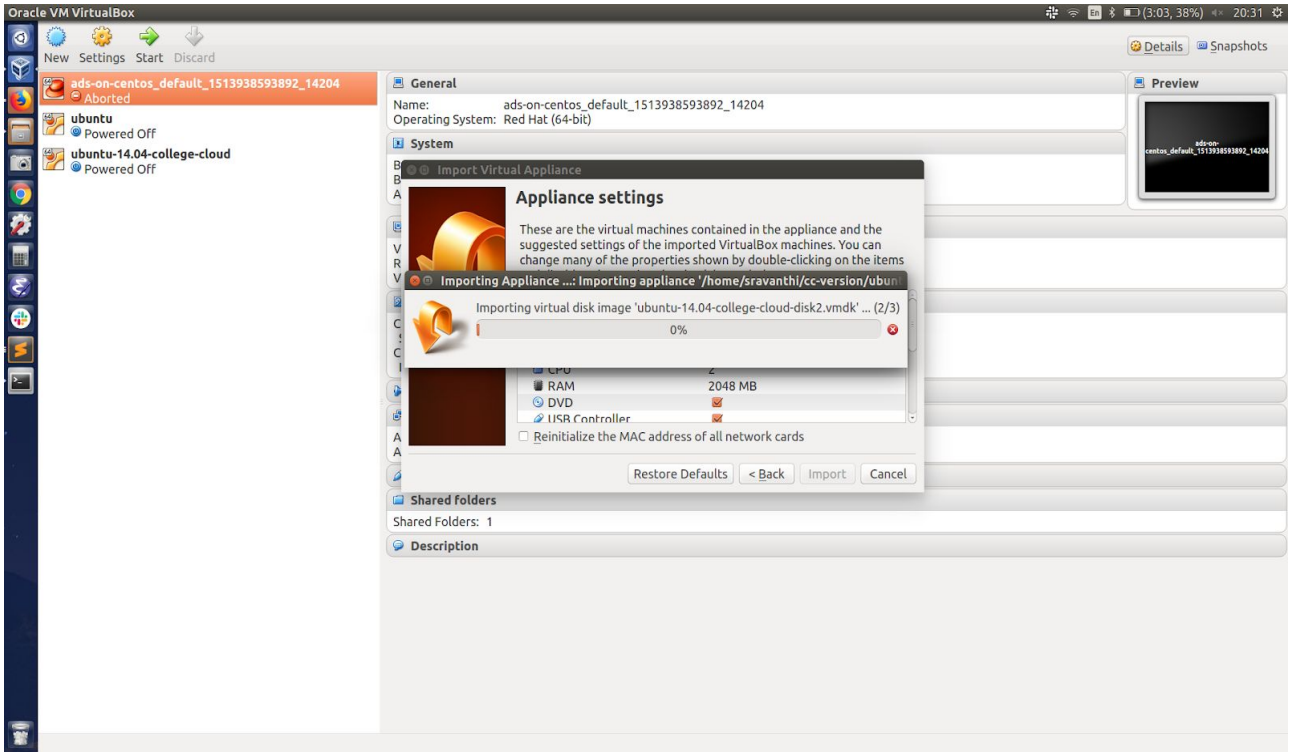
7. Select the downloaded file by clicking on the browse button



8. Then the import setup gets started
9. Click on next to start importing the downloaded file



10. The importing process looks as below:



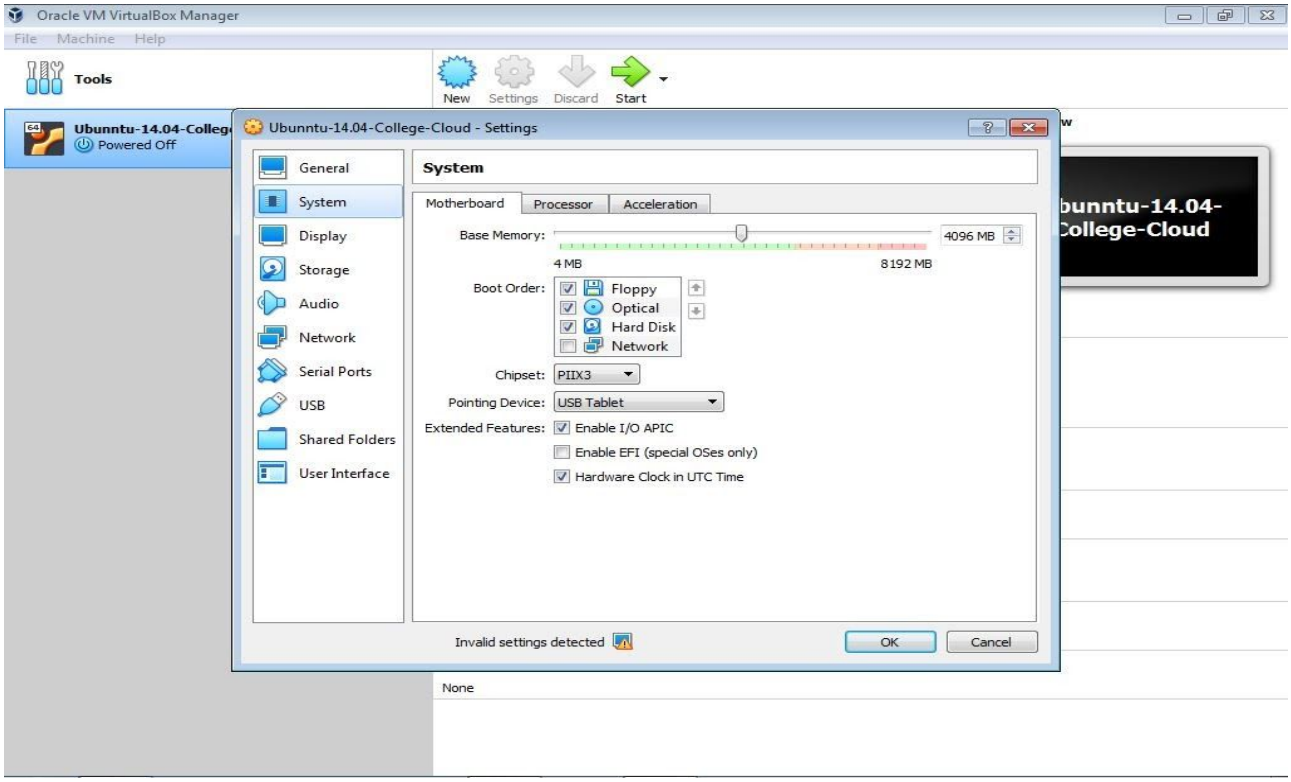
11. This may take 5 to 10 minutes to complete the import process.
12. After the completion of importing, you can find the ubuntu-virtualbox in the VirtualBox window
13. Double click on the ubuntu-virtualbox.
14. You can find the Ubuntu OS, it prompts to enter a password.
15. Password for the OS is “cc”.

NOTE:

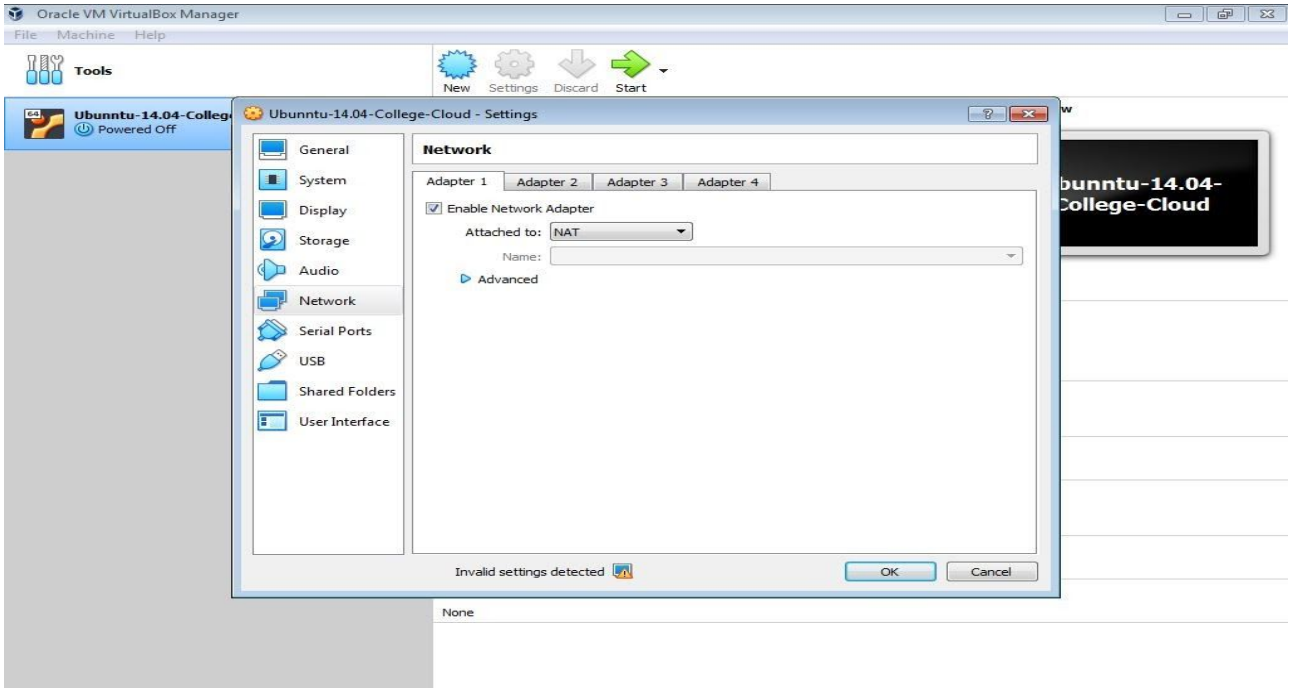
Select the **ubuntu-14.04-college-cloud** from the VirtualBox window and allocate the Processor and Memory/RAM size from the **Settings** menu appropriately based on the system configuration of the user

machine.

- Recommended Settings for the imported box
- Processor --> 1
- Memory/RAM size --> 2GB or 4GB according to how much your ram is.



- Please change the network setting in your Virtualization software for the imported image from **Bridge adapter** to **Nat**.



- Do not update or upgrade any application in it.
- Click on the link to use the labs.