Testing your Linux Virtual Box

This document will guide you through downloading and installing the software you need for this offering. Make sure you get a fully working system early in the week so you have time to ask for help if you are bumping into problems.

Update – The screenshots have been made using a now rather old version of Virtual Box. No big differences but don't be surprised if you see some extra user interface elements as you follow the guidelines below. Lesson #1; technology evolves faster than you type ☺

Step #0 – Downloading Virtual Box installer & ISO files

You will find here the link to the virtual box website, please visit this link to find the latest version of the Microsoft Windows Installer. Download the installer's executable file and run it on your machine.

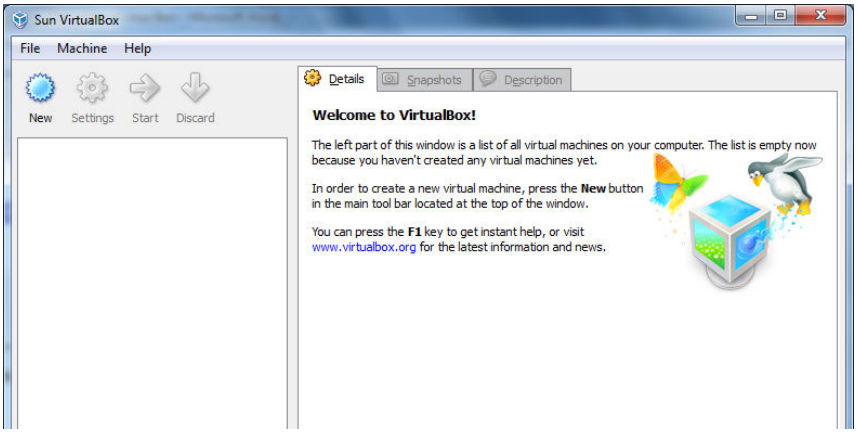
https://www.virtualbox.org

The latest version of virtual box should work just fine. If there is an incompatibility between it and the Ubuntu distribution we are using, your instructor will post during the first week some additional information about which version you need to download instead.

When you are done, download the ISO image for the Linux Ubuntu installation CD. Make sure to select the 64 bits version of the latest Ubuntu distribution available. Again, if this version has revealed to be incompatible with the latest Virtual Box release, your instructor will post during the first week some additional information about which Ubuntu distribution you need to download instead.

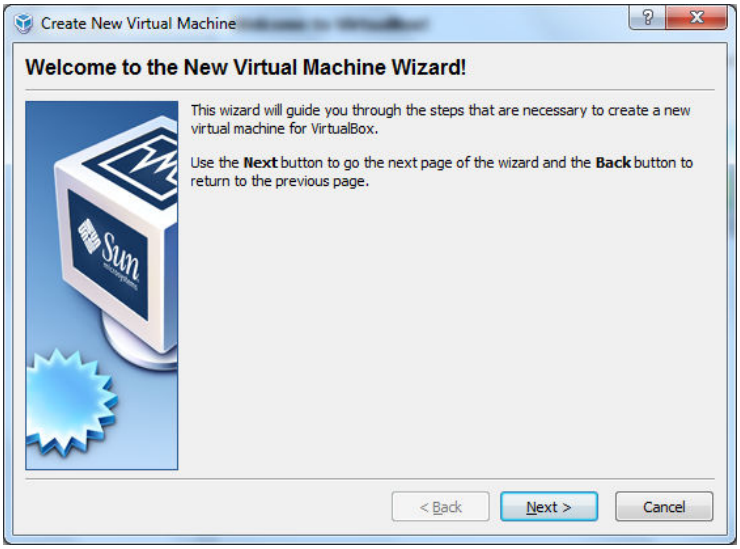
http://www.ubuntu.com/download/desktop

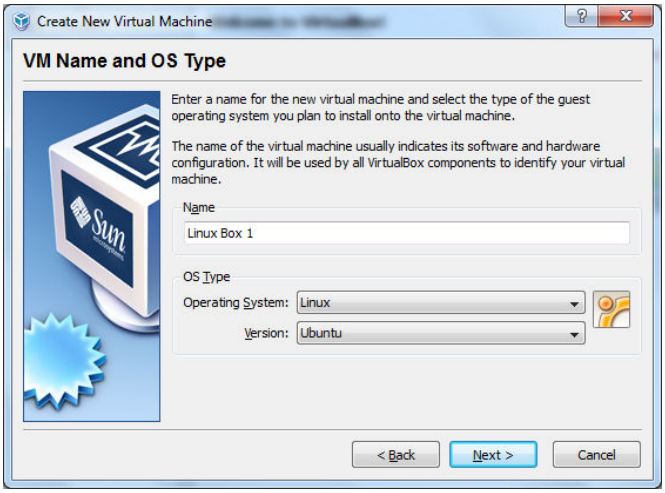
Step #1 – Building your first virtual machine



Start the virtual box software. The first time you will be prompted to register it freely by opening an account at Sun Microsystems online. Do so, you will then be able to access the main panel illustrated below.

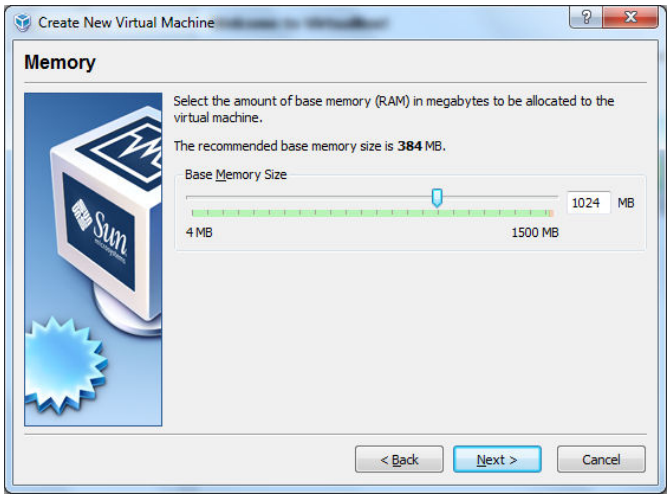
You first task will be to select the "New" option in the "Machine" menu. You are now entering the virtual machine building wizard.

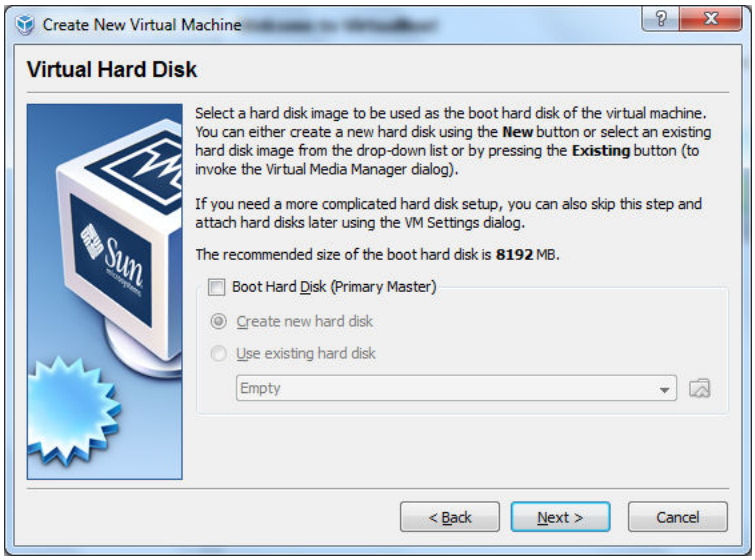




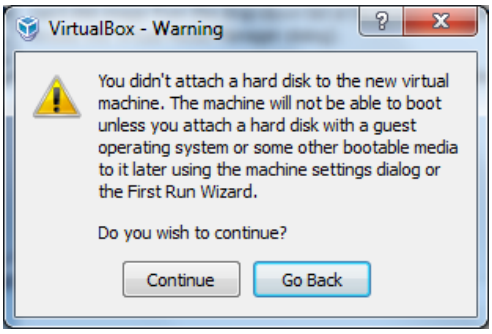
After hitting "Next", you will be prompted to enter a name for your virtual machine and select the type and then version of operating system you plan on installing in it.

Next, select the amount of RAM you want this virtual machine to have at its disposal. You may go with the minimal default value or allocate a bit more depending on your physical machine configuration.





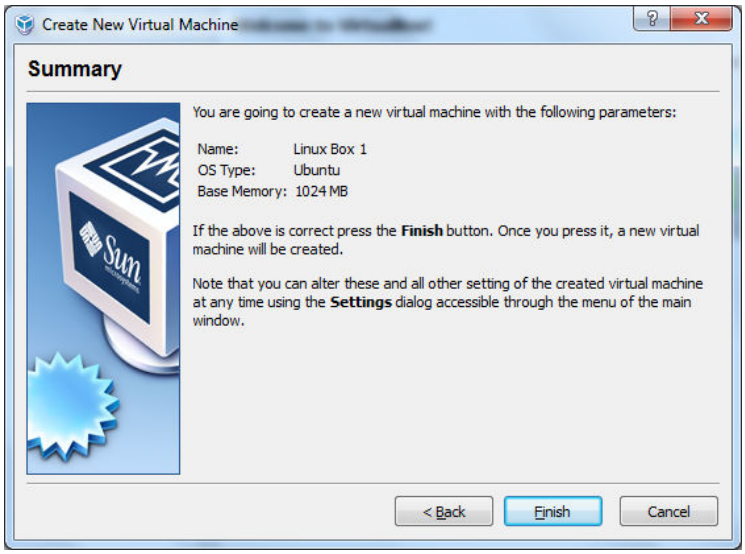
Next, you are prompted to set up your virtual hard drive. For this week, we are going to simply run Linux directly from the ISO image. This is the kind of setup we would use if booting from the DVD of a physical machine just to give a shot to Linux without altering anything on our hard drives.



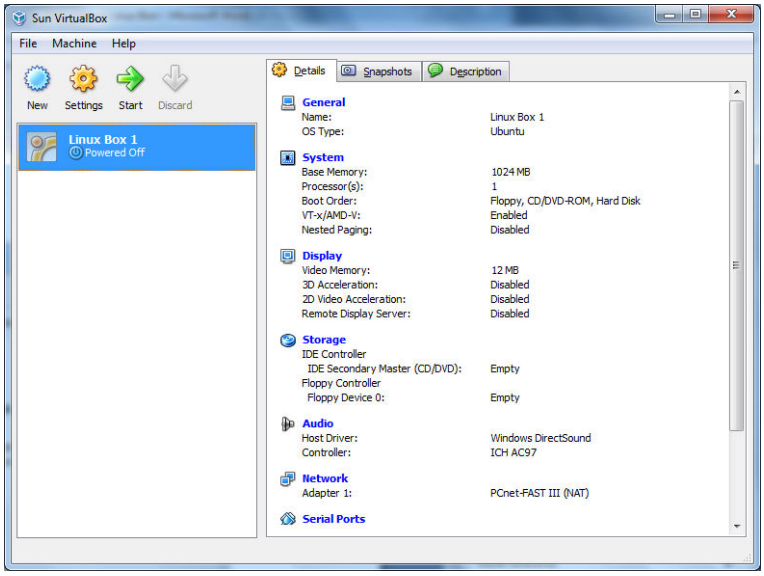
This setup is not what we'll use in the rest of this offering. You get a warning indicating that you might have forgotten to define any hard drive since, in this setup, all we will be able to do is boot Linux from the DVD image but not save any of our work on a virtual hard drive.

Just go ahead with this setup for now.

You are now ready to configure how your virtual machine will boot.

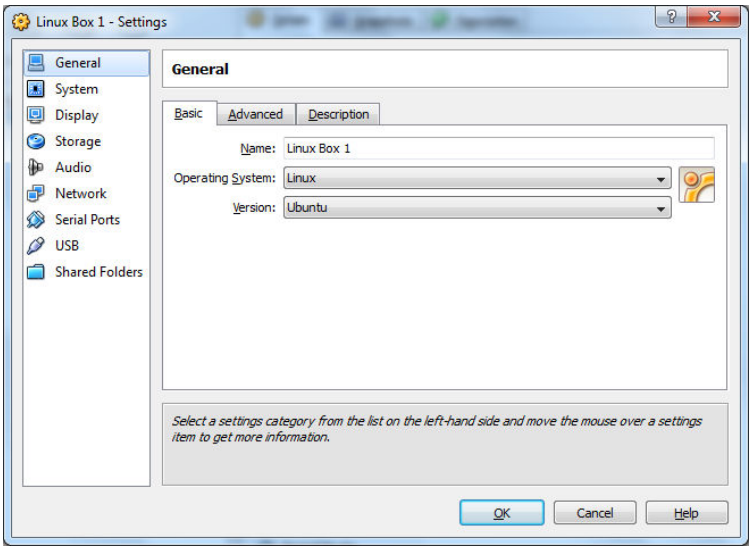


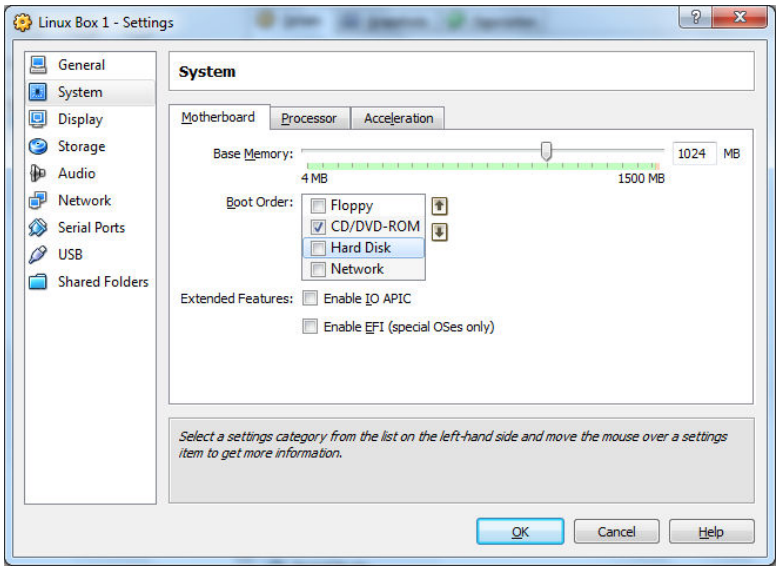
Step #2 – Setting up your Linux Virtual Box



Now we are ready to finalize our setup for our virtual Linux box. Select your brand new virtual machine in the left panel and hit the “Settings” cogwheel button.

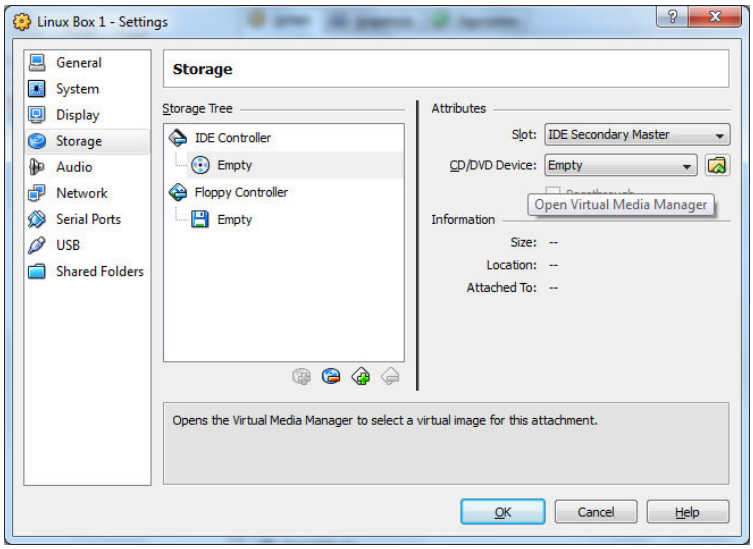
You are able to modify the settings of your virtual machine with this tool.



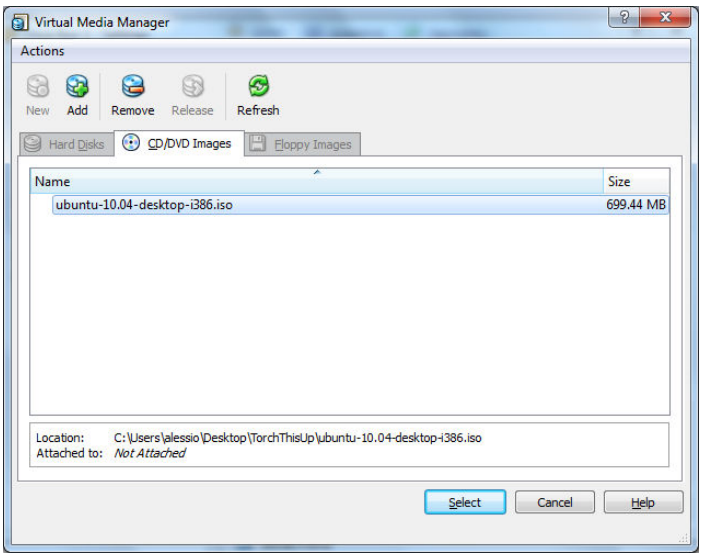


We will start by selecting the "System" section and tell our virtual box that we want it to boot from its virtual DVD drive.

Now, we need to provide a "virtual disk" to our virtual machine. This is where the ISO file you downloaded is going to be useful. Go to the "Storage" section and select the "Empty" device under the "IDE Controller".

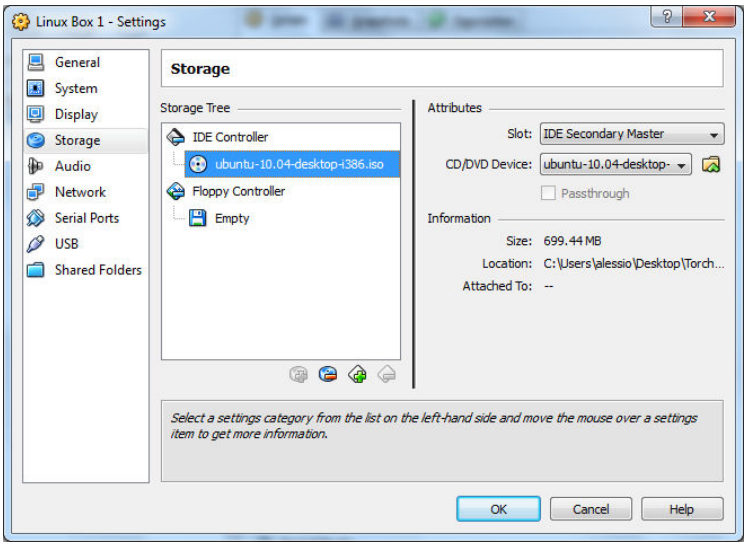


Open the media manager by hitting the folder button to the right of the drop down box reading "Empty" in front of the "CD/DVD Device:" field.



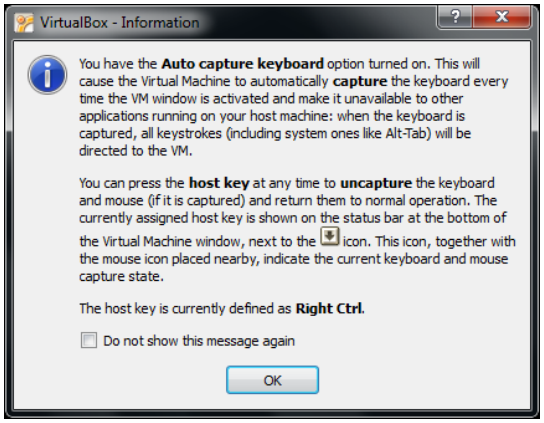
The "add" button will allow you to browse your hard drive for an ISO image or a virtual hard drive image. Go to where you downloaded our Ubuntu ISO image and select it. It will now be listed in the media manager main window so that you might select it to be used with our virtual DVD drive.

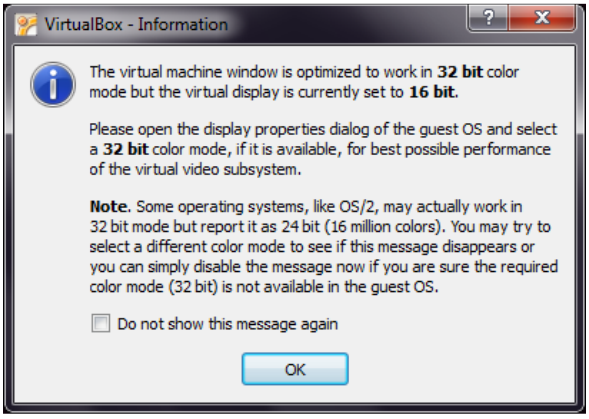
Now that we have the right image selected for our virtual DVD drive and that the boot order has been set, we are done with the setup.

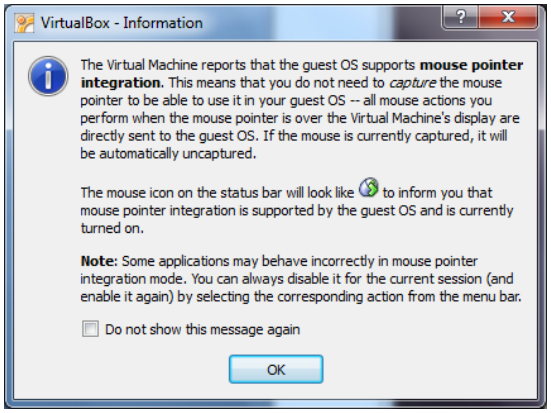


Step #3 – Booting your Linux Box

Select your Linux box from the left panel and hit the "start" button. You will get a pop up explaining to you how the virtual machine window will "capture" your mouse and keyboard when you interact with it. By default, releasing to work on your desktop is done by pressing the right control key. You might also get another warning about the color depth, disregard it for now.

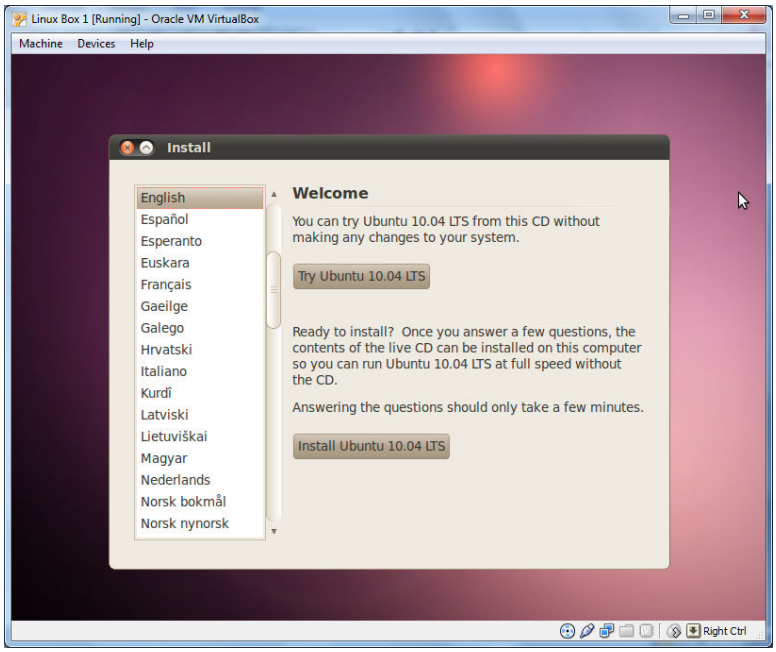






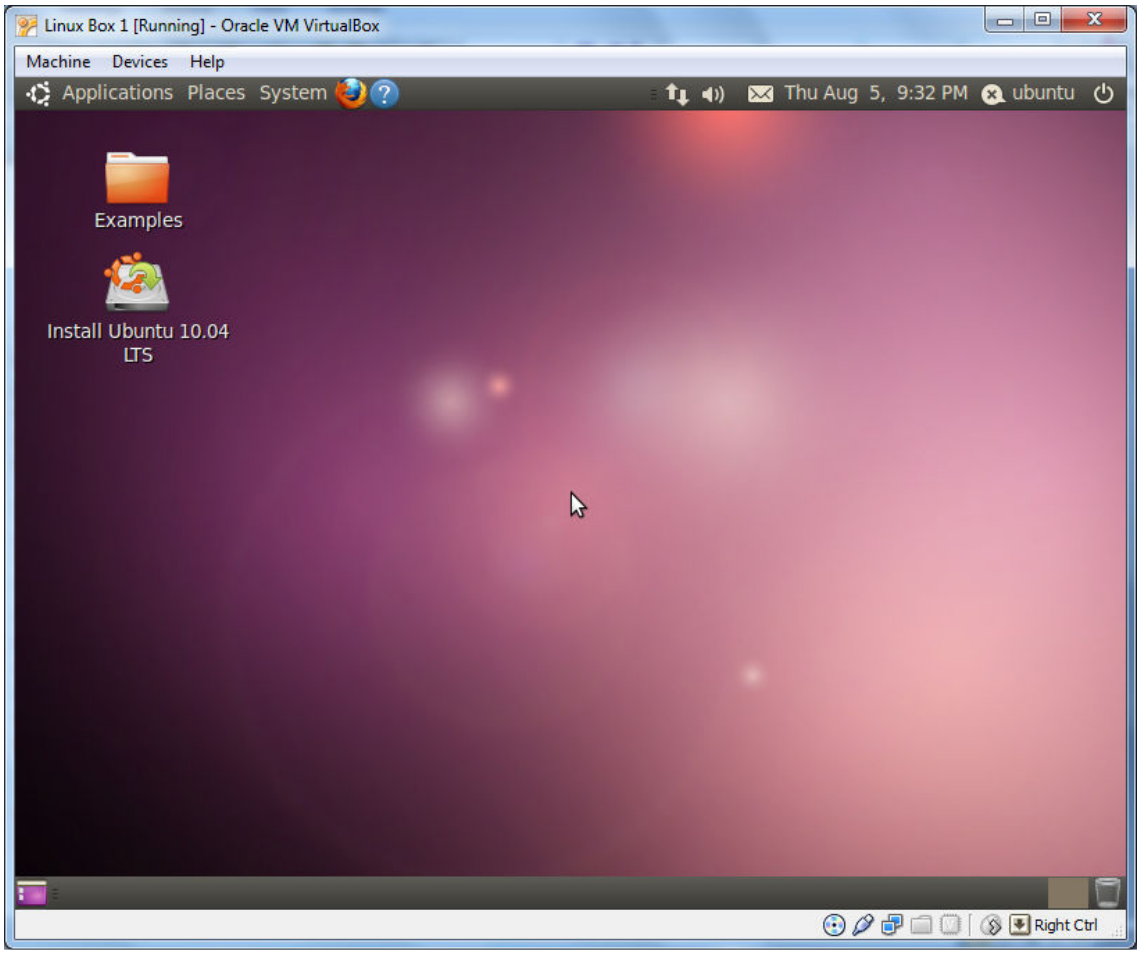
Update – now most guest operating systems you will be installing support a new feature of virtual box: the integrated mouse. Instead of the above, some Linux distributions will make virtual box display a warning that you don't need to worry about capturing the mouse / keyboard anymore. If this feature is not supported, you will see the above pop ups.

You virtual Linux Box is now booting. Do not click or press any key inside the VM until you see the following screen. This should take less than a minute.



This boot menu offers several options. Let's pick "Try Ubuntu … LTS". This will run the Ubuntu system off the CD without requiring use to install it to or even have a virtual hard drive. When we are done, all work is lost so we will do things differently very soon.

After less than a minute, you should see the screen below. Welcome to Linux!


Linux Box 1 [Running] - Oracle VM VirtualBox
Machine Devices Help
Applications Places System
Thu Aug 5, 9:32 PM ubuntu
Examples
Install Ubuntu 10.04 LTS
Right Ctrl