Virtual Box – Installing Ubuntu Desktop Lab

<PREREQUISITE>

- Internet Connection
- Laptop
- VirtualBox previously installed
- UBUNTU DESKTOP 16.04 LTS ISO FILE - http://releases.ubuntu.com/14.04/ubuntu-14.04.5-desktop-amd64.iso

WHAT IS AN ISO?

An ISO file, often called an ISO image, is a single file that's a perfect representation of an entire CD, DVD, or BD. The entire contents of a disc can be precisely duplicated in a single ISO file.

Think of an ISO file like a box that holds all the parts to something that needs built—like a child's toy you might buy that requires assembly. The box that the toy pieces come in does you no good as an actual toy but the contents inside of it, once taken out and put together, become what you're actually wanting to use.

An ISO file works in much the same way. The file itself is no good unless it can be opened, assembled and used.

What does LTS mean?

LTS = Long Term Support

GUI = Short for Graphical User Interface, a GUI (pronounced as either G-U-I or gooey) allows the use of icons or other visual indicators to interact with electronic devices, rather than using only text via the command line.

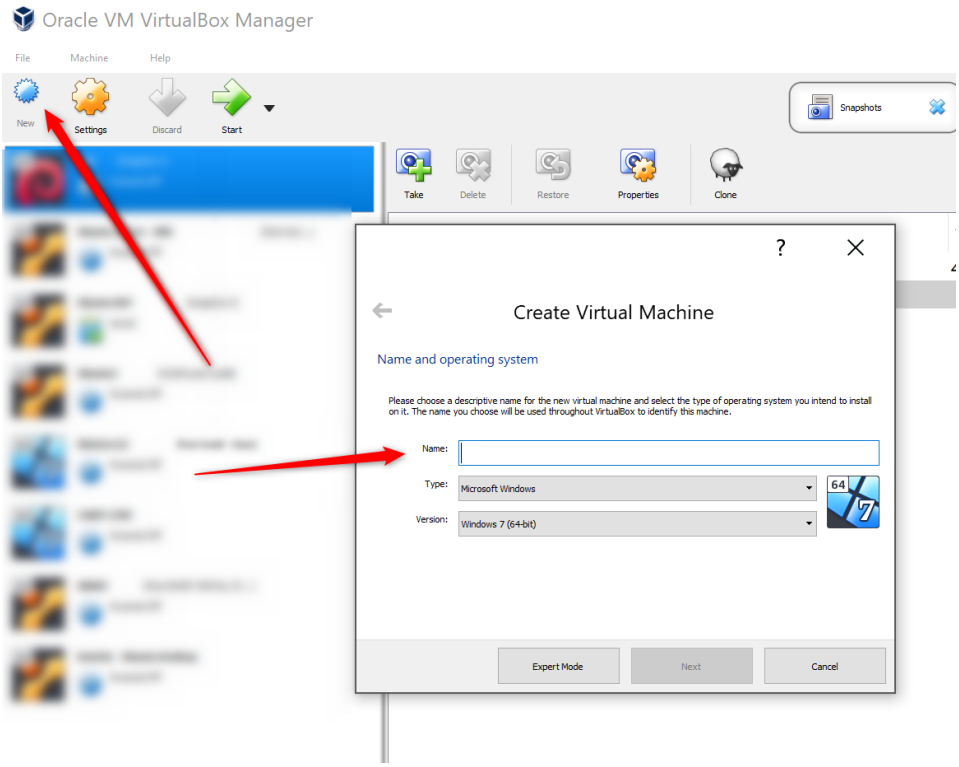
A GUI uses windows, icons, and menus to carry out commands, such as opening, deleting, and moving files. Although many GUI operating systems are navigated through the use of a mouse, the keyboard can also be utilized by using keyboard shortcuts or arrow keys.

Unlike a command line operating system or CUI, like Unix or MS-DOS, GUI operating systems are much easier to learn and use because commands do not need to be memorized. Additionally, users do not need to know any programming languages. Because of their ease of use, GUI operating systems have become the dominant operating system used by today's end-users.

LAB START

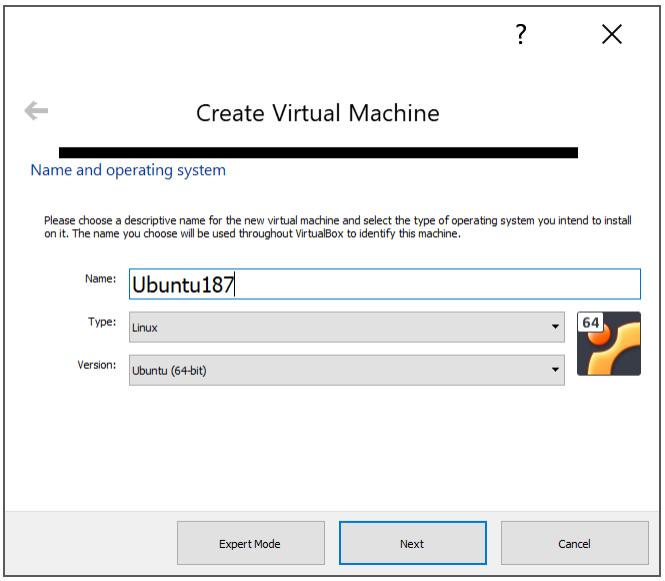
Open Virtual Box

Click on NEW to create a new Virtual Machine object.

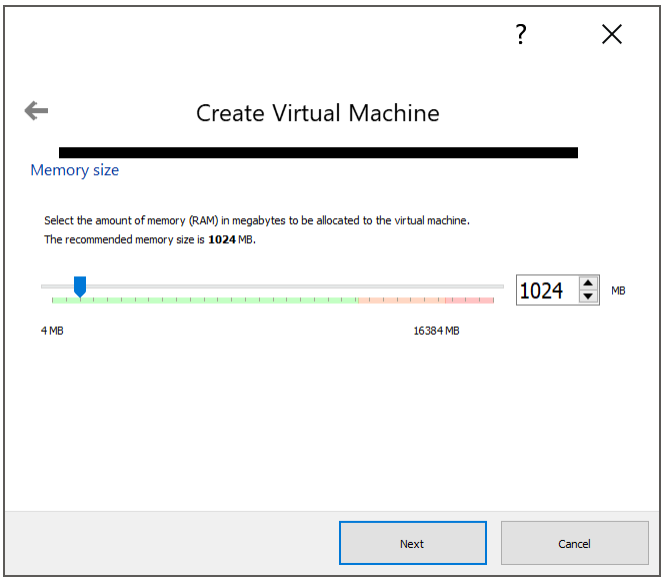


Give your computer a name and ensure you have selected the right operating system. In this guide we will be installing UBUNTU Desktop 16.04 LTS. (This operating system has a GUI) (GUI = Graphical User Interface)

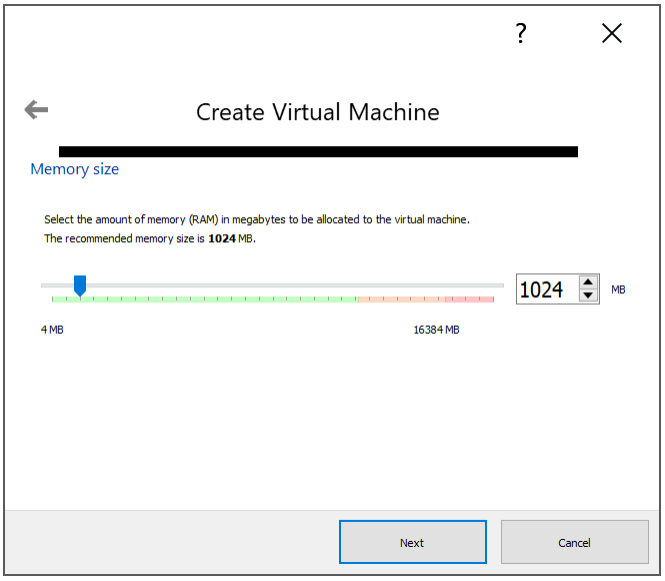
If you use the word Ubuntu, VirtualBox will autodetect what OS you are trying to install, neat eh?



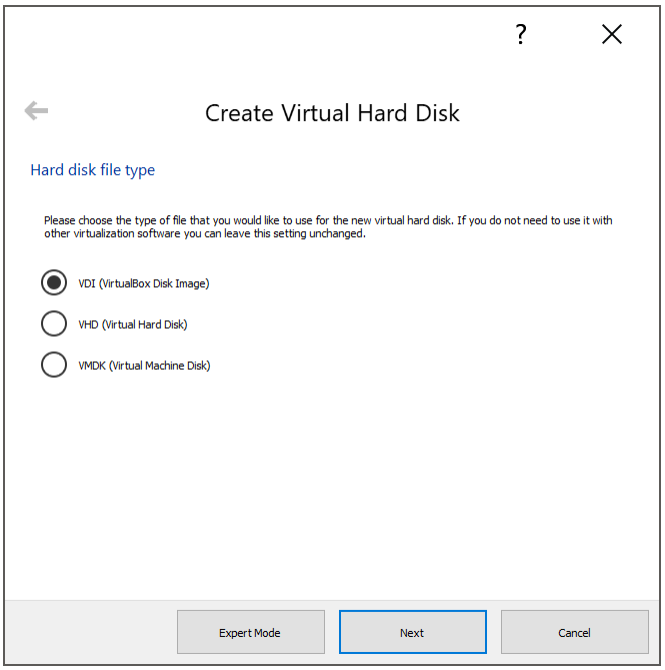
Give it 1 GB of memory



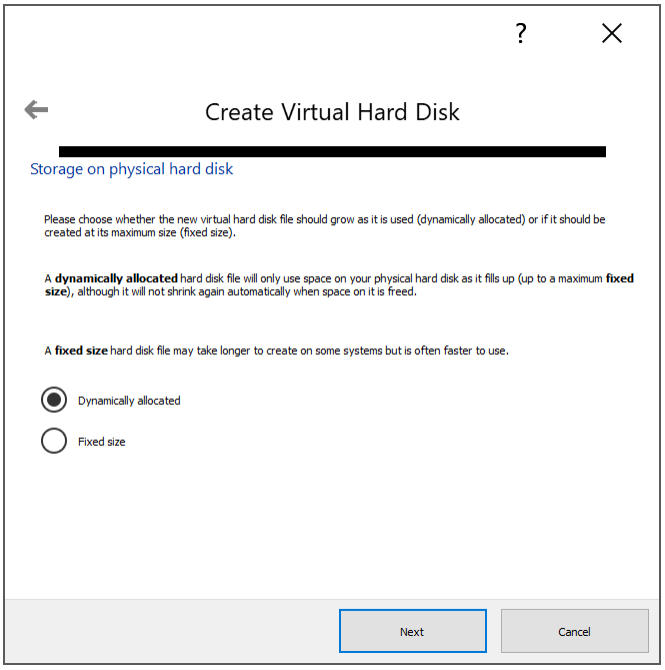
Go ahead and create a Virtual Hard Drive for it.



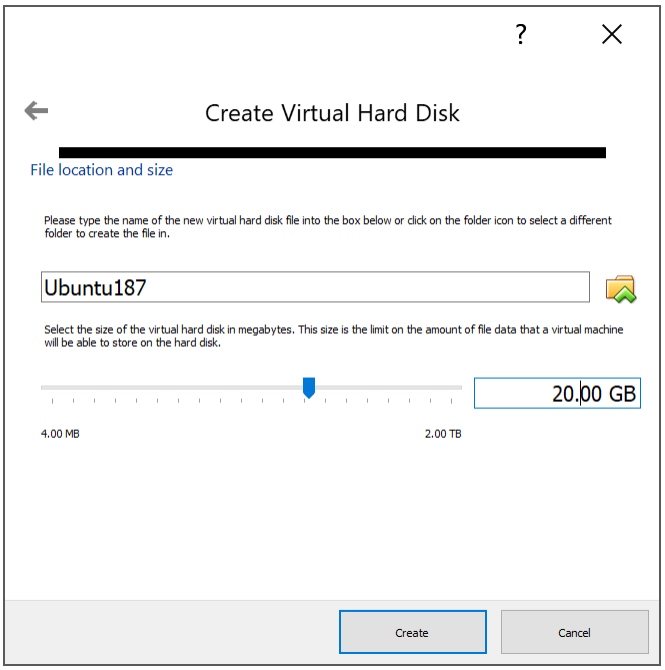
Let’s go with the default of VDI (VirtualBox Disk Image)



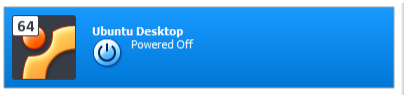
We will leave it Dynamically allocated. Take time to read what that means.



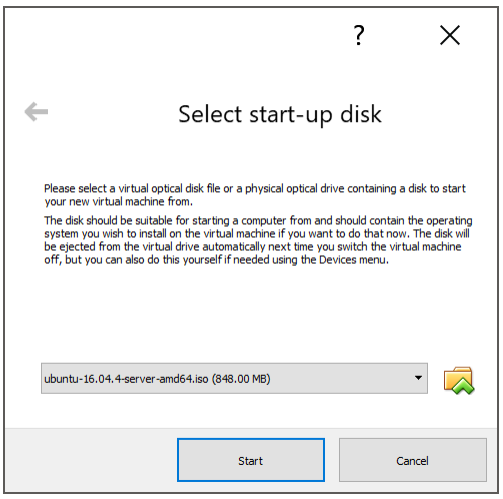
Let's bump it up to 20gb, depending on what you are going to use it for, you might need it, if you don't as you practice, you might want to delete this VM and create others which are larger and smaller depending on the application you are conducting on it.



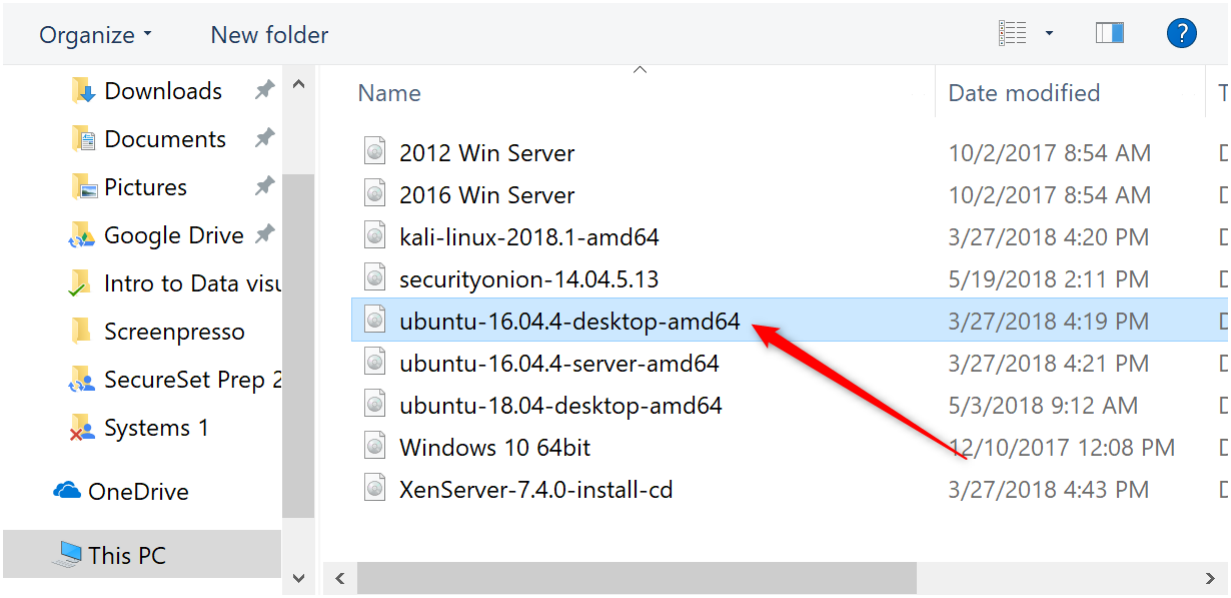
Your VM OBJECT has been created, you have created a virtual computer. (We use the word object, as the abstraction of a computer.) (In software engineering and computer science, abstraction is a technique for hiding complexity of computer systems. It works by establishing a level of simplicity on which a person interacts with the system, suppressing the more complex details below the current level.)



Since we haven't inserted the virtual ISO for the Ubuntu Desktop 16.04 LTS it will prompt us to do so:



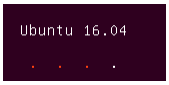
Make sure you click the folder and navigate to the DESKTOP ISO, not the SERVER ISO.



Then click on START and you should boot to the virtual ISO DISK in the virtual DVD drive.

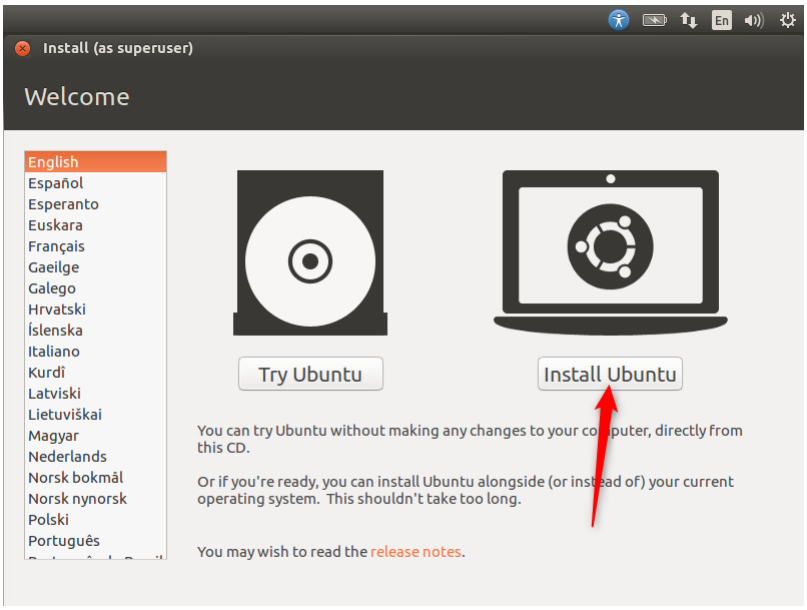
Now the computer will boot to the Virtual DVD you inserted and you can install the Operating System!

As it starts you will be presented w/ this screen.

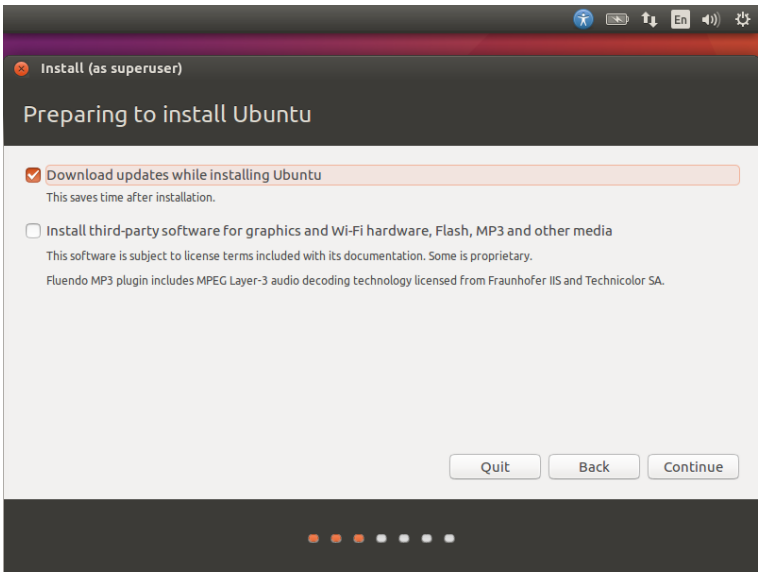


INSTALLING THE OS

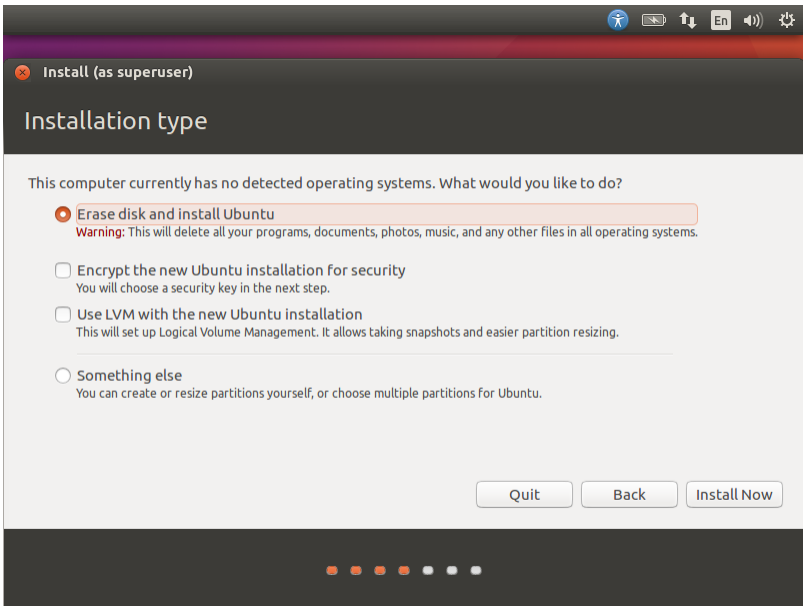
Click on INSTALL UBUNTU



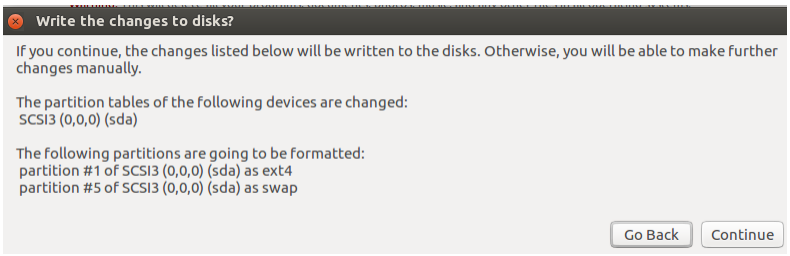
Preparing to install Ubuntu. Go ahead and select the checkbox for “Download updates while installing Ubuntu” and click on Continue



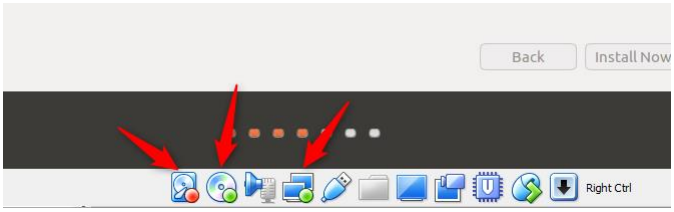
Just like what we did in the SERVER we need to format the drive and install the Ubuntu Desktop File system. The default settings are fine, just click on "Install Now"



It will give you failsafe step, (do you really want to do this?) we do so just go ahead and click on Continue.



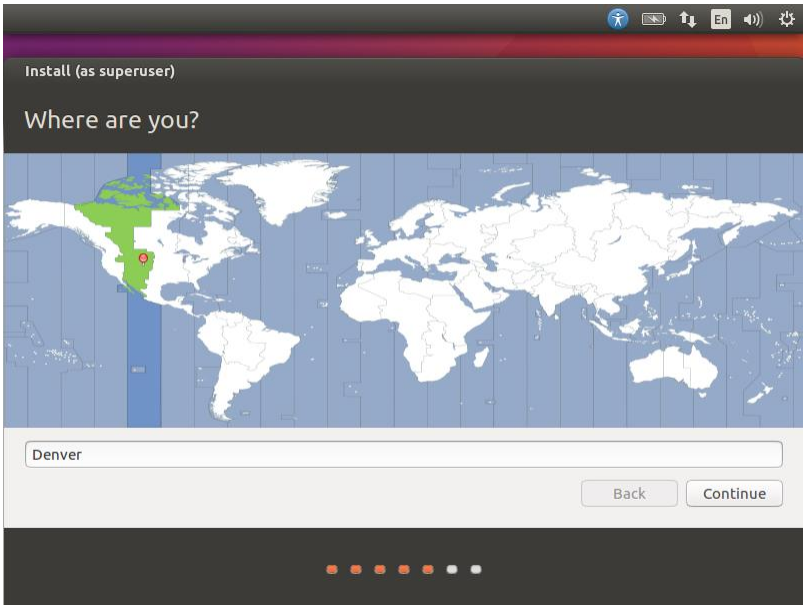
It will take some time, but you can check the activity by the blinky lights at the bottom of the window:



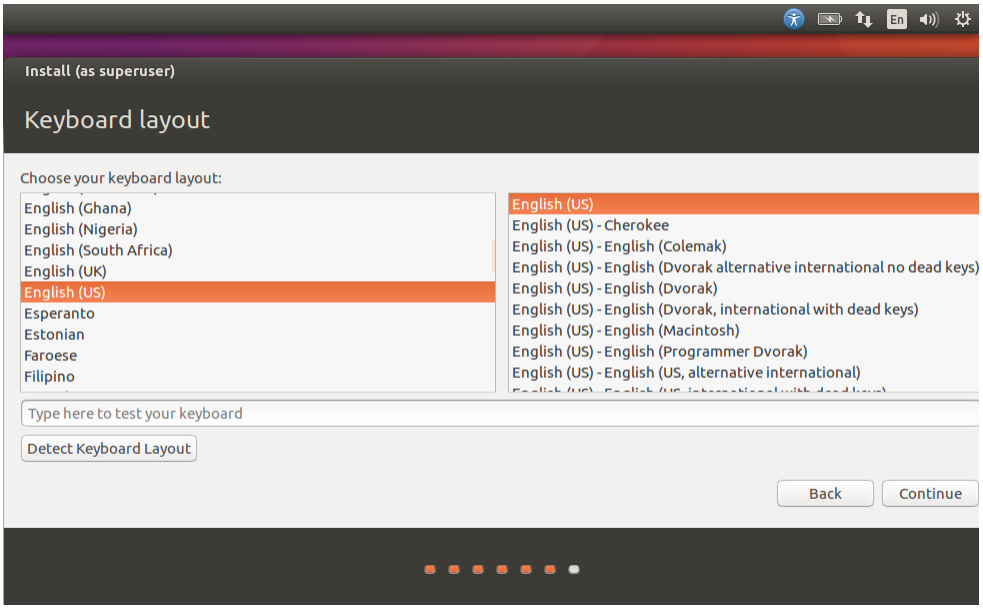
The next step will ask you want to do, just go ahead and hit enter to the default, which is "Install Ubuntu Server"

Next you will be presented as to your physical location on the planet, it should autodetect your location via the NTP servers and your public IP address (more on this in the Networking part of SecureSet Prep).

Go ahead and click on Continue.



OK, next the Ubuntu Desktop operating system wants to know your keyboard layout, go ahead and stick with English (us) and English (us). You may need to resize the window, its ok, it won't break. Go ahead and click on Continue.



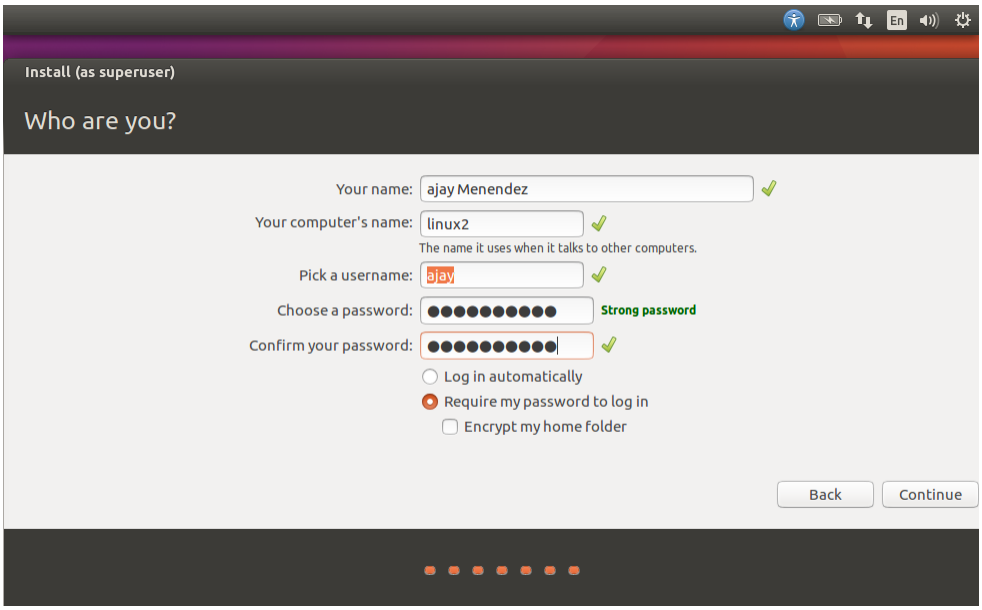
Time to drop your credentials into this new VM.

Drop a name, come up with a computer name, I did linux2 this time. Doesn't really matter, just make sure its all lower case, no spaces, no special characters.

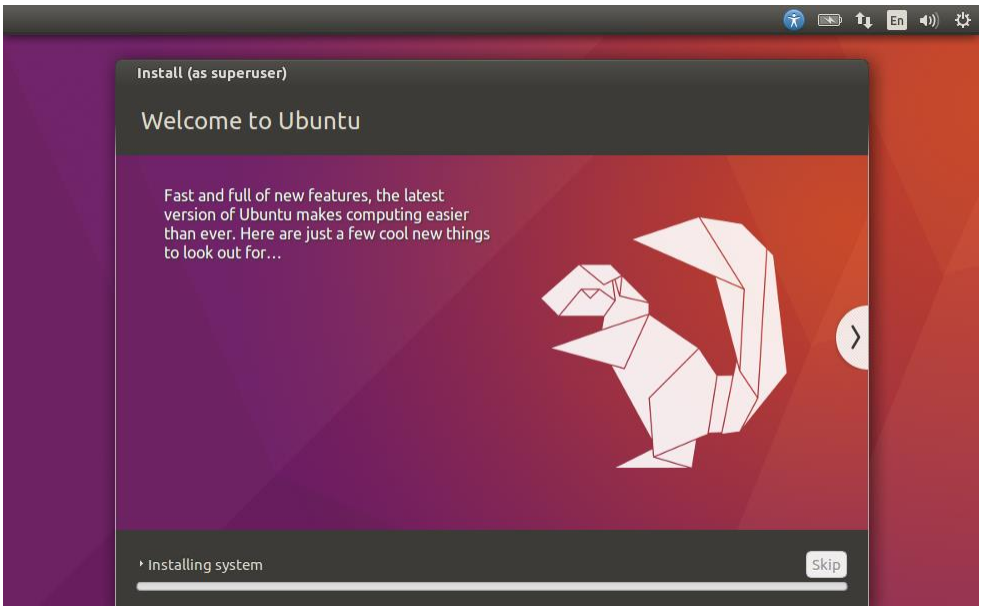
A username (again, lowercase)

And a password.

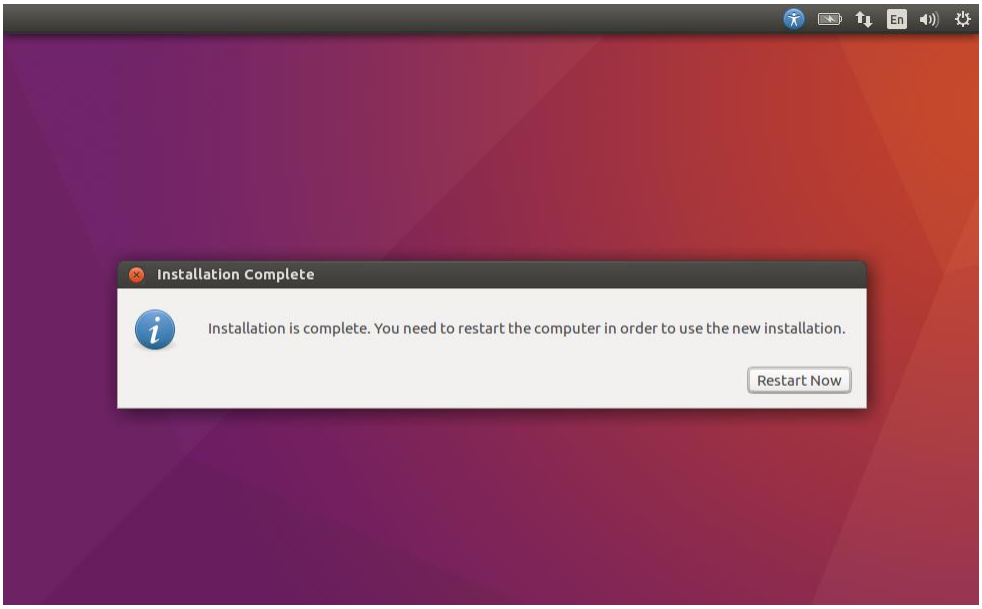
Click Continue.



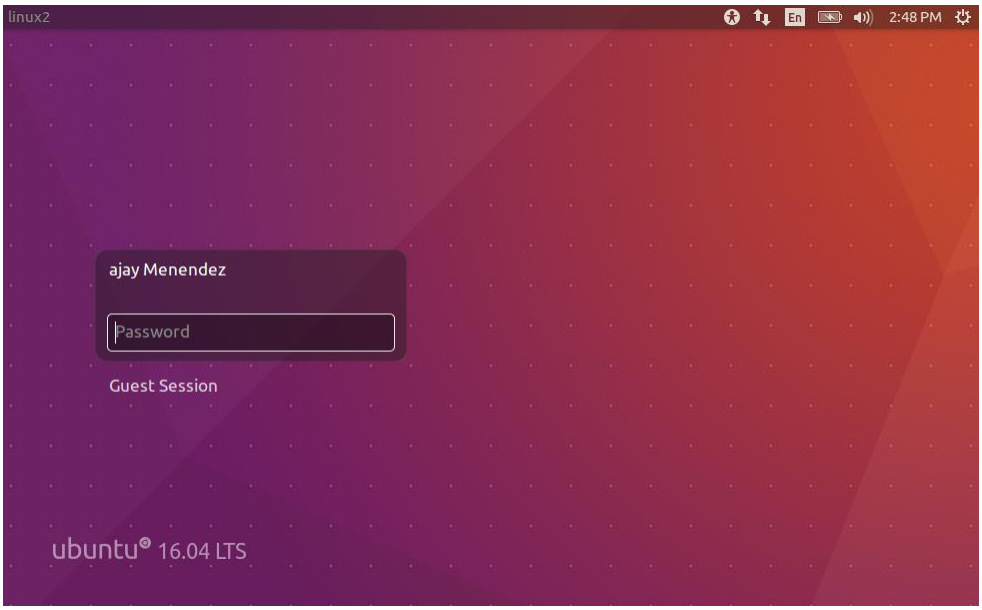
OK, its going to install the Operating System now, so it will take some time, be patient, go grab some coffee or water.



You'll be presented with the Installation complete, go ahead and click on RESTART NOW.

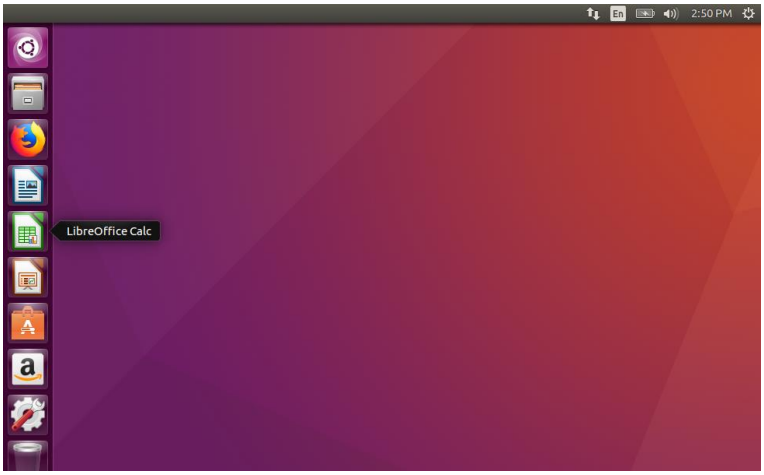


Once your Virtual Machine reboots you will be presented with a logon screen.

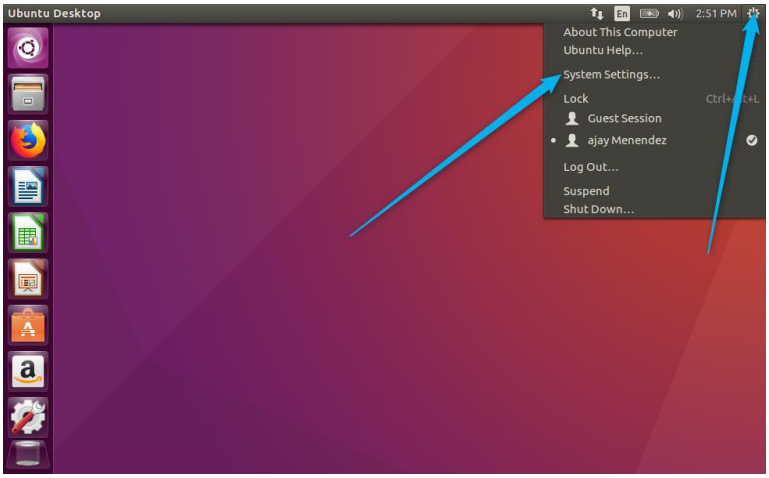


Go ahead and log in.

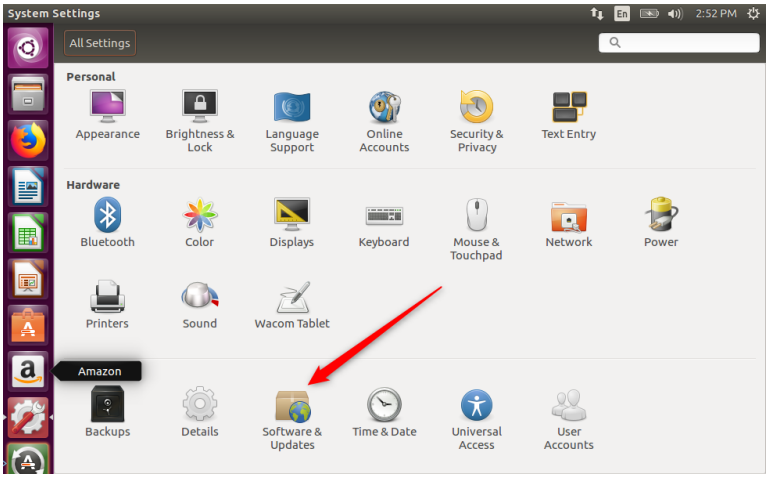
You will now be presented with the Ubuntu Desktop GUI.



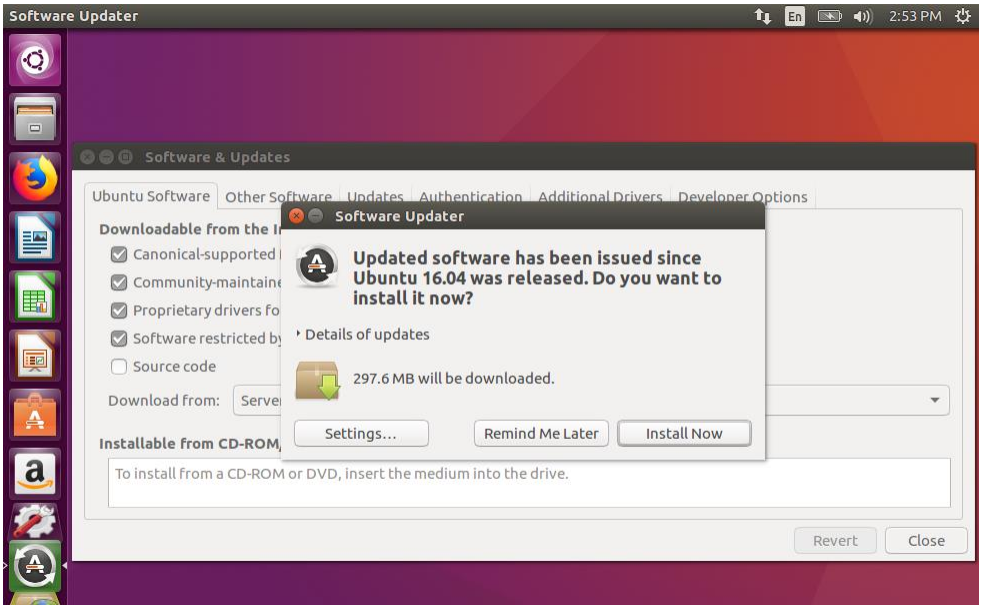
Let’s go ahead and update this system. Click on the wrench in the upper right hand corner, then the System Settings.



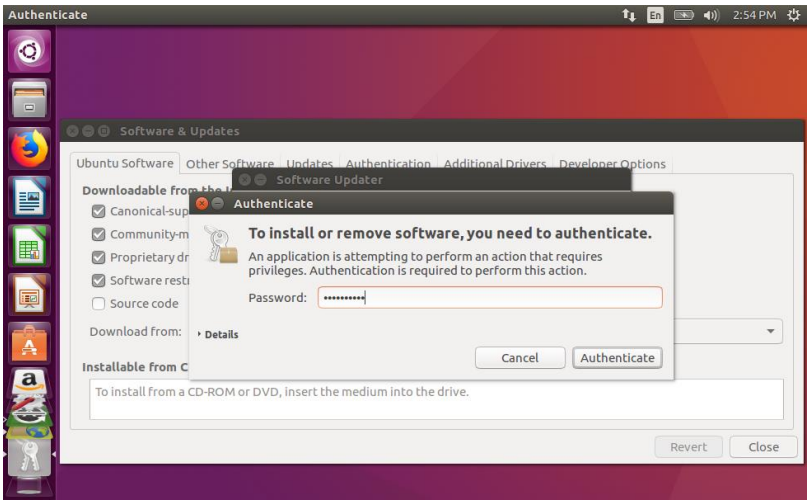
Click on “Software & Updates”



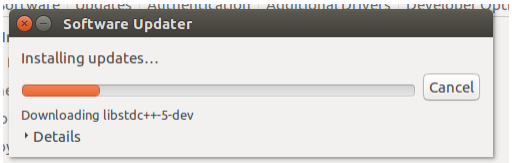
You will be presented with the following options, click on “install now”



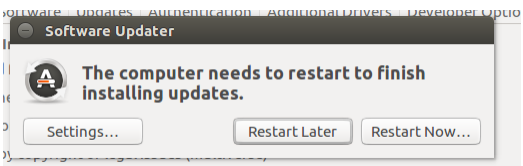
You’ll need to put in your password and click Authenticate.



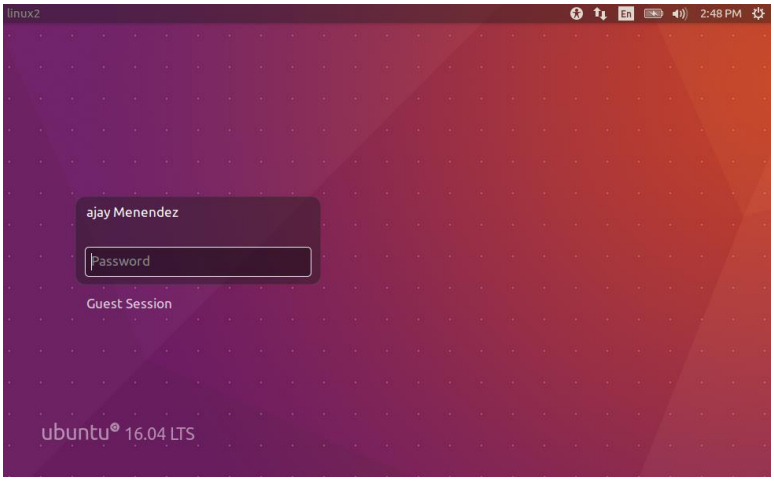
It might take some time, so some more coffee or water might be in order.



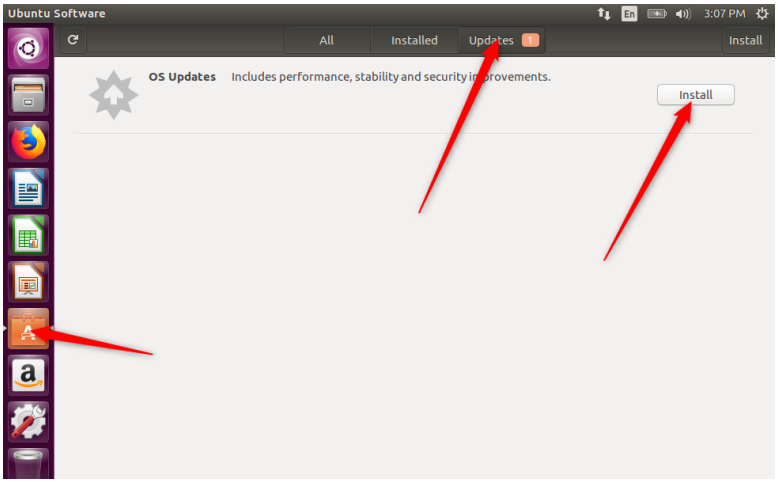
Then you will receive this prompt, go ahead and Restart Now.



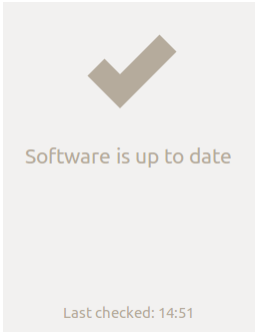
Go ahead and log back in.



Click on Ubuntu Software, select the updates tab and then click INSTALL for the OS updates.

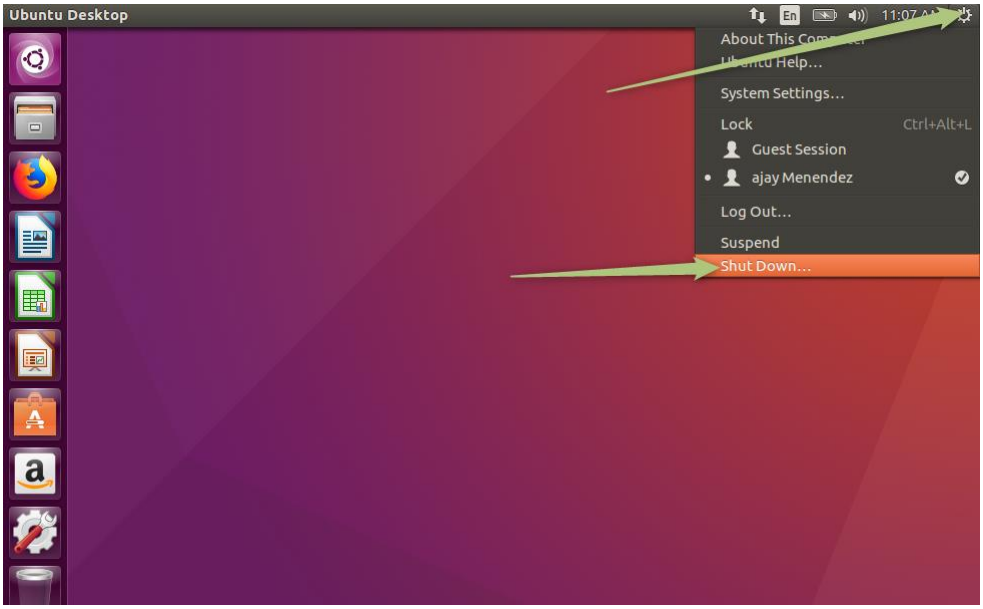


When complete you will get this message:

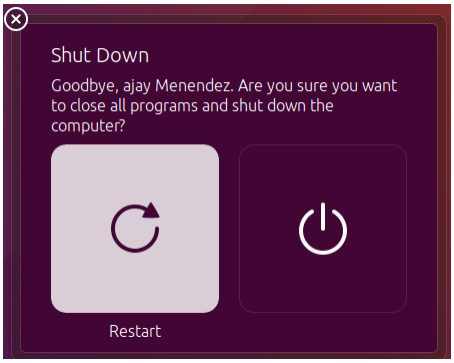


Let's review how to restart or shutdown an Ubuntu Linux Desktop Workstation:

RESTART from the GUI:



Then the left restart button:



Or to Shutdown

Excellent, so now your system is for the most part, ready to go. Good job!

AUTHOR: ajay Menendez, Executive Director Hunt Analyst Program