Assignment 1

Satyam Kumar
ID: 201552062

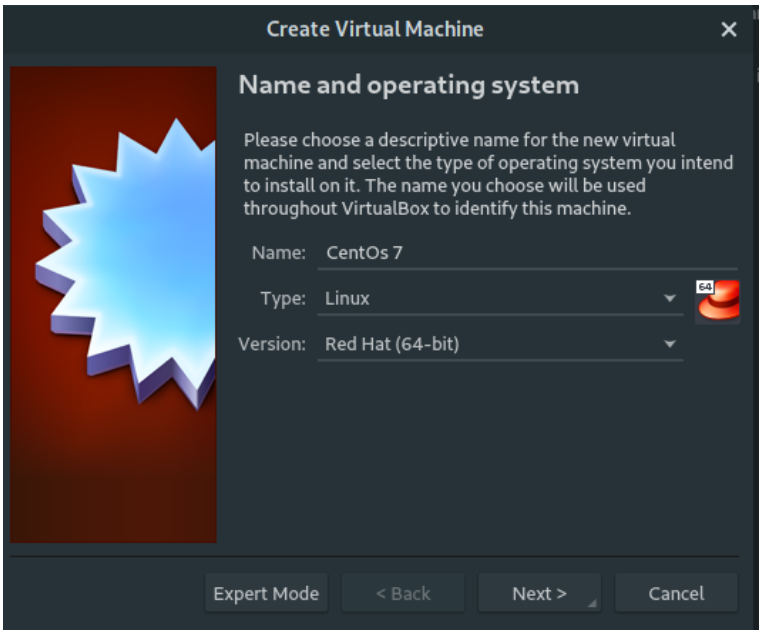
August 17, 2018

1 Installation of Virtual Box

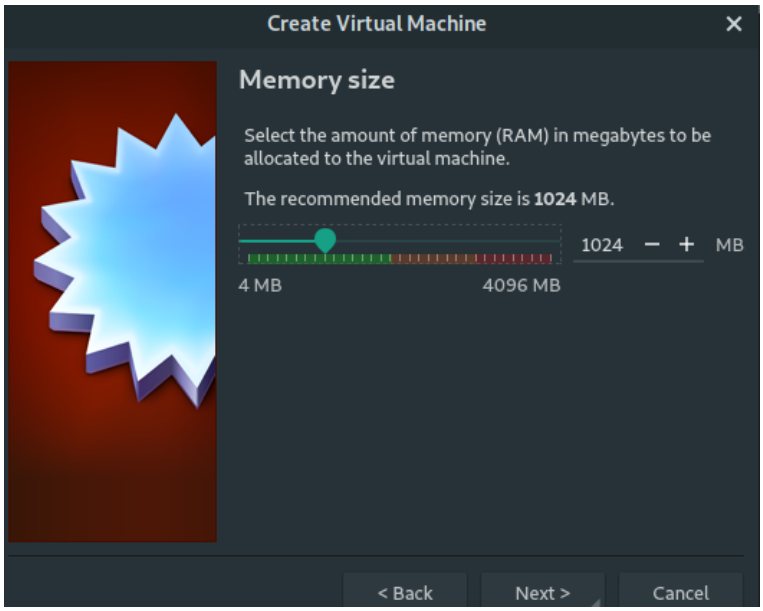
Current version of Virtual Box is 5.2.16. VirtualBox can be downloaded by following this link: `virtualbox.org`.
Virtual box can be installed using command on Arch Linux or Manjaro :
sudo pacman -S virtualbox

2 Installation of CentOS in Virtualbox

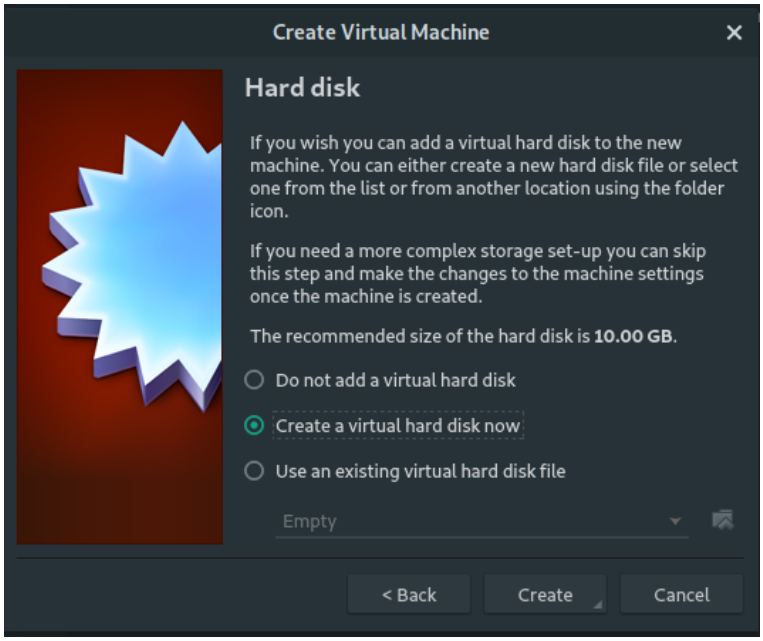
1. Open Virtual Box and select New menu from Machine icon present in the toolbar icon. Name of the Virtual Machine is given anything that you think of. I have given the name CentOs 7. Choose Linux as Operating System Type and Red Hat(64-bit) as the version.



2. Click on Next and choose the amount of RAM memory for VM.The suggested amount, which is 1024 MB(1GB) is been selected. It can be increased, based on requirements.



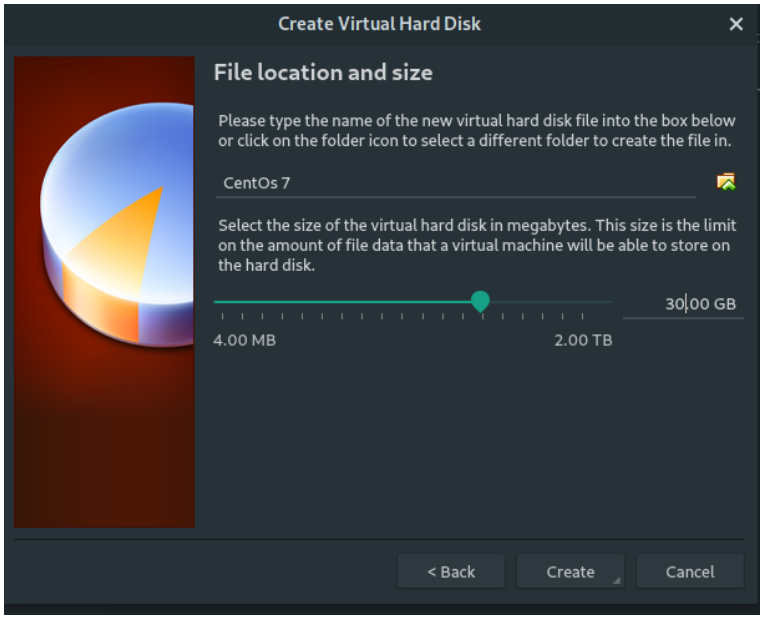
3. The next prompt will ask you to add a virtual hard disk. Go ahead and select Create a virtual hard disk now which should be the default.



4. On clicking next, type of VM hard disk is selected. Default is VirtualBox disk image(VDI).

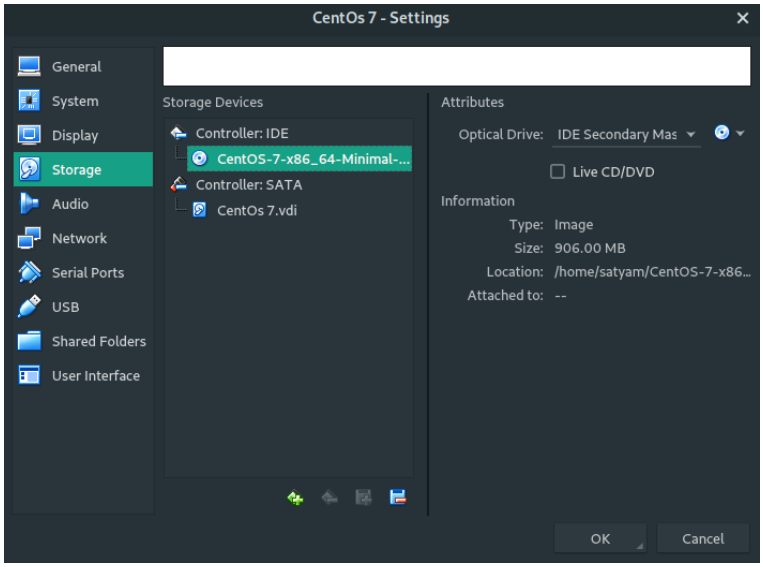
5. Next prompt ask you to choose dynamic or fixed storage. Select dynamic. Dynamic storage means that VirtualBox will only use the amount of space, on your real hard drive, that the VM actually needs until it reaches the maximum we allot.

6. Next prompt is to allot the amount of hard disk space for the Virtual Machine. 8.00GB is the default value.It is recommended to have atleast 15GB. I have alloted 30GB of hard disk space to VM Go ahead and press the Create button to finish up this part of the process.Virtual Box will show Name of the operating system, which is powered off.

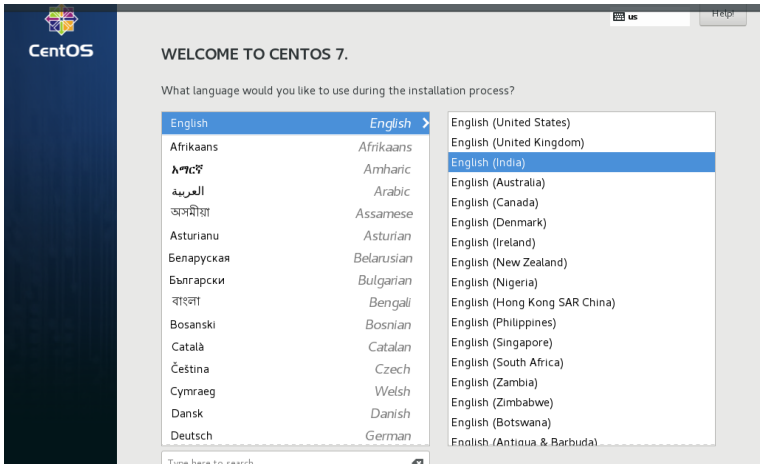


7. Install CentOS. Select the mirror, based on your country's nearest location and download the ISO file.

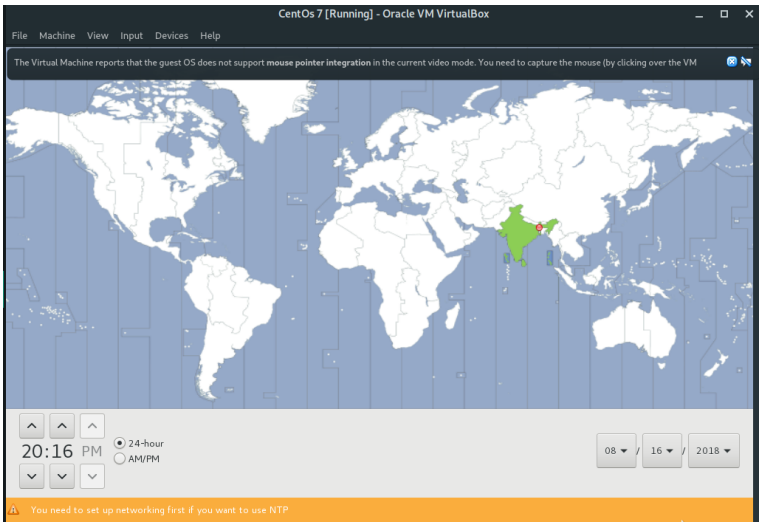
8. Right on the Operating System and go to settings. Select the storage tab. Select the Controller:IDE and select the Optical drive. In that drive, ISO downloaded and stored in local directory. Right click on Normal start.



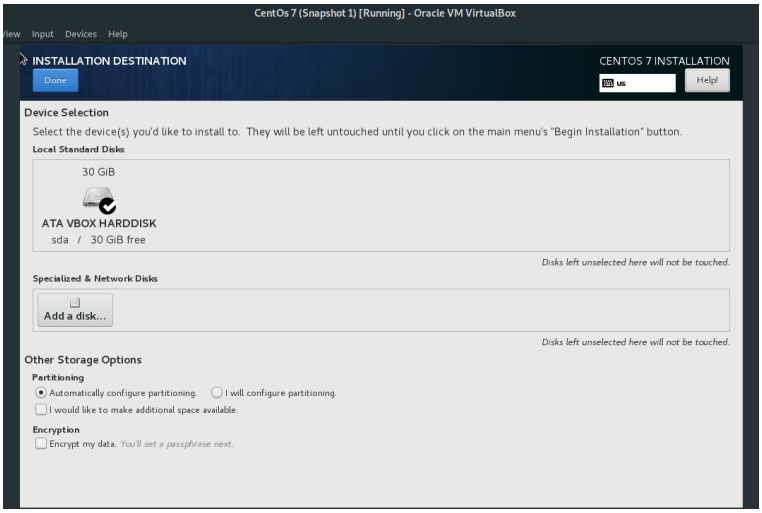
9. Install process begins by asking you to select the language of your preference. Once that language is choosen, it will lead to next prompt to select the install destination.



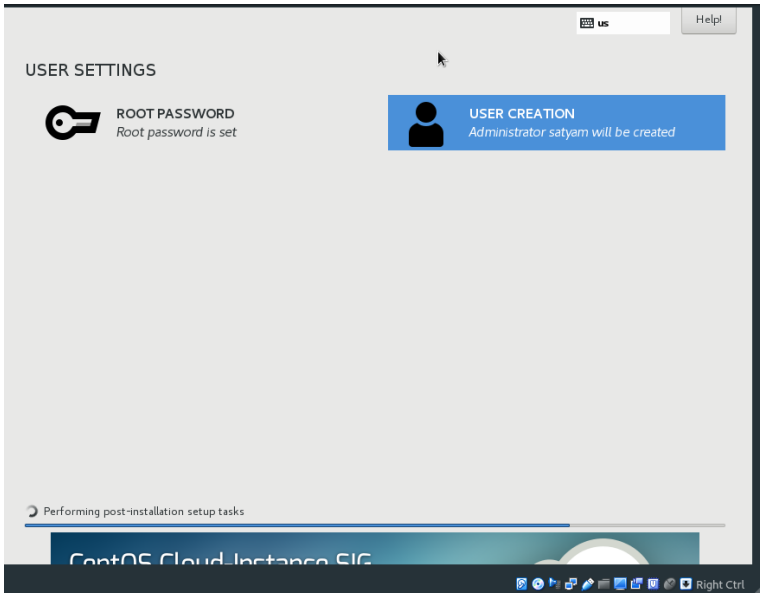
10. In localization menu, select the date and time tab. Select the timezone.



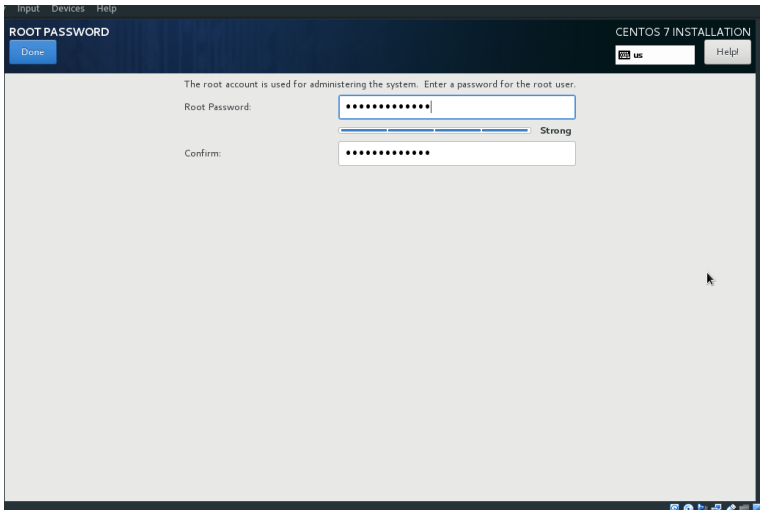
11. In system menu, select the installation destionation, and keep the default partioning ie automatic configuration partioning.Click on Begin Installation.



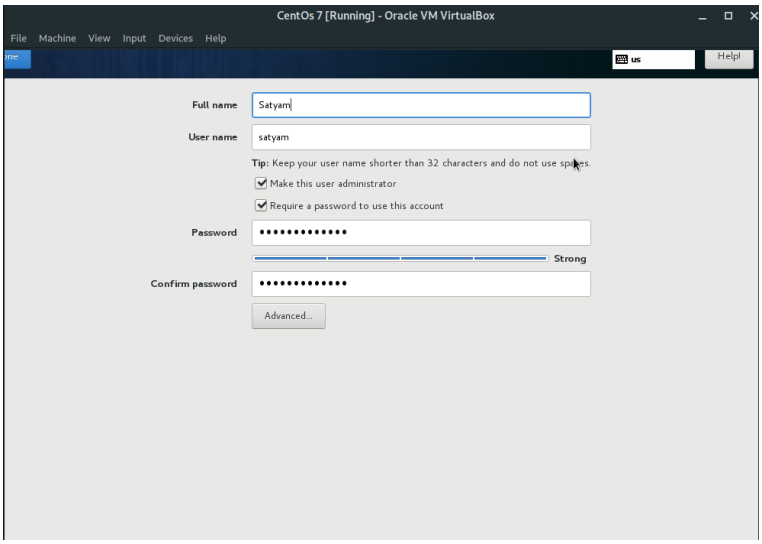
12. The install will begin, but there are still two more steps we need to take. The next window will give us the opportunity to set the root password and to add an additional account.



13. Select Root Password and create a new password for the root account.



14. Add another account so that you can log in to the VM without directly logging into root. Go ahead and make the user an administrator.



15. The installer will complete a few more things and then you'll see a message at the bottom that says Complete and will find a button to reboot the VM. Go ahead and click Reboot to startup the VM for the first time.

16. Once the system reboots,you would see the following login screen

17. Check for ssh in Virtual Machine. After this you need to install GUI through terminal. Following commands are used for installing GUI

    i Console with network enable -
    systemctl get-default

    ii Start GUI -
    systemctl isolate graphical.target

    iii If we perform a reboot we will not be presented with the GUI. To do this, we must first set the graphical target to become the default -
    systemctl set-default graphical.target

After completion of steps related to installation of GUI, reboot the system.

3 Known Command (Q5)

- ls(Listing): ls -la, ls -a
  Functionality : To list all files present in a directory.
- cat filename, cat ¿ filename
  Functionality To view content of multiple files and also to display content in the screen. To create file using cat.
- touch filename
  Functionality To create new empty file.
- mv file1 file2
  Functionality To move files or directory from one location (source) to another location (destination)
- rm(Remove): rm file1, rm -r dir
  Functionality To remove files or directory if not required.
- cp(Copy): cp src destination
  Functionality To copy files from source to directory.
- ip addr
  Functionality To find ip address of networking devices connected with computer or laptop.
- lspci
  Functionality To list all hardware devices(PCI devices)