

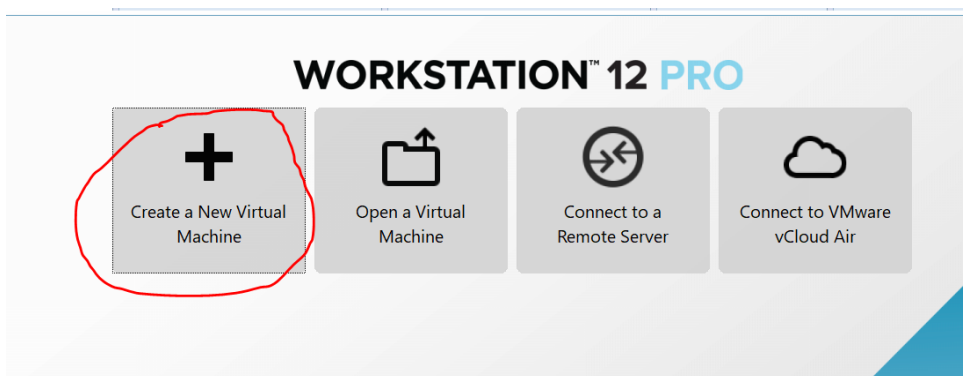
Practical 8A

Lab Requirements – RHEL 6 ISO file.

Objective – Install and Configure Red Hat Enterprise Linux

1. We now complete our final virtual machine, which is a Red Hat Enterprise Linux 6 virtual machine. This is form of a server operating system similar to Windows Server.
2. Again we start using VMWare Workstation, and we click on **Create A New Virtual Machine**.

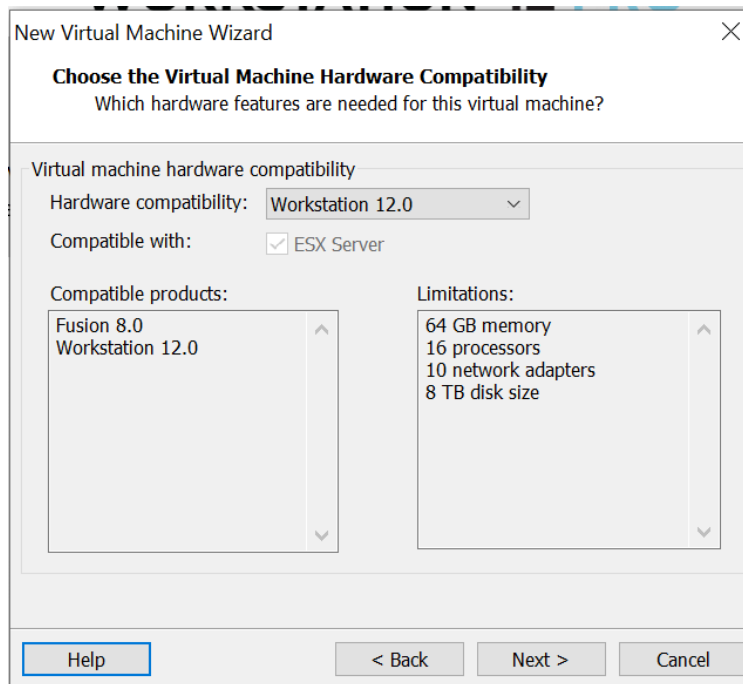
This guide uses VMWare Workstation 12. Your VMWare Workstation may be a different version. Adapt the guide to your workstation version where necessary.



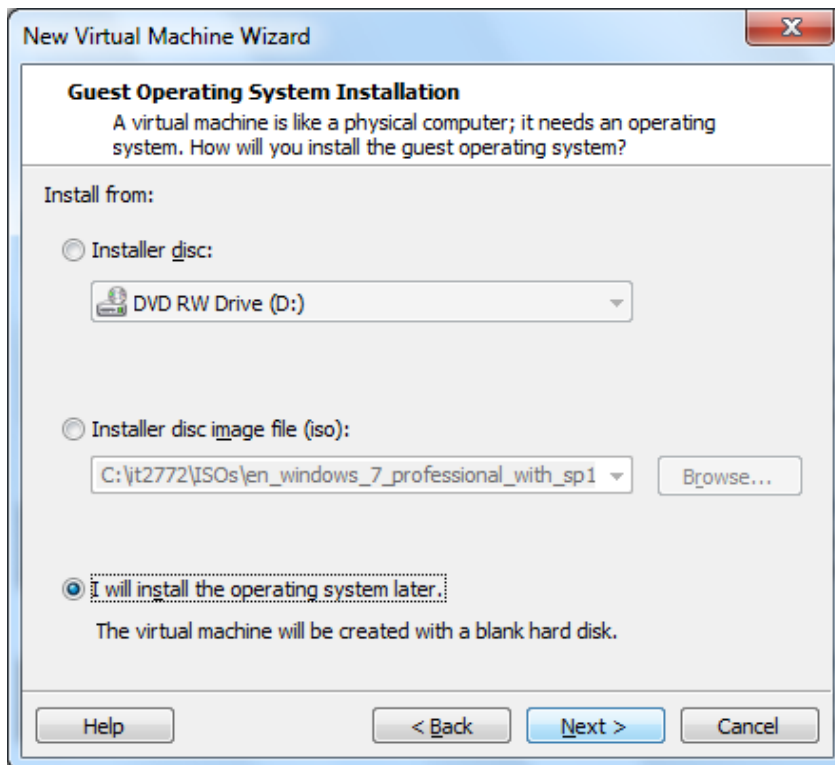
3. Select **Custom** install and click **Next**.



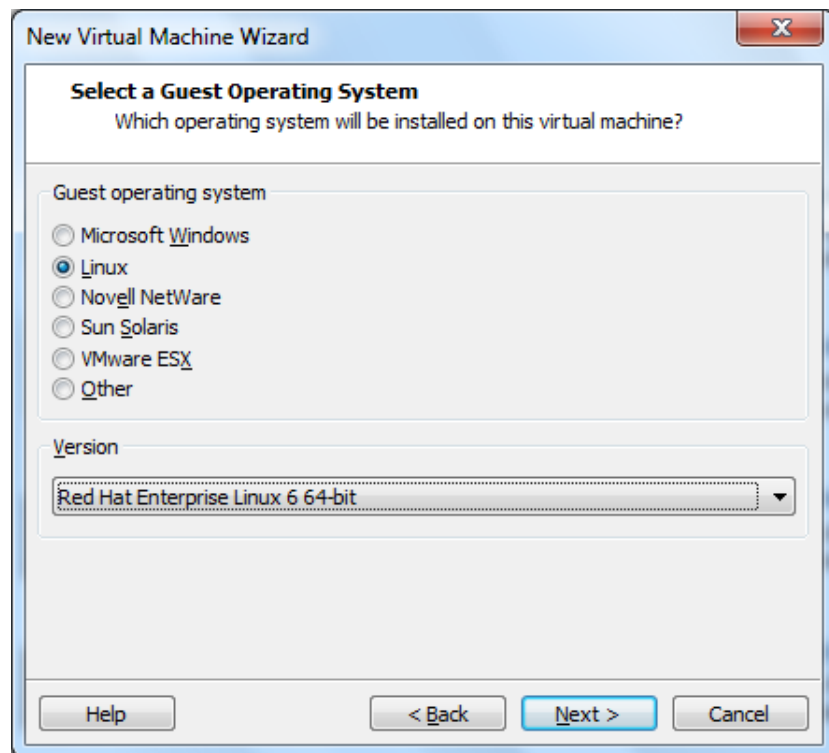
4. Again Workstation 12 (yours may be another number; choose the highest) backward compatible.



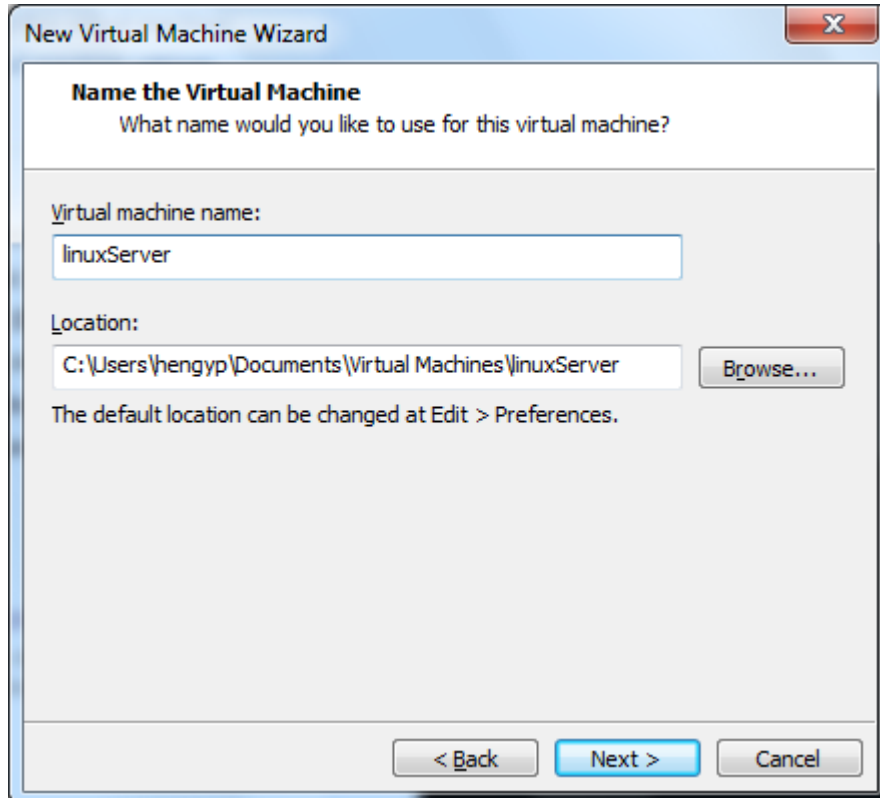
Again we will mount the ISO later to install the operating system.



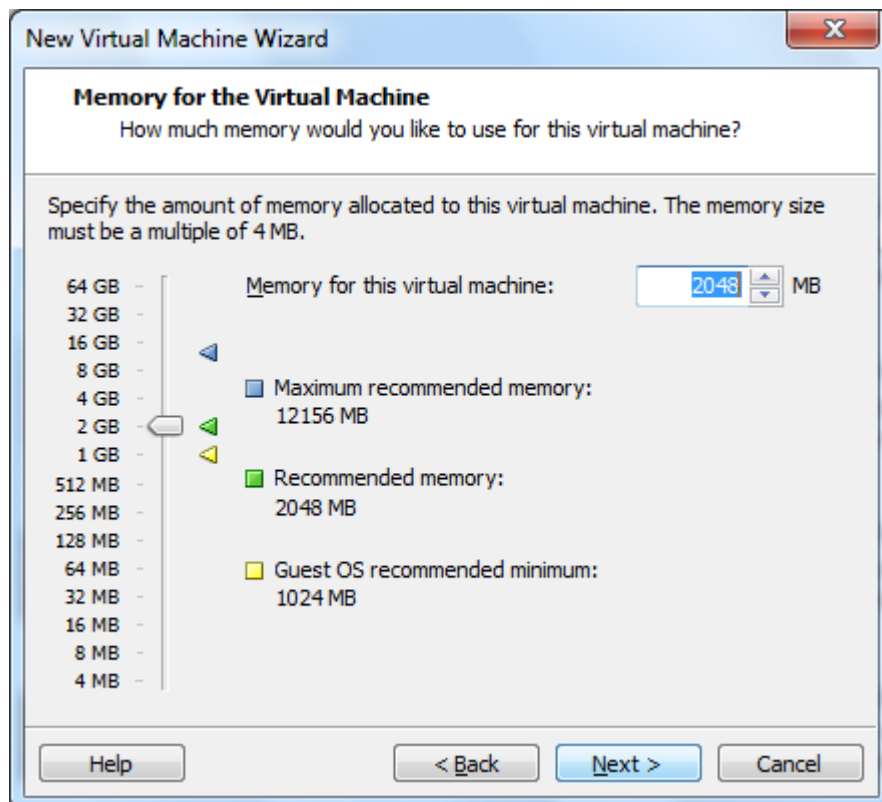
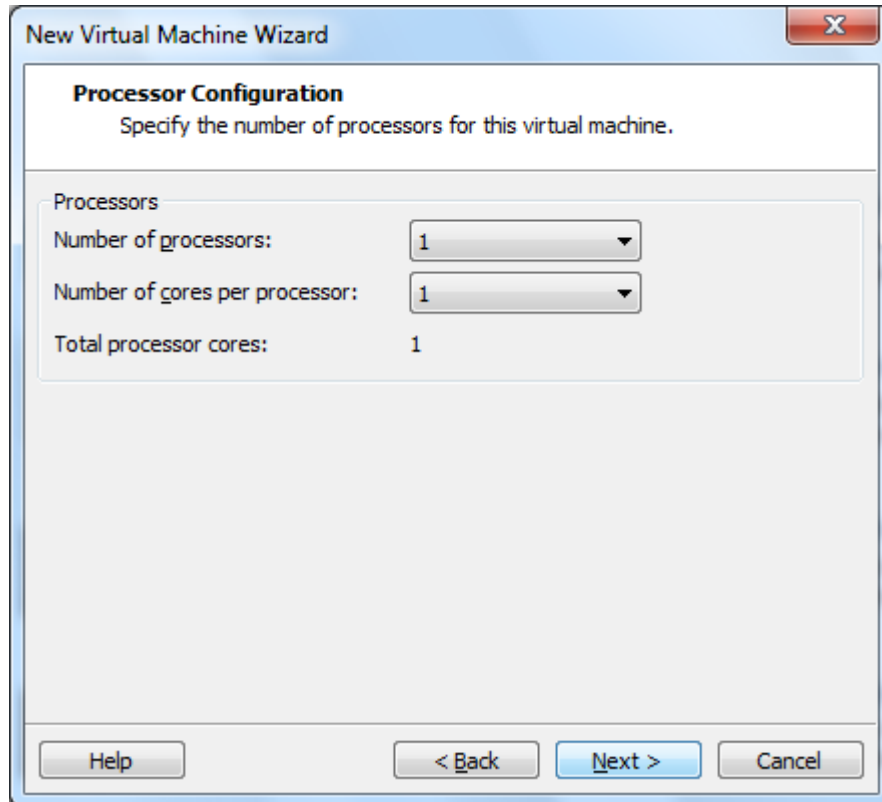
5. Select the operating systems as shown below and Click Next.

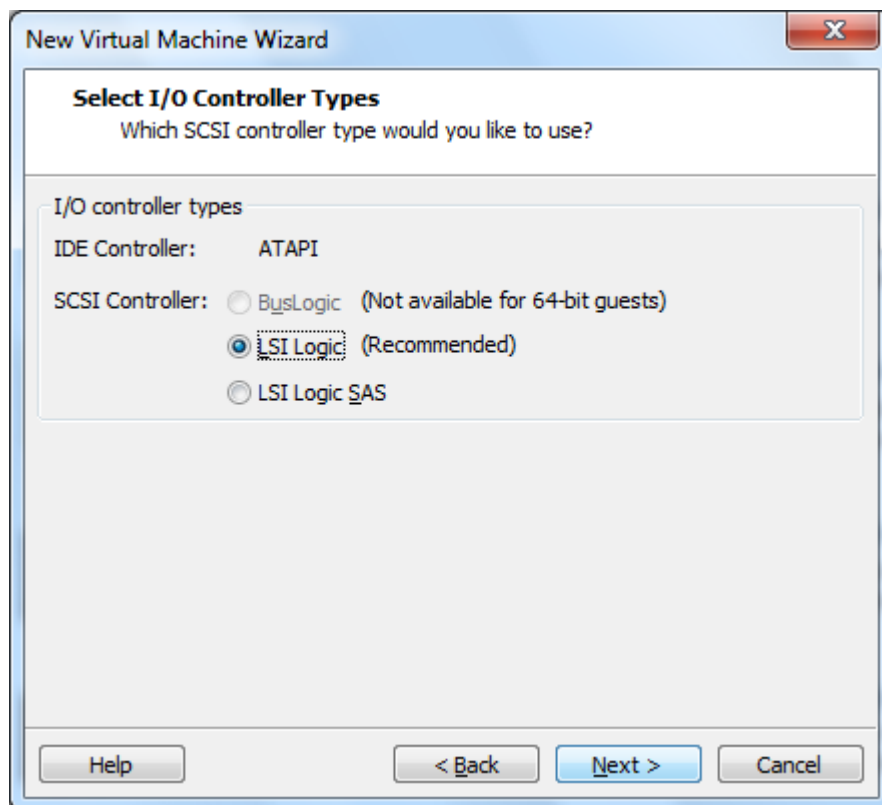
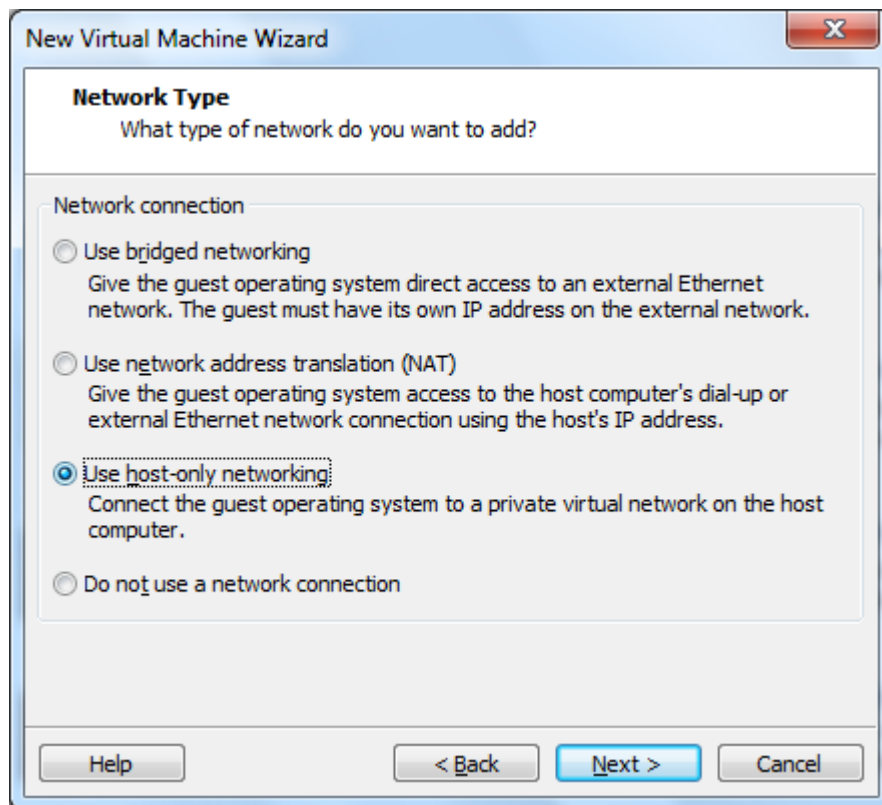


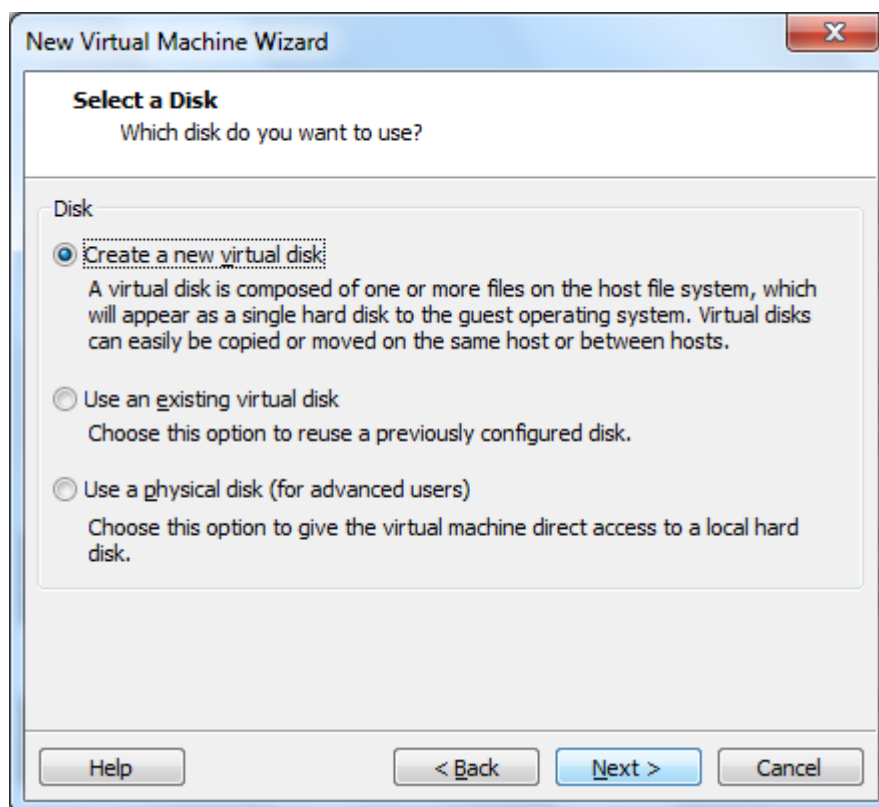
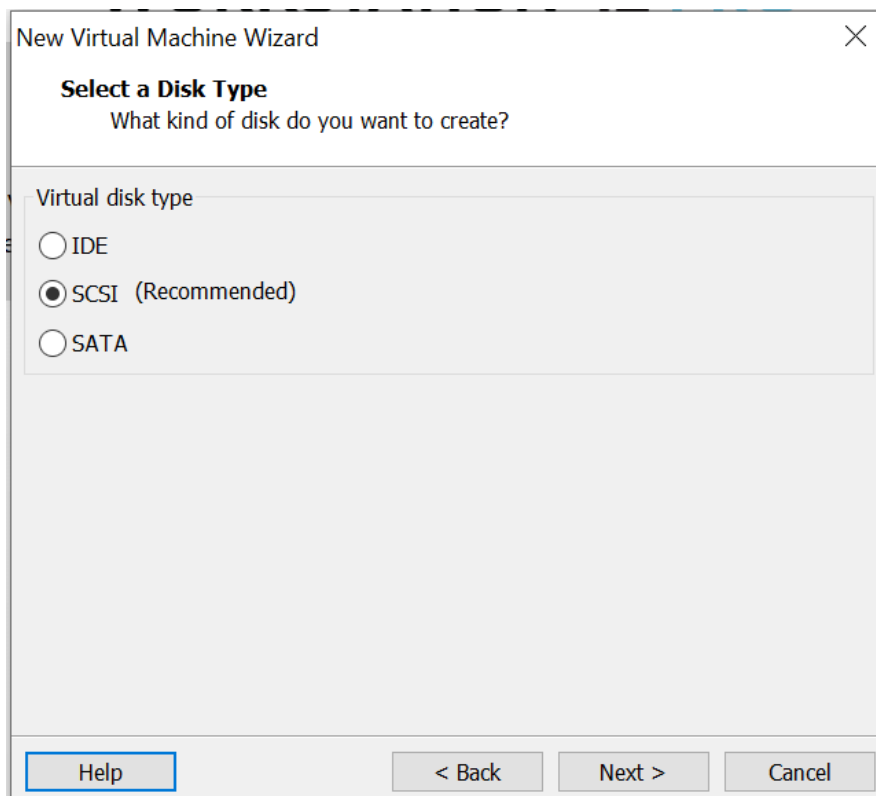
6. Give the virtual machine a name, as shown, for example. The **Location** may be different as it is installed on your PC. You can accept the default location.



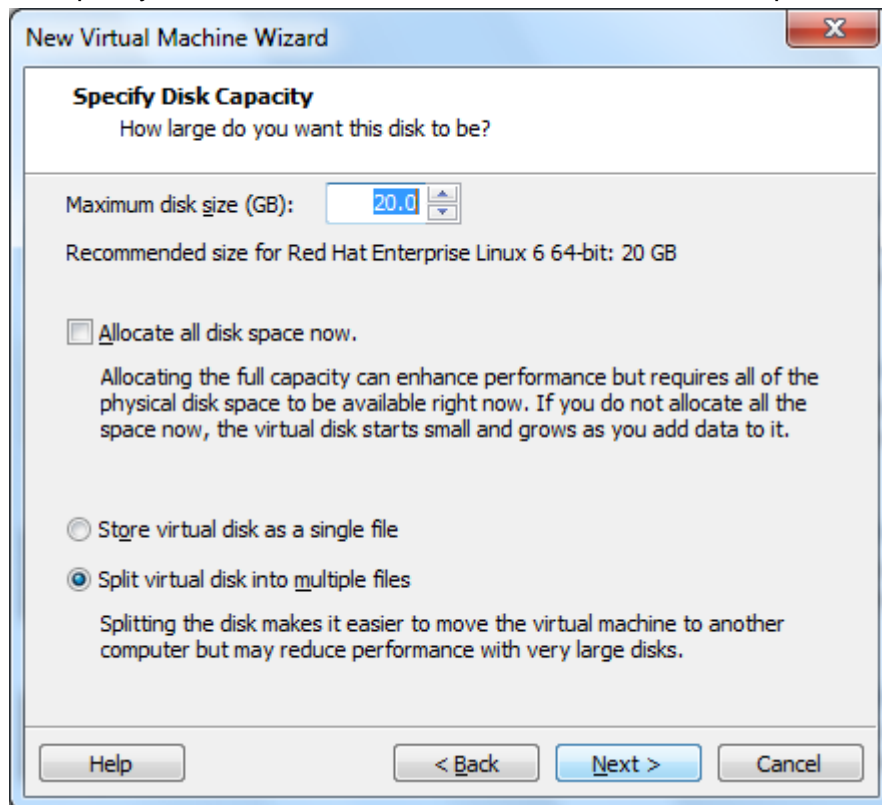
7. Same configuration for CPU, memory and disks as for the last 2 VMs.







8. Specify hard disk size to be 20Gb. Click **Next** and accept the default virtual disk name.



The screenshot shows the 'Specify Disk Capacity' step of the 'New Virtual Machine Wizard'. The window title is 'New Virtual Machine Wizard'. The main heading is 'Specify Disk Capacity' with the subtext 'How large do you want this disk to be?'. There is a text box for 'Maximum disk size (GB):' with the value '20.0' and a small up/down arrow icon. Below this, it says 'Recommended size for Red Hat Enterprise Linux 6 64-bit: 20 GB'. There are two radio button options: 'Allocate all disk space now.' (which is unselected) and 'Split virtual disk into multiple files' (which is selected). Below the second option, there is explanatory text: 'Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.' At the bottom, there are four buttons: 'Help', '< Back', 'Next >', and 'Cancel'.

Specify Disk Capacity
How large do you want this disk to be?

Maximum disk size (GB):

Recommended size for Red Hat Enterprise Linux 6 64-bit: 20 GB

☐ Allocate all disk space now.

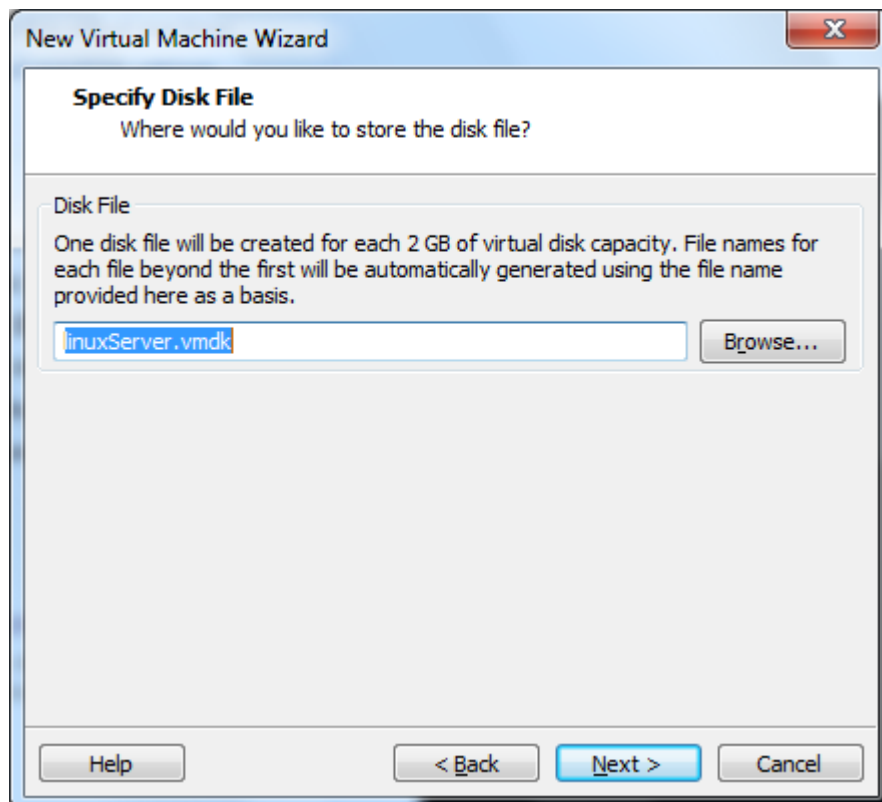
Allocating the full capacity can enhance performance but requires all of the physical disk space to be available right now. If you do not allocate all the space now, the virtual disk starts small and grows as you add data to it.

☐ Store virtual disk as a single file

☒ Split virtual disk into multiple files

Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.

Help < Back Next > Cancel



The screenshot shows the 'Specify Disk File' step of the 'New Virtual Machine Wizard'. The window title is 'New Virtual Machine Wizard'. The main heading is 'Specify Disk File' with the subtext 'Where would you like to store the disk file?'. There is a text box for 'Disk File' containing the text 'linuxServer.vmdk'. To the right of the text box is a 'Browse...' button. Below the text box, there is explanatory text: 'One disk file will be created for each 2 GB of virtual disk capacity. File names for each file beyond the first will be automatically generated using the file name provided here as a basis.' At the bottom, there are four buttons: 'Help', '< Back', 'Next >', and 'Cancel'.

Specify Disk File
Where would you like to store the disk file?

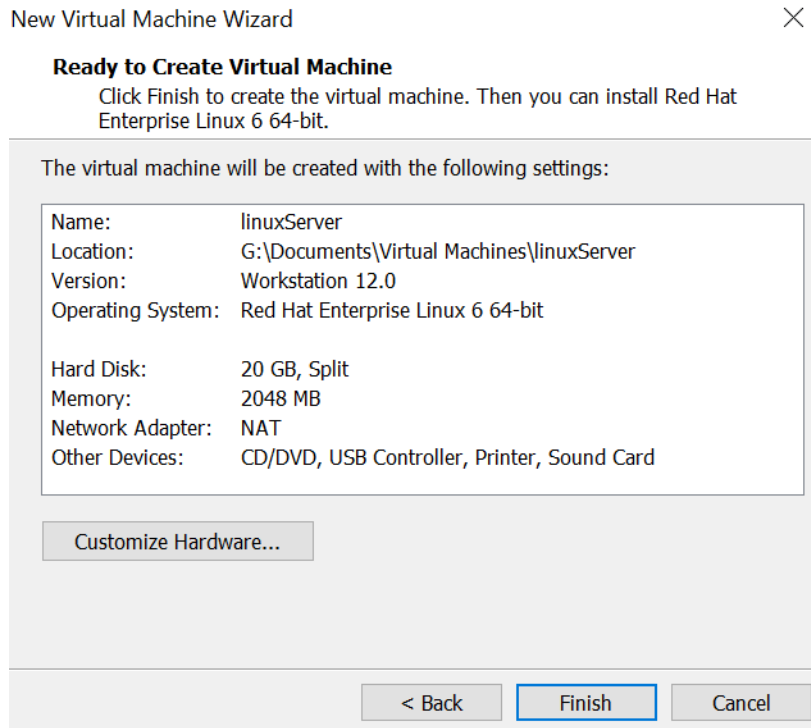
Disk File

One disk file will be created for each 2 GB of virtual disk capacity. File names for each file beyond the first will be automatically generated using the file name provided here as a basis.

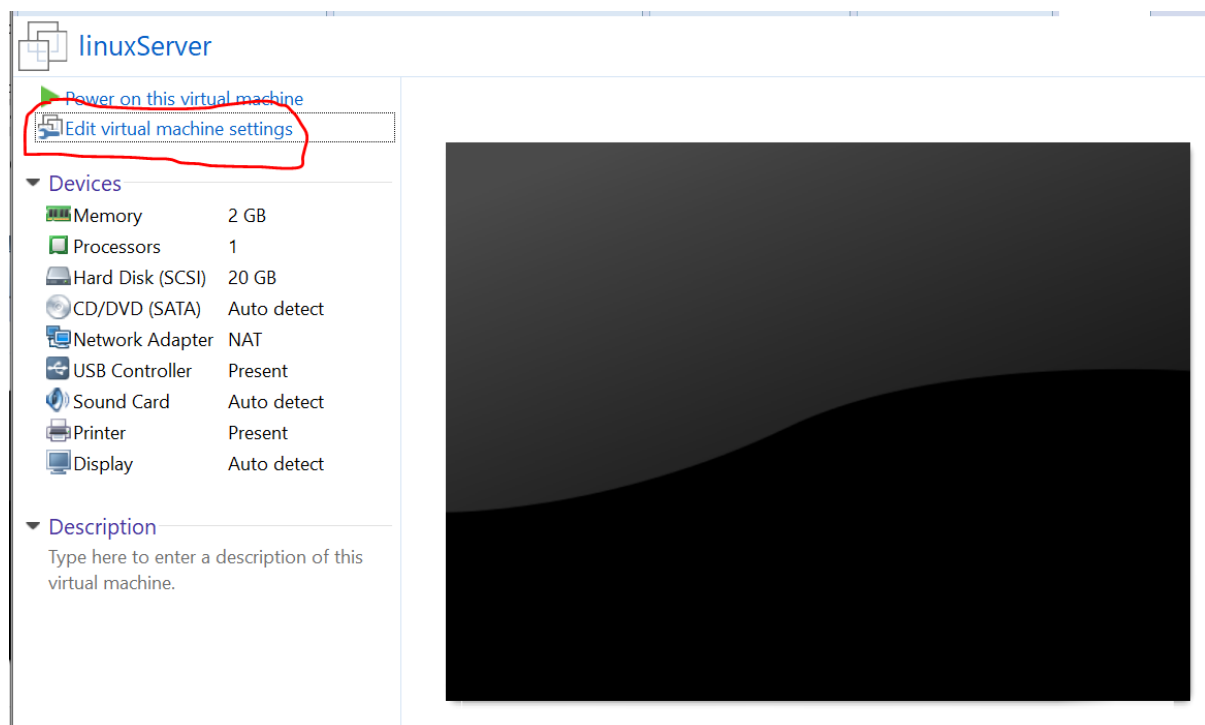
Browse...

Help < Back Next > Cancel

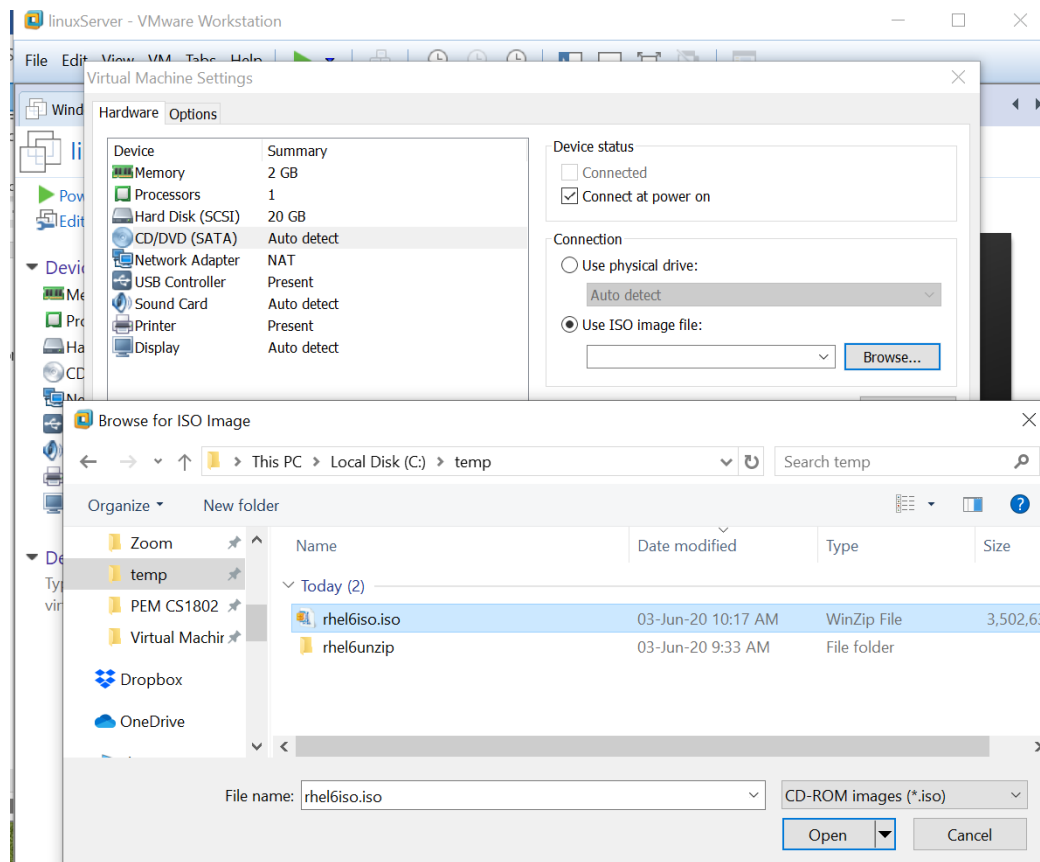
9. Click on Finish to start the process of installing RHEL6.



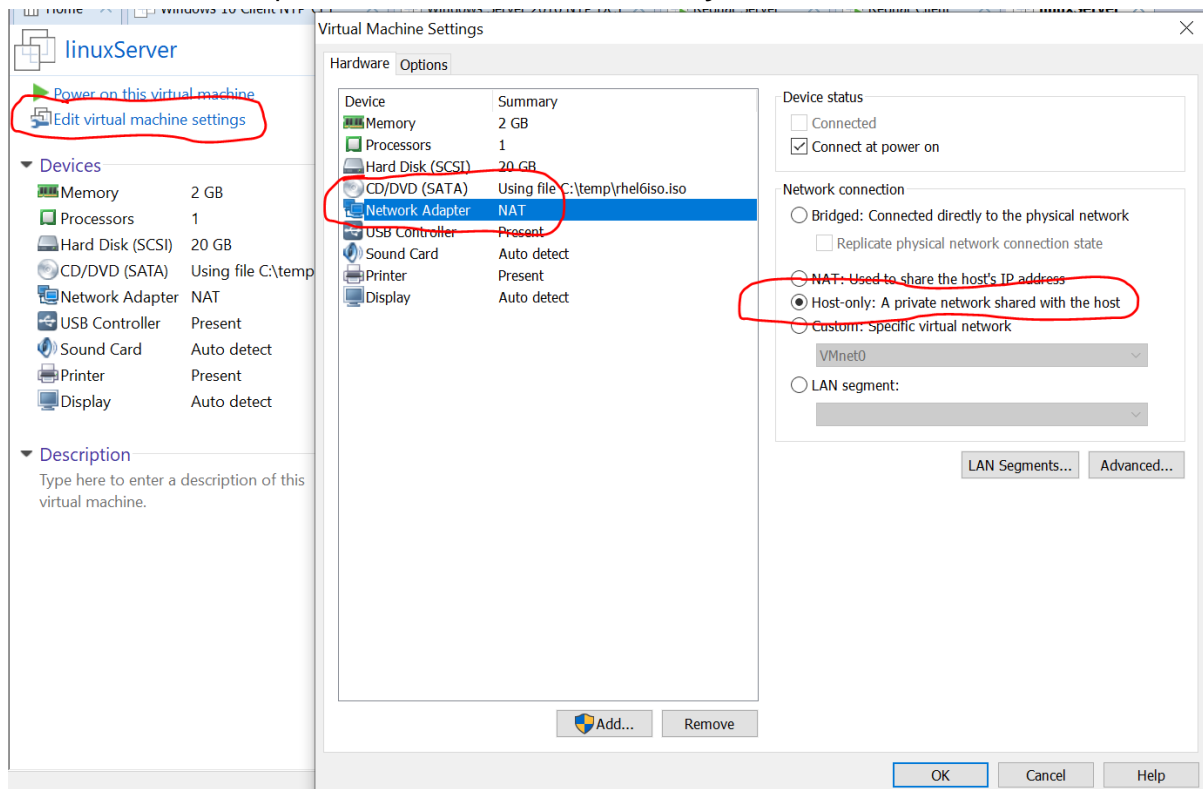
10. Click on **Edit virtual machine settings** to change the CD/DVD to mount the ISO installer.



11. We browse and find the RHEL6 ISO installer file. Your file names may differ. Your instructor will inform you where to obtain the ISO file.

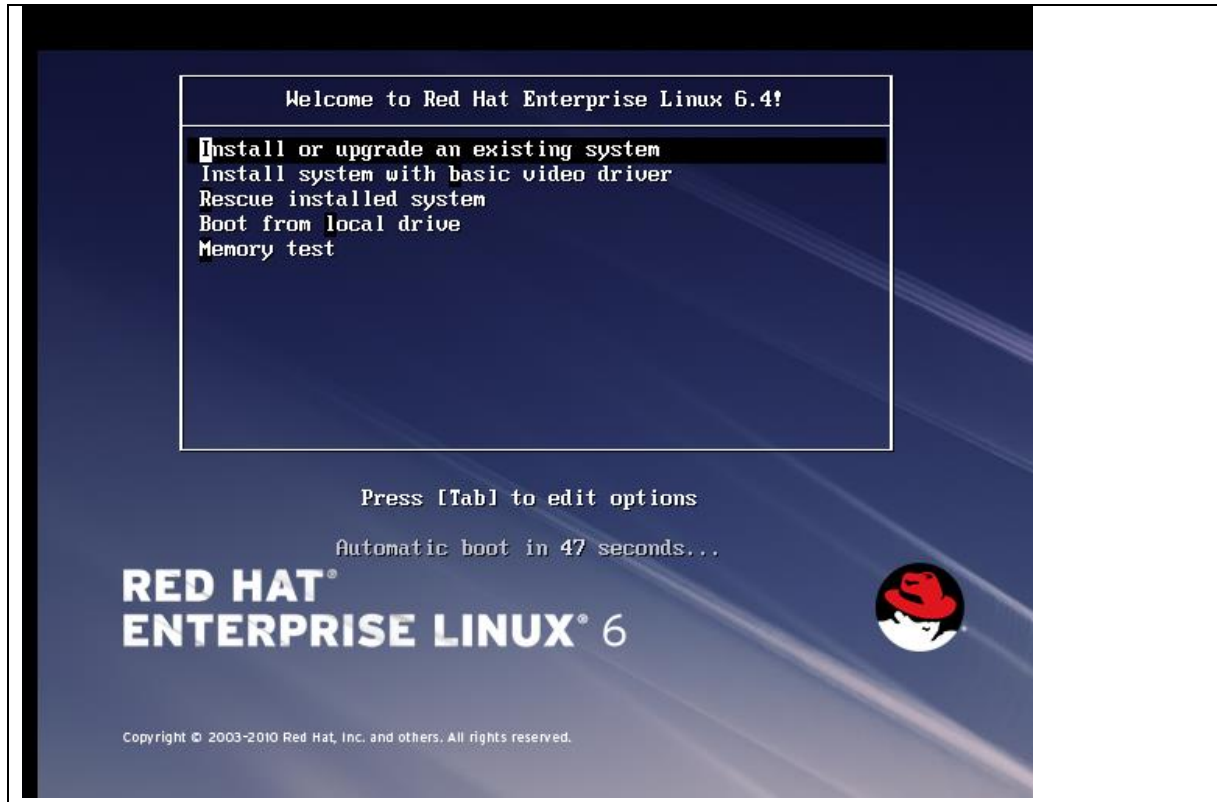


Click on Network Adaptor and select Custom **Host-only**. Click **OK**.

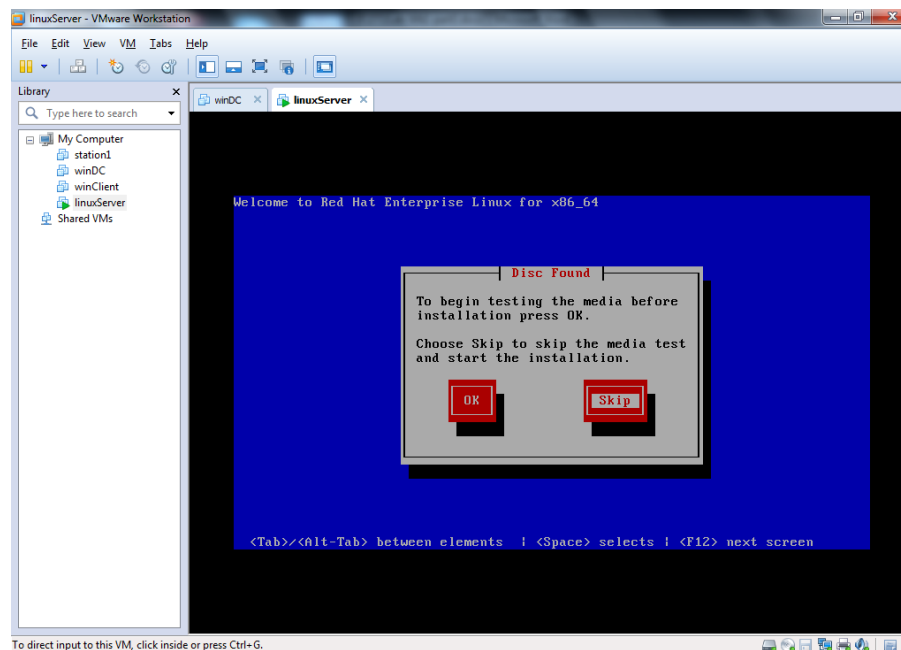


12. Then we click on the **Power on this virtual machine** to get the installation process going.

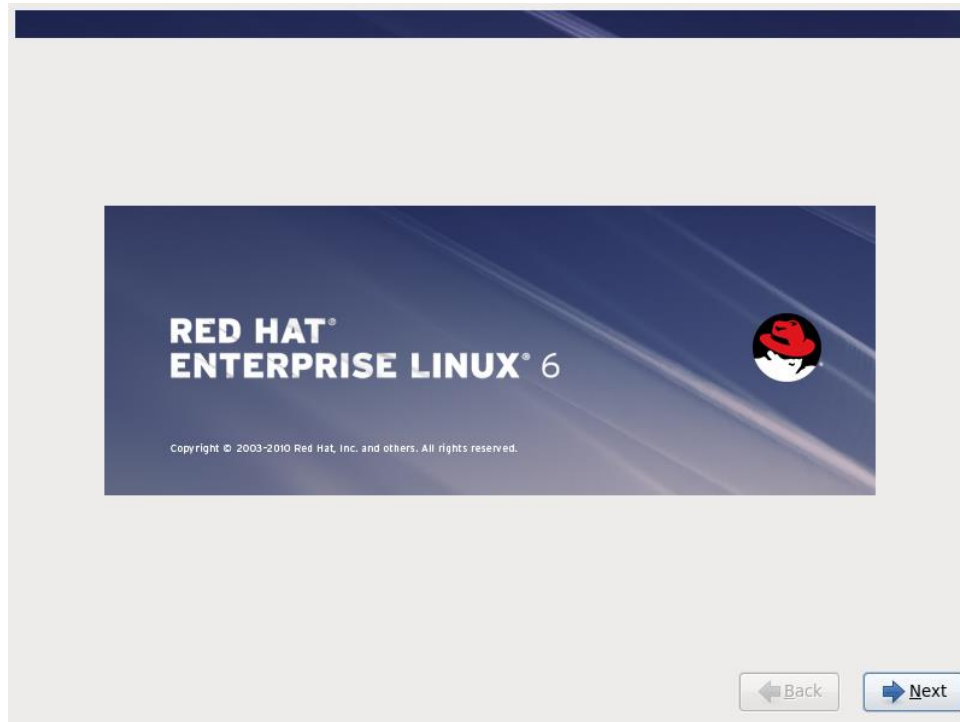
13. Make sure Select Install or upgrade an existing system is highlighted and hit Enter.



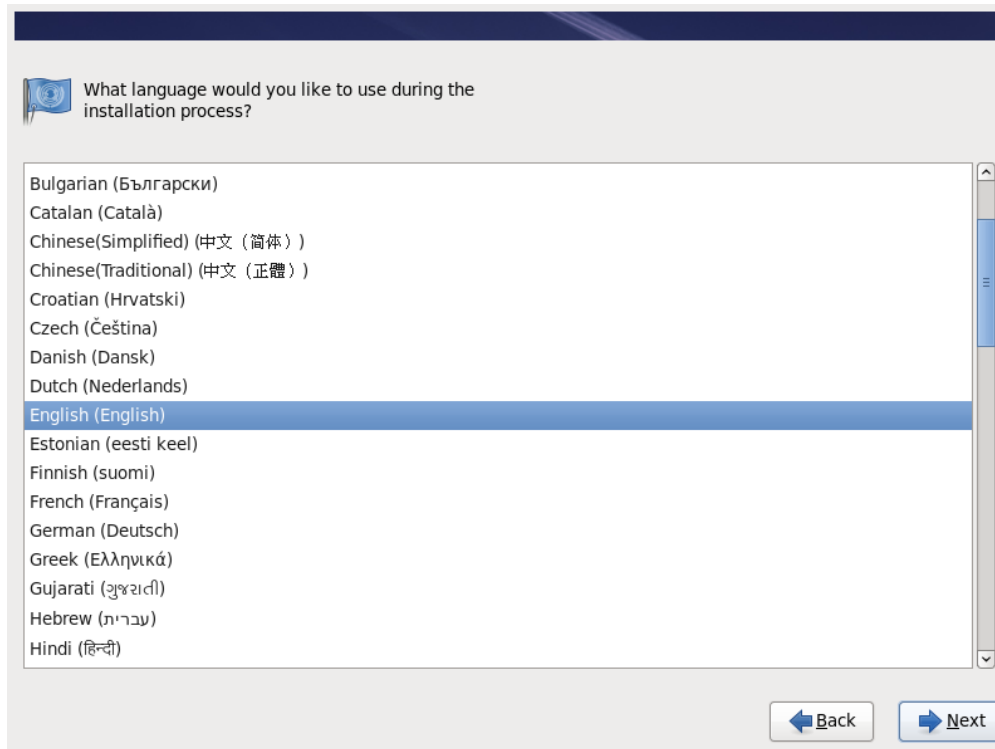
14. Tab and move to Skip and hit Enter



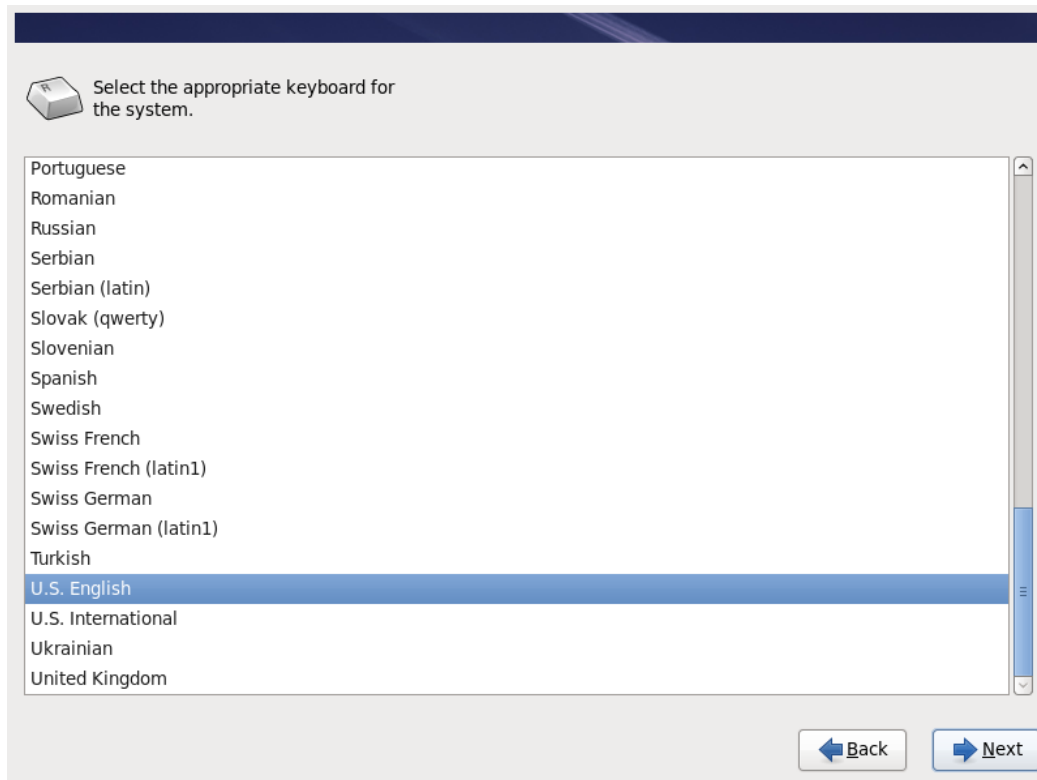
15. You should see the start screen and click **Next**.



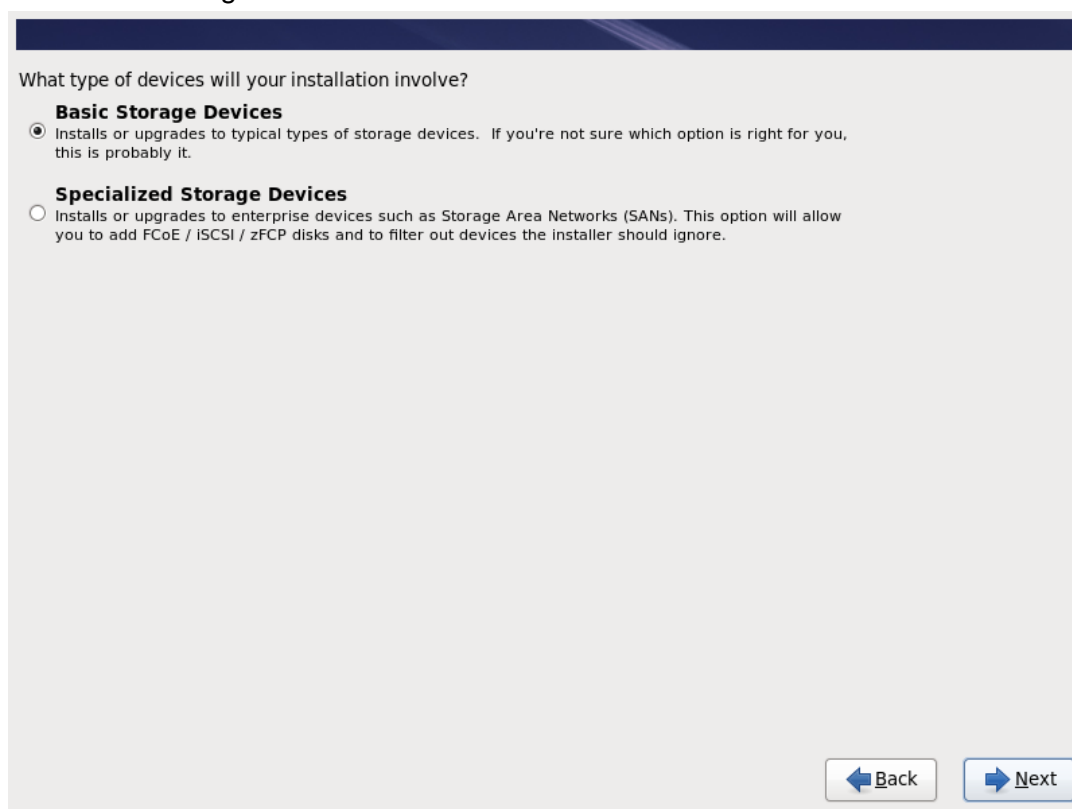
16. Select English



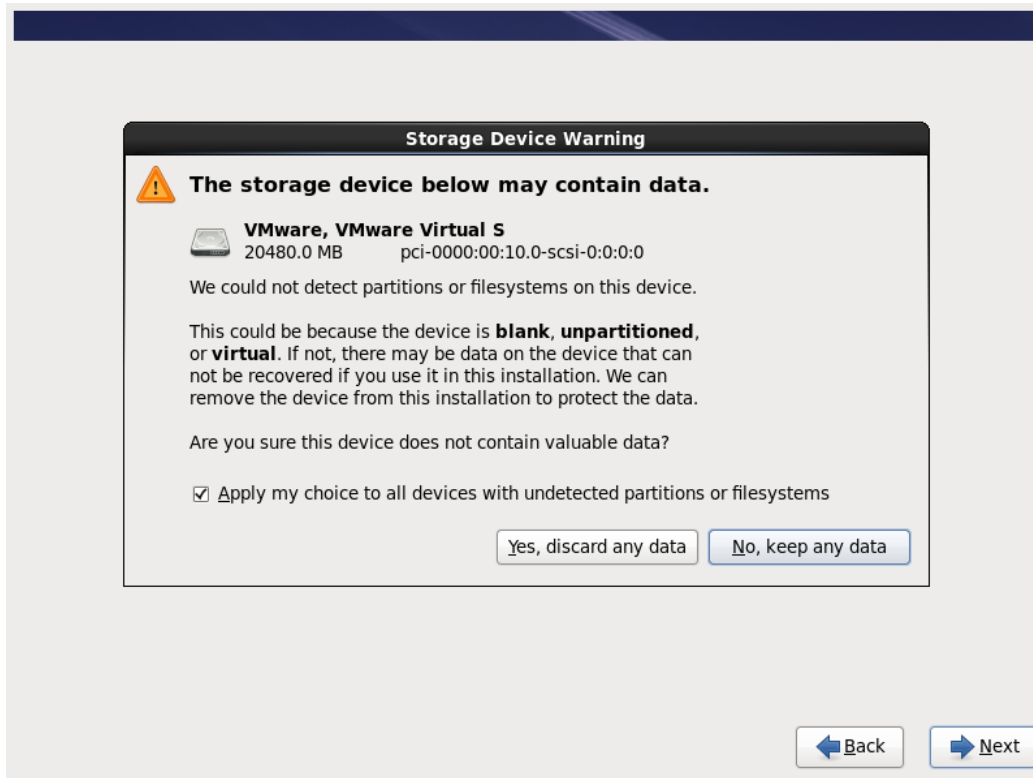
17. Select US English keyboard, as this defacto standard.



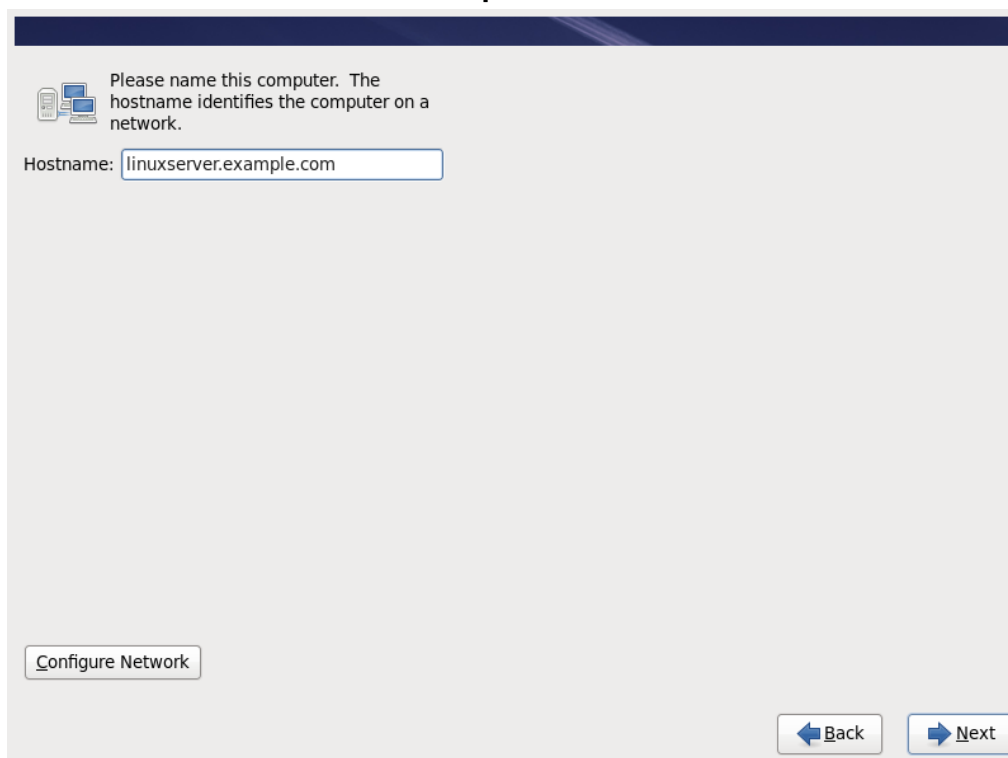
18. Select Basic Storage



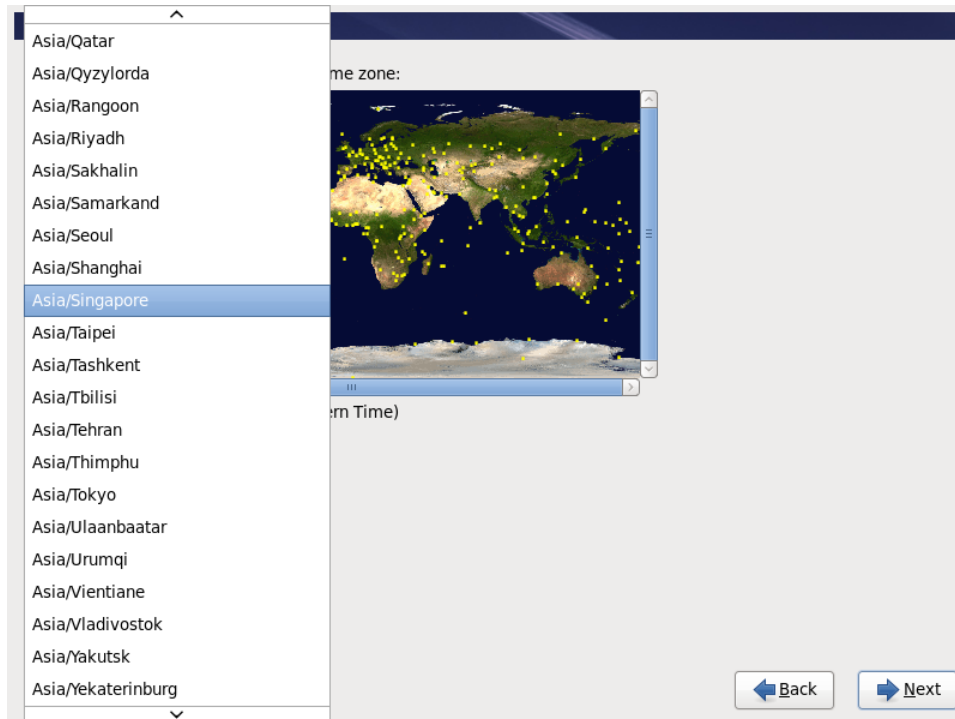
19. Select **Yes, discard my data** if you see the warning screen below.



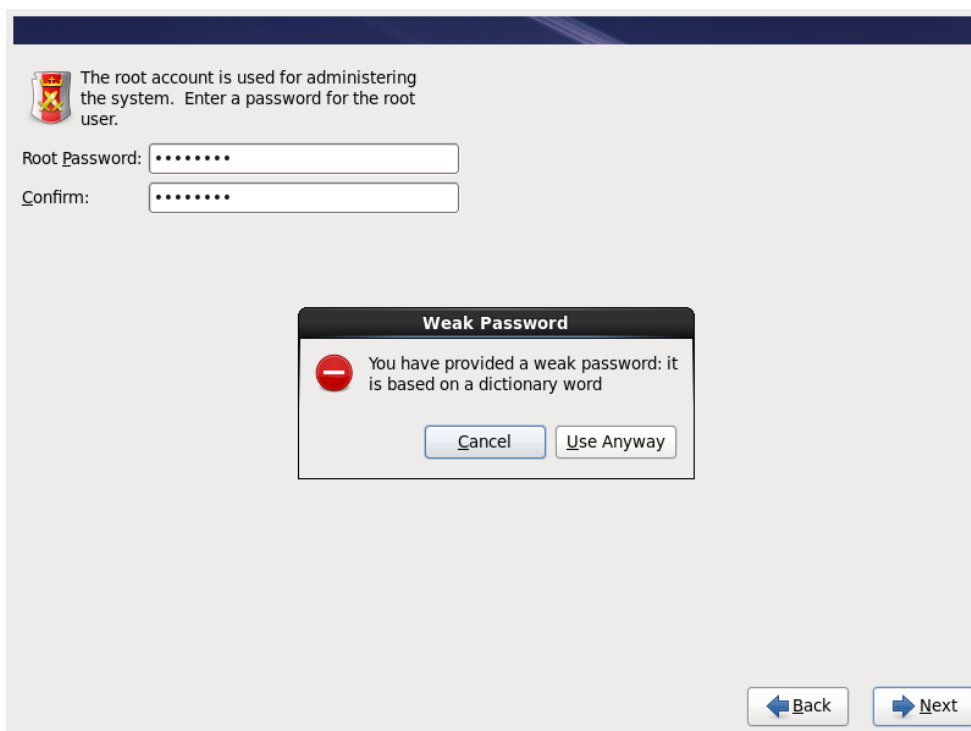
20. Give the hostname as **linuxserver.example.com** and click **Next**.



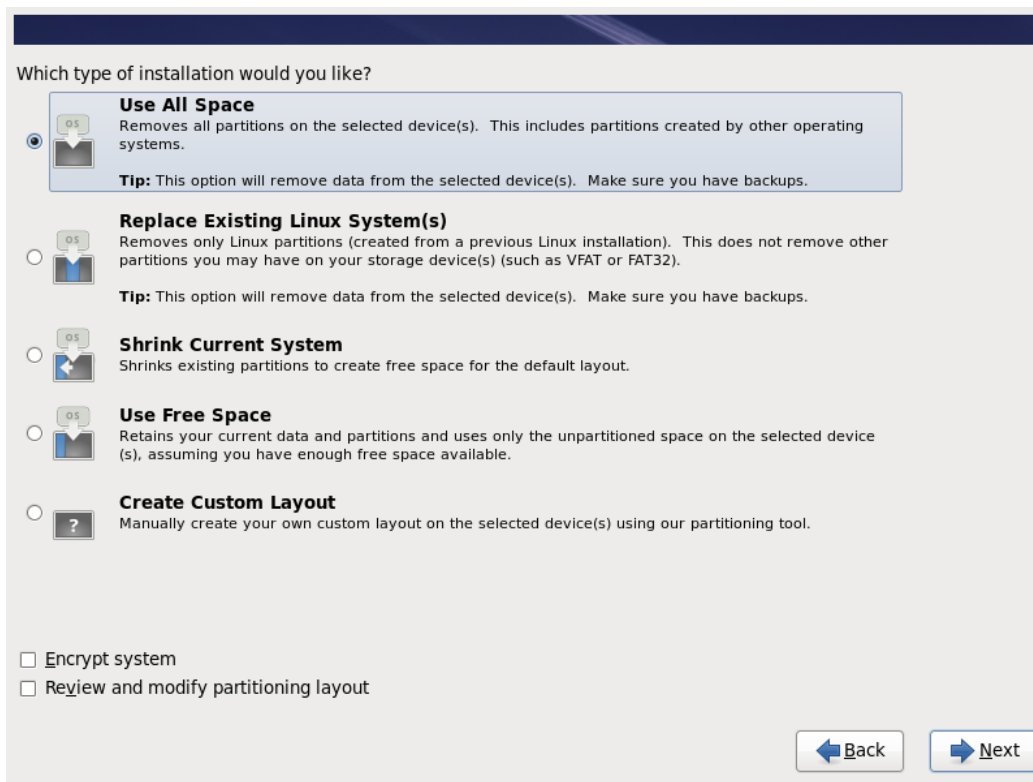
21. Select Asia/Singapore as the time zone and click **Next**.



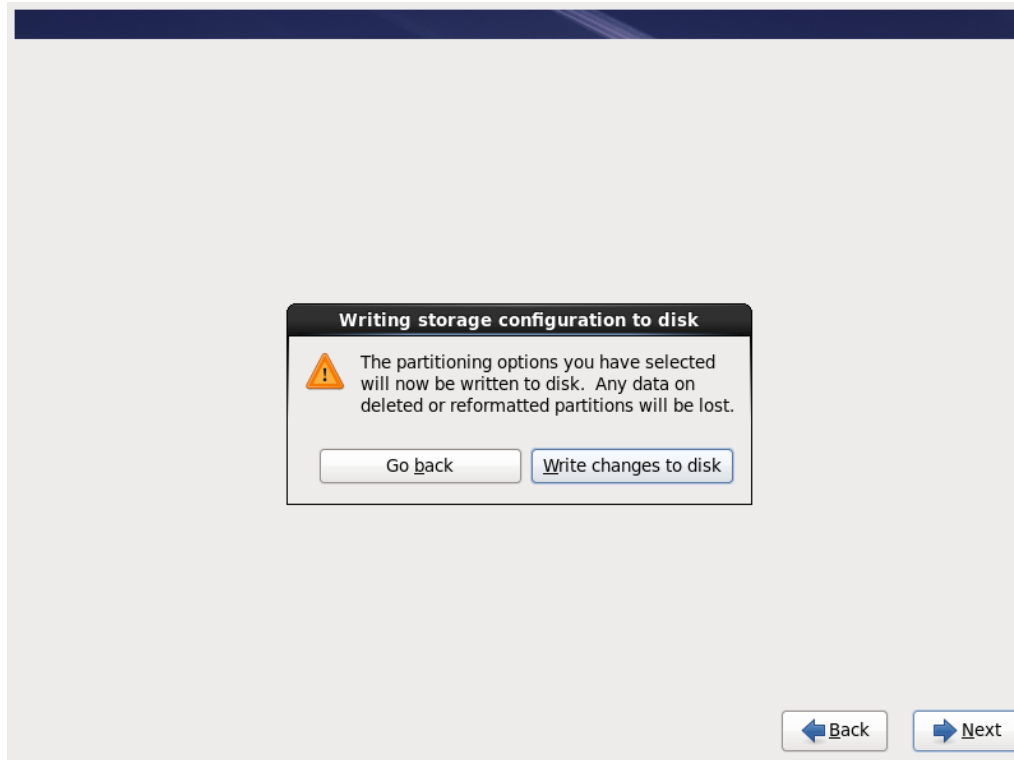
22. Enter the standard password **redhat** for root user. If see a warning, just click on **Use Anyway**



23. Select **Use All Space** to format the drive for use by the Linux file system and click **Next**.



24. Select Write Changes to Disk.



25. Select **Desktop** as the default basic server install and click **Next**.

The default installation of Red Hat Enterprise Linux is a basic server install. You can optionally select a different set of software now.

- ☐ Basic Server
- ☐ Database Server
- ☐ Web Server
- ☐ Identity Management Server
- ☐ Virtualization Host
- ☒ Desktop
- ☐ Software Development Workstation
- ☐ Minimal

Please select any additional repositories that you want to use for software installation.

- ☐ High Availability
- ☐ Load Balancer
- ☒ Red Hat Enterprise Linux
- ☐ Resilient Storage

You can further customize the software selection now, or after install via the software management application.

☒ Customize later ☐ Customize now

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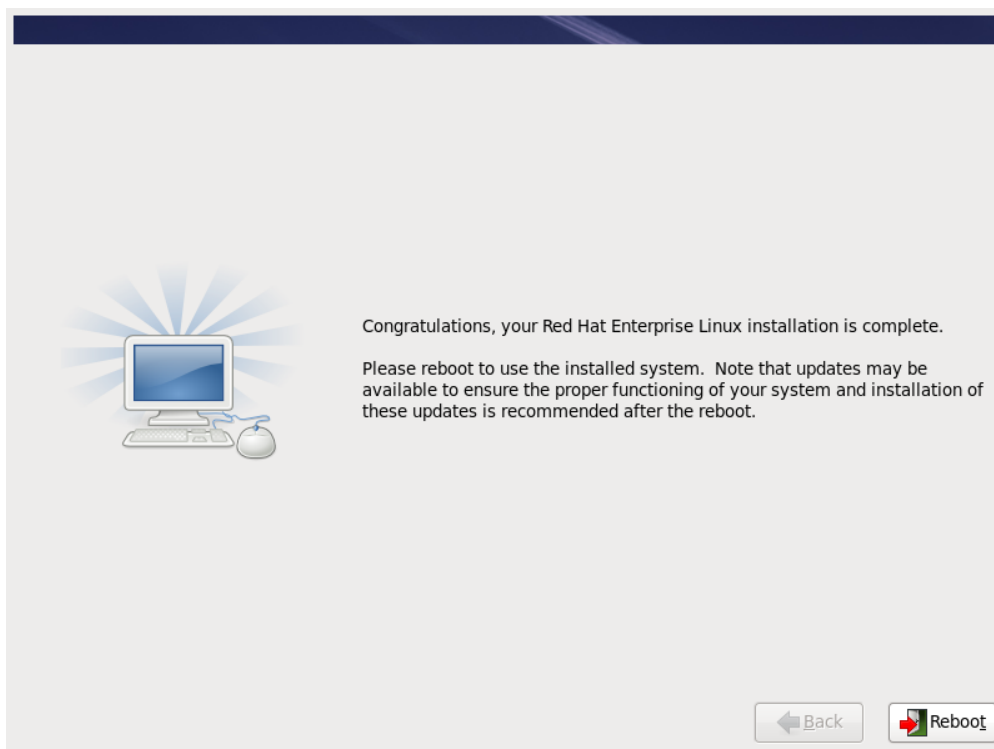
Dependency Check

Checking dependencies in packages selected for installation

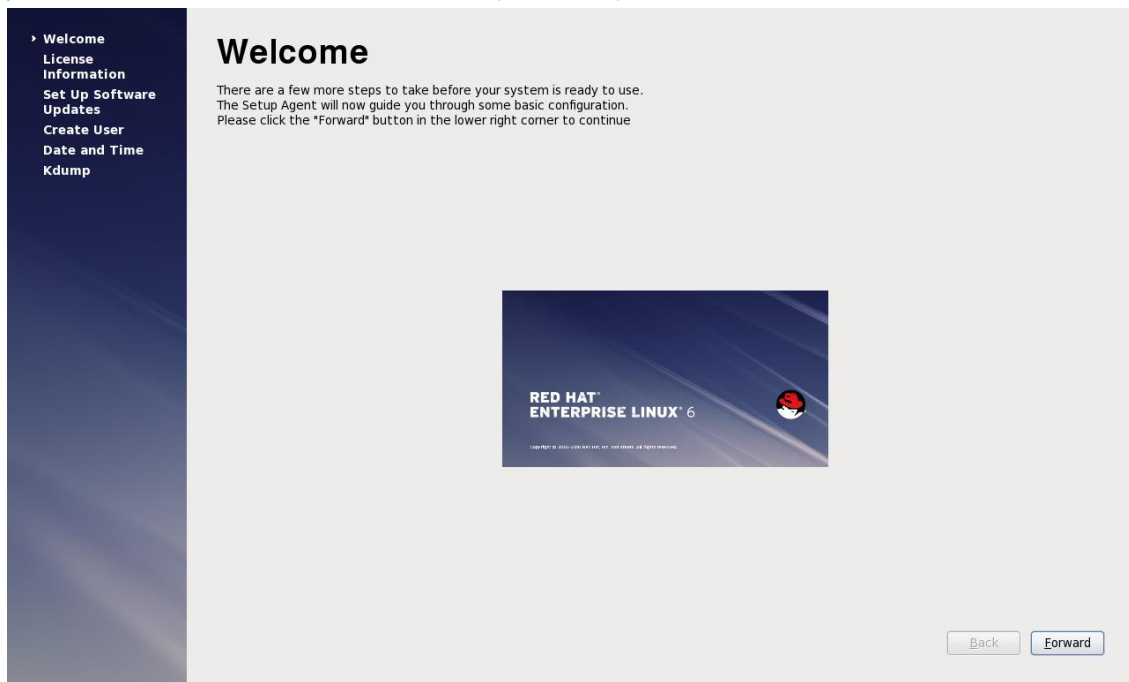
26. It will start the installation process...



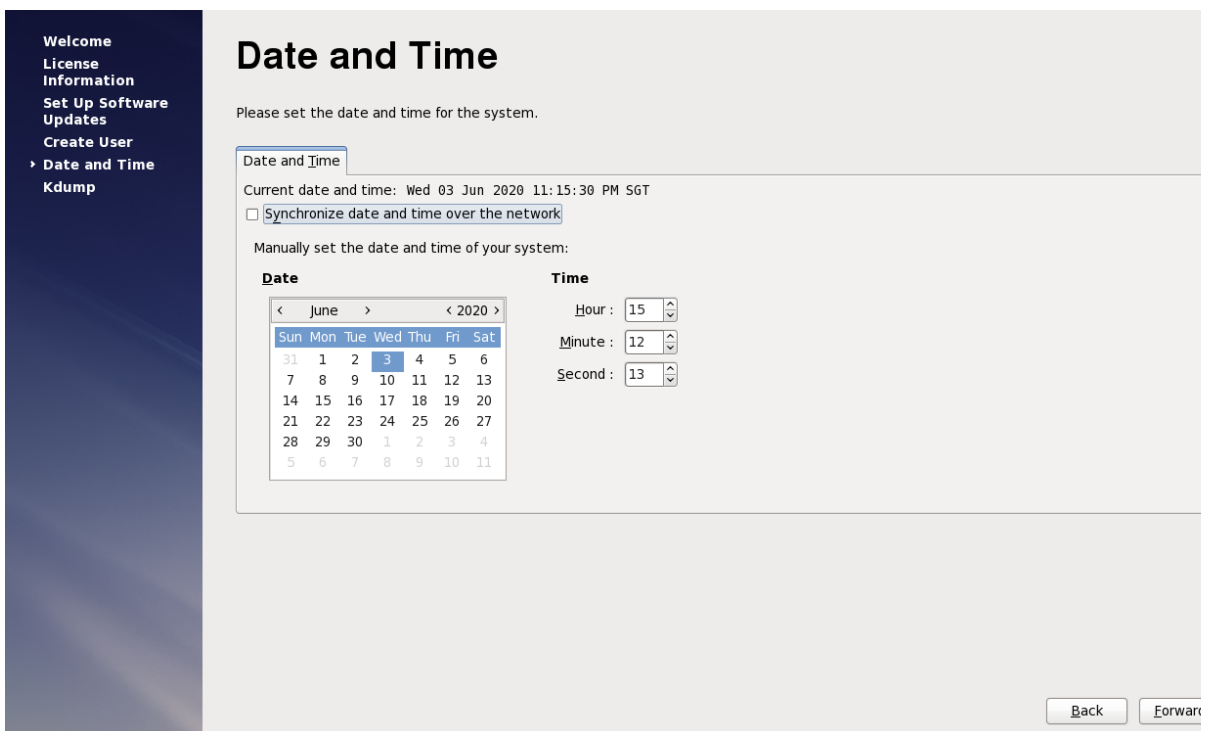
27. Finally the installation is complete when you see the screen below. Reboot to get started with RHEL6.



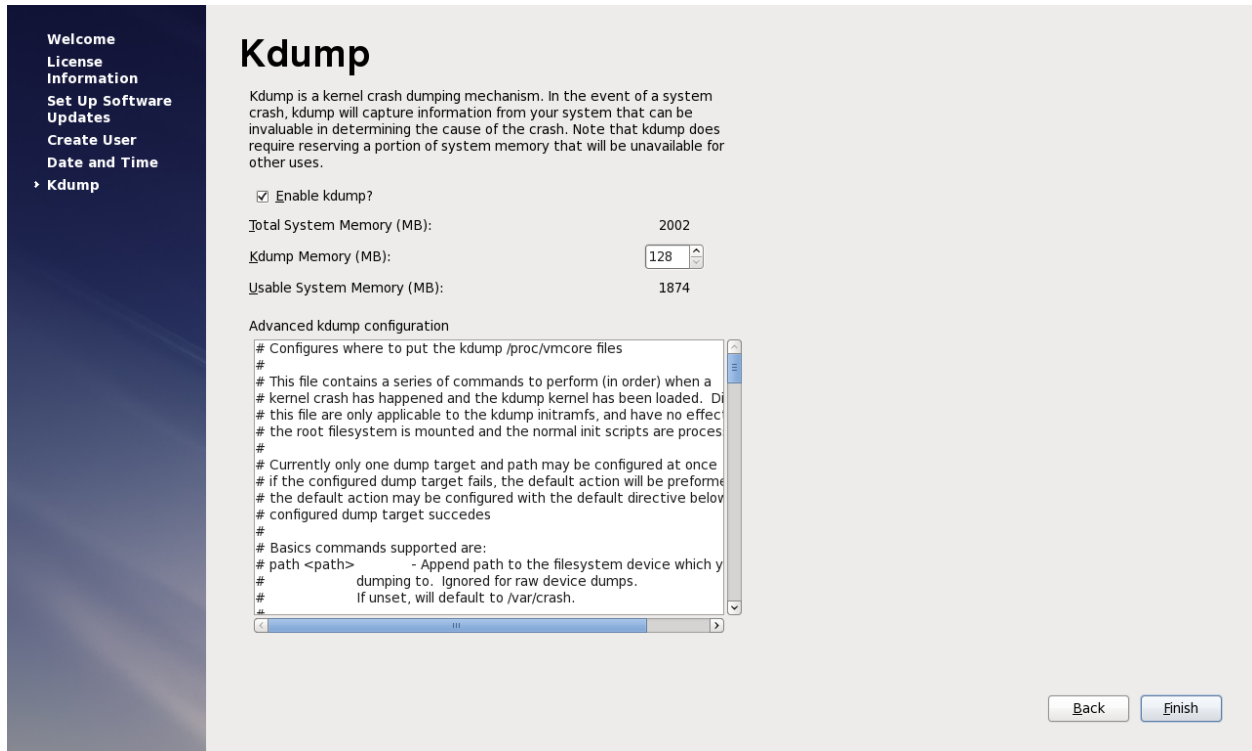
28. Just complete the final installation steps, by clicking on **Forward** for each screen. When you are at the Date and Time screen, just set up the correct time and click **Forward**.



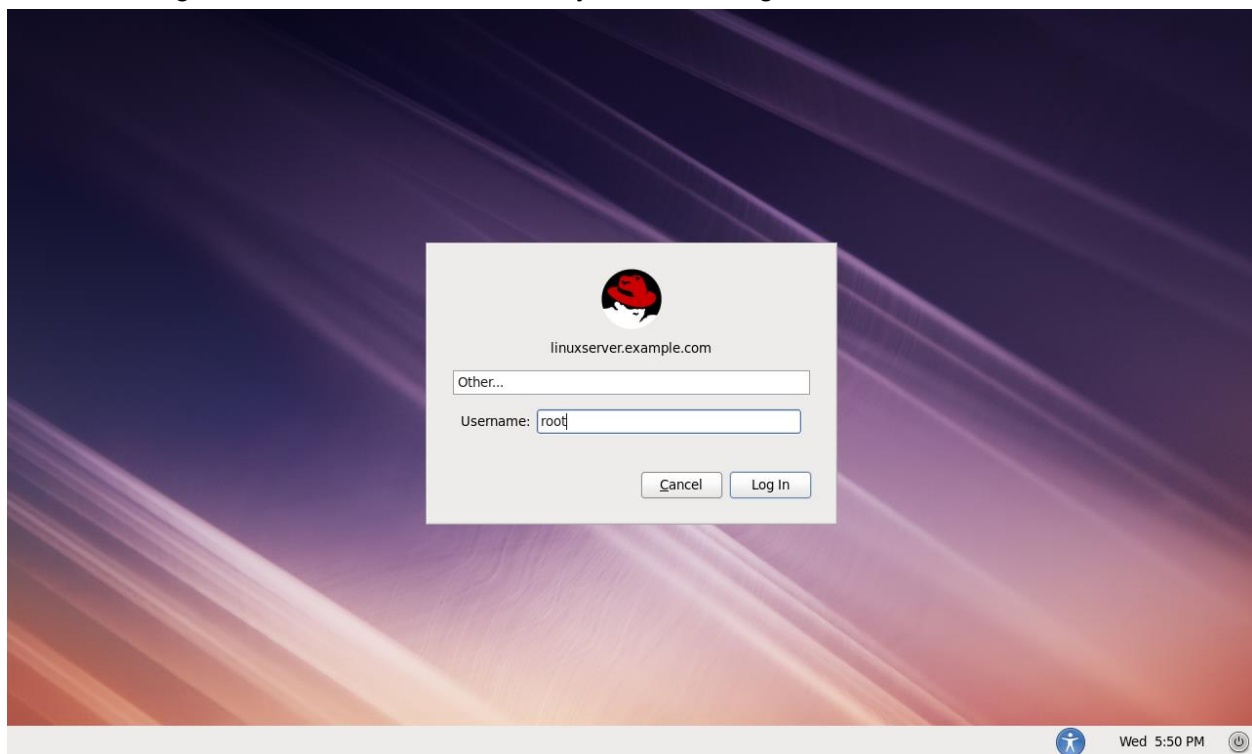
29. Set the Time in the screen below.



30. At the final kDump screen, just click **Finish**.

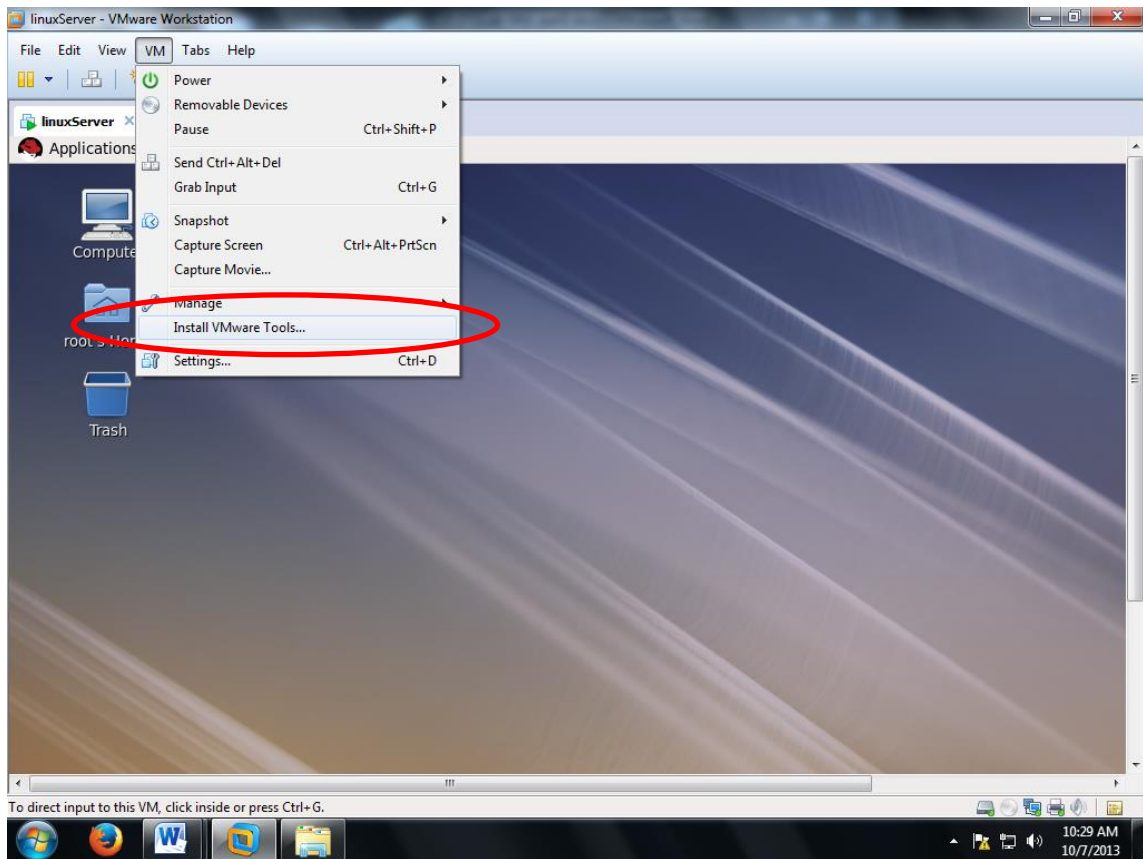


31. Reboot again... And we are done when you see the login screen.

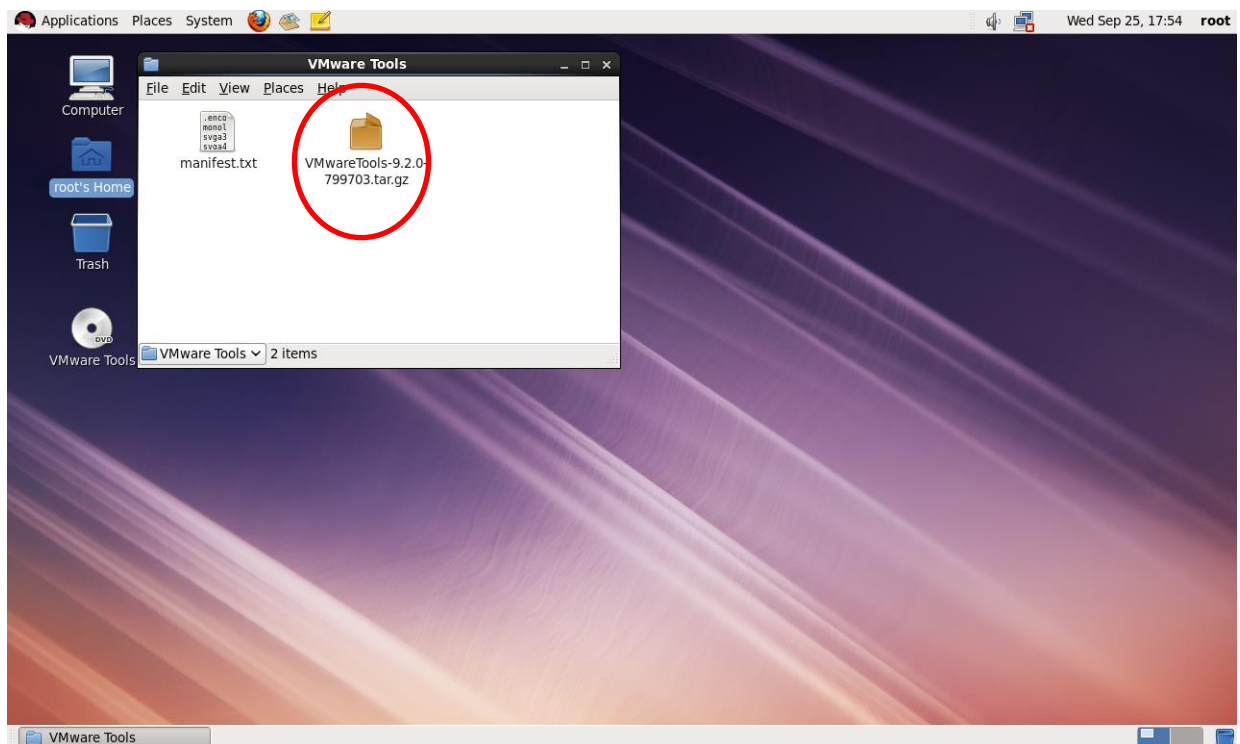


32. Login as **root**, if you have not done so, you will also need to install **VMTools**.

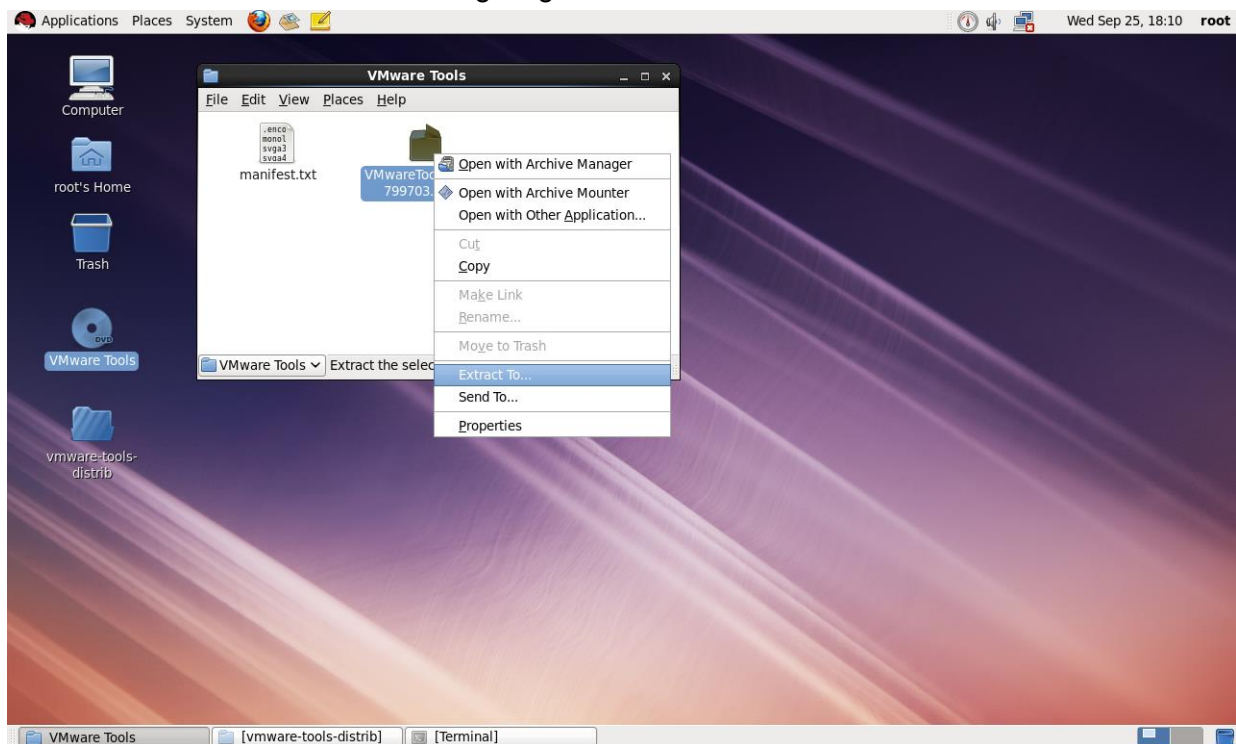
33. Then in the same way we have done so, go to VMWare Workstation menu, select VM. Then select “Install VMWare Tools...”



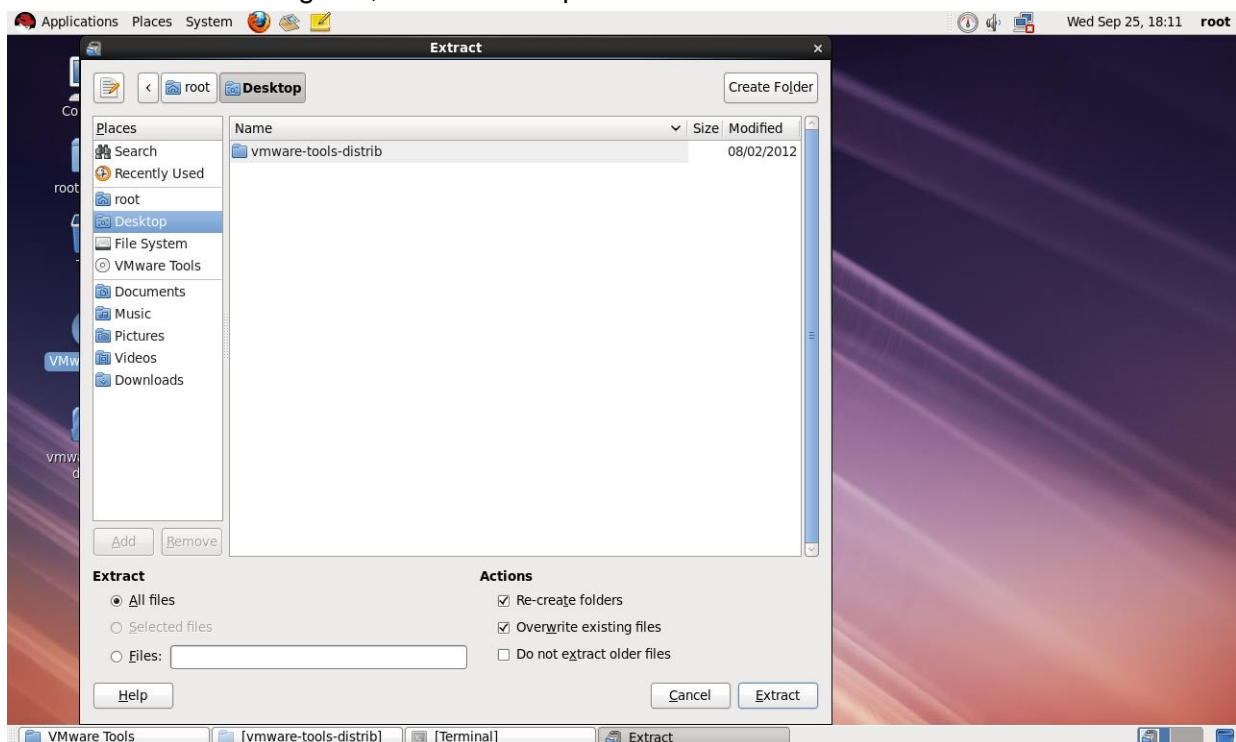
34. Right click on the location shown below.



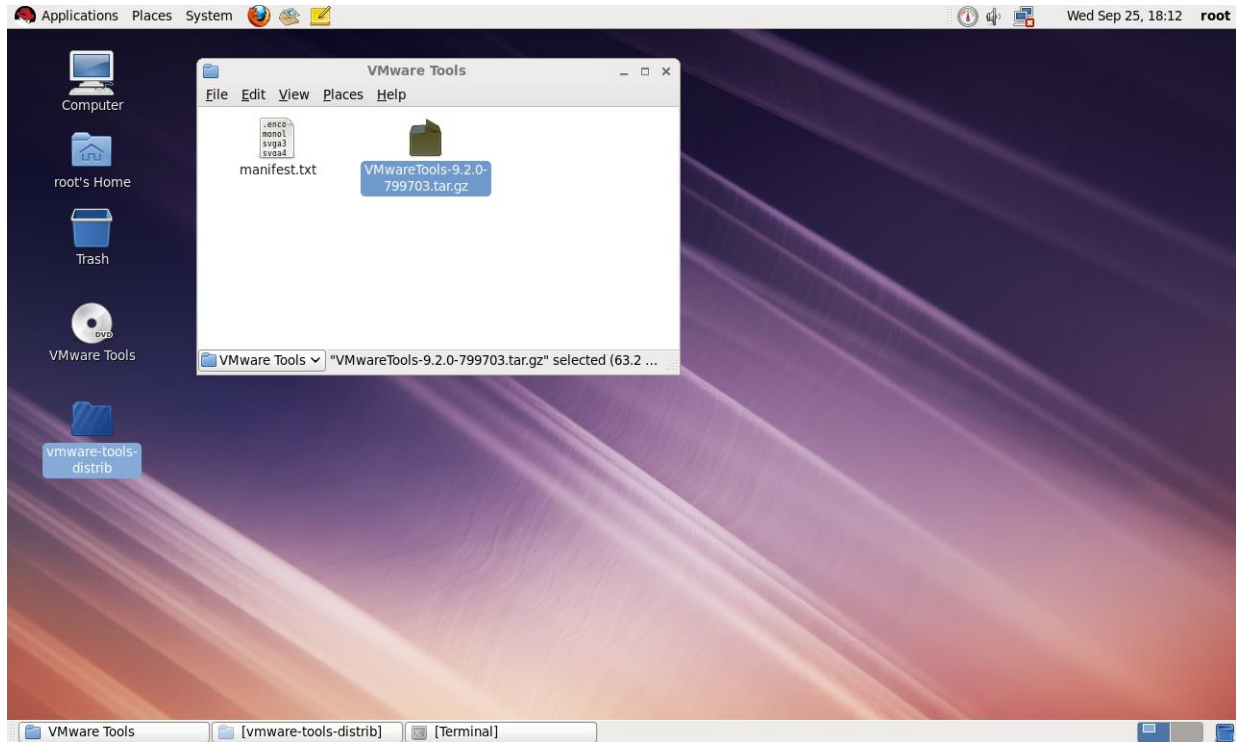
35. After doing that you will see the VMTools folder appear in the screen. Select the file VMWareTools-9.2.0-799703.tar.gz, right click and select “**Extract To..**”



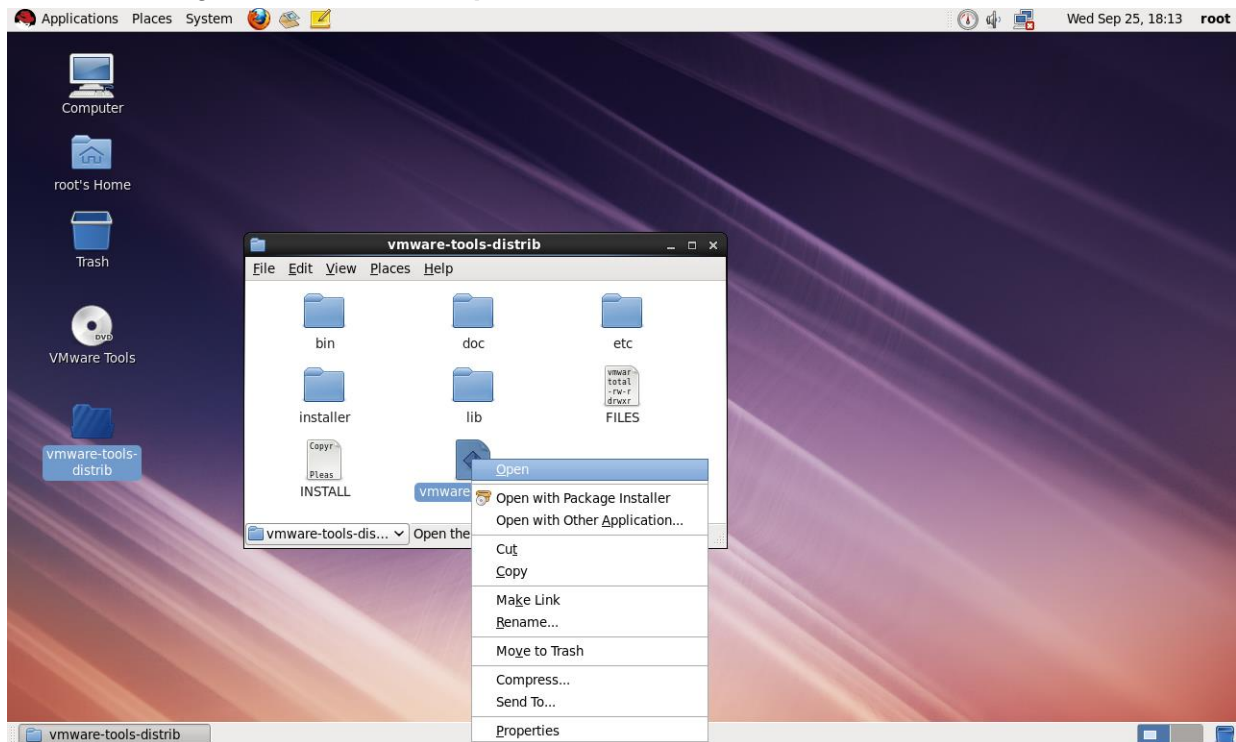
36. In the Extract dialog box, select Desktop. And click **Extract**.



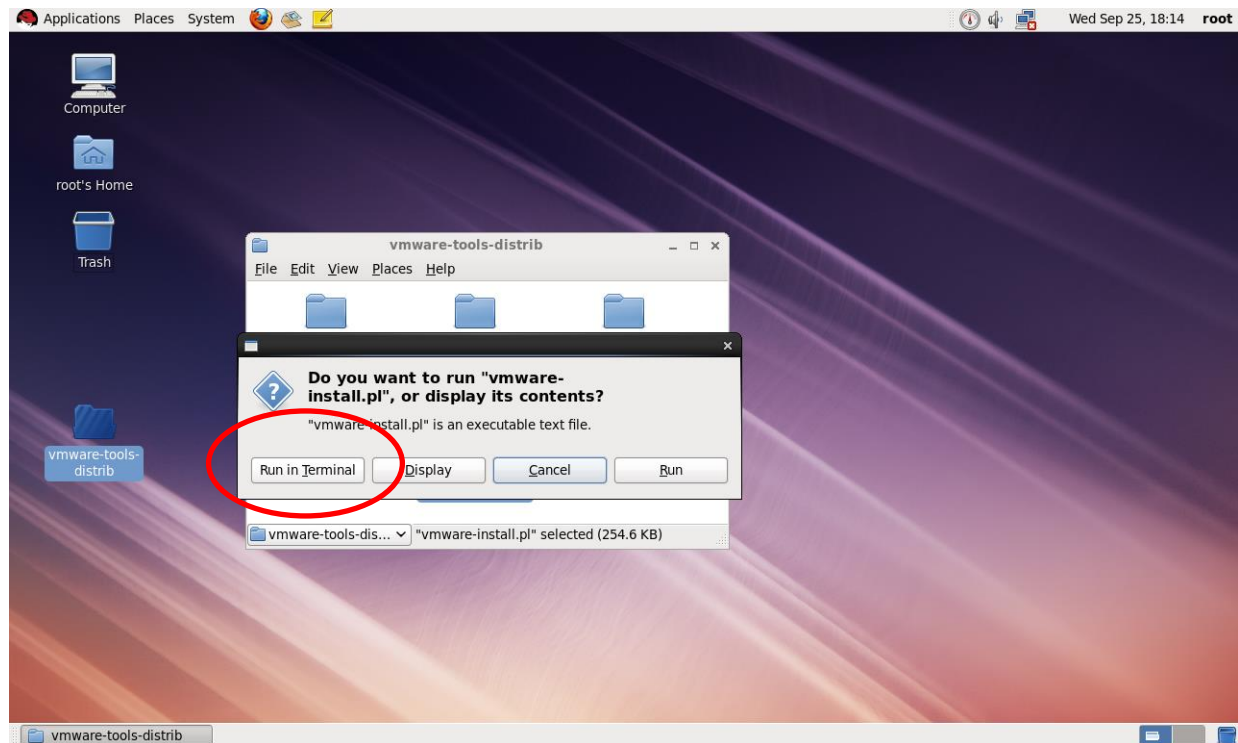
37. You will see a new folder on the Desktop screen.



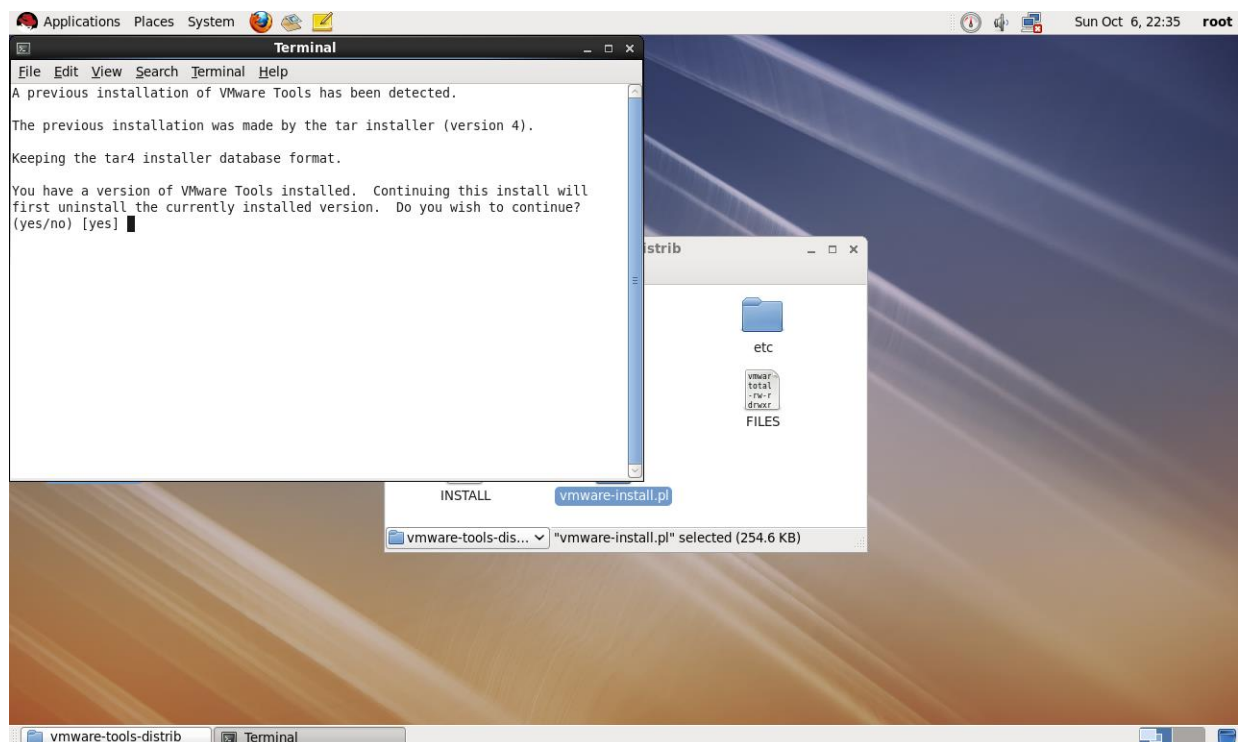
38. Double click on the folder and you see the contents of the folder. Select **vmware-install.pl** and do a right click and select **Open**.



39. Then click on the button **"Run in Terminal"** to install **VMTools**.



40. At every question prompted in the installer. Just hit the **Enter** key to accept the default values.



41. Once, the installer script has completed. Logout and reboot the Linux VM. The screen resolution should be adjusted correctly on next boot-up.

END OF LAB