

## Assignment 1:

Problem Statement:

Install centos 6.4 in virtual box from ISO image

## Solution:

Okay, so let us start some hands on. See, all our labs are based on virtual machines and don't worry, you will learn to set them up from scratch! So let's get started by learning how to set up our first virtual machine.

I will explain the whole process step by step.

The first step is to download the virtualization software. Well, you can use any software which can perform virtualization, but I prefer VMWARE Player. It's free and works well for most of our lab scenarios. So let's get a copy of it. Go to the link mentioned below to download it. Depending on the operating system that you are using, you may download 32 or 64 bit versions of the same.

[https://my.vmware.com/web/vmware/free#desktop\\_end\\_user\\_computing/vmware\\_player/7\\_0](https://my.vmware.com/web/vmware/free#desktop_end_user_computing/vmware_player/7_0)

Once downloaded, follow the wizard to install it. It's really simple!

The next step is to get a copy of CentOS ISO file. You can use any version, but I prefer 6.5. You can go to the CentOS official site and download the ISO directly from there.

Go to the following link

<http://www.centos.org/download/>

Scroll all the way down and click on "click here" under older versions.

On the next page, scroll down to archived versions and click on the tree next to 6.5

On the next page, click on the folder named isos

On the next page, click on the folder named x86\_64

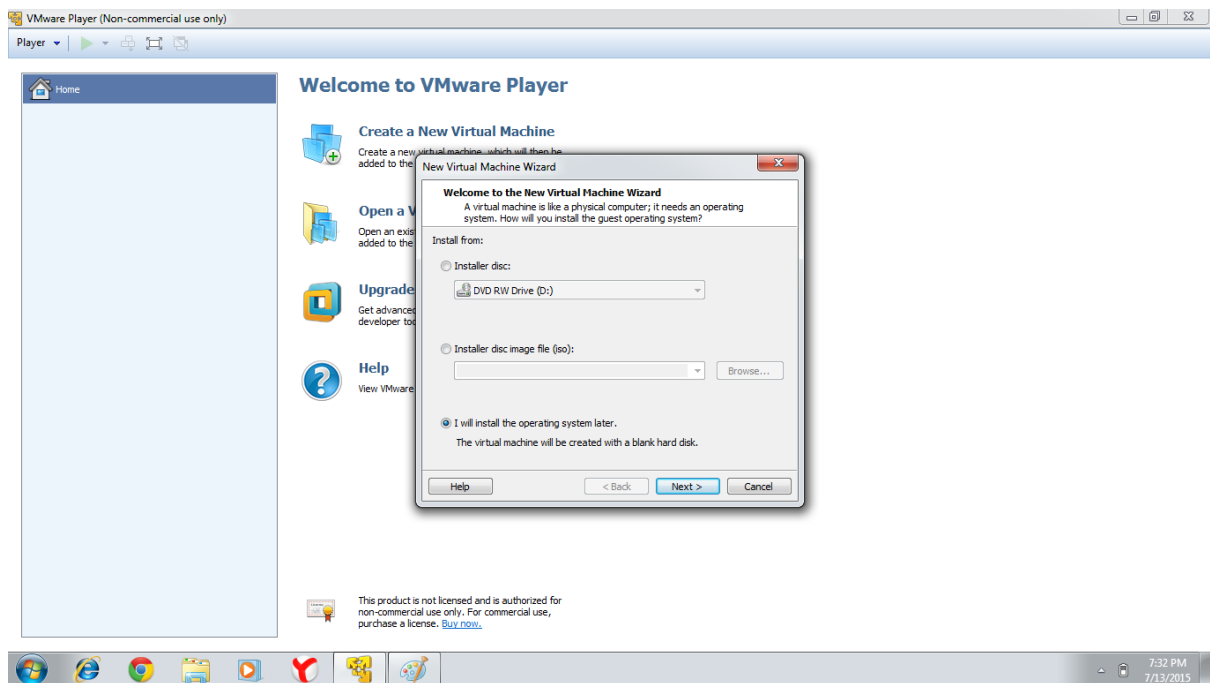
Click on CentOS-6.5-x86\_64-bin-DVD1to2.torrent and download the torrent file. Once done, you may open the torrent file in a torrent client and download the entire ISO. Note that it is roughly 4 GB in size and will consume your bandwidth.

Now, open VMWARE Player ( I will refer to it as player for the rest of the lab sessions). It will ask you to give your e mail address. Type it in and open the main console.

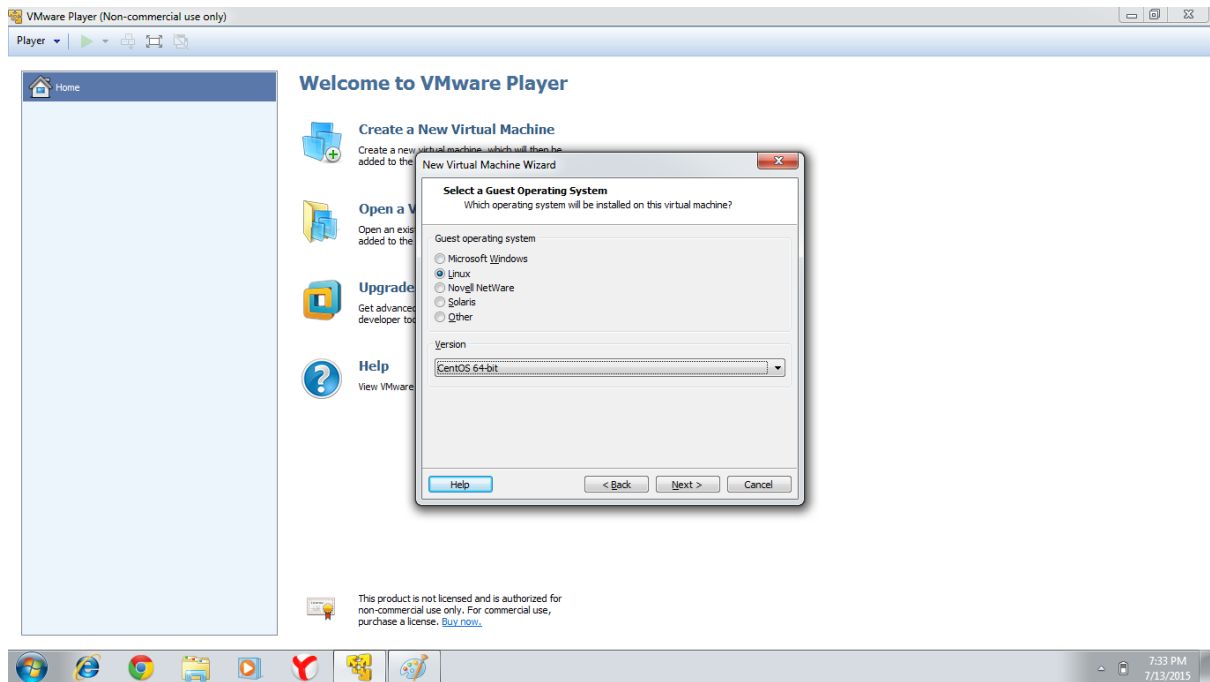
Click on create a new virtual machine



On the next screen choose I will install the OS later.

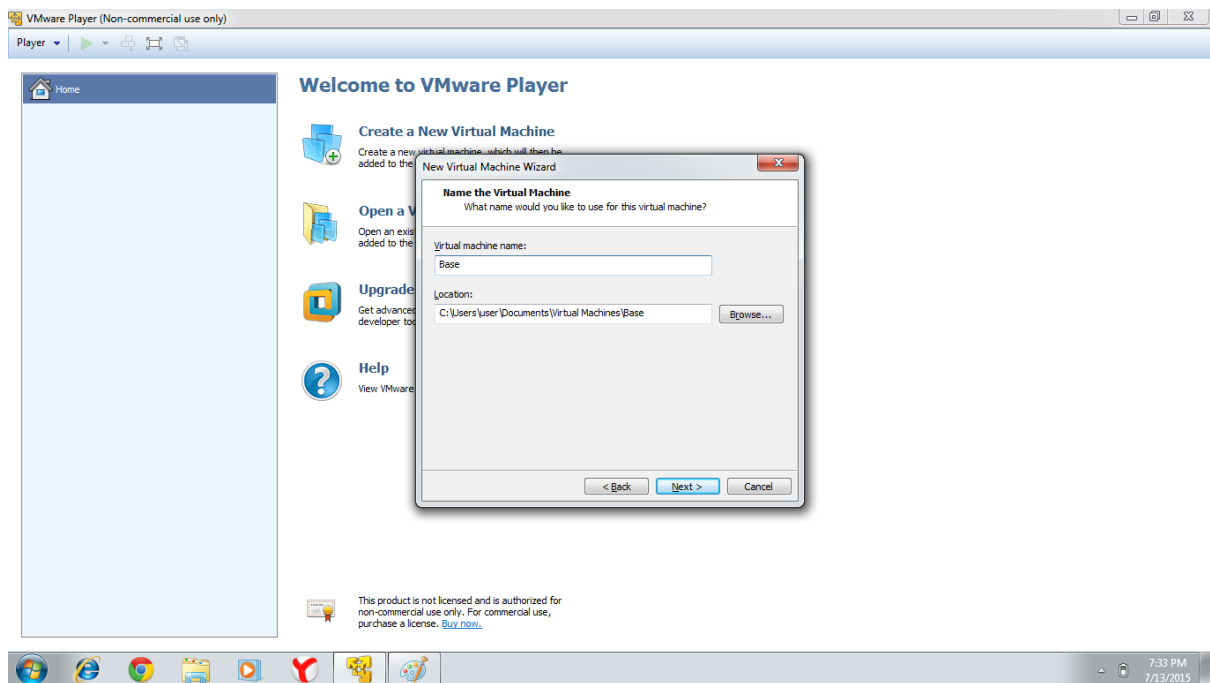


On the next screen, select Linux and Cent OS 64 bit as version

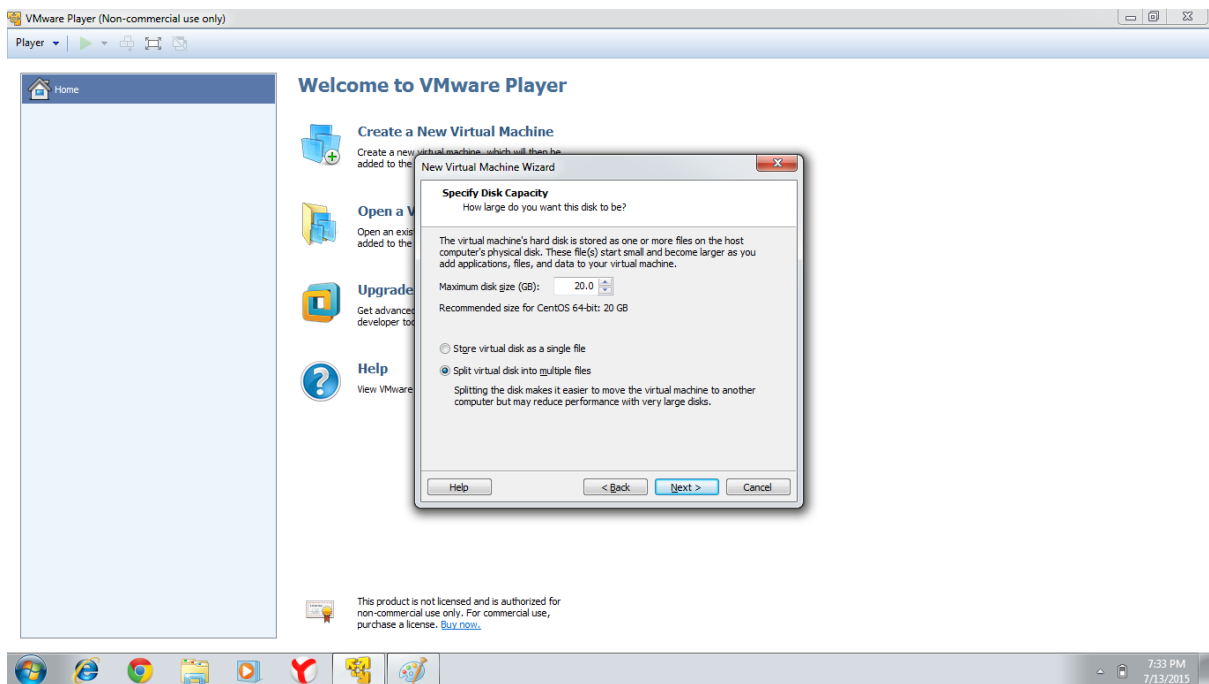


On the next screen give a name “Base” to our virtual machine.

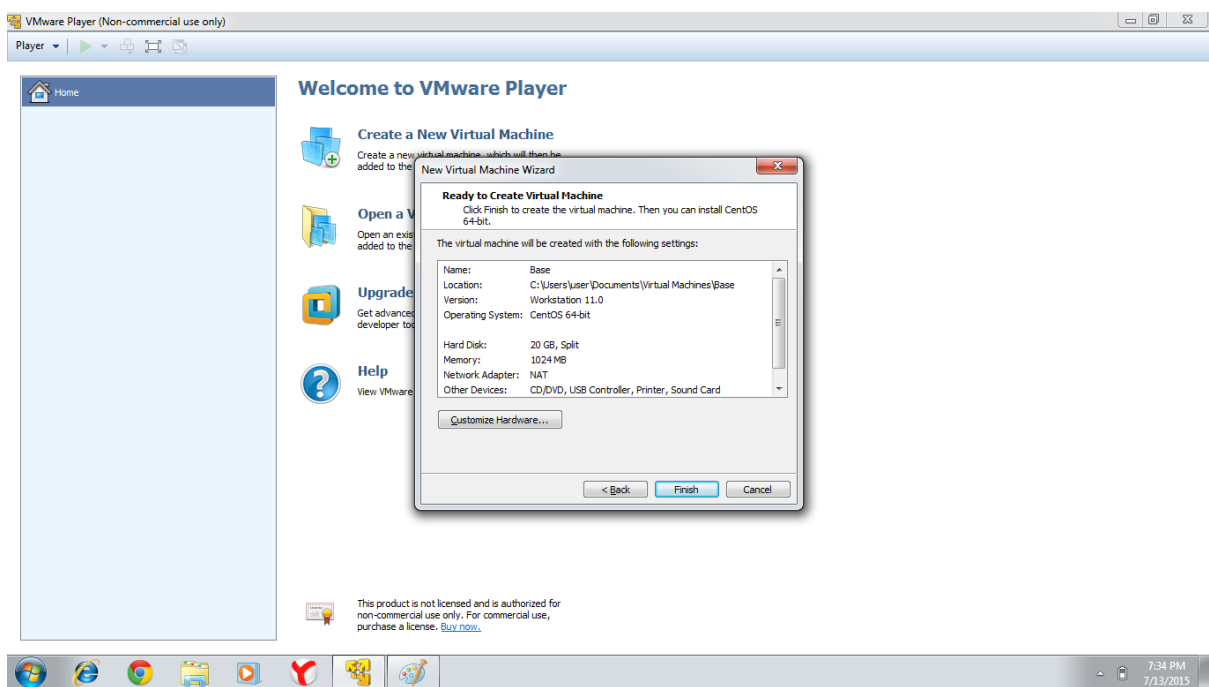
Note – You may want to change the location of the virtual machine as well. By default it will be in C drive.



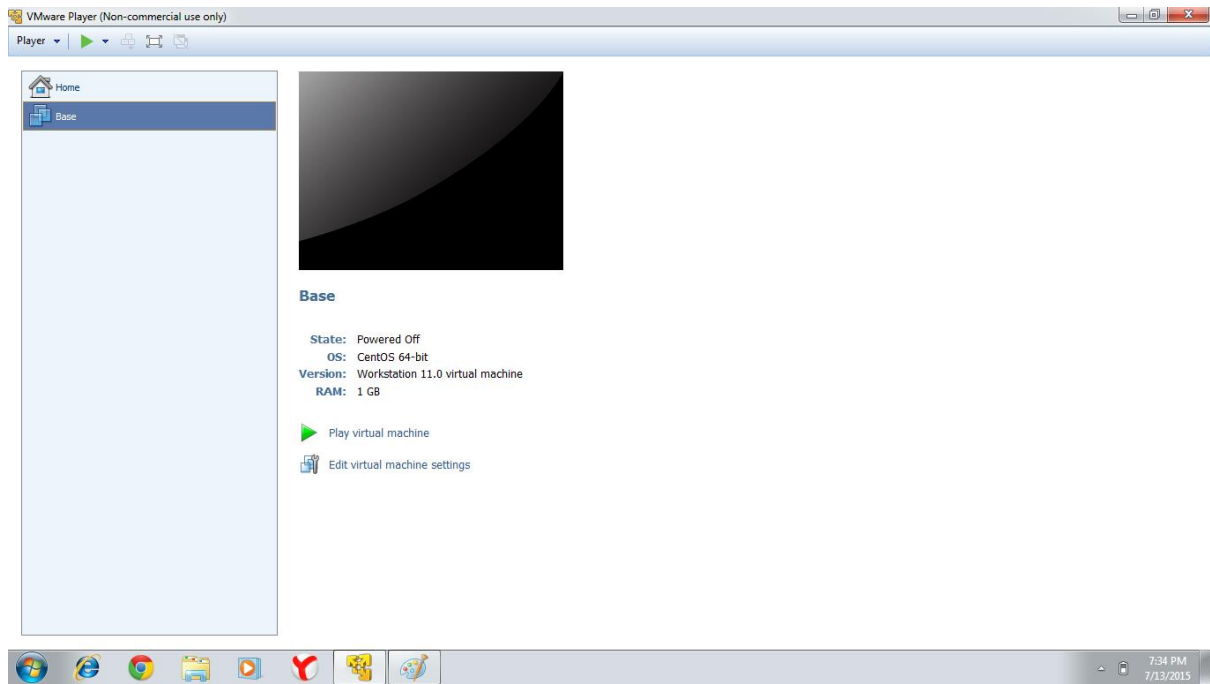
On the next screen, do not make any changes and click next.



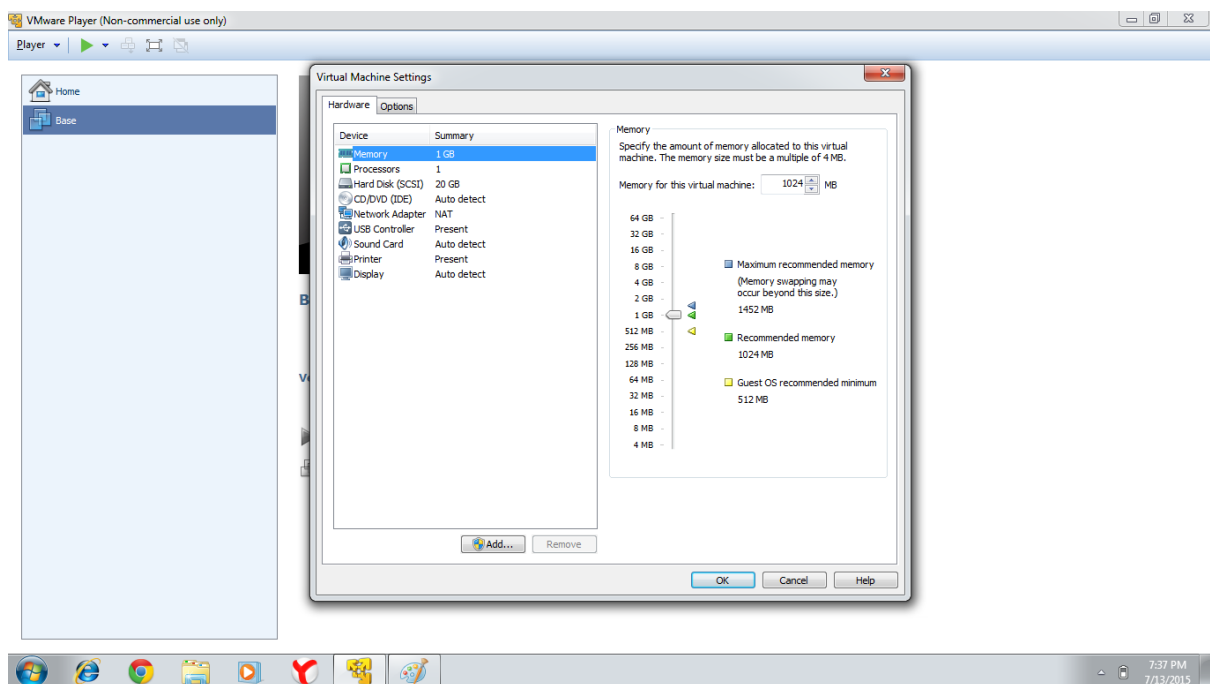
On the last screen, just click finish



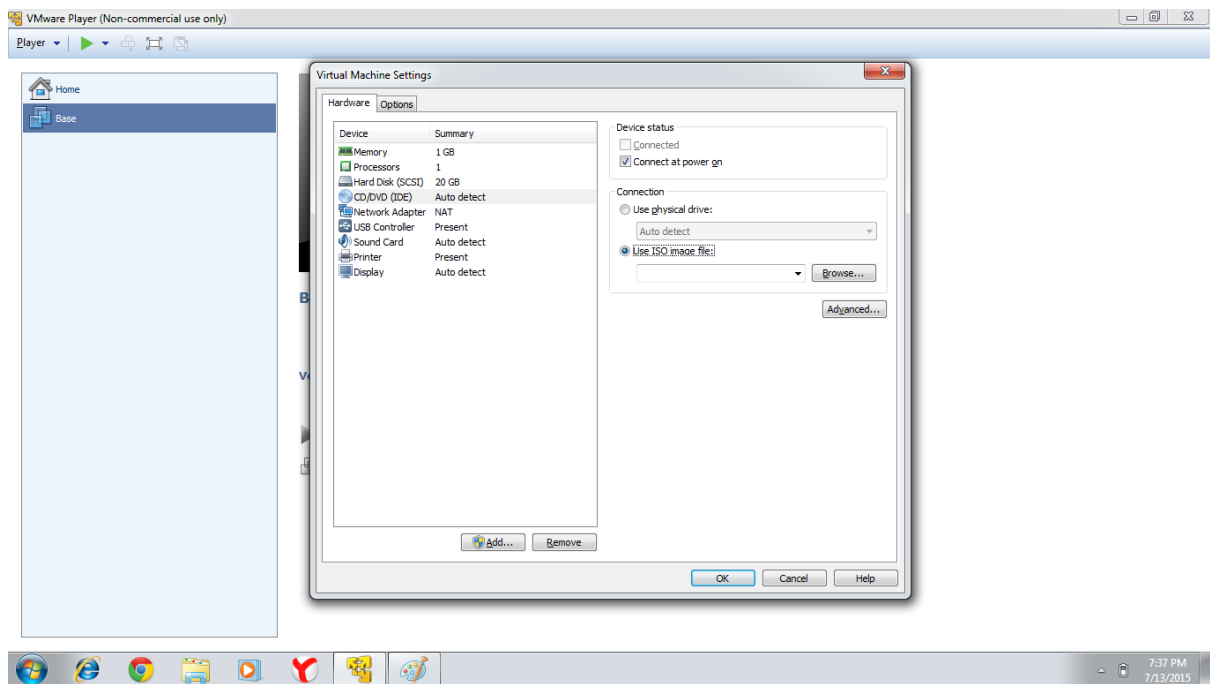
If you did well, you will have the Base virtual machine on the start-up page, as shown below



Now, click on edit virtual machine settings



Click on CD/DVD and select use ISO image. Browse and give the Cent OS ISO file that we have just downloaded.



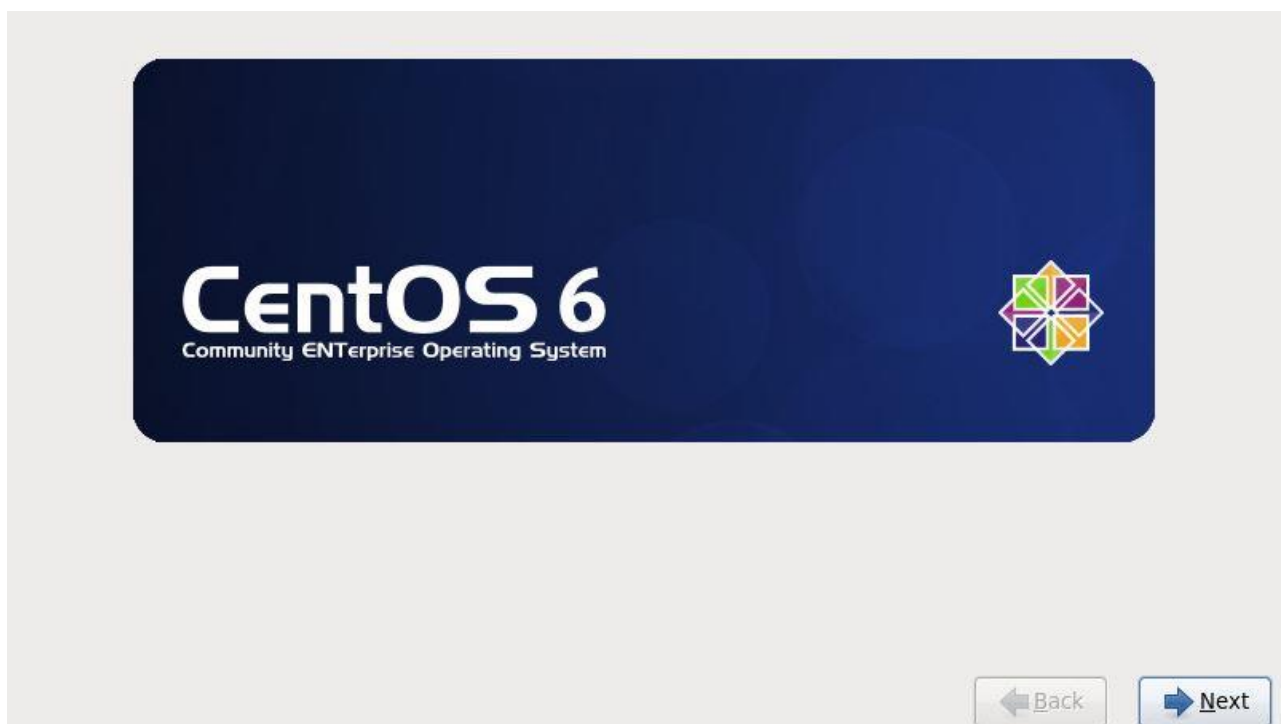
Click OK. Now we are ready to install Cent OS. Click on Play this virtual machine. The VM will boot from the ISO. The following screen will be displayed.



2. Choose **Skip** to cancel the installation media check. But if you choose ok, this will check your installation media for any sort of missing installation files of the operating system.



3. Now you can see the installation welcome screen. Here click **next** button.



4. Now choose the language you prefer to install and click **next** button.



What language would you like to use during the installation process?

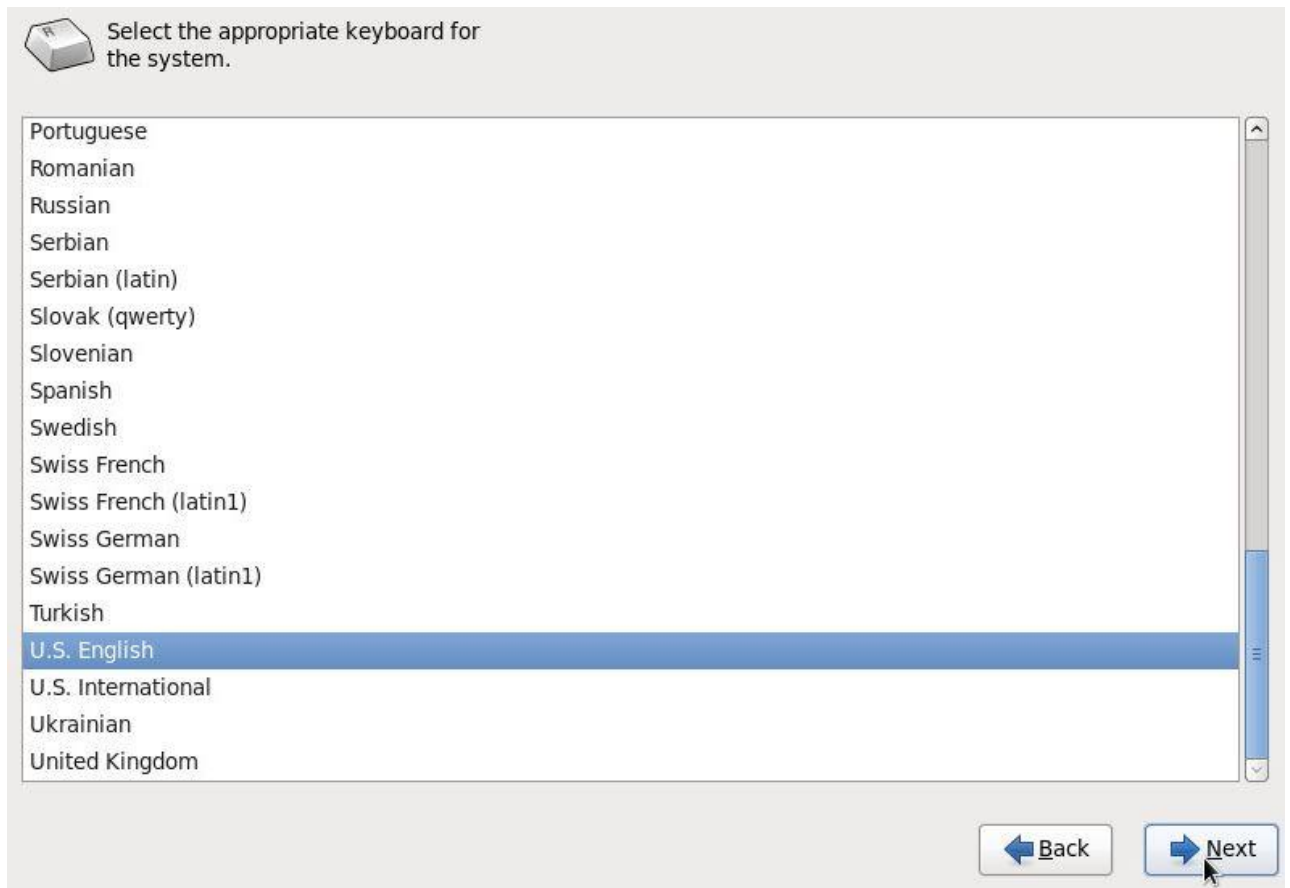
Bulgarian (Български)  
Catalan (Català)  
Chinese(Simplified) (中文 (简体))  
Chinese(Traditional) (中文 (正體))  
Croatian (Hrvatski)  
Czech (Čeština)  
Danish (Dansk)  
Dutch (Nederlands)  
English (English)  
Estonian (eesti keel)  
Finnish (suomi)  
French (Français)  
German (Deutsch)  
Greek (Ελληνικά)  
Gujarati (ગુજરાતી)  
Hebrew (עברית)  
Hindi (हिन्दी)

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5. Choose the appropriate keyboard layout from the option and click **next** button.






6. Here choose **Basic Storage Device** and click **next** button.



7. Click Yes, discard any data to continue option in storage device warning.



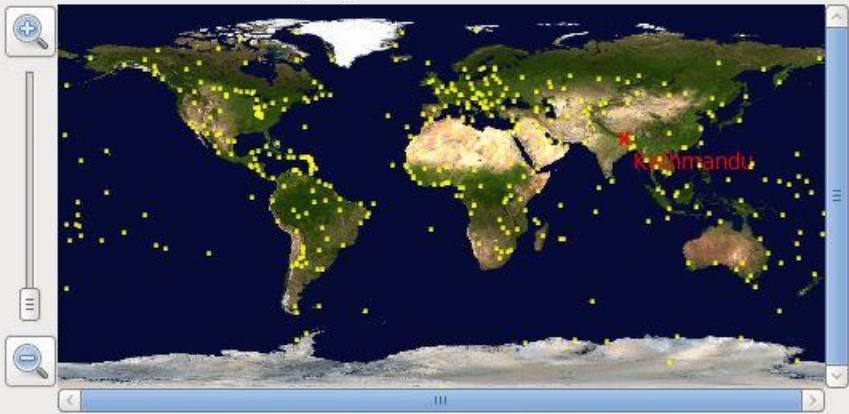
8. Type unique host name for this system and click Next button.

 Please name this computer. The hostname identifies the computer on a network.

Hostname:

9. Select time/zone and click **next** button.

Please select the nearest city in your time zone:



Selected city: Kathmandu, Asia

☒ System clock uses UTC

10. Enter strong root password and click **next** button.



The screenshot shows a window with a light gray background. In the top-left corner, there is a red shield icon with a yellow cross. To its right, the text reads: "The root account is used for administering the system. Enter a password for the root user." Below this text, there are two input fields. The first is labeled "Root Password:" and the second is labeled "Confirm:". Both fields contain eight dots, indicating masked text. At the bottom right of the window, there are two buttons: "Back" with a left-pointing arrow and "Next" with a right-pointing arrow. A mouse cursor is visible over the "Next" button.

The root account is used for administering the system. Enter a password for the root user.






Root Password:

Confirm:

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11. Choose the type of installation. Here I will choose **replace existing Linux system(s)**. You can choose use all space.

Which type of installation would you like?

- ☐  **Use All Space**  
Removes all partitions on the selected device(s). This includes partitions created by other operating systems.  
**Tip:** This option will remove data from the selected device(s). Make sure you have backups.
- ☒  **Replace Existing Linux System(s)**  
Removes only Linux partitions (created from a previous Linux installation). This does not remove other partitions you may have on your storage device(s) (such as VFAT or FAT32).  
**Tip:** This option will remove data from the selected device(s). Make sure you have backups.
- ☐  **Shrink Current System**  
Shrinks existing partitions to create free space for the default layout.
- ☐  **Use Free Space**  
Retains your current data and partitions and uses only the unpartitioned space on the selected device(s), assuming you have enough free space available.
- ☐  **Create Custom Layout**  
Manually create your own custom layout on the selected device(s) using our partitioning tool.

- ☐ Encrypt system
- ☐ Revew and modify partitioning layout

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12. Click write changes to disk.

### Writing storage configuration to disk



The partitioning options you have selected will now be written to disk. Any data on deleted or reformatted partitions will be lost.

Go back

Write changes to disk

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13. Choose basic server and click next.

The default installation of CentOS is a minimum install. You can optionally select a different set of software now.

☐ Desktop  
☐ Minimal Desktop  
☐ Minimal  
☒ Basic Server  
☐ Database Server  
☐ Web Server  
☐ Virtual Host  
☐ Software Development Workstation

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

☒ CentOS

 Add additional software repositories

 Modify repository

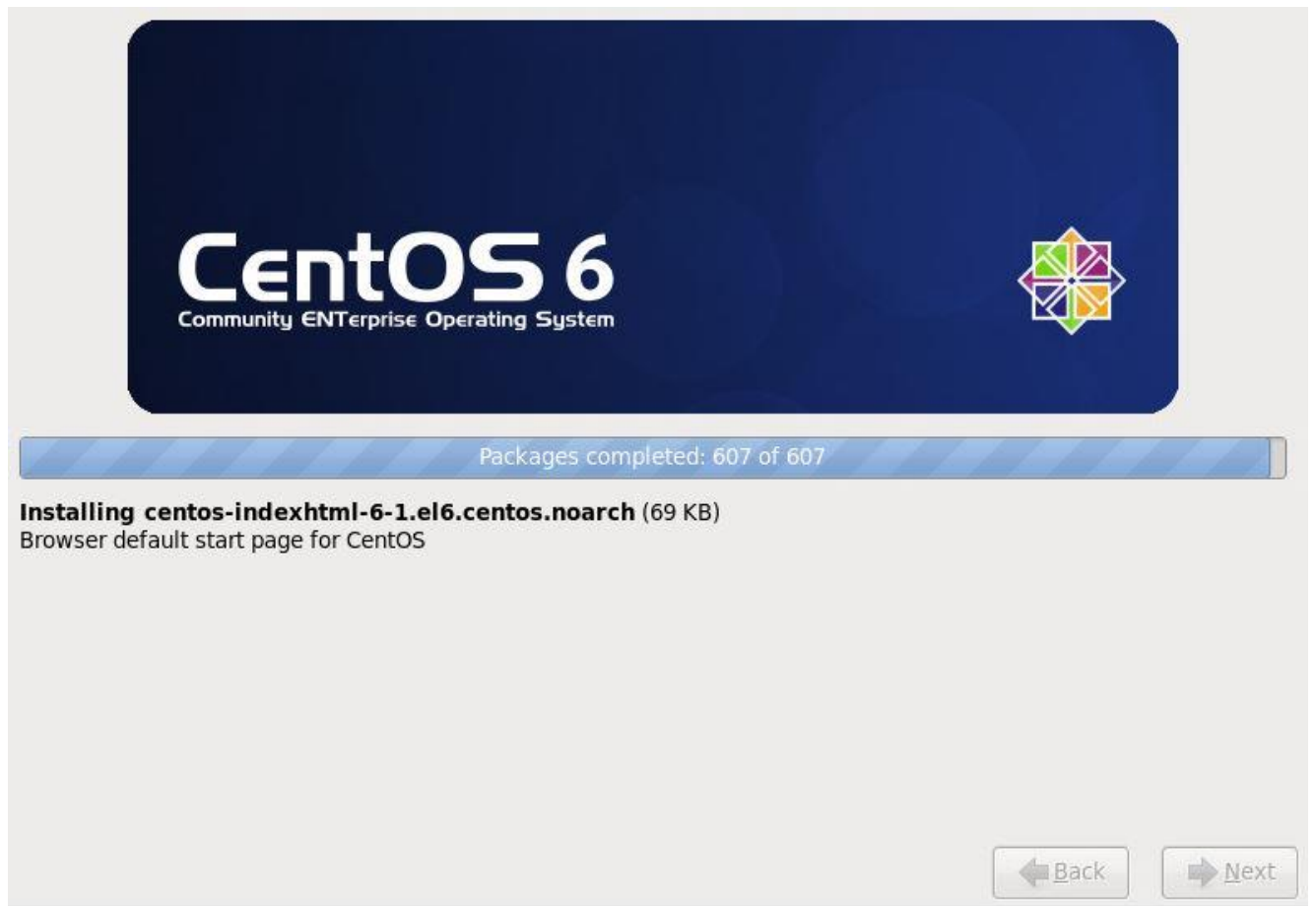
You can further customize the software selection now, or after install via the software management application.

☒ Customize later    ☐ Customize now

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14. The installation will start now.



15. Click restart once finished.



Once done, it will also ask you to create a local user account. Create a local user named Hadoop. We are going to have lot of fun! That's it so far.