



SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY

## **Enterprise Standards and Best Practices for IT Infrastructure**

**4<sup>th</sup> Year 2<sup>nd</sup> Semester 2014**

### **Lab Report**

### **Baremetal Virtual machine Installation**

Name: Pinnawalage H.U

SLIIT ID: IT13055486

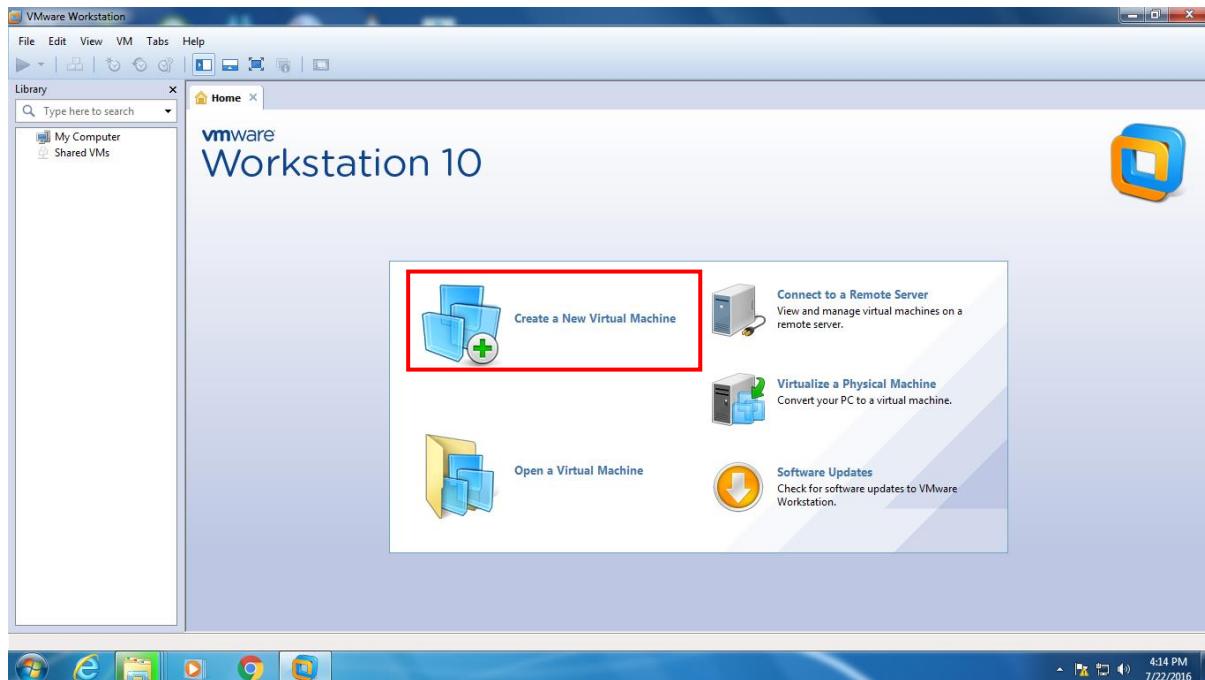
Date of Submission: 15/08/2016

# VMware ESXi 5.5.0 Installation

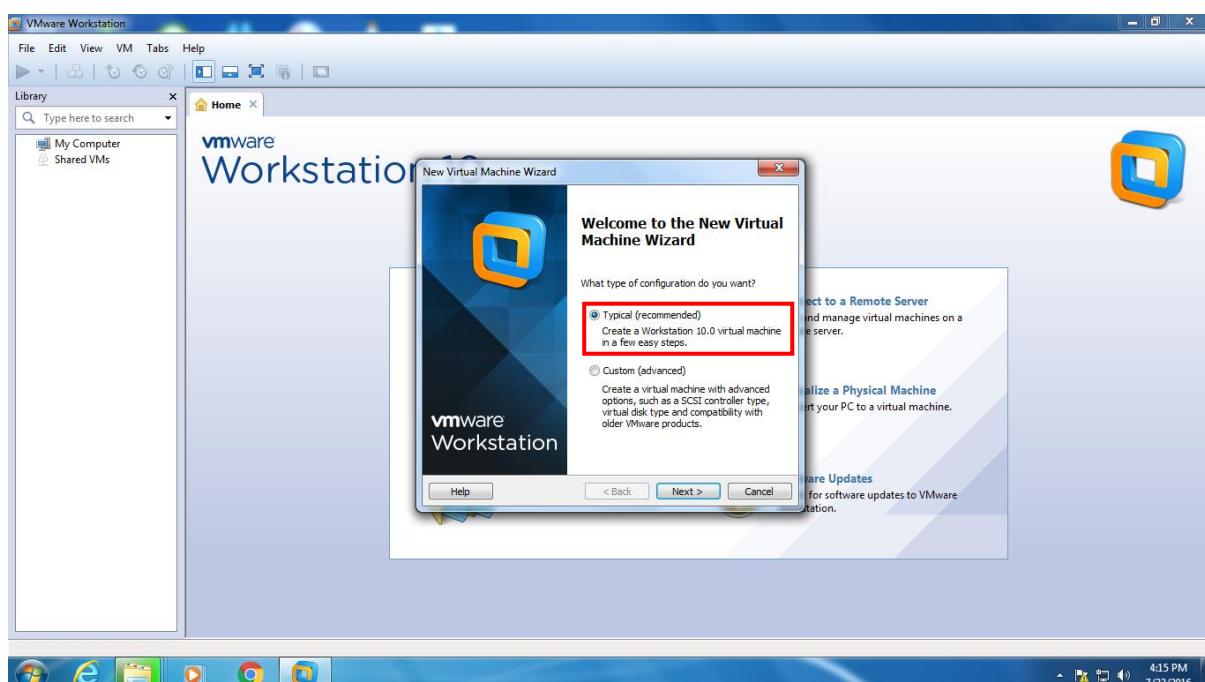
VMware ESXi 5.5.0 is the bare-metal hypervisor. But ESXi is installing on VMware Workstation 10 due to shortage of hardware.

Step 1: First setup the virtual machine.

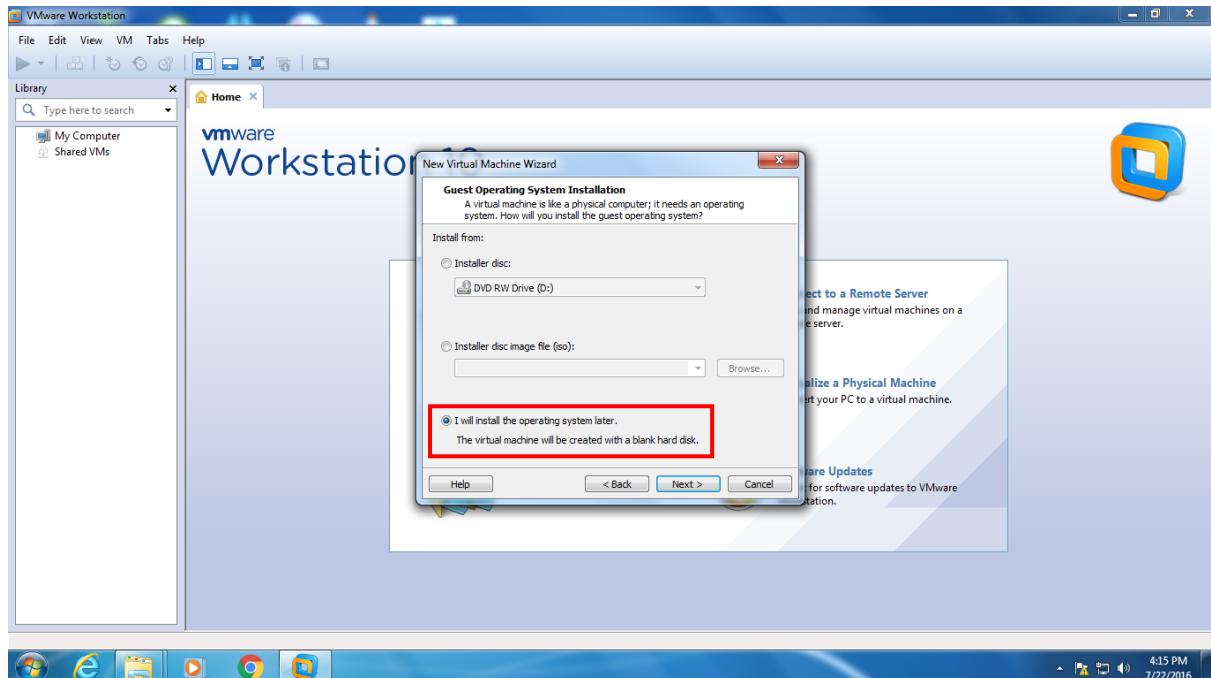
Open VMware Workstation and select **Create a New Virtual Machine**.



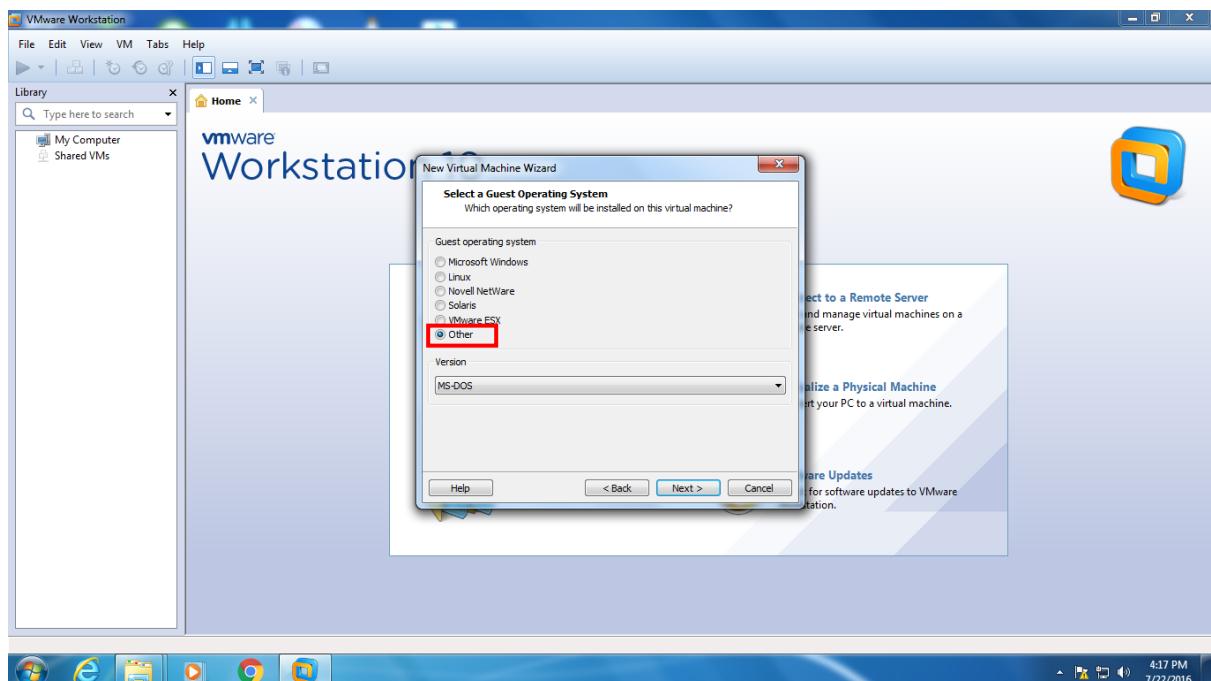
Step 2: Select **Typical** as the configuration type.



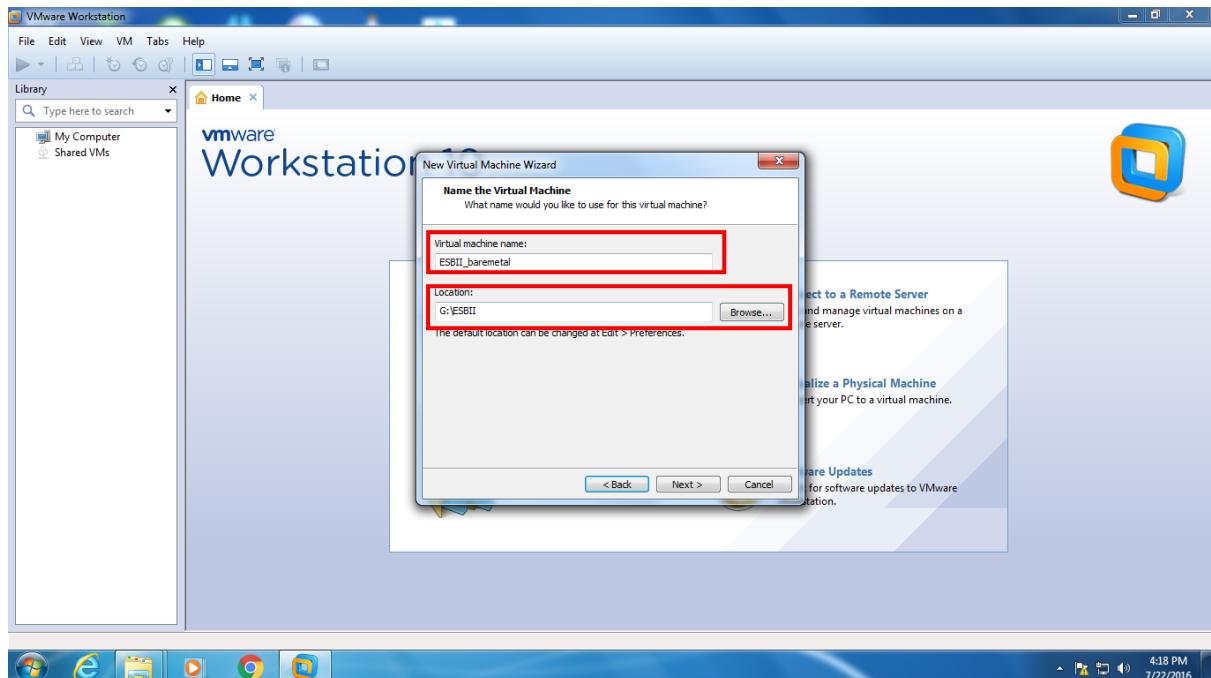
Step 3: Select **I will install the operating system later** if you wish to add the operating system later or select the ISO file. Here the operating system will be added later.



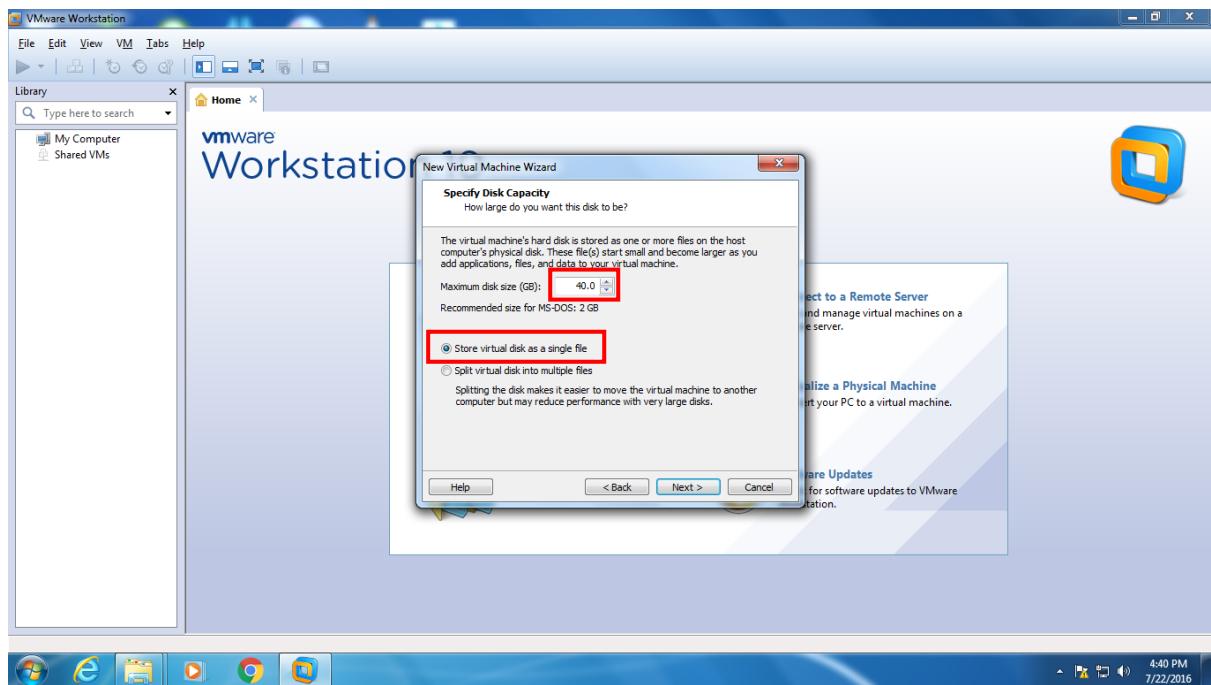
Step 4: Select **Other** as the Guest Operating System.



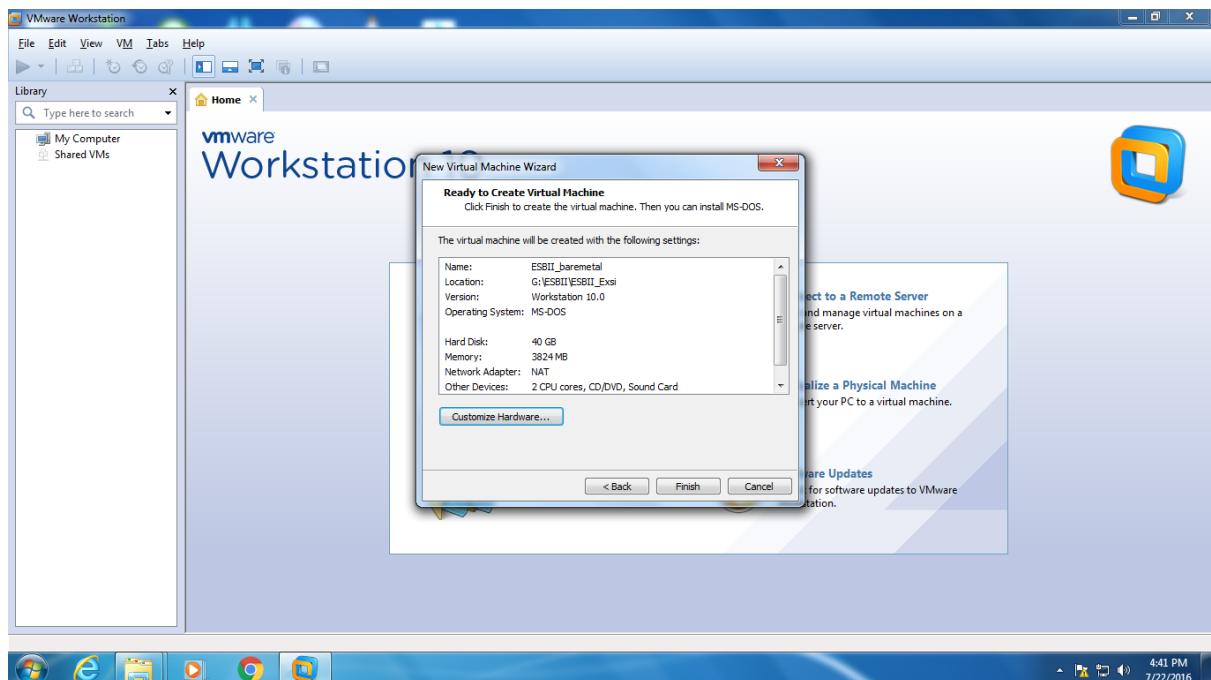
Step 5: Name the virtual machine and give the location to create the machine.



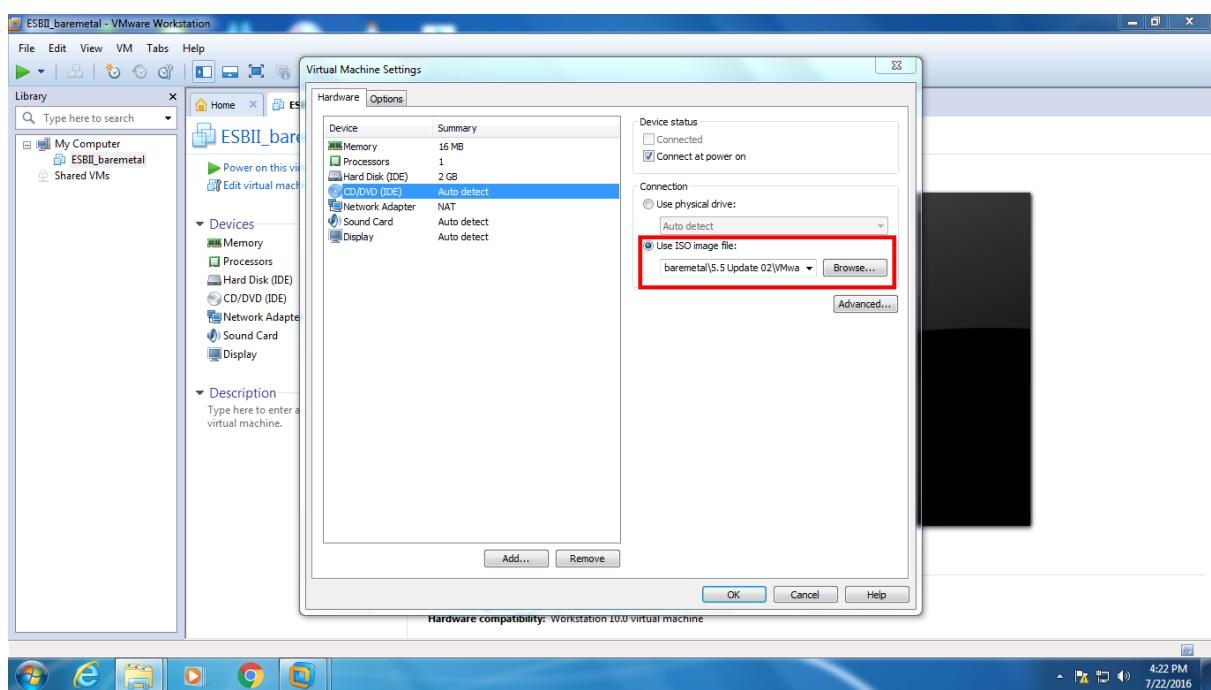
Step 6: Specify the disk capacity (**40 GB**) and select **Store virtual disk as a single file**.



Step 7: Select **Finish** to create the virtual machine.

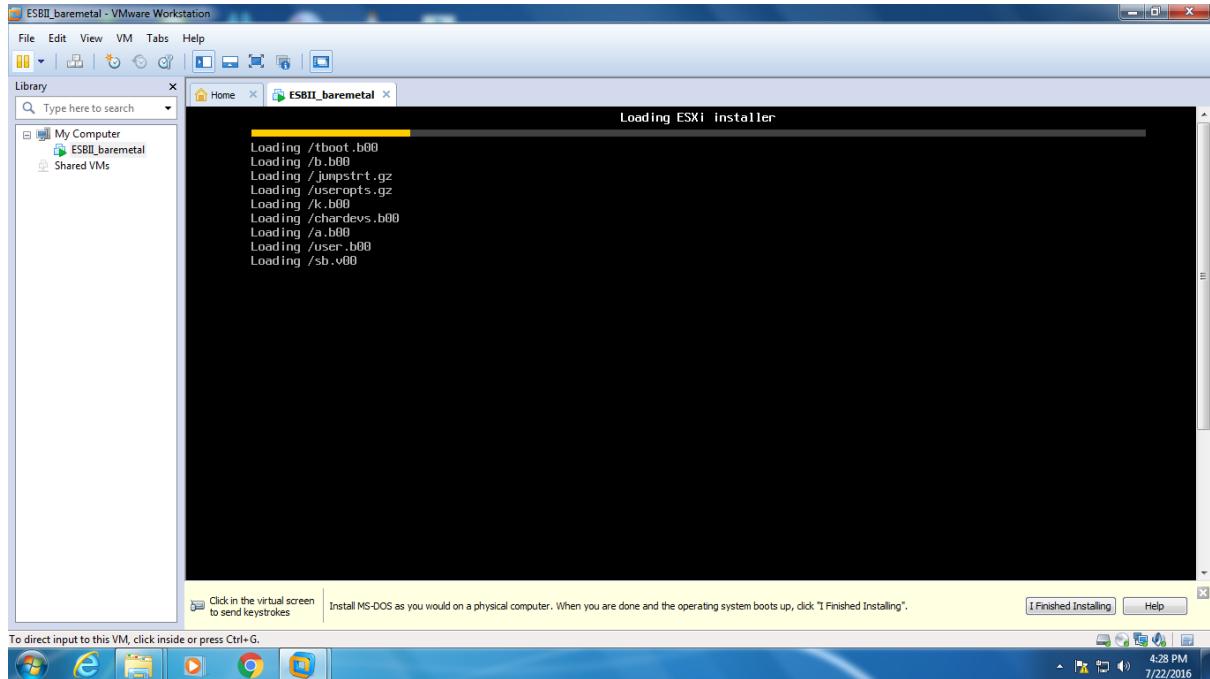


Step 8: Go to the Virtual Machine Settings (VM->Settings). Change the Memory as 4GB, and browse and select the ISO file of VMware ESXi 5.5.0.

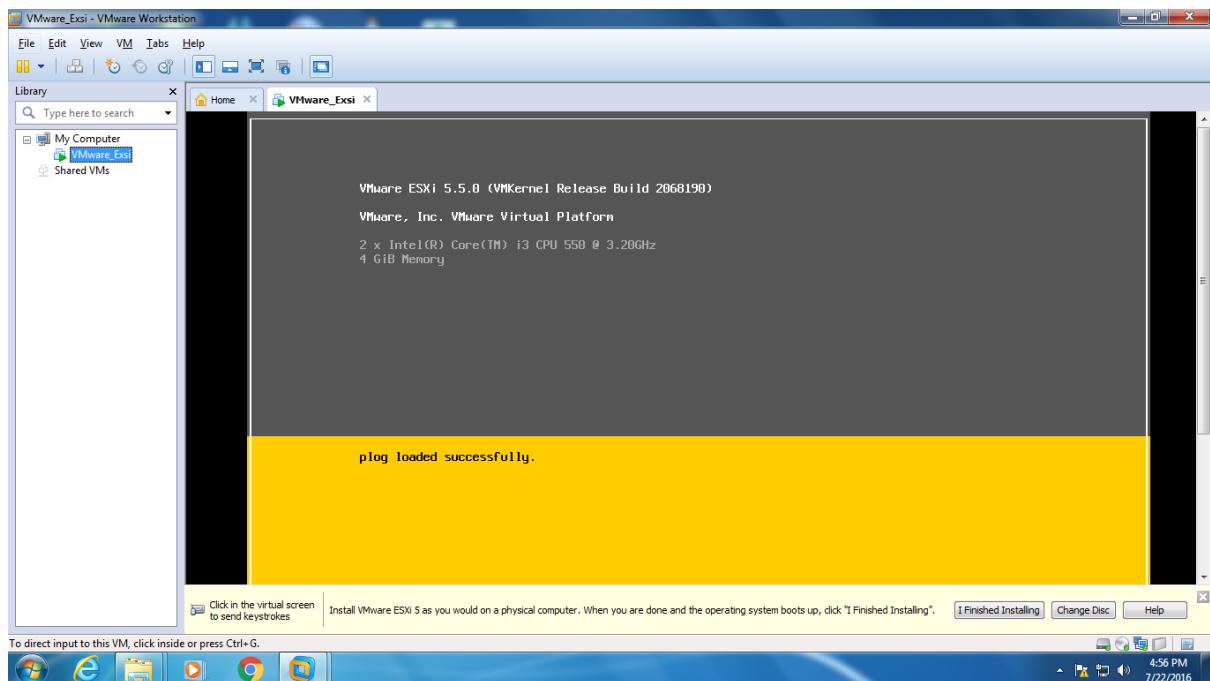


Step 9: Power on the virtual machine and select the ESXi-5.5.0-Standard-Installer. Loading

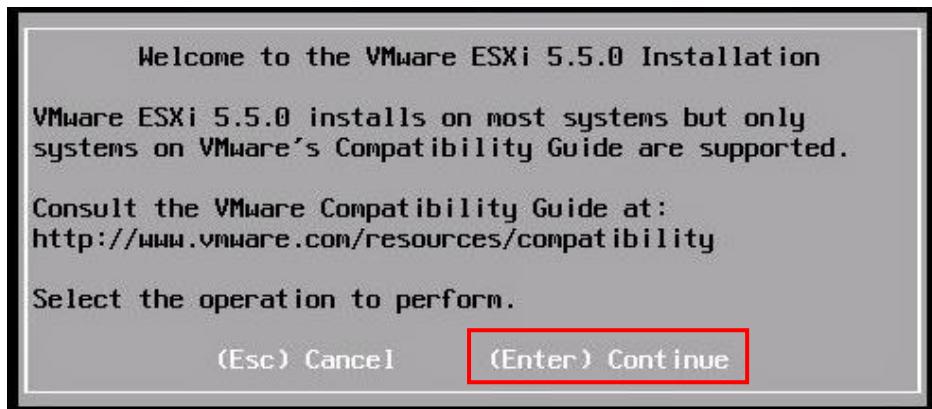
Then ESXi installer will start.



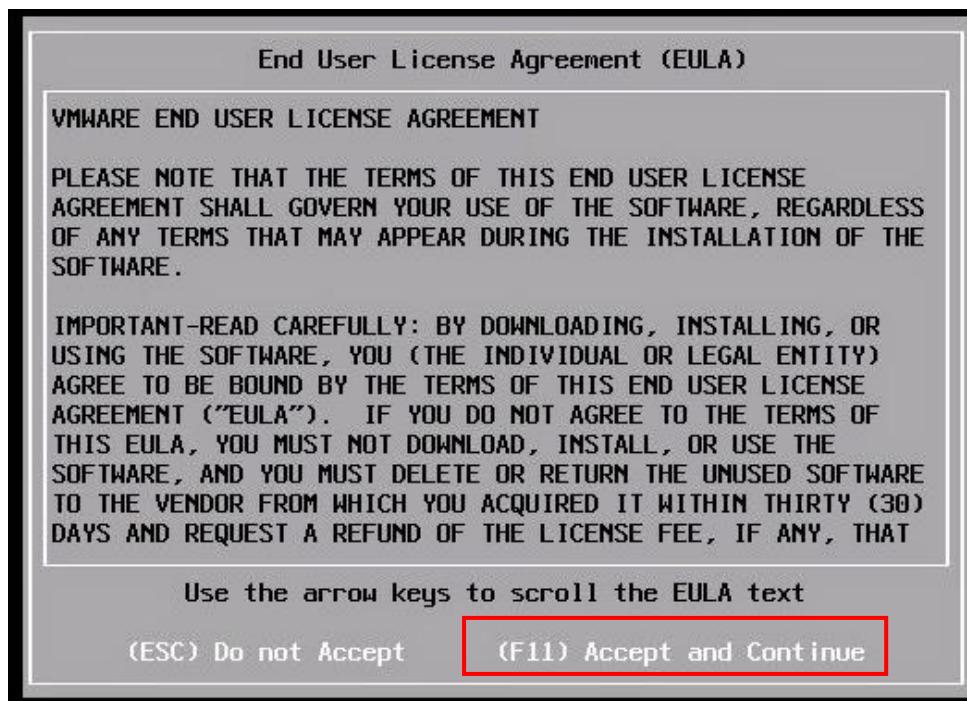
Step 10: Then the installer detects all the hardware and loads the drivers.



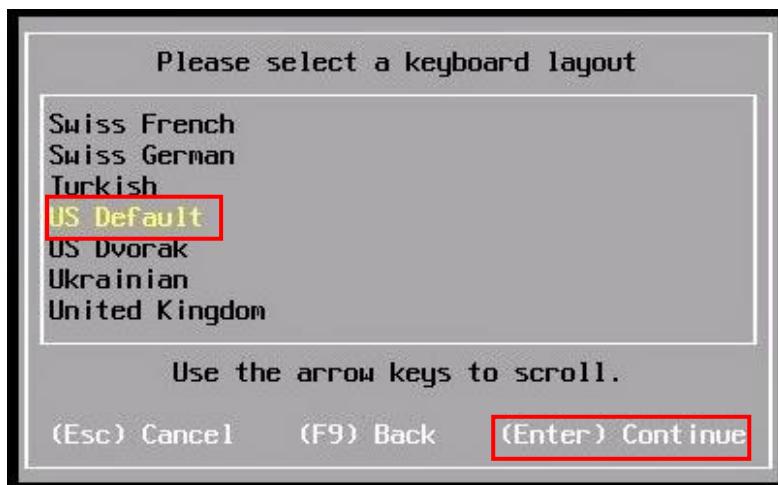
Step 11: Press (**Enter**) to start installation.



Step 12: Press (**F11**) to Accept License Agreement.



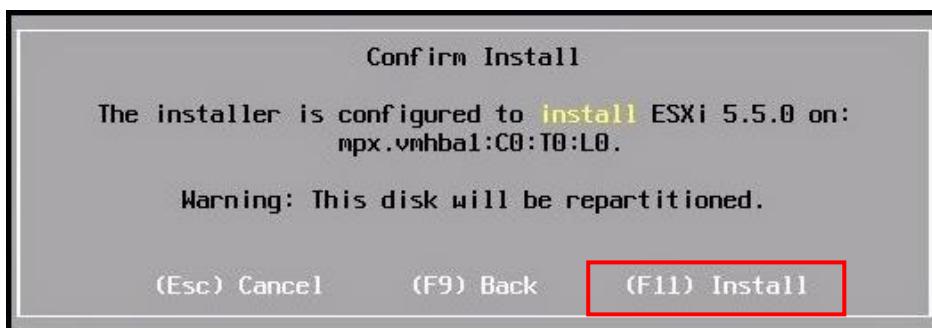
Step 13: Select the keyboard layout and press **Enter**.



Step 14: Enter a secure password for the "root" account and Press **Enter**.



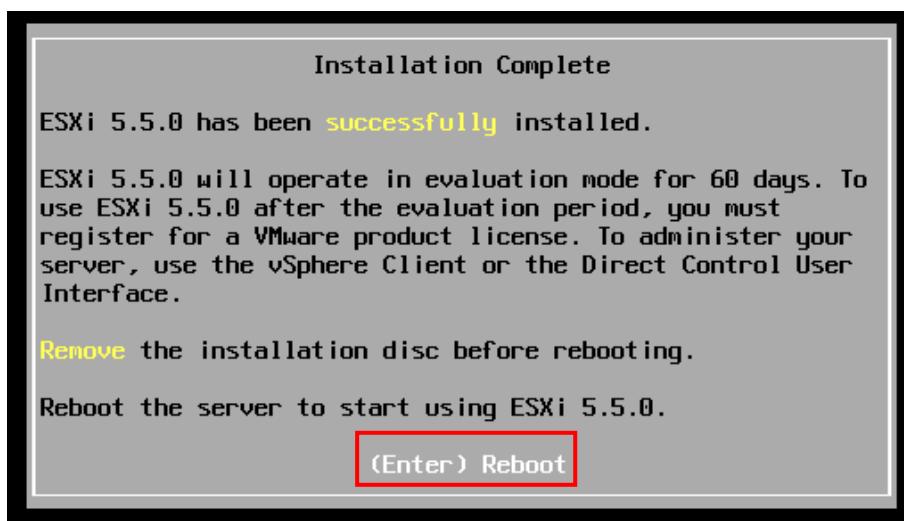
Step 15: Press **(F11)** to confirm installation.



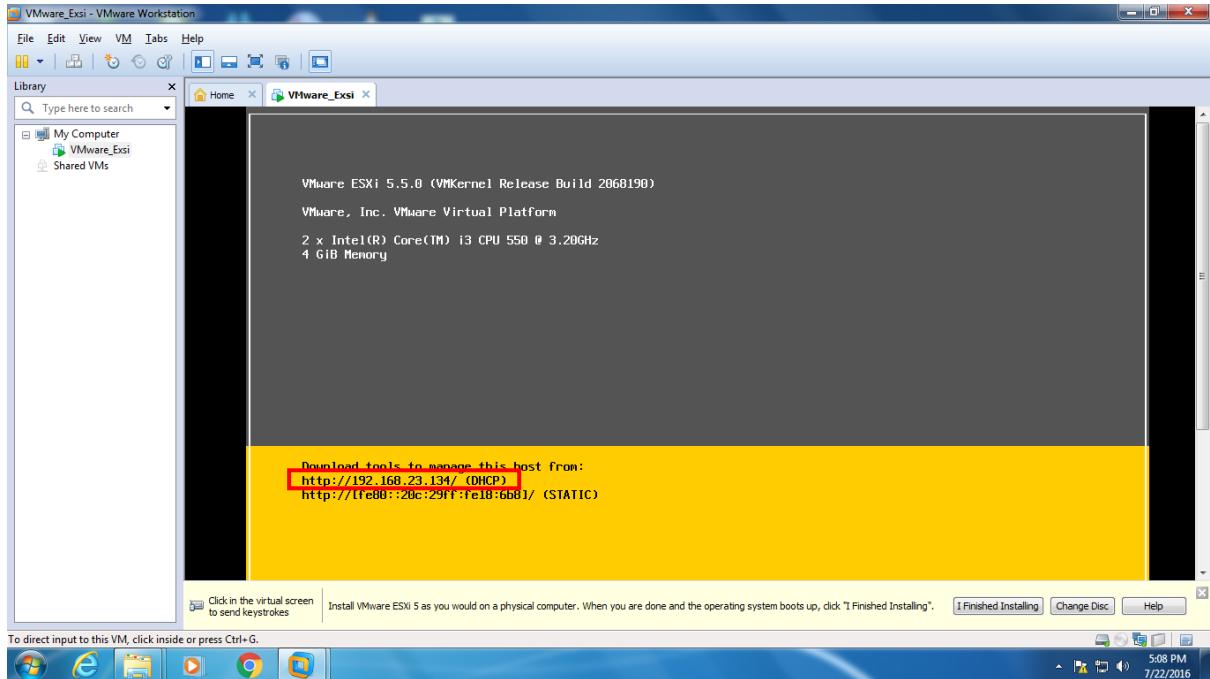
Step 16: Installation will take several minutes to complete.



Step 17: Once the installation is complete press **Enter** to reboot the ESXi server.

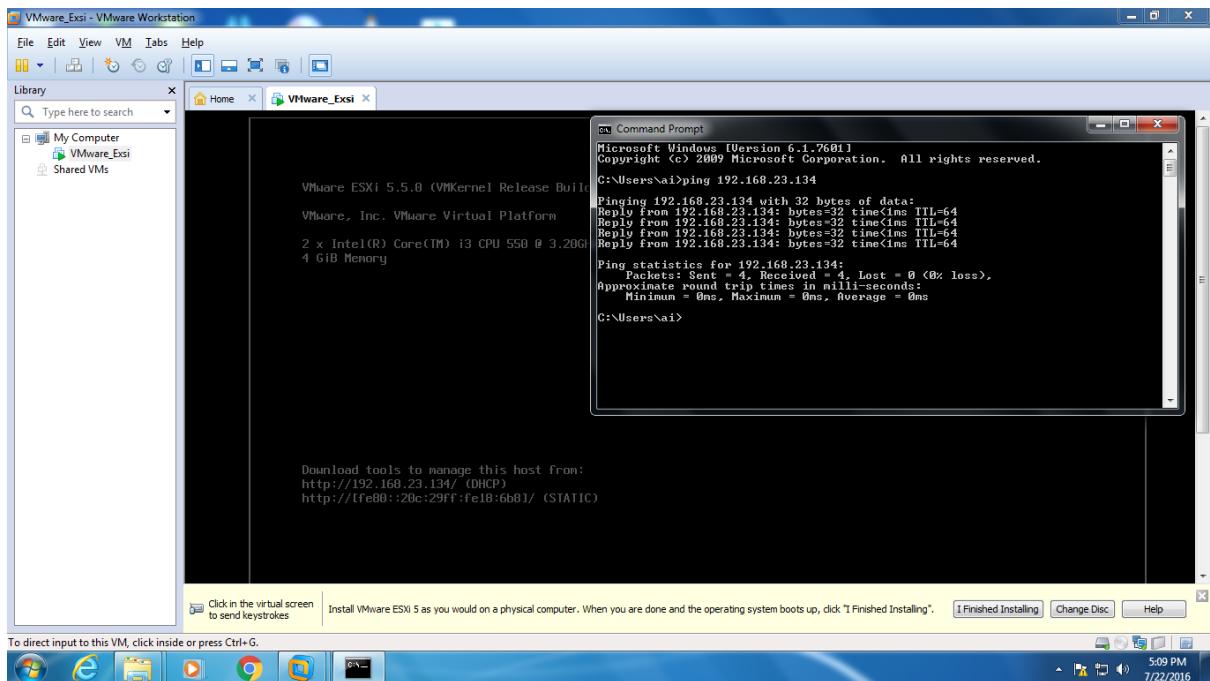


Step 18: Once the ESXi server has booted, it will receive a DHCP lease (IP address) that is used to manage with the vSphere client.

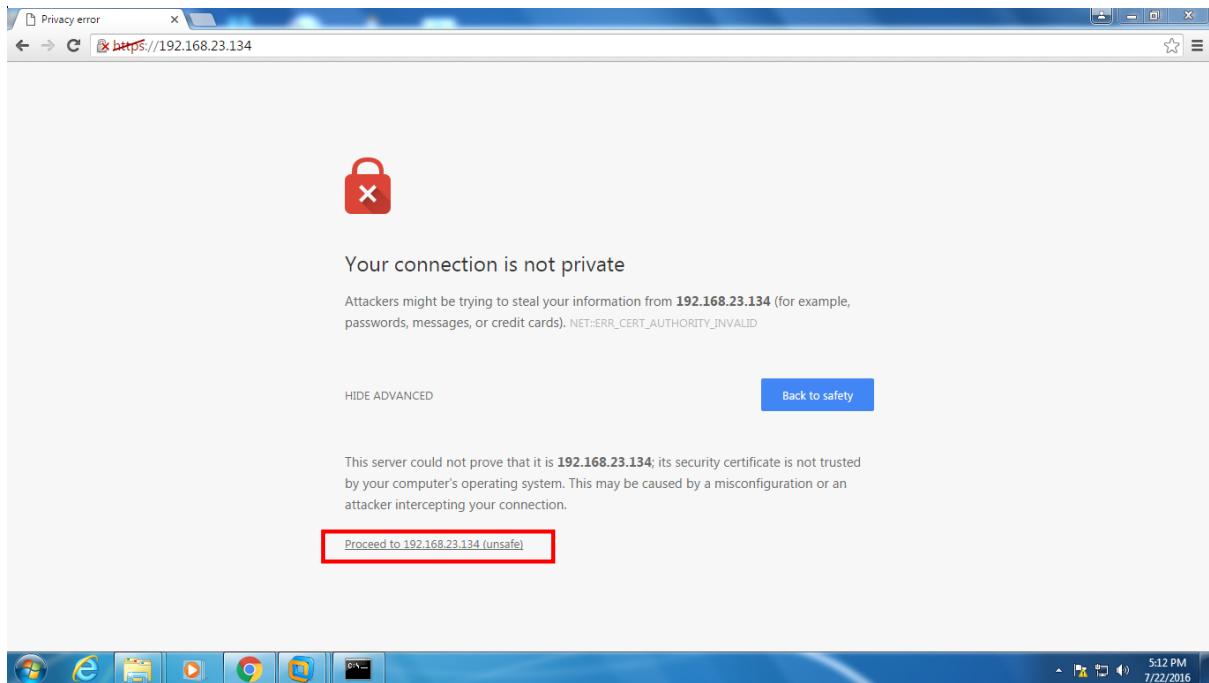


Step 19: Ping to the IP address and check the ping statistics (sent-4, received-4).

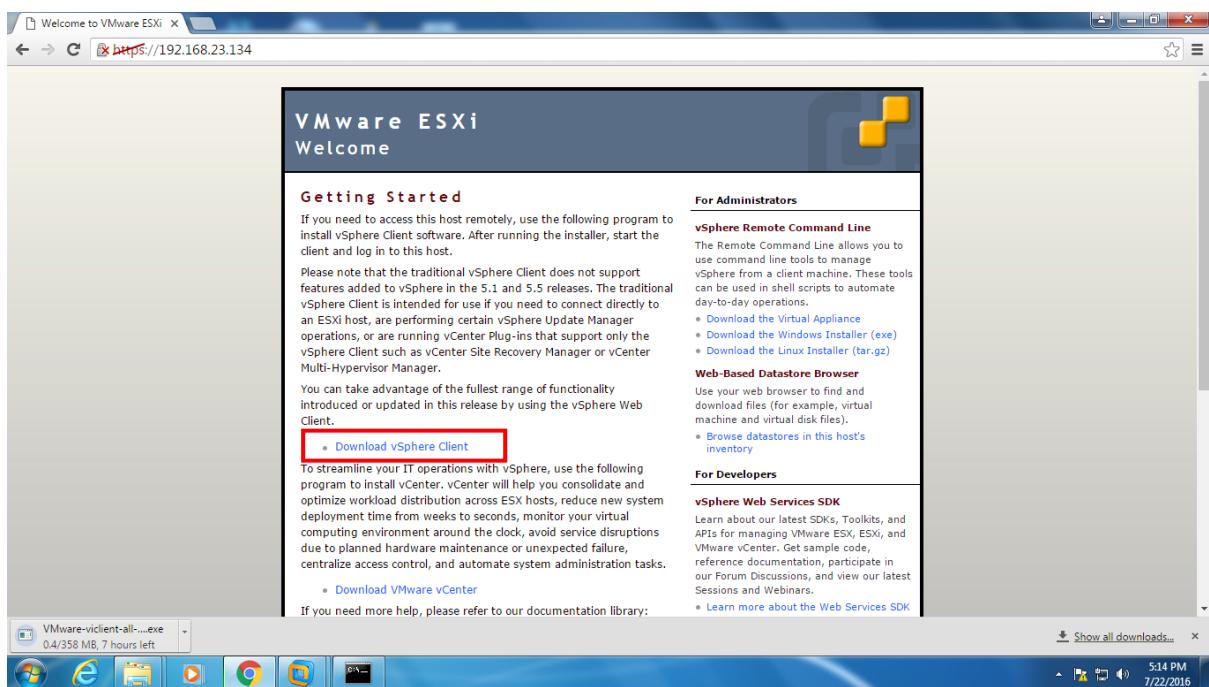
ping 192.168.23.134



Step 20: Open the browser and go to the given DHCP lease. It will give a screen saying **Your connection is not private**. Click **Proceed to 192.168.23.134 (unsafe)** to proceed.

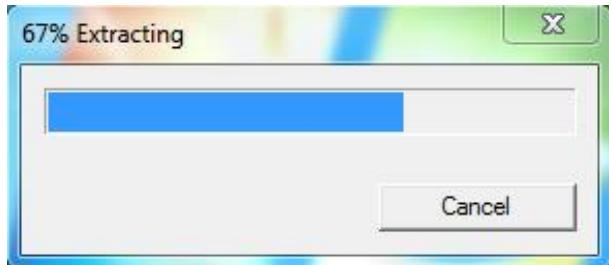


Step 21: Then VMware ESXi Welcome screen will appear. Download the **vSphere Client**.

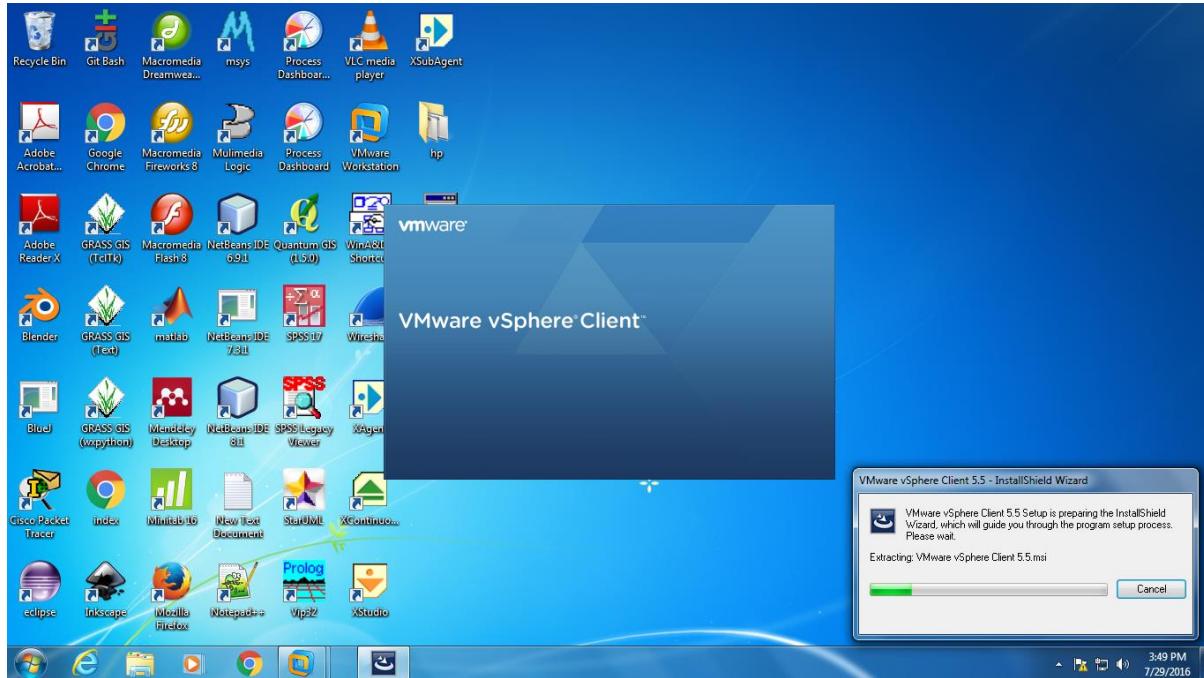
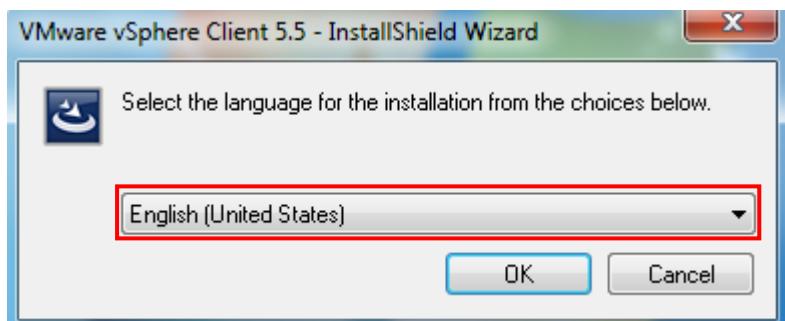


# VMware vSphere Client 5.5 Installation

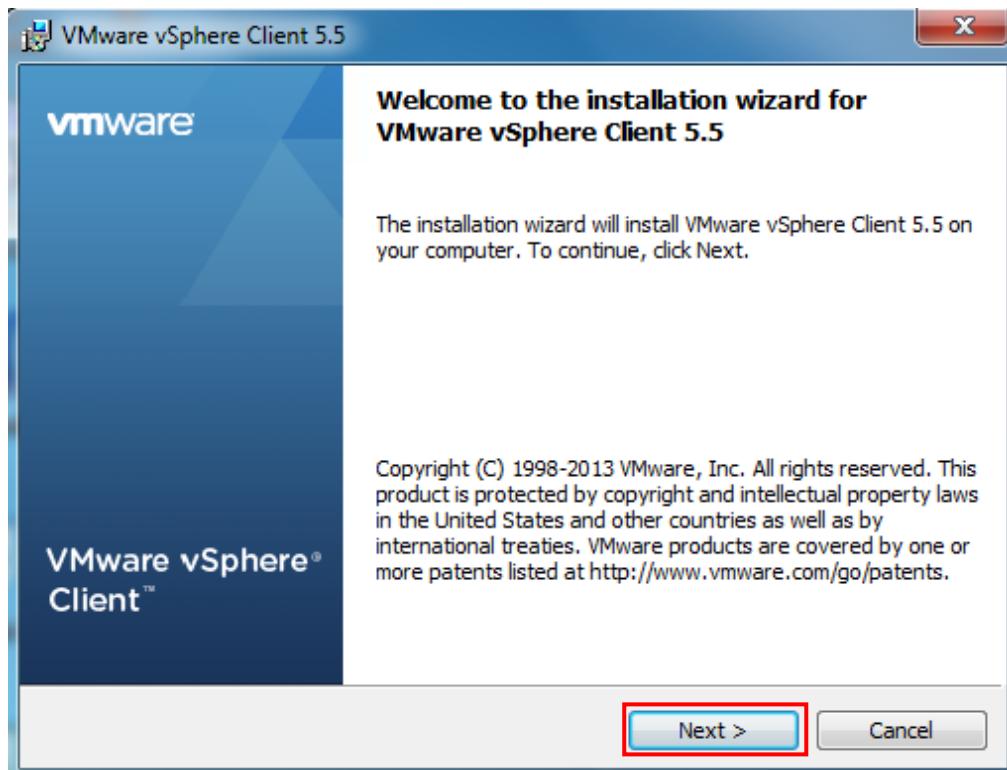
Step 1: First extract the downloaded vSphere Client installer file.



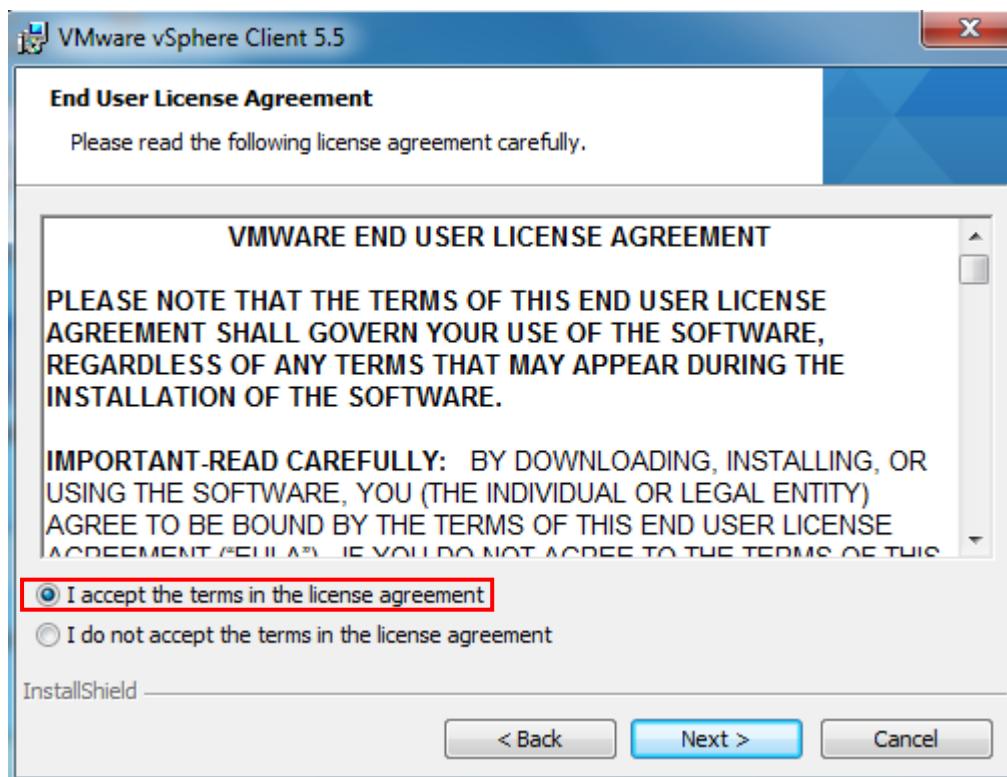
Step 2: Select the language **English (United States)** click next.



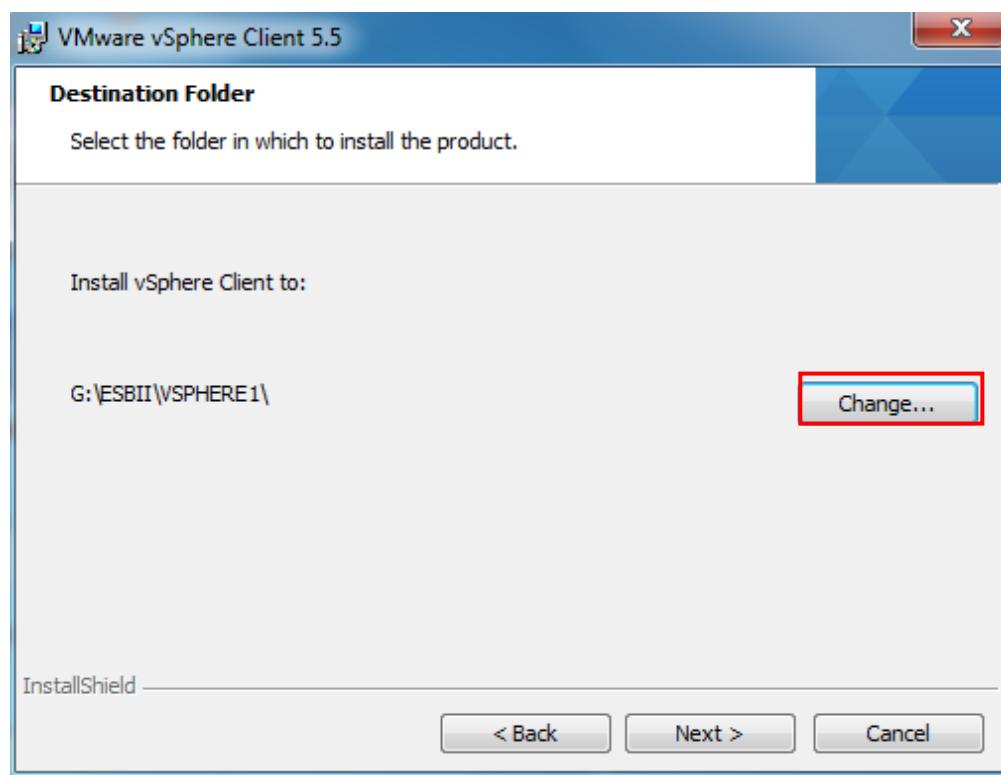
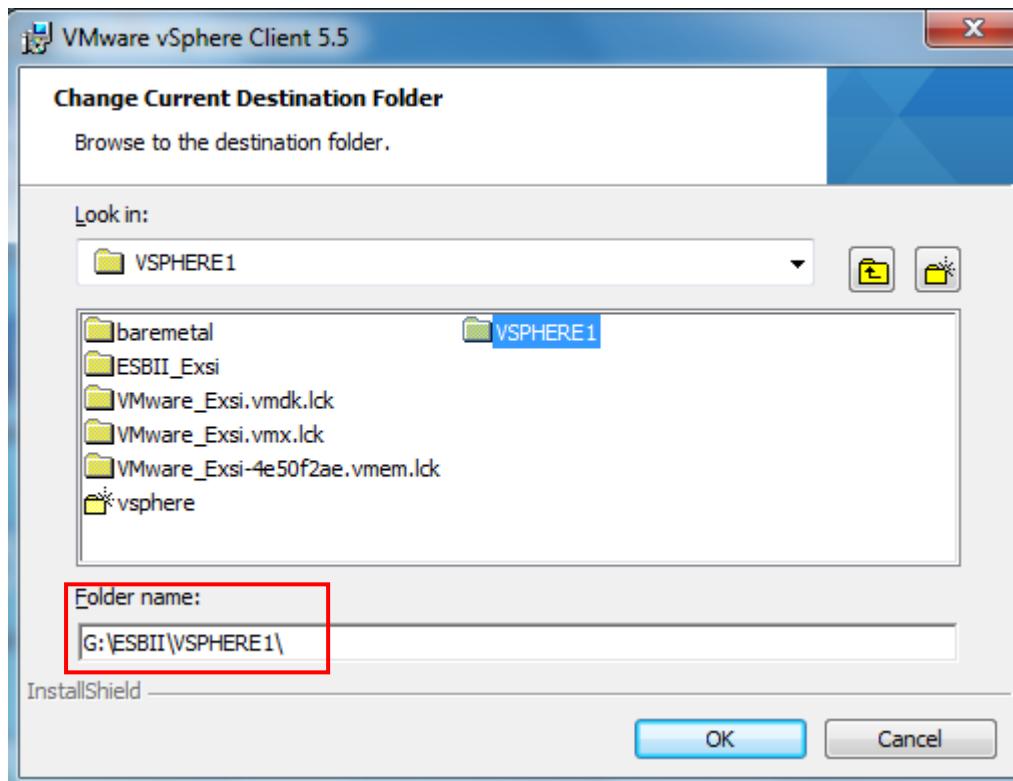
Step 3: Click **Next** to continue.



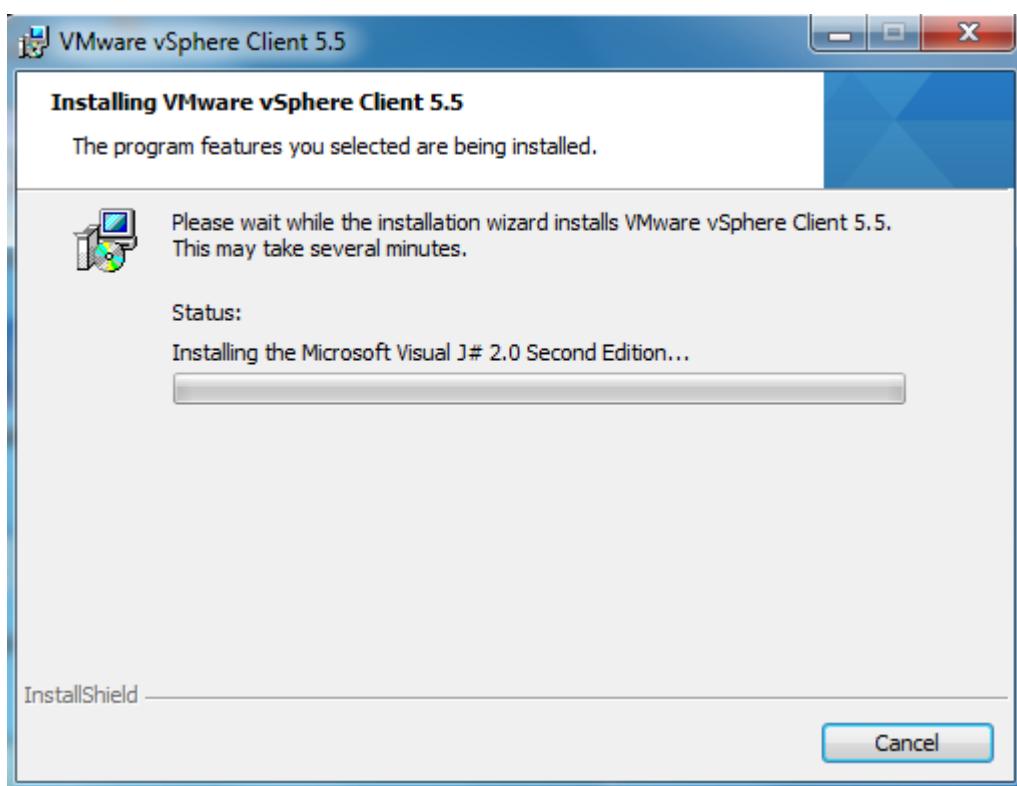
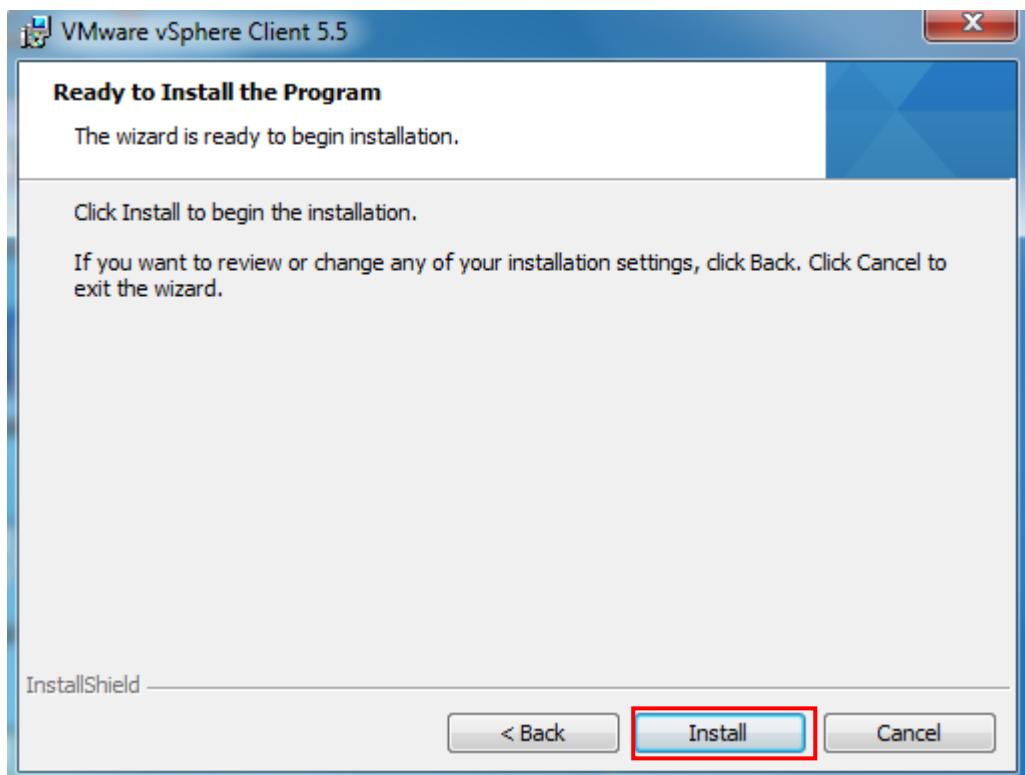
Step 4: Read and accept the license agreement.

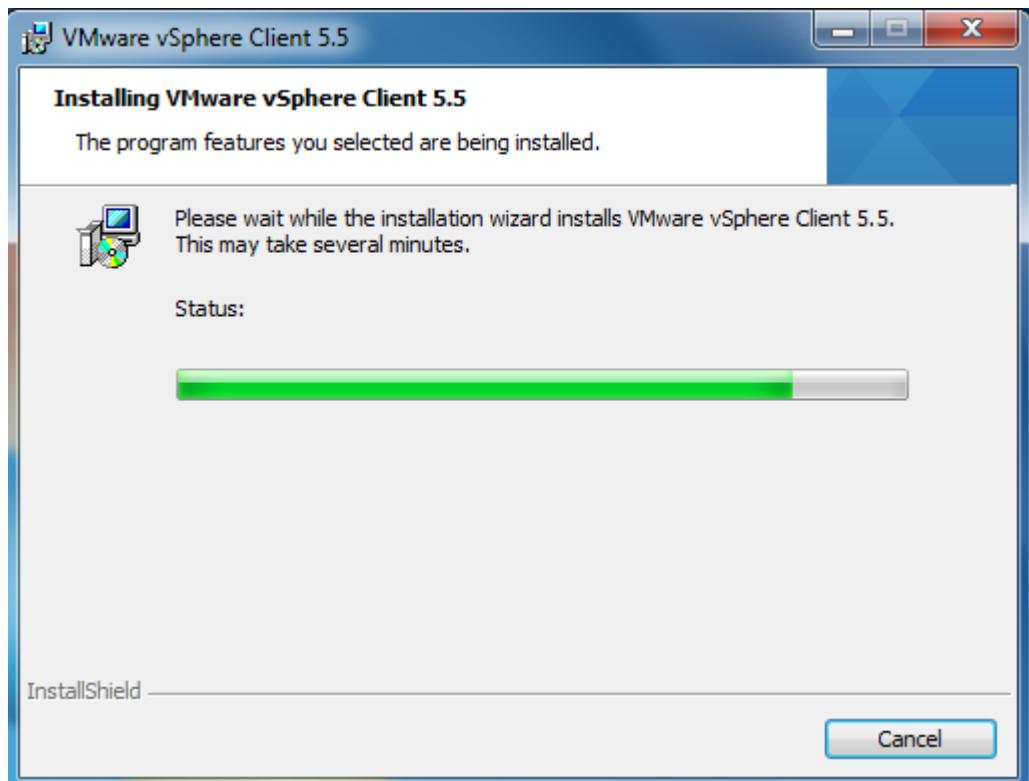


Step 5: Set the install location by clicking **Change** and click **OK** to confirm.

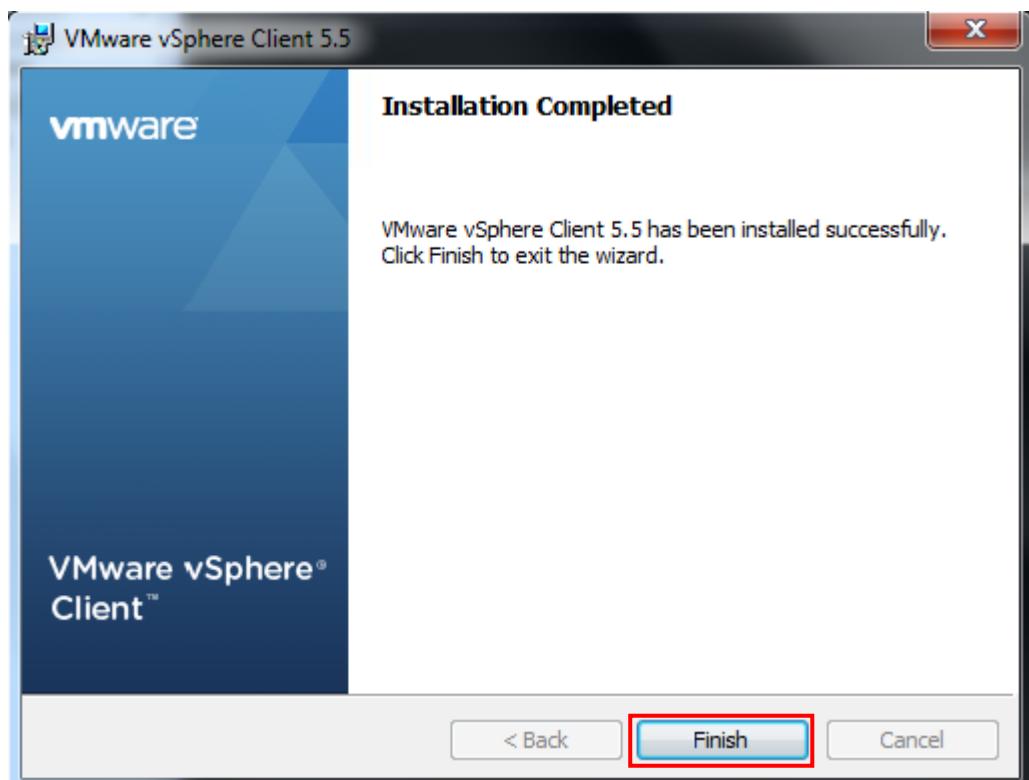


Step 6: Click **Install**.



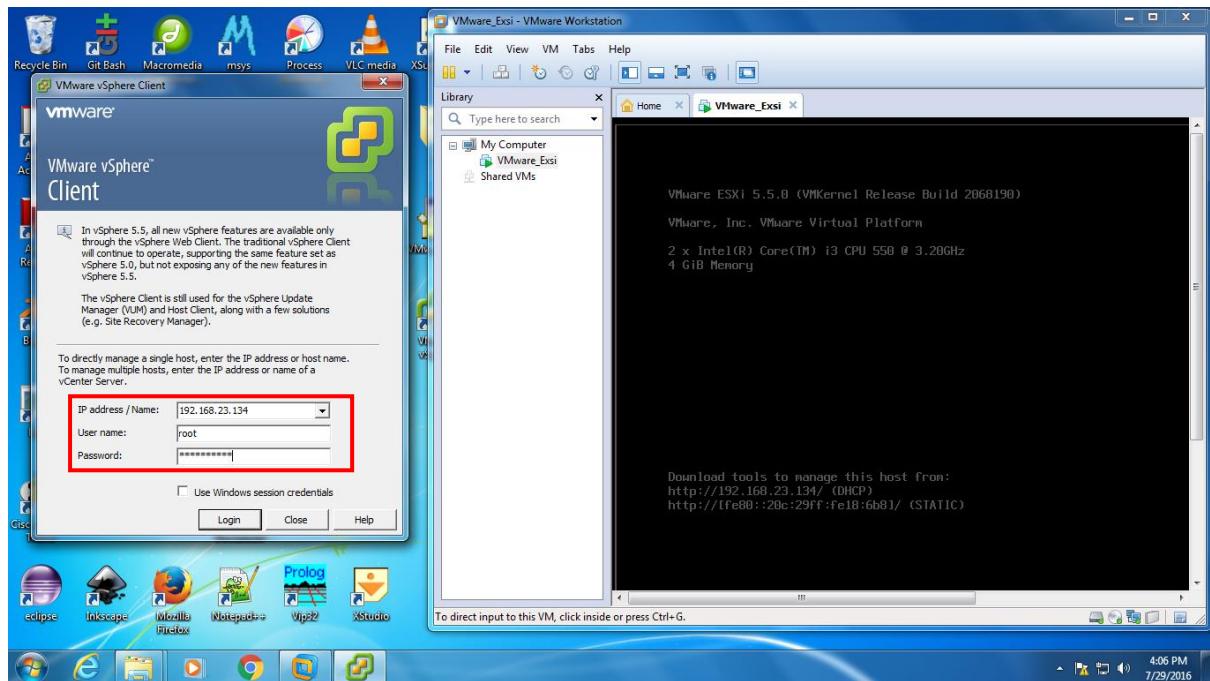


Step 7: Installation completed. Click Finish.

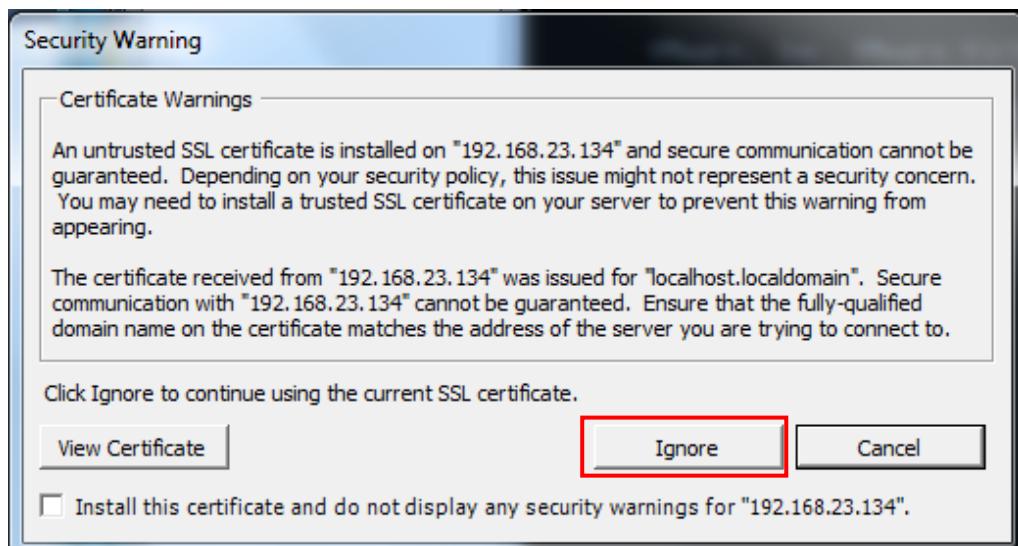


Step 8: Then open the VMware vSphere Client.

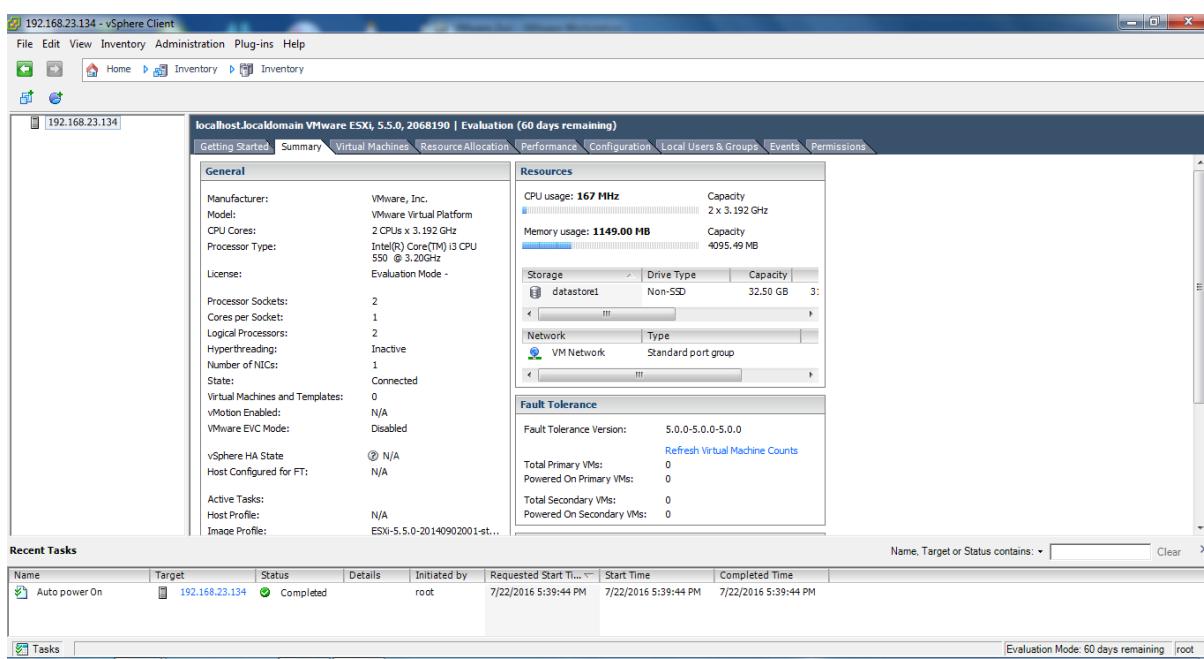
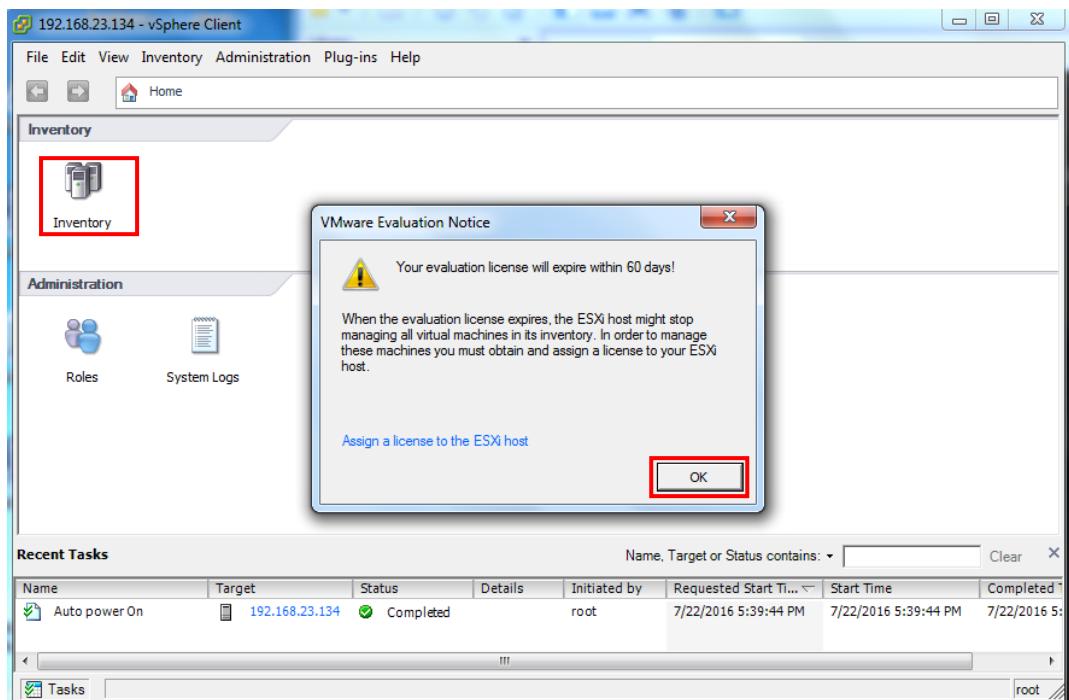
Give the IP address obtained from EXSi, username as **root** and the password entered for the root account as the password.



Step 9: Select **Ignore** to continue.



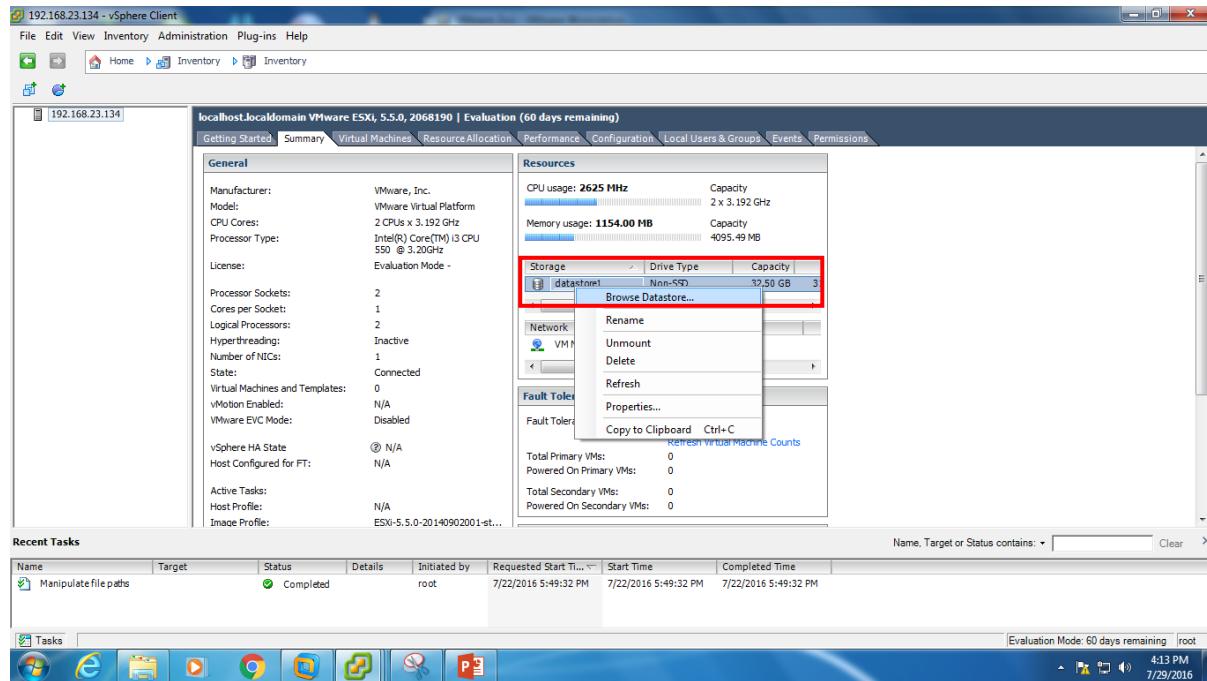
Step 10: Click **OK** to continue. Then select **Inventory**.



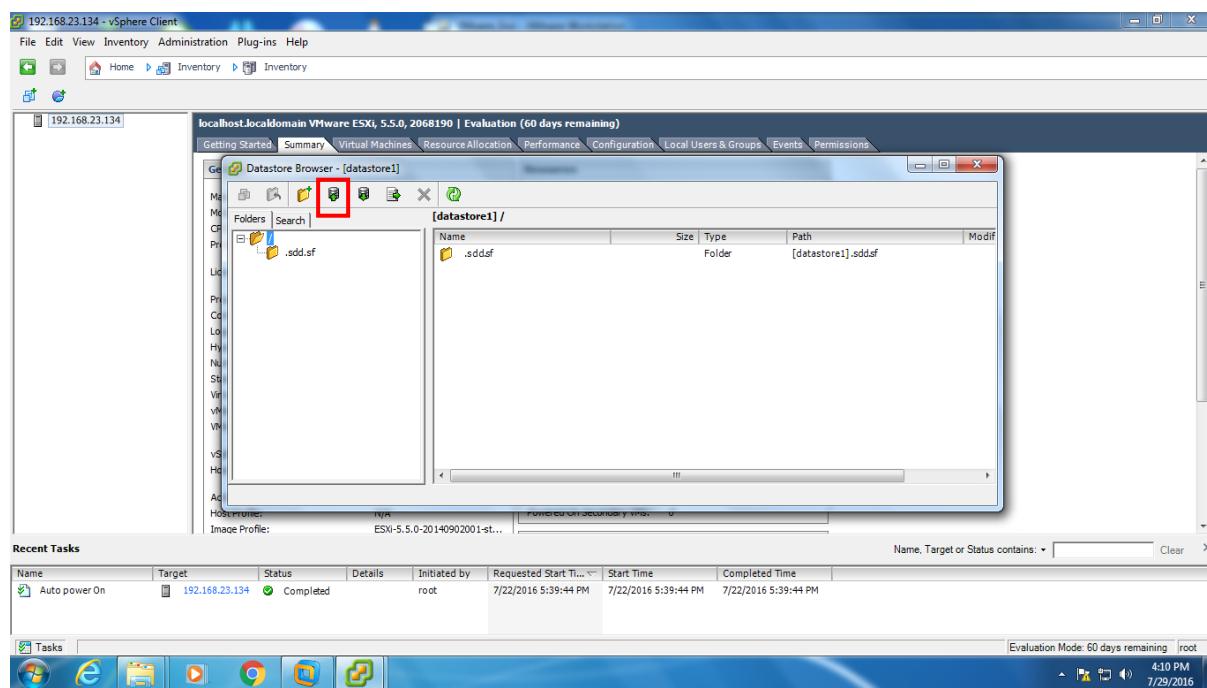
# Kali Linux Installation

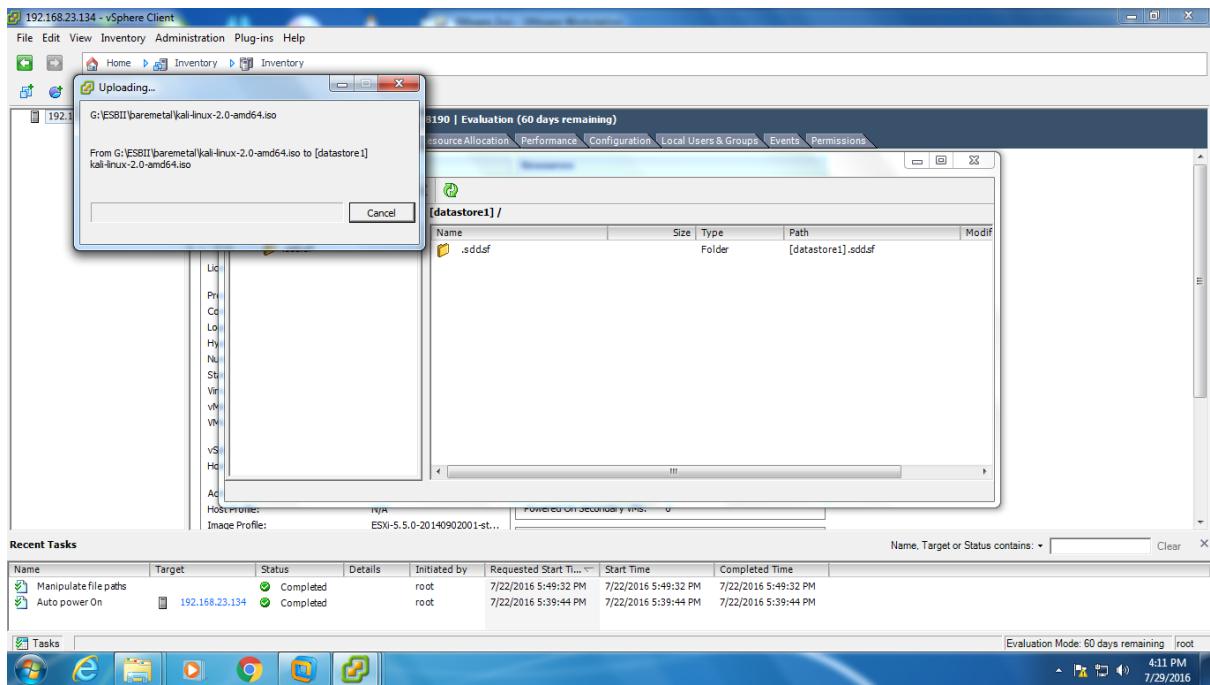
Step 1: Then install the Kali Linux Operating System. For that first it is needed to add the ISO files to the Storage.

**Storage-> datastore->Browse Datastore...**



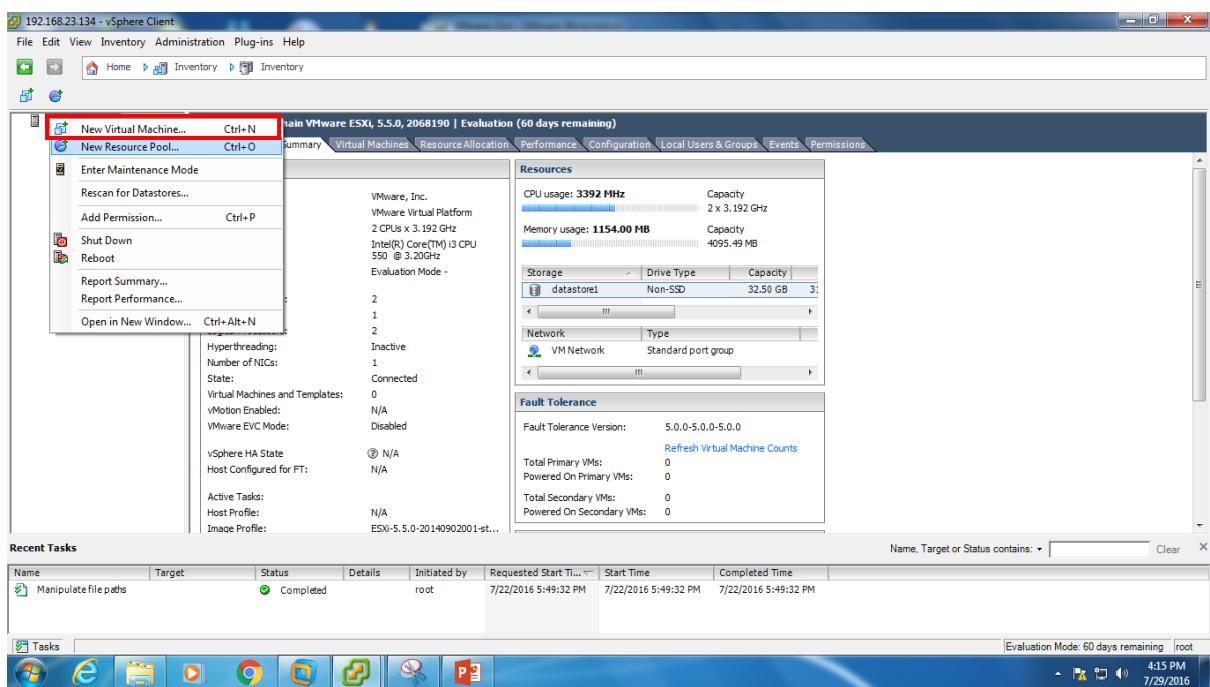
Step 2: Upload the ISO file of the operating system to the datastore.



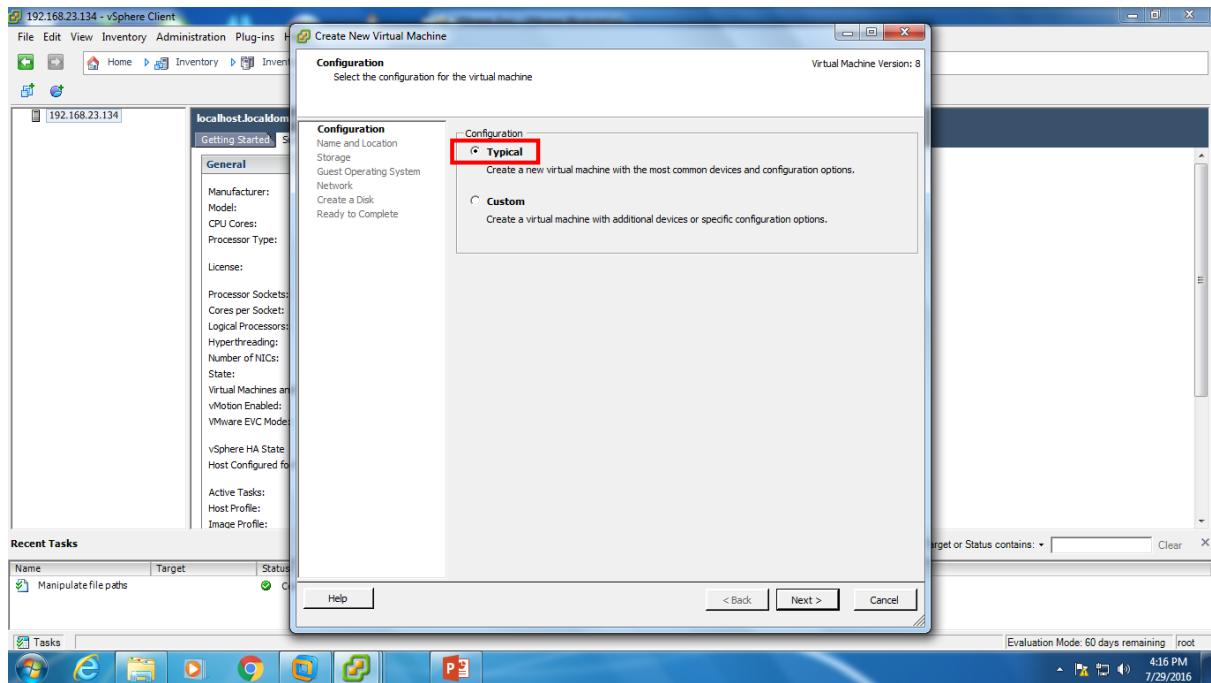


Step 3: Create a new virtual machine after uploading the ISO file of the operating system to the datastore.

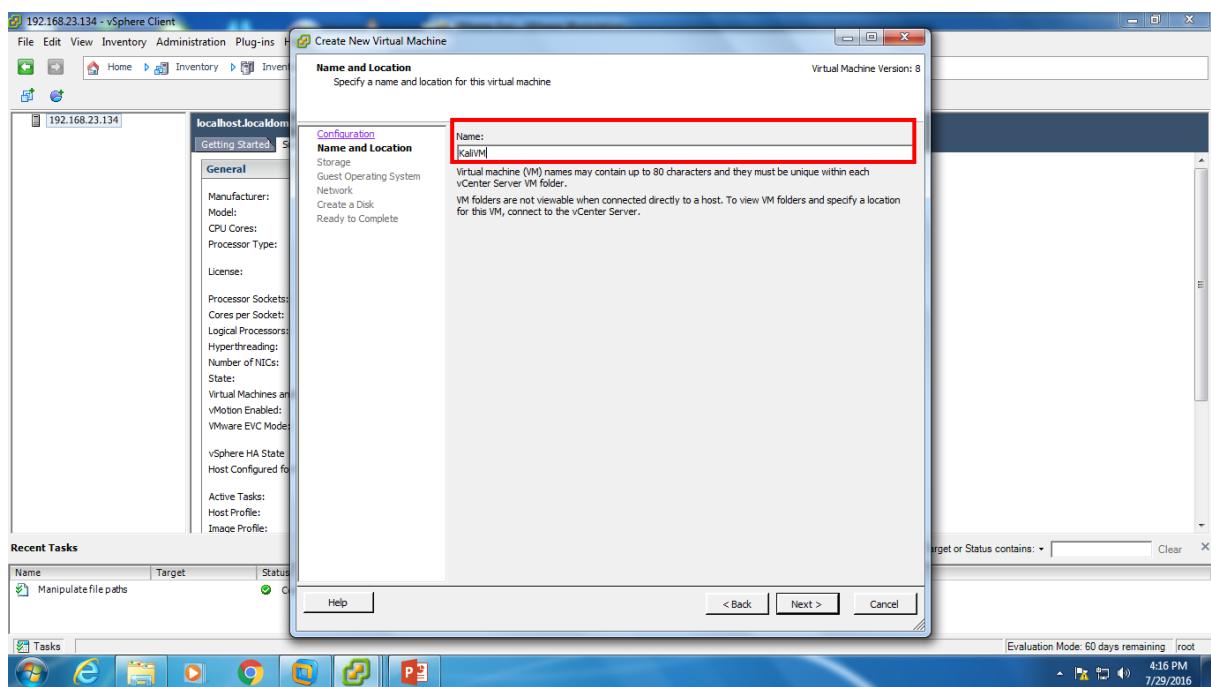
### 192.168.23.134 ->New Virtual Machine



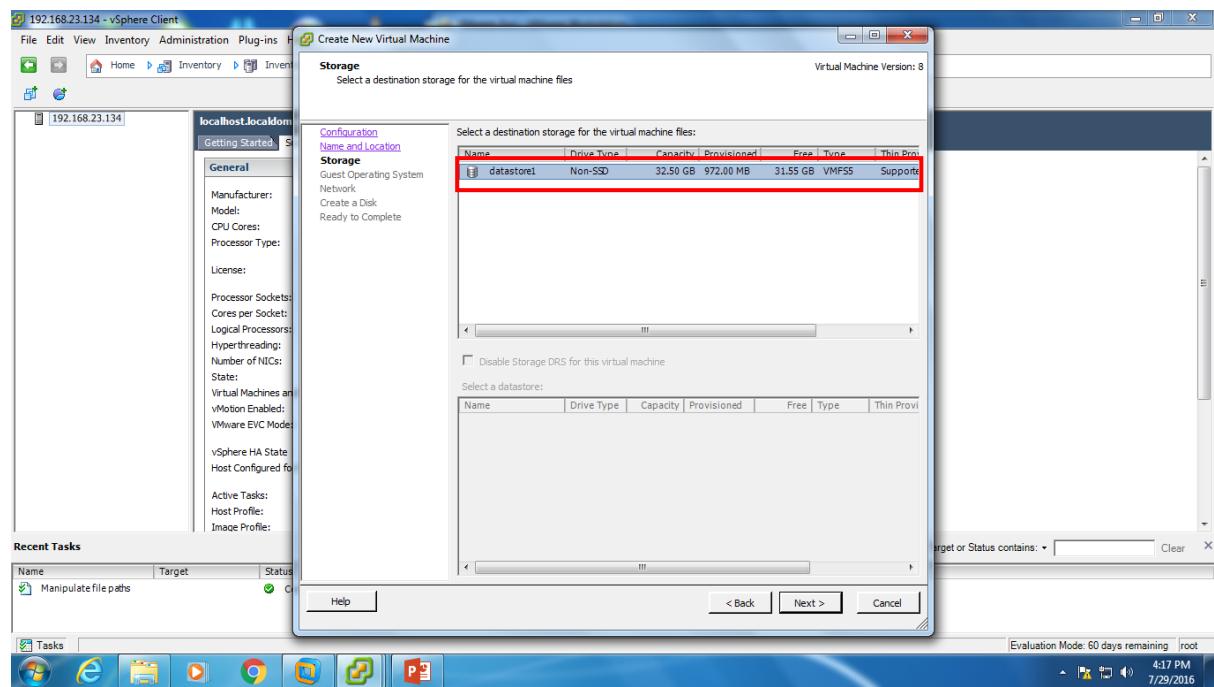
## Step 4: Select **Typical** as configuration type.



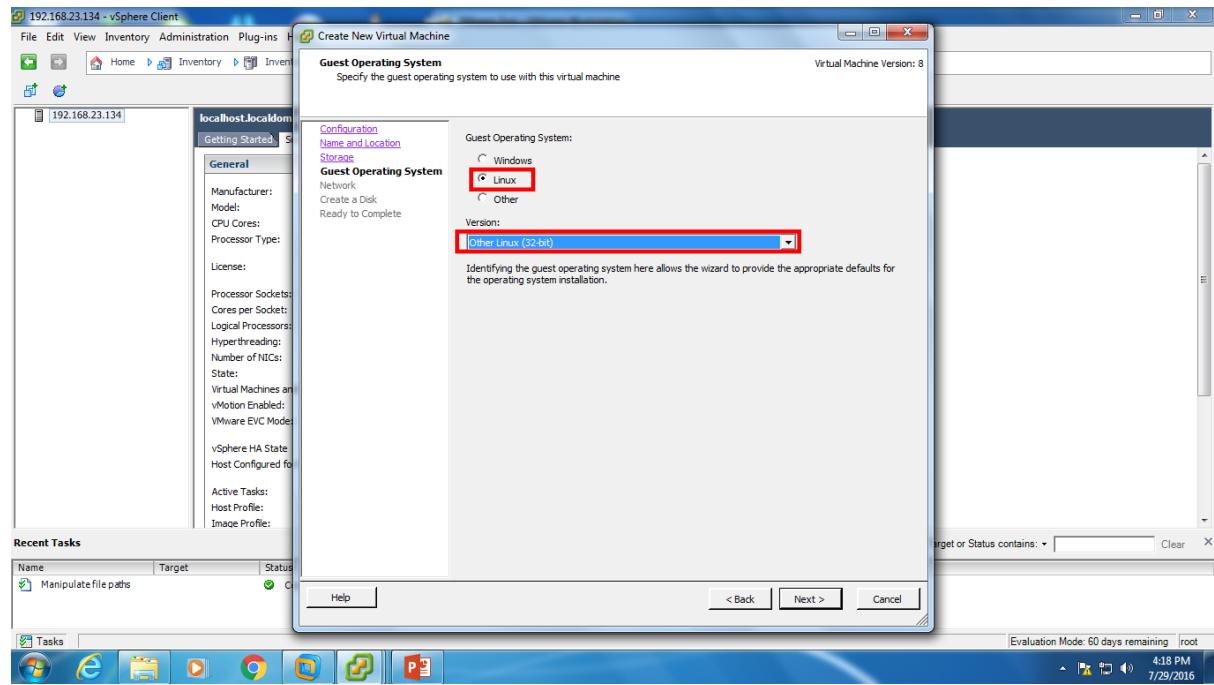
## Step 5: Specify the name of the virtual machine.



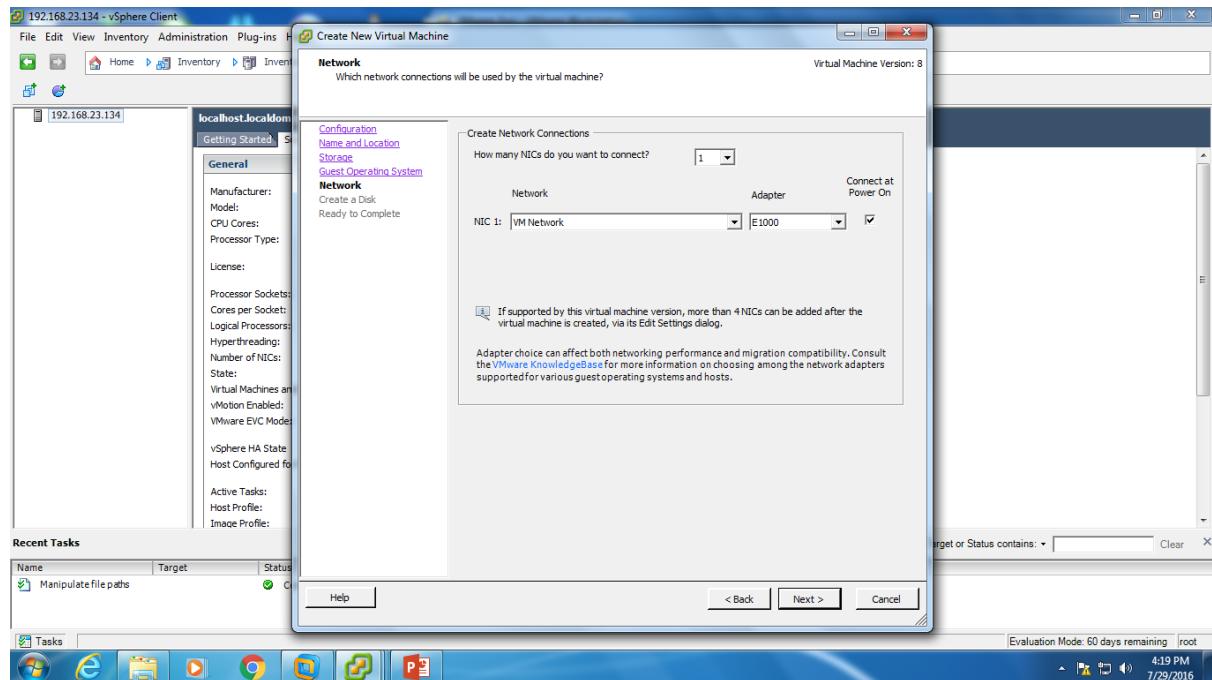
Step 6: Select the destination **datastore** for the virtual machine files.



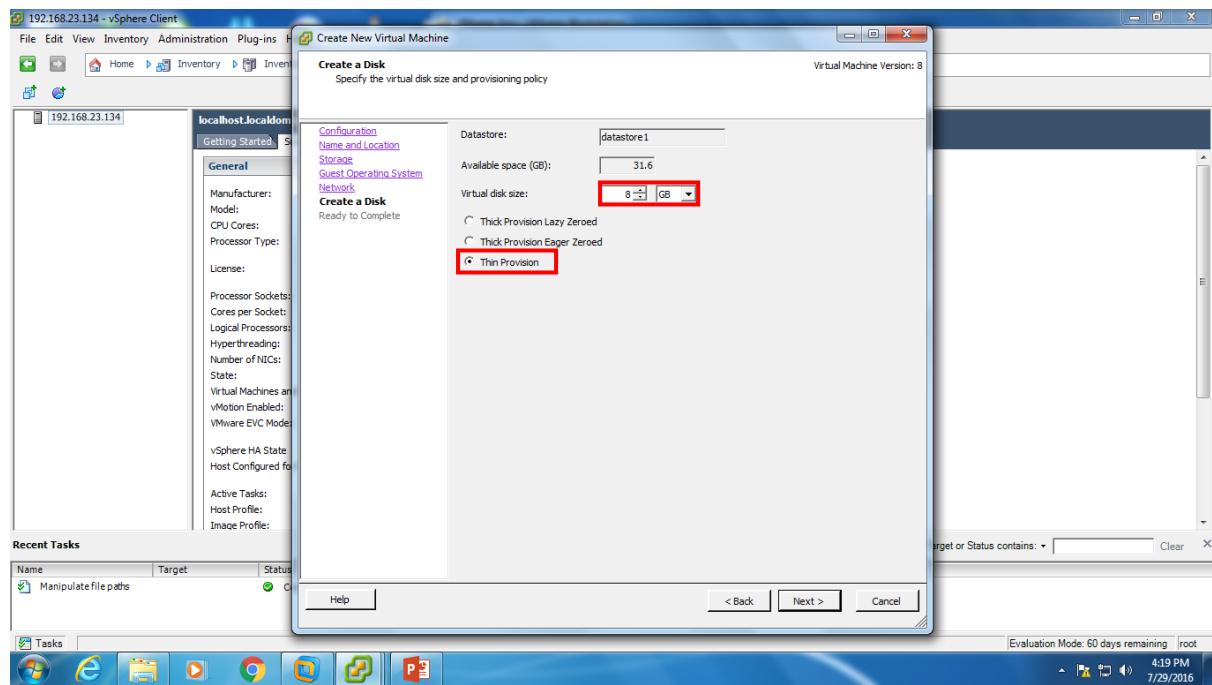
Step 7: Select the guest operating system.



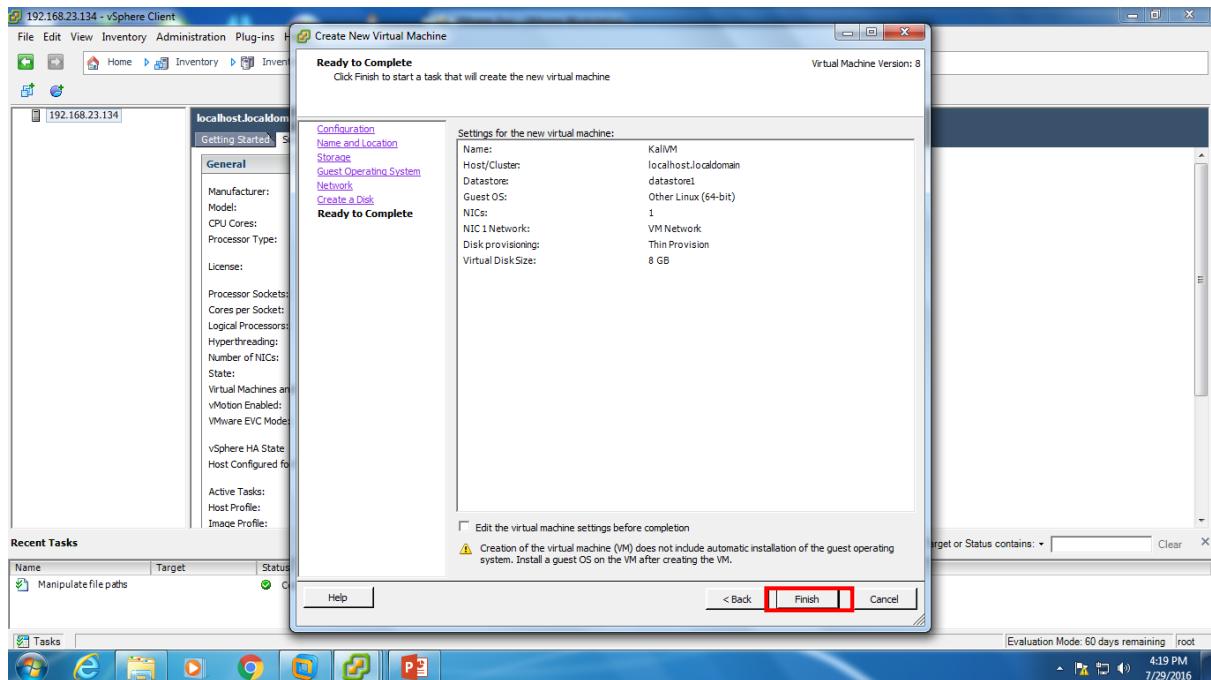
Step 8: Keep the settings of Network Connections as it is and click next to proceed.



Step 9: Set virtual disk size to **8 GB** and select **Thin Provision**.

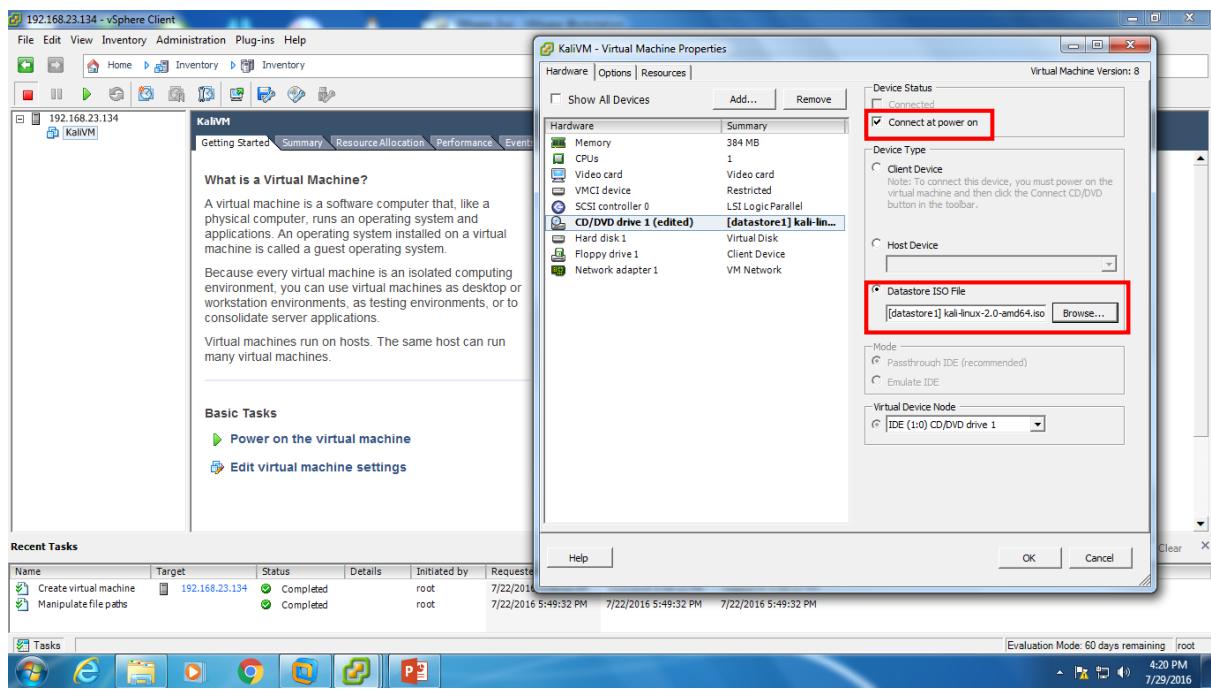


**Step 10: Select Finish to create the virtual machine.**

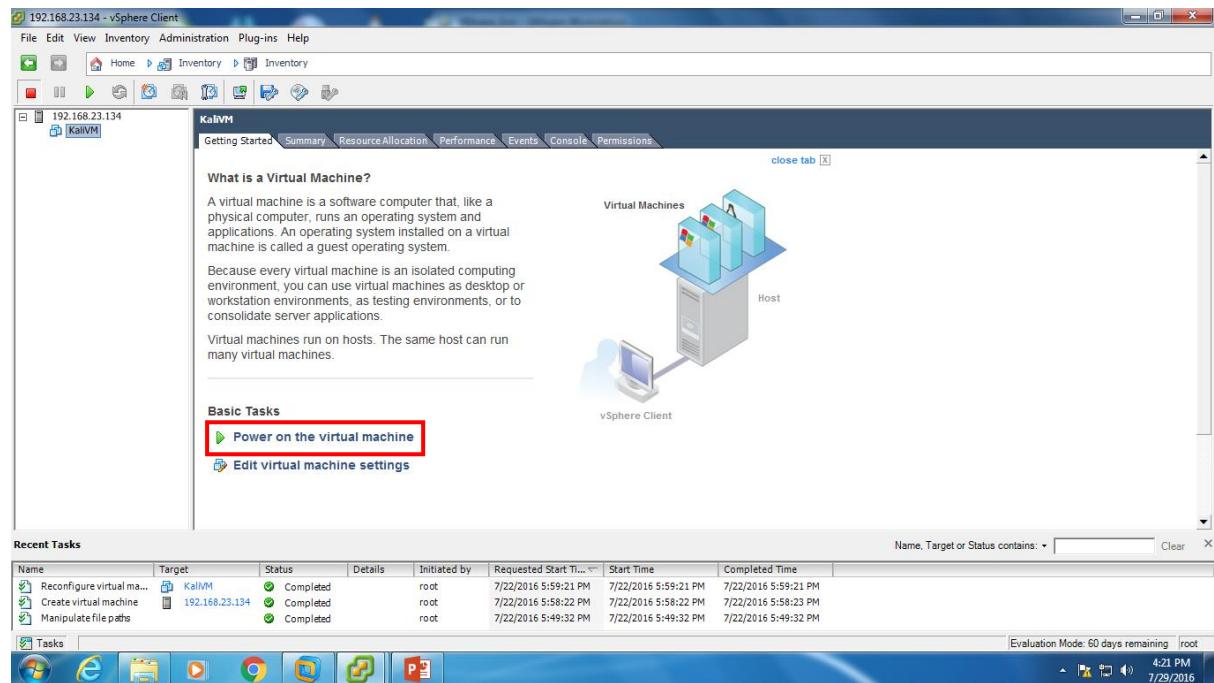


**Step 11: Select Datastore ISO File, Browse and select the ISO file from the datastore.**

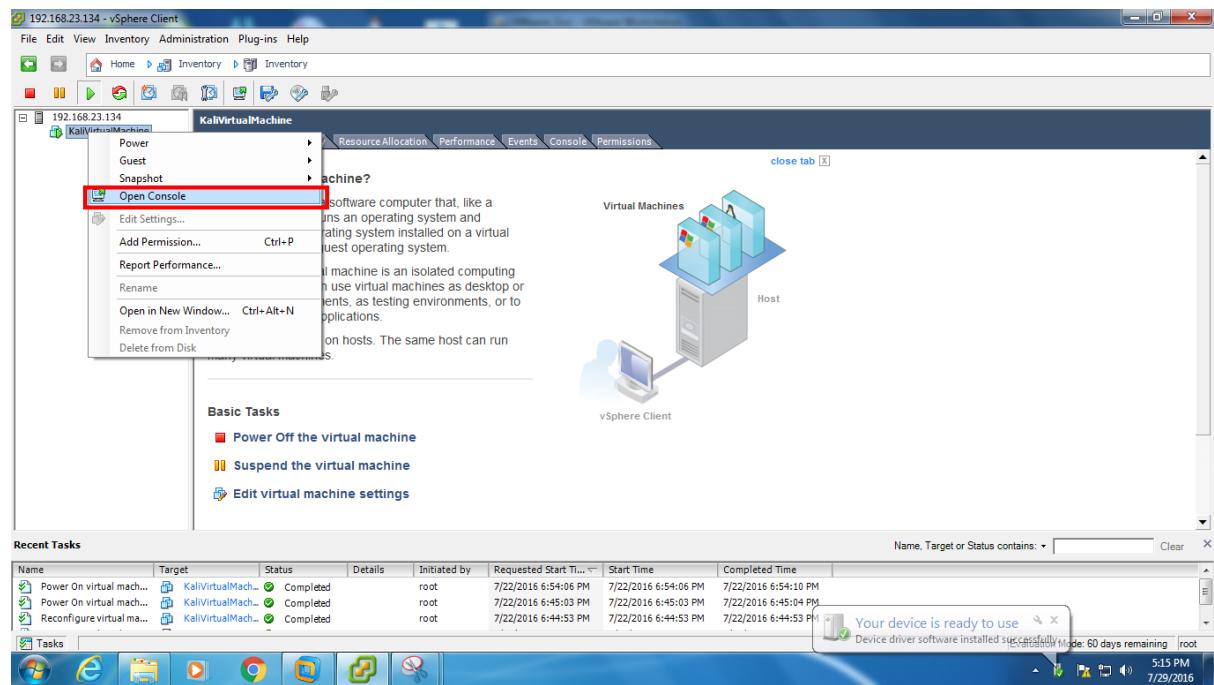
**Click Connect at power on.**



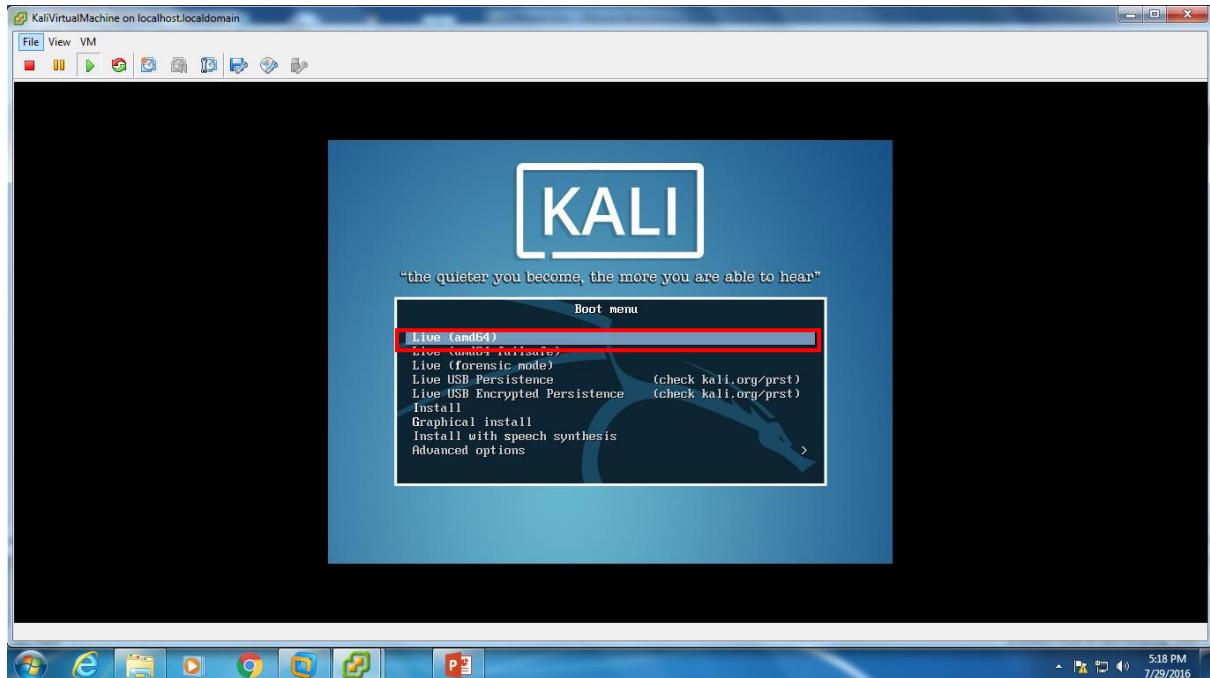
## Step 12: Power on the virtual machine.



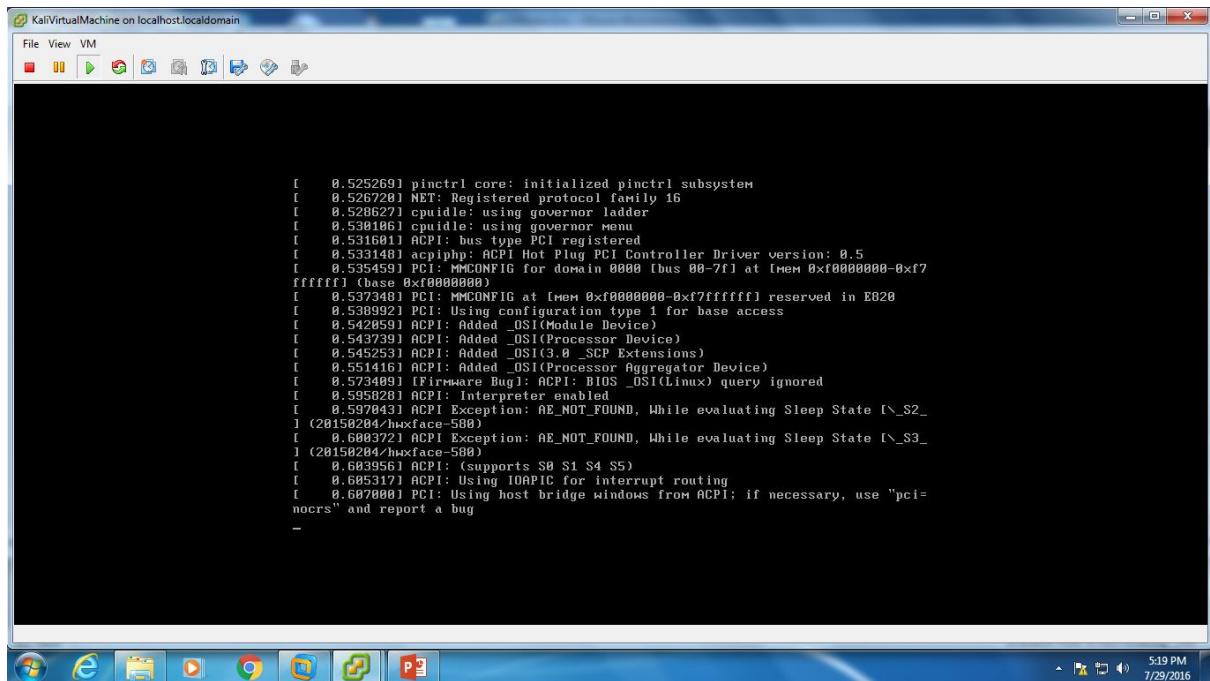
## Step 13: Open Console to continue Kali Linux installation.



Step 14: Select **Live (amd64)** for installation.



Step 15: It will take a while for the installation.



```
KaliVirtualMachine on localhost.localdomain
File View VM
[OK] I Started Create list of required static device nodes ...current kernel.
[OK] 7.3655501 systemd[1]: Started Create list of required static device nodes f
or the current kernel.
[OK] I Mounted Debug File System.
[OK] 7.3697891 systemd[1]: Mounted Debug File System.
[OK] 7.3940791 systemd[1]: Starting Create Static Device Nodes in /dev...
Starting Create Static Device Nodes in /dev...
[OK] 7.4060751 systemd[1]: Starting Syslog Socket.
[OK] I Listening on Syslog Socket.
[OK] 7.4160521 systemd[1]: Listening on Syslog Socket.
[OK] 7.4178891 systemd[1]: Starting Journal Service...
Starting Journal Service...
[OK] I Started Journal Service.
[OK] 7.4270401 systemd[1]: Started Journal Service.
[OK] I Started udev Coldplug all Devices.
Starting udev Wait for Complete Device Initialization...
[OK] 7.6126241 fuse init (API version 7.23)
[OK] I Started Load Kernel Modules.
Mounting FUSE Control File System...
Starting Apply Kernel Variables...
[OK] I Mounted FUSE Control File System.
[OK] I Started Apply Kernel Variables.
[OK] I Started Create Static Device Nodes in /dev.
[OK] I Started LSB: NFS support files common to client and server.

-
```

Step 16: Live installation completed.

