

## **Practical No.1**

**Aim :-** Implement VMware ESXi for server virtualization.

### **VMware ESXi**

VMware ESXi is a smaller footprint version of ESX that does not include the ESX Service Console. It is available without the need to purchase a vCenter license as a free download from VMware with some features disabled. VMware ESXi was originally a compact version of VMware ESX that allowed for a smaller 32 MB disk footprint on the Host. With a simple configuration console for mostly network configuration and remote based VMware Infrastructure Client Interface, this allows for more resources to be dedicated to the Guest environments.

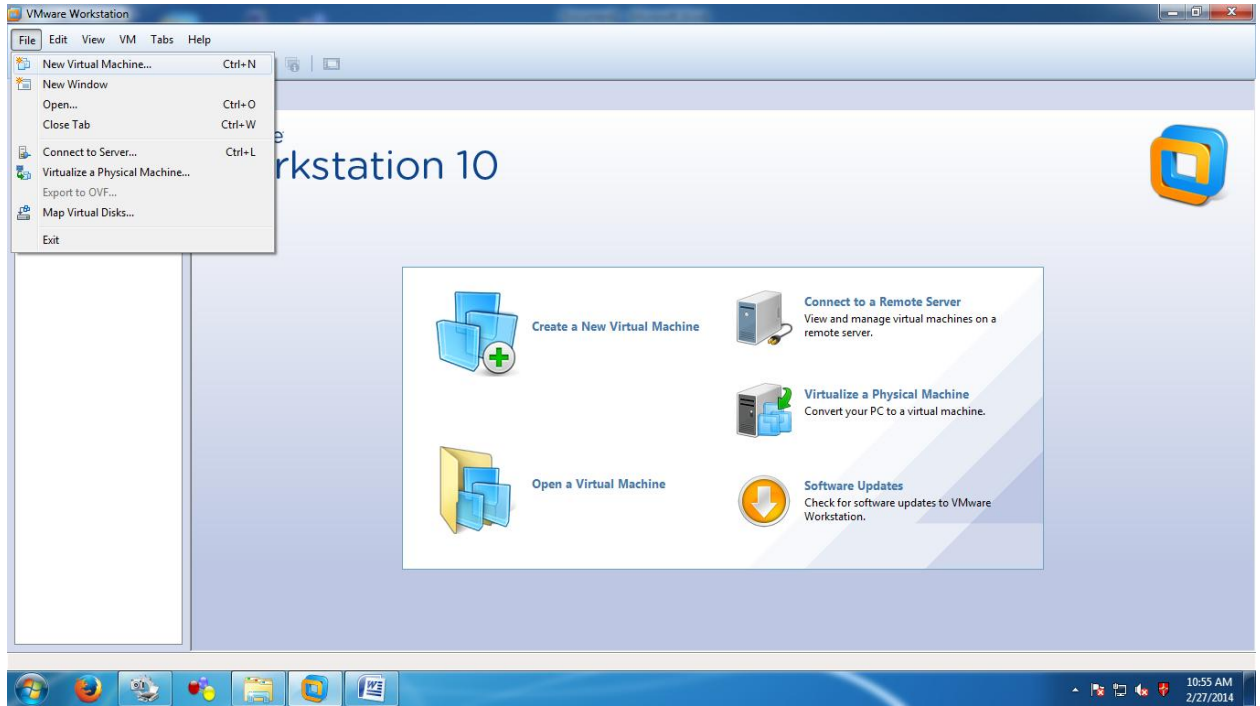
There are two variations of ESXi, VMware ESXi Installable and VMware ESXi Embedded Edition. The same installation media will install to either one or the other of these installation modes depending on the size of the target media.<sup>[28]</sup> It has the ability to upgrade to VMware Infrastructure 3 or VMware vSphere 4.0 ESXi. Originally named VMware ESX Server ESXi edition, through several revisions the product finally became VMware ESXi 3. New editions then followed: ESXi 3.5, ESXi 4 and now ESXi 5.

VMware ESXi sets a new bar for security and reliability because its smaller code base represents a smaller “attack surface” with less code to patch. VMware ESXi was designed with simplicity in mind. Its menu-driven startup and automatic configurations make it the easiest way to get started with VMware virtualization.

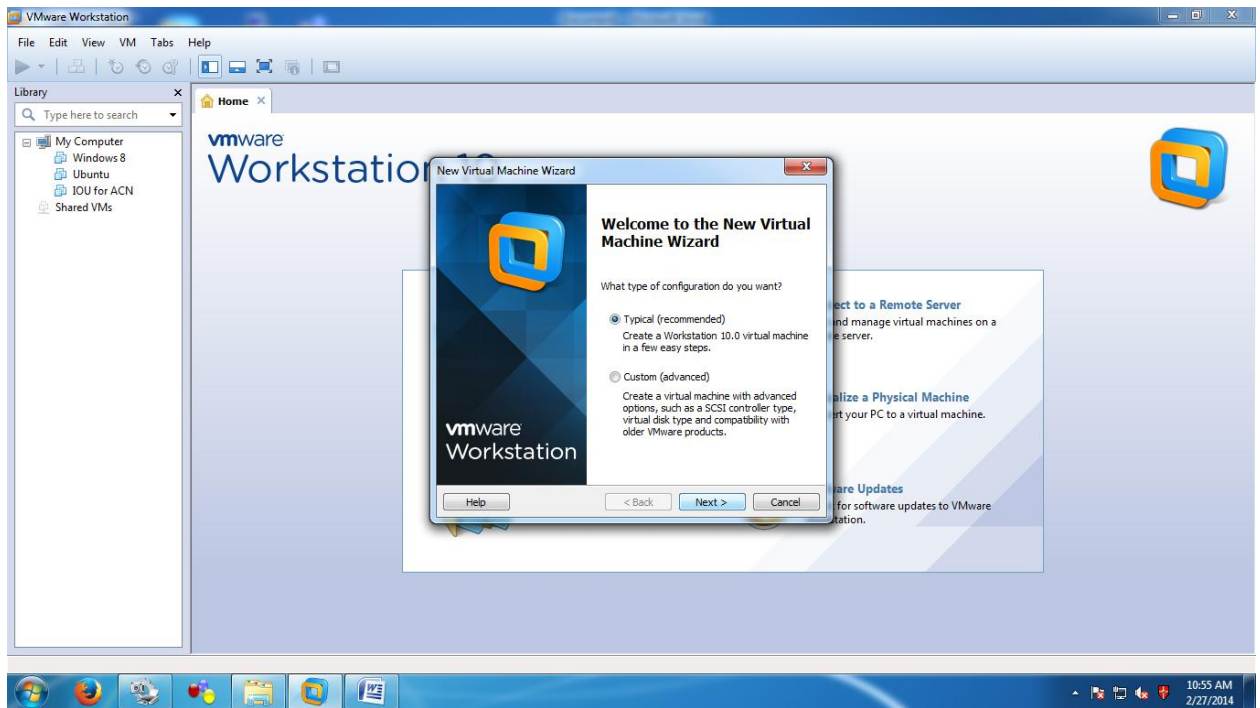
### **BENEFITS**

- Decrease hardware, power and cooling costs by running multiple operating systems on the same physical server.
- Lower management overhead costs by reducing the hardware footprint in the datacenter.
- Guarantee high levels of performance for the most resource-intensive applications.
- Consolidate hardware resources with the peace of mind that comes with the industry’s most widely deployed, production-proven and secure server virtualization platform.

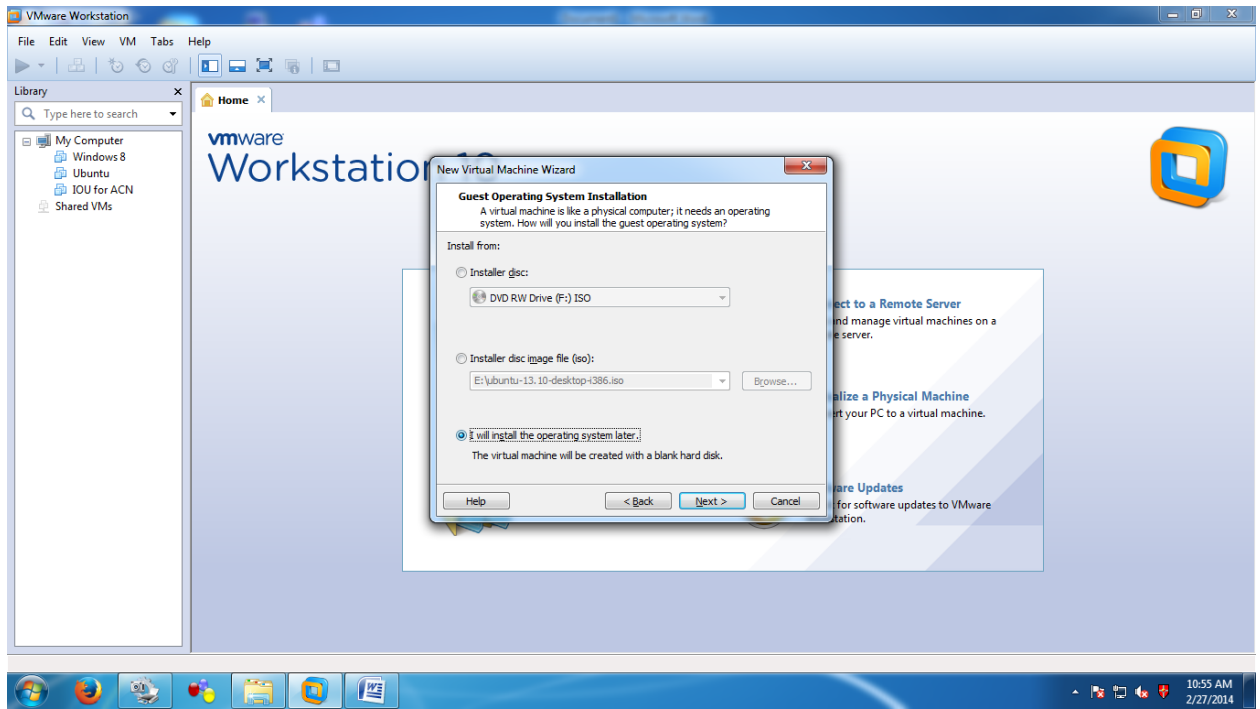
**STEP 1:** Open the VMware Workstation 10. Go to the File menu. Click on New Virtual Machine option.



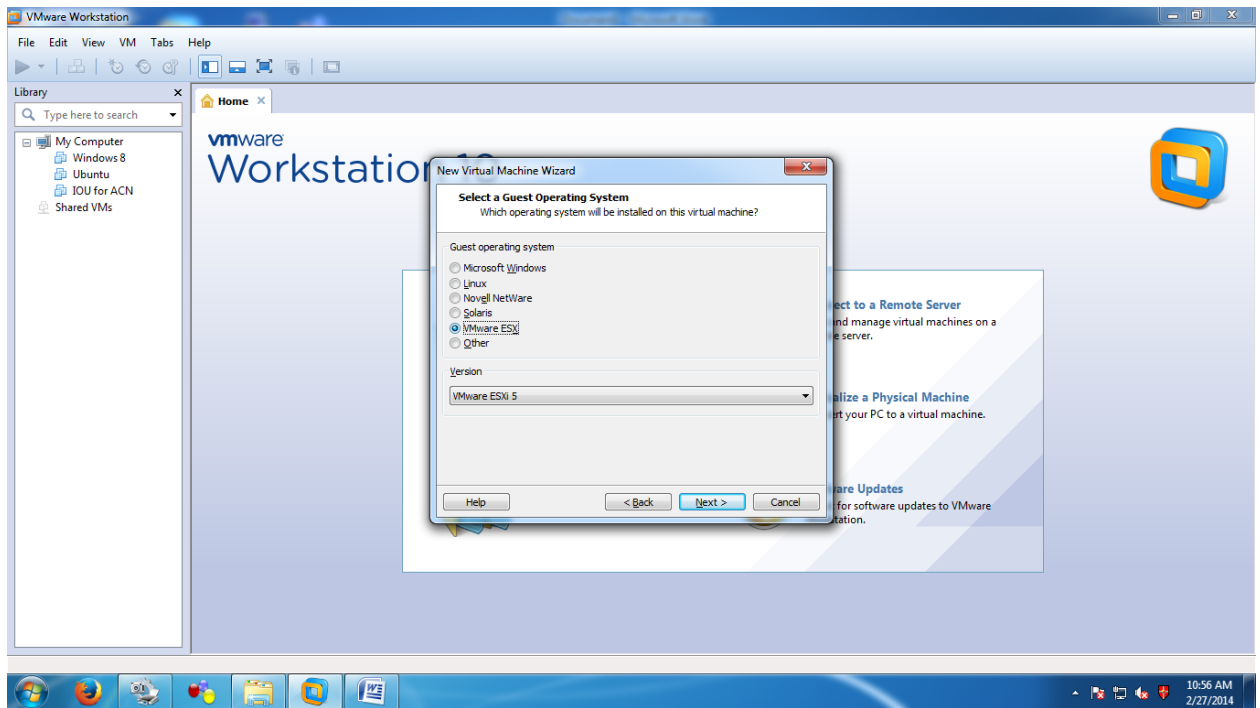
**STEP 2:** Click on “Typical” option button & click on Next.



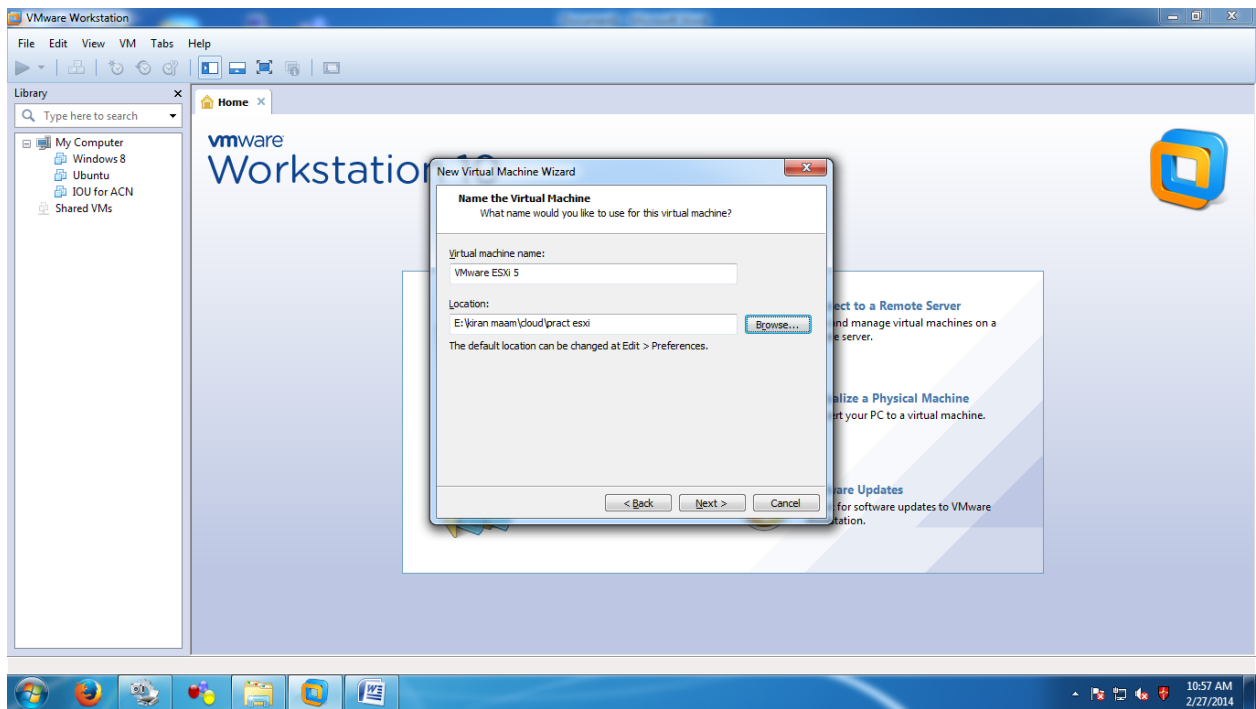
**STEP 3:** Select the option button “I will install the operating system later” & click on Next.



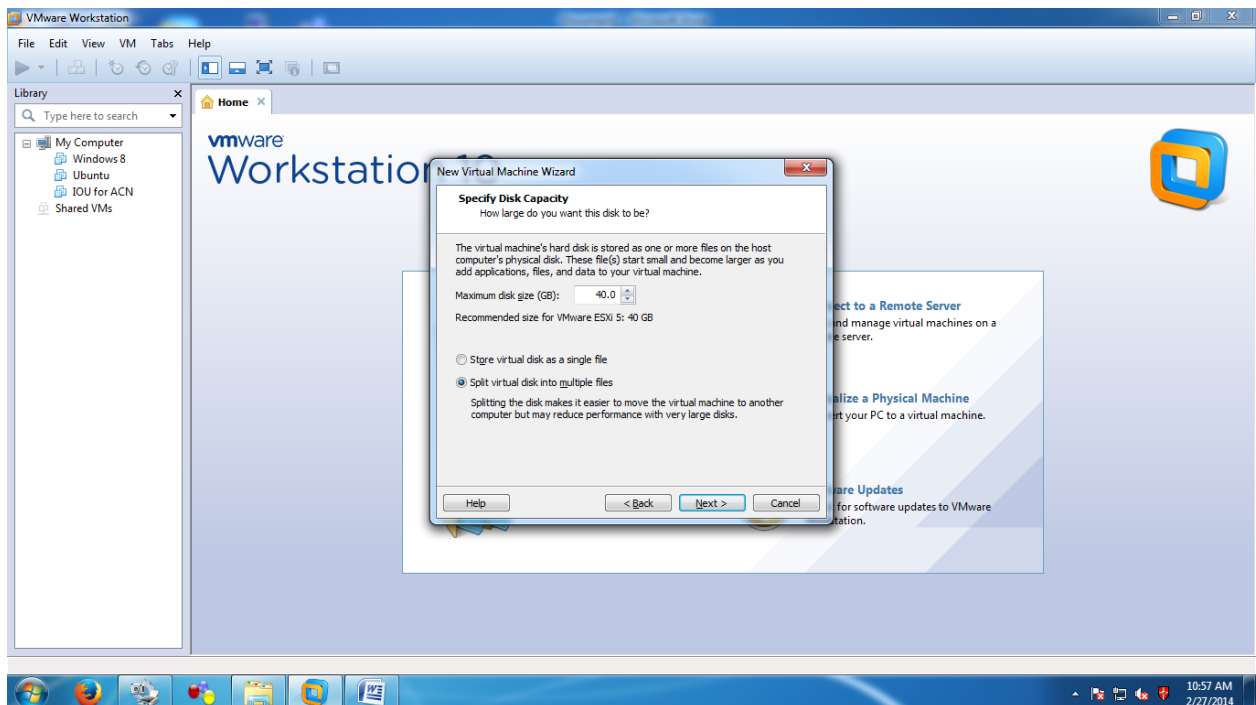
**STEP 4:** Select the Guest operating system as VMware ESXi & confirm the version should be VMware ESXi 5.



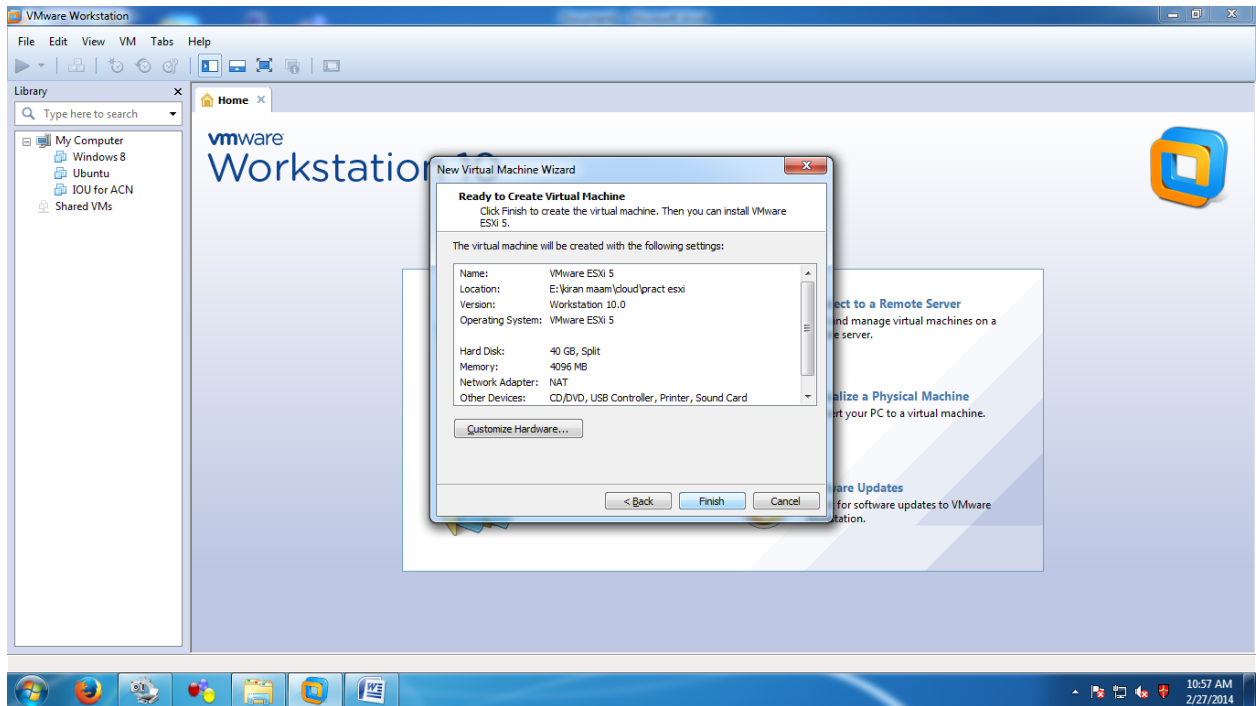
**STEP 5:** Give the Virtual machine name as VMware ESXi 5 & click on the browse for the location & create one separate directory for ESXi server in your folder & specify the path over here. Then click on Next.



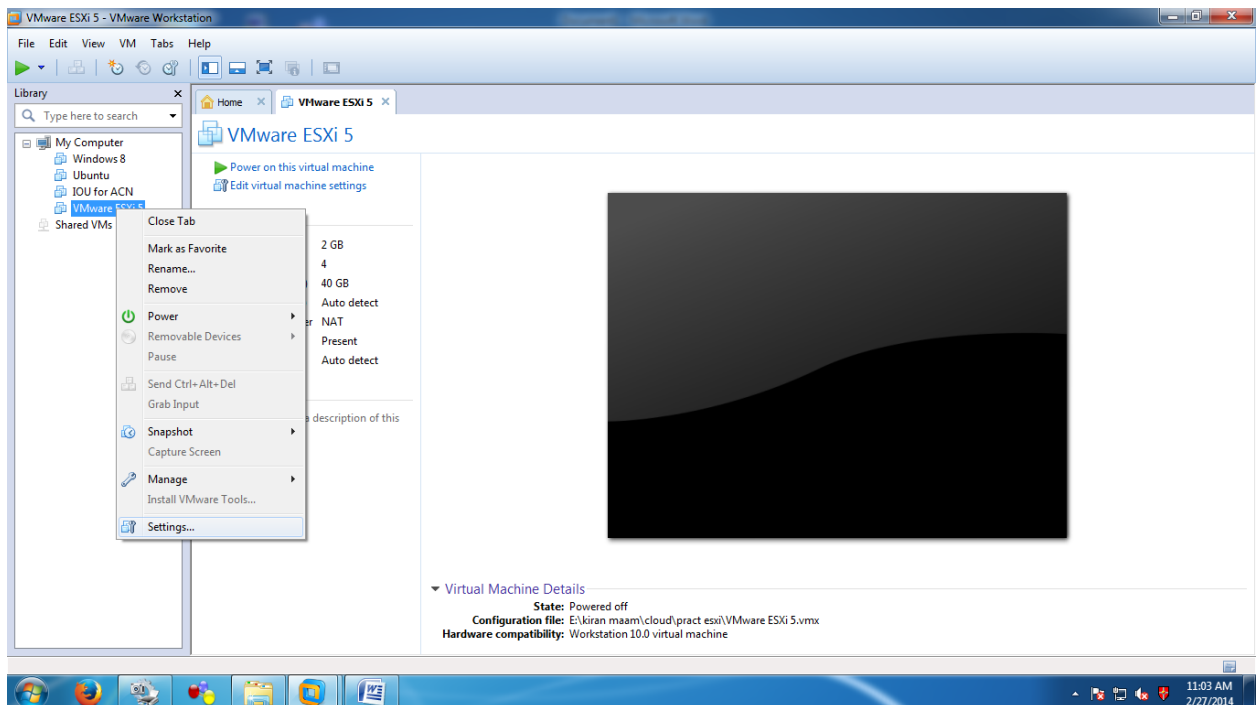
**STEP 6:** You have to specify the size of virtual hard-disk used for ESXi. By default it is 40 GB. Click on Next.



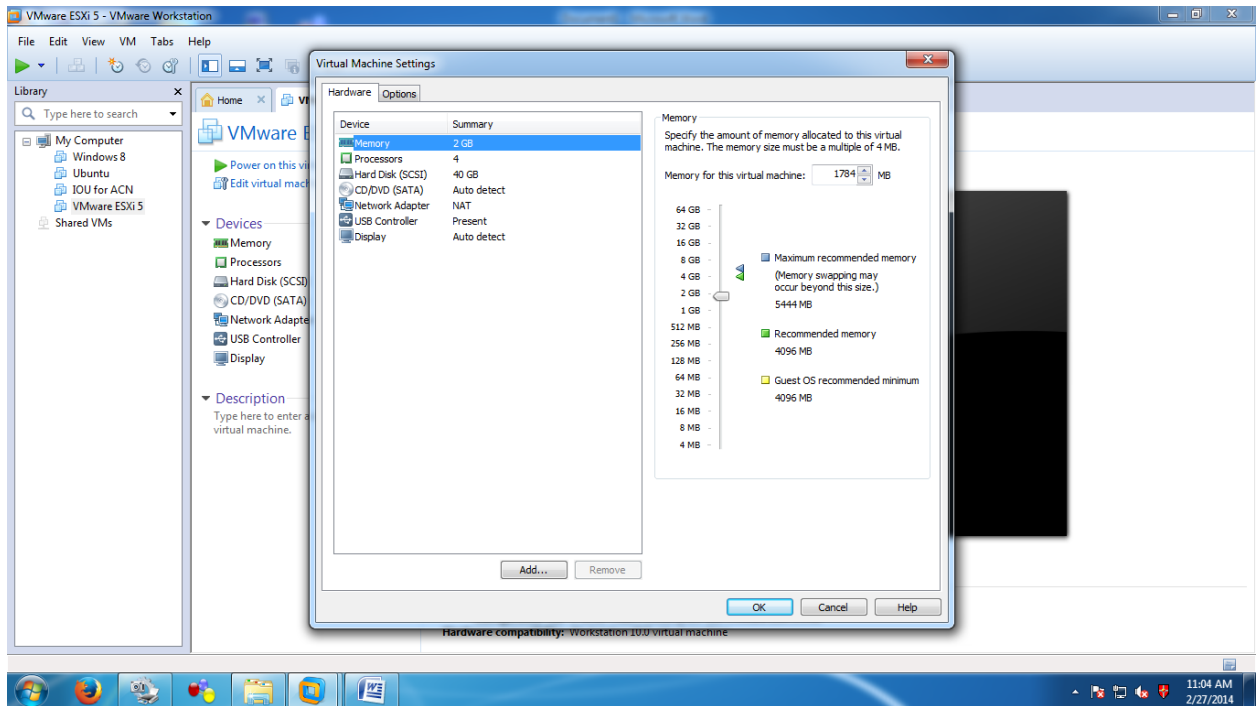
**STEP 7:** Then it will display the whole hardware information for VMware ESXi 5. Just click on Finish.



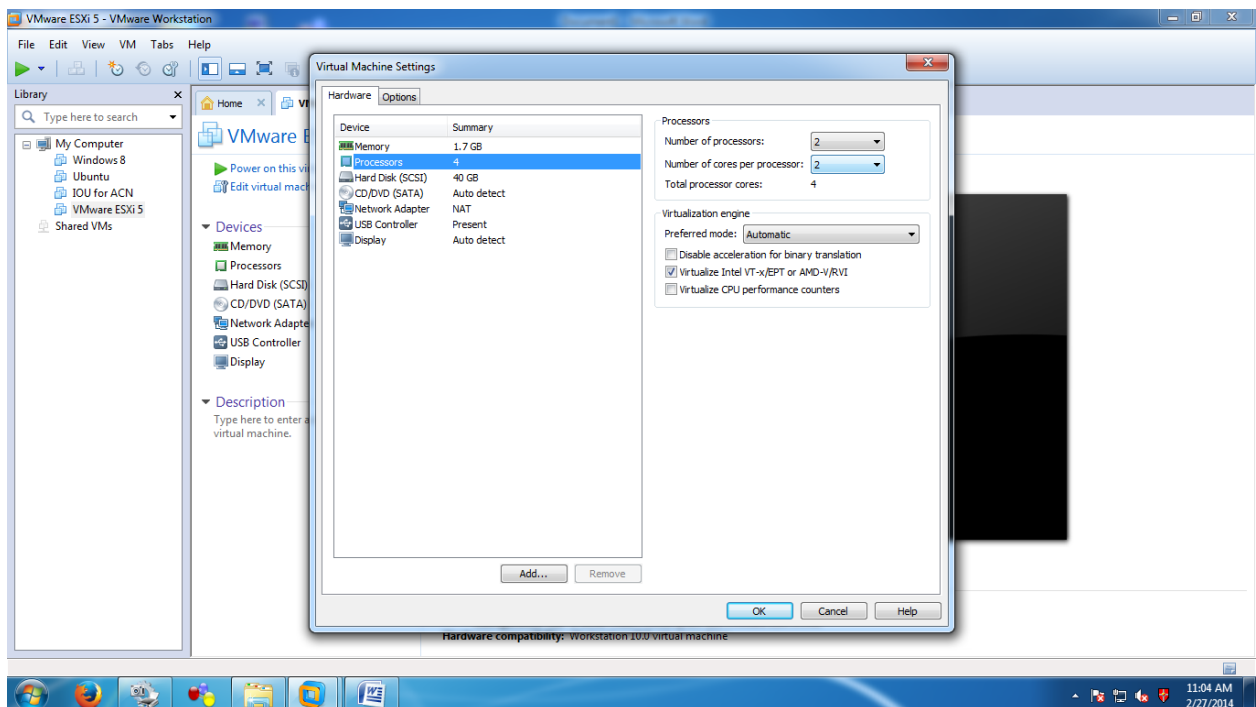
**STEP 8:** Now ESXi server or ESXi operating system is properly installed on our virtualization layer & in the left tab of VMware, it will show VMware ESXi 5. Right click on VMware ESXi 5 & click on settings option.



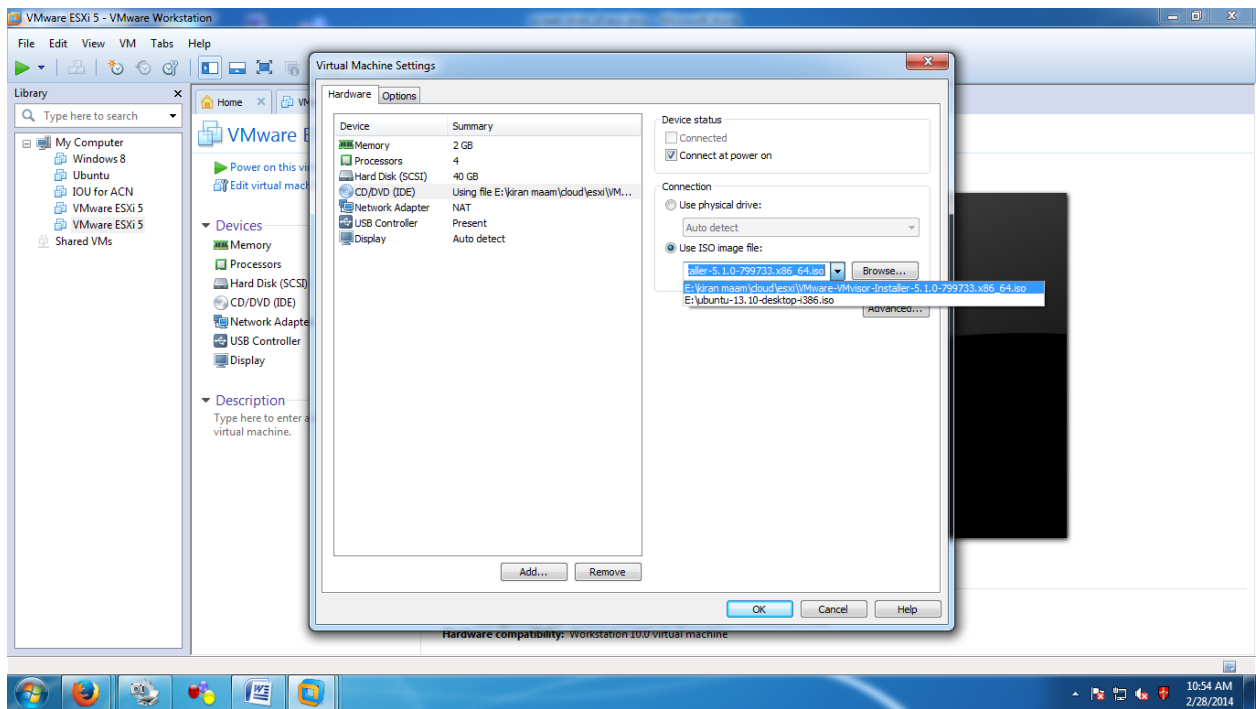
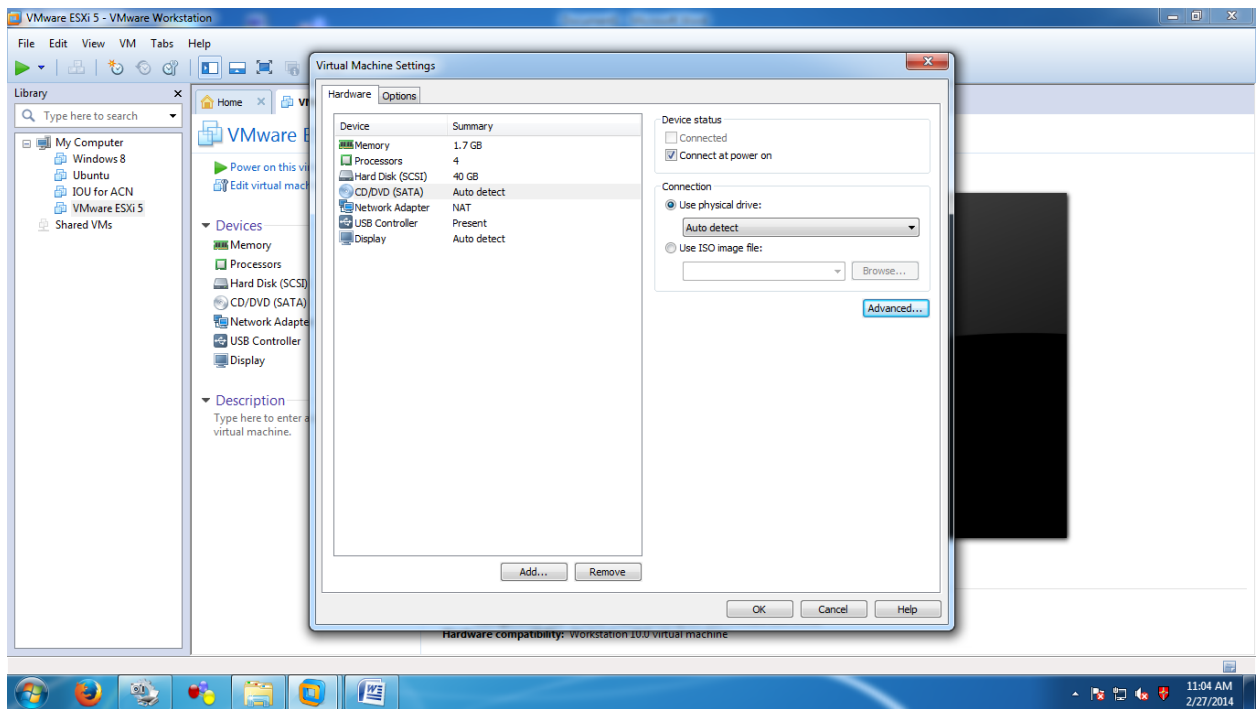
**STEP 9:** The virtual machine settings will display, by default, memory 4 GB; Select the memory option & from the slider at the right side, make the memory as 2 GB.



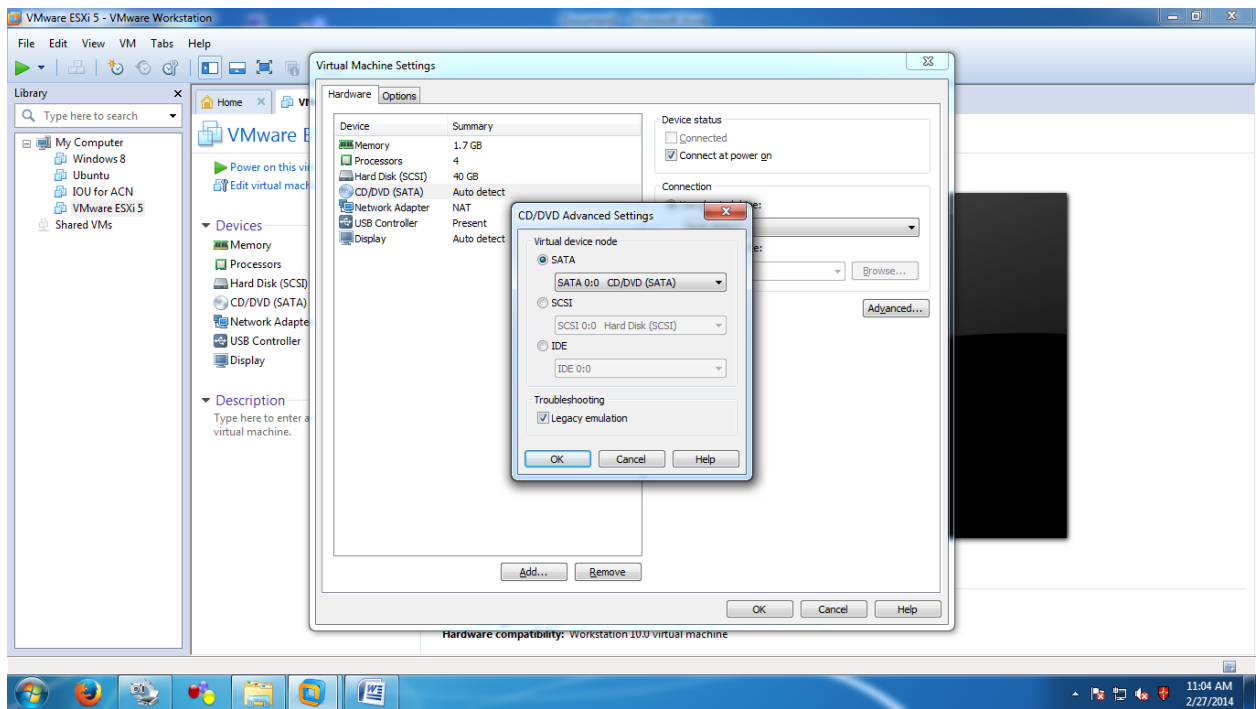
**STEP 10:** Click on processors. It will display you the number of processors as 2 & the number of core processors is 1, make it number of core processors as 2.



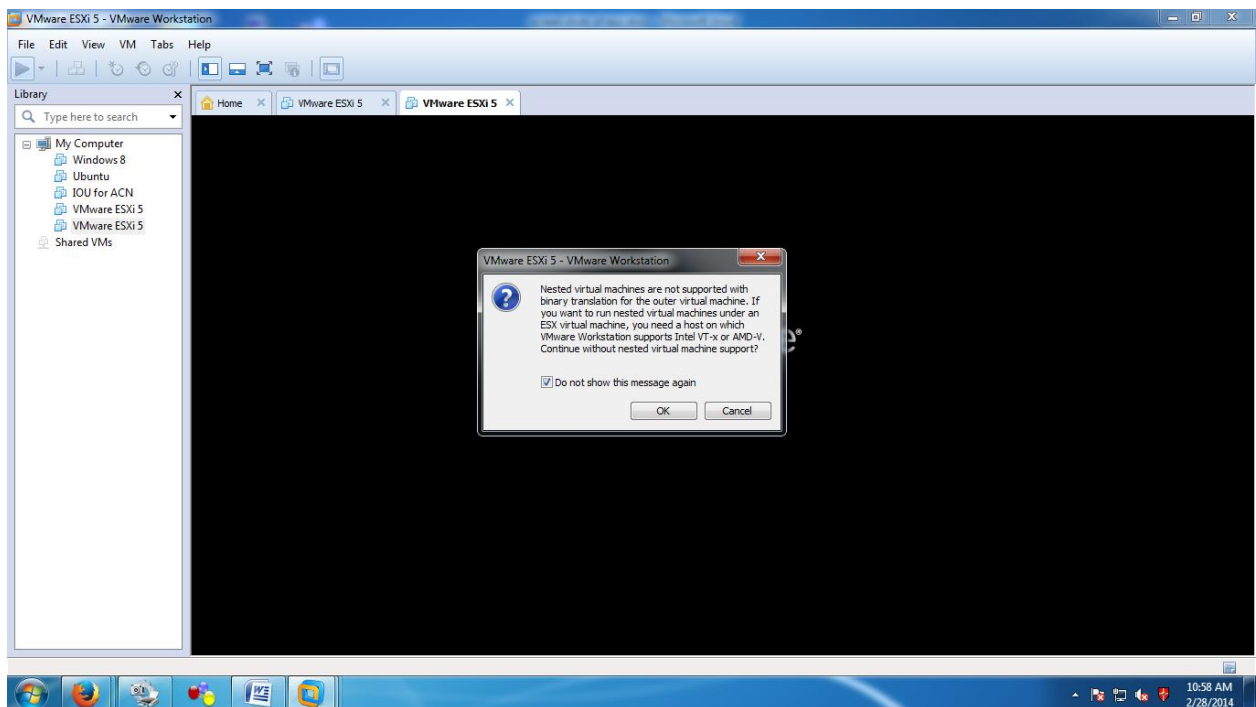
**STEP 11:** Click on CD/DVD SATA option & click on the option button “Use ISO image file” & then click on browse button & just select the ISO image of ESXi server “VMware-VMvisor-Installer-5.1.0-799733.x86\_64.iso”. Then click on OK.



**STEP 12:** Now again right-click on VMware ESXi 5, click on settings option & click on CD/DVD option & click on advanced button. Select the Virtual device node as SATA & in the troubleshooting, click on Legacy emulation checkbox & then click on OK.

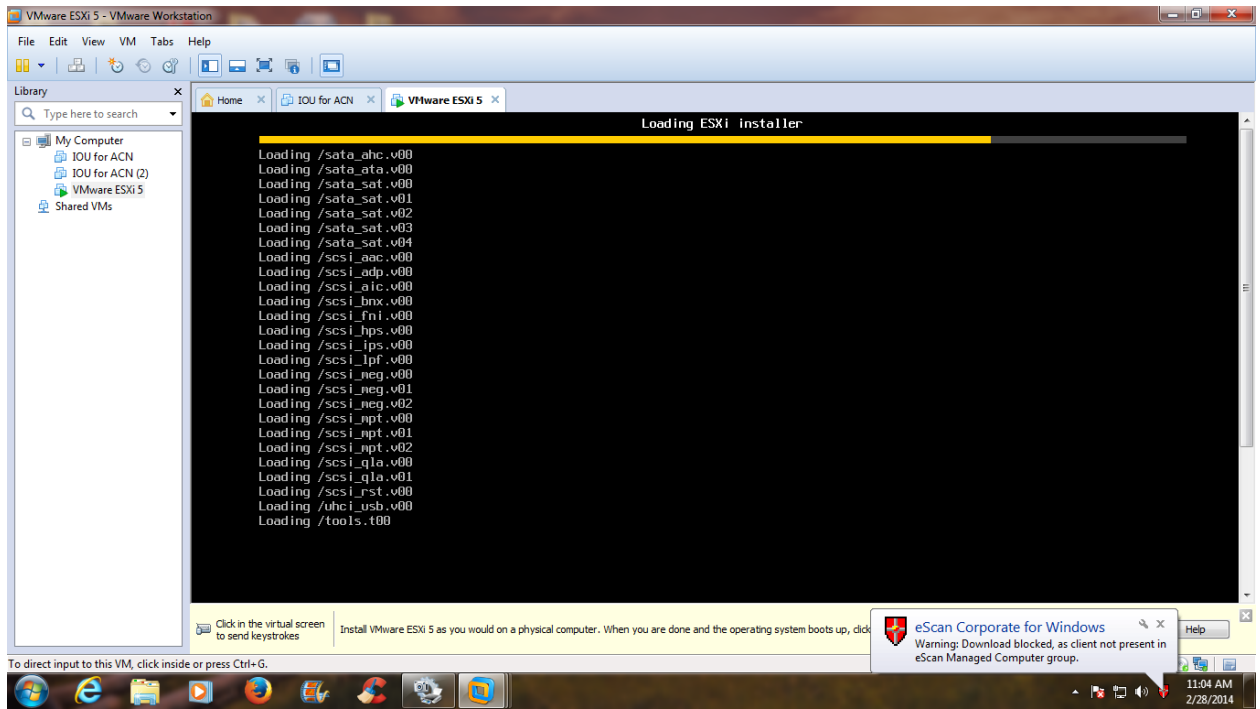


**STEP 13:** Make ESXi 5.0 Power On.

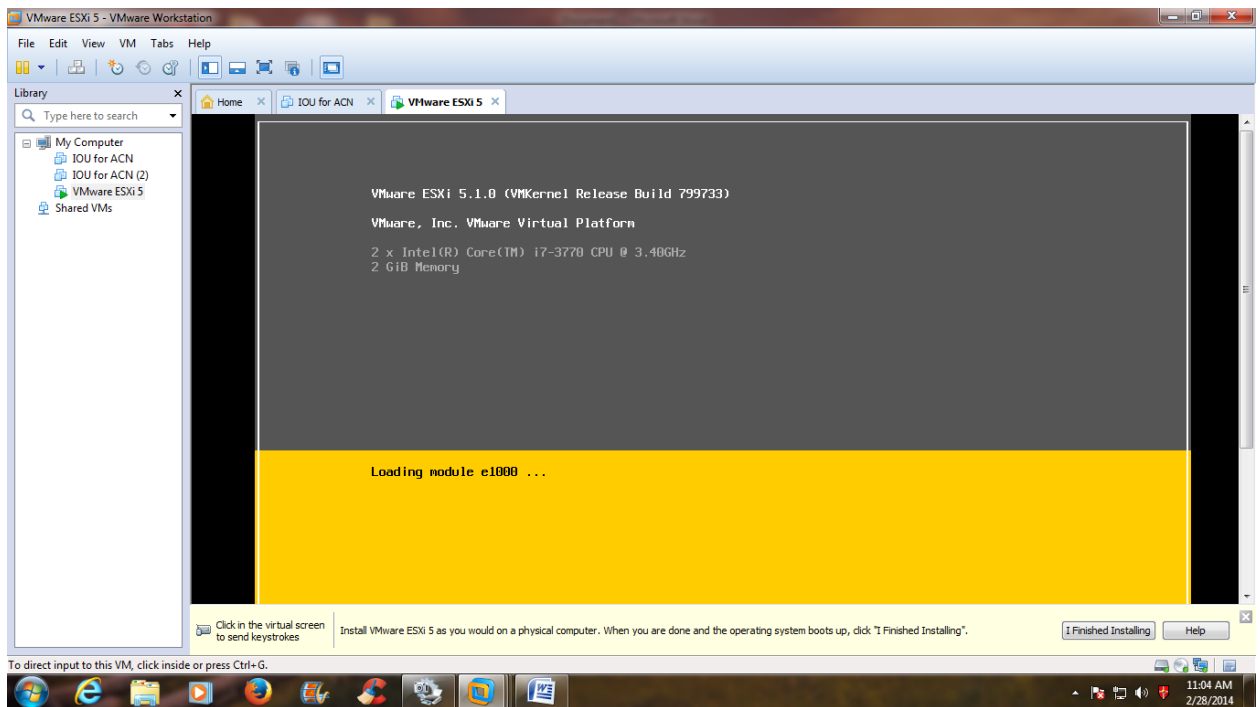


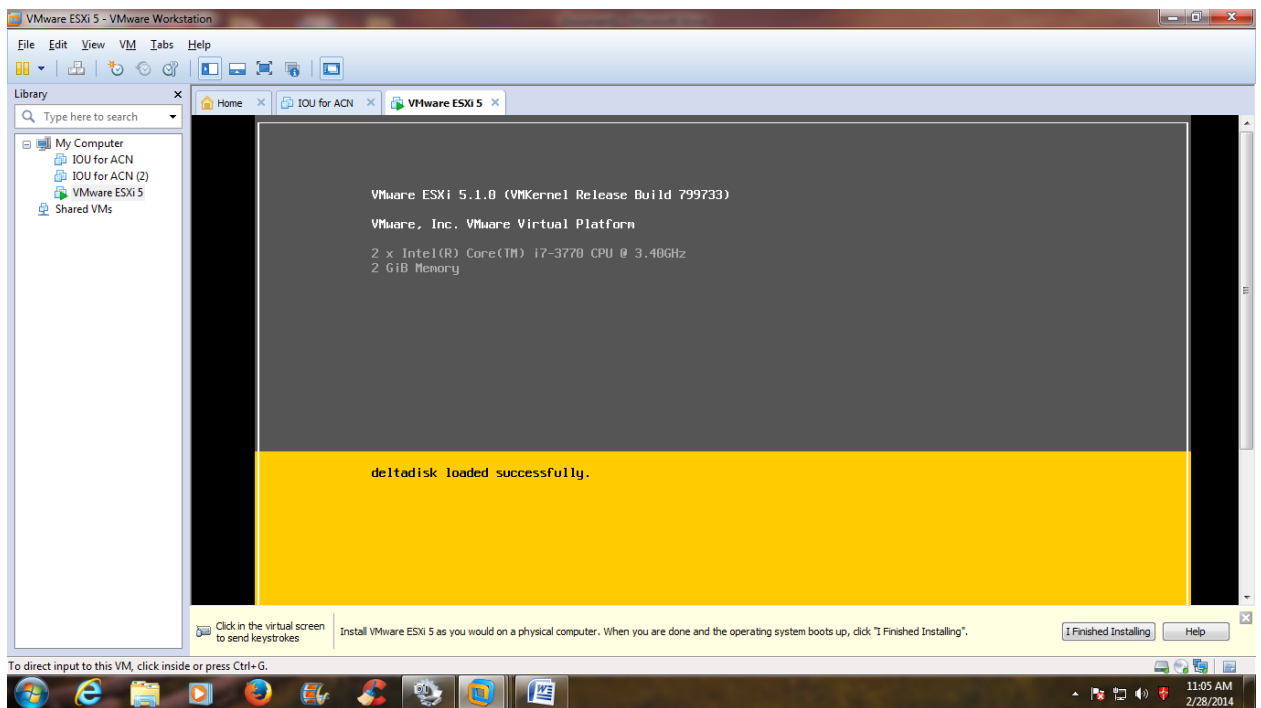


**STEP 14:** Double click on VMware ESXi 5 to install it. It will load the ESXi installer.

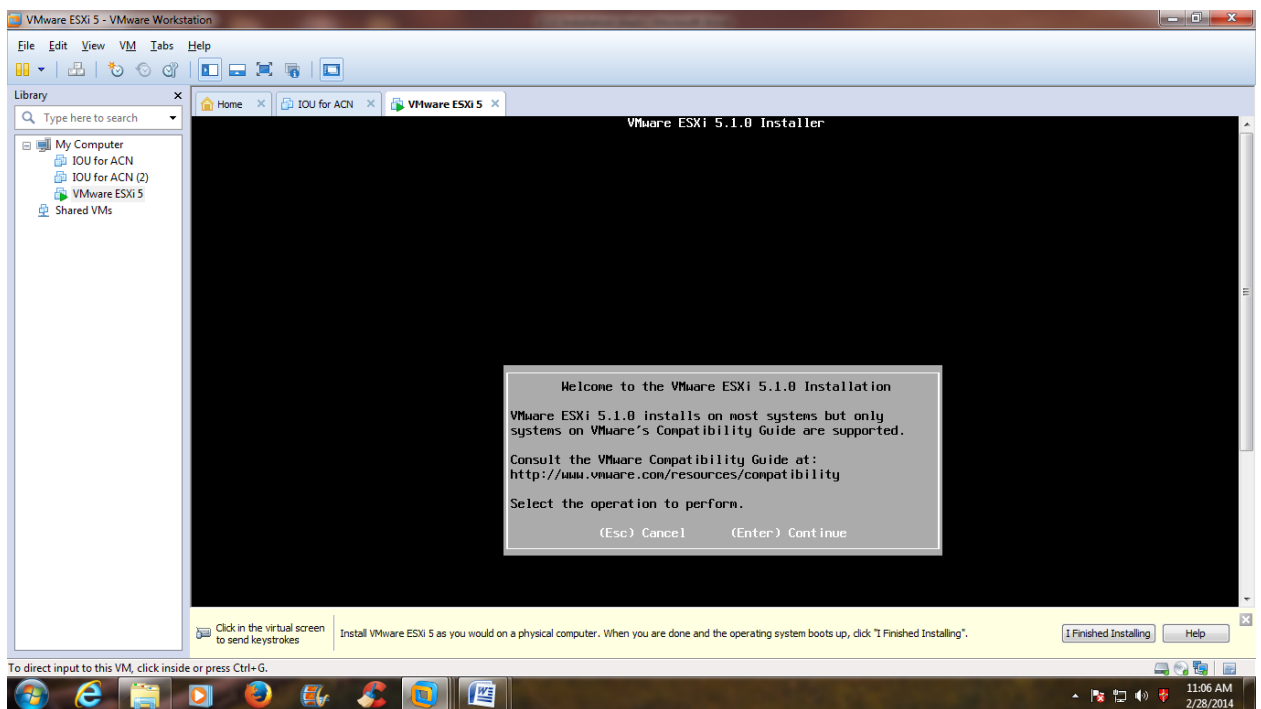


**STEP 15:** It will load ESXi VMKernel & data disk.

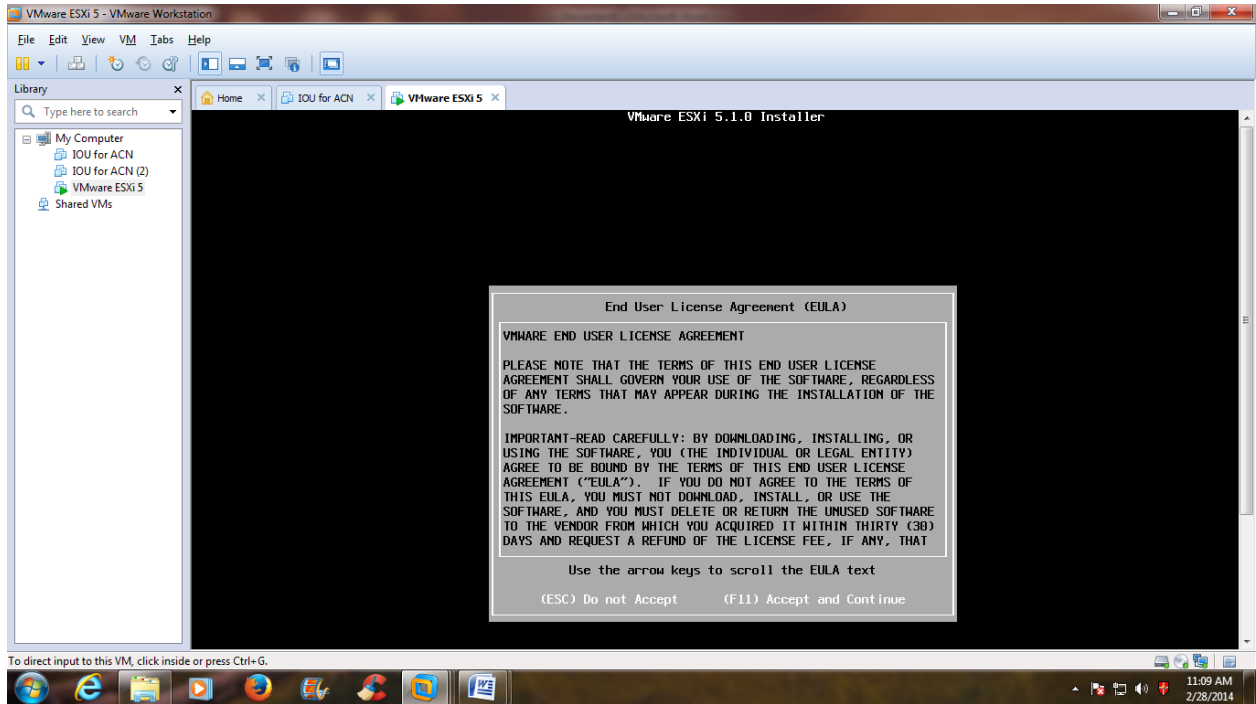




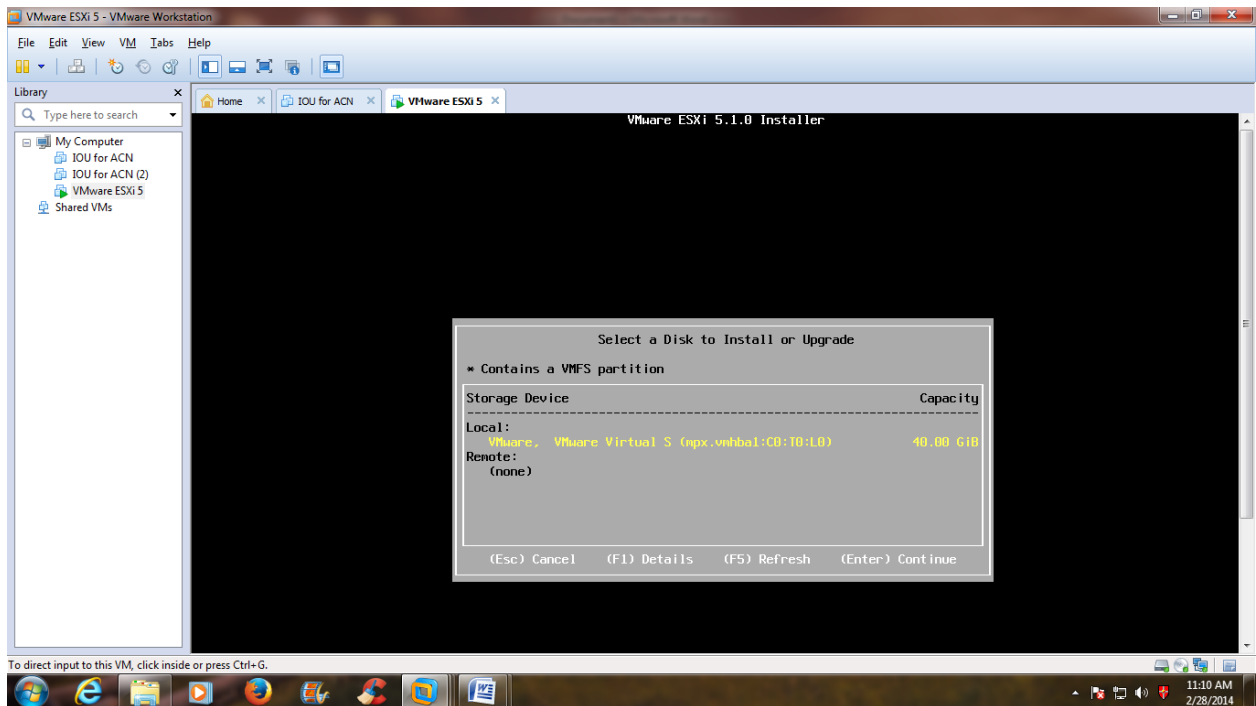
**STEP 16:** After loading this, it will display the Welcome screen for ESXi installation. Click on (Enter) to continue.



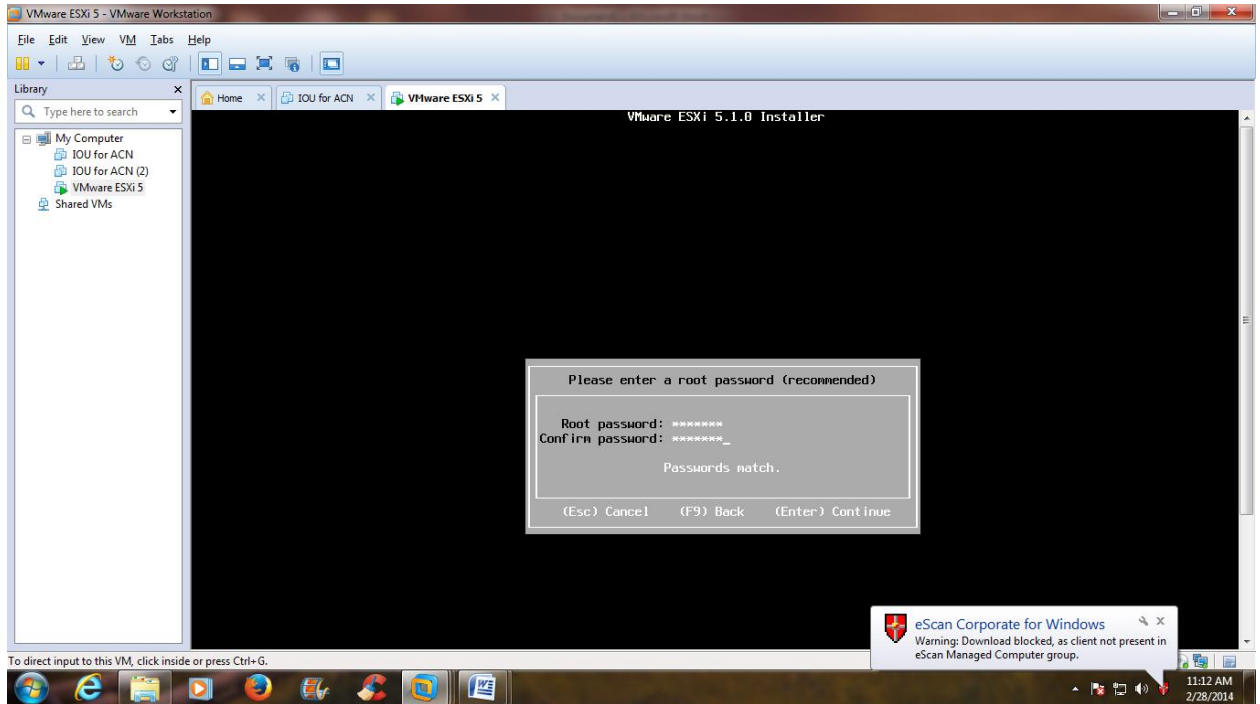
**STEP 17:** It will display End User License Agreement screen. Click on (F11) key to accept the license & continue.



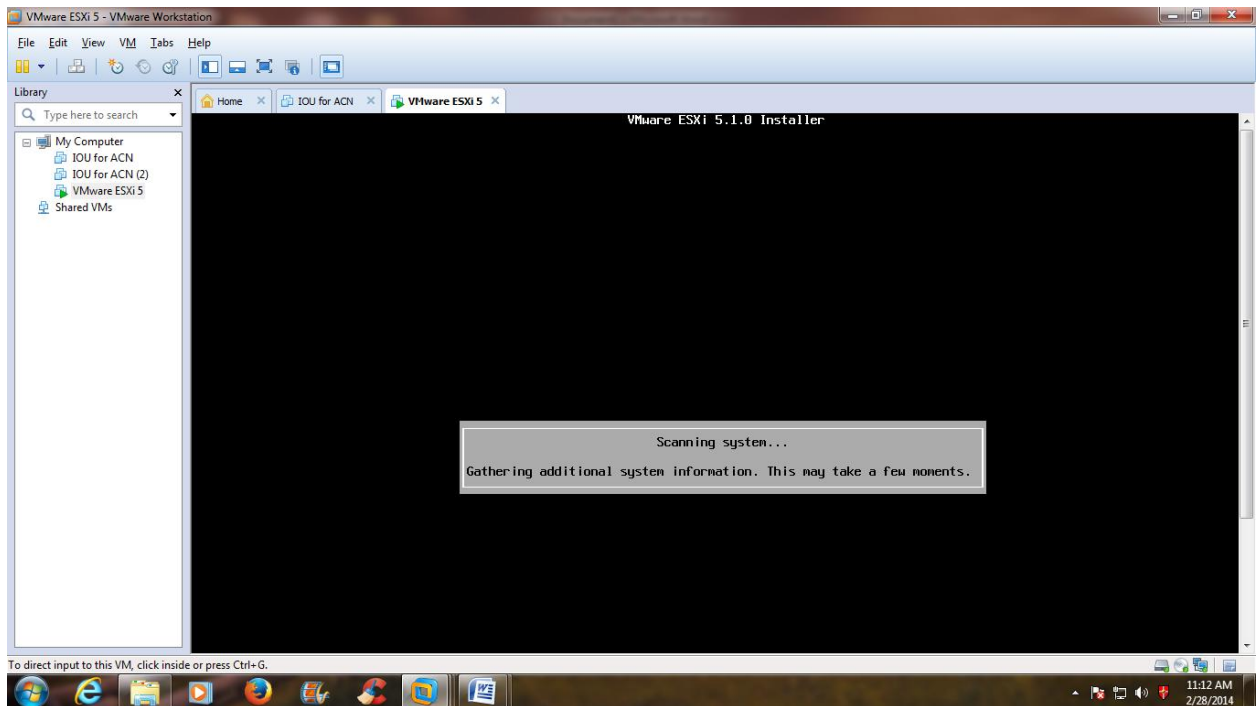
**STEP 18:** It will display the screen for selecting the disk to install. Click on (Enter) to continue.



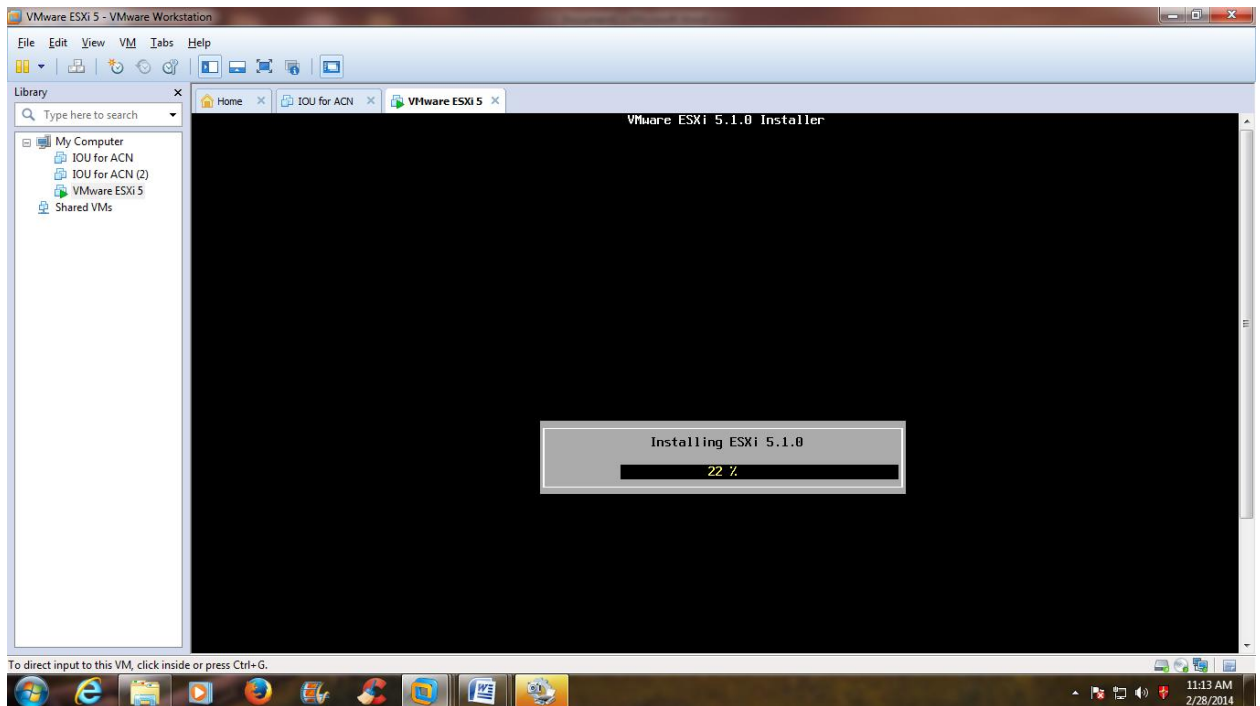
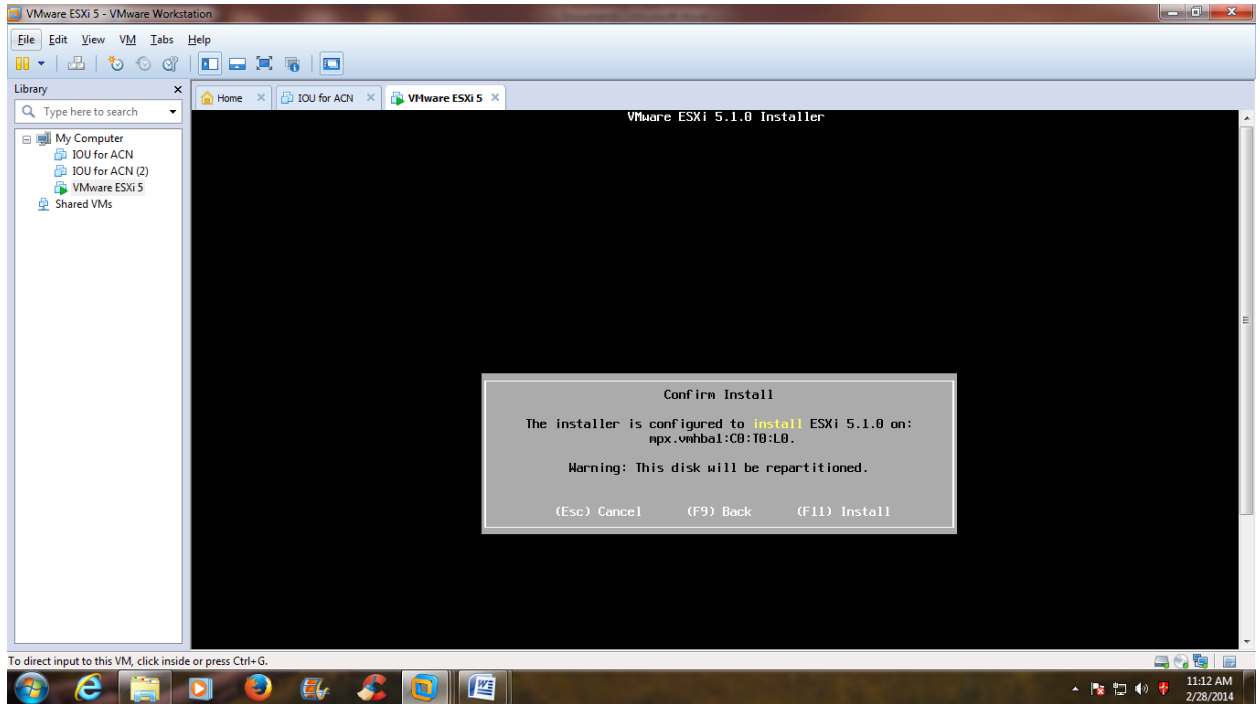
**STEP 19:** It will display the screen for entering the password for root user. Just enter the password & remember the password for future use.



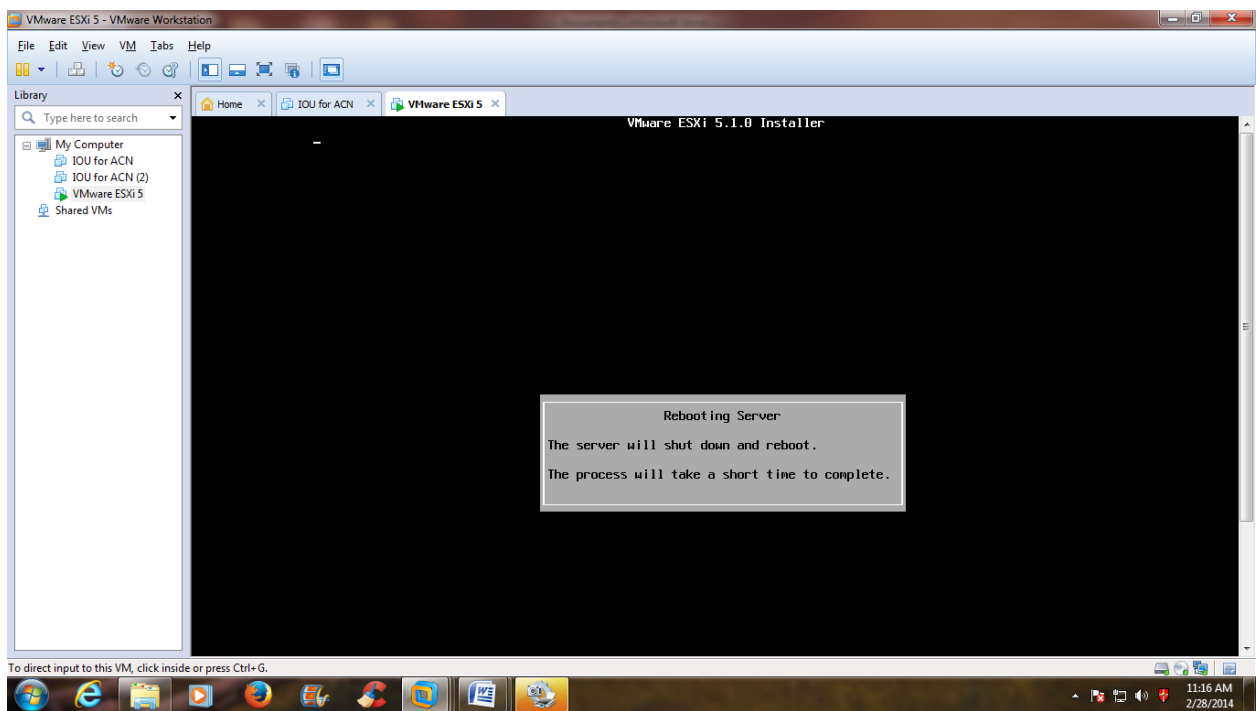
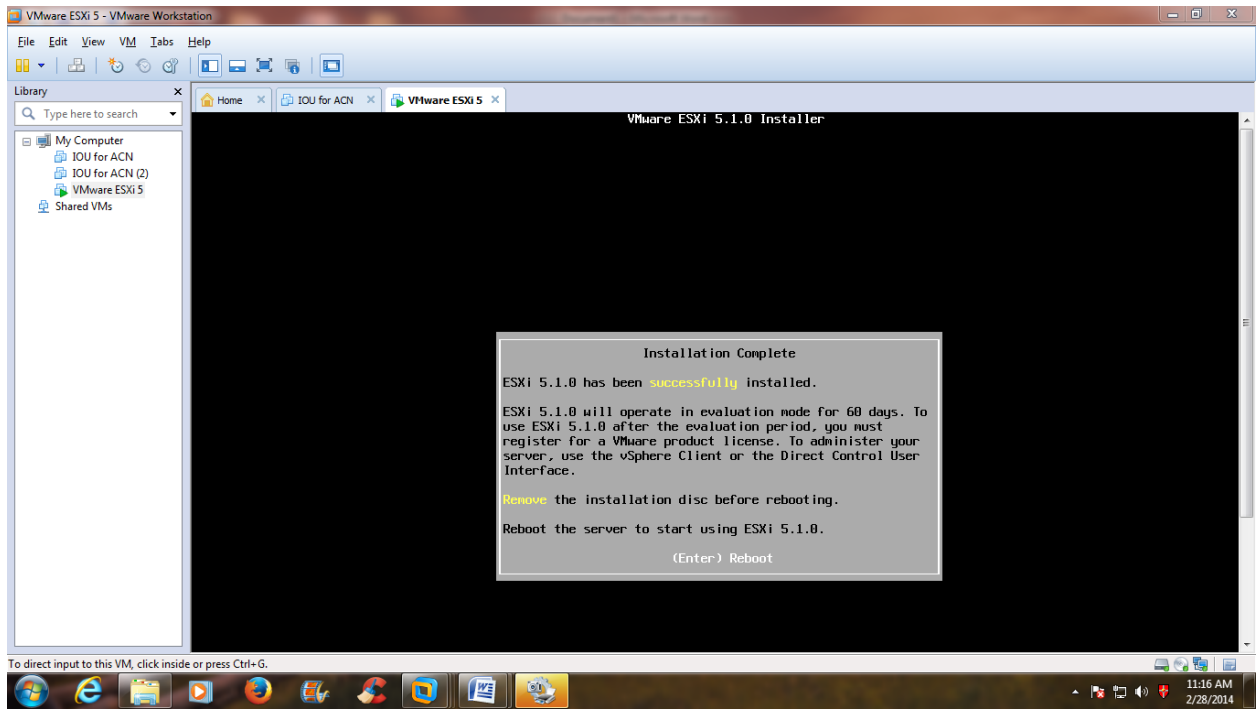
**STEP 20:** After entering the password, it will scan the system.

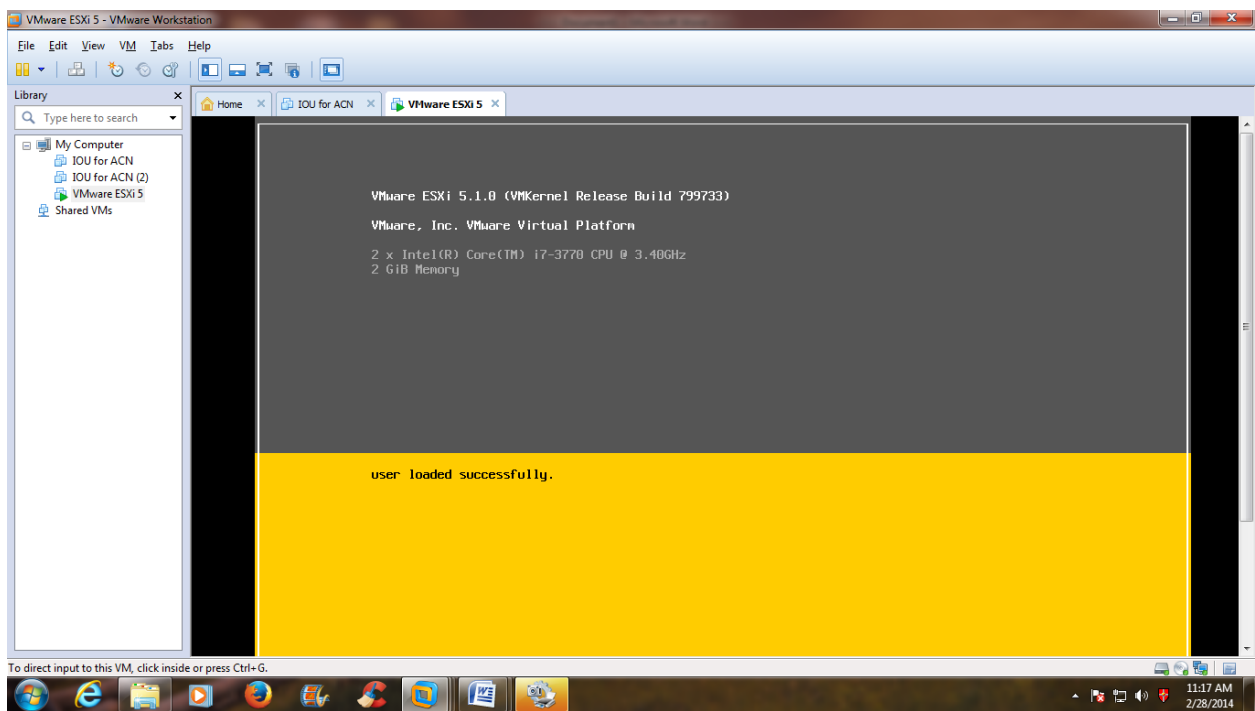
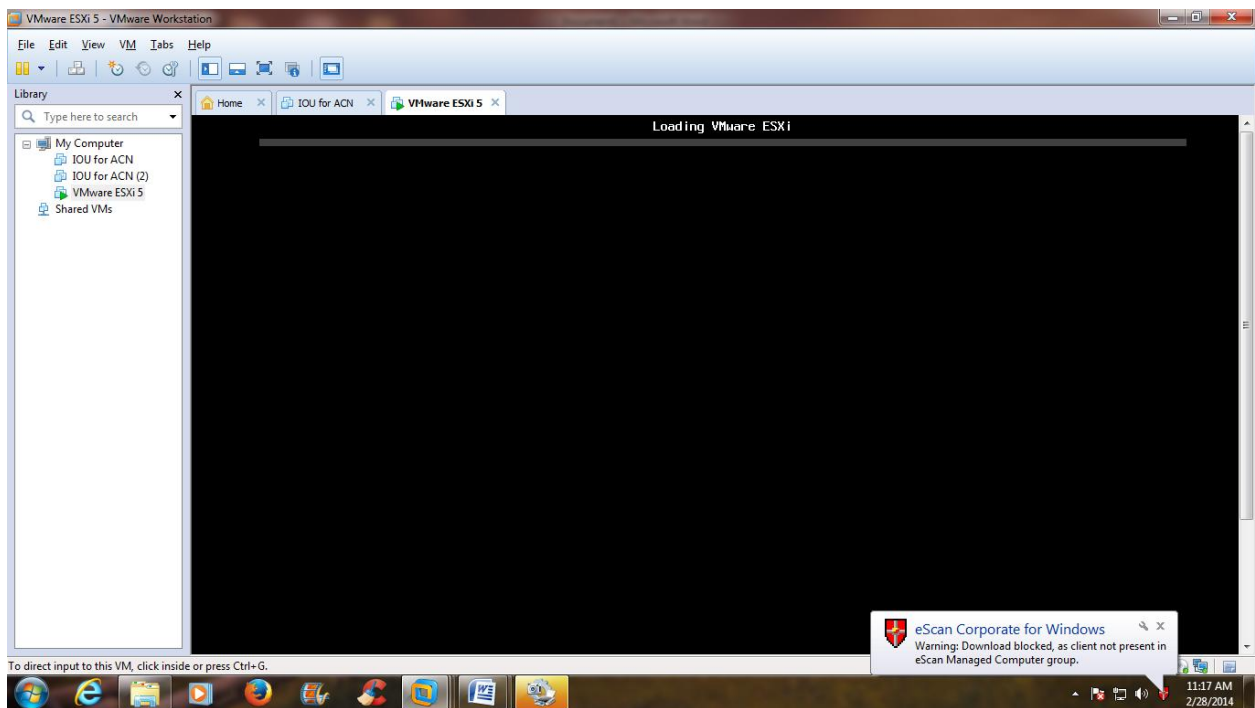


**STEP 21:** After scanning, it will provide the window for Confirm install. Press (F11) to install. It will install the ESXi server.



**STEP 22:** Then it will ask for rebooting.





**STEP 23:** After rebooting the server, it will provide an ip-address through DHCP. Note down IP Address provided by DHCP.

