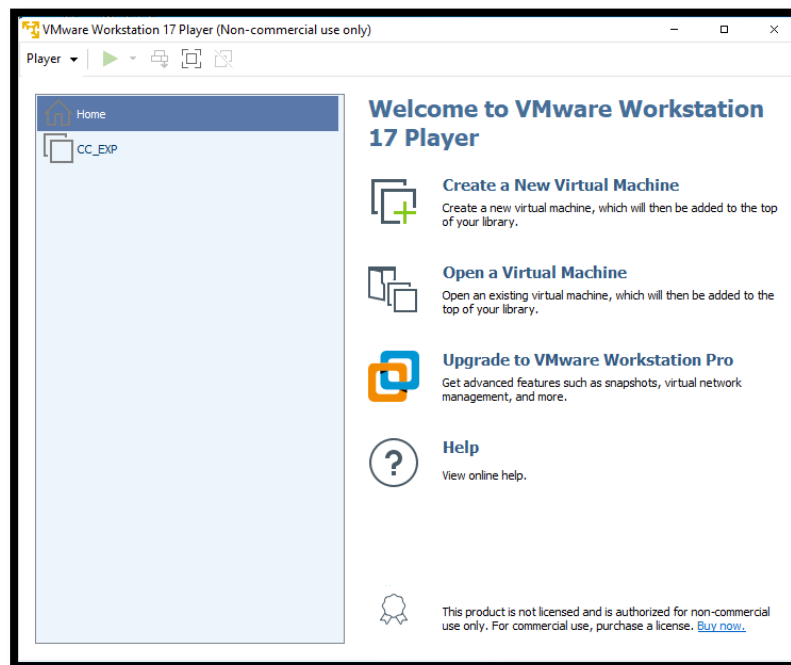


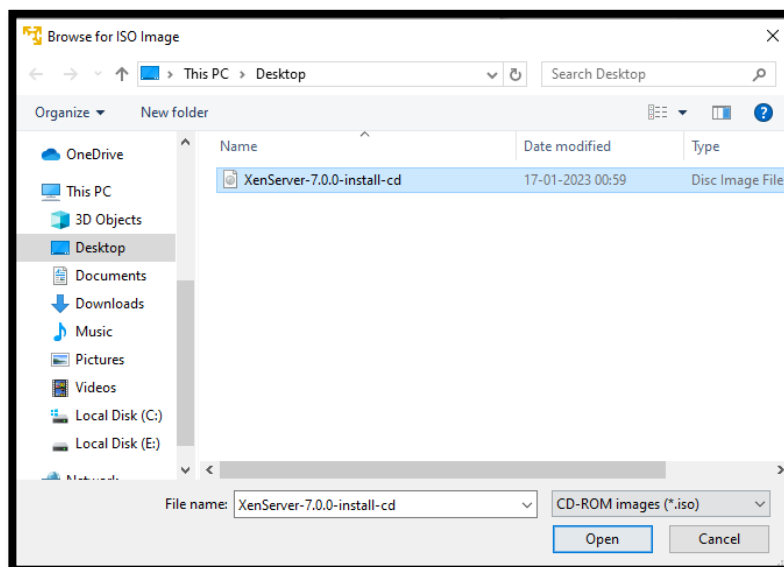
**Name : Keyur Patel**  
**Roll No : 16010421073**  
**Batch : A2**

## **EXP-1** **:Virtualization**

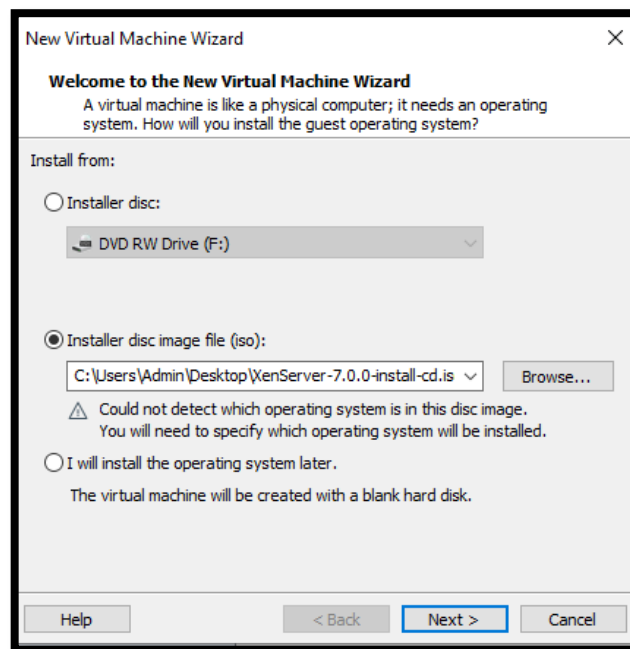
**After Installing VMware workstation:**



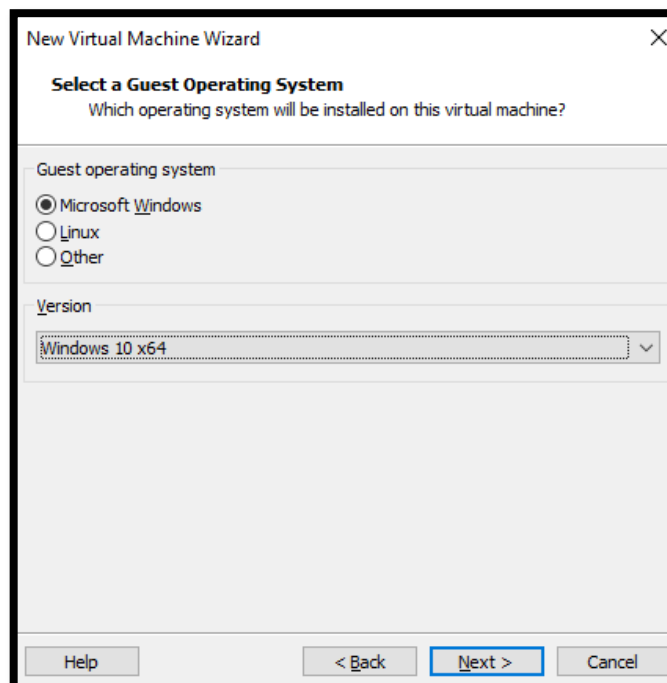
**Selecting iso file :**



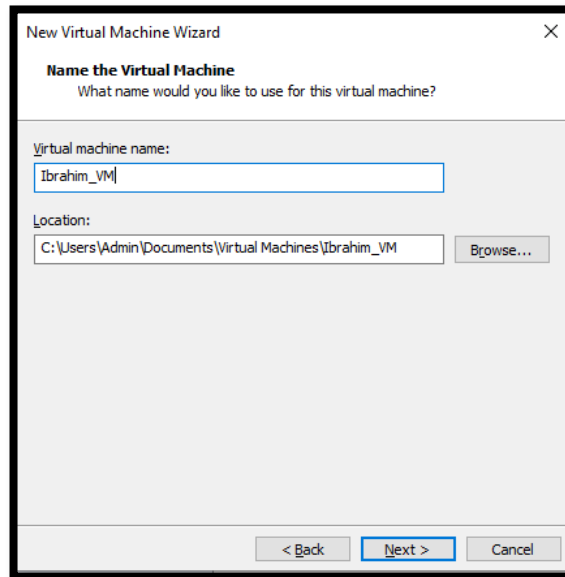
## Downloading and adding the path of Disc Image:



## Selecting 'Microsoft Windows' as Guest Operating System:

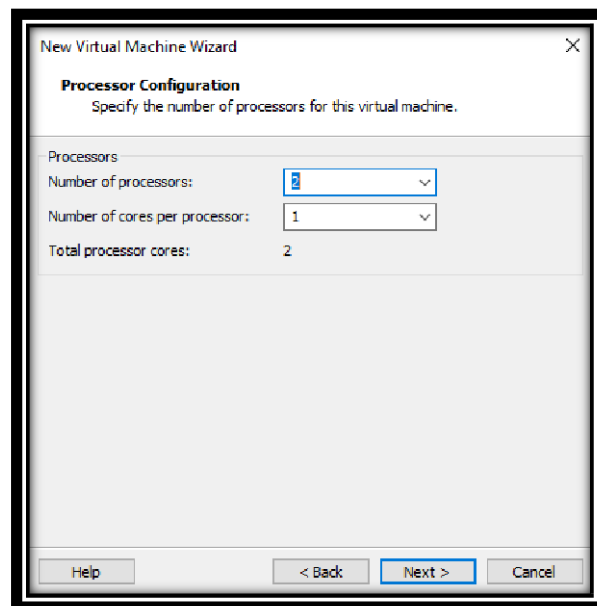


## Giving the Virtual Machine a name:



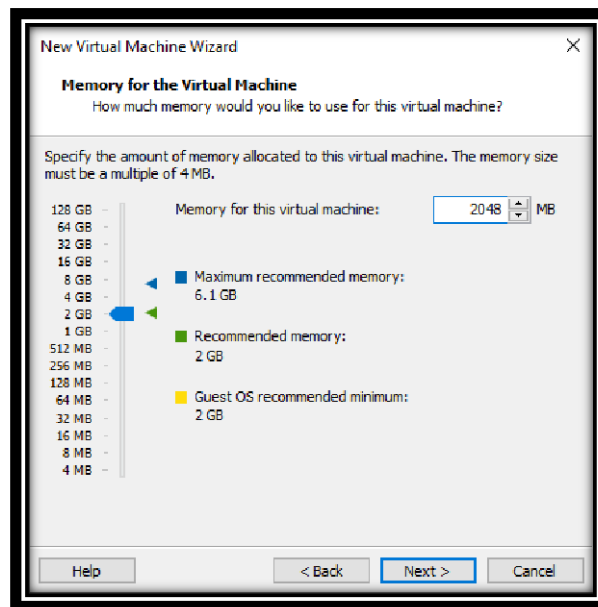
The screenshot shows the 'Name the Virtual Machine' step of the 'New Virtual Machine Wizard'. The window title is 'New Virtual Machine Wizard'. The subtitle is 'Name the Virtual Machine' with the instruction 'What name would you like to use for this virtual machine?'. There are two input fields: 'Virtual machine name:' with the text 'Ibrahim\_VM' and 'Location:' with the text 'C:\Users\Admin\Documents\Virtual Machines\Ibrahim\_VM'. A 'Browse...' button is next to the location field. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

## Selecting a Firmware Type:

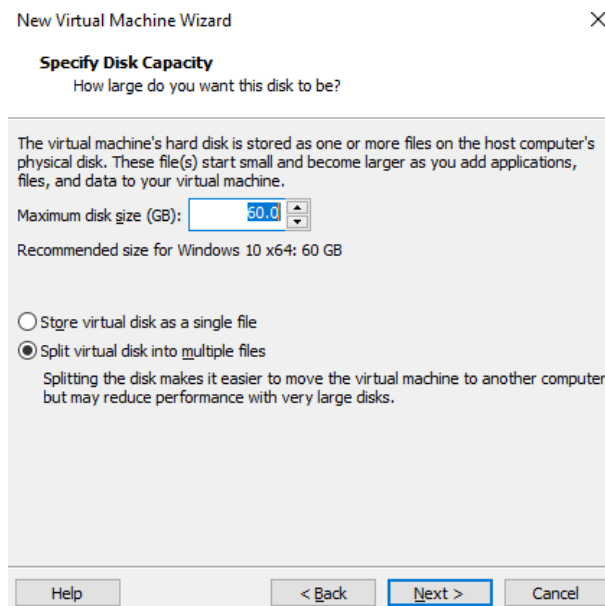


The screenshot shows the 'Processor Configuration' step of the 'New Virtual Machine Wizard'. The window title is 'New Virtual Machine Wizard'. The subtitle is 'Processor Configuration' with the instruction 'Specify the number of processors for this virtual machine.'. There are two dropdown menus: 'Number of processors:' set to '2' and 'Number of cores per processor:' set to '1'. Below these, it says 'Total processor cores: 2'. At the bottom, there are four buttons: 'Help', '< Back', 'Next >', and 'Cancel'.

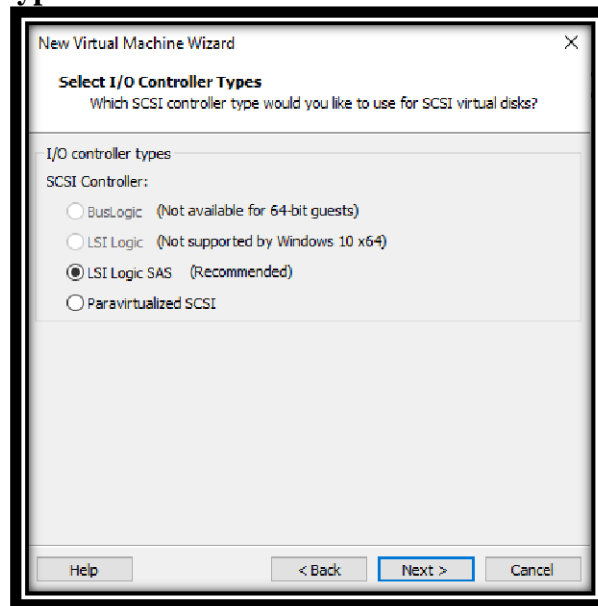
## Selecting appropriate Processor Configuration:



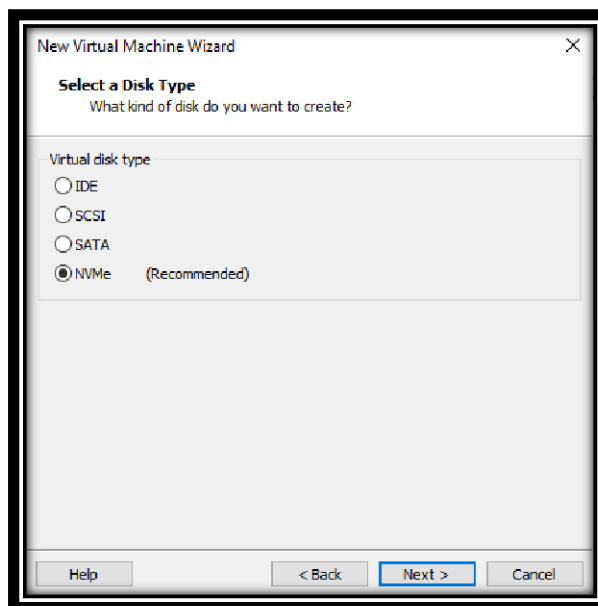
## Specifying Disk Capacity for Virtual Machine:



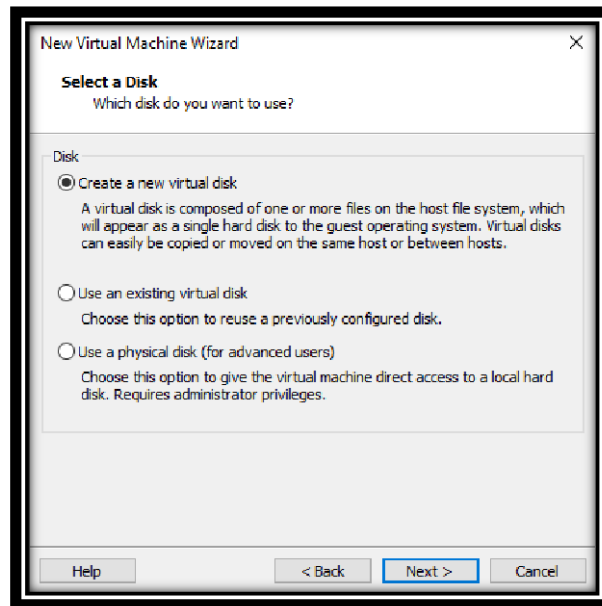
## Selecting a Network Type:



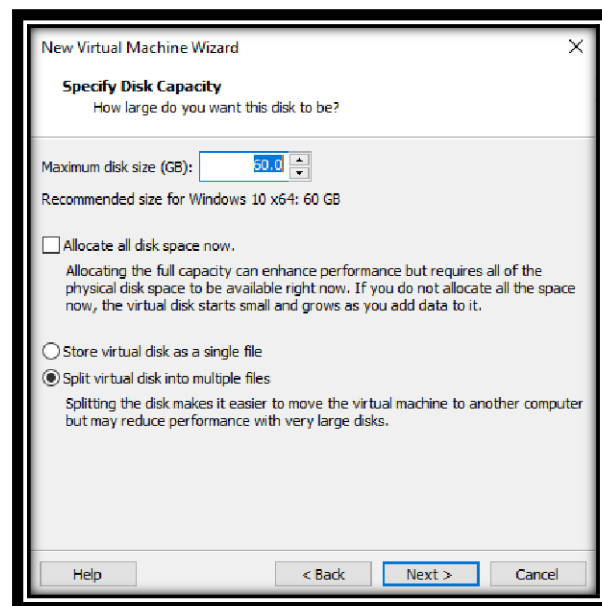
## Selecting I/O Controller Type:



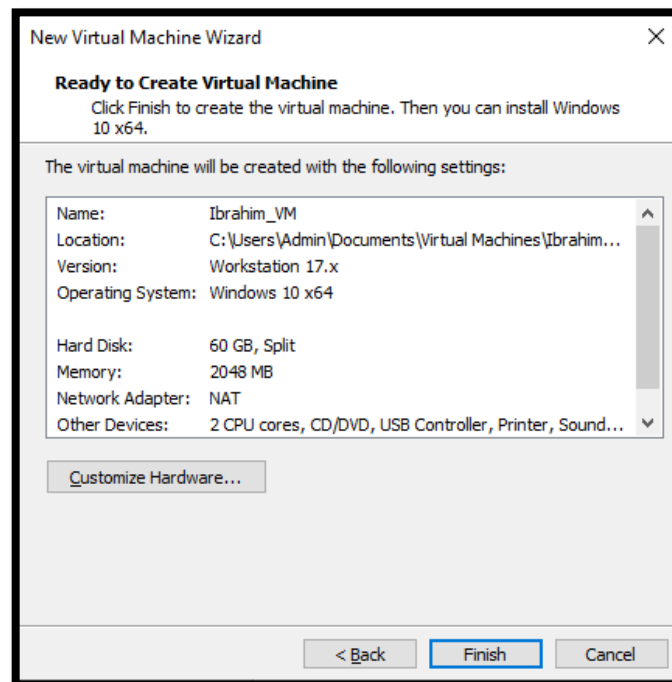
## Selecting Disk Type:



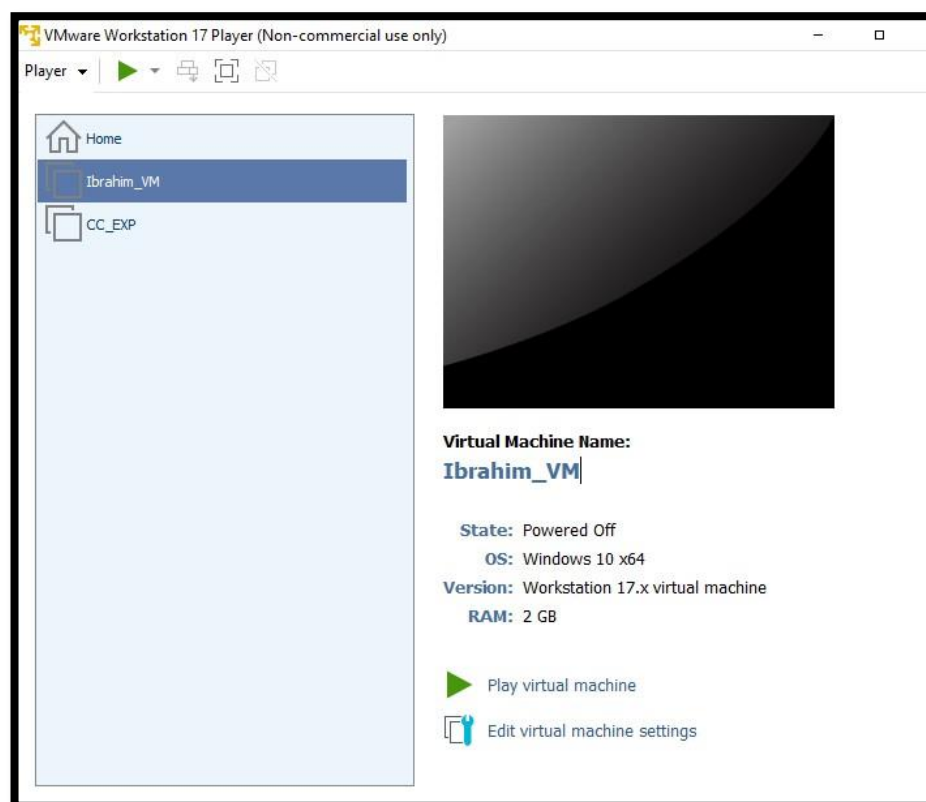
## Selecting a Disk:



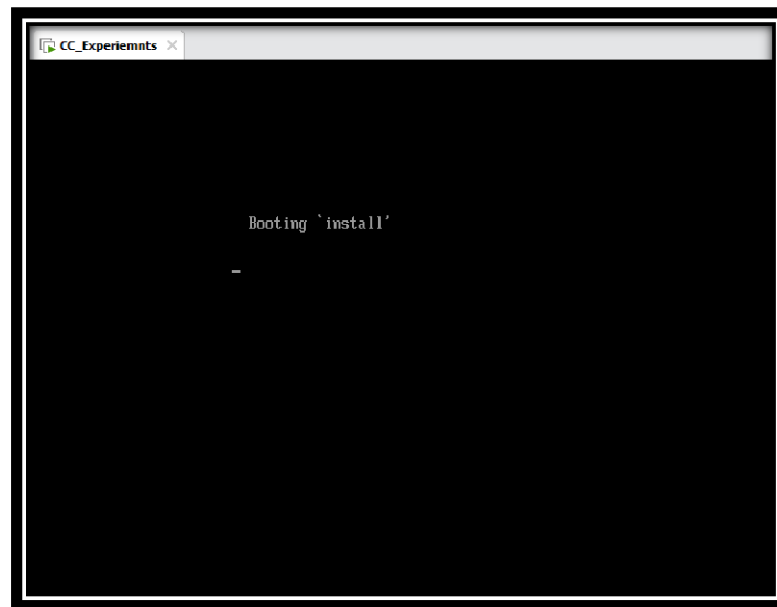
## Specifying Disk File:



Clicking on 'Finish' the workstation will now have a virtual computer

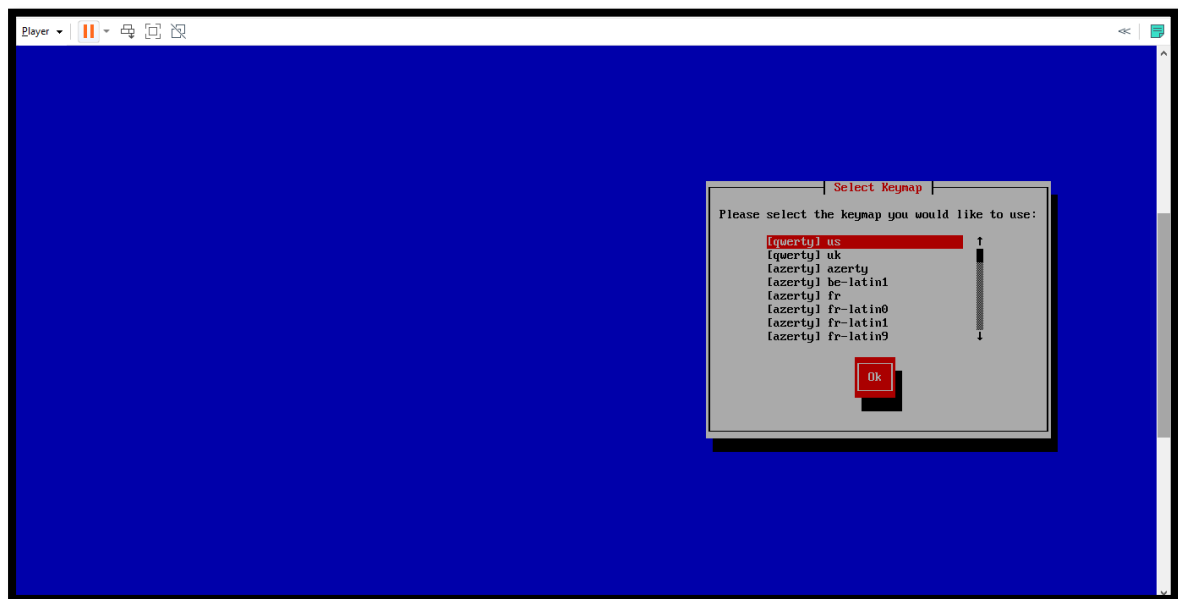


## On powering on the virtual machine:

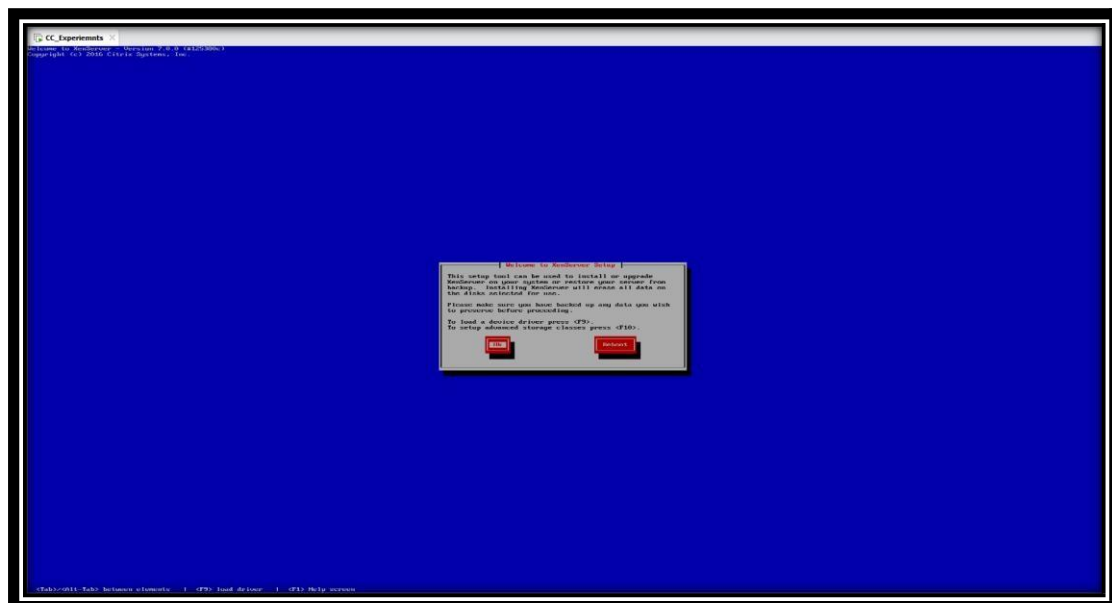


```
Player | [Icons] | [Icons] | [Icons]
[ 52.739766] pciehp 0000:00:18.4:pcie04: Slot already registered by another ho
tplug driver
[ 52.742439] pciehp 0000:00:18.5:pcie04: HPC vendor_id 15ad device_id 7a0 ss_u
id 15ad ss_did 7a0
[ 52.745235] pciehp 0000:00:18.5:pcie04: pci_hp_register failed with error -16
[ 52.747518] pciehp 0000:00:18.5:pcie04: Slot already registered by another ho
tplug driver
[ 52.750186] pciehp 0000:00:18.6:pcie04: HPC vendor_id 15ad device_id 7a0 ss_u
id 15ad ss_did 7a0
[ 52.752974] pciehp 0000:00:18.6:pcie04: pci_hp_register failed with error -16
[ 52.755252] pciehp 0000:00:18.6:pcie04: Slot already registered by another ho
tplug driver
[ 52.757915] pciehp 0000:00:18.7:pcie04: HPC vendor_id 15ad device_id 7a0 ss_u
id 15ad ss_did 7a0
[ 52.760706] pciehp 0000:00:18.7:pcie04: pci_hp_register failed with error -16
[ 52.762995] pciehp 0000:00:18.7:pcie04: Slot already registered by another ho
tplug driver
[ 52.765598] pciehp: PCI Express Hot Plug Controller Driver version: 0.4
[ 52.767789] efifb: probing for efifb
[ 52.769945] efifb: framebuffer at 0xf0000000, mapped to 0xffffc90008100000, u
sing 12288k, total 12288k
[ 52.772908] efifb: mode is 2048x1536x32, linelength=8192, pages=1
[ 52.774058] efifb: scrolling: redraw
[ 52.776024] efifb: Truecolor: size=8:8:8, shift=24:16:8:0
[ 52.784754] Console: switching to colour frame buffer device 256x96
[ 52.792333] fb0: EFI UGA frame buffer device
[ 52.793889] ACPI: Deprecated procfs I/F for AC is loaded, please retry with CONFIG_ACPI_PROCFS_POWER cleared
[ 52.797190] ACPI: AC Adapter [ACAD] (on-line)
[ 52.798769] input: Power Button as /devices/LNXSYSTM:00/LNXPWRBN:00/input/input0
[ 52.801712] ACPI: Power Button [PWRF]
```





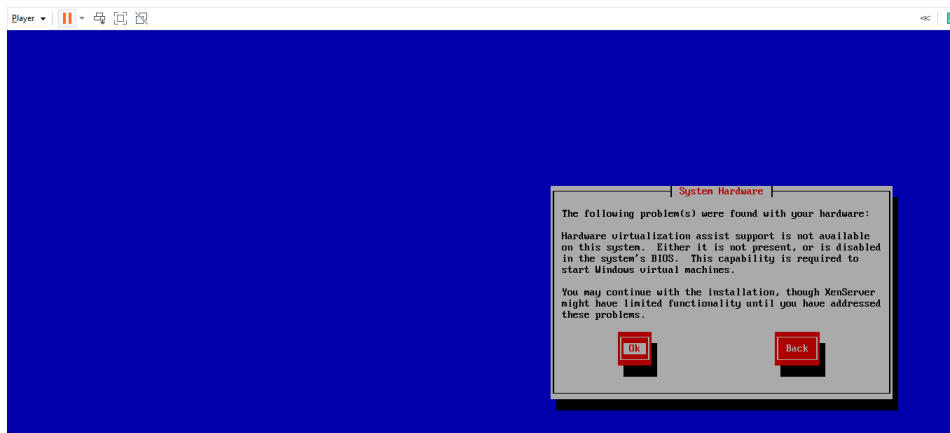
Selecting 'qwerty-us':



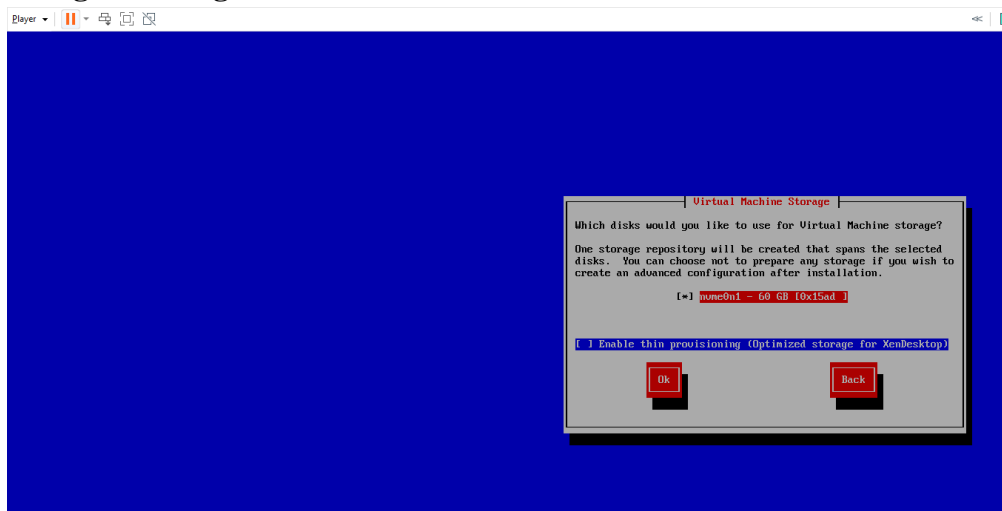
## Confirming the dialogue box



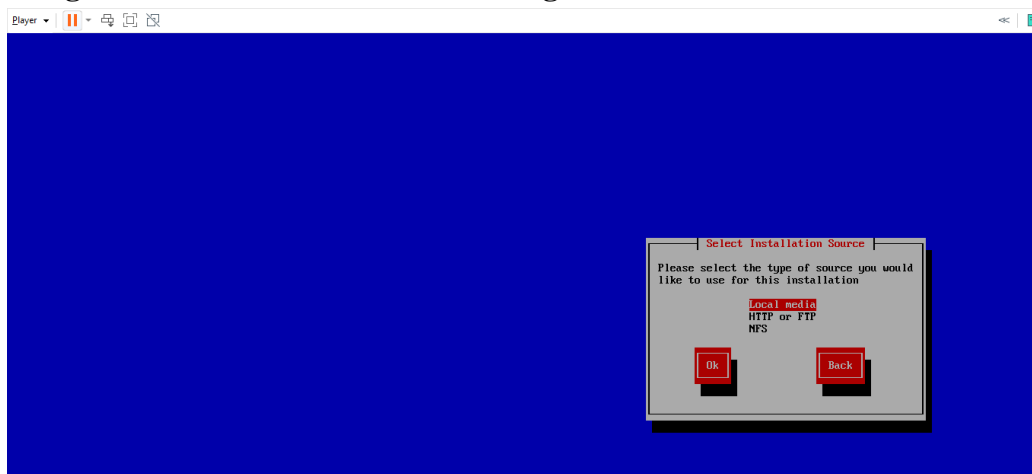
Accepting the terms:



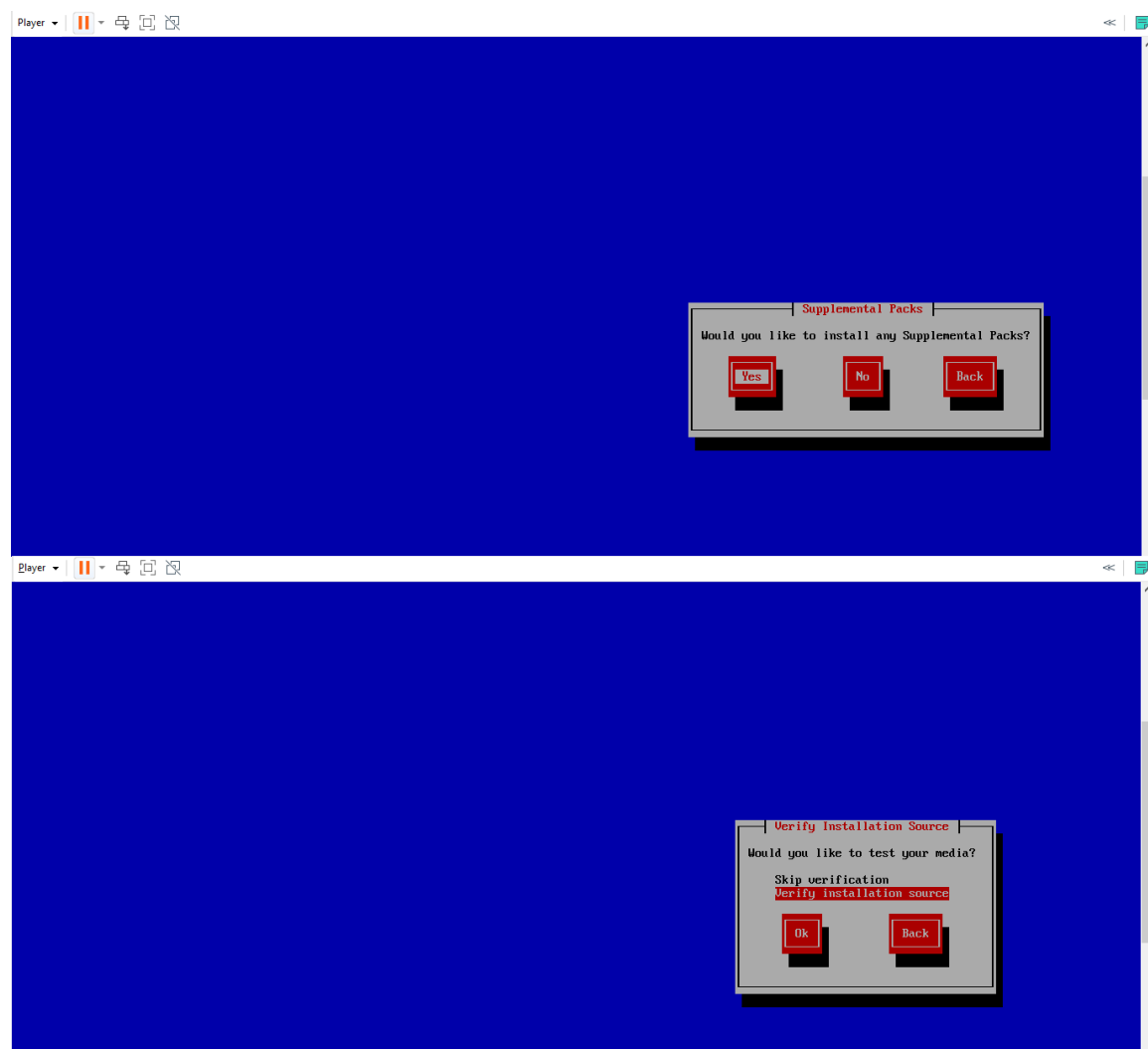
**Confirming the dialogue box:**



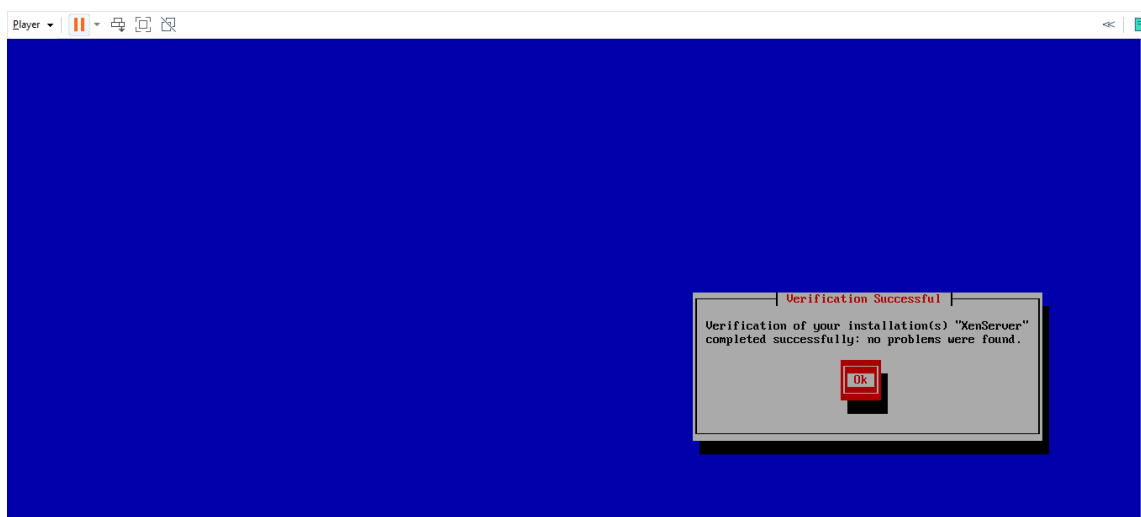
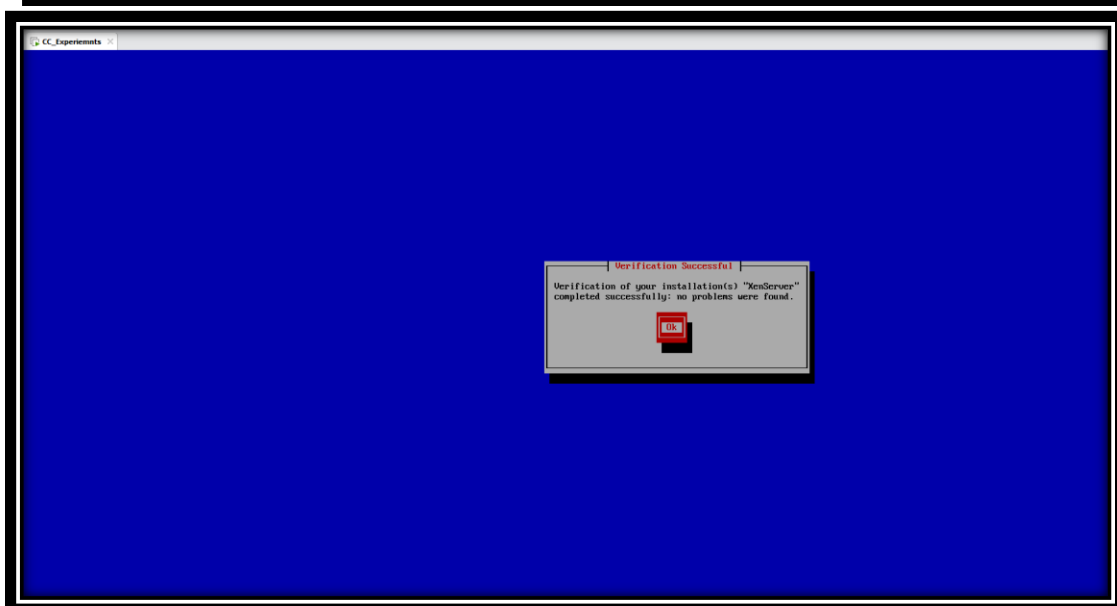
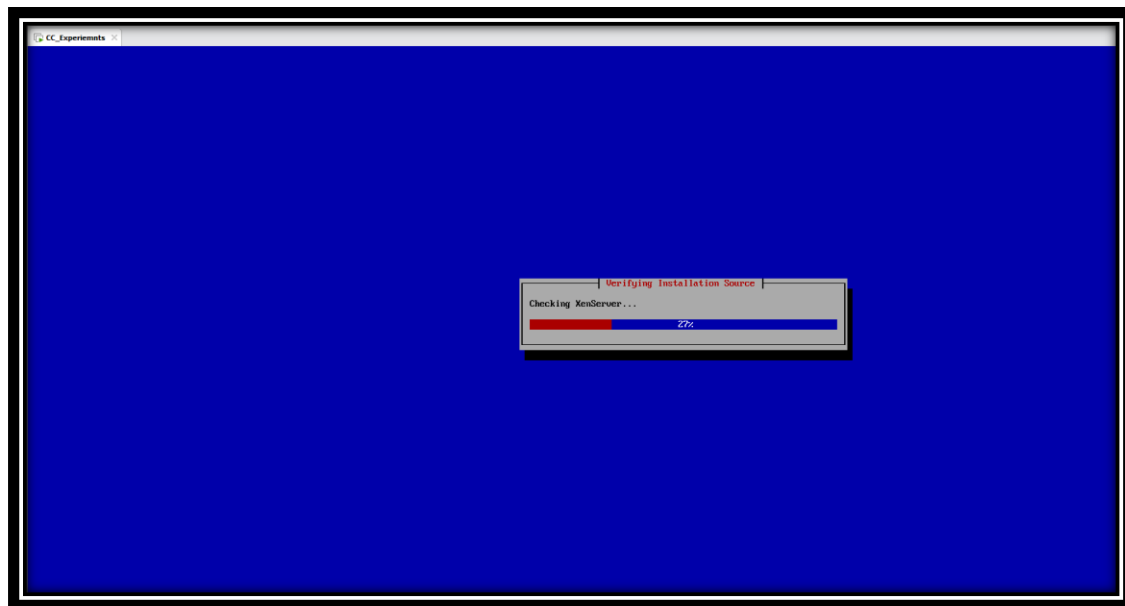
**Selecting the disk for virtual machine storage:**



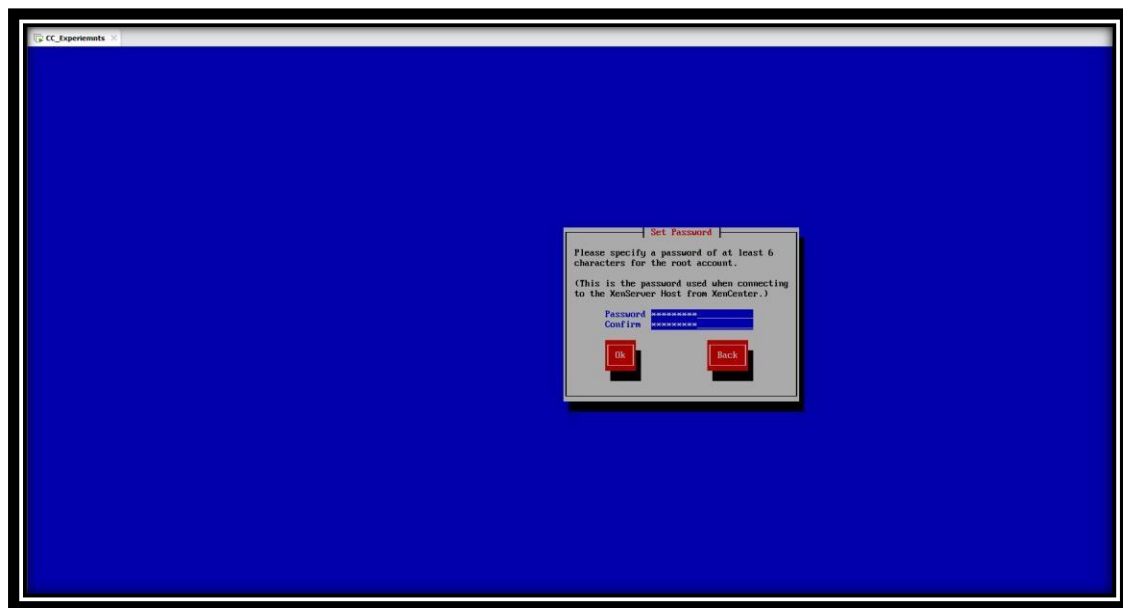
**Selecting the Installation Source:**



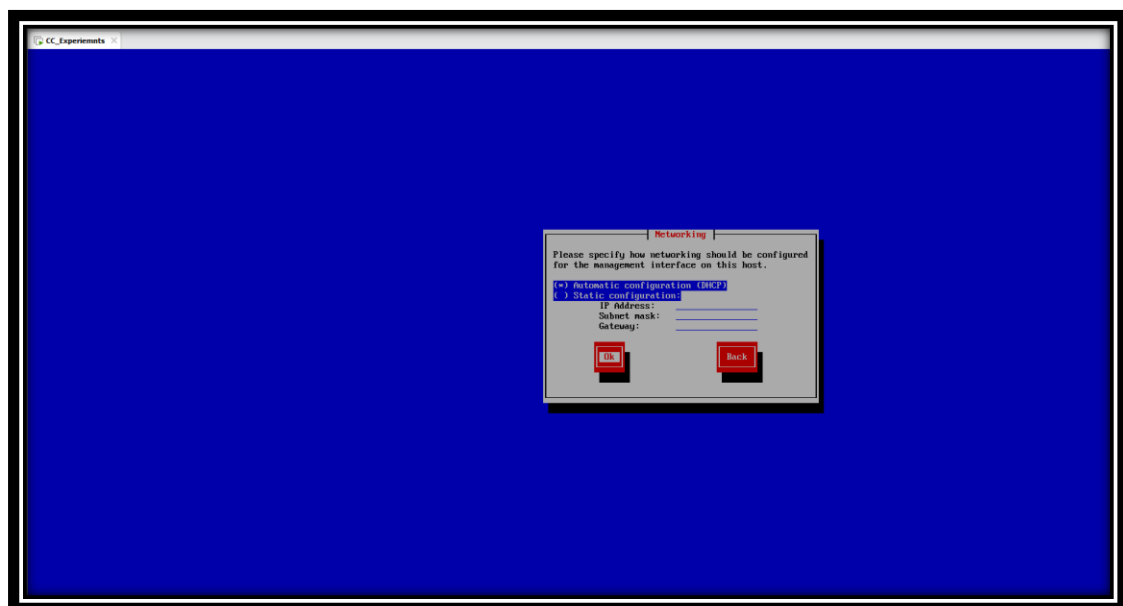
**Opting to verify the installation source:**



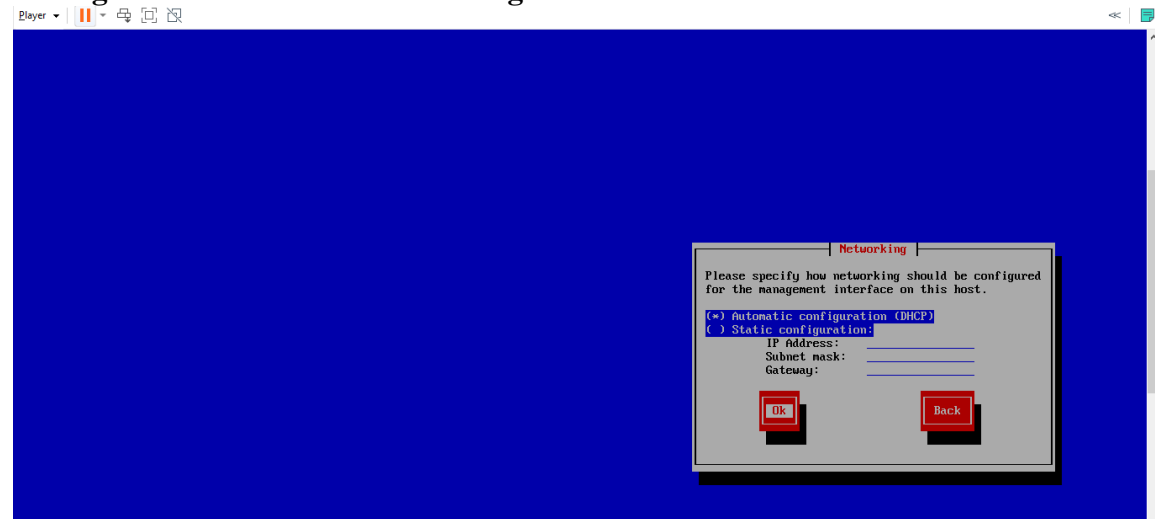
## Setting the password:



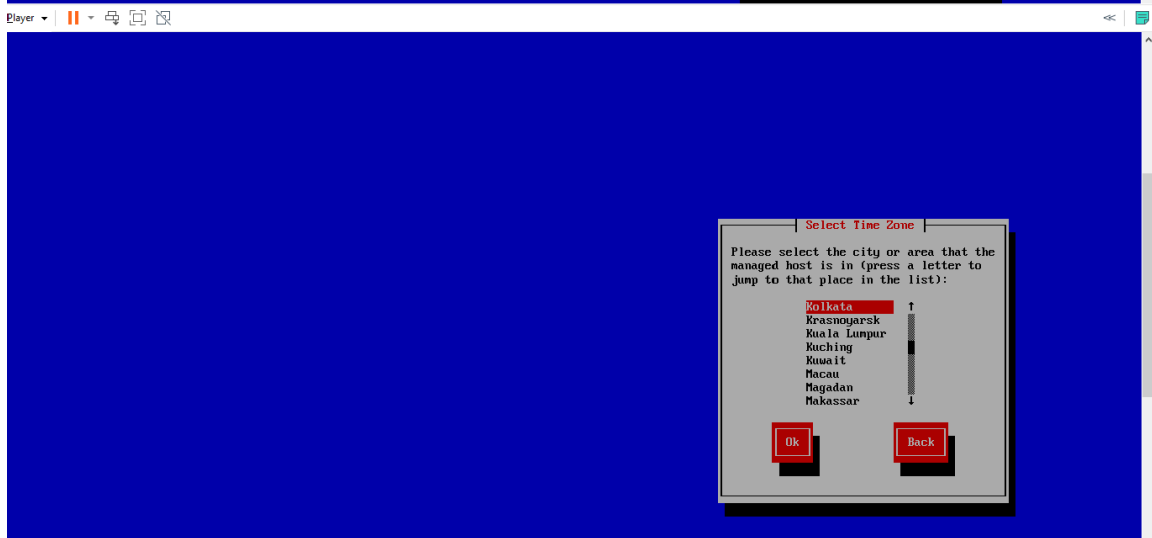
## Specifying the network configuration:



## Setting the Hostname and DNS configuration:



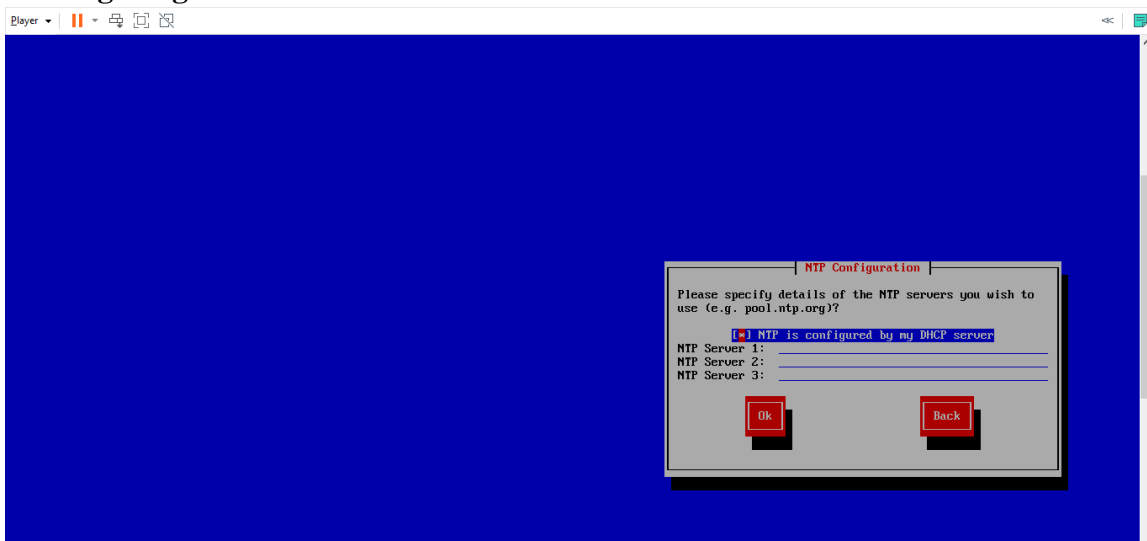
## Selecting the Time Zone:



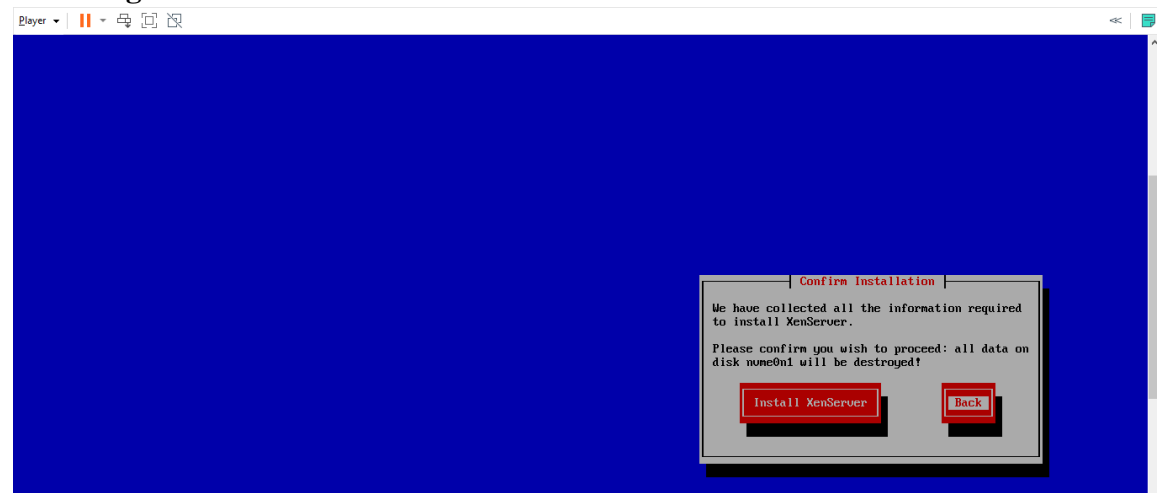
## Setting the System Time:



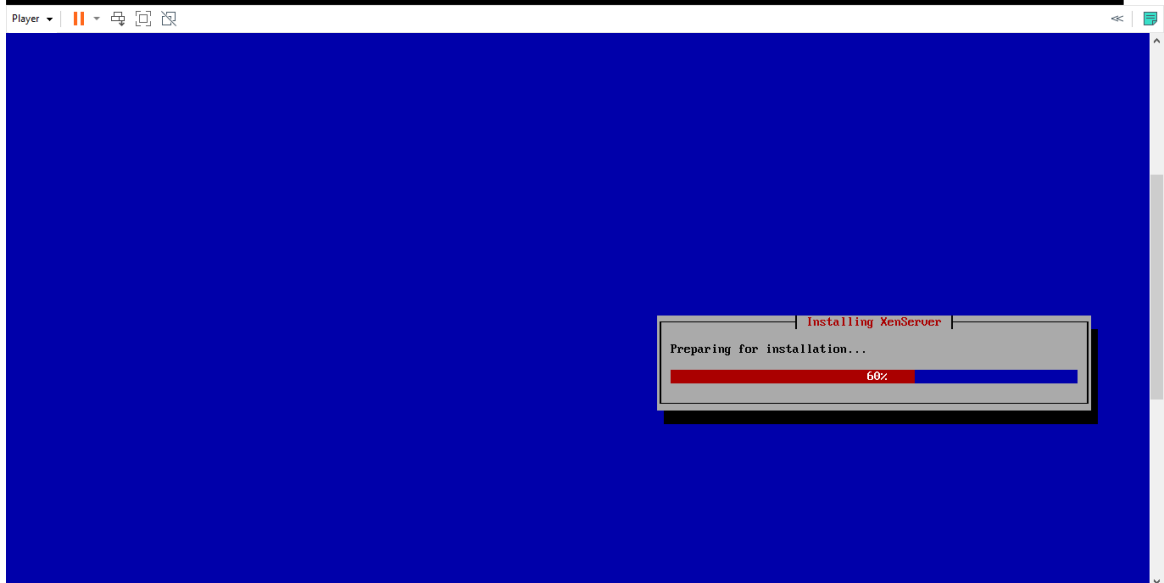
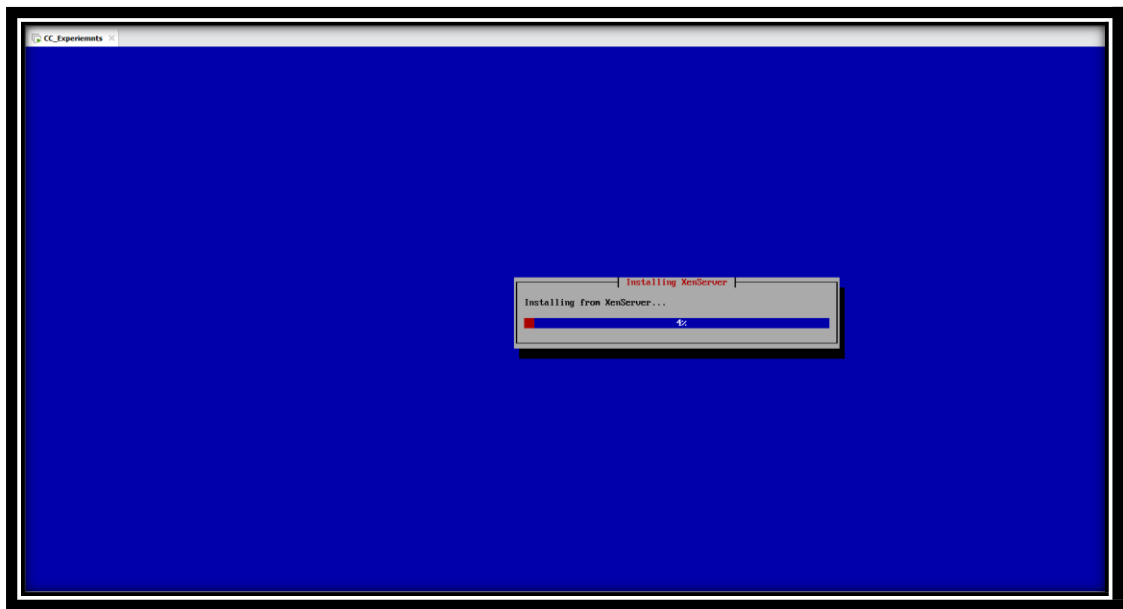
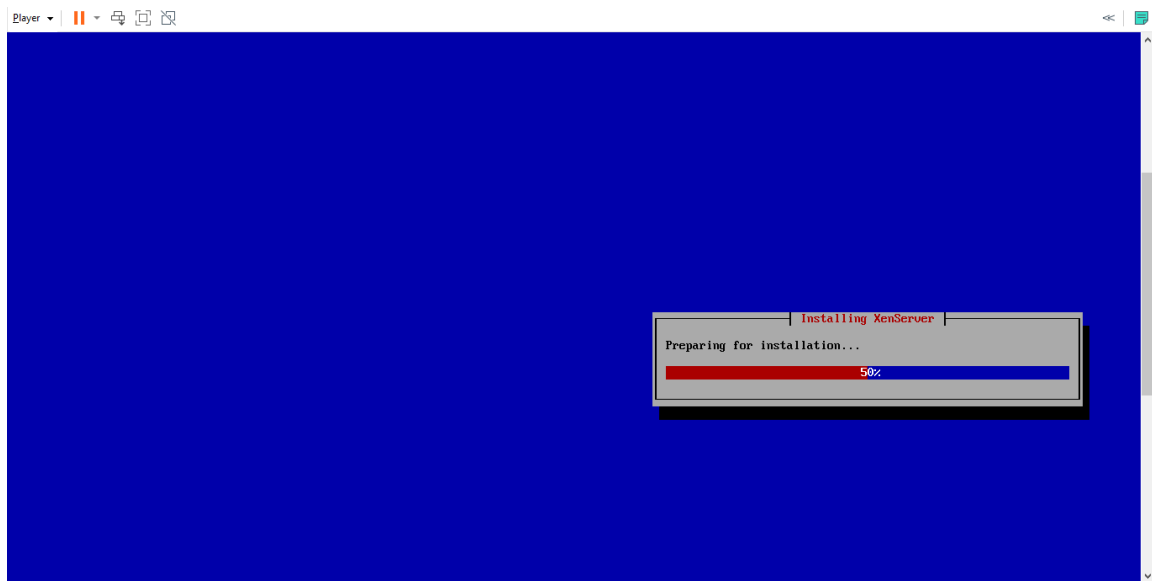
## Configuring NTP servers:

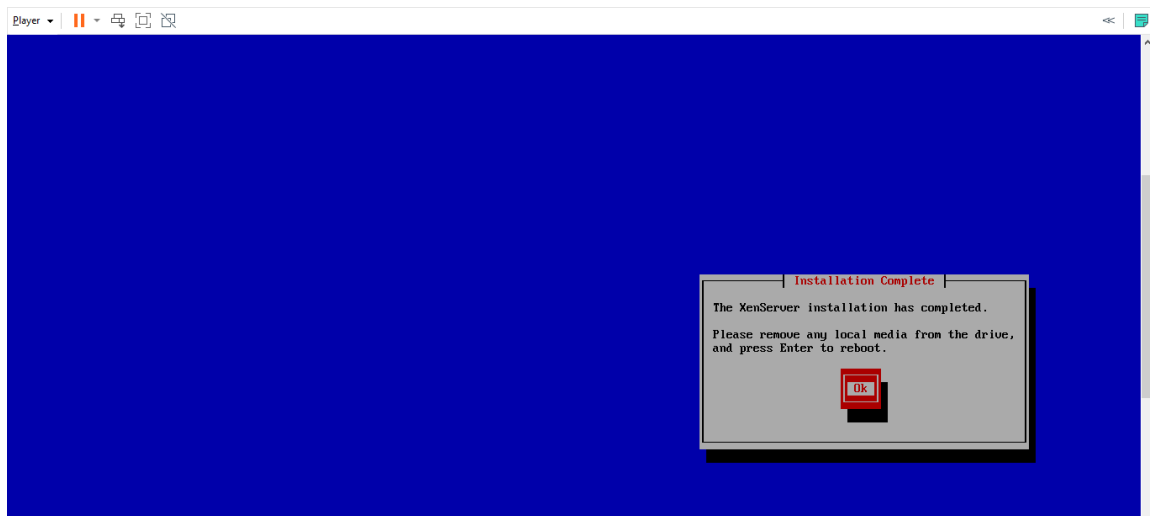
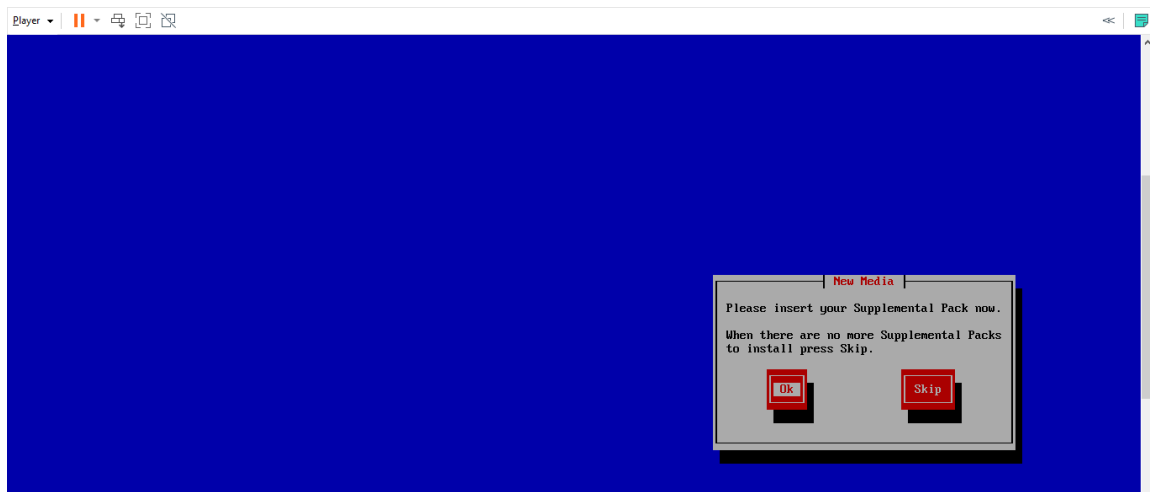


## Installing XenServer:







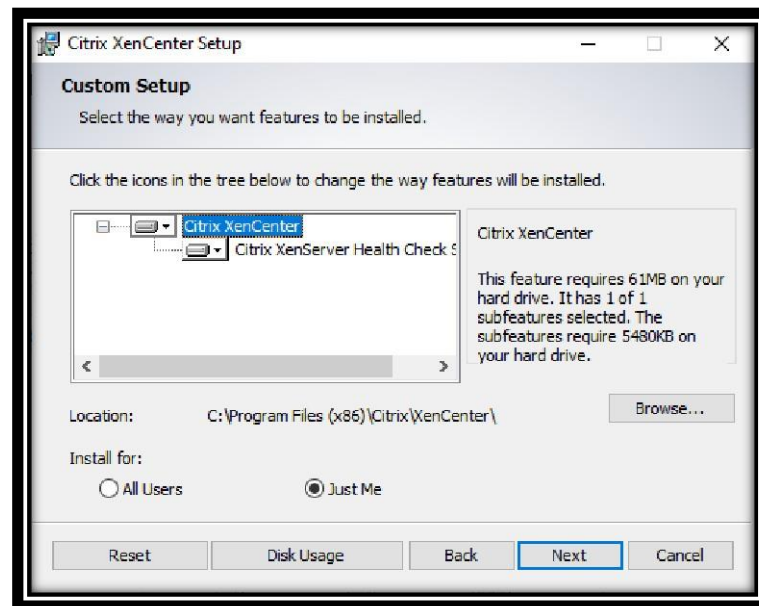




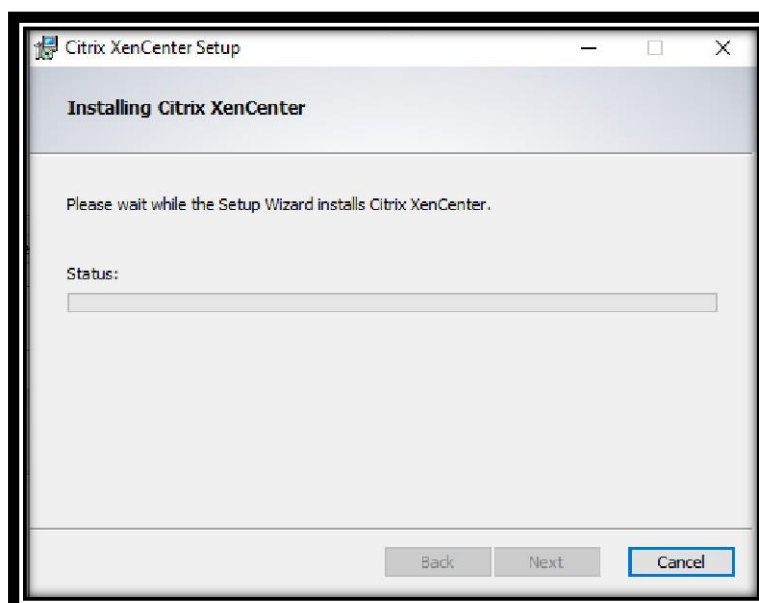
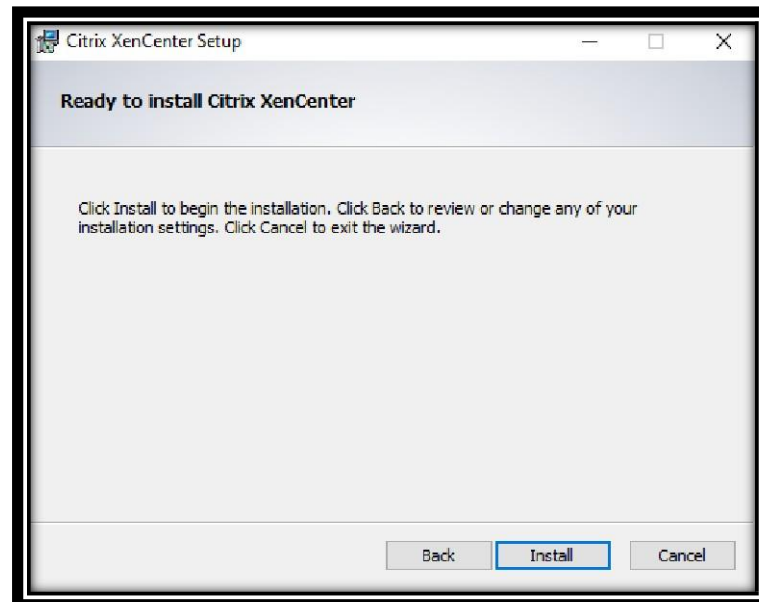
**Downloading and opening XenCenter:**

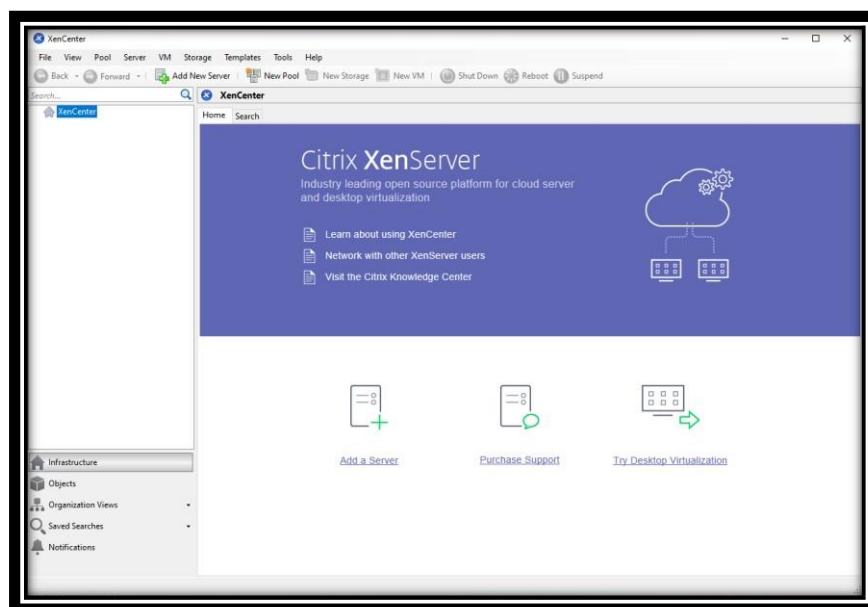


**Select the features to be installed:**



### Installing Citrix XenCenter:





**Clicking on 'Add a Server':**

**Add New Server**

Enter the host name or IP address of the server you want to add and your user login credentials for that server.

Server: 192.168.175.128

User login credentials

Username: root

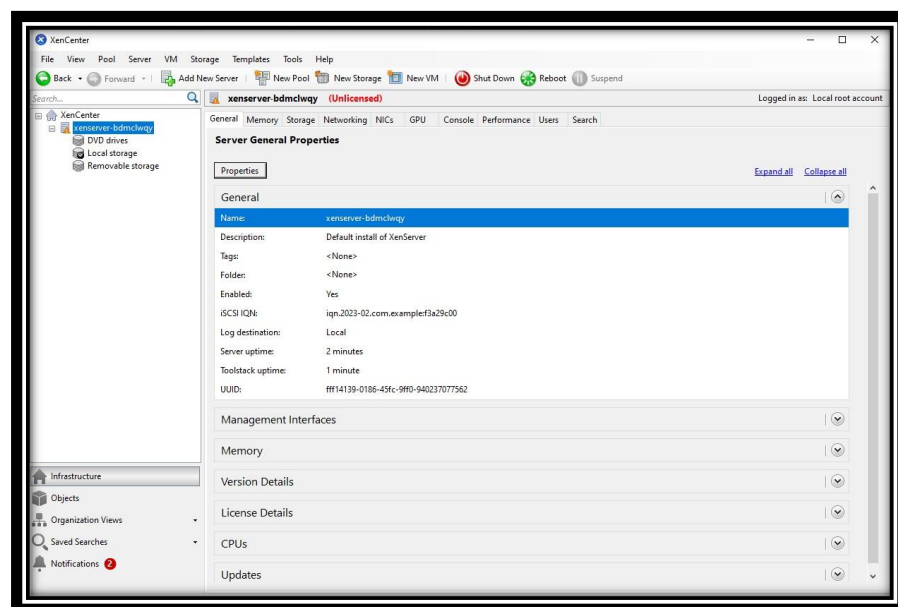
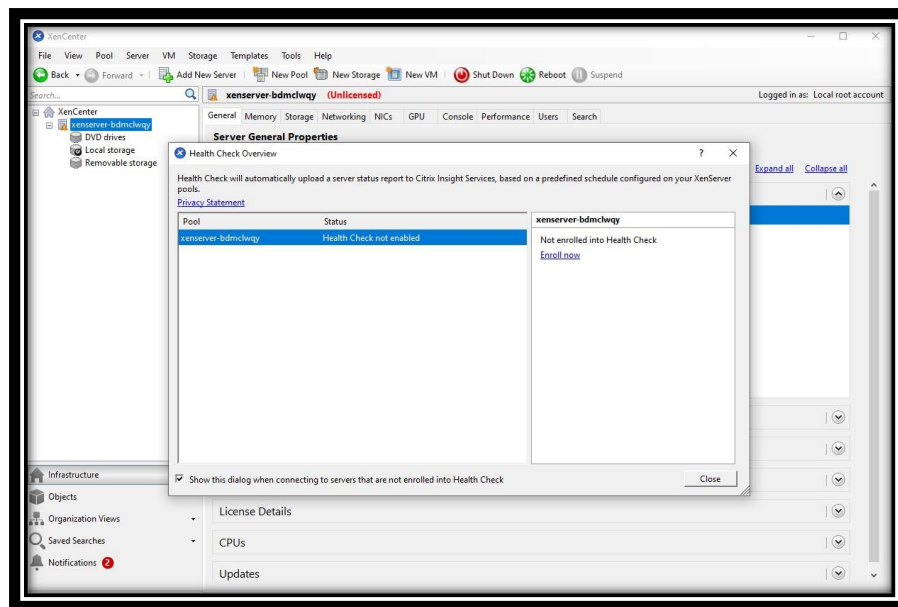
Password: ••••••••

Add Cancel

**Adding the server details:**



## Selecting appropriate option and Finishing:



## Questions:

### 1. On a particular server, within each virtual machine:

- You can run any version of Windows without regard for the version(s) running in the other virtual machines.
- The versions of Windows must be no more than one release level apart
- The versions of Windows must be the exactly same.

### 2. On a particular server:

- If you need to reboot one virtual machine, you have to first reboot the physical server, the individual virtual machines and then reboot automatically when the physical-machine reboot is finished.
- If you reboot one virtual machine, all the other virtual machines reboot at the same time.

- c. You can reboot a virtual machine without it having any effect on the other virtual machines.

**3. When choosing which applications or databases to place on one physical machine (using a virtual machine for each application), it is best to:**

- a. Choose a mixture of applications and databases with different workloads.
- b. Keep all the heavy-workload application/databases together and all the light-workload applications and databases together.

**4. Introduction of server virtualization in a data center:**

- a. Will make the introduction of Storage –Area Network (SAN) absolutely necessary.
- b. Will make the introduction of Storage –Area Network (SAN) desirable.
- c. Will not materially change storage requirements.

**5. In a virtualized- server environment, compared with a traditional server environment:**

- a. It is easier to keep track of software licensing.
- b. Tracking software licensing is neither materially easier nor harder.
- c. It is significantly harder to keep track of software licensing.

**6. The VM Kernel can't boot it by itself, so that it takes the help of the 3rd party operating system.**

- a. True
- b. False

**7. The hypervisor acts like a traffic cop, directing hardware access and coordinating requests from the guest operating systems.**

- a. True
- b. False

**8. XEN hypervisor does not support VM migration.**

- a. True
- b. False

**9. XEN hypervisor works on multiple cloud platforms.**

- a. True
- b. False

**Outcomes: CO1- Understand Virtualization**

**Conclusion: (Conclusion to be based on the objectives and outcomes achieved)**

Learnt about Virtualization using VMware workstation and XEN Server-Client installation.