Practical 1 and 2 Aim: Installation of ● Vmware Esxi ● Citrix Xen ● Microsoft Hyper-V

**A) Aim:- Implement VMware on ESXI Server.**

Step 1:

Open VmWare Workstation. Click on New VM.

Step 2:

Select Typical(recommended) & click on Next.

Step 3:

Click on Installer Disc image file > Select VmWare ESXi Server.iso file > Next.

Step 4:

Give name :- VMware ESXi 5

Step 5:

Select Store virtual disk as a single file & Give size as 40.0 Gb.

Step 6:

Click on Finish.

Step 7:

Click on Start > Select 1st option.

Step 8:

Wait until all packages are installed.

Step 9:

Press Enter.

Step 10:

Press Enter.

Step 11:

Select US Default > Enter.

Step 12:

Give password :- admin123.

Step 13:

Press F11 Button.

Step 14:

VMware ESXi is being installed.

Step 15:

Press Enter to Reboot.

Step 16:

After Reboot you can see the ip address :- 192.168.159.129.

Step 17:

Select VMware-viclient-all-5.1.0.exe installer and Install it.

Step 18:

Click on Ok.

Step 19:

Click on Next > Click on Install.

Step 20:

Click on Finish.

Step 21:

Select VMware vSphere Client shortcut on Desktop.

Step 22:

Give Ip address :- 192.168.159.129

User name :- root

Password :- admin123

Step 23:

Click on Login.

Step 24:

Click on Configuration Tab > Storage > (Right-Click) on datastore1 and Select Browse Datastore.

Step 25:

Click on Upload Icon and Select Upload File.

Step 26:

Select Windows 7 x86 Iso and Click on Upload.

Step 27:

You can see the Windows 7 x86 iso in datastore1.

Step 28:

(Right-click) on Server IP > Select New Virtual Machine.

Step 29:

Select Typical.

Step 30:

Give name :- Windows 7 Pro Zubair 2019>Next.

Step 31:

Select the datastore1>Next

Step 32:

Select Windows as Guest O.S and select Windows 7 (32-bit).

Step 33:

Leave as default.

Step 34:

Give Virtual disk size as 20Gb > Next.

Step 35:

Click on Finish.

Step 36:

Right-Click on Windows 7 Pro under Server Ip and Select Edit Settings.

Step 37:

Go to CD/DVD drive 1 and select Datastore ISO file and Select your Windows 7 iso file Also check the Connect at power on option > Click on Ok.

Step 38:

Right-Click on Windows 7 Pro under Server Name and Select Open Console.

Step 39:

Click on Power On > Windows will start for the first time.

Step 40:

Click on Next Until this screen > Windows in installing.

Step 41:

After install it will Reboot.

Step 42:

Give name to Machine :-

Step 43:

Select Clock as (UTC +5:30).

**B) Aim:- Implement VM on XEN Server.**

**Pre Installation Procedure** Step 1:

Create a folder > Give any name (cloud in our case),

Copy Windows 7 Iso File in it,

Right Click on the folder, click on properties and go to the Sharing Tab.

Step 2:

Select > Everyone and Give > Read/Write (Permission Level)

Step 3:

Go to Start Menu > Control Panel > Network and Sharing Center > Change advanced sharing settings.

Step 4:

Turn Off Password Protection Sharing > Save Changes.

## Implement VM on XEN Server

Step 1:

Open VmWare & Click on Add New Virtual Machine.

Step 2:

Select Hardware Compatibility as Workstation 11.x

Step 3:

Click on Installer disk image & Select XenServer.iso file

Step 4:

Select VMware ESX as O.S & Version VMware ESXi 5

Step 5:

Give virtual machine name :- XEN SERVER ZUBAIR UPG 2019

Step 6:

Select 2 Processors and Select 1 Core.

Step 7:

Select Ram as 4096 MB

Step 8:

Network Type :- Use host-only networking

Step 9:

Disk :- Create a new virtual disk

Step 10:

Storage Capacity :- 40Gb & Select Store virtual disk as a single file.

Step 11:

Your configuration is ready

Step 12:

Your new virtual machine XEN SERVER is created.

Step 13:

Click on Edit Virtual Machine > Processors > Select Virtualize Intel.

Step 14:

Start your virtual machine.

Step 15:

Select “[qwerty] us” and click on ok.

Step 16:

Click on Ok.

Step 17:

Click on “Accept EULA”.

Step 18:

Click on Ok.

Step 19:

Select “Local Media” and click on Ok.

Step 20:

Click on No.

Step 21:

Select “Skip verification” and click on Ok.

Step 22:

Username :- root (default) & Password :- admin123456. Click on Ok.

Step 23:

Click on Ok.

Step 24:

Enter the name for Hostname configuration and click on Ok.

Step 25:

Select “Asia” and click on Ok.

Step 26:

Select “Calcutta” and click on Ok.

Step 27:

Select “Using NTP” and click on Ok.

Step 28:

Click on Ok.

Step 29:

Click on “Install XenServer”.

Step 30:

Installing XenServer.

Step 31:

Click on Ok to reboot.

Step 32:

Machine is Rebooted.

Step 33:

Make note of Ip Address provided :- 192.168.61.138

Step 34: Go to Authentication Tab

Step 35:

Write the Password :- admin123456

Step 36:

Open Citrix Xenserver Management Program

Step 37:

Click on “New Server” and enter the following details:

* Server : 192.168.61.138
* Username :- root✓ Password :- admin123456

Step 38:

Your Xen Server Machine is Added.

Step 39:

Click on New Storage Button and Select Windows File Sharing (SMB/CIFS).

Step 40:

Leave as default and click on Next.

Step 41:

Share name :- \\192.168.61.1\cloud and click on Finish.

Step 42:

Right-Click on Added Server and Select New VM.

Step 43:

Select Windows 7 (32-Bit) and click on Next.

Step 44:

Click on Next.

Step 45:

Select Windows 7 Iso from your shared folder and click on Next.

Step 46:

Click on Next.

Step 47:

Click on Next.

Step 48:

Click on Next.

Step 49:

Click on Next.

Step 50:

Your VM Configuration. Click on “Create Now”.

Step 51:

Select the Console Tab. Your new VM Is Ready. Complete the installation.

**C) Aim:- Implement Hypervisor.**

Step 1:

Start the Virtual Machine, Select File -> Click on New Virtual Machine.

Step 2:

In Virtual Machine wizard. Select Custom (advanced) button and then Click on Next.

Step 3:

Click on Next.

Step 4:

Browser the Windows Server (Hypervisor) image file and then Click on Next.

Step 5:

Give the Windows product key.

Step 6:

Give the Virtual Machine Name as Zubair\_Hypervisor. Click on Next.

Step 7:

Click on Next.

Step 8:

Give the total processor as 2. Click on Next.

Step 9:

Give the memory allocation as 2 GB. Click on Next.

Step 10:

Use the NAT. Click on Next.

Step 11:

Select the LSI logic and Click on Next.

Step 12:

Select the SCSI Virtual Disk Type. Click on Next.

Step 13:

Select, Create a new virtual disk. Click on Next.

Step 14:

Store Virtual Disks into multiple disks. Click on Next.

Step 15:

Check the name of the virtual machine and then Click on Next.

Step 16:

Click on finish.

Step 17:

Zubair\_Hypervisor begins to install.

Step 1:

Click on Server Manager.

Step 2:

On Windows Server 2012, install Hyper-V manager features. Open Server Manager and Click on Add roles and features.

Step 3:

Click on Next.

Step 4:

Select Role-based or feature-based installation. Click on Next.

Step 5:

Select a server from the server pool.

Step 6:

Click on Hyper-V.

Step 7:

It will give you an error that “Hypervisor already running”.

Step 8:

To solve this error. Power off the Virtual Machine and make the following change. VM -> Properties. Check the “Virtualize Intel VT-x/EPT or AMD-V/RV1” and “Virtualize CPU performance counters” checkbox.

Step 9:

Then go to Options Tag.

Select Version as Hyper-V (unsupported). And Click on Ok.

Step 10:

Now Start the VM ware machine and Repeat Step 1 and Step 6. Click on Next.

Step 11:

Check on Failure Clustering and Group Policy Management. Click on Next.

Step 12:

Click on Next.

Step 13:

Check on Ethernet0 Checkbox. Click on Next.

Step 14:

Check the Checkbox. Click on Next.

Step 15:

Click on Next.

Step 16:

Click on Install.

Step 17:

It will show the feature Installation. That show that restarted id pending...

Now restart on VM ware machine and open Server Manager, go to Tools Menu and Click on Hyper-V Manager.

Step 18:

Right Click on Your Machine. i.e WIN-XXXXXXXXXX. And Click on New and Virtual Machine.

Step 19:

Click on Next.

Step 20:

Specify the name of the new VM ware machine as Zubair VM 2019. Click on Next.

Step 21:

Specify the memory as 512 MB. Click on Next.

Step 22:

Specify the Connection as Intel. Click on Next.

Step 23:

Check and Click on Next.

Step 24:

Click on Install an Operating System and Select CorePure64.iso

Step 25:

Click on Finish.

Step 26:

Virtual Machine is being configured.

Step 27:

Right click on your machine and click on Connect.

Step 28:

Click on Start.