

LOYALIST COLLEGE

| IN TORONTO

Group D

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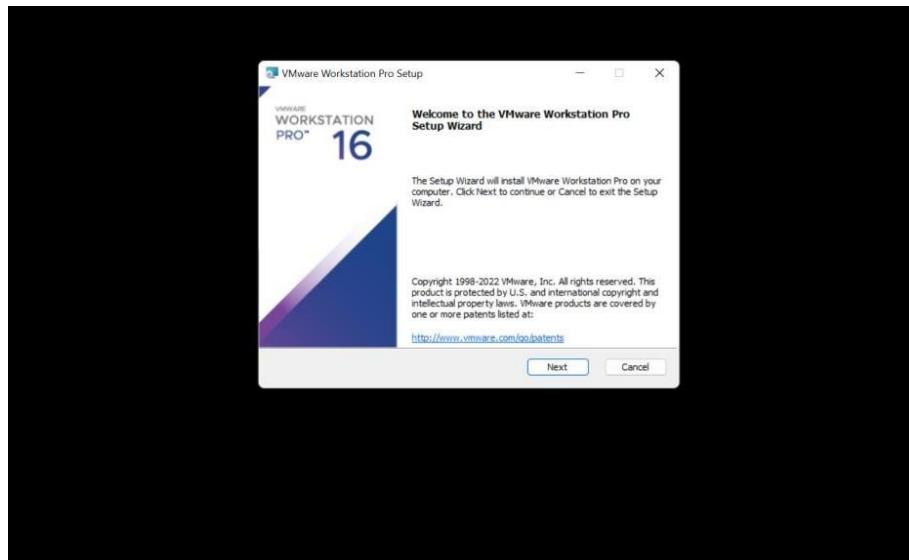
Assignment Submission Checklist

Is this my best effort?	<input checked="" type="checkbox"/>
Has the spelling been checked?	<input checked="" type="checkbox"/>
Is the references section correct?	<input checked="" type="checkbox"/>
Is all cited material referenced?	<input type="checkbox"/>
included screen shots	<input type="checkbox"/>
are the steps covered the requirements?	<input checked="" type="checkbox"/>
Are the steps executed in sequences	<input type="checkbox"/>
Are there any materials that you have not cited? (Should therefore be expunged).	<input type="checkbox"/>
Each screen shots commented and included enough explanations	<input checked="" type="checkbox"/>
Is the word length, OK?	<input checked="" type="checkbox"/>
Have I checked for spelling and grammar?	<input checked="" type="checkbox"/>
Is your name, student number, instructor's name and course code on the title page?	<input checked="" type="checkbox"/>
Is an extra software used?	<input type="checkbox"/>
The answers are in clear and good order (sorted)?	<input checked="" type="checkbox"/>
Is the output graphs match the developed codes	<input type="checkbox"/>
X, Y labels are defined and titled in the graph correctly	<input type="checkbox"/>
Did I check the whole checklist?	<input checked="" type="checkbox"/>
Layout and presentation is an Good and an Acceptable level	<input checked="" type="checkbox"/>

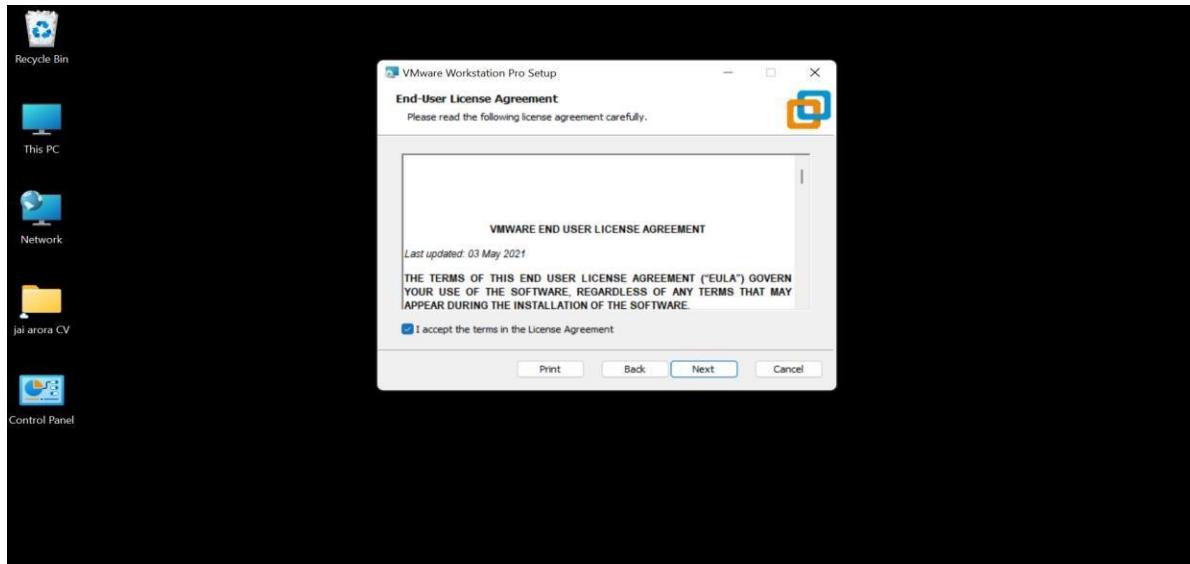
1. Install the VMware Pro 16

Step 1 – Run the installer.

- Start the installer by double clicking it ,VMware Workstation Pro Setup wizard window

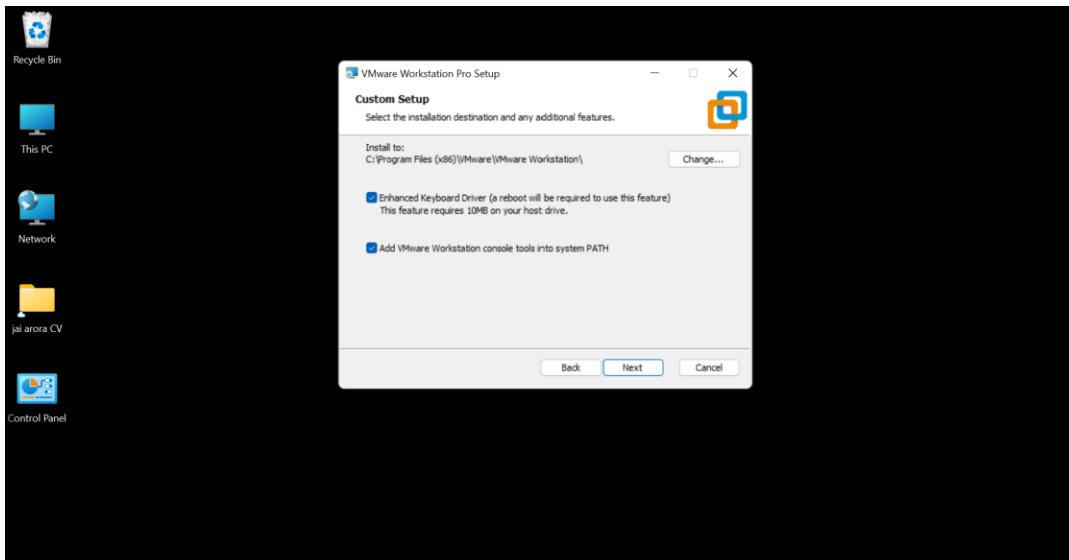


- Click next and accept the license terms and click next again to move on to the next screen.



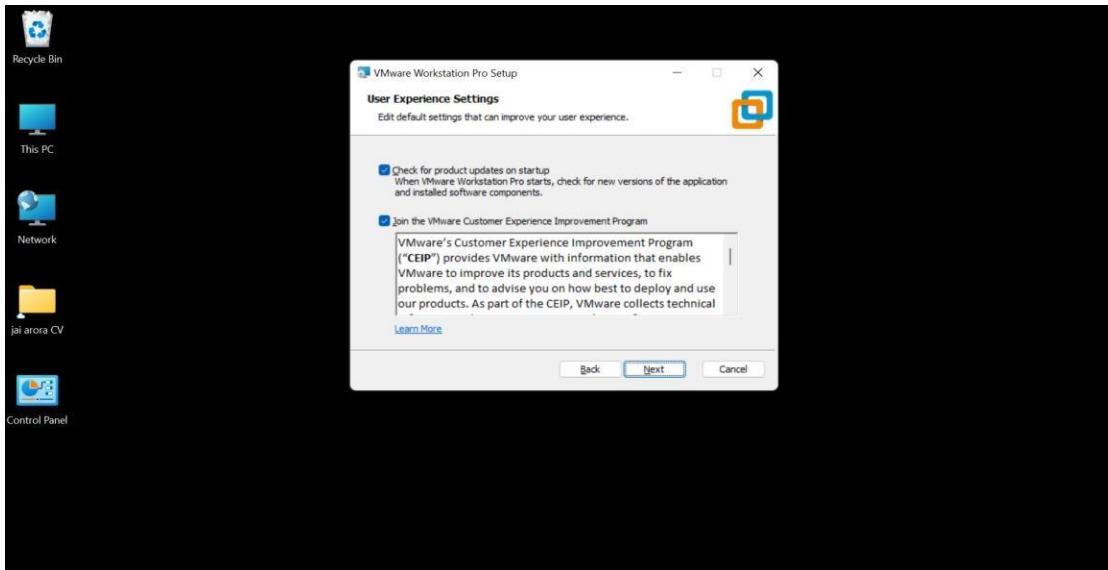
Step 2 – Custom setup – Enhanced Keyboard driver and Installation directory

- In this dialog box, please select the folder in which you want to install the application. we leave it as it is. Also check the box Enhanced Keyboard Drivers option. Click next.



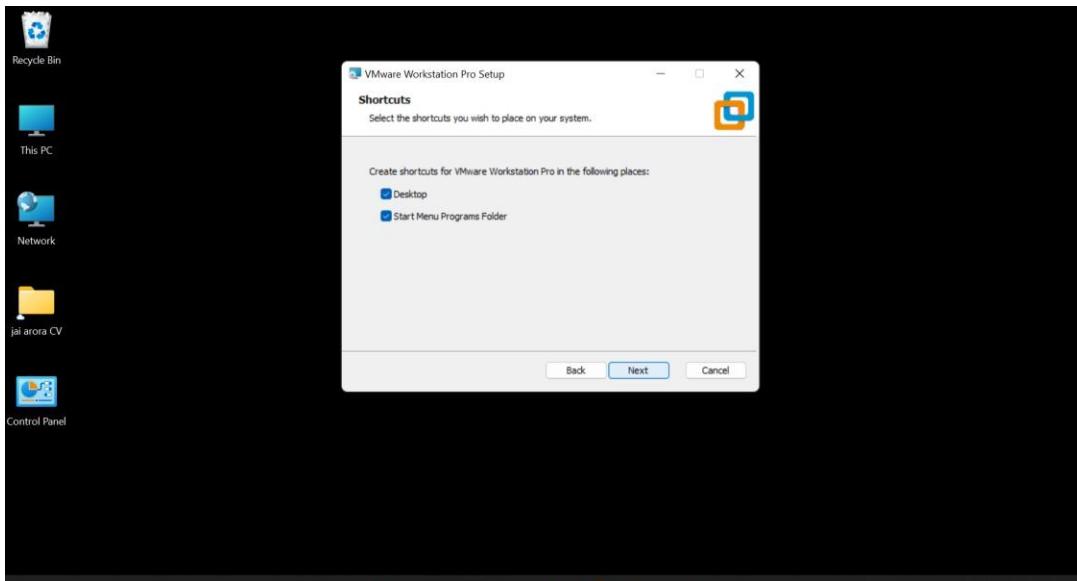
Step 3 – User Experience Settings

- Check the options for Check the product update at Startup and Join the VMware Customer Program. we normally leave it as it is. You can uncheck it if you so desire. Click next



Step 4 – Select where the shortcuts will be installed

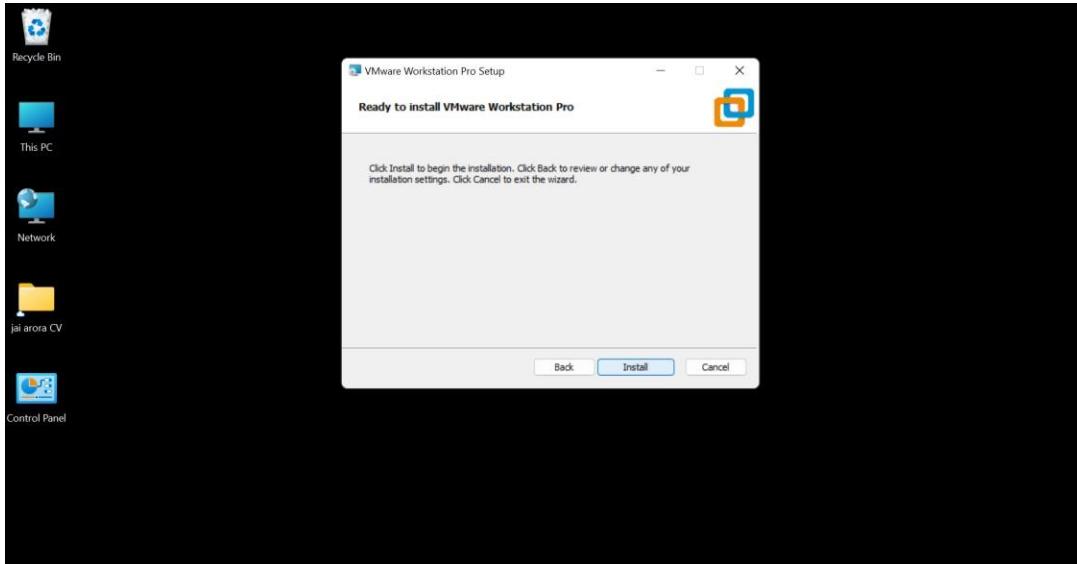
Check the box where the shortcut to run the application will be created. I leave it as it is. Click on next.



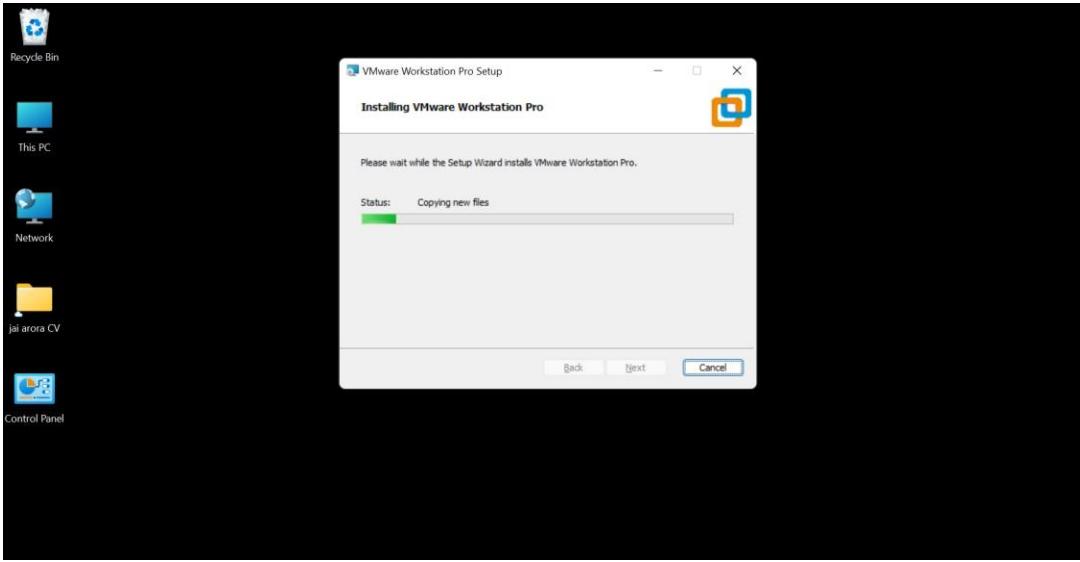
Step 5 –

Ready to install

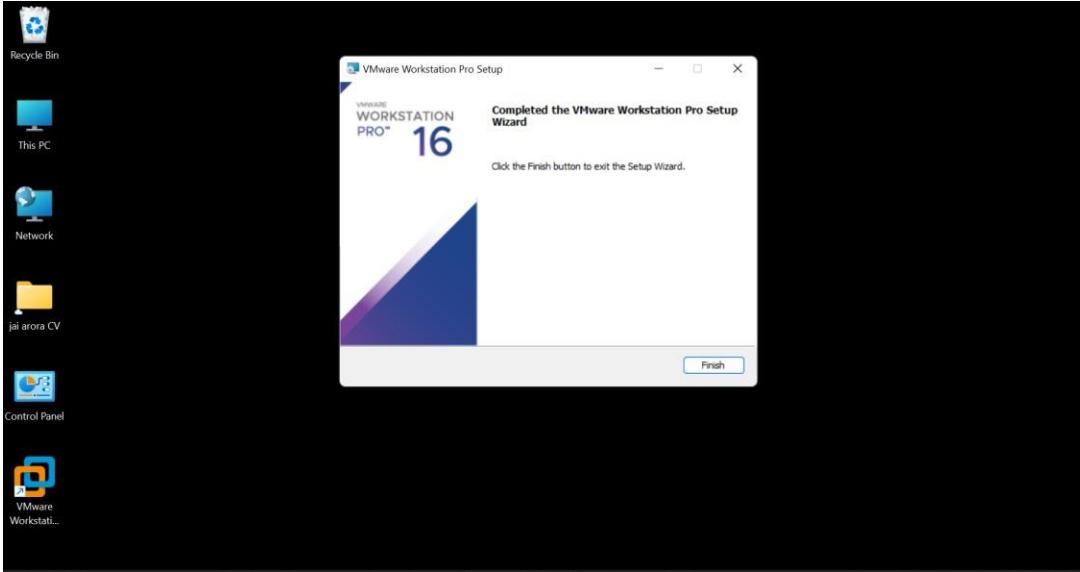
- Now the installation wizard is ready to install. Click on install to begin the installation.



- Installation is in Progress, wait for it to complete.

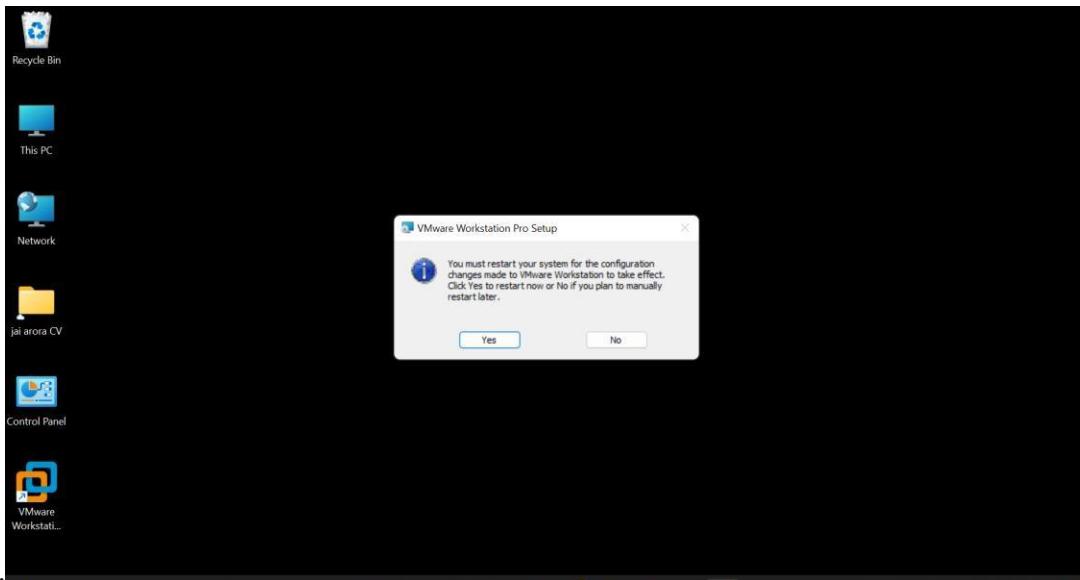


- After sometime , Installation compete message will show.



- Click on Finish to Complete the installation.

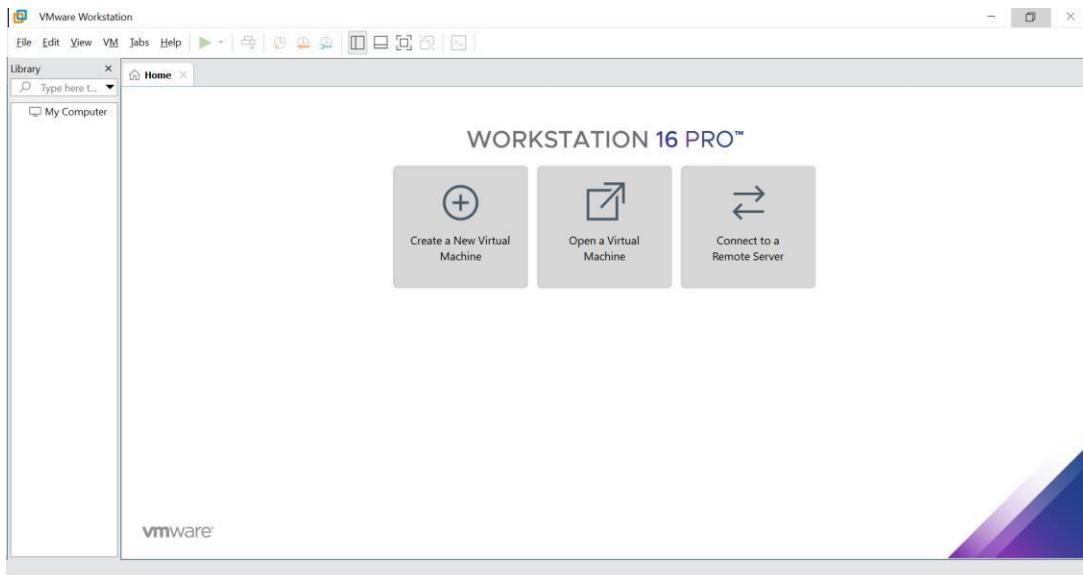
System will be asked to restart your system. Click on Yes to restart. Click No, if you want to restart later. But you must restart before using the application, else some features will not work properly



Step 6– Ready to Open

Now Run the application. You should see a desktop icon. Double click on that or use the start menu to navigate to VMware 16 Pro option.

Now you will see VMware Workstation 16 Pro ready to be used

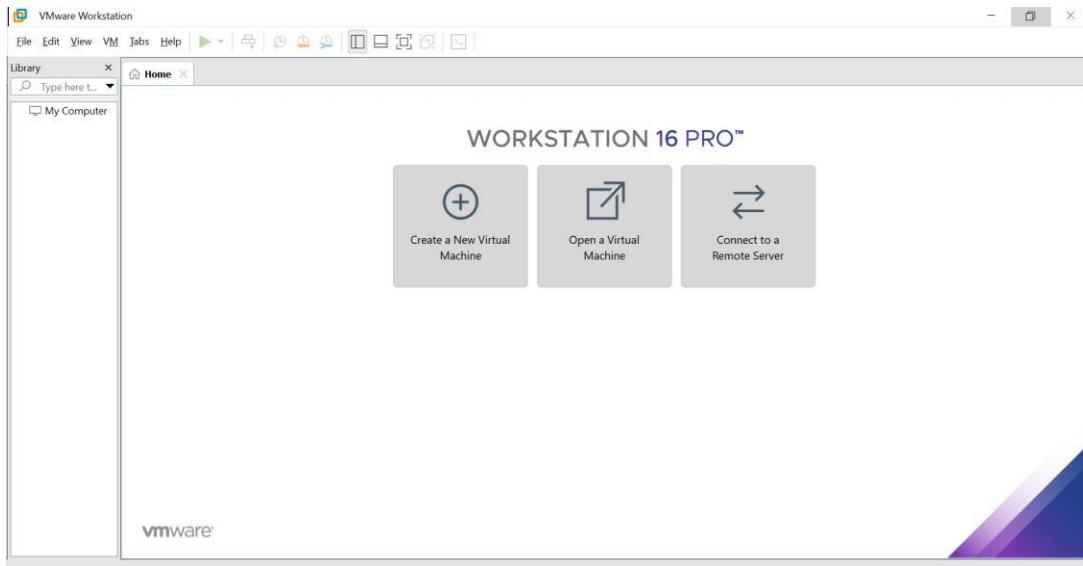


2. Install Window Server 2019

Note Make sure you install the ISO file of the OS that you have planned to install. i.e., Windows Server 2019. You can download it from the official website of Microsoft. Just go to this link and select the edition you want to download.

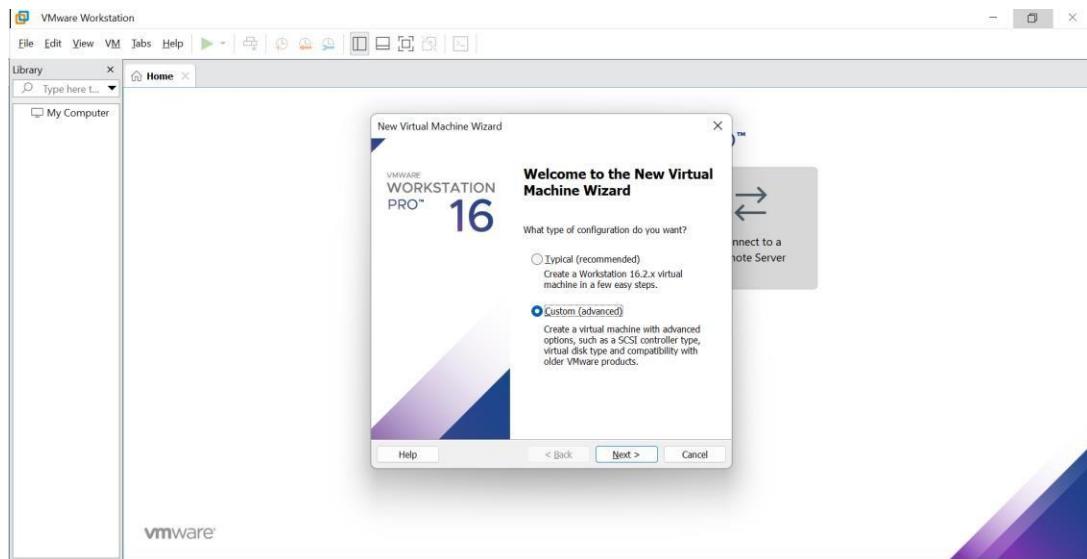
Step1: Open VMware Workstation and Create a new Virtual Machine

- Launch VMware Workstation on your computer then Click on "**File**" in the menu, then select "New Virtual Machine." Or you Can directly click on the "**Create a New Virtual Machine**" icon showing on Home Page
- The New Virtual Machine Wizard will open.



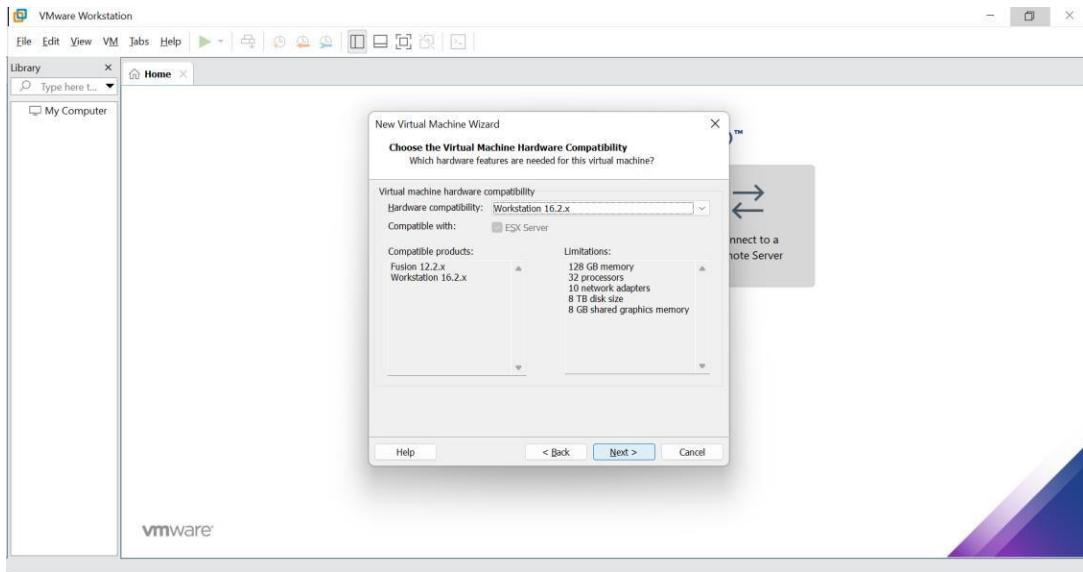
Step 2: Choose Typical Configuration:

- Select "Custom" for a Custom configuration. Click "**Next.**"



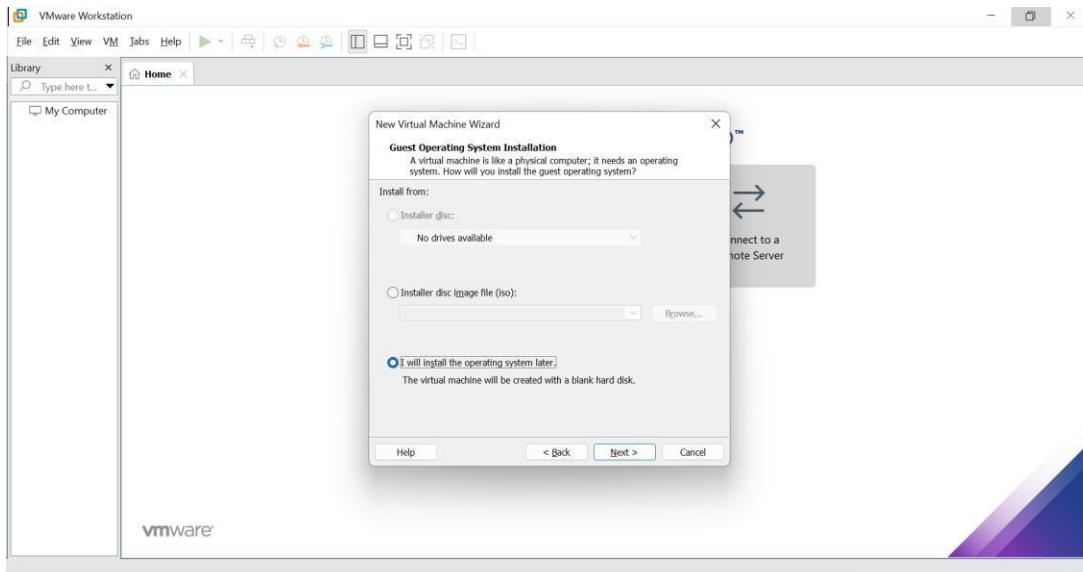
Step 3: Choose VM Hardware Compatibility

- Choose the compatible hardware from the **drop-down**
- Click **Next**



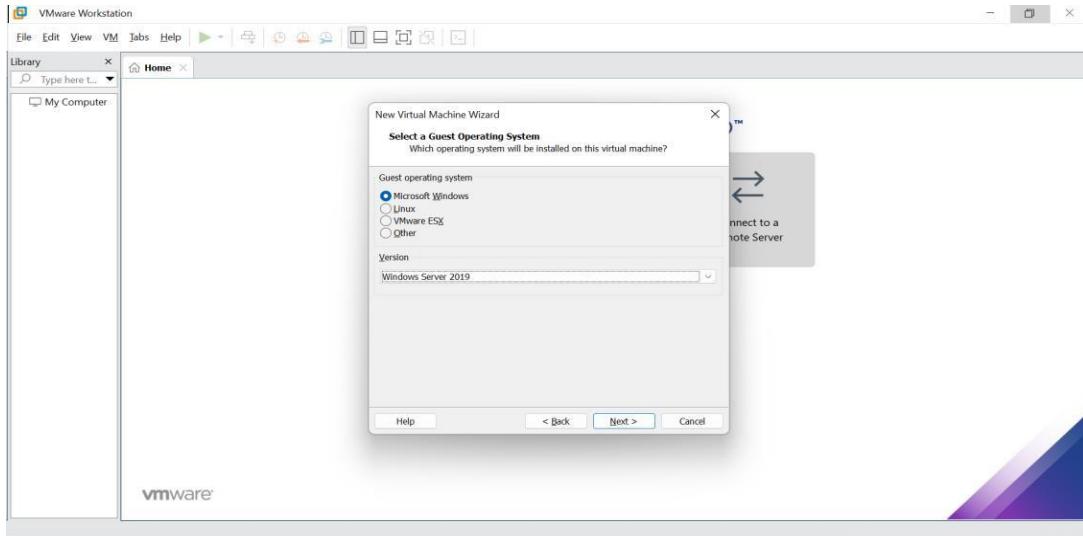
Step 4: Select to install operating system later option:

- Select to **install operating system later** option
- Click **Next**



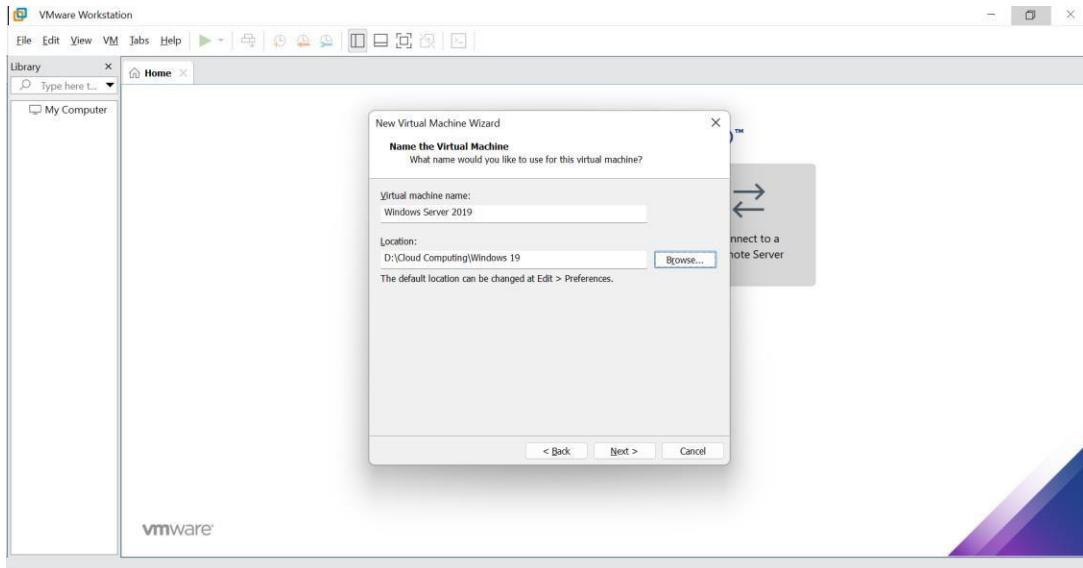
Step 5: Select Guest Operating System:

- Choose "**Microsoft Windows**" as the guest operating system and select "**Windows Server 2019**" from the version dropdown menu. Click "**Next**".



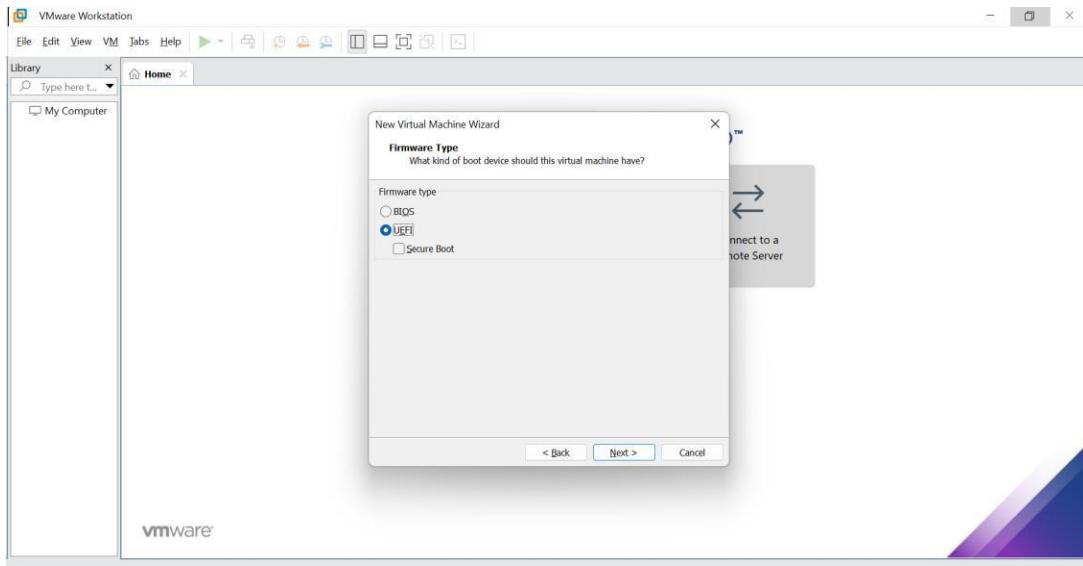
Step 6: Name and Location of the Virtual Machine

- Enter a name for your virtual machine and choose a location to store it. Click "Next."



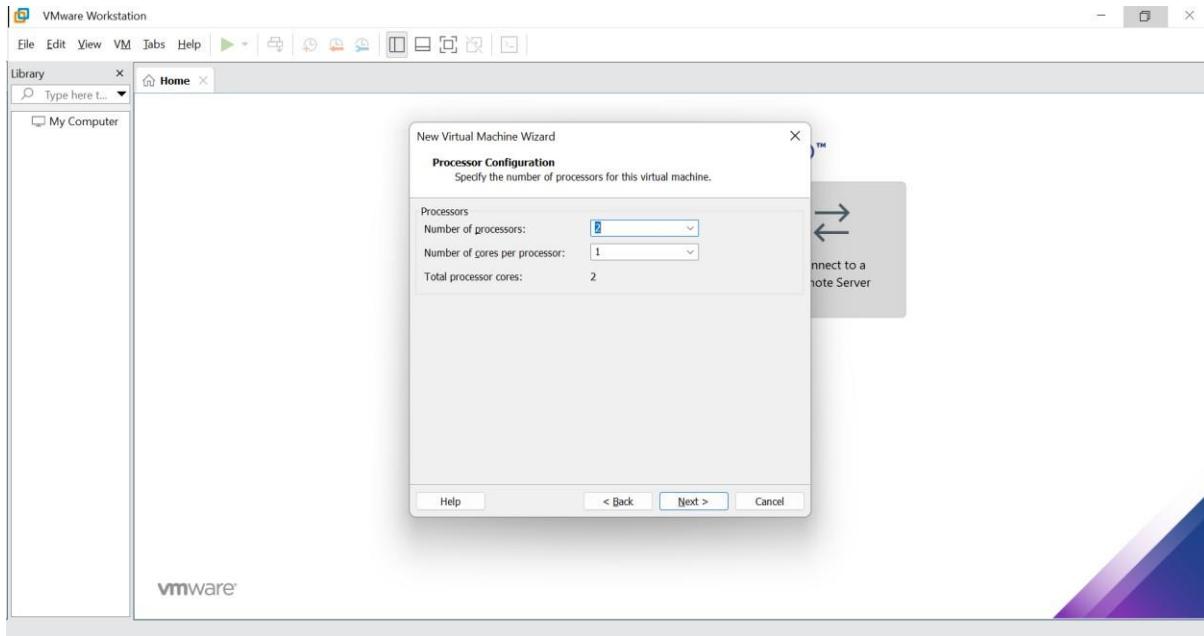
Step 7: Select Firmware Type

- We can select either BIOS or UEFI. Note: Only new boards support UEFI.
- Click **Next**



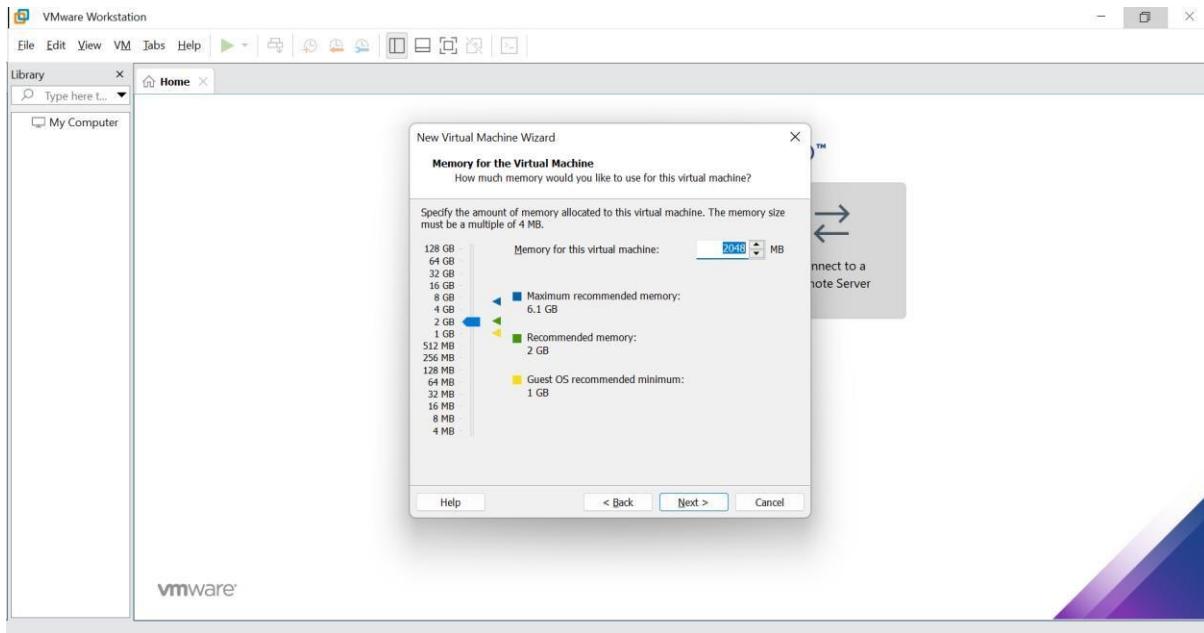
Step 8 : Processor Configuration for a Virtual Machine

- Set the number of processors and the amount of memory (RAM) hardware
- Click "Next".



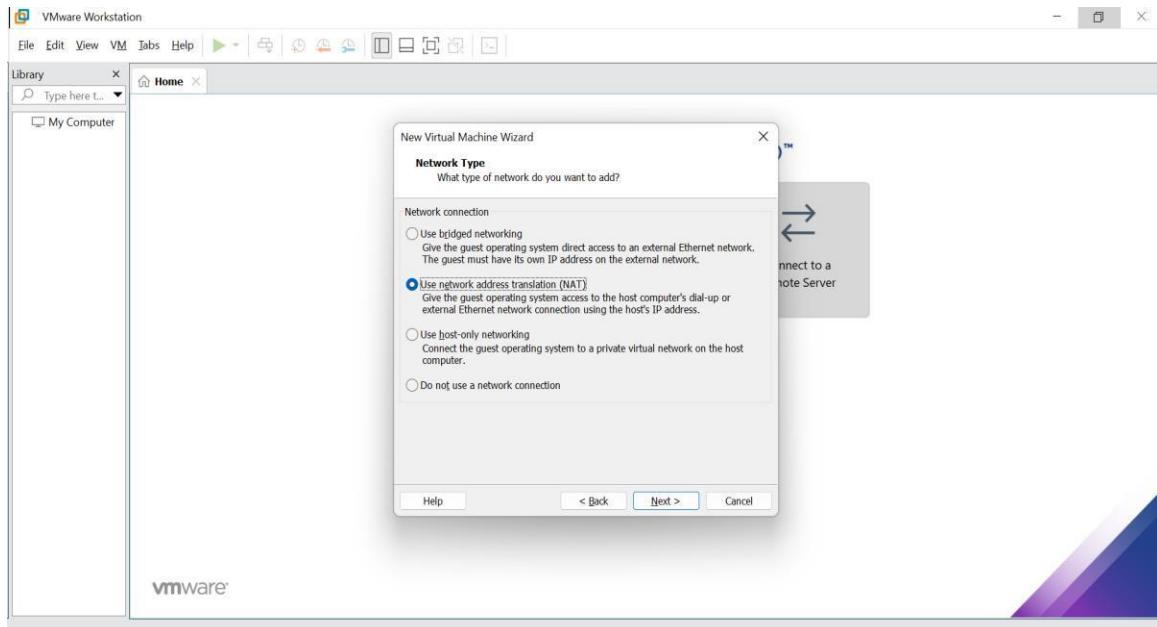
Step 9: Set the Memory for the virtual machine

- This depends on host machine's hardware. Adjust these settings based on your system resources.
- Click **Next**



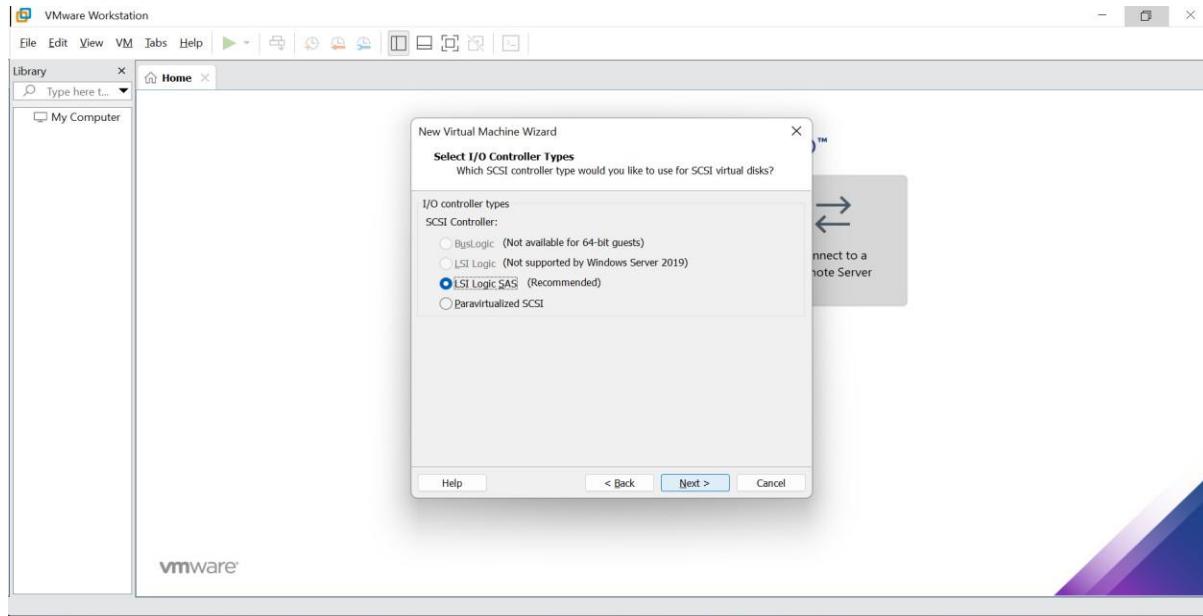
Step 10 : Select Network Type for the VM

- Choose the network type for your virtual machine. The default is usually "NAT" for easy internet access. Click "Next."



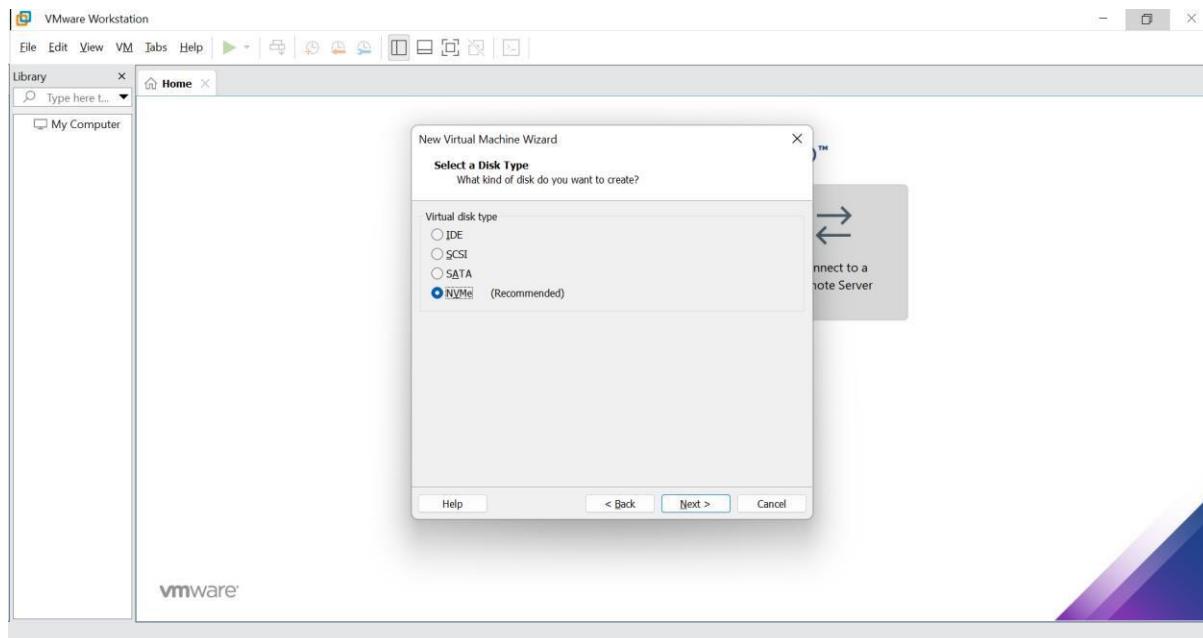
Step 11 :Specify I/O Controller Types

- Choose the type of I/O controller for your virtual machine's hard disk. The default is usually fine. Click "Next."



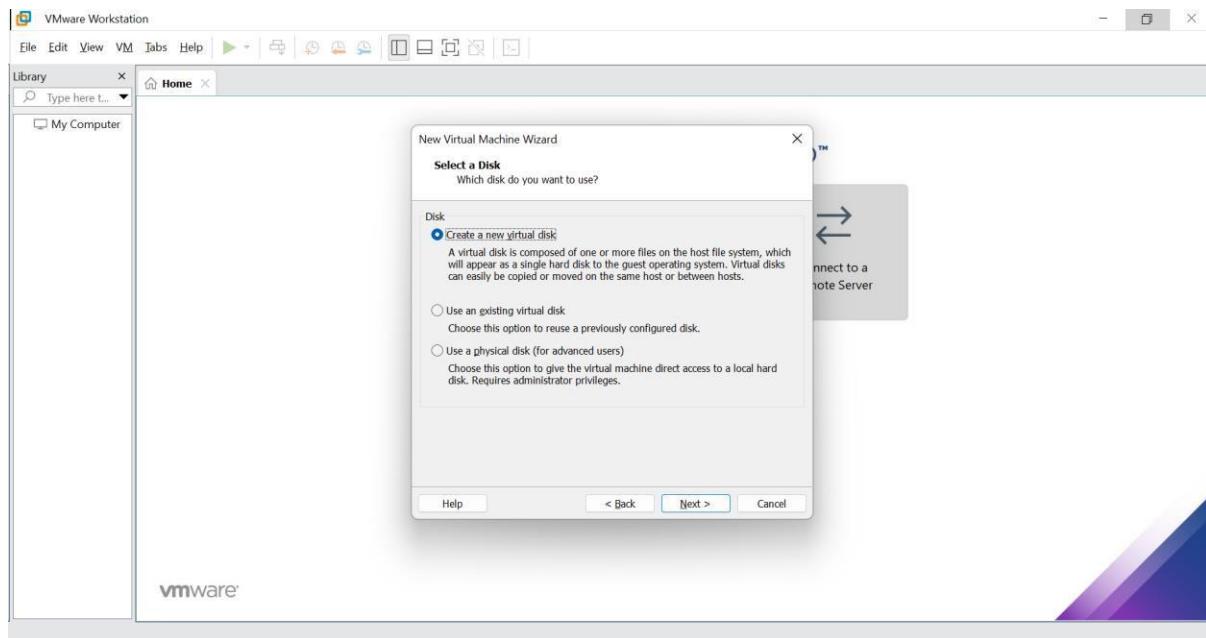
Step 12: Select Disk Type

- Choose Disk type based on the requirements. The default recommendation is usually displayed, and select the recommended Disk type then Click "Next".



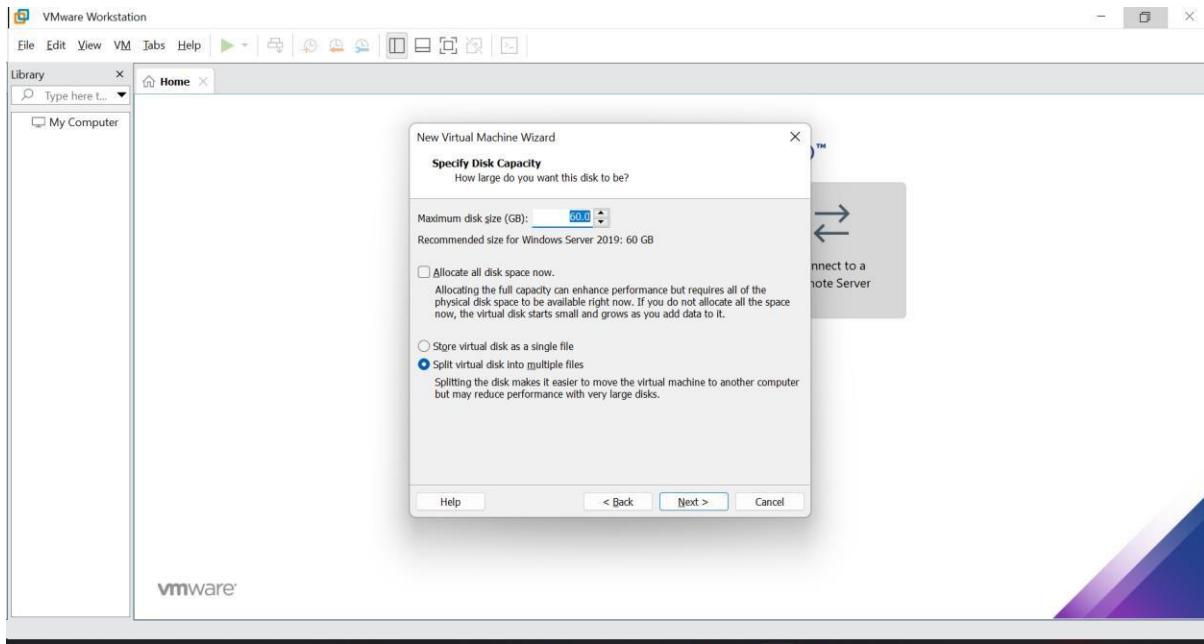
Step 13: Select a Disk:

- Choose whether to create a new virtual disk or use an existing one. For a new installation, select "Create a new virtual disk" and click "Next."



Step 14: Specify Disk Capacity:

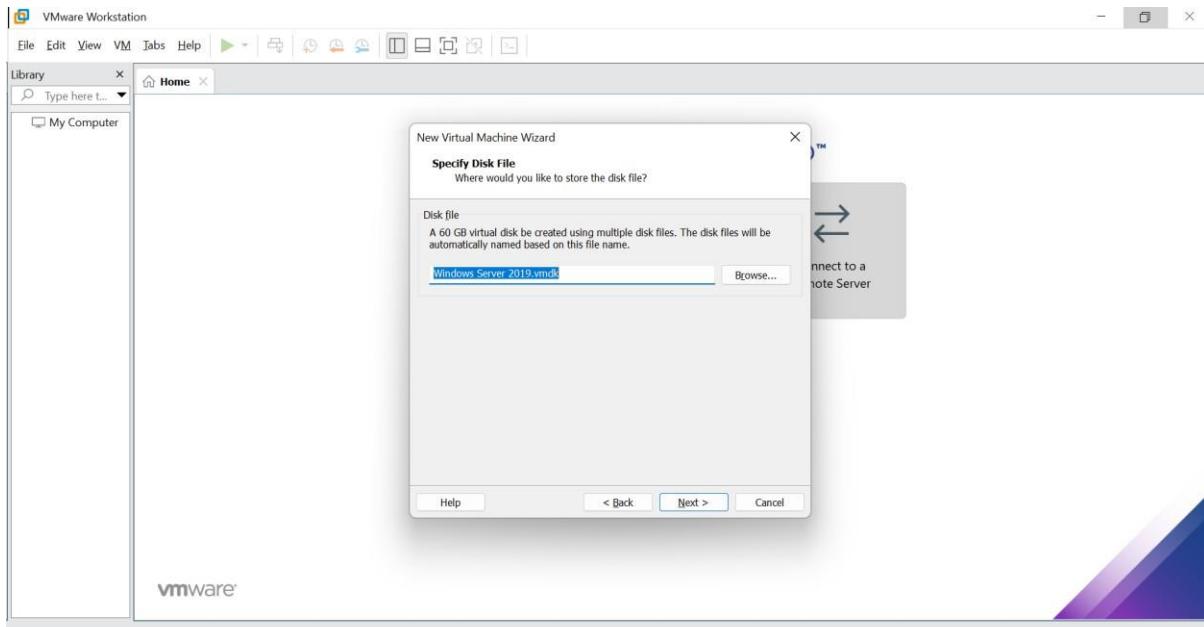
- Set the disk size for your virtual machine. We Allocated the 60 GB and select "Split virtual disk into multiple file" and then Click "Next."



Step 15: Give the path where you want to keep the VM disk

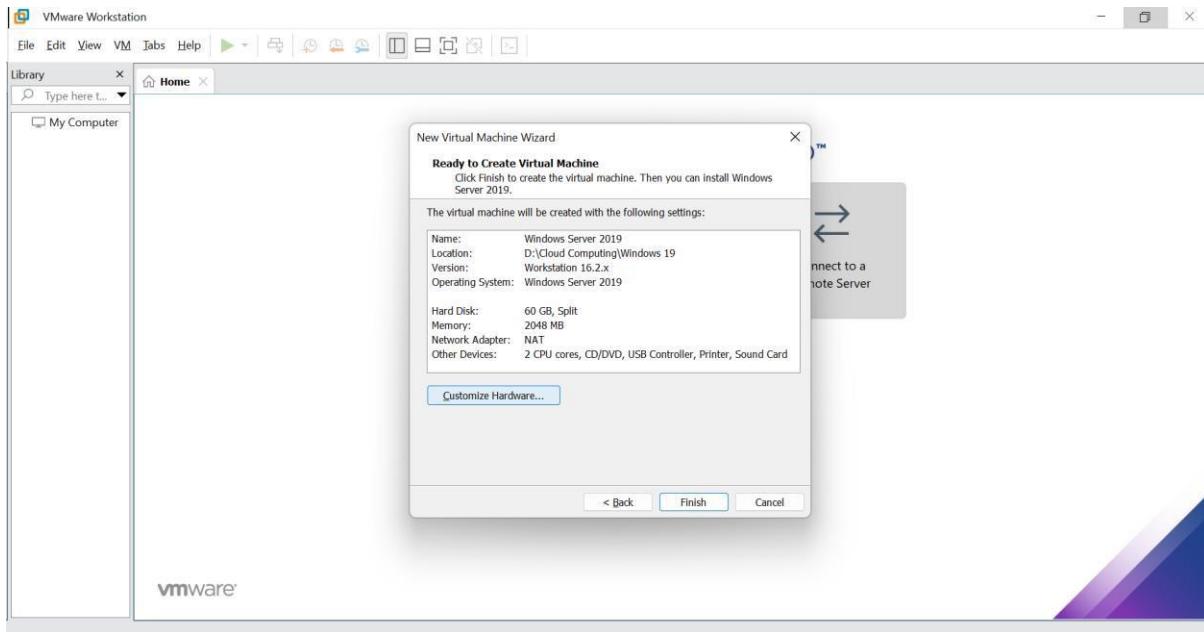
1. Give the location where to save the disk.

2. Click **Next**



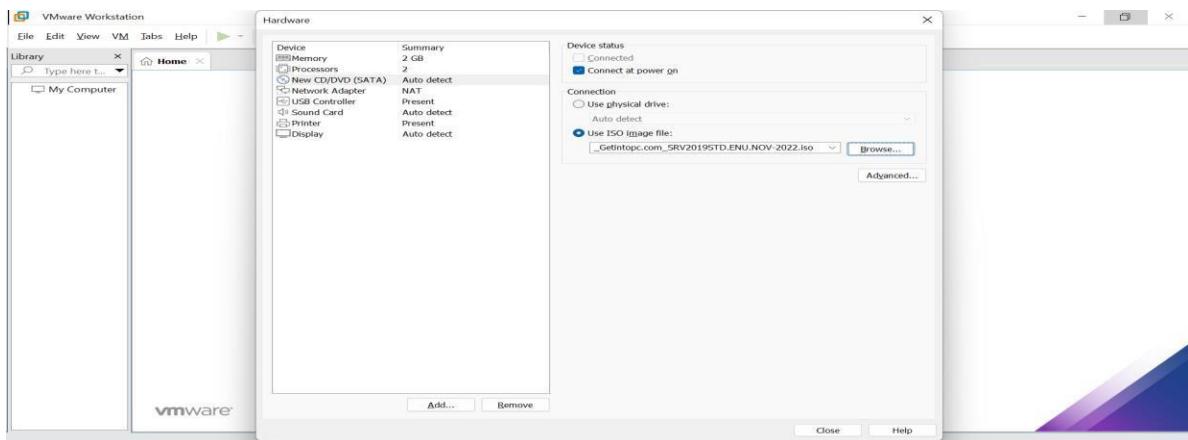
Step 16: Create the VM

- VM settings are ready to create the VM.
- Click **Finish**



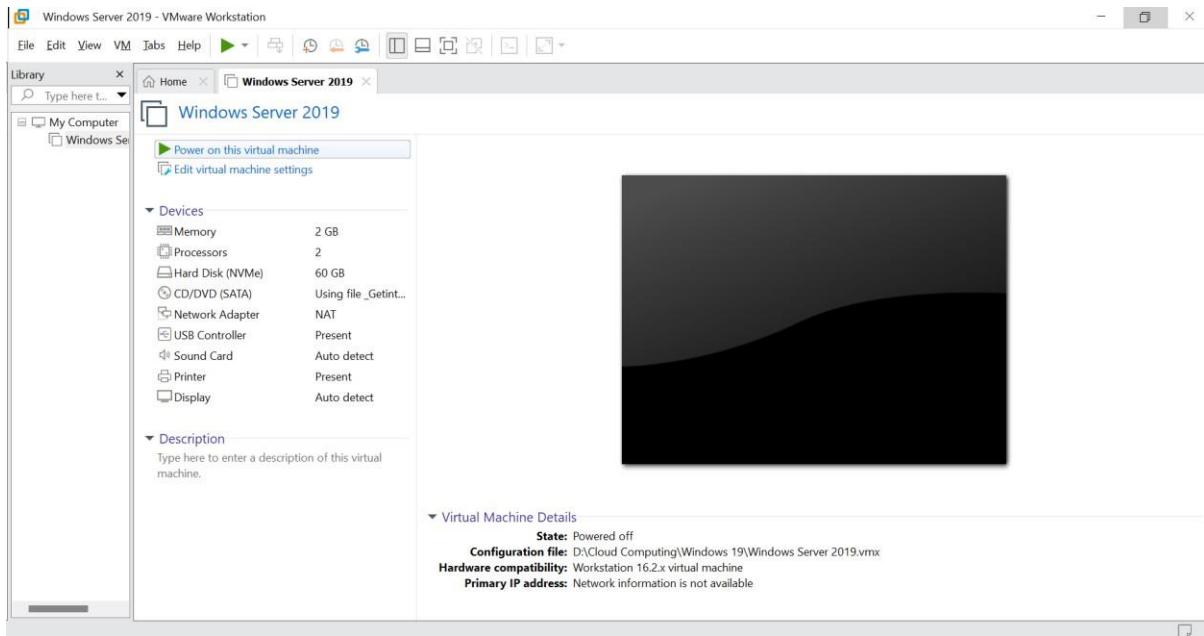
Step 17: Load the ISO image to boot the VM

- Select use ISO image file
- Browse the ISO image
- Click "Close" when done



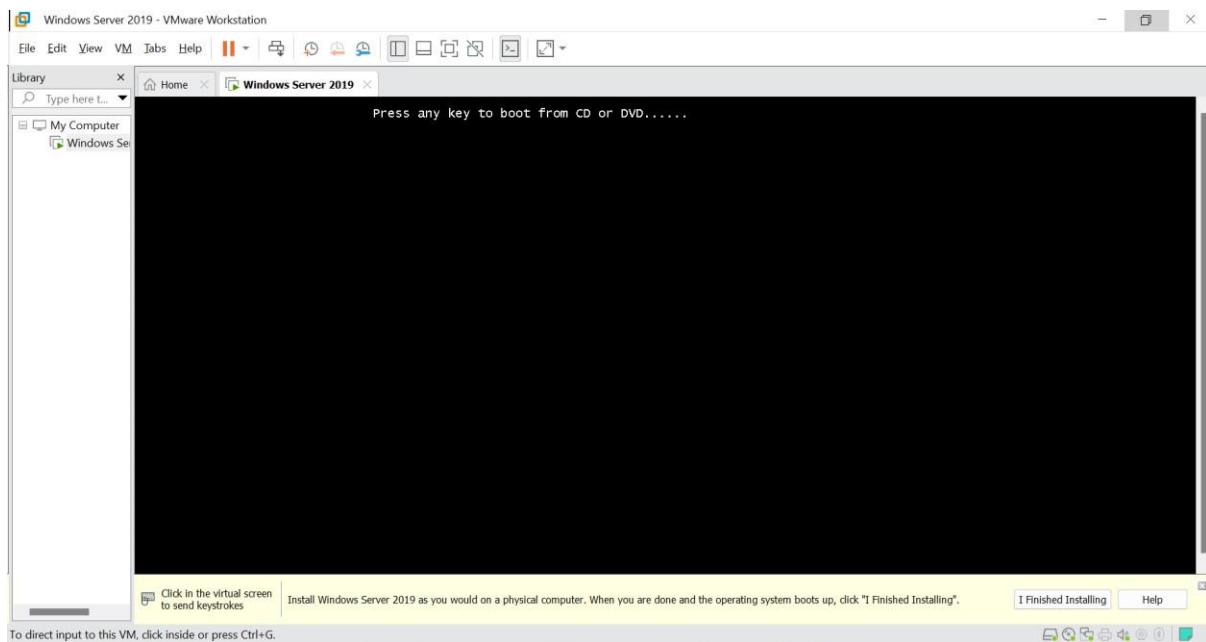
Step 18 : All set to power on the VM

Click "Power on this virtual machine"

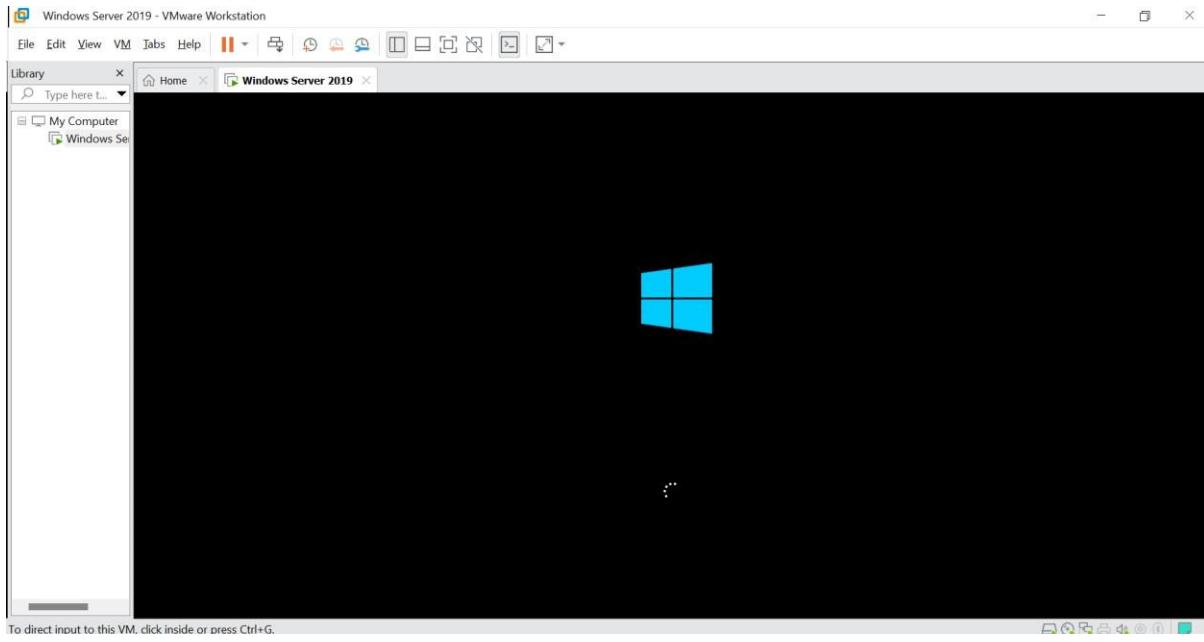


Step 19 : Install Windows Server 2019

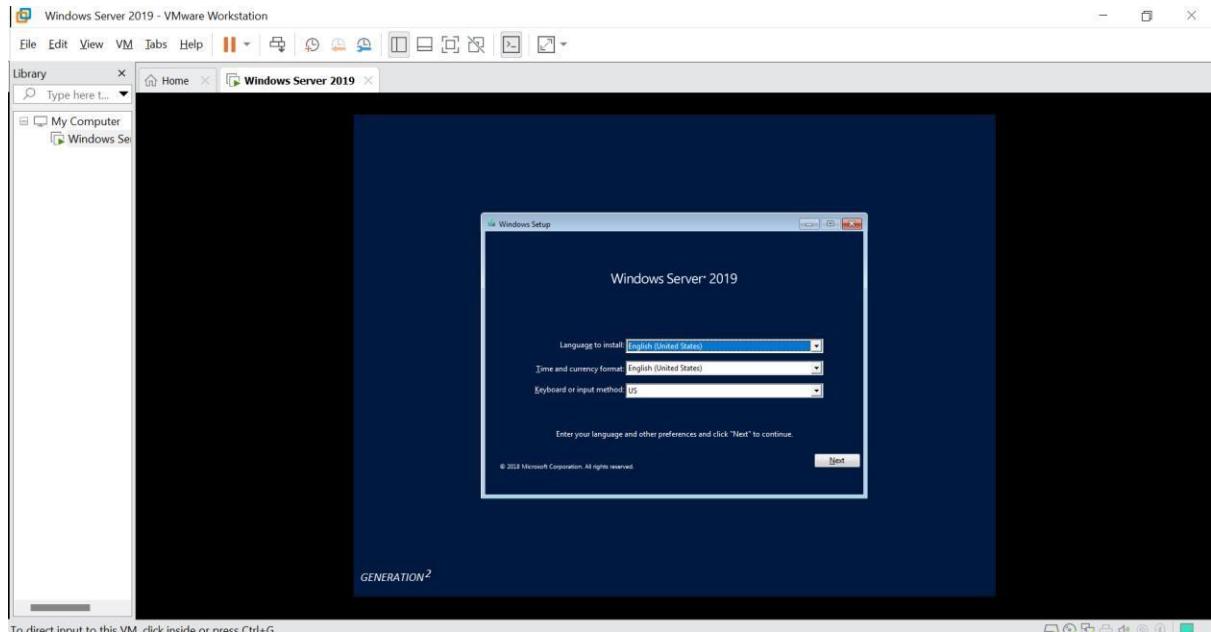
- The virtual machine will boot from the ISO, and the Windows Server installation process will begin.



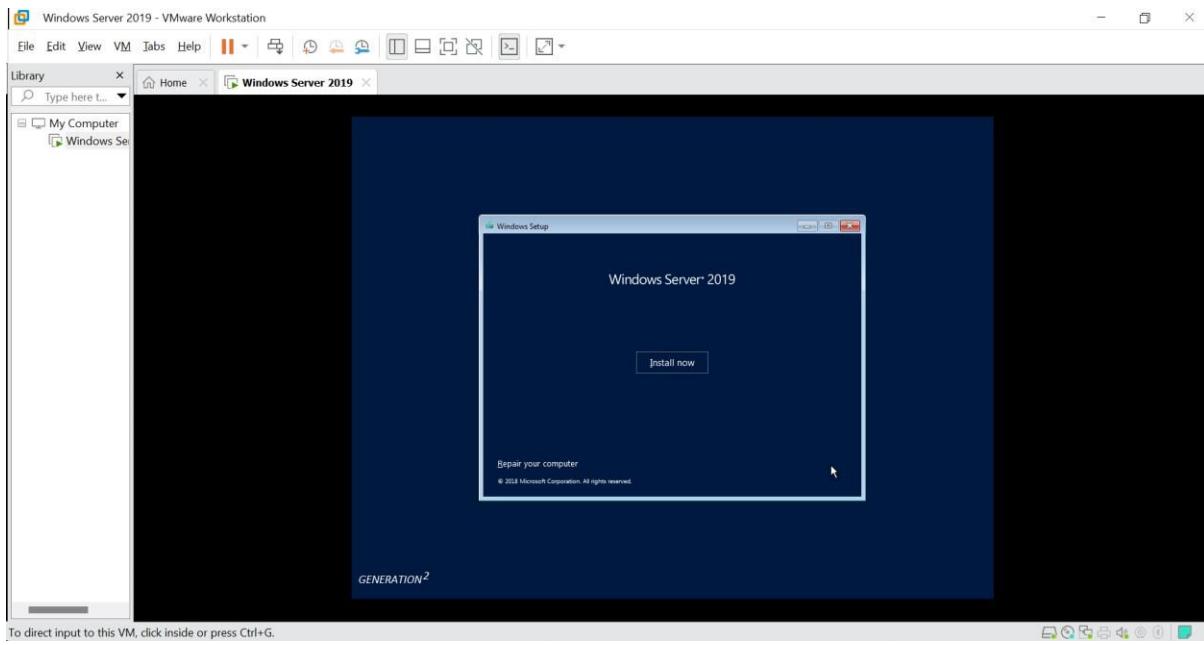
- First we boot screen,it will take 1 to 2 mintutes for processing



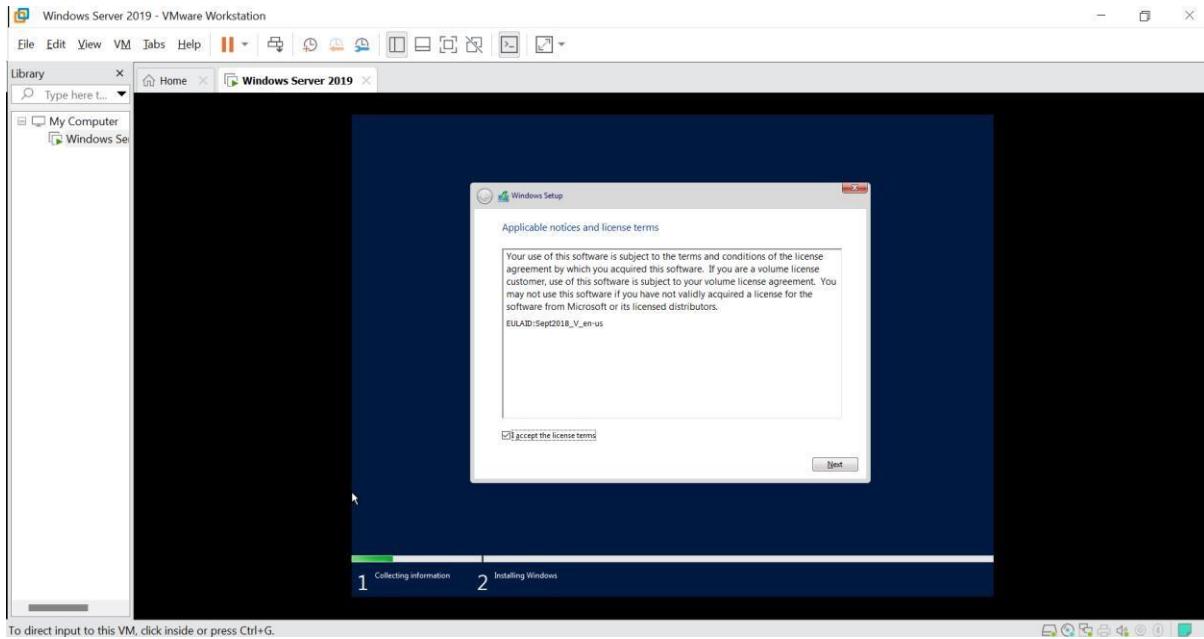
- The installation wizard will appear in a couple of seconds after the boot. Select the language time and keyboard settings then click on **NEXT**



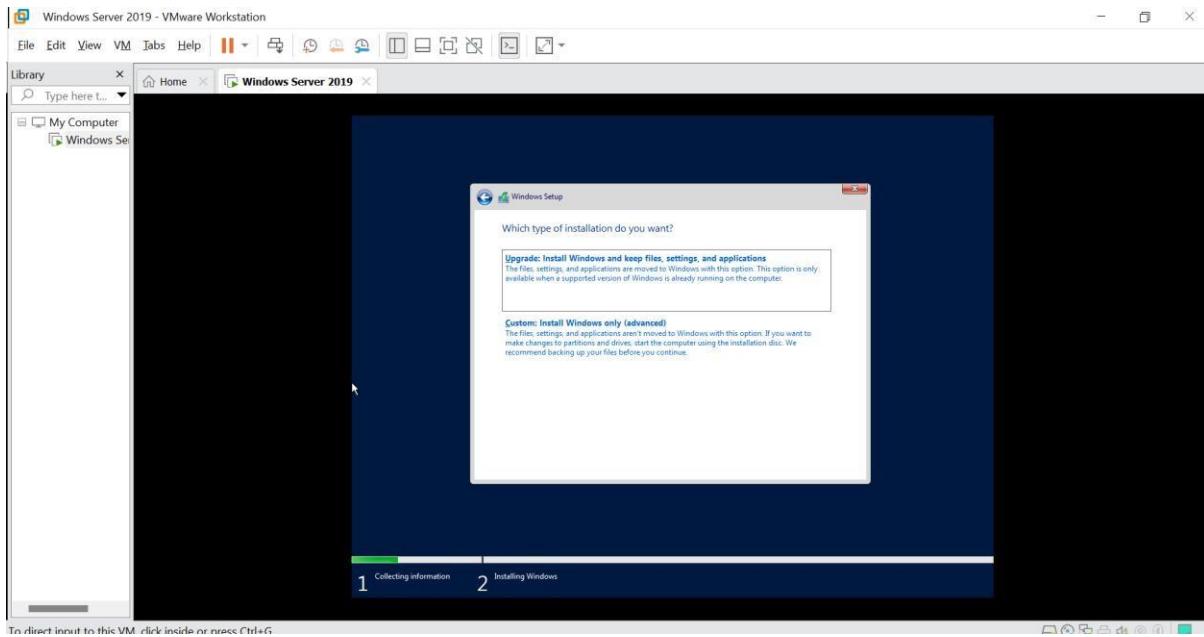
- Click on **Install Now** to install window server 2019



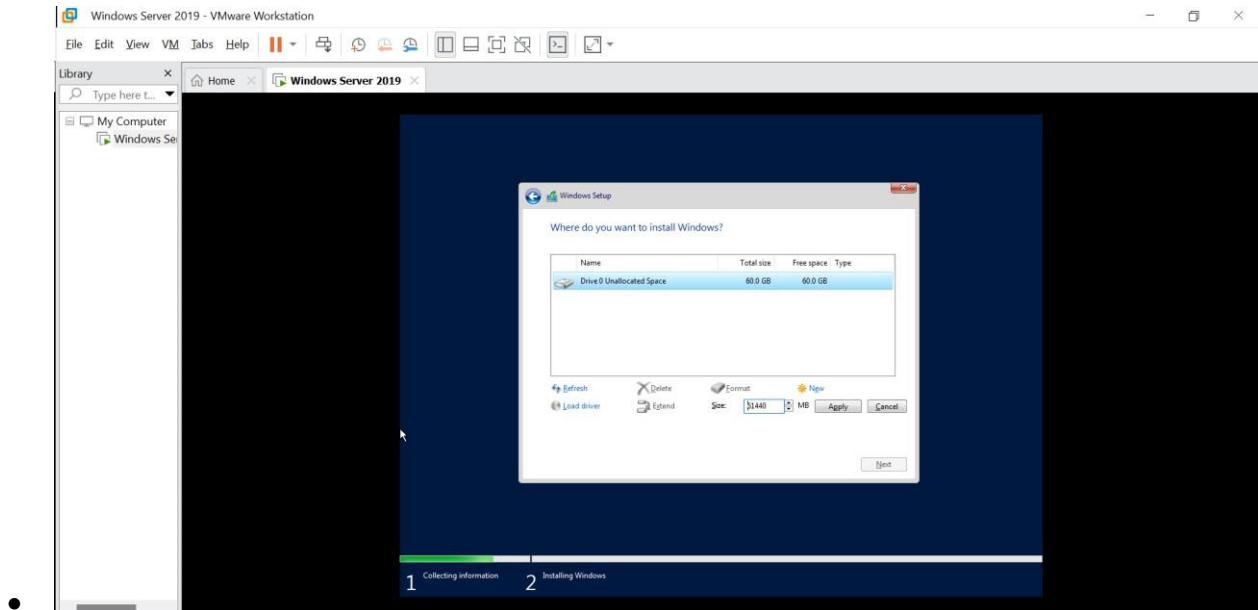
- Accept the License Agreement then click on Next



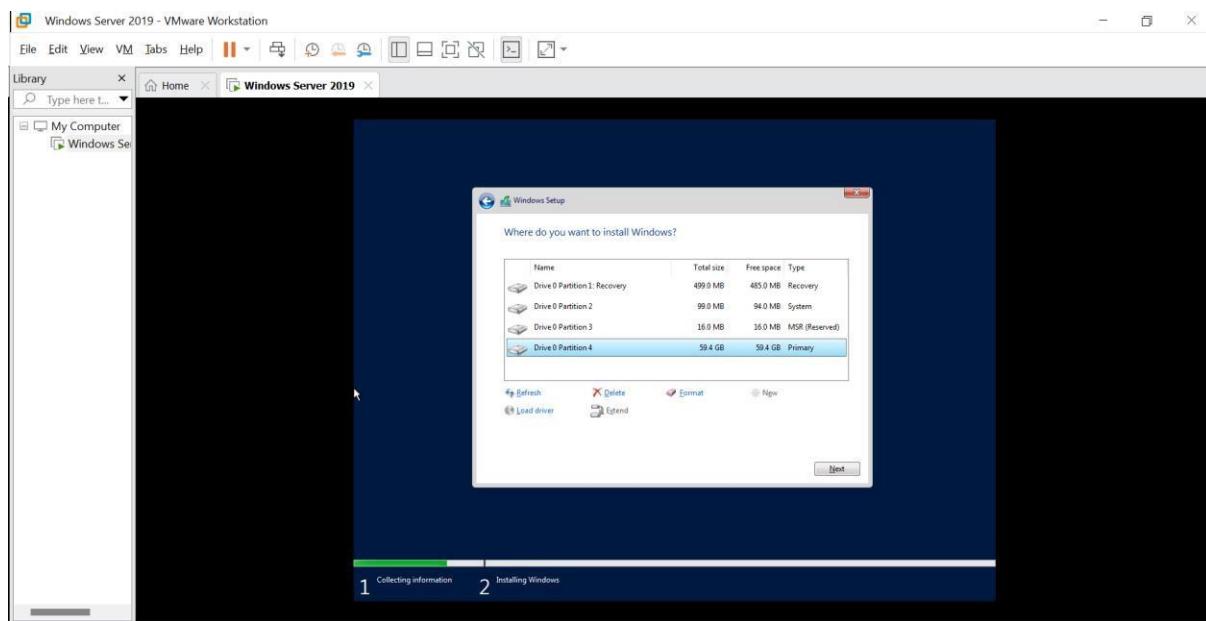
- Select the Custom instalation type if doing a fresh installation



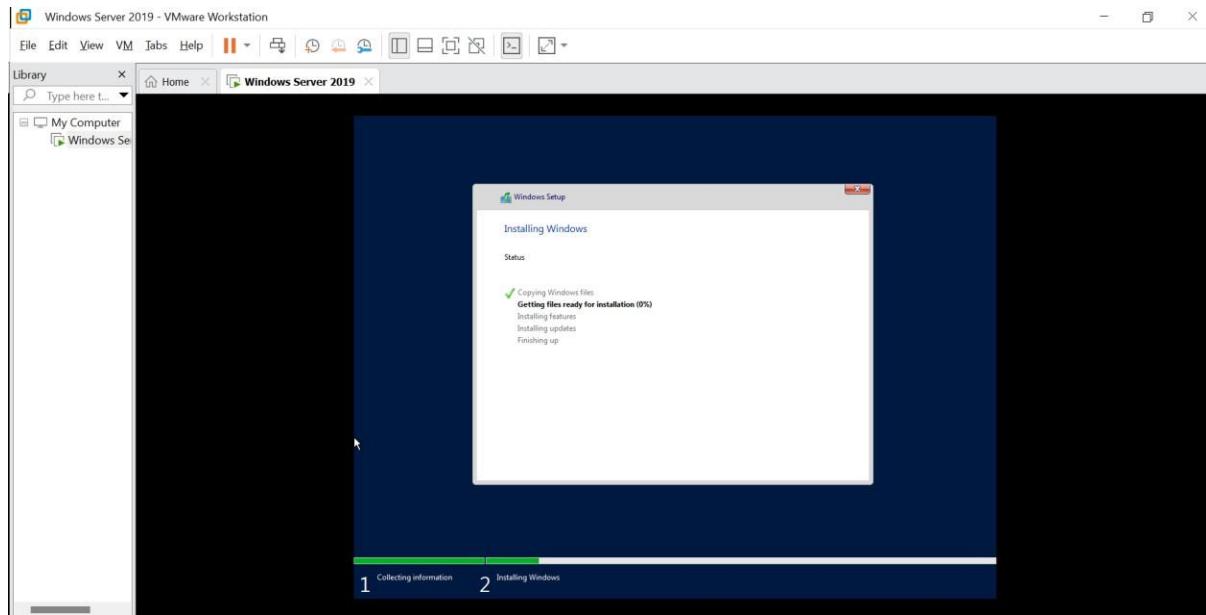
- click on new assign the partition size and allocate the size and then click on **Apply**



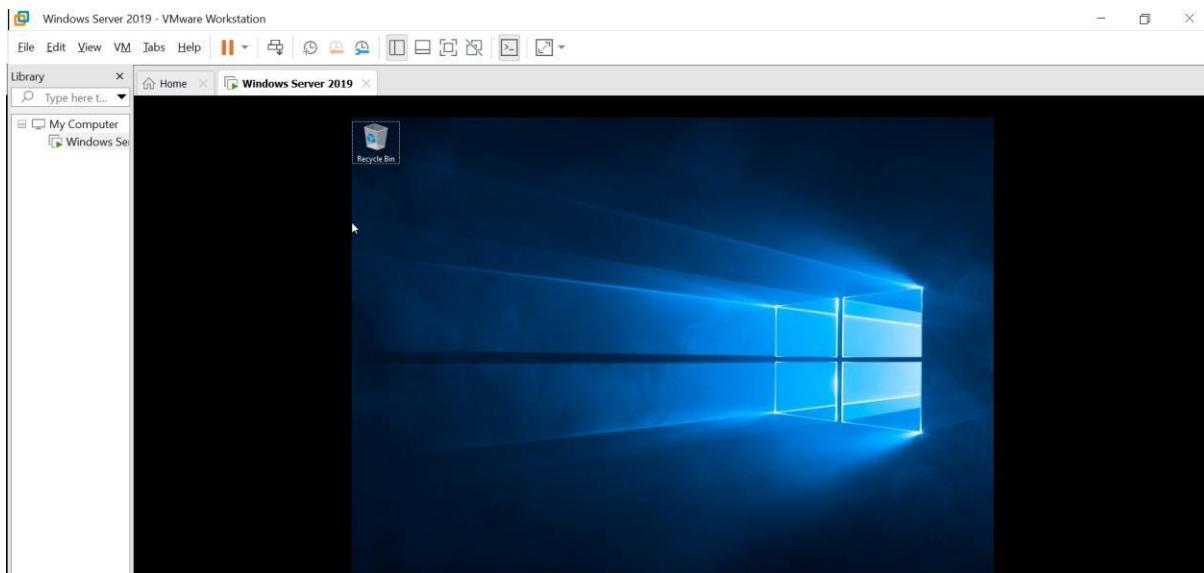
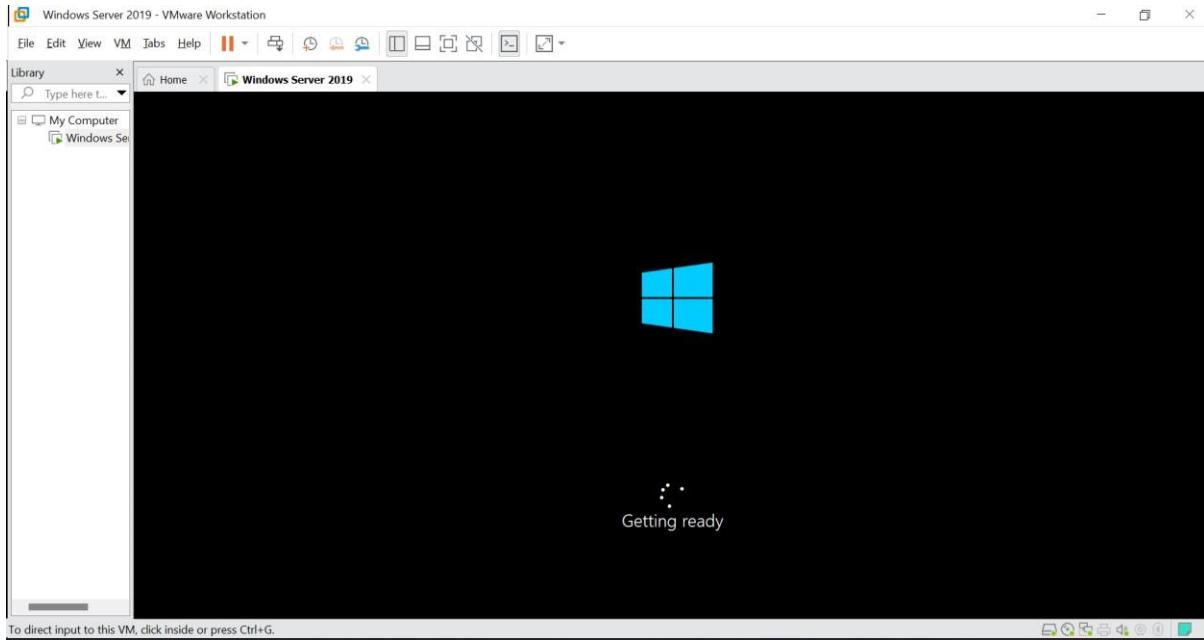
- Select the new created partition and then click on Next to install Windows Server 2019



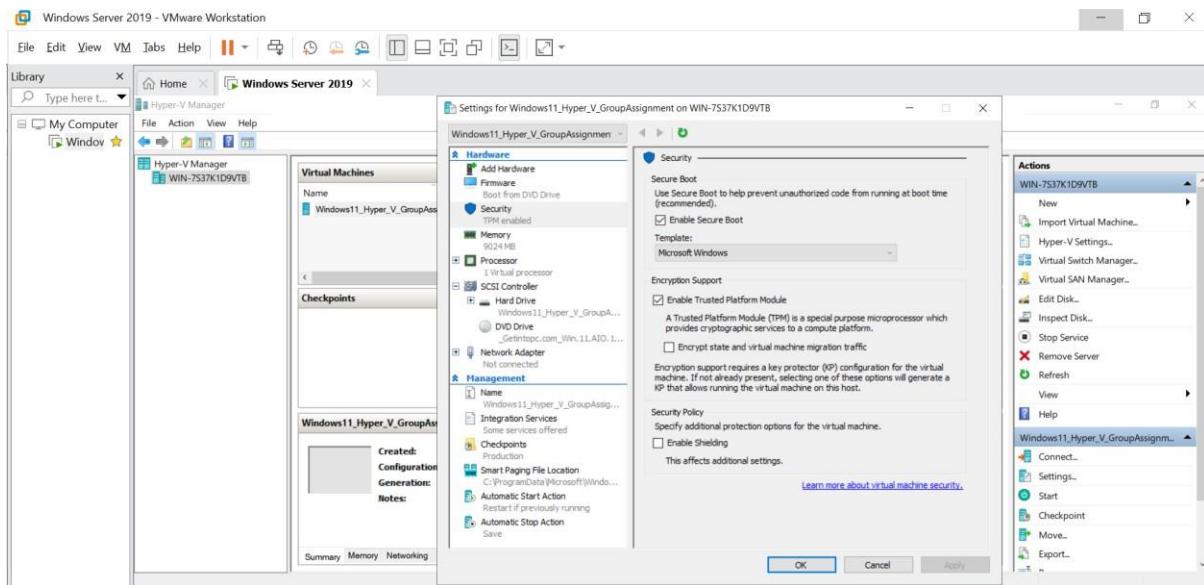
- Window server 2019 installtion is in progress



- Windows getting ready after the installation completes



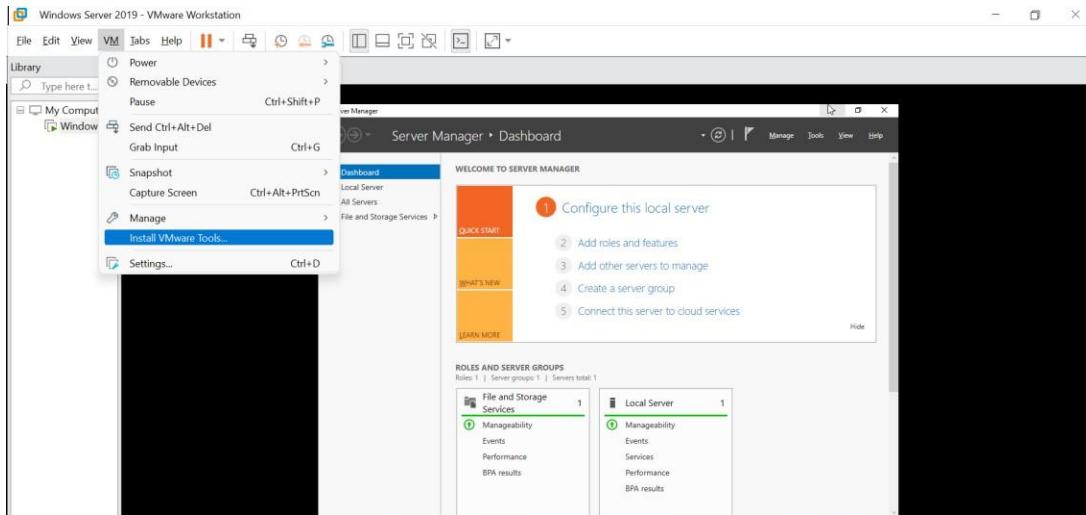
Windows Server 2019 Home Screen



3. Install VMware tools

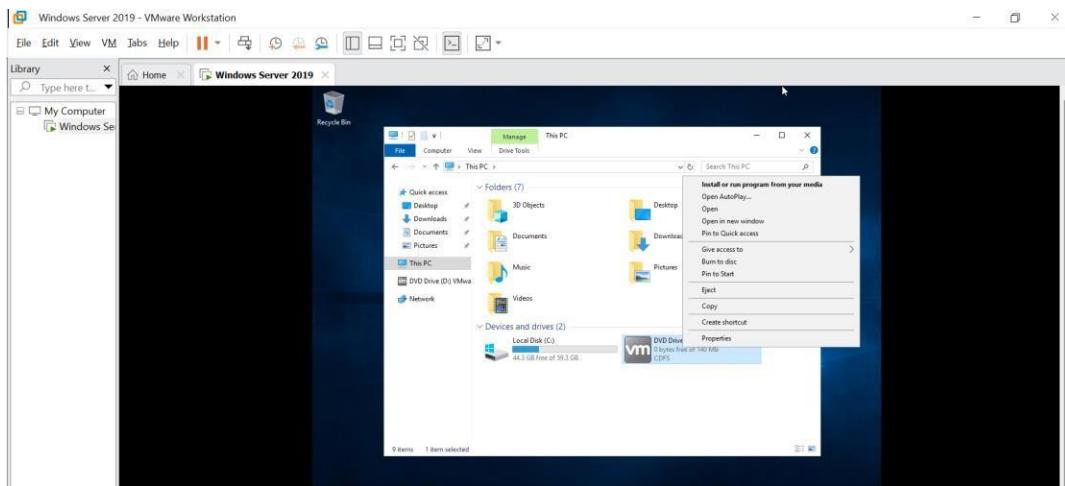
Step 1: Mount VMware Tools ISO

- In the virtual machine console, go to the "VM" menu at the top of the screen and select "Install VMware Tools." This action usually mounts a virtual CD/DVD drive containing the VMware Tools ISO



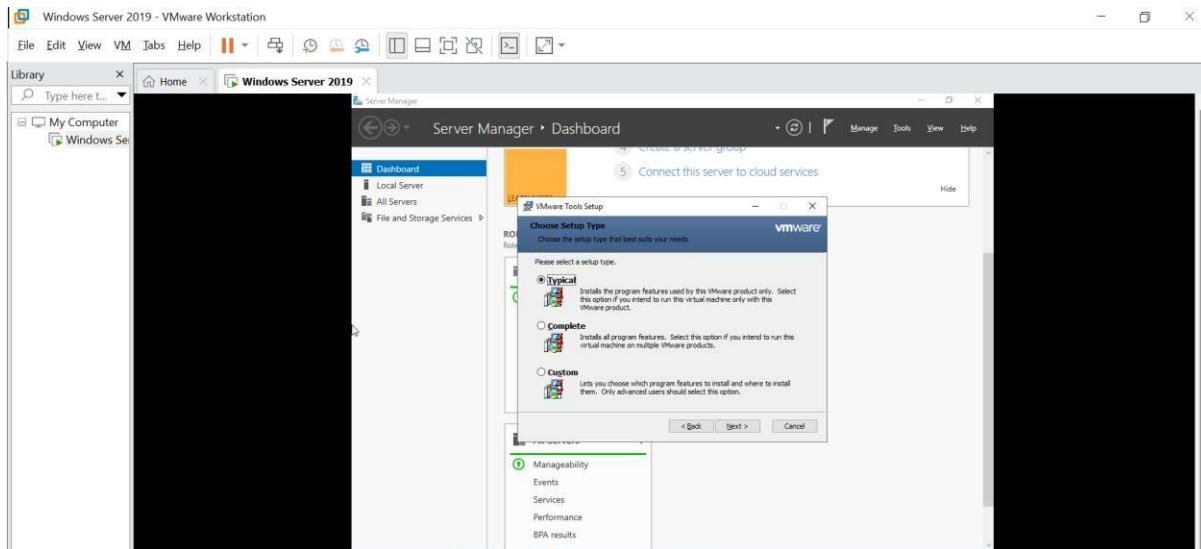
Step 2: Navigate CD/DVD Drive

- Open File Explorer on your Windows Server 2019 virtual machine.
- Navigate to the CD/DVD drive and then right click on that and select Install and run program



Step 3: Start the Installation Process

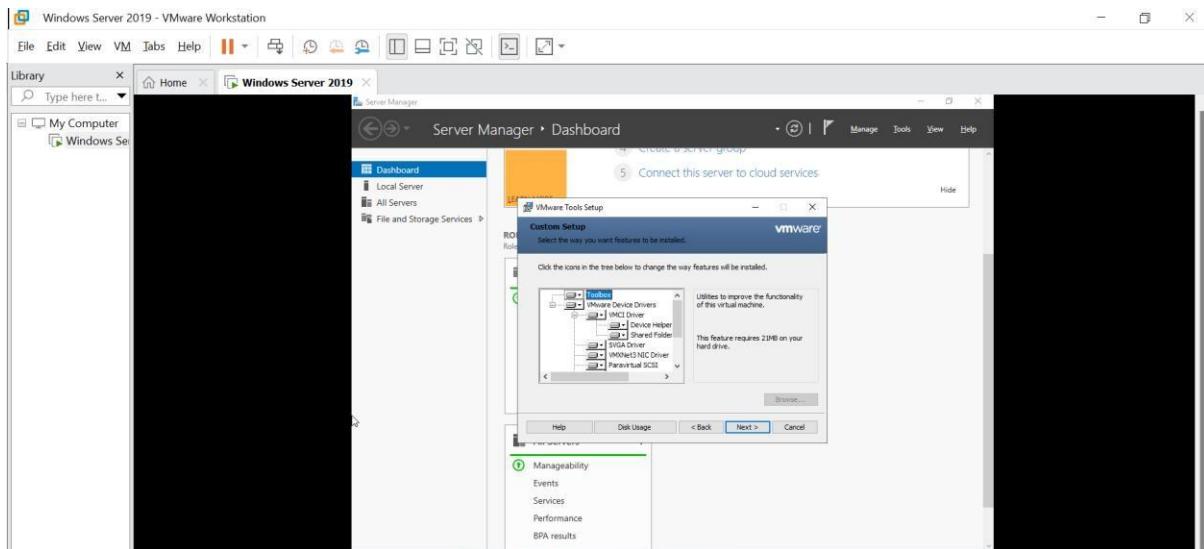
- The VMware Tools installation wizard will start. Click "Next" to begin the installation.



Step 4: Select Components

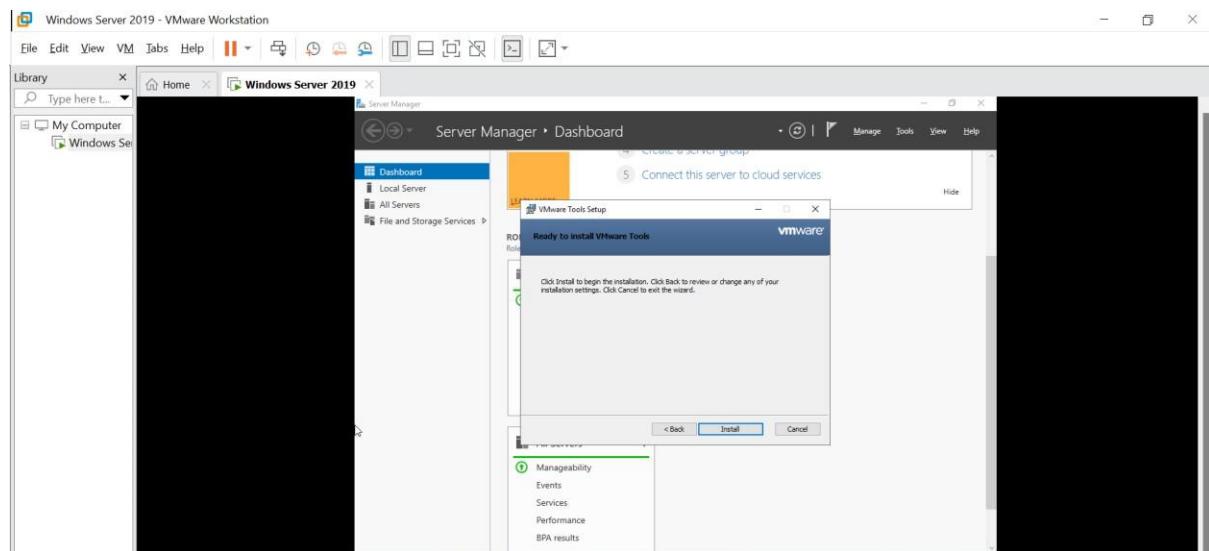
- Choose the components to install as per requirement. The default settings are

usually suitable for most installations. Click "Next."



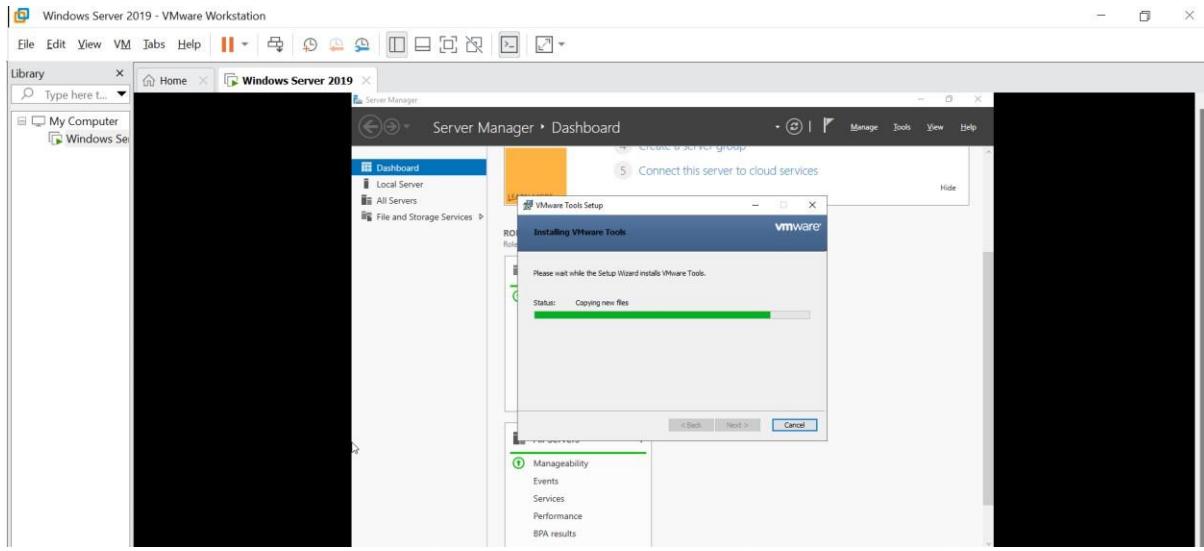
Step 5: Ready to Install

- Review your selections and click "Install" to start the installation process.



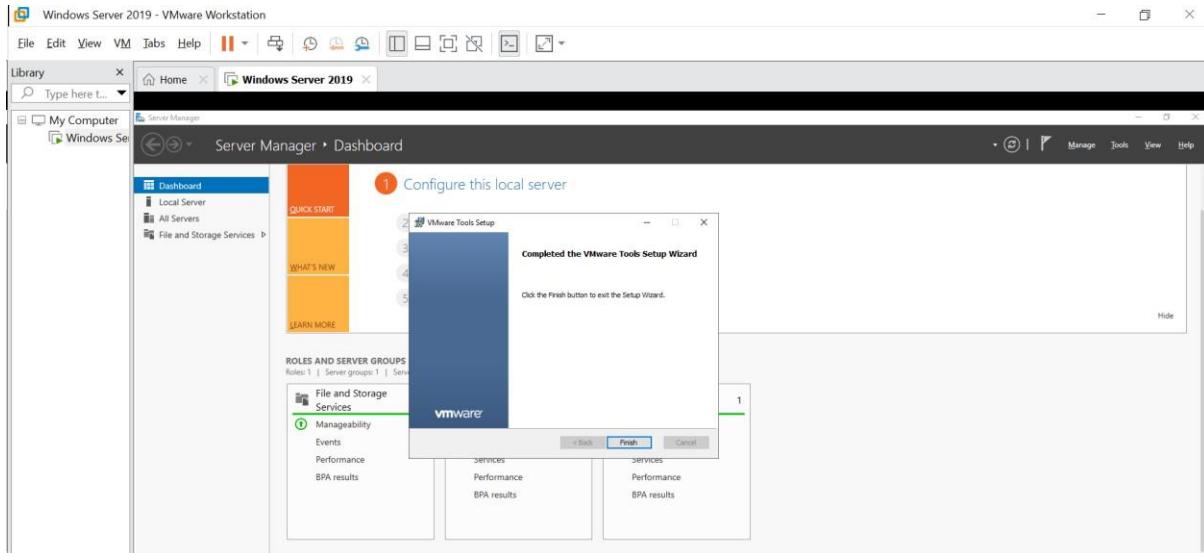
Step 6: Installation Progress

- Wait for the installation to complete. This may take a few minutes.



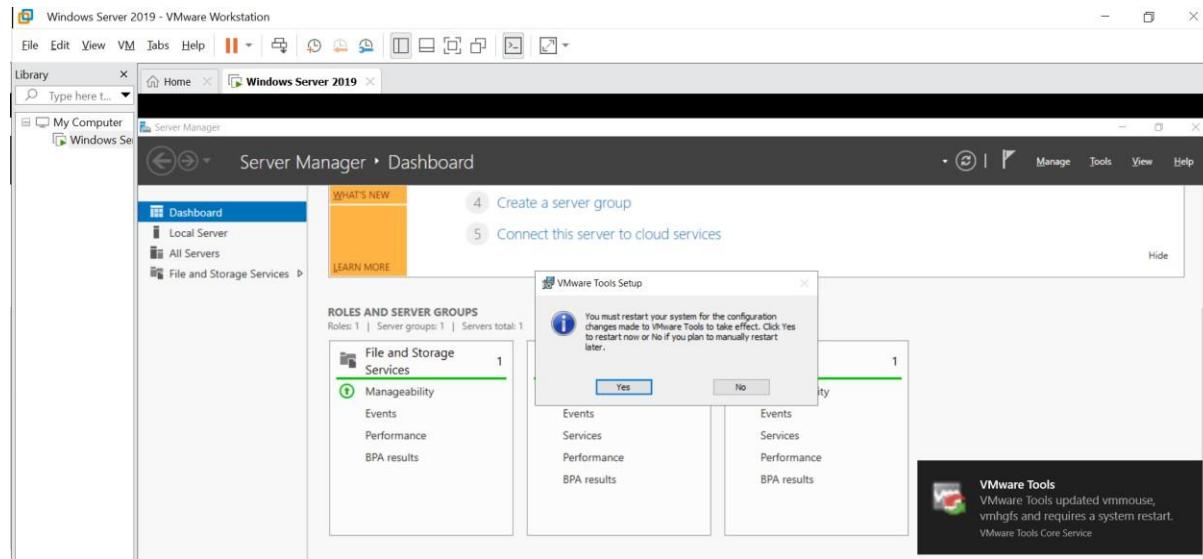
Step 7: Complete the Installation

- Once the installation is finished, click "Finish" to complete the setup.



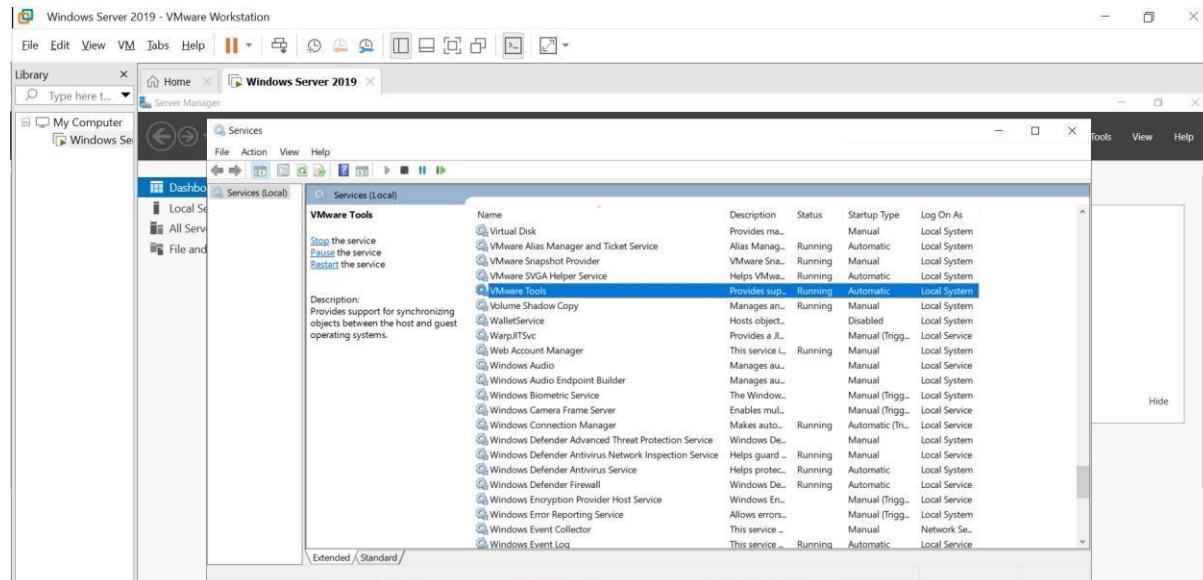
Step 8: Restart POP-UP

- To apply the changes, simply restart your Windows Server 2019 virtual machine



Step 9: Check VMware Tools Services

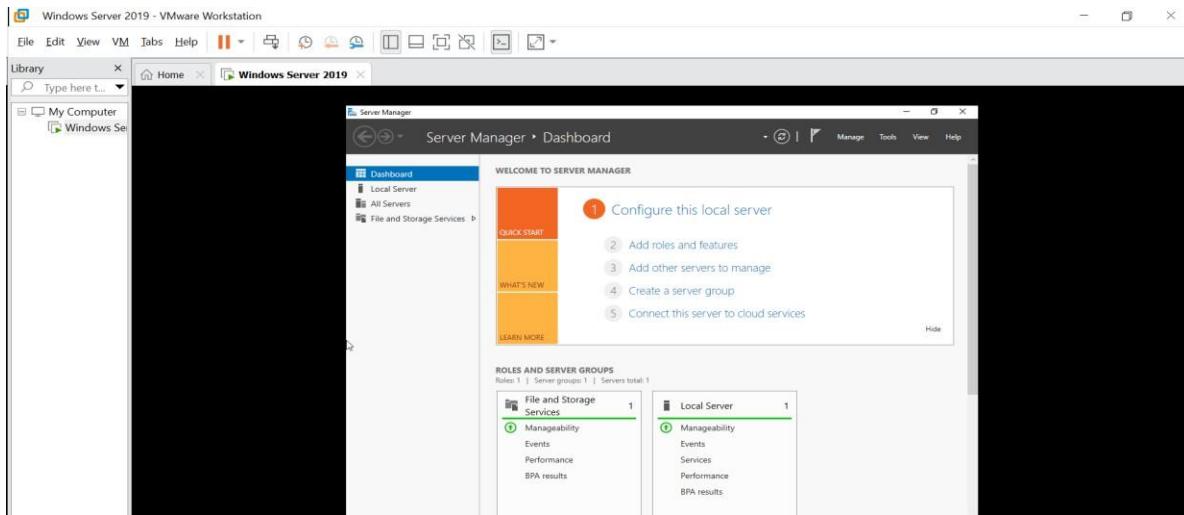
- Open the "Services" application on your Windows Server 2019. And also can do the same through "window+R" key and type "services.msc" and then Enter.
- Look for services starting with "VMware" in the list. Common services include "VMware Tools Service" or similar.



4. Install HYPER-V on the window server 2019

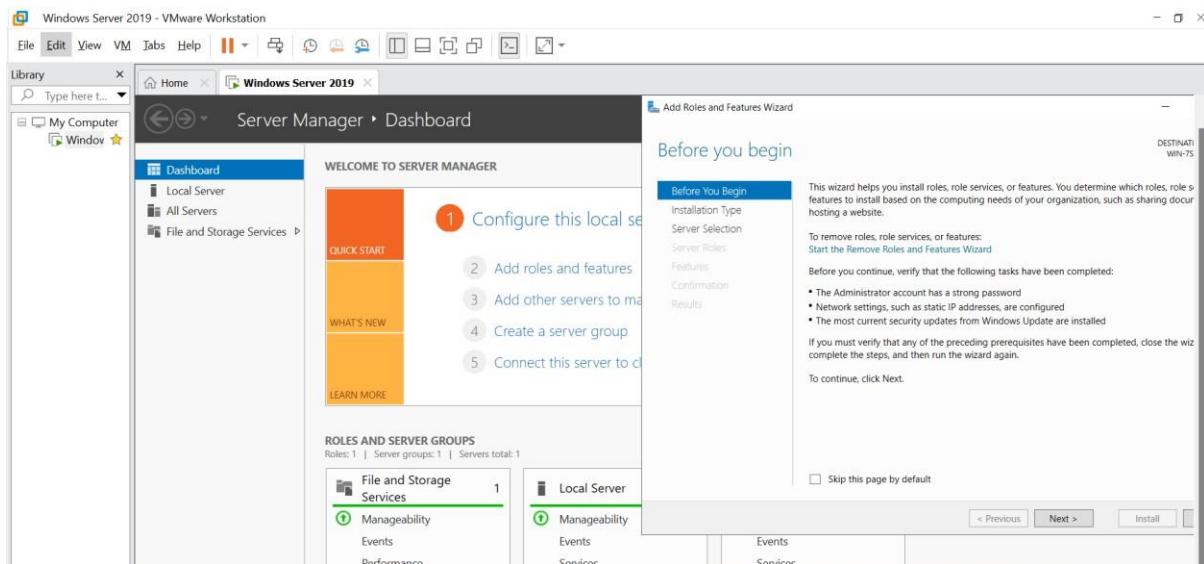
Step 1: Open Server Manager

- Launch the Server Manager from the taskbar or by clicking on the "Server Manager" icon on the desktop.
- In the Server Manager dashboard, click on "Manage" in the top-right corner and select "Add Roles and Features."



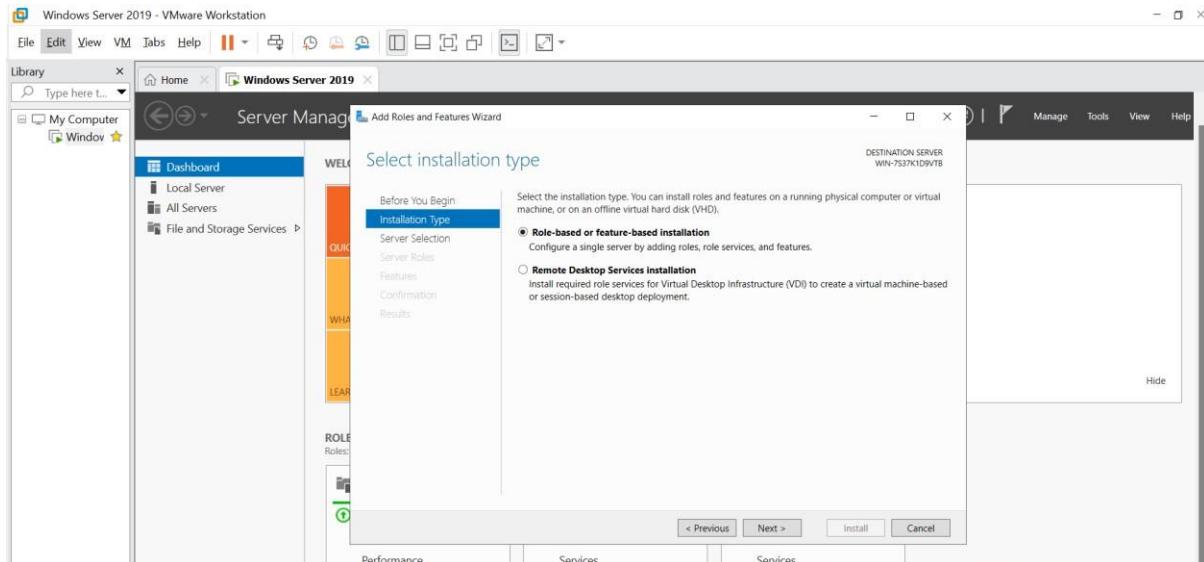
Step 2: Add Roles and Features Wizard

- The "Add Roles and Features Wizard" will open. Click "Next" to proceed.



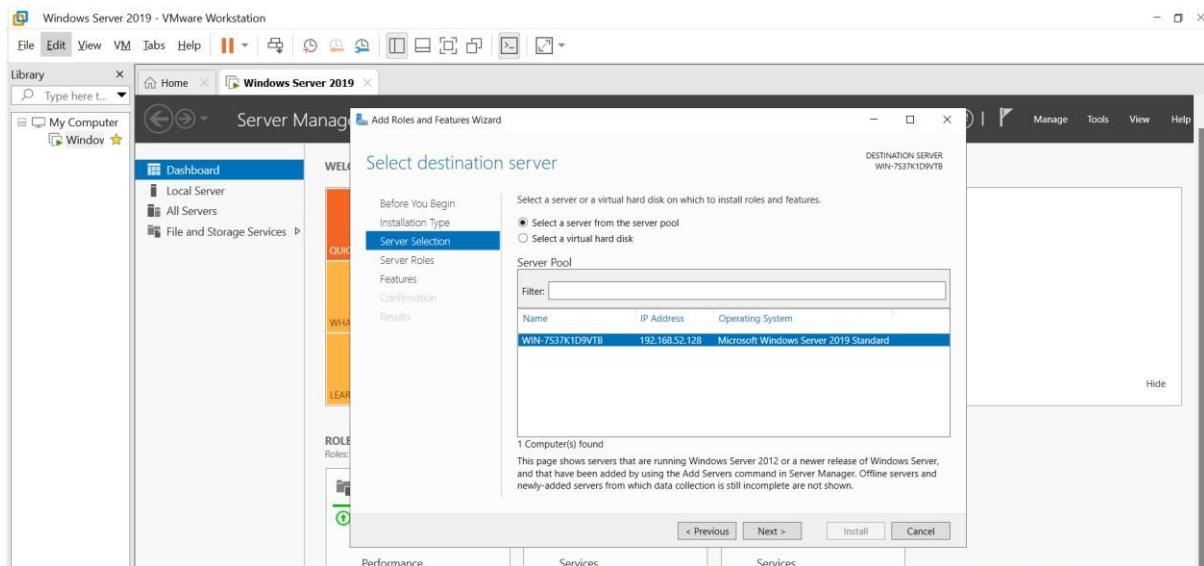
Step 3: Installation Type

- Select "Role-based or feature-based installation" and click "Next."



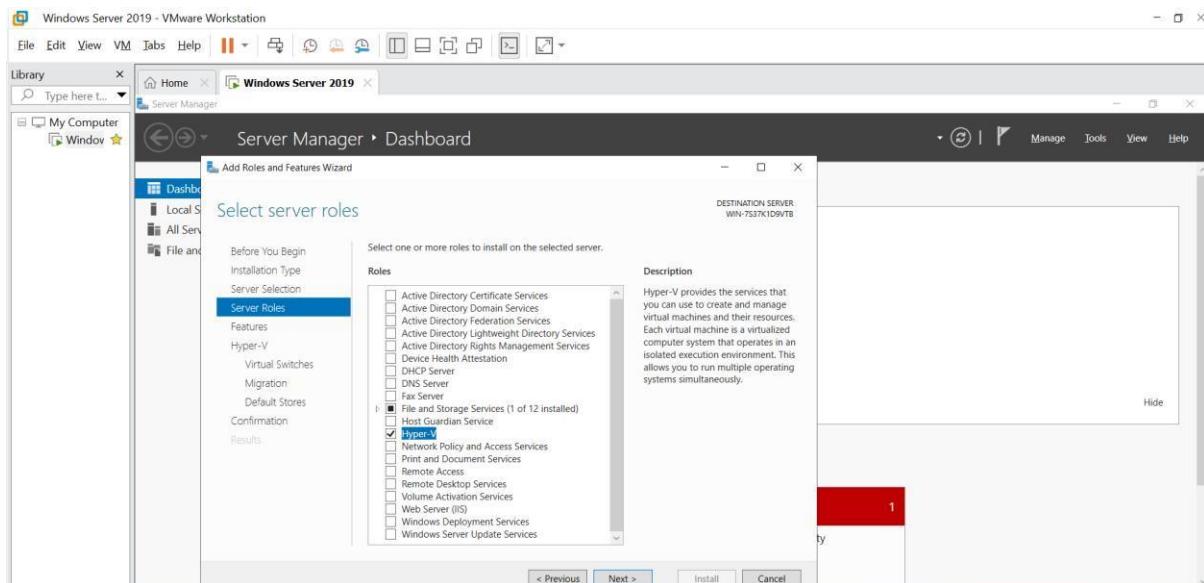
Step 4: Select a Server

- Choose the server where you want to install the Hyper-V role and click "Next."

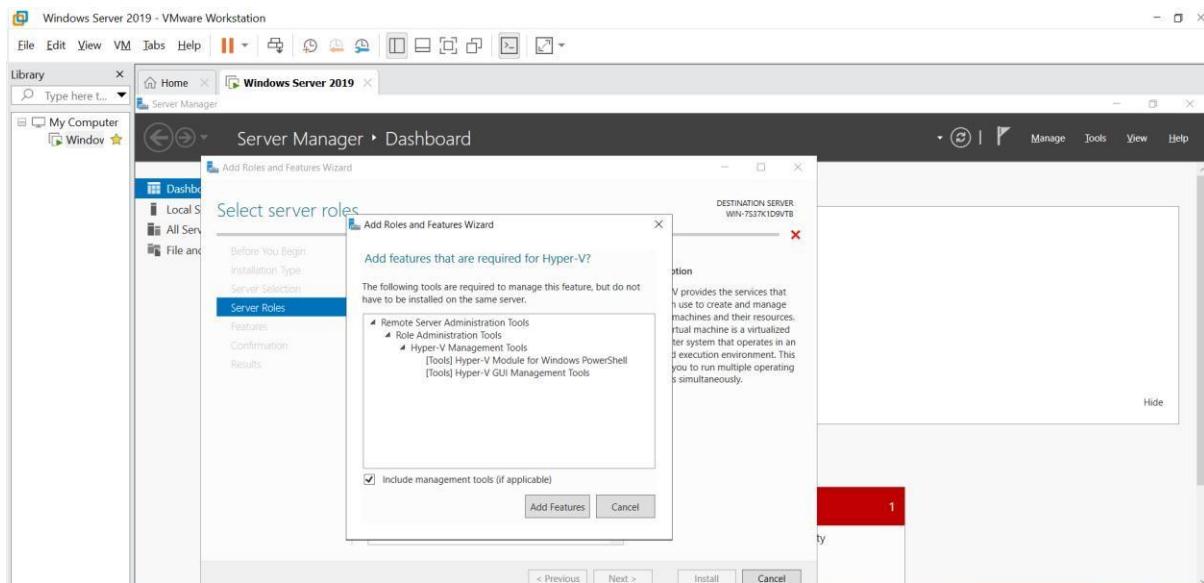


Step 6: Select Role

- In the "Select server roles" section, find and select "Hyper-V."

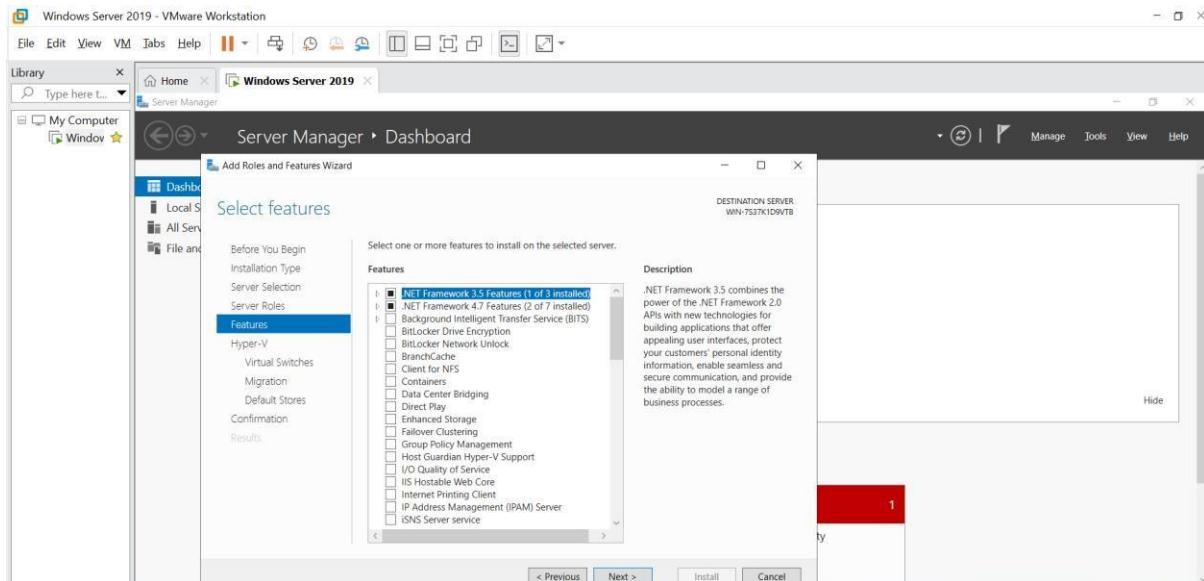


- A pop-up will appear asking you to add features that are required for Hyper-V. Click "Add Features" and then click "Next."



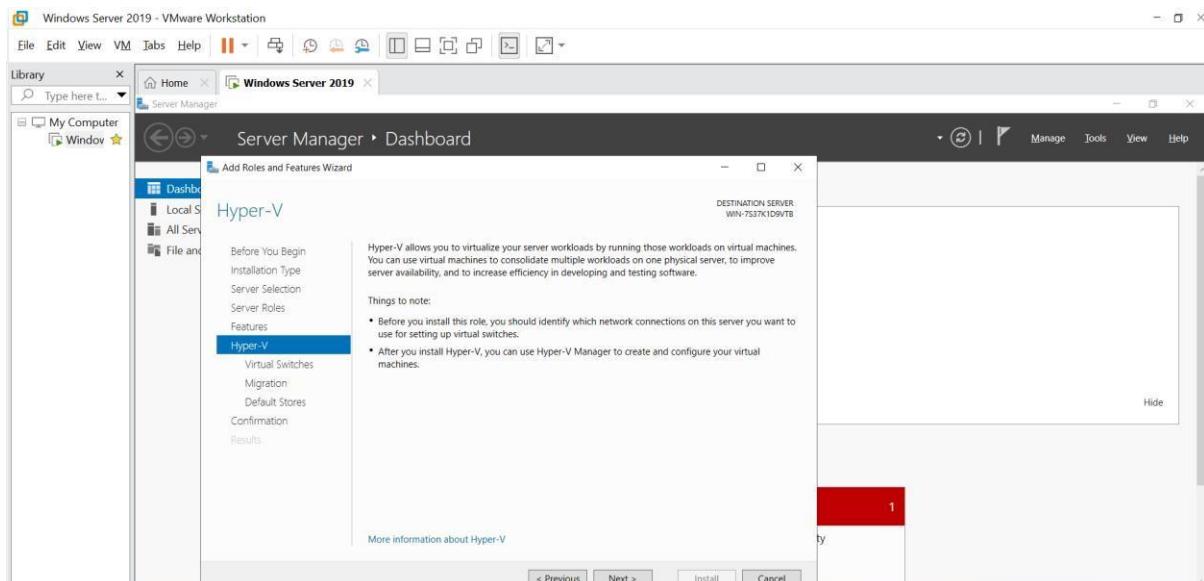
Step 6: Select Features

- Review the features required for Hyper-V and click "Next."

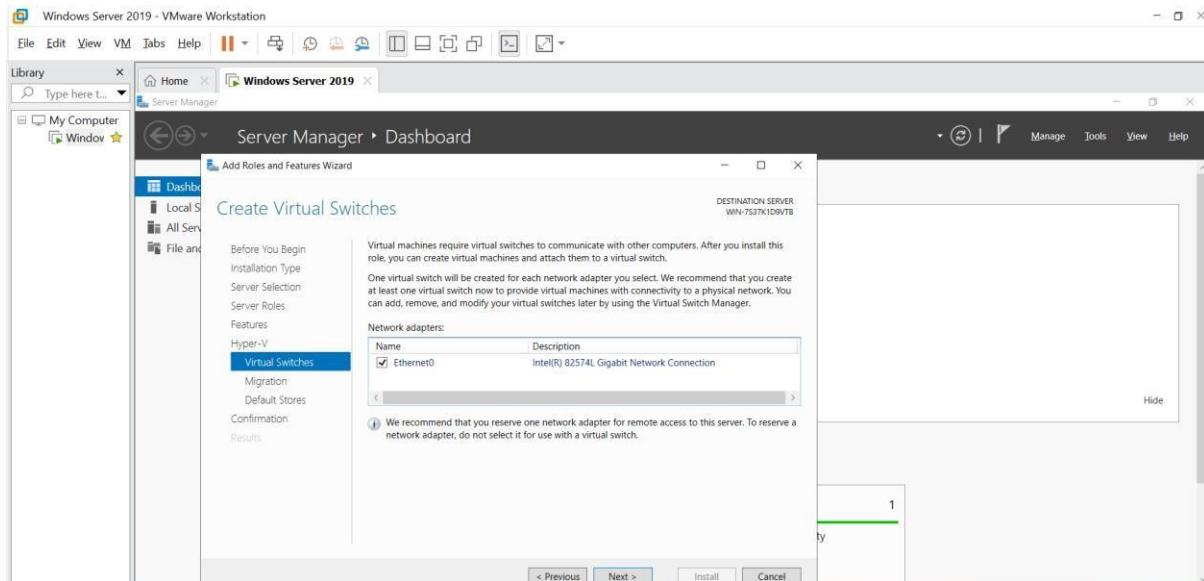


Step 7: Hyper-V

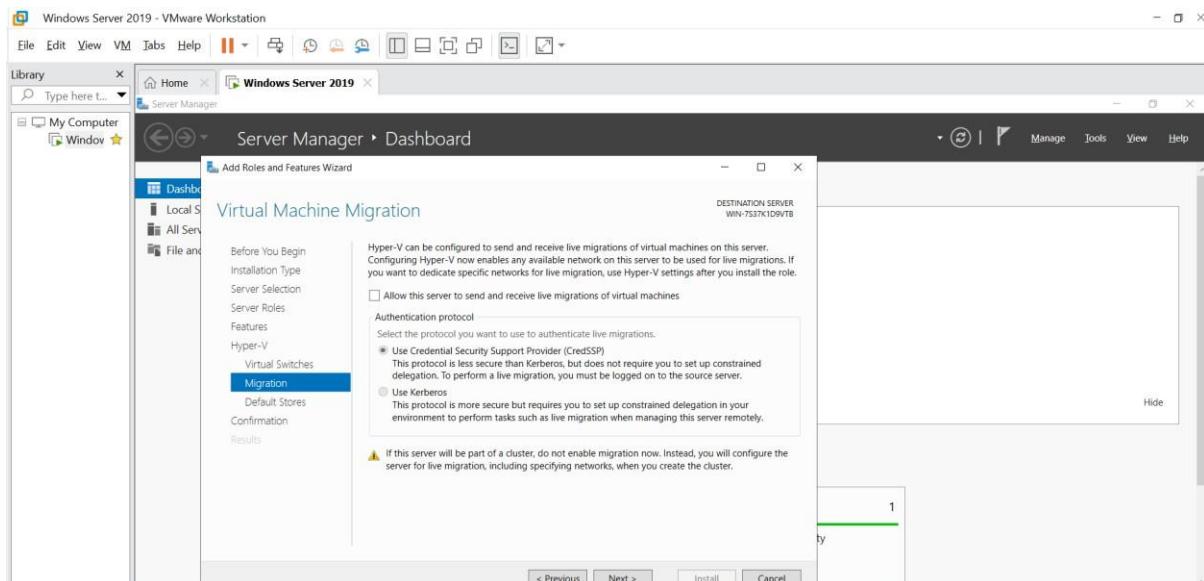
- On the "Select features" screen, click "Next."



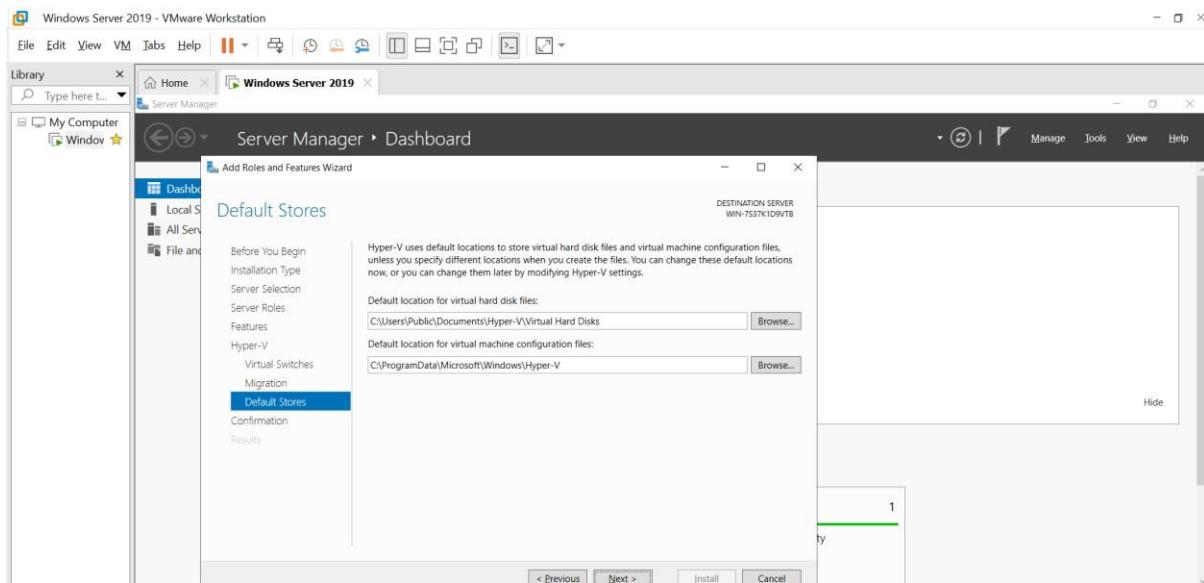
- In the virtual Switches section, select the network adapter for providing VMs with network connectivity then “NEXT”.



- In the Migration section, Select the **Credential Security Support Provider** and then **Next**

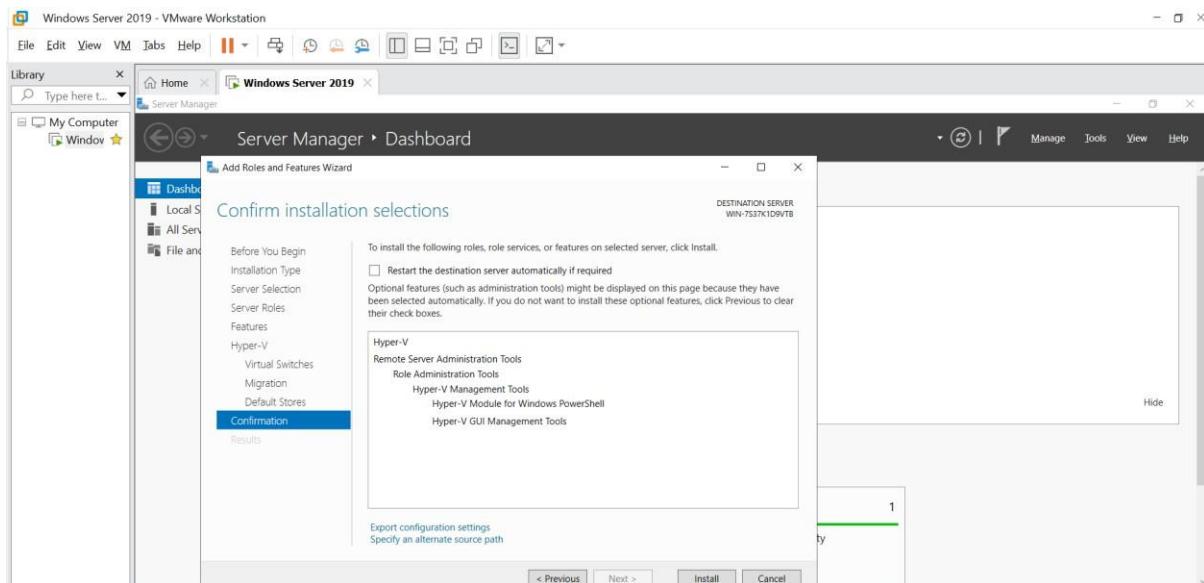


- In the Default Stores section, you can select default locations for virtual hard disk files and VM configuration files then click “Next”.

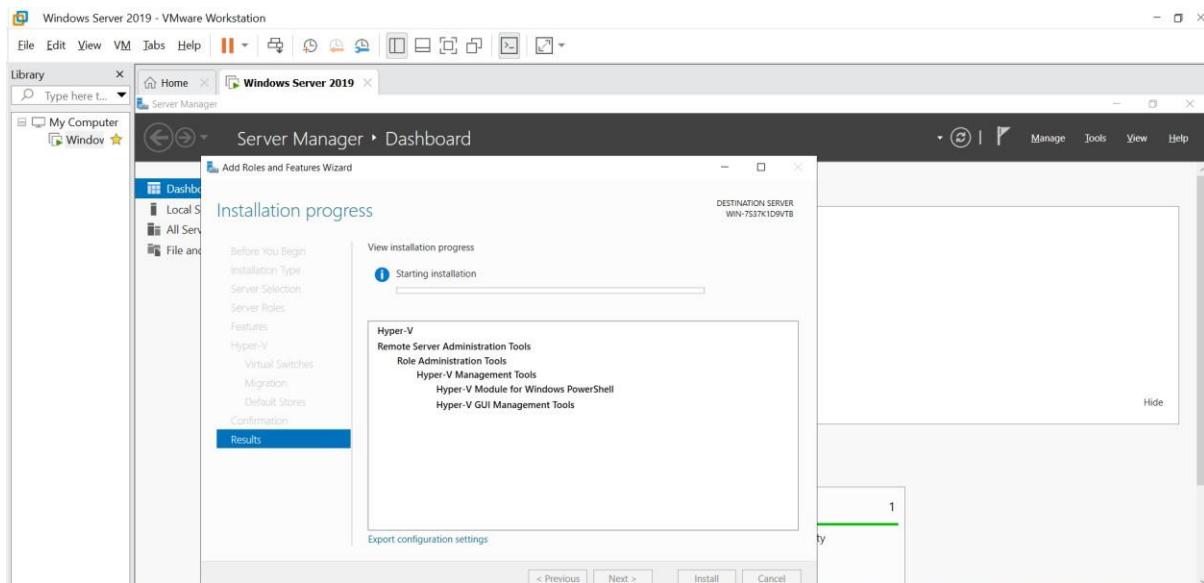


Step 8: Confirm Selections

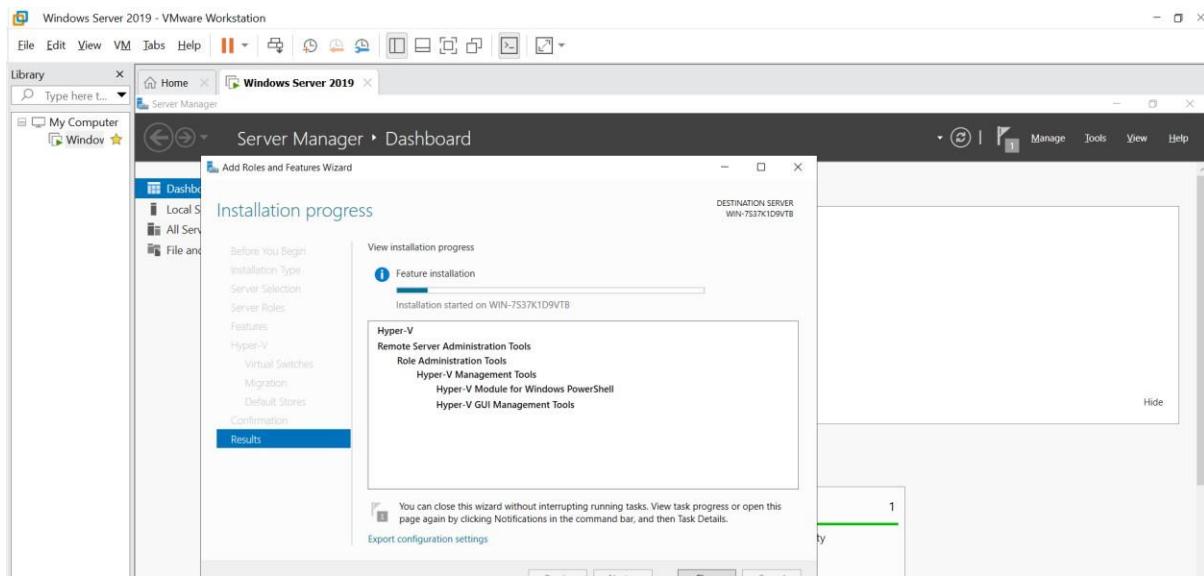
- Review the information on the "Confirm installation selections" screen.
- Click "Install" to start the installation process.



- The installation process will begin.

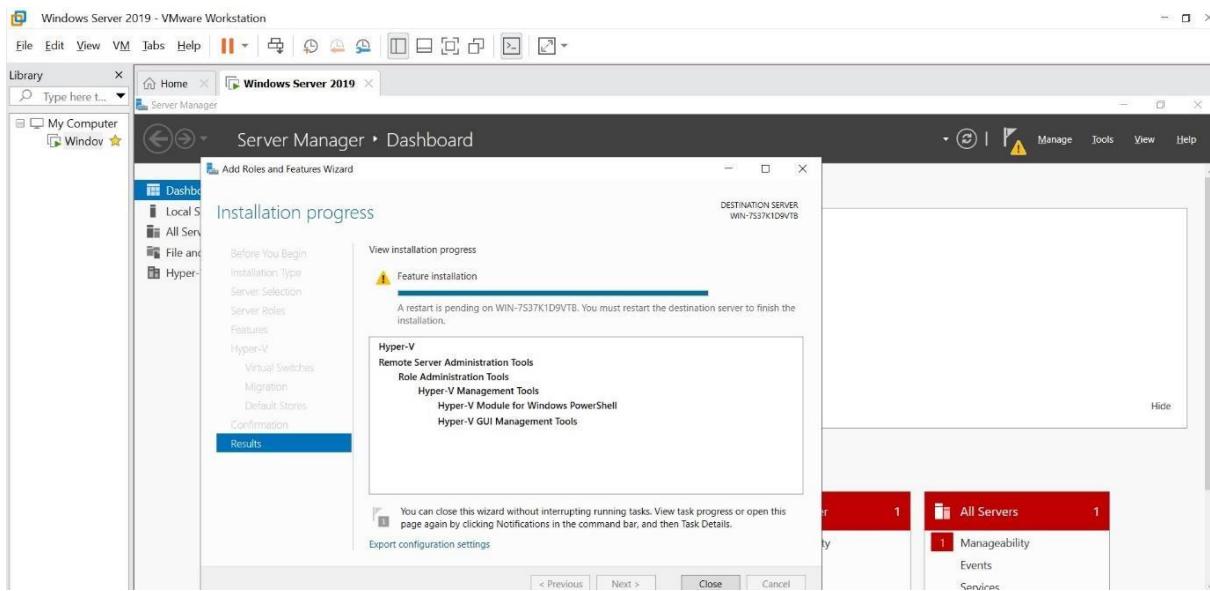


- Installation is in progress



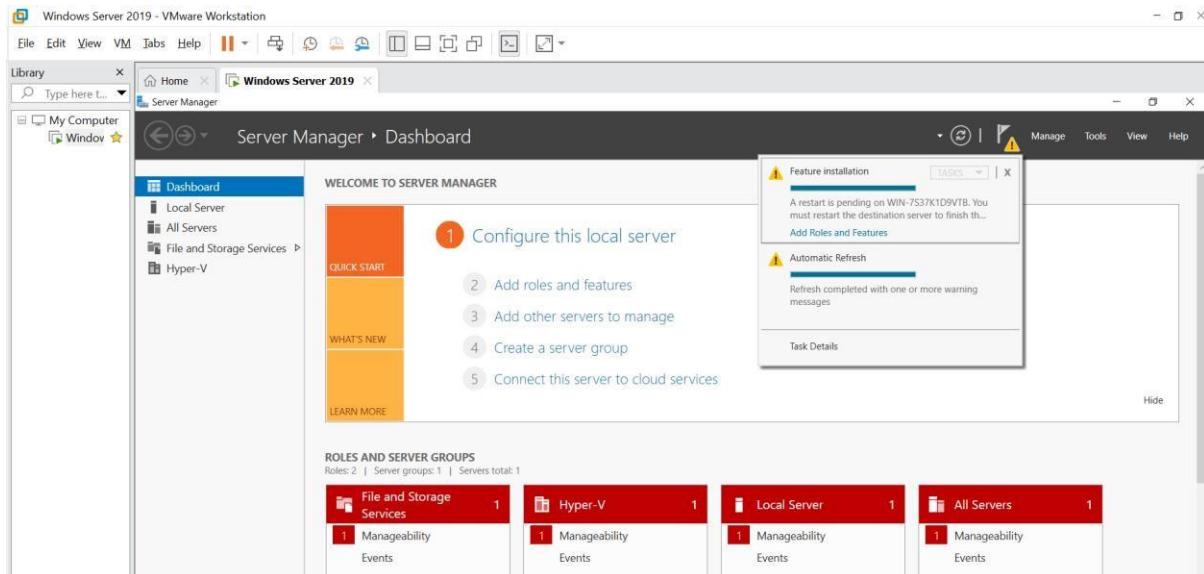
Step 9: Installation Complete:

- Once the installation is complete, a summary screen will be displayed. Review the information, and if there are no issues, click "Close."



Step 10: Restart Server

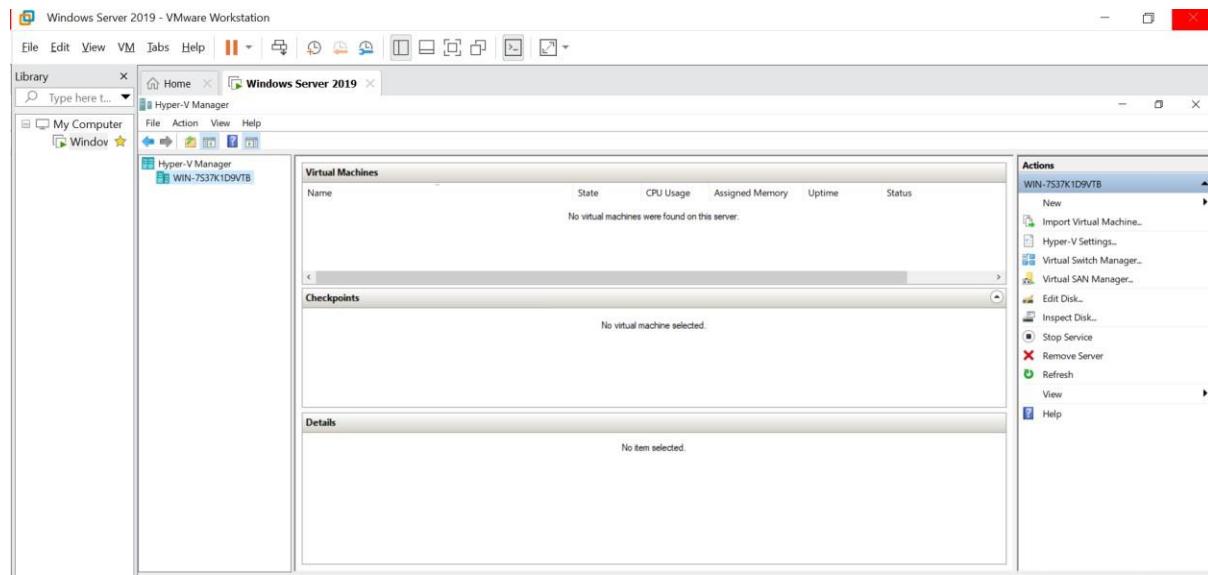
- Click on the 'Restart' notification in the notification option to restart the server



5. Install window 7 on HYPER-V

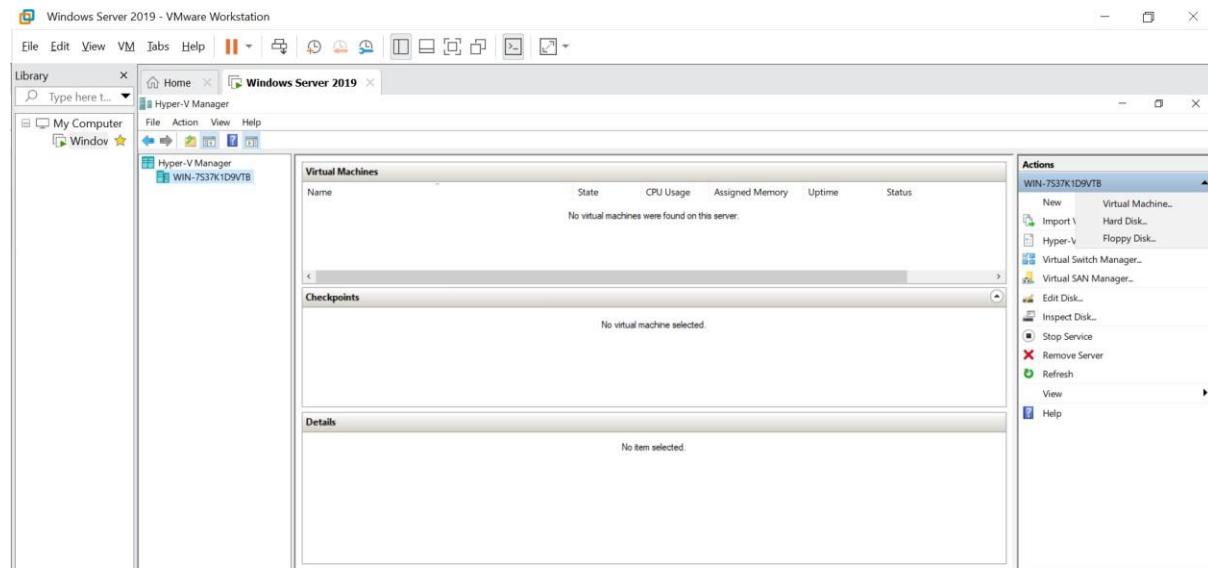
Step1: Open Hyper-V Manager

- Launch Hyper-V Manager on your Windows Server2019 machine.



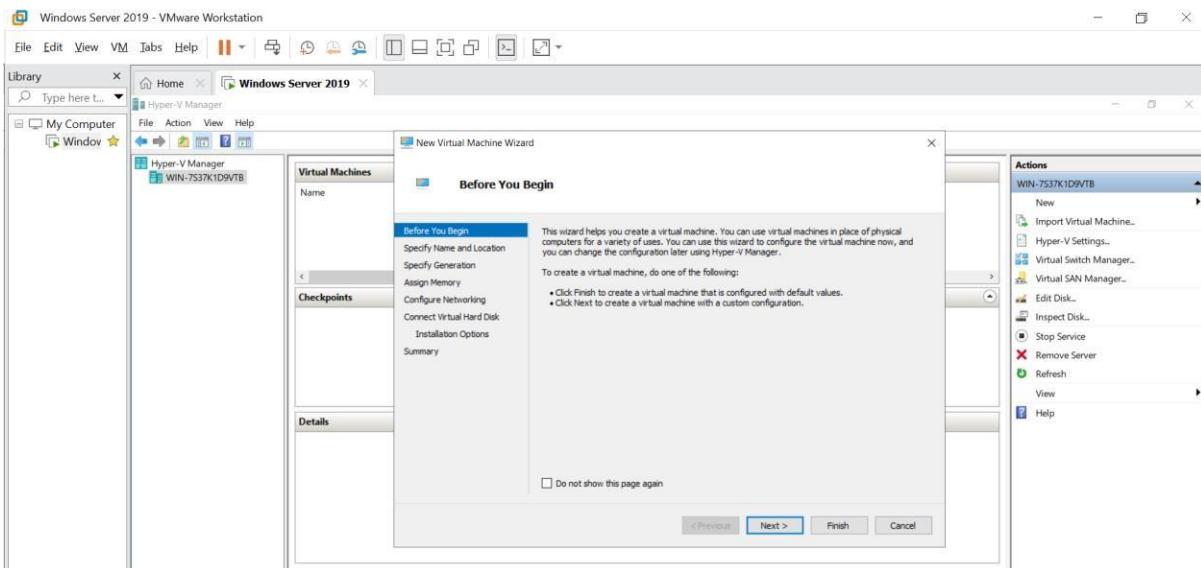
Step 2: Create a New Virtual Machine

- In Hyper-V Manager, right-click on your host machine and choose "New" > "Virtual Machine."



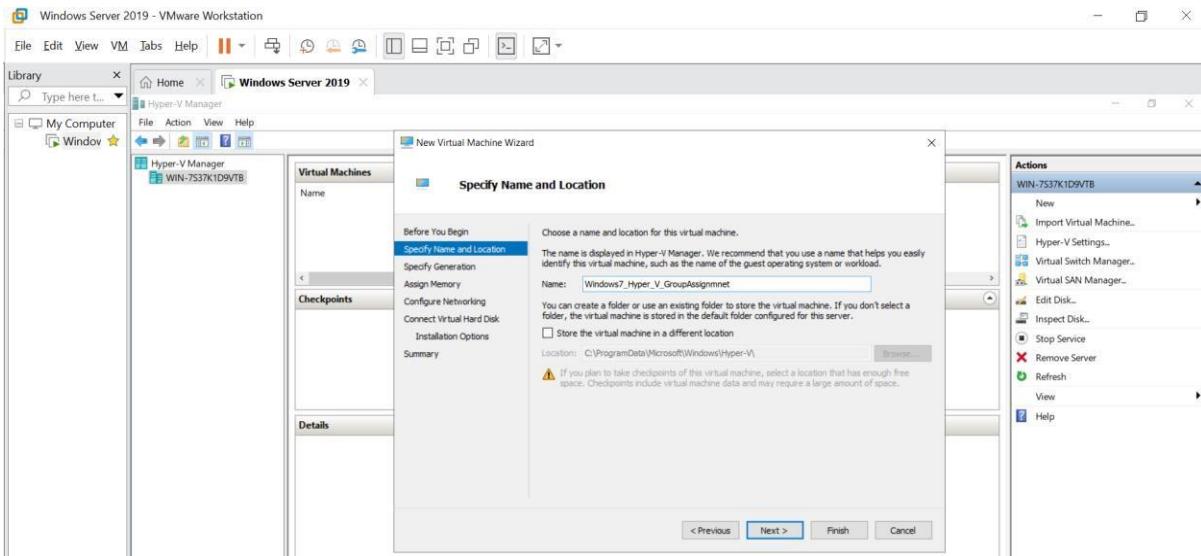
Step 3: New Virtual Machine Wizard

- The "New Virtual Machine Wizard" will open. Click "Next" to begin.



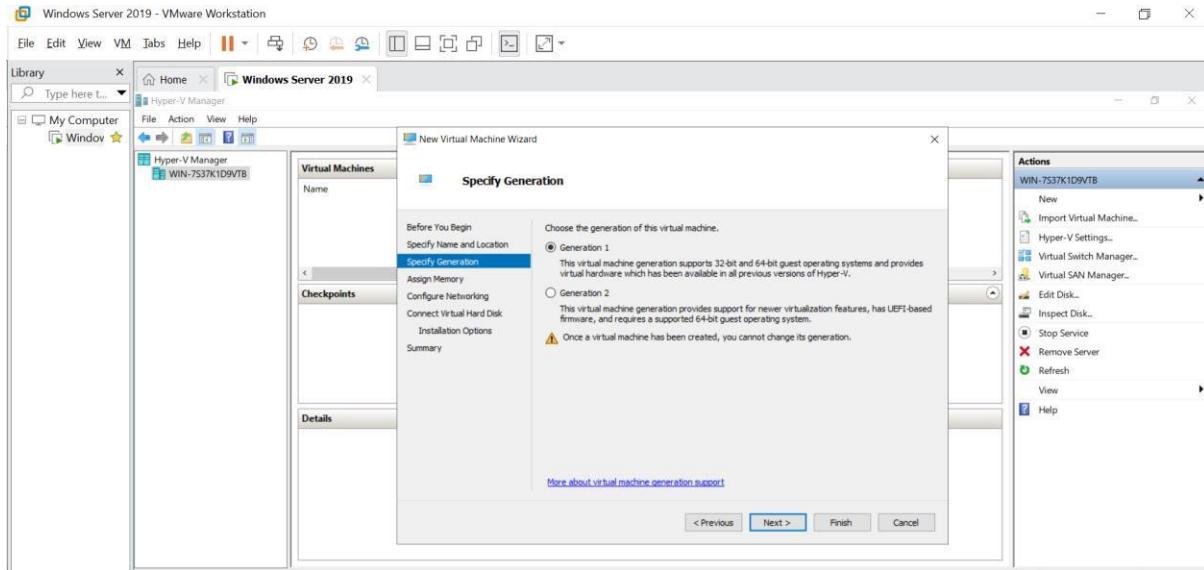
Step 4 : Specify Name and Location

- Enter a name for your virtual machine i.e "Windows_7_Hyper_V_Group Assignment").
- Choose a location to store your VM files. Click "Next."



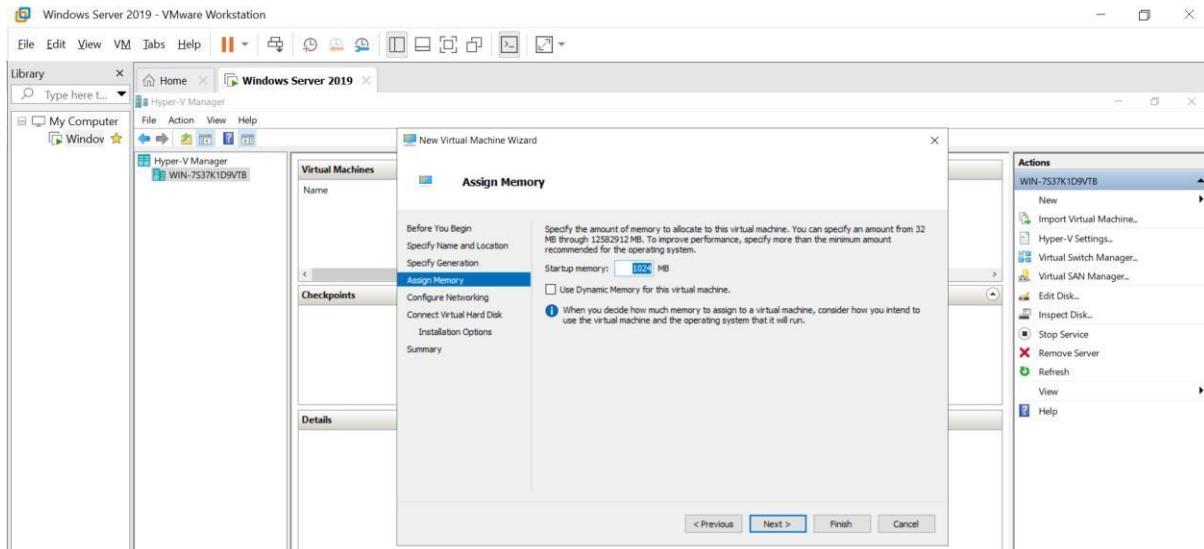
Step 5:Specify Generation

- Choose "Generation 1". Click "Next."



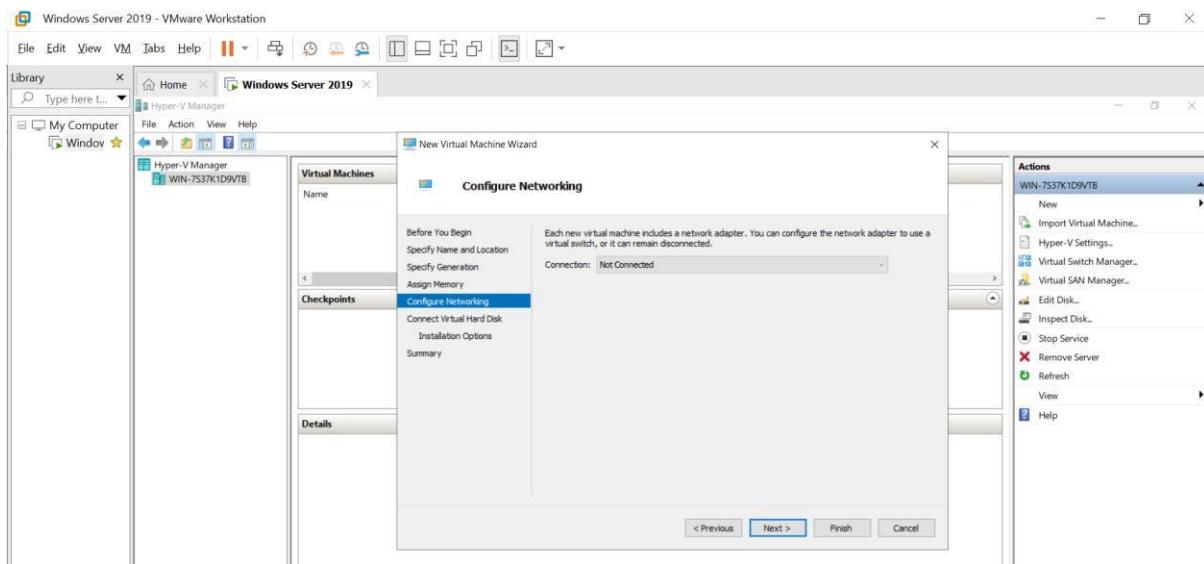
Step 6: Assign Memory

- Assign Memory, a **minimum of 1024MB** for Win Server 2022 – If you want to get a decent performance, then assign 4GB of RAM to the server.



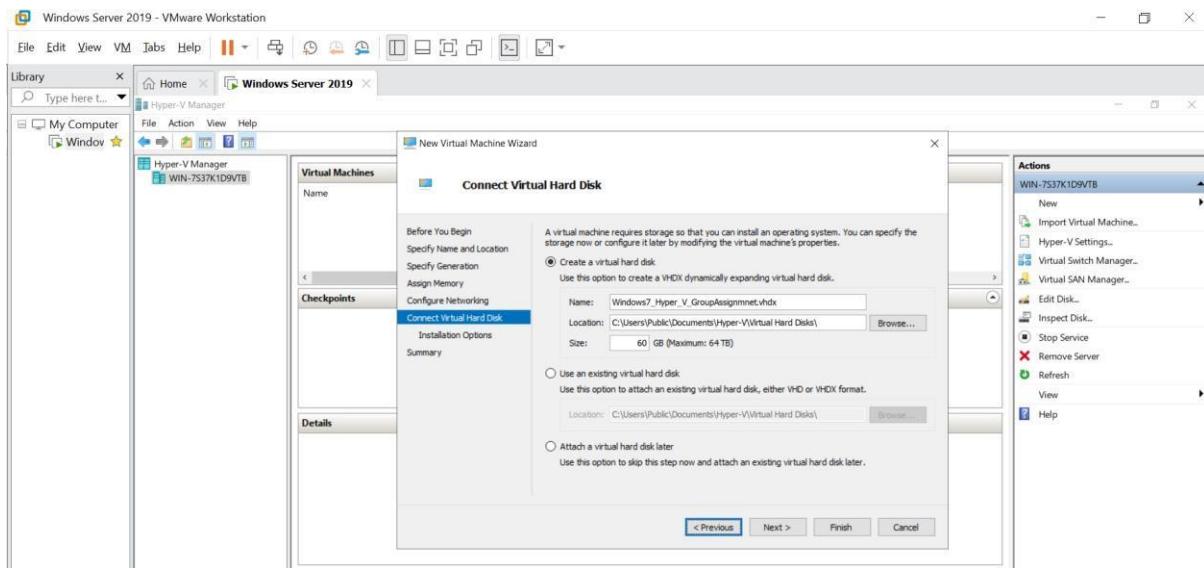
Step 7: Configuring networking

- Right now, there is no need to configuring the network



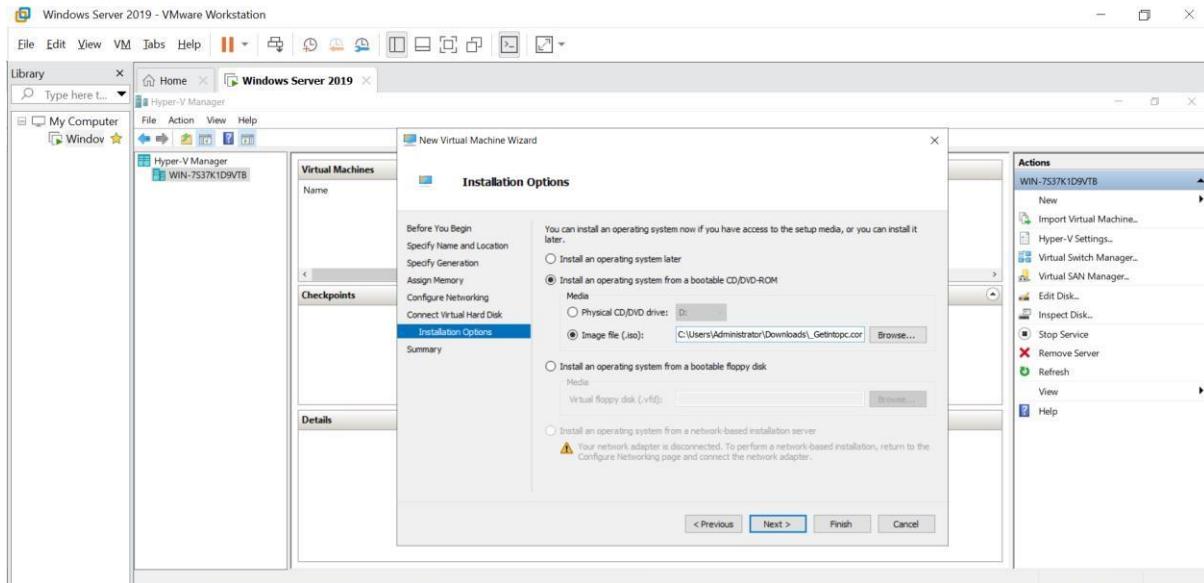
Step 8: Connect Virtual Hard Disk

- Create a new virtual hard disk and Allocate at least 30 GB for a decent performance then Click "Next."



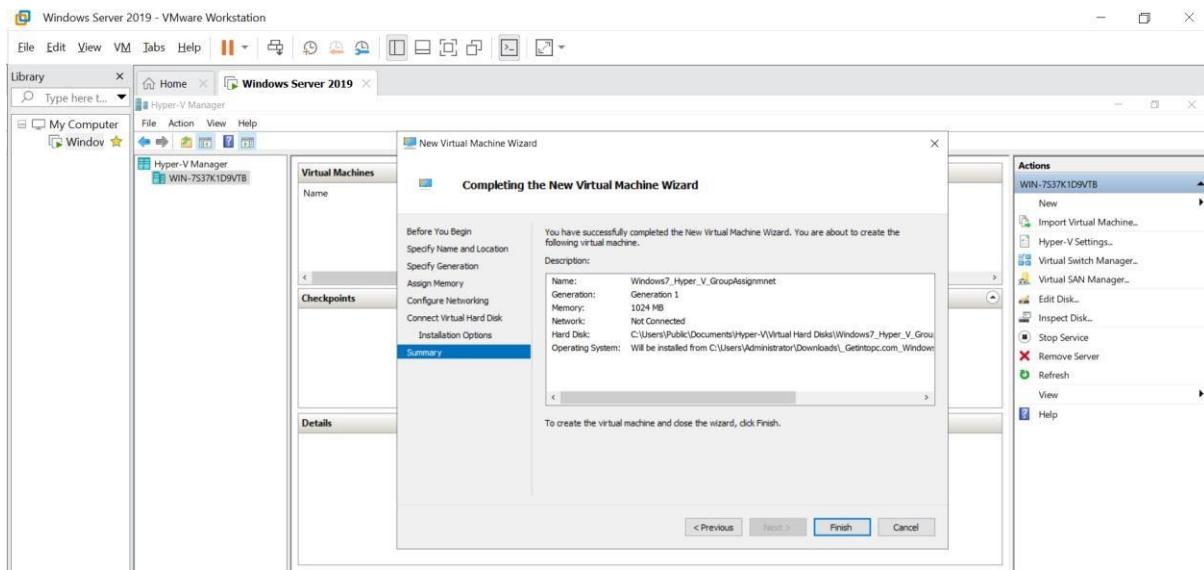
Step 9: Installation Options

- Choose "Install an operating system from a bootable image file."
- Browse and select the Windows 7 ISO file. Click "Next."



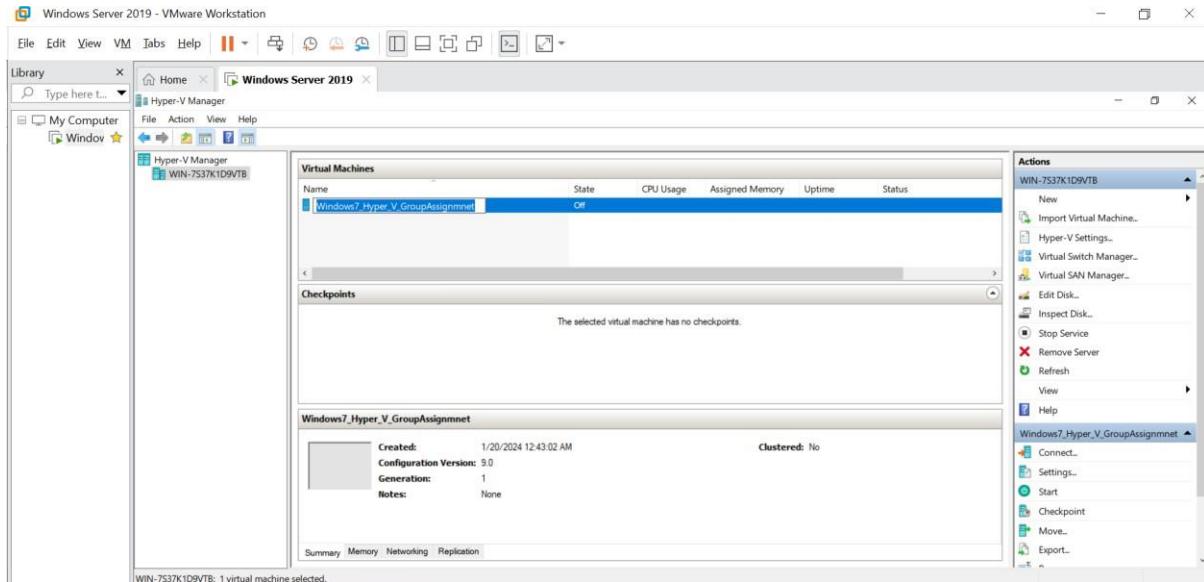
Step 10: Complete Wizard

- Review your selections on the summary page and click "Finish."



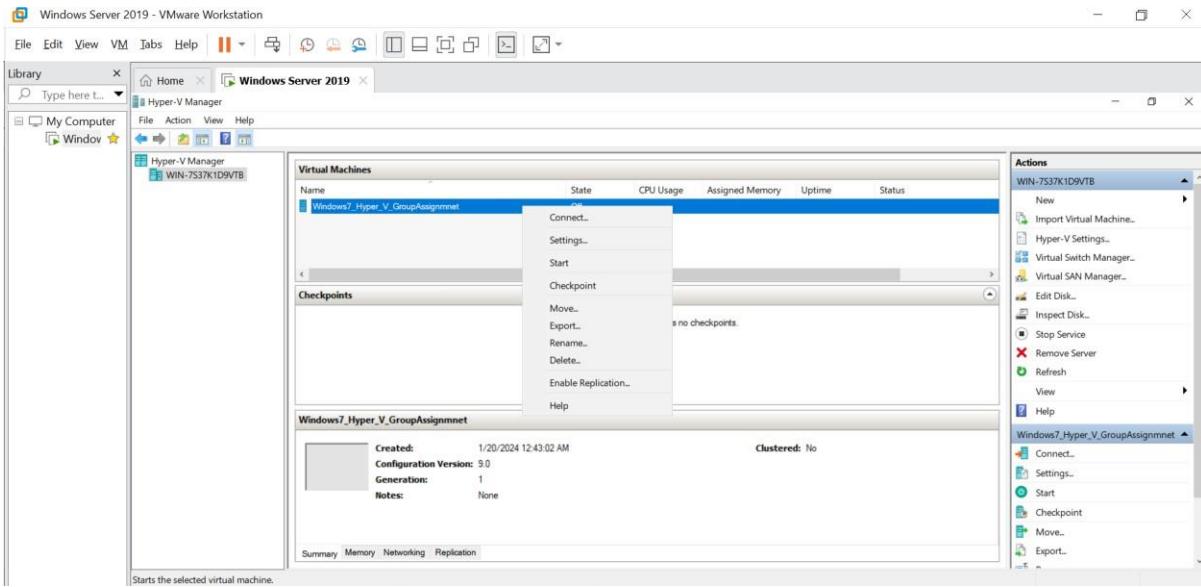
Step 11: Start Virtual Machine

- In Hyper-V Manager, right-click on your virtual machine and choose "Start."



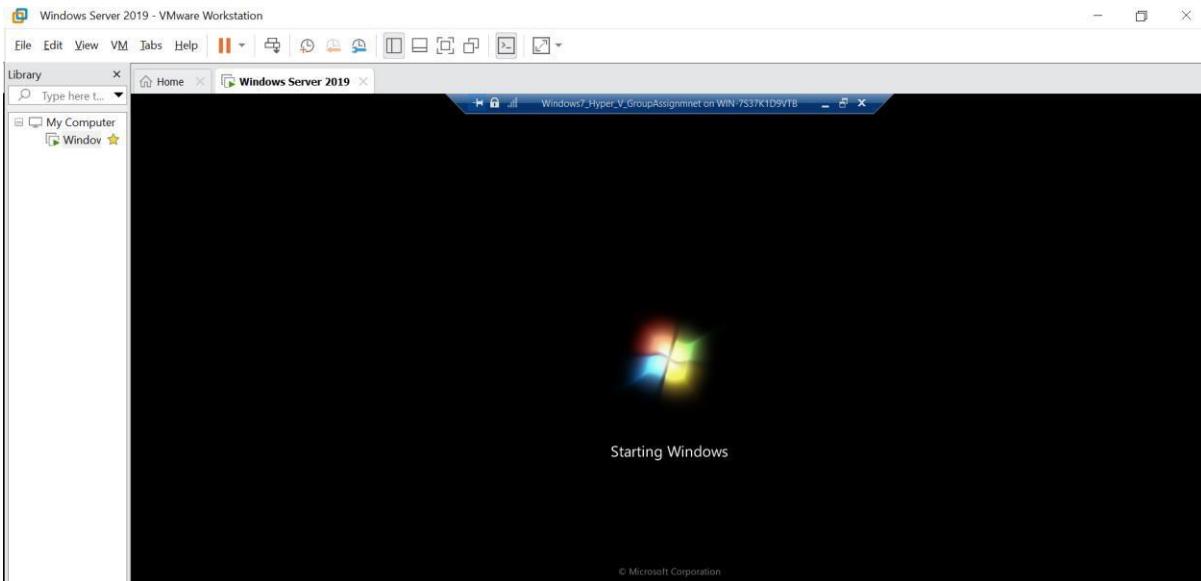
Step 12: Connect to the Console

- Right-click again and choose "Connect" to open the VM's console.

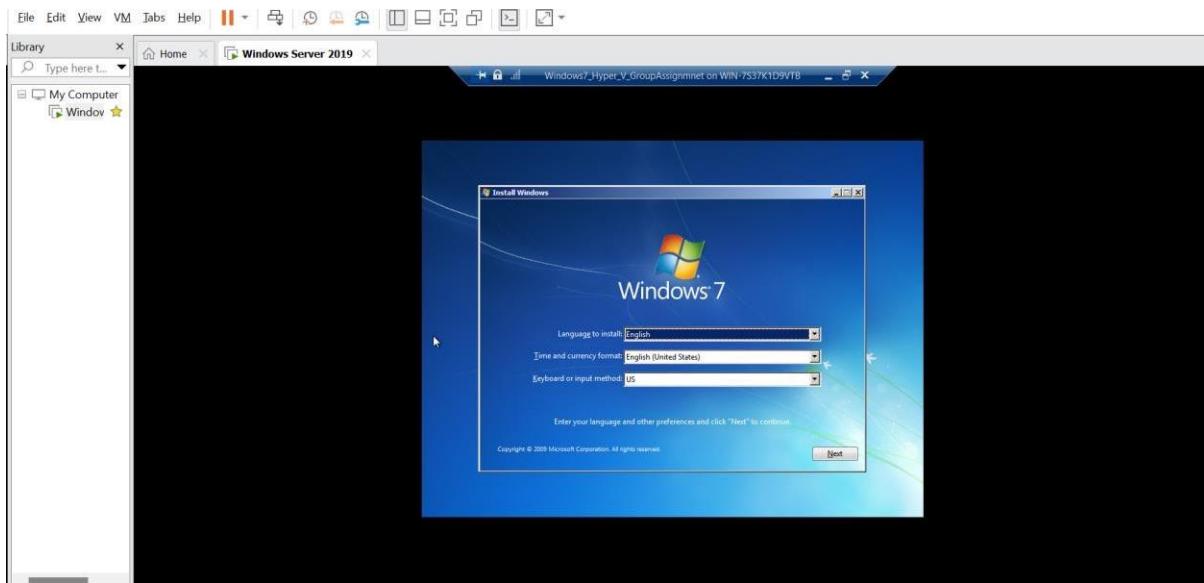


Step 13: Install Windows 7

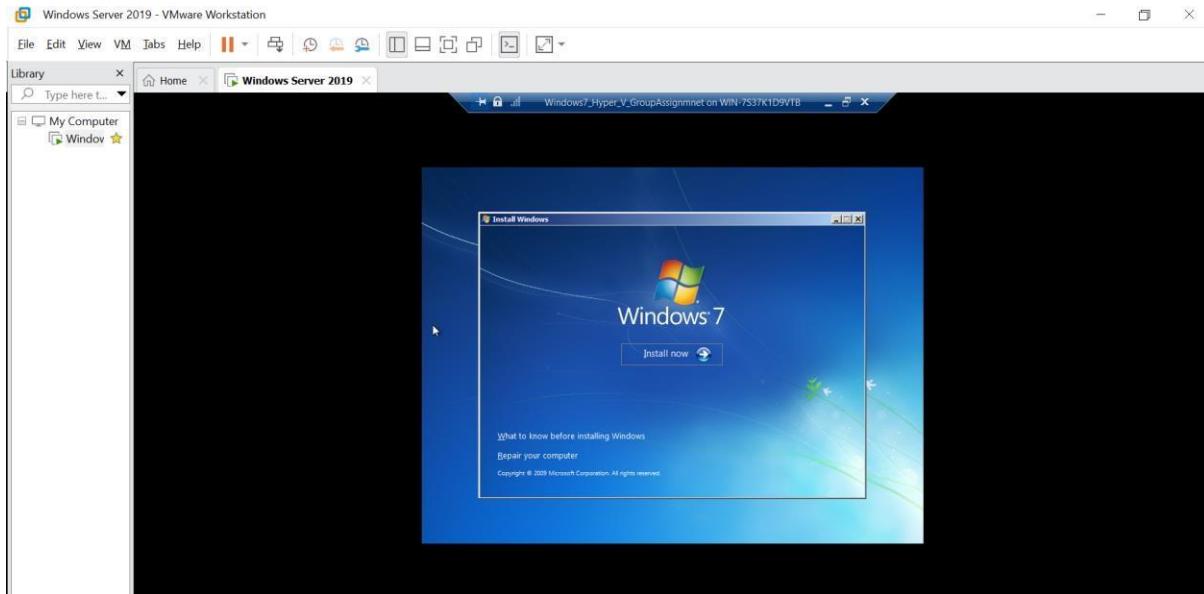
- First boot screen, it will take 1 to 2 minutes for processing



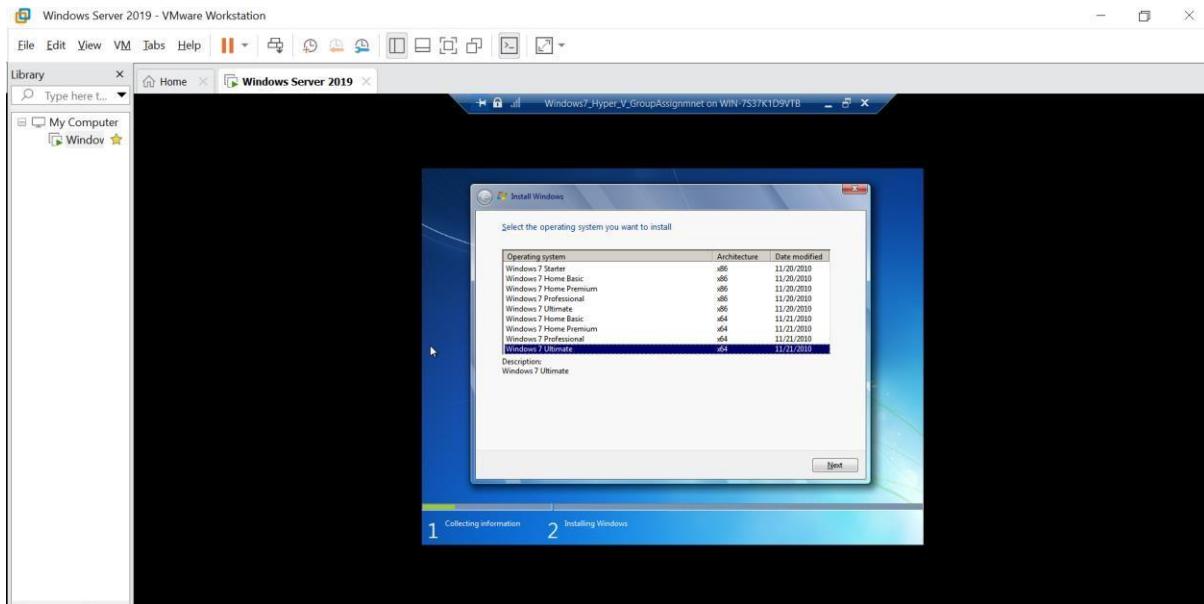
- The installation wizard will appear in a couple of seconds after the boot. Select the language time and keyboard settings then click on Next



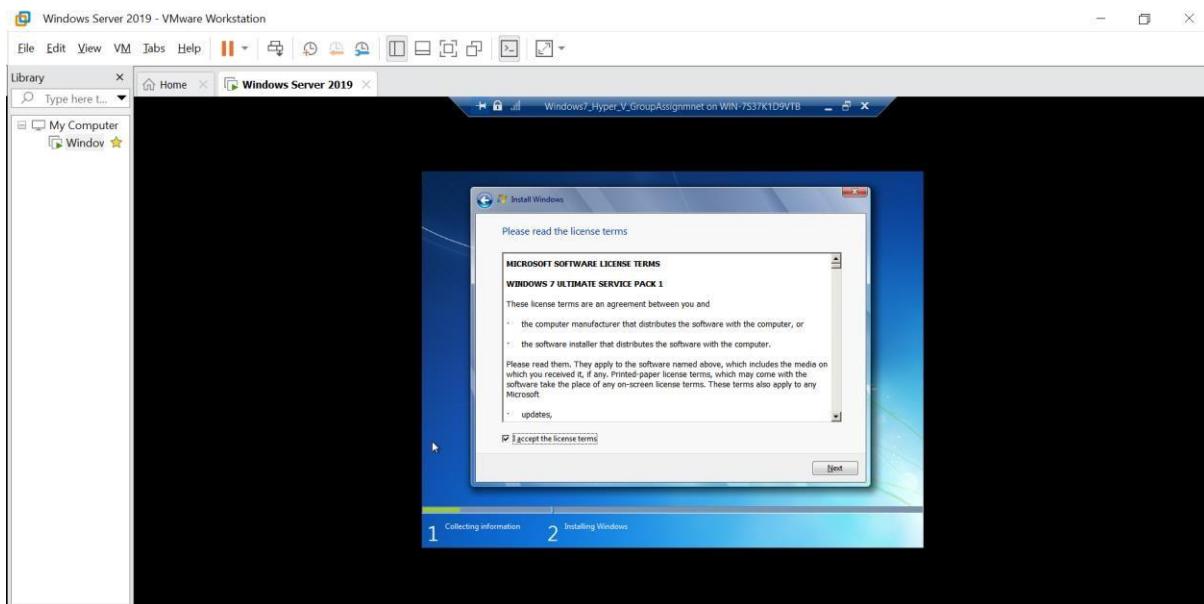
- Click on **Install Now** to install window 7



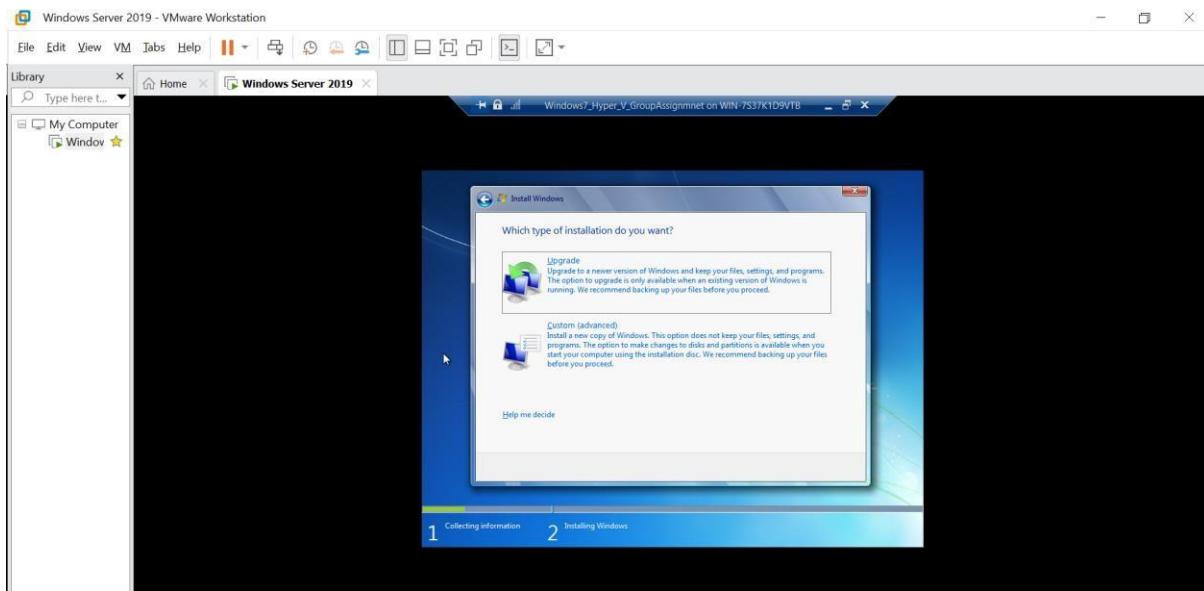
- Select the operating system to install



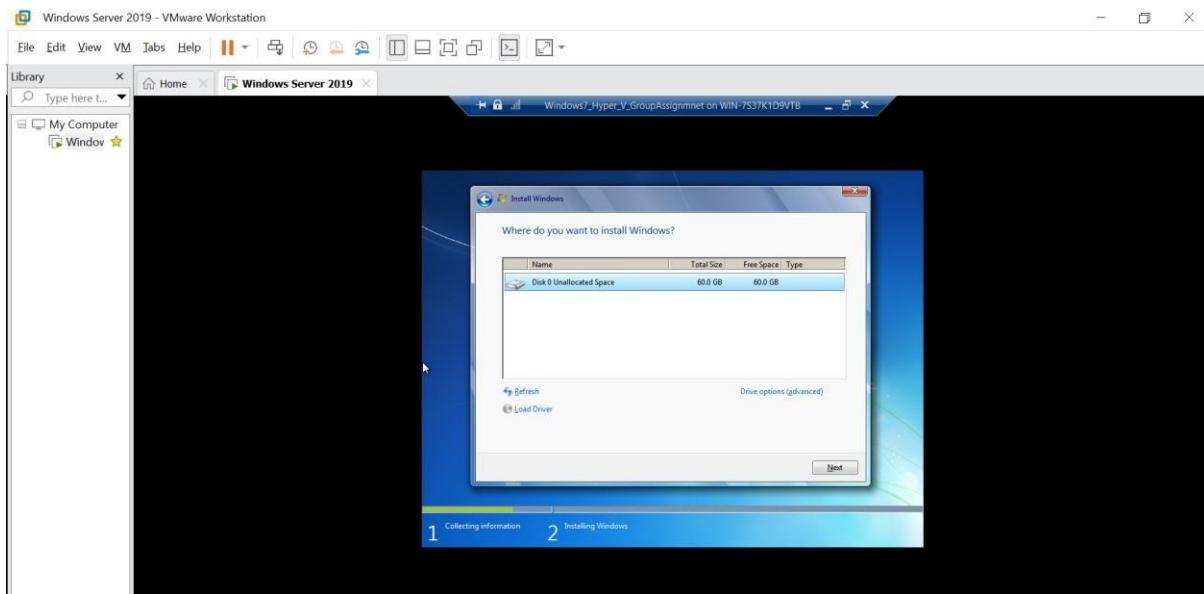
- Accept the License Agreement then click on Next



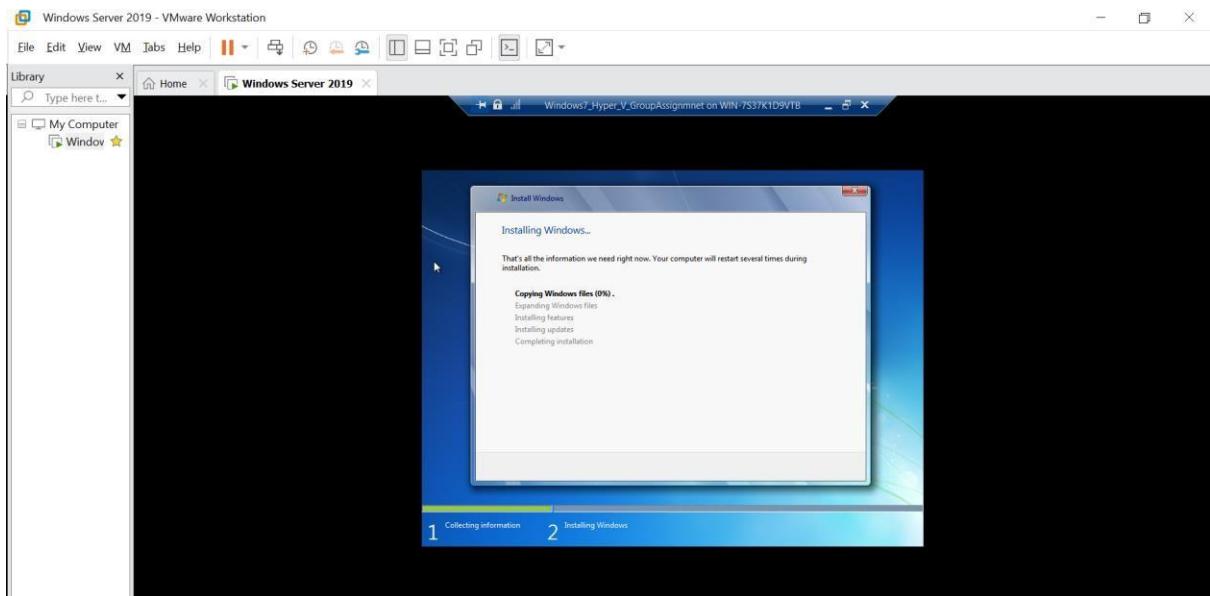
- Select the Custom instalation type if doing a fresh installation



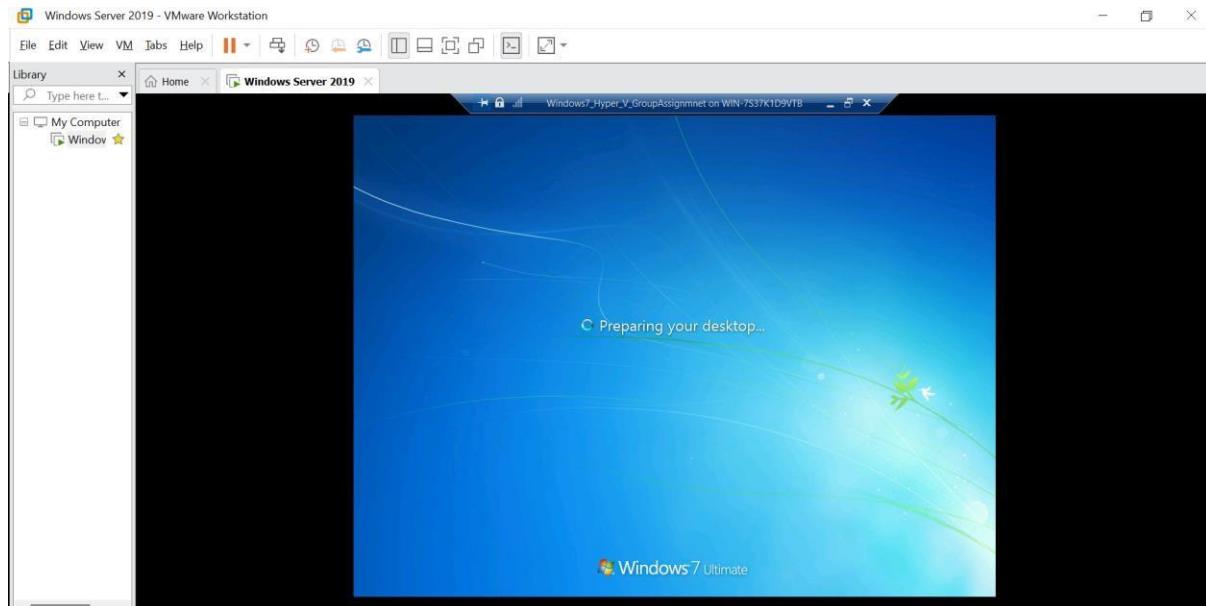
- Select the partition and Click Next to install Windows 7



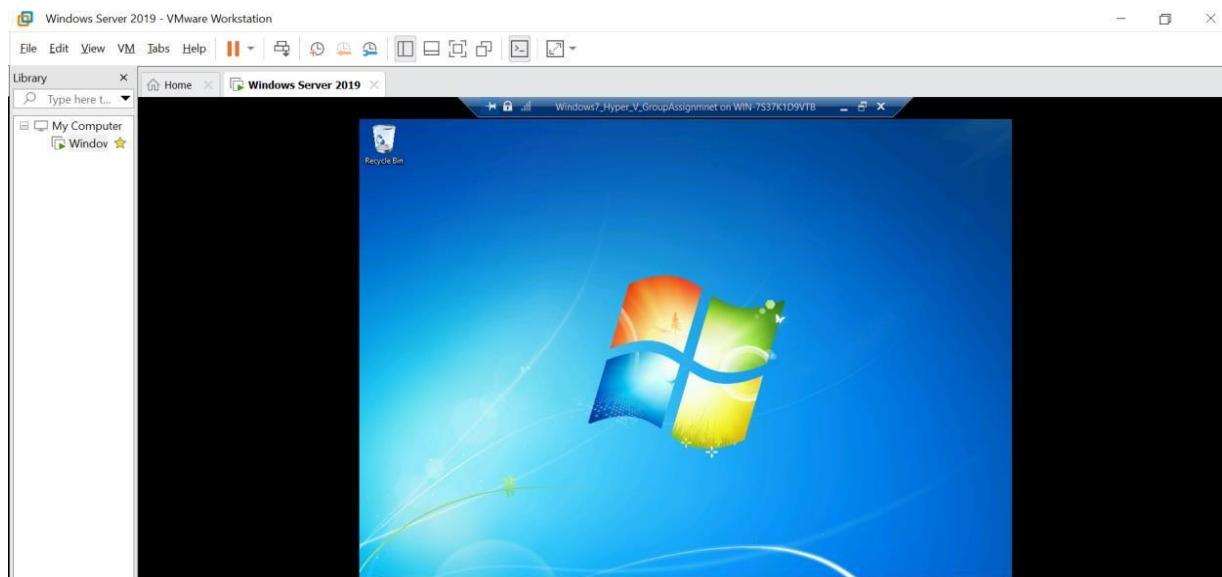
- Window server 2019 installtion is in progress



- Windows getting ready after the installation completes



- Windows 7 is ready to use



Bibliography

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