

Exp. No:7b

Date: 25.08.25

Creation of VM, Powershell commands, Management

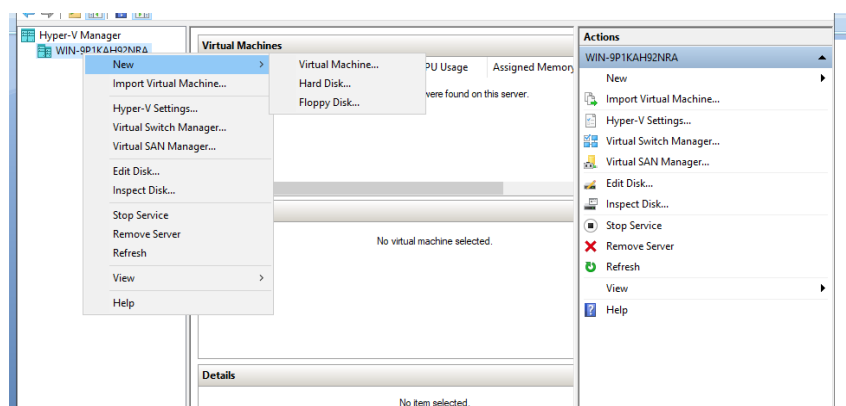
Aim:

To create and manage Virtual Machines (VMs) using Hyper-V, including PowerShell commands for automation and efficient administration.

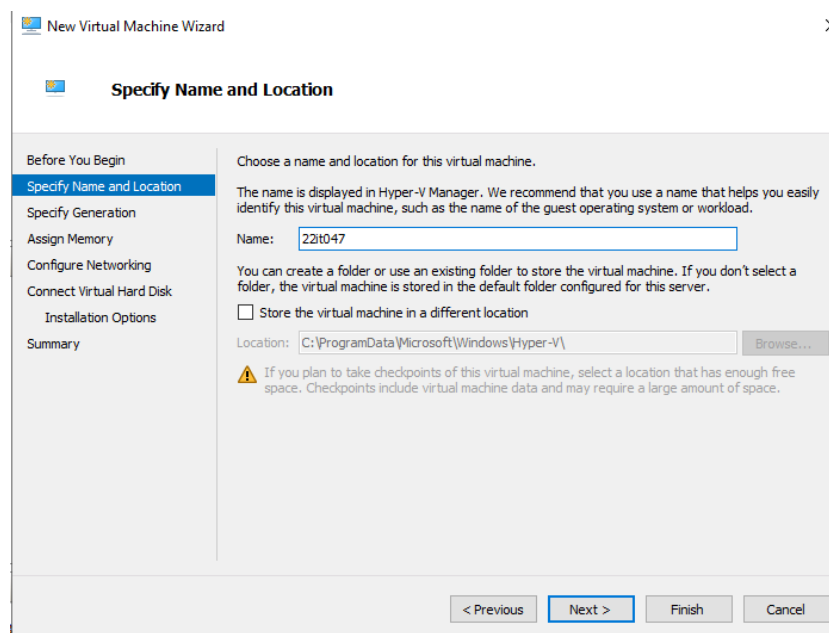
Procedure:

(VM installation without powershell)

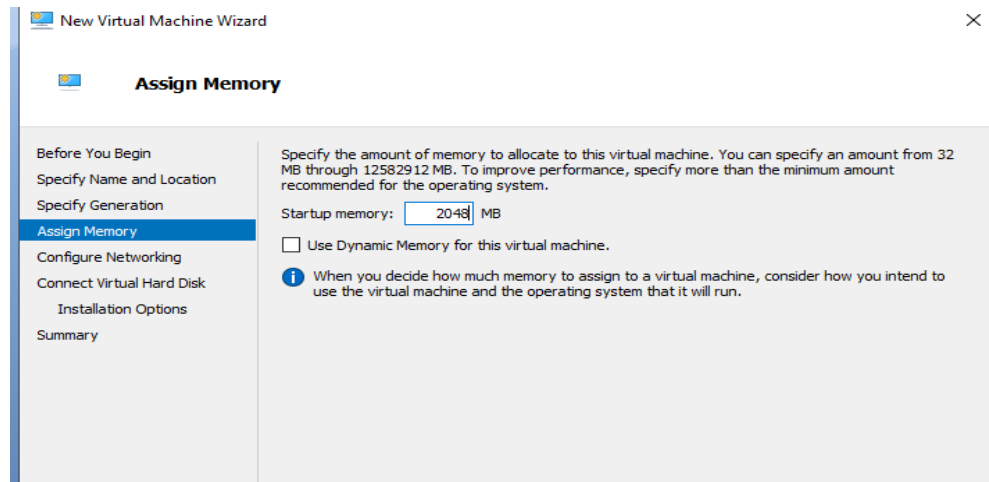
- 1) Open Tools-> hyper v manager-> right click on server and click create new vm



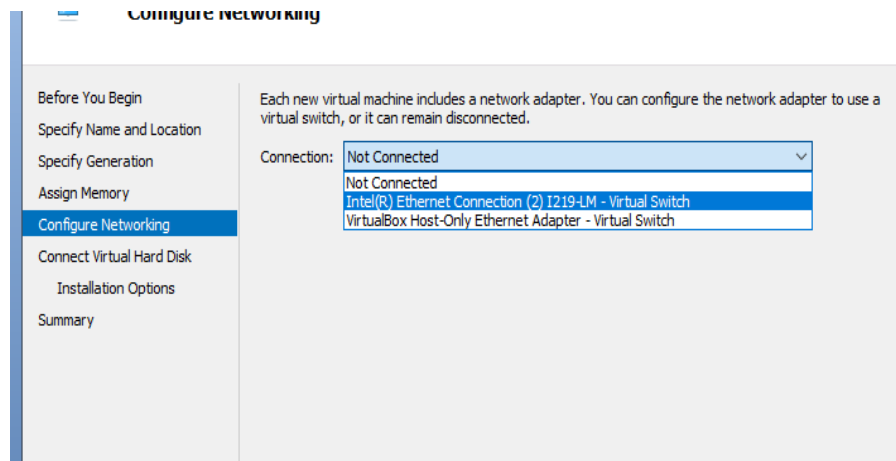
- 2) Specify name and location click next.



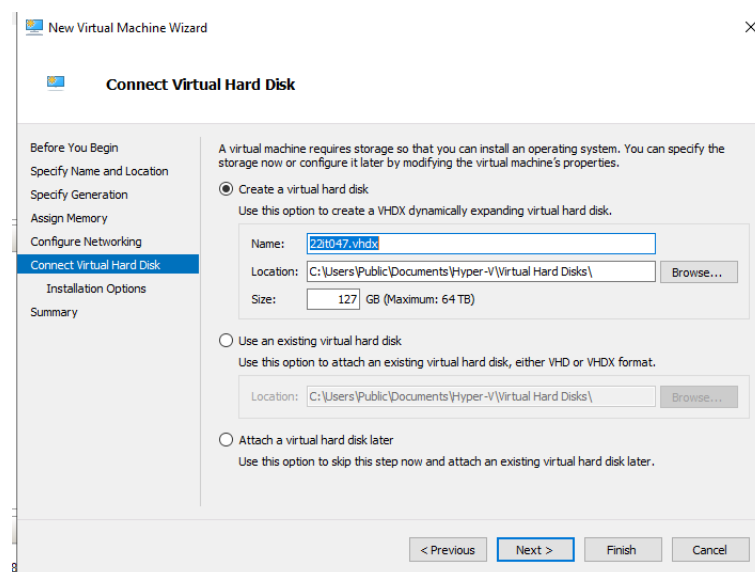
- 3) Assign the memory for the vm(for safety give as 2gb)



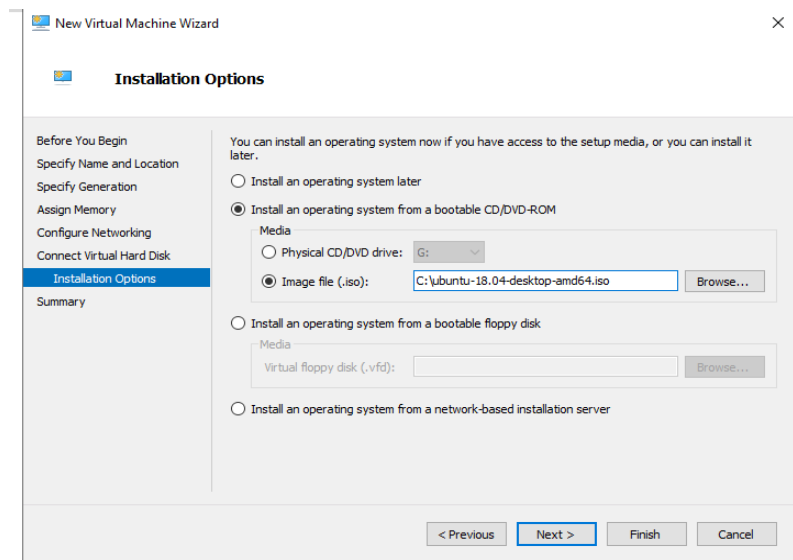
4) Configure the network click on interR Ethernet connection virtual switch



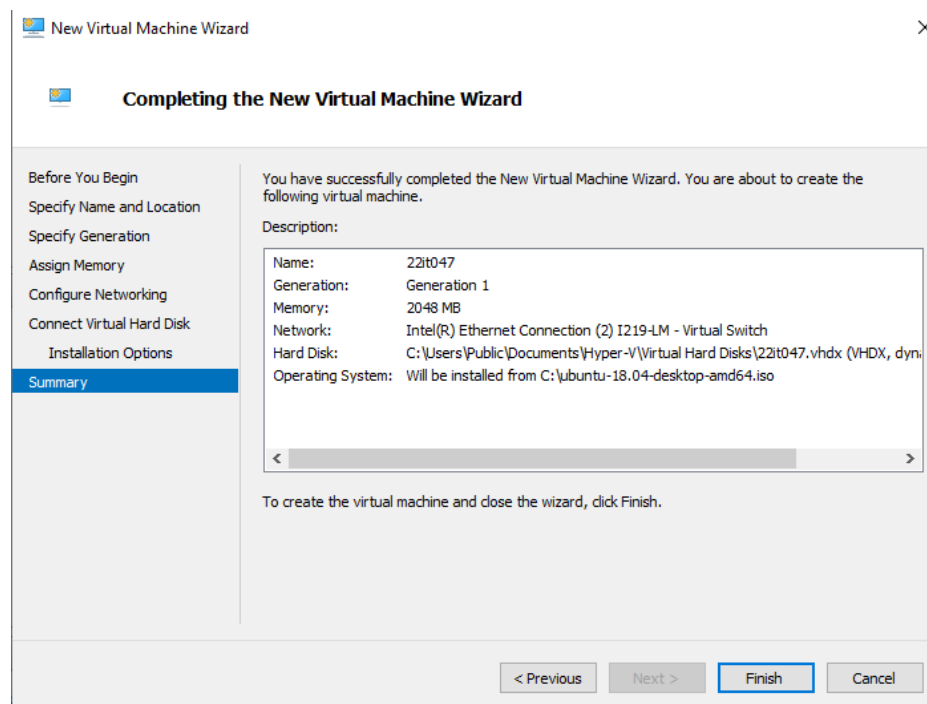
5) Connect virtual hddisk (name,location,maximum gb) click next.



6) Import the iso file which os need to install on the vm(here ubuntu)



7) Click finish



VM installation using Powershell Procedure :

1) Create vm with name and space in gb with virtual hard disk creation

Virtual Machines						
Name	State	CPU Usage	Assigned Memory	Uptime	Status	Configurati...
22it047	Off					9.0
22IT043_KESHO	Off					9.0
tcovm	Off					9.0

```
PS C:\Users\Administrator> New-VM -Name "tcevm" -MemoryStartupBytes 2GB -NewVHDPath "D:\tcevm.vhdx" -NewVHDSIZEBytes 60GB -Path "D:\\"
Name State CPUUsage(%) MemoryAssigned(M) Uptime Status Version
-----
tcevm Off 0 0 00:00:00 Operating normally 9.0
```

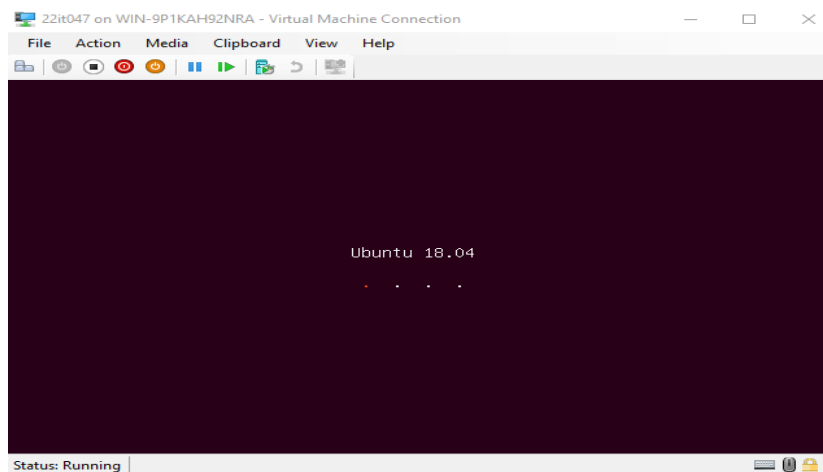
2) Assign virtual switch to the vm

```
PS C:\Users\Administrator> Connect-VMNetworkAdapter -VMName "tcevm" -SwitchName "Intel(R) Ethernet Connection (2) I219-L
M - Virtual Switch"
PS C:\Users\Administrator>
```

3) Import the iso file which os need to install on vm

```
PS C:\Users\Administrator> Connect-VMNetworkAdapter -VMName "tcevm" -SwitchName "Intel(R) Ethernet Connection (2) I219-L
M - Virtual Switch"
PS C:\Users\Administrator> Set-VMDvdDrive -VMName "tcevm" -Path "C:\ubuntu-18.04-desktop-amd64.iso"
PS C:\Users\Administrator>
```

4) Start the vm



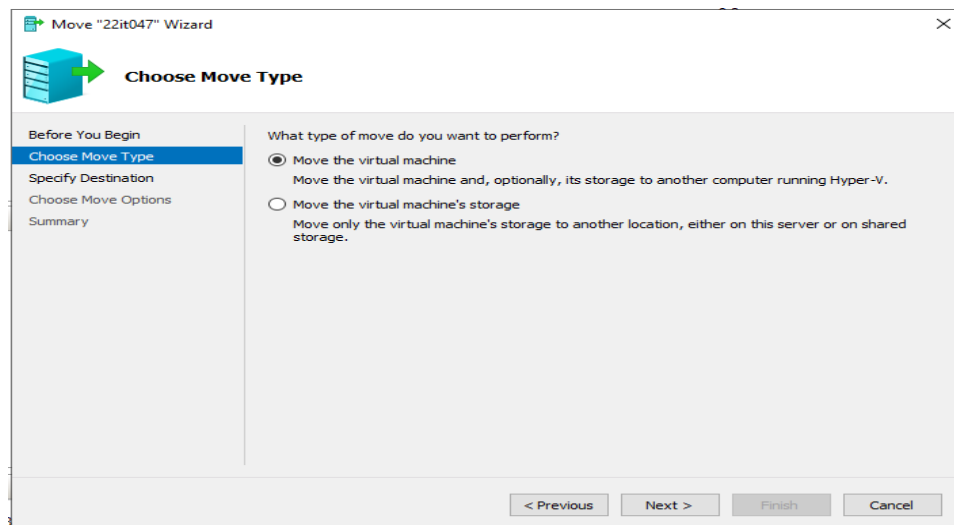
Powershell commands

1) Get VM, start VM and stop VM

```
PS C:\Users\Administrator> Get-VM
Name State CPUUsage(%) MemoryAssigned(M) Uptime Status Version
-----
22IT043_KESHO Off 0 0 00:00:00 Operating normally 9.0
22it047 Off 0 0 00:00:00 Operating normally 9.0
tcevm Off 0 0 00:00:00 Operating normally 9.0

PS C:\Users\Administrator> Start-VM -Name "22it047"
PS C:\Users\Administrator> Stop-VM -Name "22it047"
```

Migration (Right click the VM and click move) and give finish.



Result:

Thus, the creation and manage Virtual Machines (VMs) using Hyper-V, including PowerShell commands for automation and efficient administration has been executed successfully.