

Links:

DC01: <https://wfd-vcenter001.conestogac.on.ca/ui/webconsole.html?vmlId=vm-118222&vmName=DC01&numMksConnections=0&serverGuid=6ea79d3e-d131-46b6-abcb-8e3379f5344&locale=en-US>

MS01: <https://wfd-vcenter001.conestogac.on.ca/ui/webconsole.html?vmlId=vm-118230&vmName=MS01&numMksConnections=0&serverGuid=6ea79d3e-d131-46b6-abcb-8e3379f5344&locale=en-US>

WS01: <https://wfd-vcenter001.conestogac.on.ca/ui/webconsole.html?vmlId=vm-118238&vmName=WS01&numMksConnections=0&serverGuid=6ea79d3e-d131-46b6-abcb-8e3379f5344&locale=en-US>

Virtual Machine Name	IP Address	Subnet Mask	Default Gateway	DNS (Primary)
DC01	172.16.214.90	255.255.255.0	172.16.214.1	142.156.150.112
MS01	172.16.214.91	255.255.255.0	172.16.214.1	172.16.214.90
WS01	172.16.214.92	255.255.255.0	172.16.214.1	172.16.214.90

WS01 → 172.16.214.100 (DHCP IP)

Password : Secret55 for DC01 and MS01

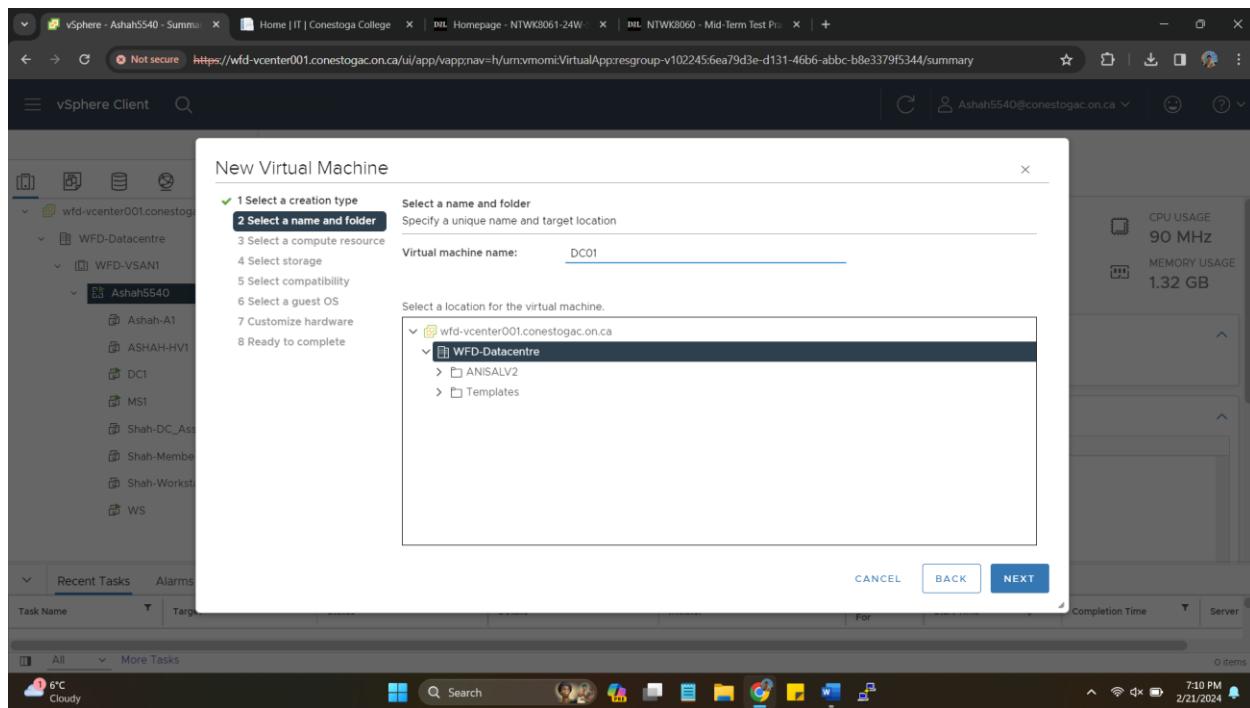
User login id : Aagam Shah

Password : Secret55

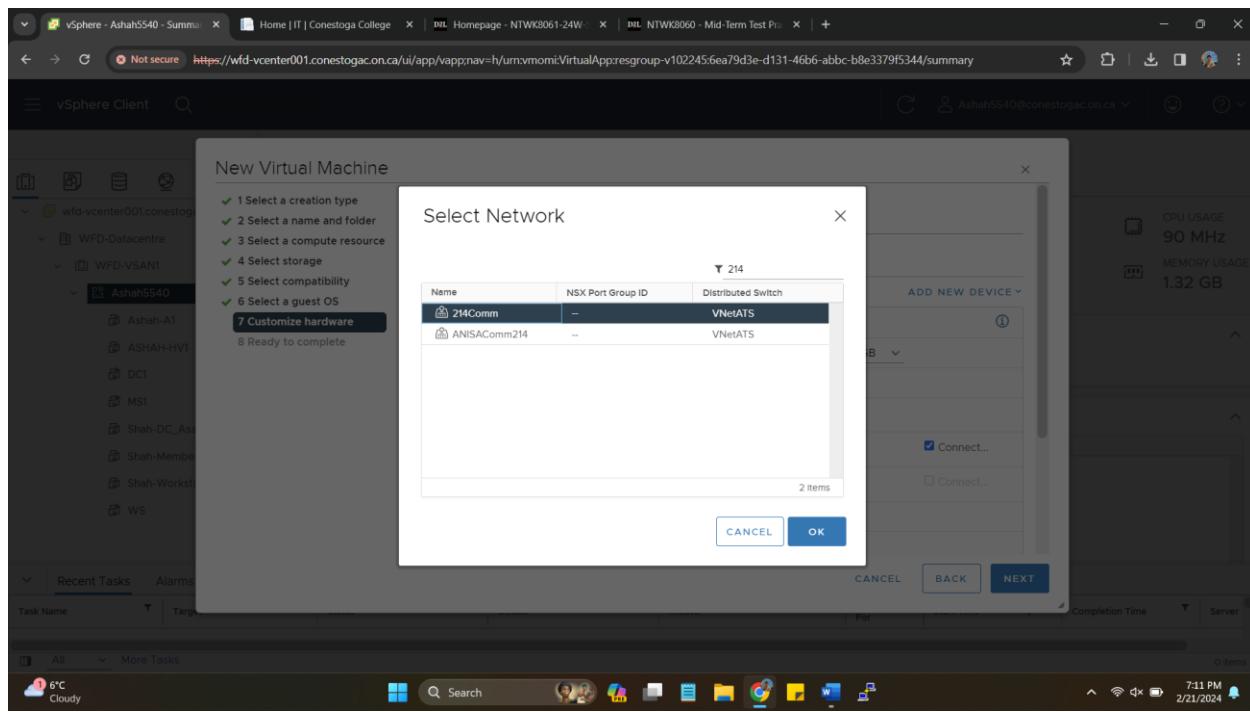
1) Create an AD domain with the domain name yourlastnamemt.local with the below specifications.

- 1x Domain Controller
- 1x Member Server
- 1x Windows Workstation

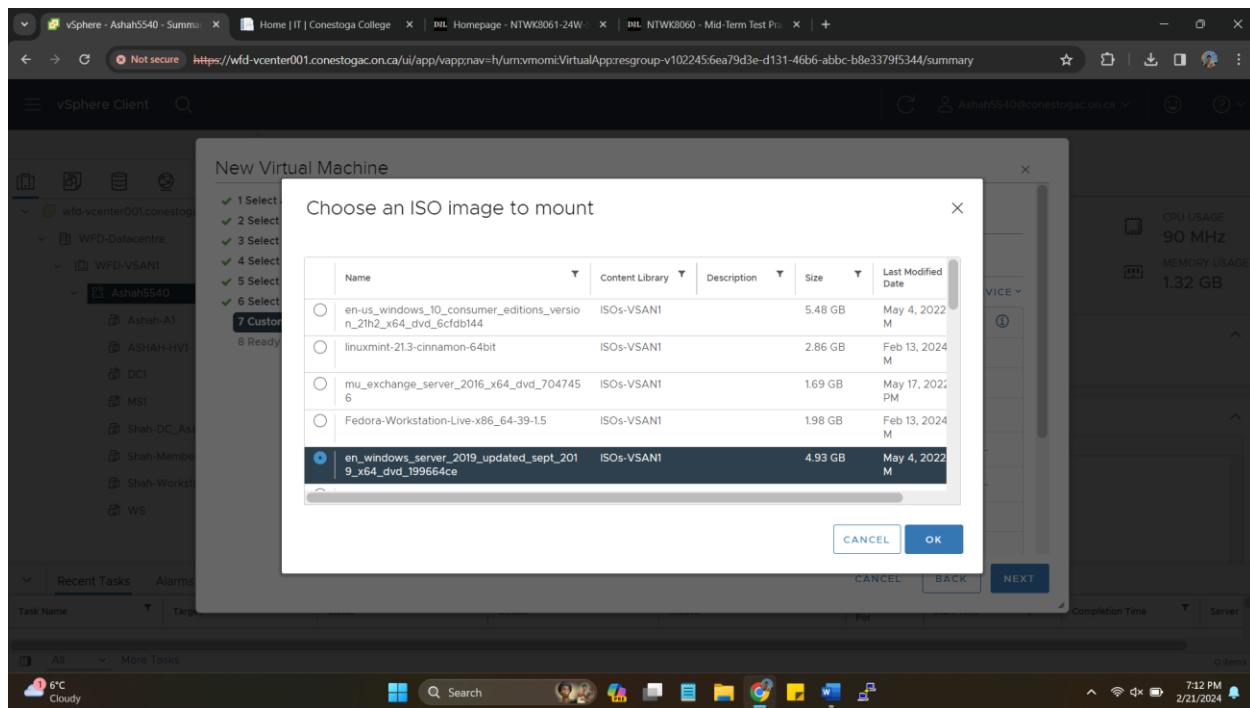
Creating Domain Controller



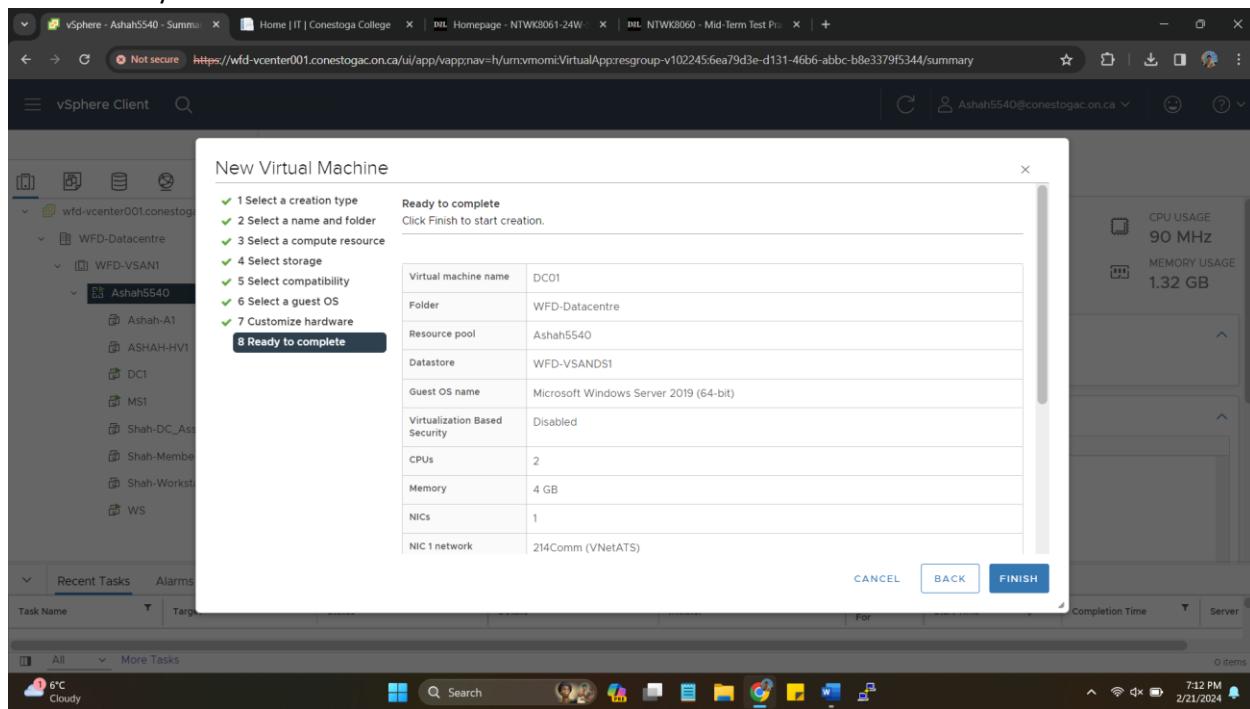
## Selecting COM Port

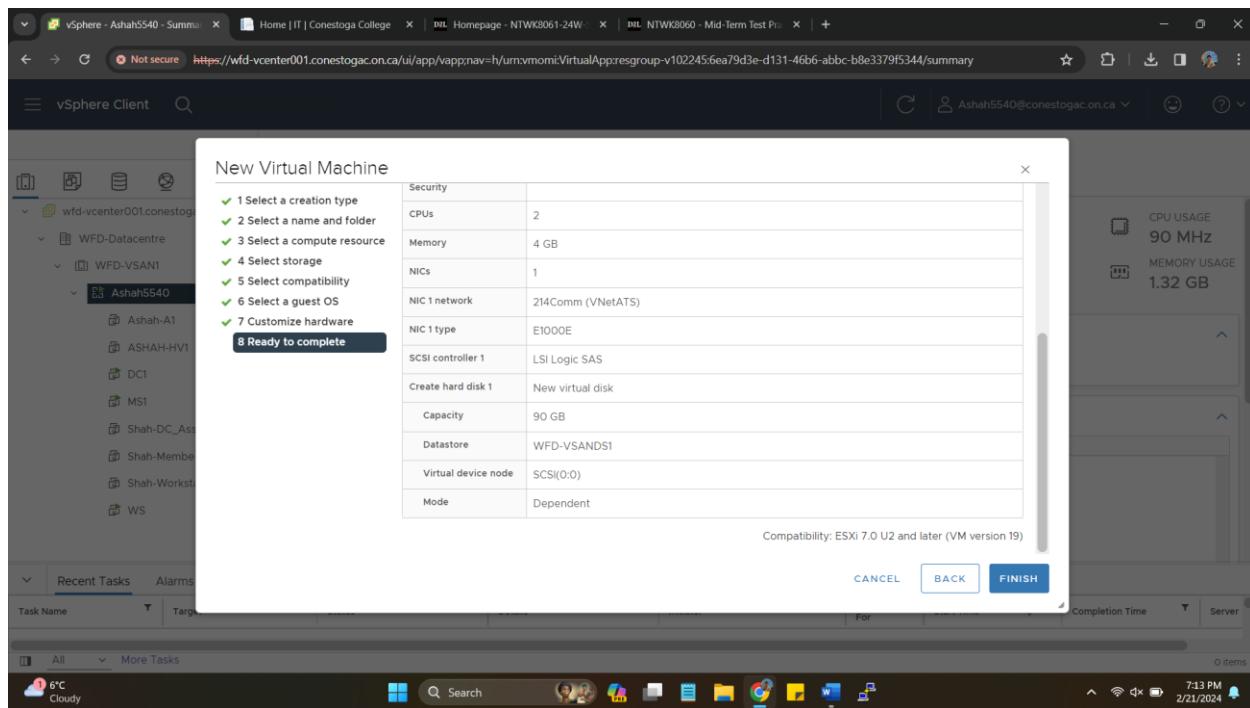


## Selecting ISO image

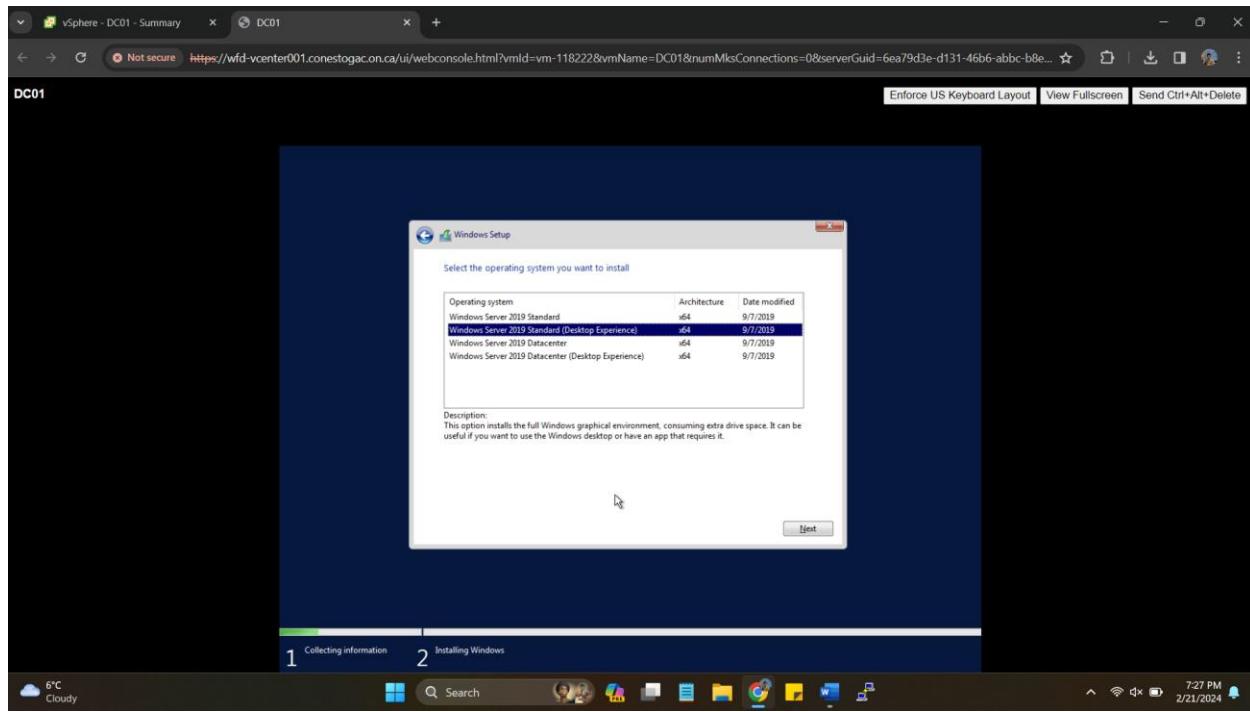


## VM Summary

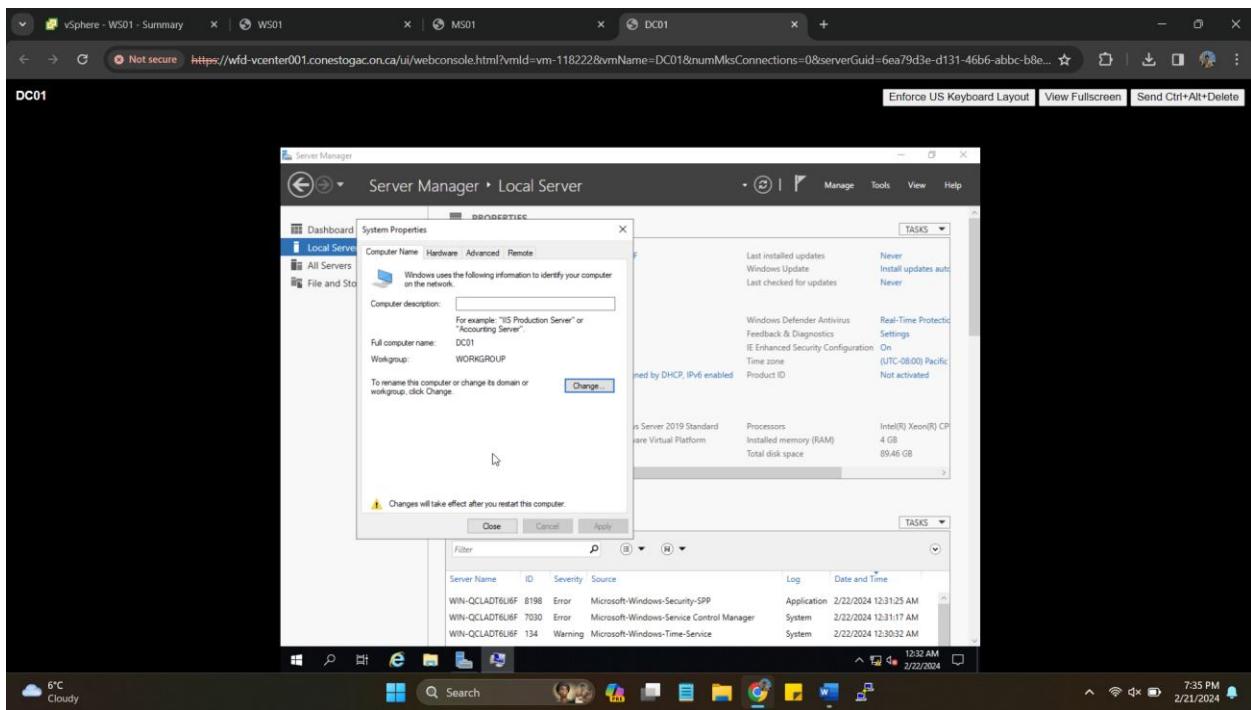




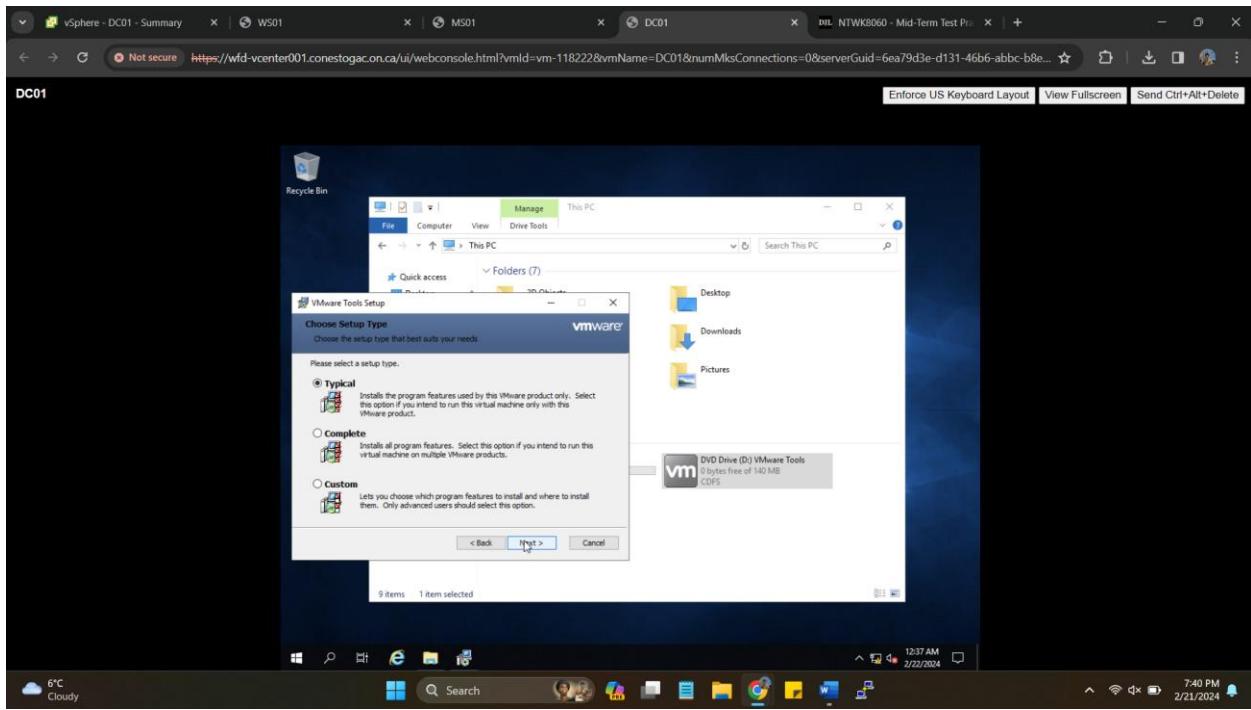
## Installing OS : Windows Server 2019 Standard (Desktop Version)



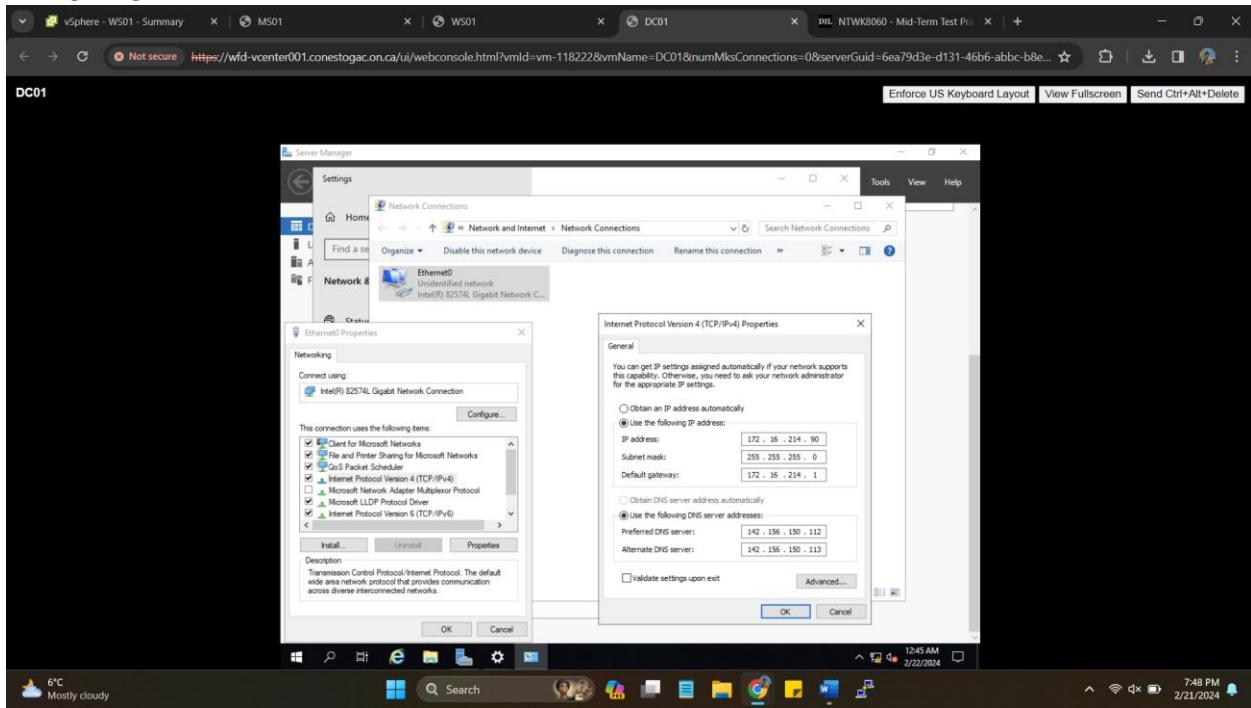
## Changing Computer Name to DC01



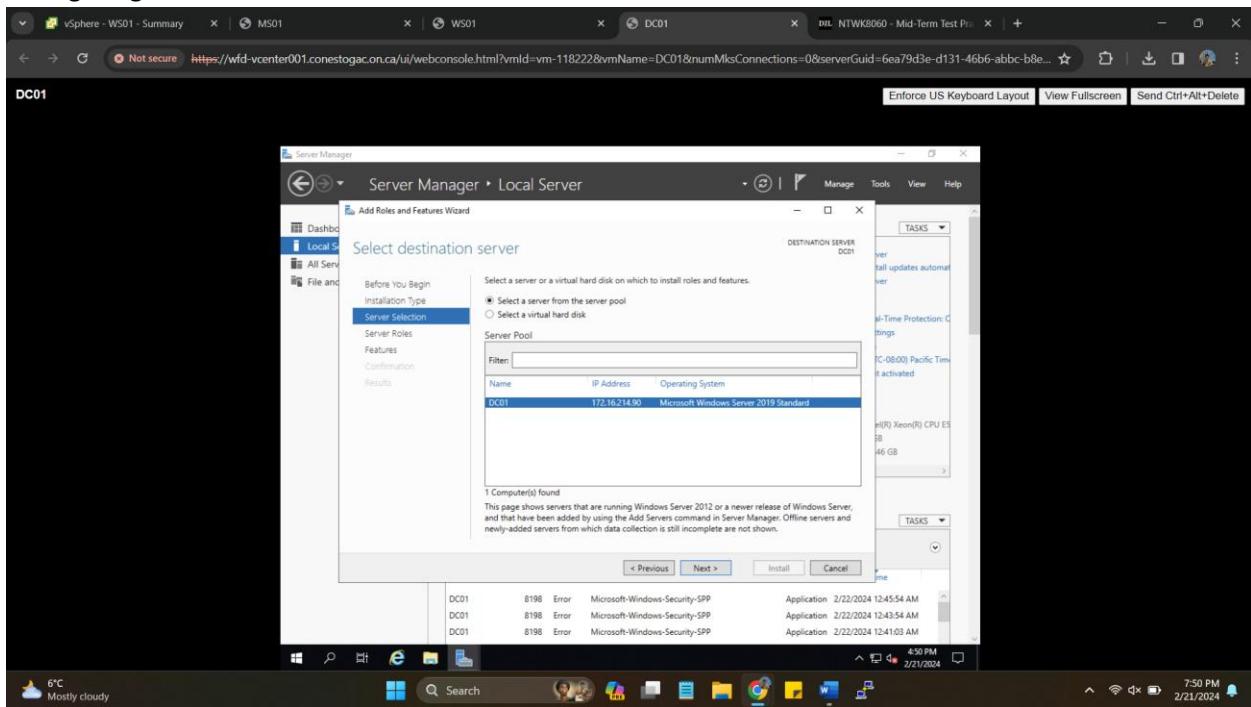
## Installing VMtools on DC01



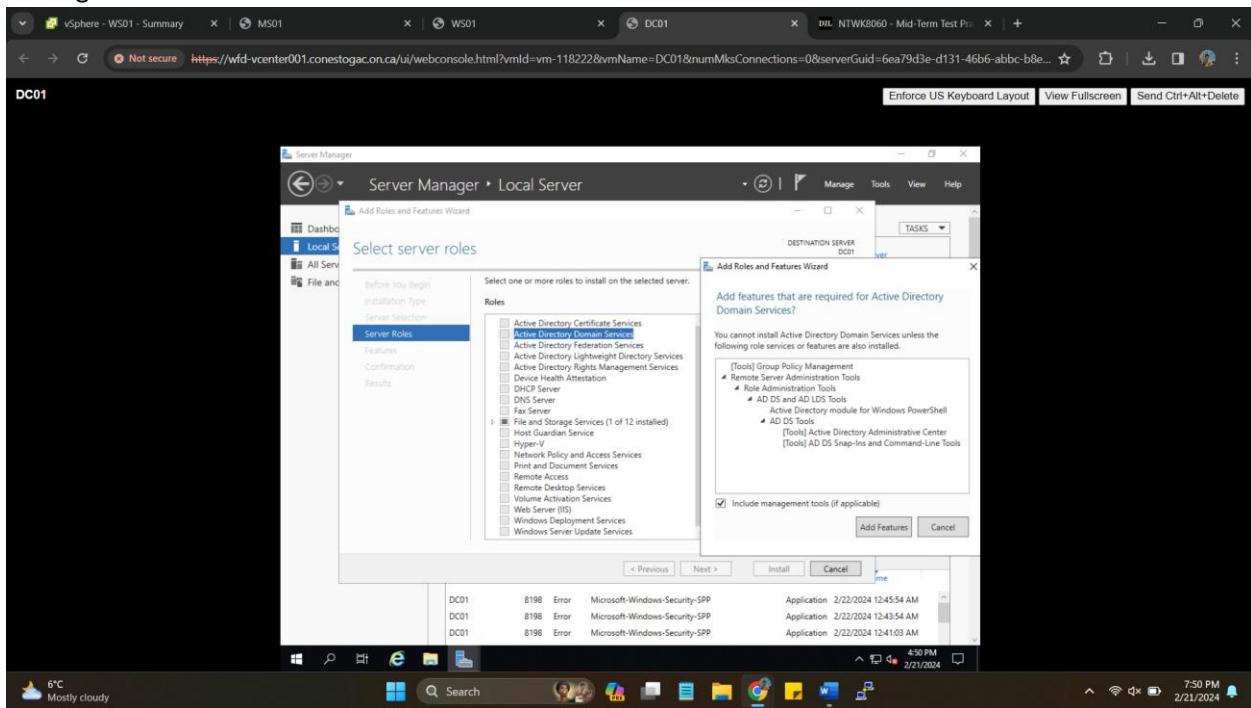
## Configuring IP to DC01



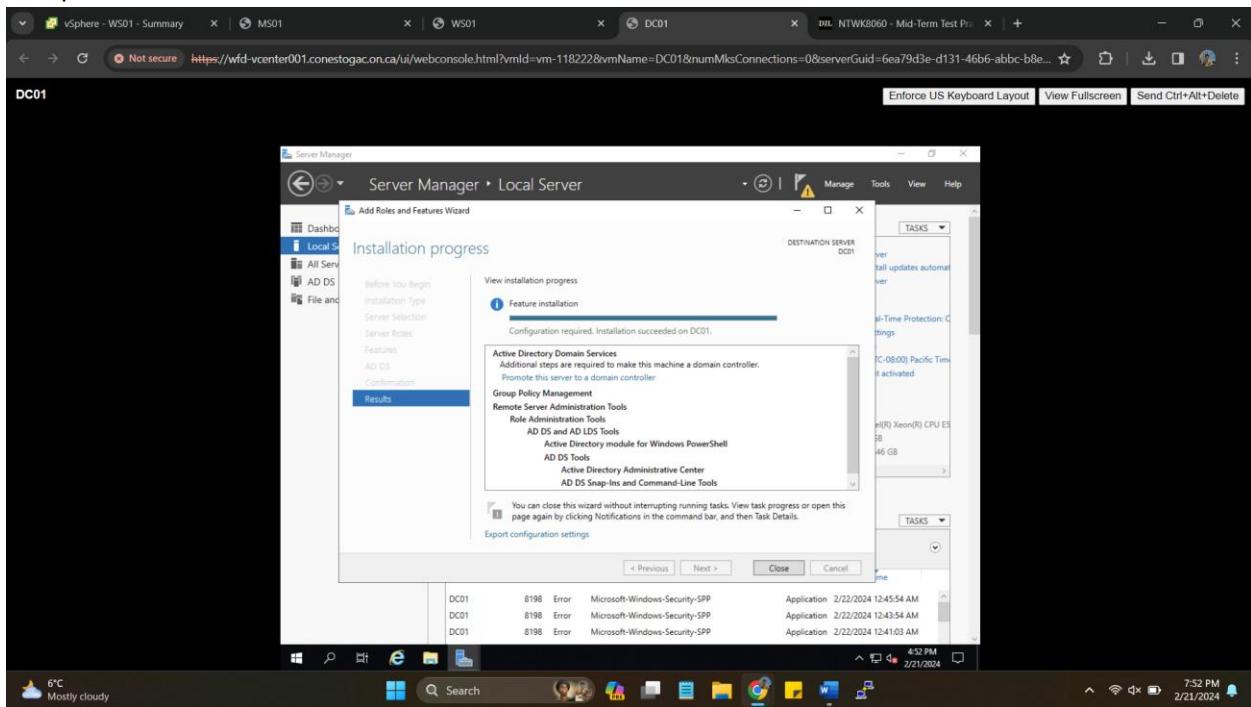
## Configuring ADDS on DC01



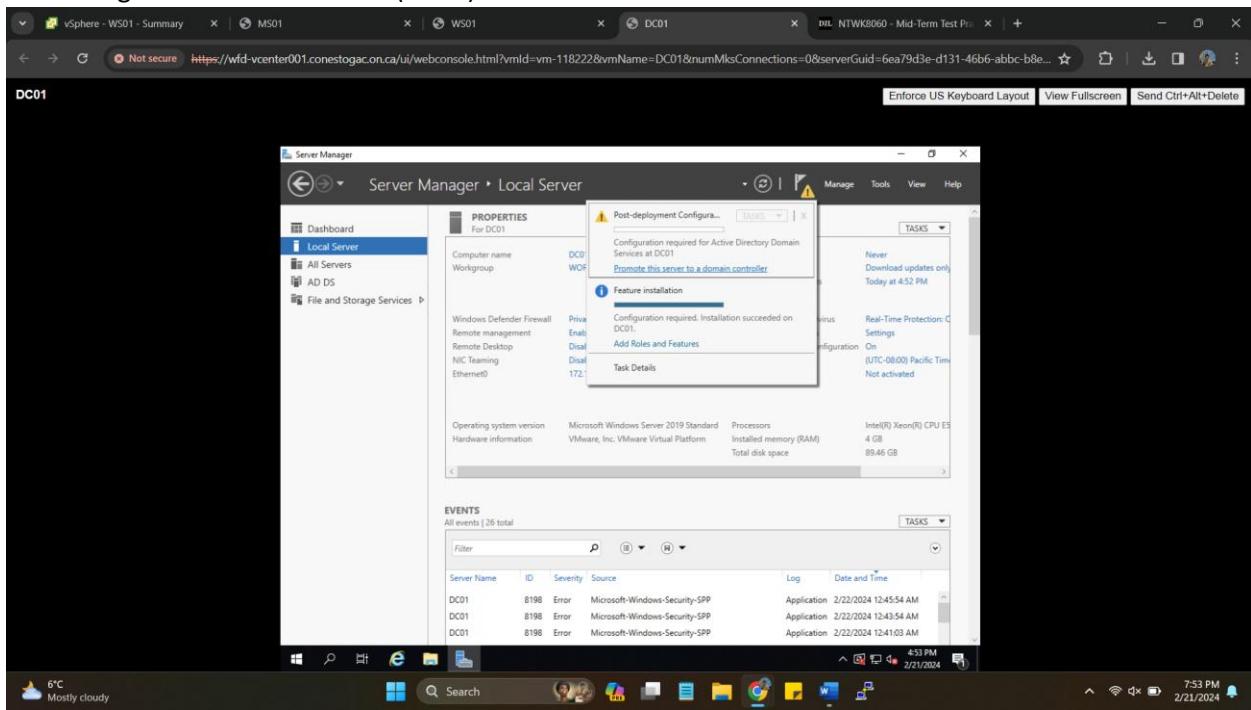
## Adding Feature to DC01 of ADDS



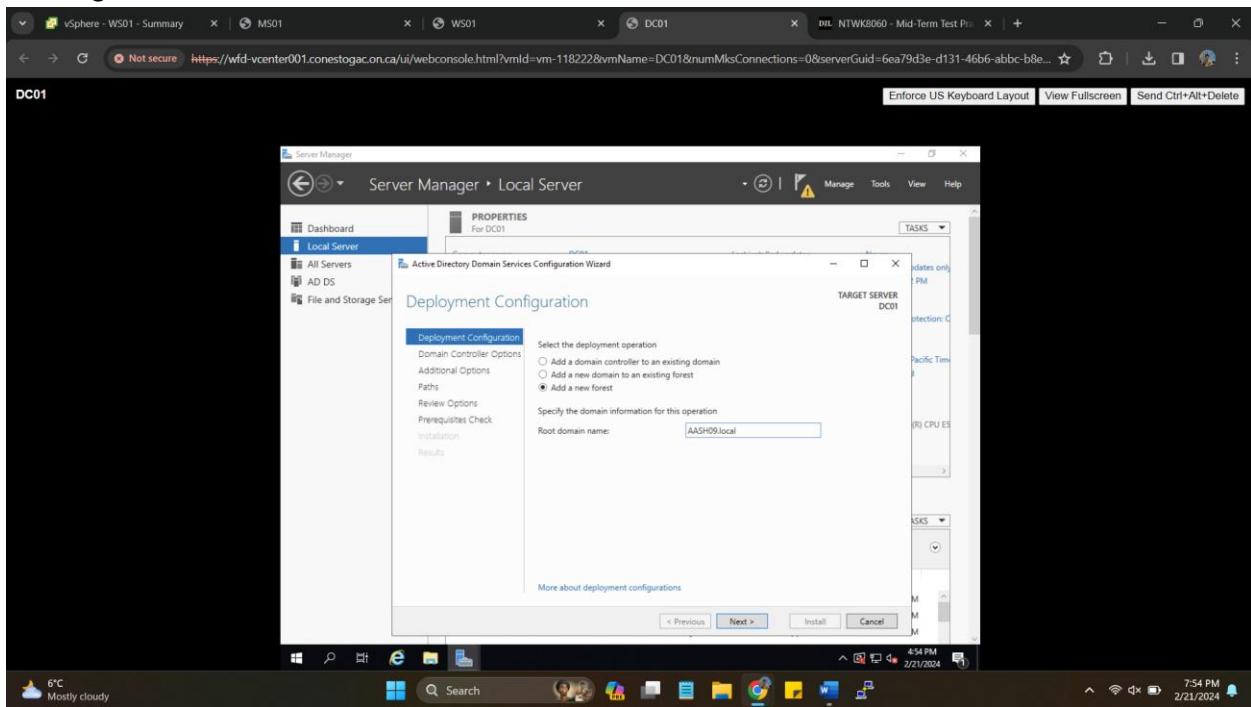
## Completion of feature installation



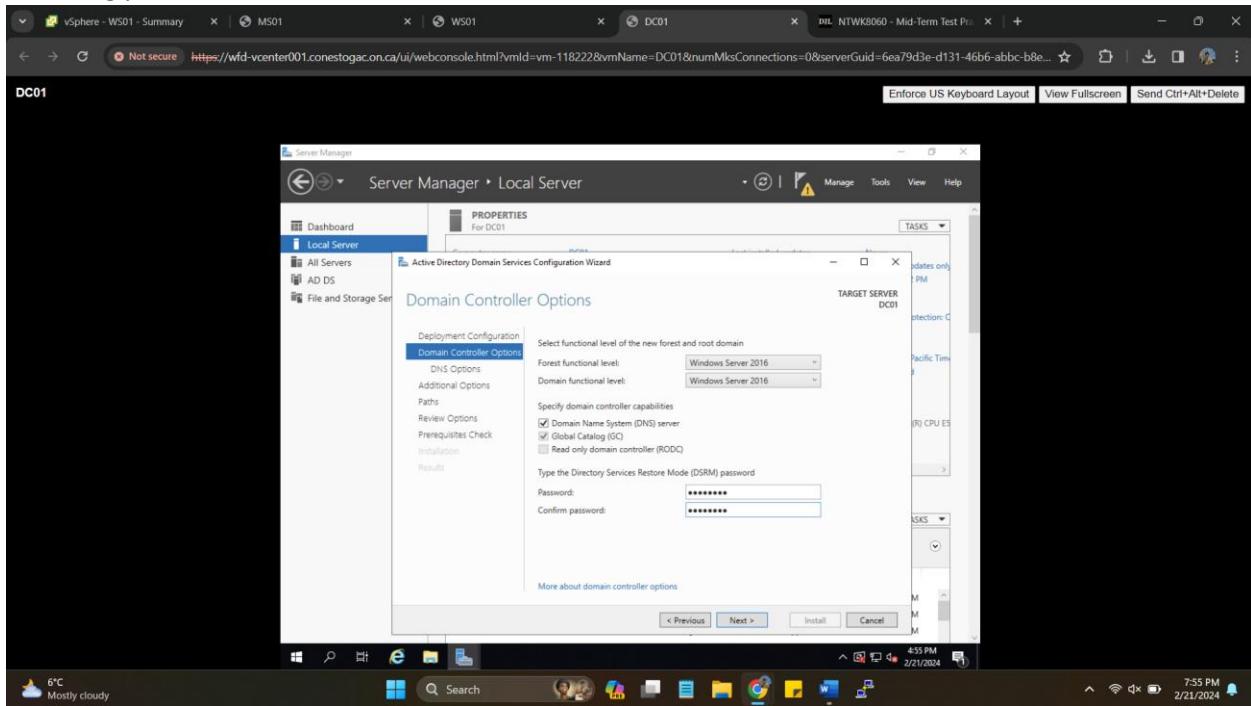
## Promoting to Domain Controller (DC01)



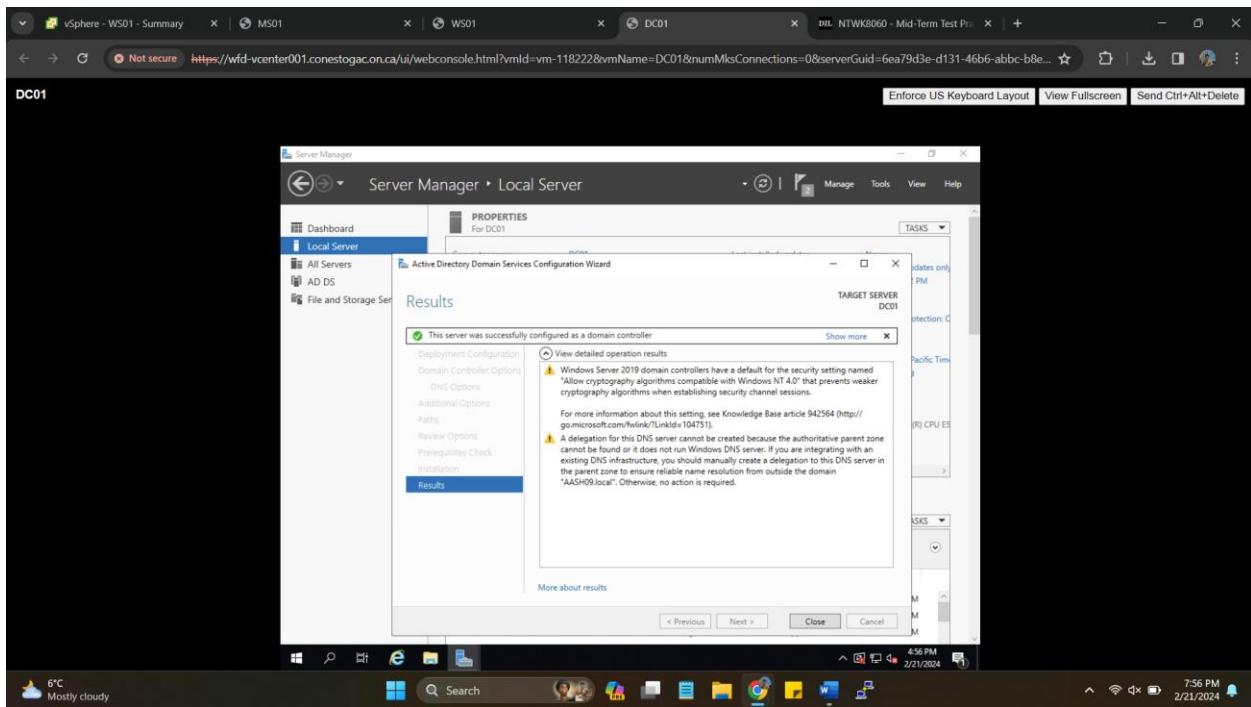
## Creating New Forest in Domain Controller : "AASH09.local"



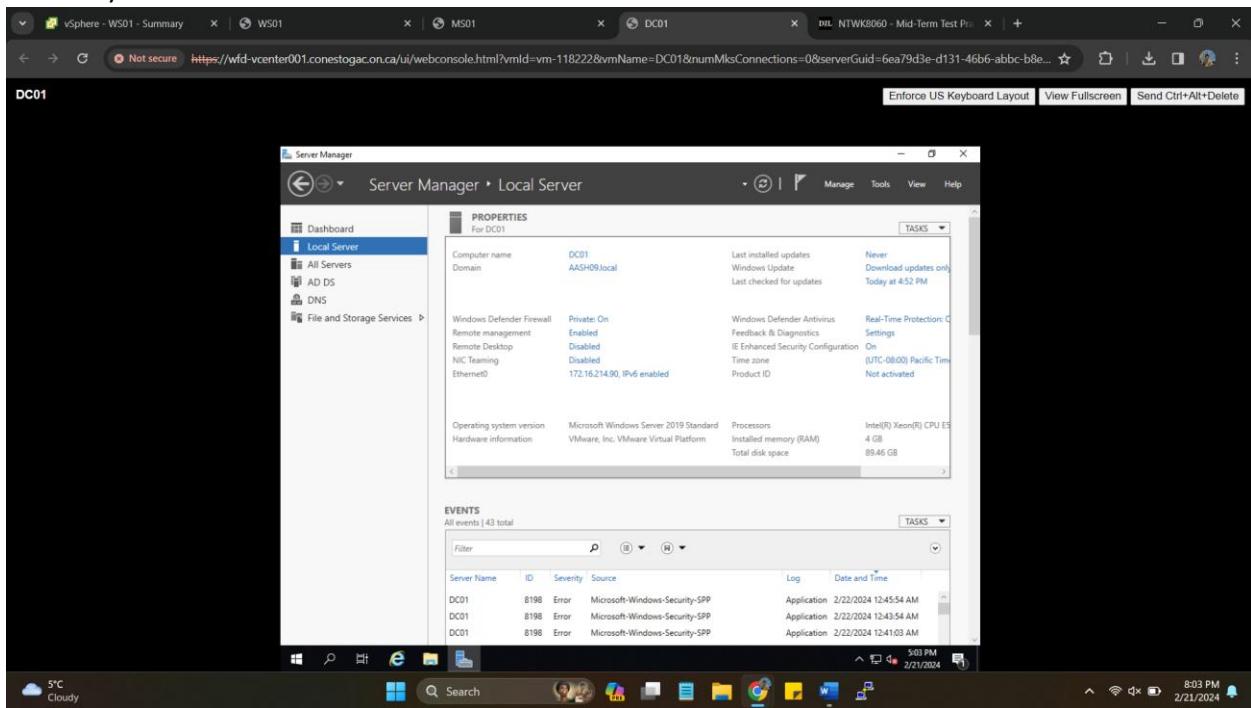
## Providing password as “Secret55”



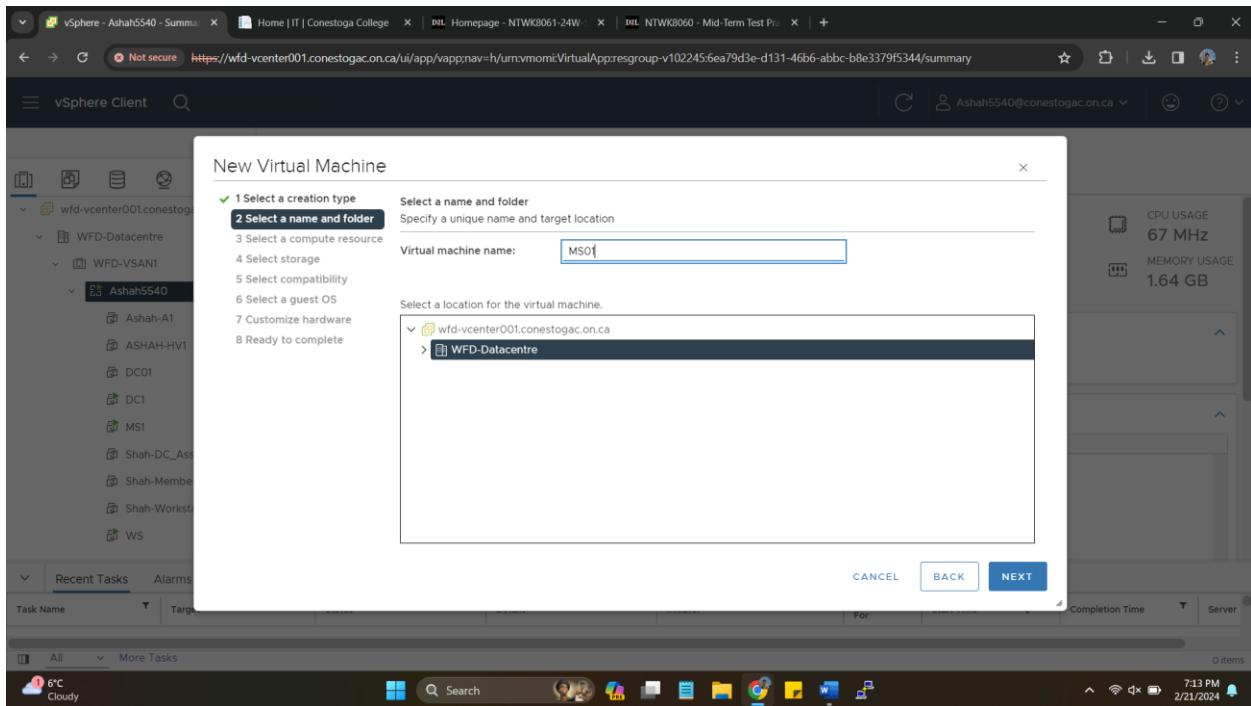
## Successful installation

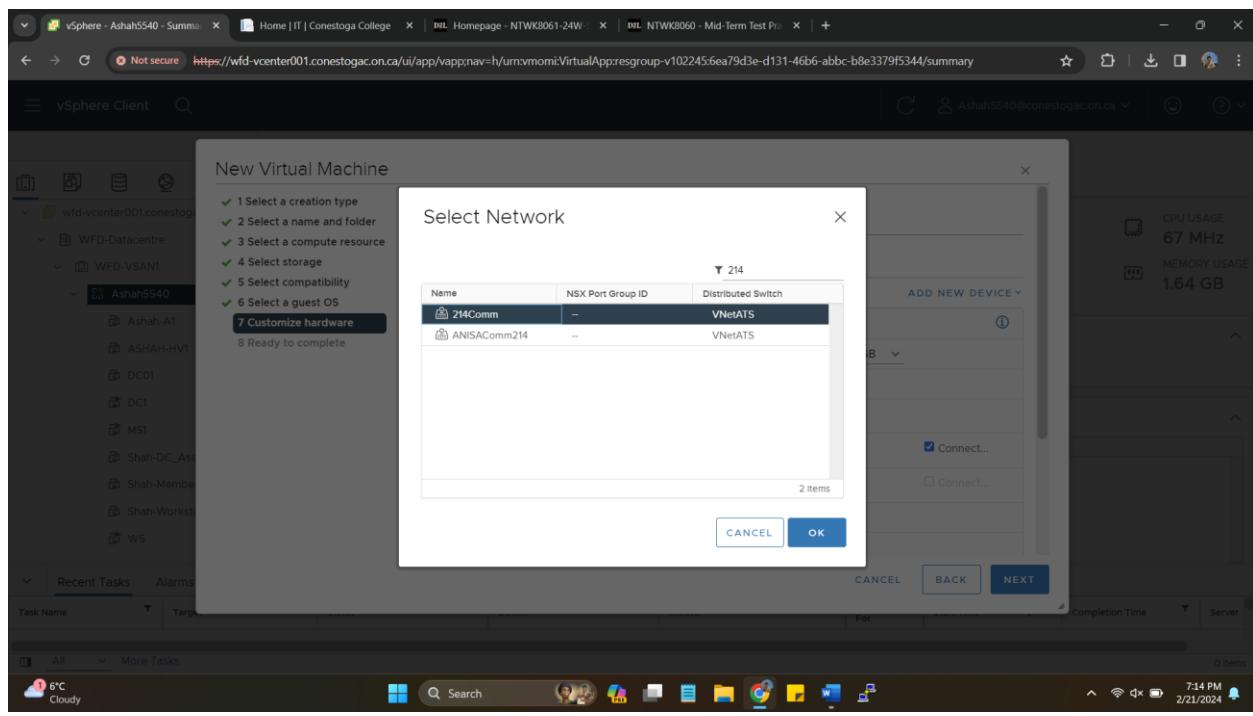
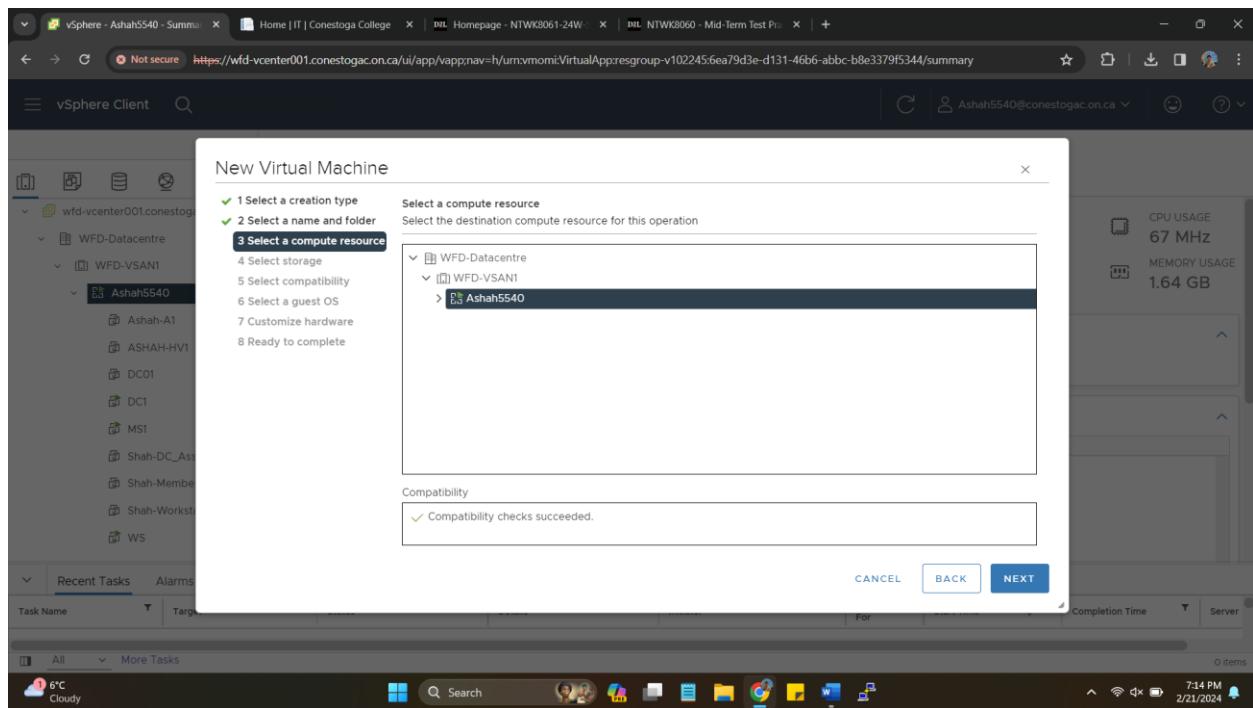


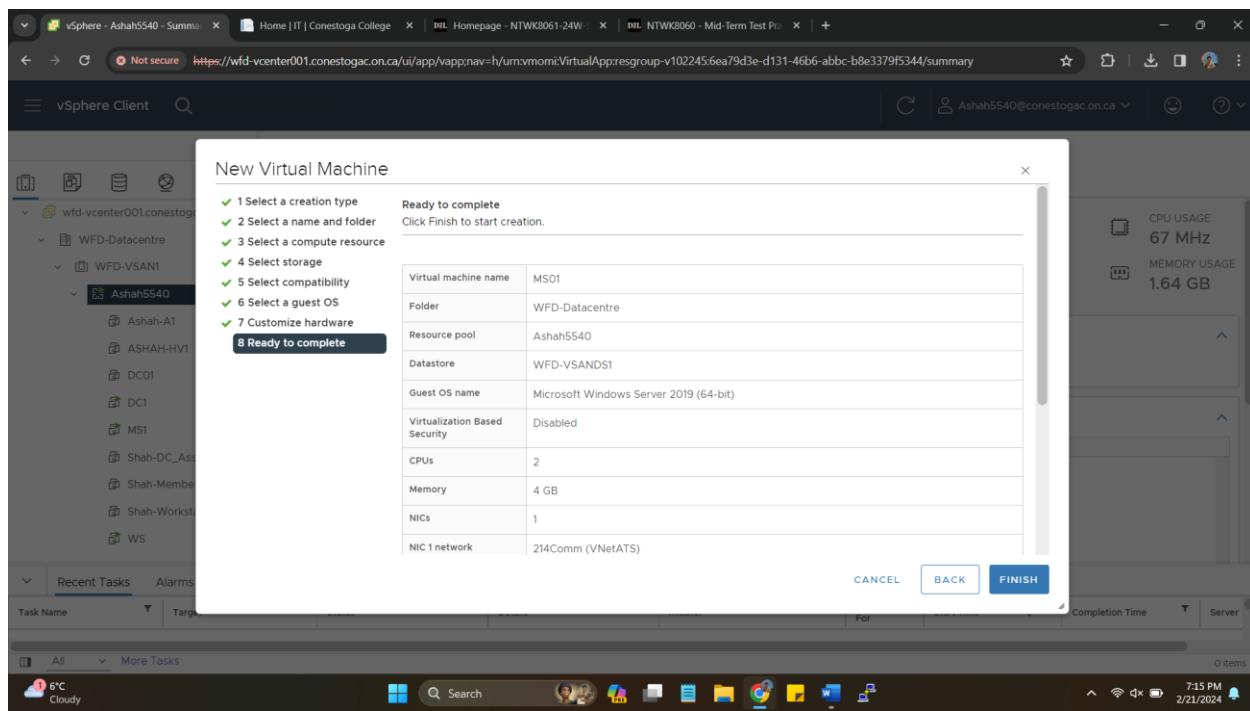
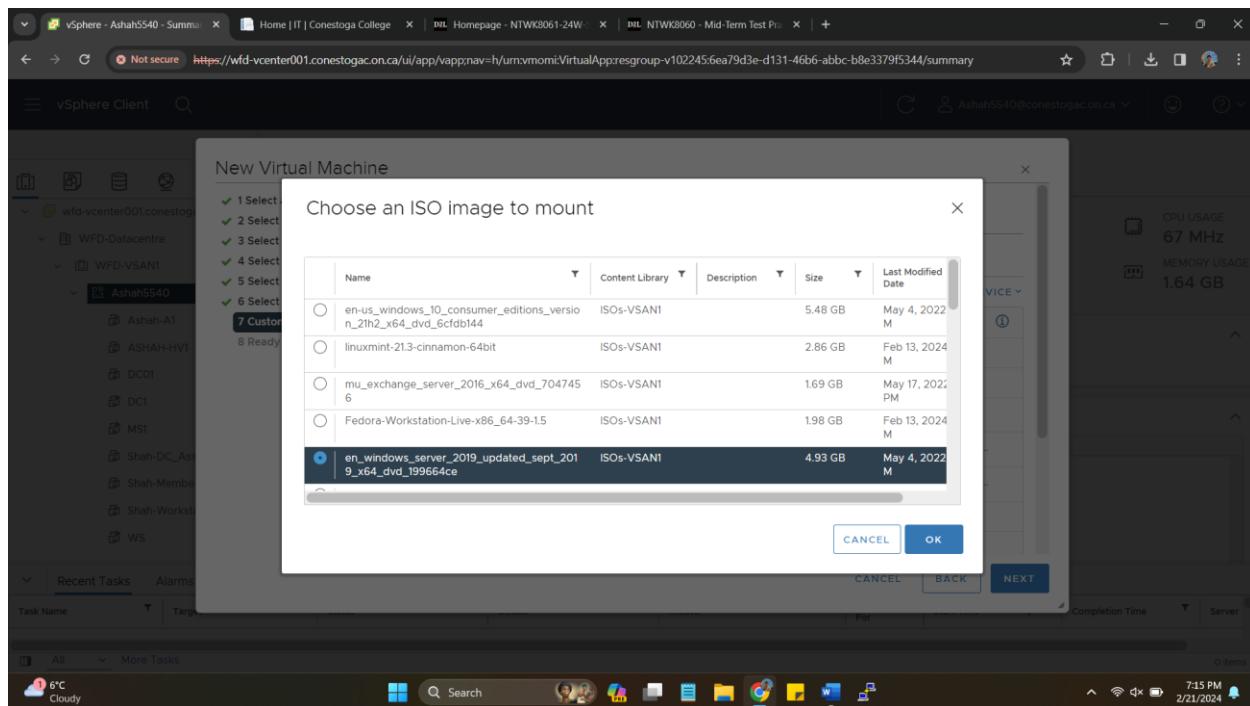
## Summary of Domain Controller

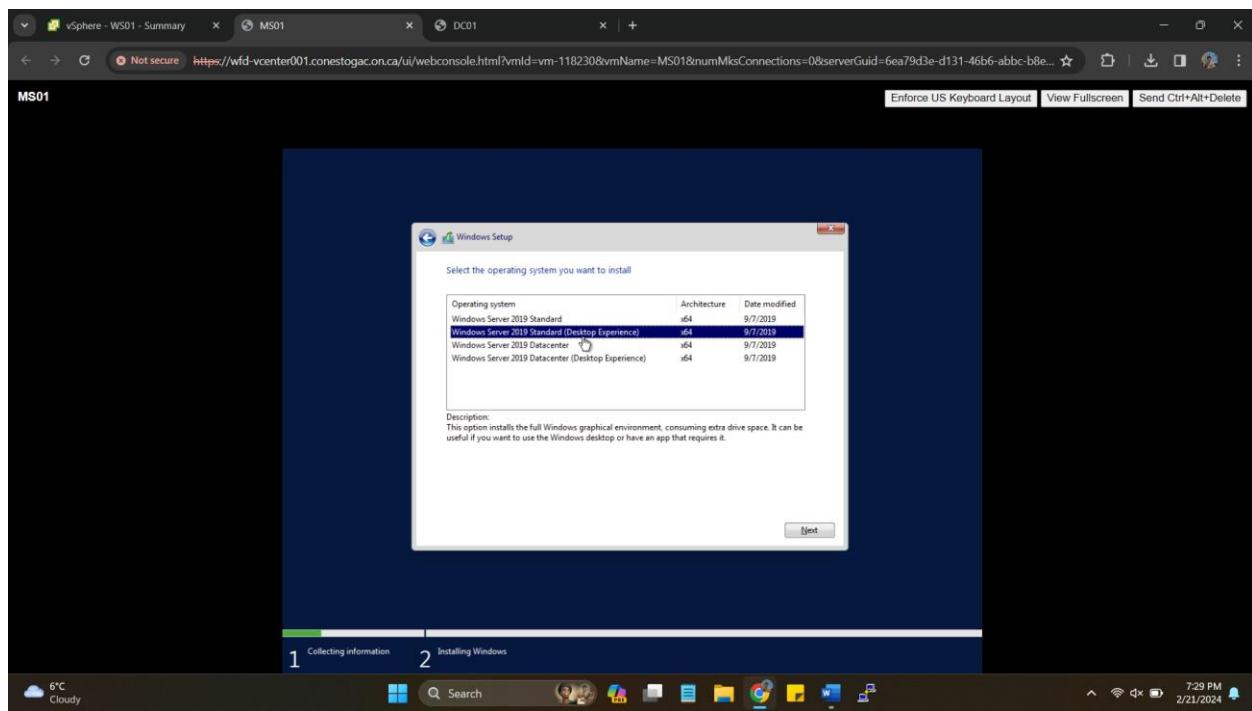
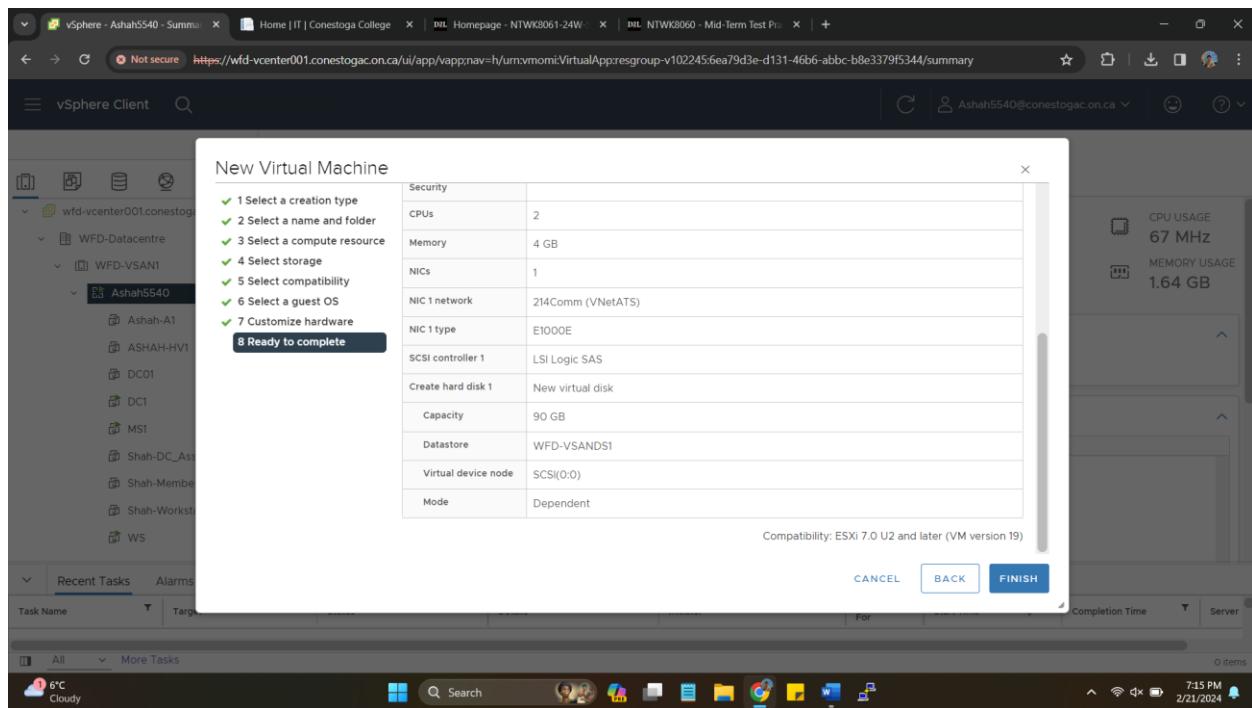


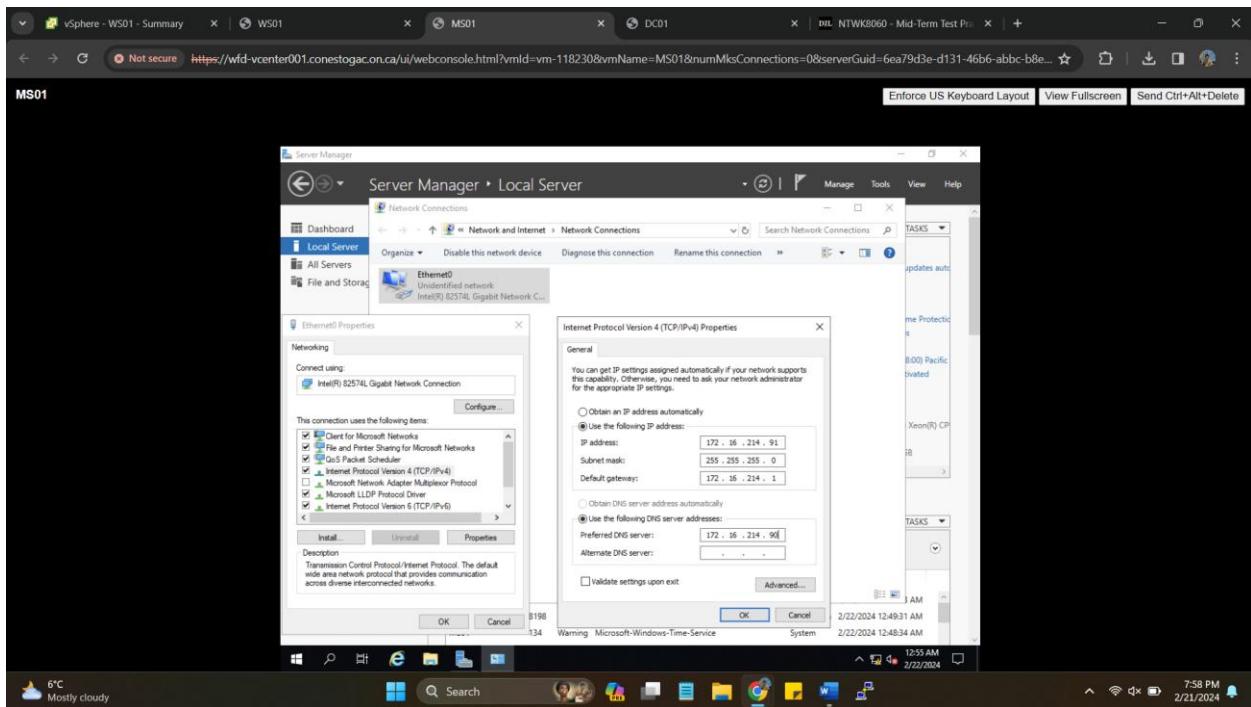
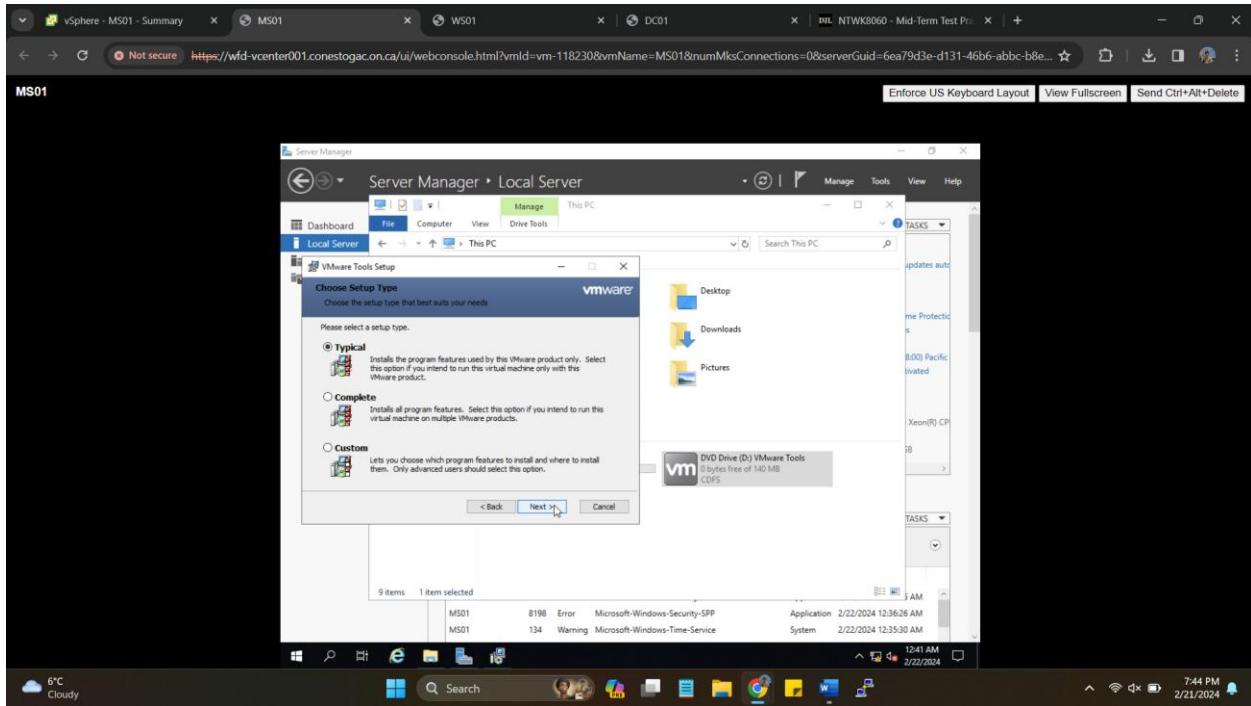
## Member Server

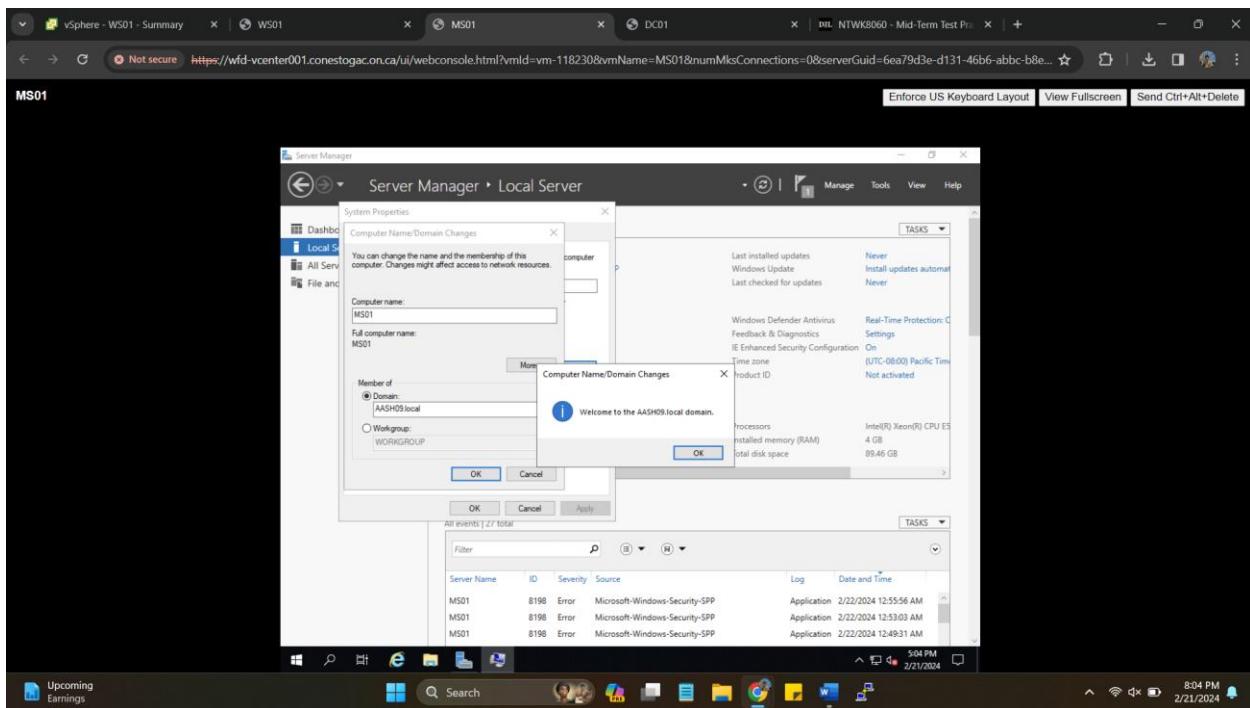




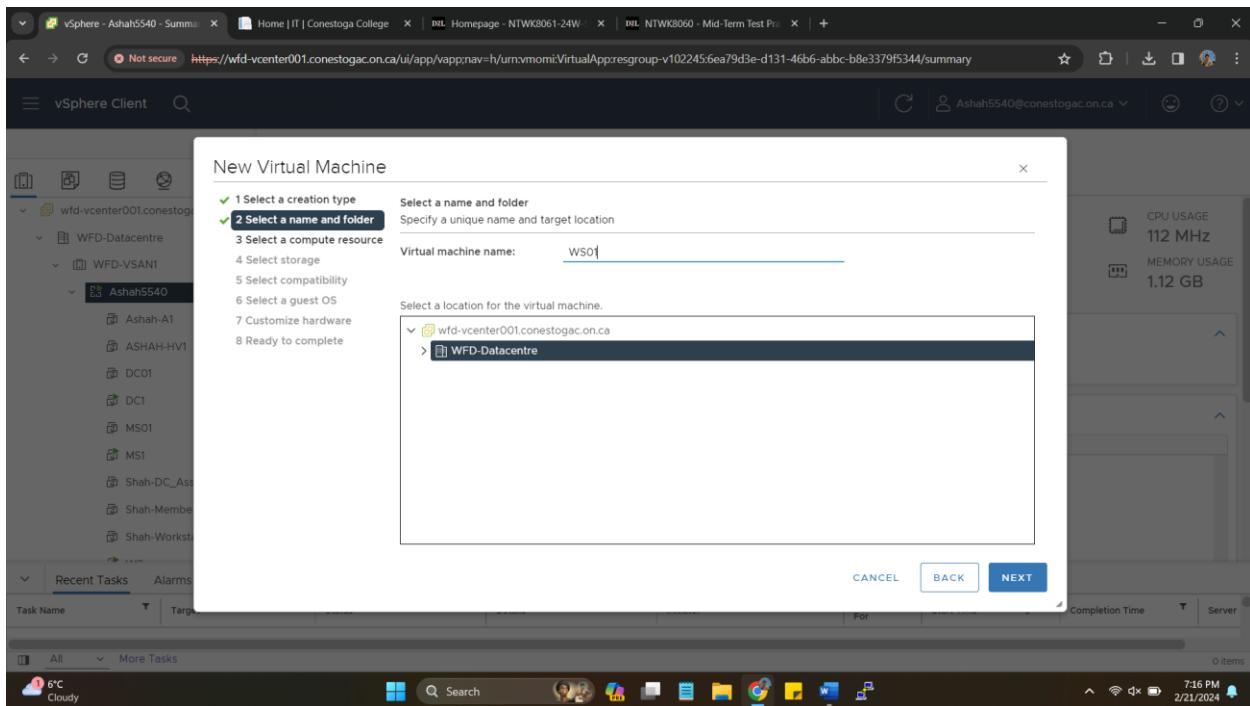


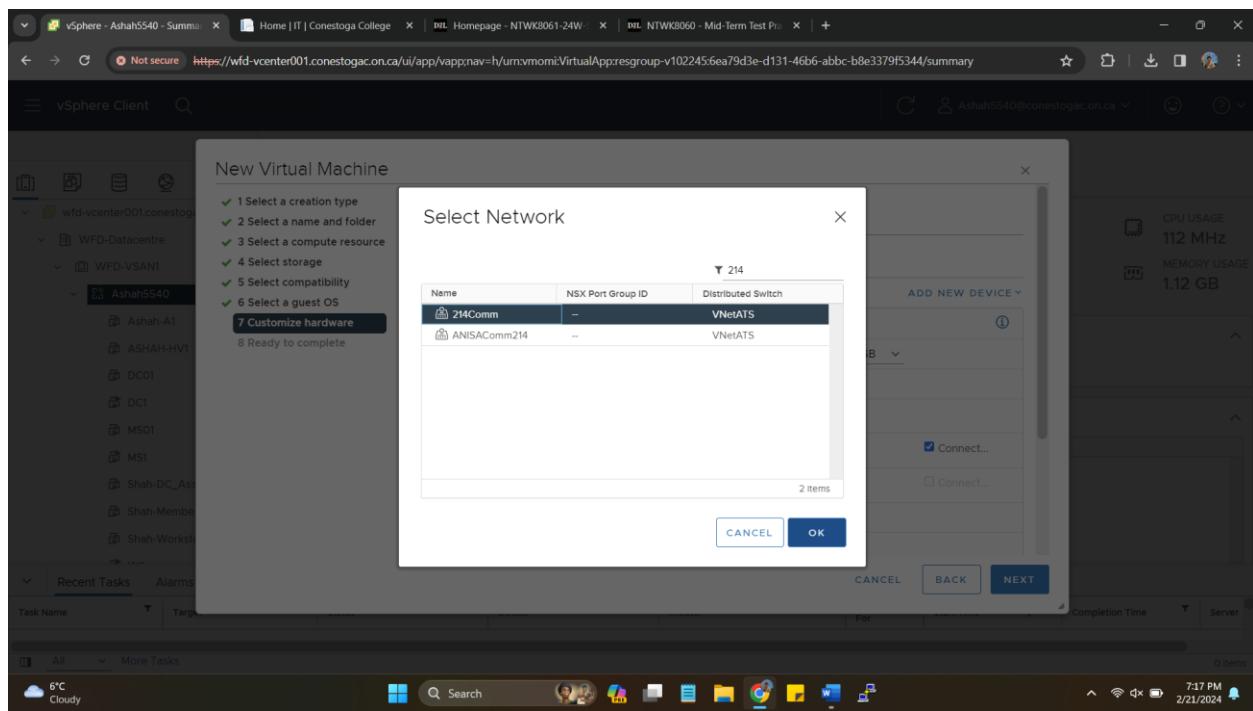
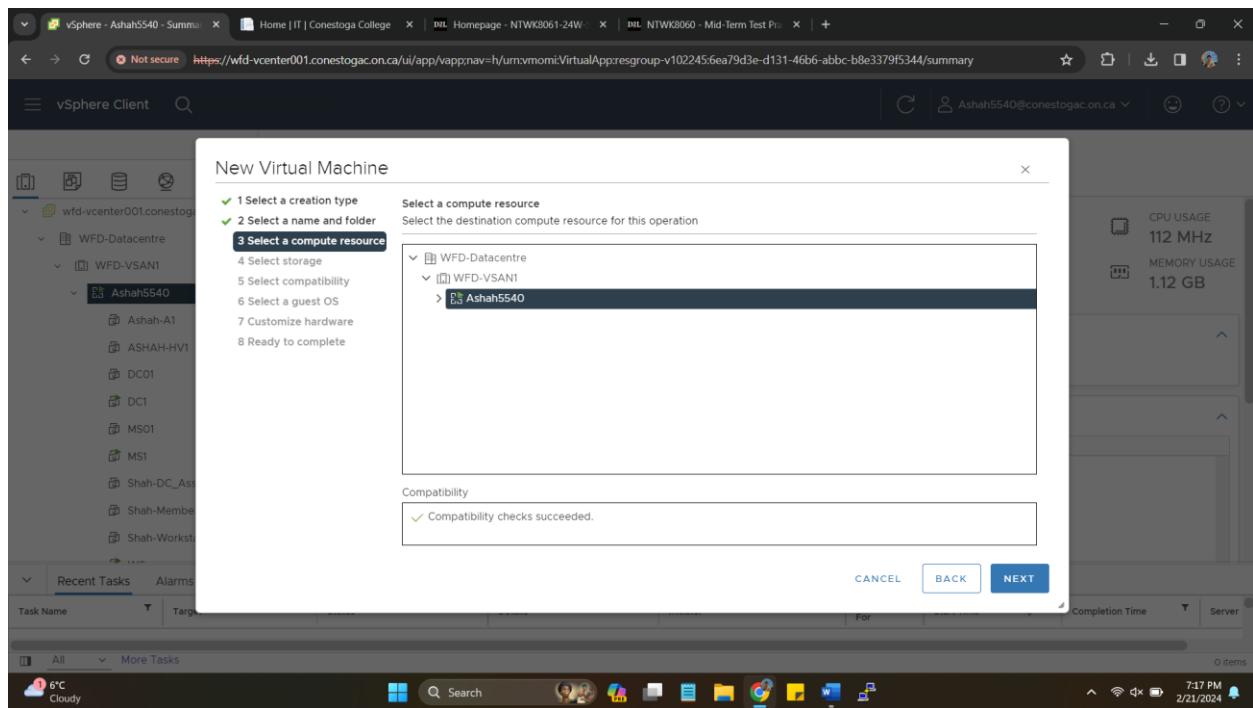


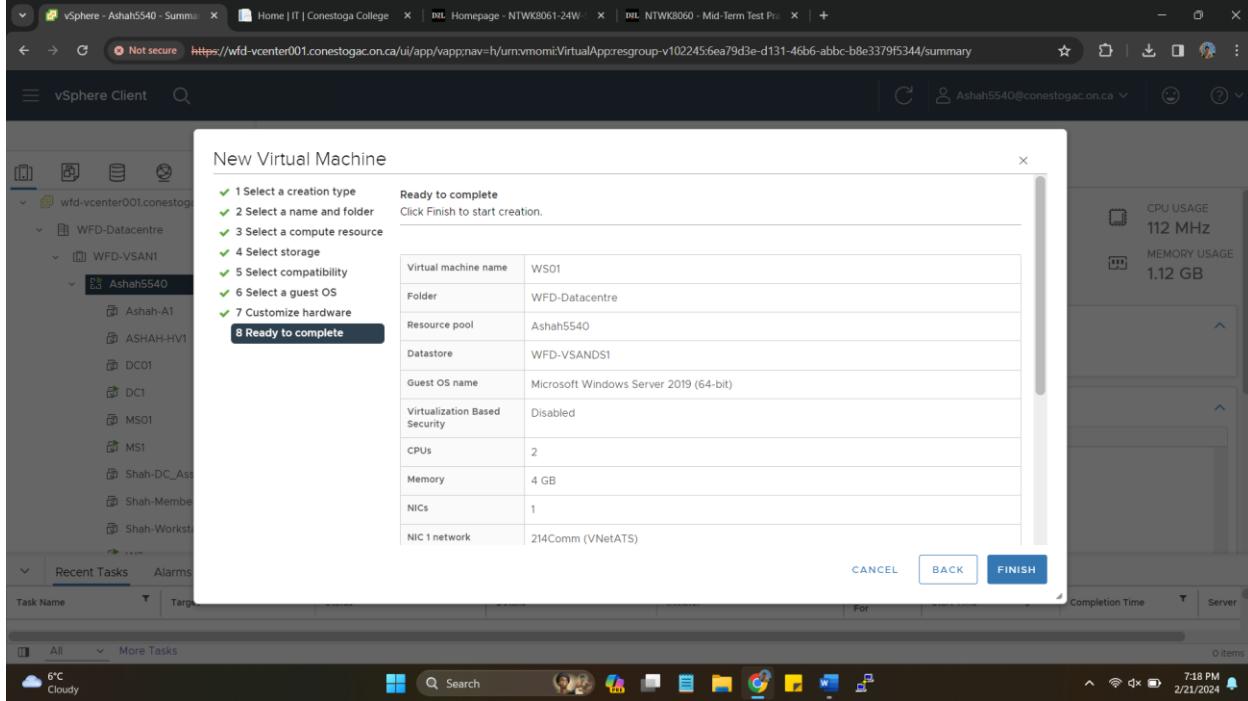
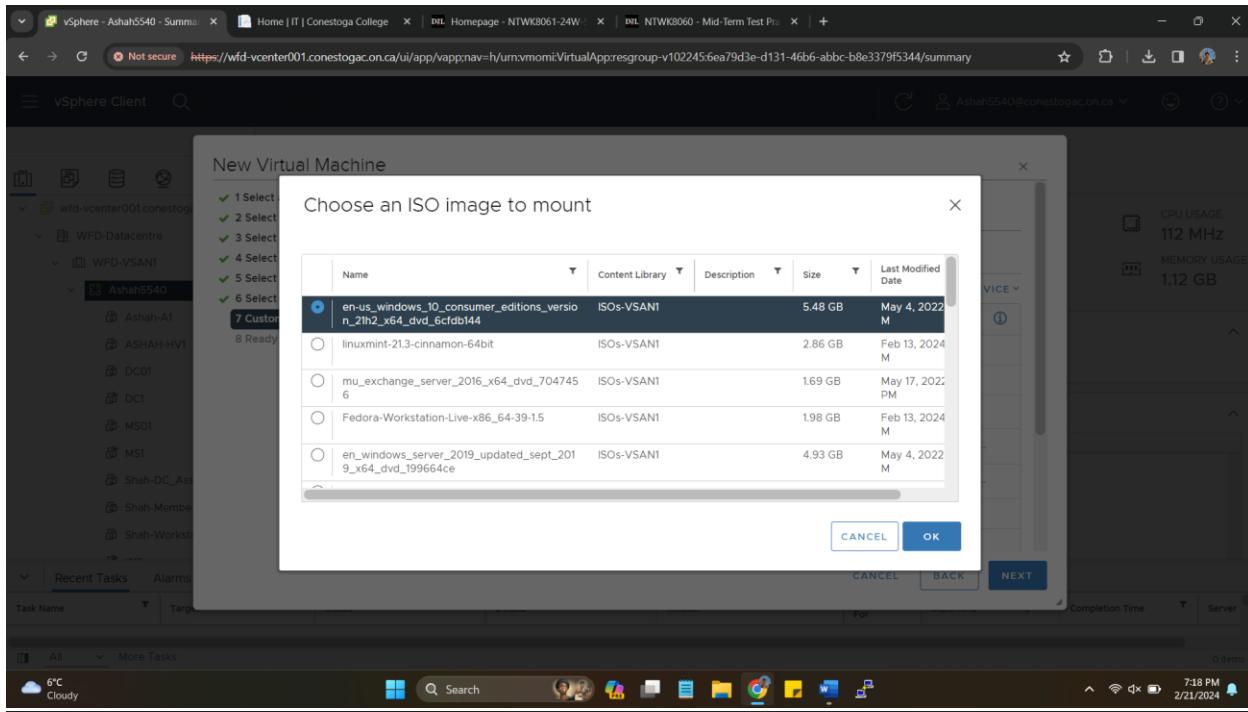


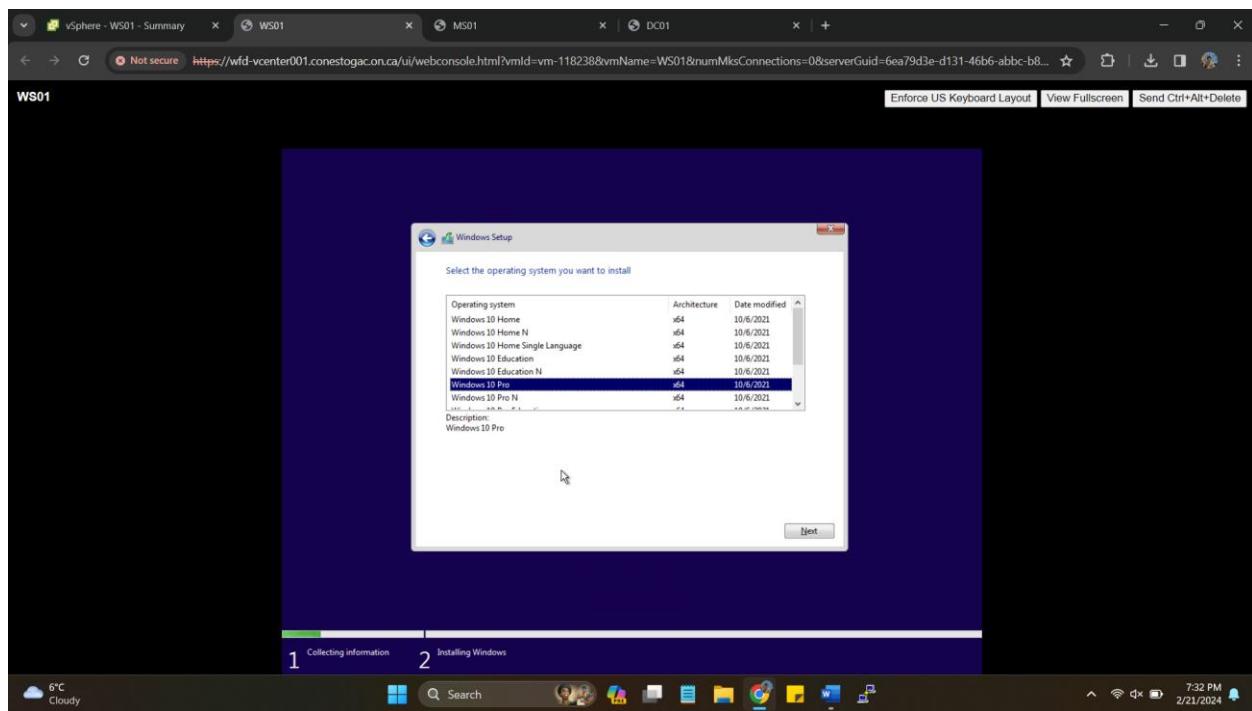
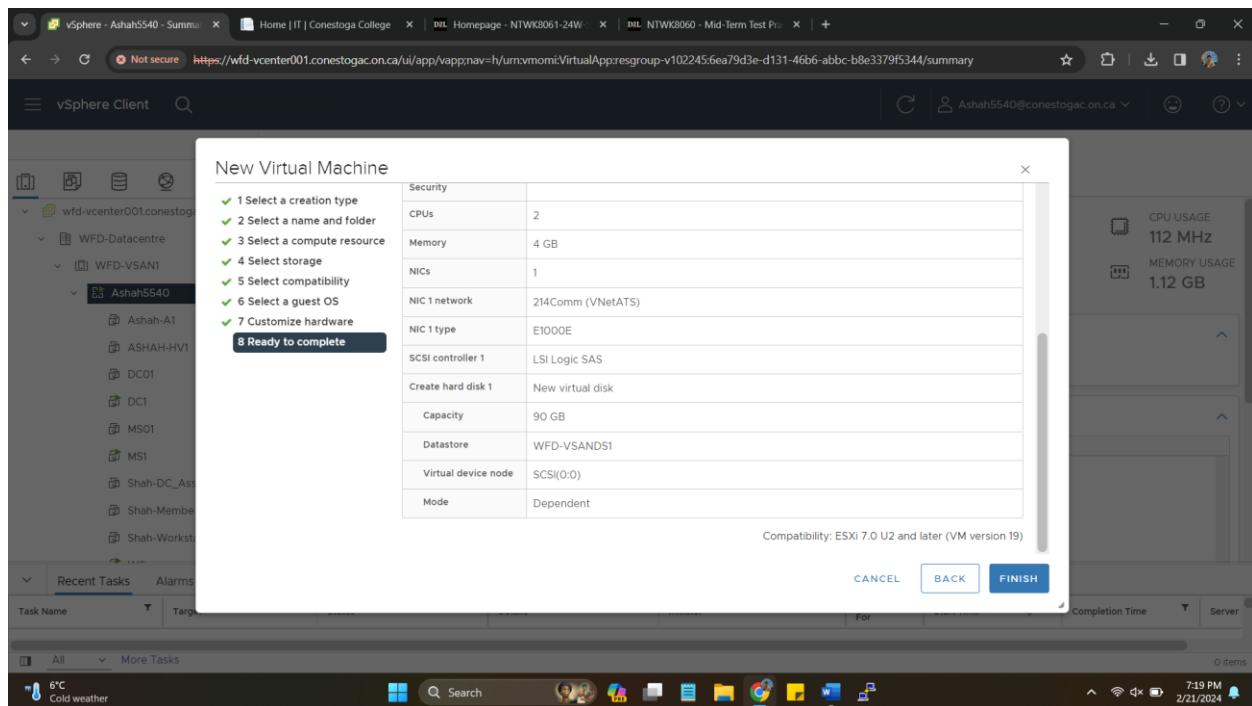


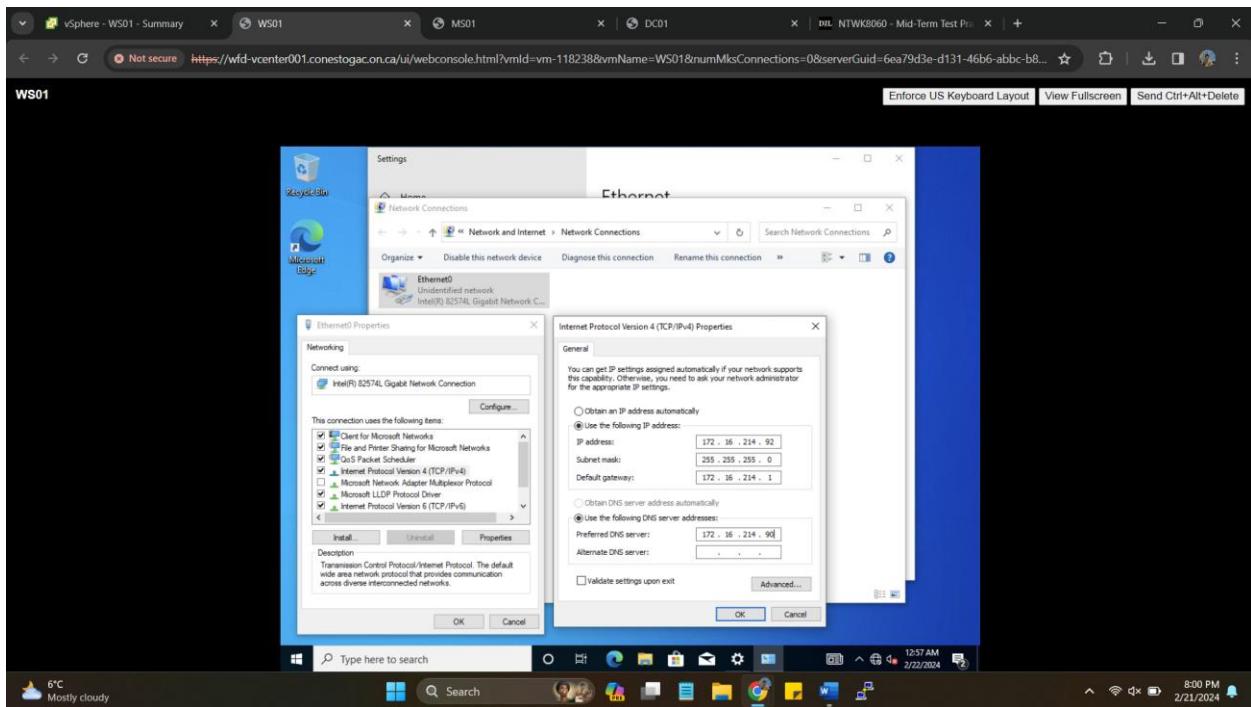
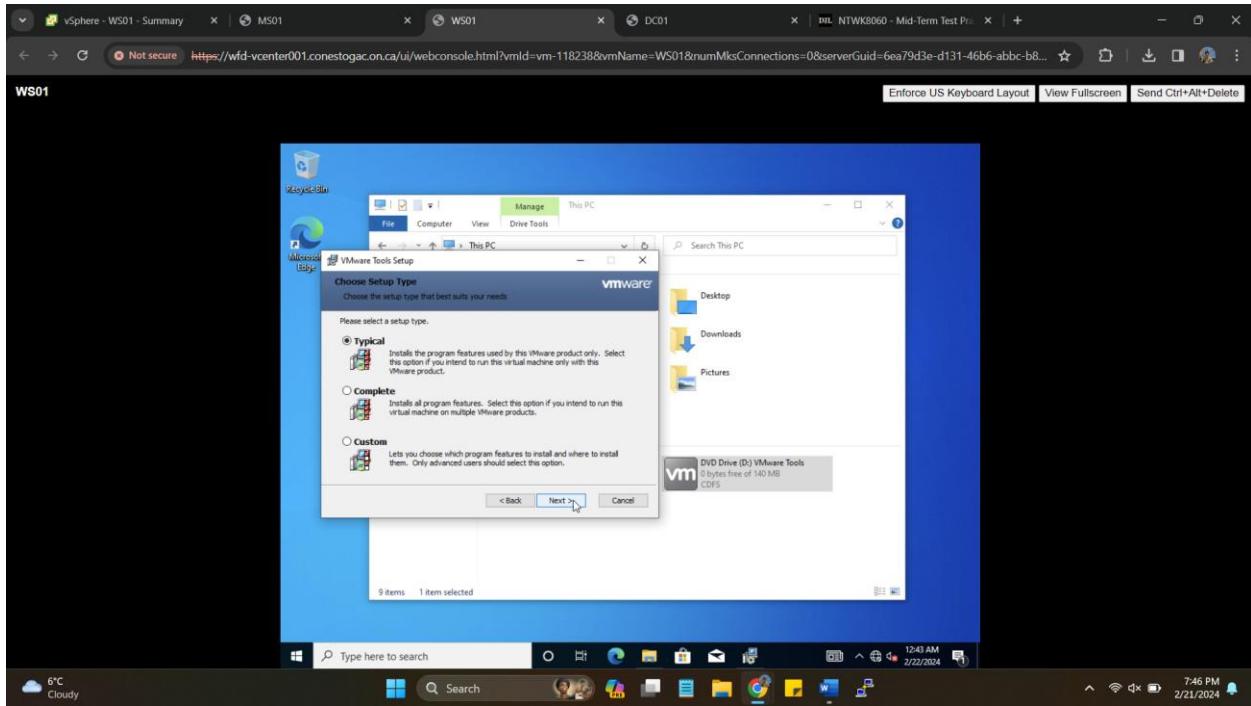
## Workstation

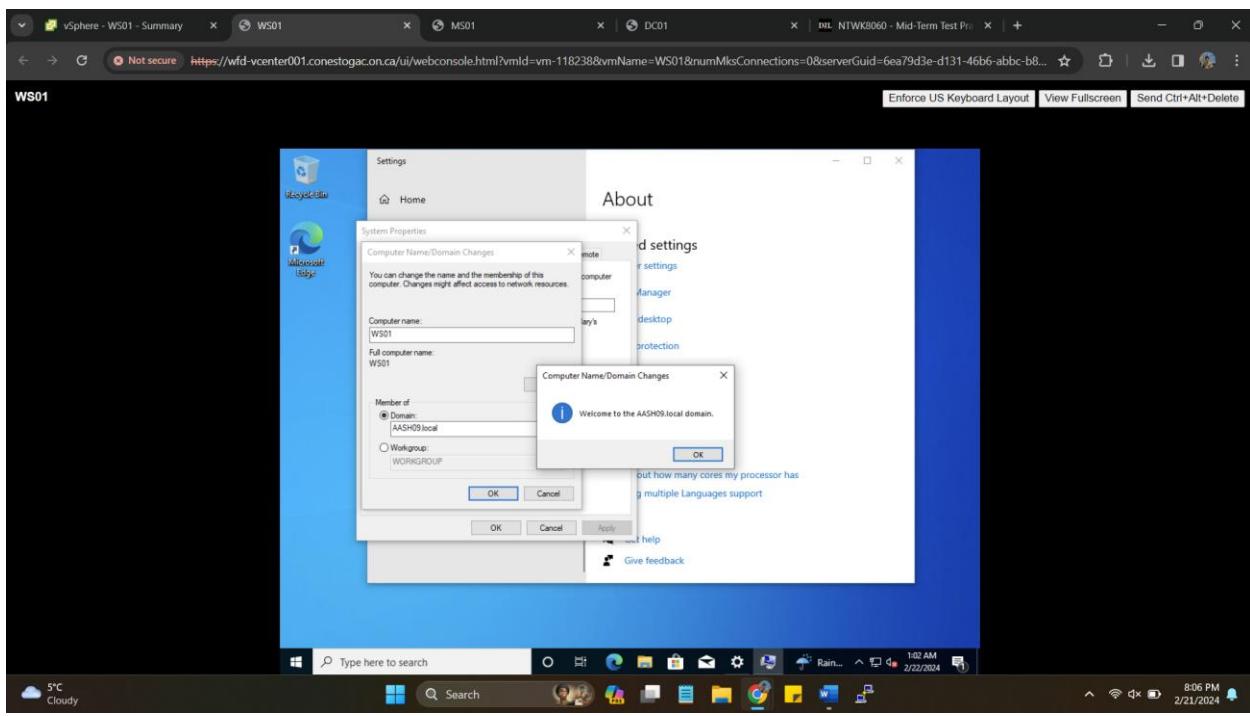
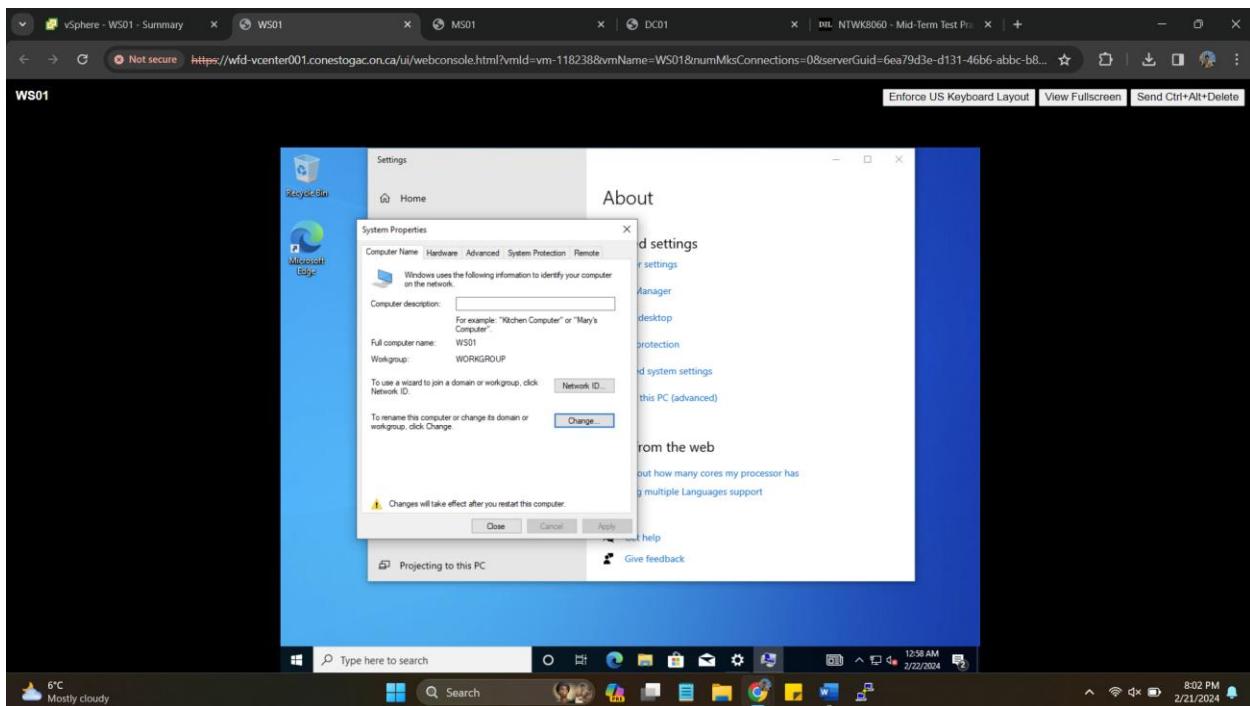






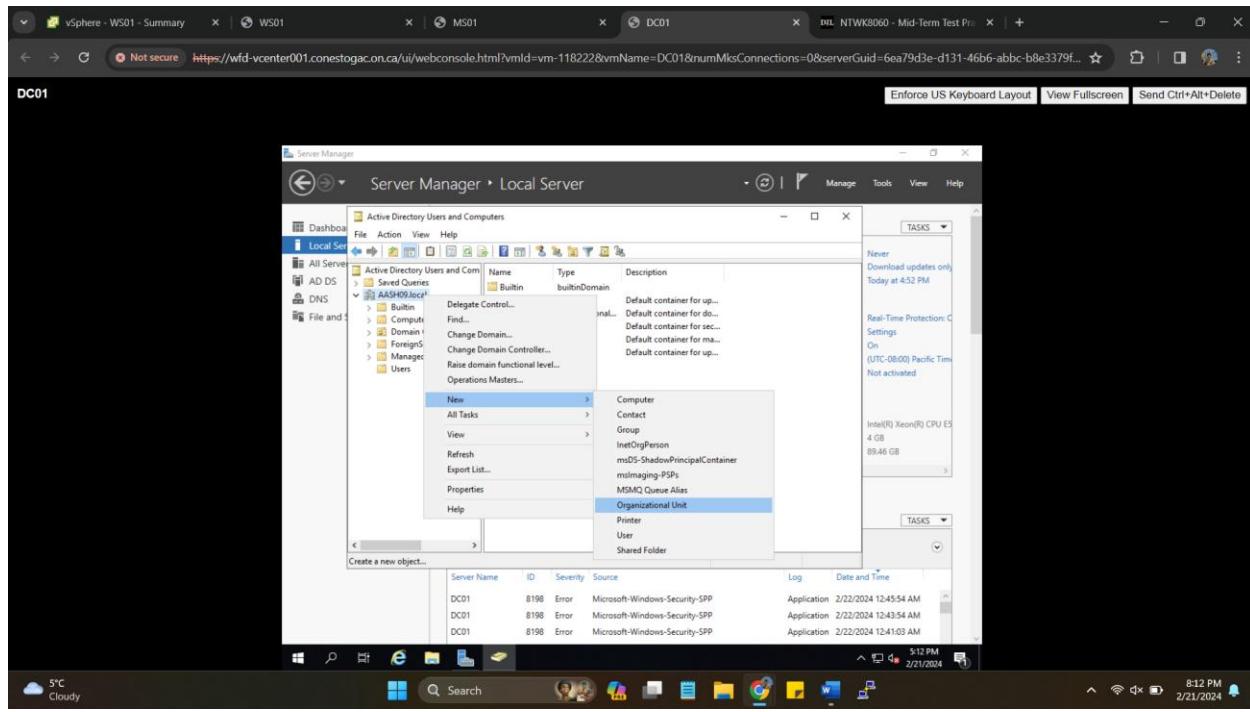
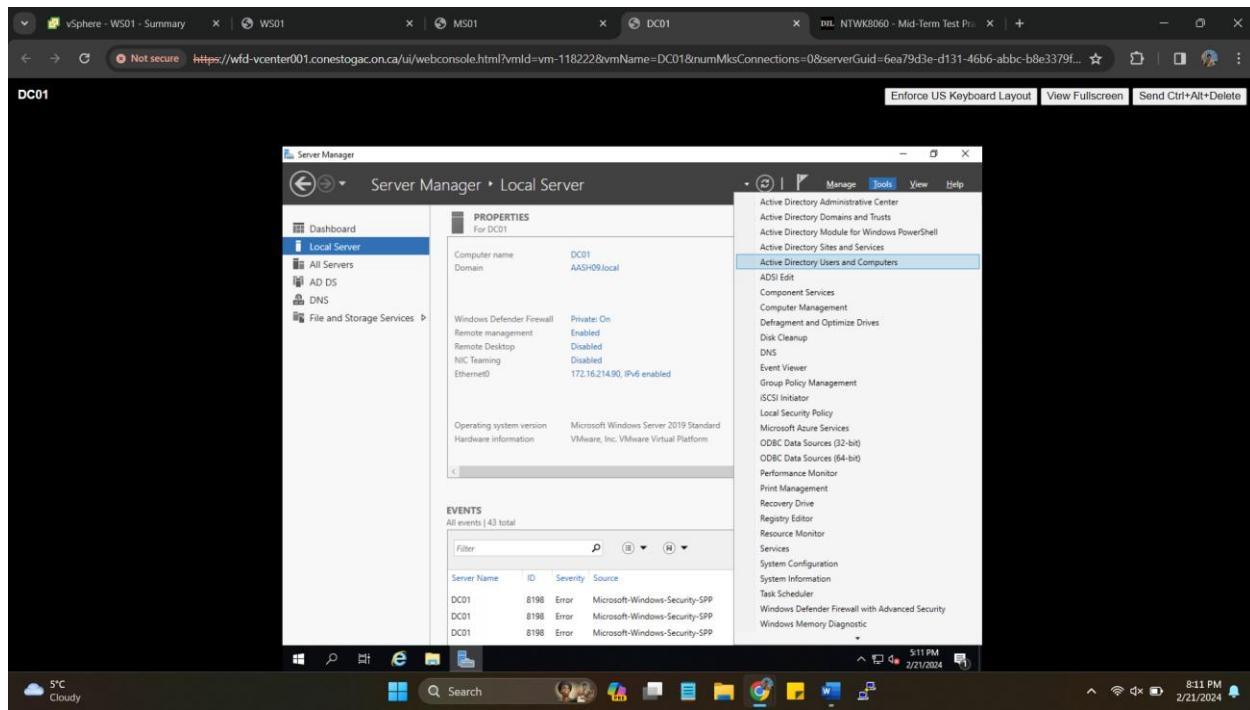


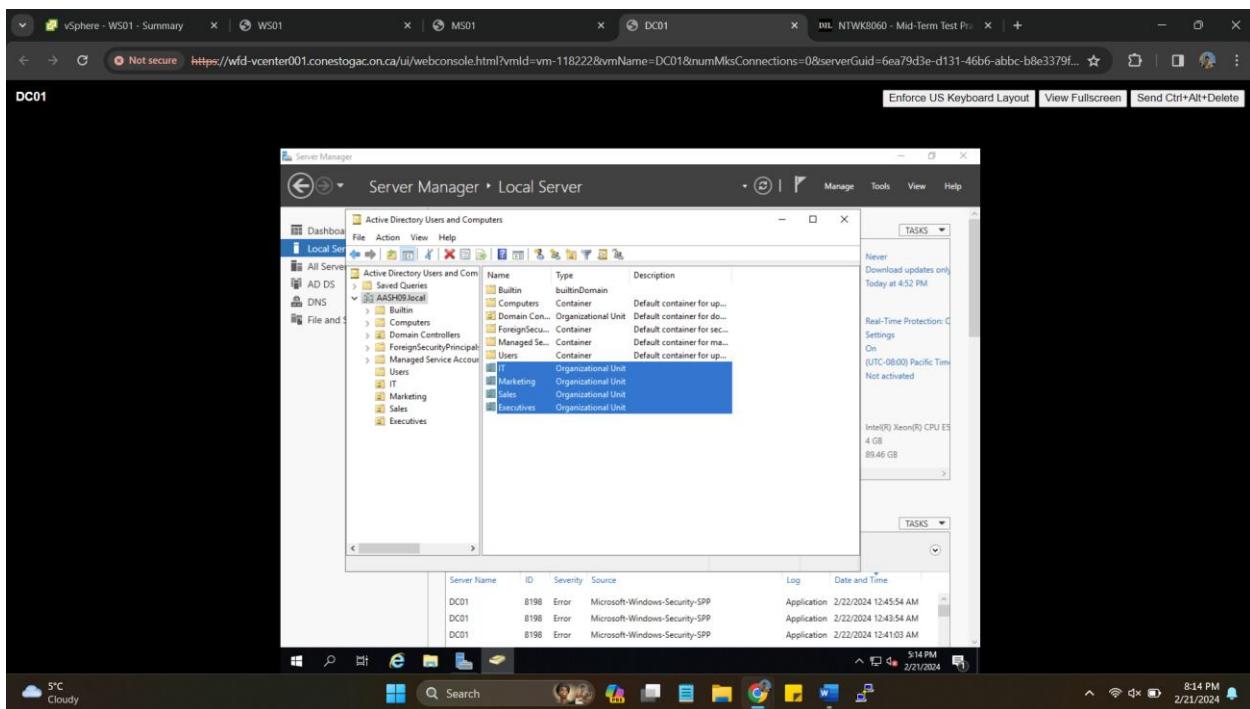
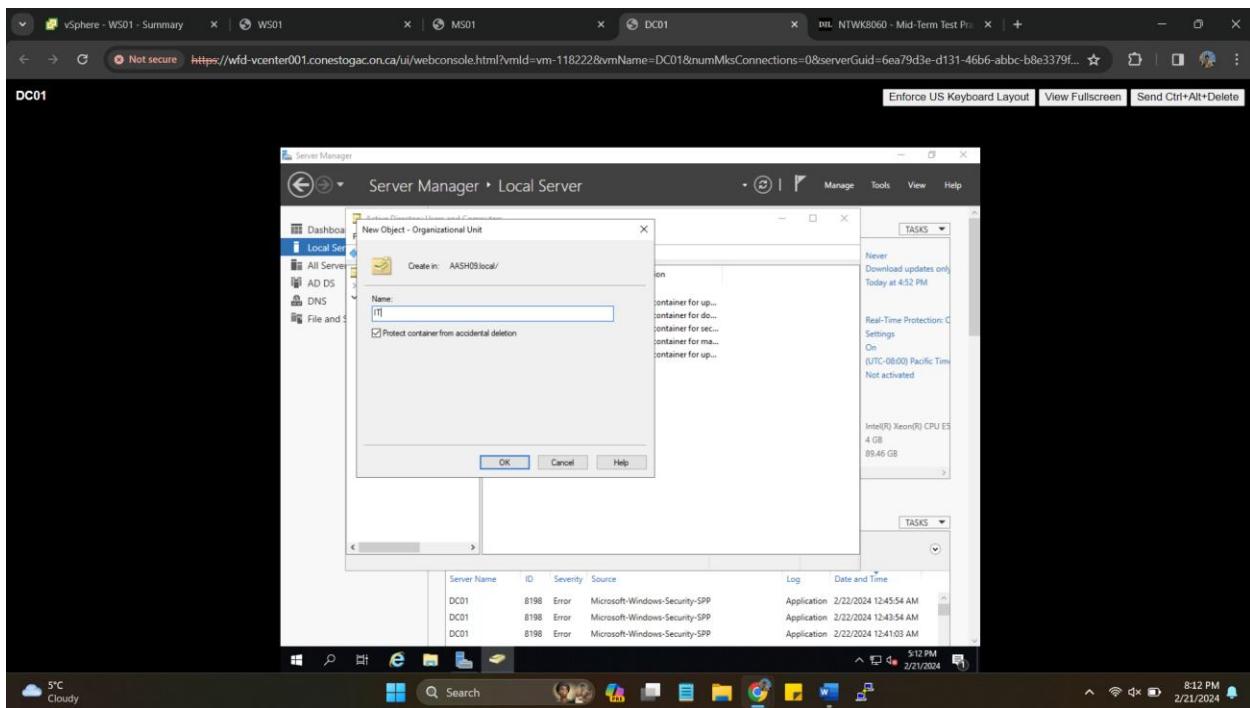




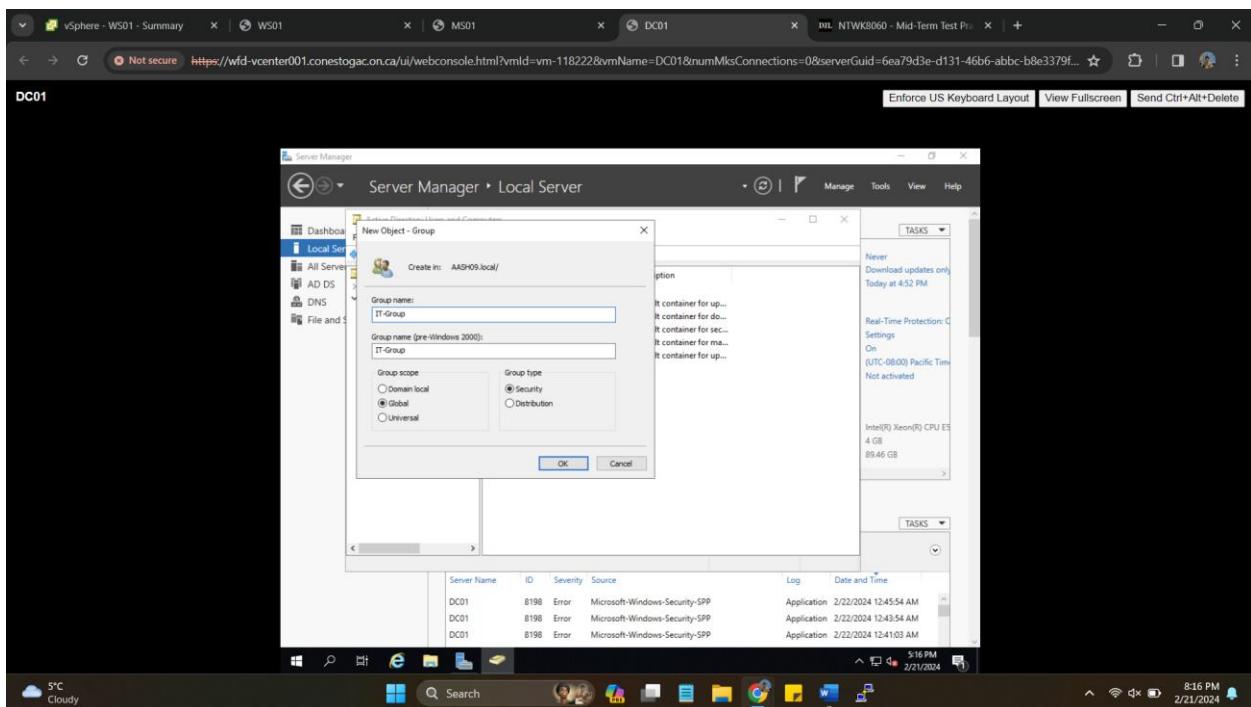
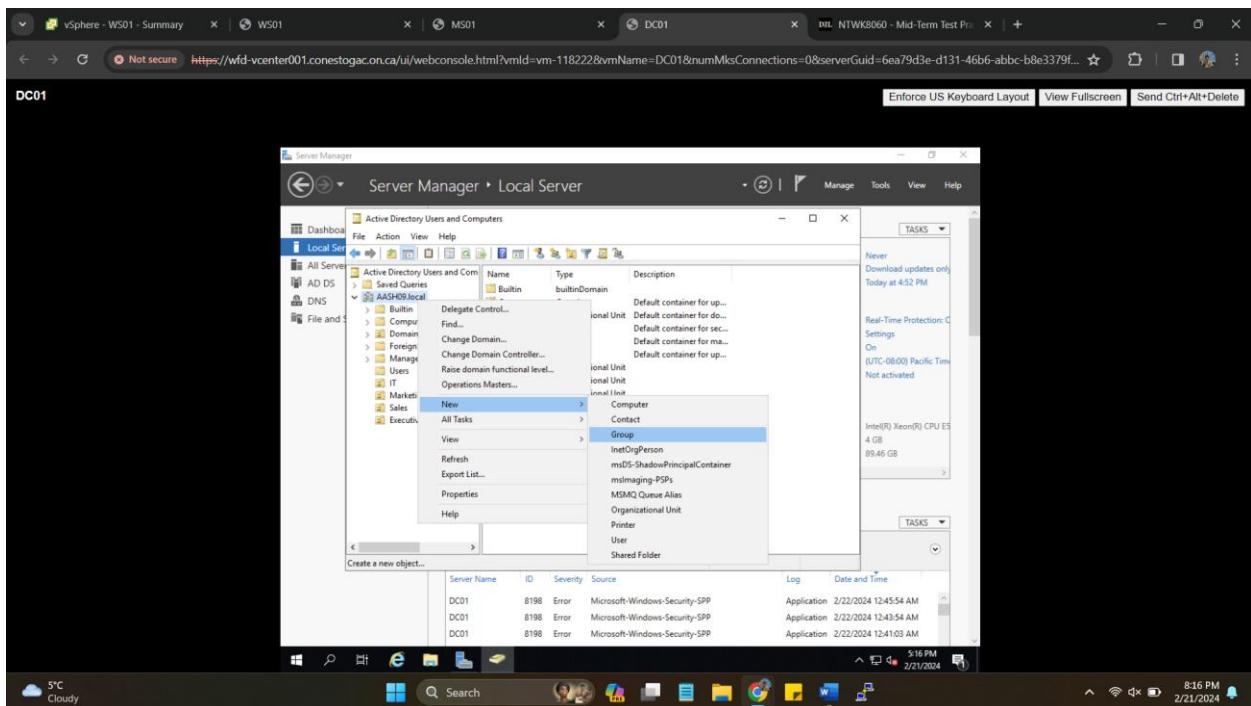
## 1) Create an OU structure in AD Users and Computers with the below departments.

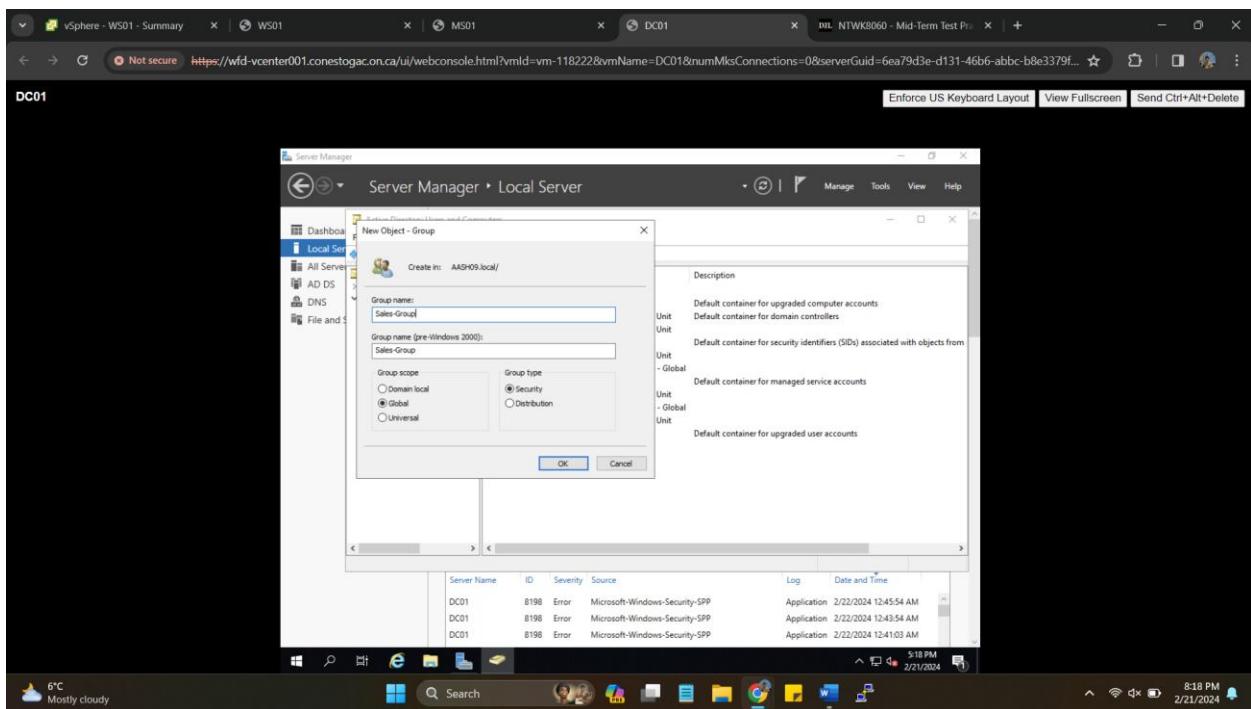
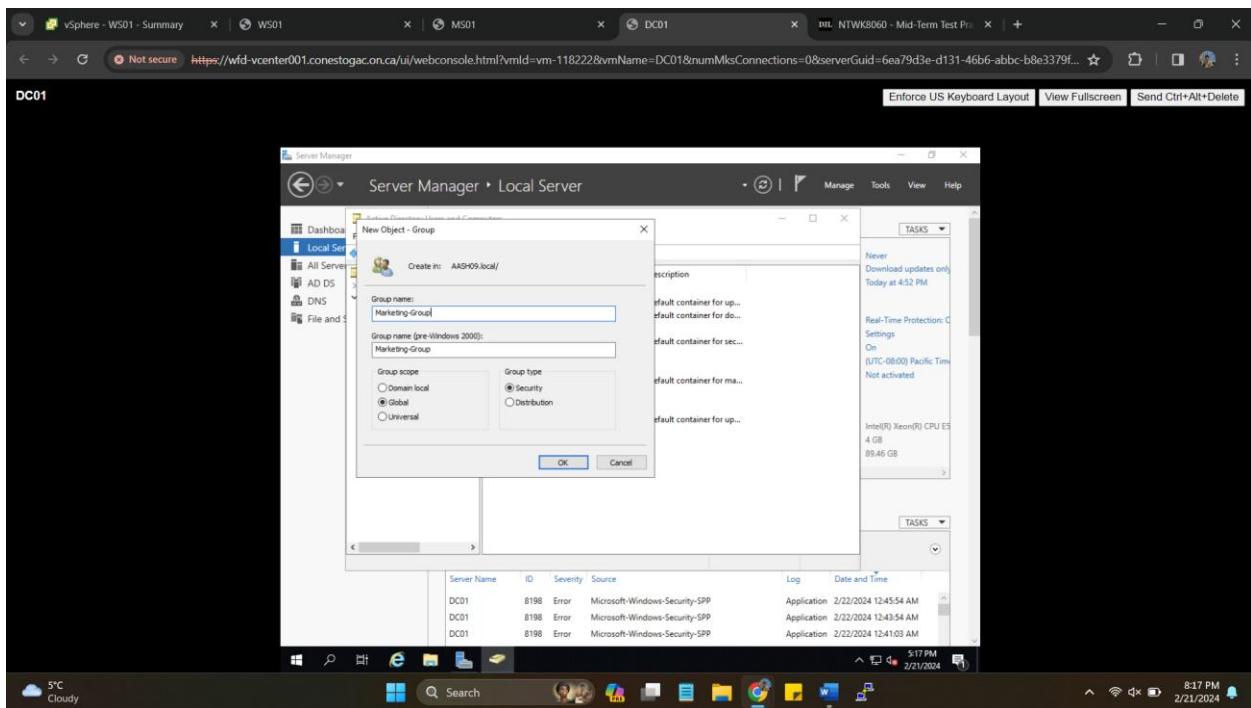
- IT
- Marketing
- Sales
- Executives

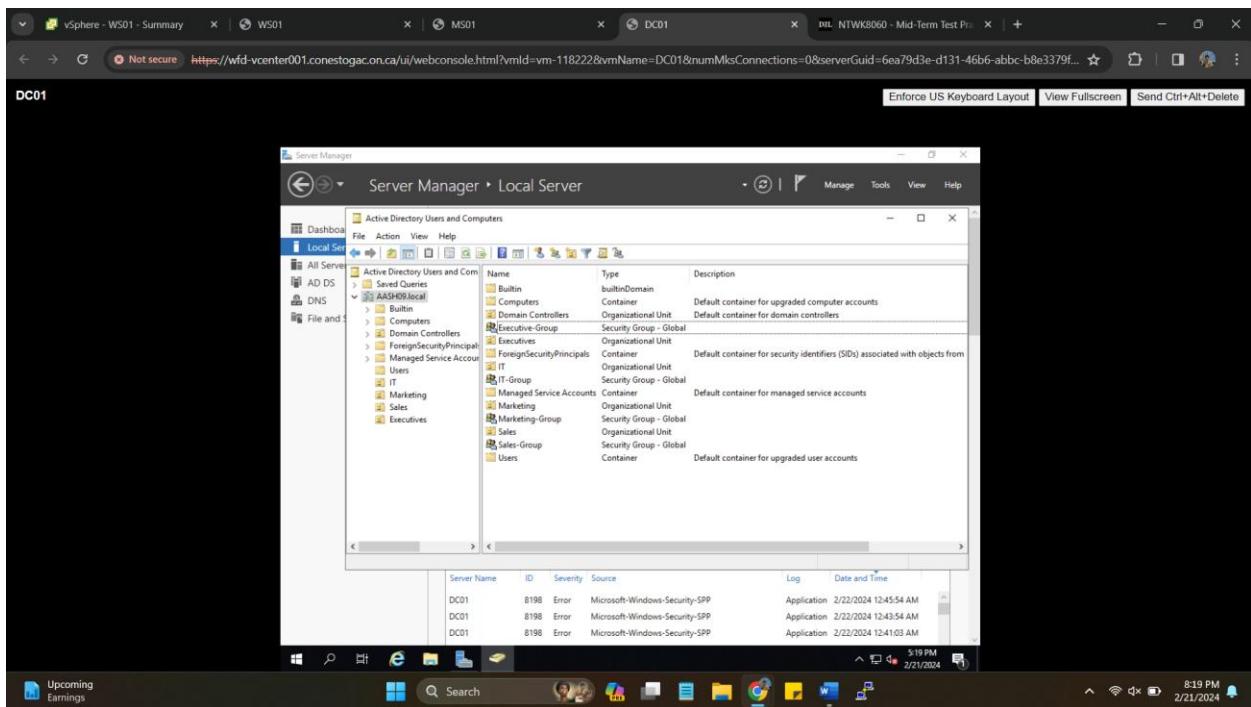
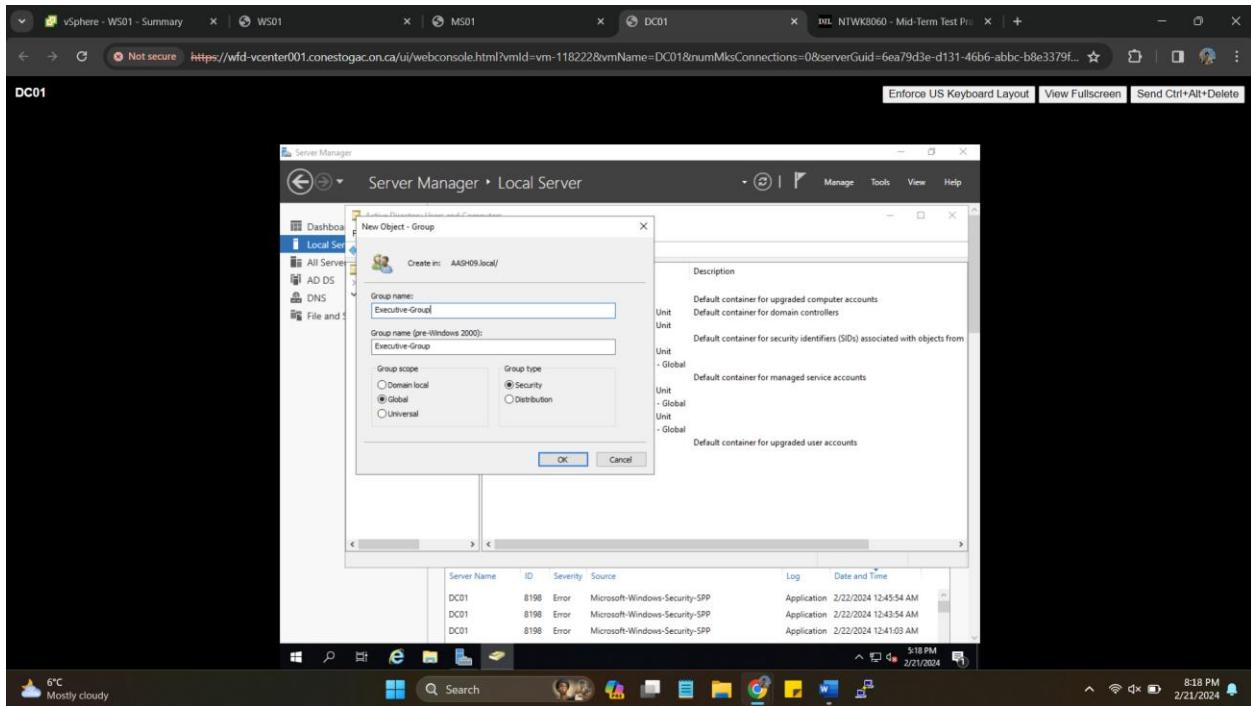


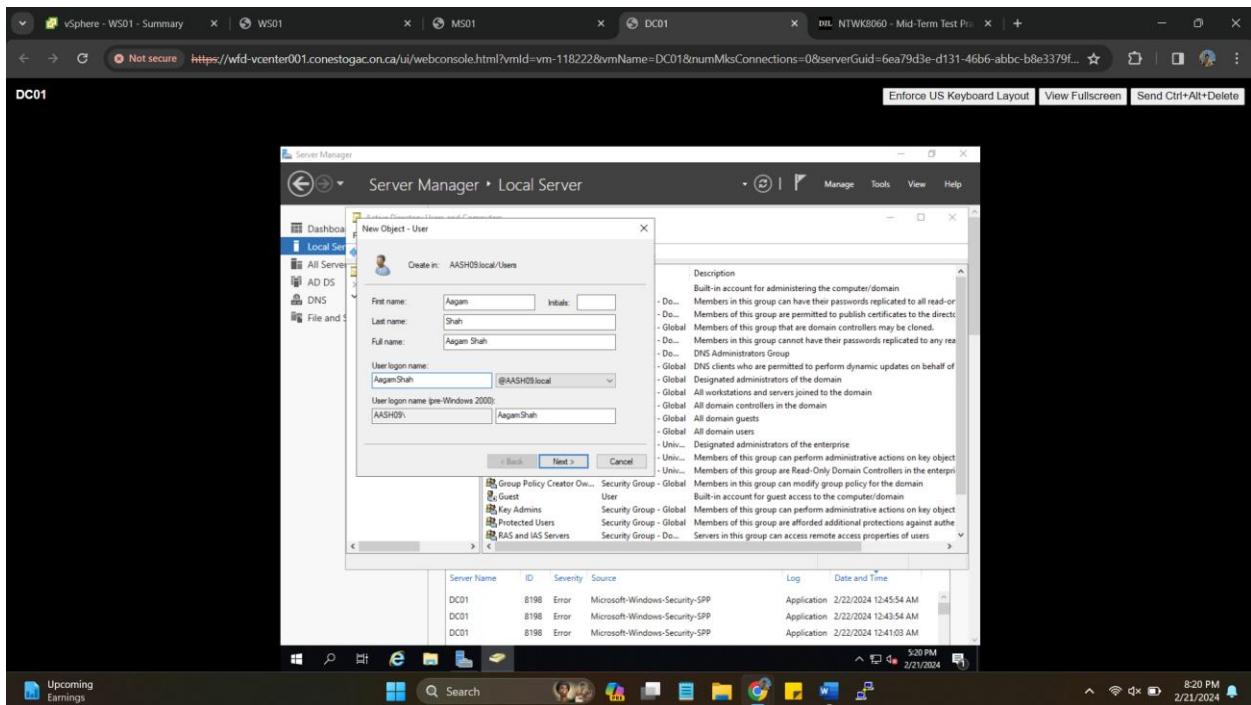
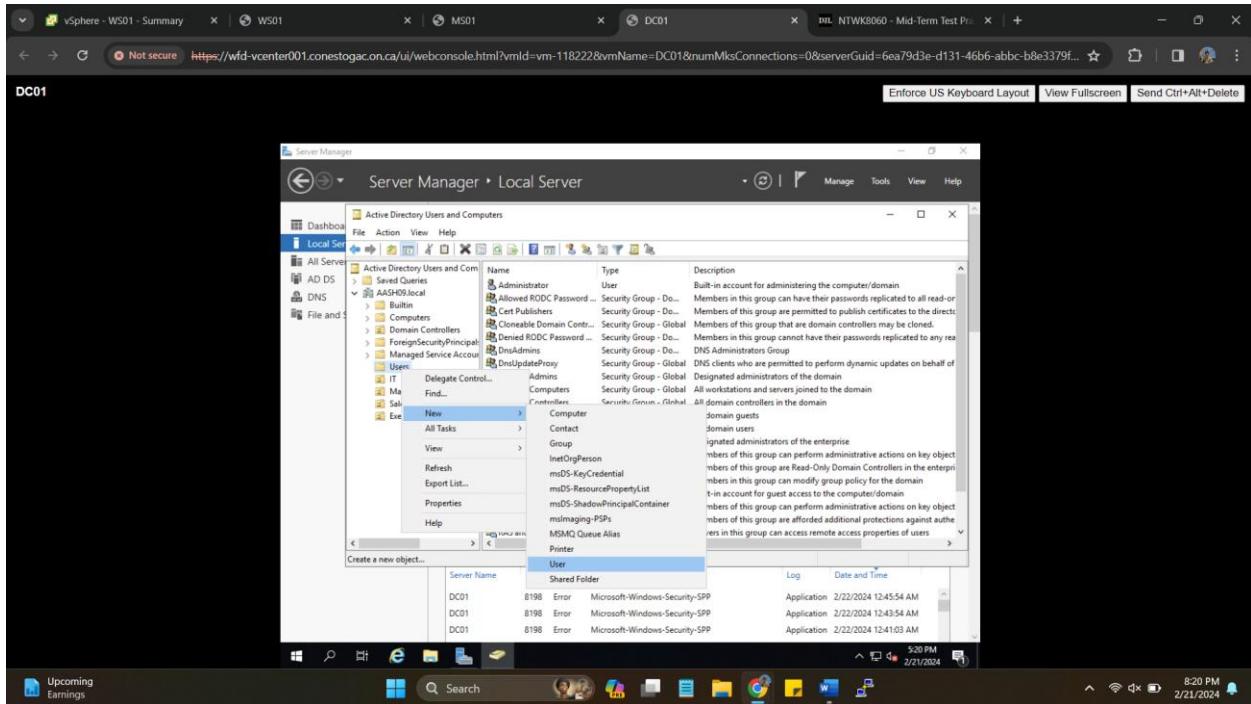


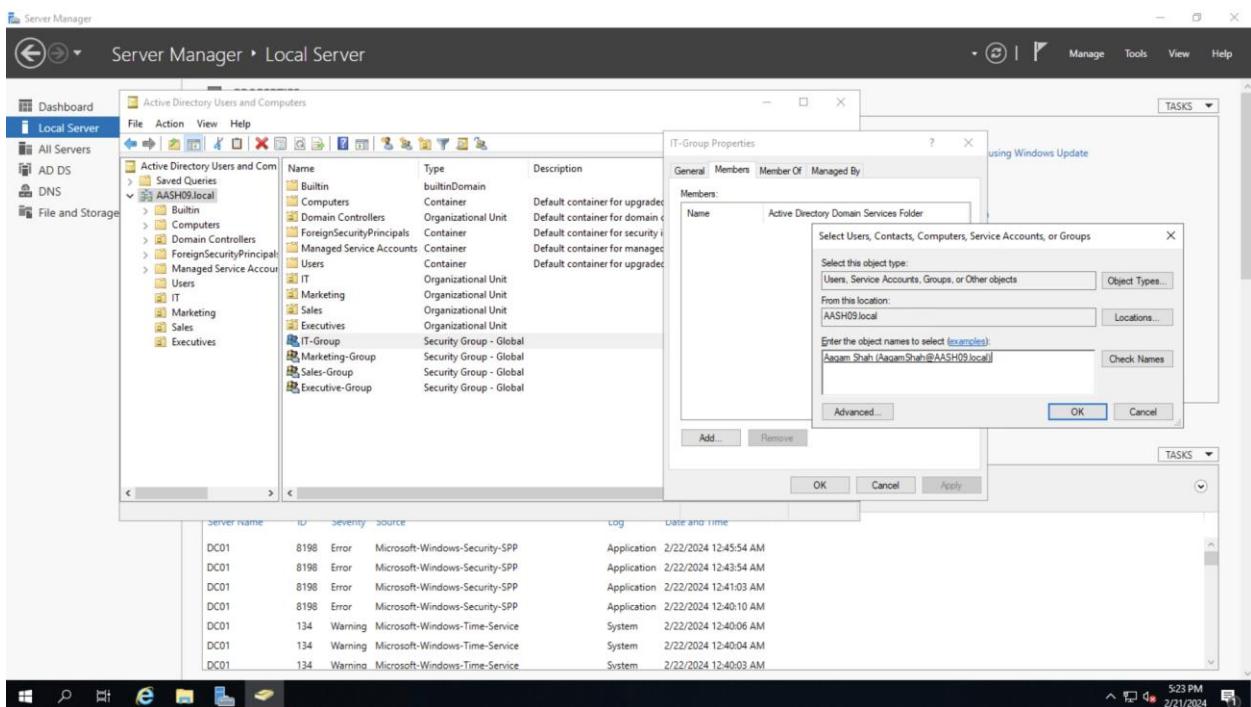
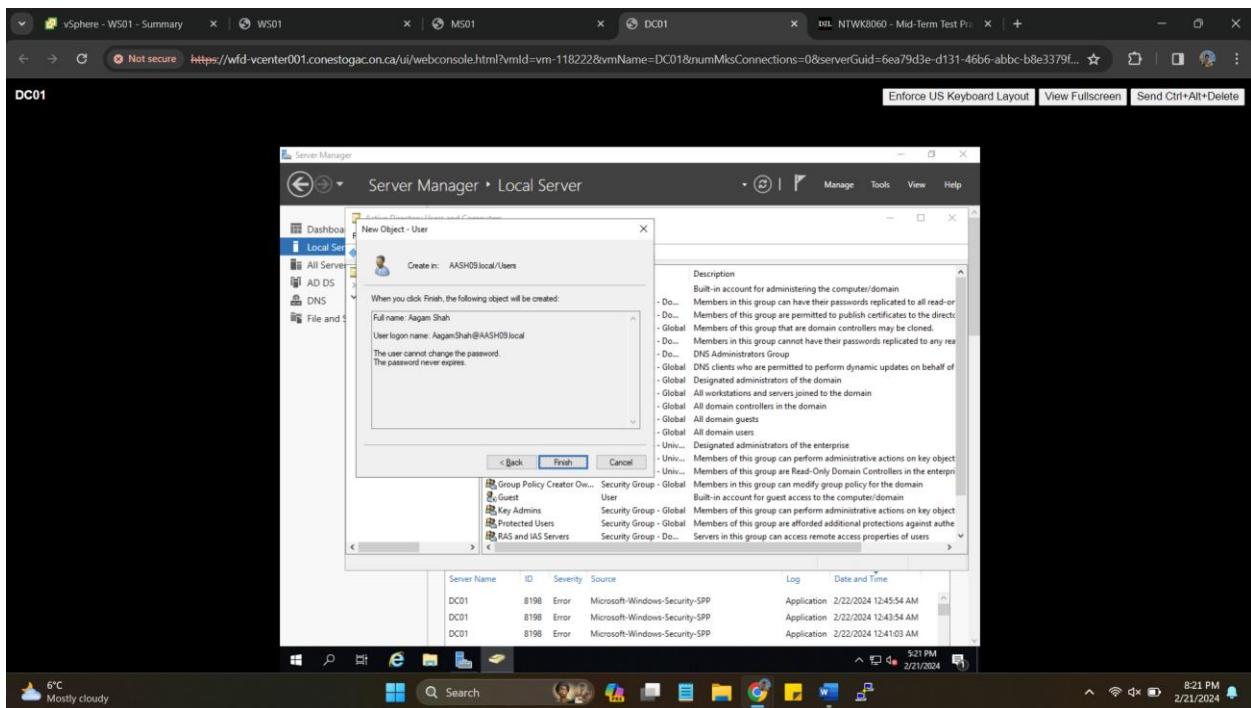
- 1) Create Global Groups for each department and add some users to them (At least one user per group).

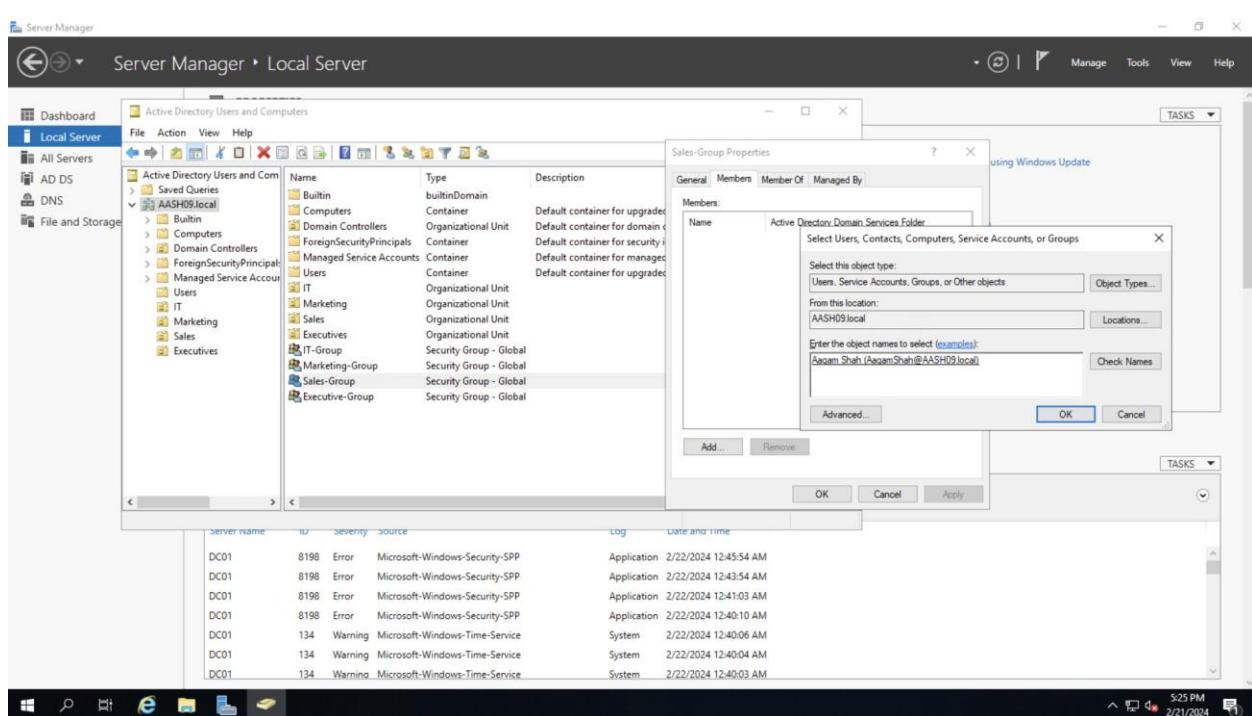
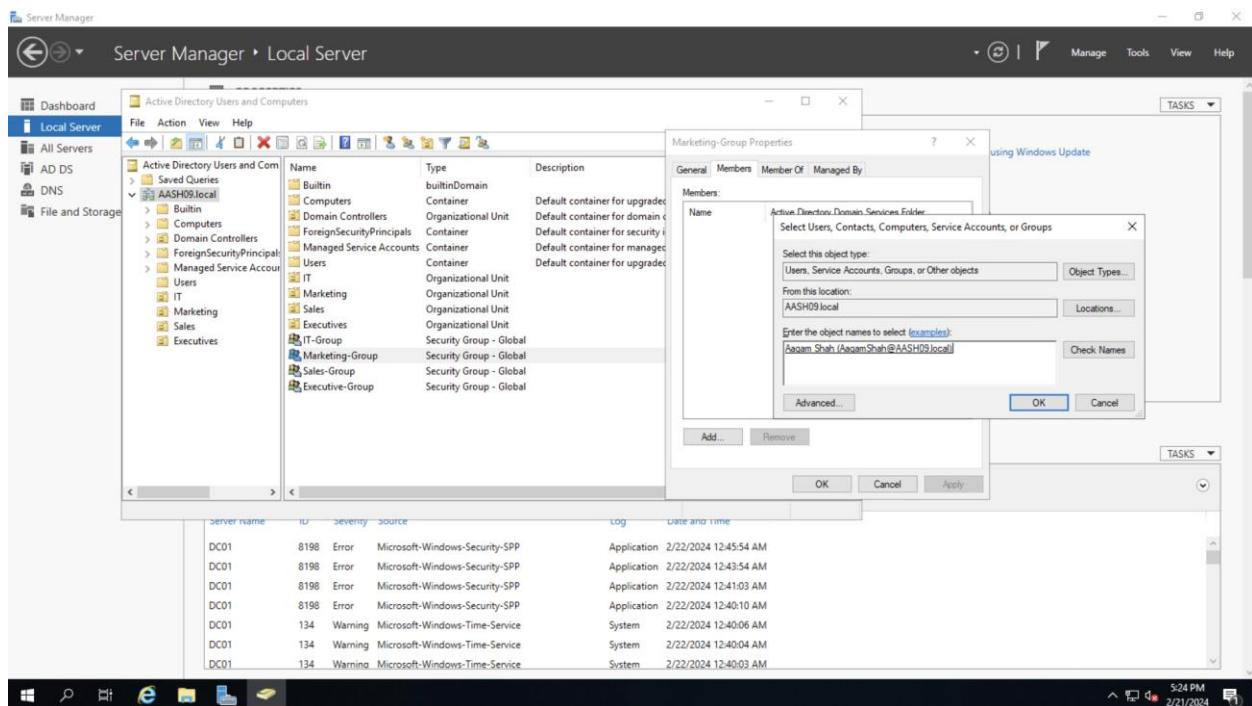


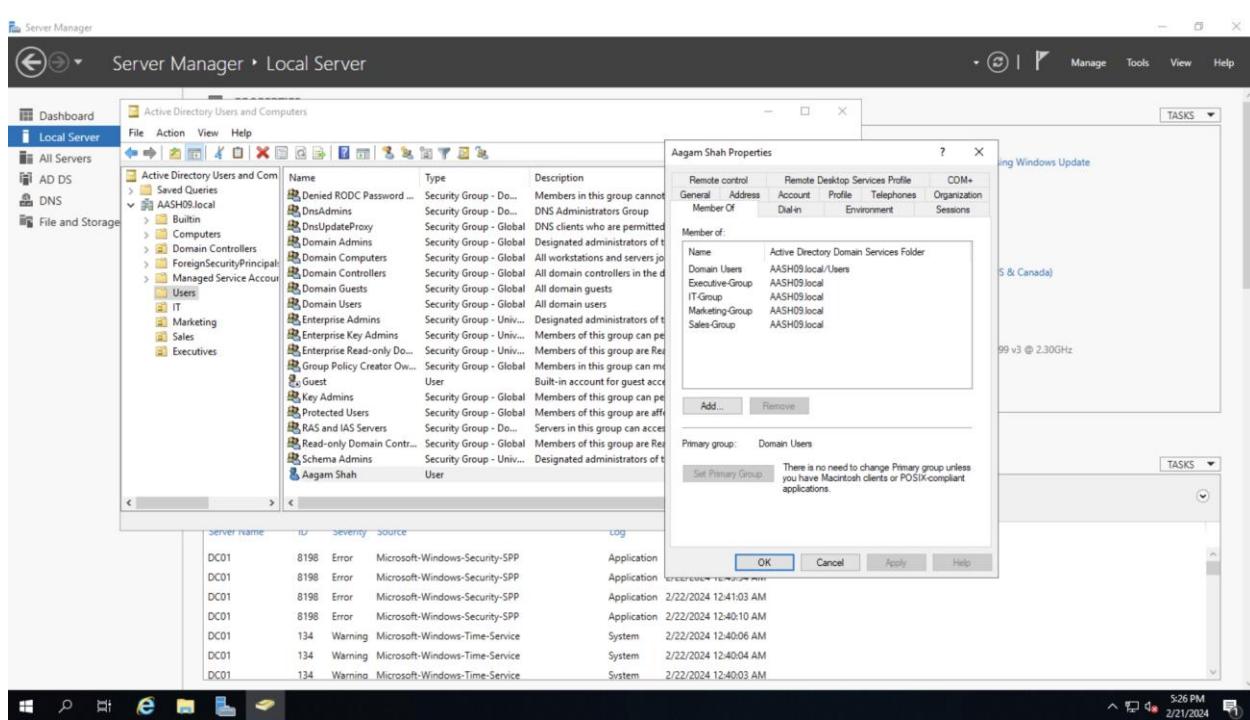
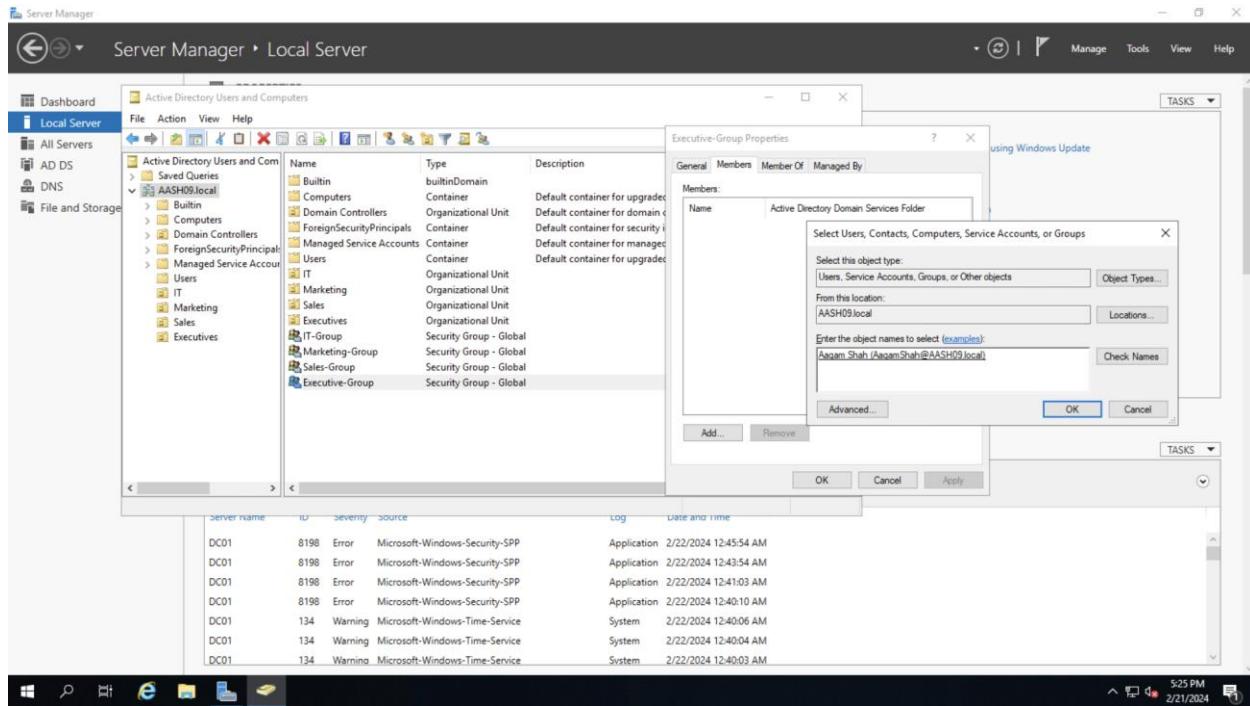




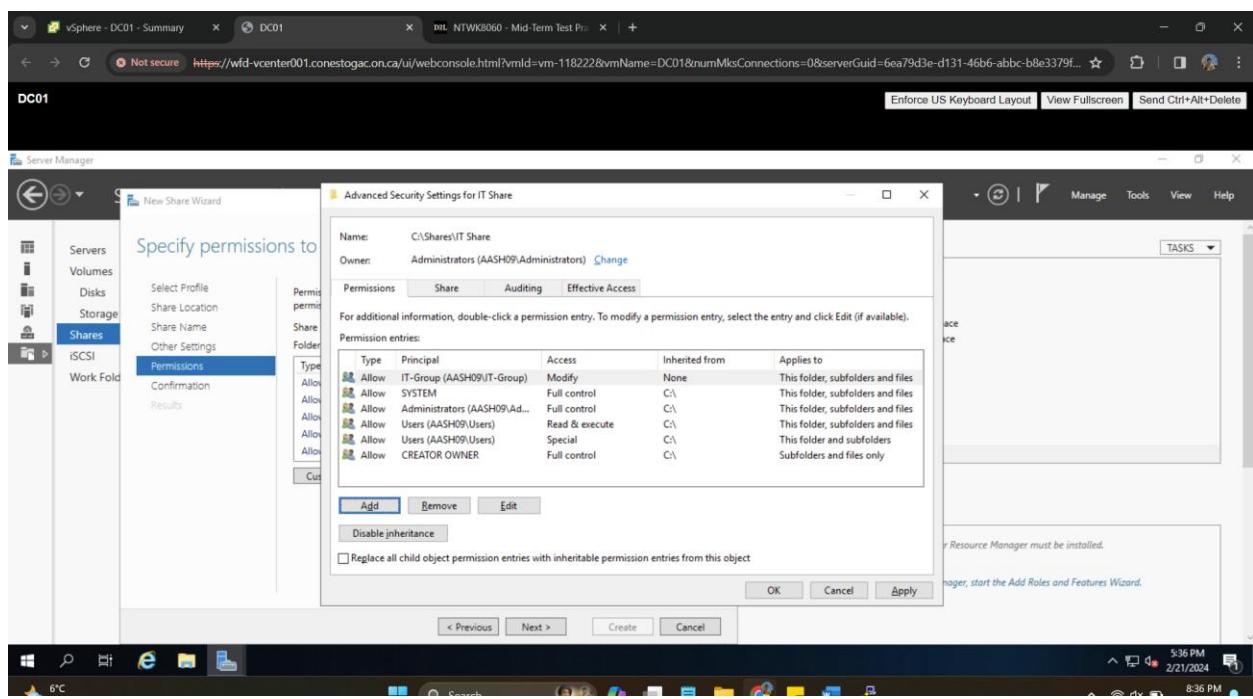
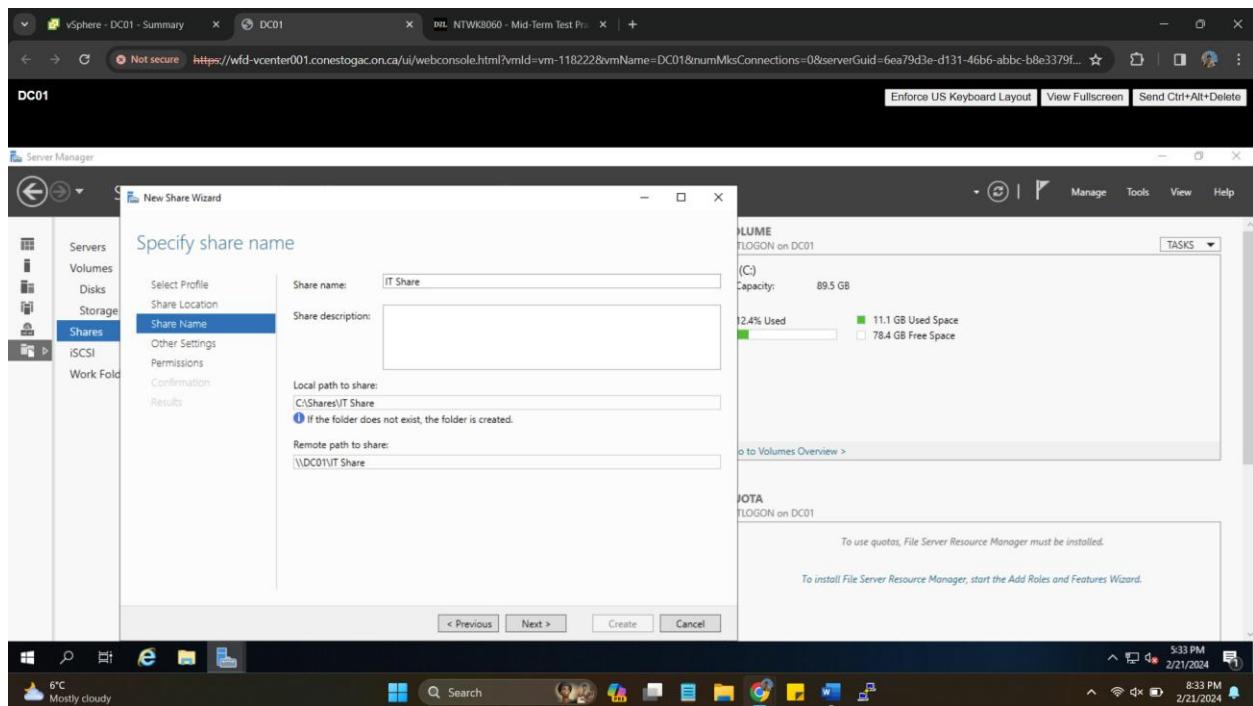


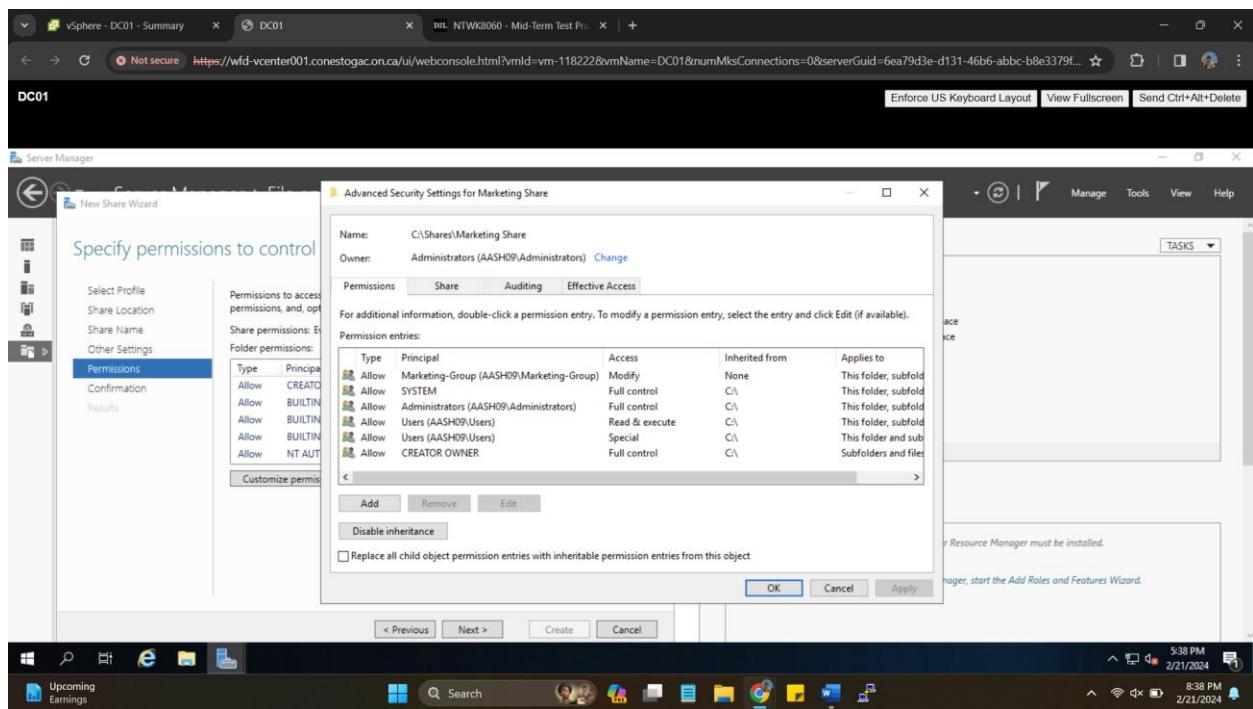
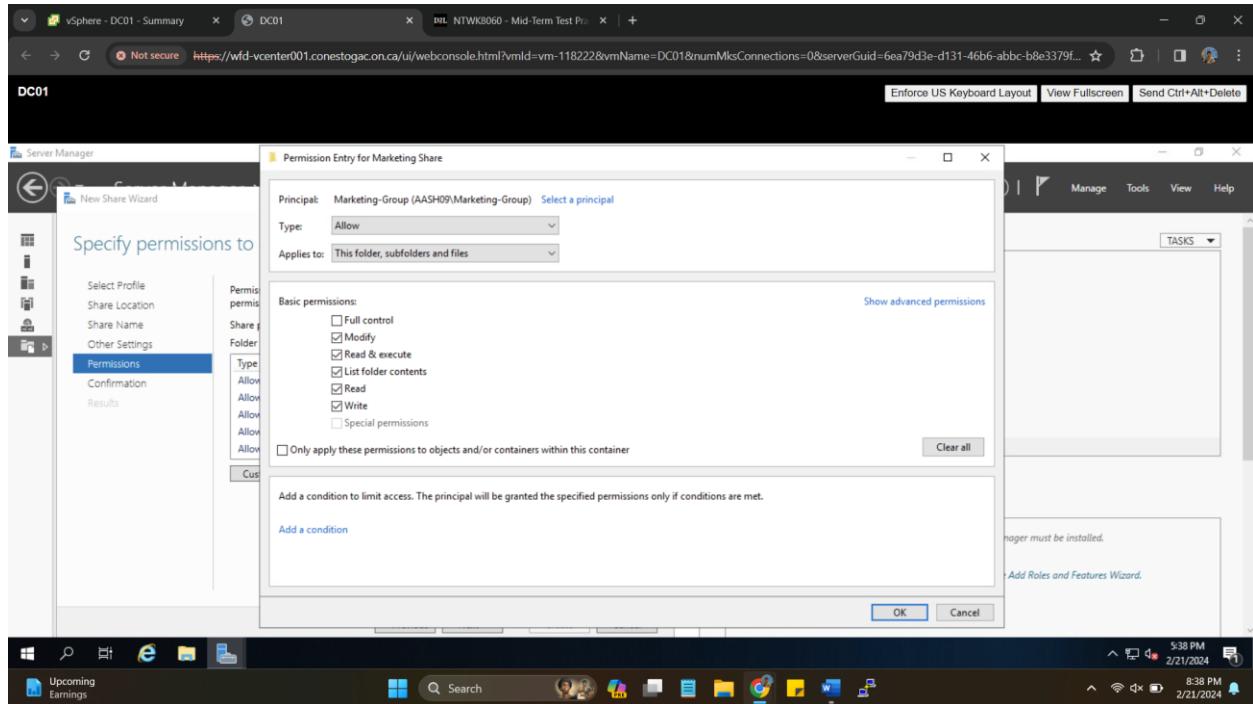


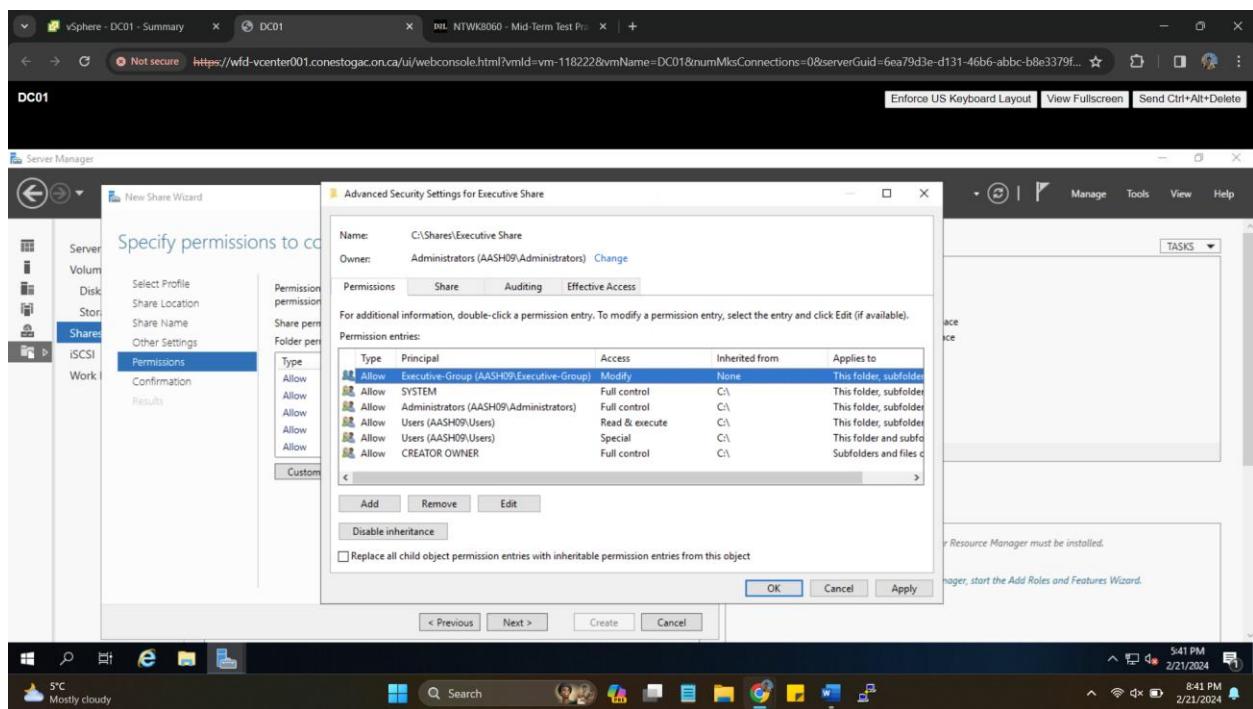
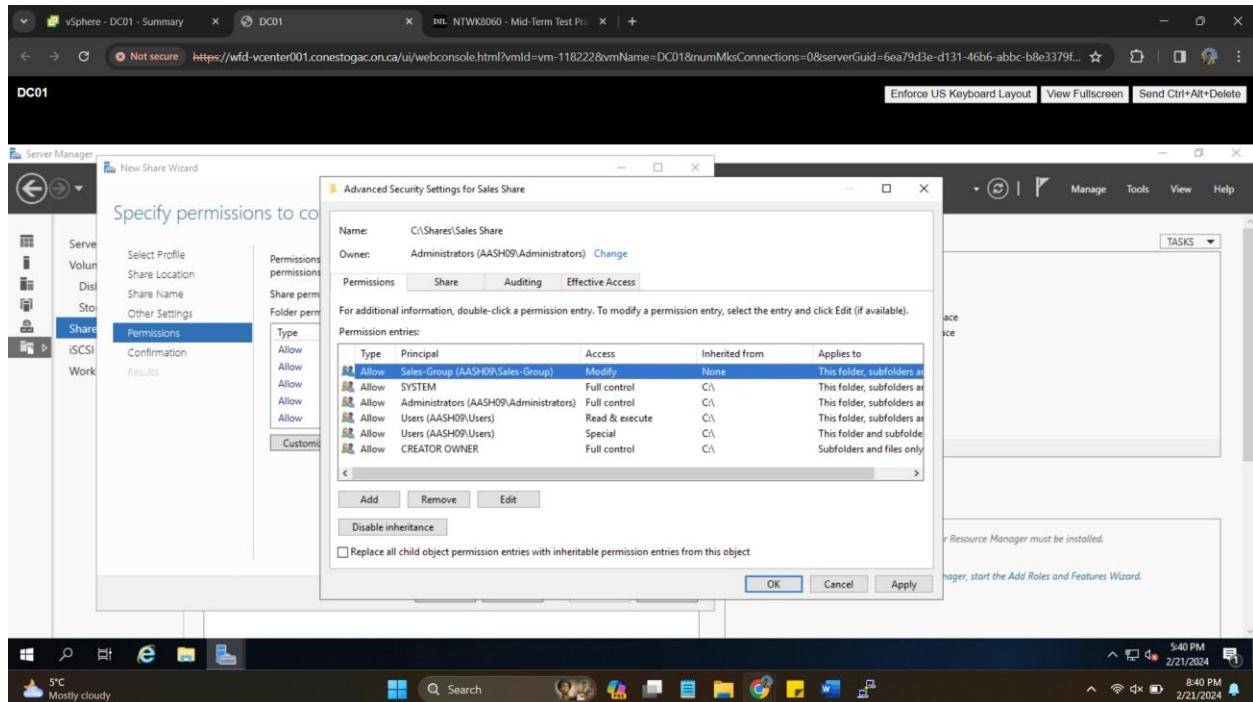


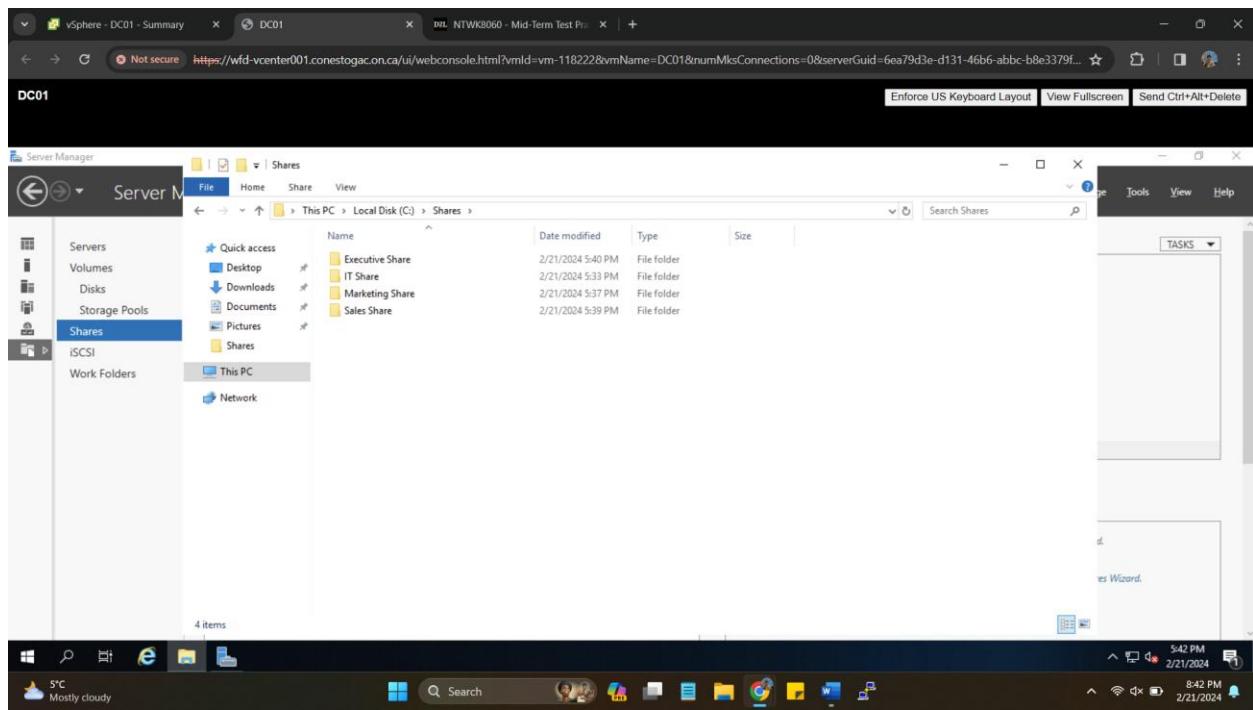
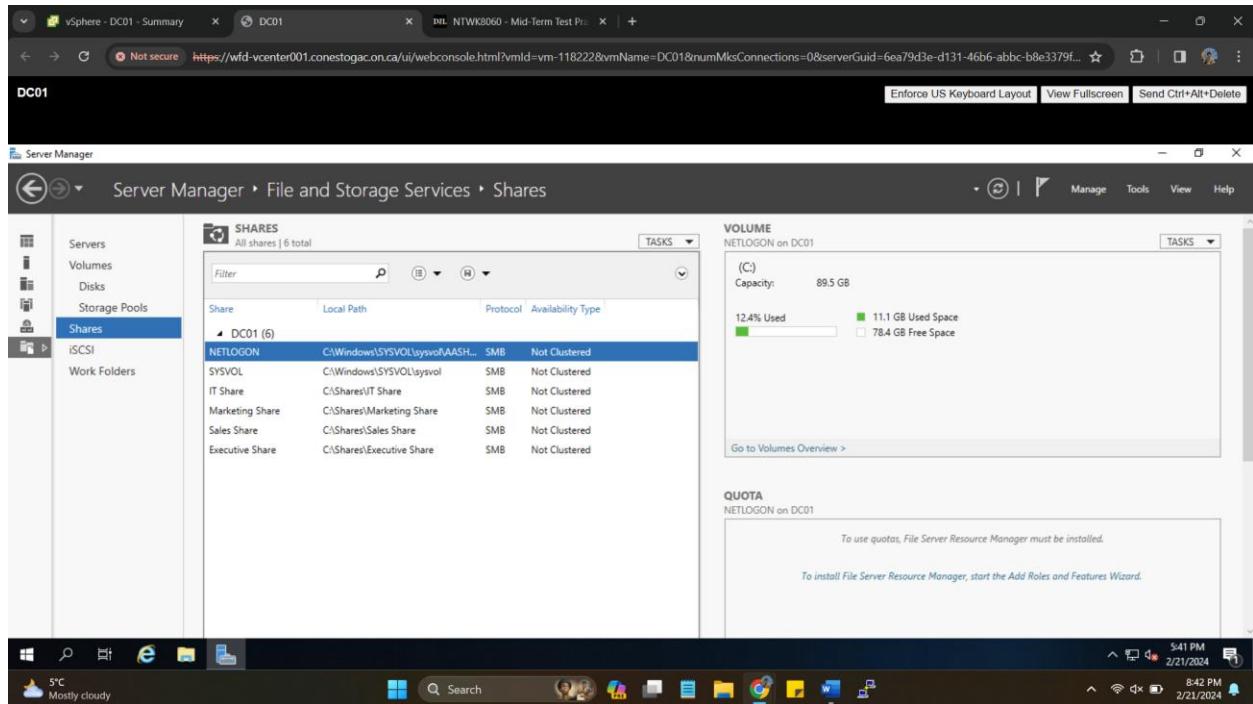


- 1) Create four file shares on the Domain Controller one for each department where the department group has modify access to the share. Ex. IT Group has Modify NTFS access to the IT Share.





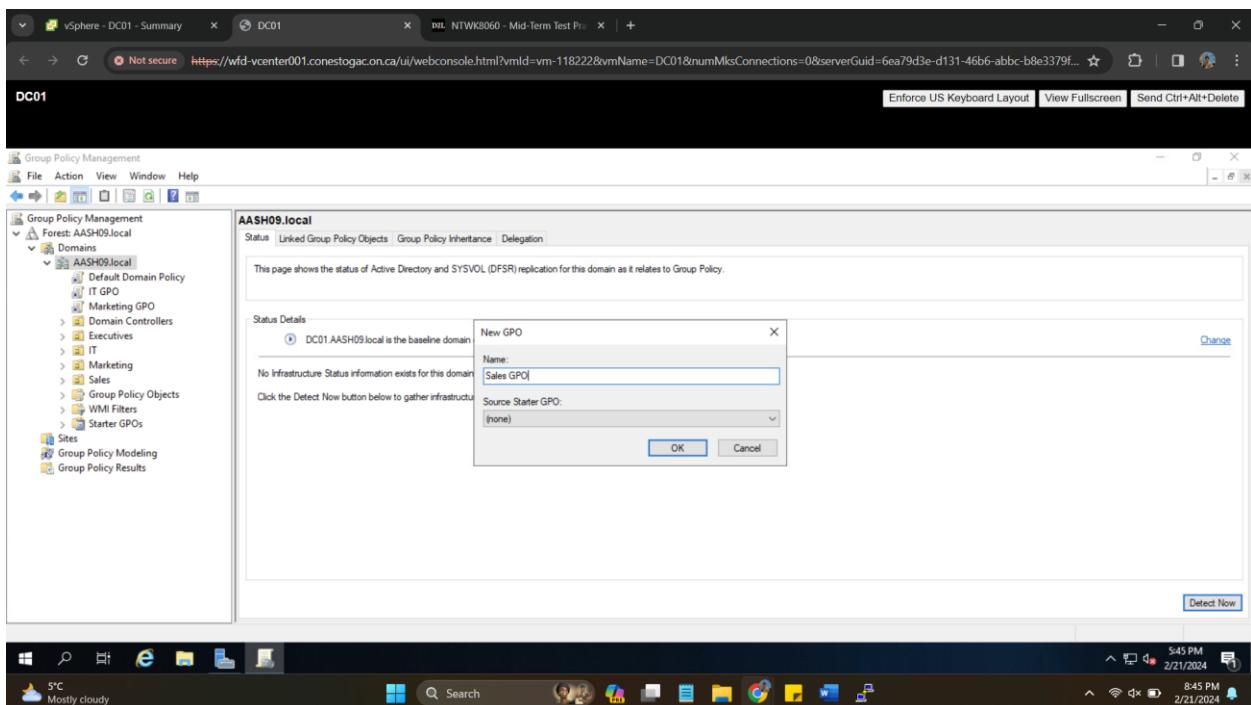
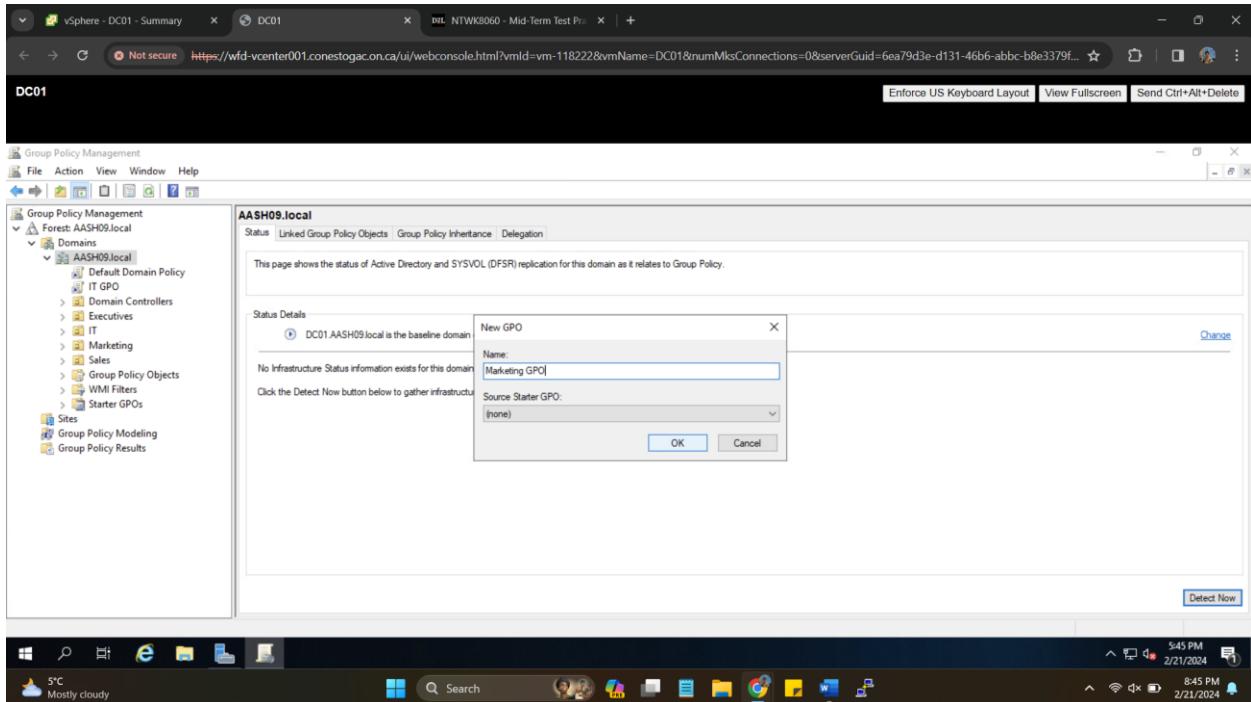




- 1) Create a Group Policy Object for each department OU ex. IT GPO, Marketing GPO and link them to the correct OU.

The screenshot shows the 'Server Manager' interface for a local server named 'DC01'. The main pane displays the 'PROPERTIES' for the server, including basic information like computer name (DC01), domain (AASH09.local), and system configuration details such as Windows Defender Firewall settings and processor information. On the right, a navigation bar lists various management tools, with 'Group Policy Management' currently selected. The bottom of the screen shows the Windows taskbar with the date and time (5:43 PM, 2/21/2024).

The screenshot shows the 'Group Policy Management' console. The left pane shows the organizational unit structure under 'AASH09.local'. A 'New GPO' dialog box is open in the center, prompting for a name ('IT GPO') and a source Starter GPO ('(none)'). The bottom of the screen shows the Windows taskbar with the date and time (8:43 PM, 2/21/2024).



The screenshot shows the Group Policy Management console for the domain AASH09.local. In the left navigation pane, under 'Forests > AASH09.local > Domains > AASH09.local', several GPOs are listed: Default Domain Policy, IT GPO, Marketing GPO, Sales GPO, Domain Controllers, Executives, IT, Marketing, Sales, Group Policy Objects, WMI Filters, and Starter GPOs. A 'New GPO' dialog box is open in the center, prompting for a name. The 'Name:' field contains 'Executive GPO'. Below it, 'Source Starter GPO:' is set to '(none)'. Buttons for 'OK' and 'Cancel' are at the bottom. The status bar at the bottom right shows the date and time as 2/21/2024 8:46 PM.

The screenshot shows the 'Linked Group Policy Objects' tab for the 'IT' GPO. The table displays one entry:

Link Order	GPO	Enforced	Link Enabled	GPO Status	WMI Filter	Modified	Domain
1	IT GPO	No	Yes	Enabled	None	2/21/2024 5:45:20 PM	AASH09.local

The status bar at the bottom right shows the date and time as 2/21/2024 8:47 PM.

vSphere - DC01 - Summary    DC01    NTWK8060 - Mid-Term Test Pr... +

Not secure https://wfd-vcenter001.conestogac.on.ca/ui/webconsole.html?vmId=vm-118222&vmName=DC01&numMksConnections=0&serverGuid=6ea79d3e-d131-46b6-abbc-b8e3379f...

DC01

Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

Group Policy Management

File Action View Window Help

Marketing

Link Order	GPO	Enforced	Link Enabled	GPO Status	WMI Filter	Modified	Domain
1	Marketing GPO	No	Yes	Enabled	None	2/21/2024 5:45:46 PM	AASH09.local

Group Policy Management

File Action View Window Help

Sales

Link Order	GPO	Enforced	Link Enabled	GPO Status	WMI Filter	Modified	Domain
1	Sales GPO	No	Yes	Enabled	None	2/21/2024 5:46:07 PM	AASH09.local

5°C Mostly cloudy    5:47 PM 2/21/2024

Search    Start button    File Explorer    Task View    Edge    Google Chrome    File    Settings    Control Panel    System

8:48 PM 2/21/2024

vSphere - DC01 - Summary    DC01    NTWK8060 - Mid-Term Test Pr... +

Not secure https://wfd-vcenter001.conestogac.on.ca/ui/webconsole.html?vmId=vm-118222&vmName=DC01&numMksConnections=0&serverGuid=6ea79d3e-d131-46b6-abbc-b8e3379f...

DC01

Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

Group Policy Management

File Action View Window Help

Marketing

Link Order	GPO	Enforced	Link Enabled	GPO Status	WMI Filter	Modified	Domain
1	Marketing GPO	No	Yes	Enabled	None	2/21/2024 5:45:46 PM	AASH09.local

Group Policy Management

File Action View Window Help

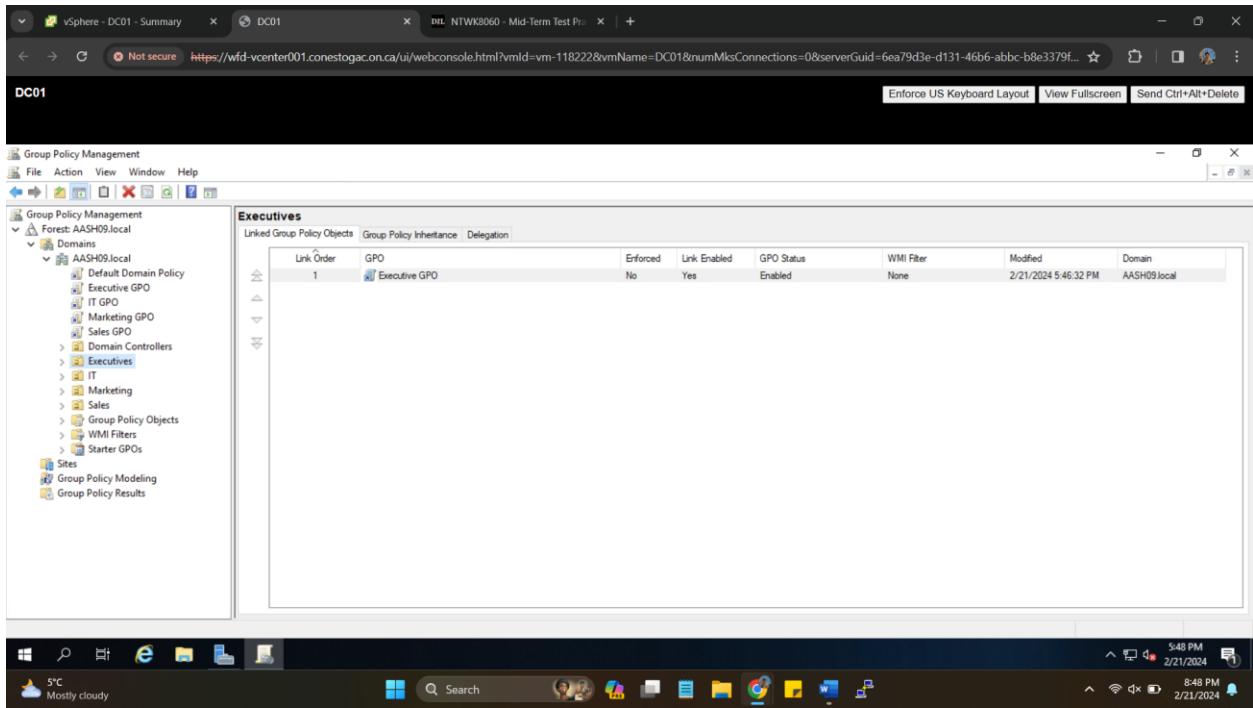
Sales

Link Order	GPO	Enforced	Link Enabled	GPO Status	WMI Filter	Modified	Domain
1	Sales GPO	No	Yes	Enabled	None	2/21/2024 5:46:07 PM	AASH09.local

5°C Mostly cloudy    5:48 PM 2/21/2024

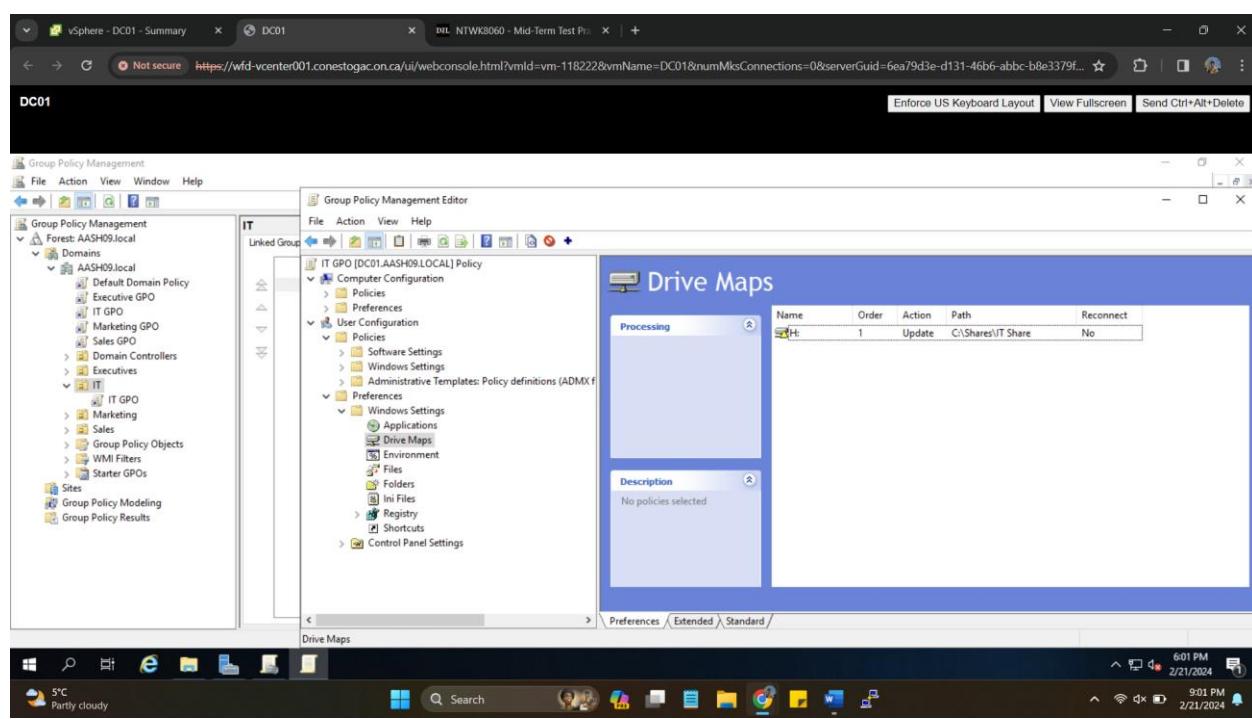
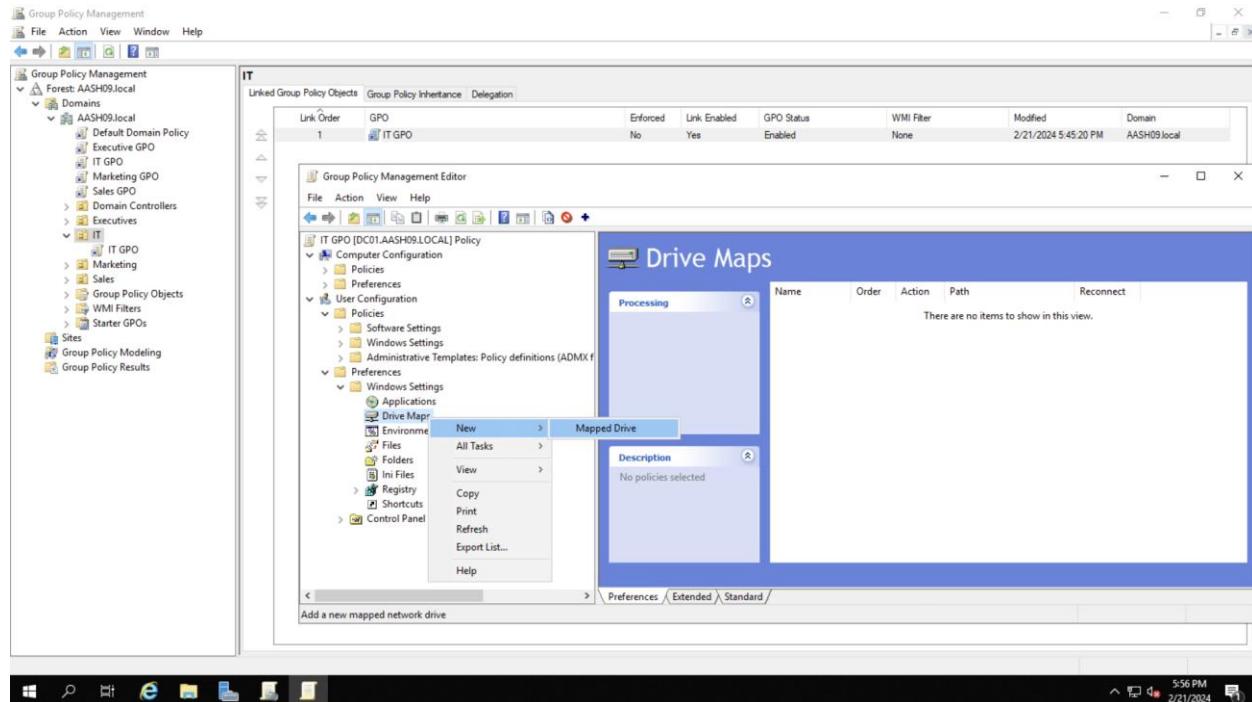
Search    Start button    File Explorer    Task View    Edge    Google Chrome    File    Settings    Control Panel    System

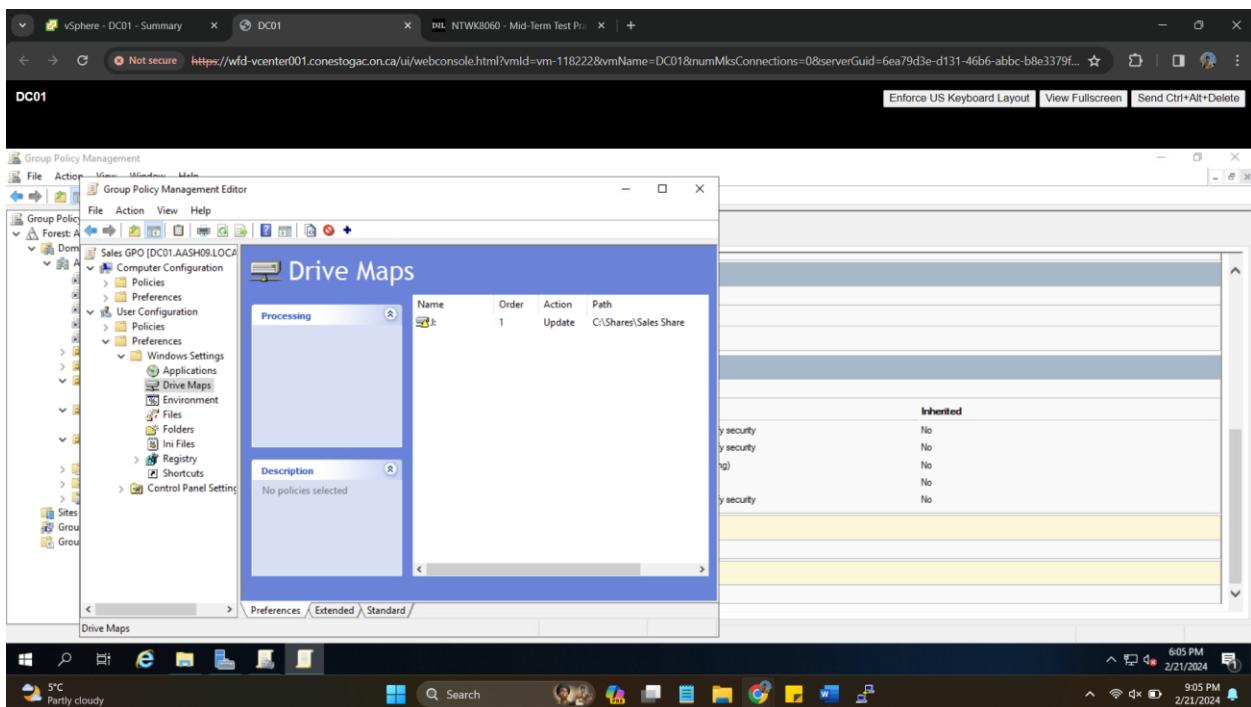
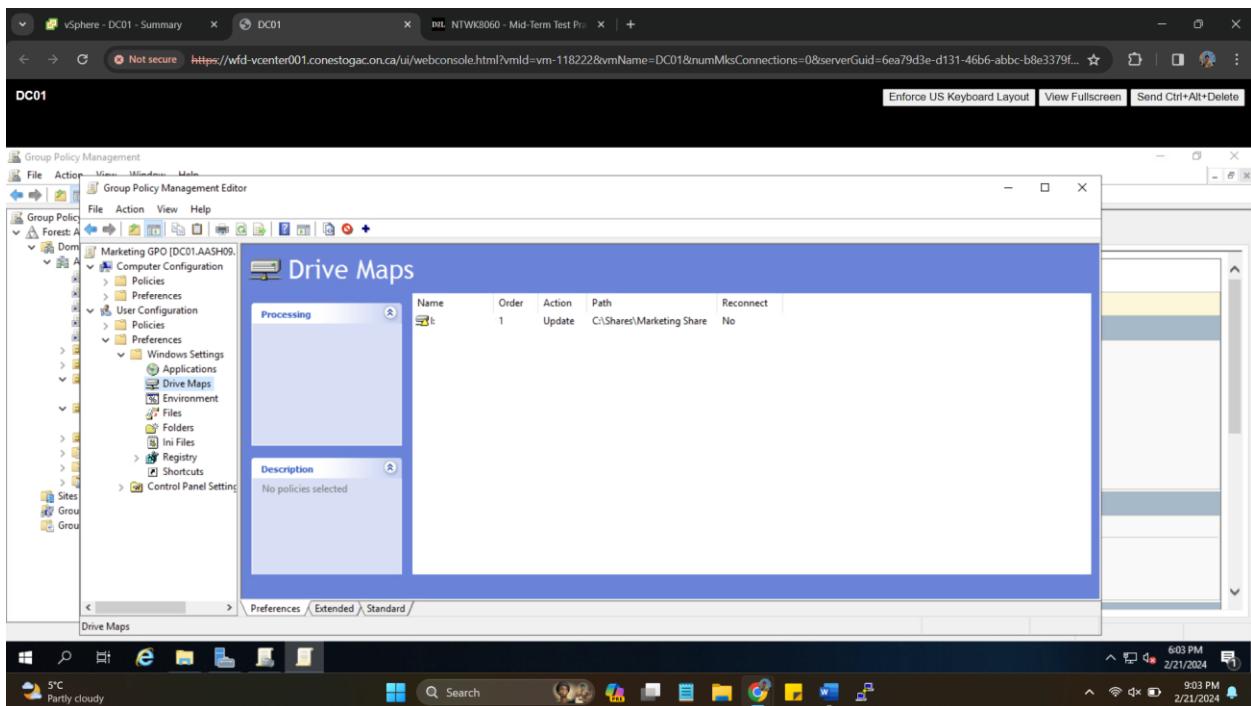
8:48 PM 2/21/2024

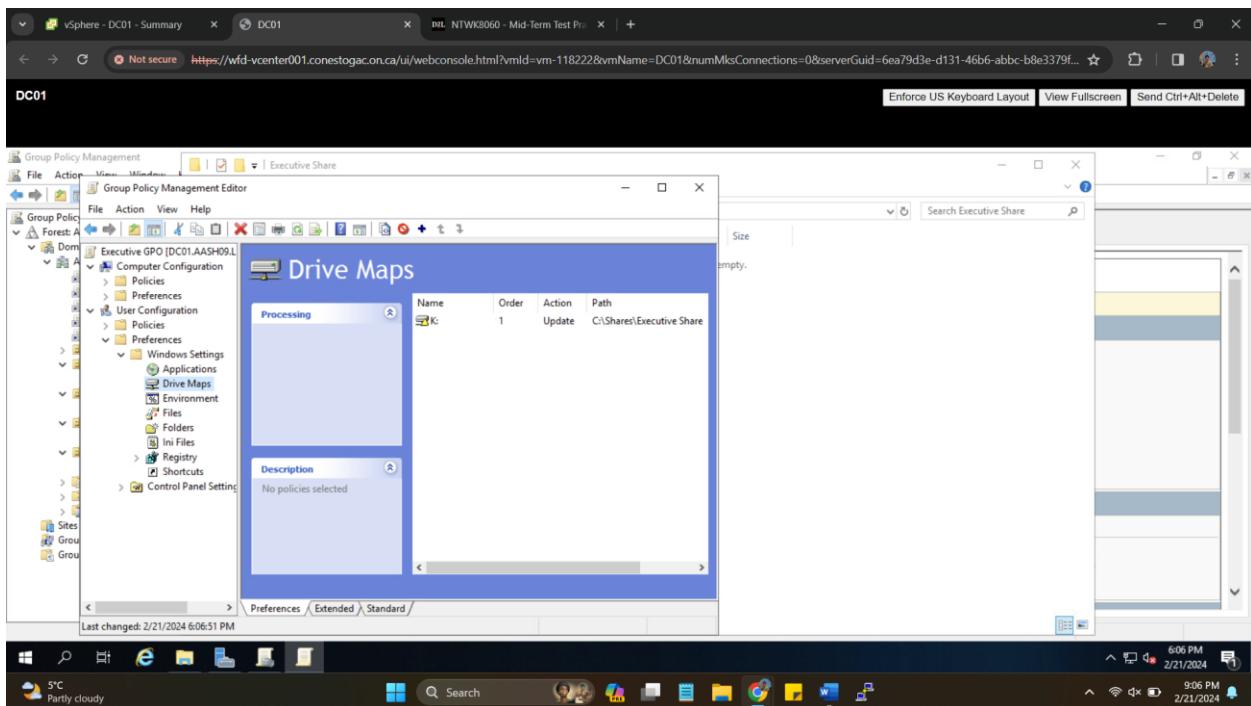


**2) Configure the GPO object settings per the below specifications.**

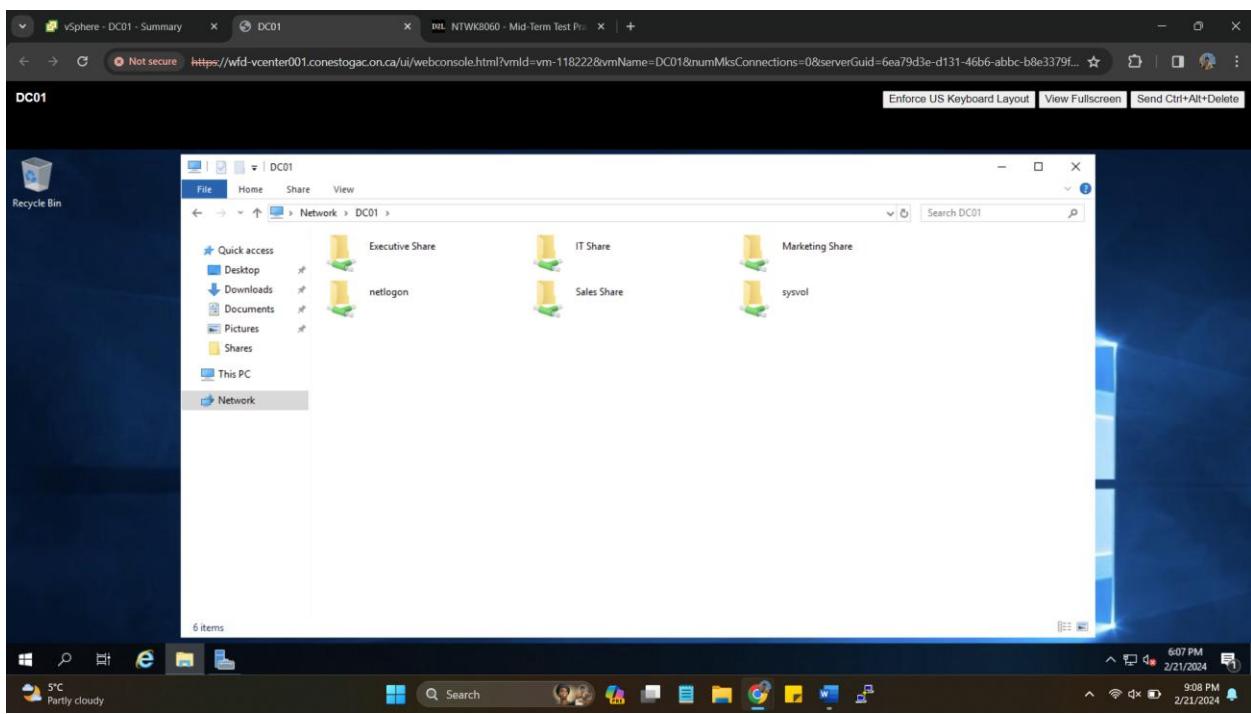
- IT – Maps the IT share
- Marketing – Maps the Marketing share
- Sales – Maps the Sales share
- Executives – Maps the Executives share





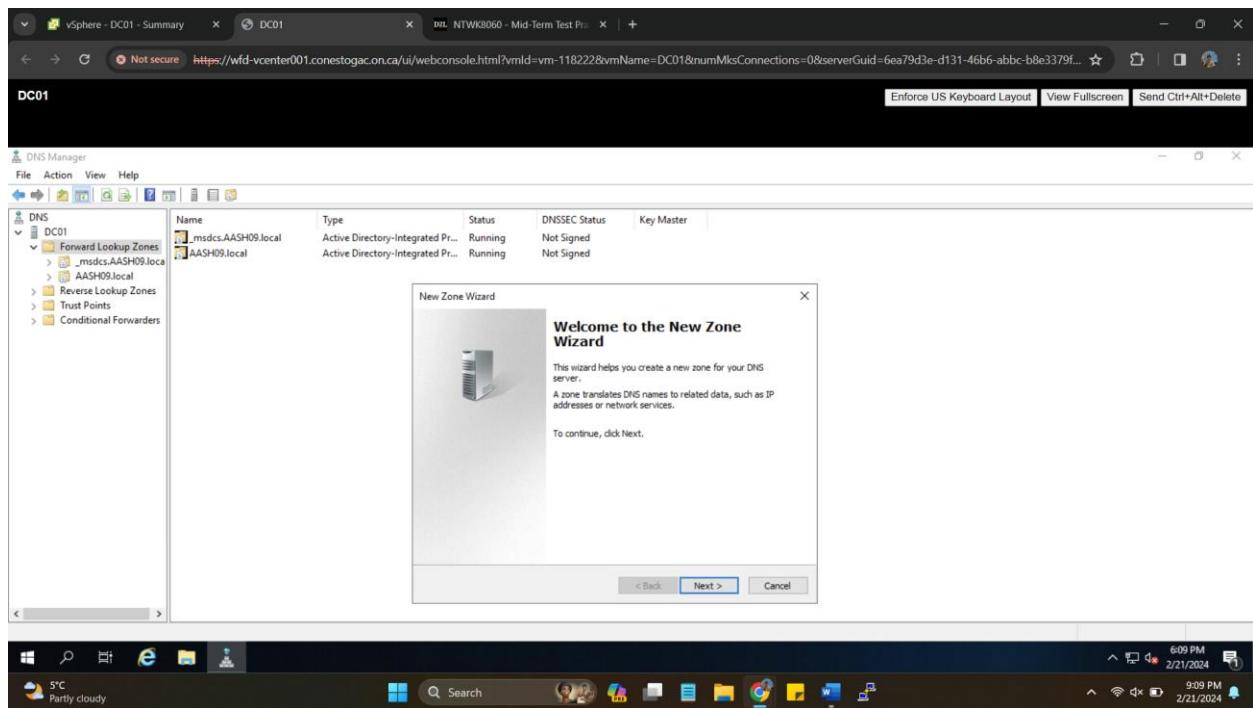


All respective drives mapped

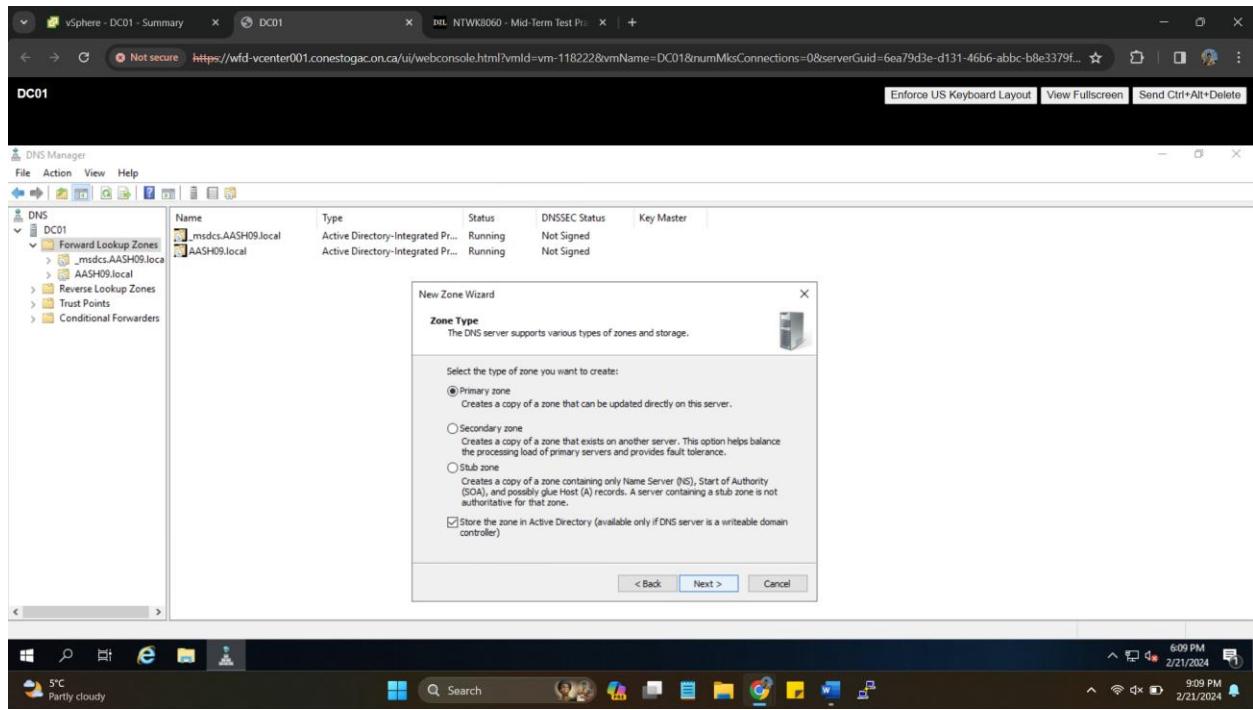


### 1) Create a forward lookup zone named acme.local.

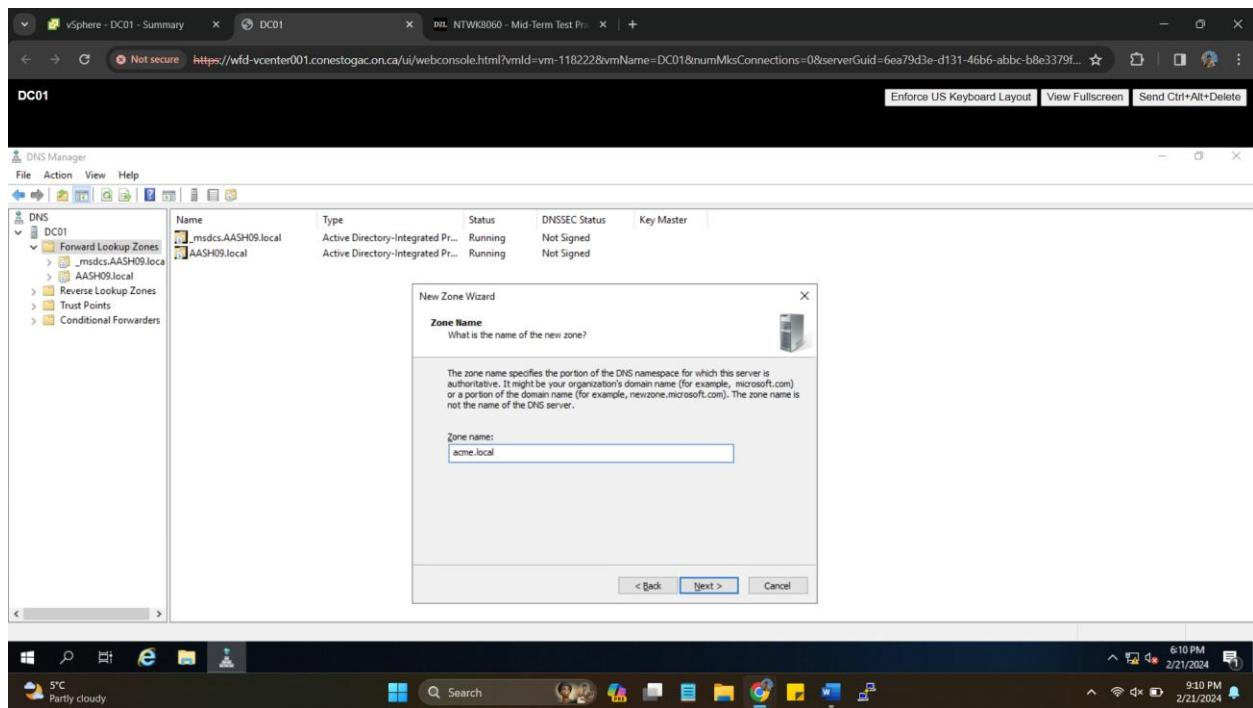
**Creating Forward Lookup zone as Acme.local**



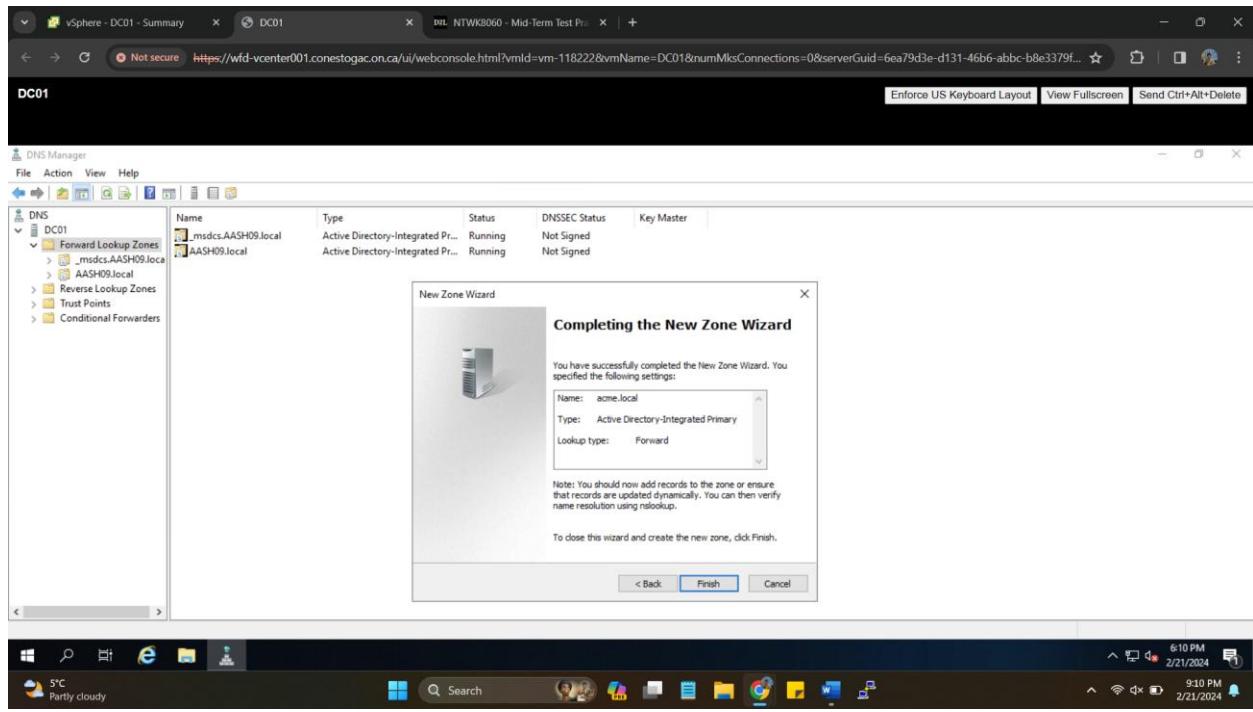
## Selecting Zone as Primary zone



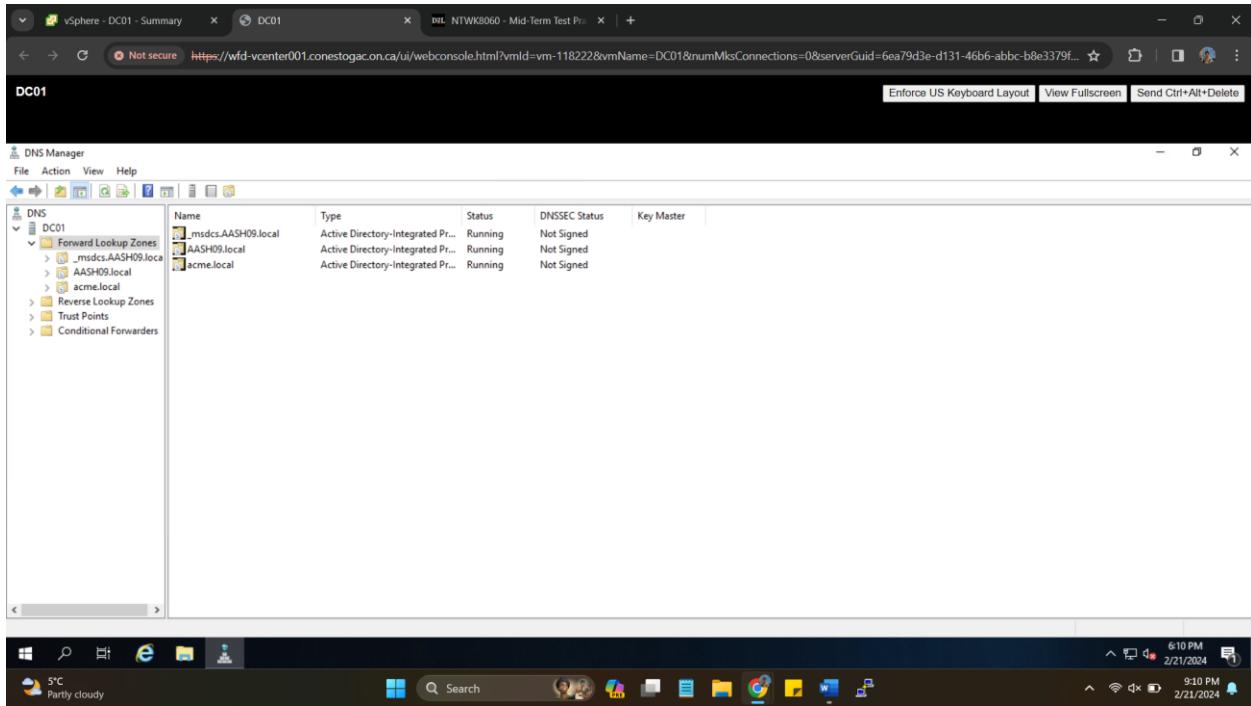
## Providing Zone name as acme.local



## Completion of zone creation

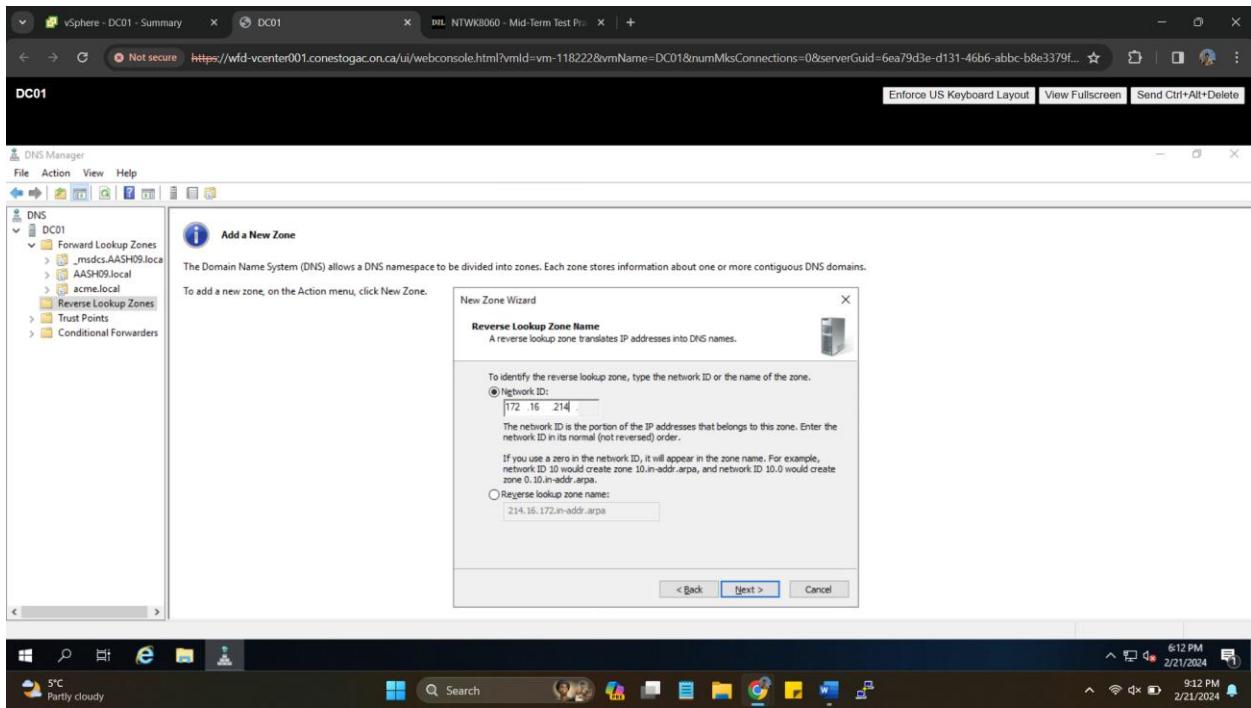


## Summary of Forward lookup zone created

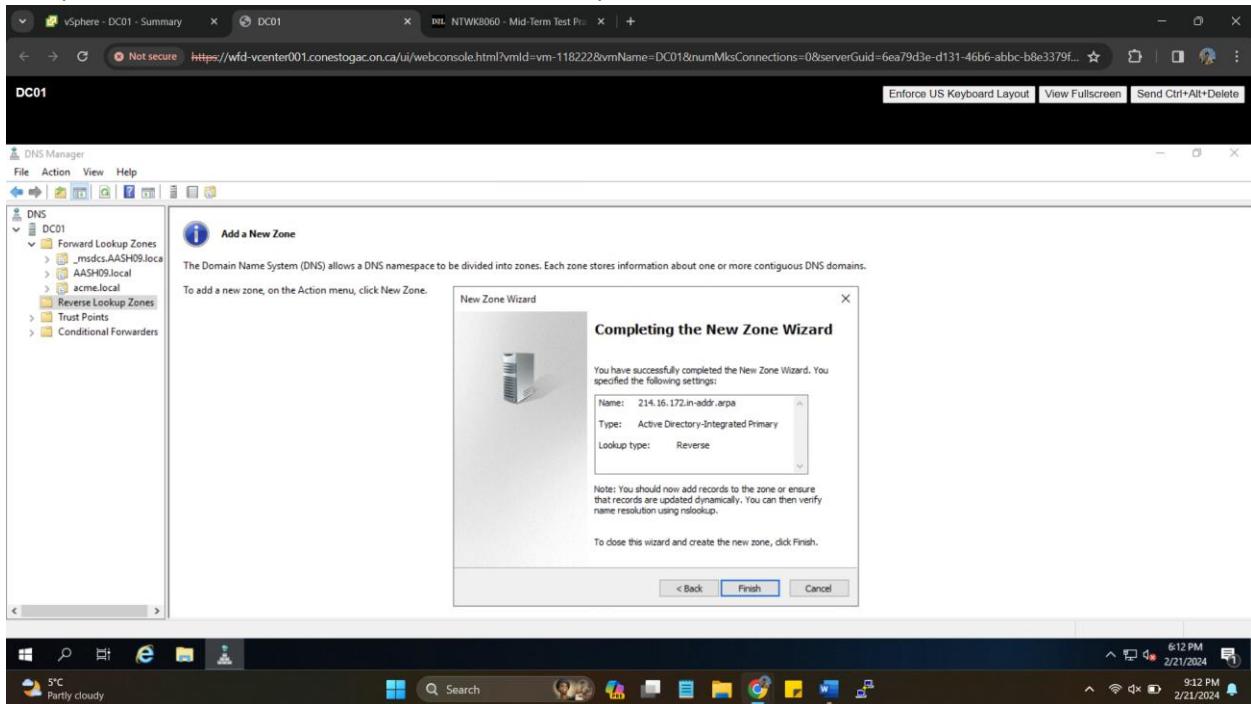


## 1) Create a reverse lookup zone for your com port IP range.

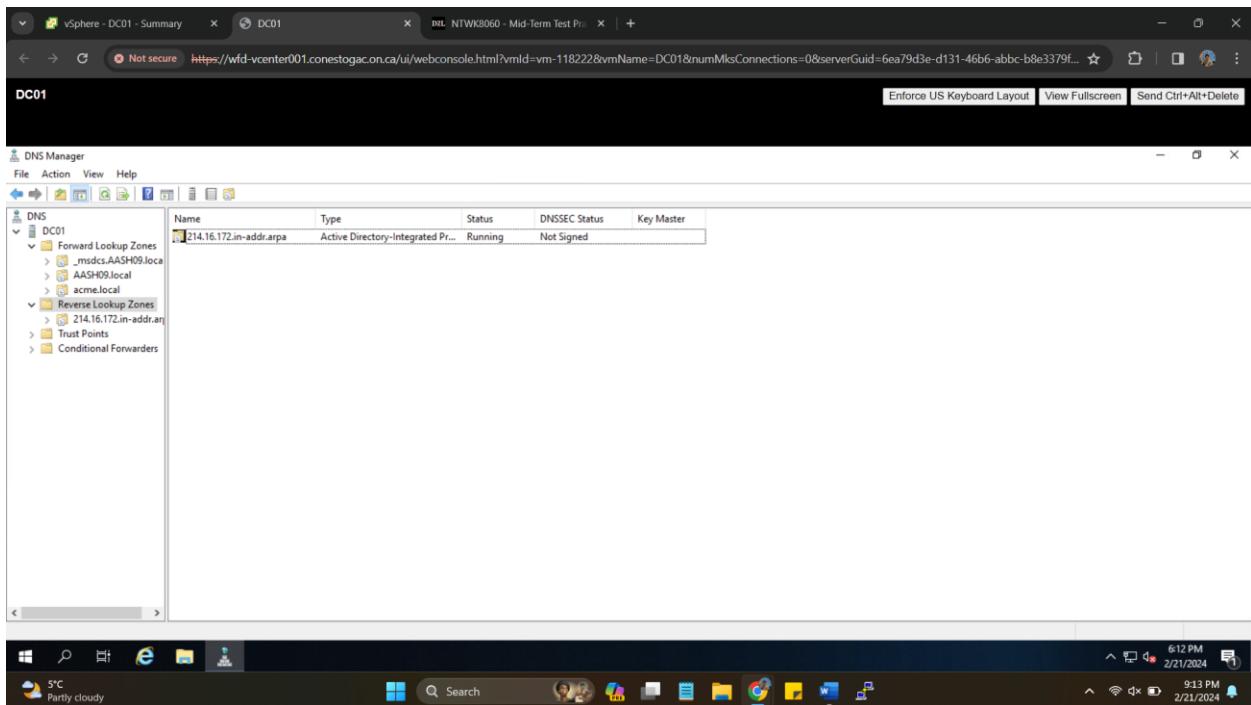
Creating reverse lookup zone with com port IP (214 range) 172.16.214.\*



## Completion of new zone creation in reverse lookup



## Summary details of reverse lookup zone created



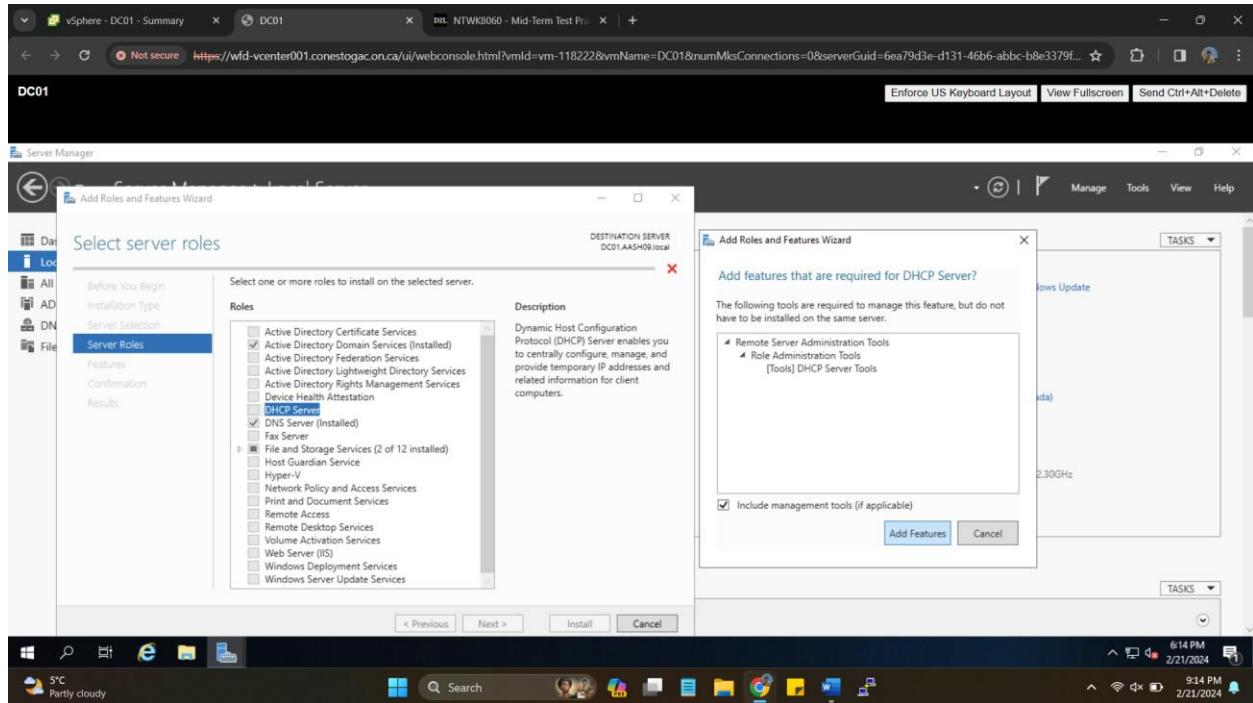
### 1) Install and configure the DHCP Role with the below scope.

Scope – 172.17.x.30 – 172.17.x.50

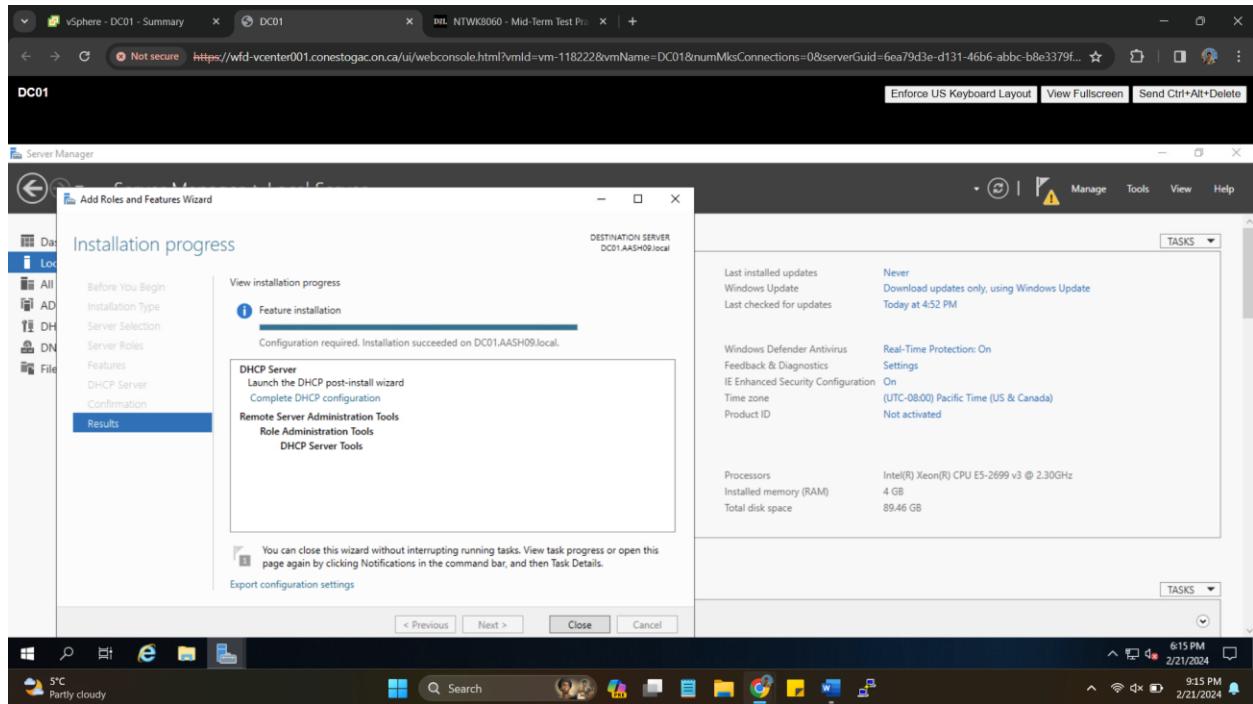
GW – 172.17.x.1

DNS – Domain Controller IP

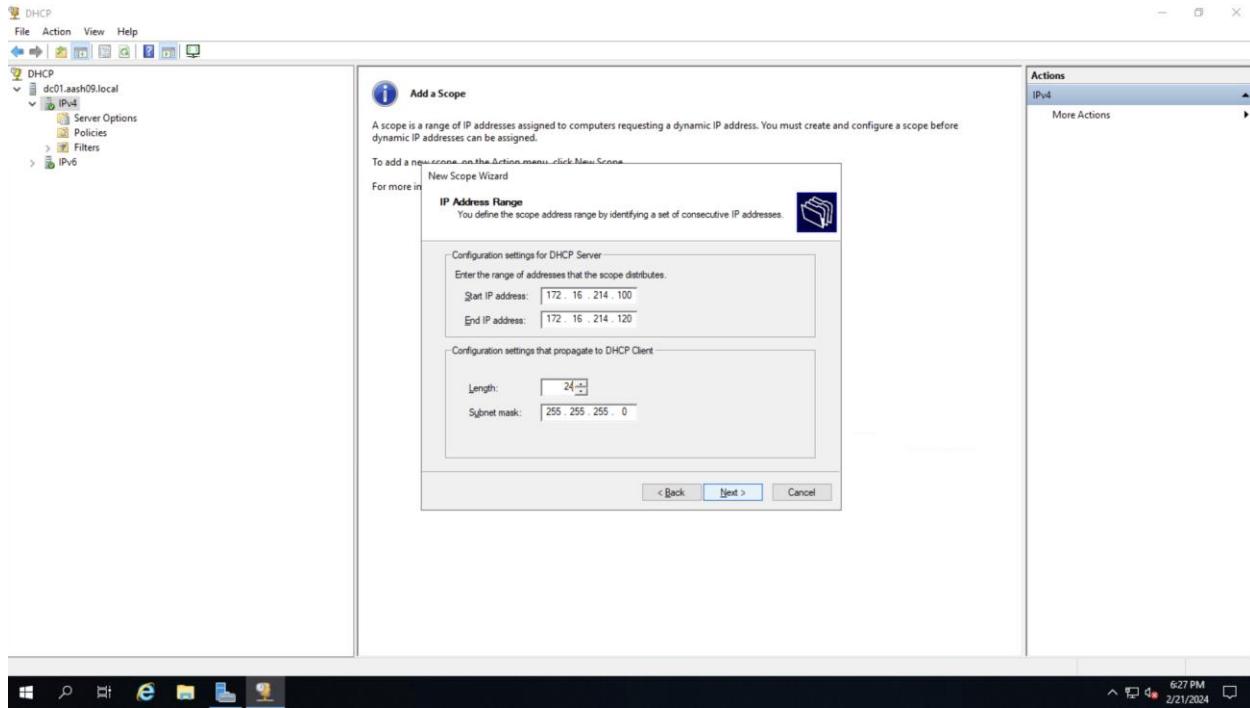
Adding DHCP feature to Domain Controller



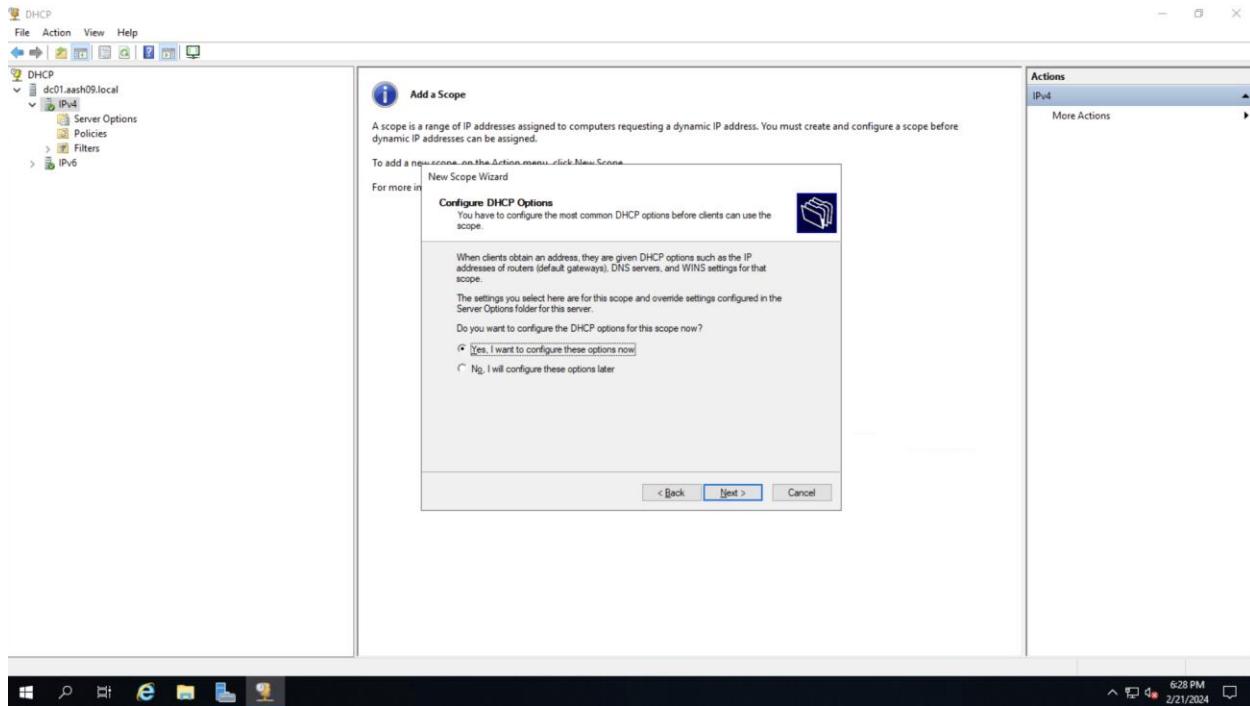
Successful installation of DHCP feature



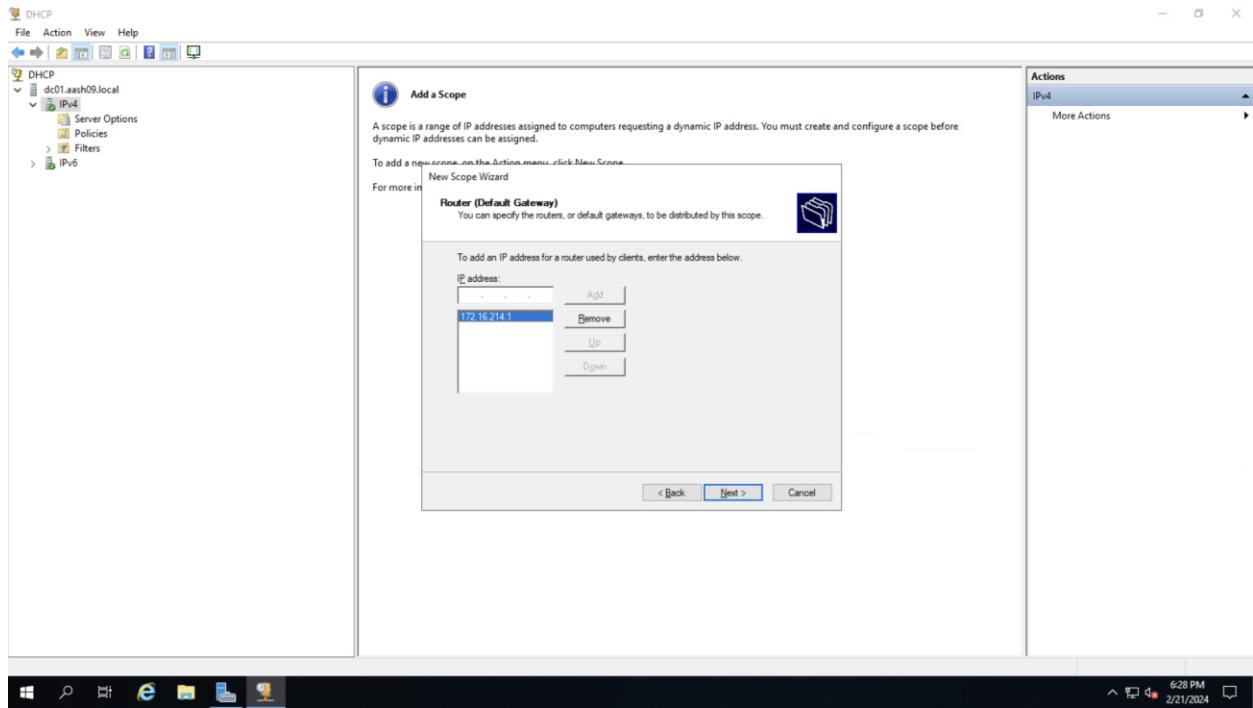
Configuring scope from 172.16.214.100 to 172.16.214.120



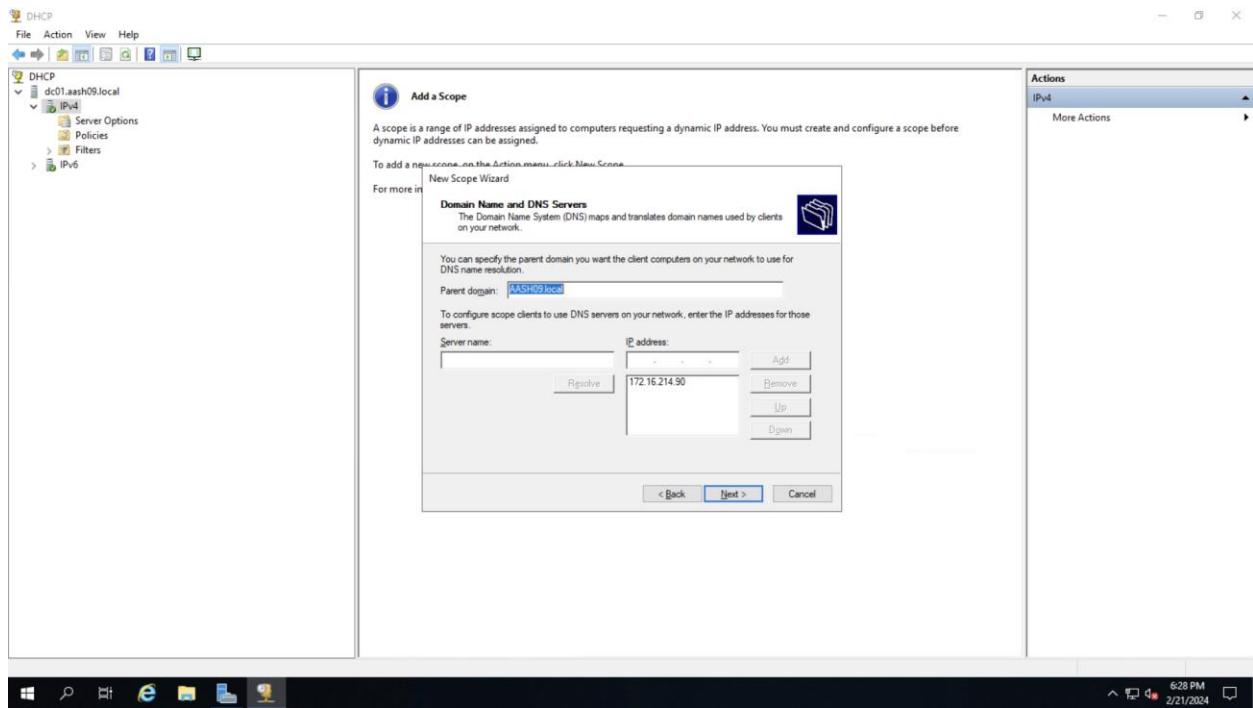
## Configuring DHCP scope



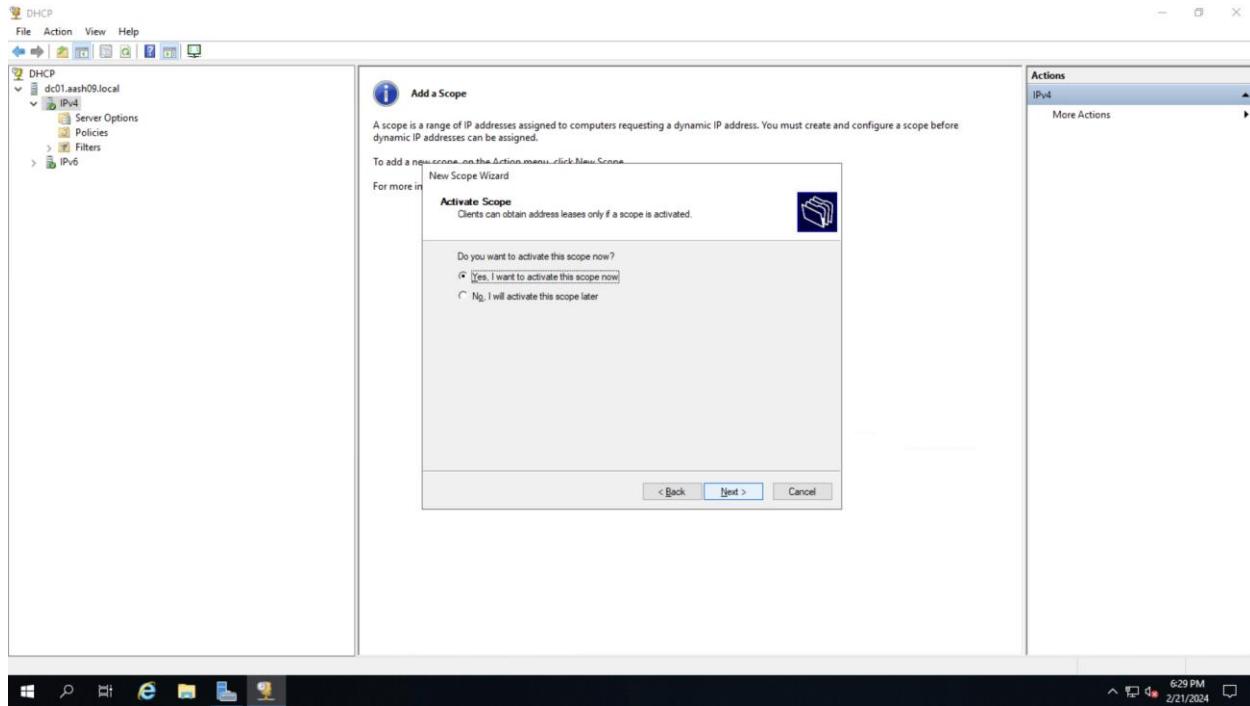
## Providing Router IP as default Gateway



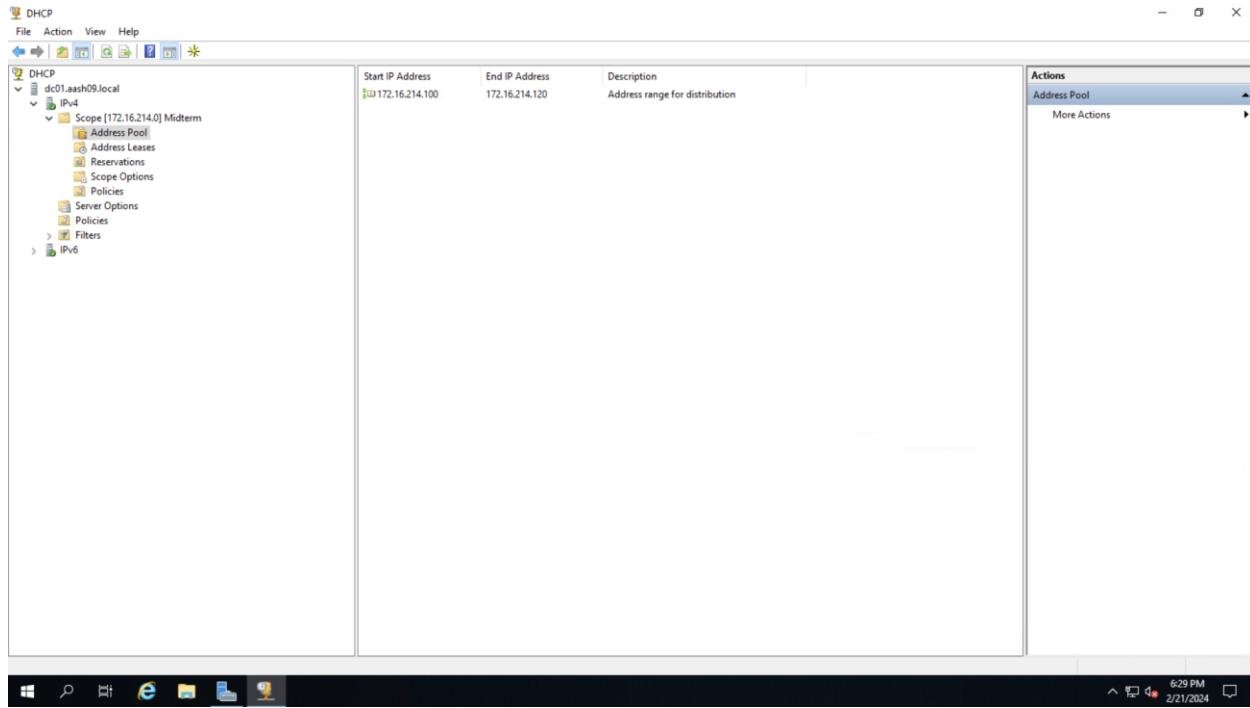
## Domain name details from domain controller



## Activating the defined scope to assign IP

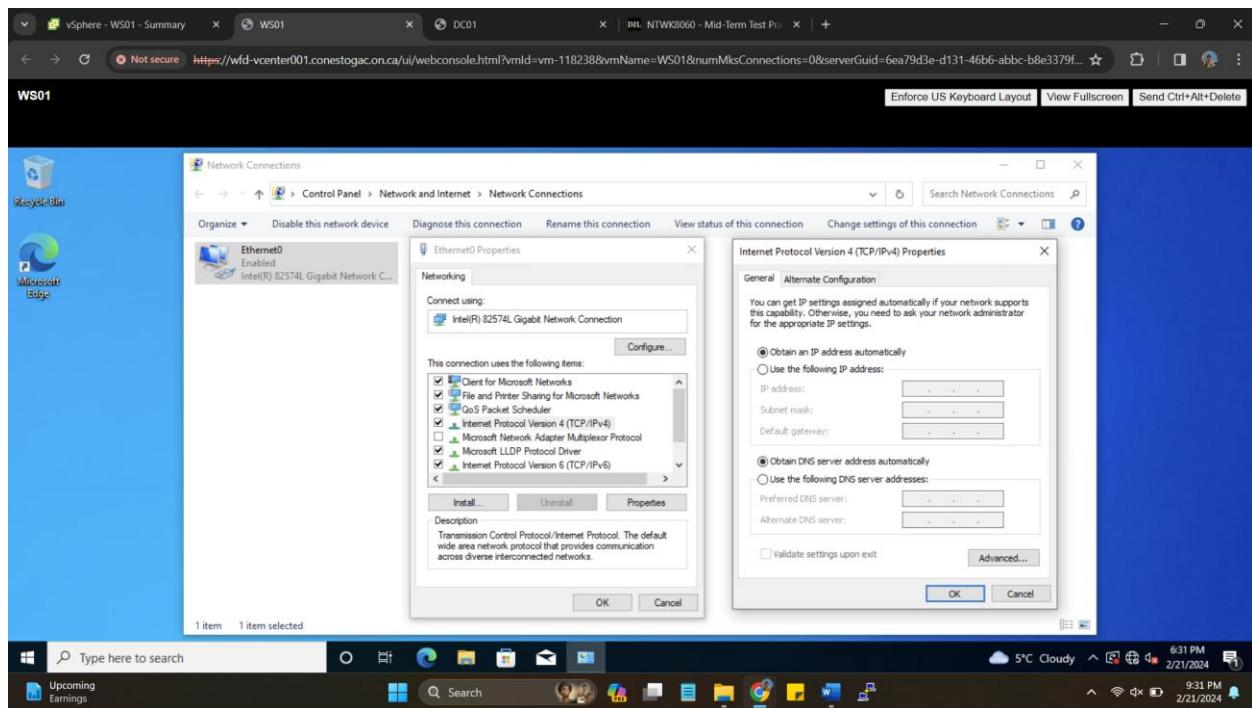


DHCP scope details of IPv4

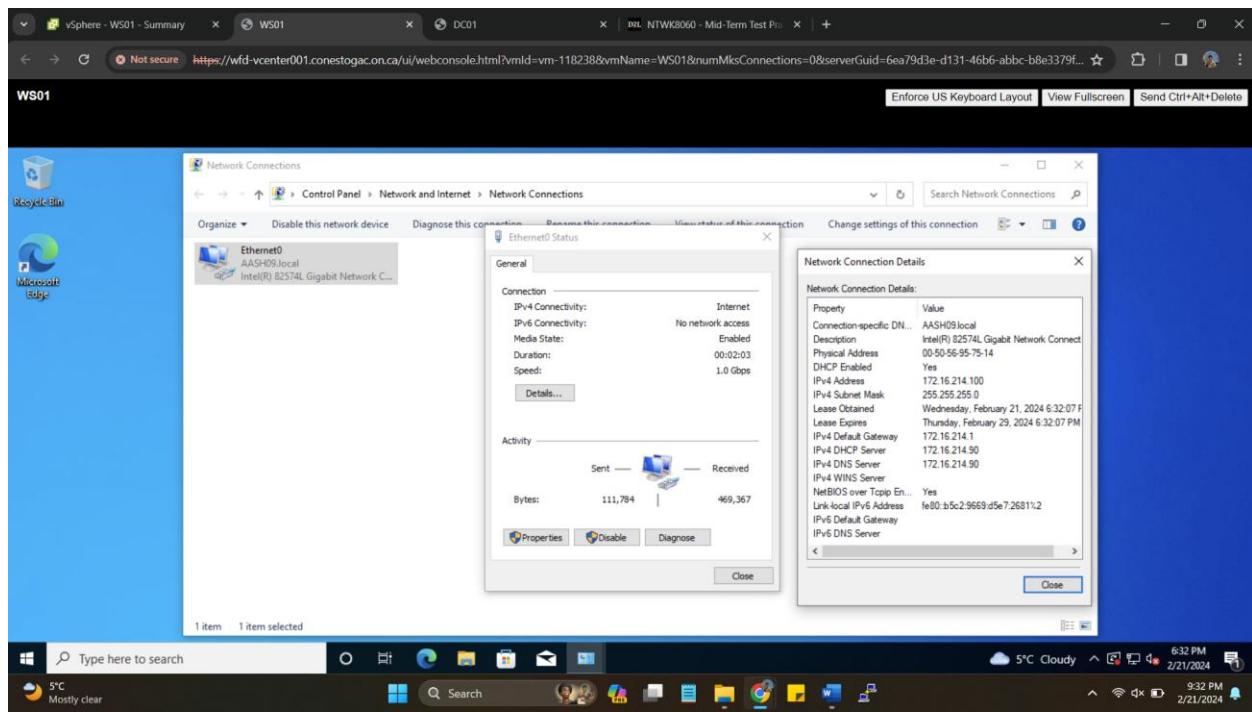


- 1) Set the Windows Workstation to DHCP and show it receiving an IP address from your DHCP Server.

**Switching Workstation to obtain IP address automatically**



IP received after DHCP enabled as : 172.16.214.100



Command Prompt IP details as IP fetched from DHCP scope

Administrator: Command Prompt

```
Microsoft Windows [Version 10.0.19044.1288]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\system32>ipconfig /all

Windows IP Configuration

Host Name . . . . . : WS01
Primary Dns Suffix . . . . . : AASH09.local
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : AASH09.local

Ethernet adapter Ethernet0:

Connection-specific DNS Suffix . : AASH09.local
Description . . . . . : Intel(R) Dual Band Wireless-AC 7265NGW
Physical Address . . . . . : 00-50-56-95-75-14
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::b5c2:9669:dse7:2681%2(PREFERRED)
IPv4 Address . . . . . : 172.16.214.100(PREFERRED)
Subnet Mask . . . . . : 255.255.255.0
Lease Obtained. . . . . : Wednesday, February 21, 2024 6:32:07 PM
Lease Expires . . . . . : Thursday, February 29, 2024 6:32:07 PM
Default Gateway . . . . . : 172.16.214.1
DHCP Server . . . . . : 172.16.214.90
DHCPv6 IAID . . . . . : 100683862
DHCPv6 Client DUID. . . . . : 00-01-00-01-2D-68-BF-63-00-50-56-95-75-14
DNS Servers . . . . . : 172.16.214.90
NetBIOS over Tcpip. . . . . : Enabled

C:\Windows\system32>
```

Type here to search

Rain tomorrow 6:33 PM 2/21/2024

5°C Mostly clear

Search

9:33 PM 2/21/2024

IP assigned to workstation details from Domain Controller → DHCP

DHCP

Client IP Address	Name	Lease Expiration	Type	Unique ID	Description	Network Access Protection	Probation Expiration
172.16.214.100	WS01.AASH09.local	2/29/2024 6:32:07 PM	DHCP	005056957...		Full Access	N/A

Actions

- Address Leases
- More Actions

Type here to search

6:34 PM 2/21/2024

5°C Mostly clear

Search

9:34 PM 2/21/2024