



# CONESTOGA

Connect Life and Learning

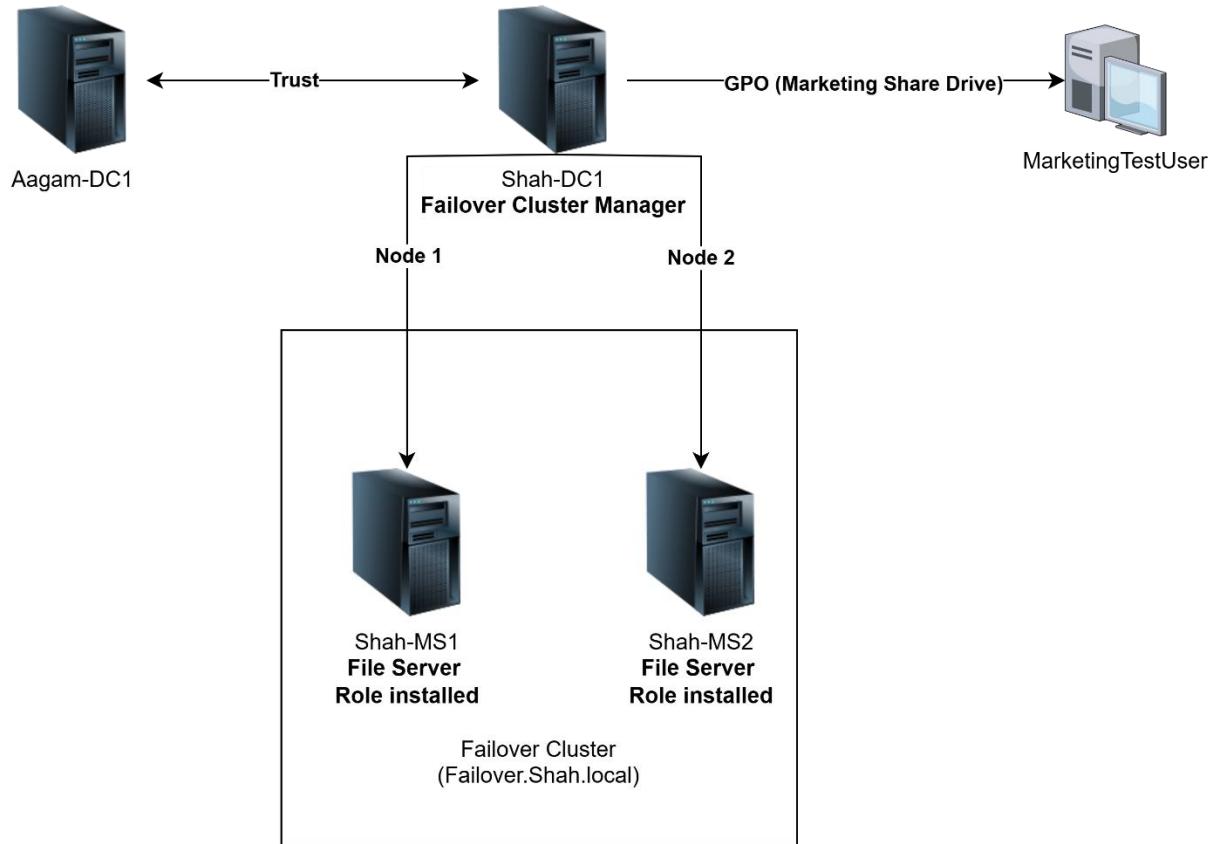
<b>Student Name:</b>	Aagam Sanjay Shah
<b>Deliverable:</b>	Assignment
<b>Course Name:</b>	NTWK8201-24F-Sec2-Advanced Windows Desktop

<b>Date Assigned:</b>	29/10/2024
<b>Date Due:</b>	30/10/2024
<b>Rules:</b>	<ul style="list-style-type: none"><li>• Individual.</li><li>• Cheating is not allowed.</li><li>• Plagiarism counts as cheating!</li><li>• That FAILURE to submit work in the course can result in a grade of 'F' or 'I' for failure to complete the course!</li></ul>

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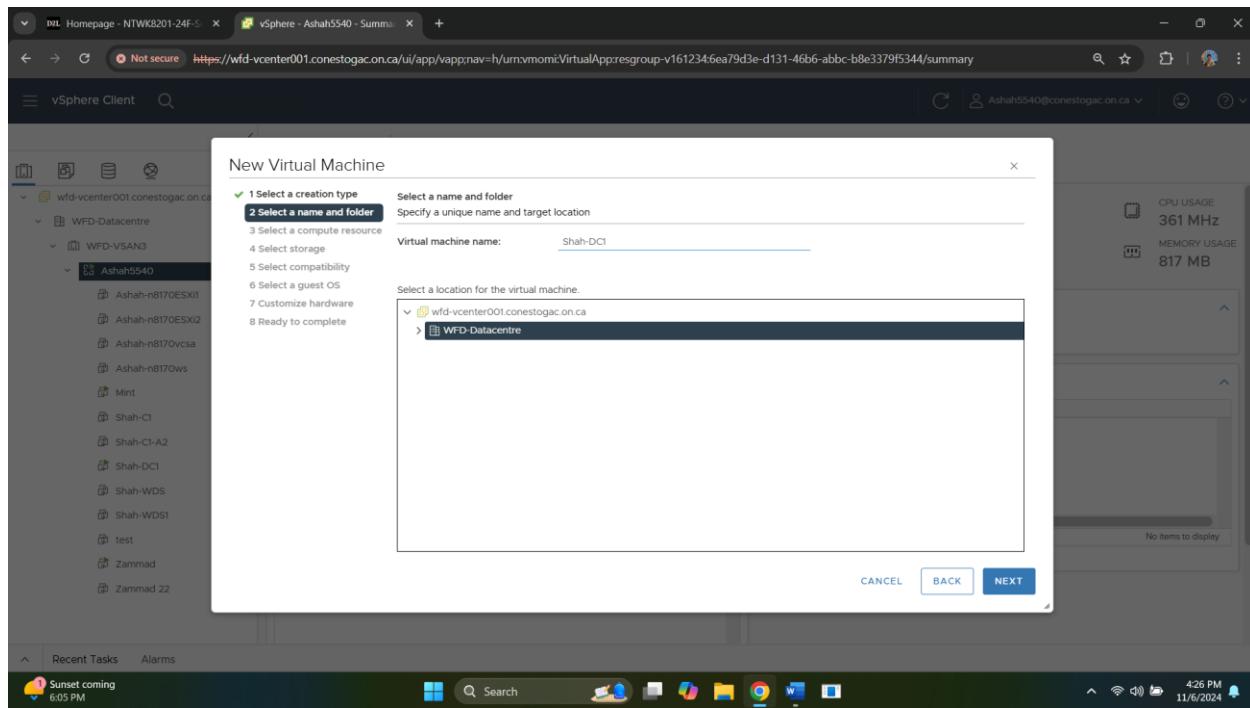
## Design Diagram



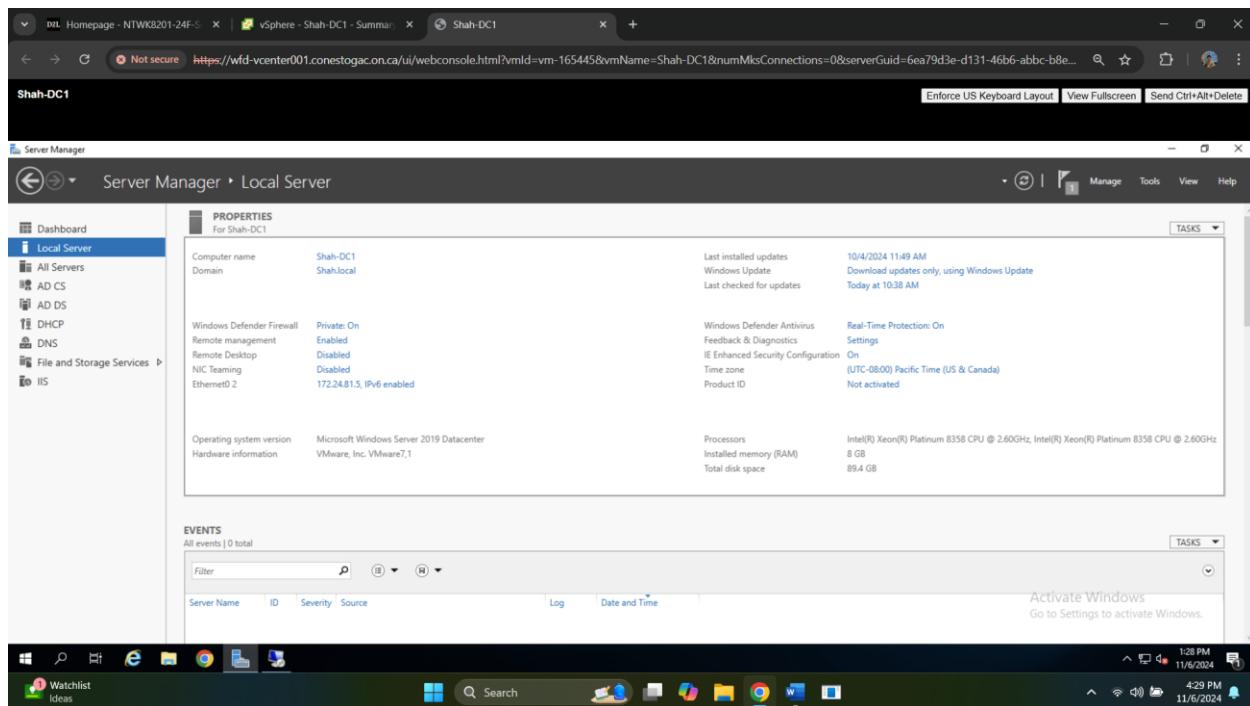
## Practical Assignment 3

### Part 1: Trusts

Install your first Windows Server with the hostname Shah-DC1.

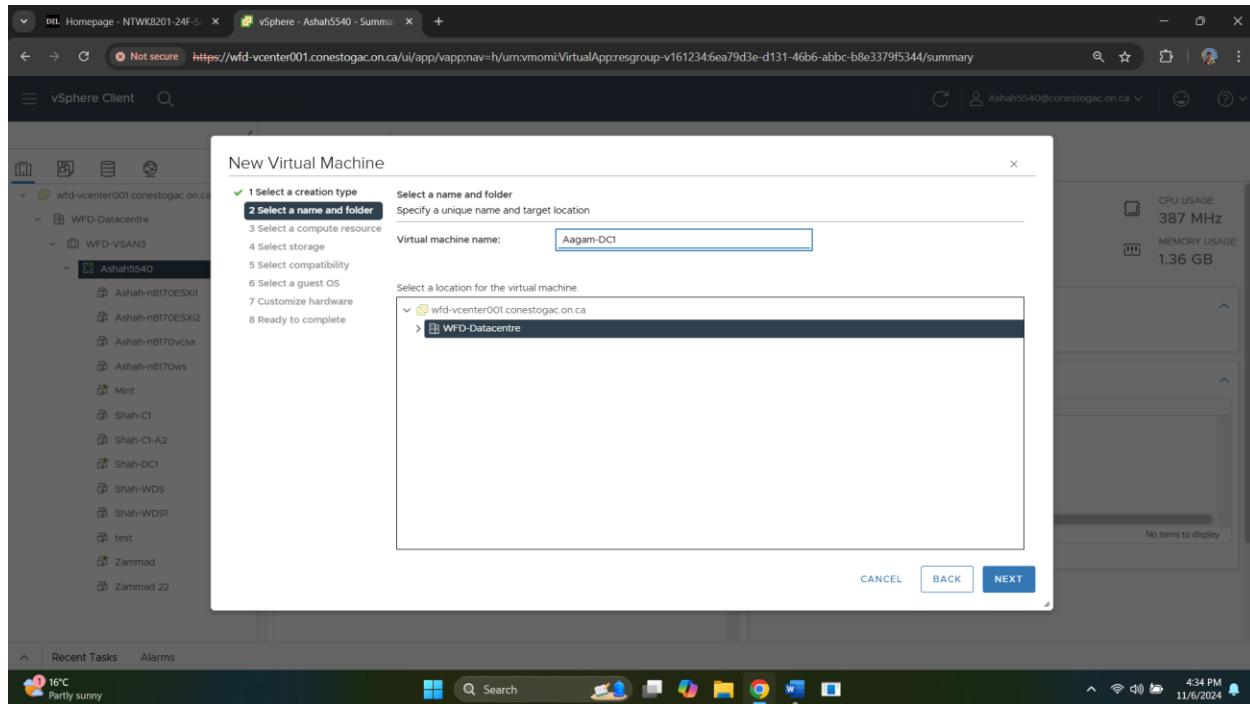


Promote your first Windows Server to a domain controller with domain name Shah.local.

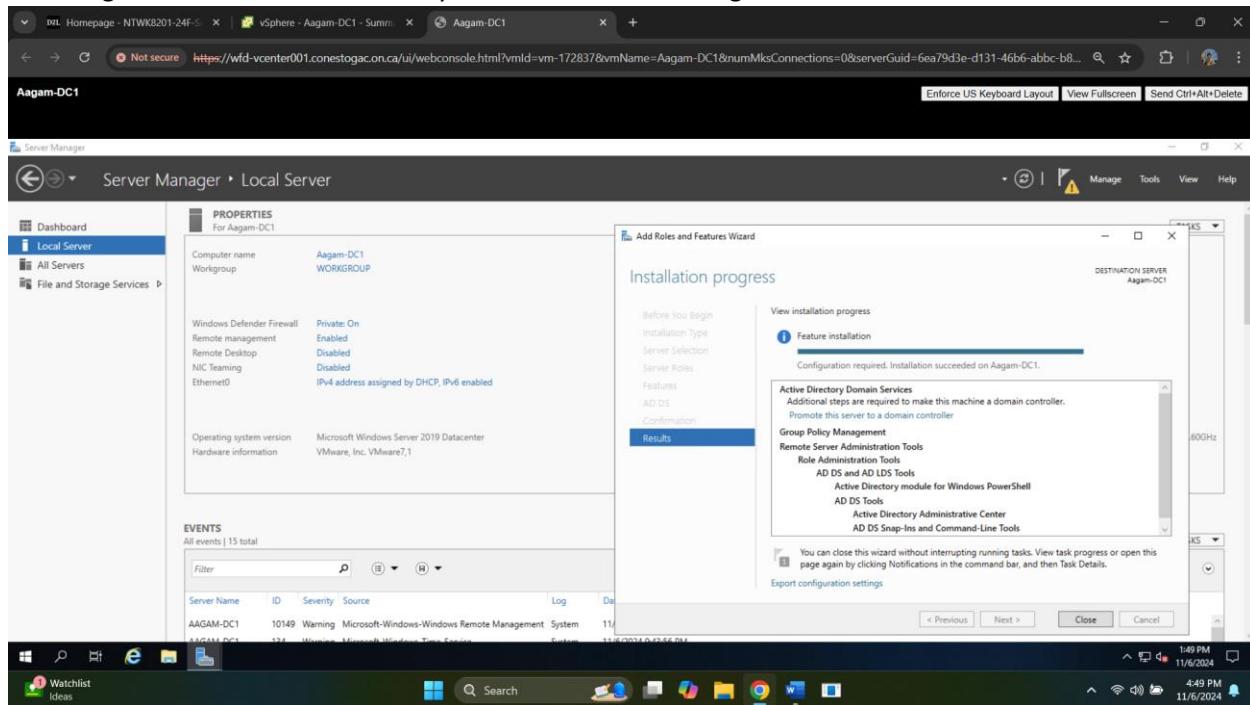


## Practical Assignment 3

### Install your second Windows Server with hostname Aagam-DC1.

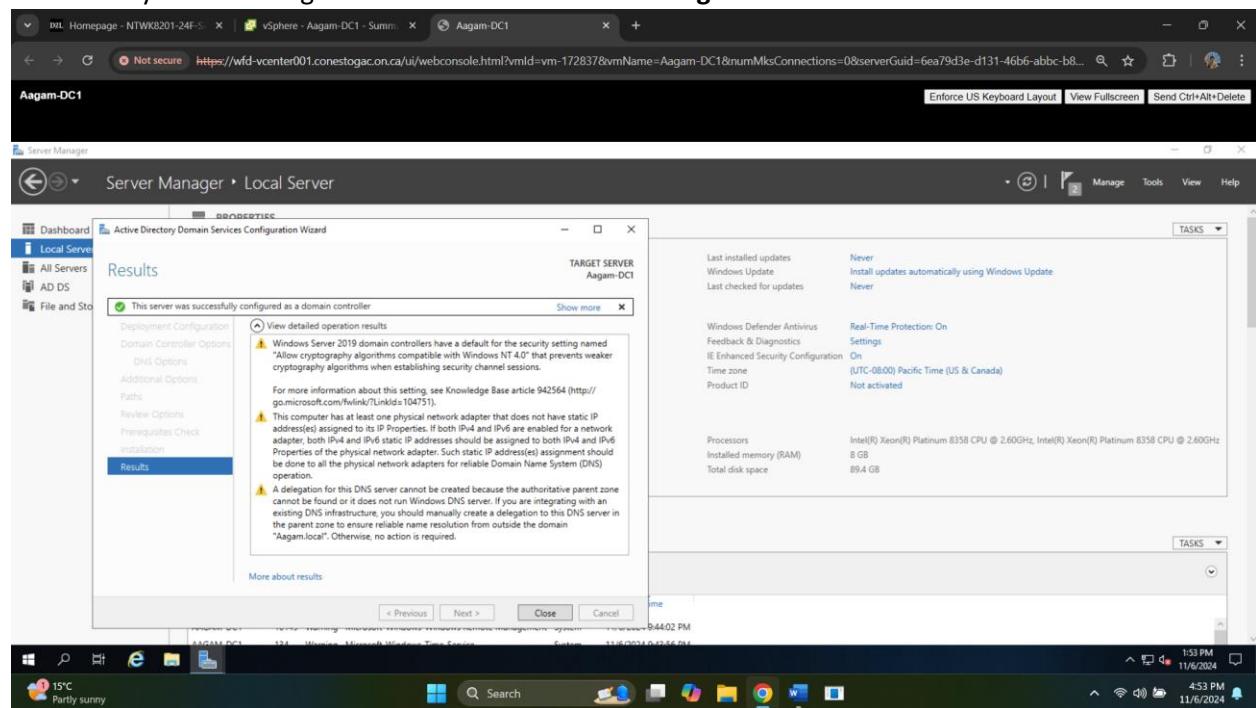


### Installing features of Active Directory Domain Services on Aagam-DC1 server.



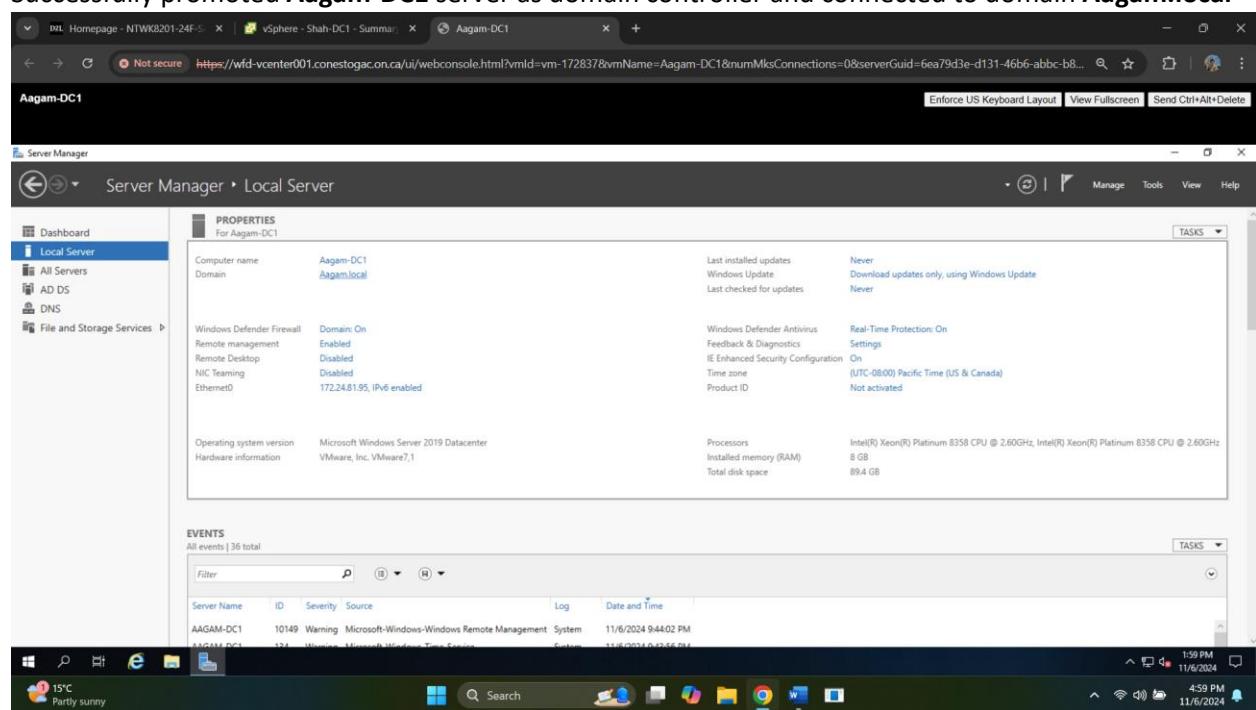
## Practical Assignment 3

Successfully server configured as domain controller → Aagam-DC1



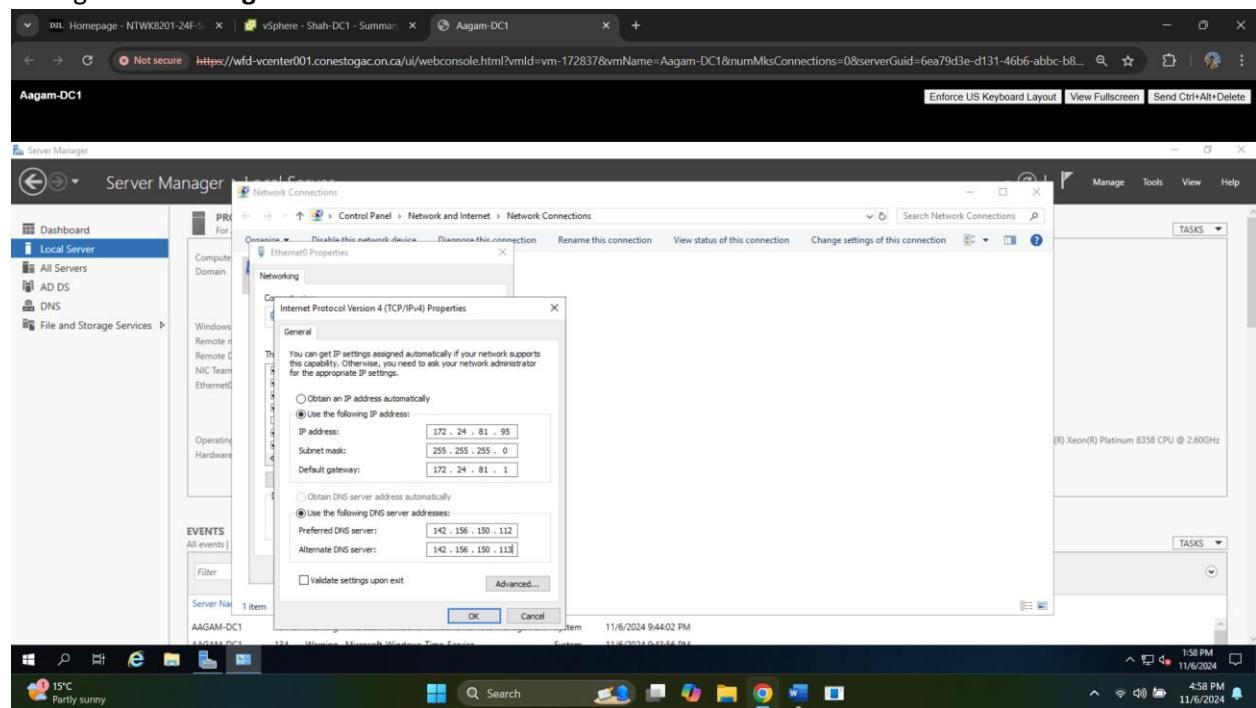
Promote your second Windows Server to a domain controller with domain name Aagam.local.

Successfully promoted Aagam-DC1 server as domain controller and connected to domain Aagam.local



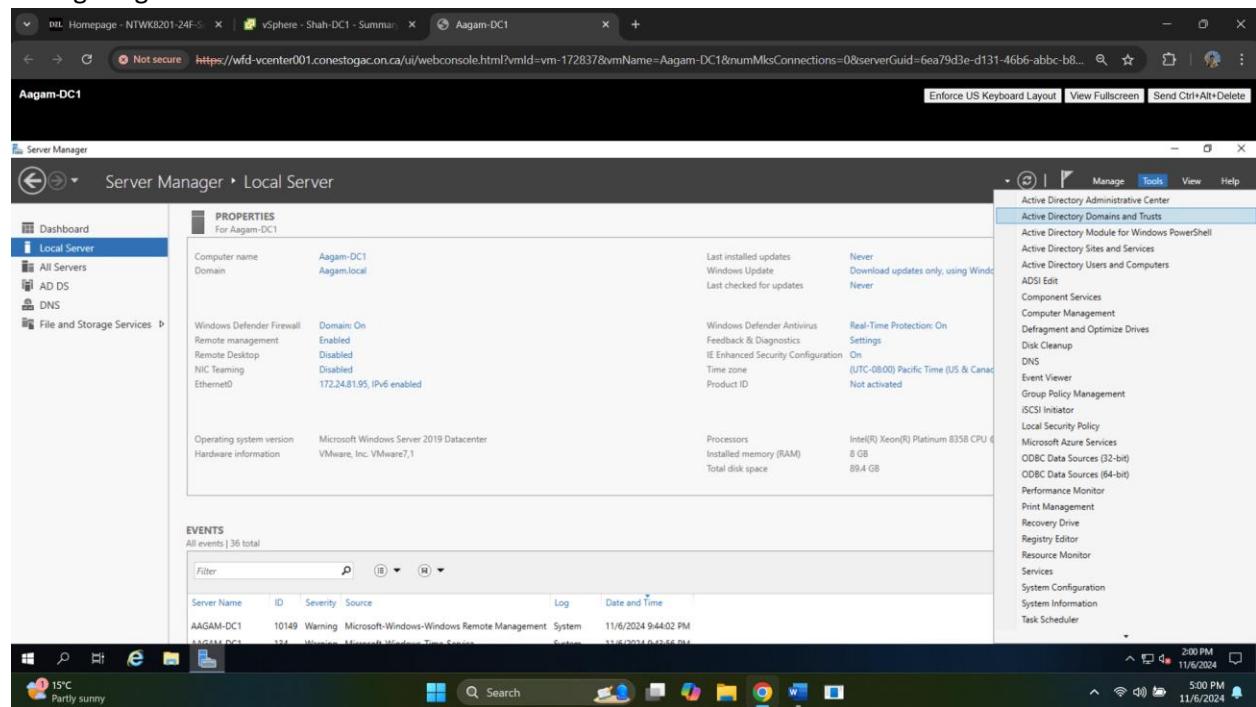
## Practical Assignment 3

### Configured IP of Aagam-DC1 server as 172.24.81.95



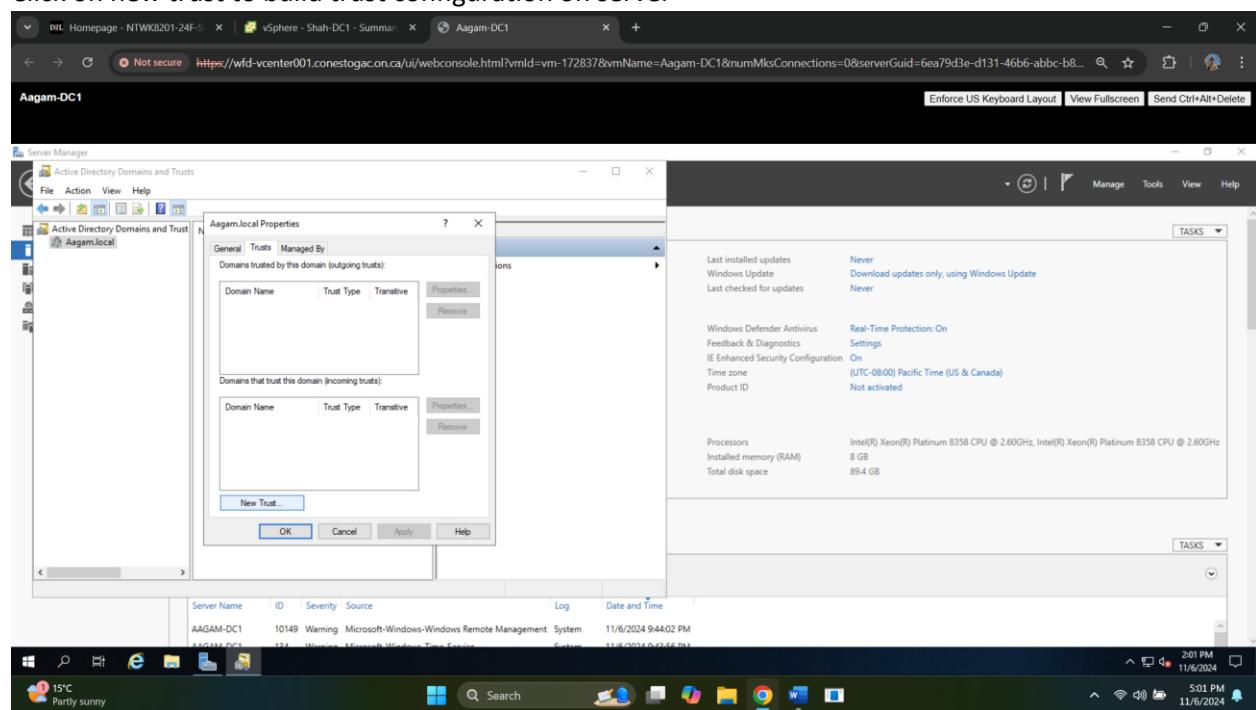
### Create a two-way trust between the forests and test that it works.

Configuring trust between 2 domain controllers.

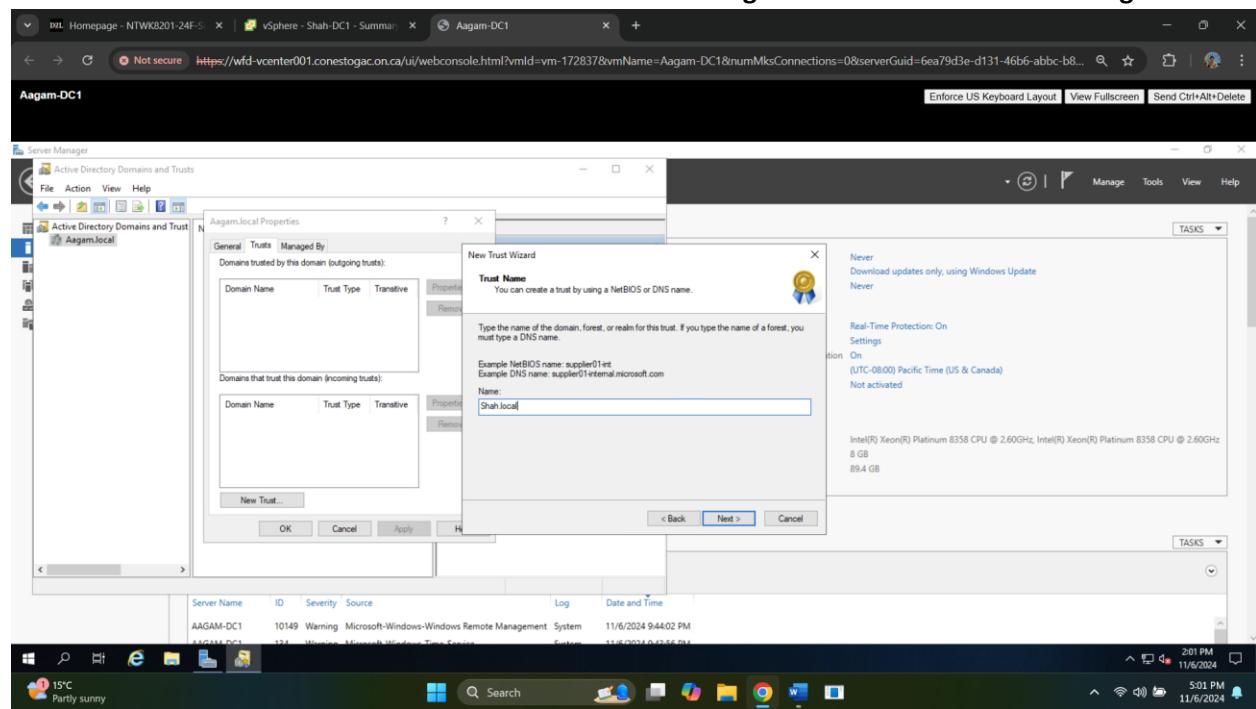


## Practical Assignment 3

Click on new trust to build trust configuration on server

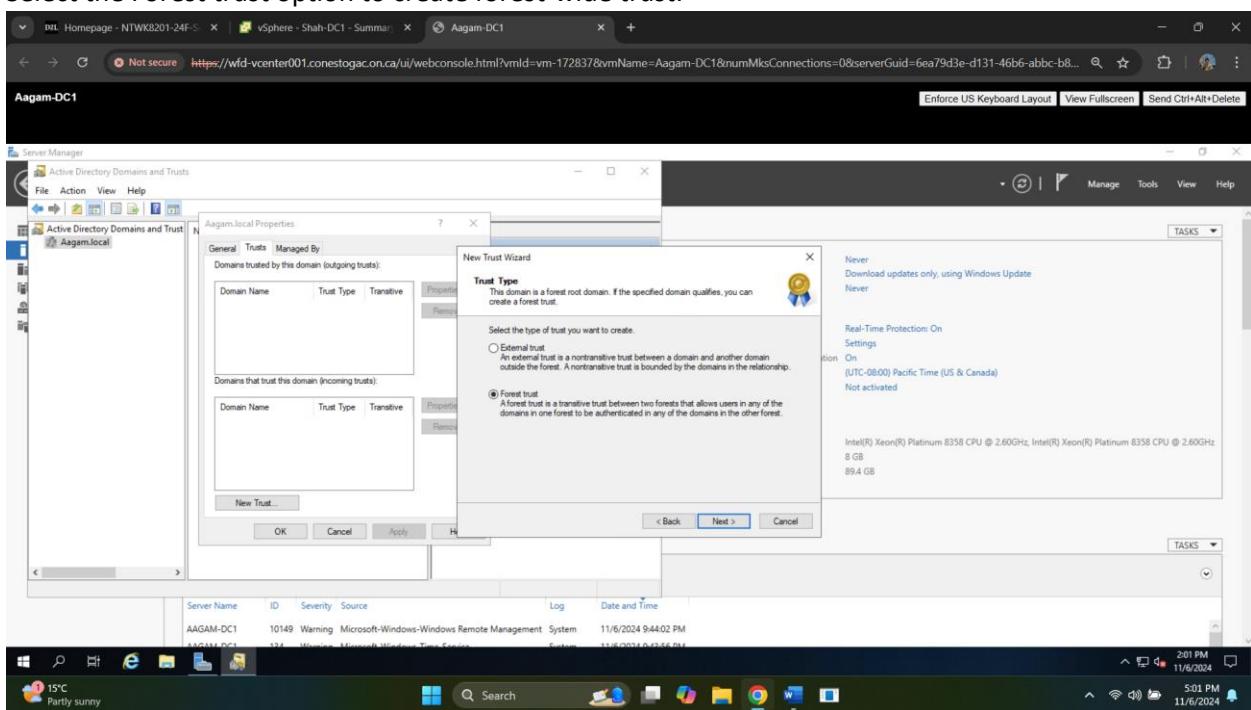


Provide domain name to create trust with “Shah.local” on Aagam.local domain controller Aagam-DC1

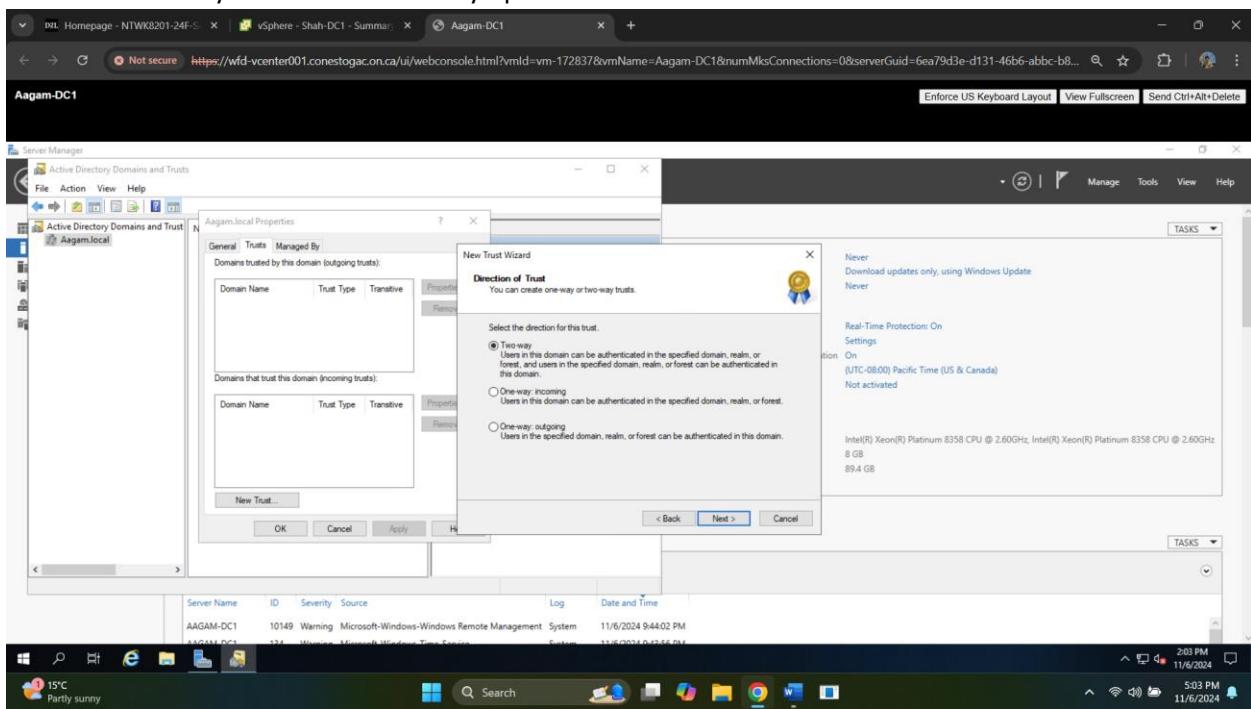


## Practical Assignment 3

Select the Forest trust option to create forest-wide trust.

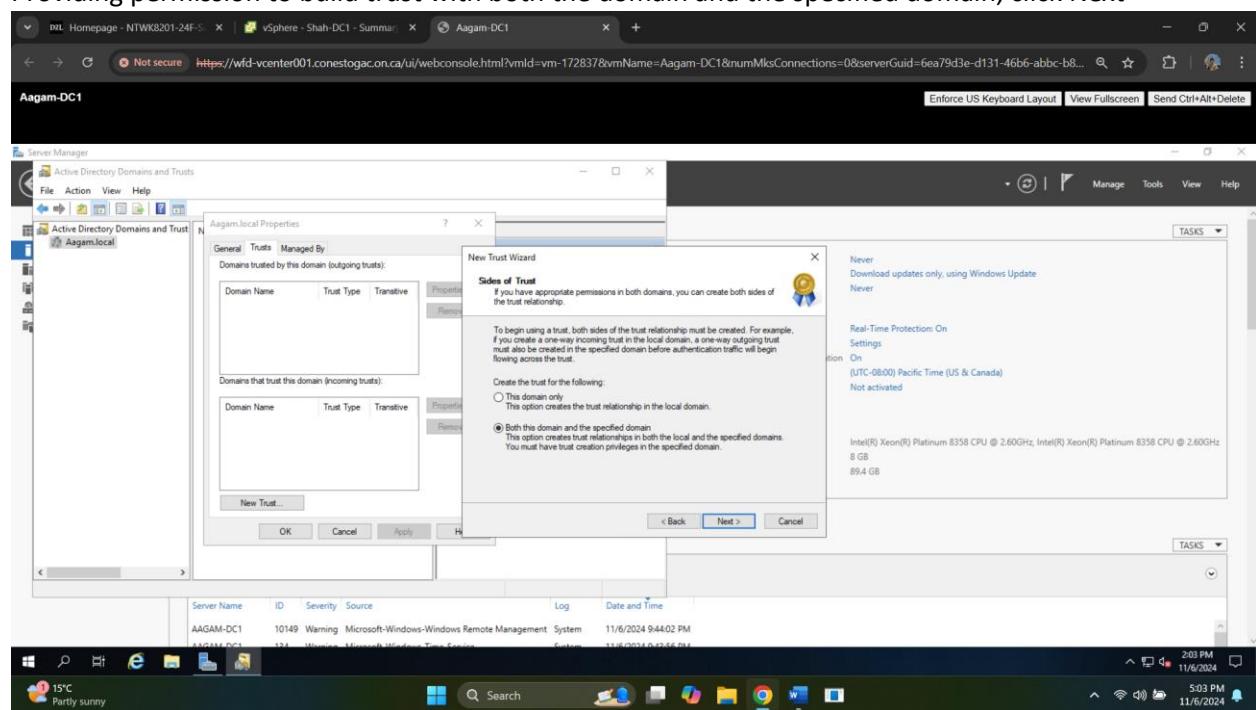


To establish 2-way trust select Two-way option and click next

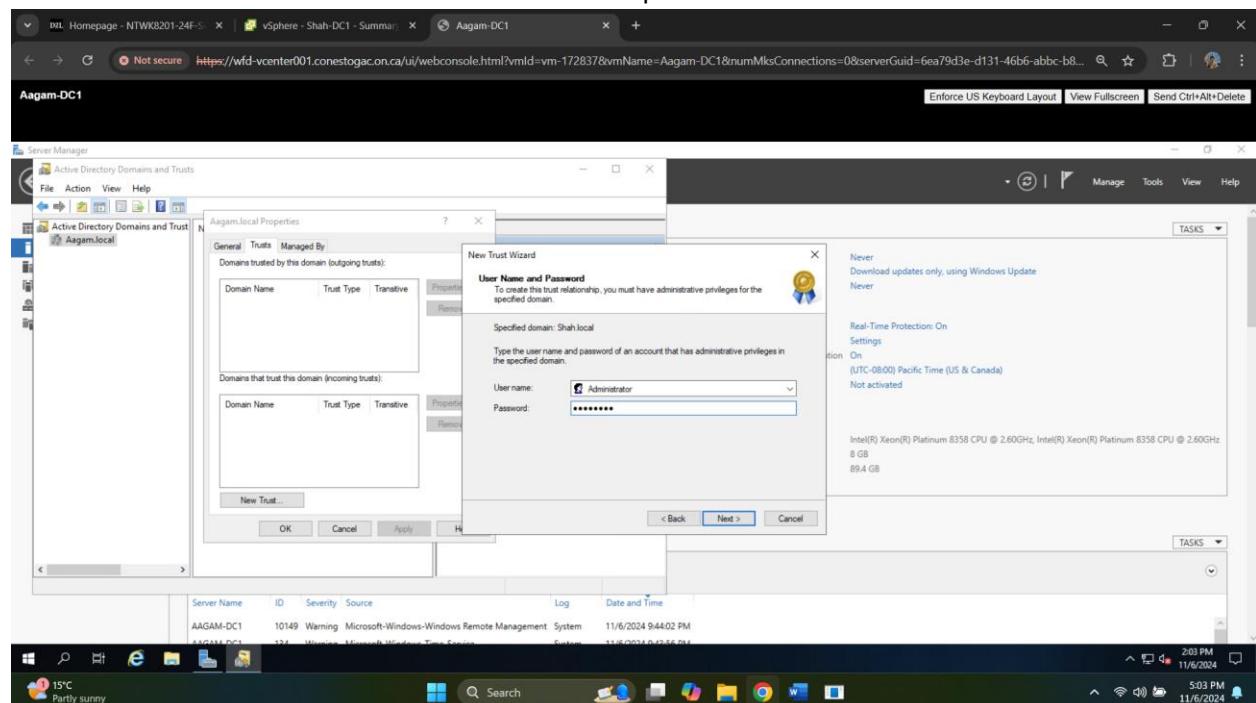


## Practical Assignment 3

Providing permission to build trust with both the domain and the specified domain, click Next

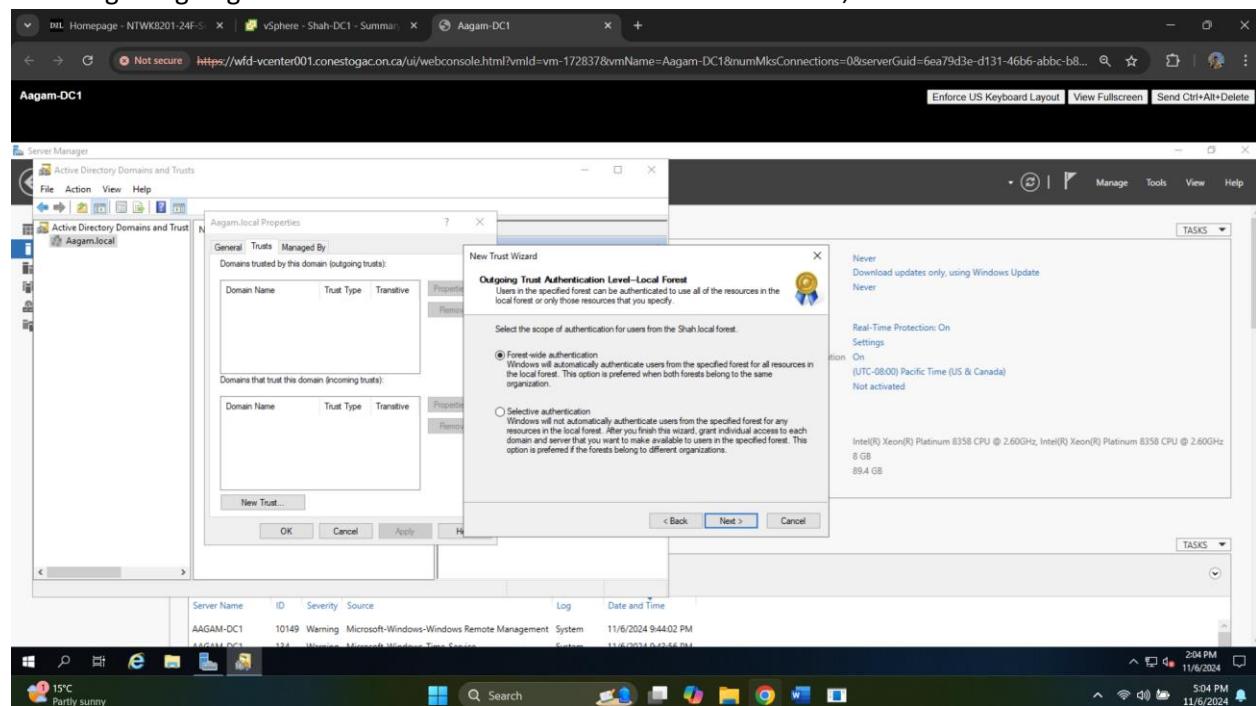


Provide Shah.local username with administrator and password to create trust.

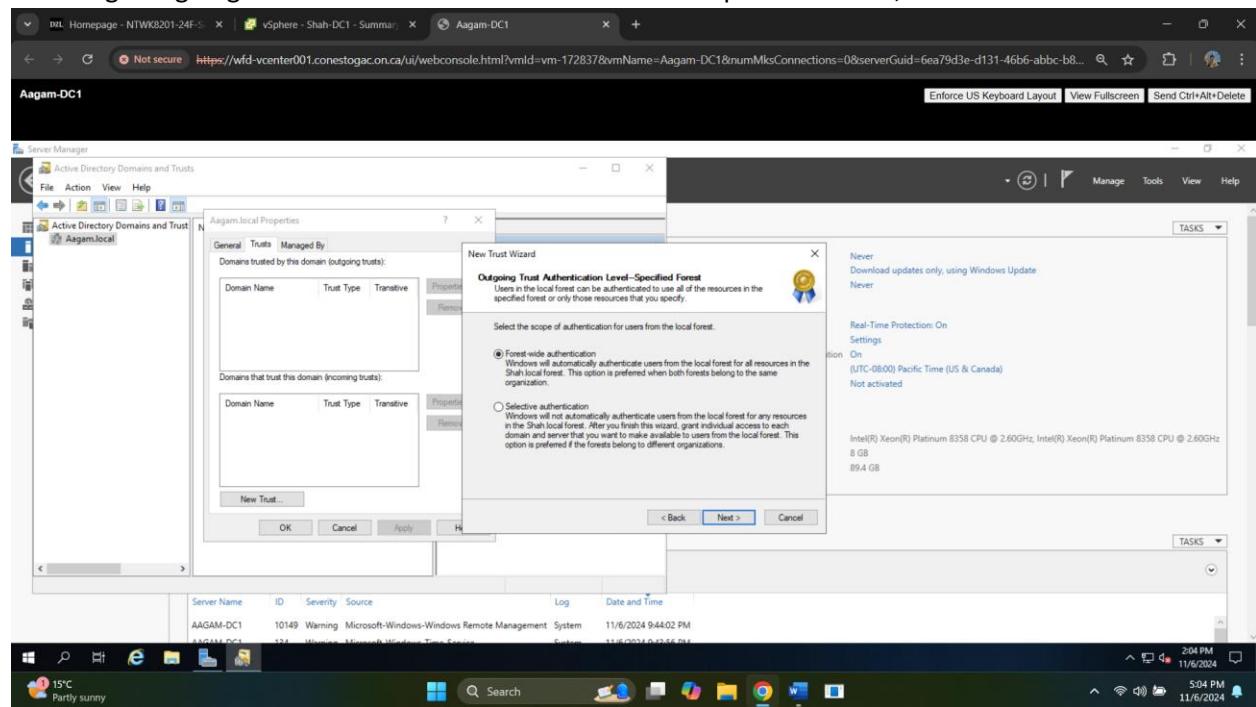


## Practical Assignment 3

Selecting out-going trust as forest-wide authentication for local forest, click on next

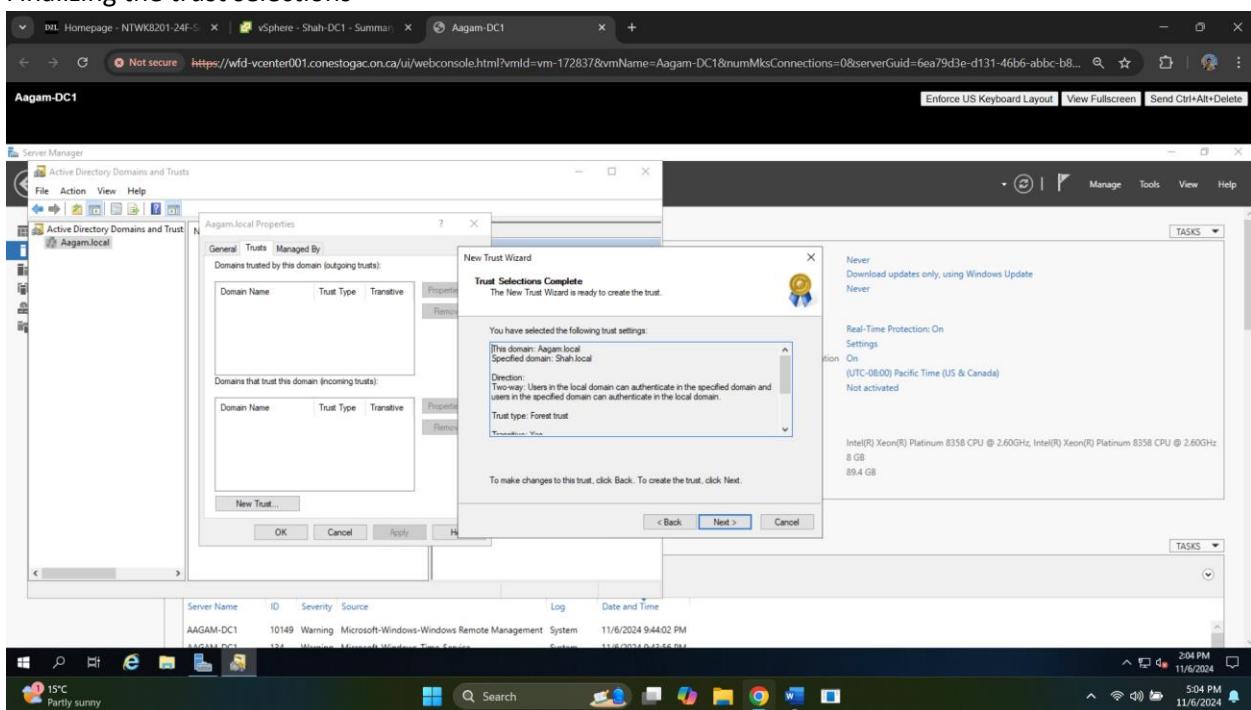


Selecting out-going trust as forest-wide authentication for Specified forest, click on next

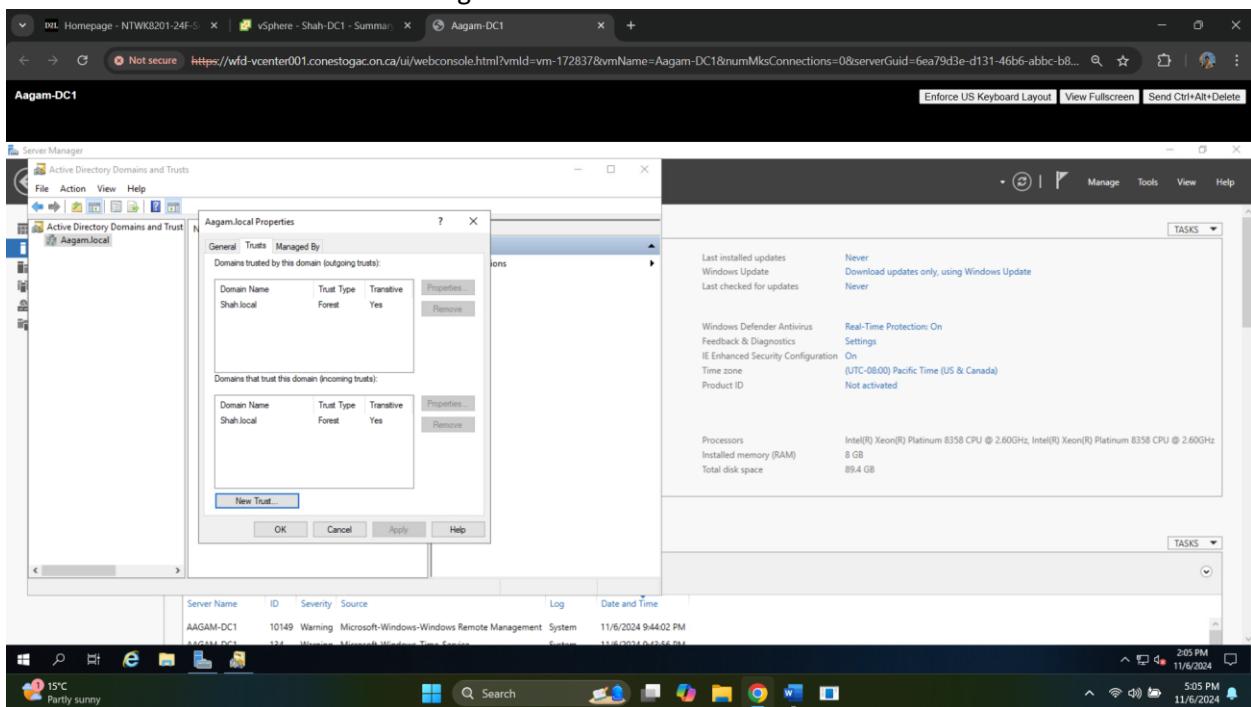


# Practical Assignment 3

## Finalizing the trust selections

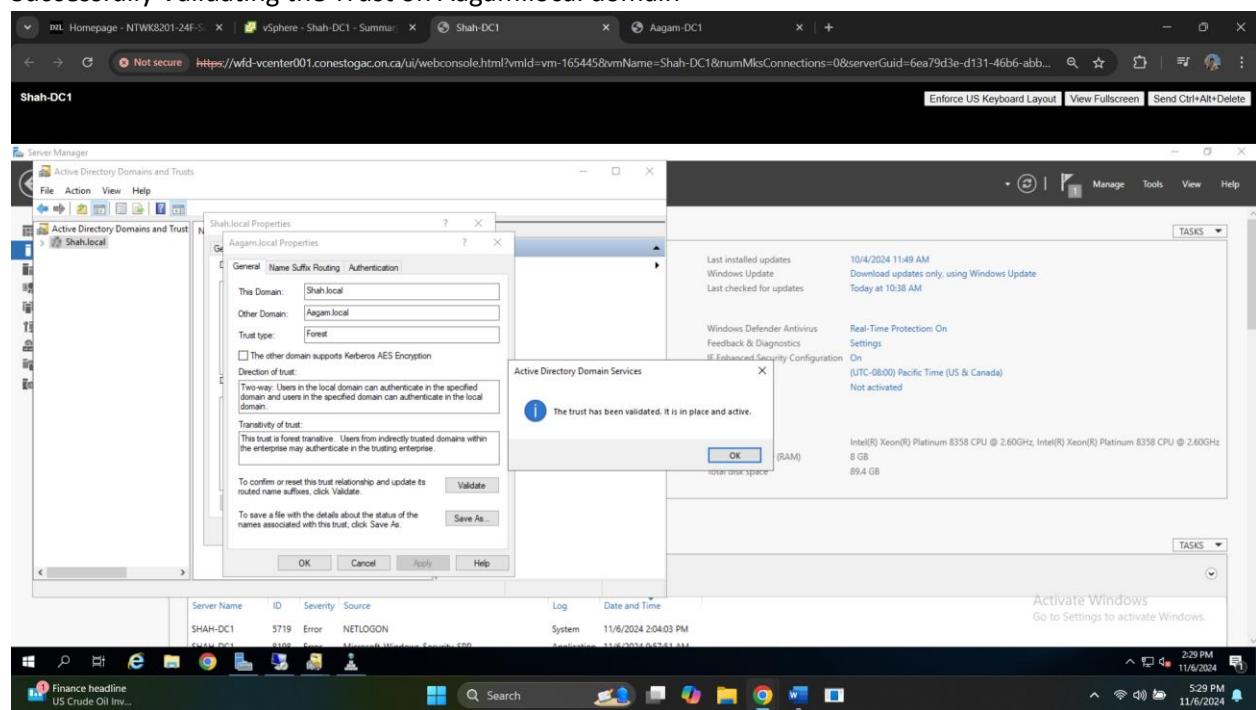


## Trust built between Shah.local and Aagam.local domains

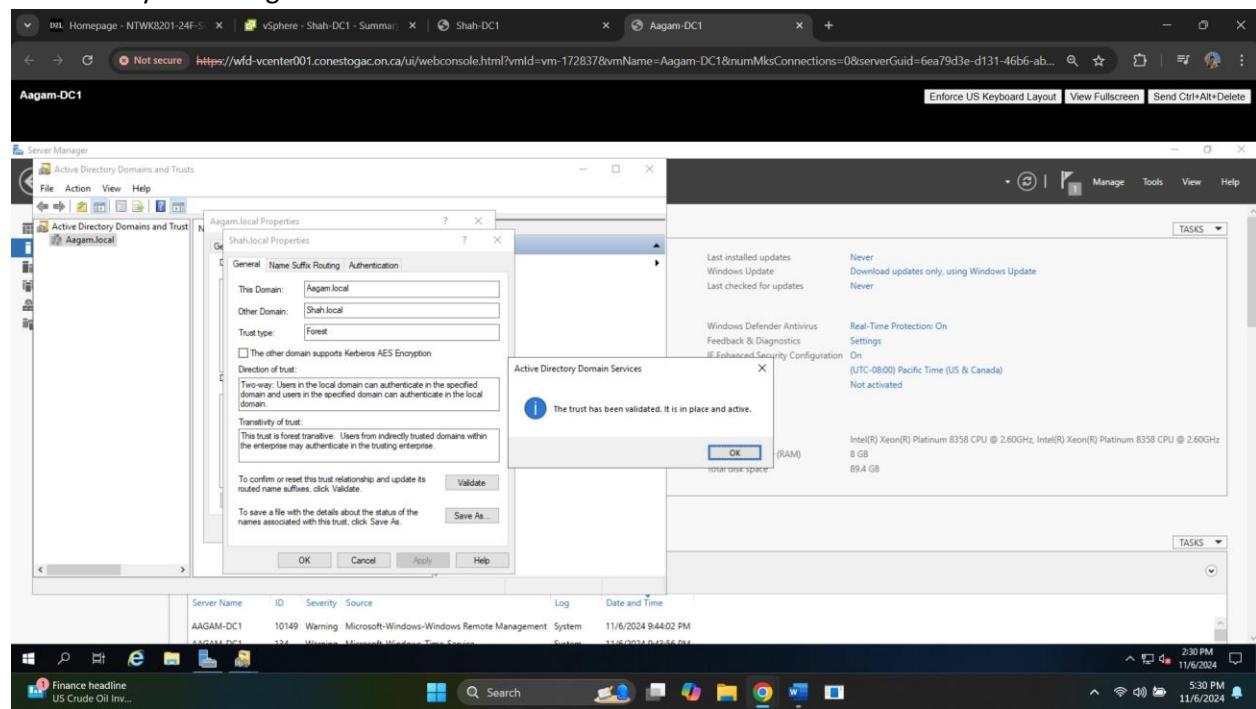


## Practical Assignment 3

### Successfully Validating the Trust on Aagam.local domain



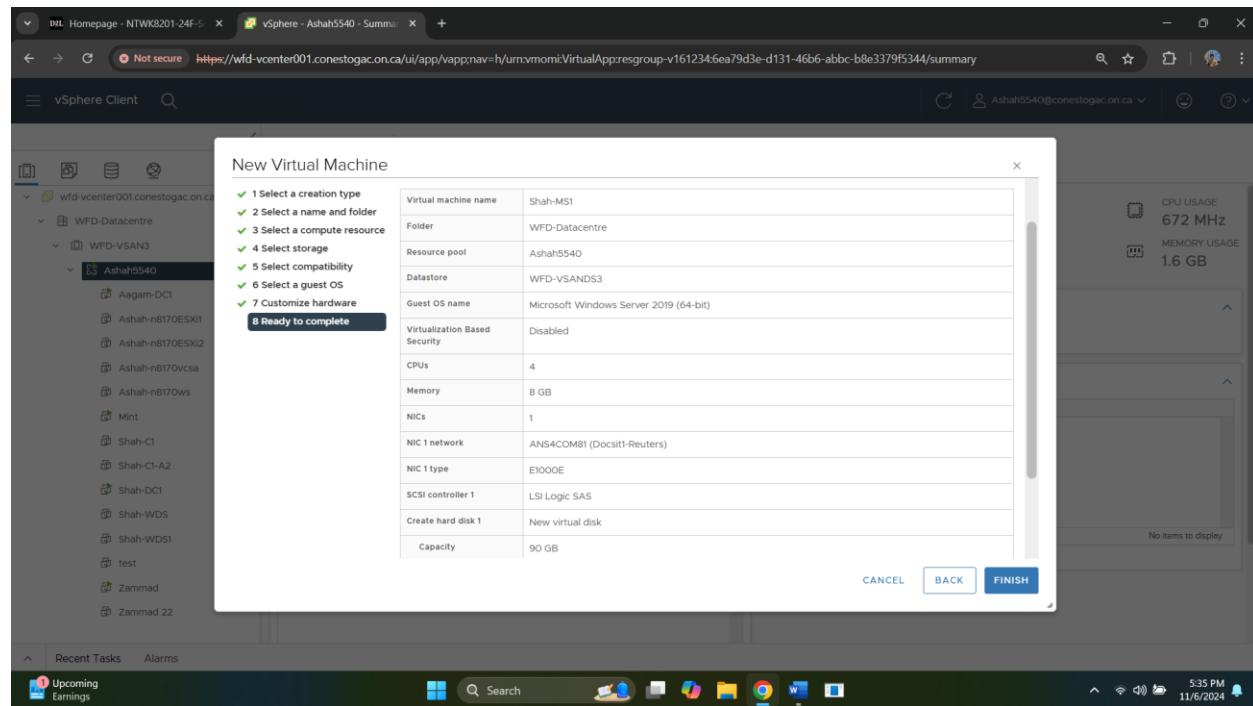
### Successfully Validating the Trust on Shah.local domain



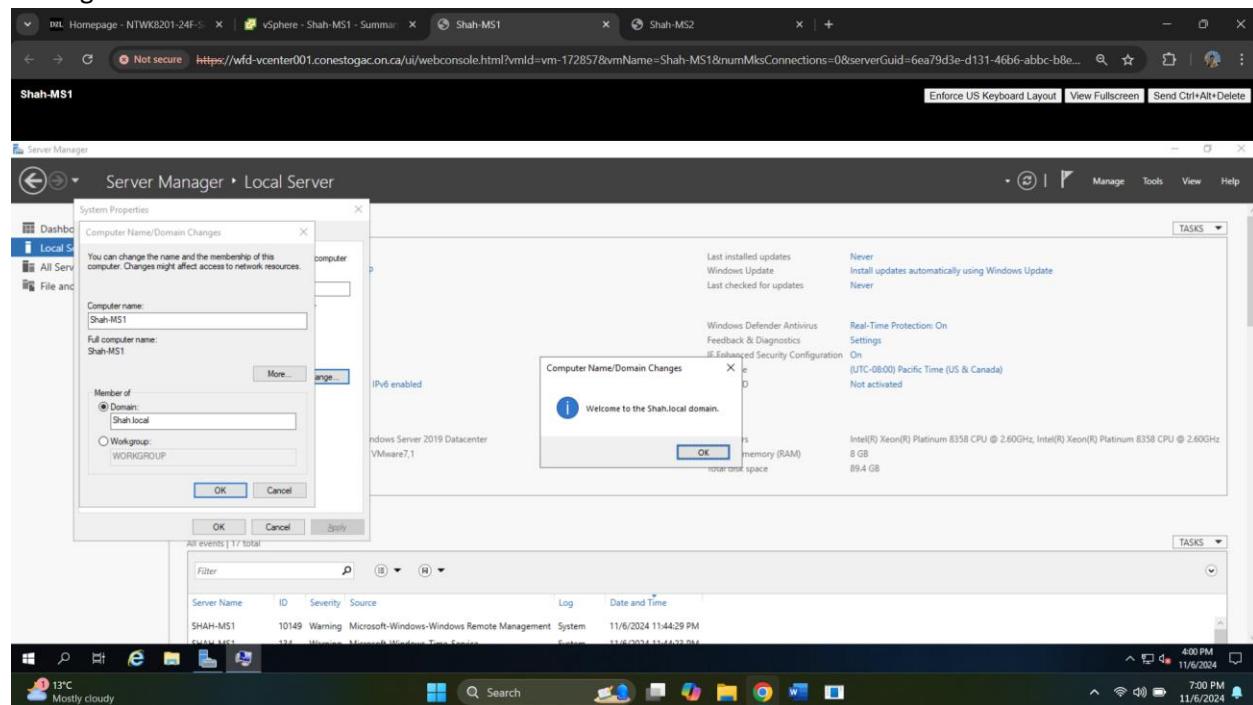
## Practical Assignment 3

### Part 2: Failover Clustering

Install your third Windows Server with the hostname Shah-MS1 and join it to Shah.local.



Joining Shah-MS1 member server to Shah.local domain.



## Practical Assignment 3

Successfully joining to domain of Shah.local on Shah-MS1

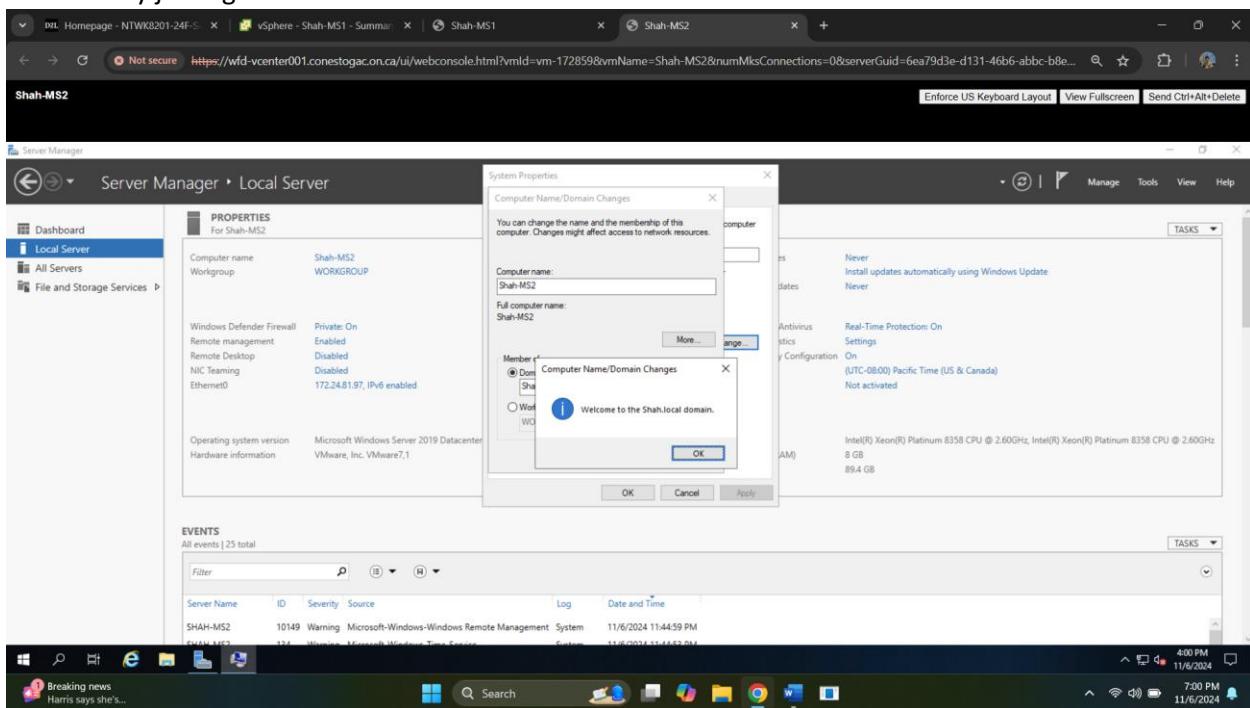
The screenshot shows the Windows Server Manager interface for Shah-MS1. The left sidebar has options like Dashboard, Local Server, All Servers, and File and Storage Services. The main area is titled 'PROPERTIES For Shah-MS1'. It displays basic information such as Computer name (Shah-MS1), Domain (Shah.local), and various system settings like Windows Defender Firewall, Remote management, and Network adapter status. Below this is the 'EVENTS' section, which lists a single warning event from Microsoft-Windows-Windows Remote Management. The taskbar at the bottom shows the date and time as 11/6/2024.

Install your fourth Windows Server with the hostname Shah-MS2 and join it to Shah.local.

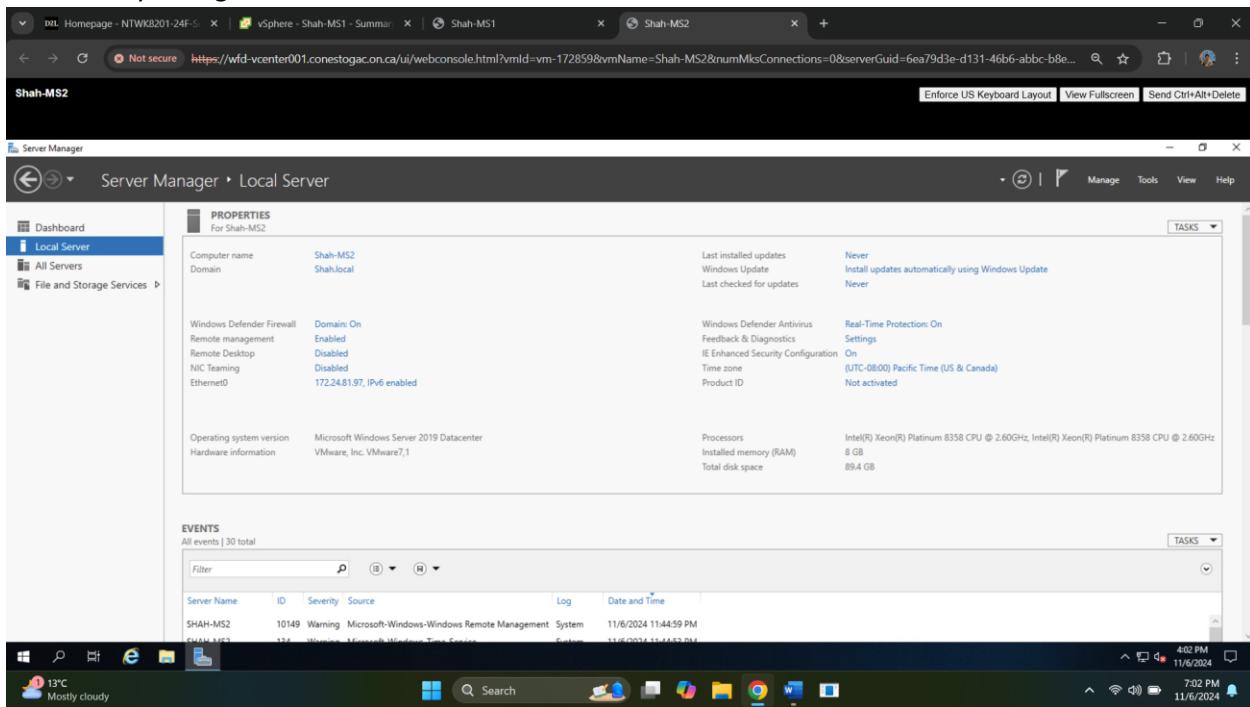
The screenshot shows the vSphere Client interface with the 'New Virtual Machine' creation wizard open. The left sidebar shows a tree view of datacenters, hosts, and clusters. The main window is titled 'New Virtual Machine' and is on step 8, 'Ready to complete'. It lists configuration details for the new VM, including the virtual machine name (Shah-MS2), folder (WFD-Datacentre), resource pool (Ashah5540), datastore (WFD-VSAN3), guest OS (Microsoft Windows Server 2019 (64-bit)), and hardware specifications (4 CPUs, 8 GB Memory, 1 NIC, LSI Logic SAS controller). The right side of the screen shows performance metrics for CPU usage (672 MHz) and memory usage (1.6 GB). The taskbar at the bottom shows the date and time as 11/6/2024.

## Practical Assignment 3

Successfully joining Shah-MS2 to domain Shah.local



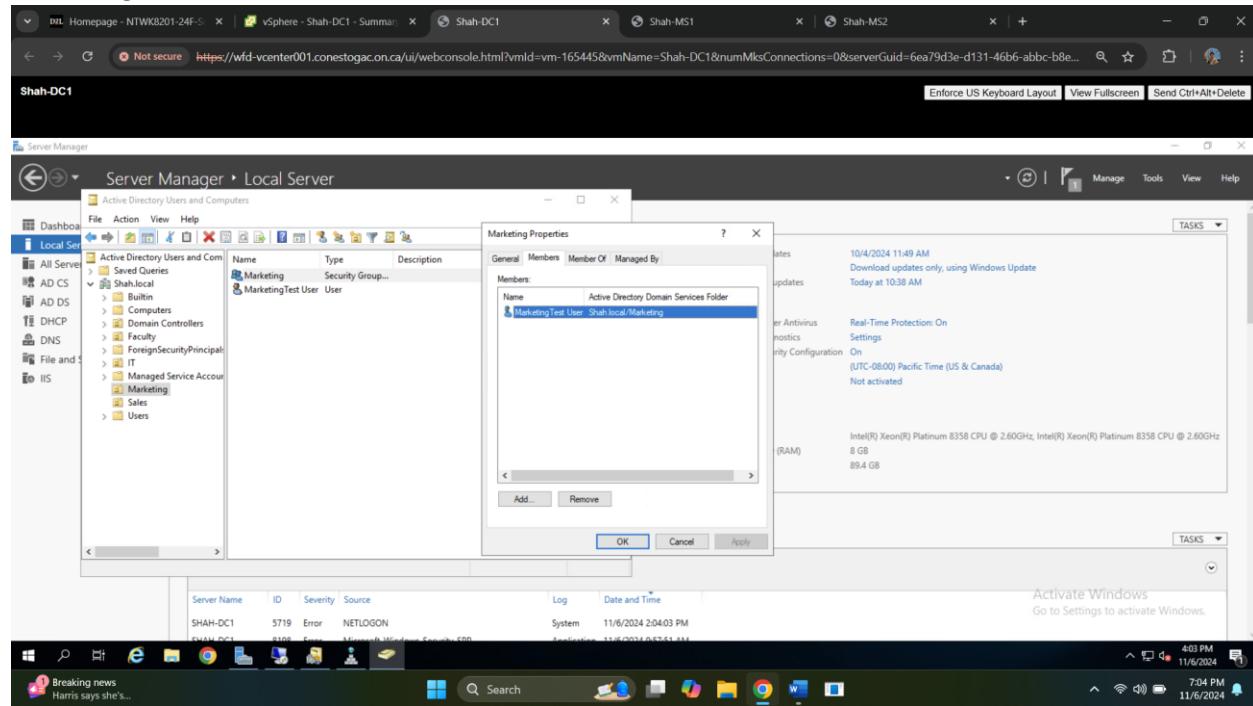
Successfully configured Shah-MS2 server to Shah.local domain.



## Practical Assignment 3

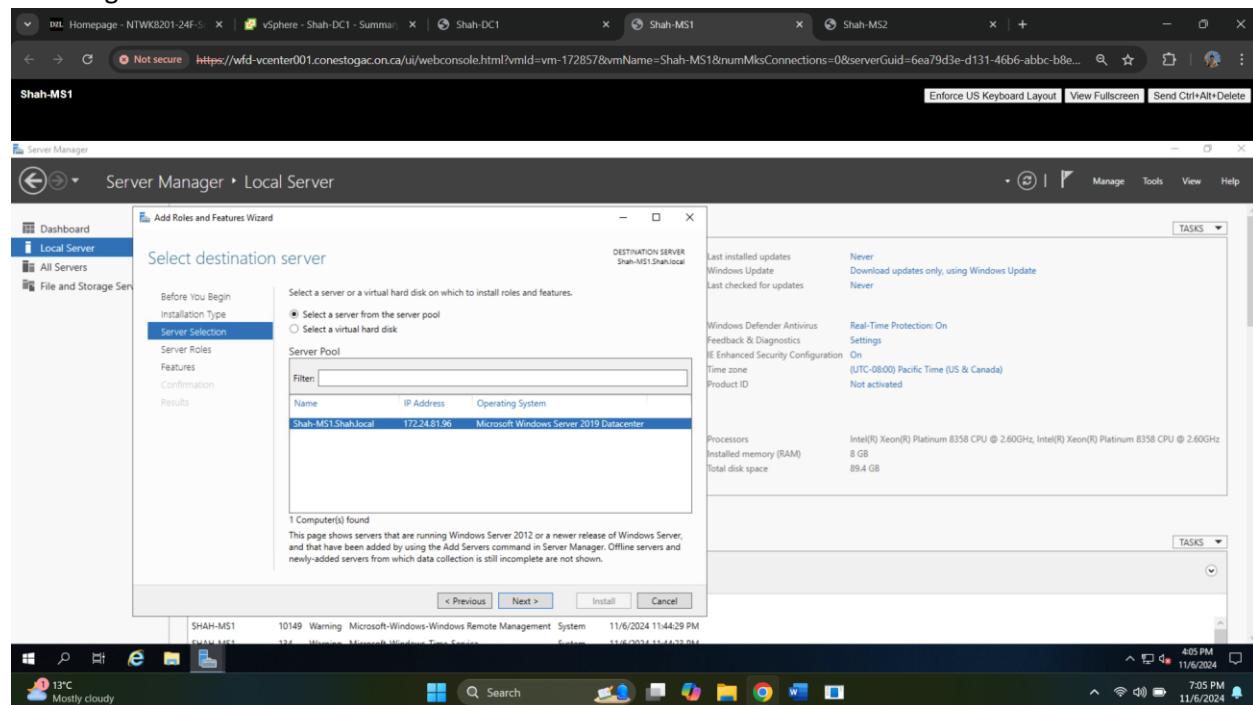
Create or reuse the Marketing group and test user from the last assignment.

Marketing Test user created on Shah-DC1 server



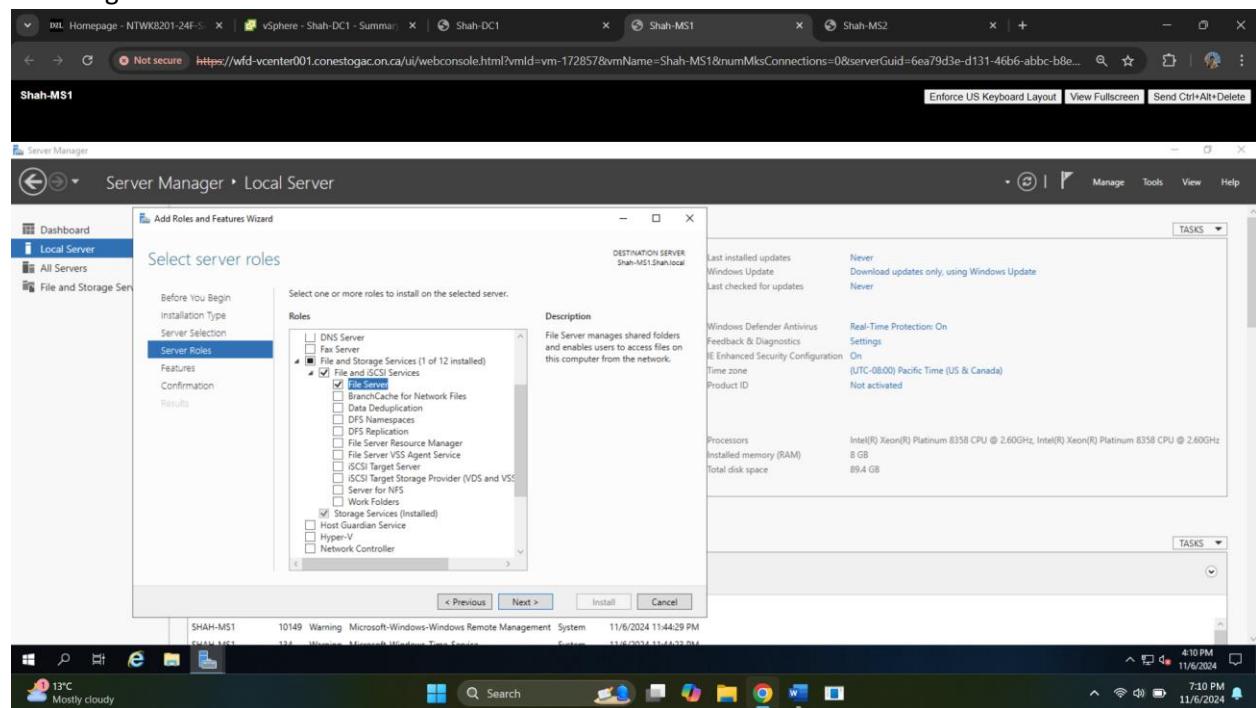
Install the File Server Role on both member servers.

Installing File Server feature on Shah-MS1

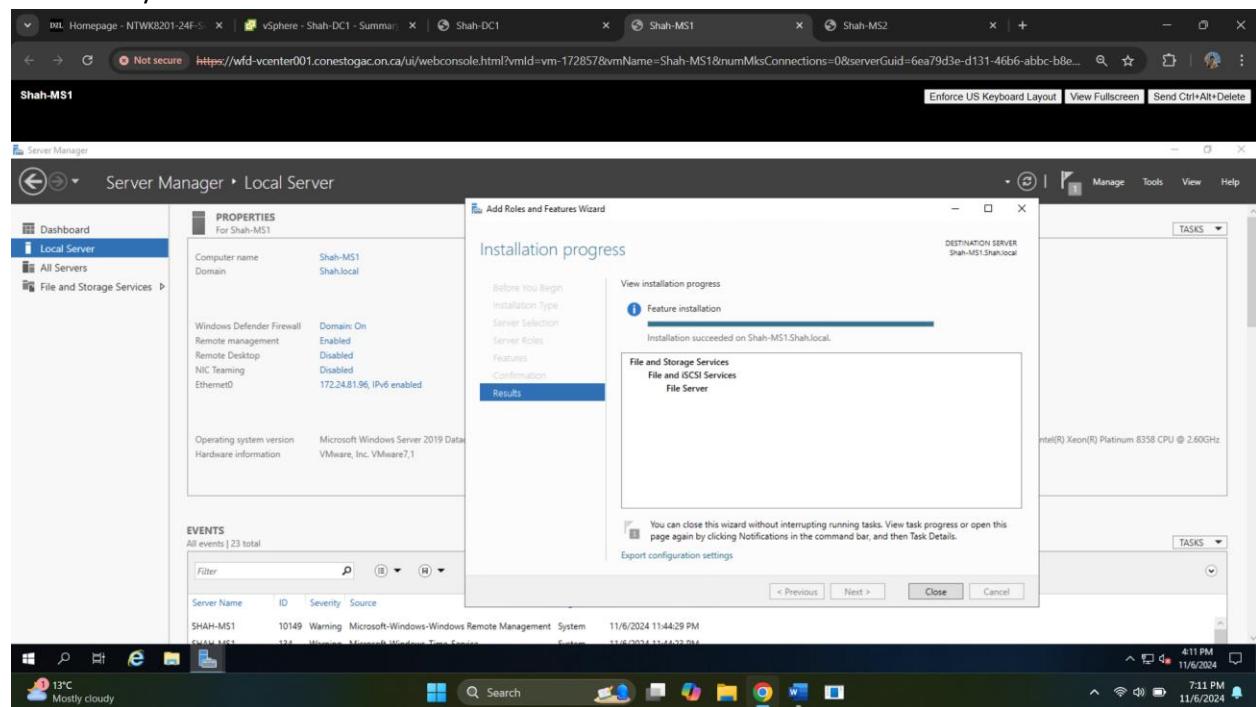


## Practical Assignment 3

### Selecting feature “File Server” to install on server Shah-MS1



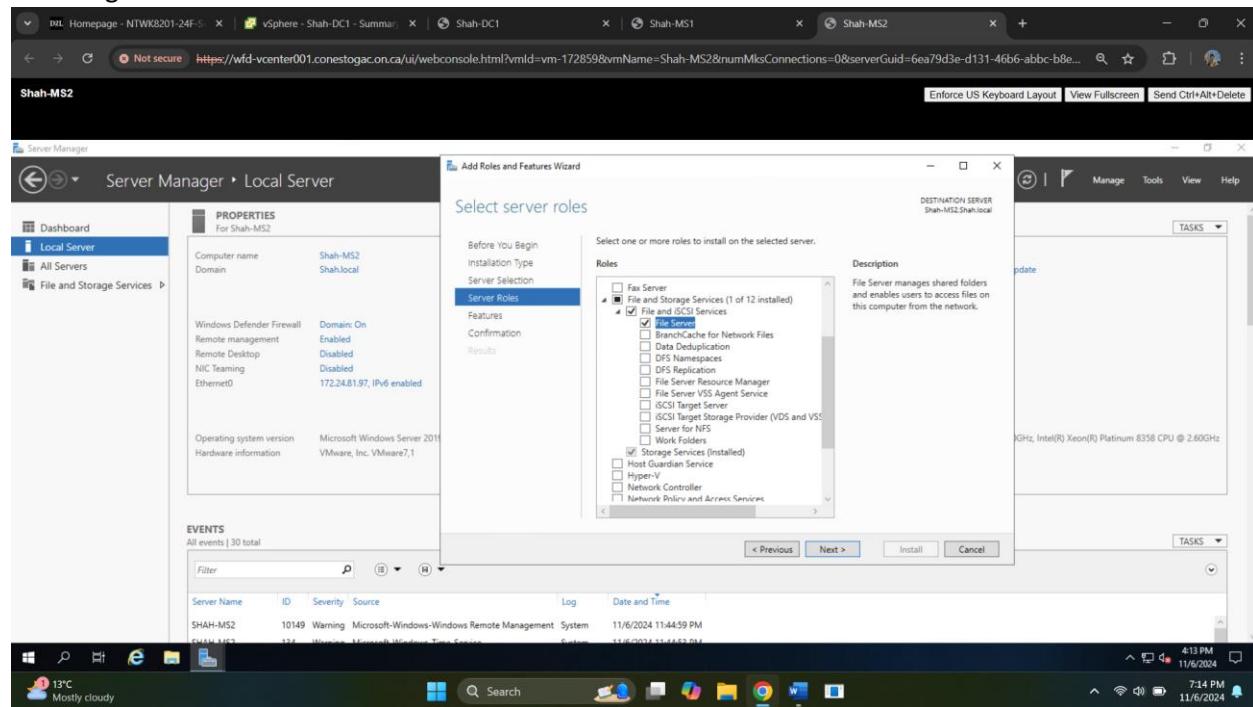
### Successfully installed File Server feature on Shah-MS14



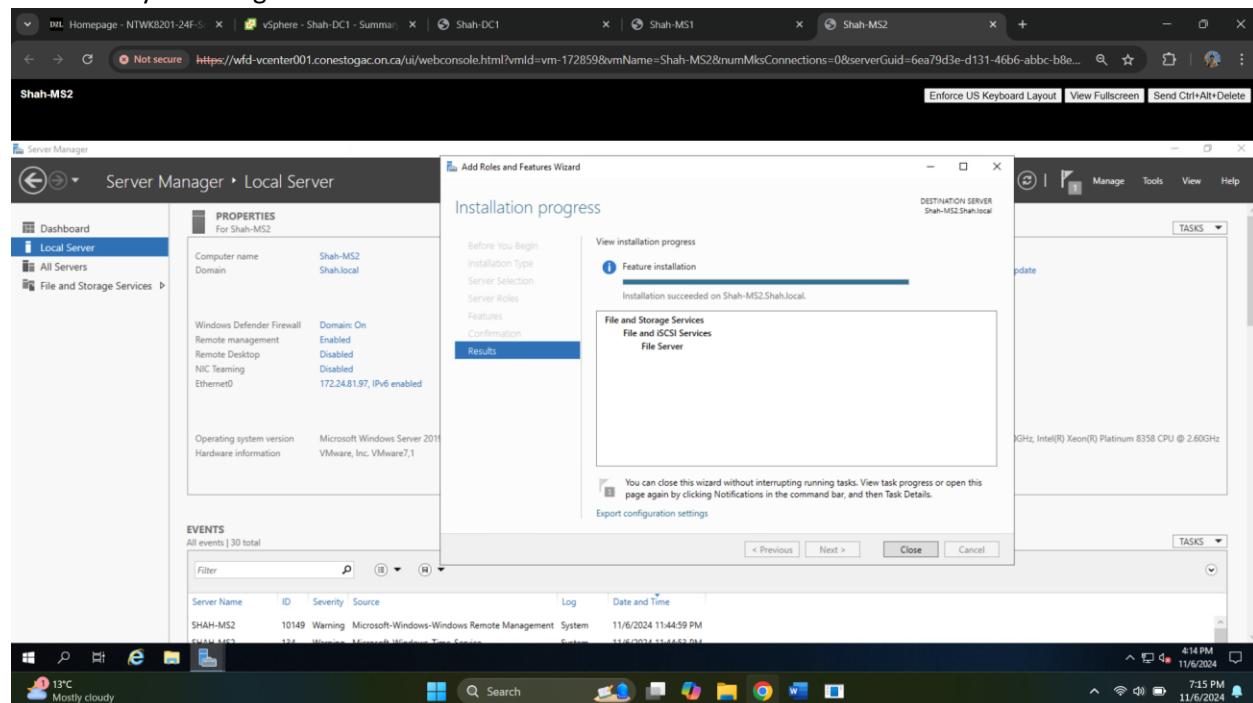
## Practical Assignment 3

### Shah-MS2

#### Selecting “File Server” role to install on Shah-MS2 server



#### Successfully installing file server feature on Shah-MS2 server



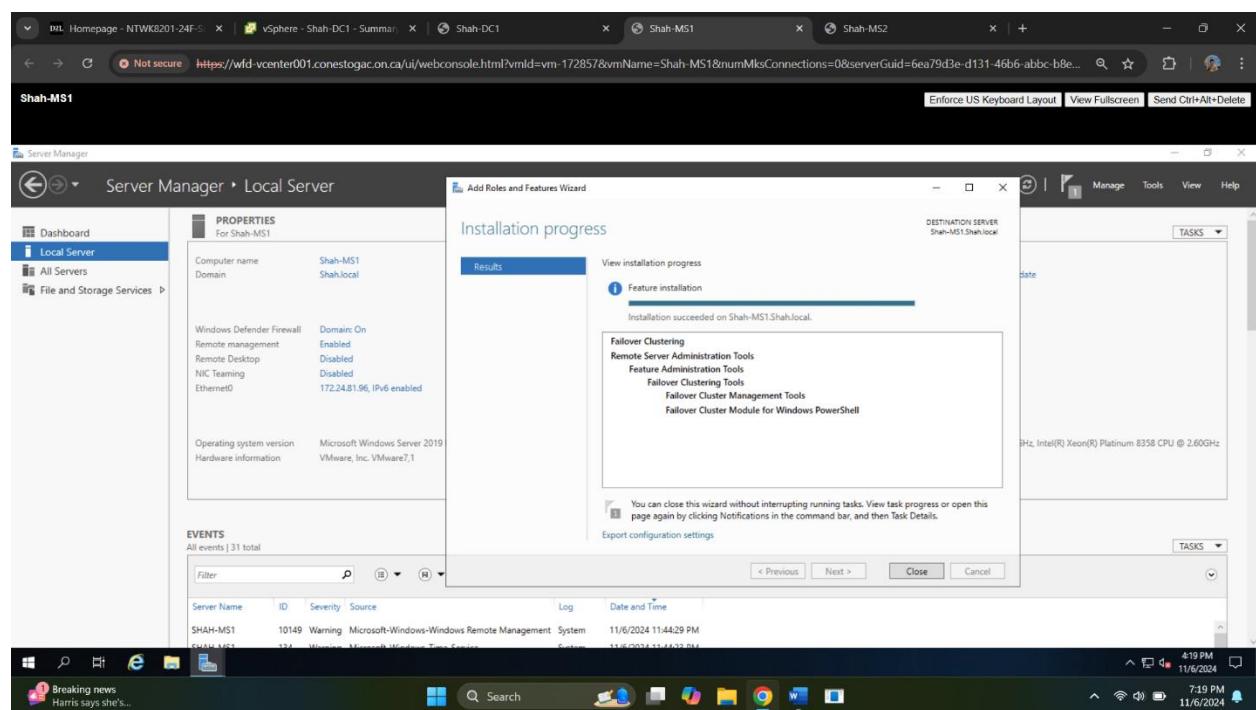
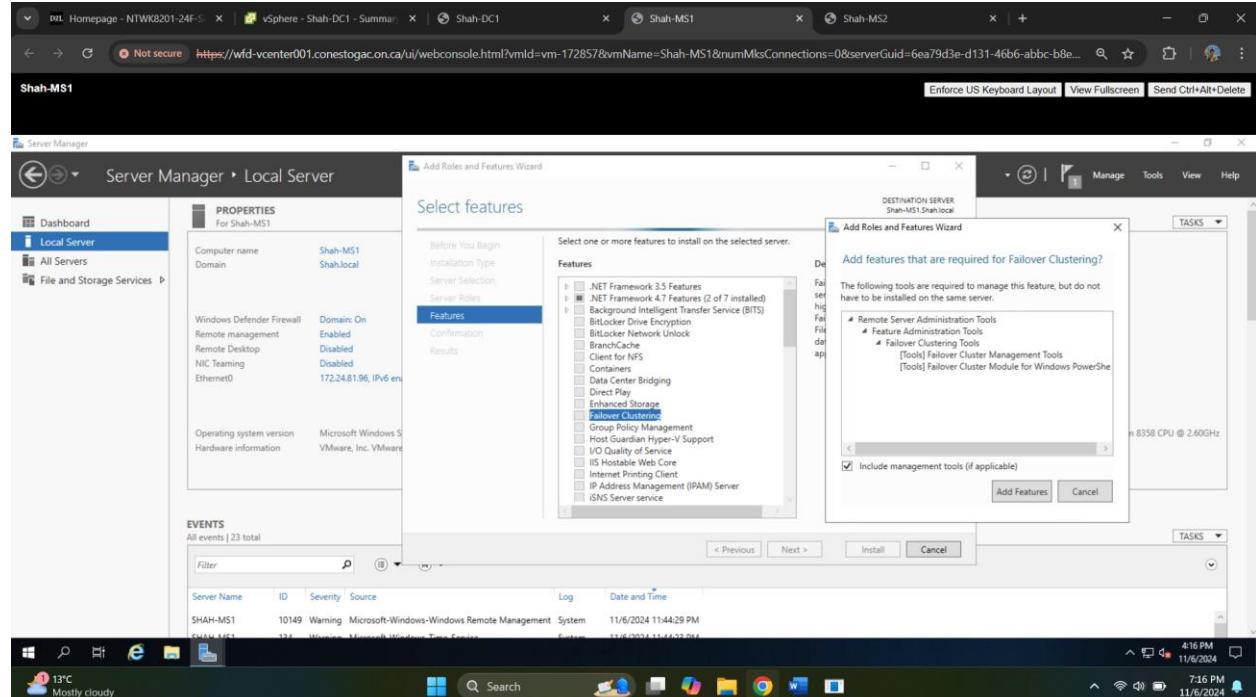
## Practical Assignment 3

### Install the Failover Cluster Role on both member servers.

Shah-MS1

Installing Failover Cluster feature on Shah-MS1 server

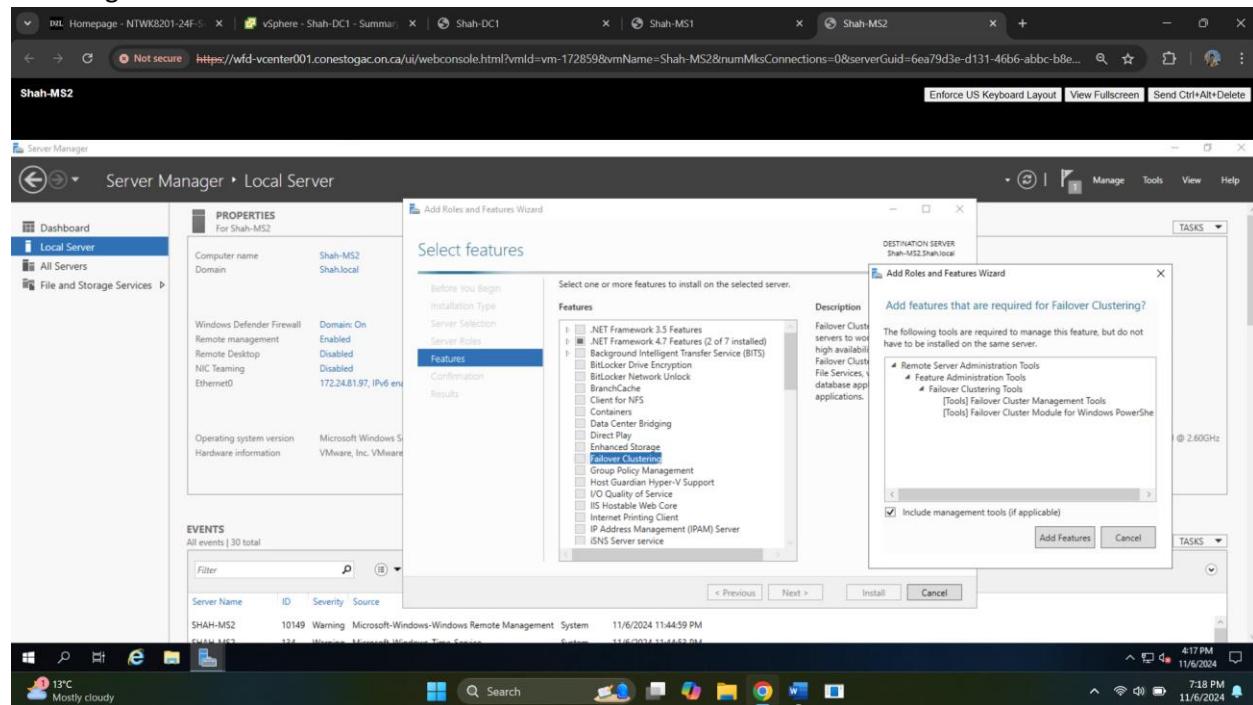
Successfully installed Failover Cluster feature on Shah-MS1 Server



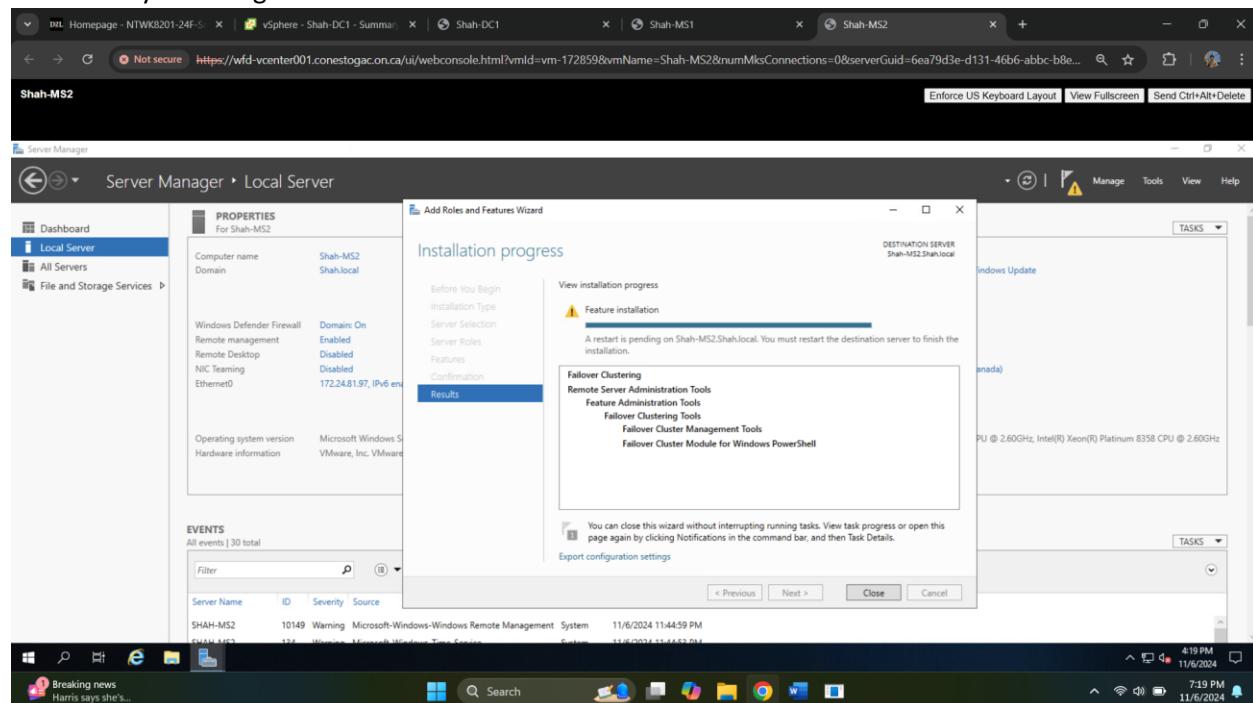
## Practical Assignment 3

Shah-MS2

Selecting “Failover Cluster” Feature on Shah-MS2 server



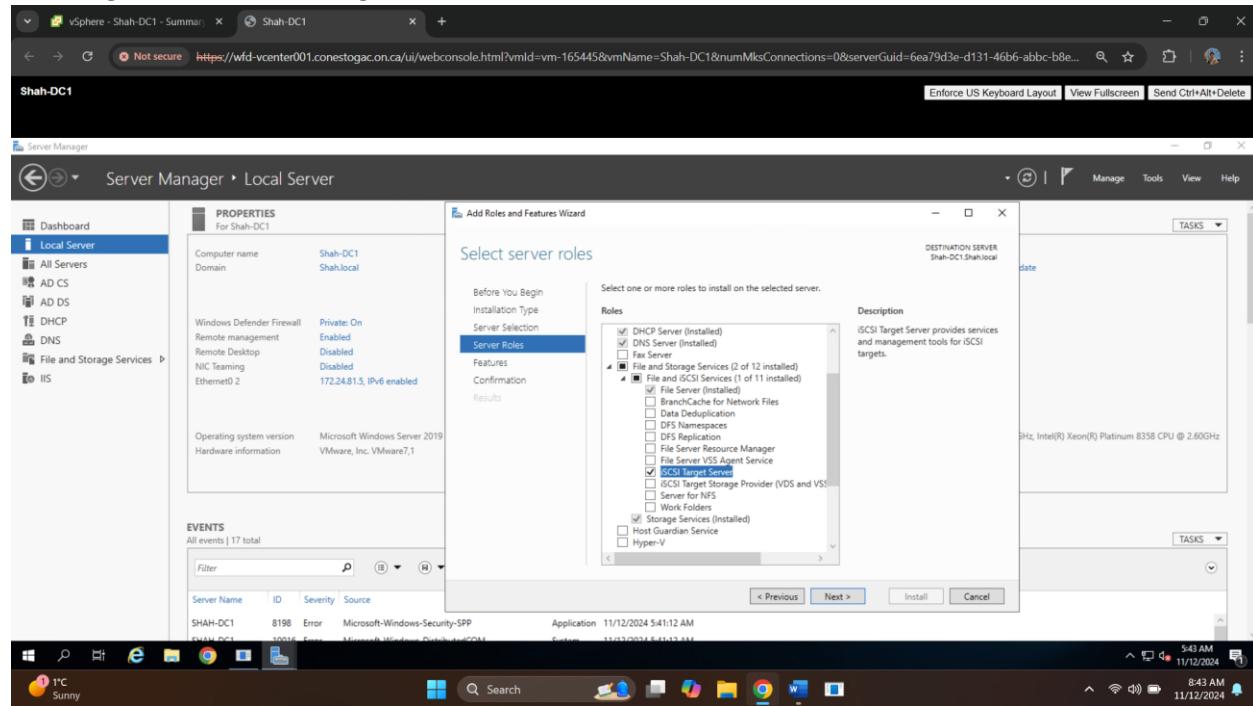
Successfully installing Failover Cluster Feature on Shah-MS2 server.



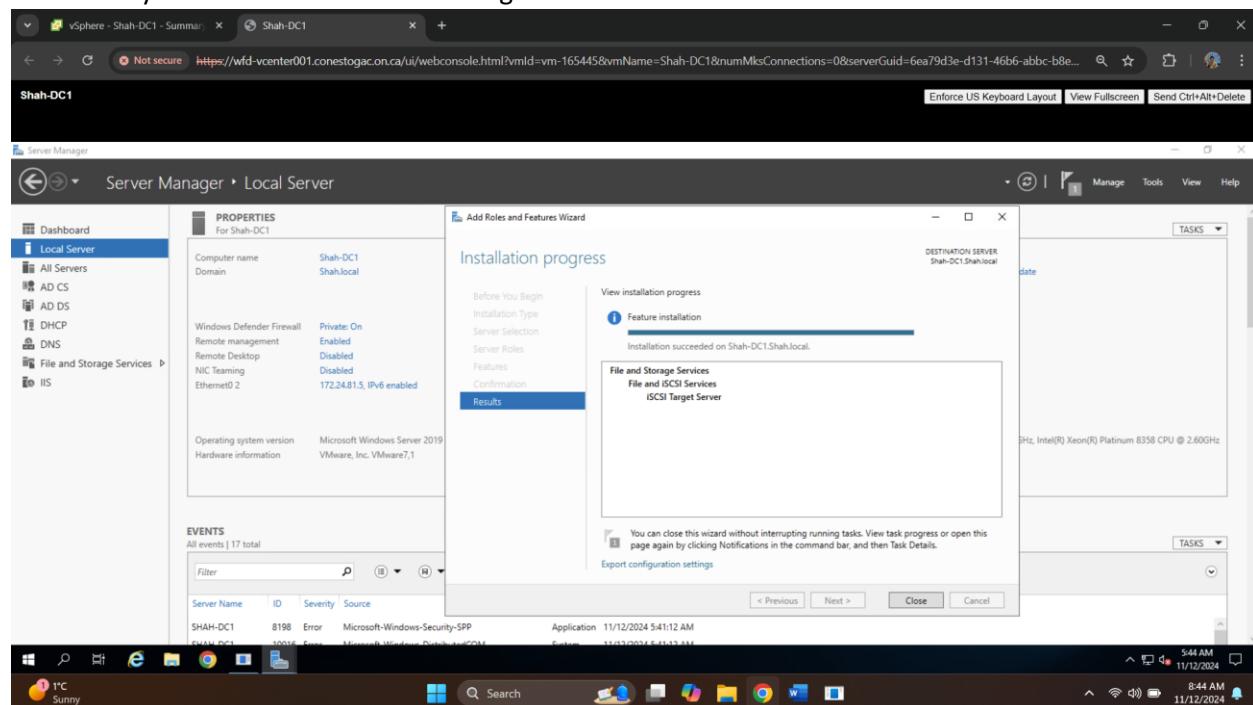
## Practical Assignment 3

### Shah-DC1 can act as your SAN for failover clustering.

Installing Feature of iSCSI Target Server on Shah-DC1

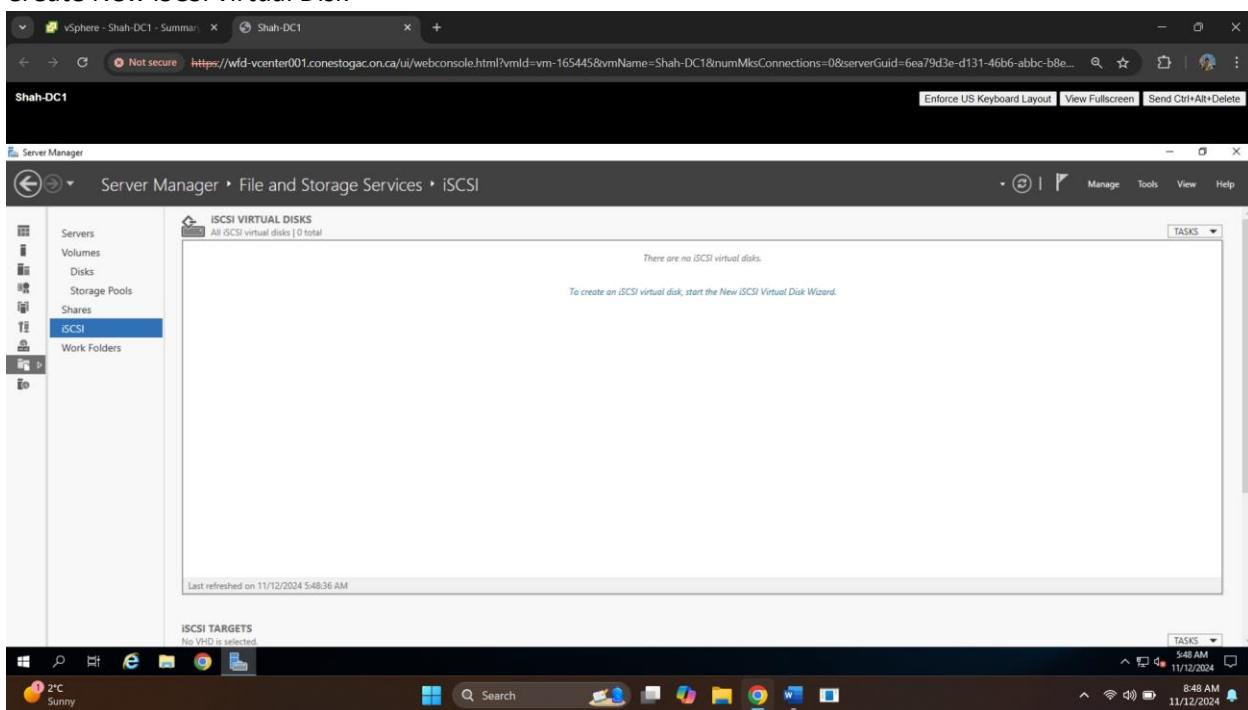


Successfully installed Feature of iSCSI Target Server

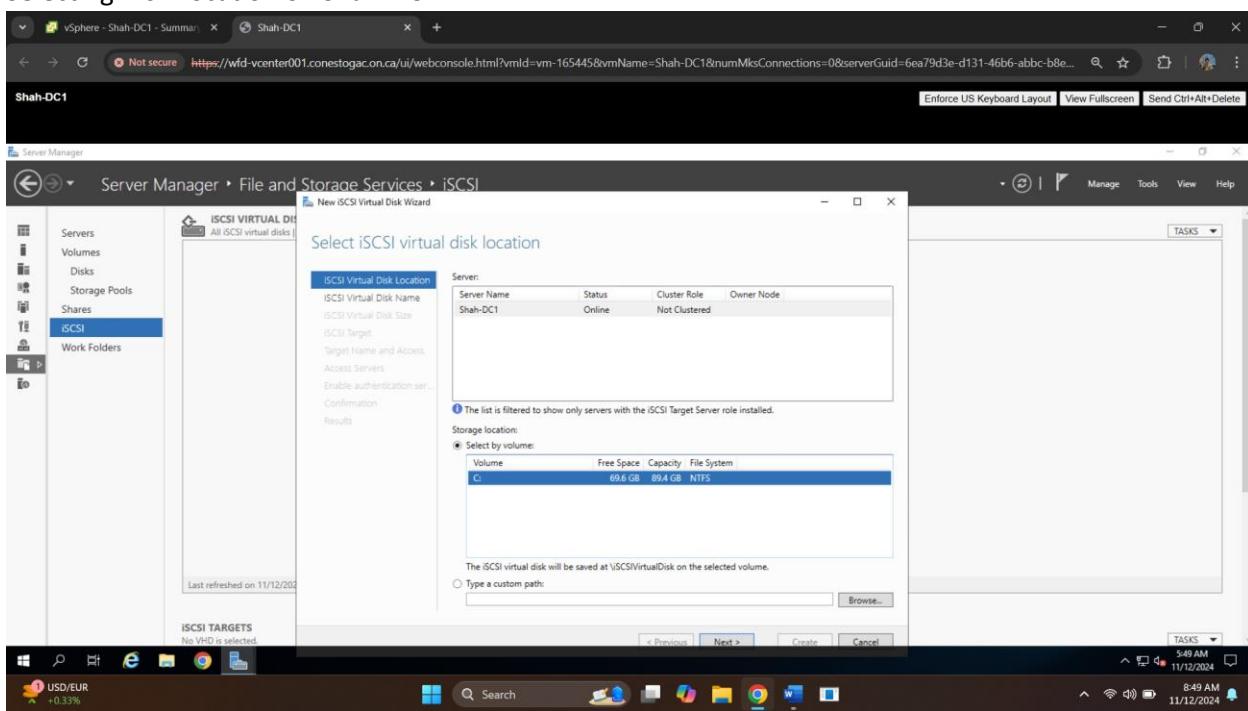


## Practical Assignment 3

### Create New iSCSI virtual Disk

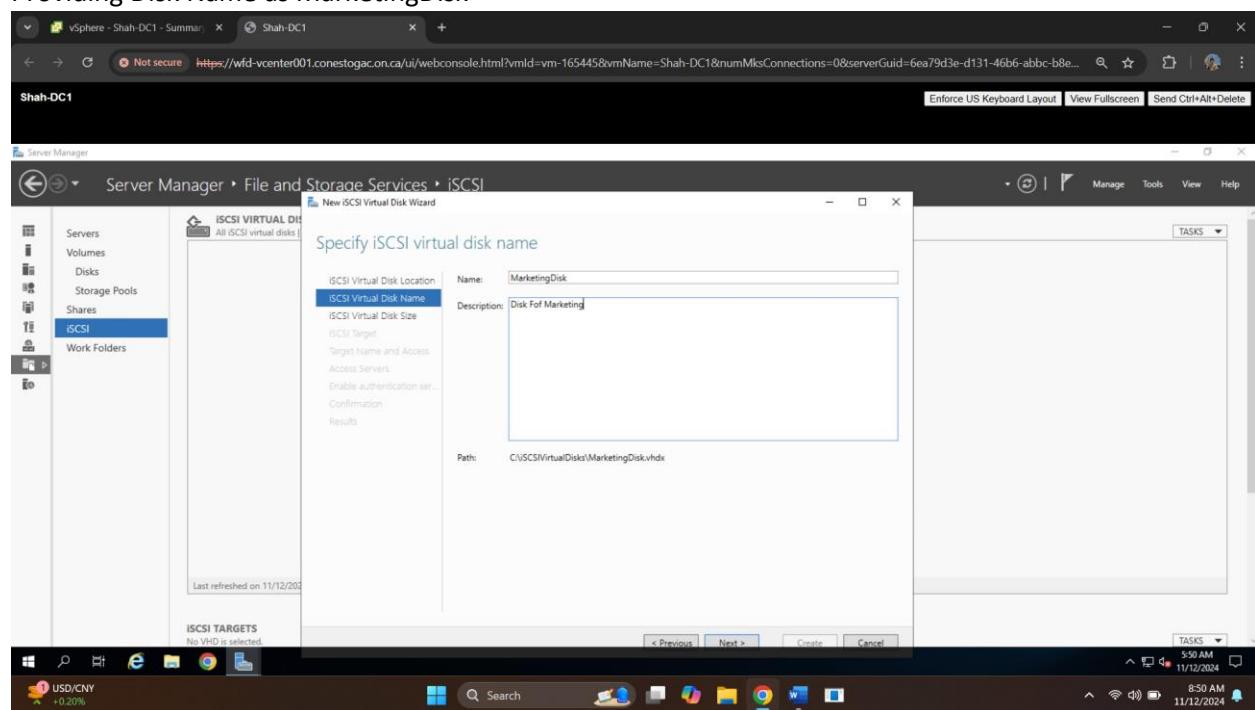


### Selecting Disk Location on Shah-DC1

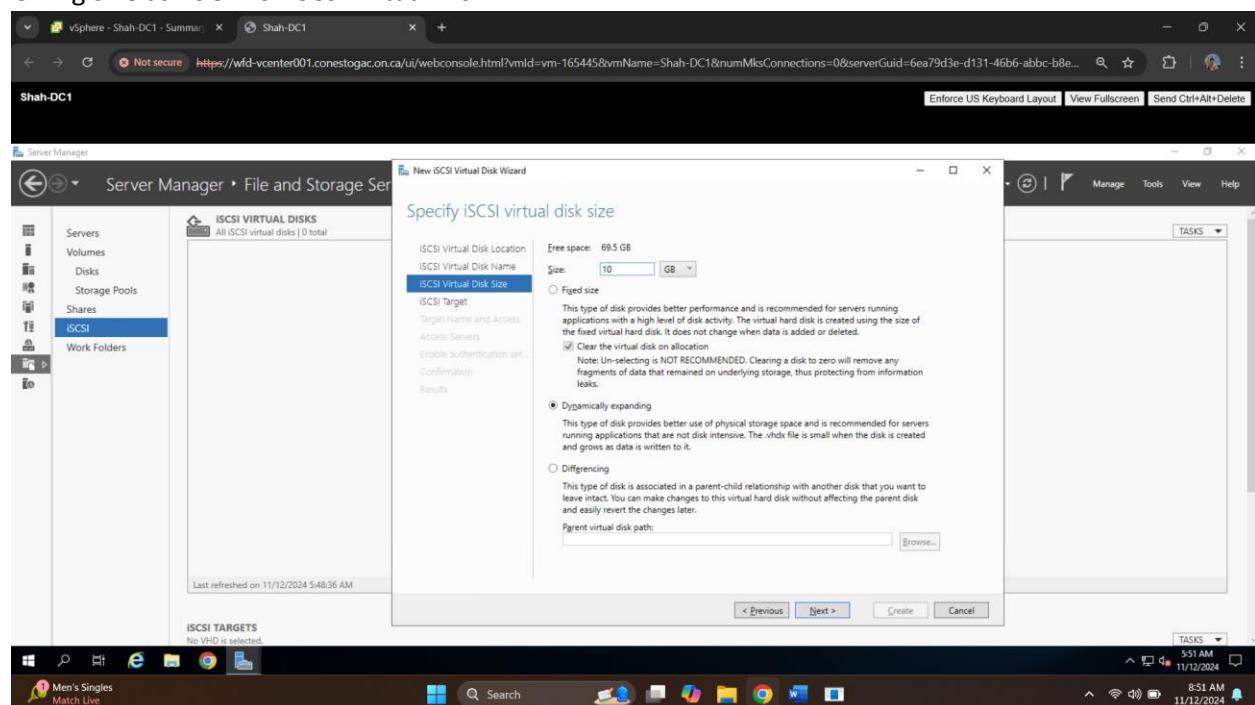


## Practical Assignment 3

### Providing Disk Name as MarketingDisk

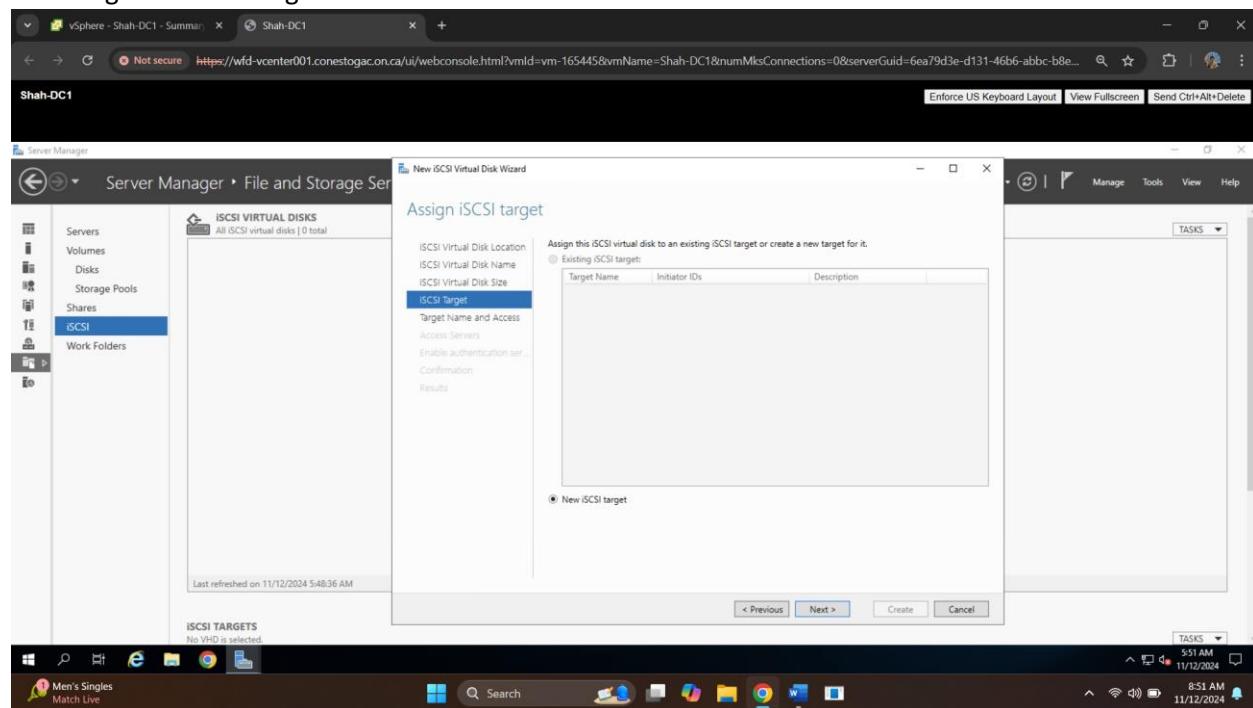


### Giving Size as 20GB for iSCSI virtual Disk

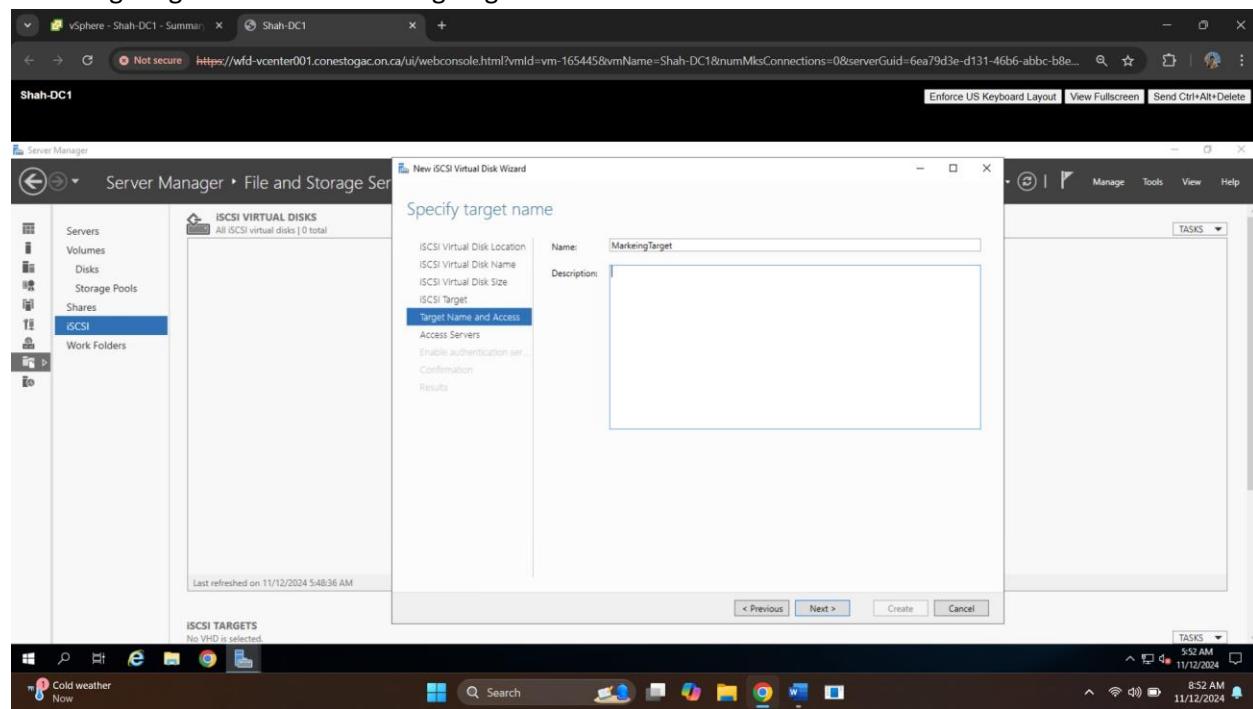


# Practical Assignment 3

## Selecting new iSCSI Target

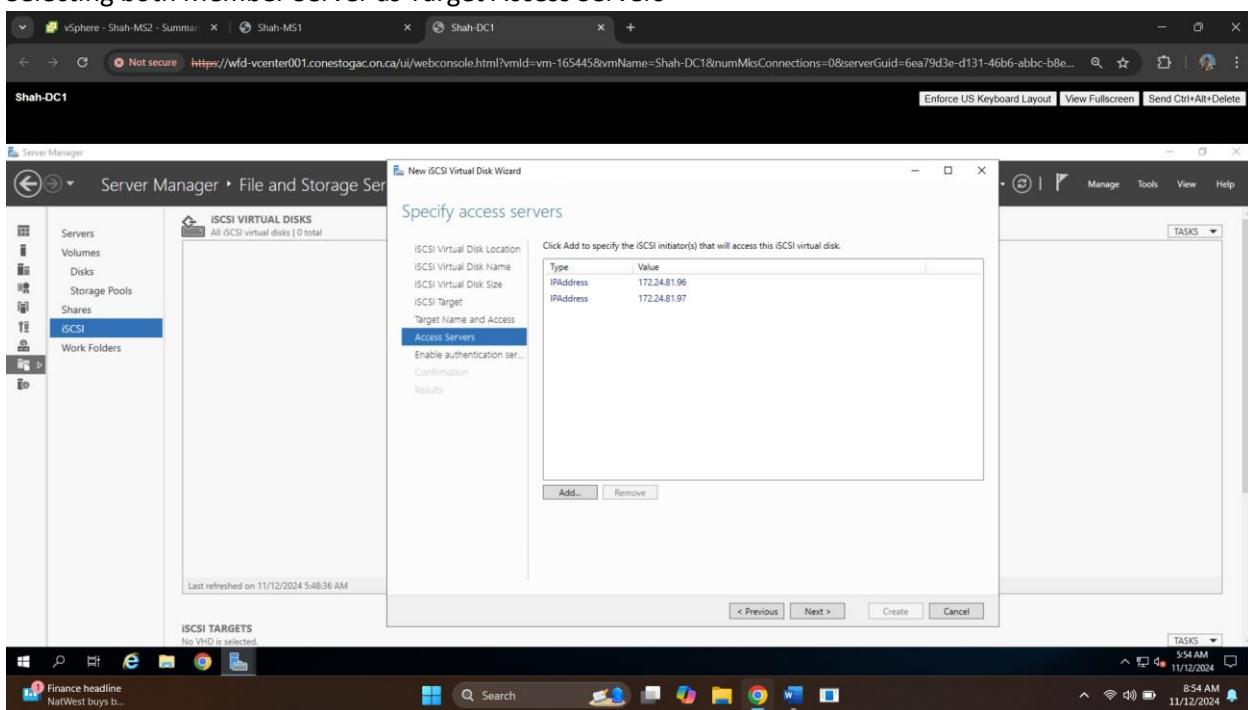


## Providing Target Name as MarketingTarget

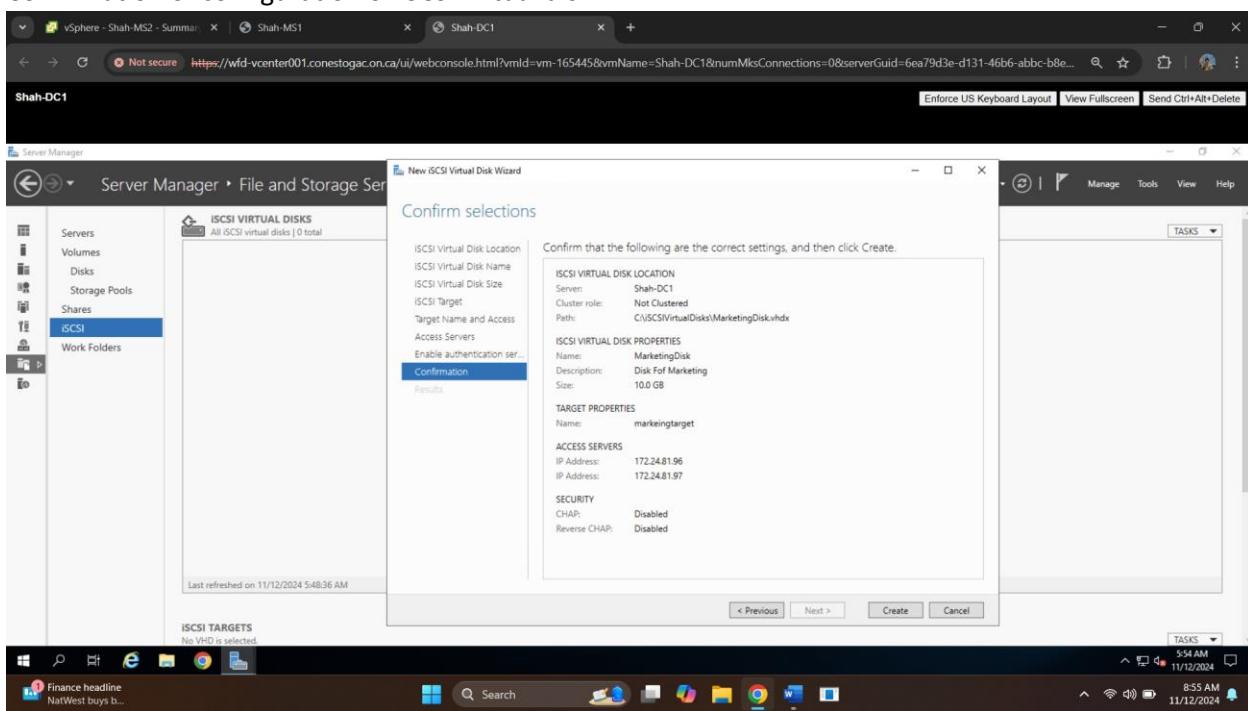


## Practical Assignment 3

### Selecting both Member Server as Target Access Servers

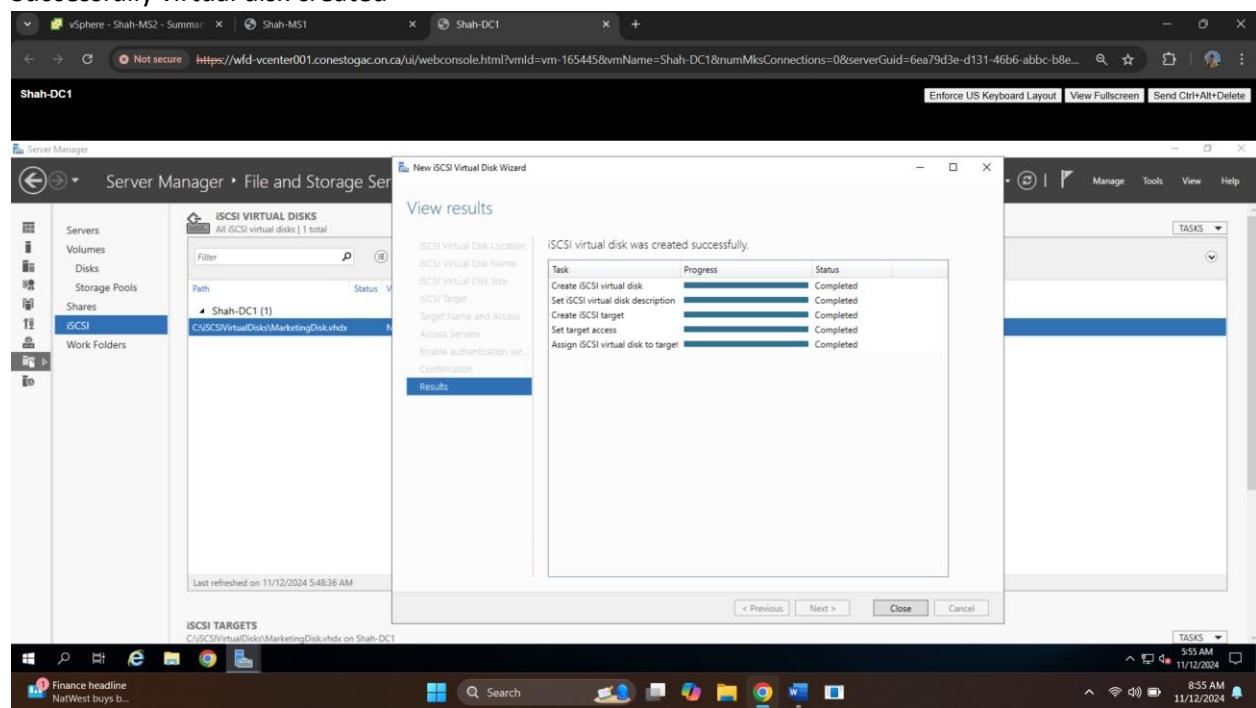


### Confirmation of configuration of iSCSI virtual disk

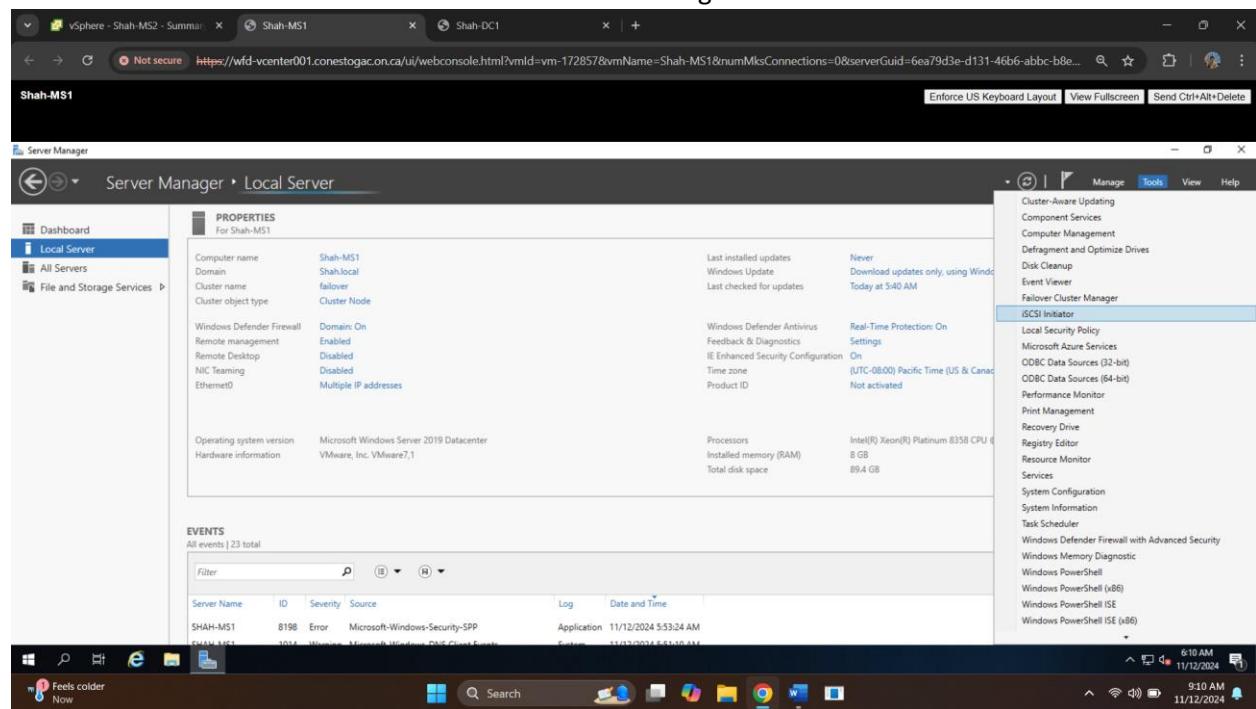


## Practical Assignment 3

### Successfully virtual disk created

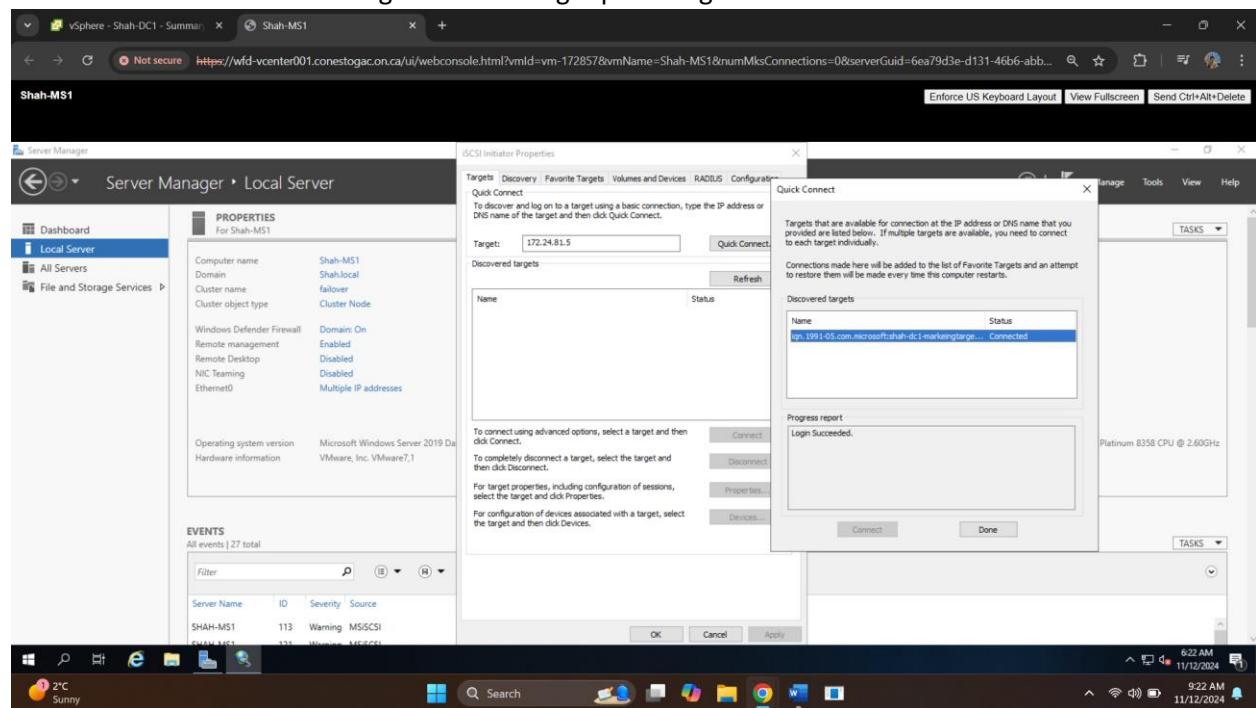


### Join Member Server Shah-MS1 and Shah-MS2 to iSCSI Target

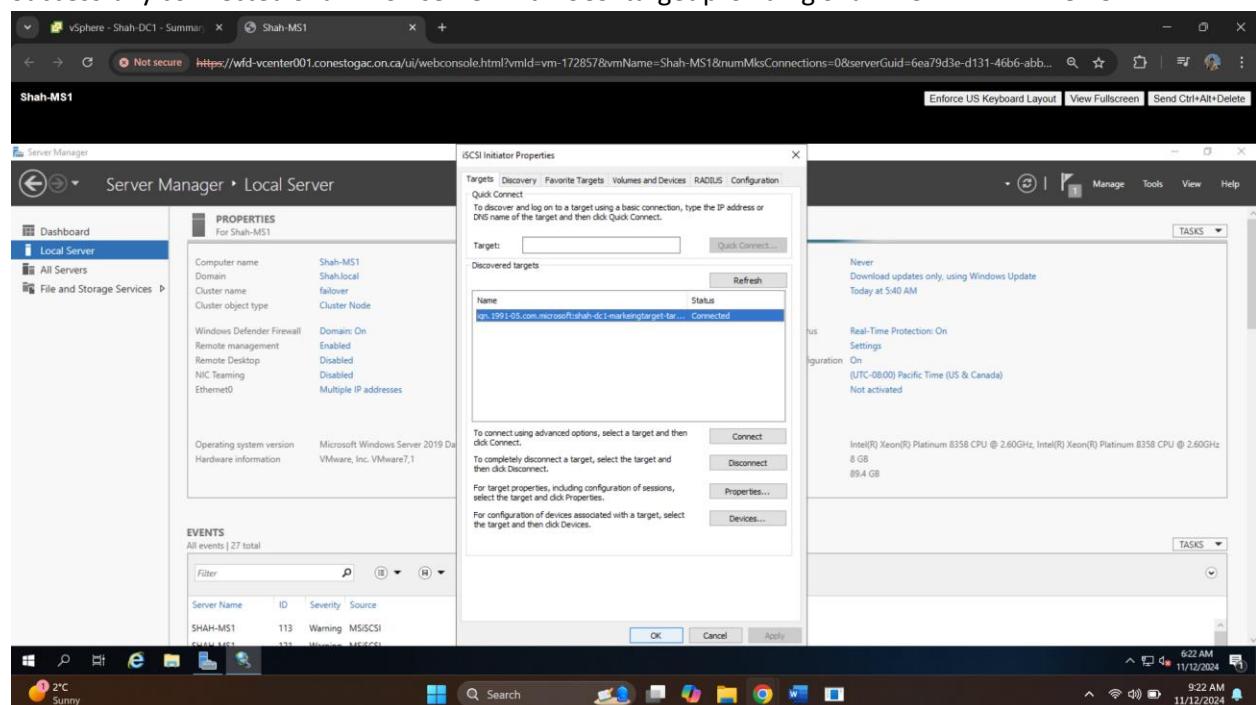


## Practical Assignment 3

On Shah-MS1 server connecting with iSCSI target providing Shah-DC1 IP 172.24.81.5

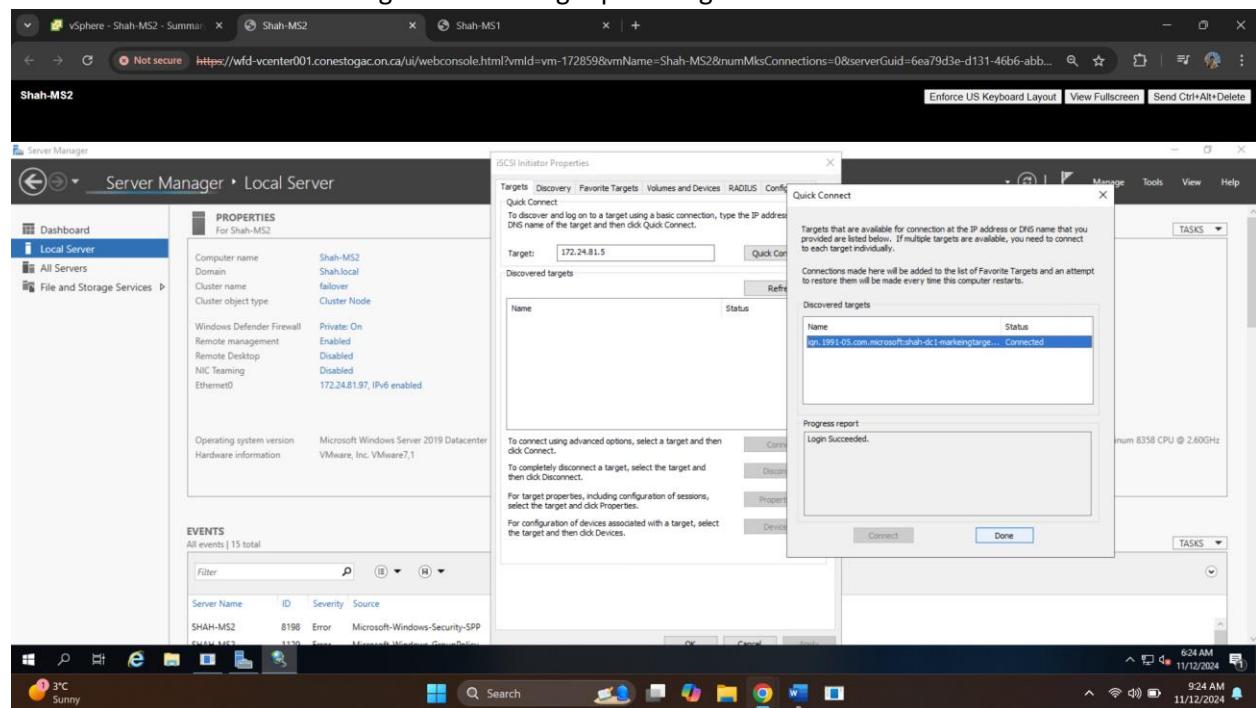


Successfully connected Shah-MS1 server with iSCSI target providing Shah-DC1 IP 172.24.81.5

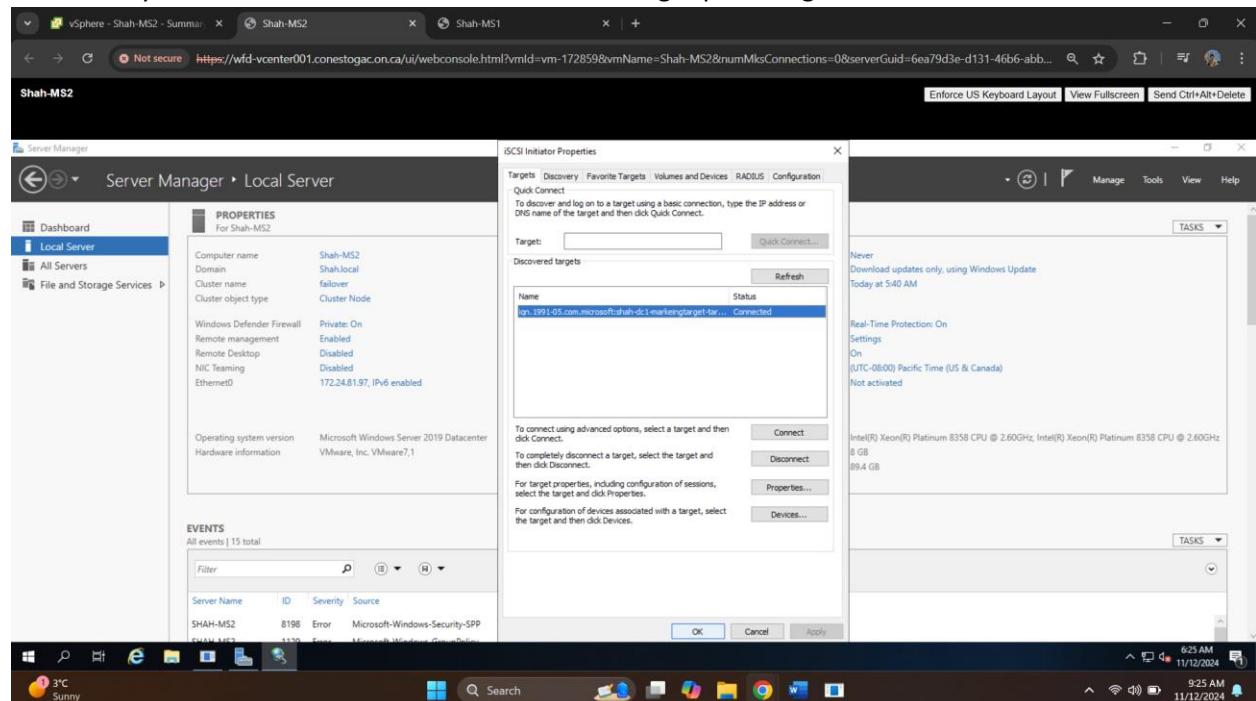


## Practical Assignment 3

On Shah-MS2 server connecting with iSCSI target providing Shah-DC1 IP 172.24.81.5

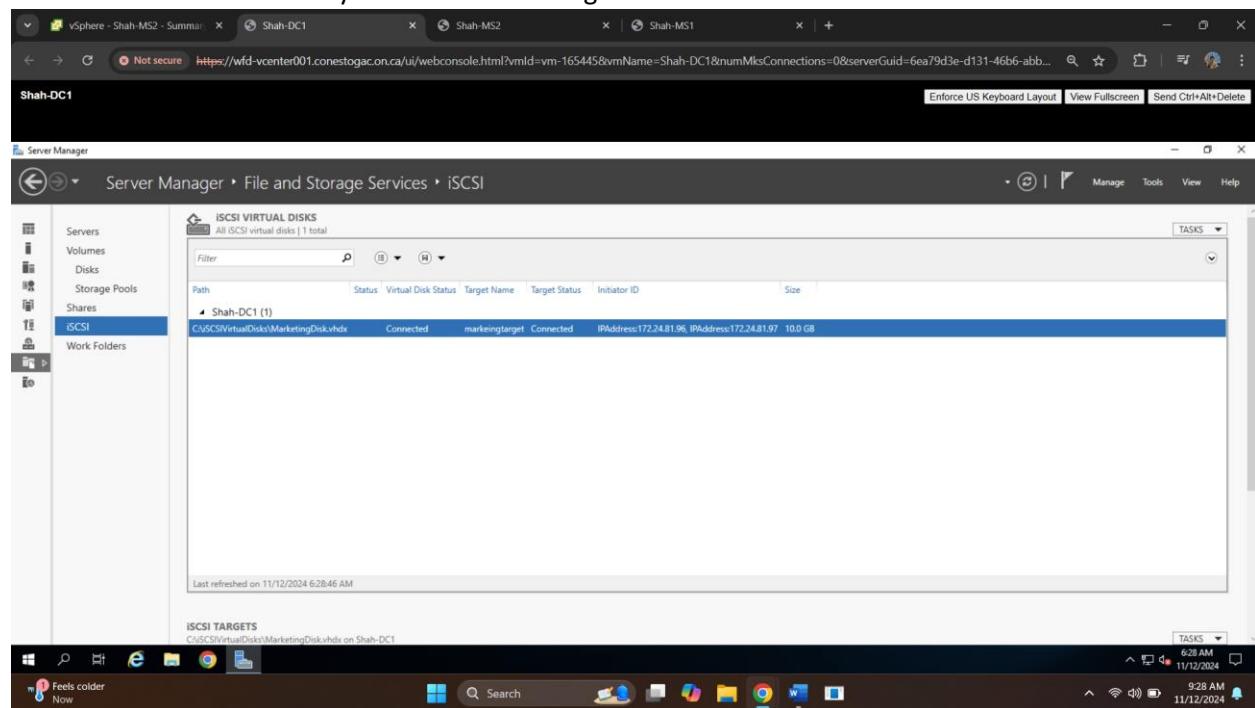


Successfully connected Shah-MS2 server with iSCSI target providing Shah-DC1 IP 172.24.81.5



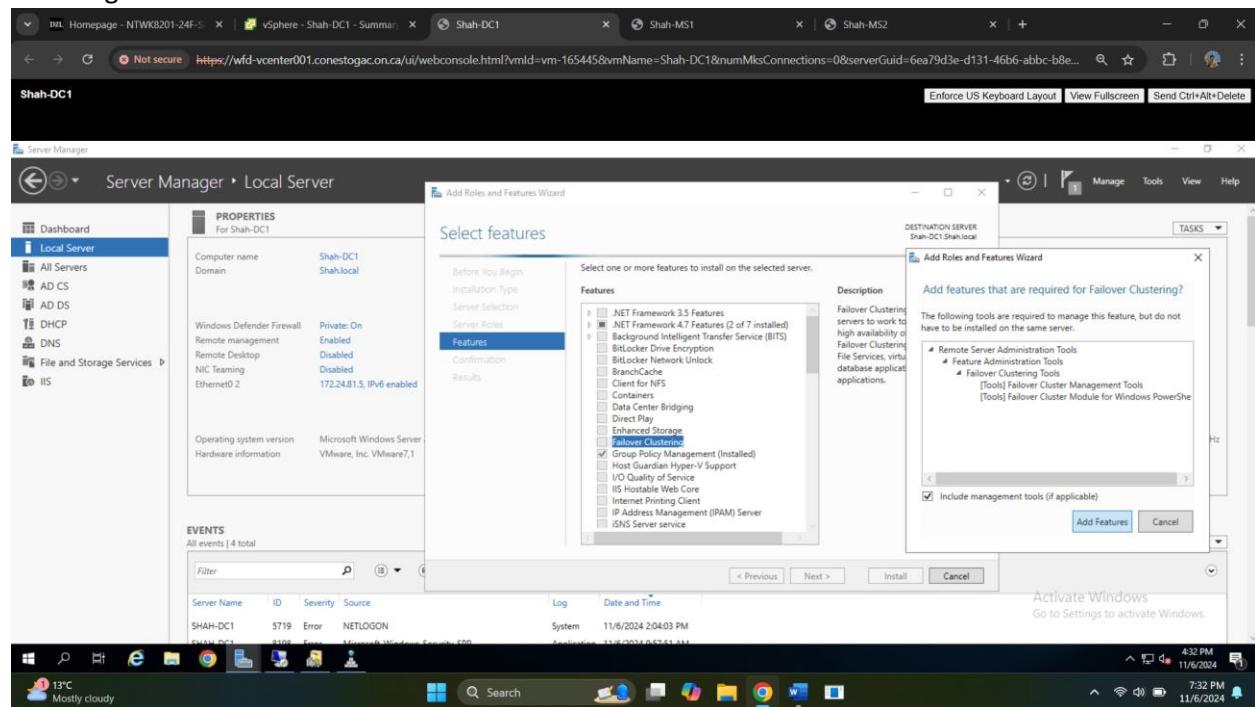
## Practical Assignment 3

iSCSI virtual disk successfully connected with target member servers



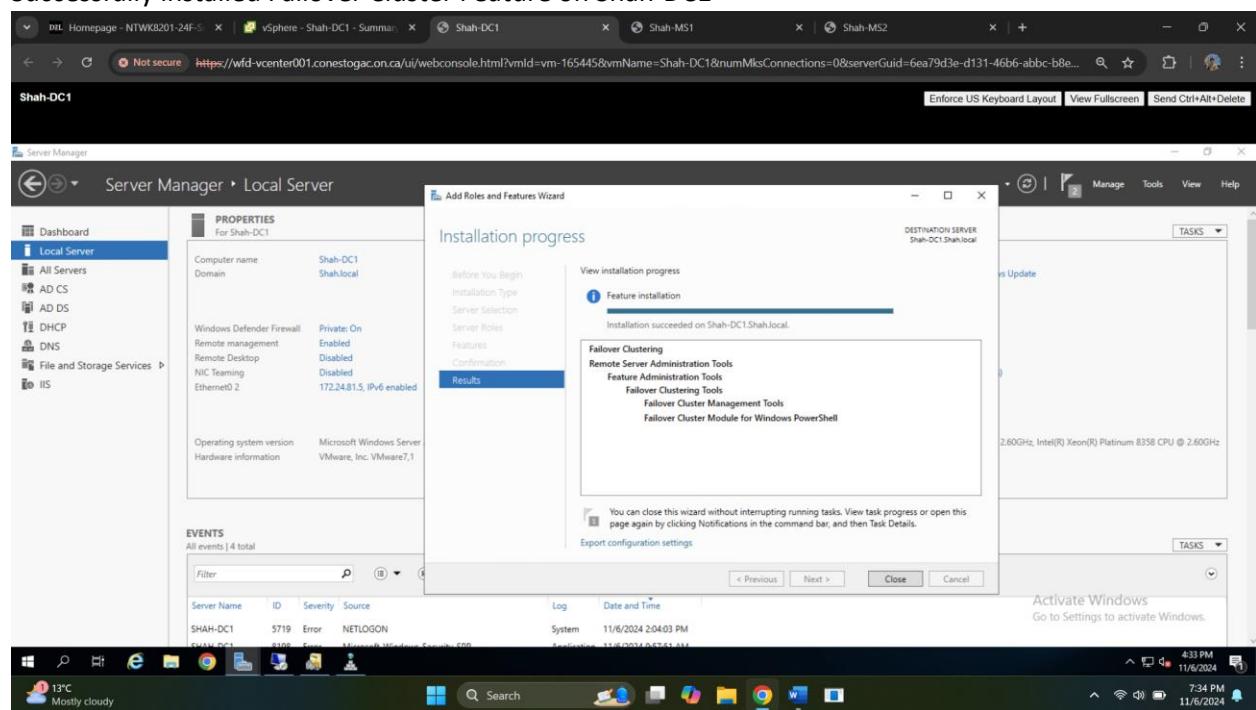
Create a Failover Cluster named failover.Shah.local.

Installing Failover Cluster Feature on Shah-DC1 server

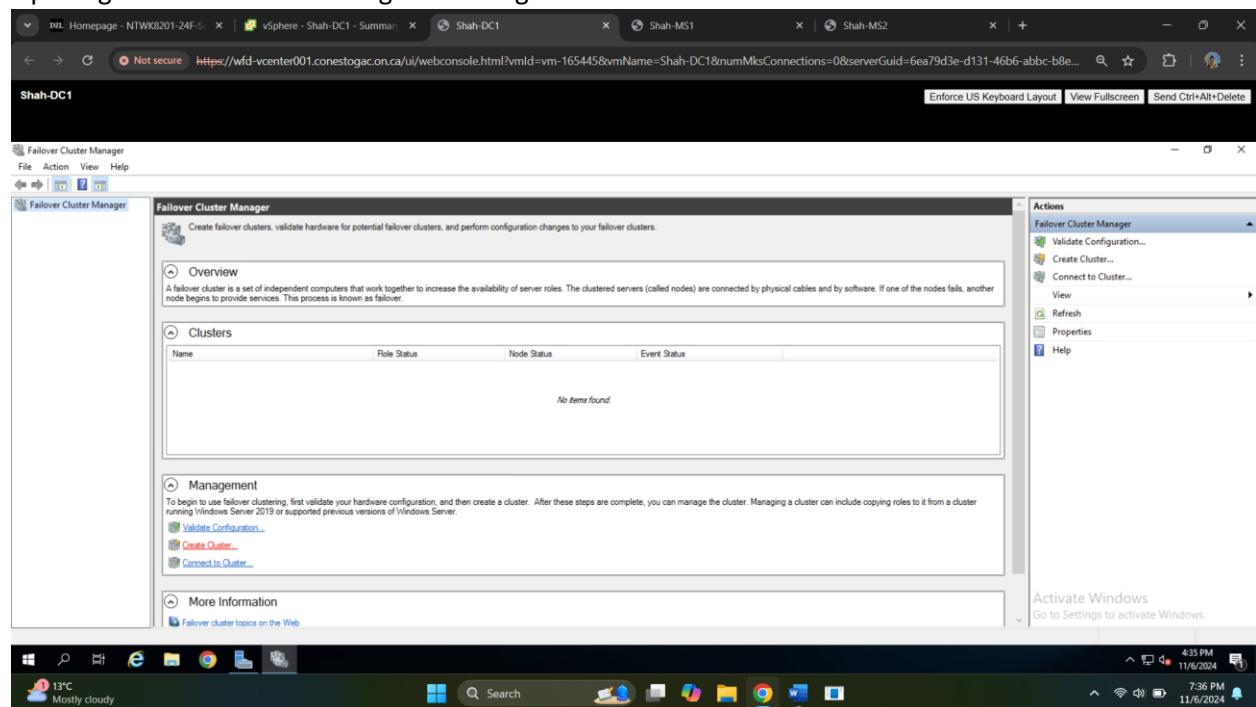


## Practical Assignment 3

Successfully installed Failover Cluster Feature on Shah-DC1

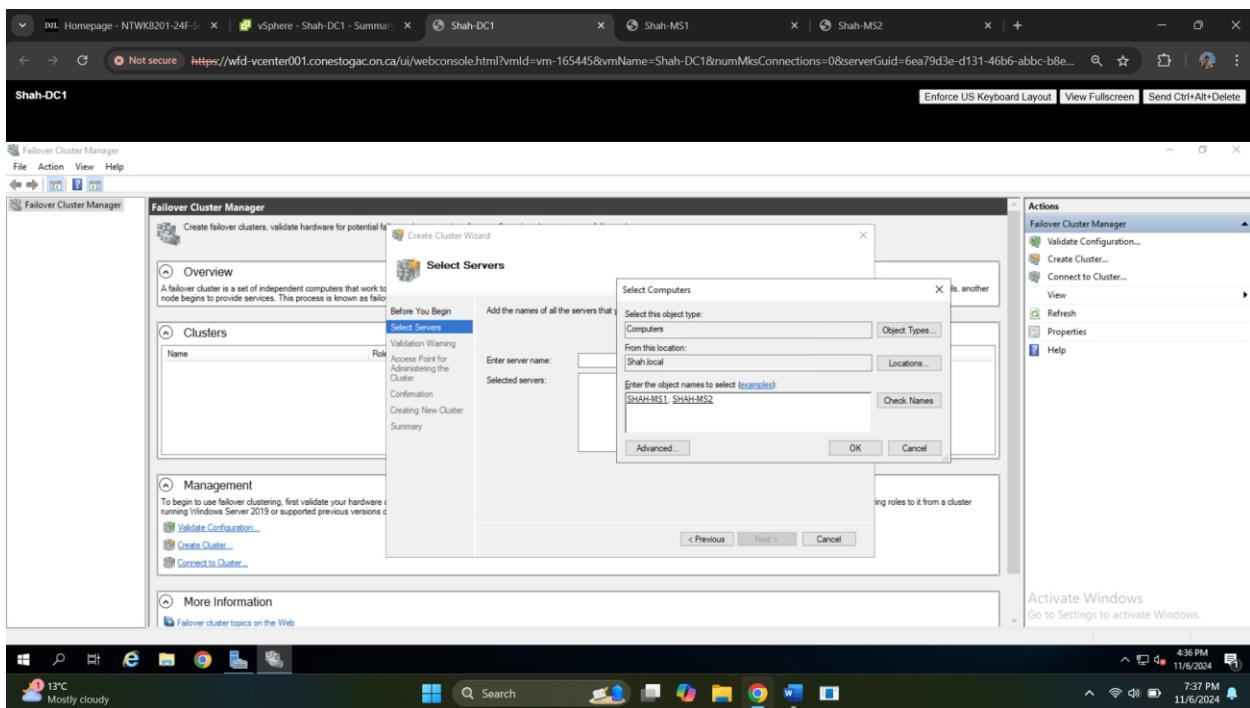


Opening Failover Cluster Manager to configure Failover cluster on Shah-DC1

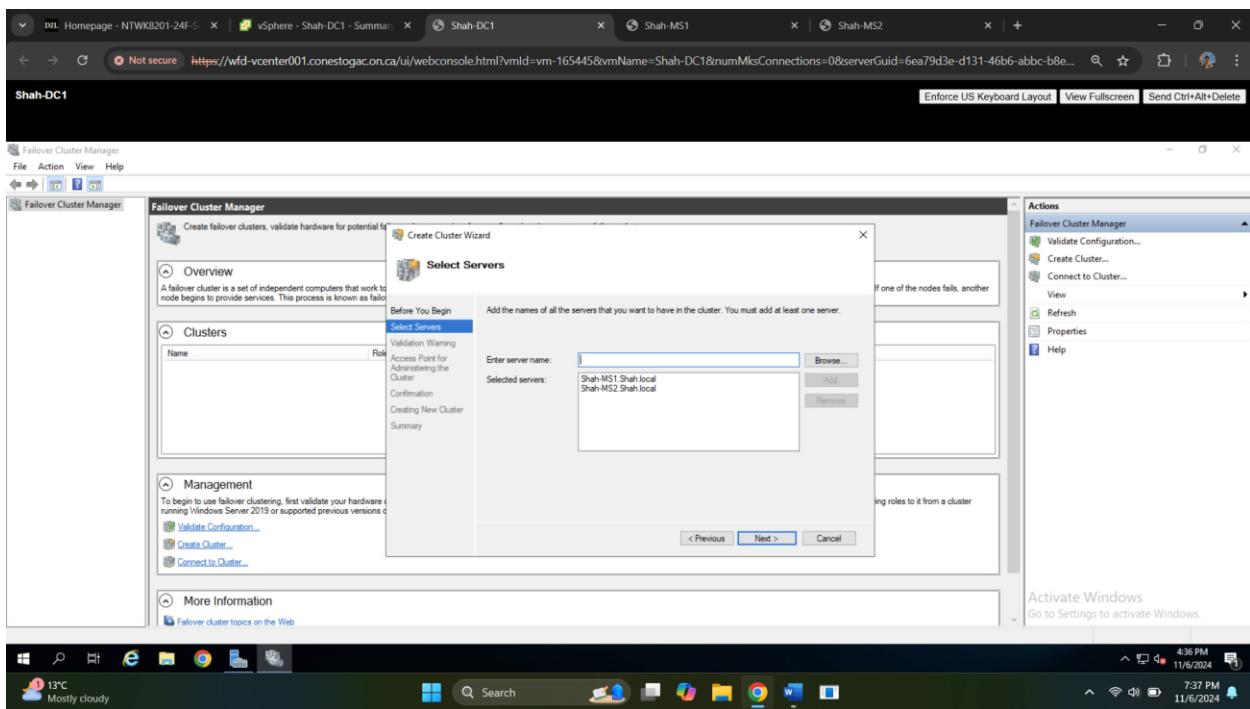


## Practical Assignment 3

### Add Shah-MS1 and Shah-MS2 in Failover Cluster as Nodes

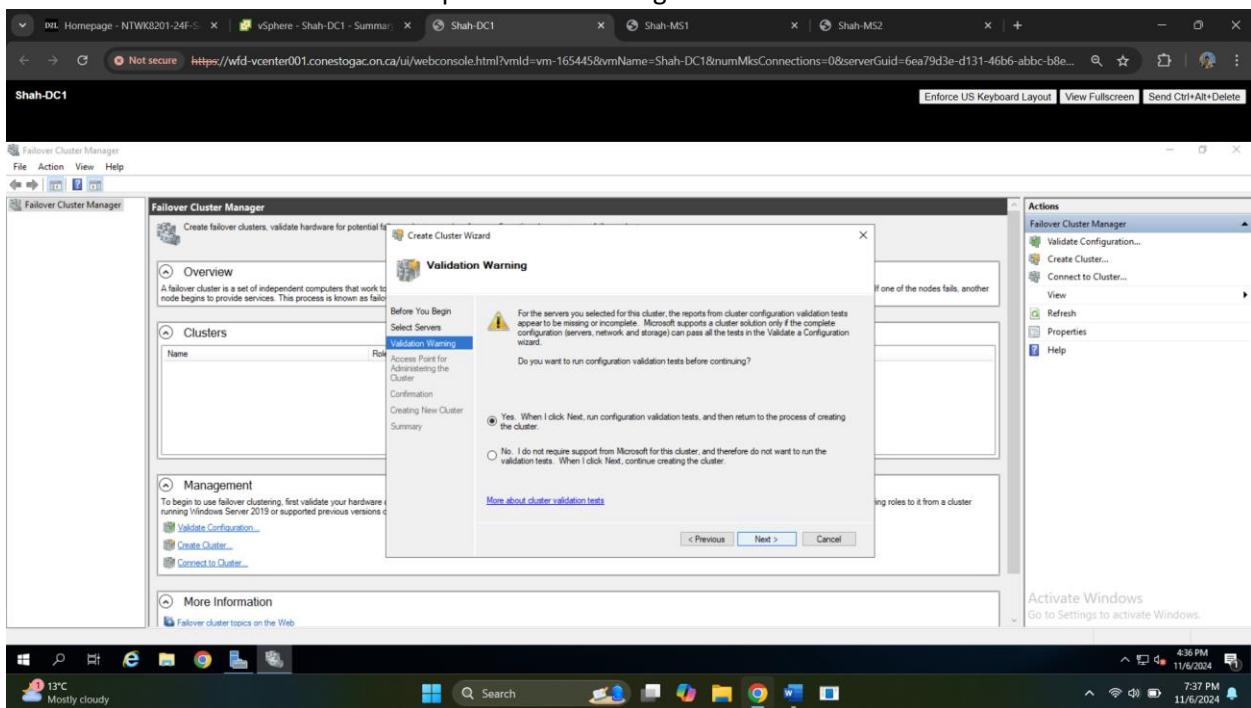


Selected Servers as nodes for Cluster creation.

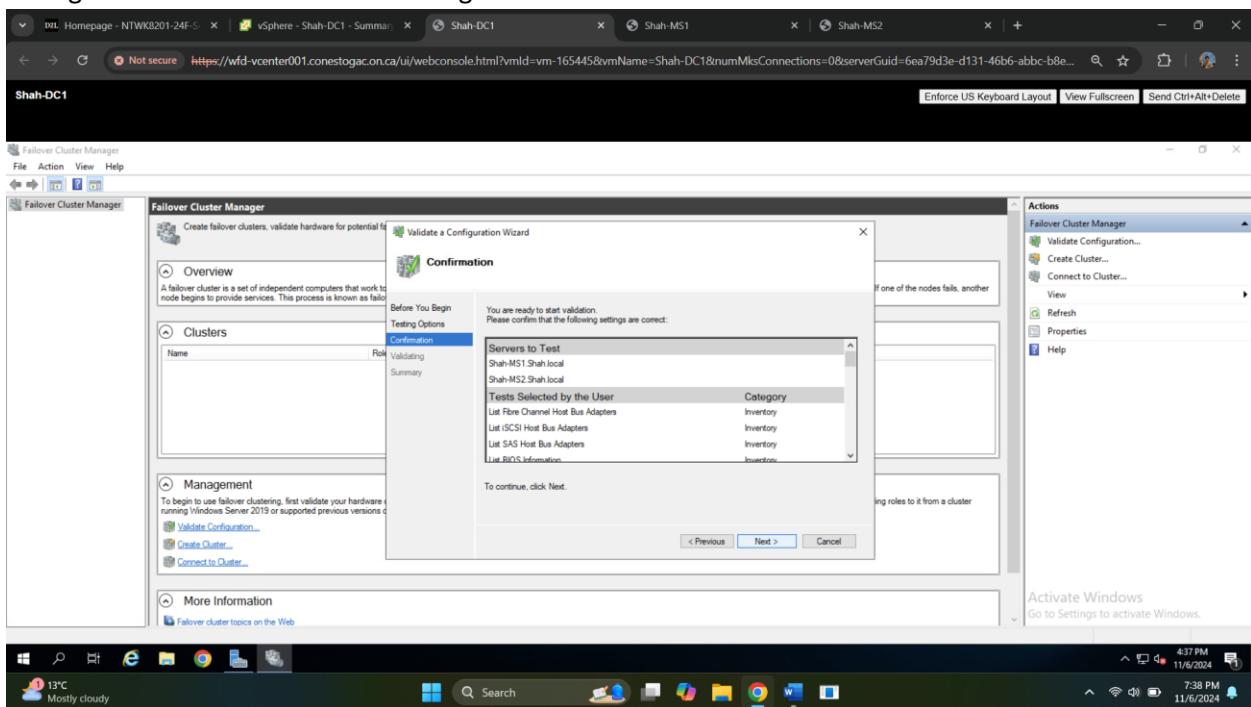


## Practical Assignment 3

Select Yes for validation Test for the process of creating the cluster.

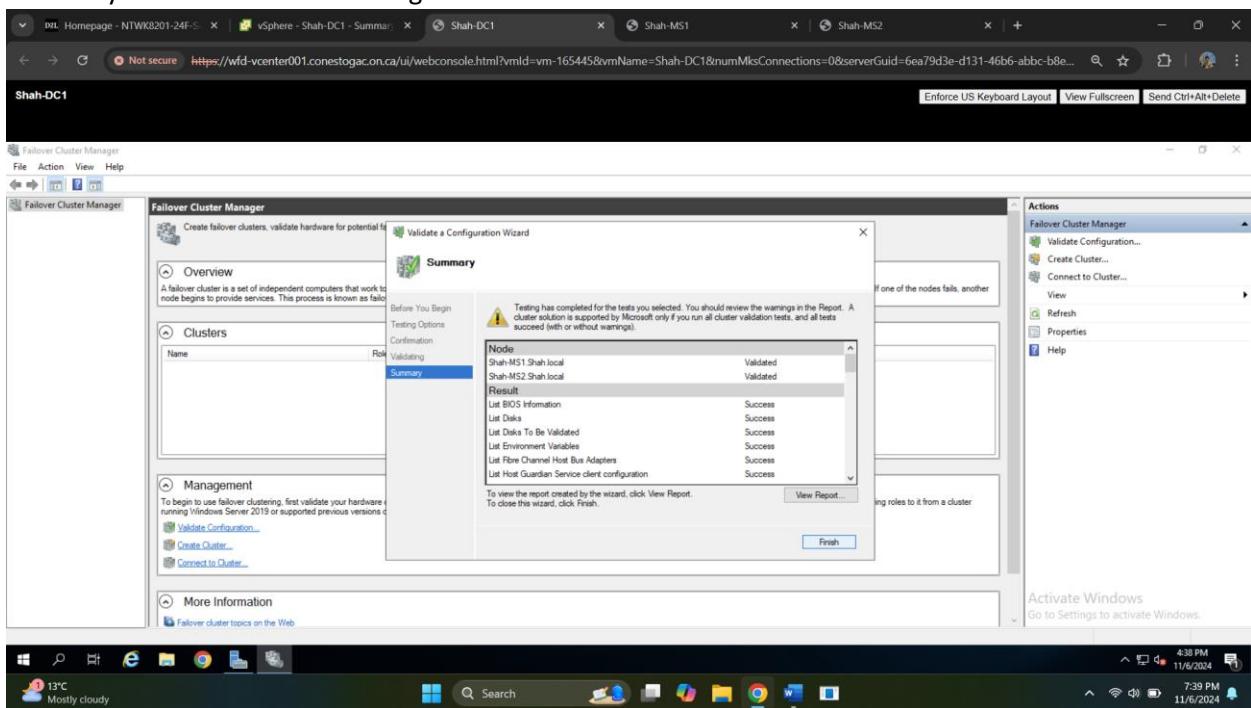


Configuration of cluster creation configuration.

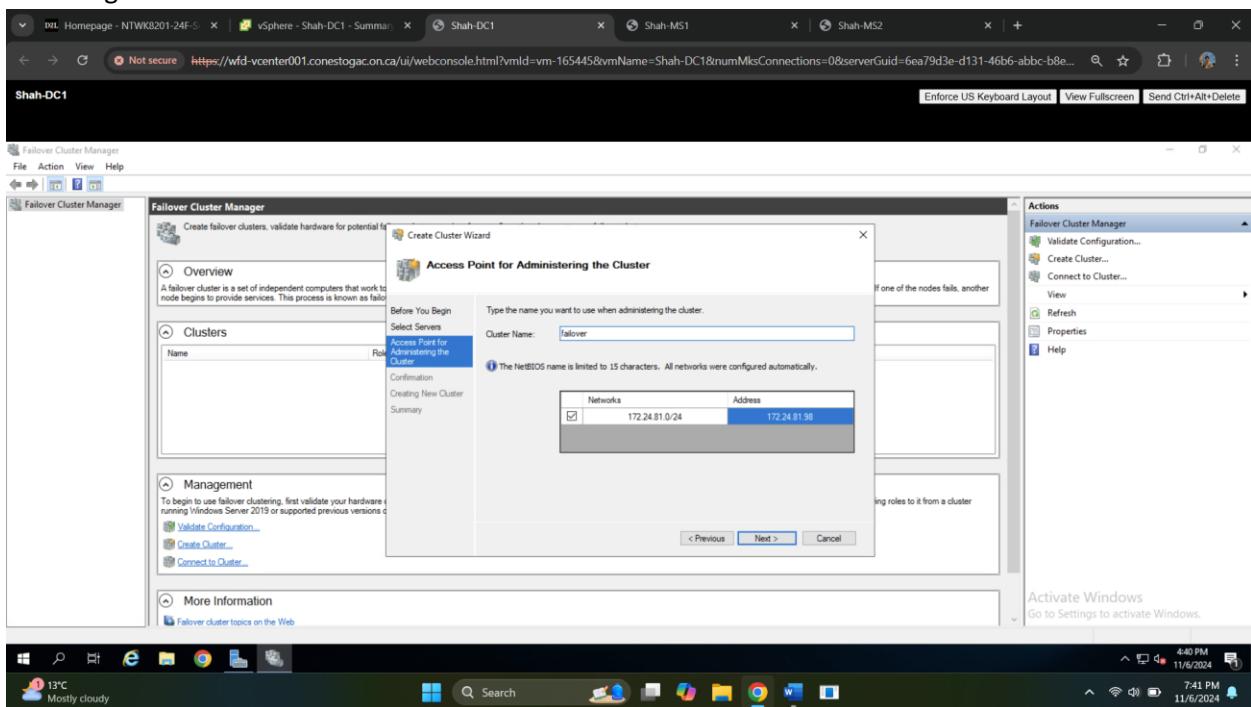


## Practical Assignment 3

### Summary of cluster creation configuration.

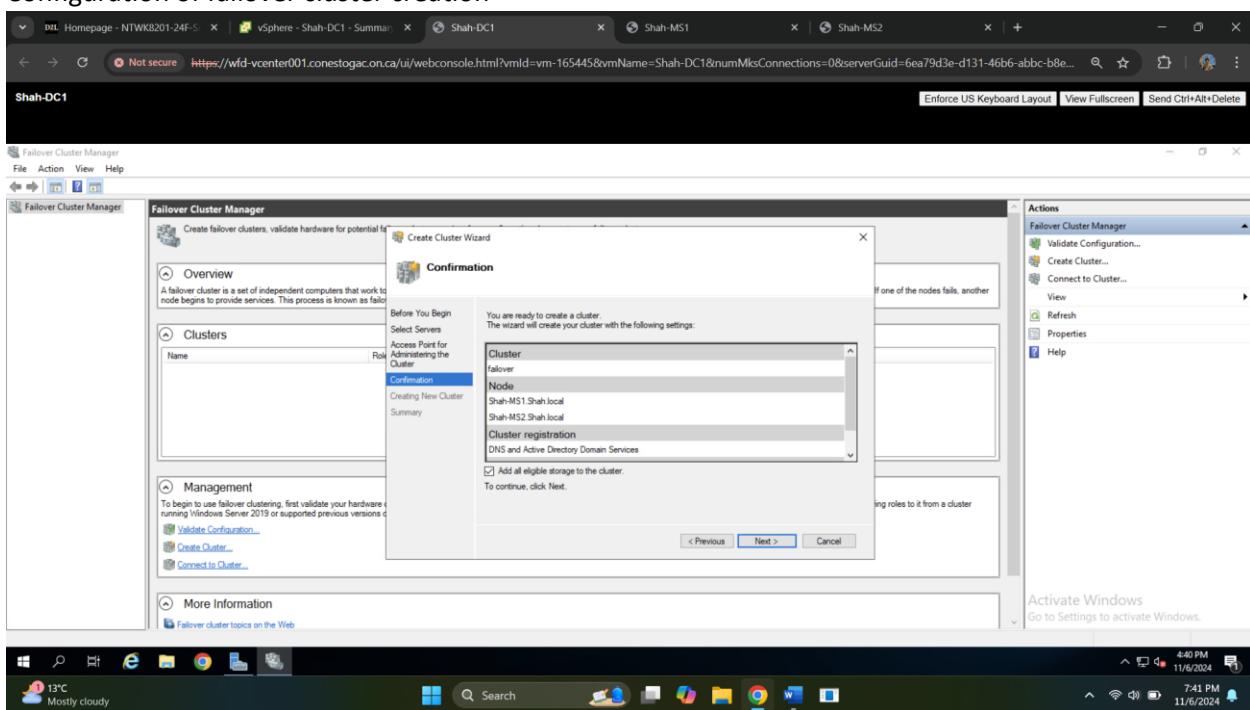


### Providing Name as "Failover" and IP address as 172.24.81.98

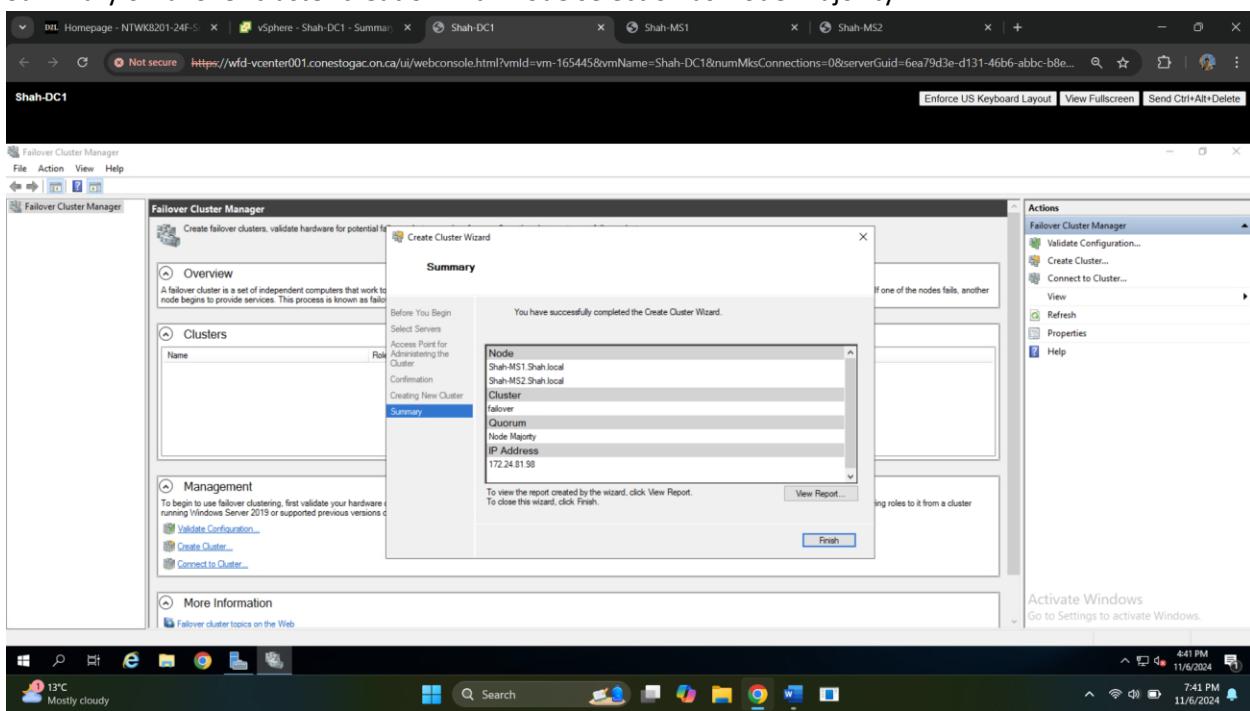


## Practical Assignment 3

### Configuration of failover cluster creation

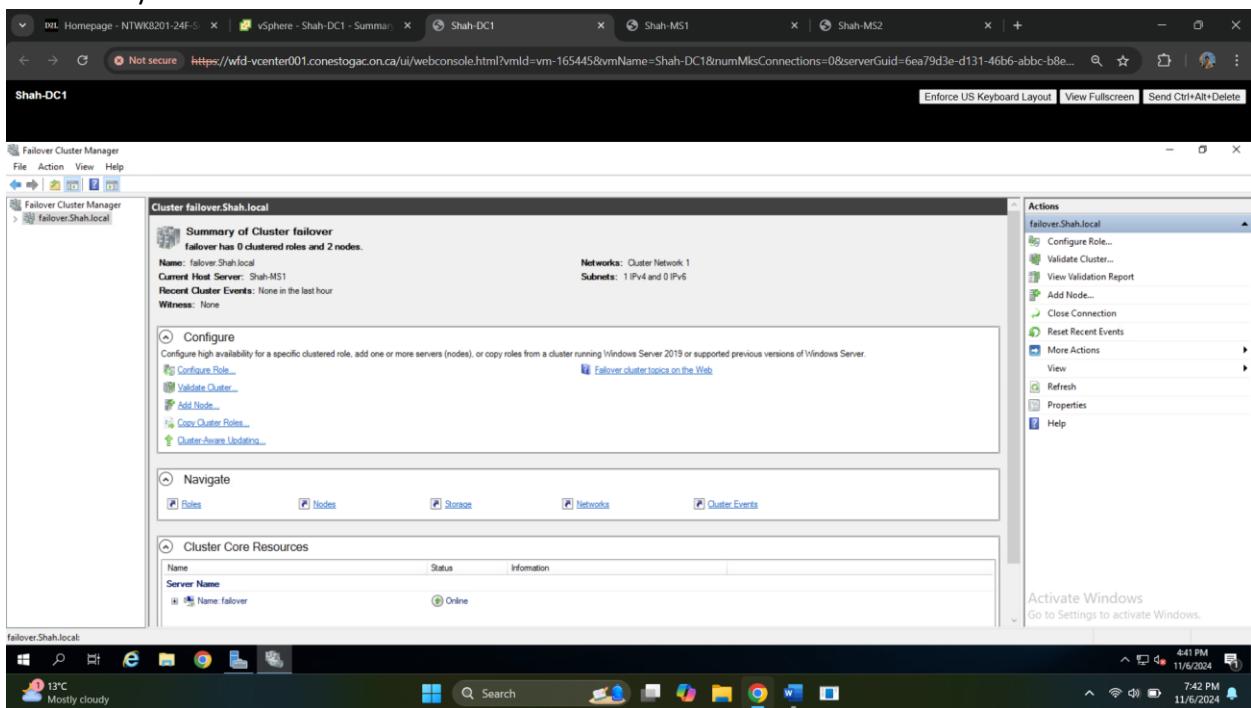


### Summary of failover cluster creation with Node selection as Node Majority

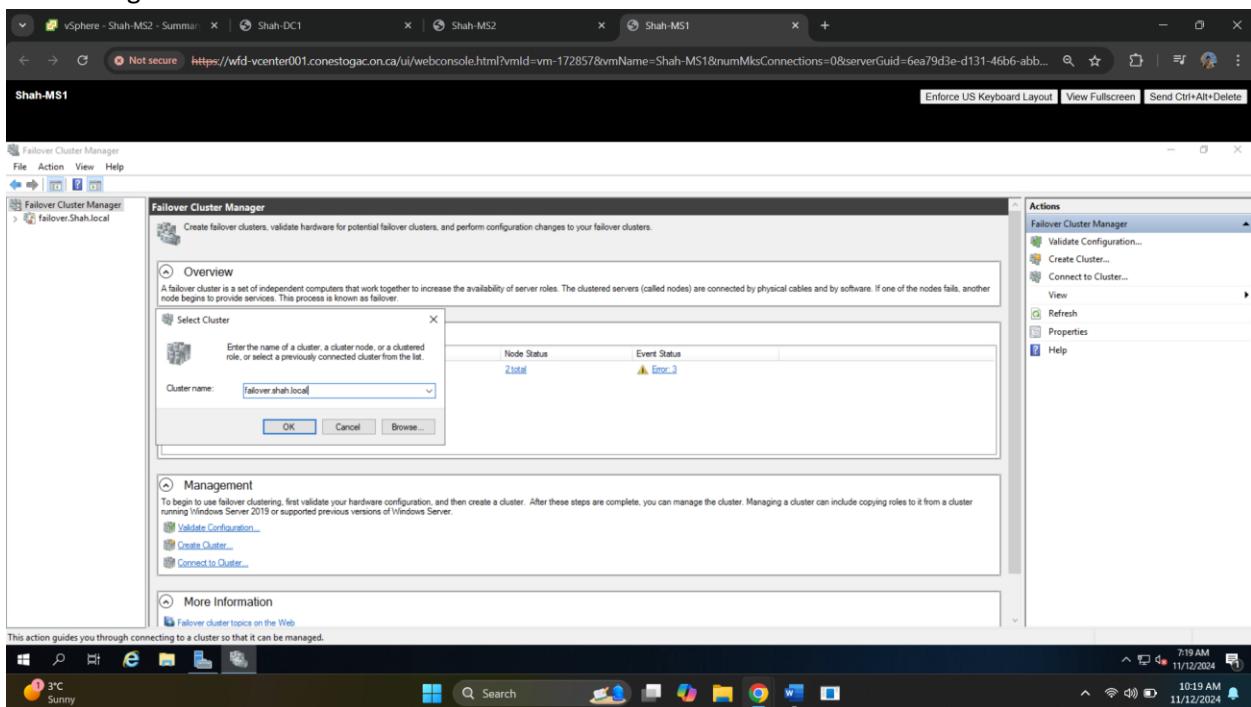


## Practical Assignment 3

Successfully failover cluster created.

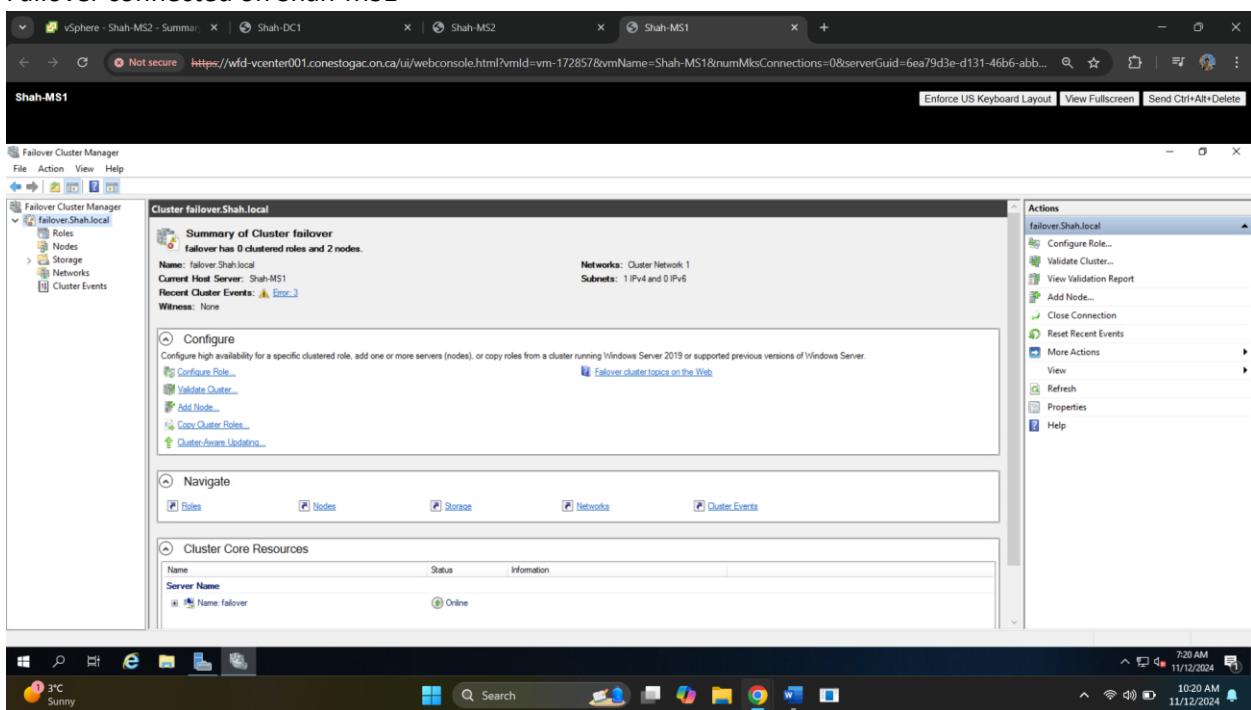


### Connecting Failover Cluster on Shah-MS1

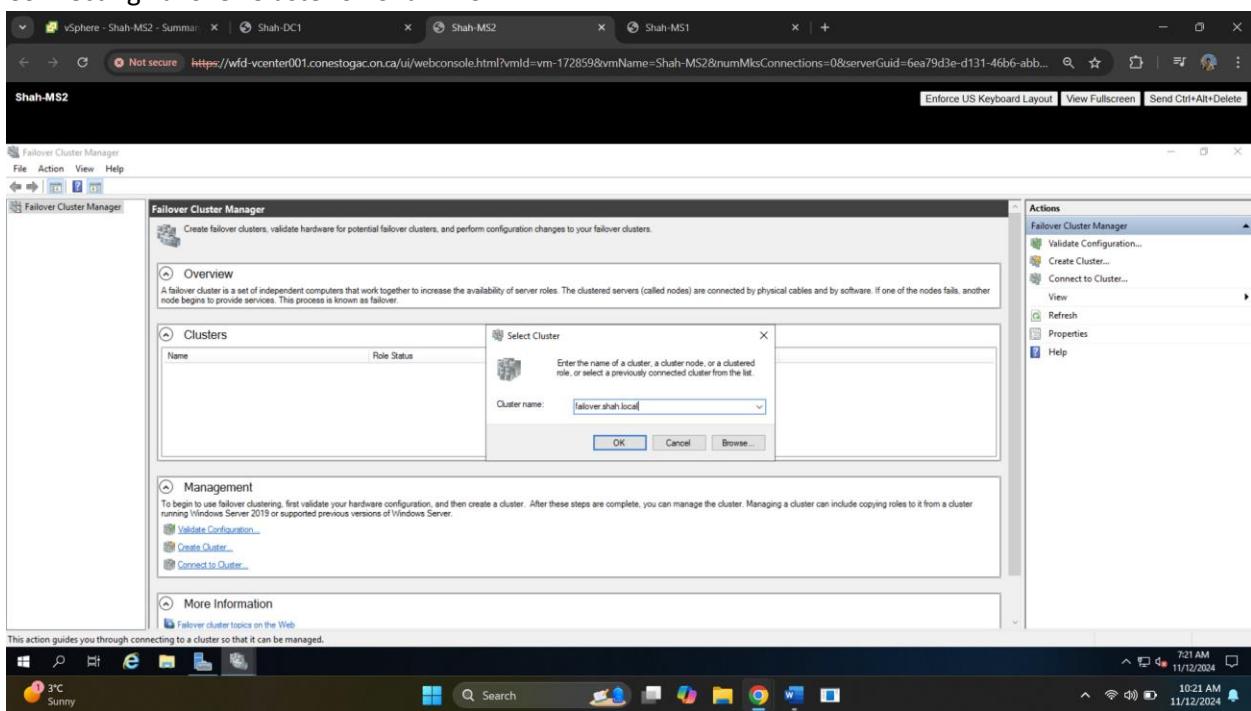


## Practical Assignment 3

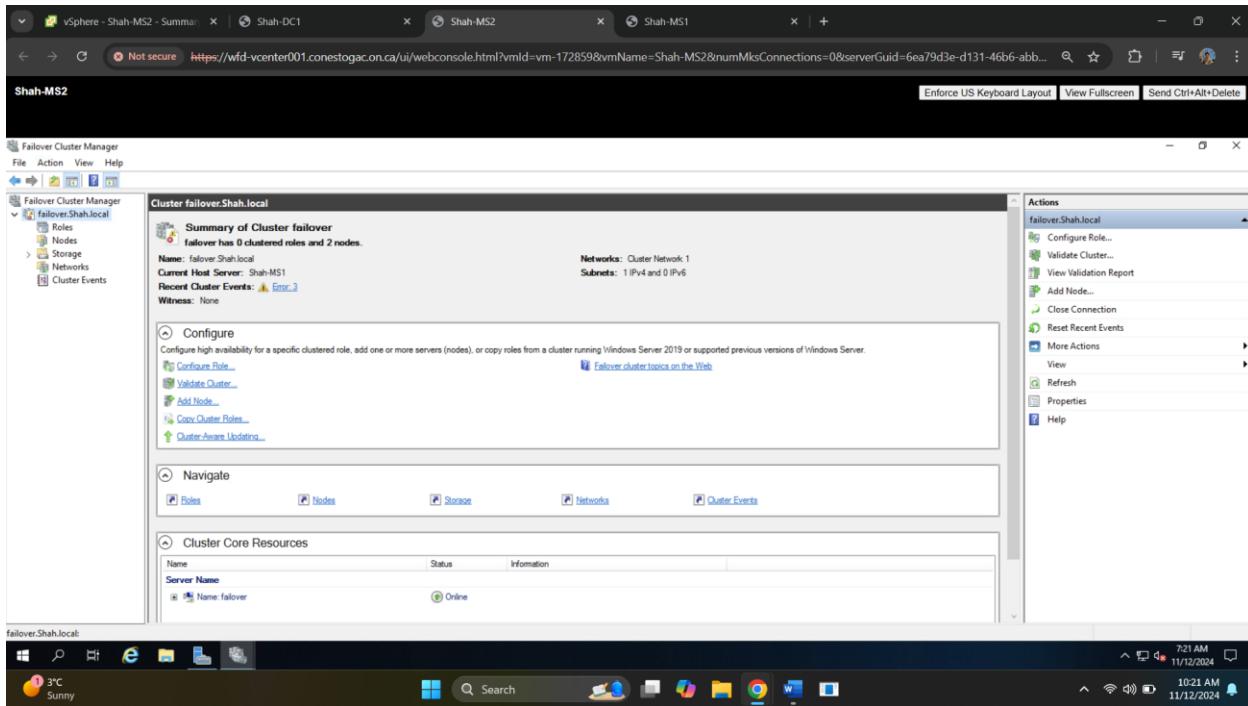
### Failover connected on Shah-MS1



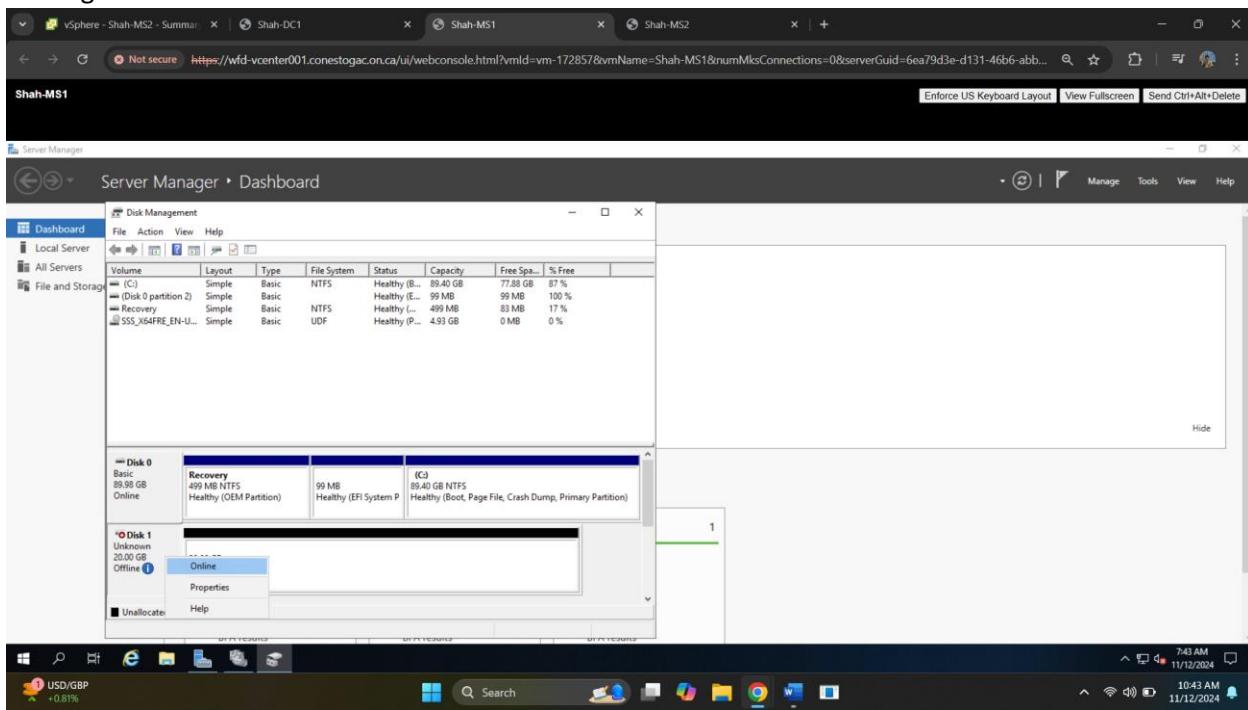
### Connecting Failover Cluster on Shah-MS2



## Practical Assignment 3

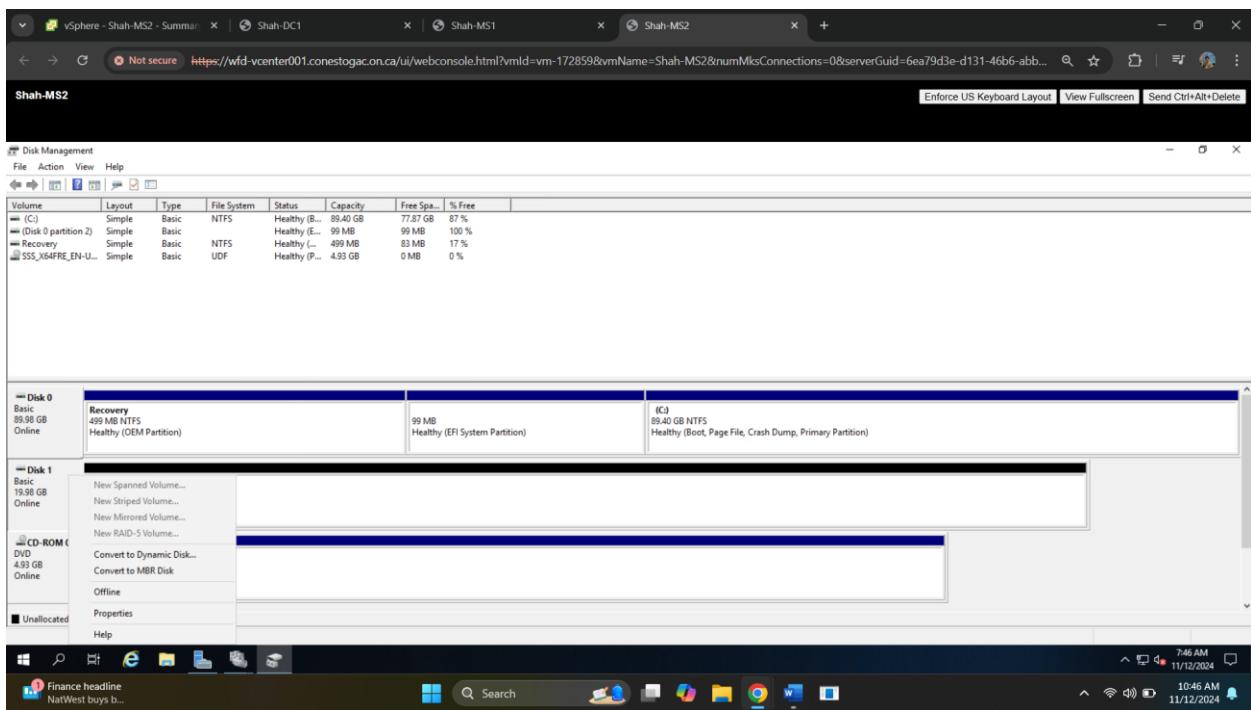


### Making iSCSI disk online on Shah-MS1 and Shah-MS2

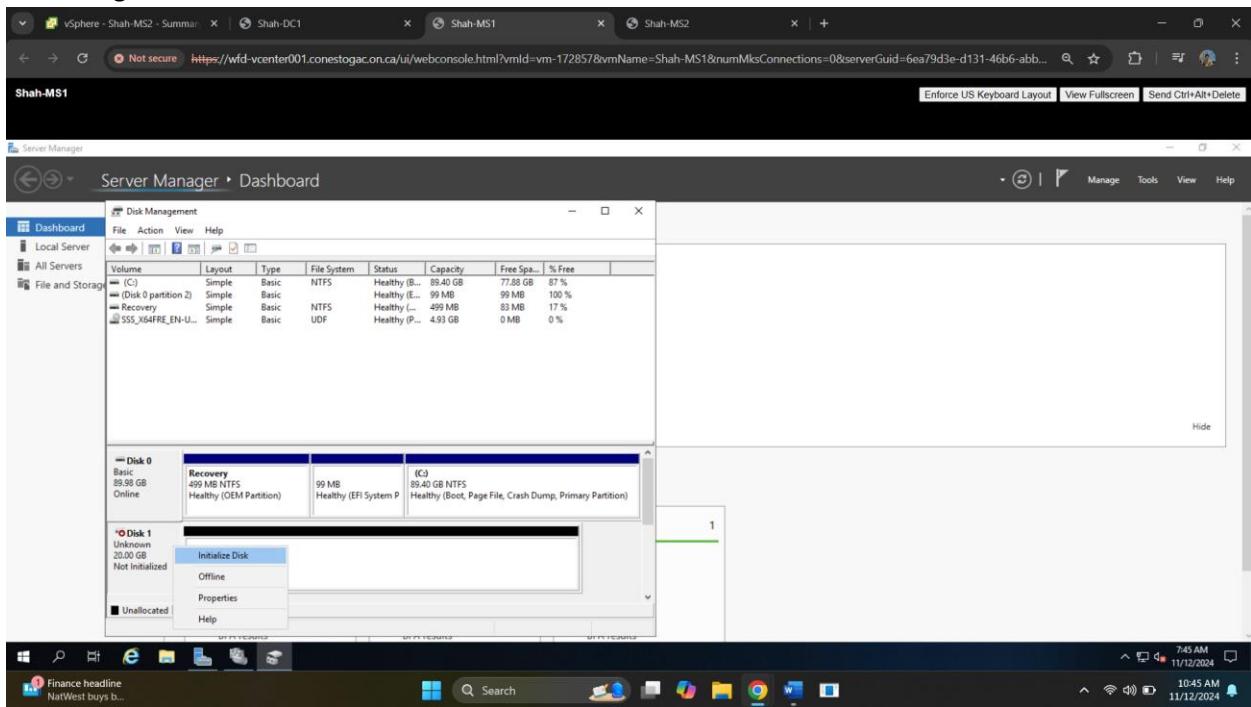


# Practical Assignment 3

## Shah-MS2 online



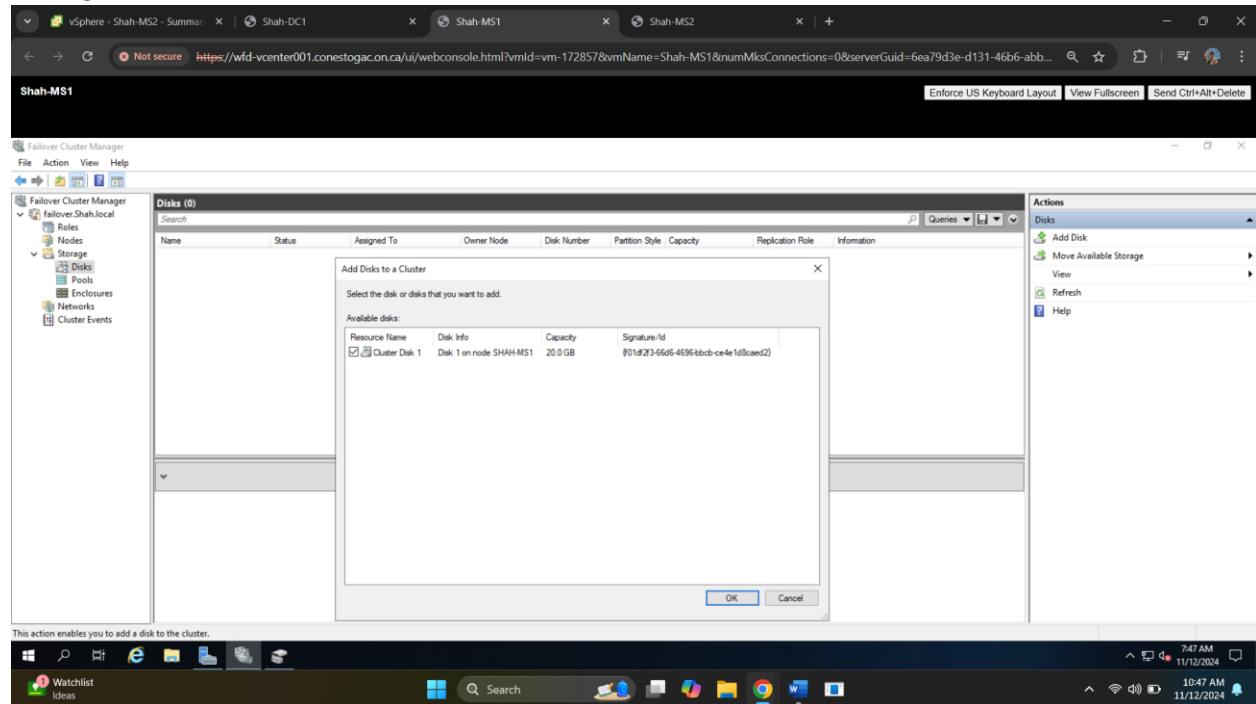
## Initializing disk



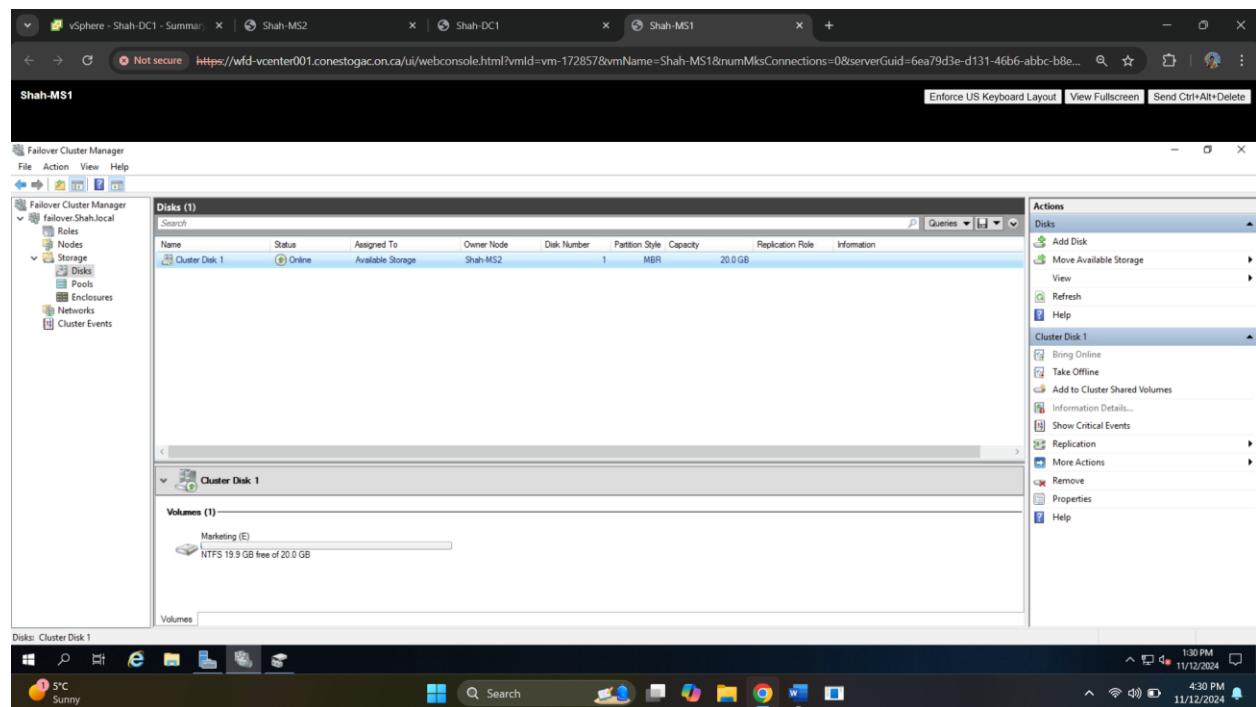
## Practical Assignment 3

### Configure the File Server clustered role with a share marketing can access.

Adding disk to Failover Cluster on Shah-MS1

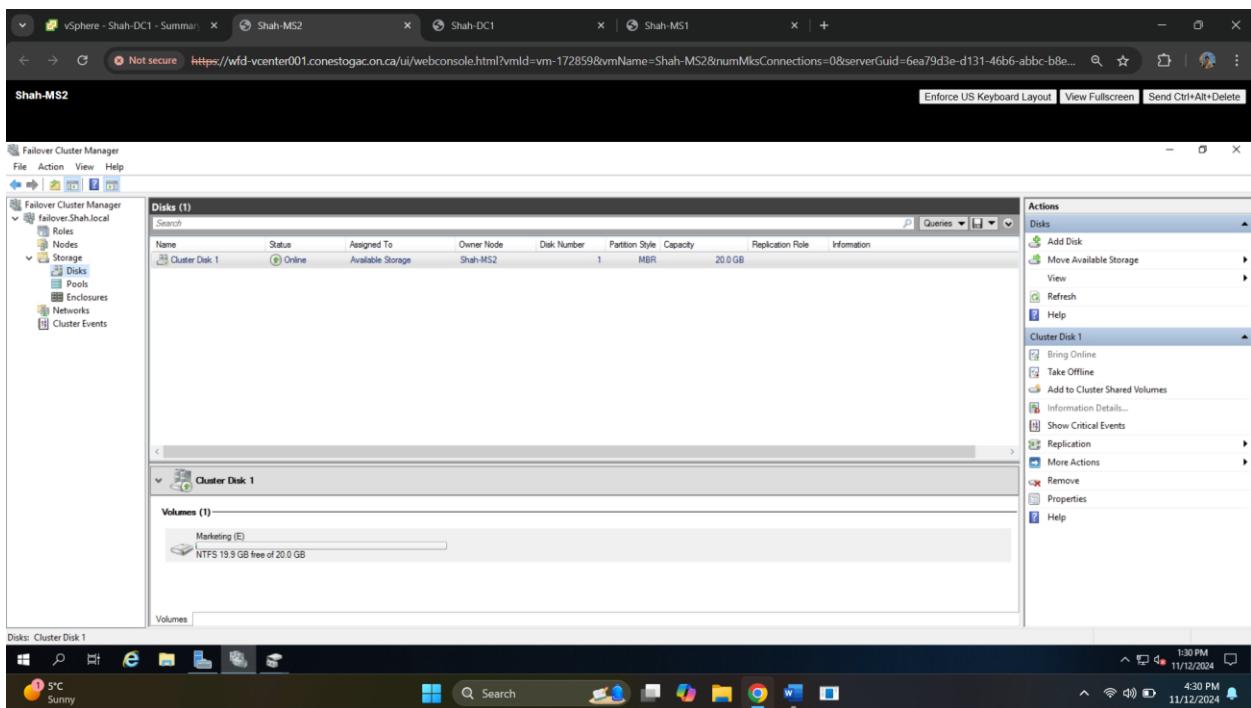


Disk connected on Shah-MS1

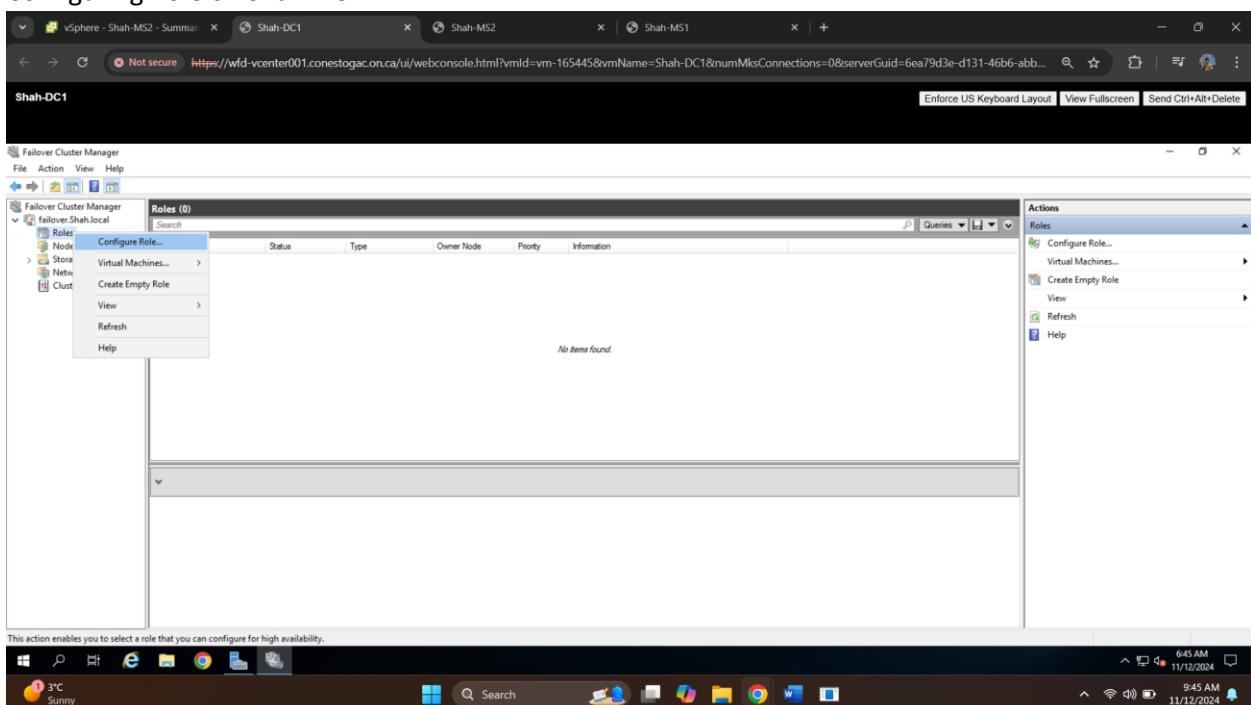


## Practical Assignment 3

Added on Shah-MS2

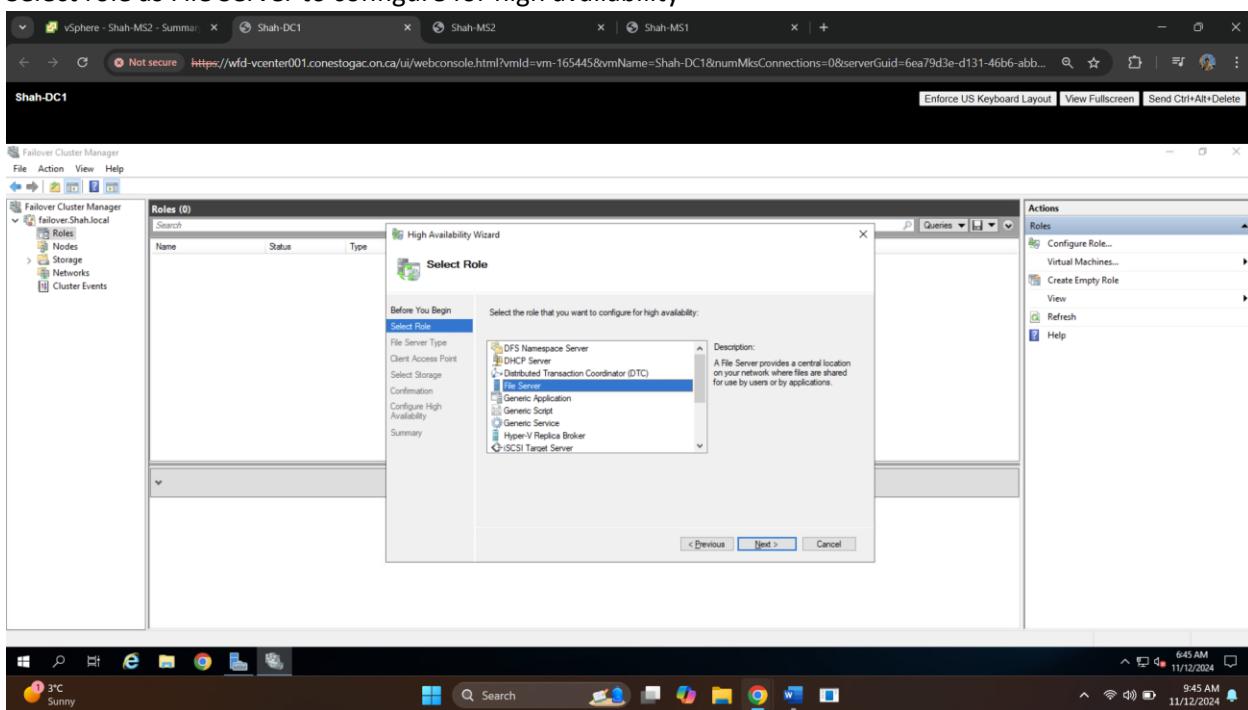


Configuring Role on Shah-DC1

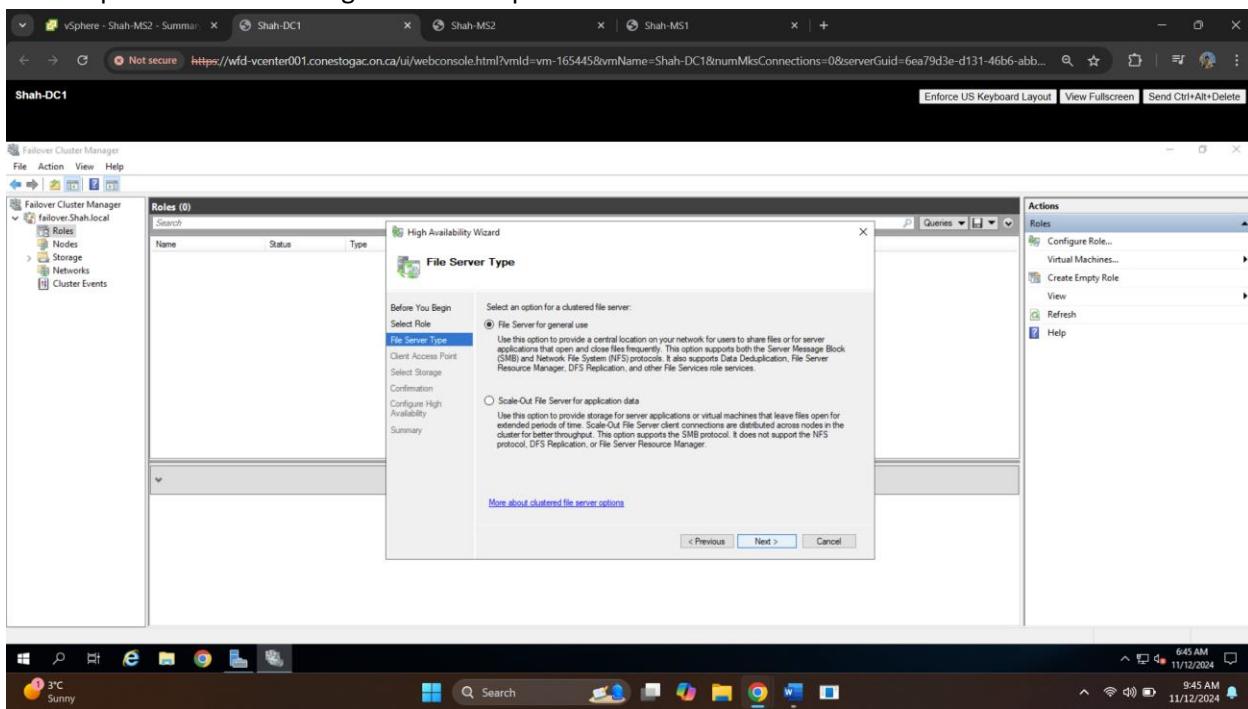


## Practical Assignment 3

### Select role as File Server to configure for high availability

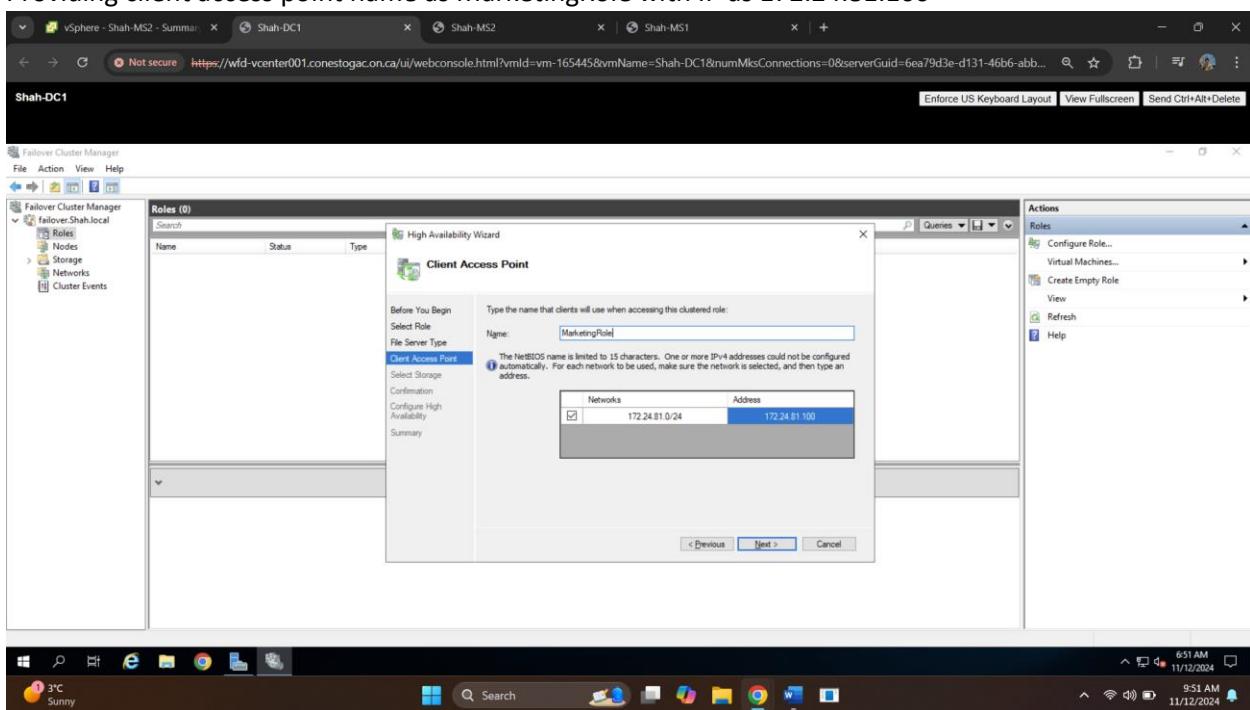


Select option File Server for general user option for Clustered File Server.

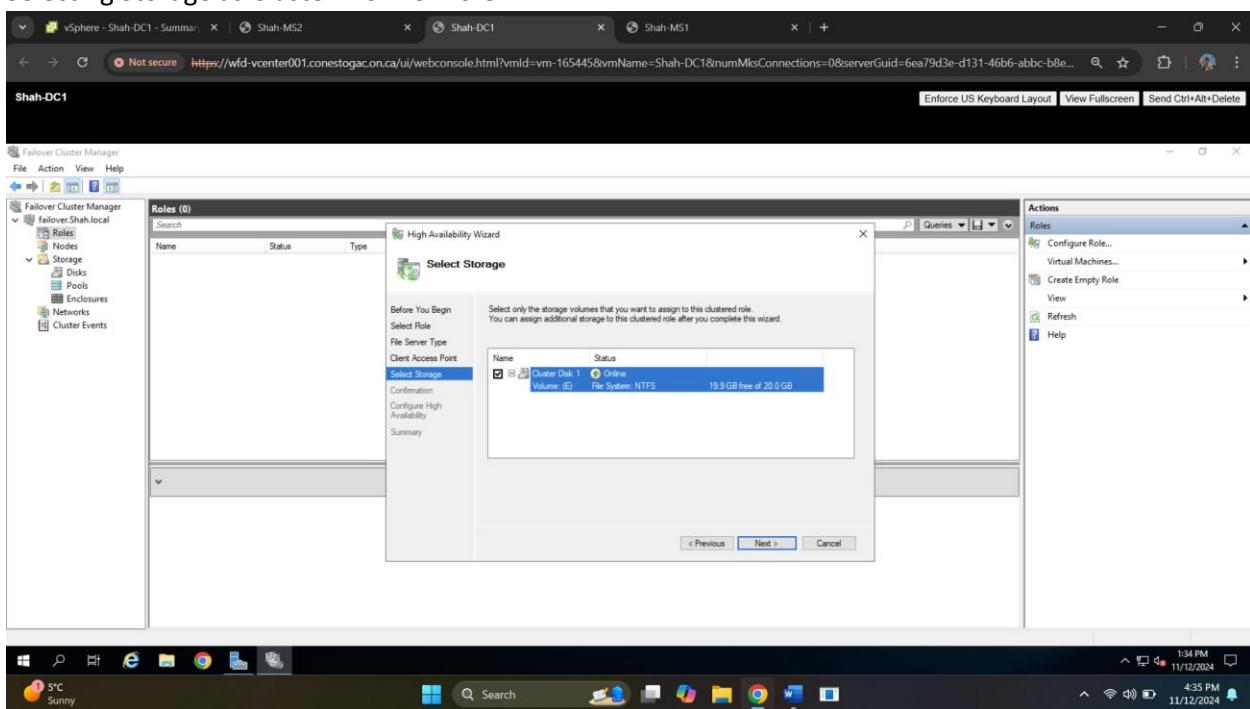


## Practical Assignment 3

Providing client access point name as MarketingRole with IP as 172.24.81.100

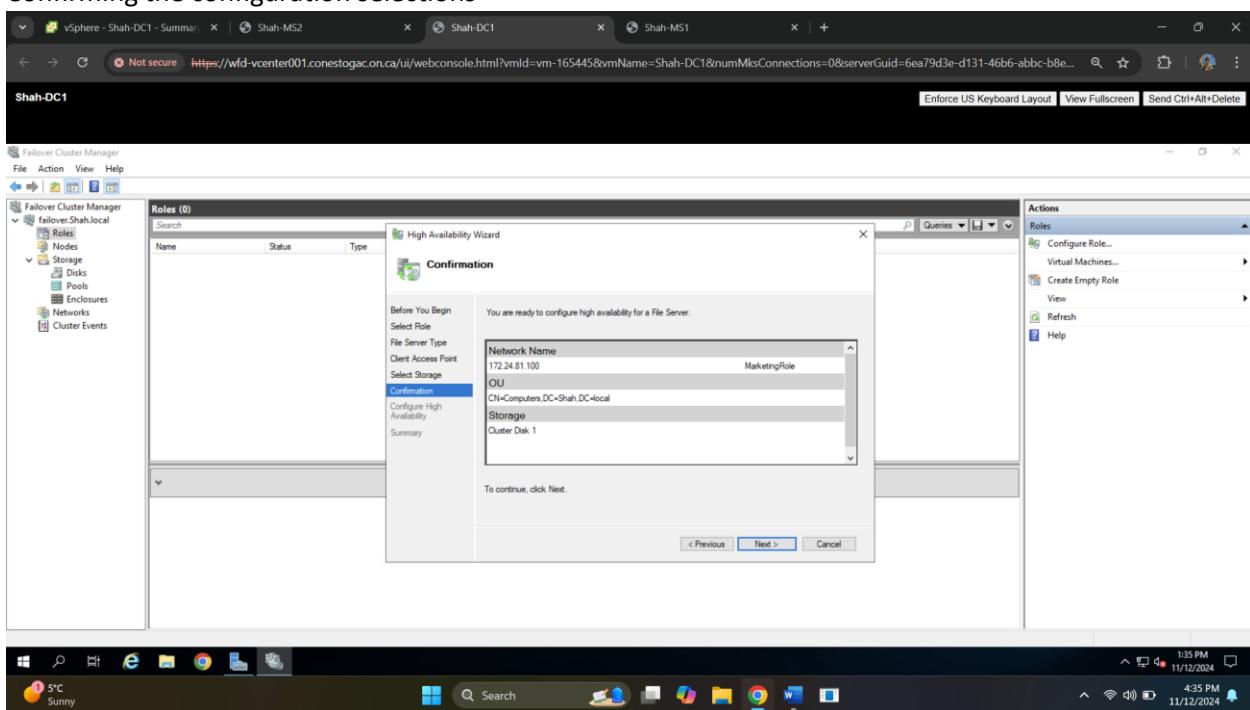


Selecting Storage as Cluster Disk1 of 20 GB

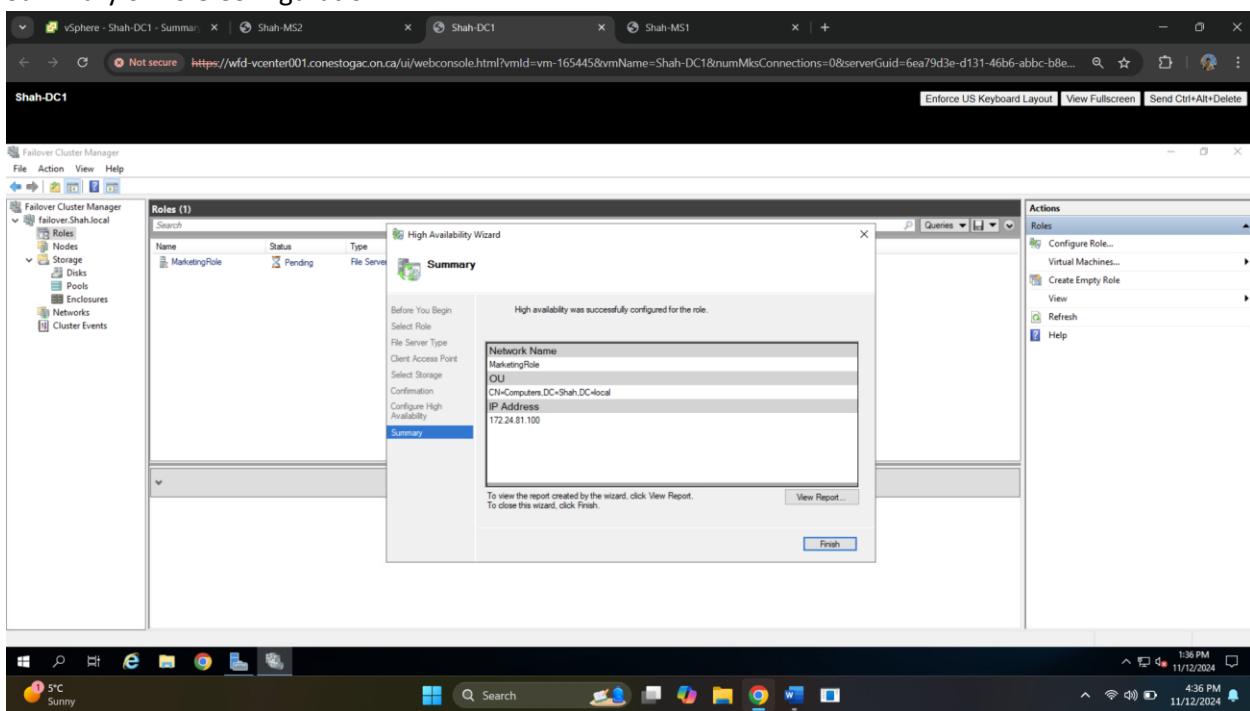


# Practical Assignment 3

## Confirming the configuration selections

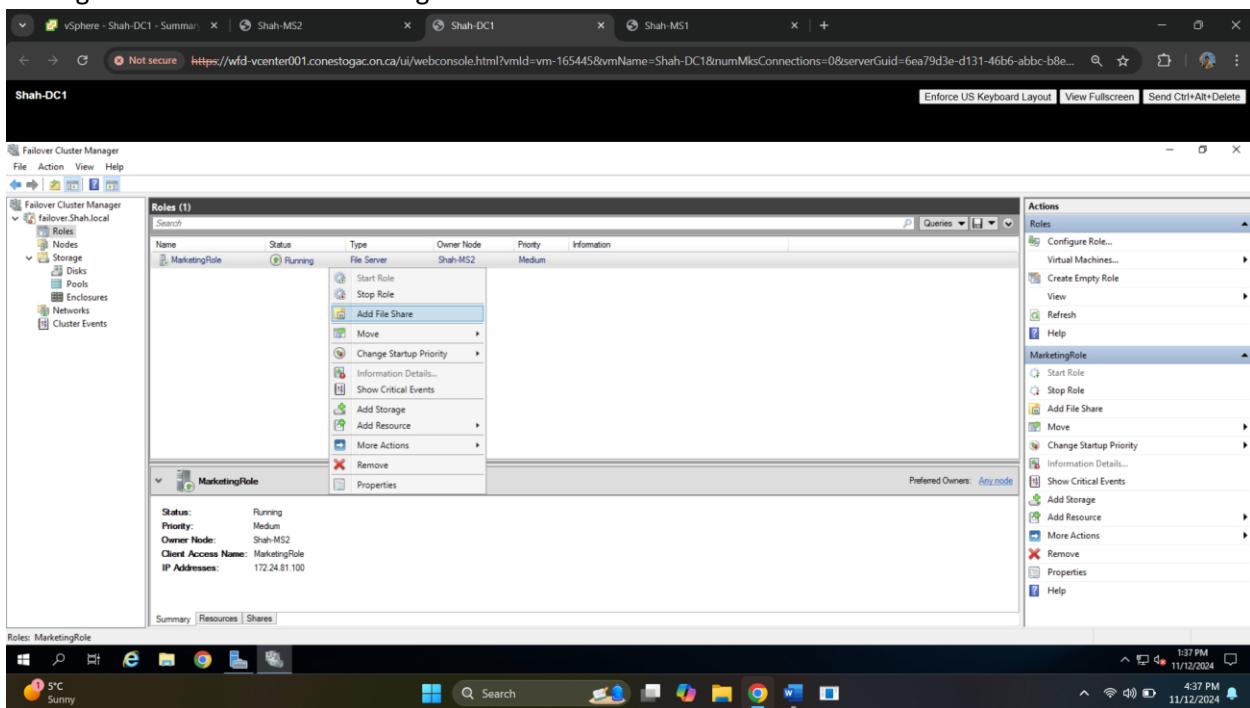


## Summary of Role Configuration

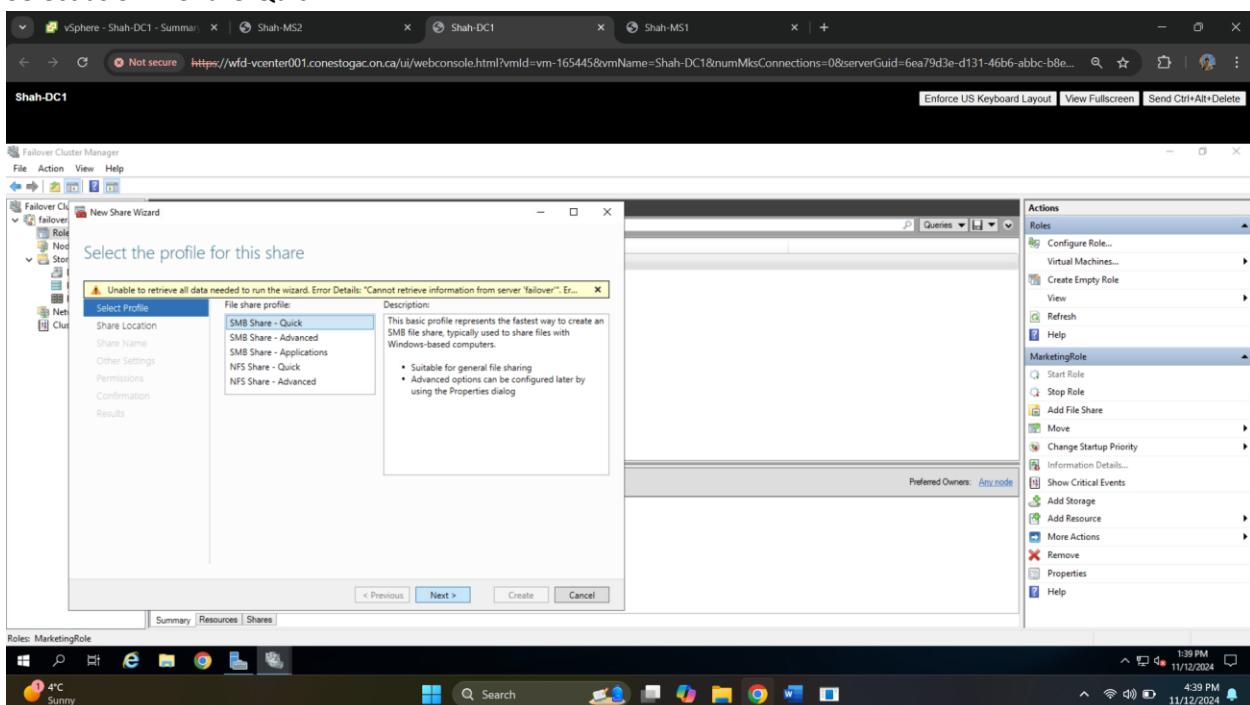


## Practical Assignment 3

### Adding File Share to the Role configured

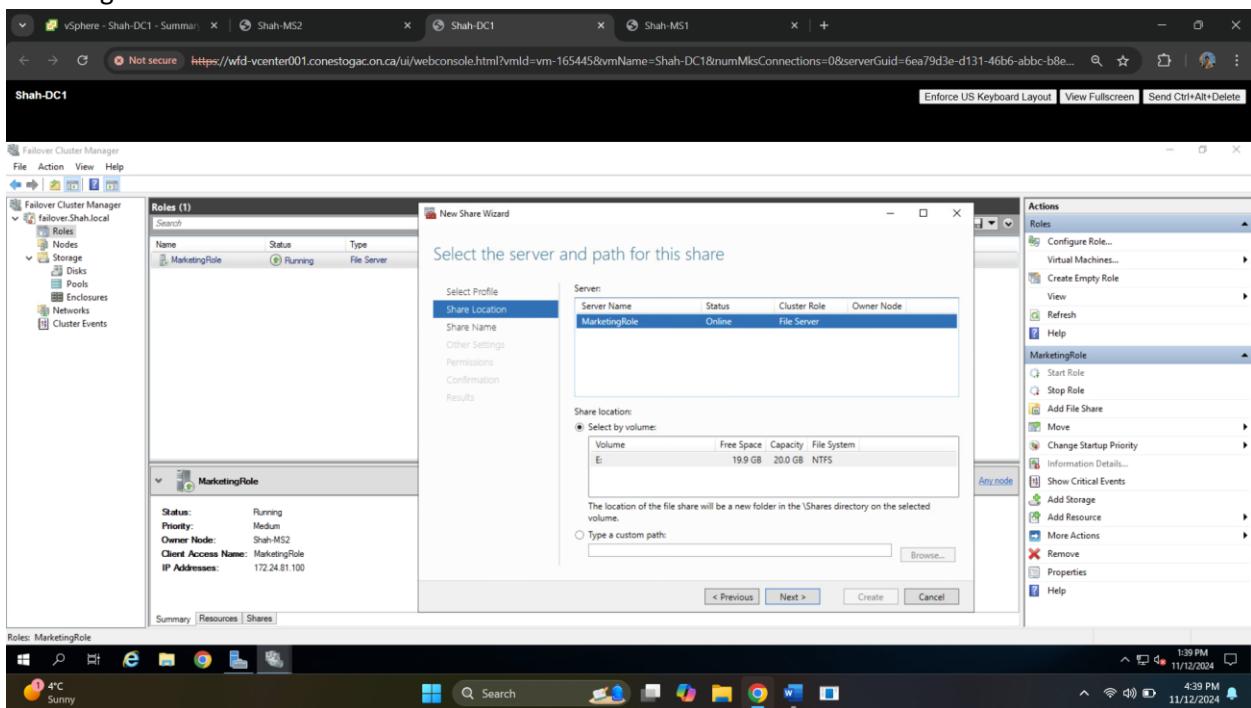


### Select as SMB Share-Quick

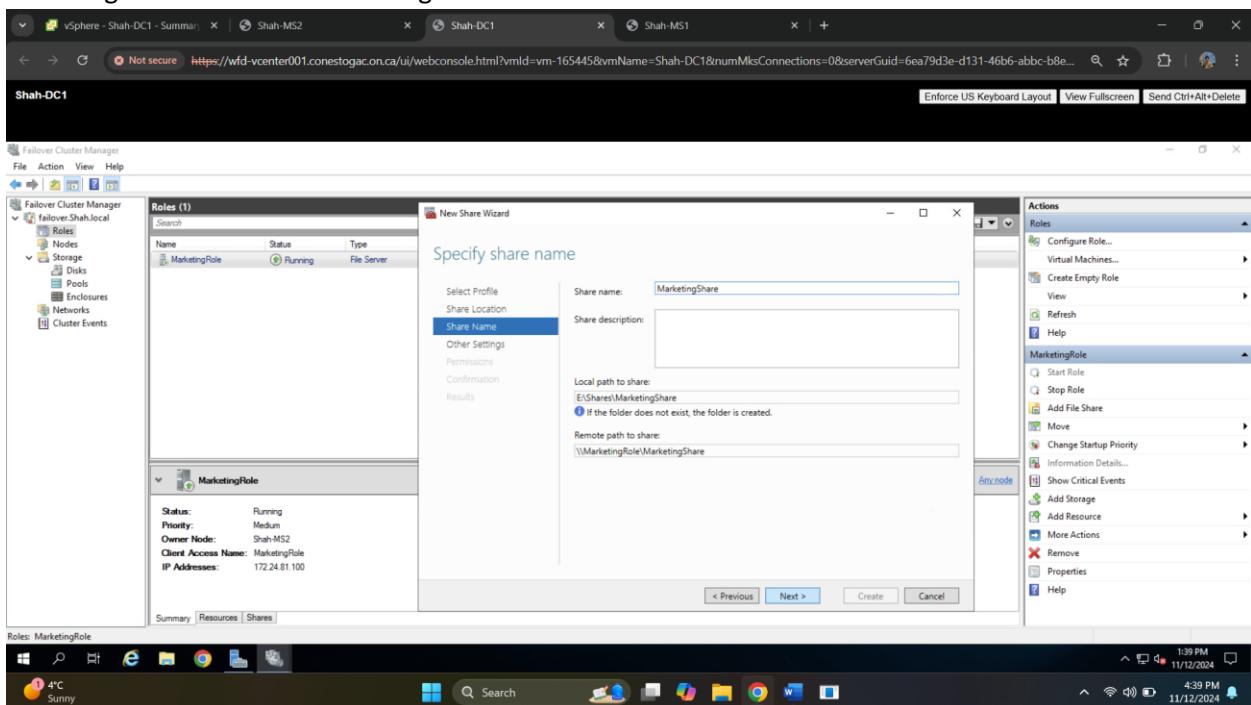


## Practical Assignment 3

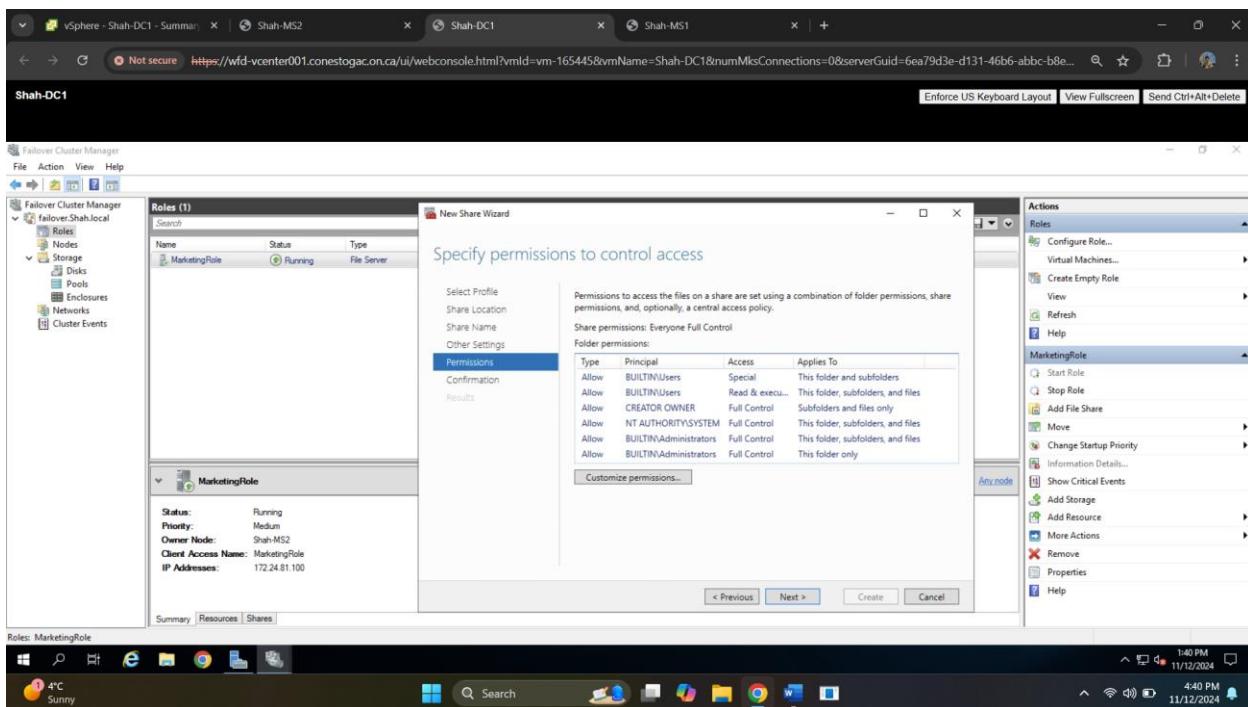
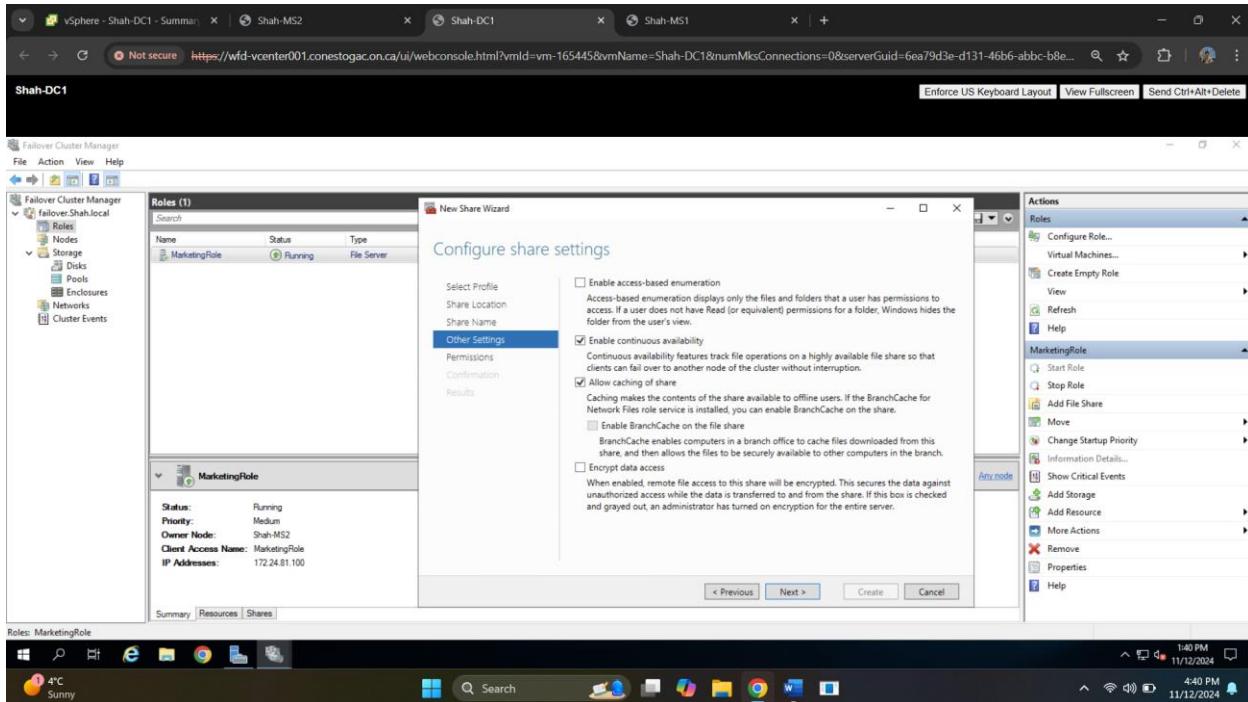
### Selecting E drive of 20GB



### Providing Share Name as MarketingShare



## Practical Assignment 3



## Practical Assignment 3

### Confirming the Share Drive selections

The screenshot shows the Failover Cluster Manager interface on Shah-DC1. A 'New Share Wizard' window is open, specifically the 'Confirm selections' step. The 'Actions' pane on the right is set to 'MarketingRole'. The 'SHARE LOCATION' section shows the share name as 'MarketingRole' and the local path as 'E:\Shares\MarketingShare'. The 'SHARE PROPERTIES' section shows the share name as 'MarketingShare', protocol as 'SMB', access-based enumeration as 'Disabled', caching as 'Enabled', branchCache as 'Disabled', encrypt data as 'Disabled', and continuous availability as 'Enabled'. Below these sections are 'Previous' and 'Next >' buttons, followed by 'Create' and 'Cancel' buttons.

**SHARE LOCATION**

Server:	MarketingRole
Cluster role:	File Server
Local path:	E:\Shares\MarketingShare

**SHARE PROPERTIES**

Share name:	MarketingShare
Protocol:	SMB
Access-based enumeration:	Disabled
Caching:	Enabled
BranchCache:	Disabled
Encrypt data:	Disabled
Continuous availability:	Enabled

**Actions**

- Start Role
- Stop Role
- Add File Share
- Move
- Change Startup Priority
- Show Critical Events
- Add Storage
- Add Resource
- More Actions
- Remove
- Properties
- Help

**Results**

The share was successfully created.

Task	Progress	Status
Create SMB share	Completed	Completed
Set SMB permissions	Completed	Completed

**Summary | Resources | Shares**

**Actions**

- Start Role
- Stop Role
- Add File Share
- Move
- Change Startup Priority
- Show Critical Events
- Add Storage
- Add Resource
- More Actions
- Remove
- Properties
- Help

**MarketingRole**

**Any node**

11/12/2024 4:40 PM

**Windows Taskbar**

4°C Sunny

11/12/2024 4:41 PM

The screenshot shows the Failover Cluster Manager interface on Shah-DC1. A 'New Share Wizard' window is open, specifically the 'View results' step. It displays a message stating 'The share was successfully created.' Below this, a table shows the tasks completed: 'Create SMB share' and 'Set SMB permissions', both with a progress bar at 100% and status 'Completed'. Below the table are 'Previous' and 'Next >' buttons, followed by 'Close' and 'Cancel' buttons.

**Actions**

- Start Role
- Stop Role
- Add File Share
- Move
- Change Startup Priority
- Show Critical Events
- Add Storage
- Add Resource
- More Actions
- Remove
- Properties
- Help

**MarketingRole**

**Any node**

11/12/2024 4:41 PM

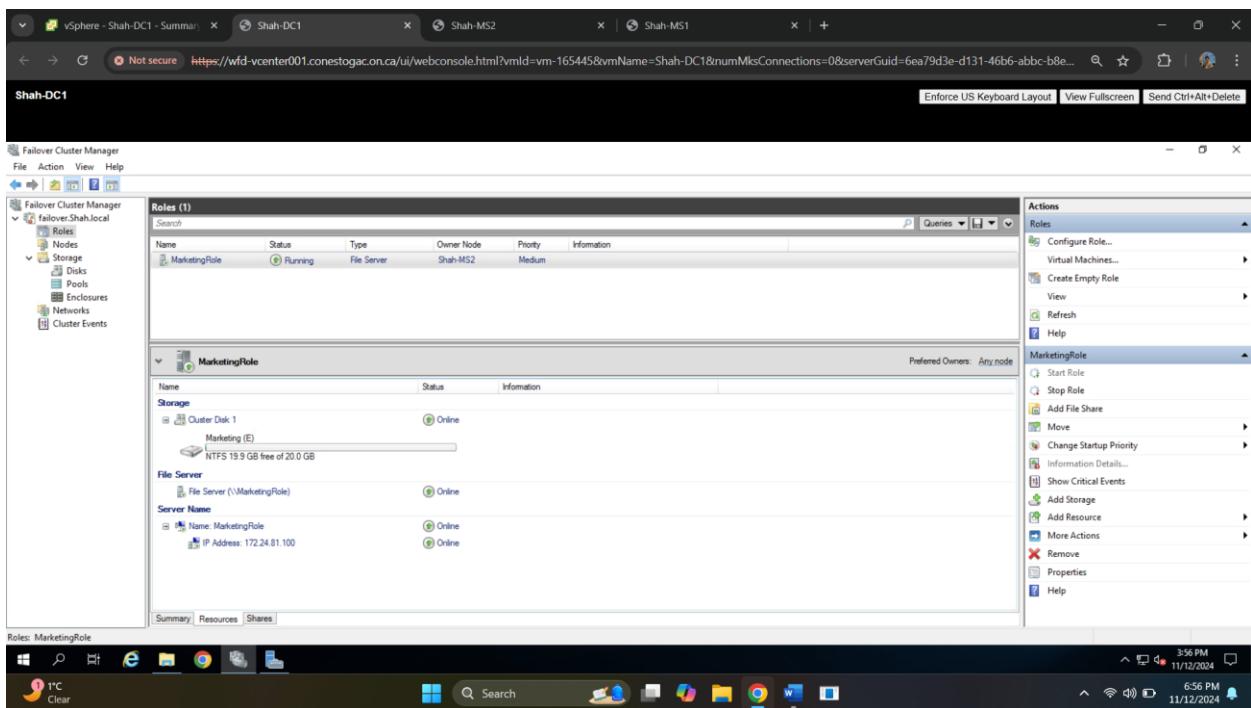
**Windows Taskbar**

4°C Sunny

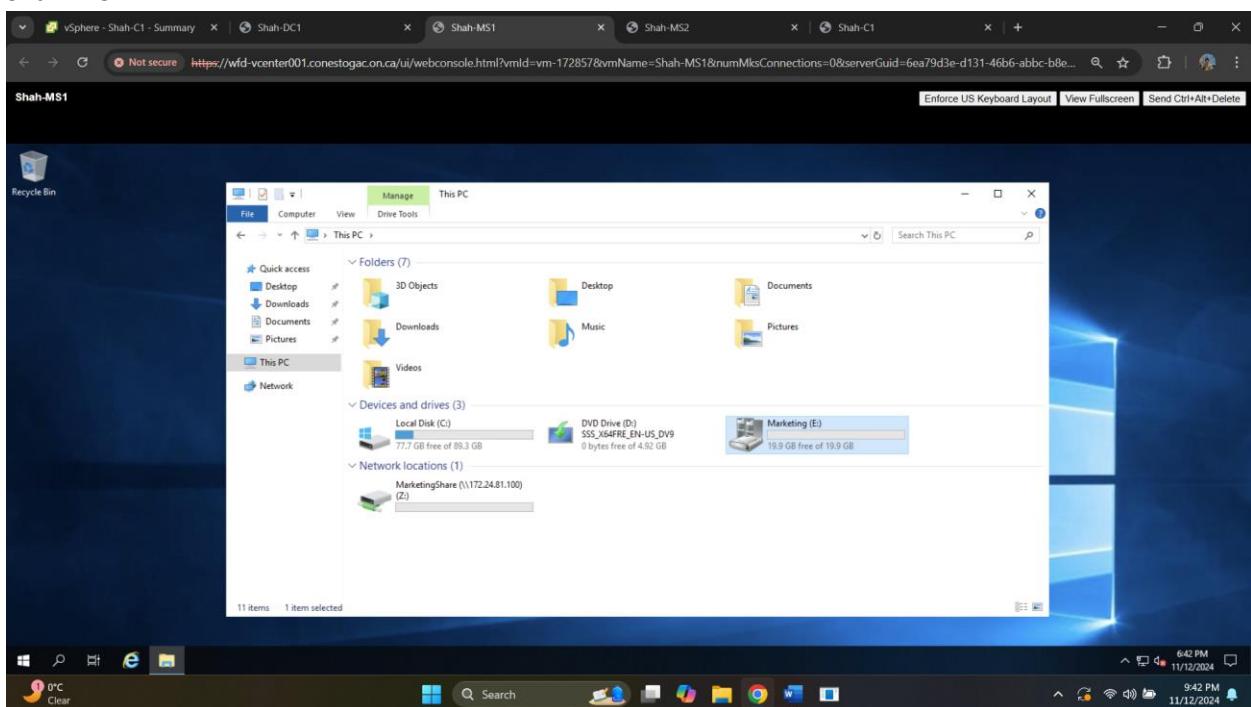
11/12/2024 4:41 PM

## Practical Assignment 3

### Shah-DC1

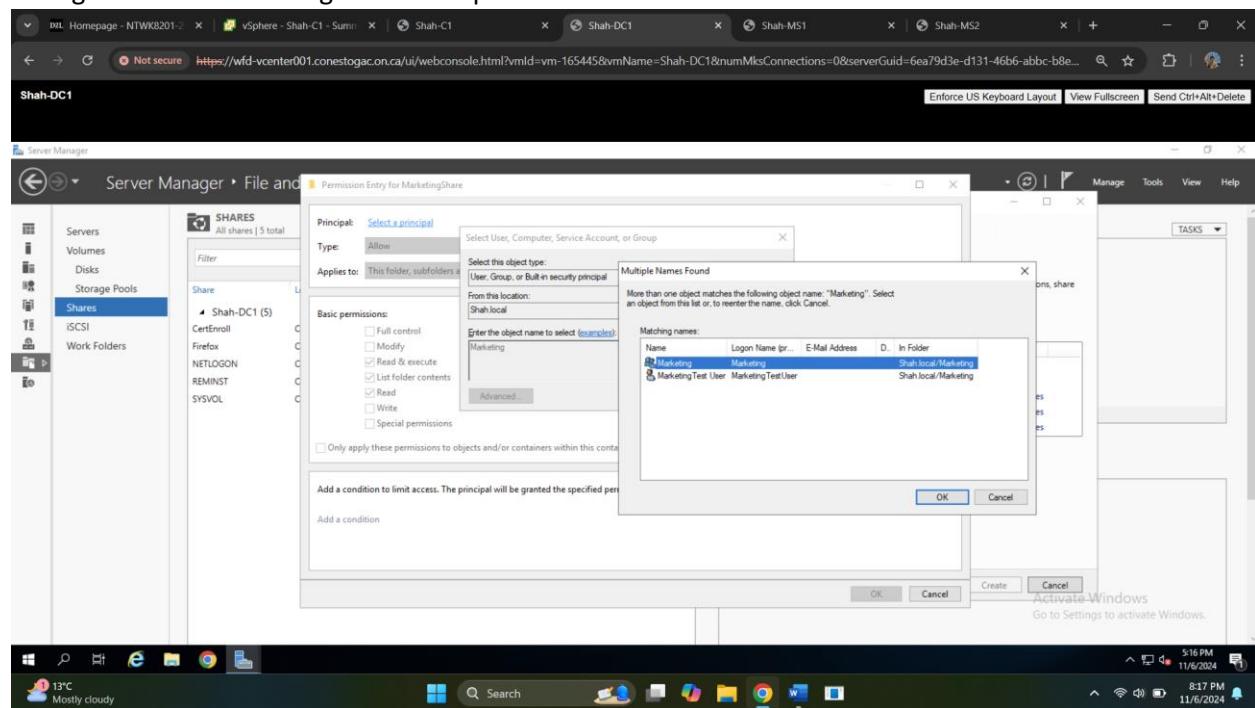


### Shah-MS1

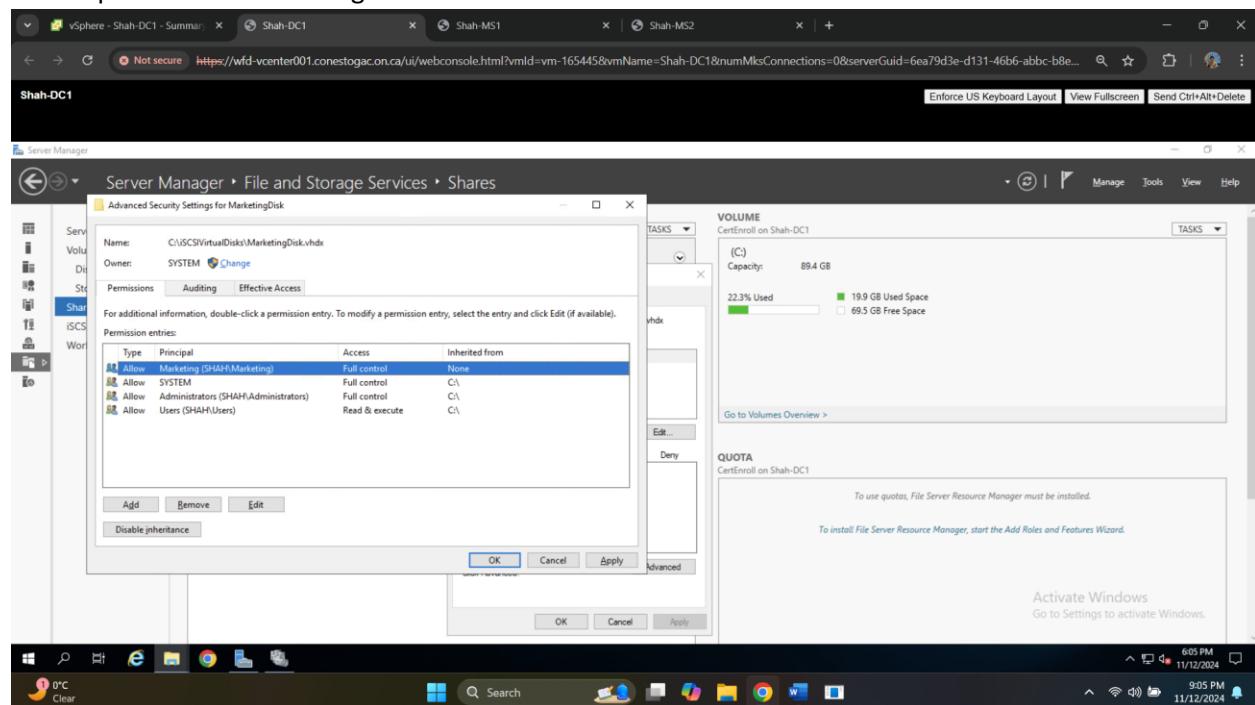


## Practical Assignment 3

### Giving Access to Marketing Users Group



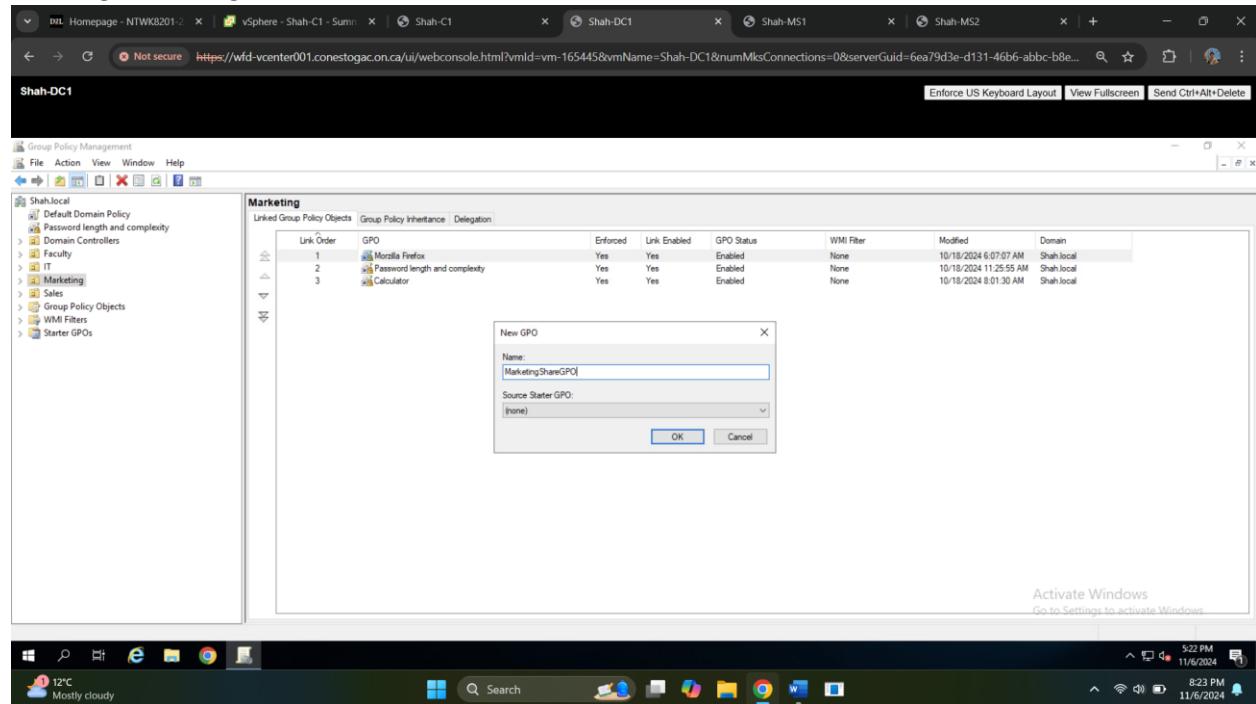
### Access provided to Marketing OU



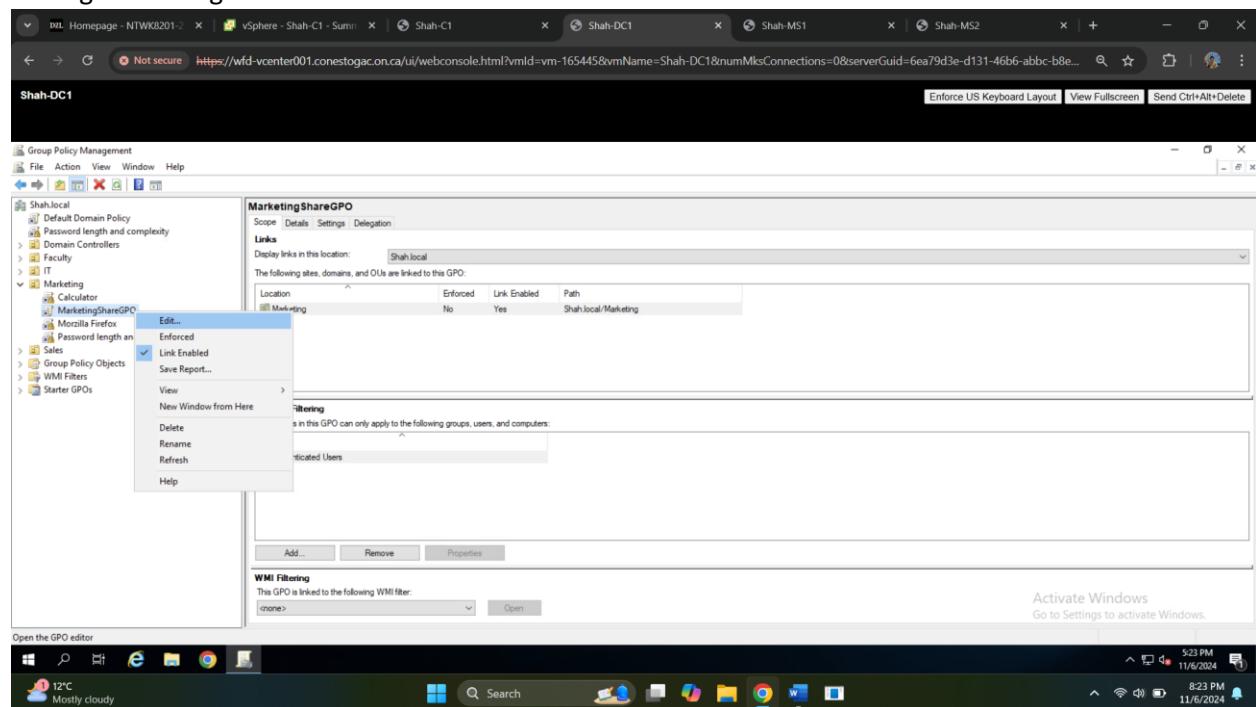
## Practical Assignment 3

### Create a group policy to mount Marketing Share on login.

#### Creating Marketing GPO

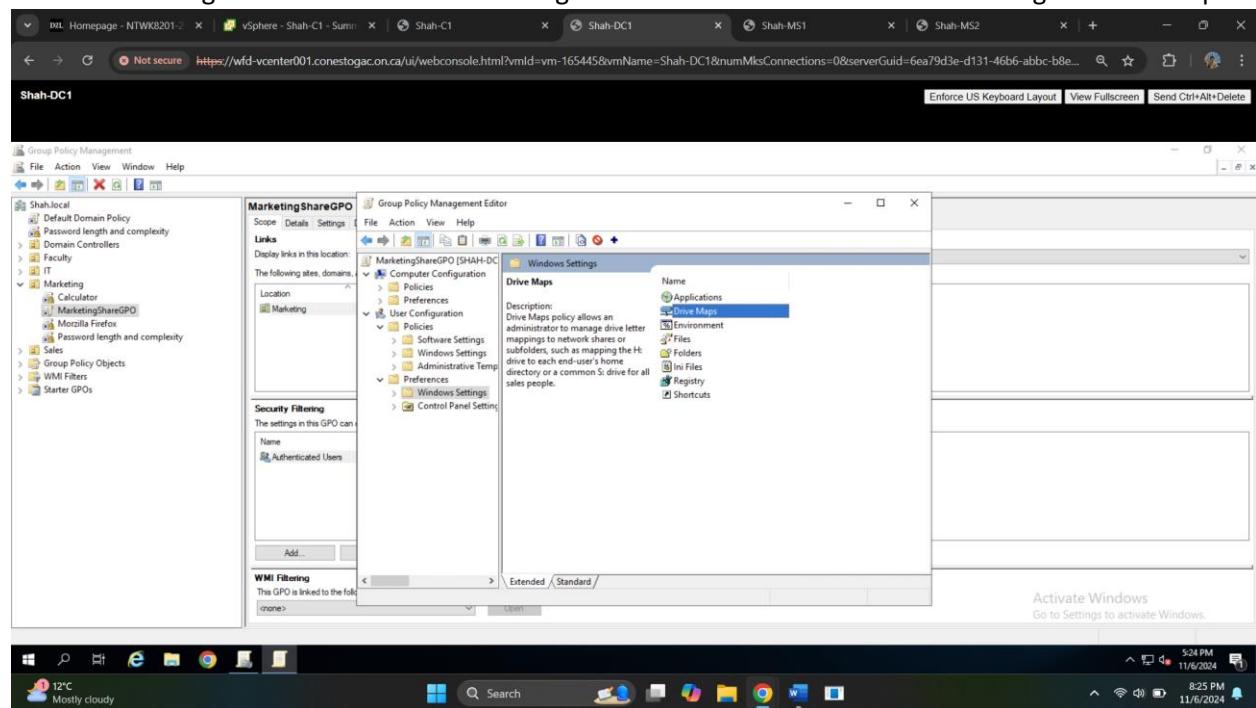


#### Editing Marketing Share GPO

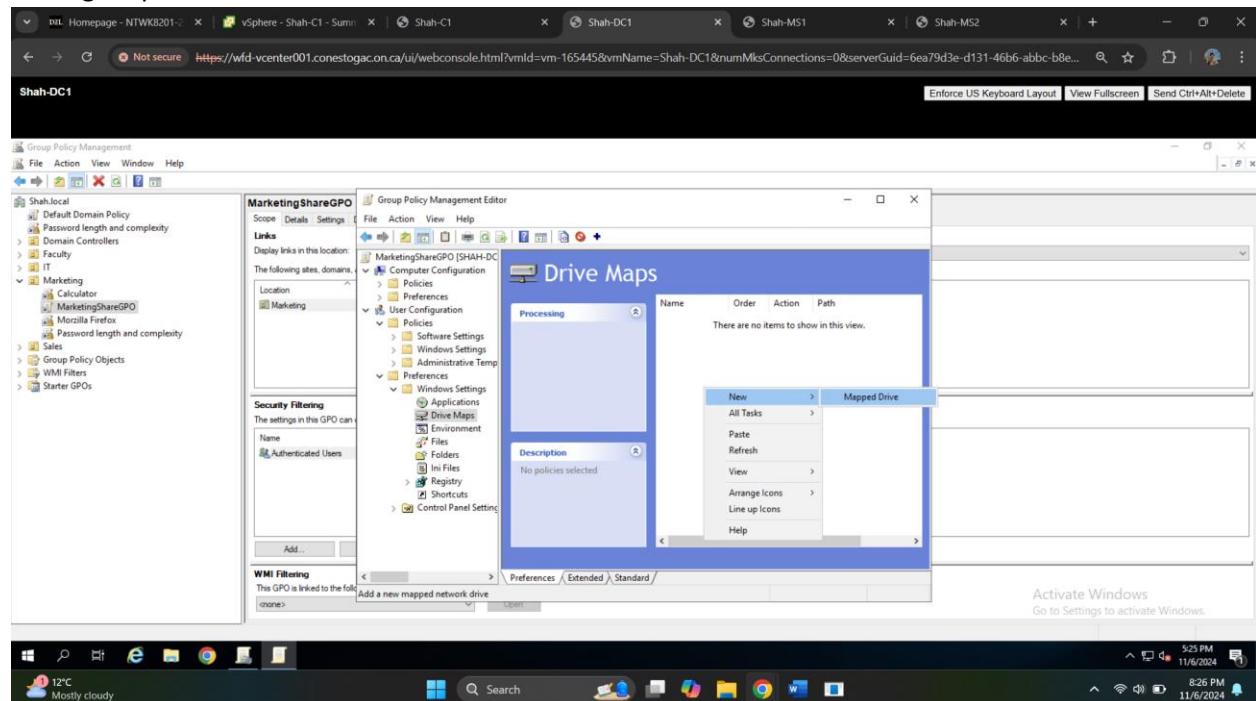


## Practical Assignment 3

Under Marketing Share GPO edit → User Configuration → Preference → Windows Settings → Drive Maps

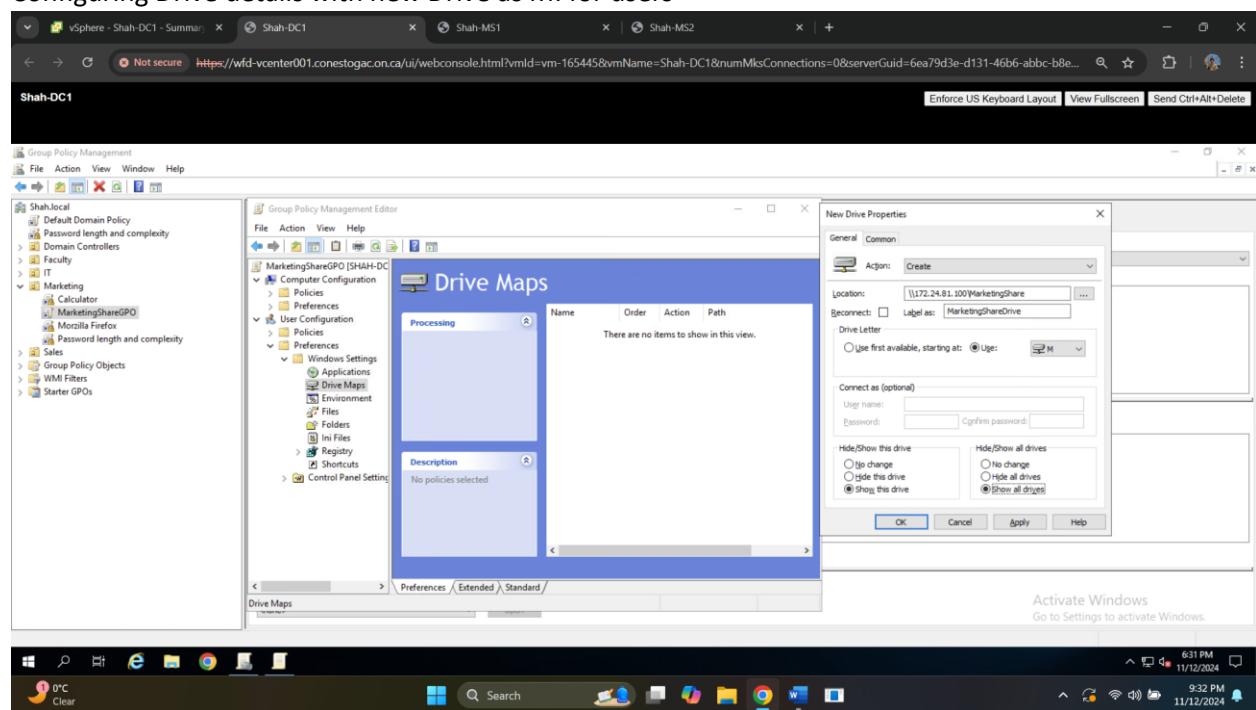


Driving Map as new

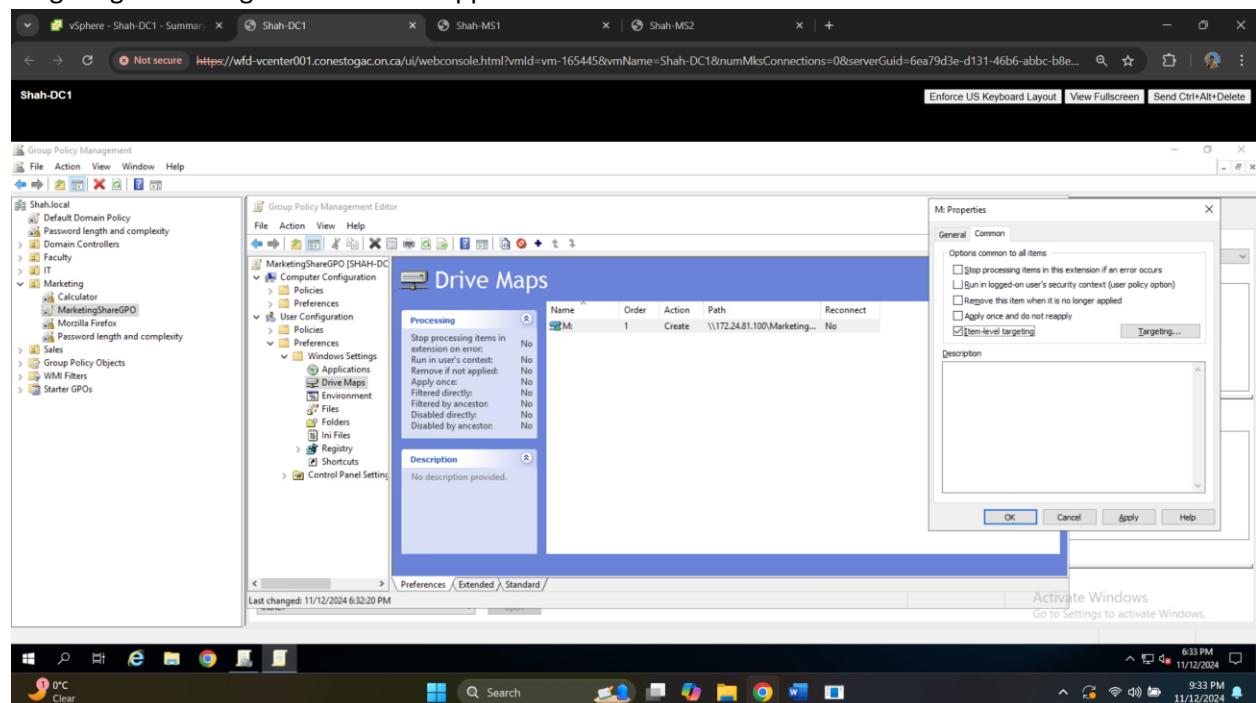


## Practical Assignment 3

### Configuring Drive details with new Drive as M: for users

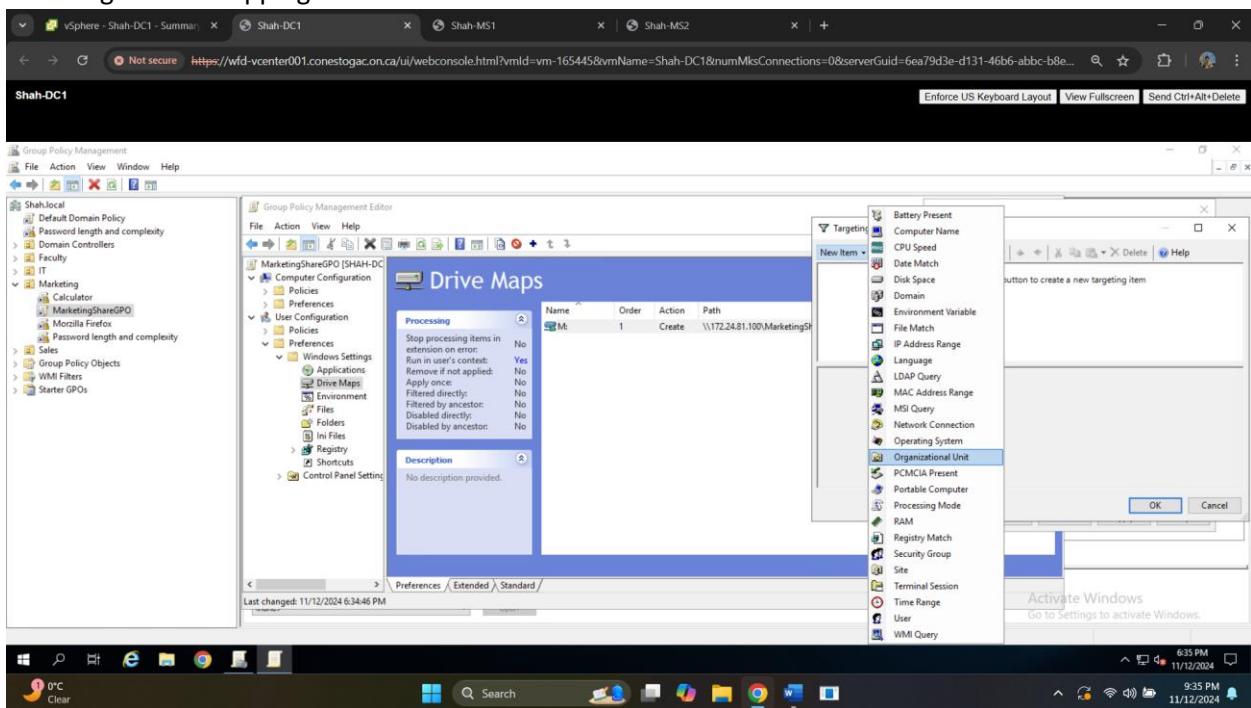


### Targeting Marketing OU for Drive Mapped

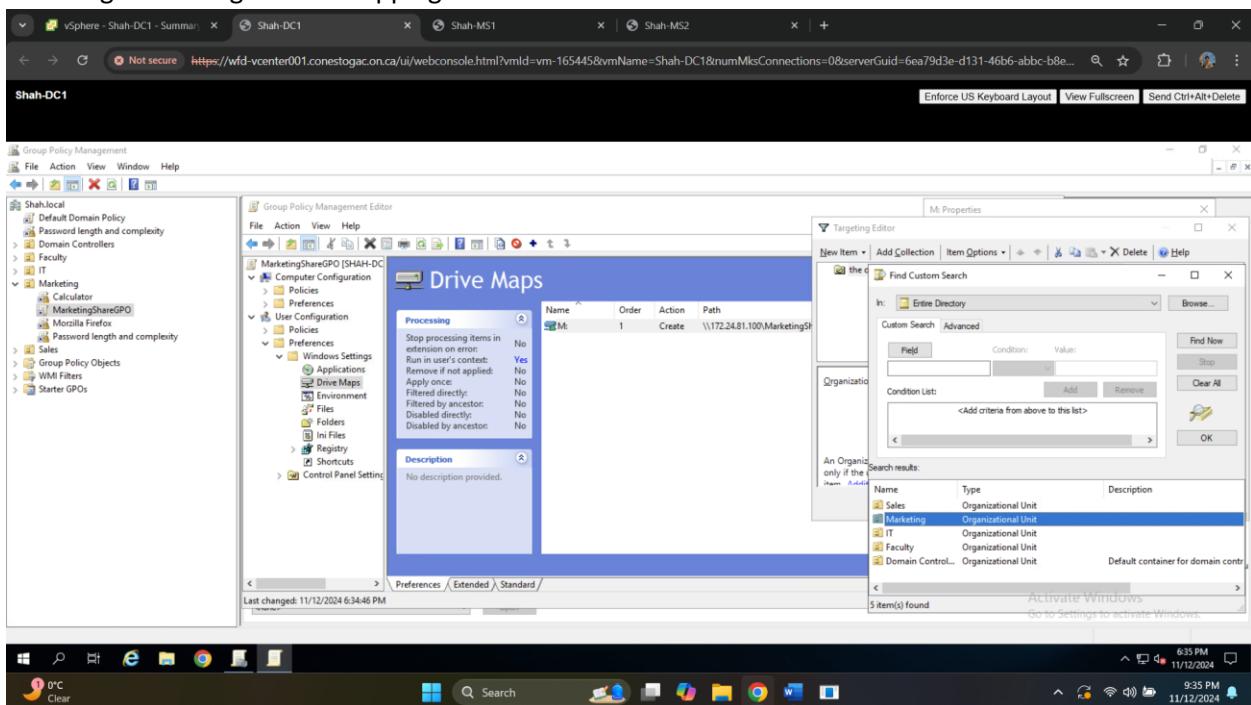


## Practical Assignment 3

### Selecting OU for mapping drive access

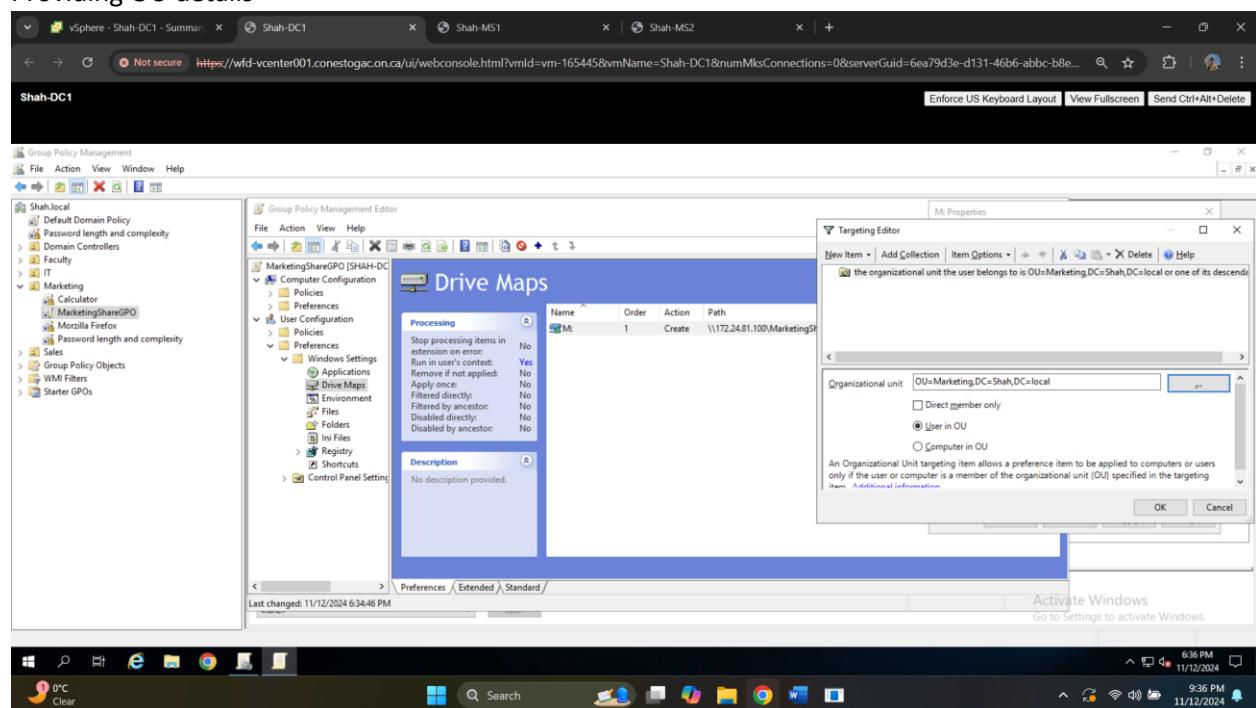


### Selecting Marketing OU for Mapping Drive

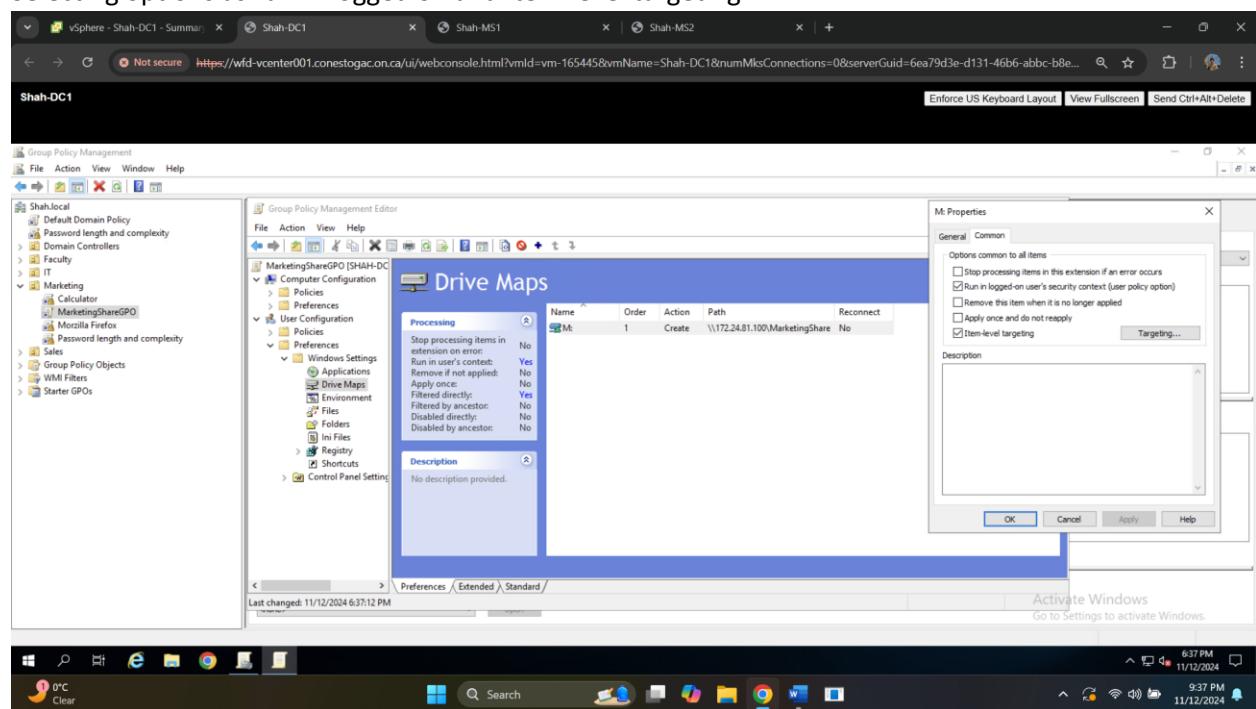


# Practical Assignment 3

## Providing OU details

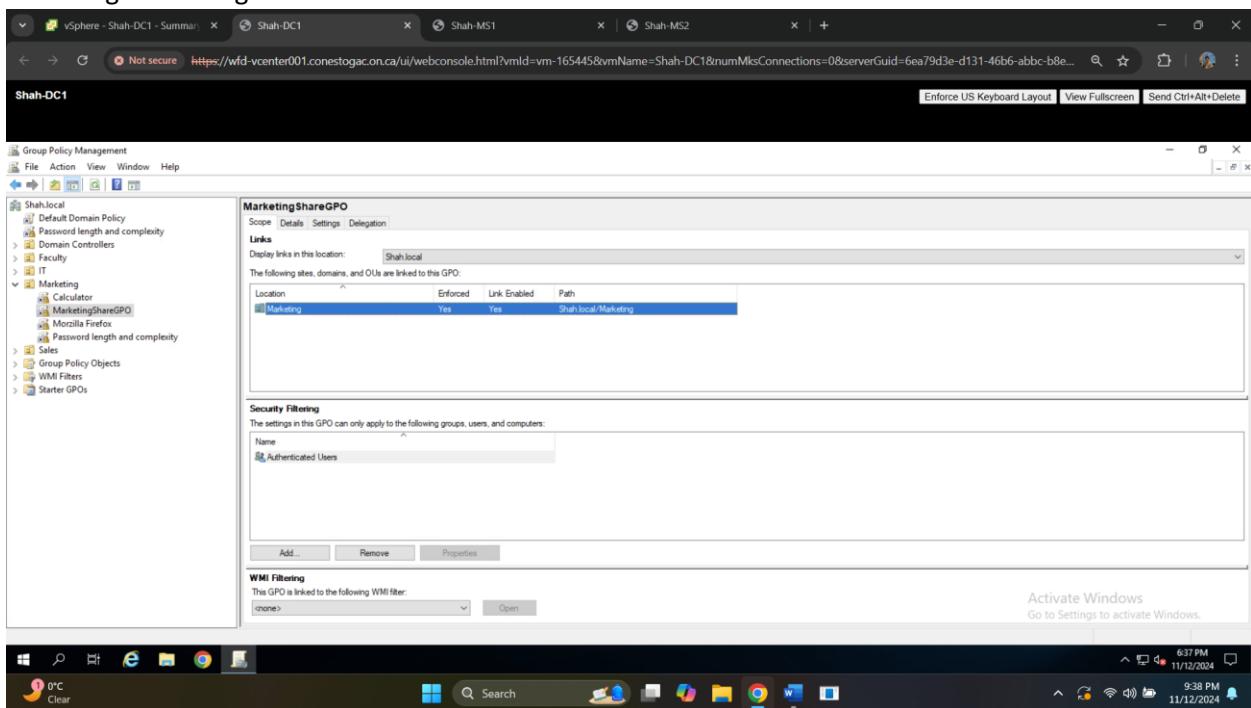


## Selecting options as run in logged on and Item-level targeting



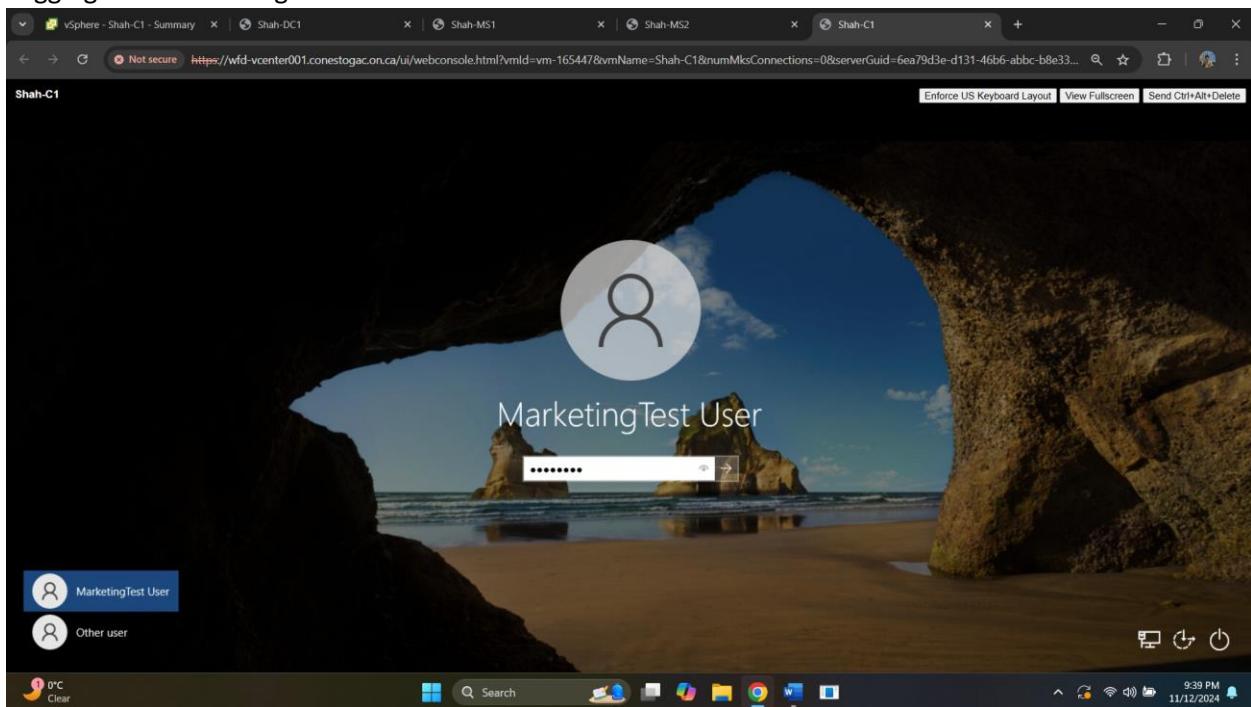
## Practical Assignment 3

### Enforcing Marketing Shared GPO



Sign into your Windows 10 client with a marketing user to test the share.

Logging in as MarketingTestUser as Windows 10 client



## Practical Assignment 3

20 GB MarketingShareDrive linked on MarketingTest User System.

