

## IP Details

Domain Controller → Shah-DC1 172.16.214.40

Member Server → Shah-S1 172.16.214.41

Workstation → Shah-C1 172.16.214.42

Subnet mask: 255.255.255.0

Gateway: 172.16.214.1

## VM Links:

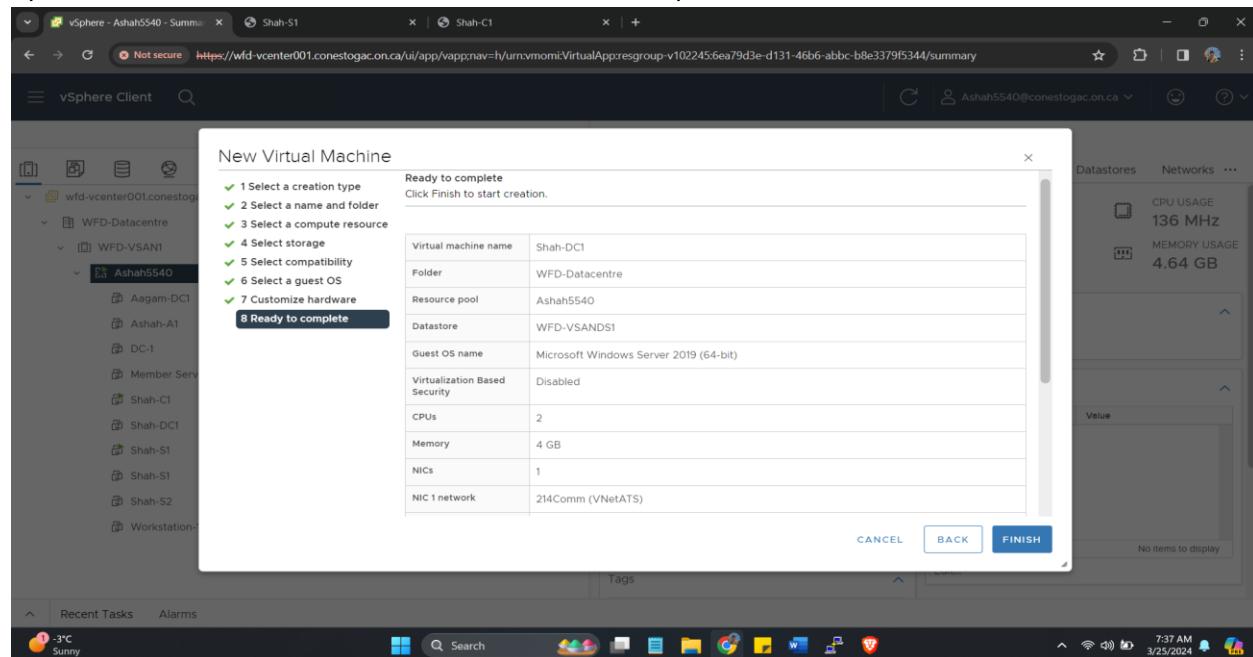
Shah-DC1: <https://wfd-vcenter001.conestogac.on.ca/ui/webconsole.html?vmId=vm-125427&vmName=Shah-DC1&numMksConnections=0&serverGuid=6ea79d3e-d131-46b6-abbc-b8e3379f5344&locale=en-US>

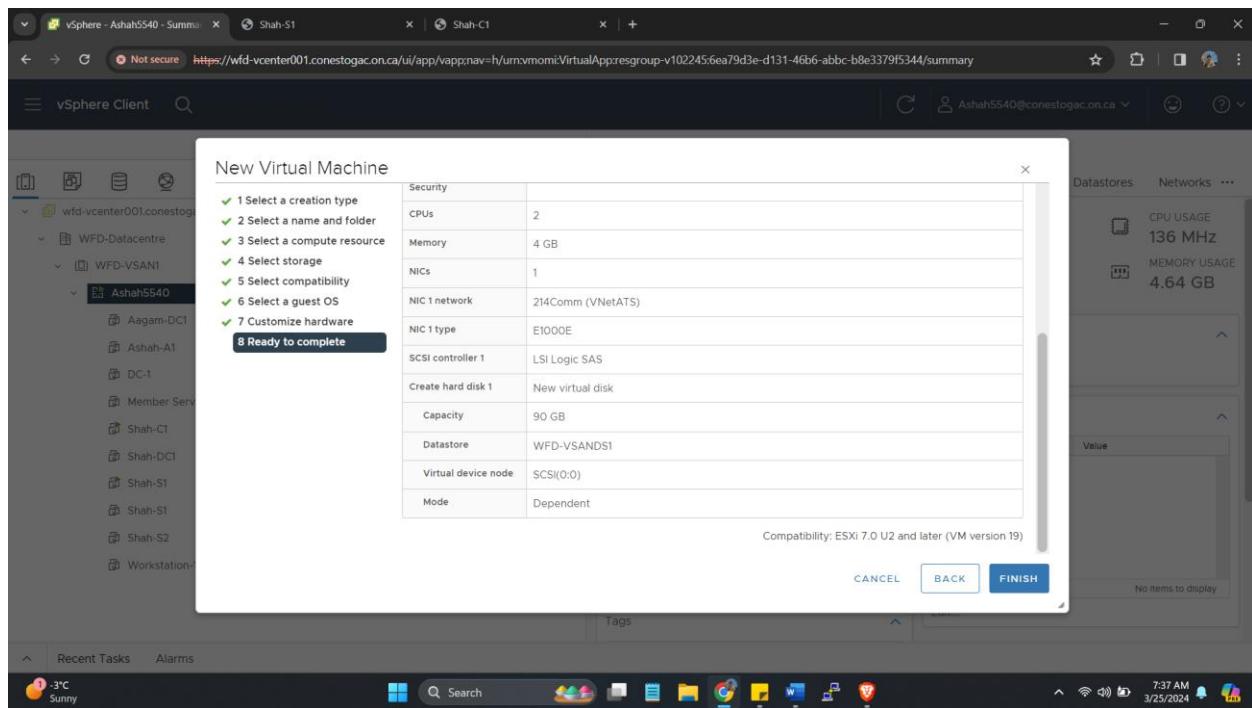
Shah-S1: <https://wfd-vcenter001.conestogac.on.ca/ui/webconsole.html?vmId=vm-125426&vmName=Shah-S1&numMksConnections=0&serverGuid=6ea79d3e-d131-46b6-abbc-b8e3379f5344&locale=en-US>

Shah-C1: <https://wfd-vcenter001.conestogac.on.ca/ui/webconsole.html?vmId=vm-125424&vmName=Shah-C1&numMksConnections=0&serverGuid=6ea79d3e-d131-46b6-abbc-b8e3379f5344&locale=en-US>

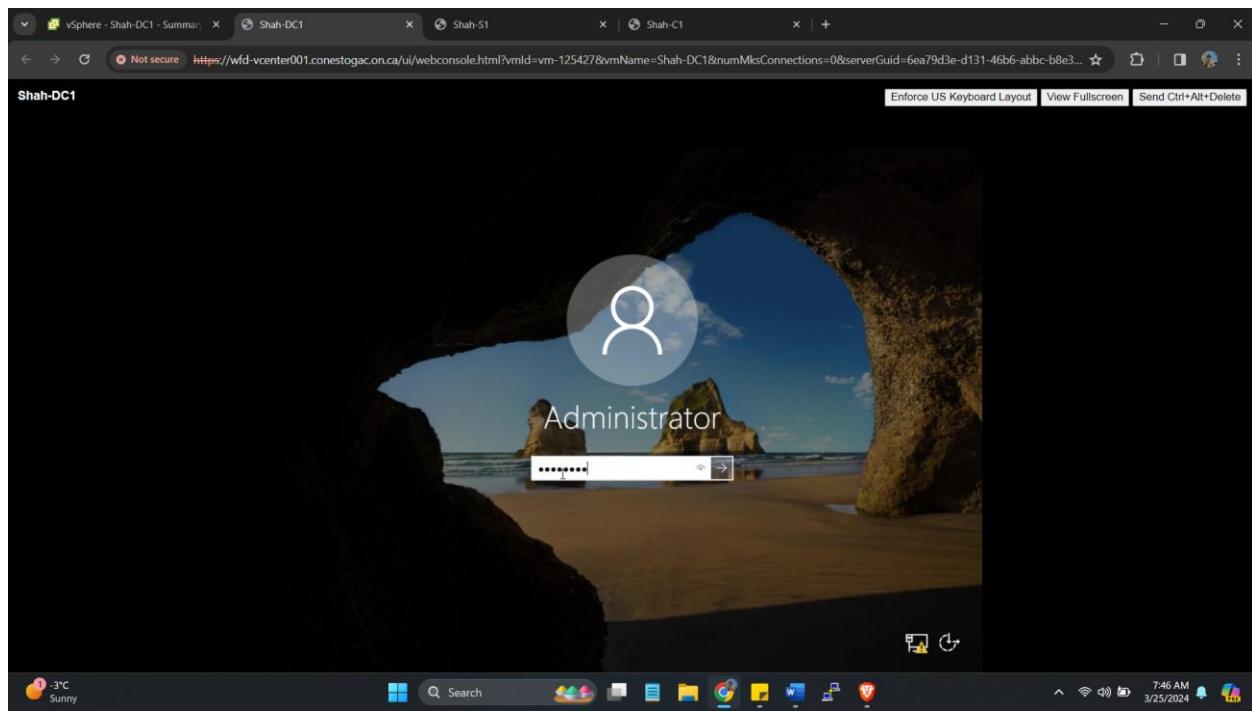
## **Shah-DC1**

Specification of VM creation for Shah-DC1 with Com port 214

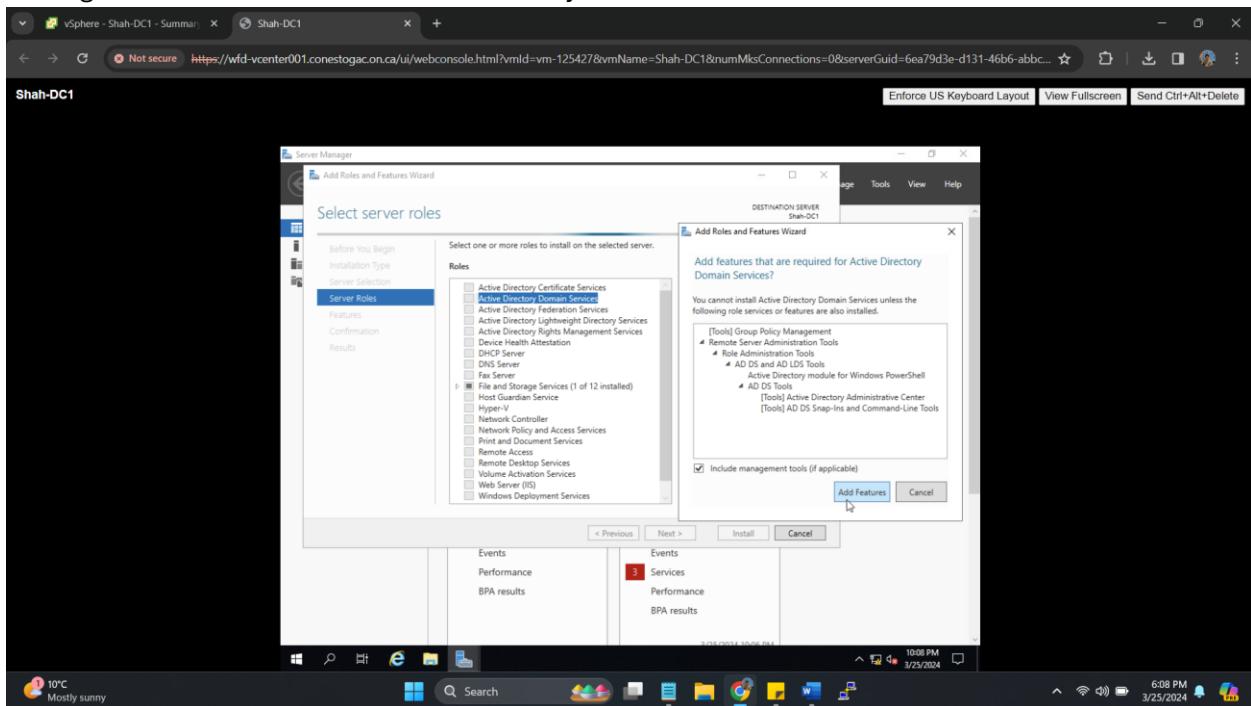




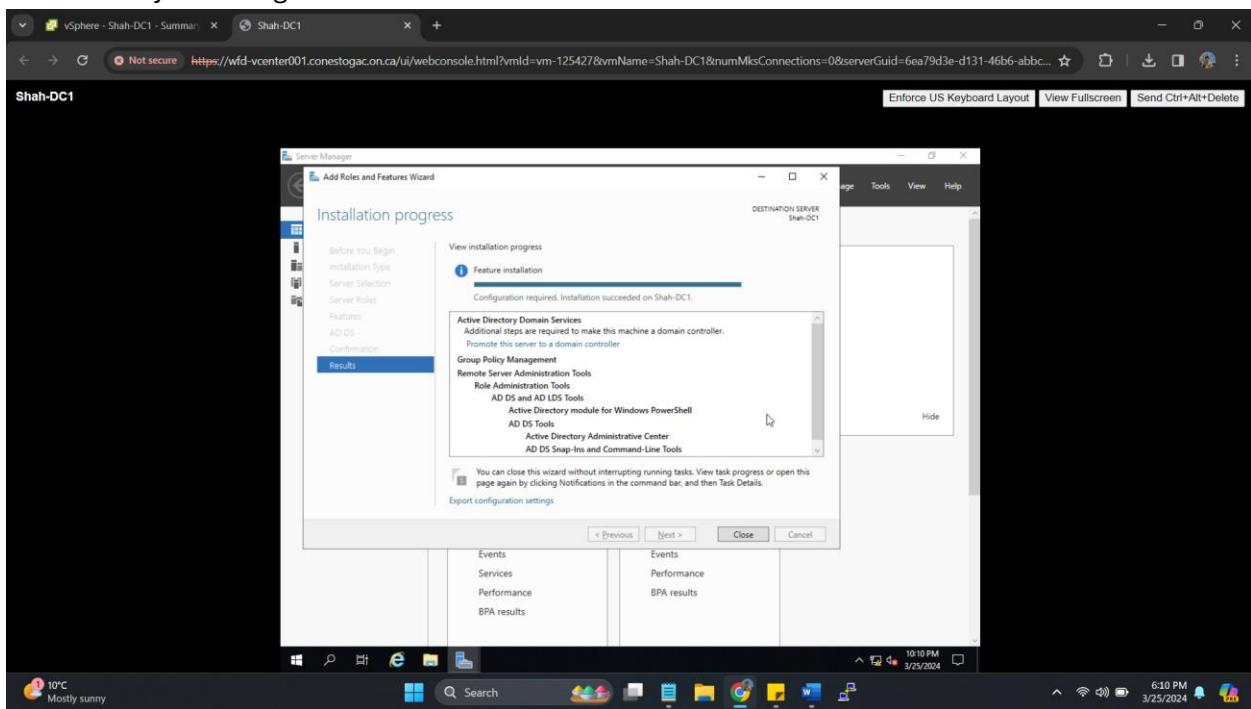
Password: Secret55



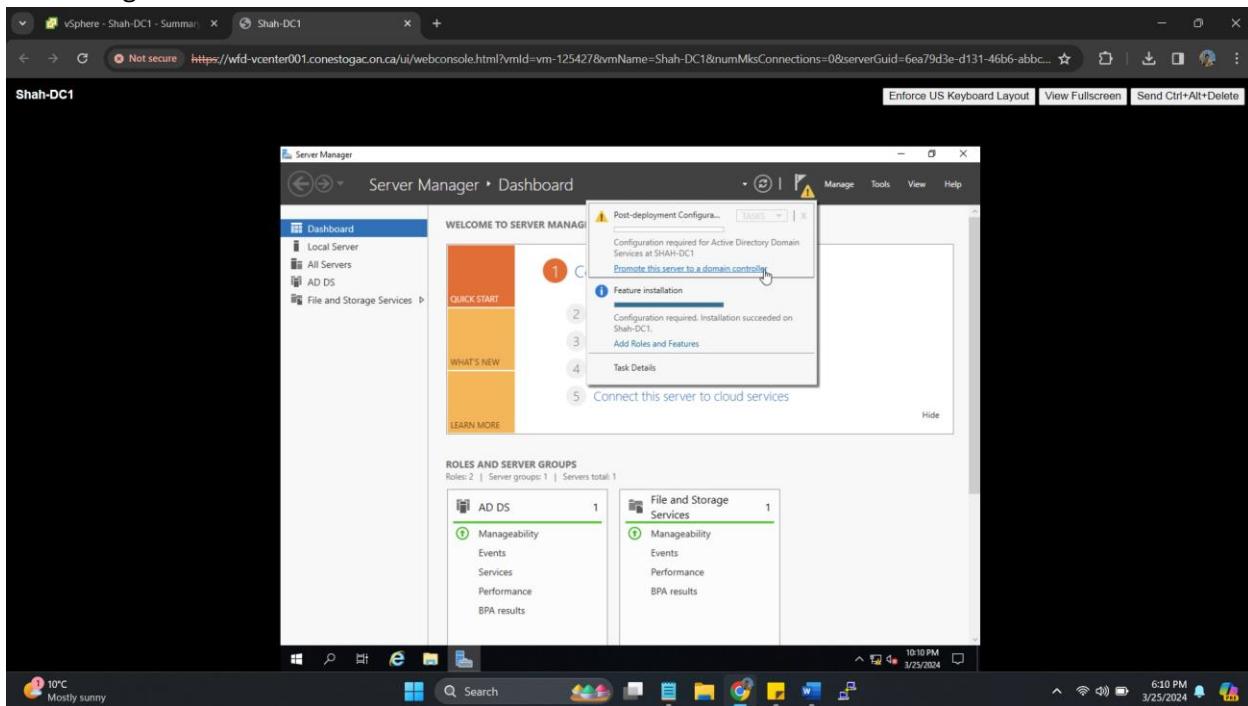
## Adding Roles and Features of Active Directory Domain Services on Shah-DC1



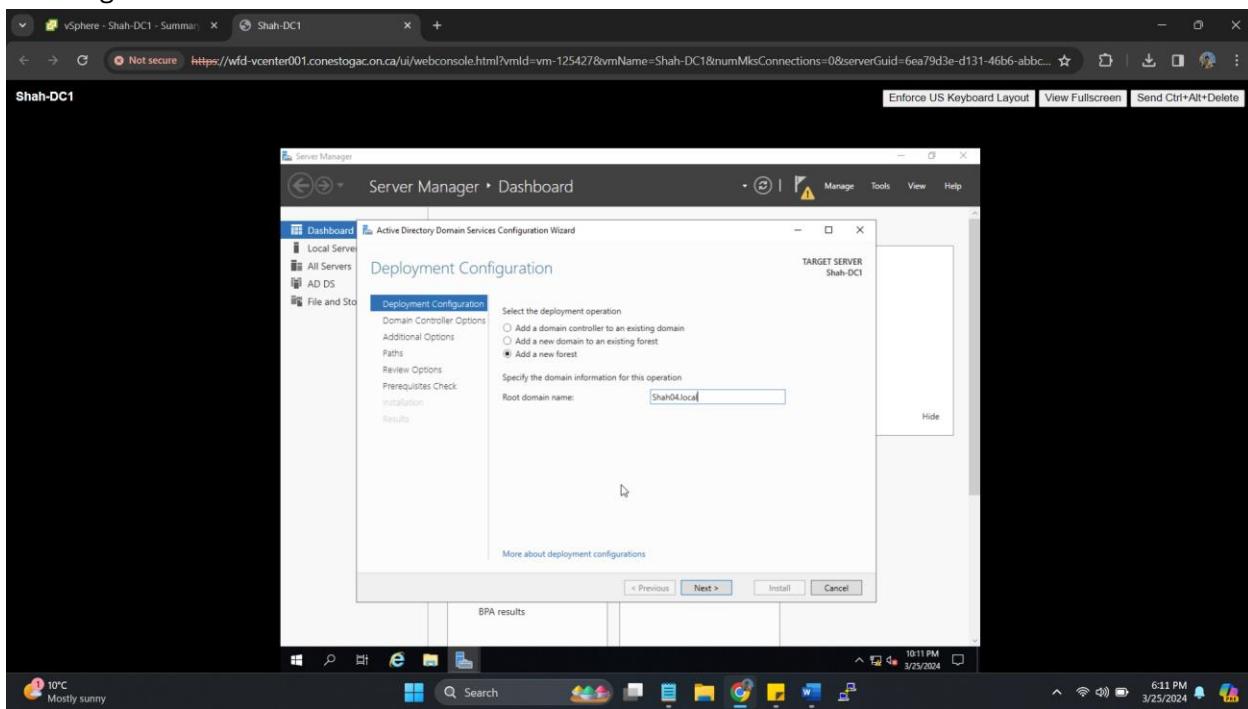
## Successfully installing ADDS services on SHAH-DC1



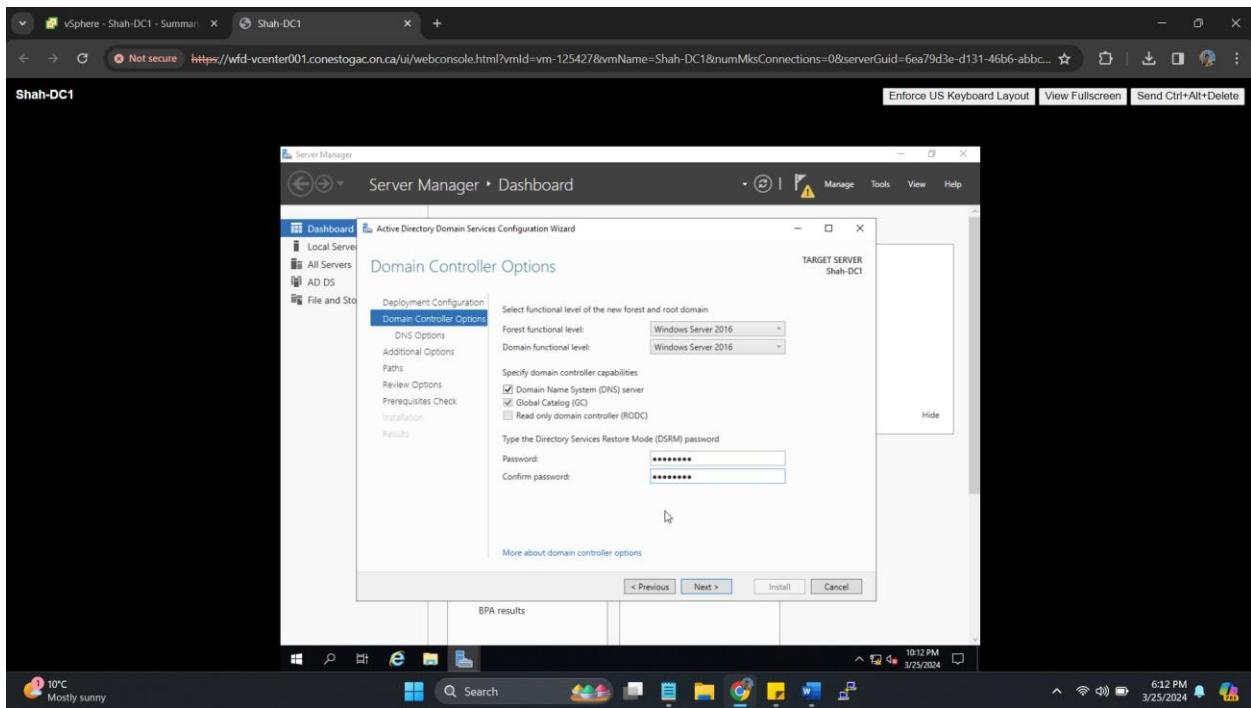
## Promoting SHAH-DC1 server to Domain Controller.



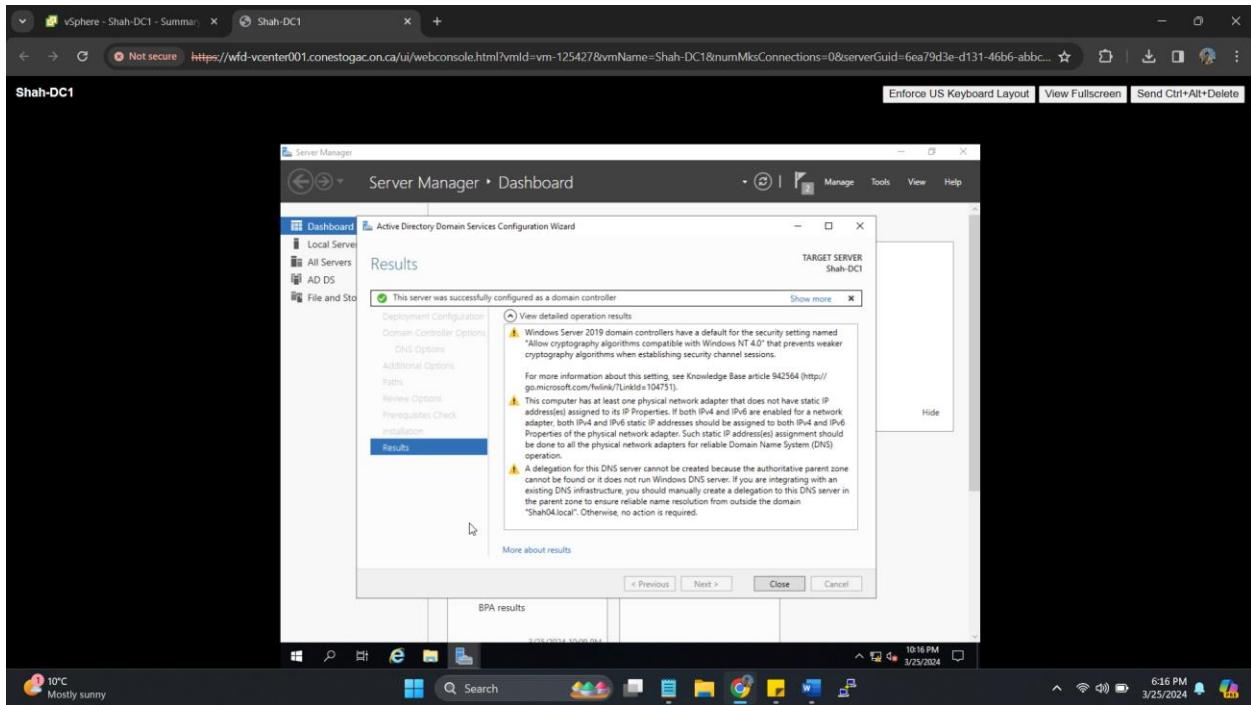
## Creating New Forest with Root Domain Name as Shah04.local



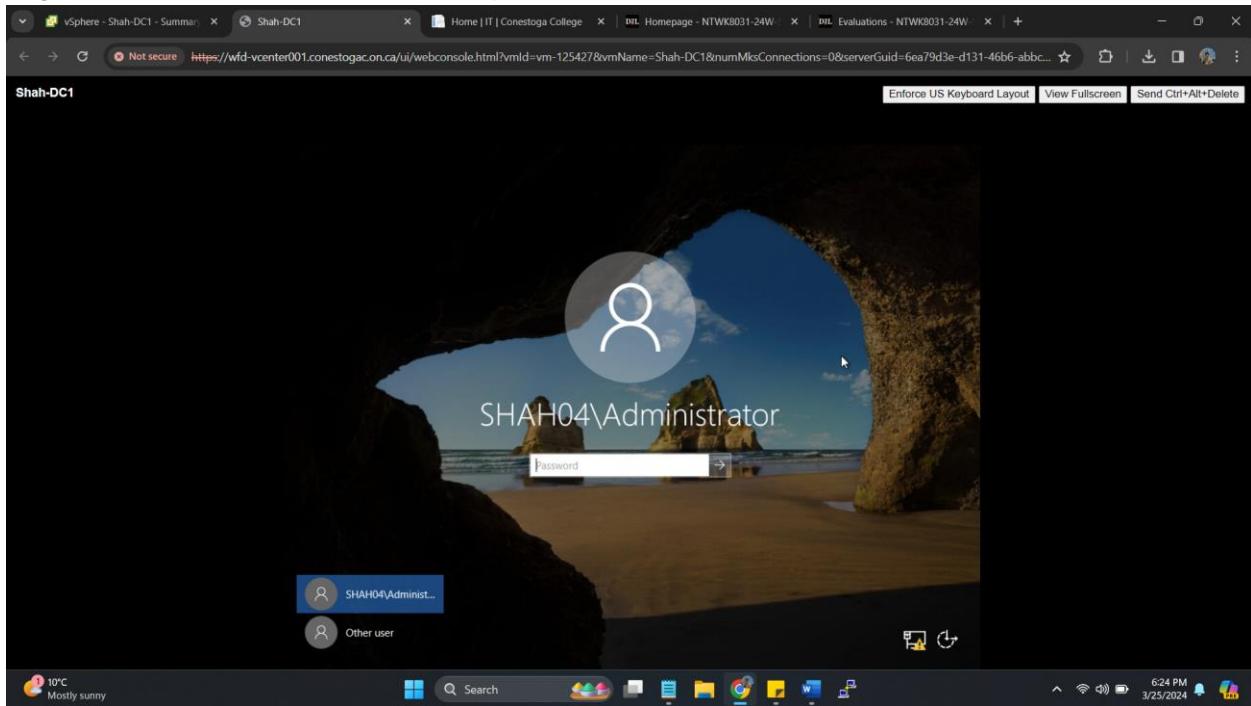
Password: Secret55



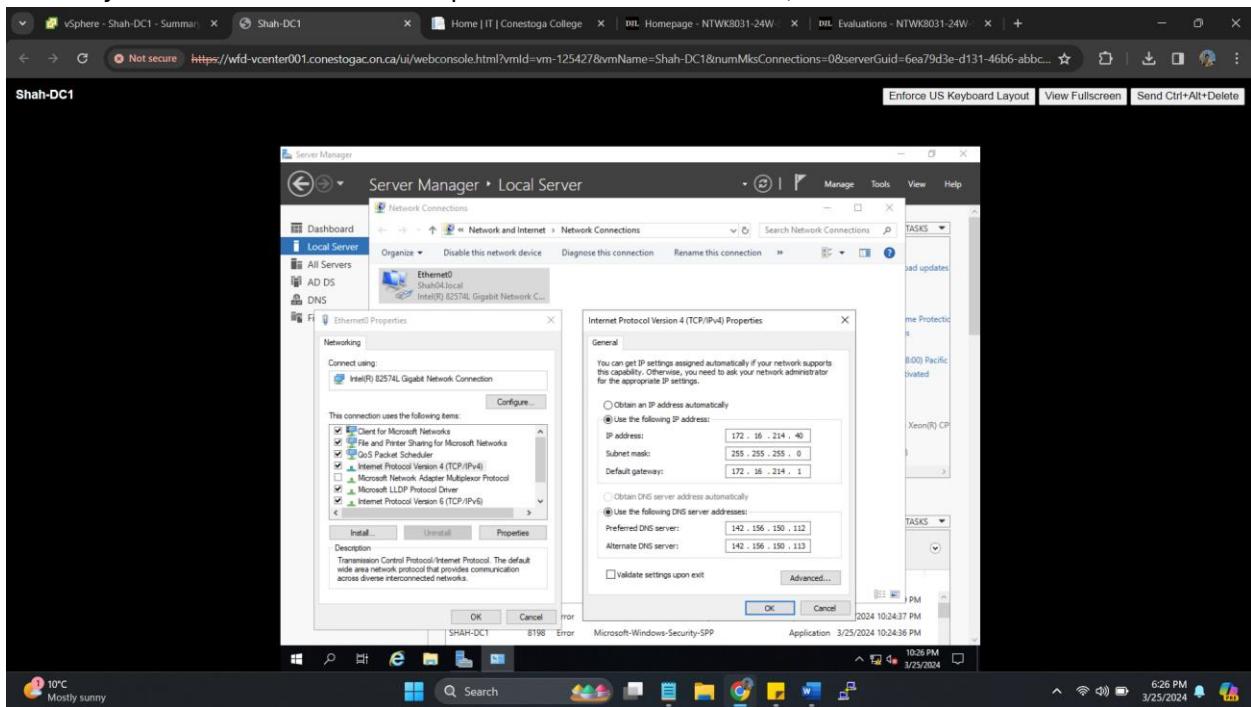
Shah-DC1 server is successfully configured as Domain controller.



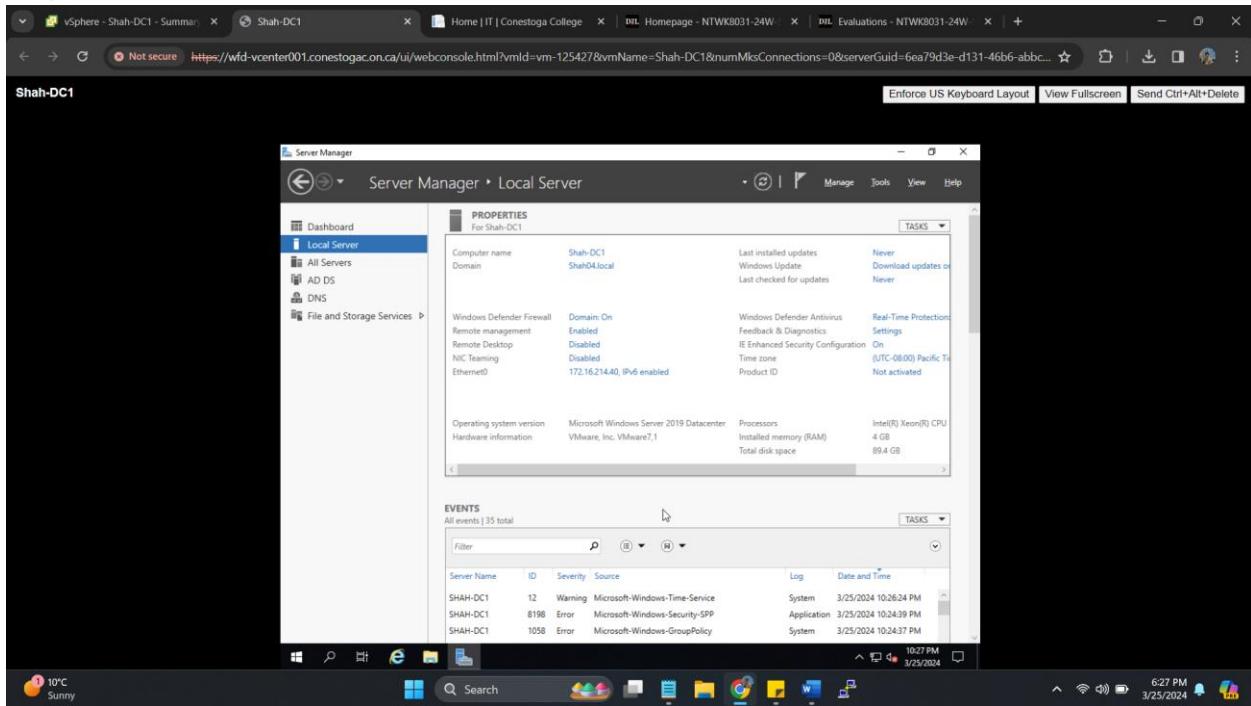
## Login to domain controller SHAH-DC1 password Secret55



Configuring IP on Domain controller IP: 172.16.214.40 subnet mask: 255.255.255.0 Default Gateway: 172.16.214.1 DNS server preferred 142.156.150.112, alternate 142.156.150.113

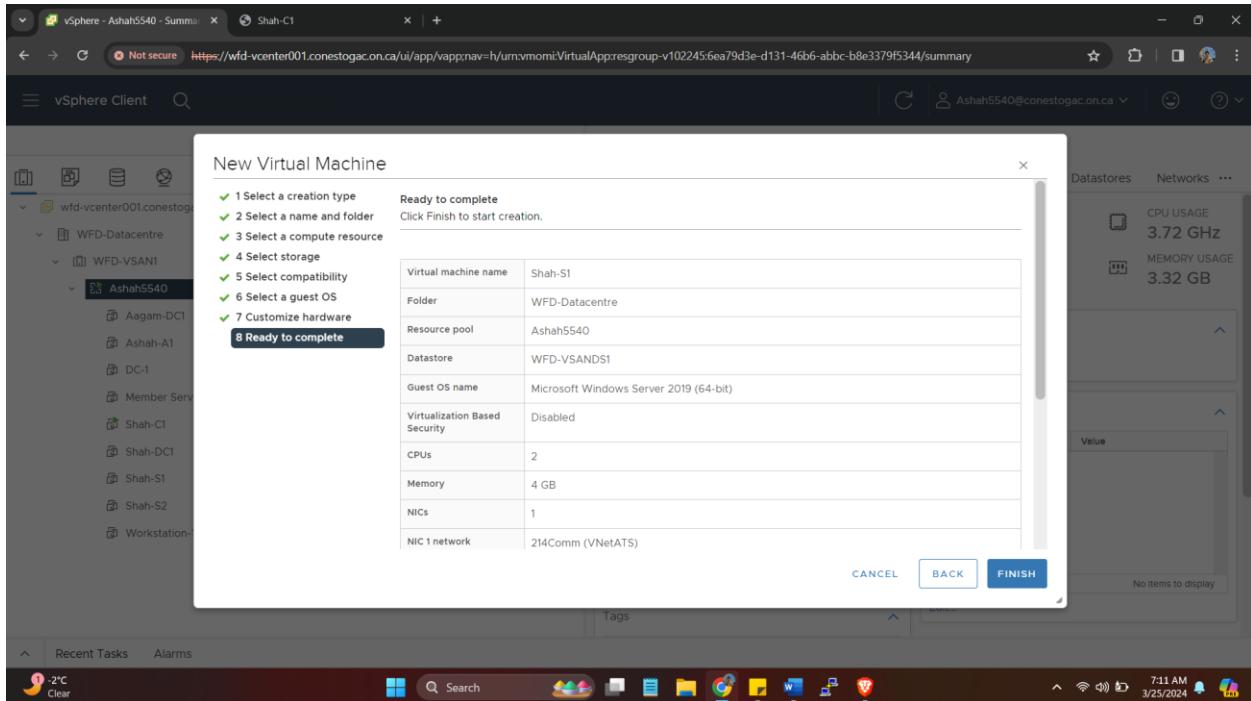


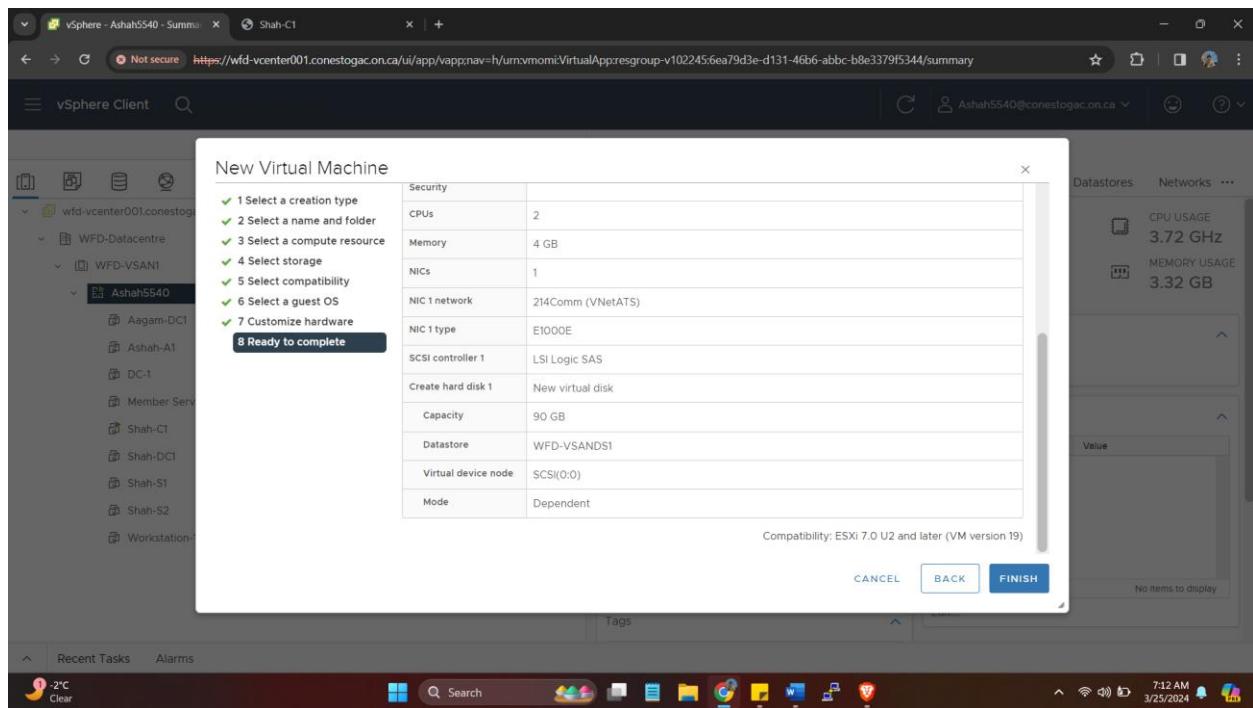
## Properties of Domain Controller.



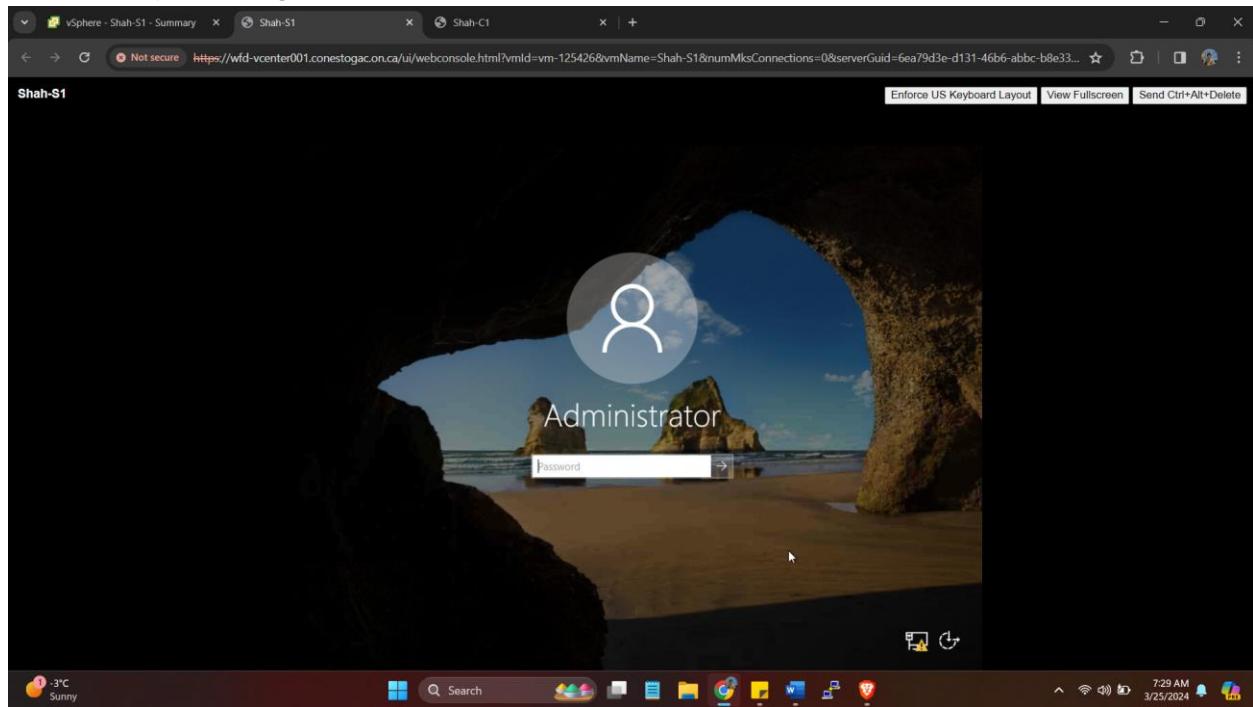
## Shah-S1

Specification of VM creation for Shah-S1 (Member Server) with Com port 214

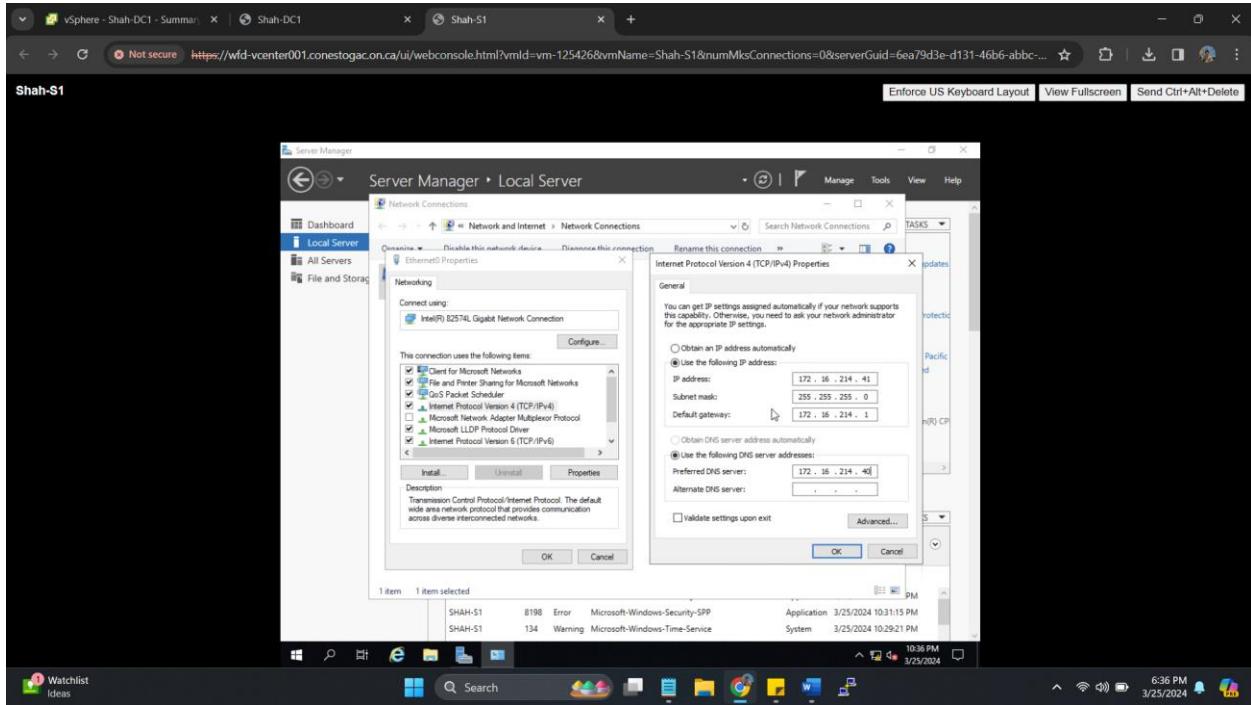




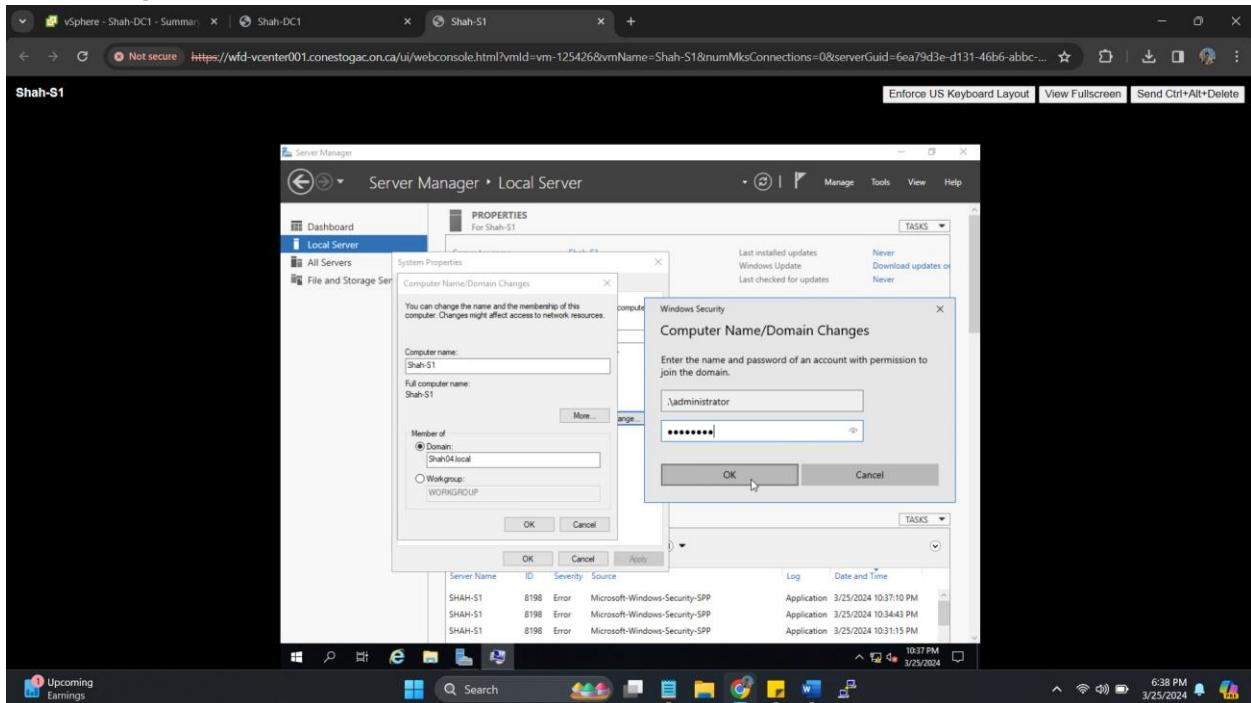
Successfully installing Windows Server as member server named SHAH-S1



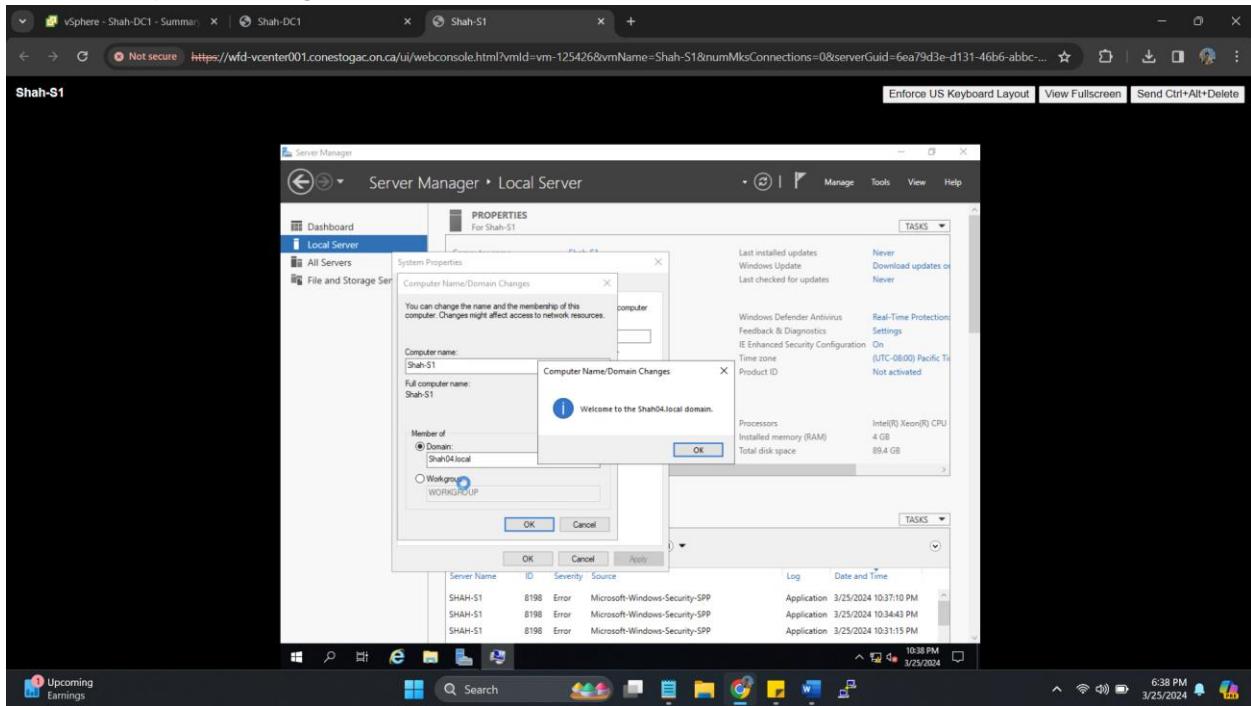
Configuring IP of member server SHAH-S1 IP: 172.16.214.41 subnet mask: 255.255.255.0 Default Gateway: 172.16.214.1 DNS server: 172.16.214.40



Connecting member server Shah-S1 to domain: Shah04.local

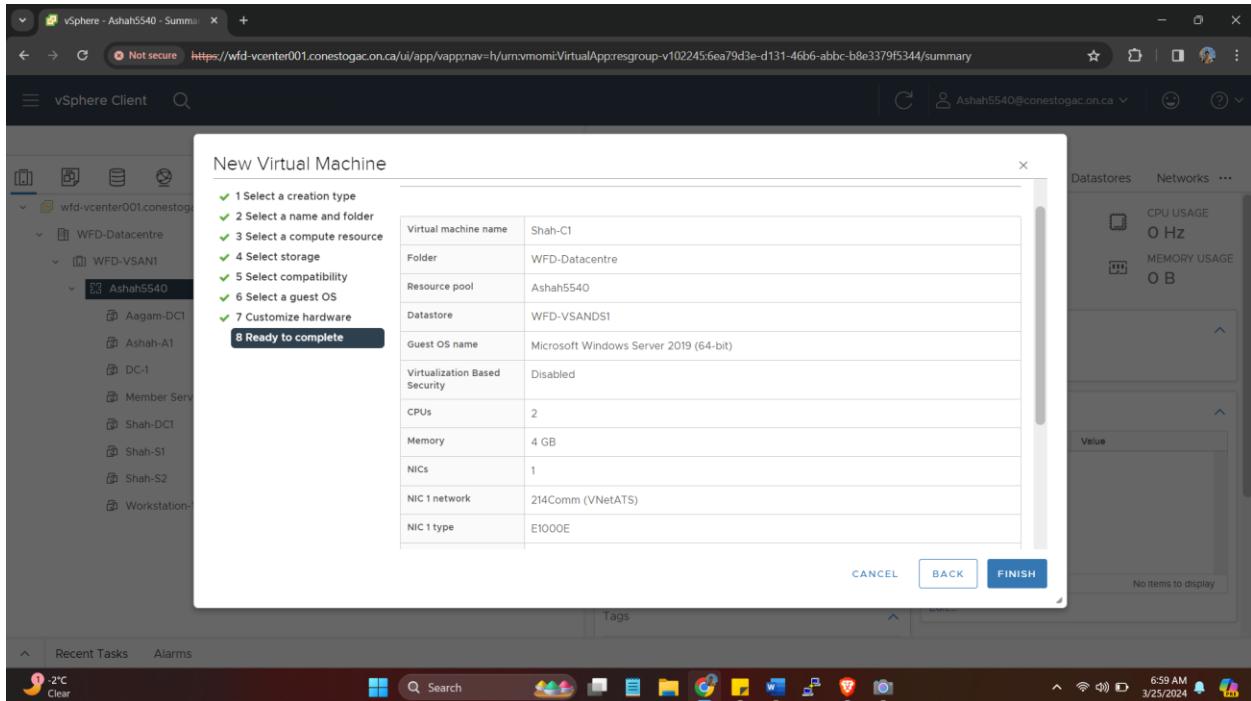


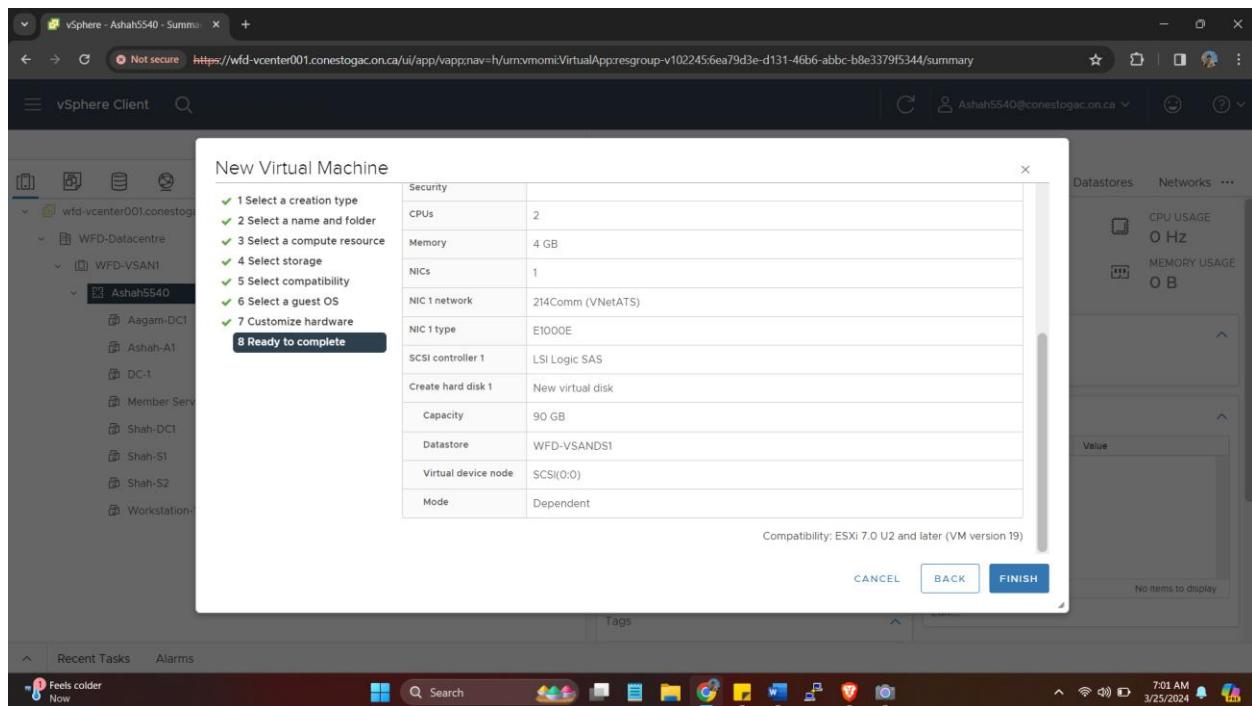
Successfully connecting member server SHAH-S1 to domain: Shah04.local



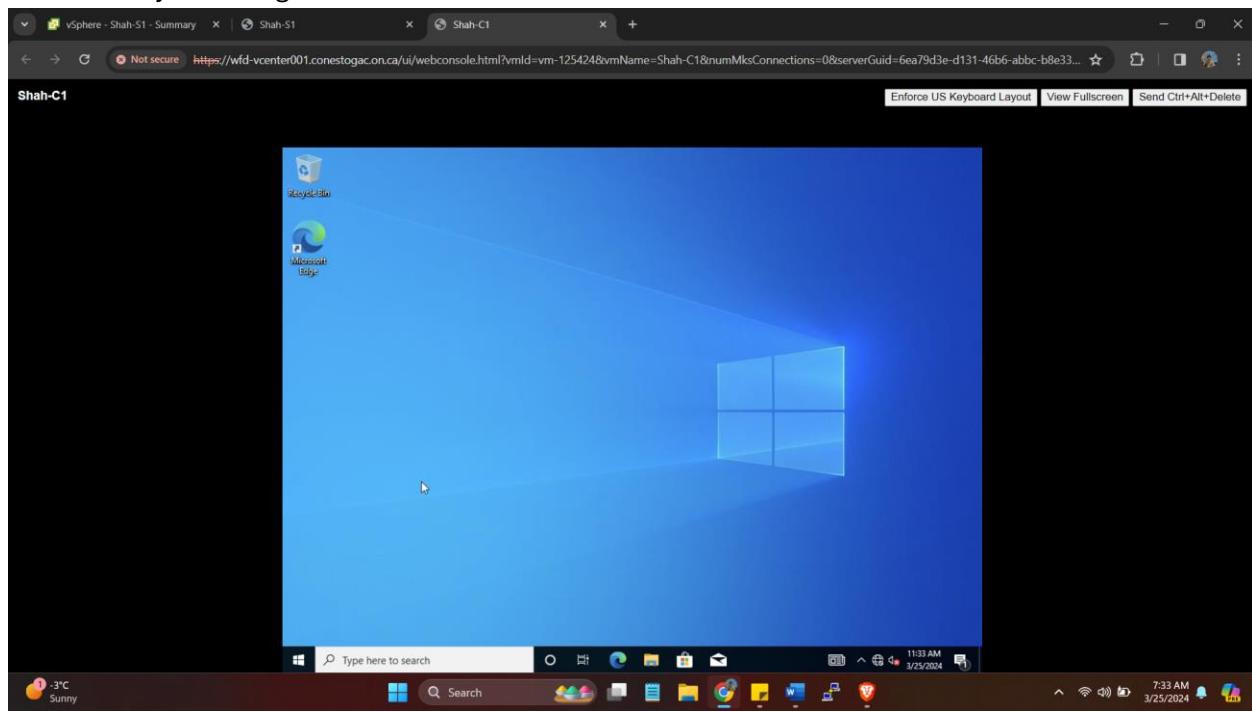
## Shah-C1

Specification of VM creation for Shah-C1 (Workstation) with Com port 214

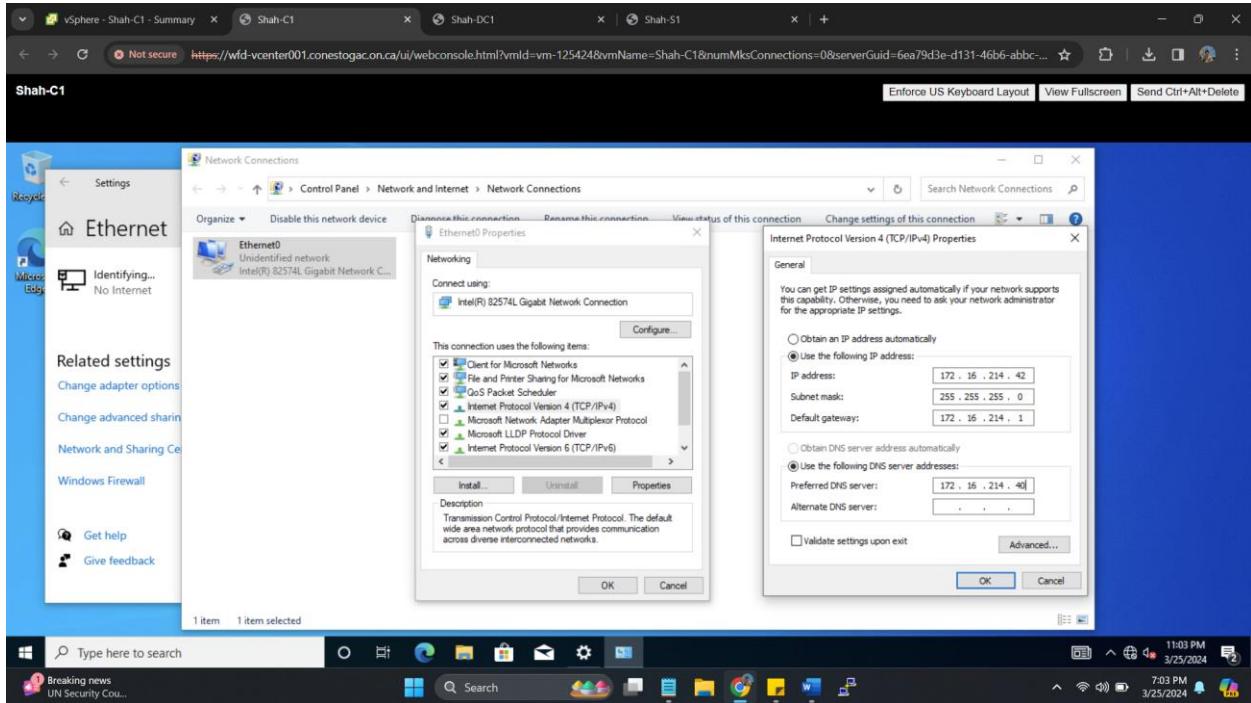




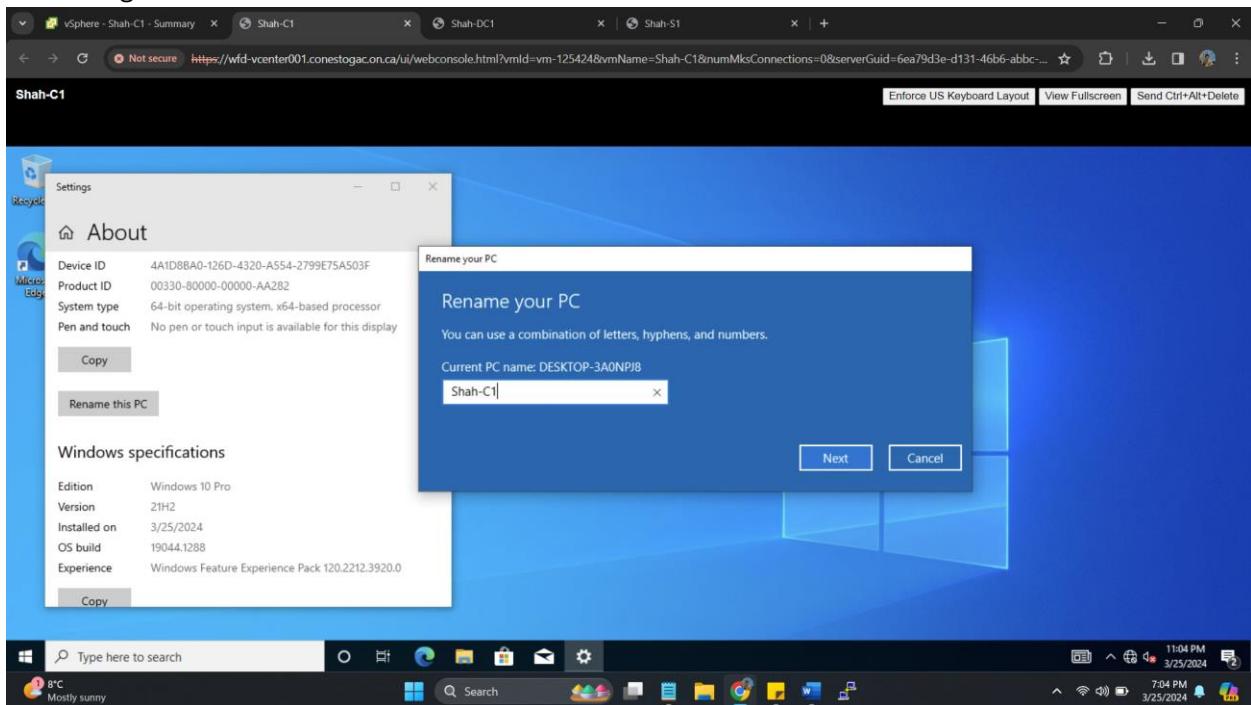
## Successfully installing Windows 10 Pro as workstation SHAH-C1



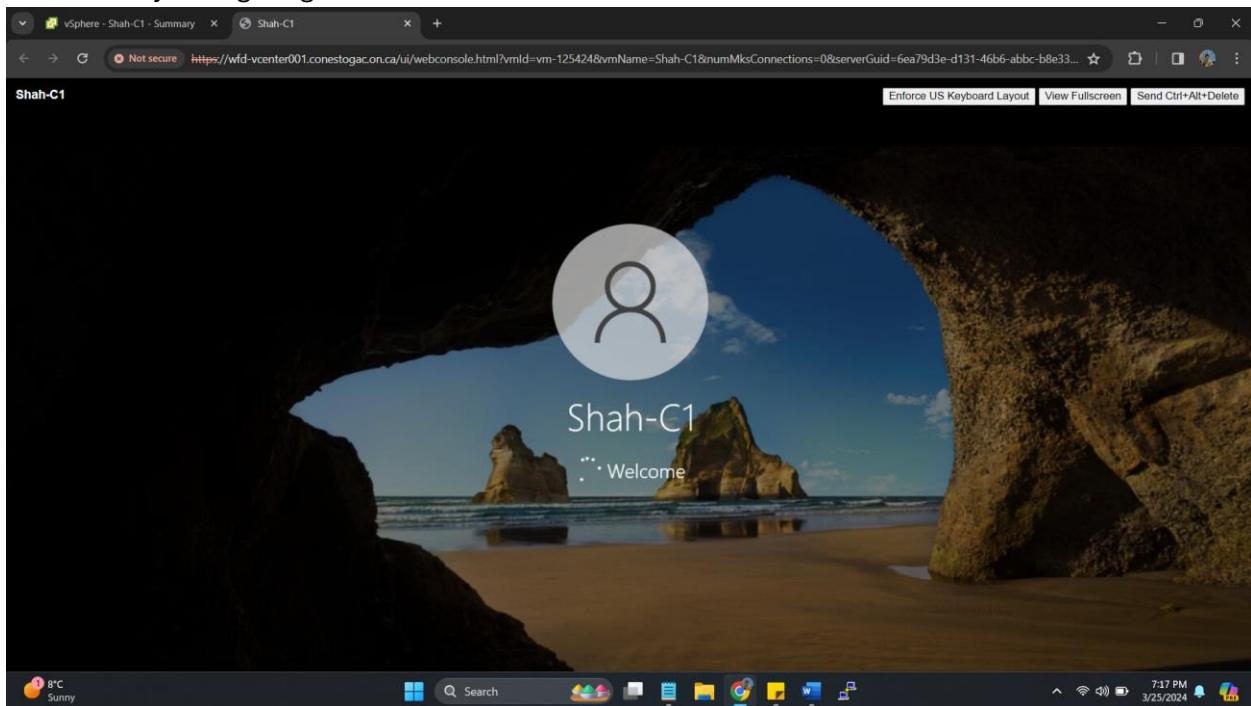
Configuring IP on workstation Shah-C1 IP: 172.16.214.42 Subnet mask: 255.255.255.0 Default Gateway: 172.16.214.1 DNS Server: 172.16.214.40



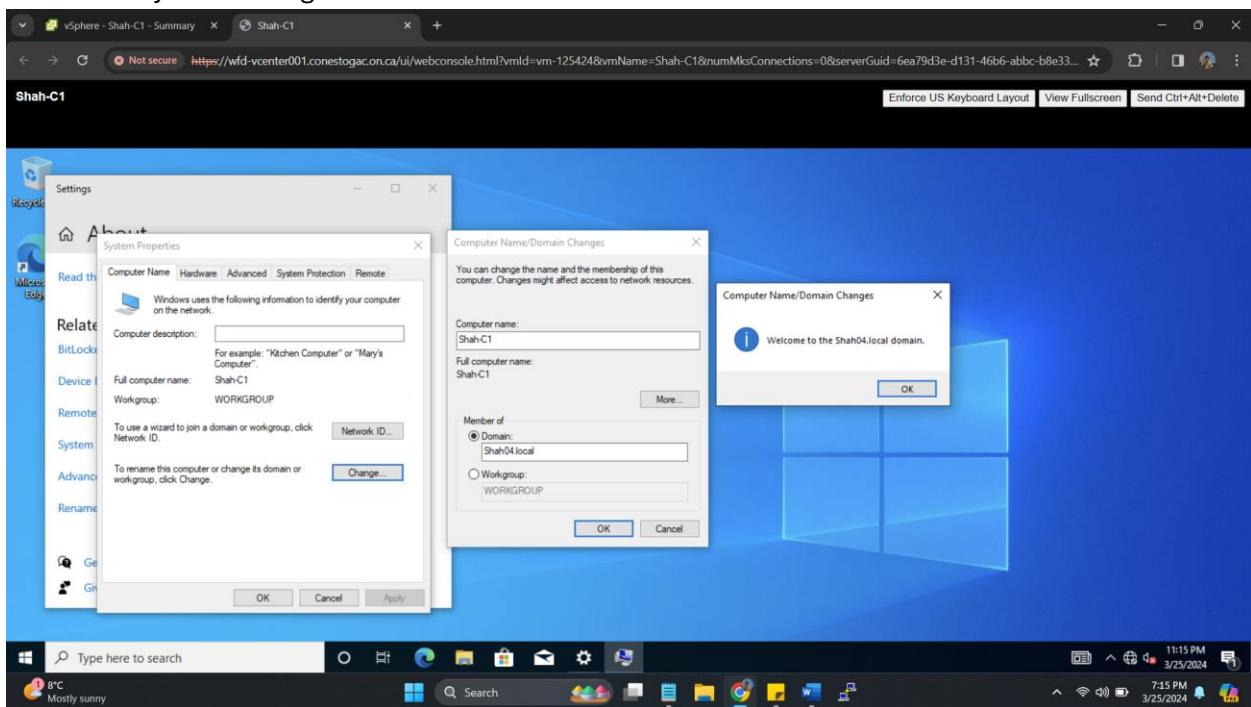
### Renaming the PC name to SHAH-C1



## Successfully configuring workstation name to SHAH-C1



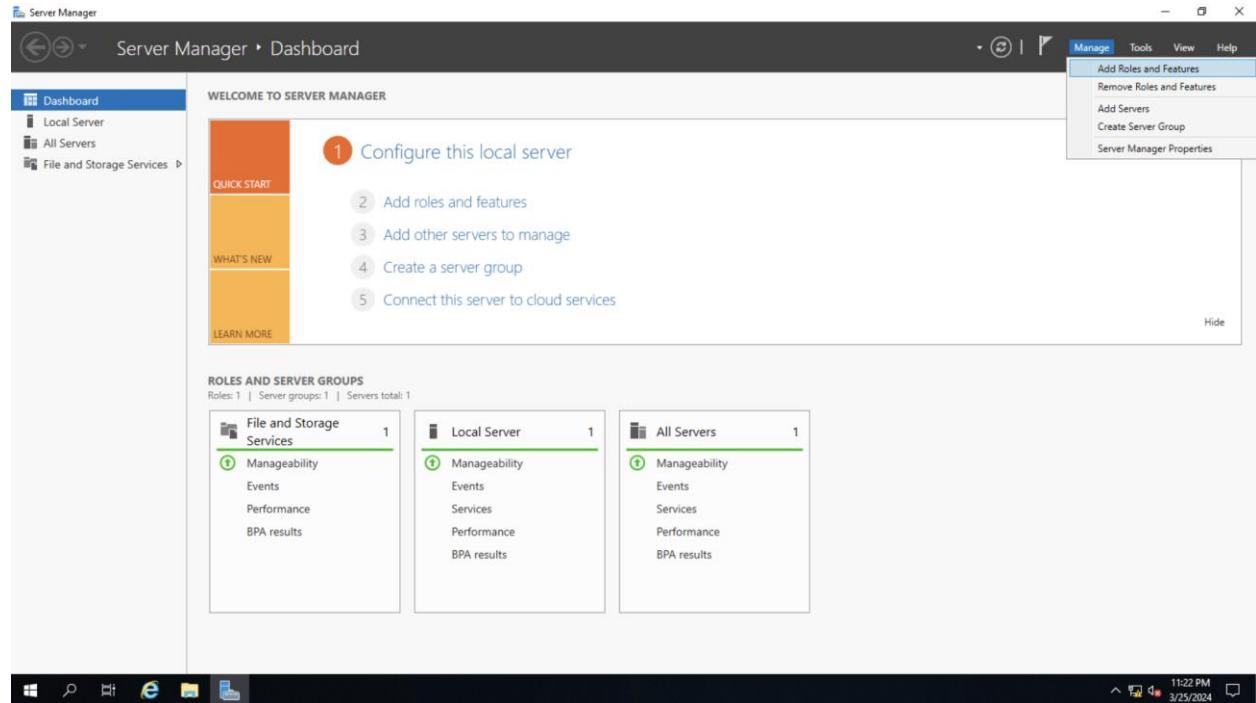
## Successfully connecting SHAH-C1 to domain: SHAH04.local



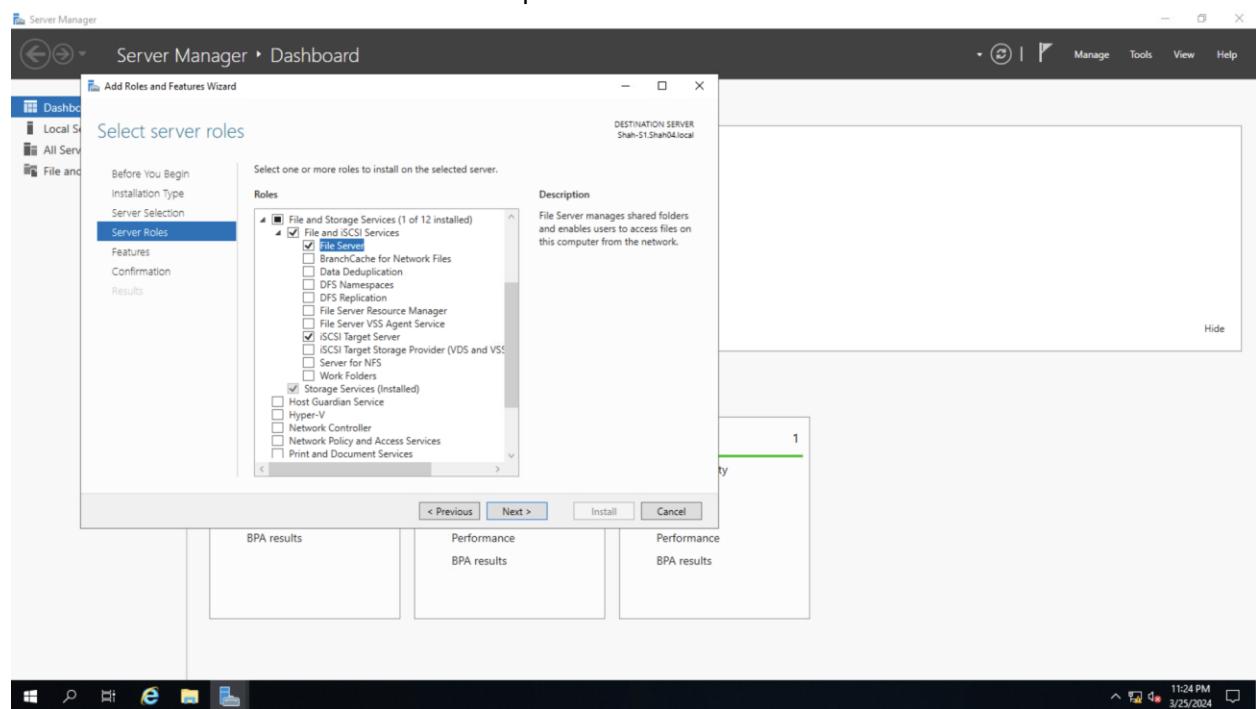
## Part 1: Creating an NTFS Share through File and Storage Services

- 1) Install the **Windows File and Storage Services Role** with the below specifications.

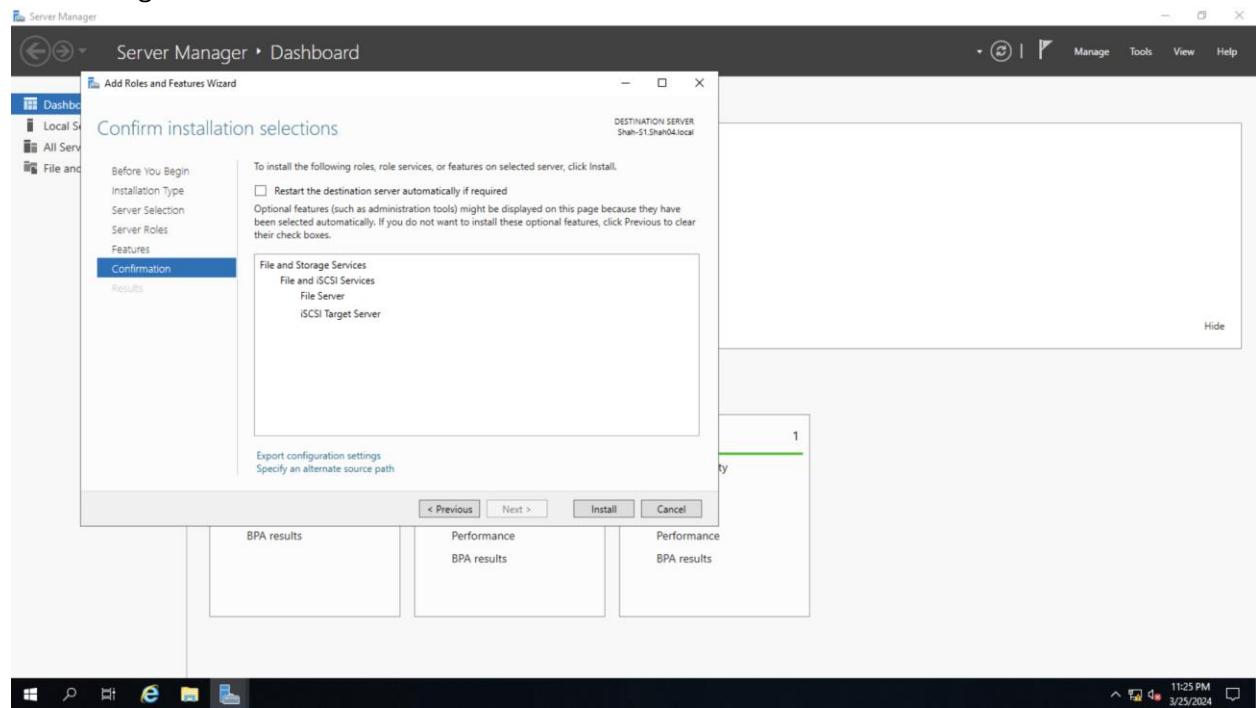
To create an NTFS share open add roles and features



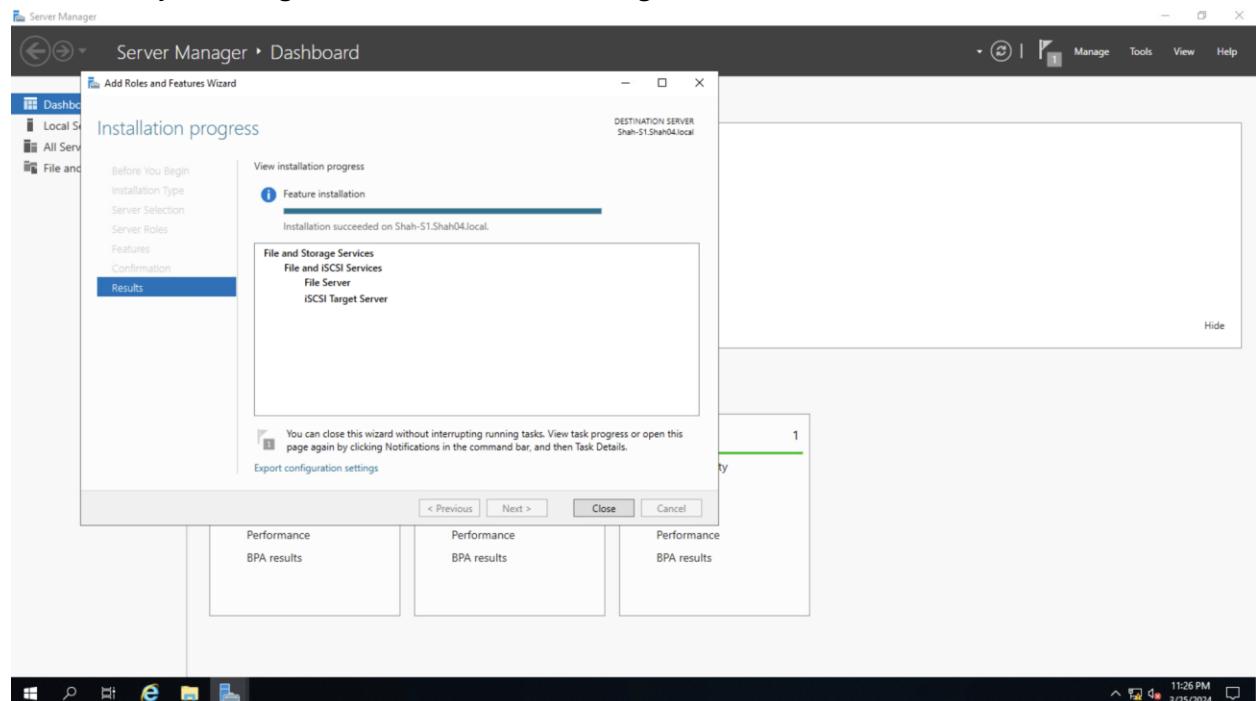
Select roles as File Server and iSCSI and proceed next



## Confirming the selections to install the server roles.

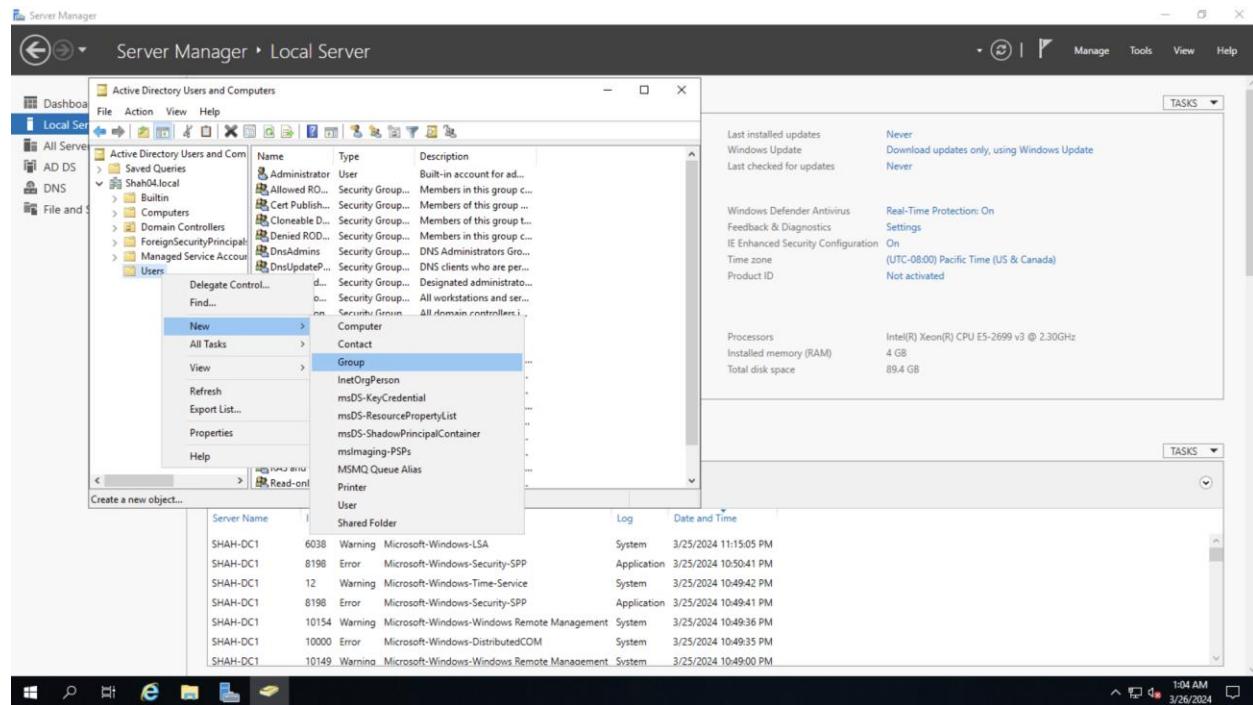


Successfully installing the file server and iSCSI target server.

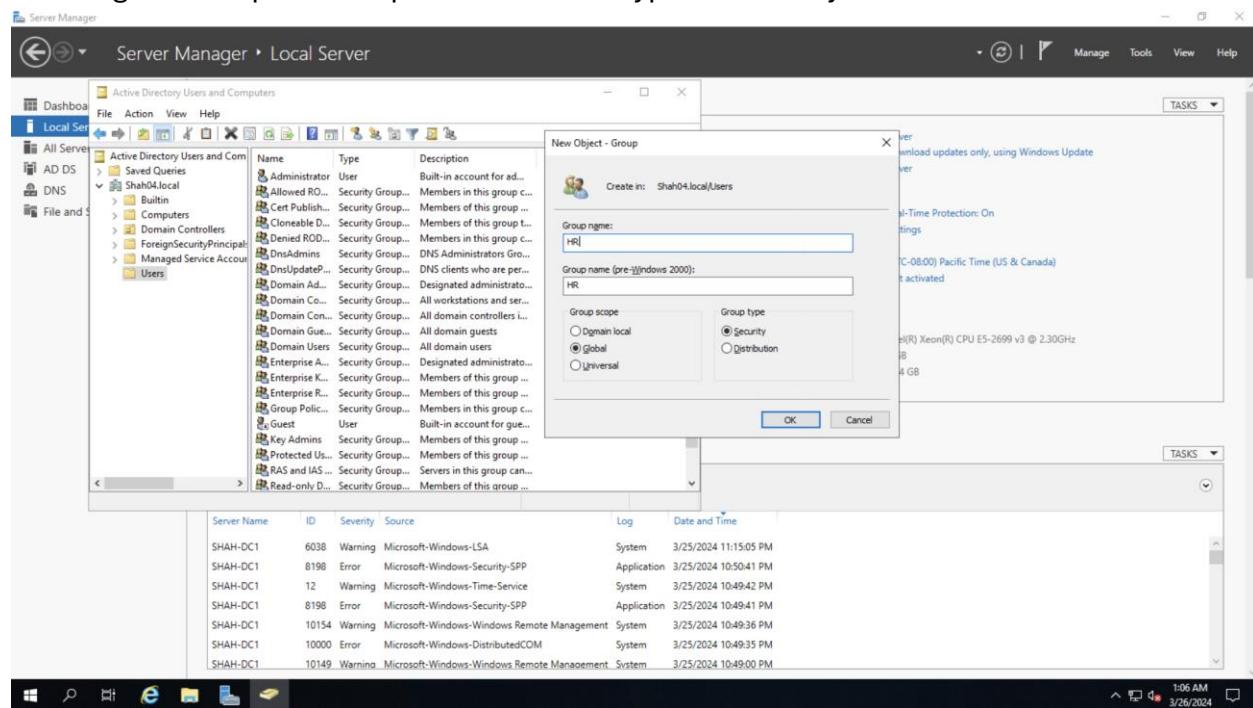


2) Create a group named **HR** in **AD users and computers**.

Open Active Directory Users and Computers → users → New → Group.

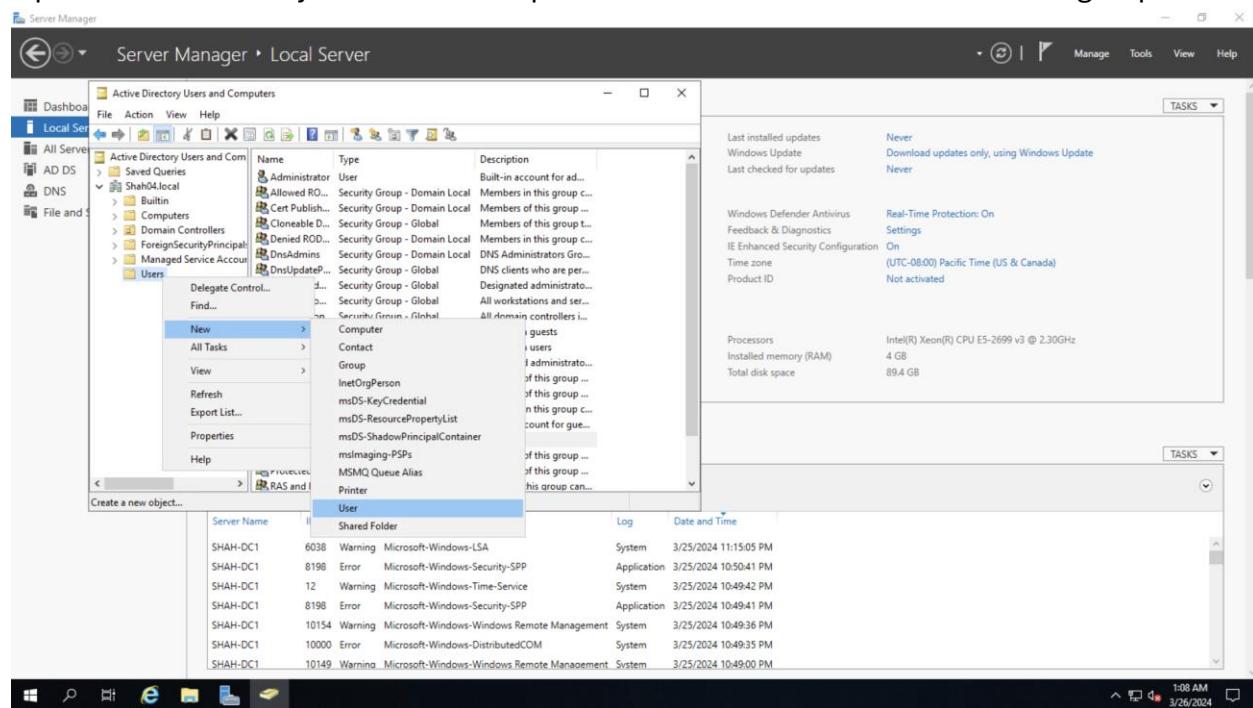


Creating HR Group with scope of Global and type as Security.

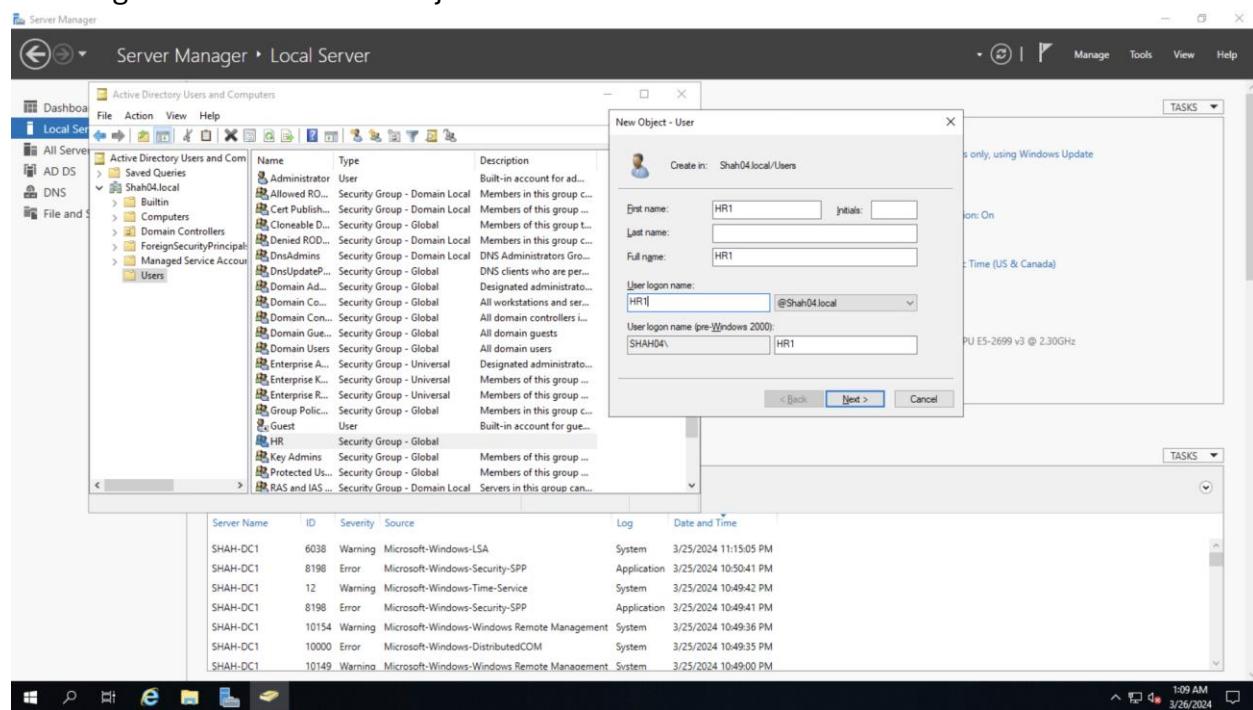


3) Create a user named **HR1** and add them to the group **HR**.

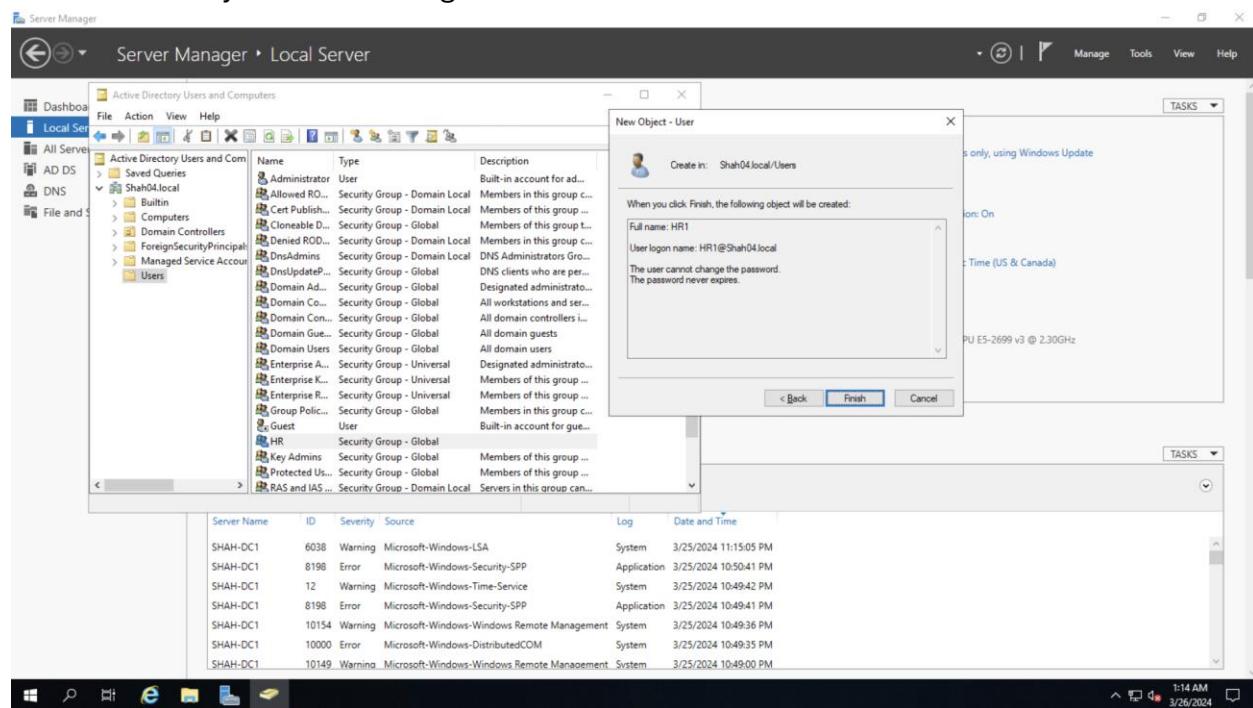
## Open Active Directory Users and Computers in SHAH-DC1 to add user HR1 in group HR.



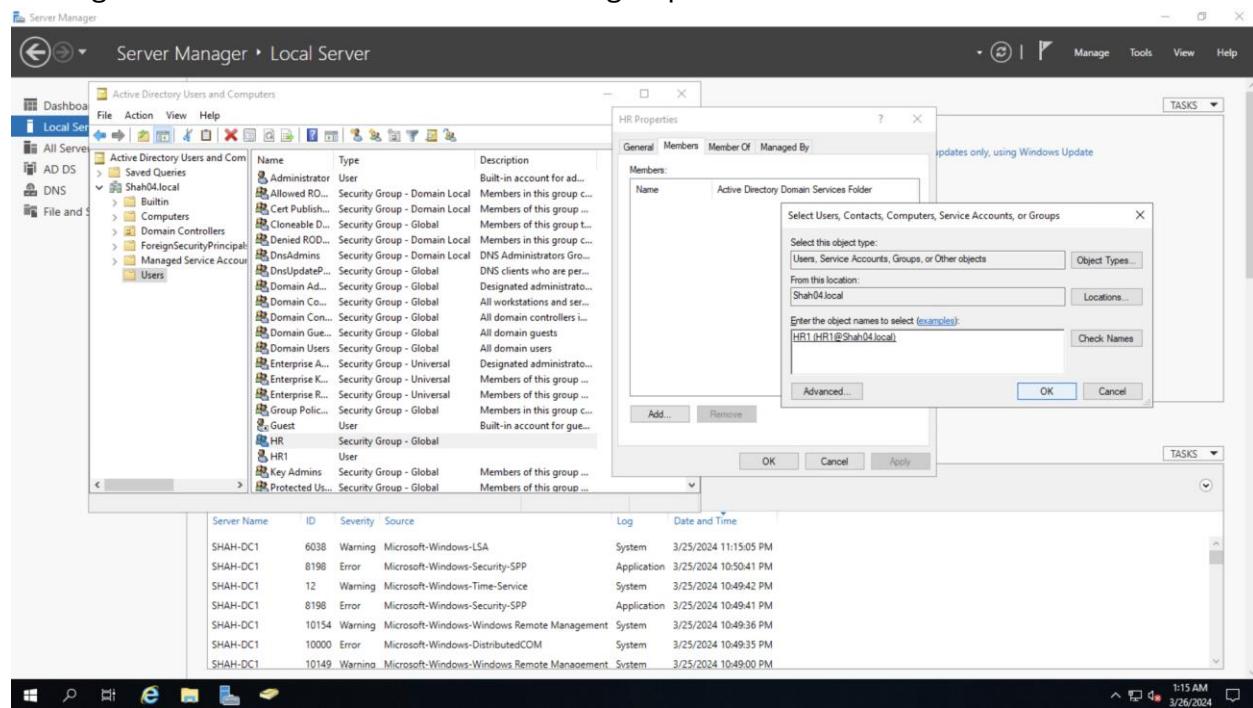
## Creating user HR1 as a new Object - User



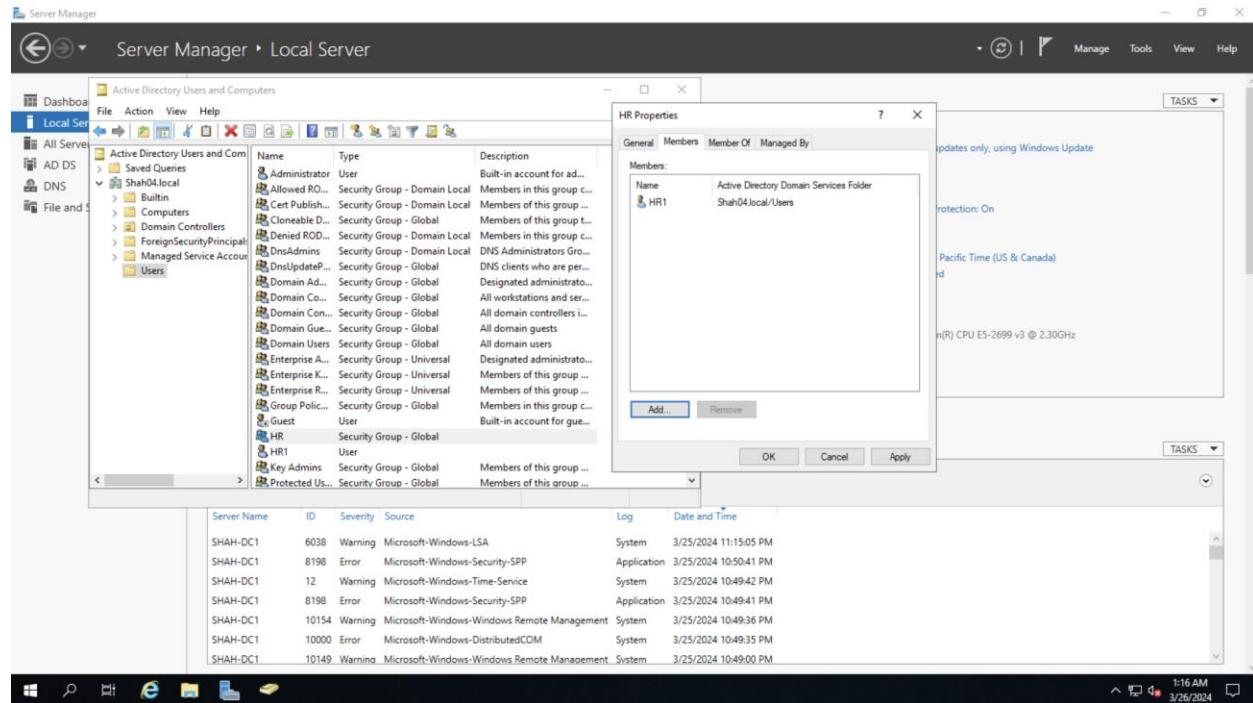
## Check summary before finishing to create the user.



## Adding HR1 user to become member of HR group.

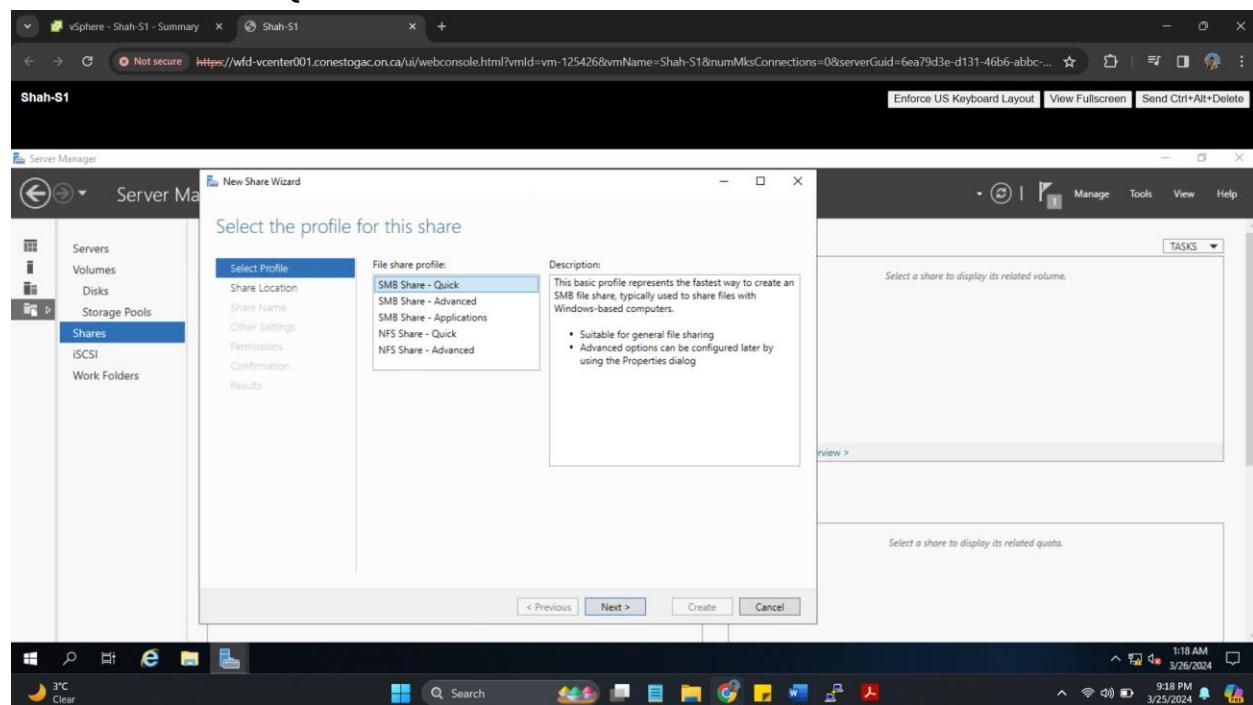


Verifying the members of HR group, HR1 is currently the only member of the HR group.

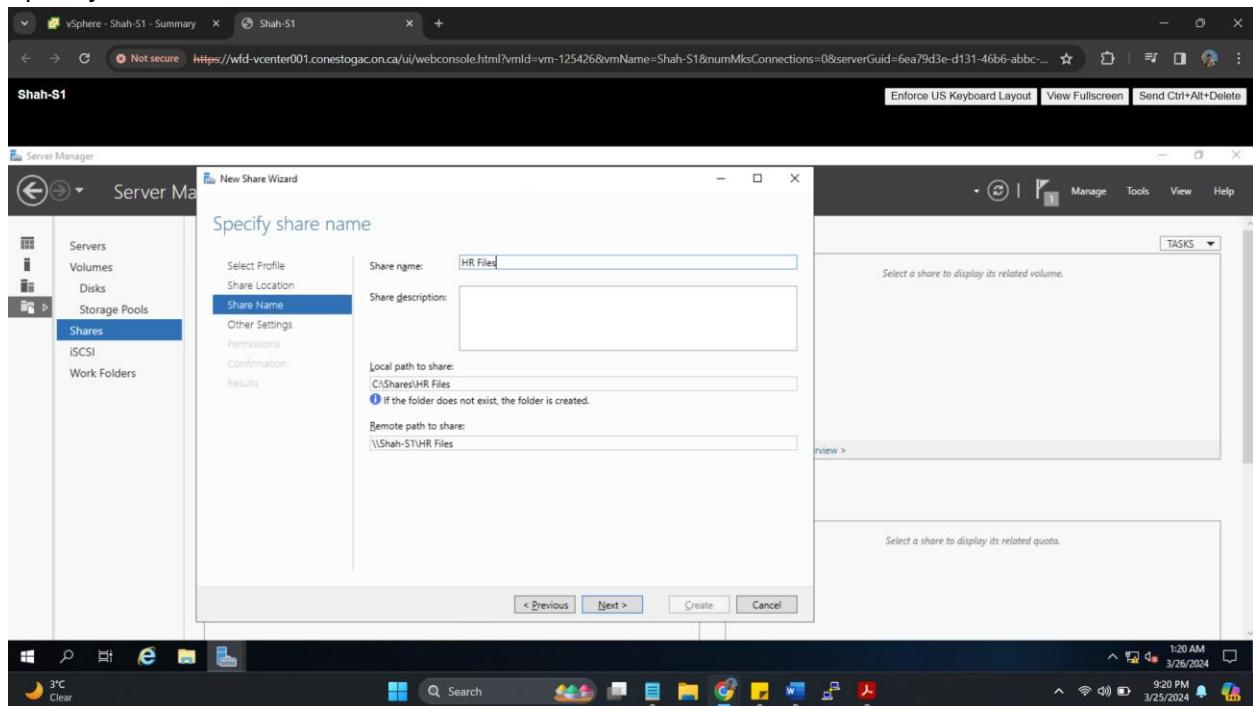


#### 4) Through **File and Storage Services** Create a share named “**HR Files**”.

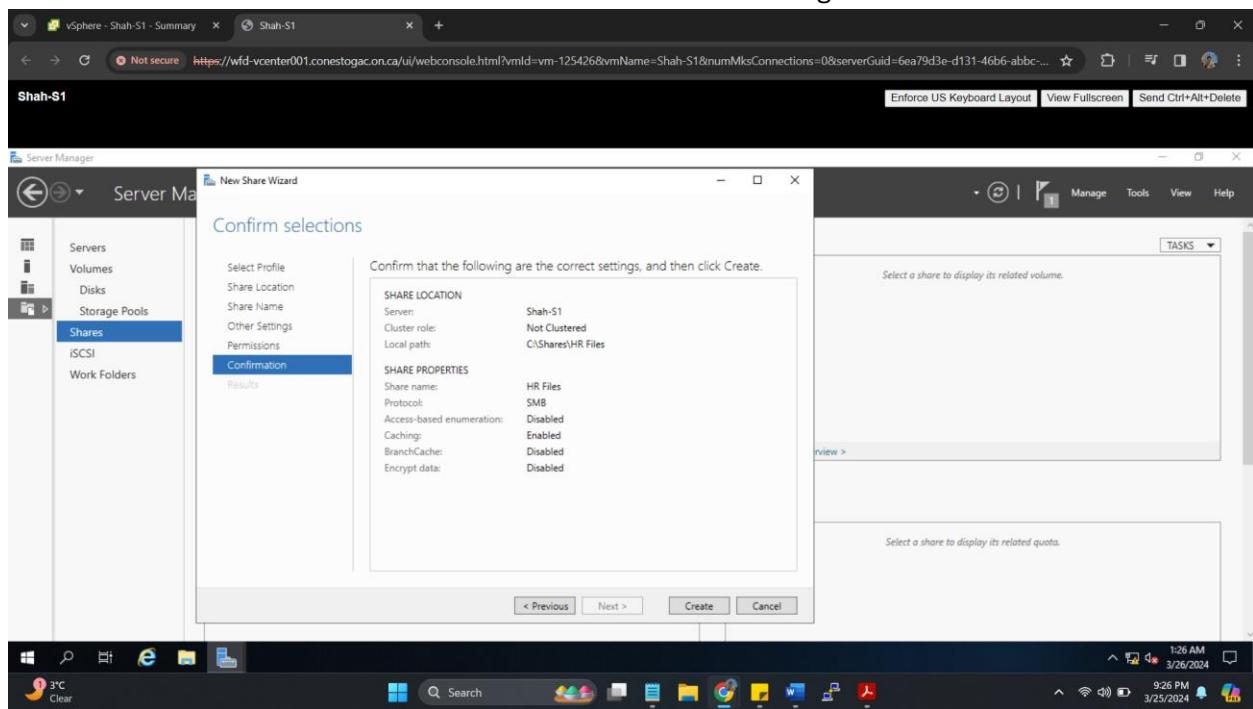
In File and Storage Services, open New Share Wizard to create a share named “**HR Files**”, select SMB Share – Quick.



Specify the share name as HR Files.

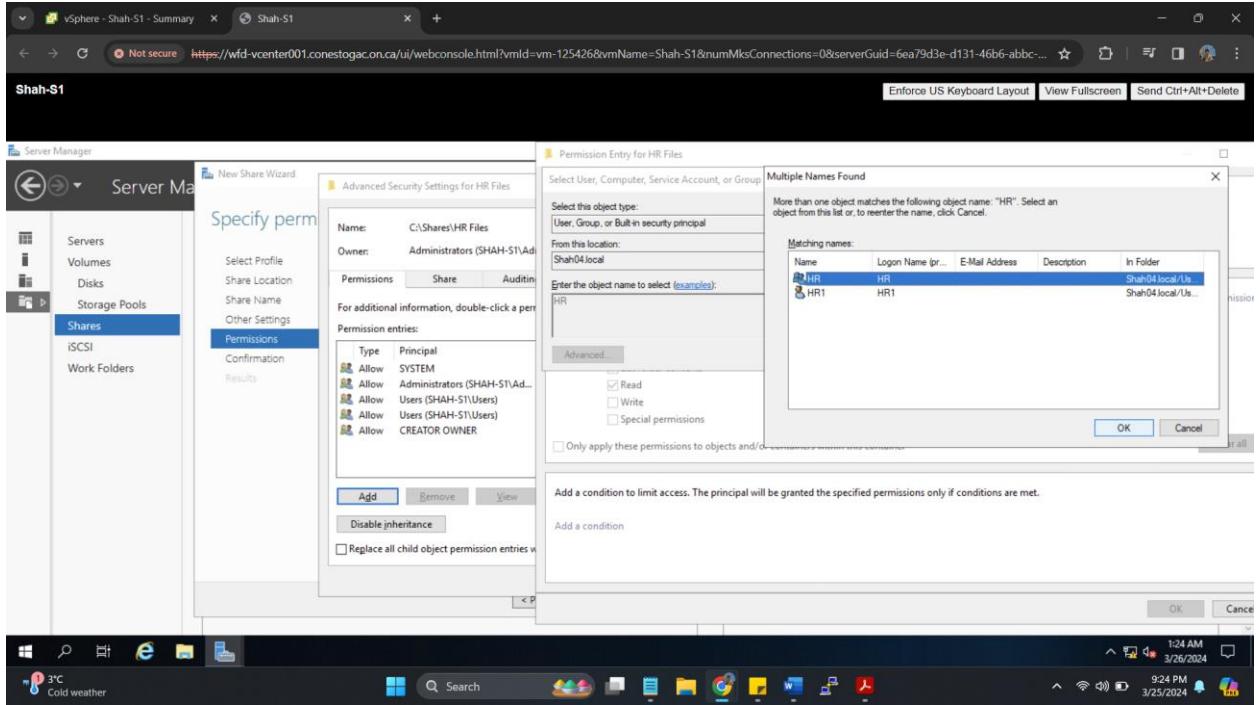


Confirm the selections for the HR Files created in Files and Storage Services

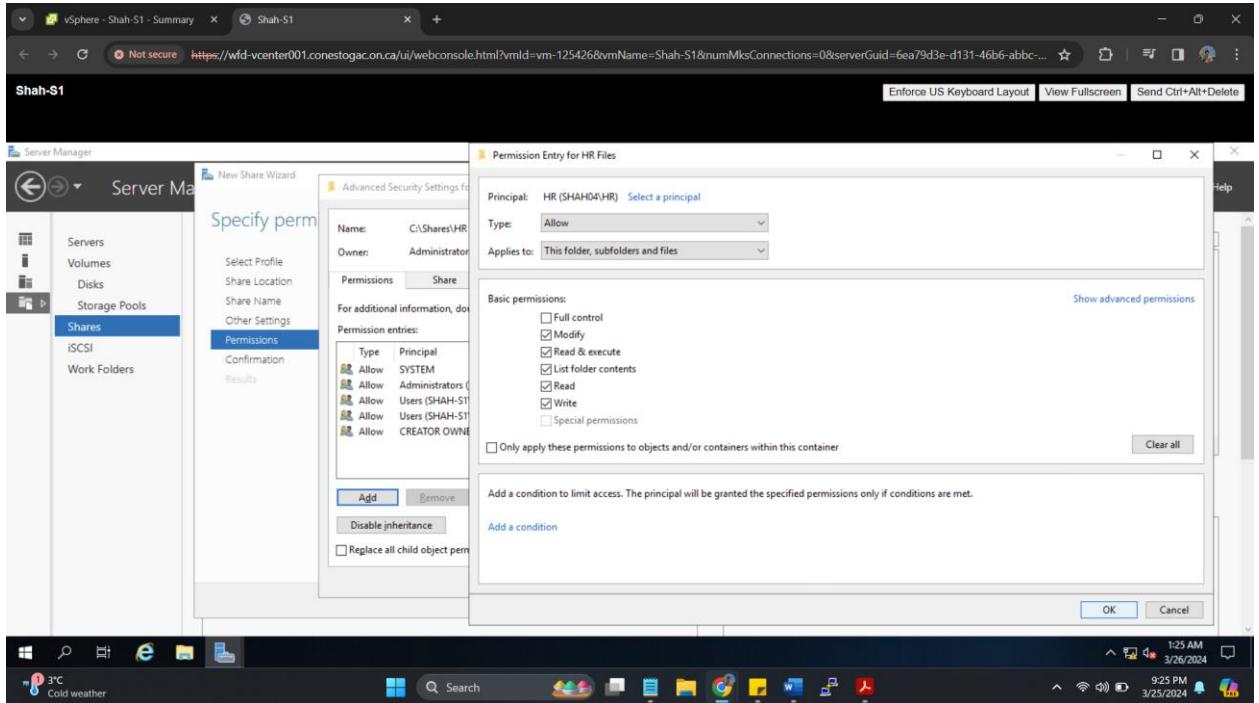


5) Give the group **HR** modify permissions to the “**HR Files**” share.

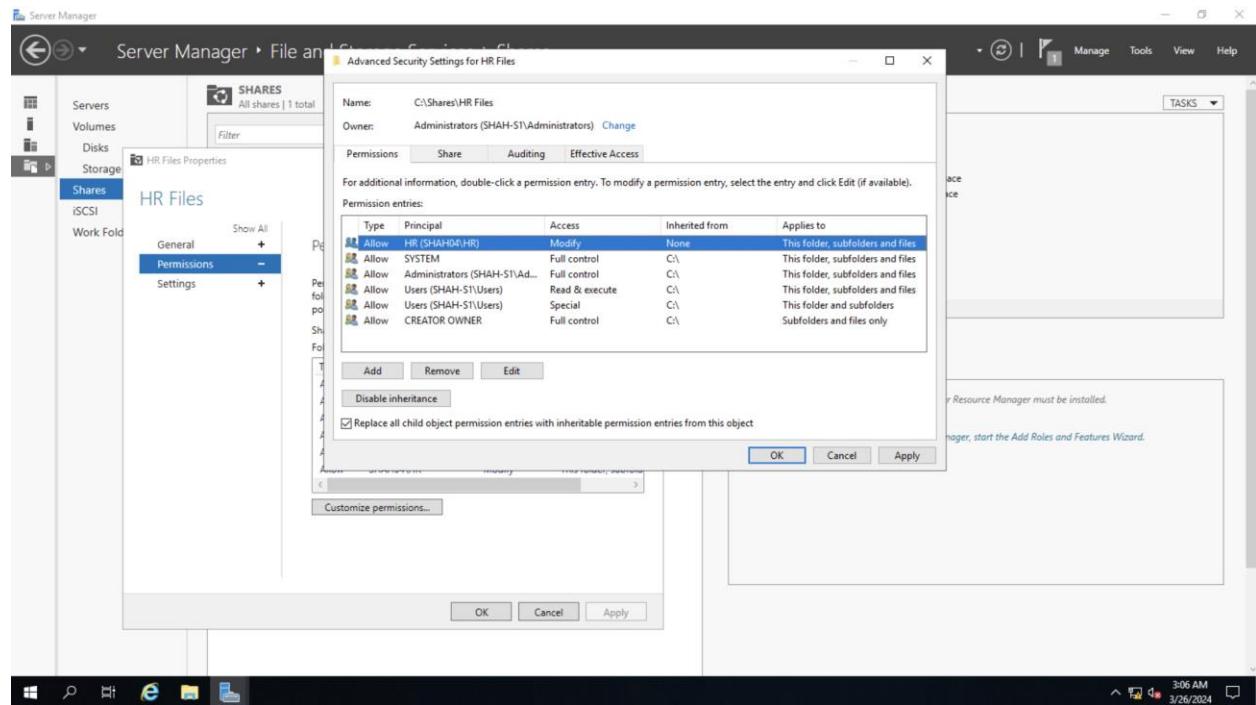
To provide modify permissions to the HR group for HR Files share, open Shares → Specify permissions → Add permissions → add HR group.



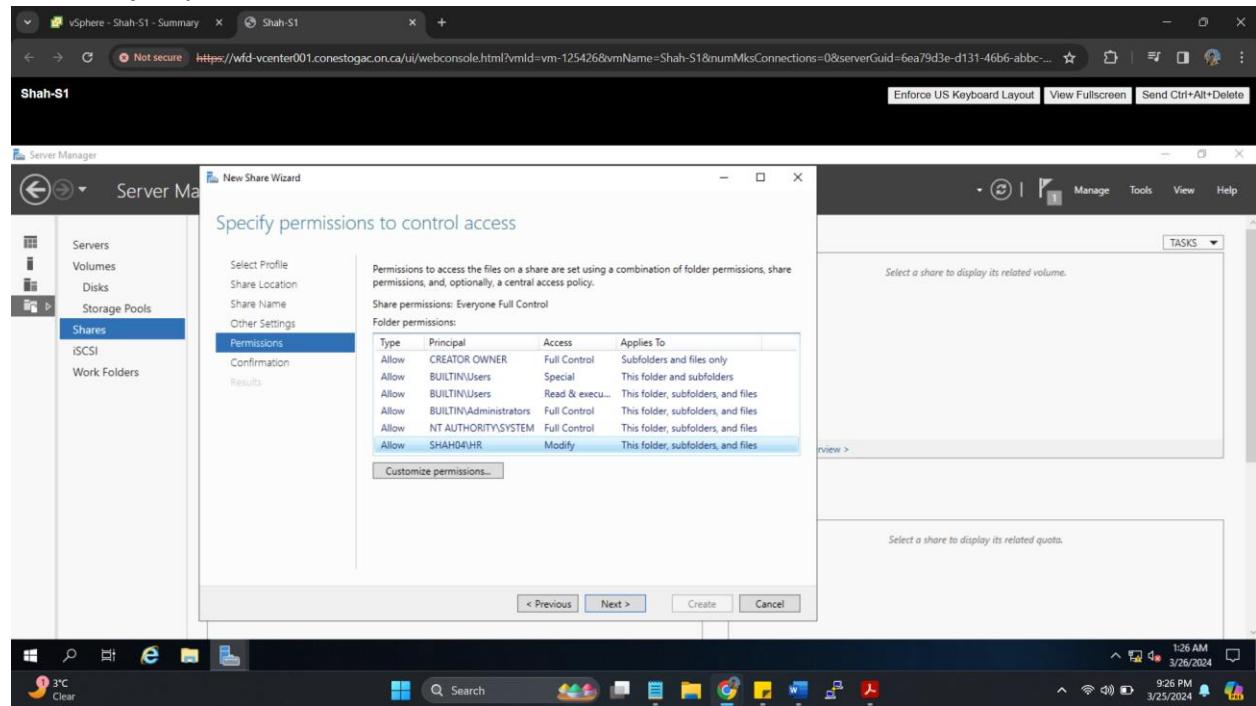
Once HR group is selected, add Modify permission to HR Group.



Screenshot below shows modify permission with HR group and users in it.

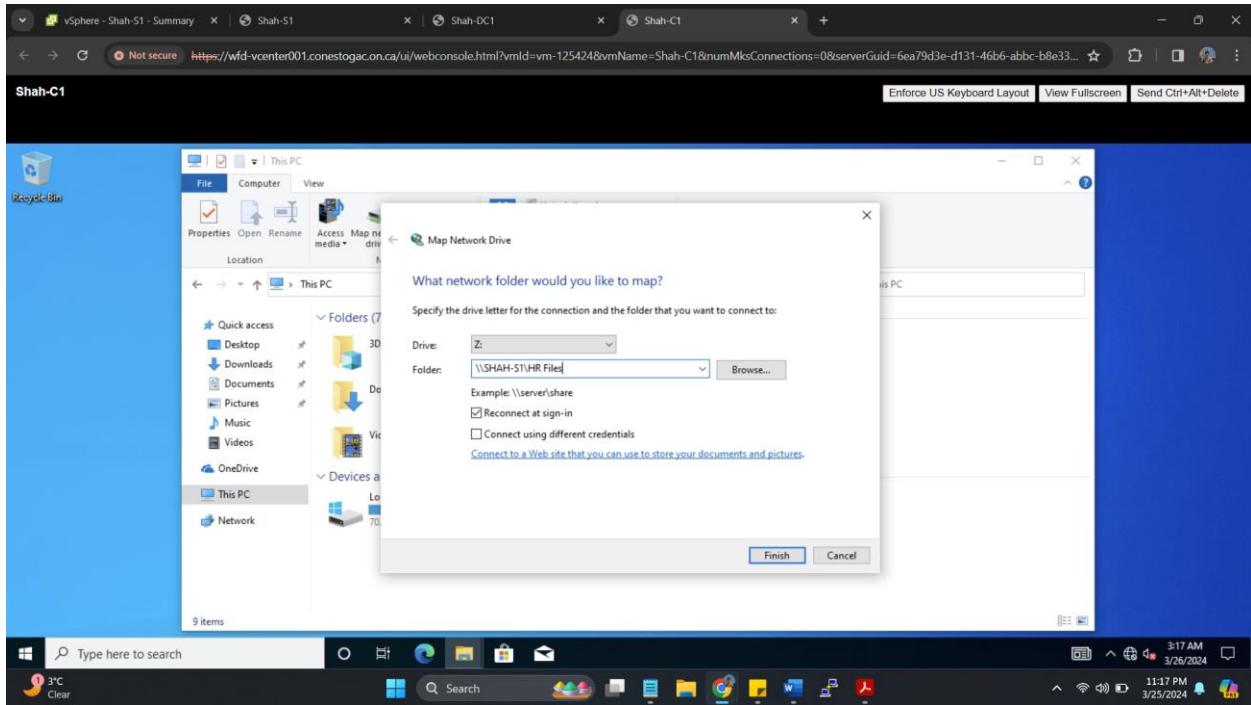


Summary of permission to control access.

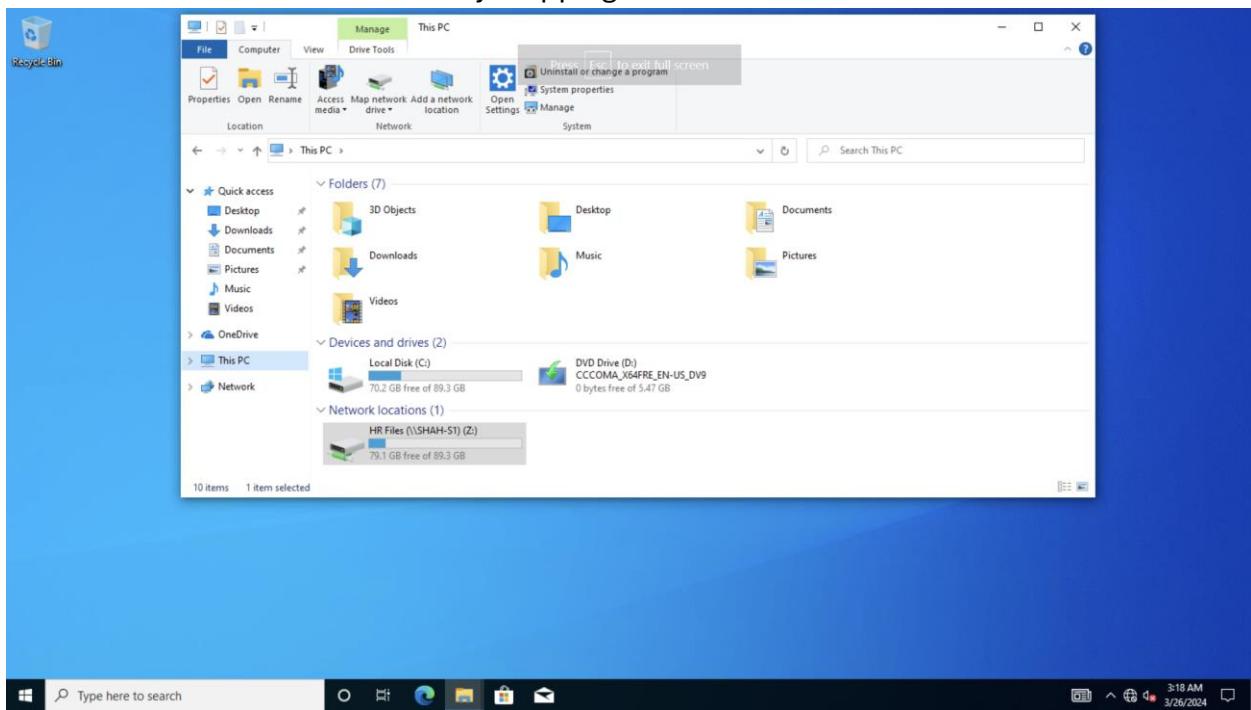


6) Map the drive on the Windows 10 client while signed in as [HR1@lastname.local](mailto:HR1@lastname.local).

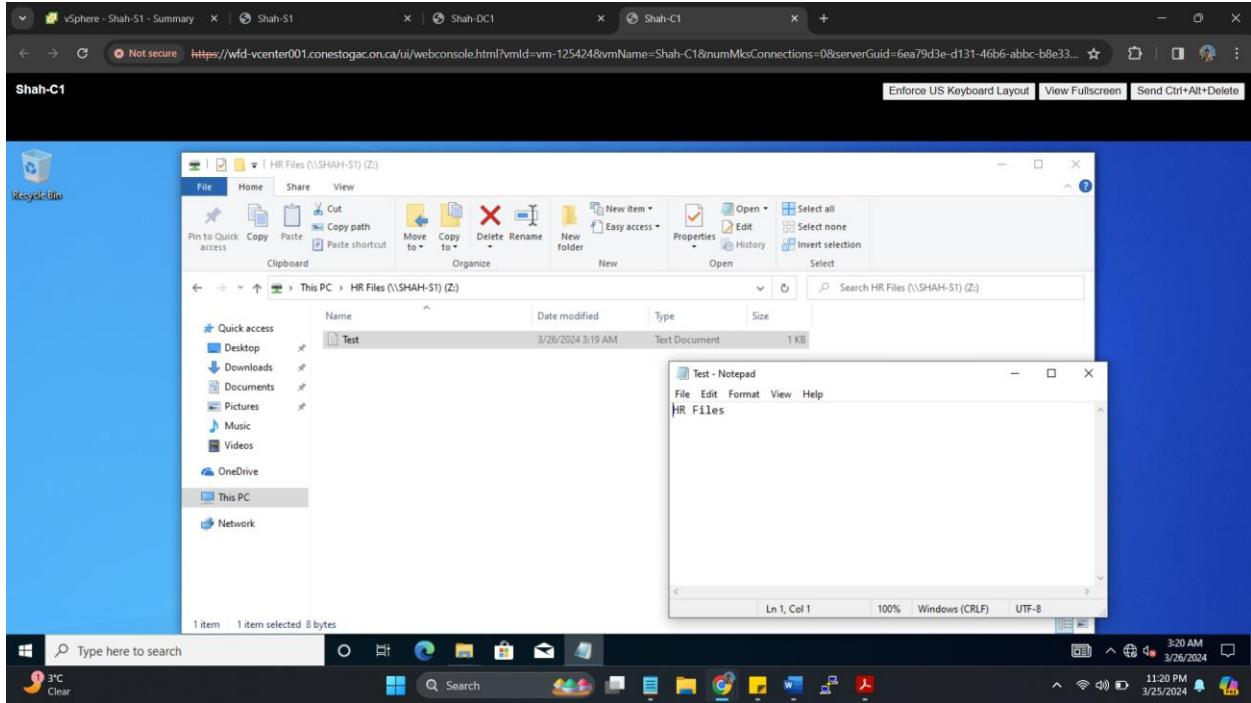
In HR1 user account, open Map network drive from file explorer and provide folder path as “\\SHAH-S1\\HR Files” and click finish to map network drive.



Screenshot shows the successfully mapping the network drive “HR Files”



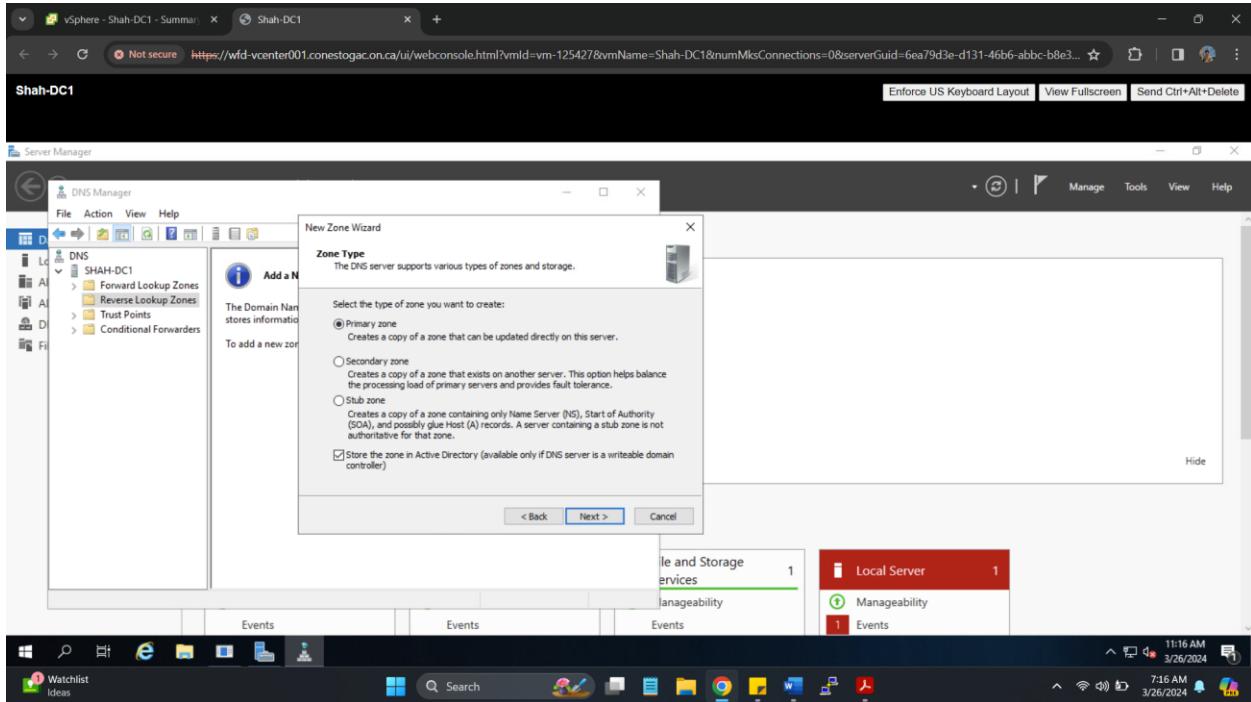
Opening the connected network drive “HR Files” and accessing the test.txt file saved in it.



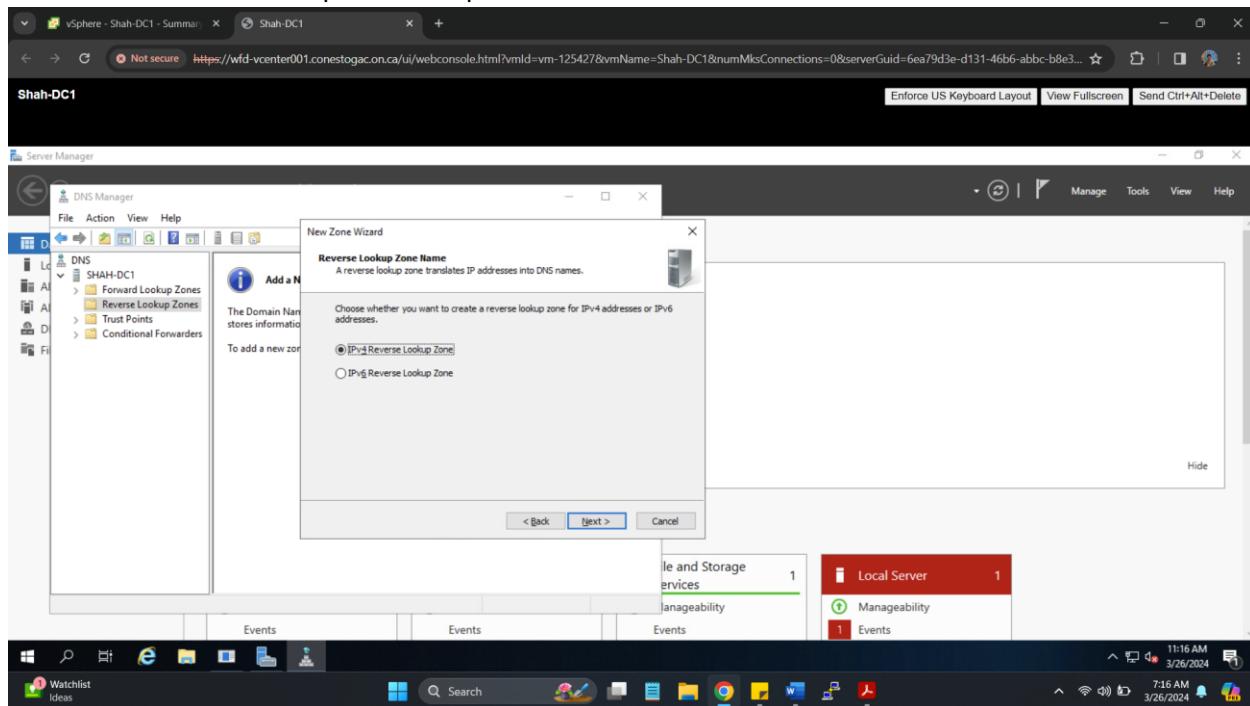
## Part 2: Setting up and connecting to iSCSI

- 1) Create a Reverse lookup zone with the IP range of your COM port in **DNS** on **Lastname-DC1**.

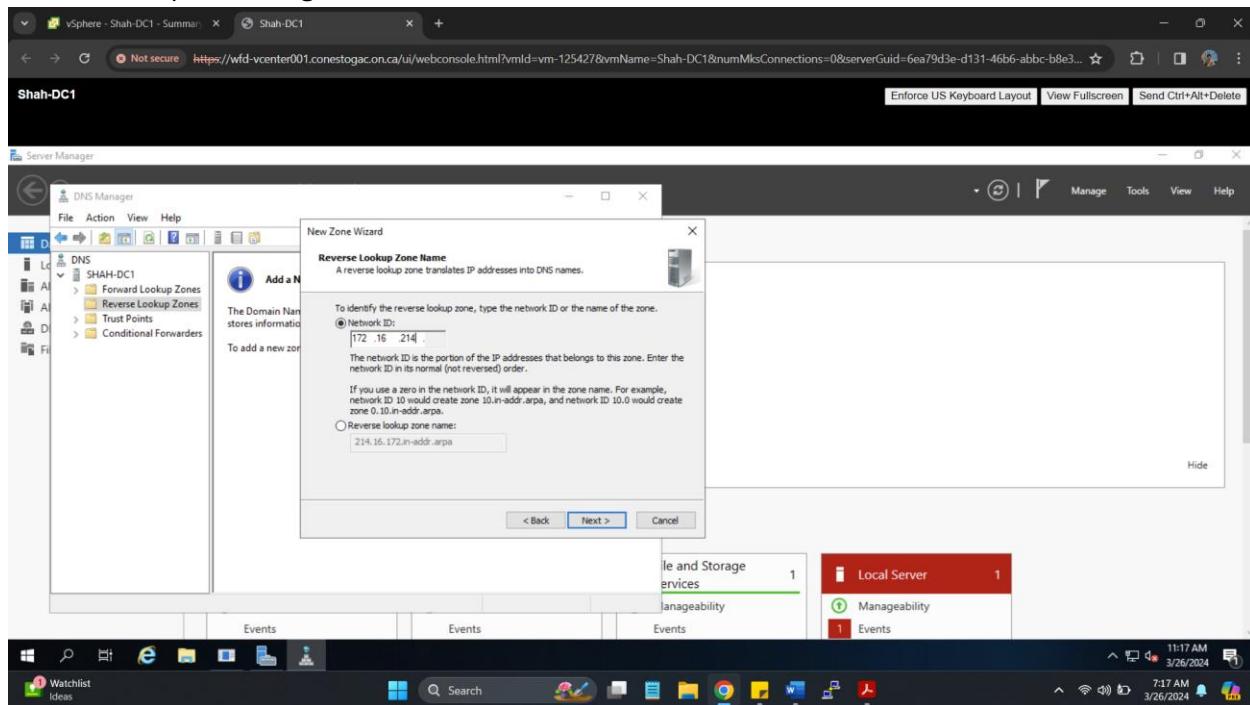
Open DNS manager to create reverse lookup zone and select primary zone.



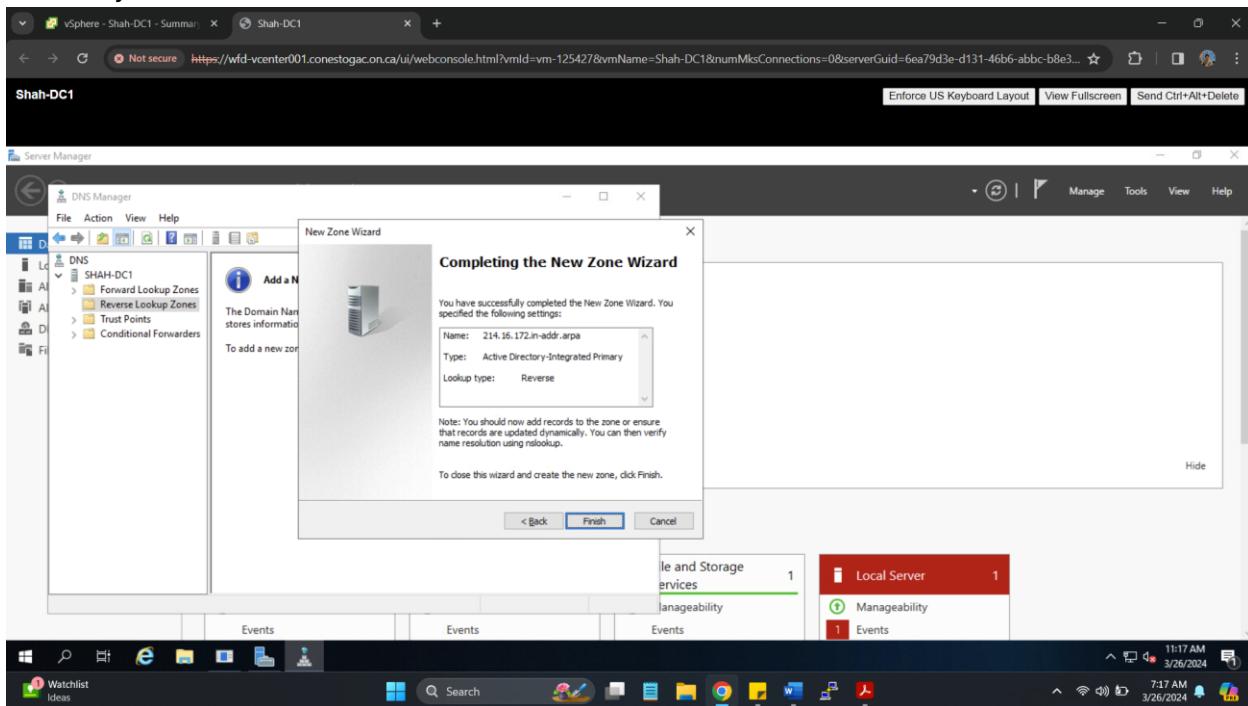
Select IPv4 reverse lookup zone and proceed to next



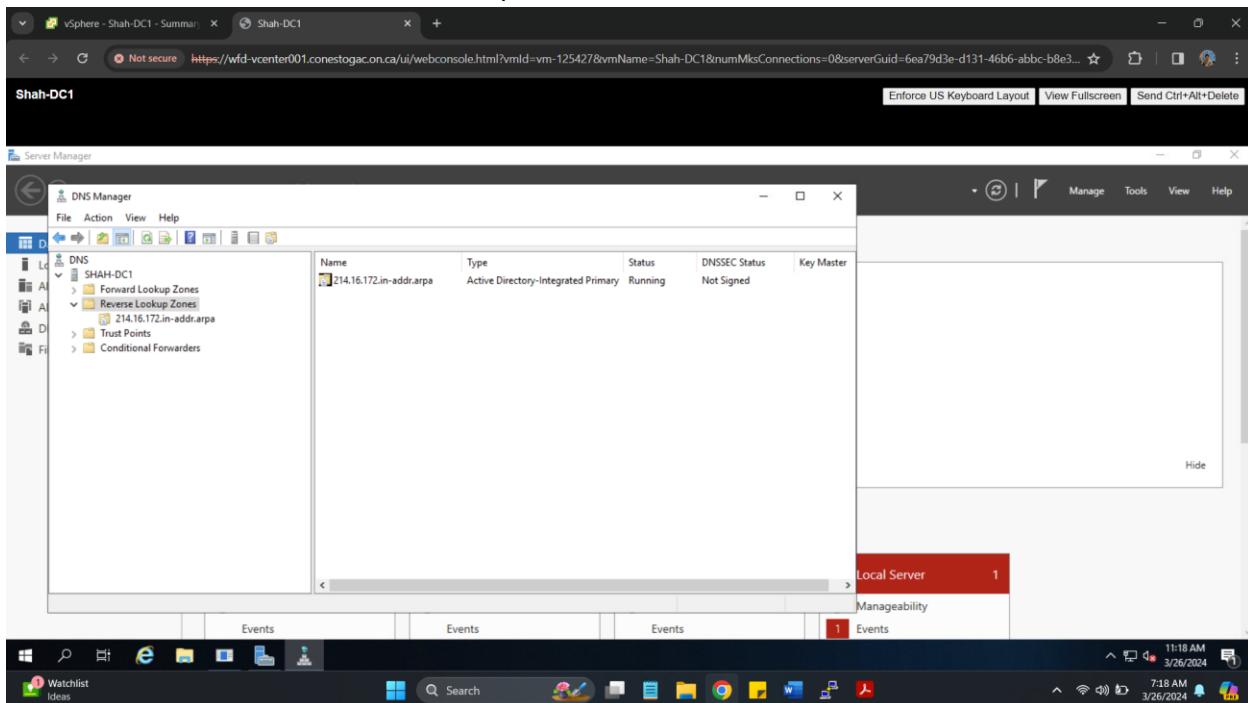
Provide com port IP range in the network id.



## Summary of new zone wizard and finish

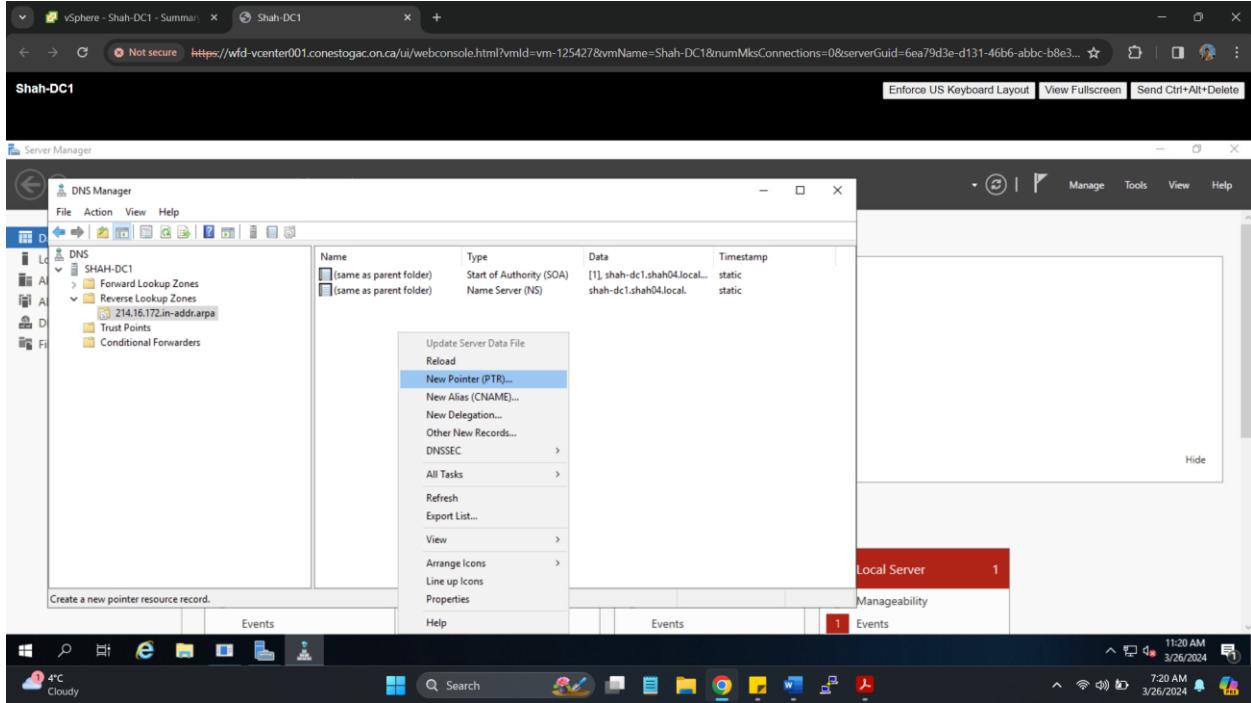


172.16.214.\* is created in reverse lookup zones.

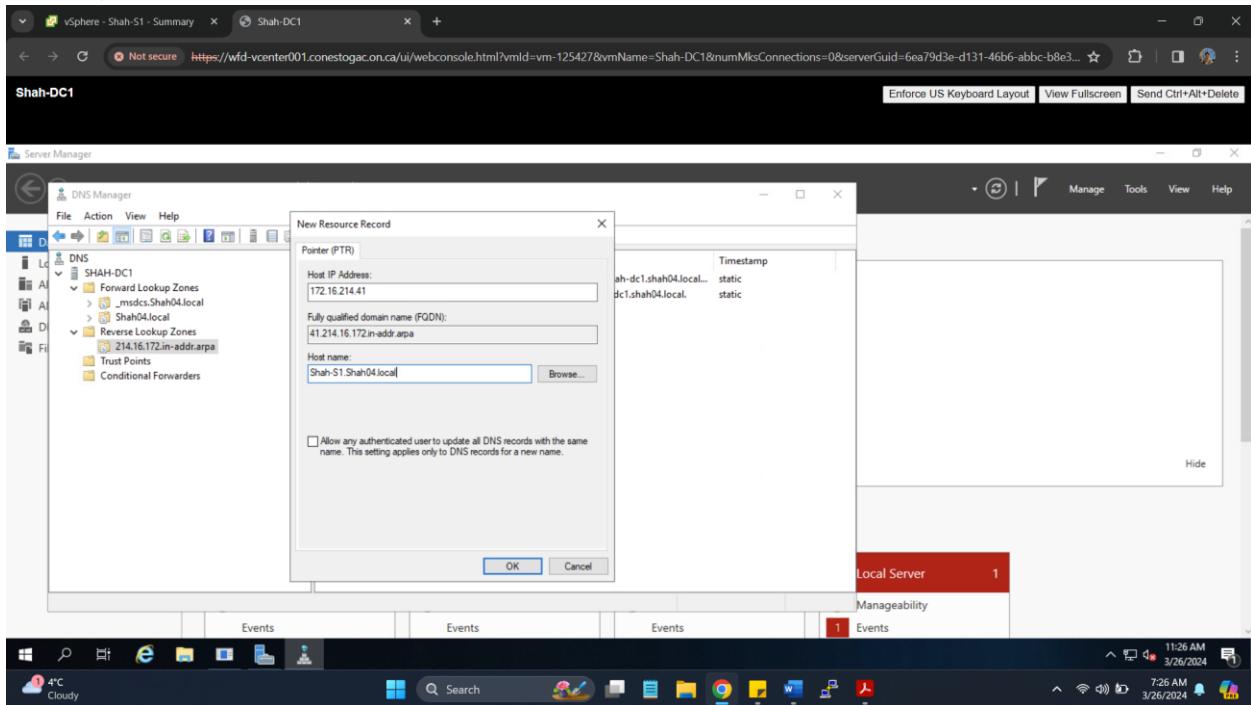


- 2) Create a PTR record for **Lastname-C1**.

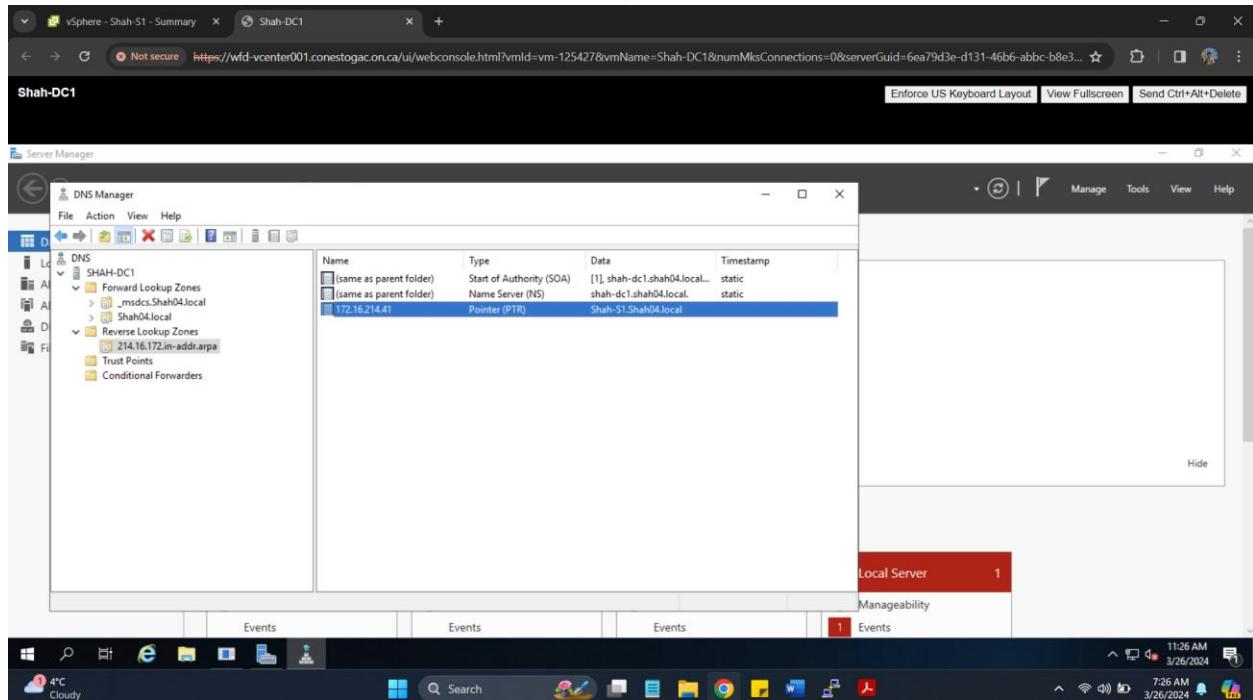
To create a PTR record, under reverse lookup zones, right click and open new Pointer (PTR) to create new resource record.



In PTR, provide host IP address: 172.16.214.41 and hostname: Shah-S1.Shah04.local

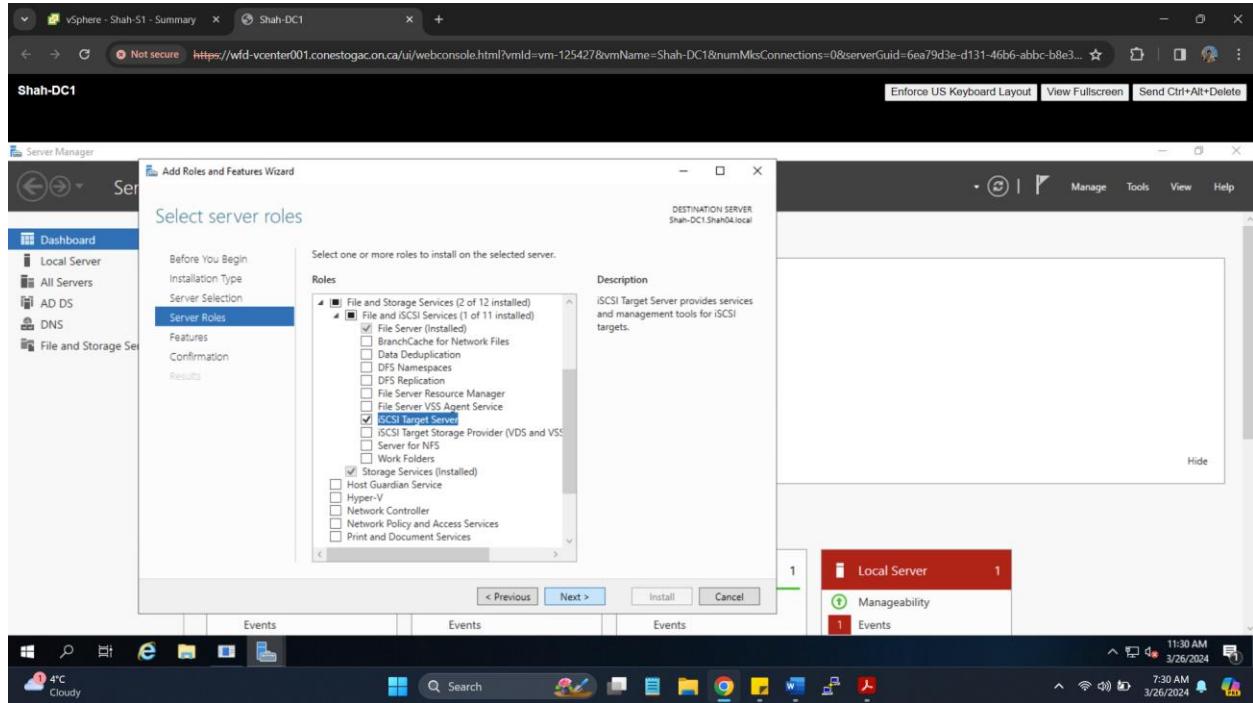


As PTR is created, can check under reverse lookup zones section.

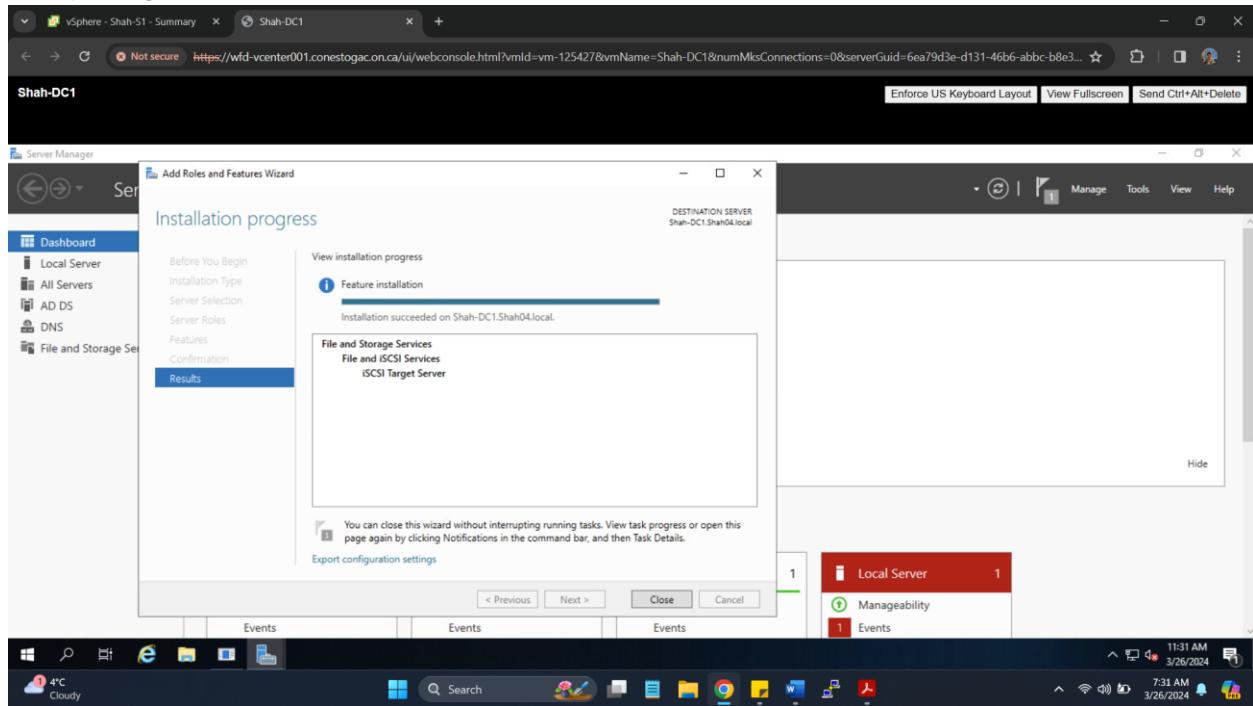


### 3) Create an iSCSI virtual disk named IT.

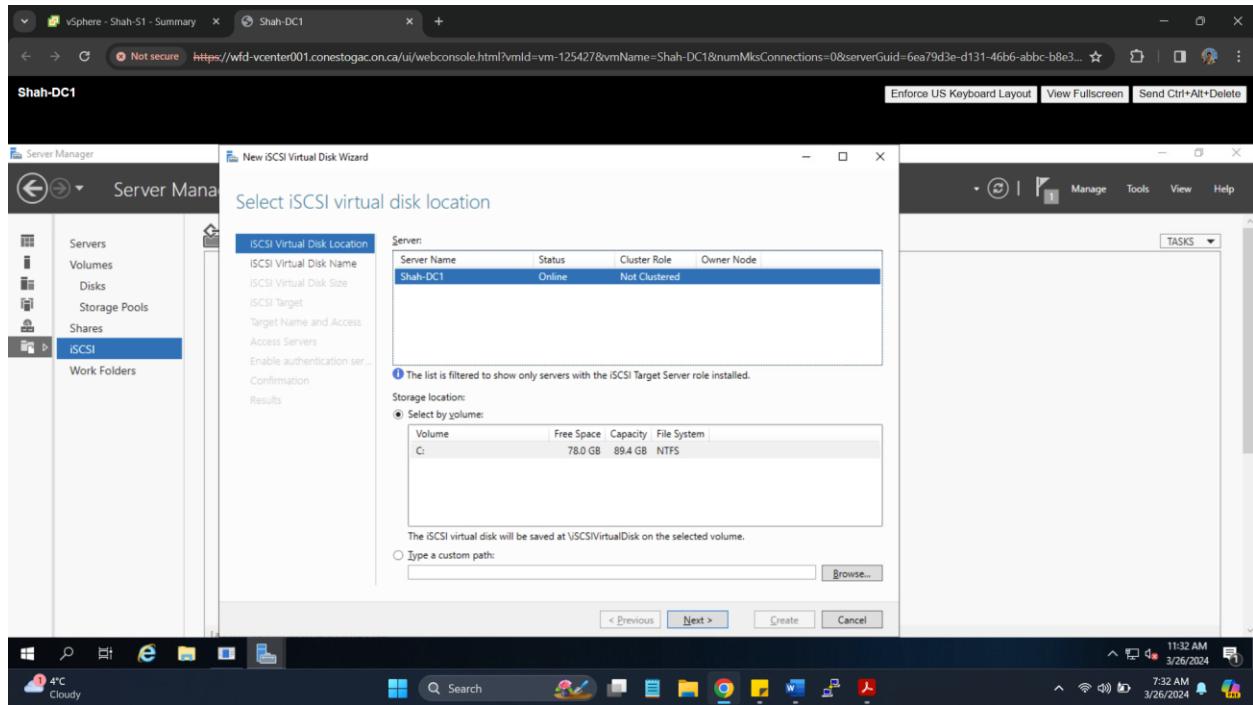
To enable features of iSCSI and file server, under add roles and features, select File server and iSCSI Target Server under File and Storage Services.



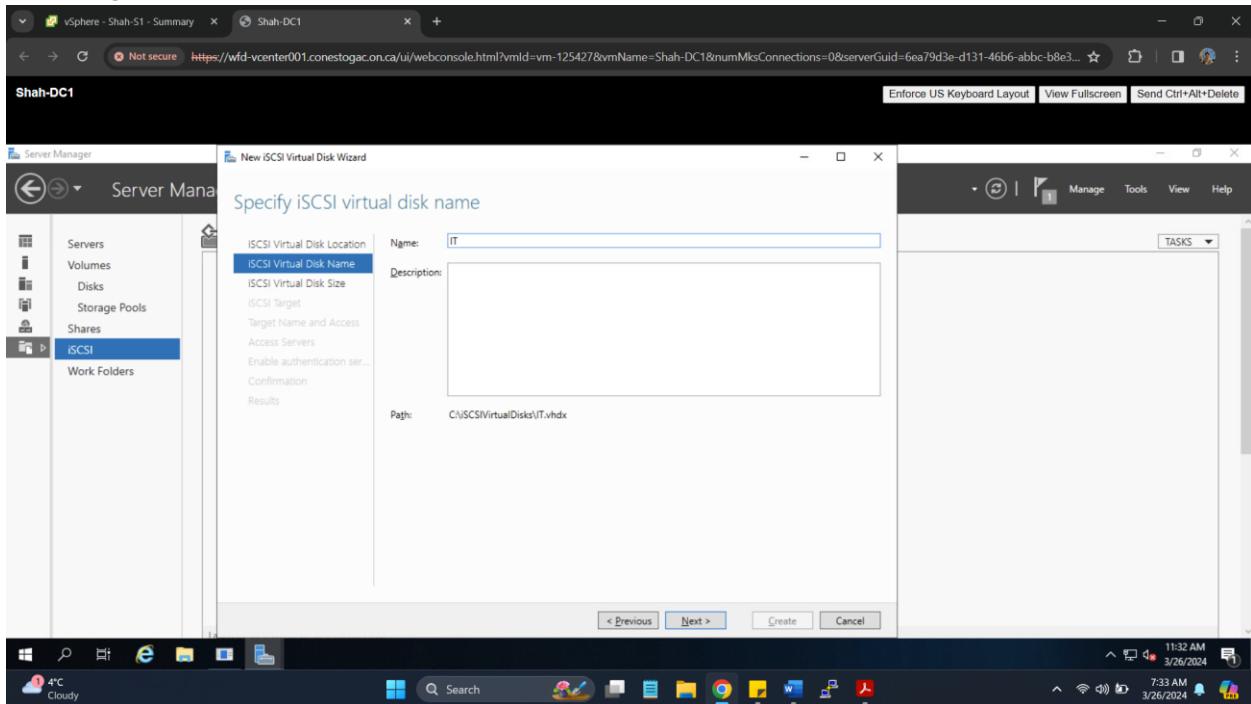
## Completing installation of file and iSCSI Services



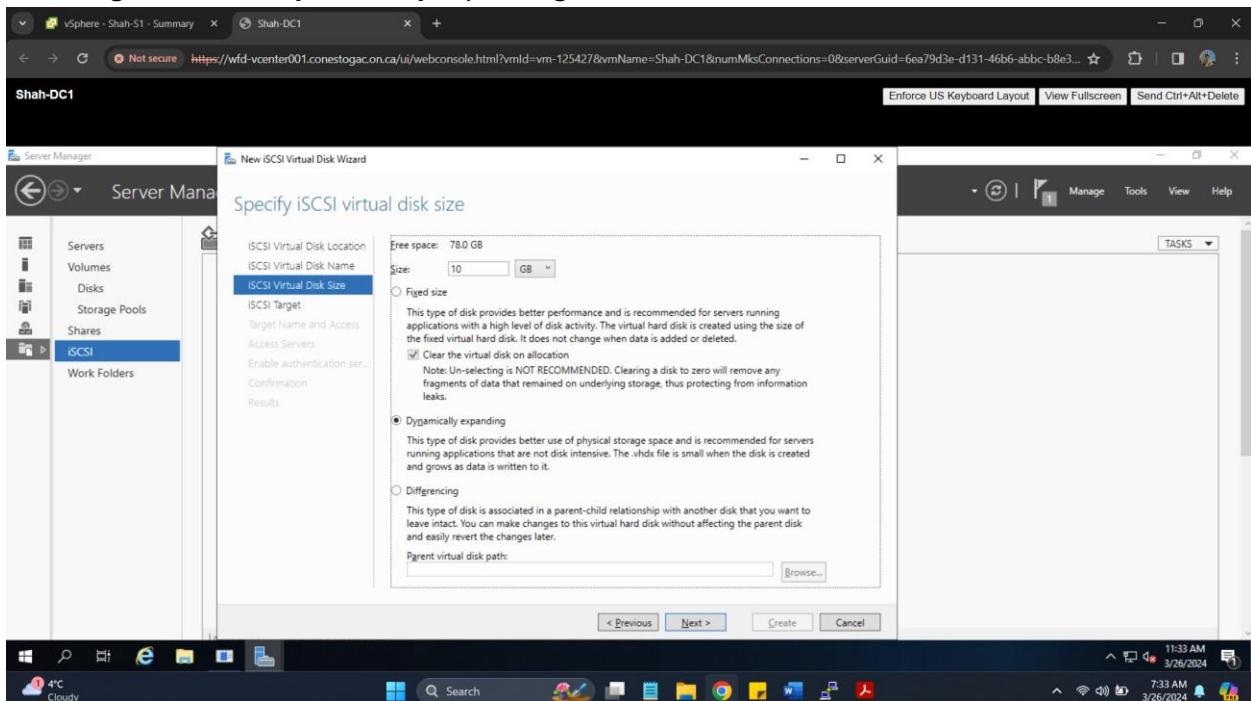
## Opening iSCSI virtual disk and selecting location



## Providing disk name as IT

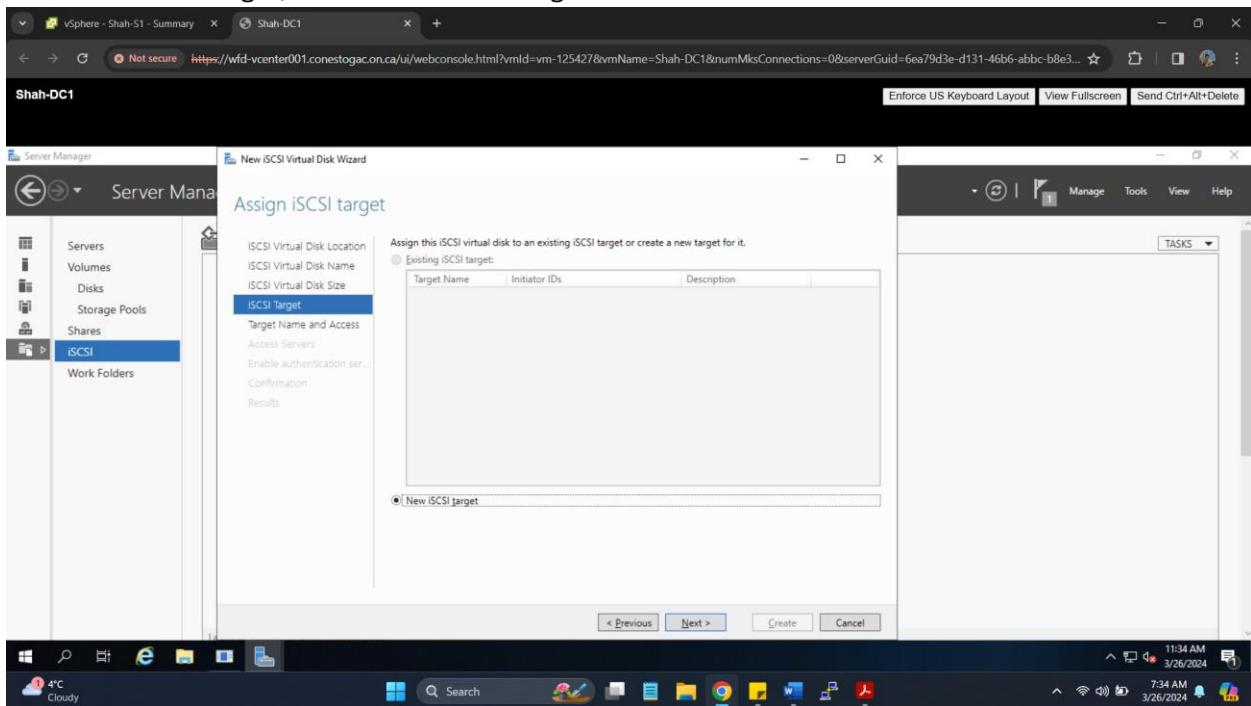


## Selecting disk size as dynamically expanding.

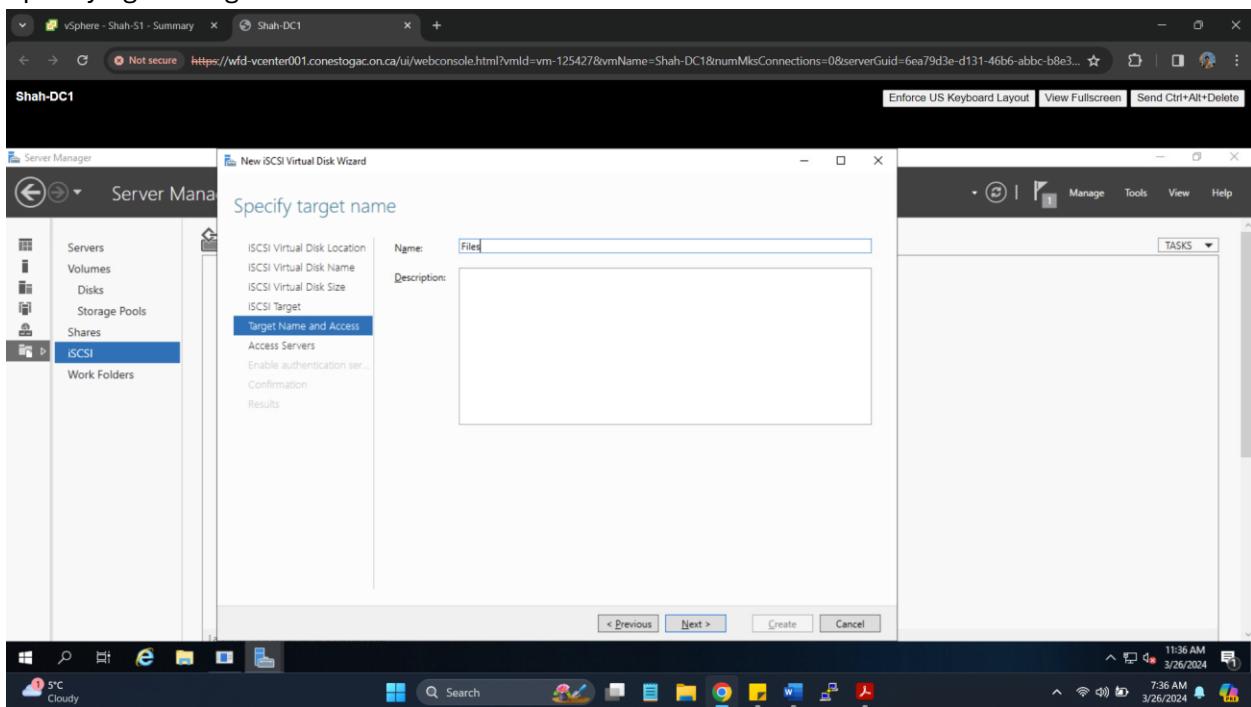


4) Set the **iSCSI target name** as **Files**.

To set the iSCSI target, create new iSCSI Target.

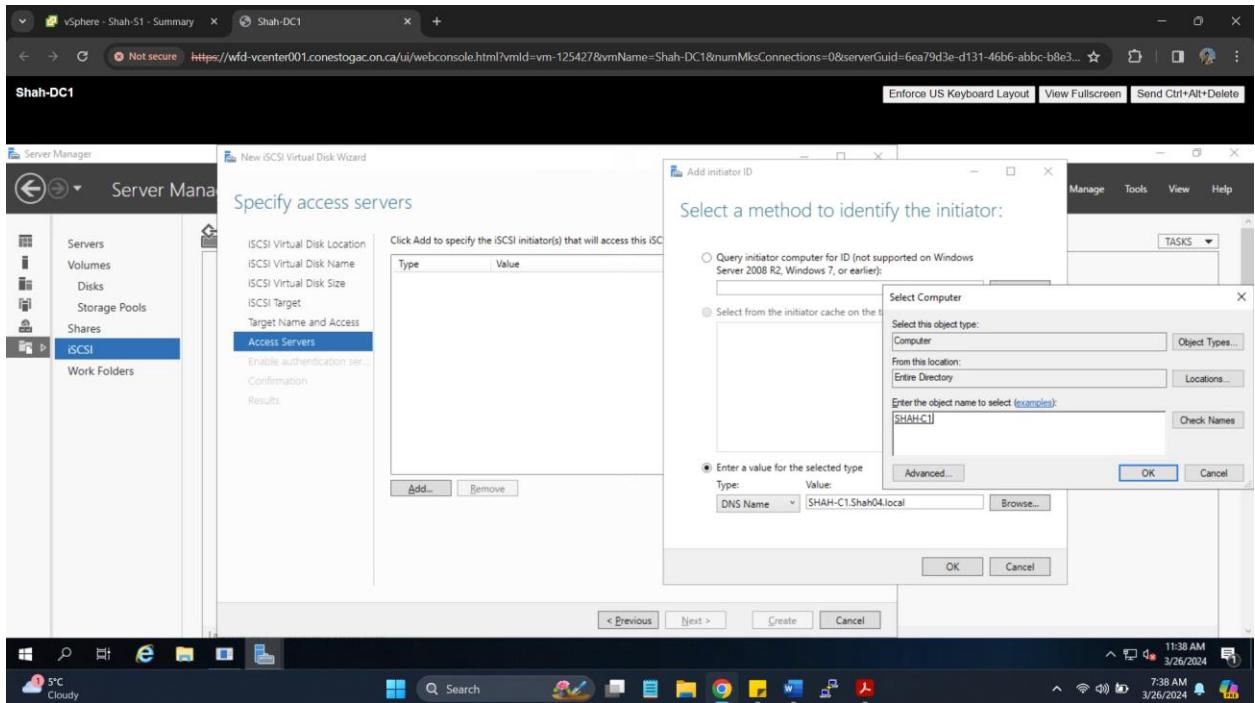


Specifying the target name as Files.

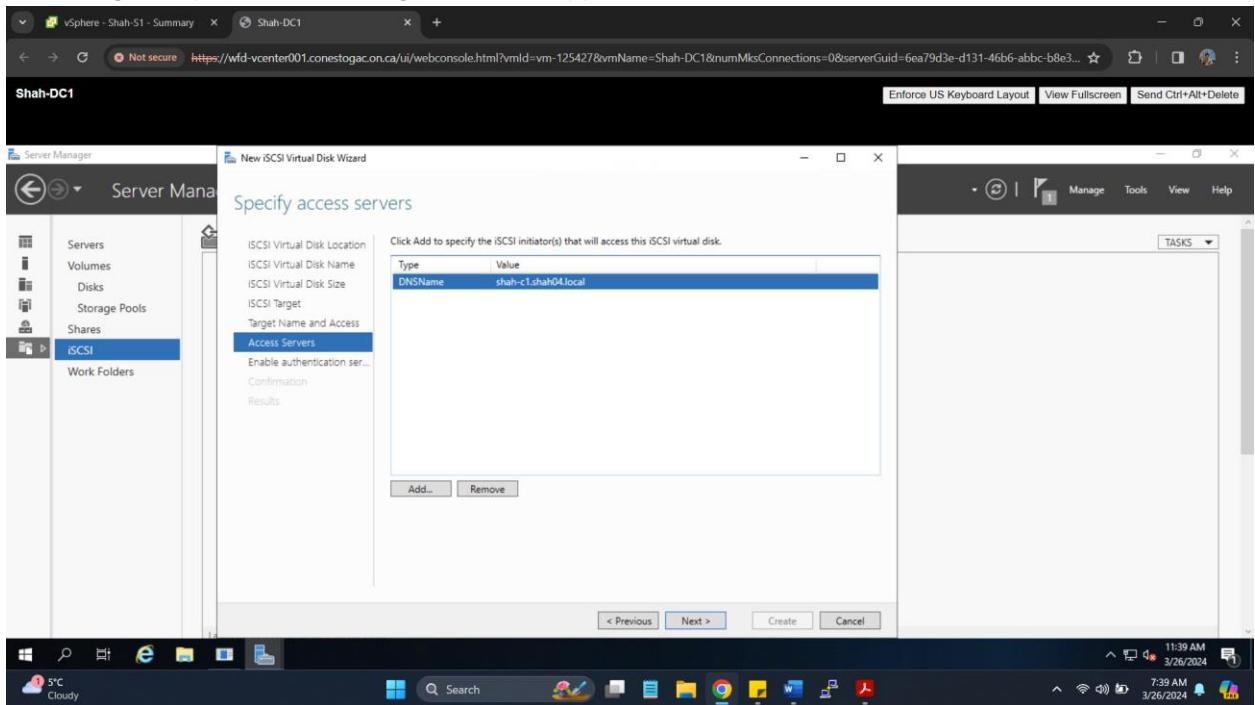


- 5) Setup access to allow the **DNS Name lastname-C1.lastname.local** to connect to the **iSCSI target**.

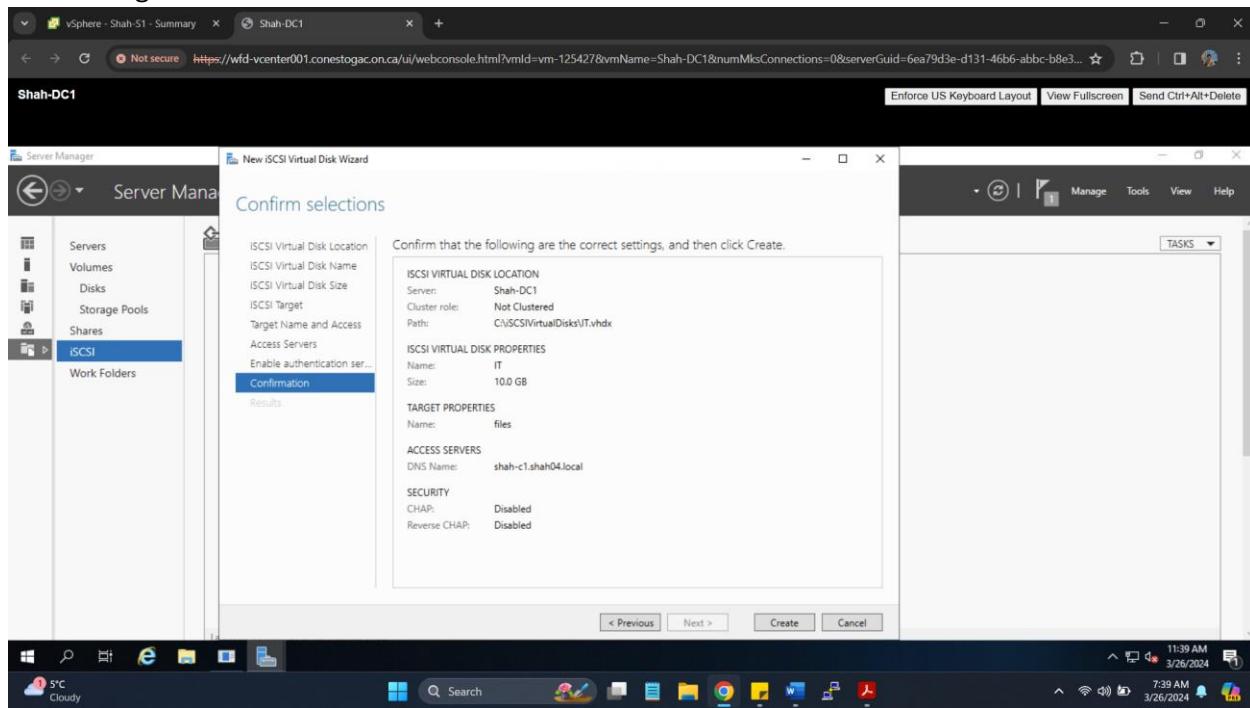
Opening File and storage, under iSCSI → allowing access by add and by entering the type as DNS Name and value as Shah-C1.Shah04.local



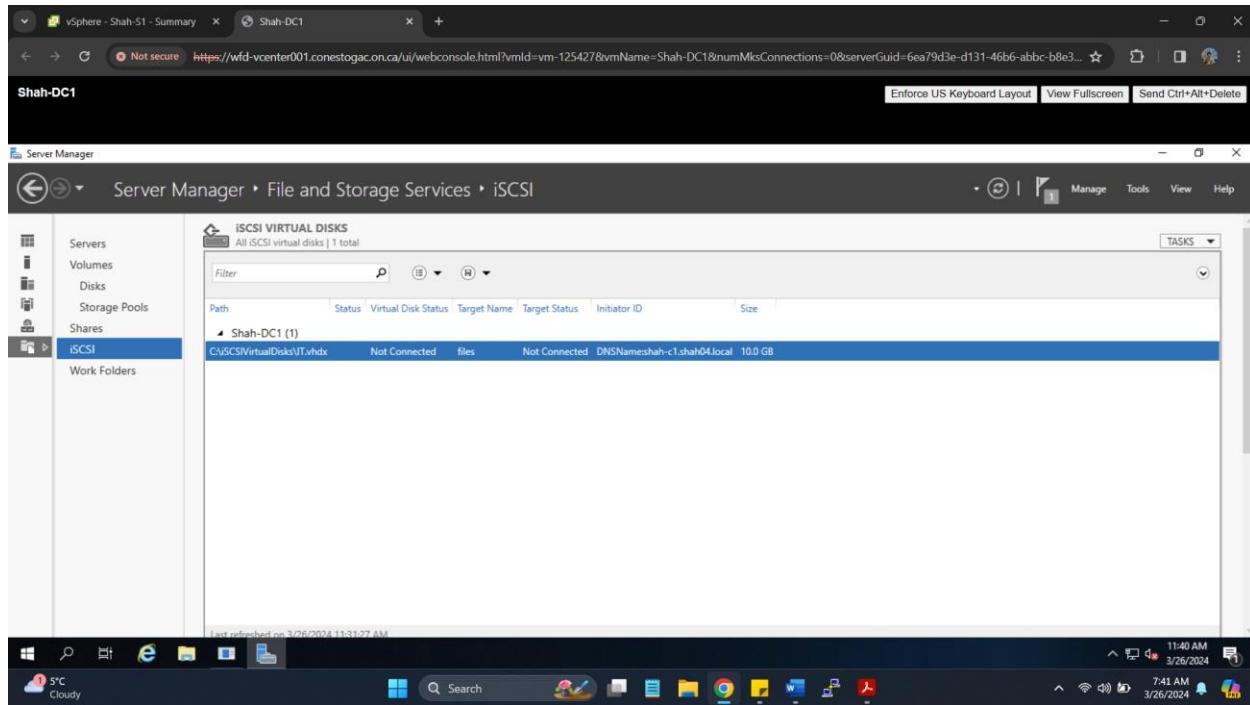
Checking the specified access given to with type and its value.



## Confirming the selections to create iSCSI virtual disk

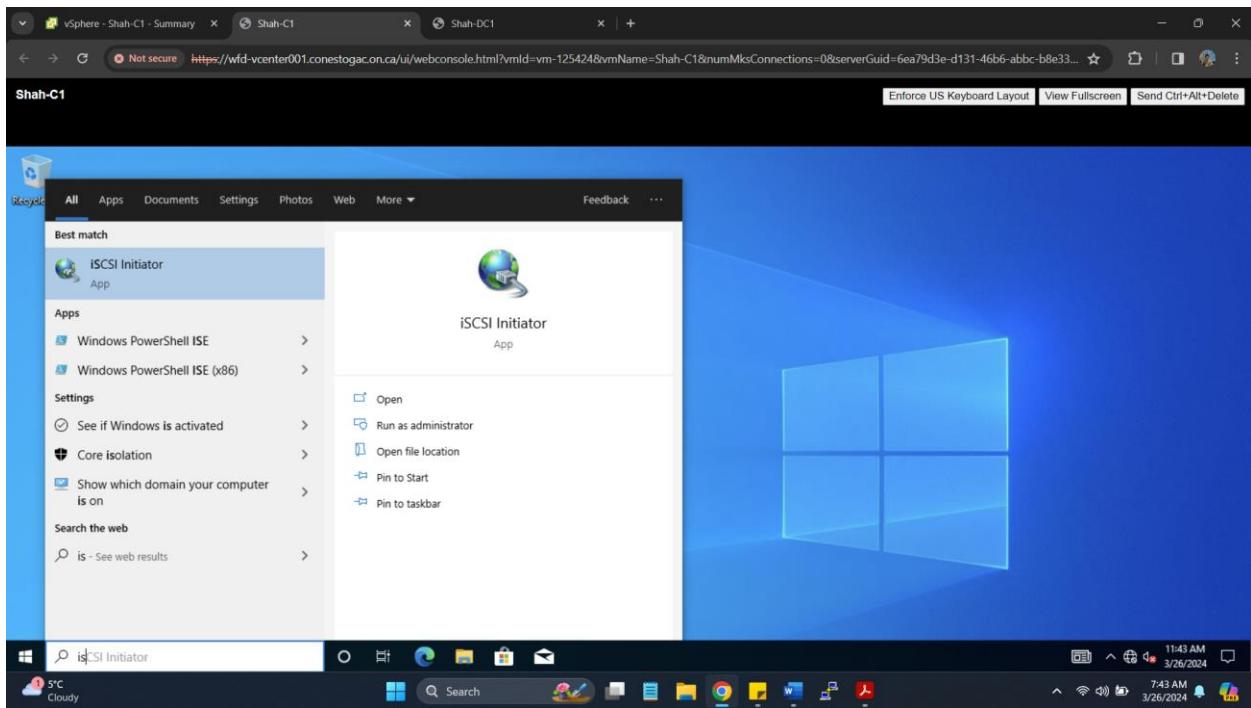


In iSCSI virtual disks shows the list of virtual disks created.

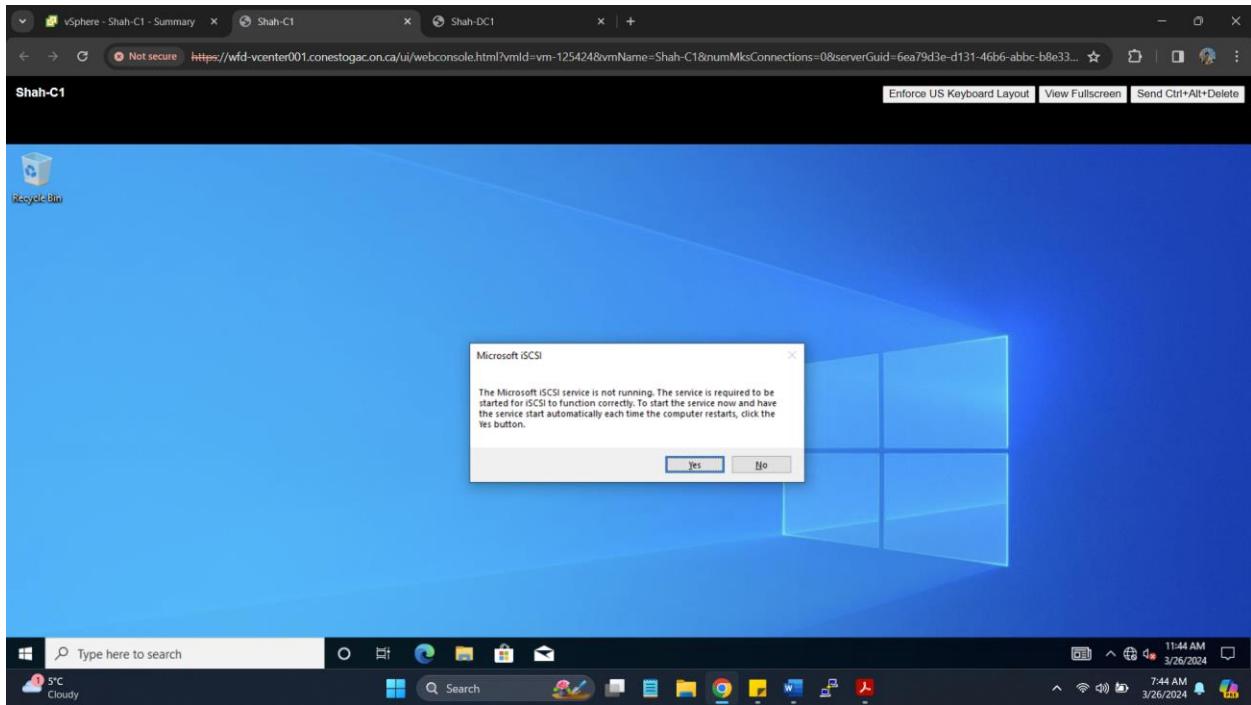


6) From **lastname-C1** connect to the **iSCSI target**.

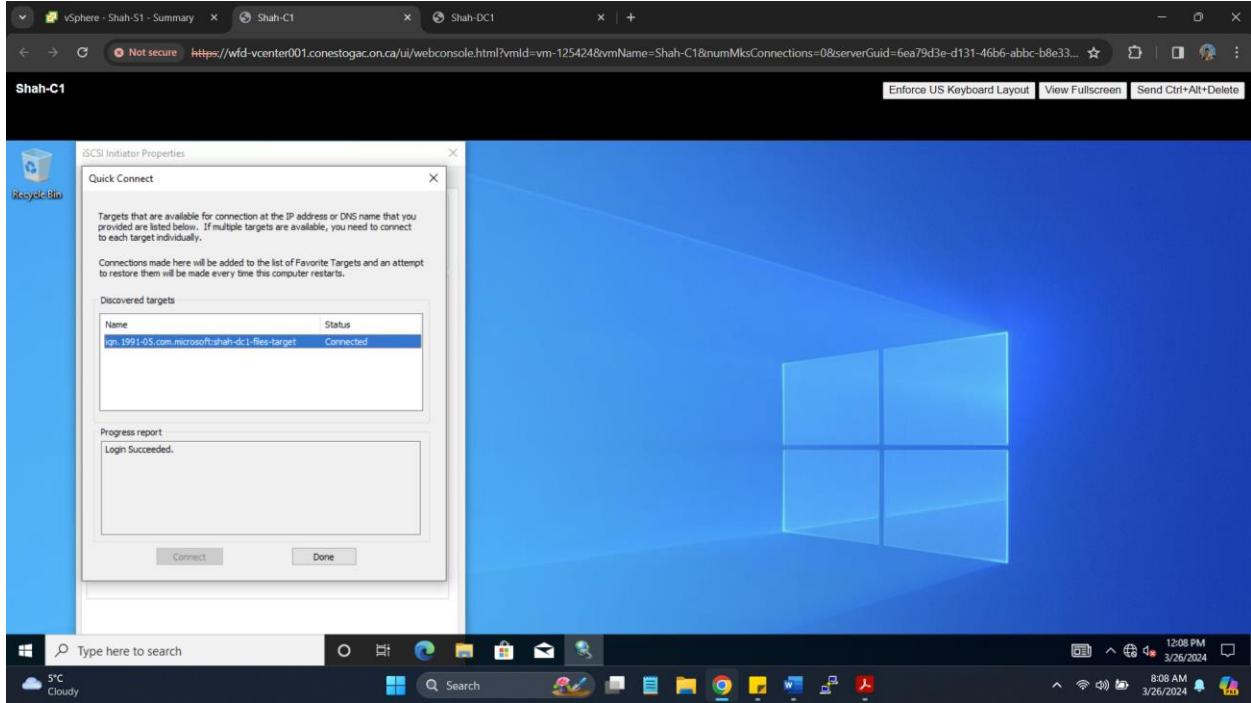
## Search iSCSI Initiator to connect Shah-C1



By default, iSCSI service is not running, need to select yes and restart the computer.

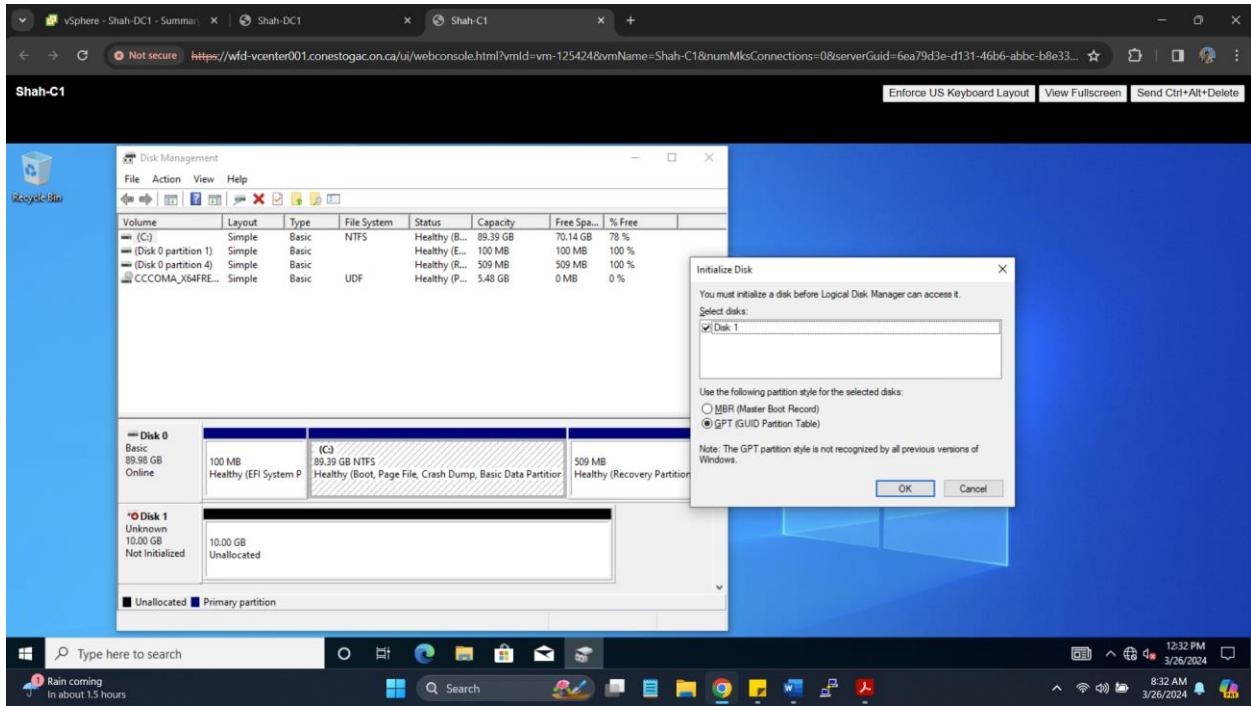


In iSCSI initiator properties, provide IP or DNS name in target to quick connect, once login is succeeded and status is connected click on done.

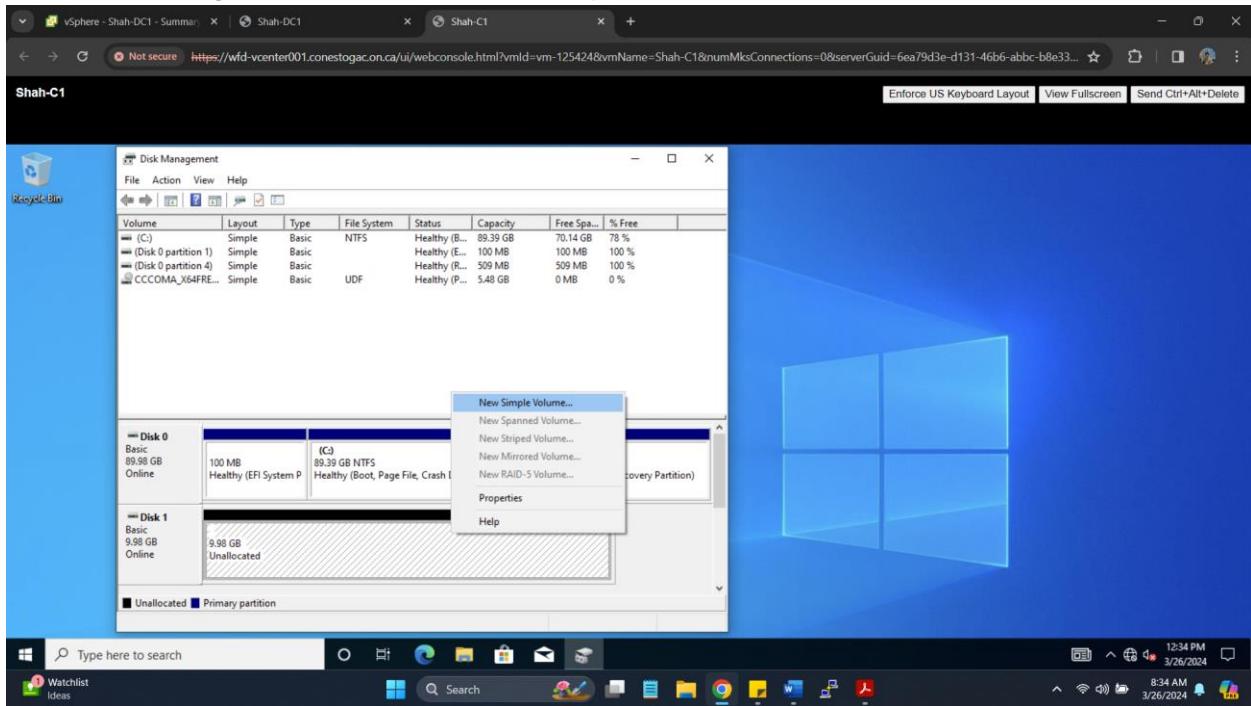


## 7) Format the disk in Disk Management.

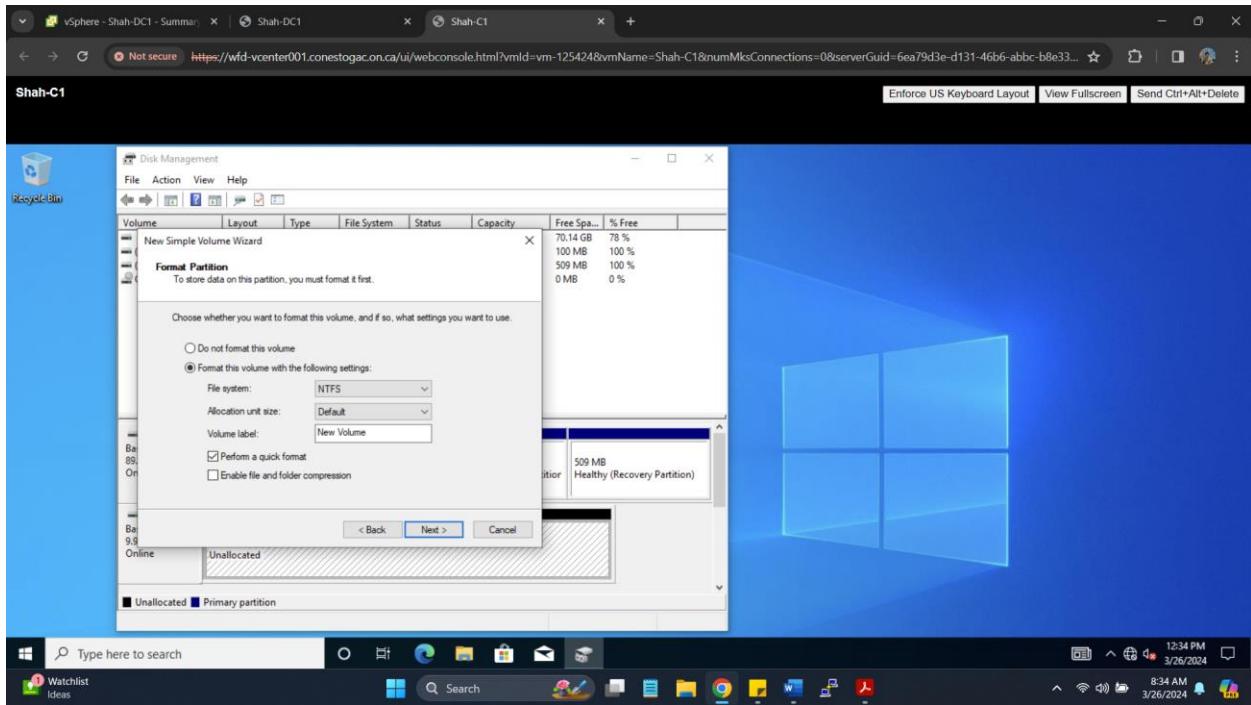
In Disk Management we are initializing disk of 10 GB



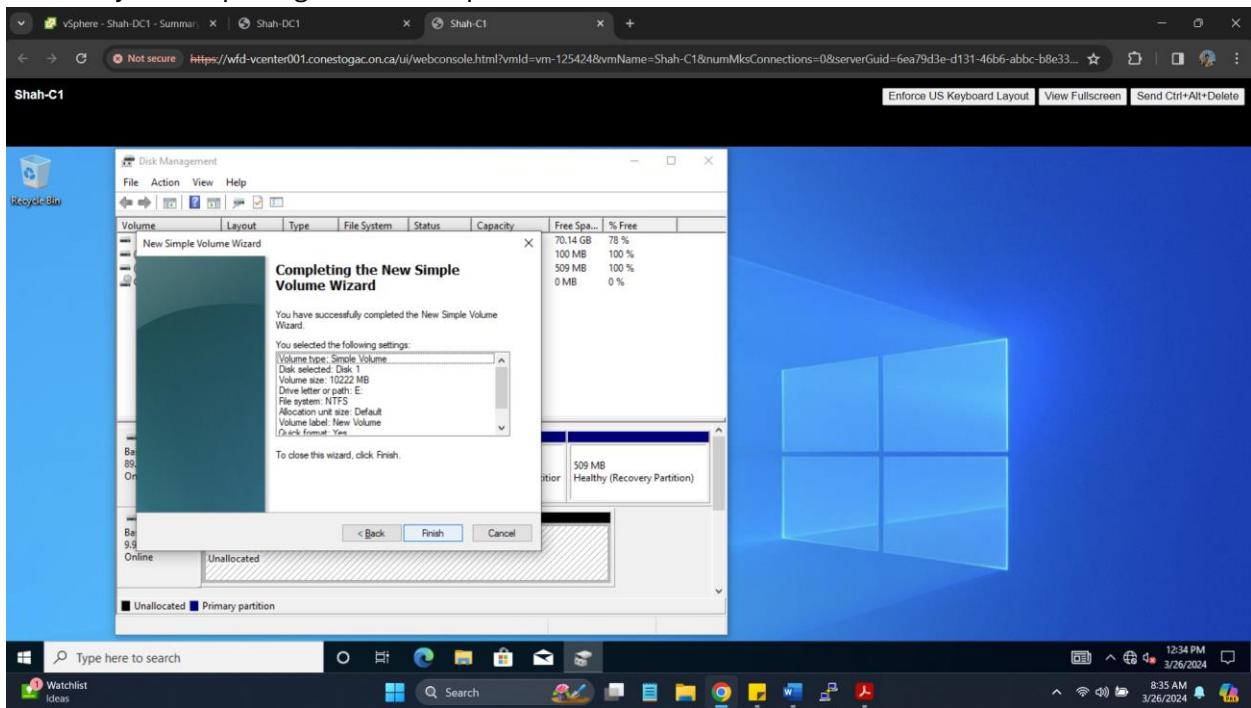
## Before formatting need to be made as new simple volume



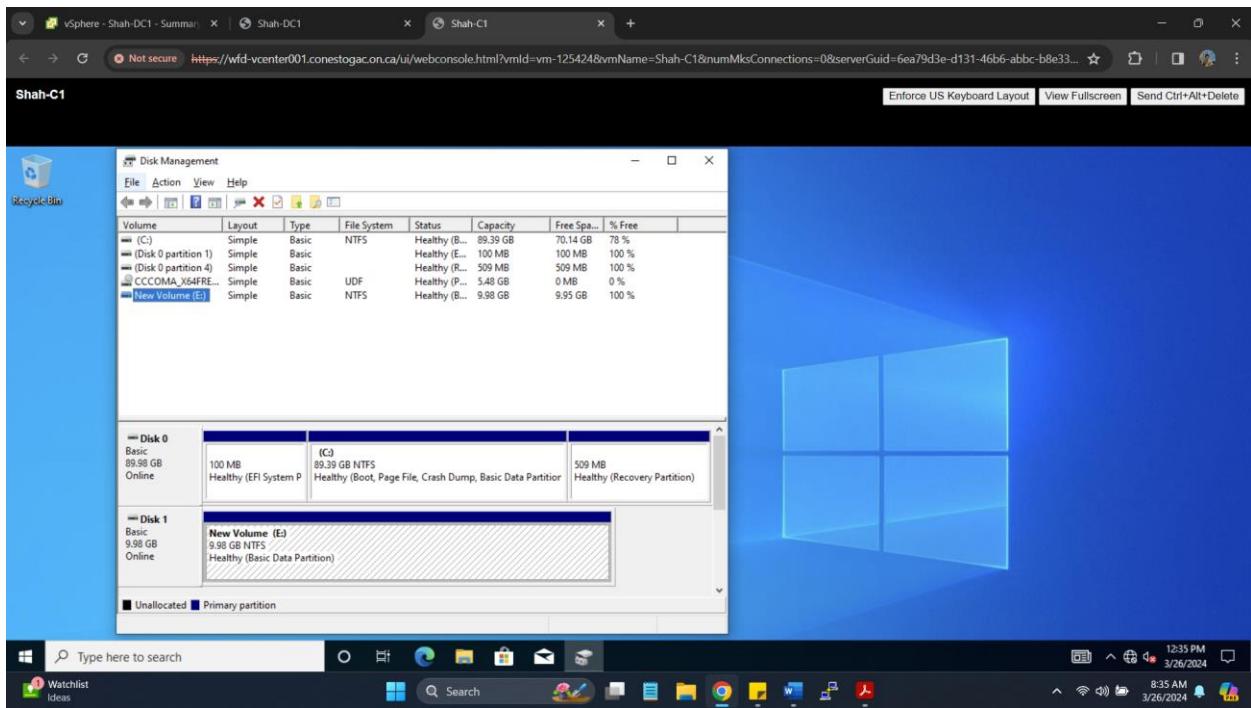
## Formatting partition file system as NTFS and volume label as new volume and proceeding next



## Summary of completing the new simple volume



New Volume created as E: for 10GB which is accessible now.



- 8) Show the disk is available in **This PC** or **Windows Explorer**.

Below screen shot shows newly created disk of 10 GB as “New Volume (E:)”

