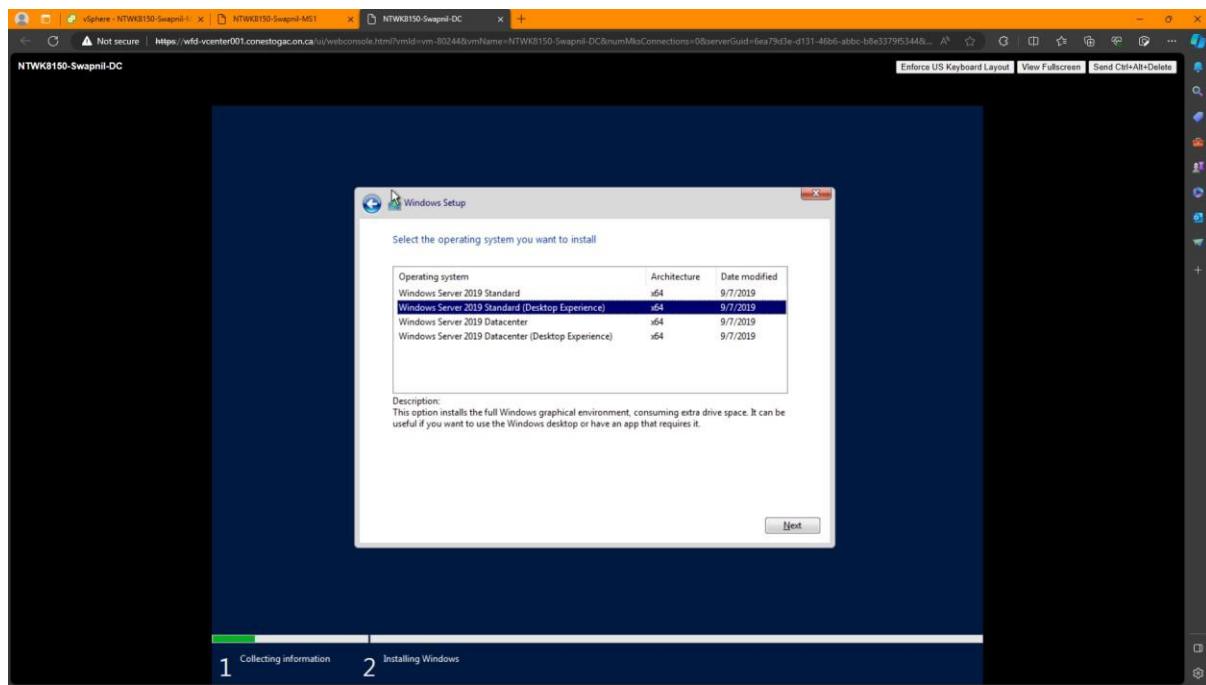
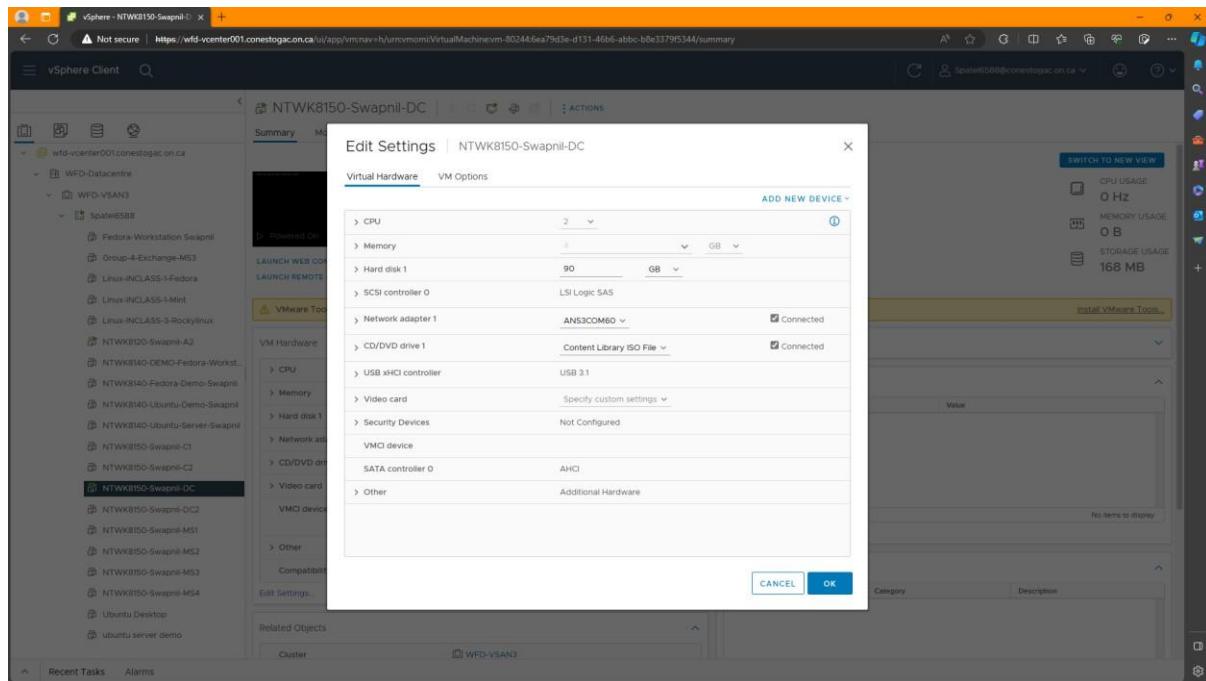
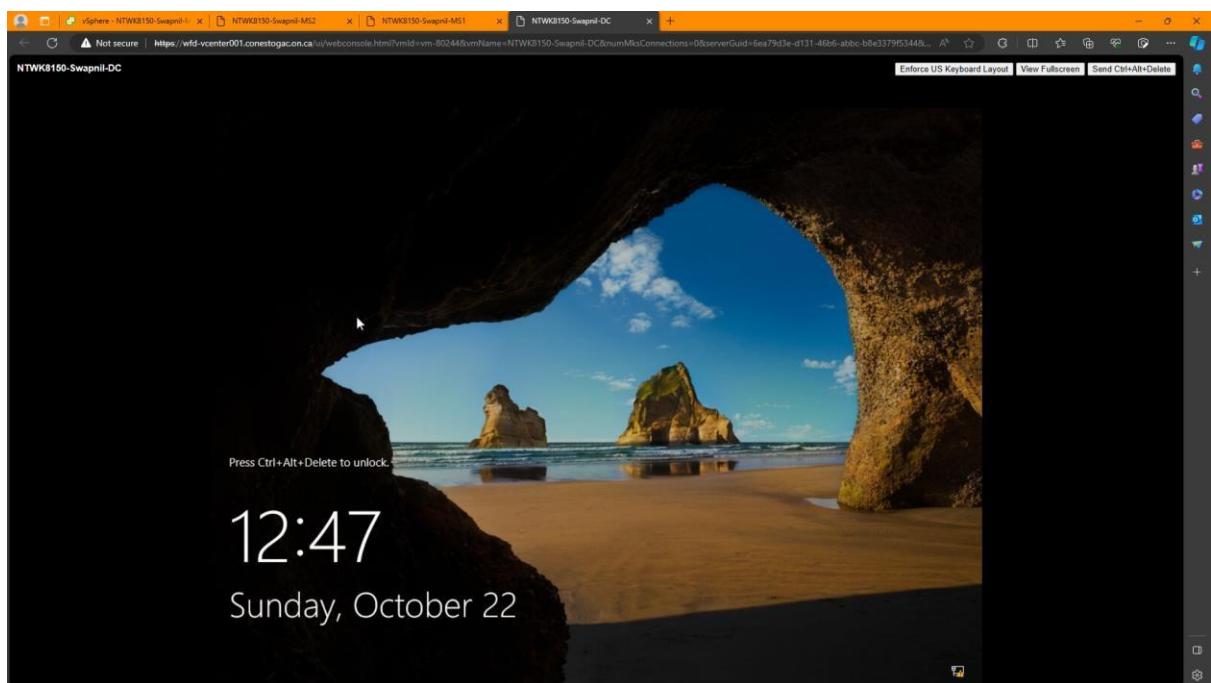
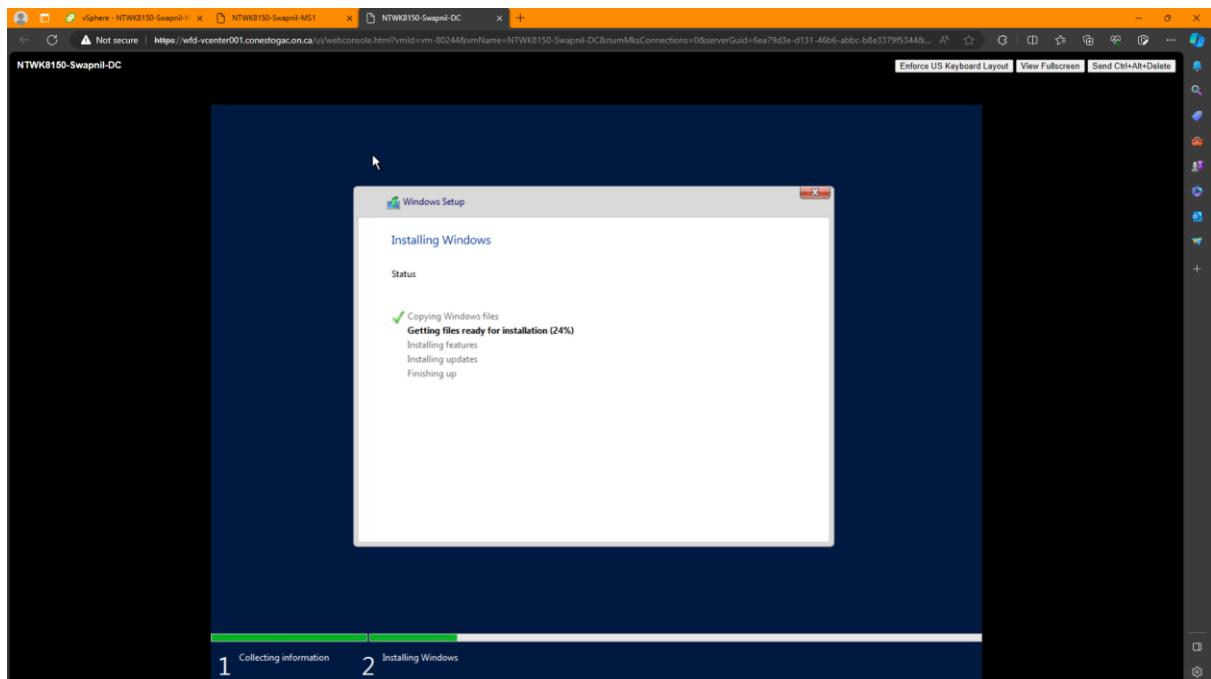
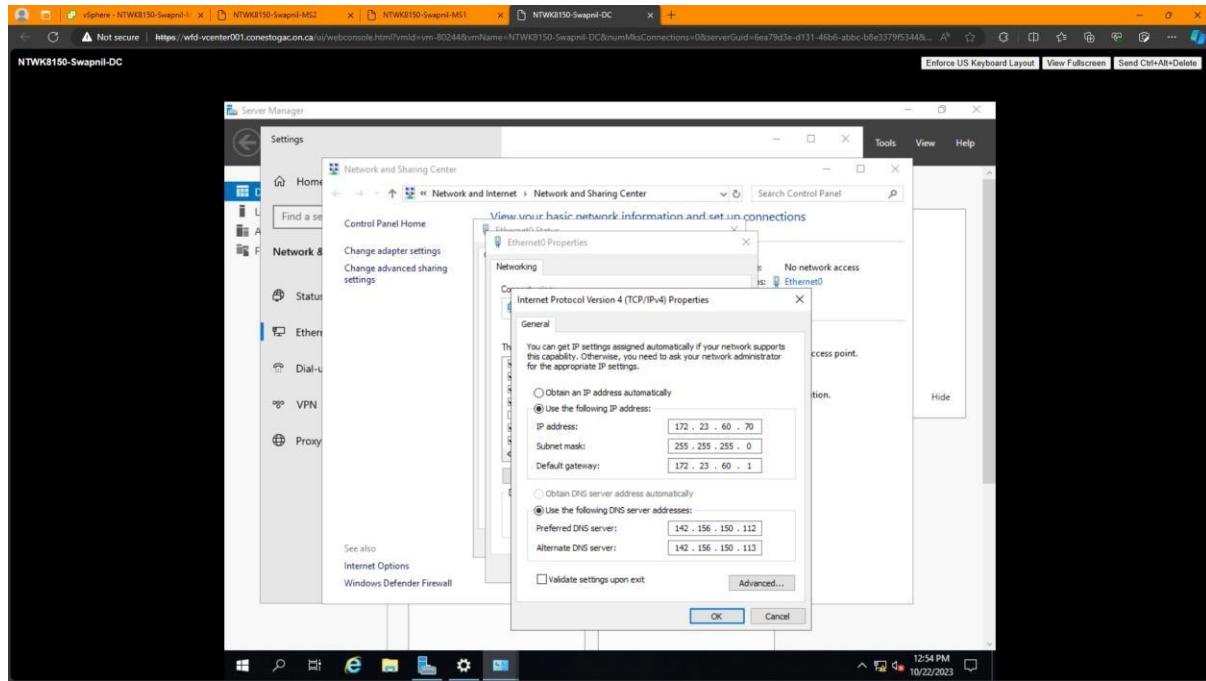


Domain Controller Installation:

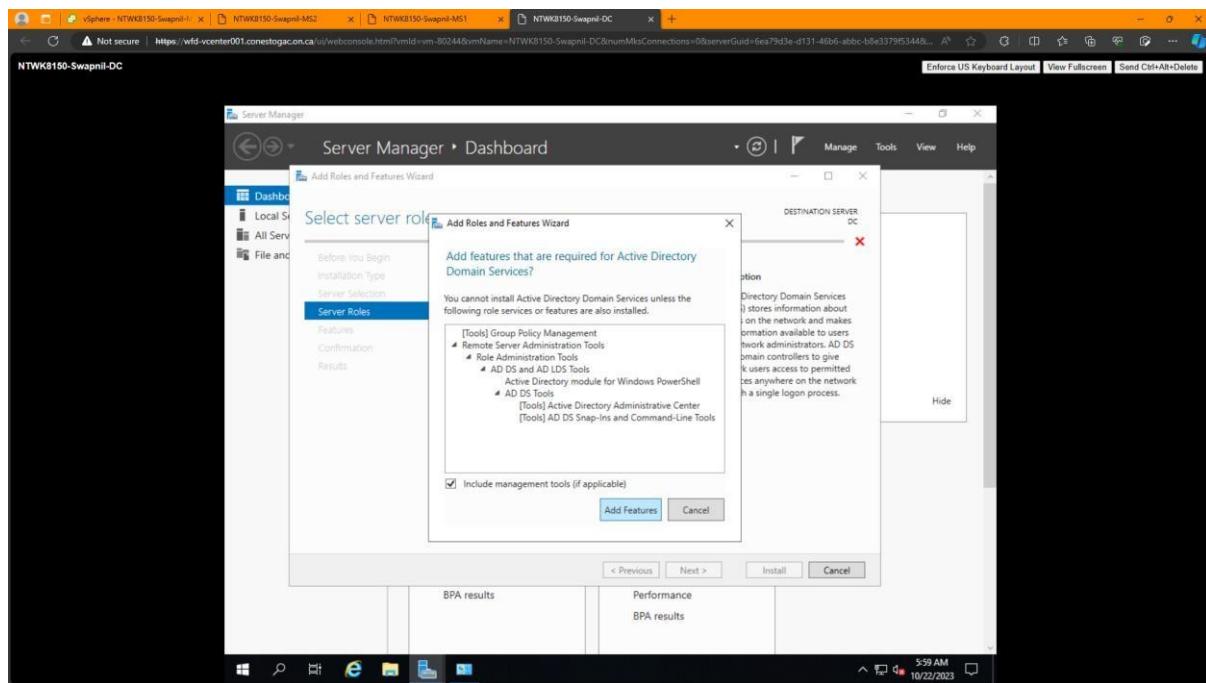


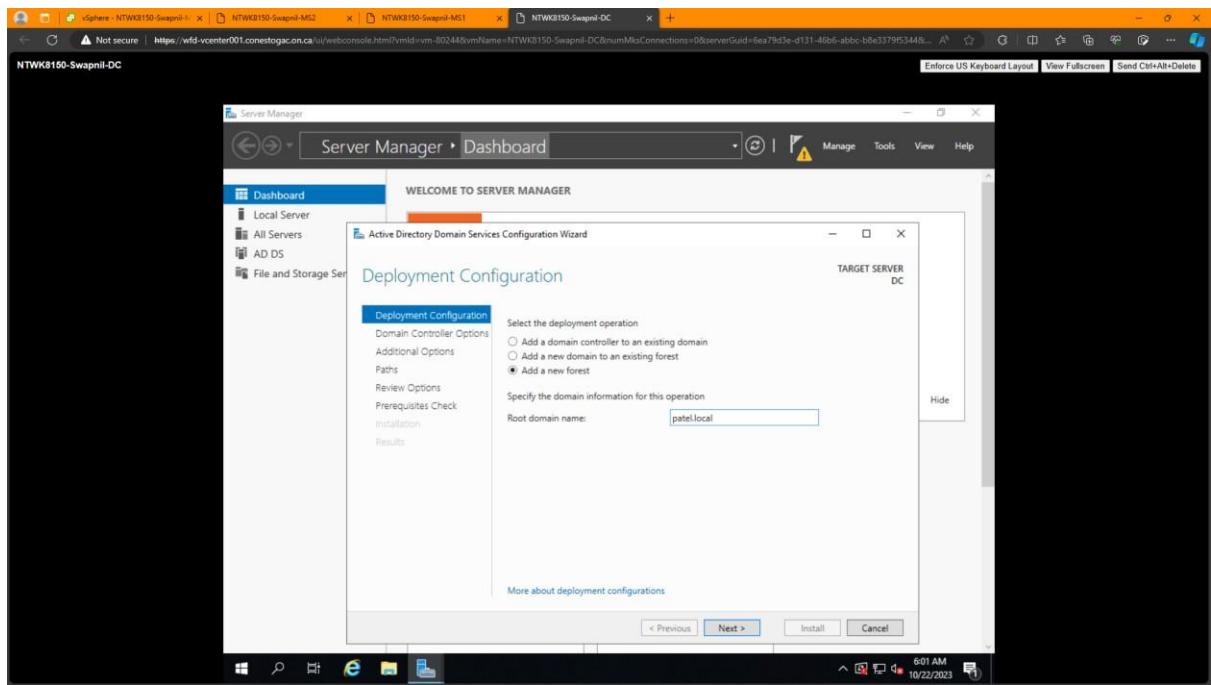
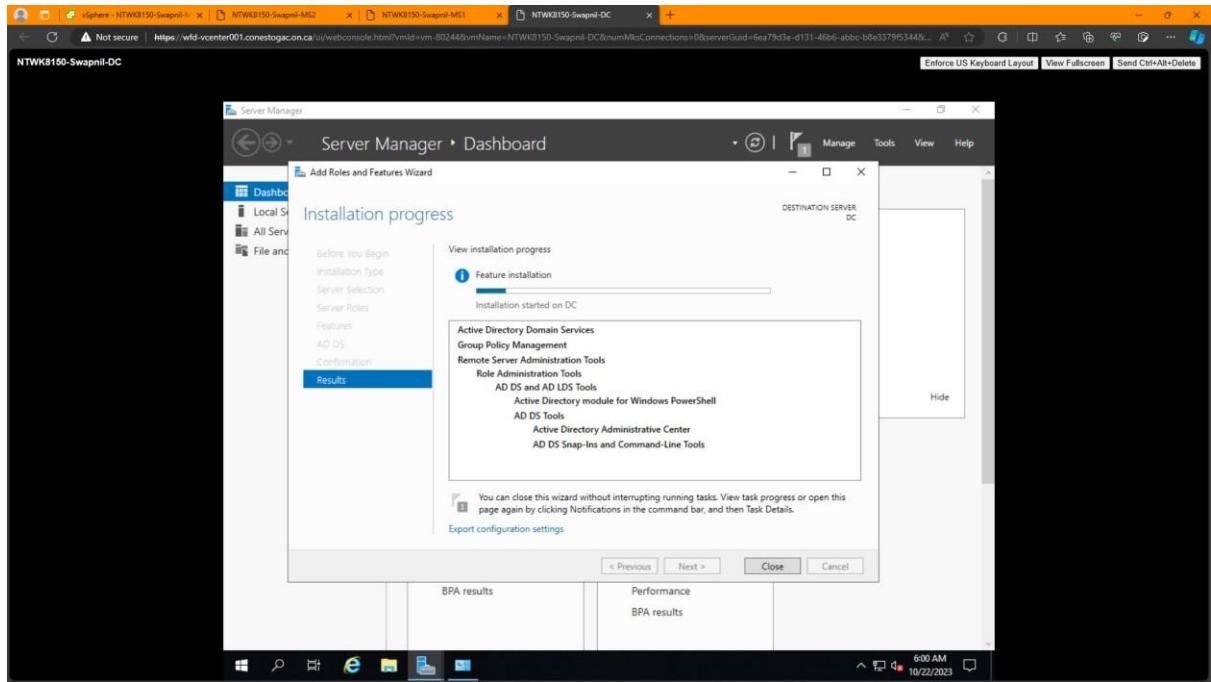


Network Configuration for Domain Controller

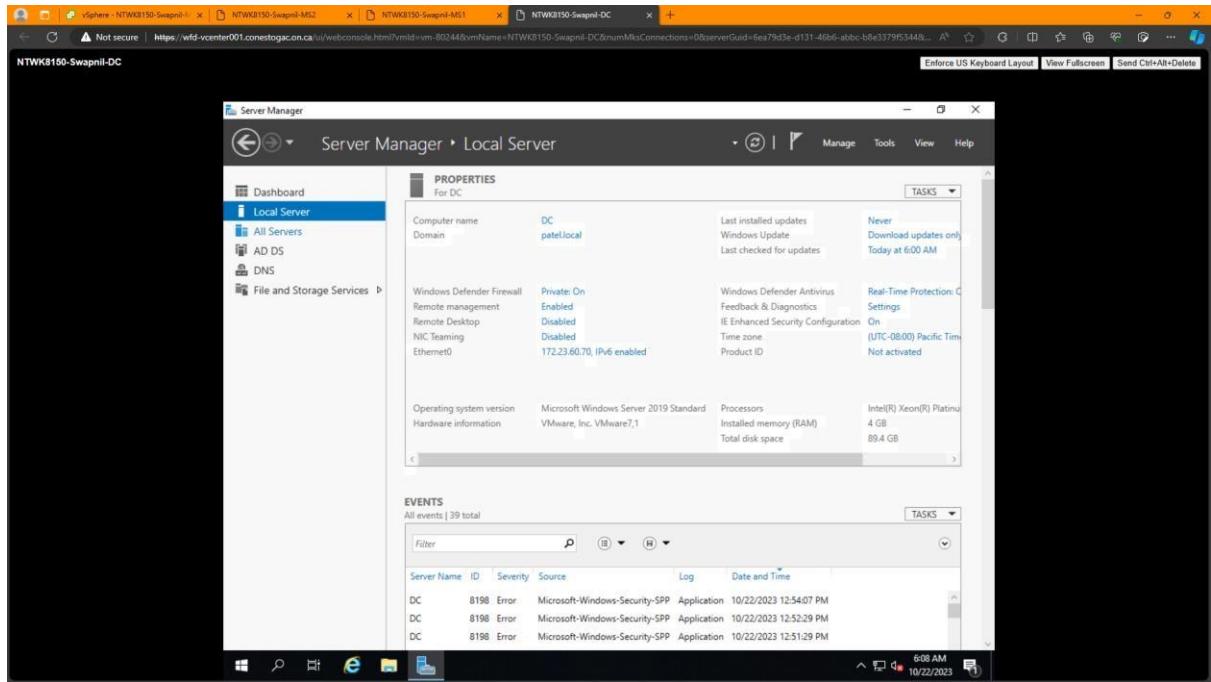


Setting up the active directory and DNS server in Domain Controller:



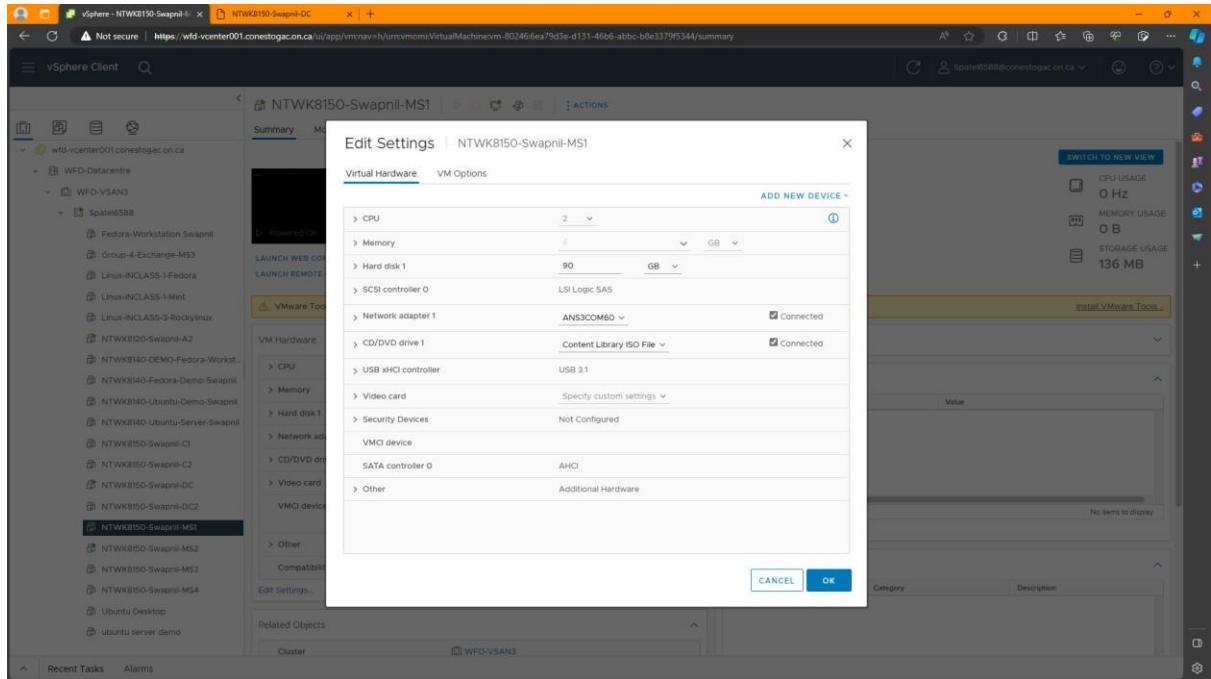


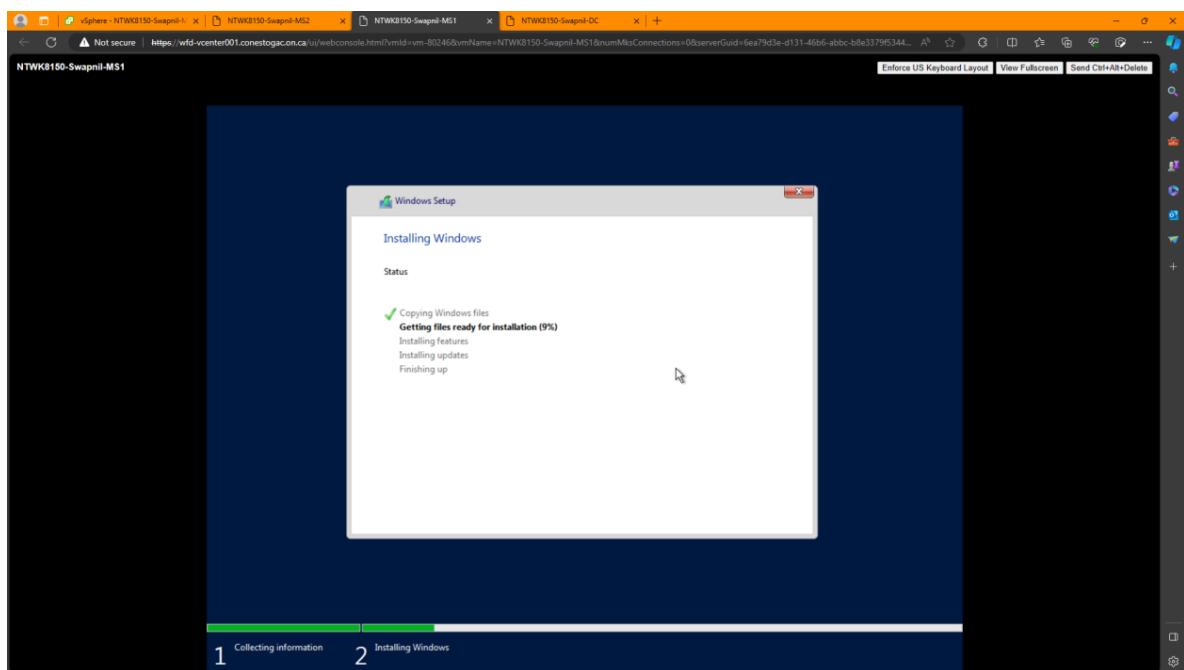
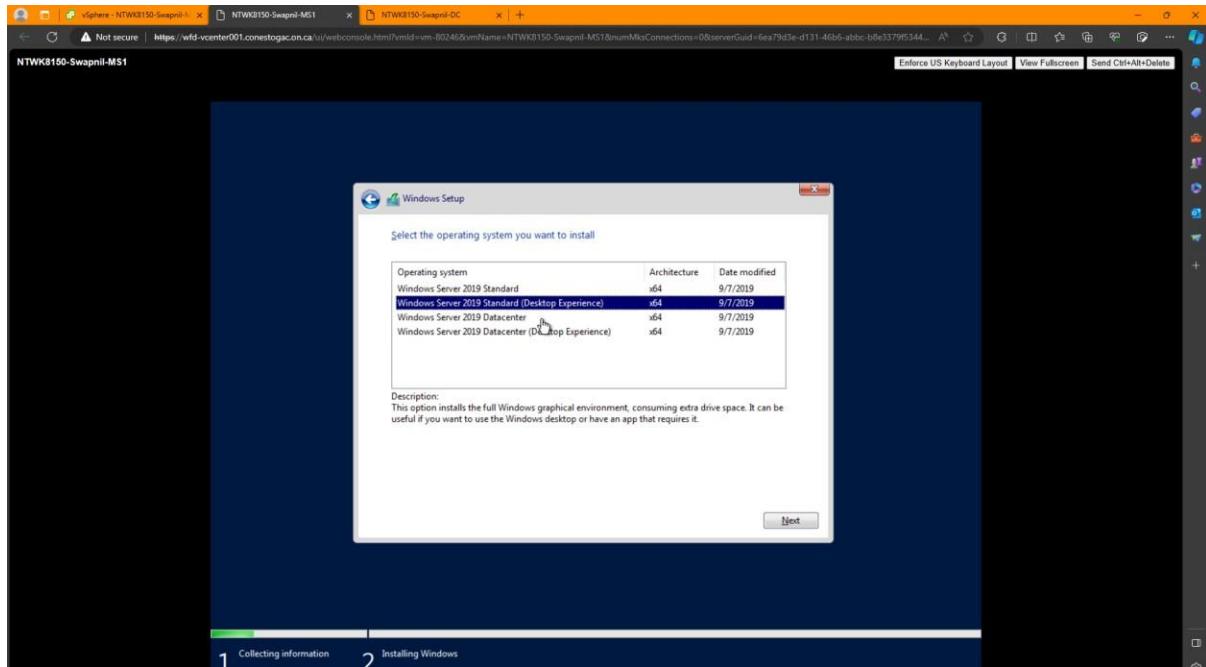
Promoting “`patel.local`” as the domain for the active directory users and computers

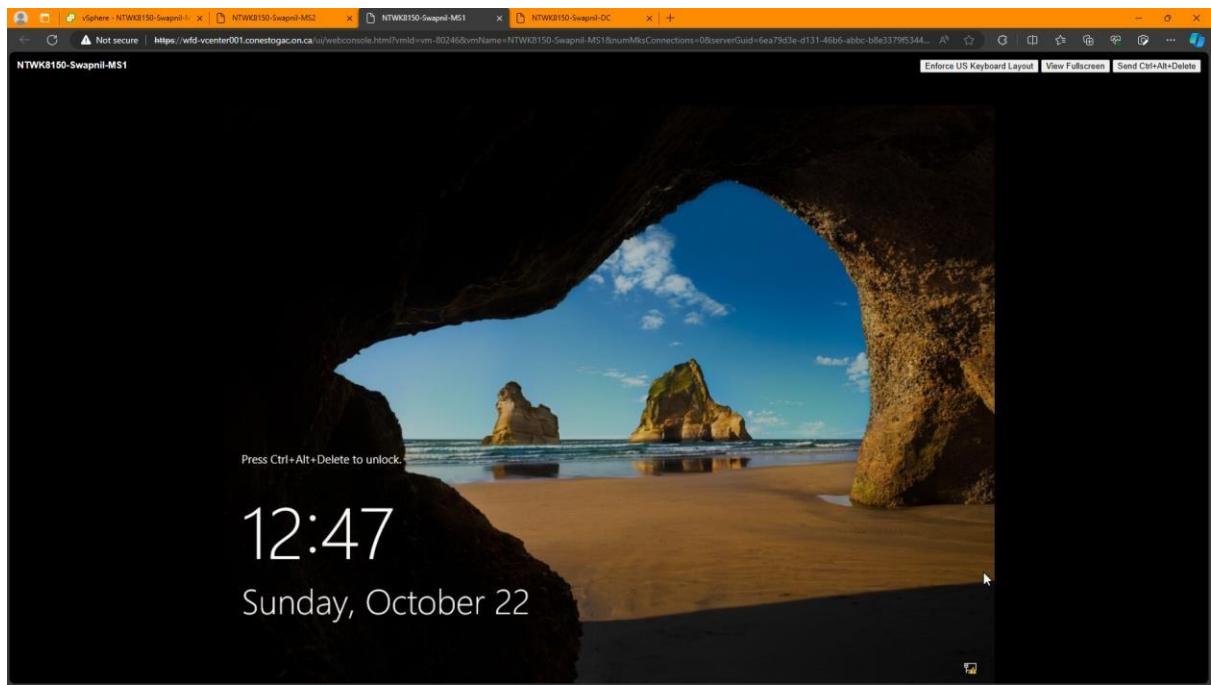


Our Domain Controller is ready to use including all the necessary features and roles installed.

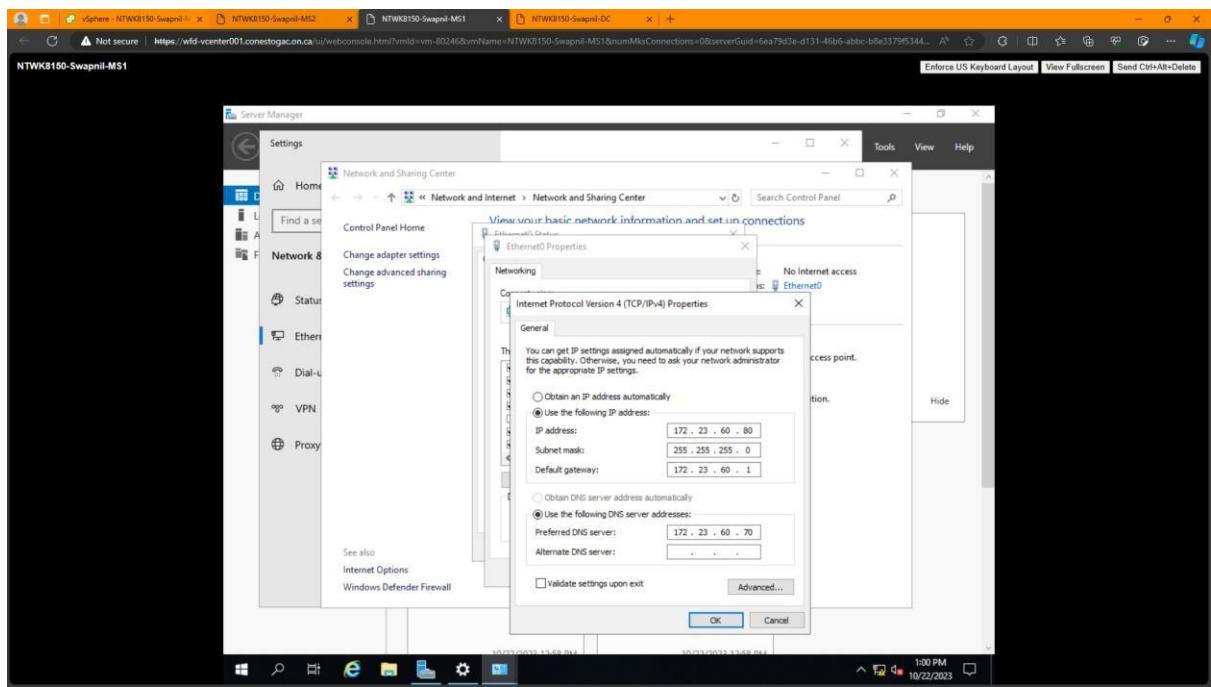
Member Server 1 Installation

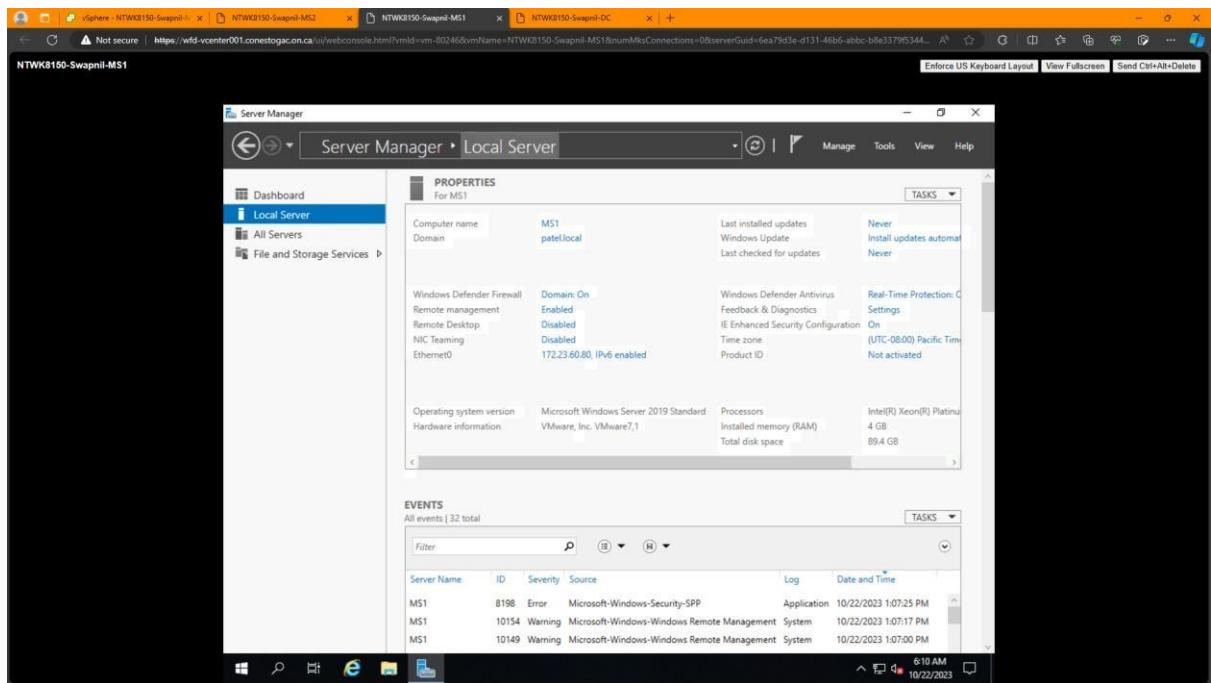
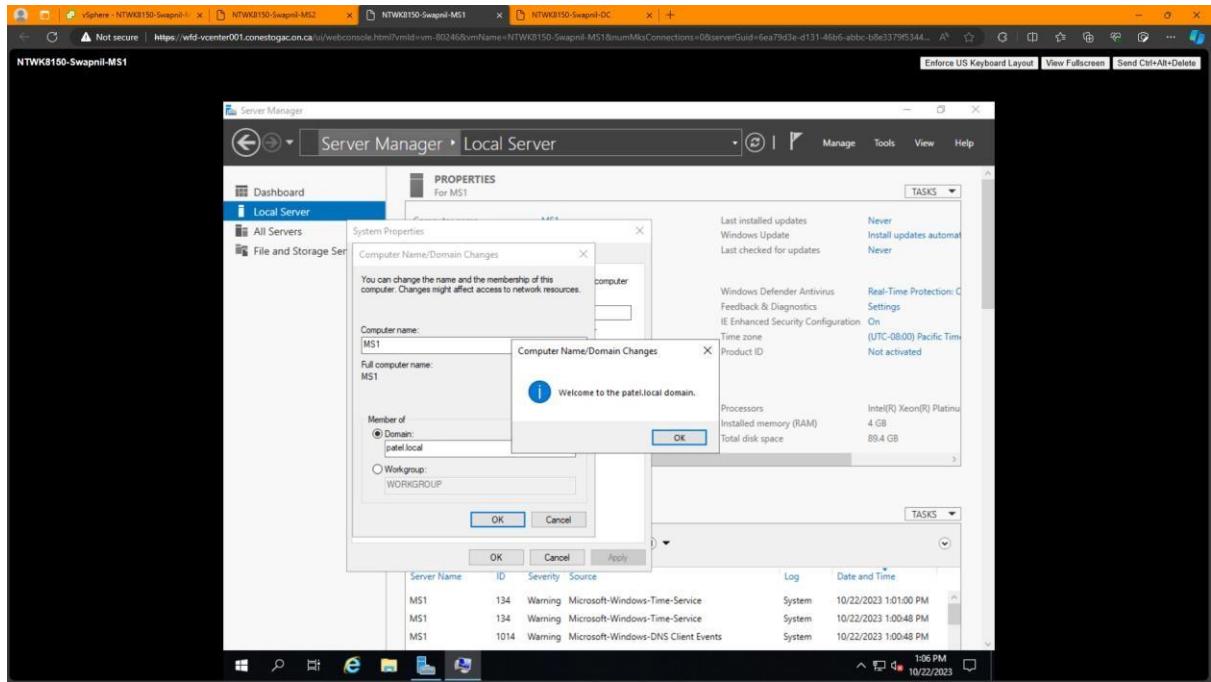






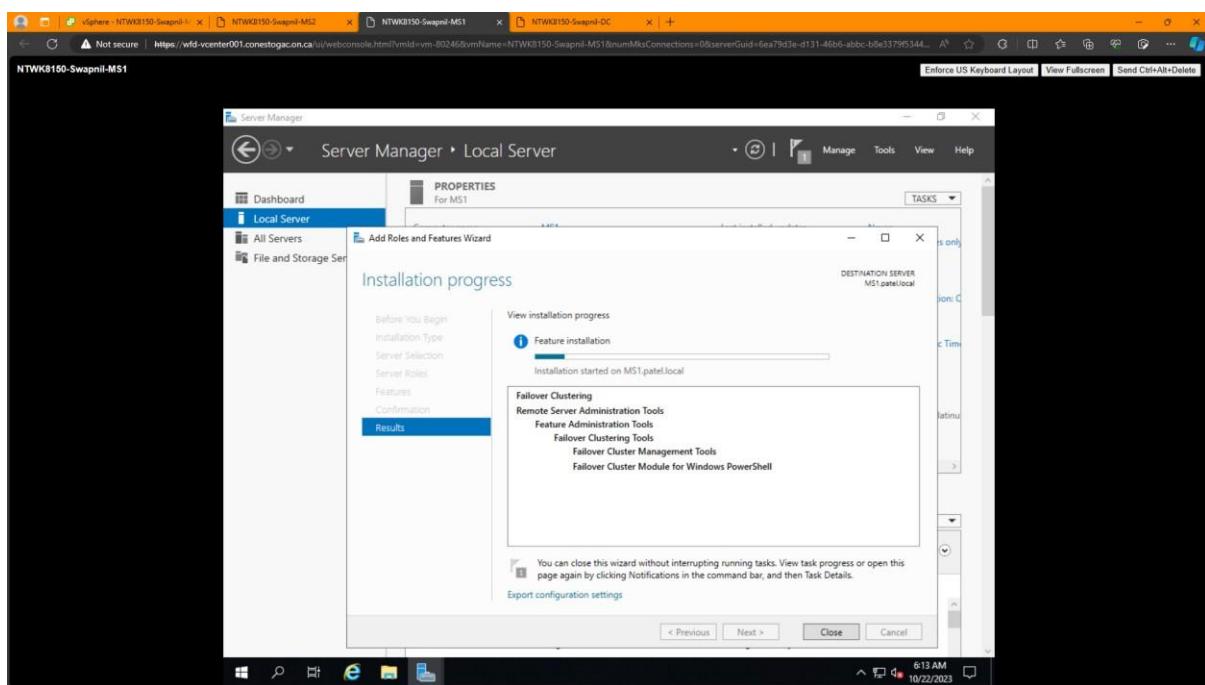
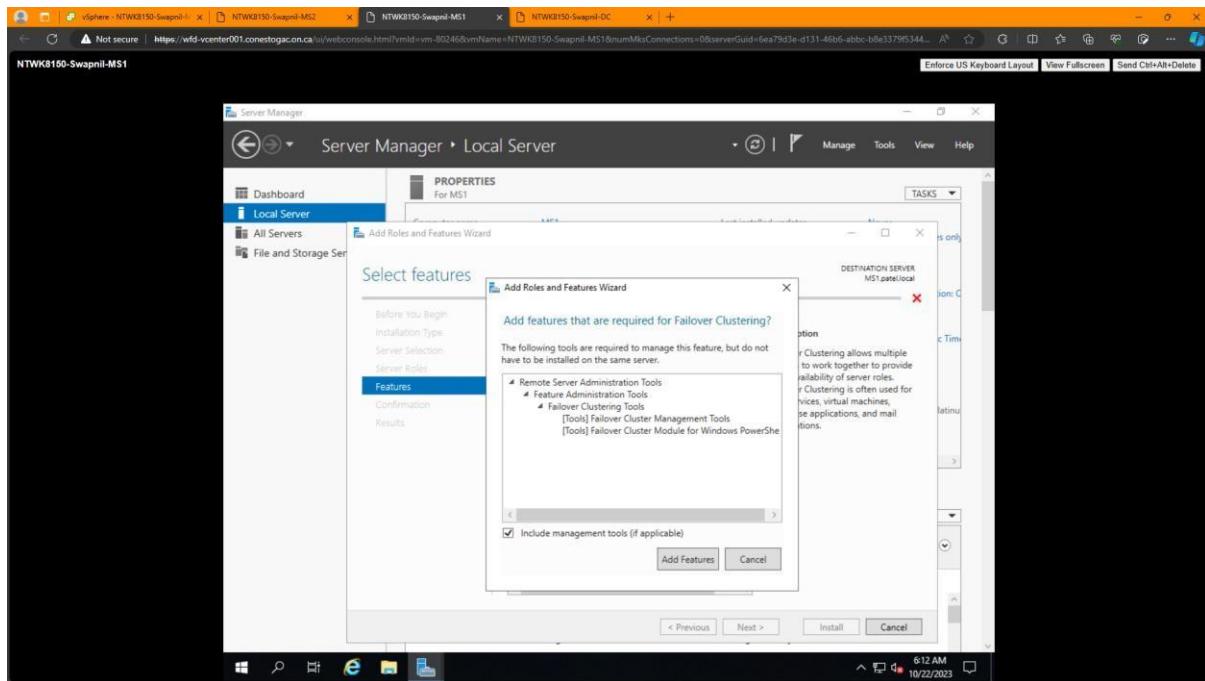
Network Configuration for the Member Server 1



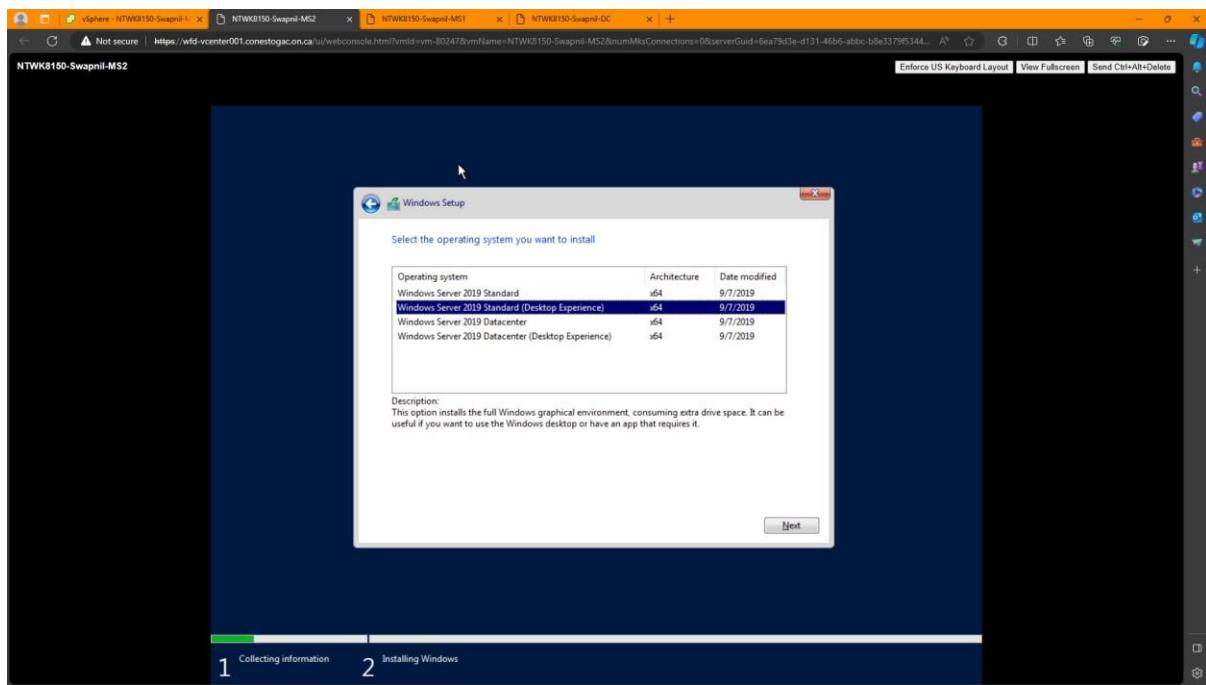
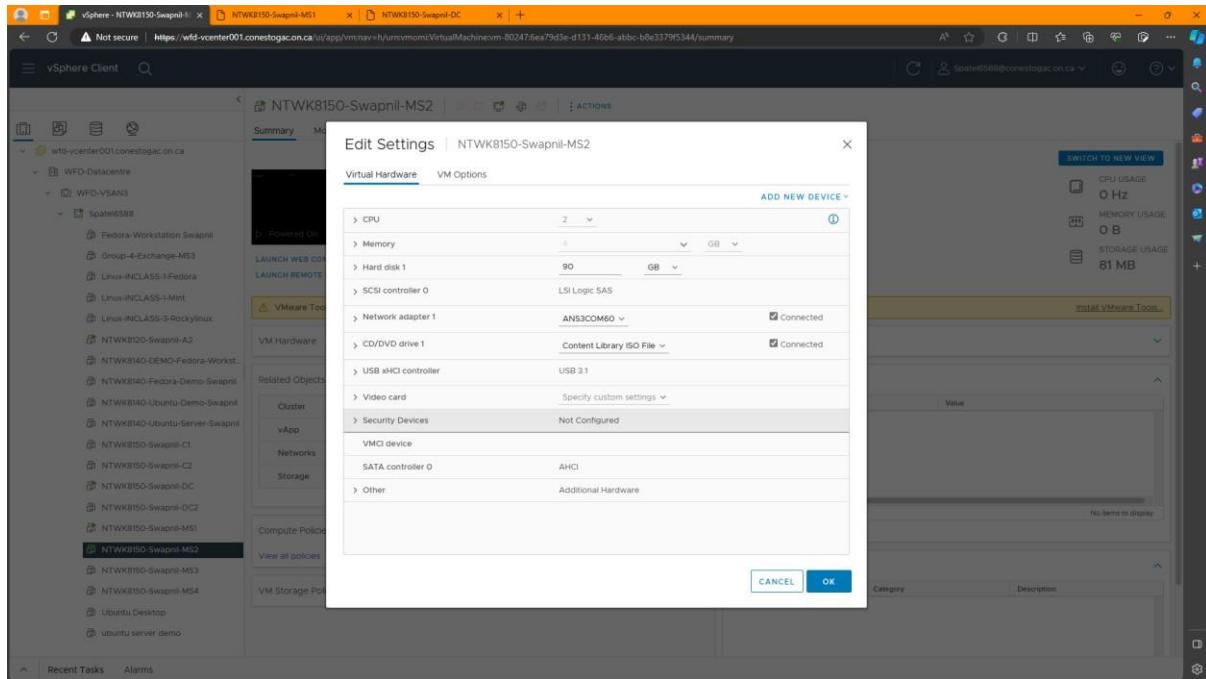


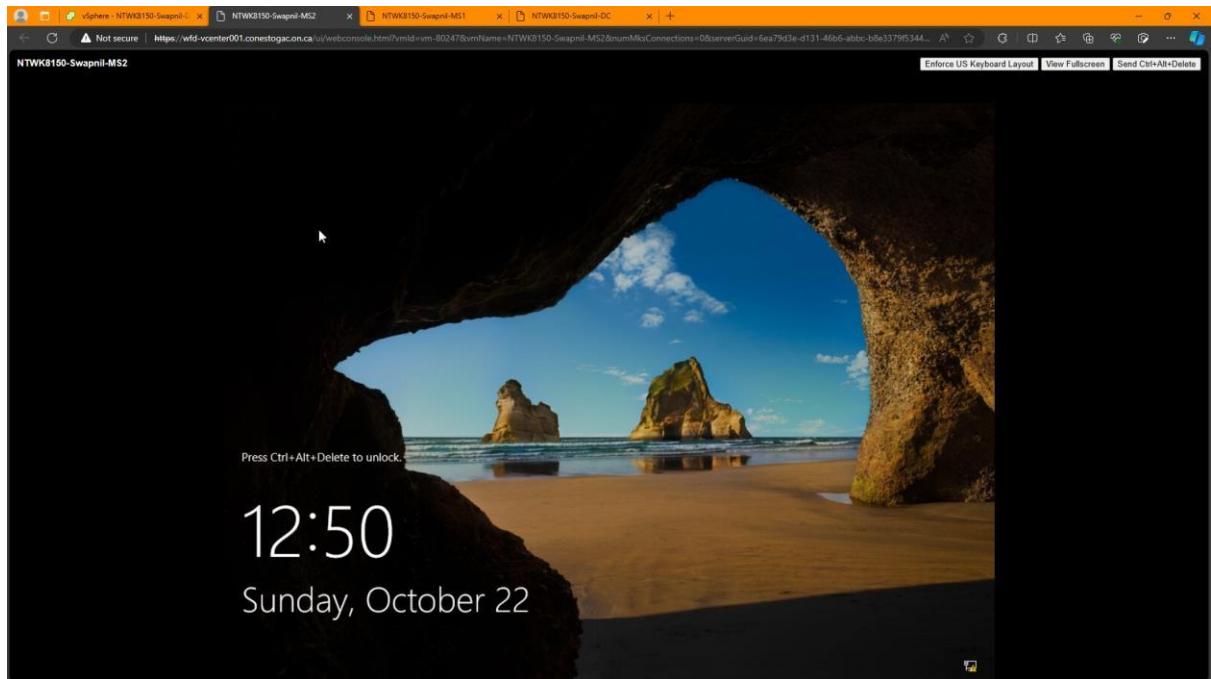
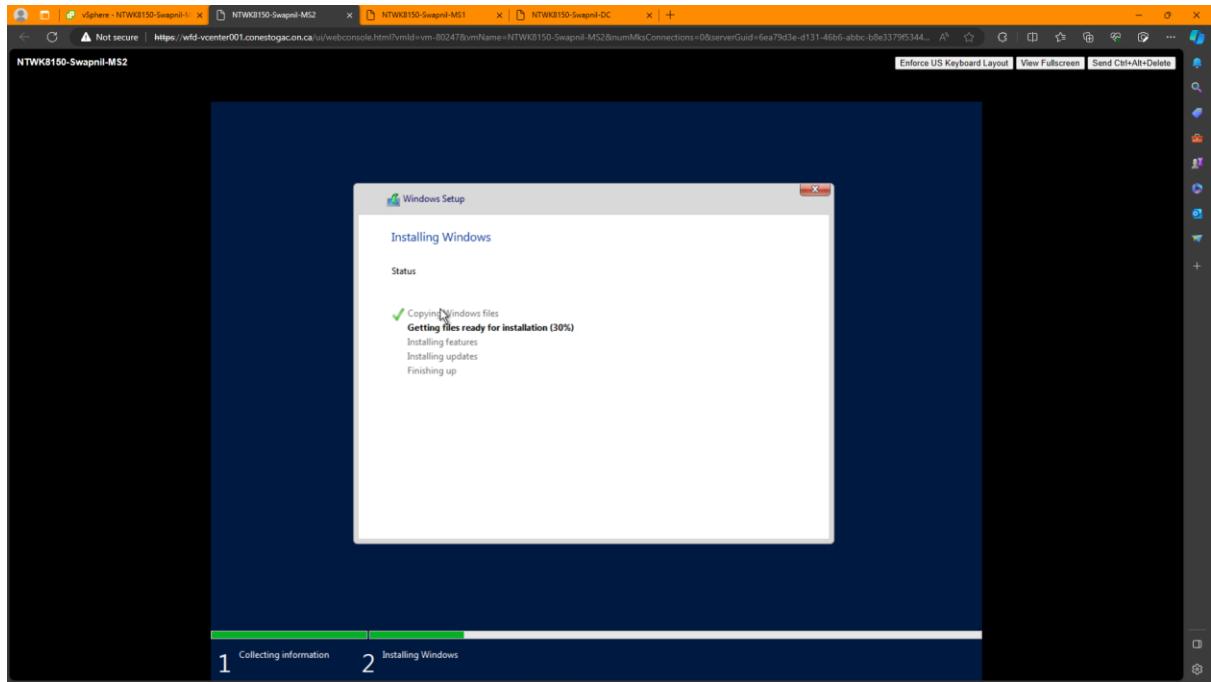
Promoting the MS1 to the domain and connecting it to the domain controller

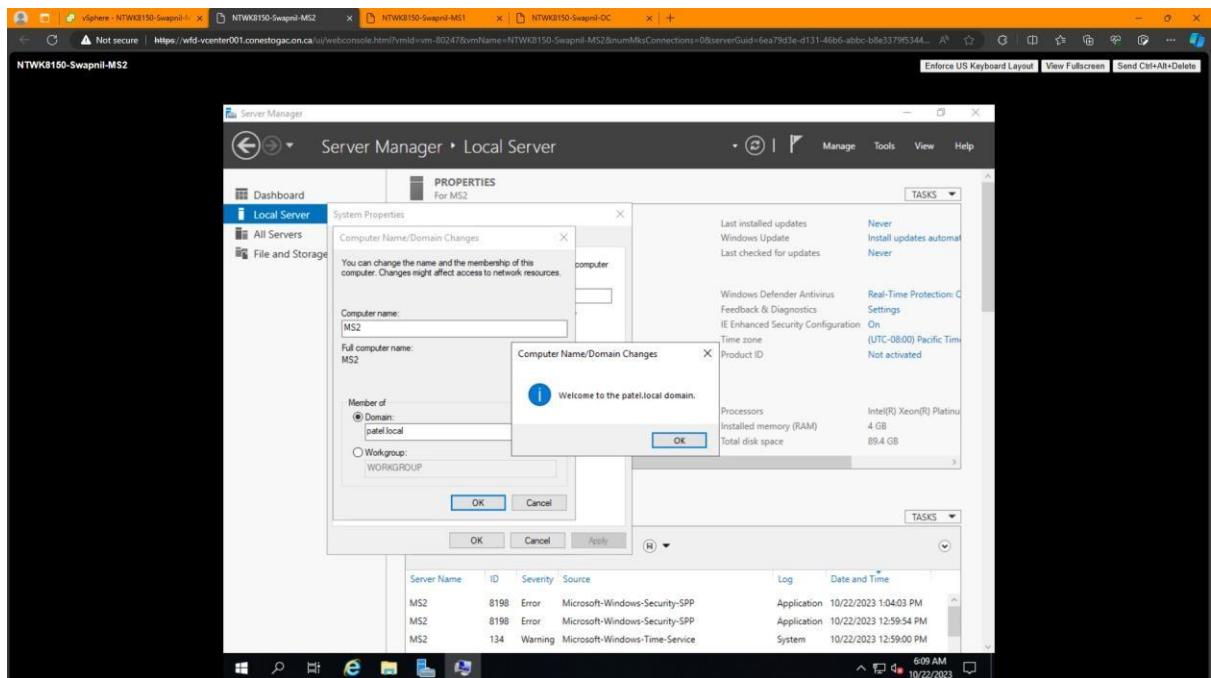
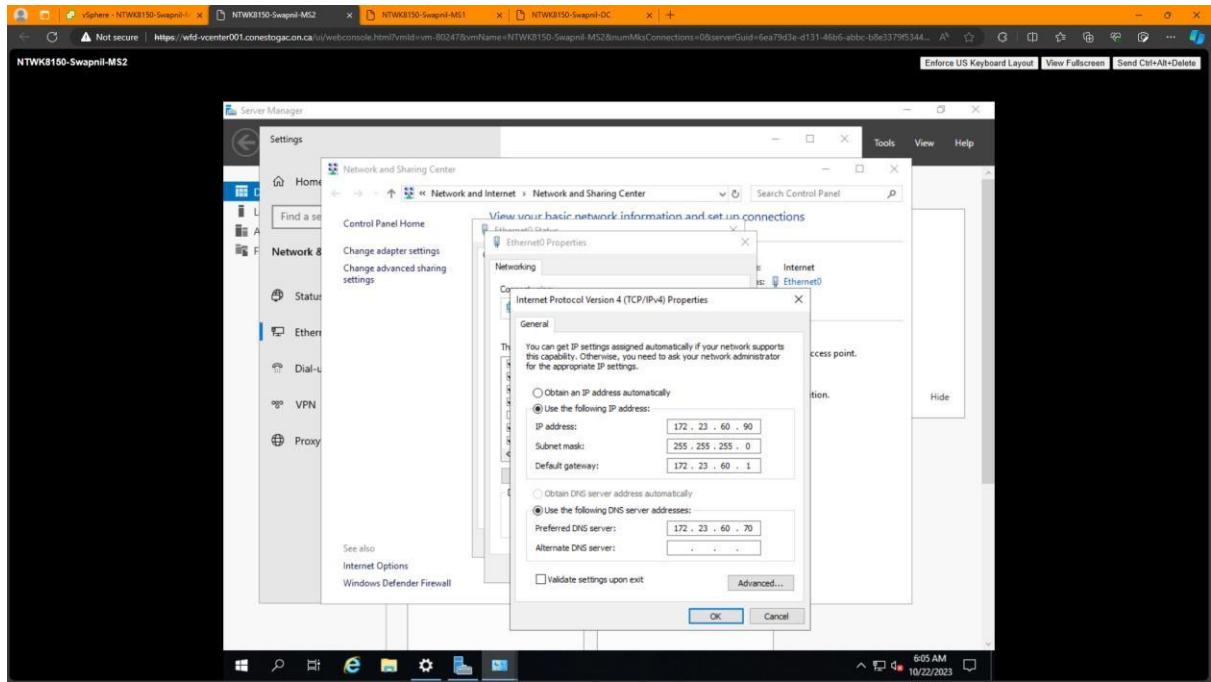
Installing the Failover clustering tools to the member server.



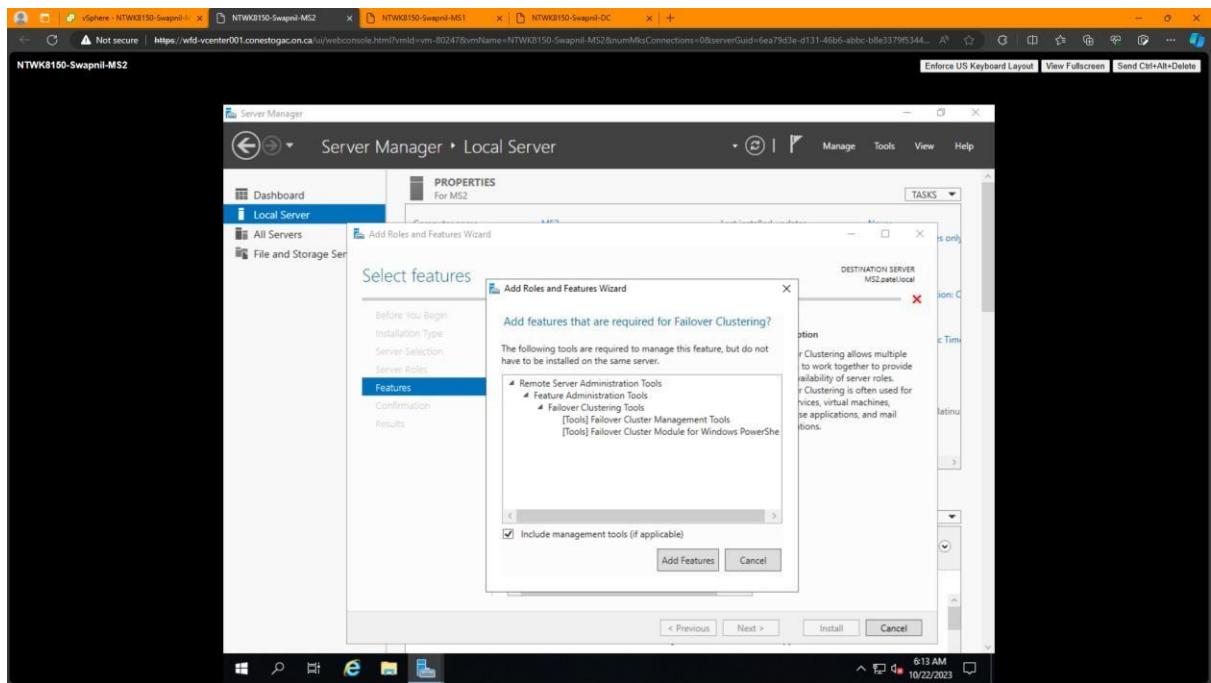
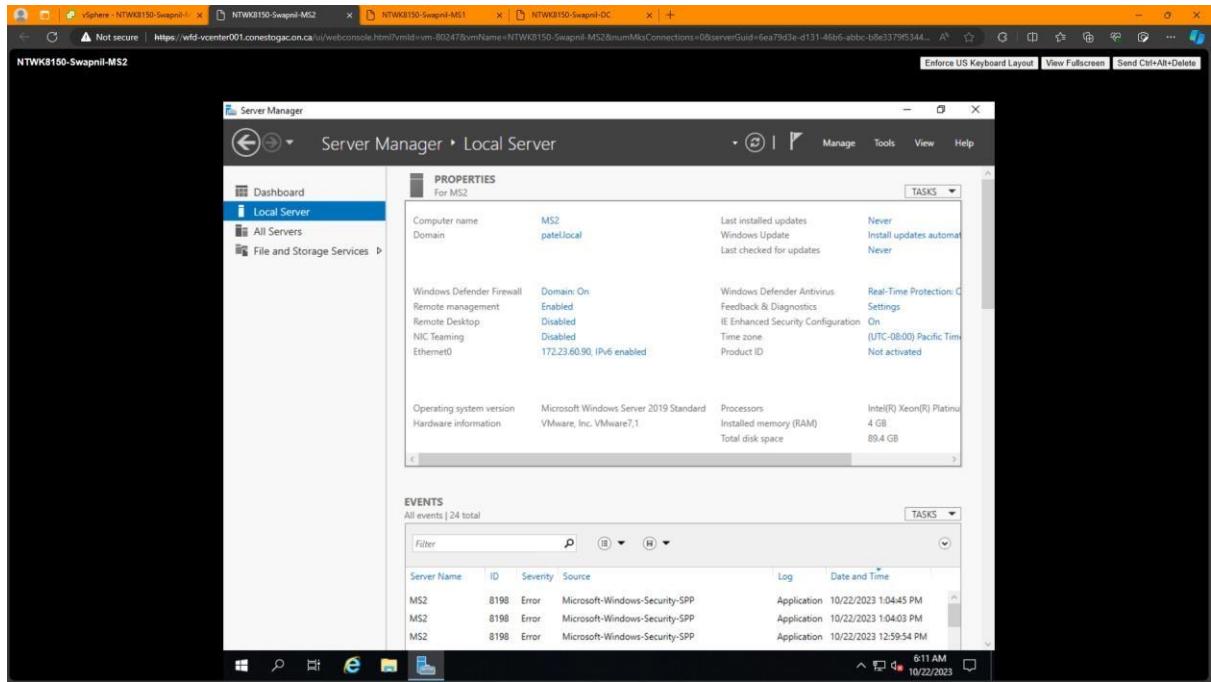
Member Server 2 Installation



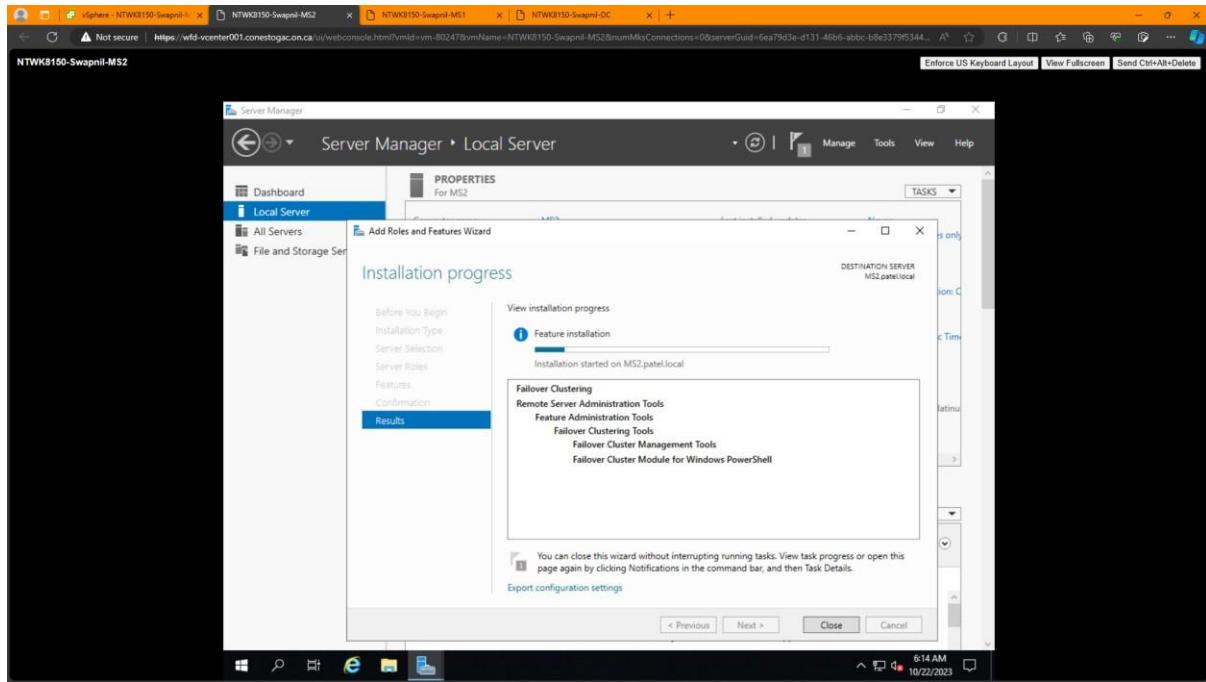




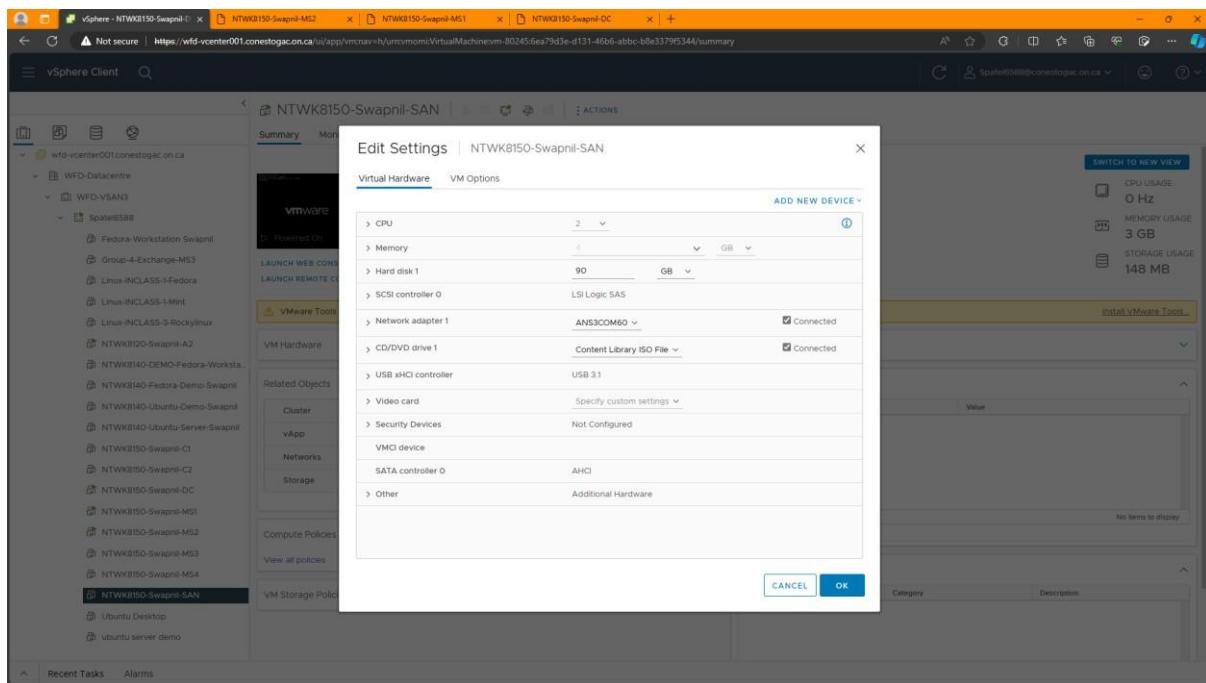
Network configuration and domain promotion of the member server 2.

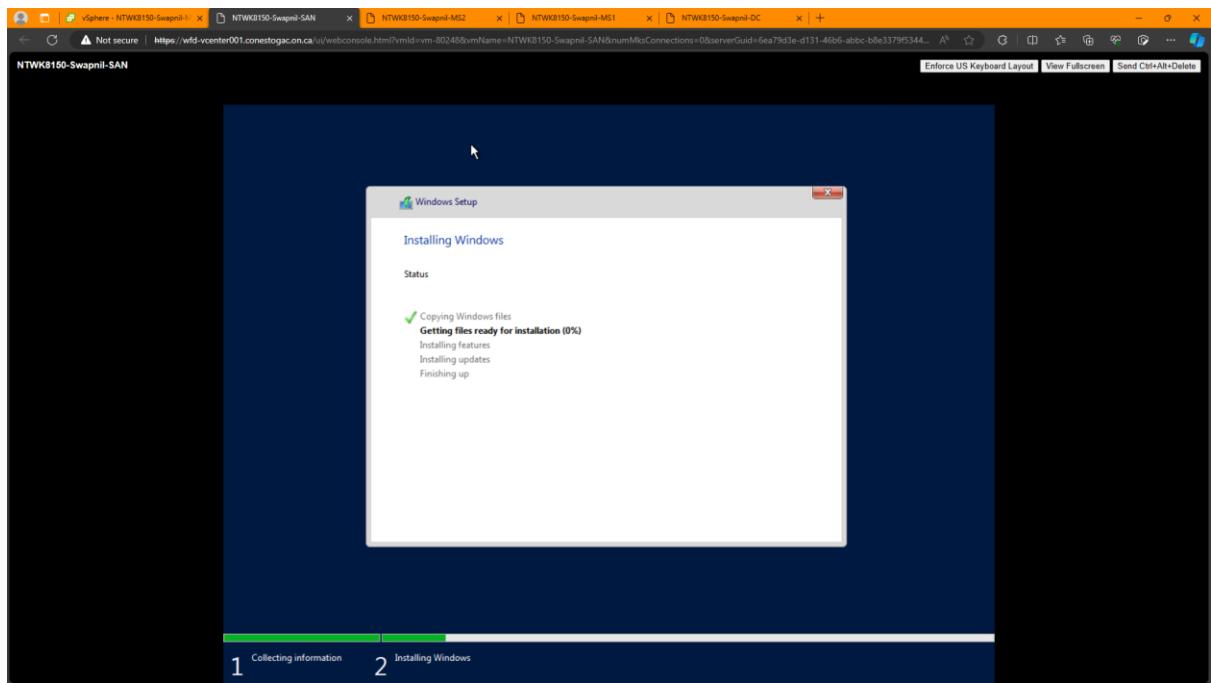
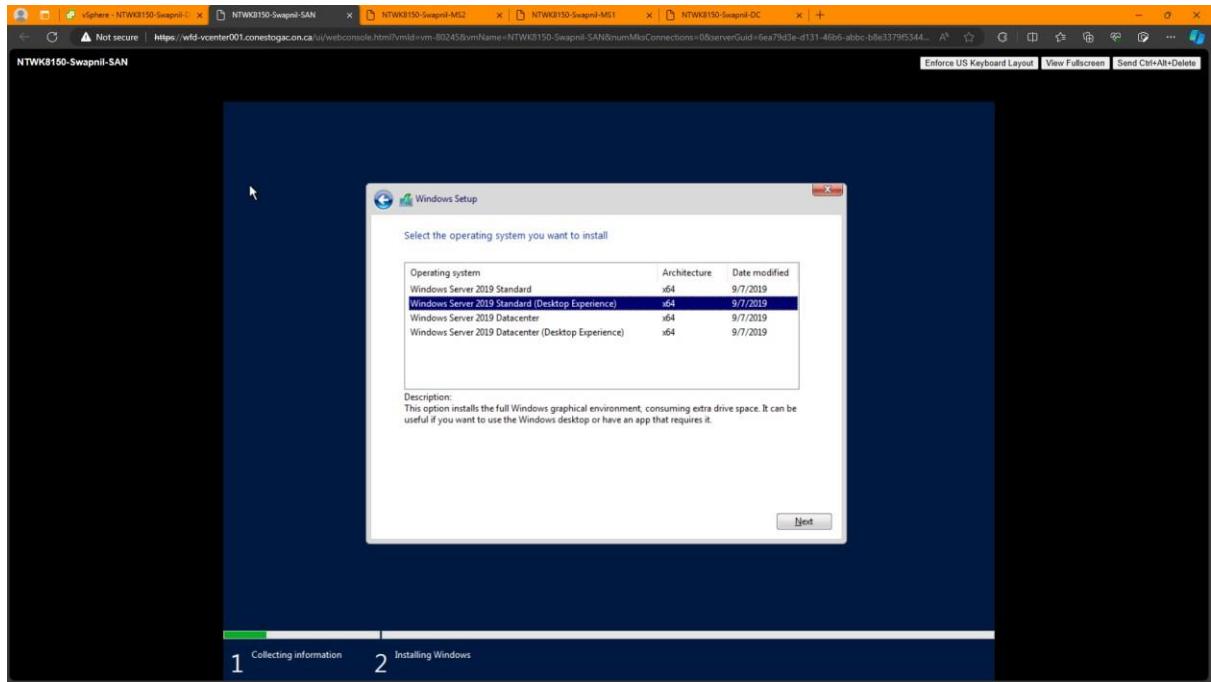


Installing the Failover clustering features to the member server 2.

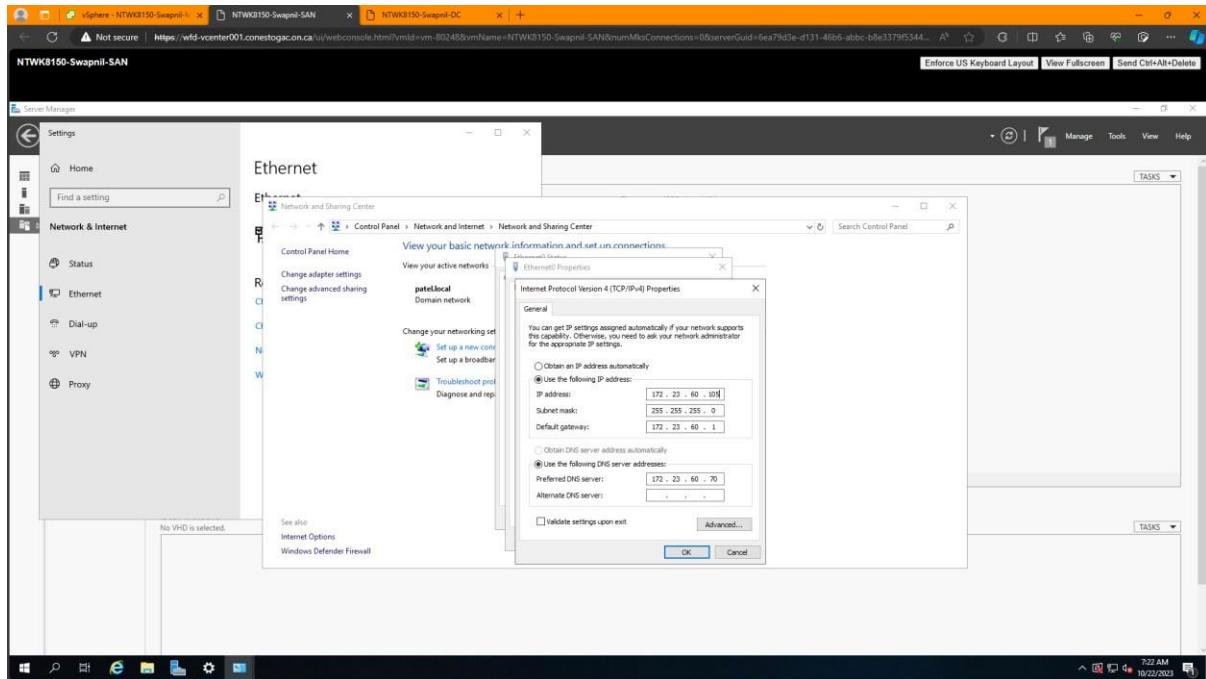


SAN Server Installation for the disk allocation and the storage management

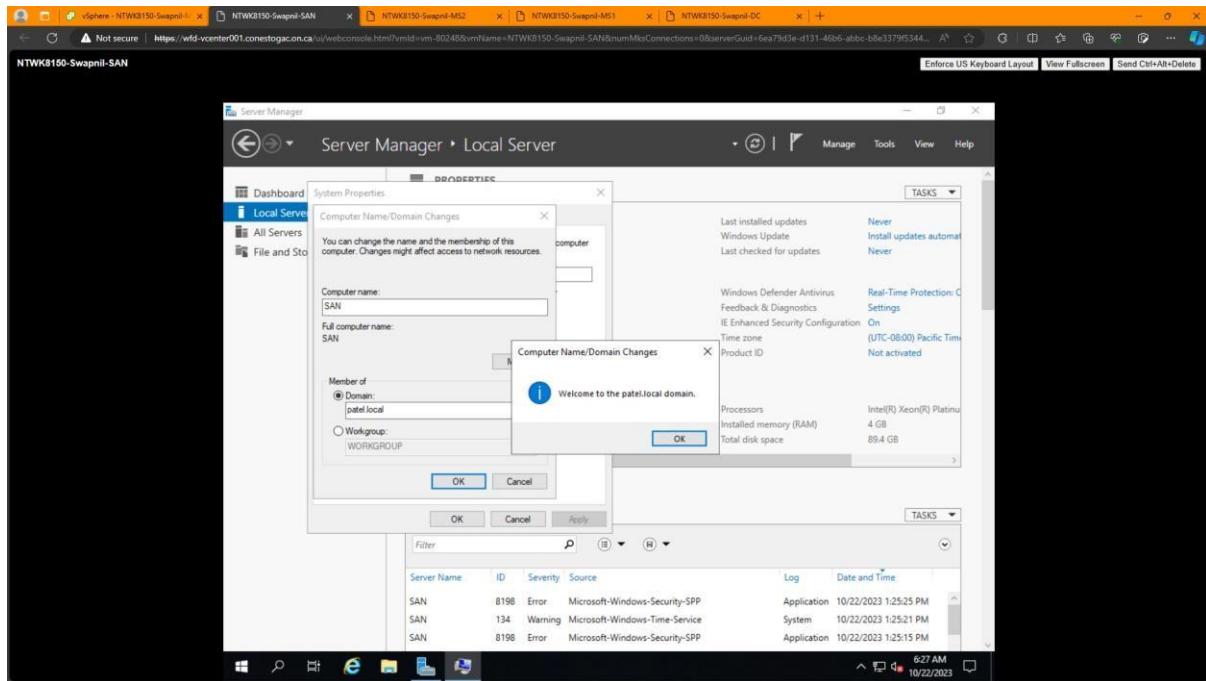




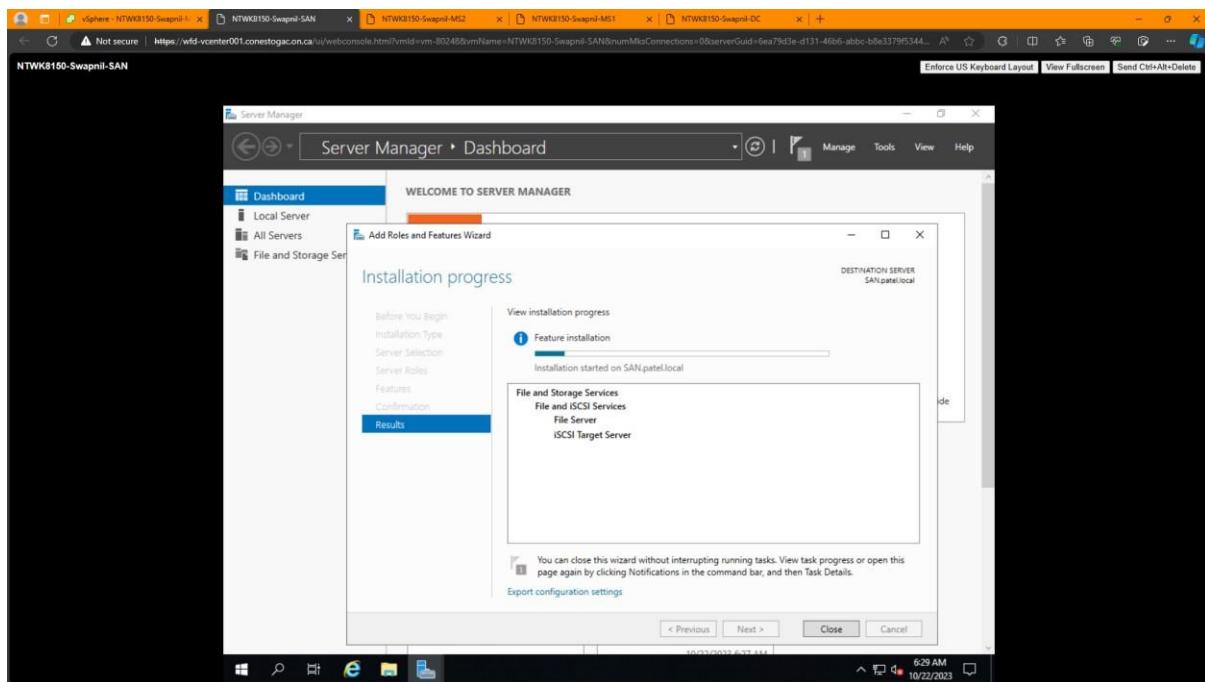
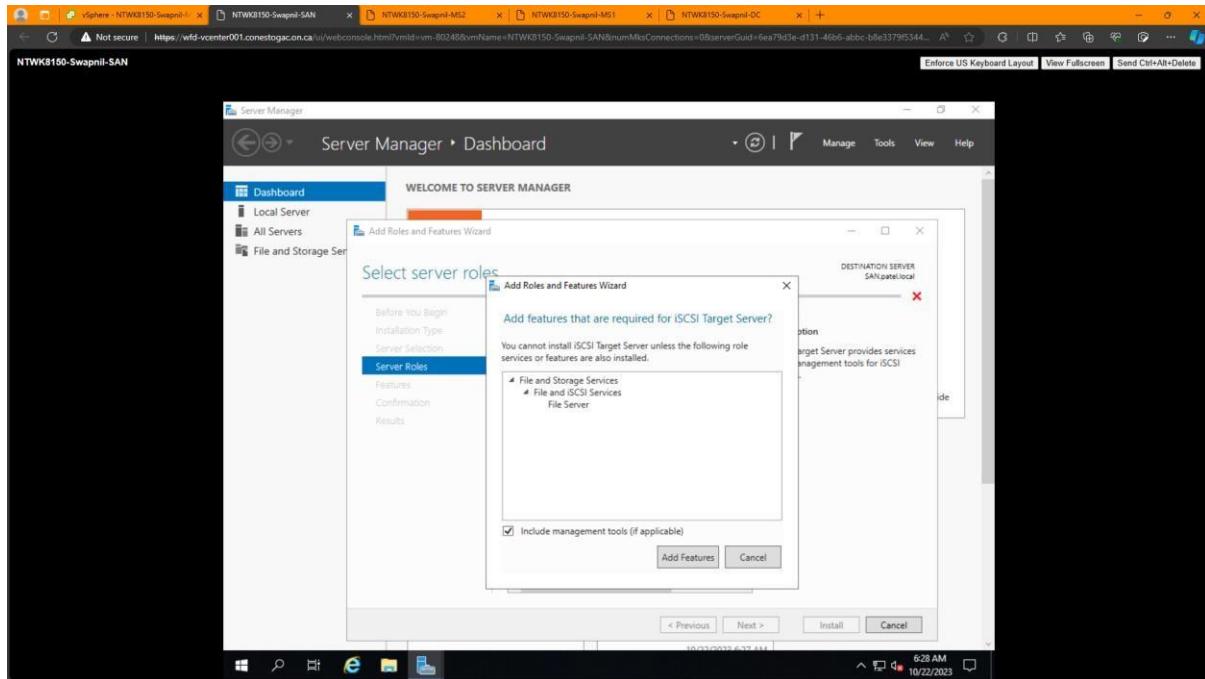
Network Configuration



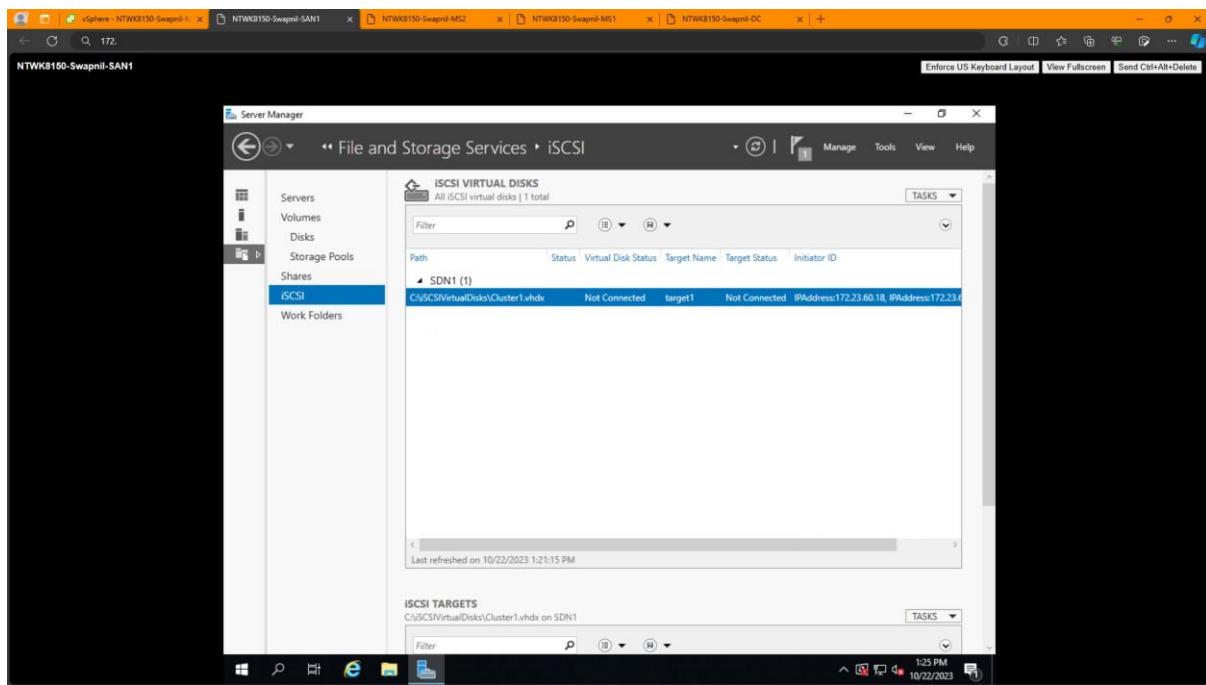
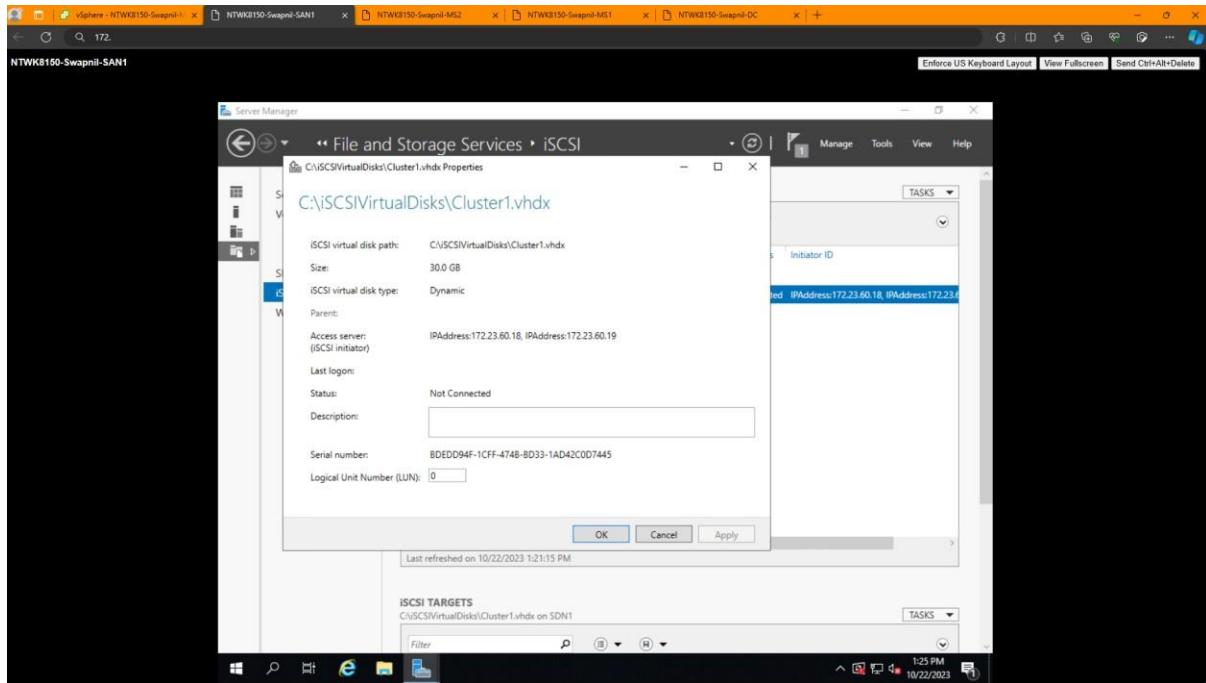
Domain promotion



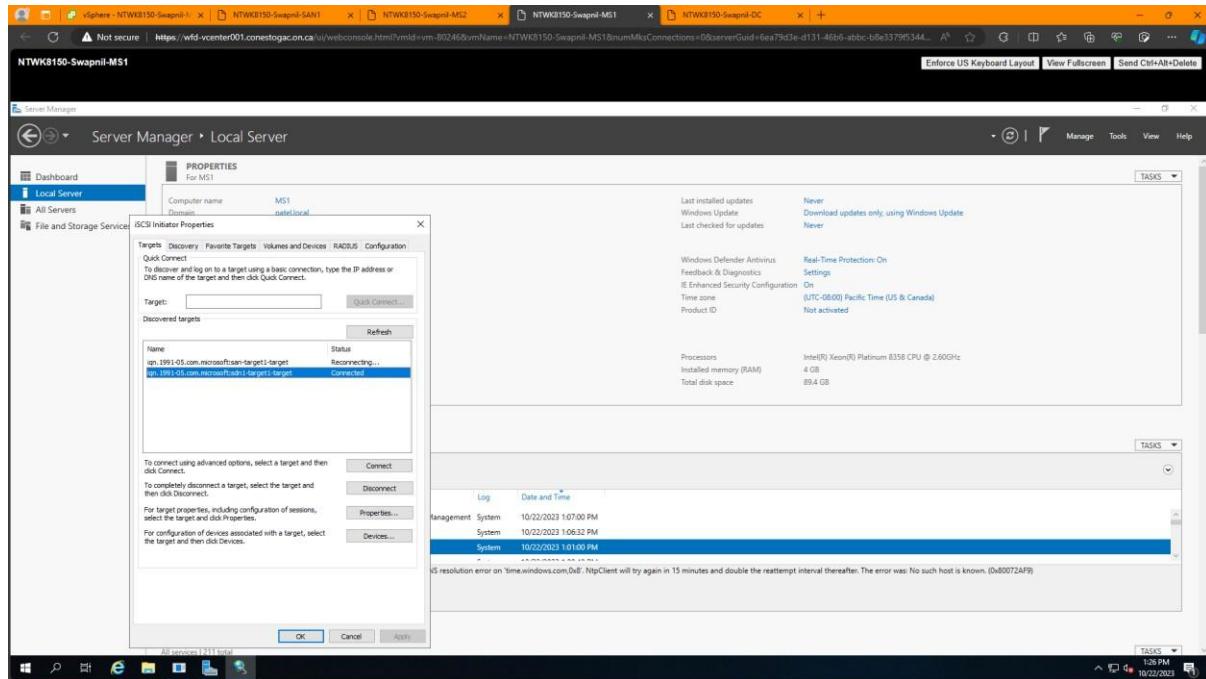
Installing the iSCSI roles for the disk and storage management.



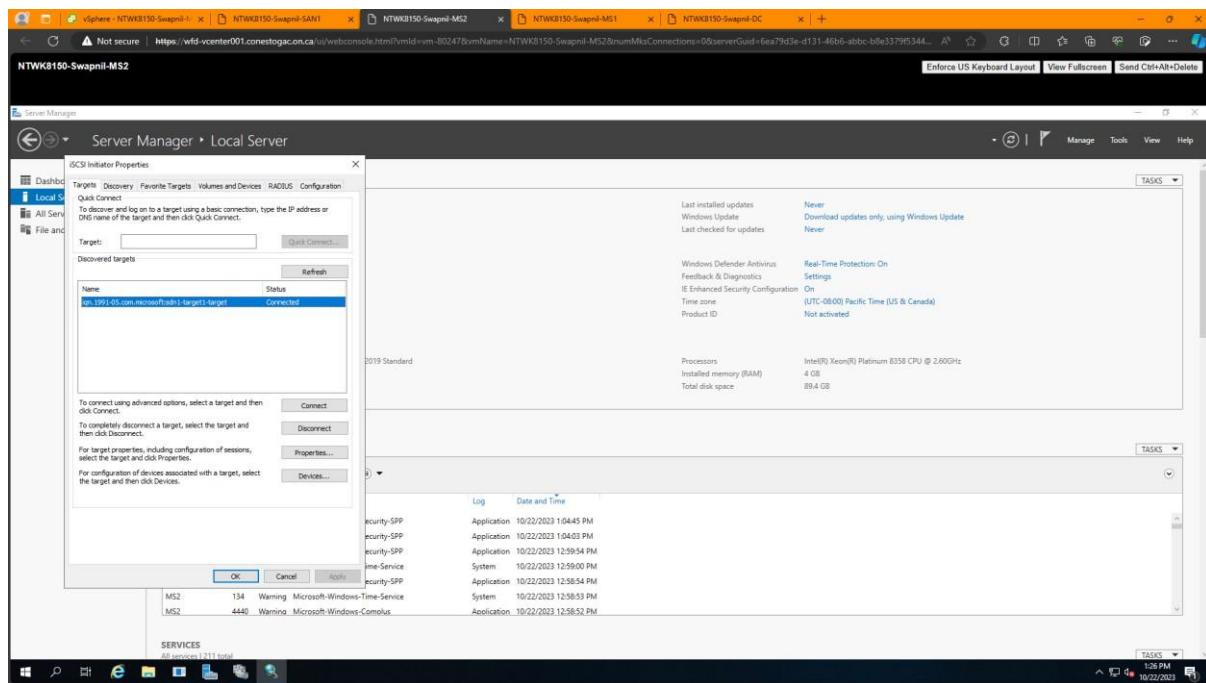
Creating new virtual disk.



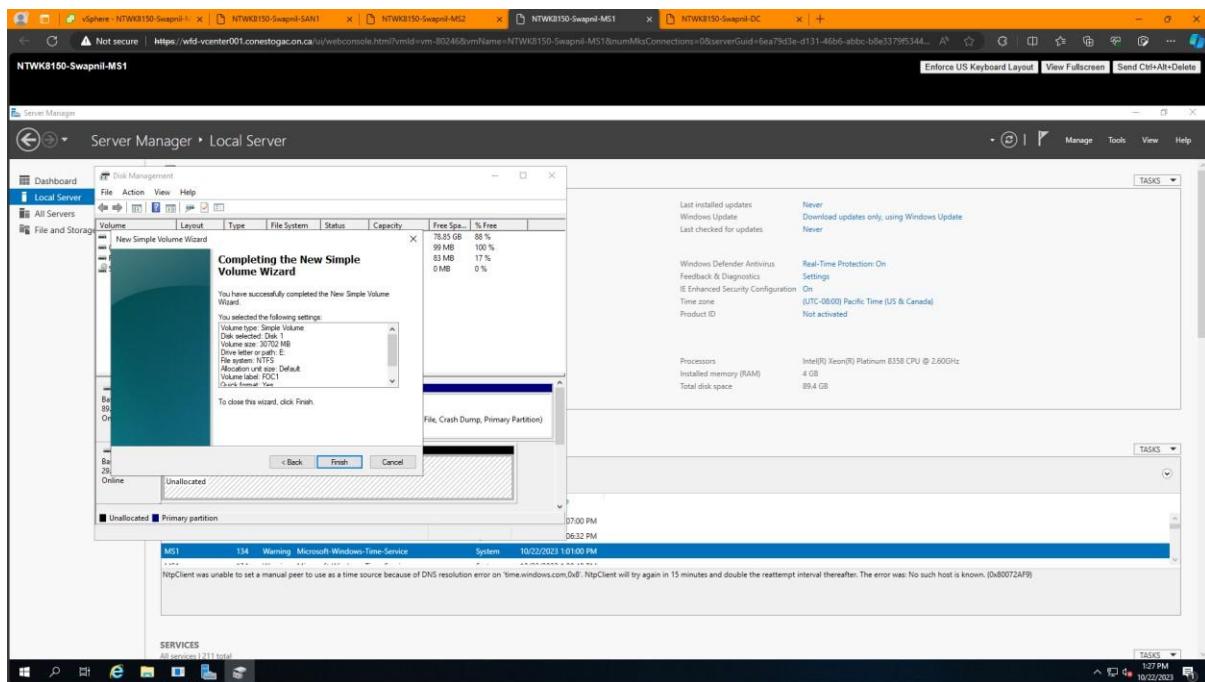
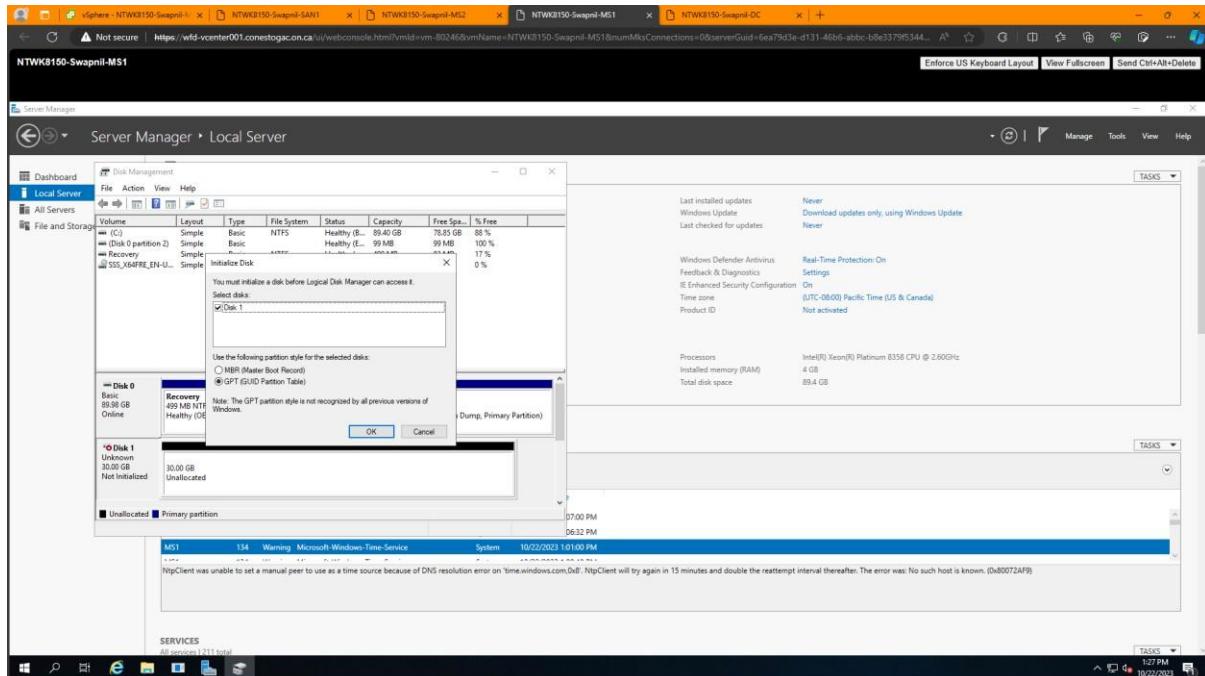
Connecting the MS1

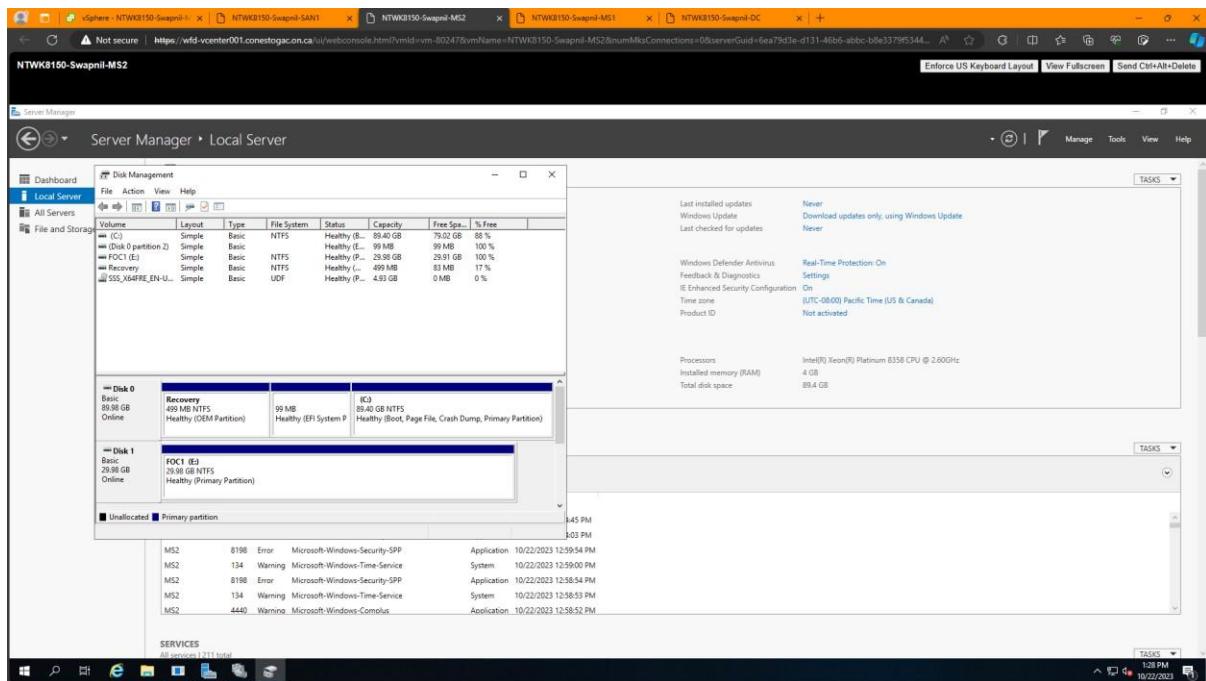
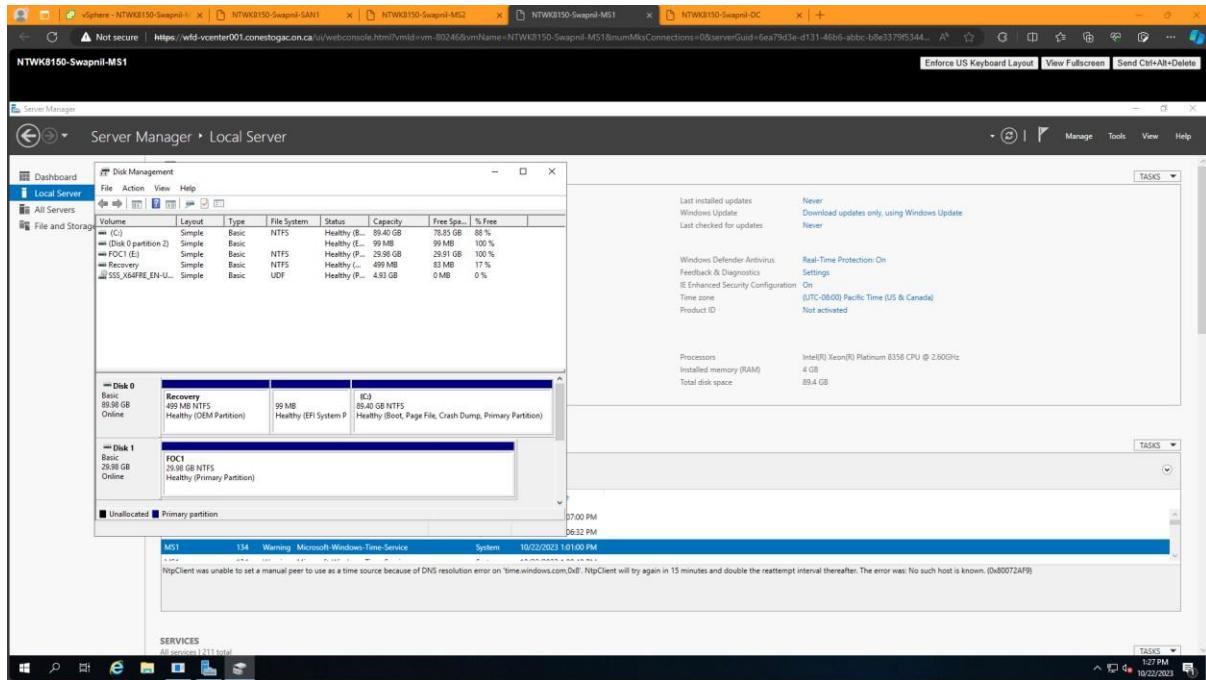


Connecting MS2

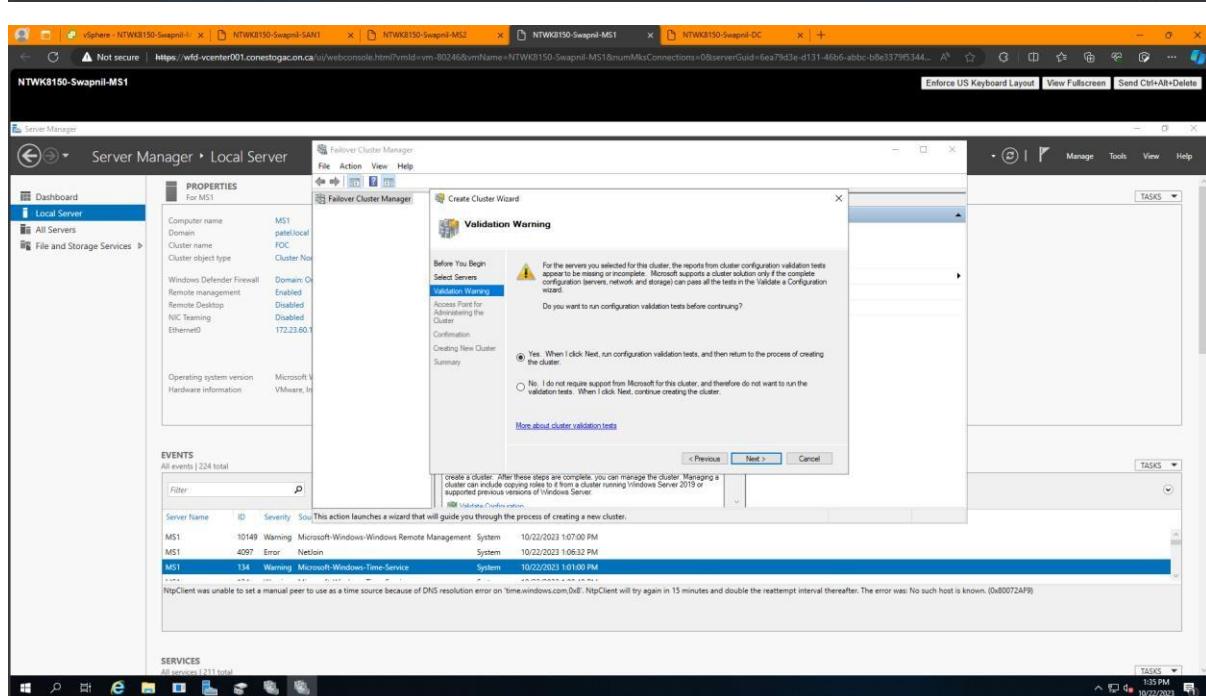
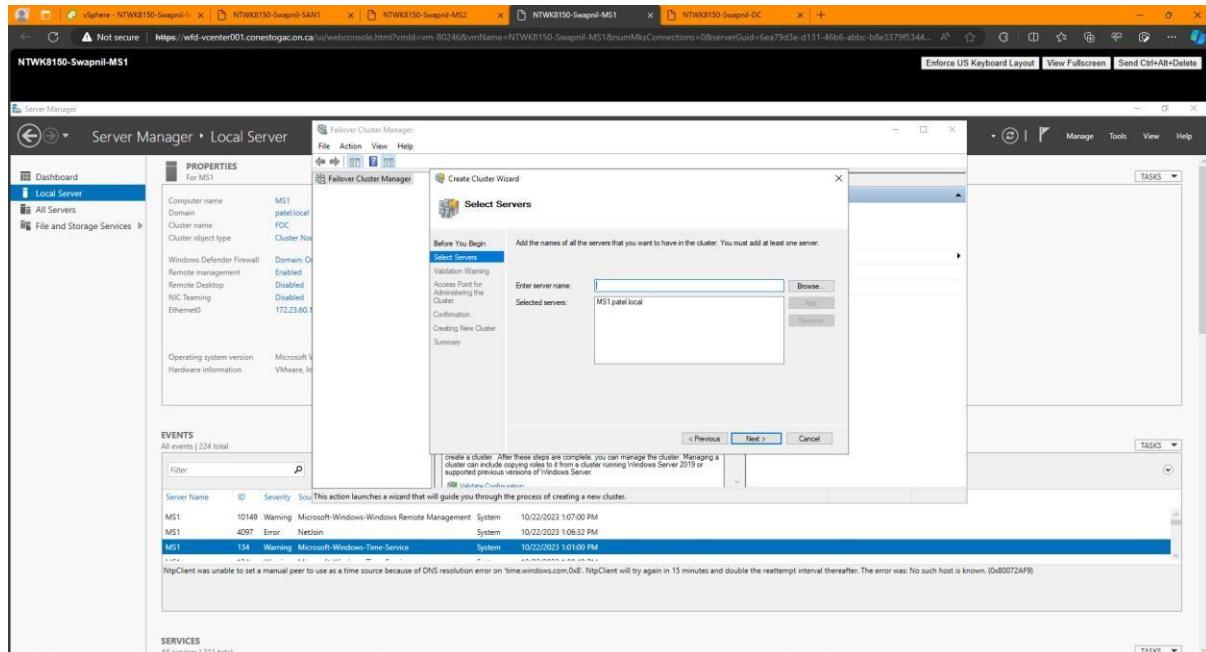


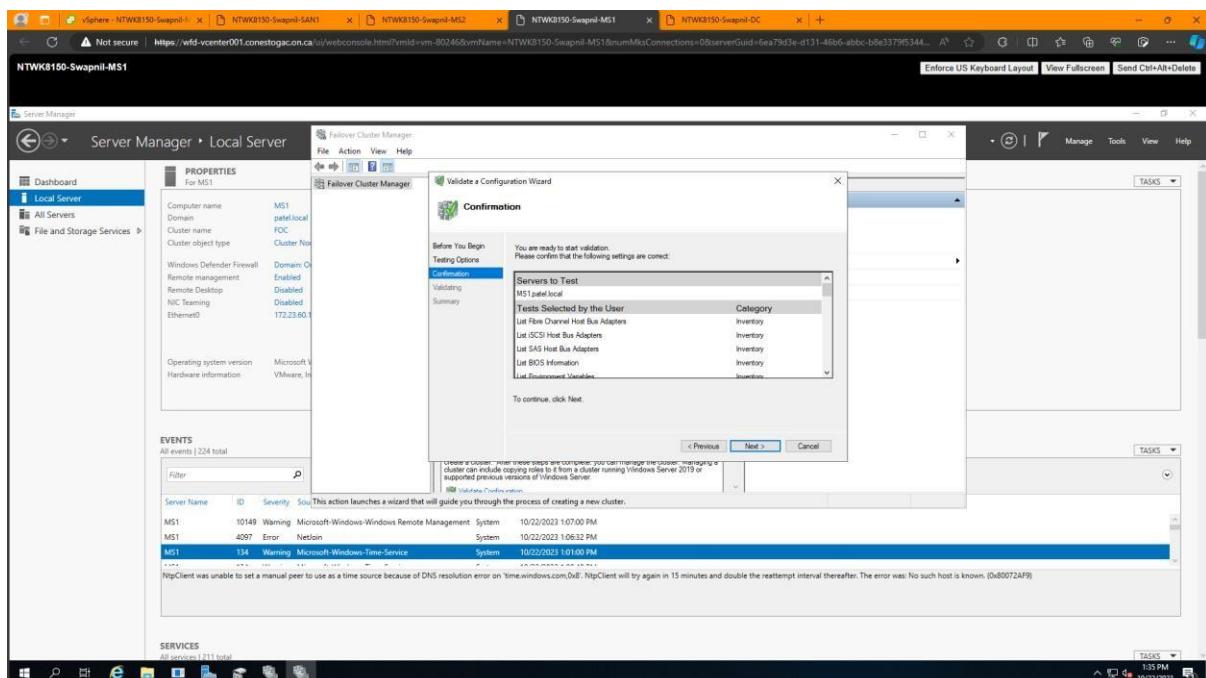
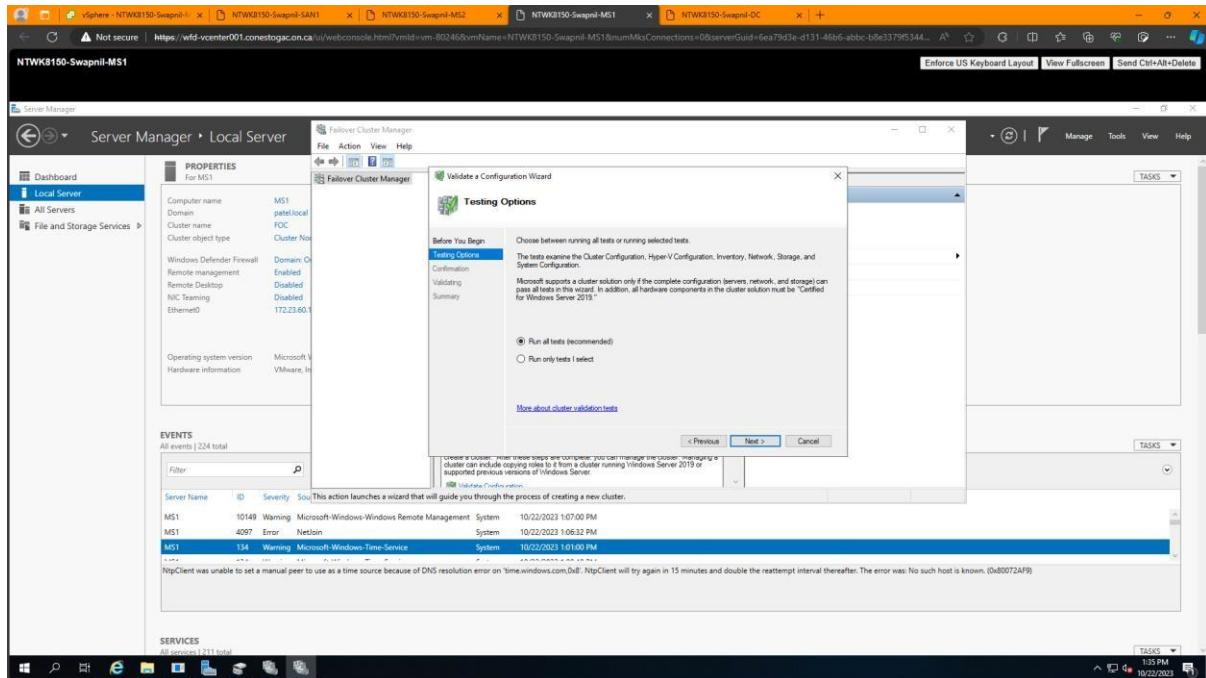
Making the Disk online allocating the free spaced



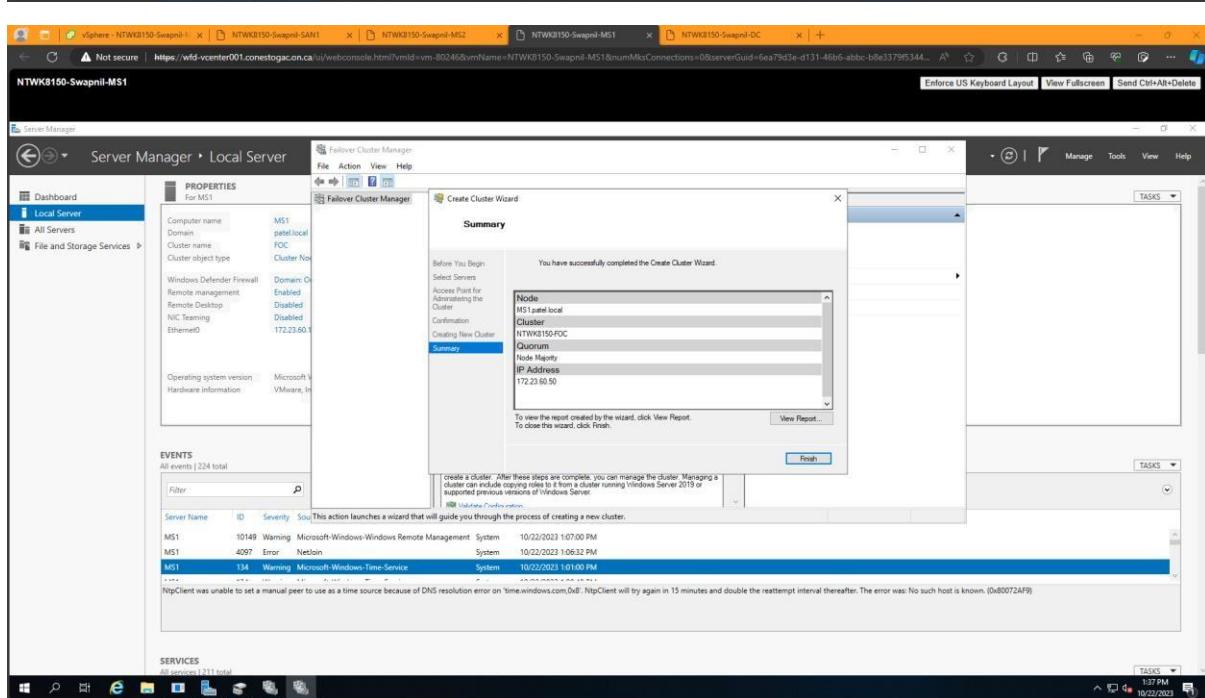
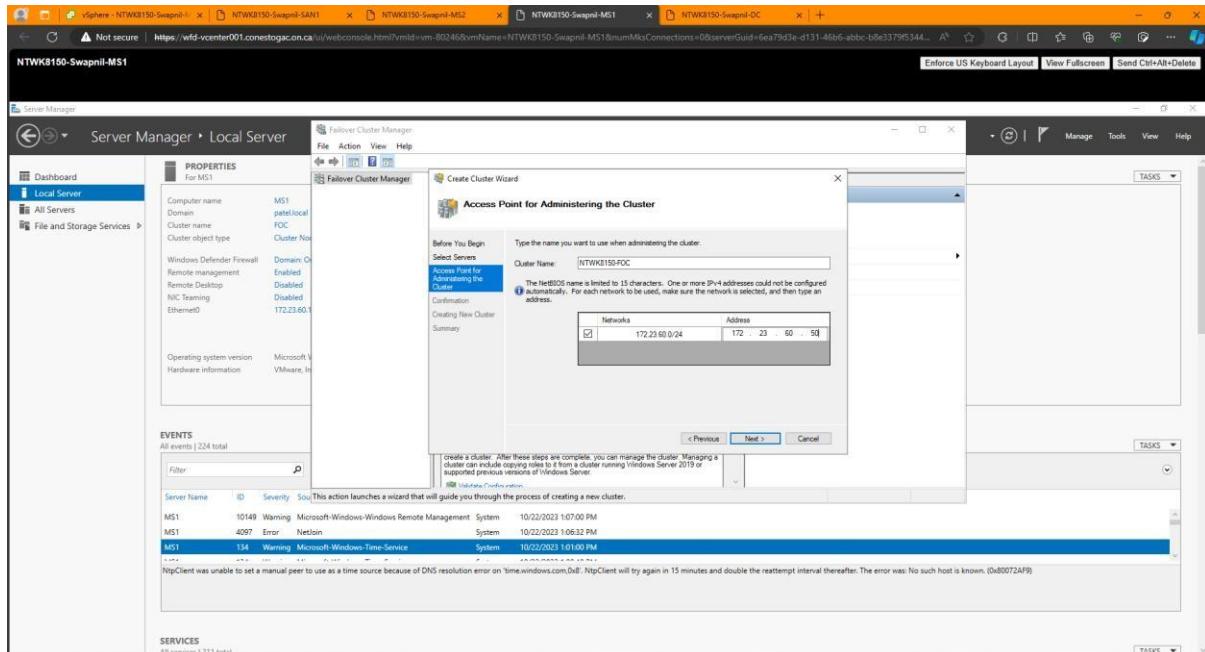


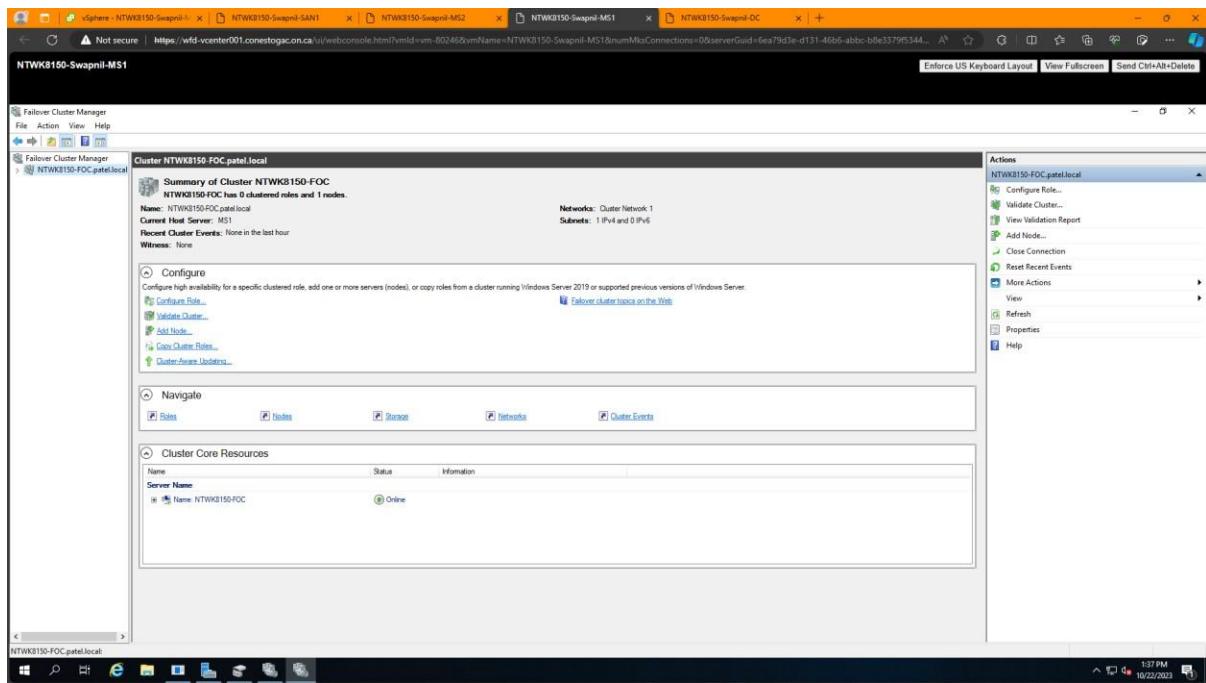
Connecting ms1 to failover cluster



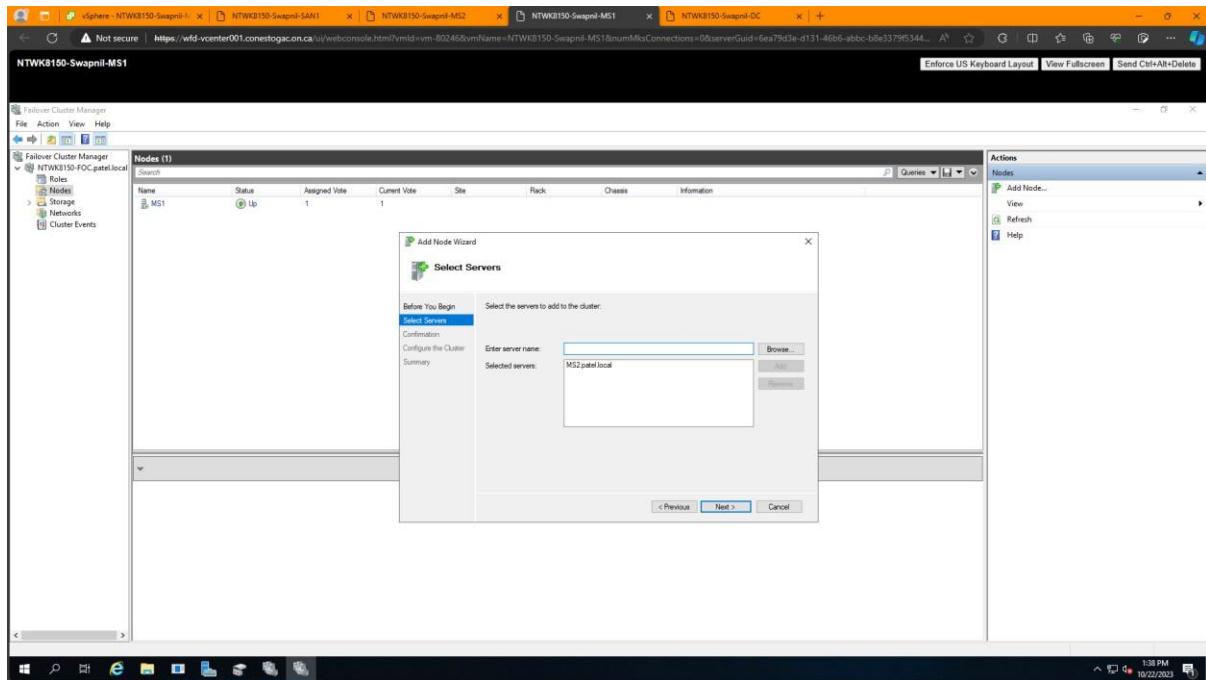


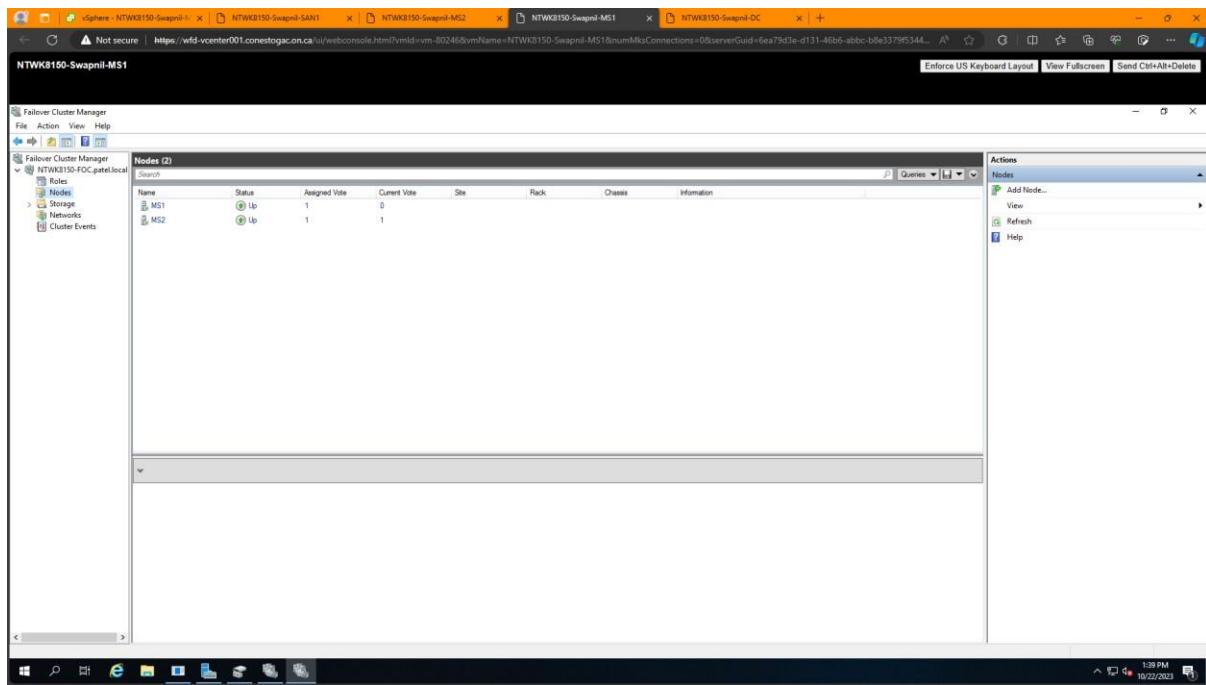
Assigning the cluster name and IP Address



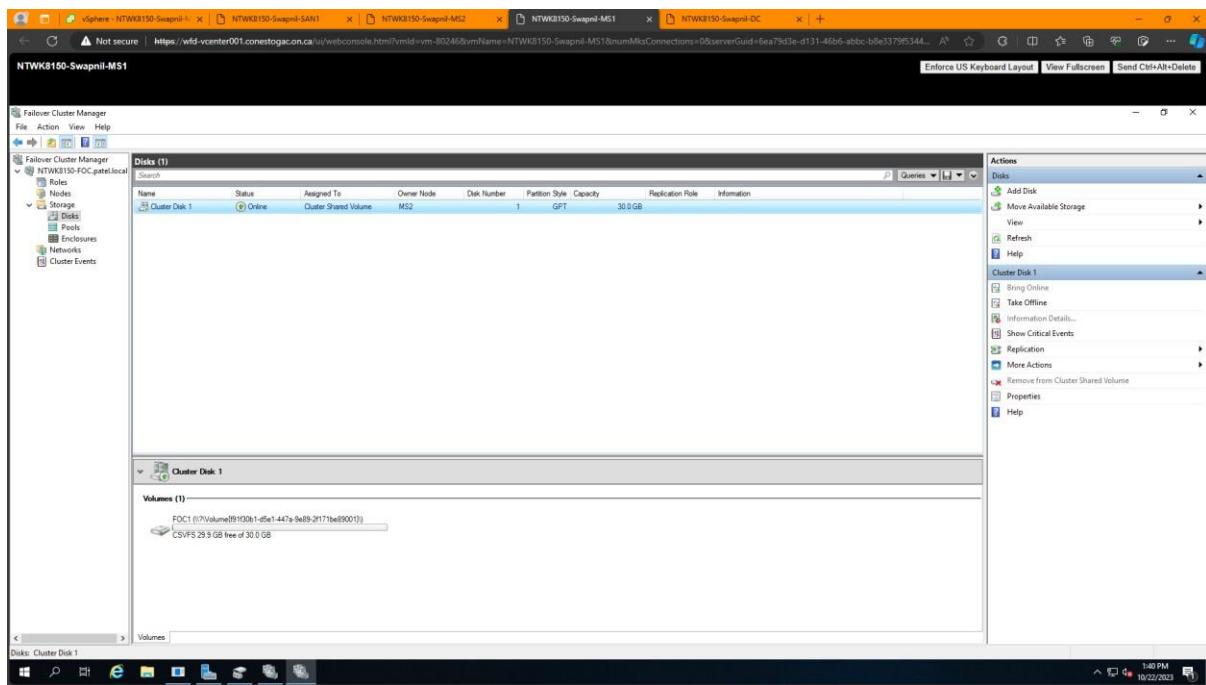


Adding MS2 to FOC node

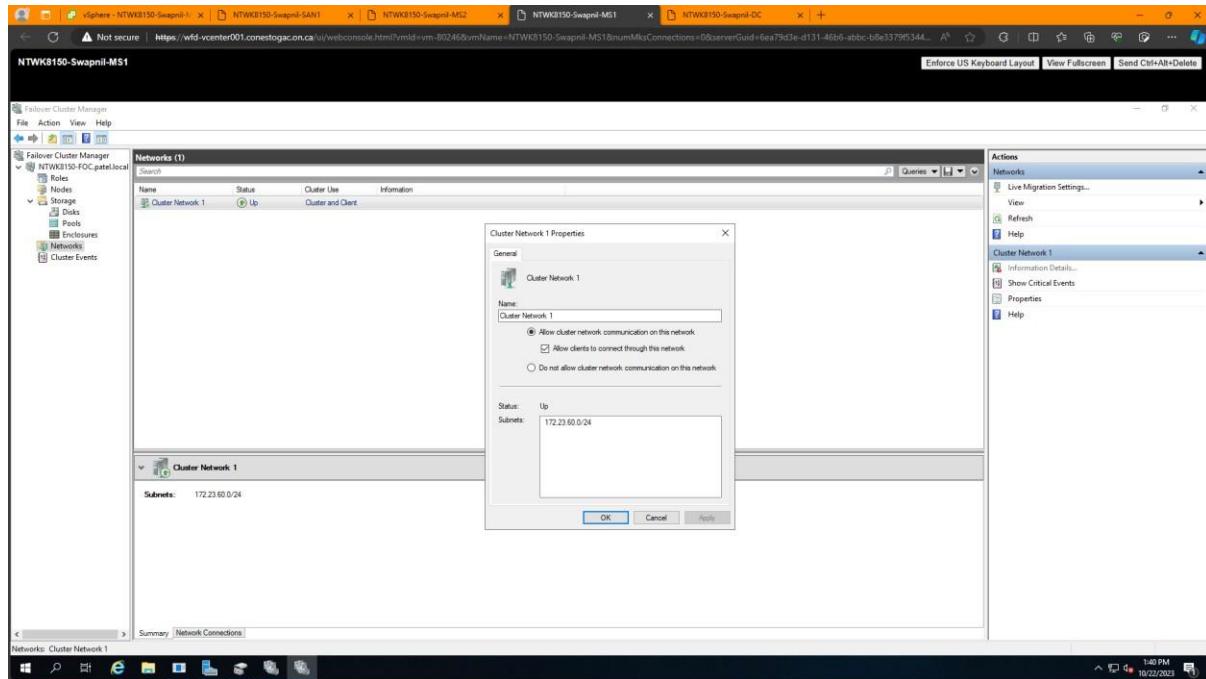




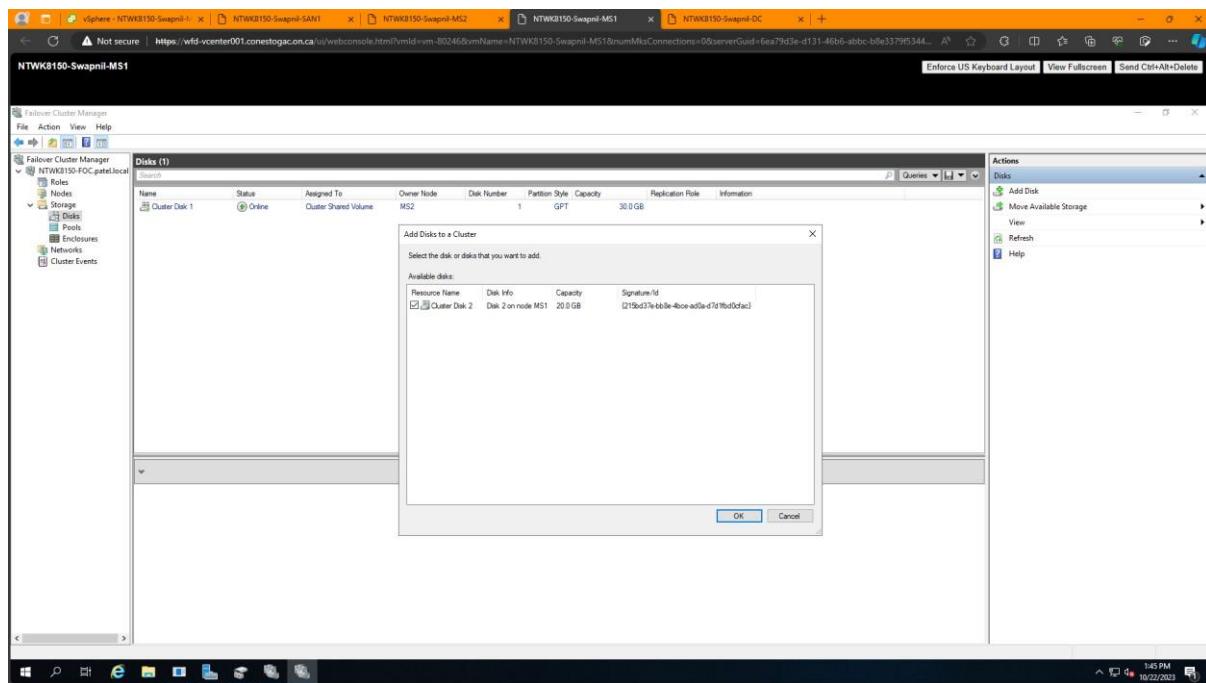
Adding disk to cluster

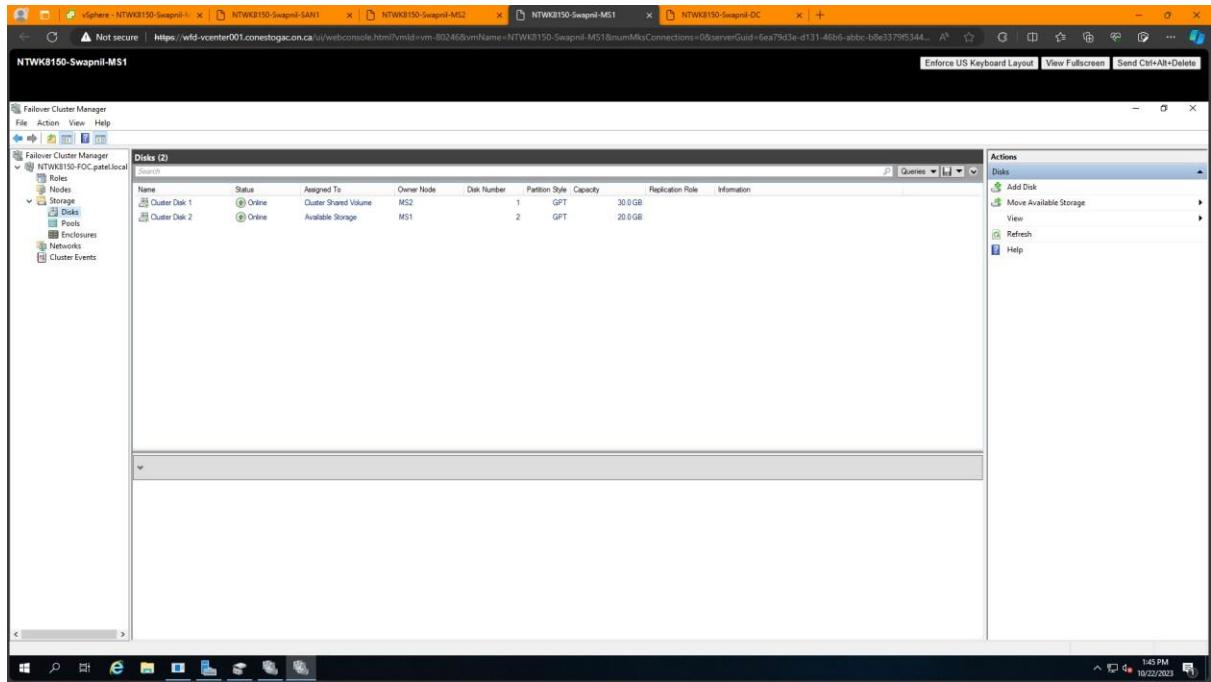


Network Configuration

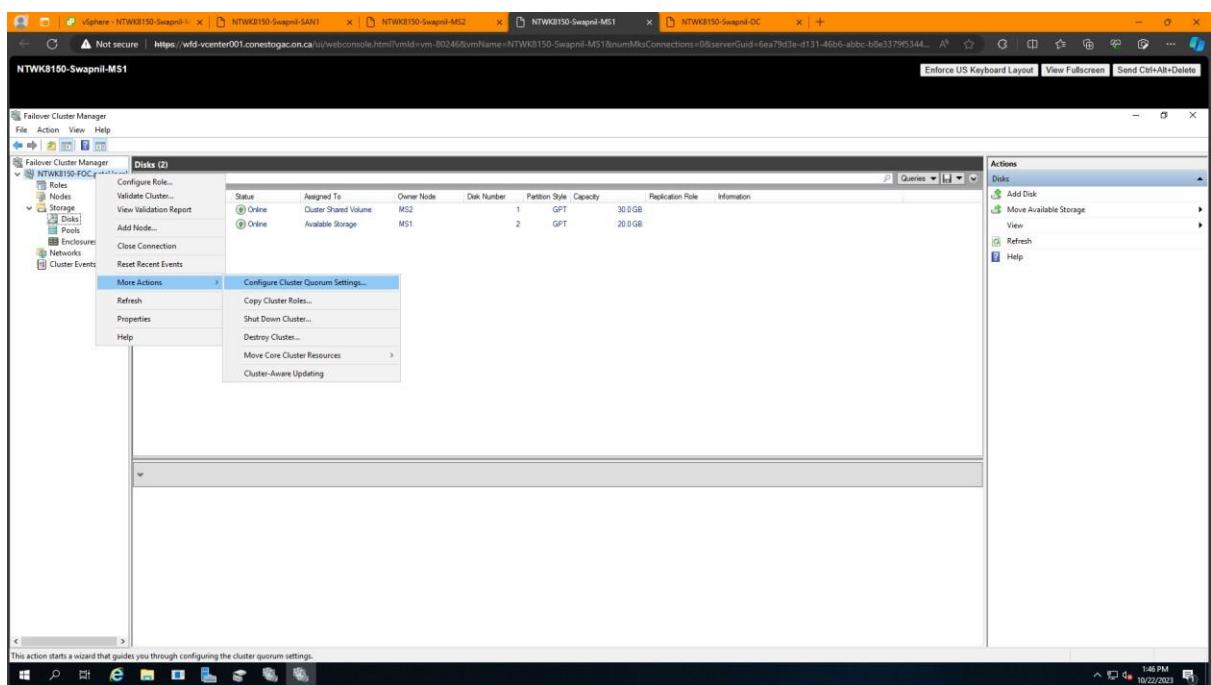


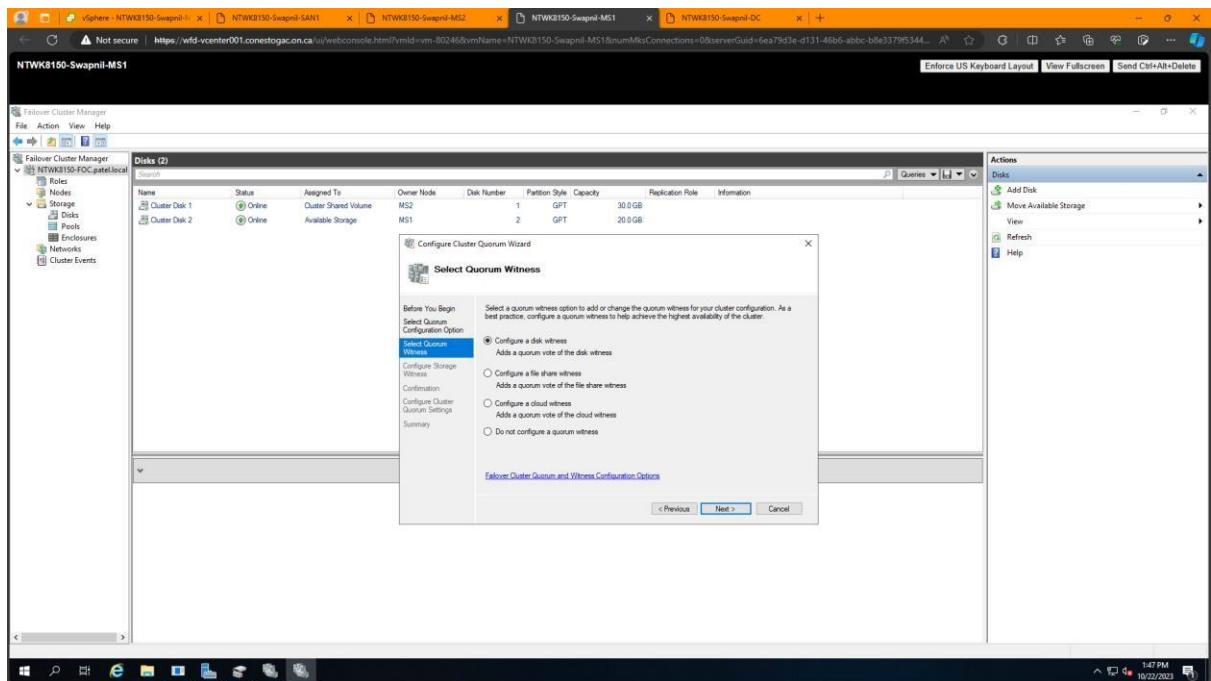
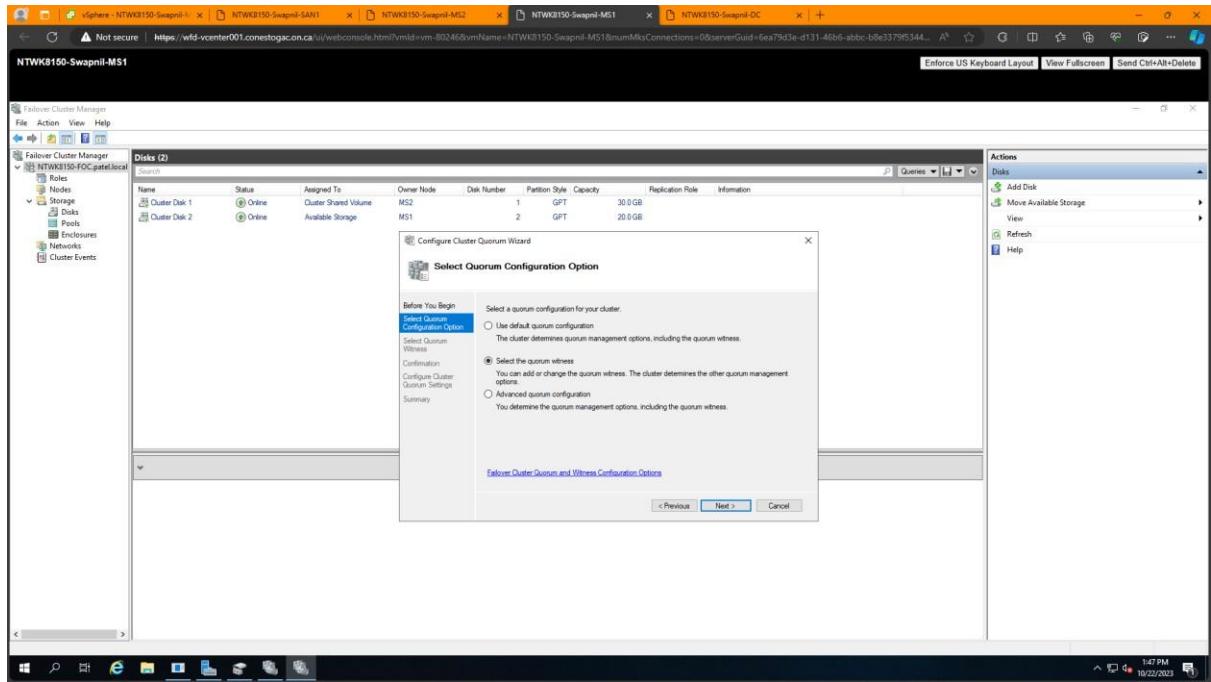
Adding quorum disk

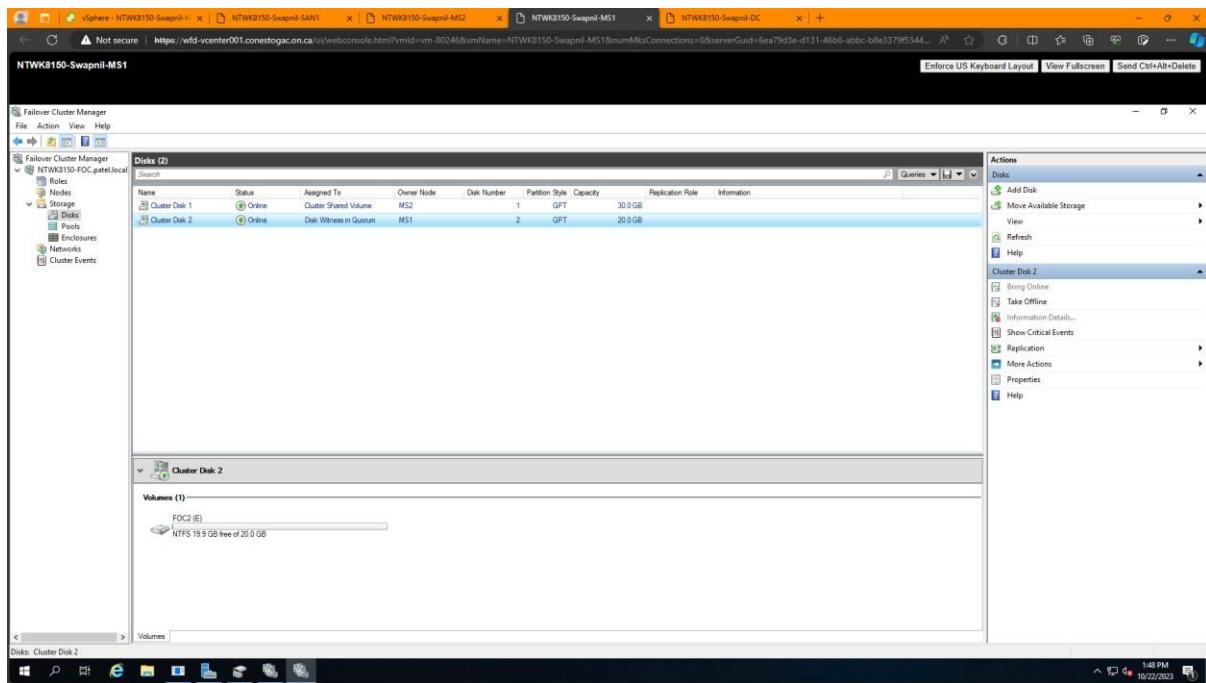
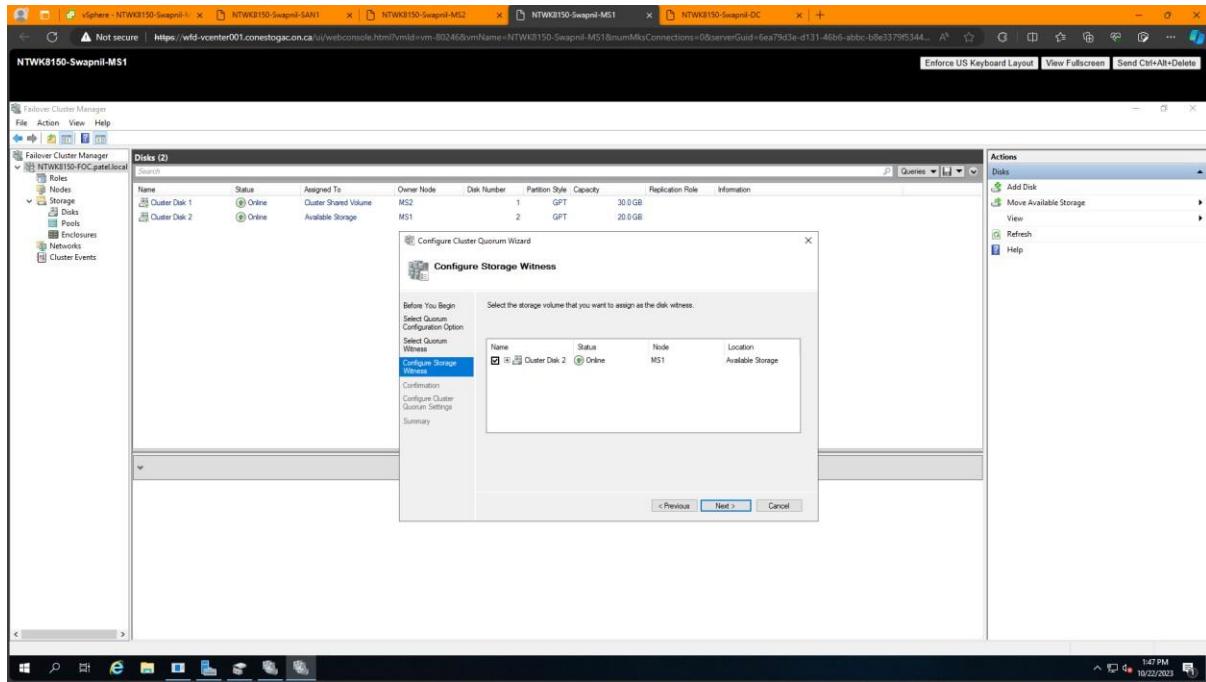




Configure cluster quorum settings.

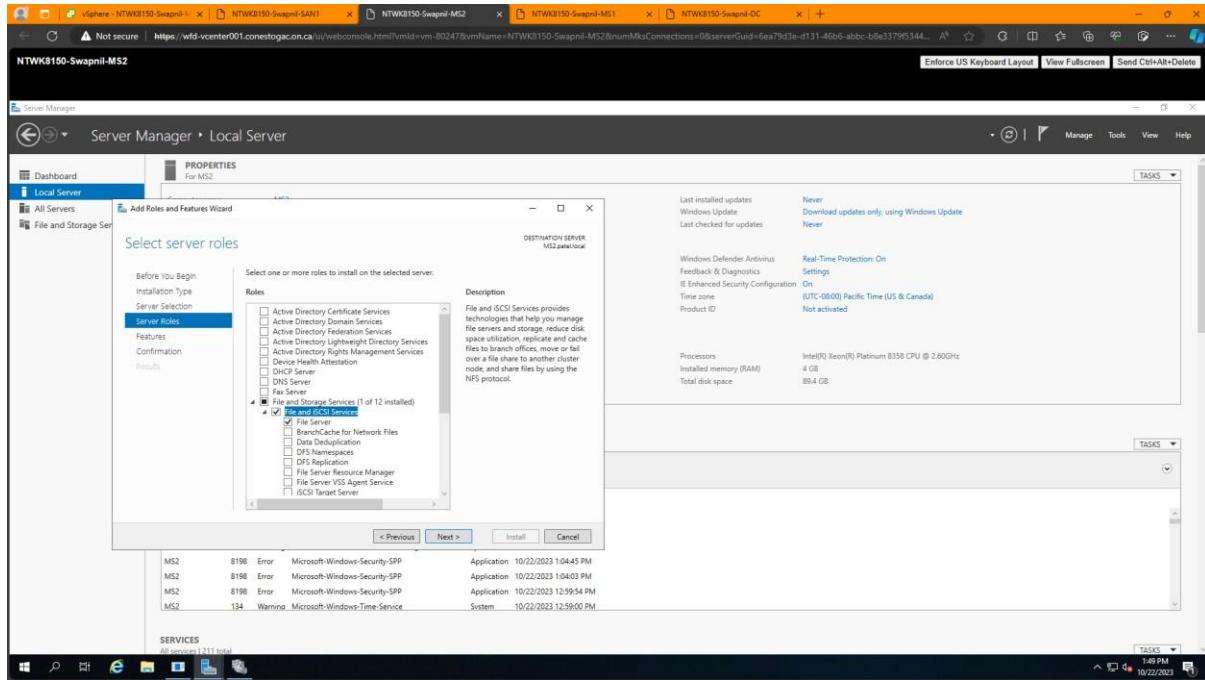




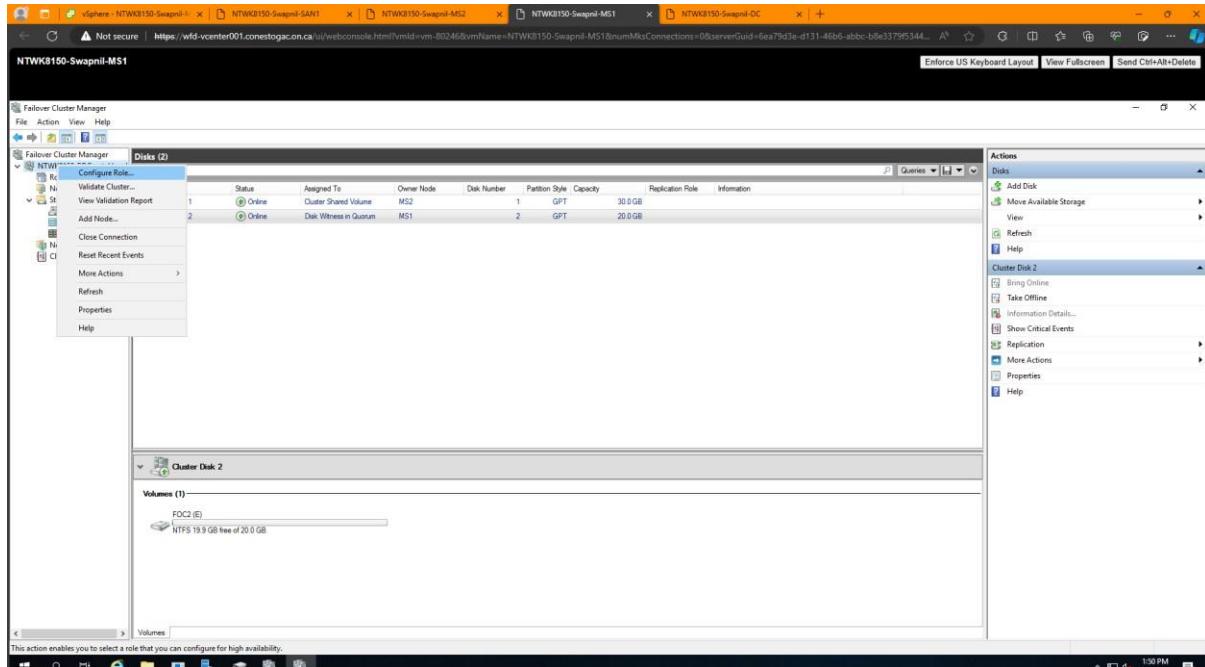


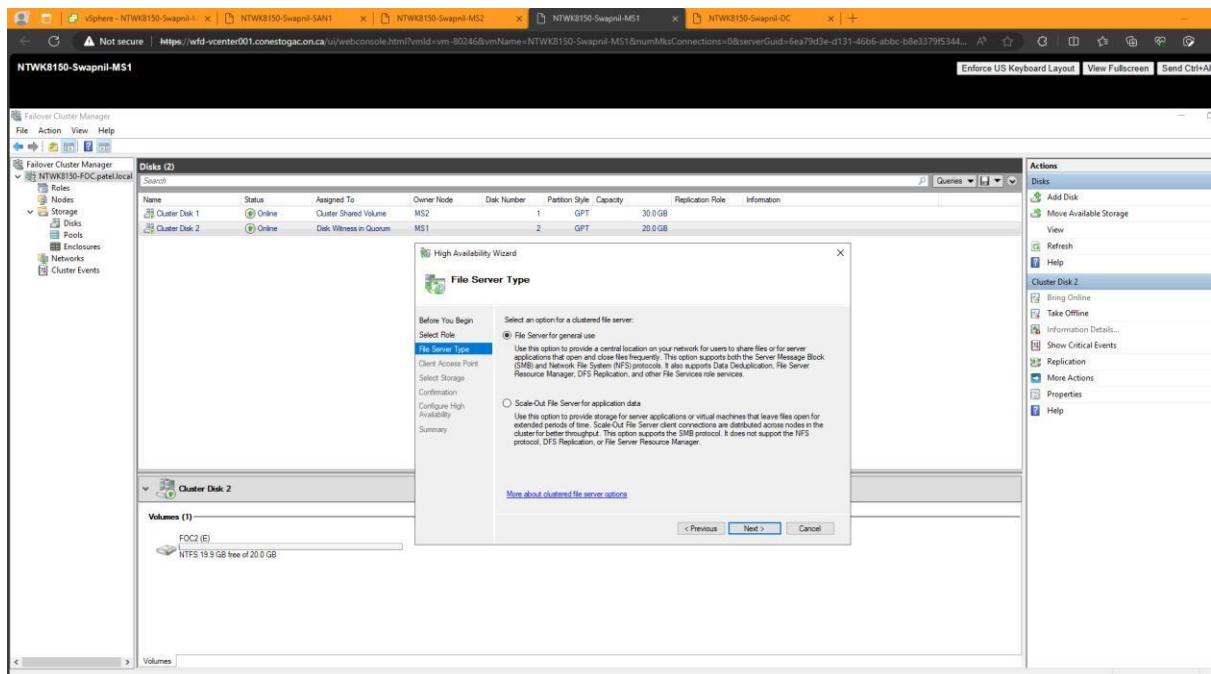
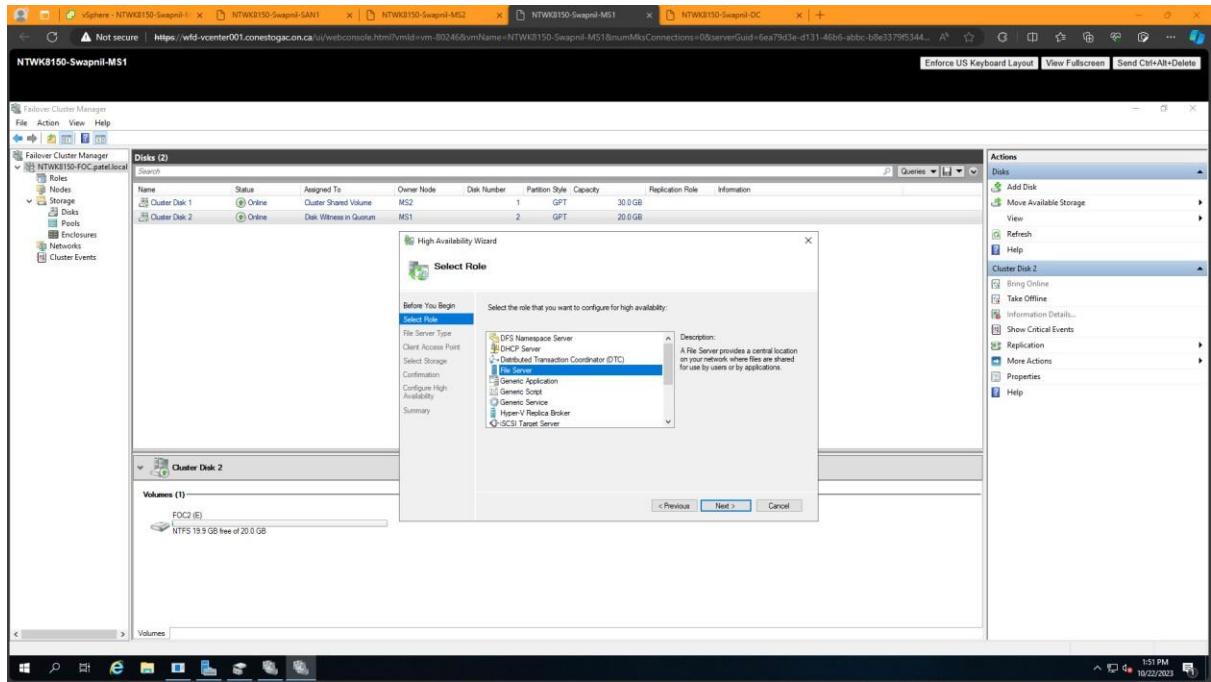
Testing File Server in Clustering

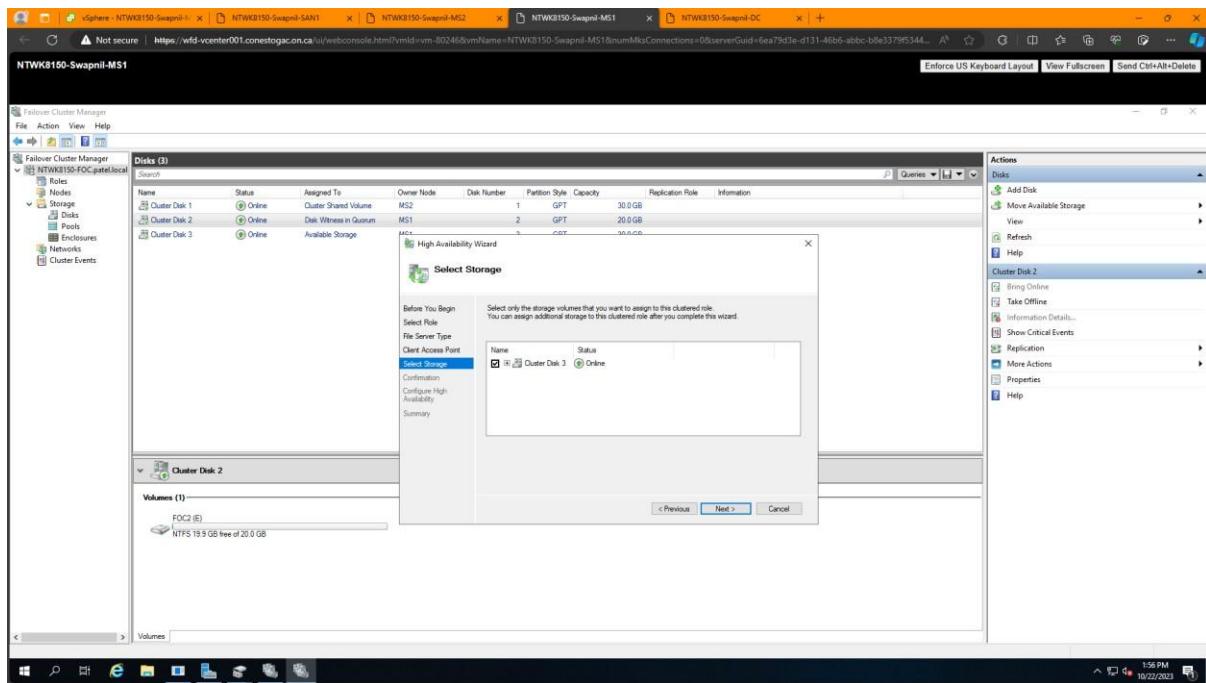
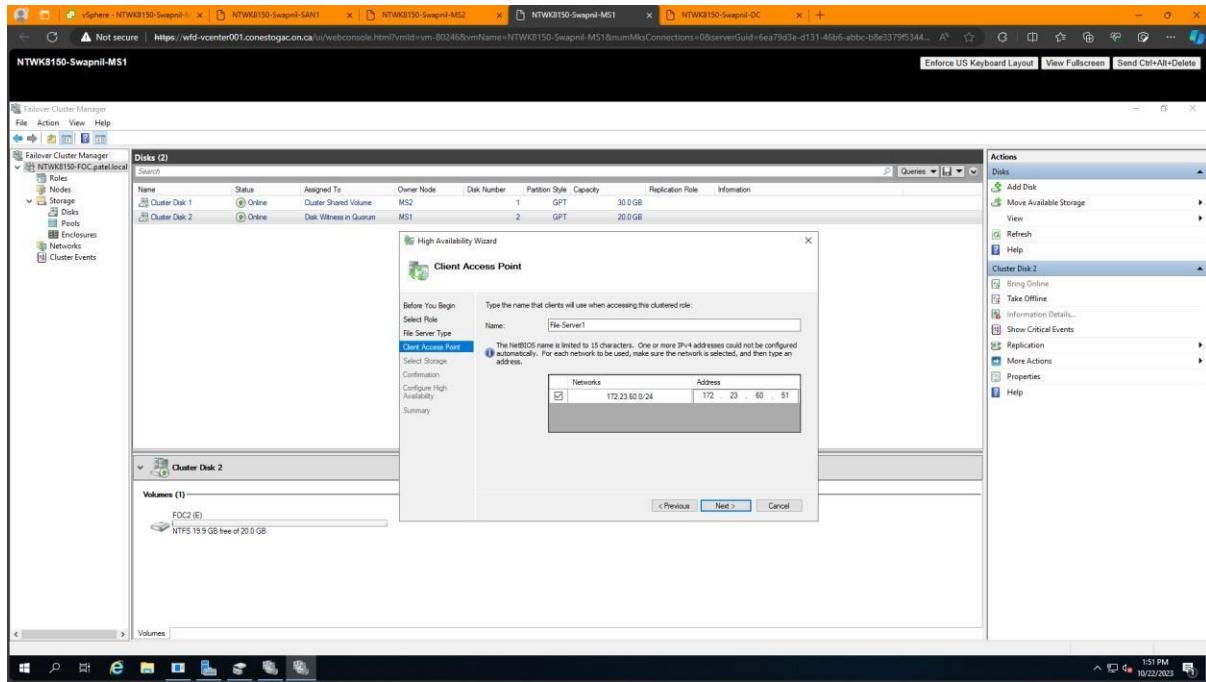
Adding file server in both the member servers

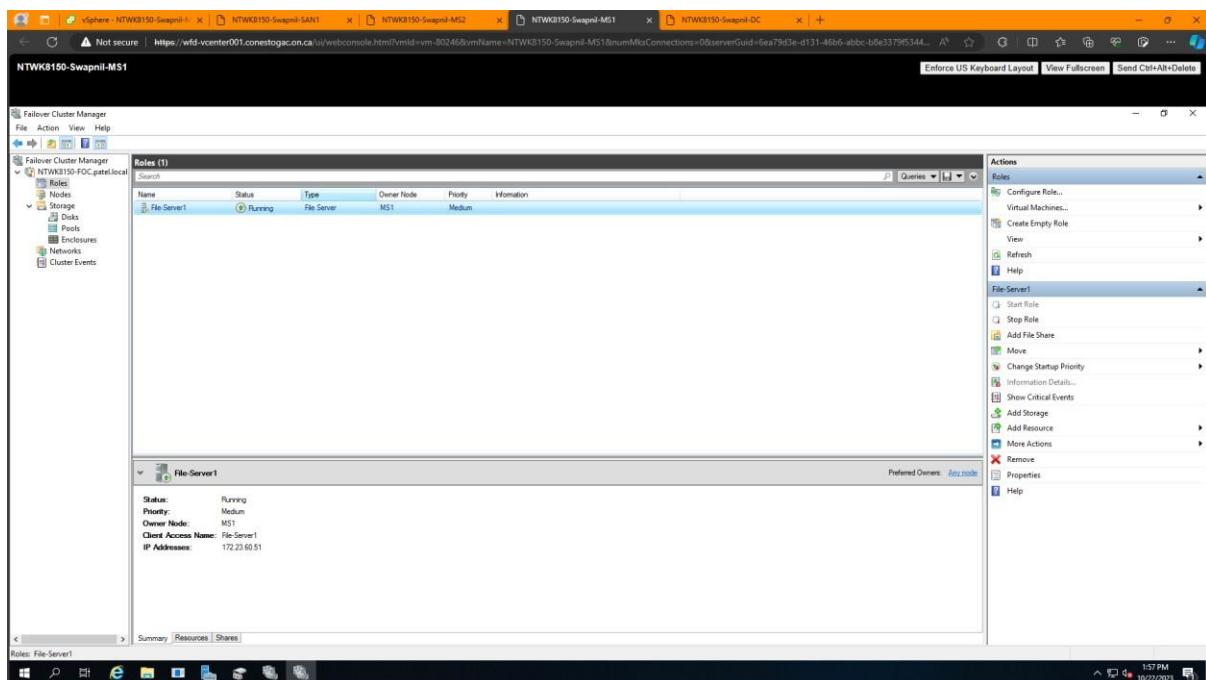
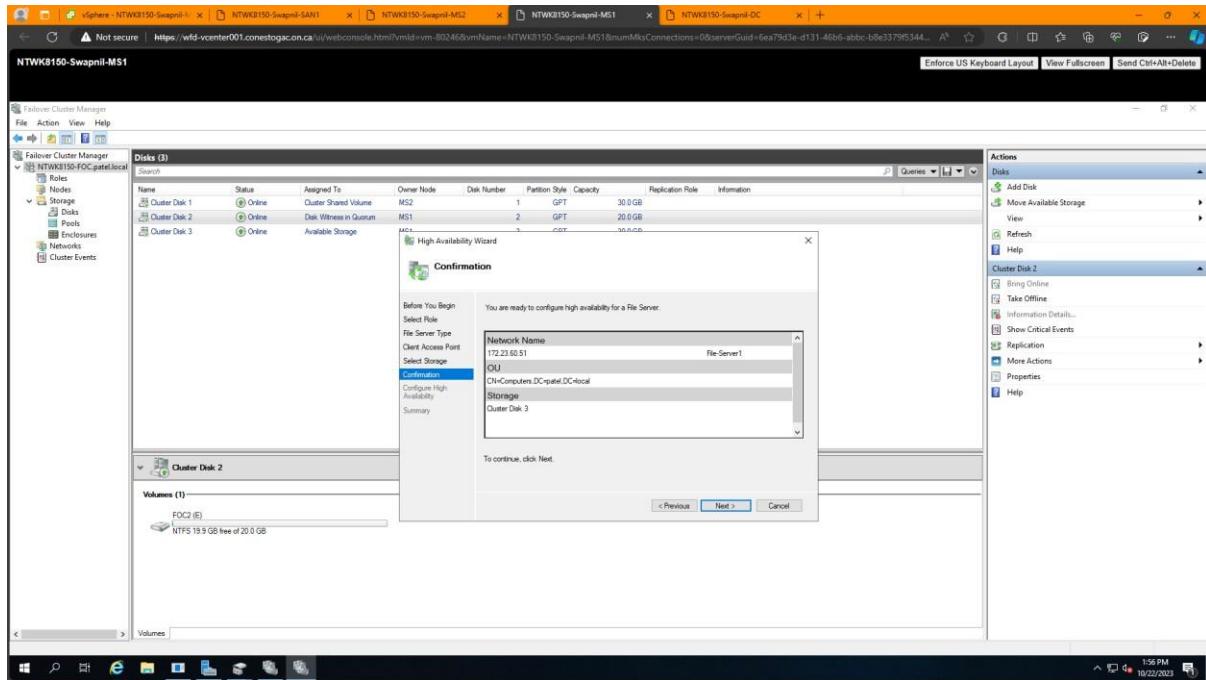


Adding files server in cluster

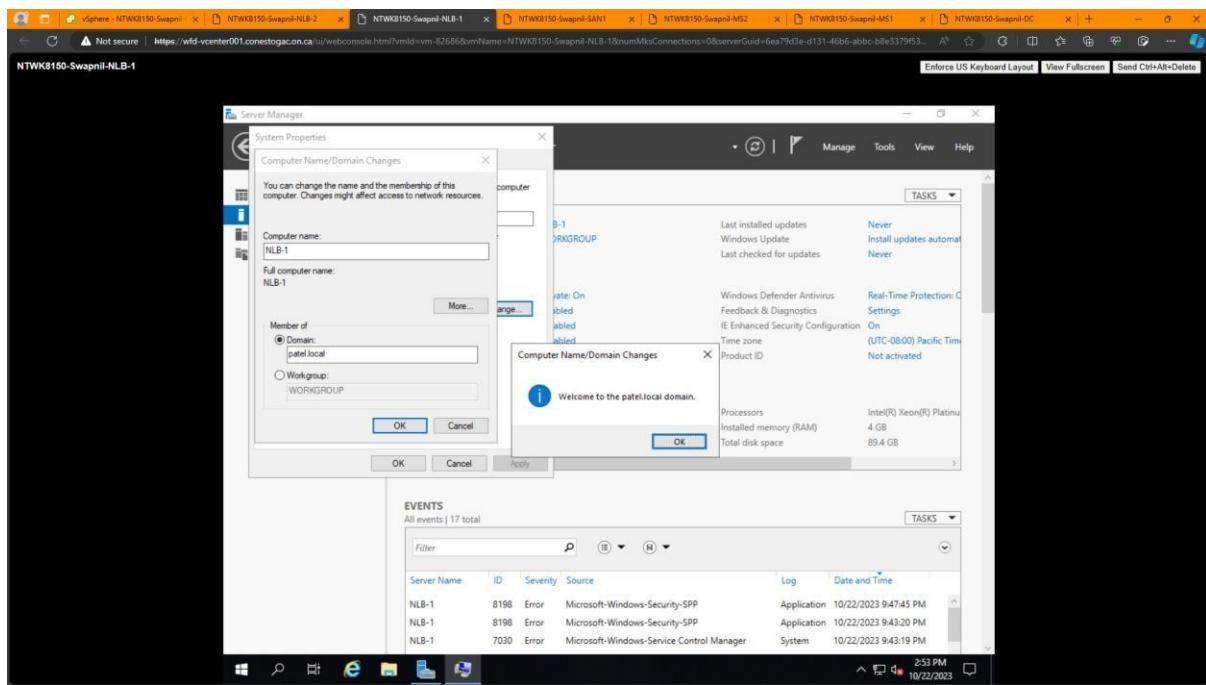
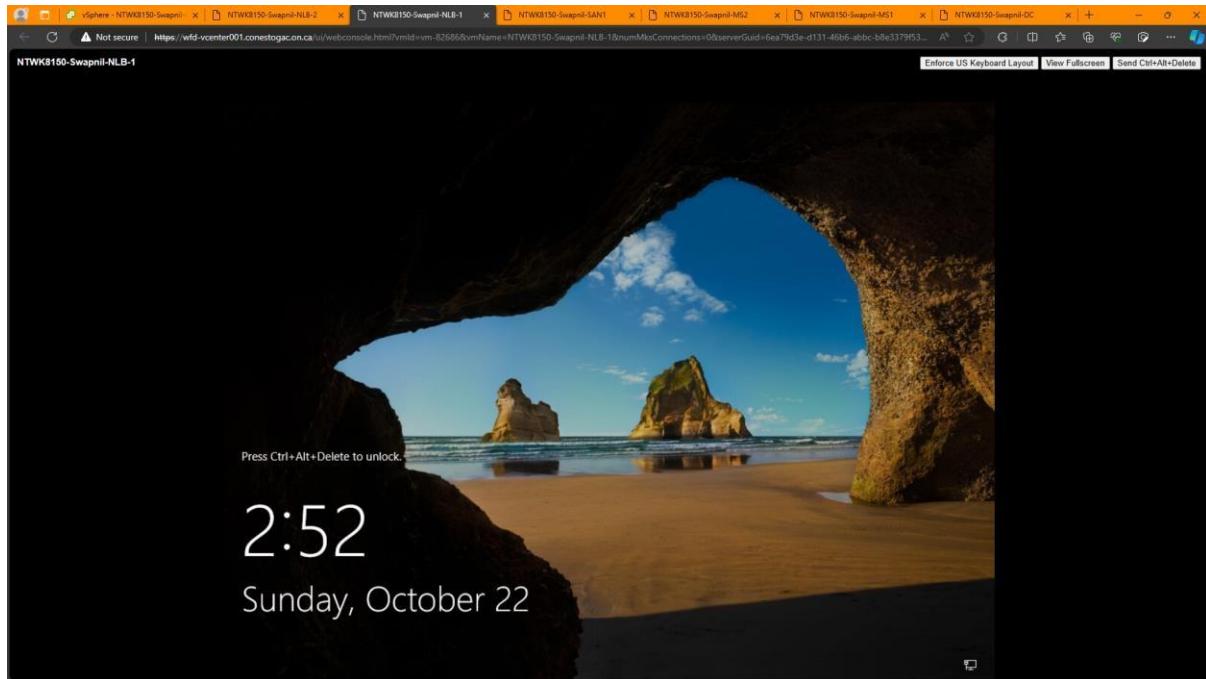


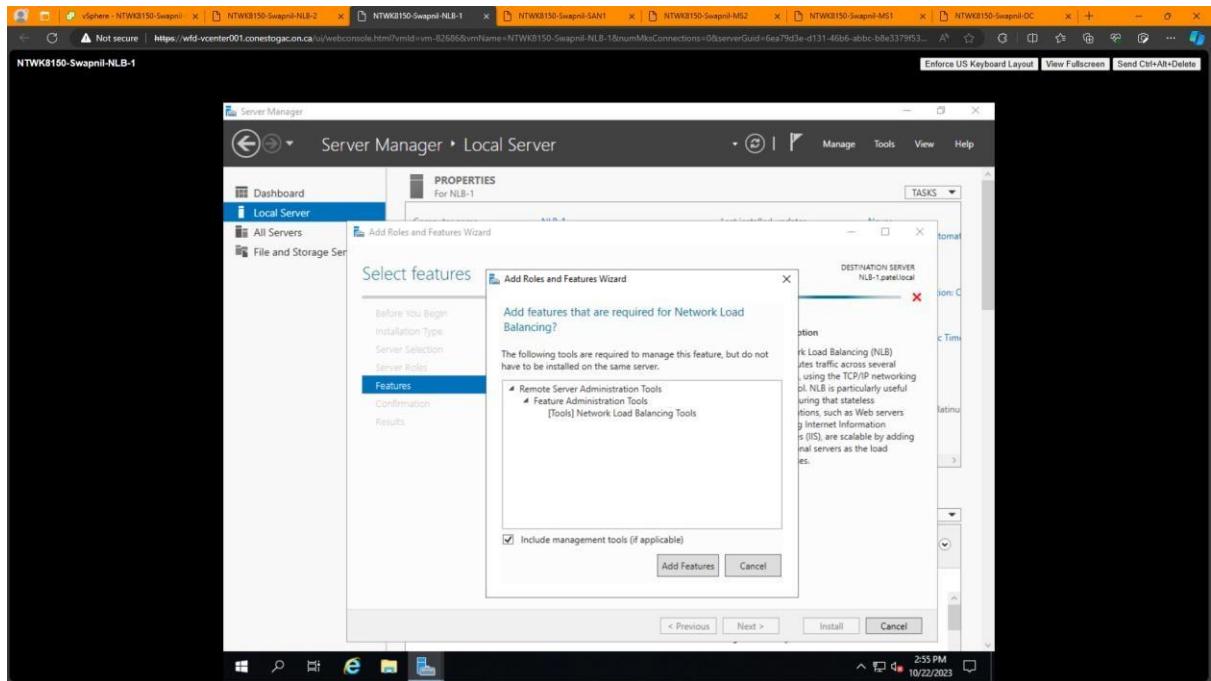
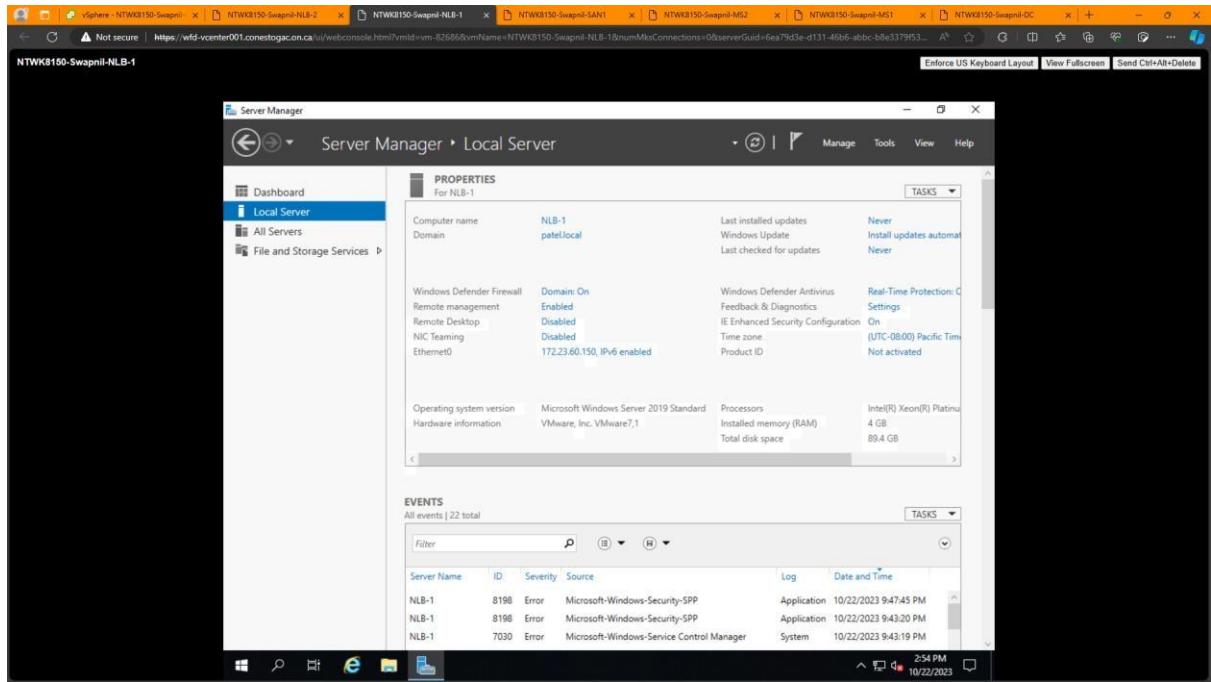


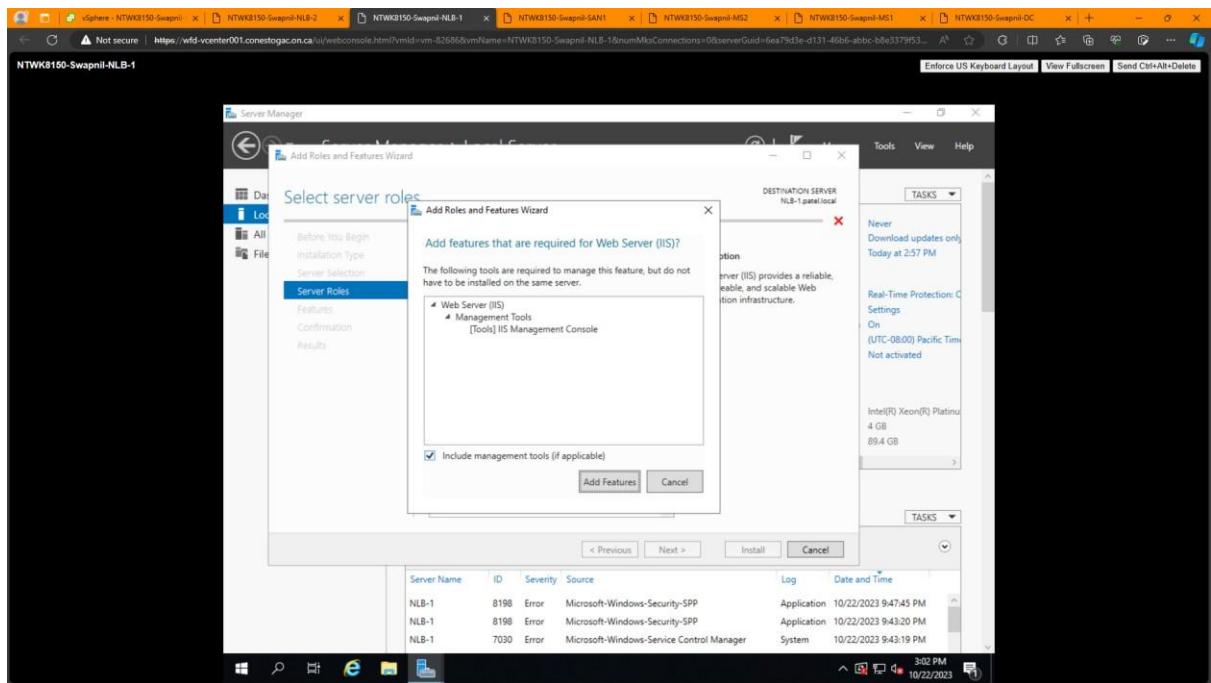
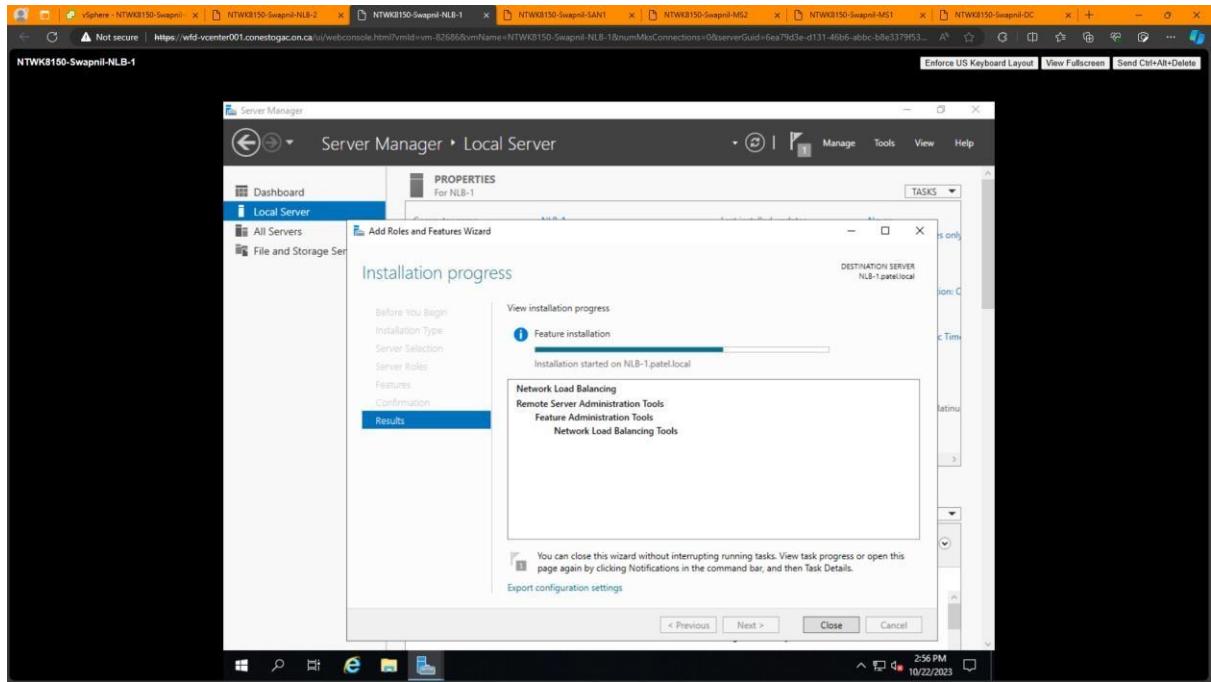


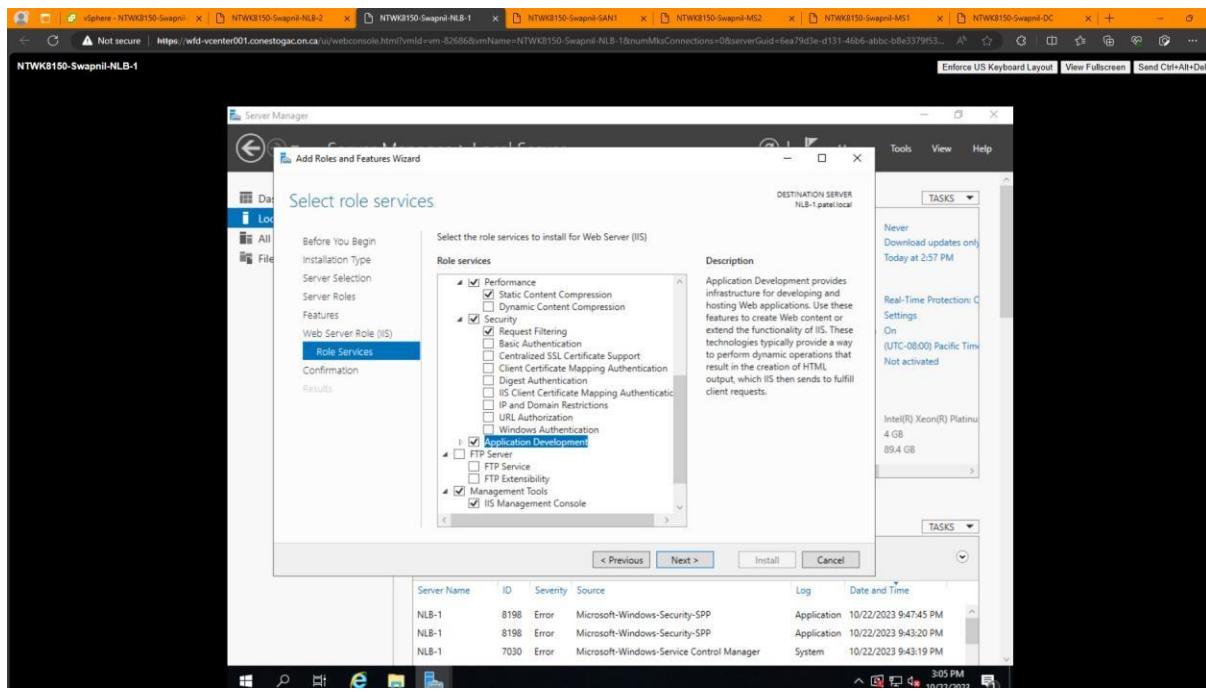


PART-2 Network Load Balancer

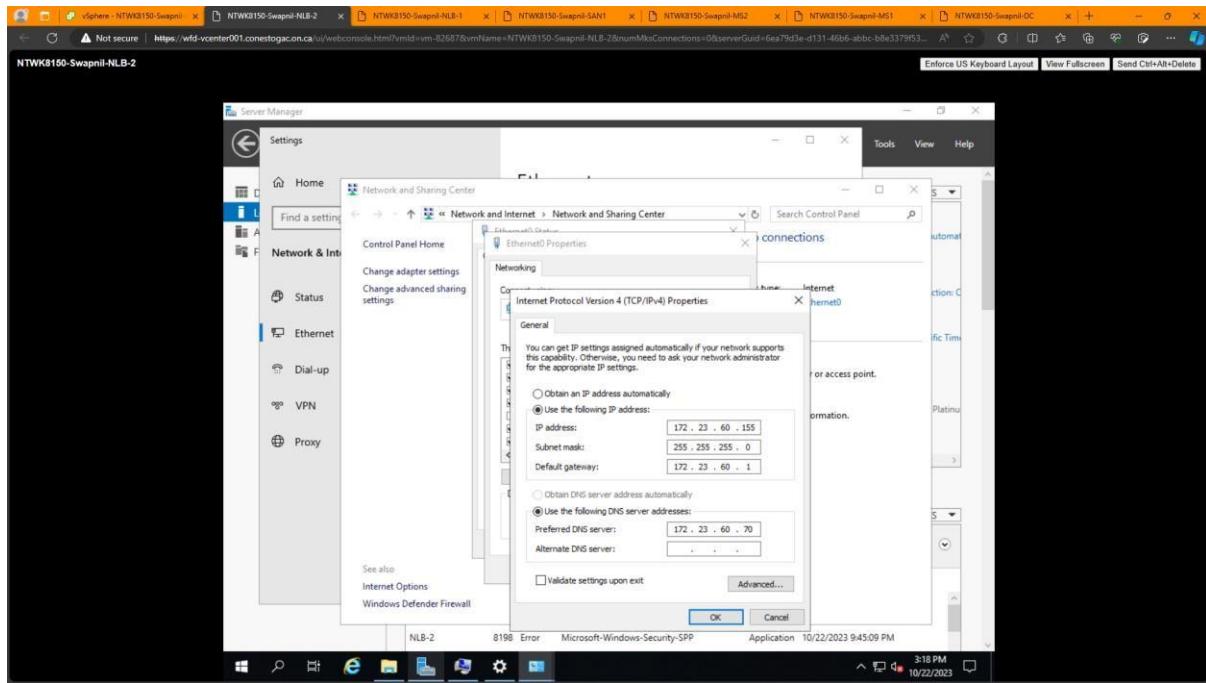


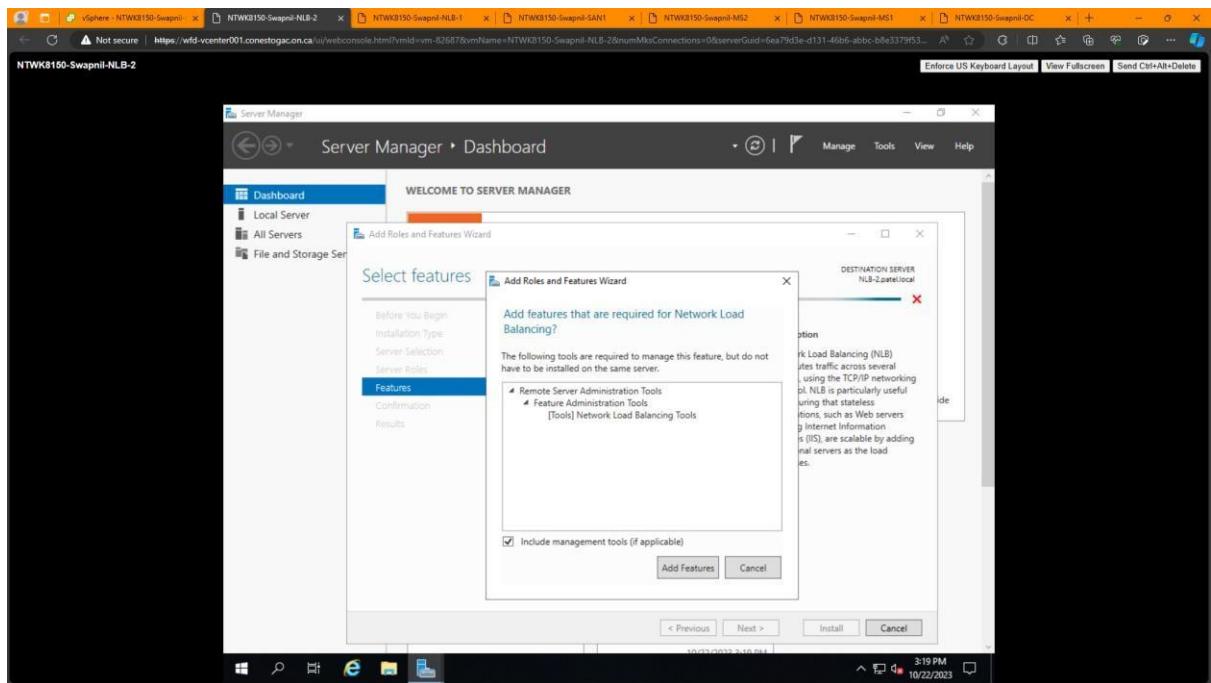
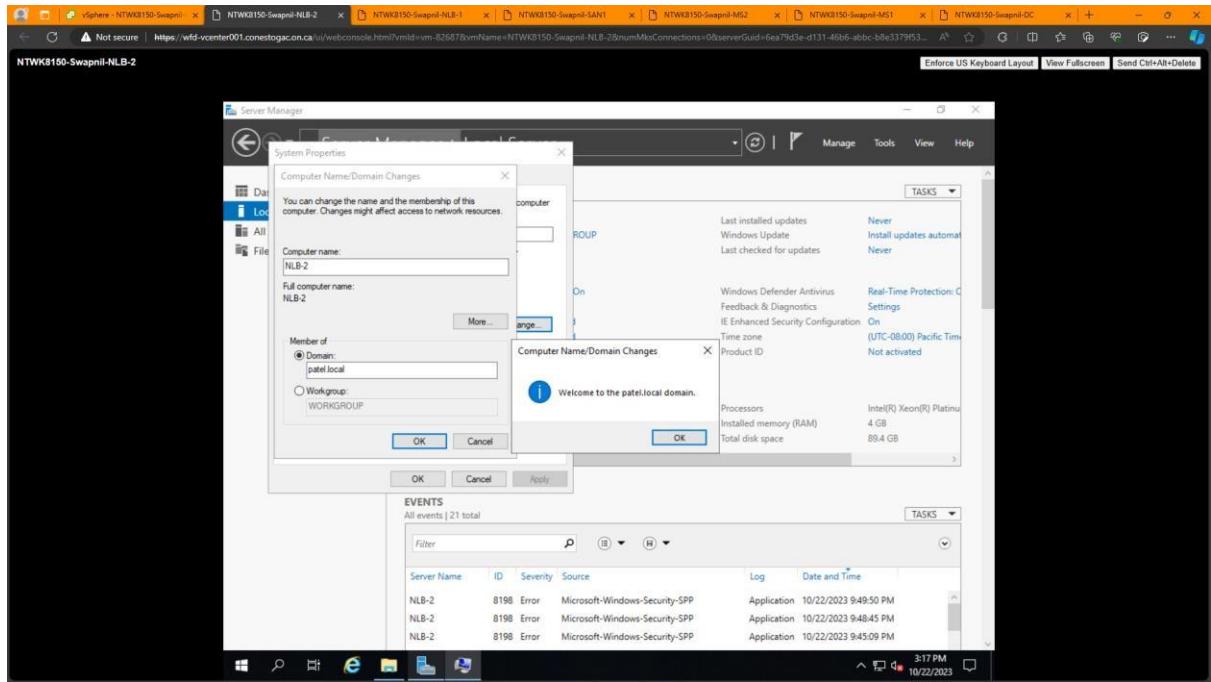


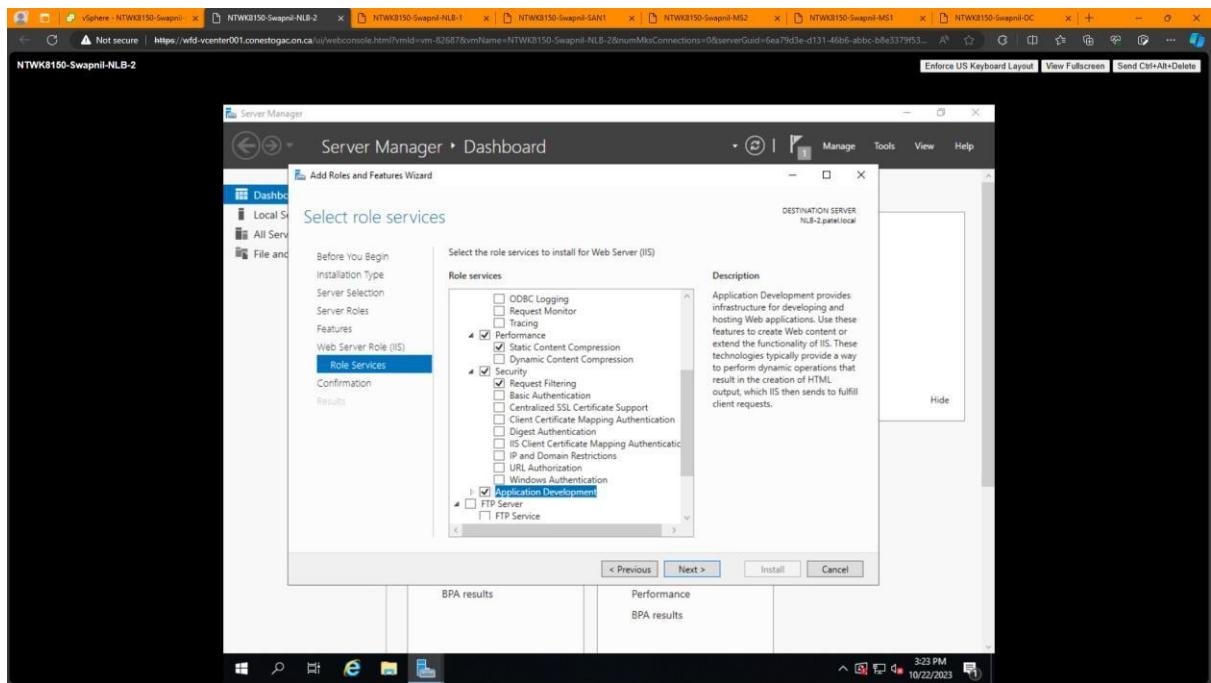
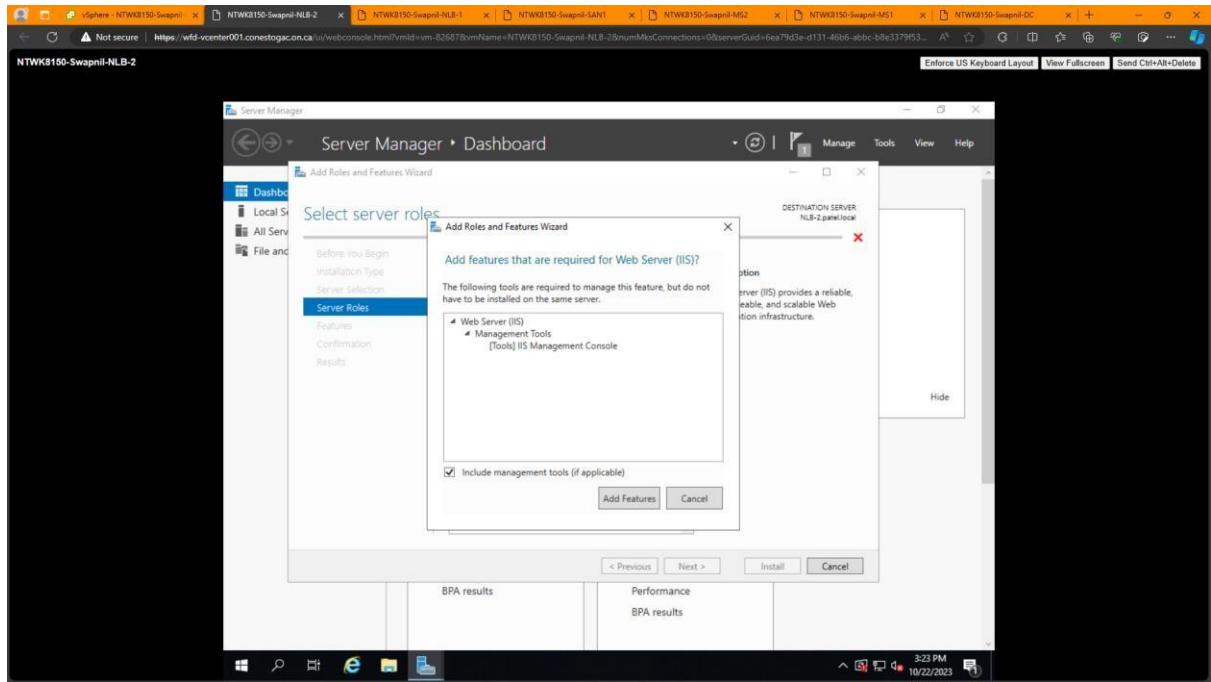


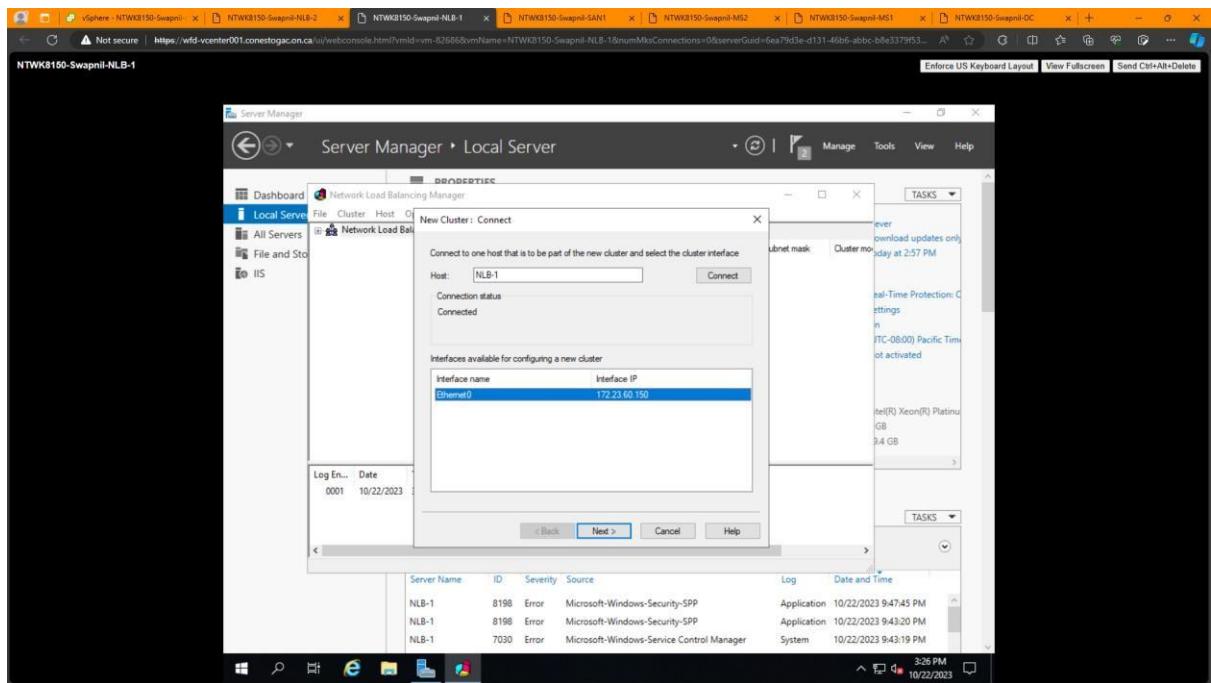
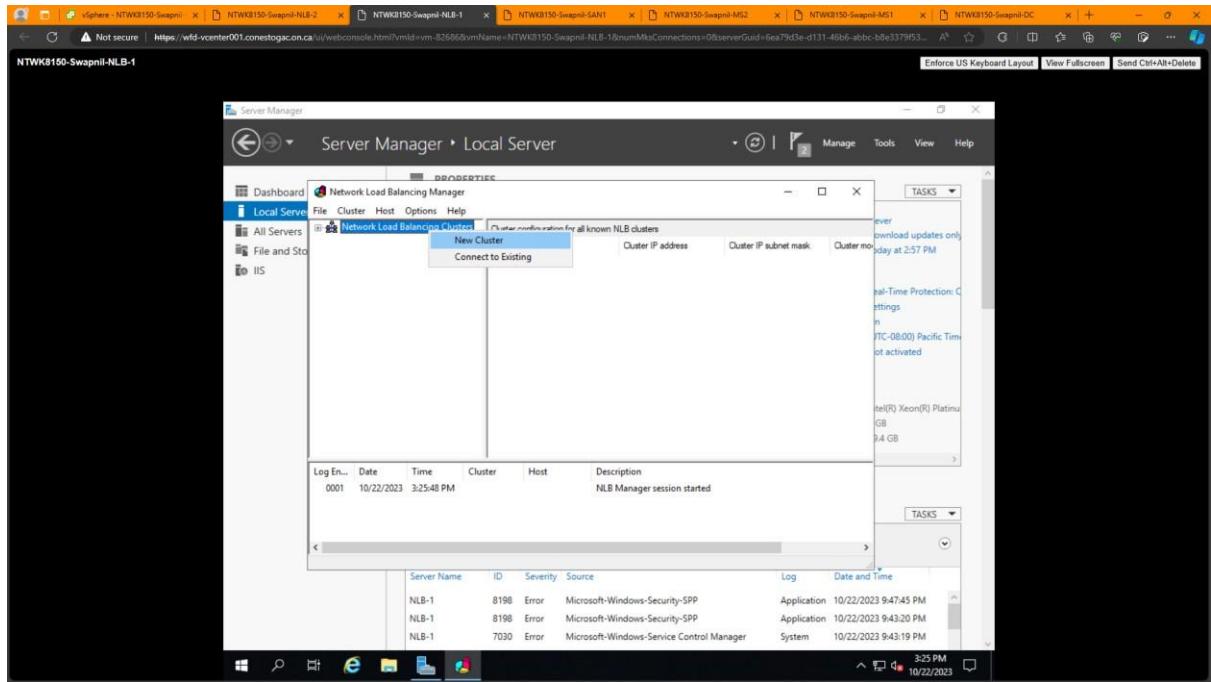


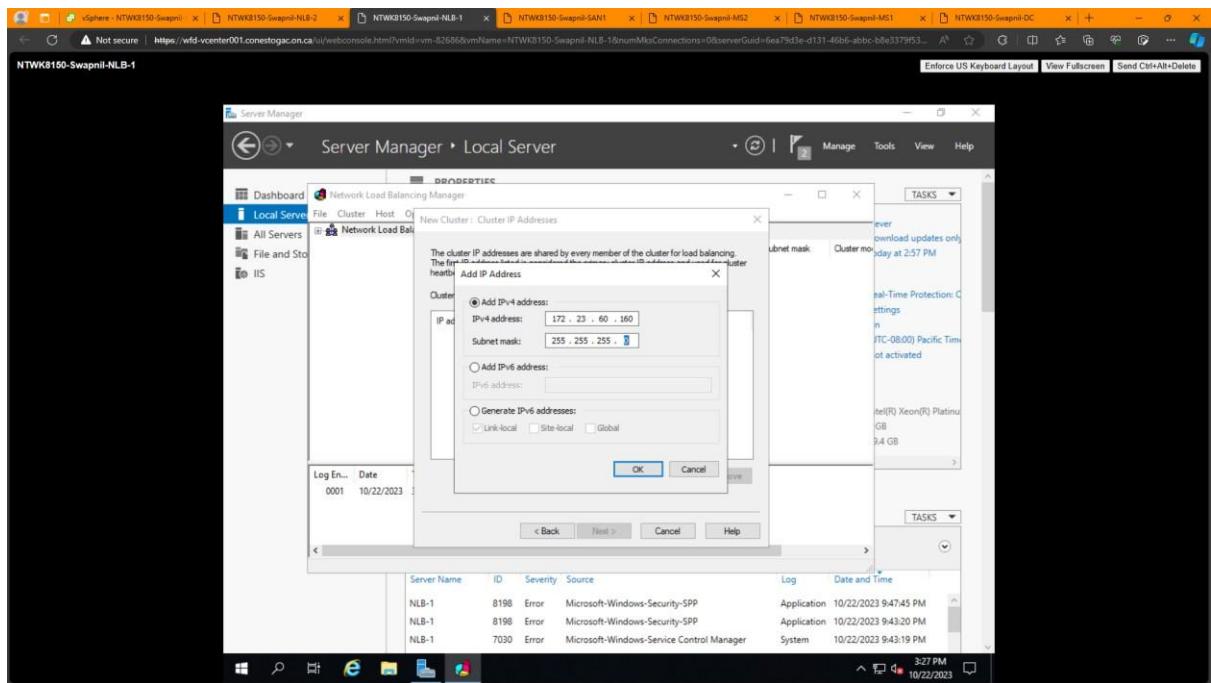
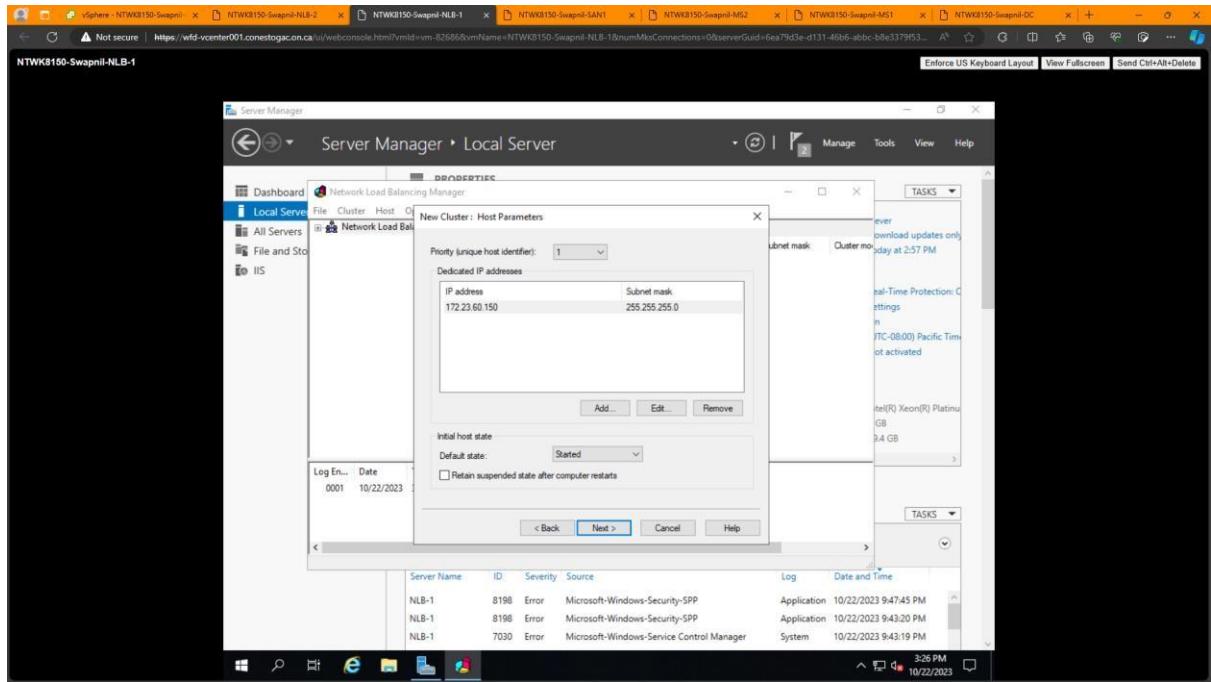
Setting Up NLB-2

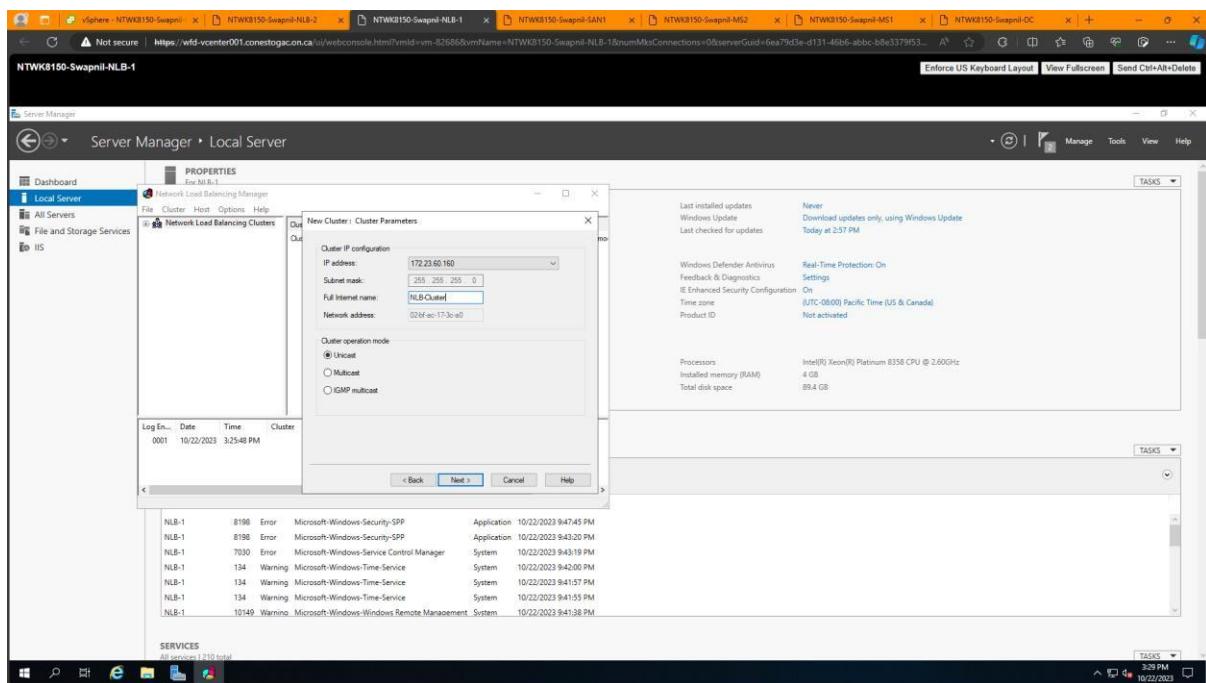
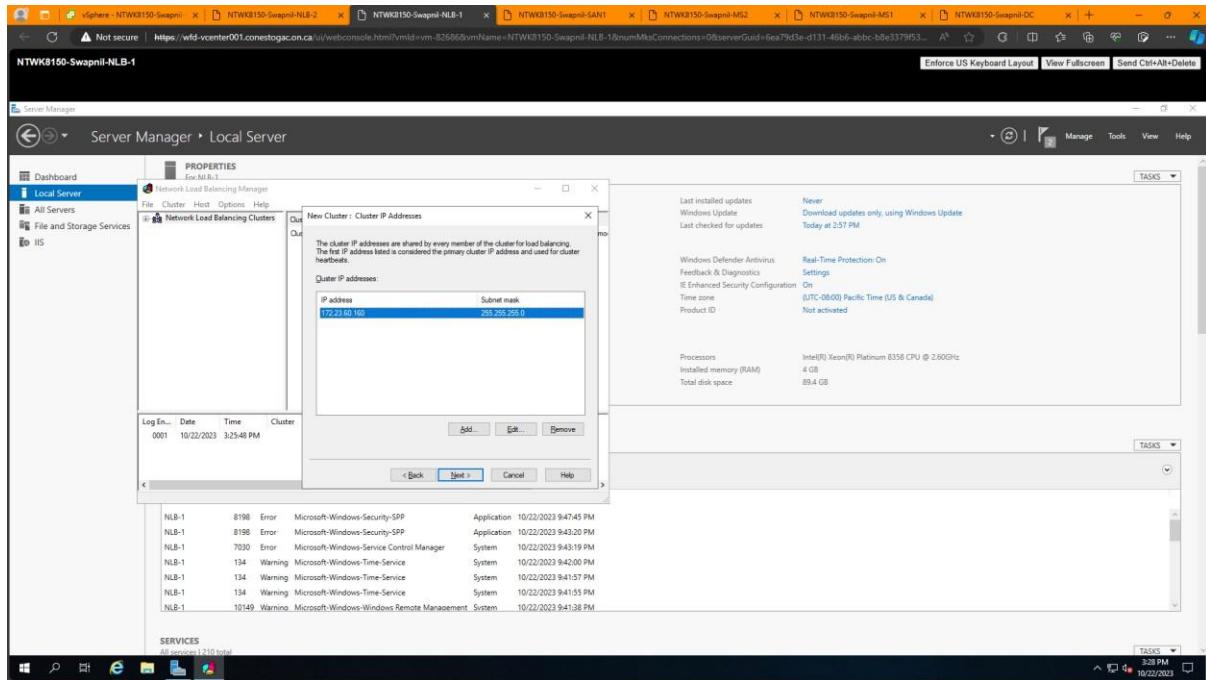












Screenshot of the Network Load Balancing Manager interface for the NLB-1 cluster.

Cluster Configuration:

Cluster name	Cluster IP address	Cluster IP subnet mask	Cluster mode
NLB-Outer	172.23.60.160	255.255.255.0	unicast

Log:

Log Entry	Date	Time	Cluster	Host	Description
0001	10/22/2023	3:35:48 PM	NLB-1		NLB Manager session started
0002	10/22/2023	3:36:37 PM	172.23.60.1...	NLB-1	Begin configuration change
0003	10/22/2023	3:36:37 PM	172.23.60.1...	NLB-1	Waiting for pending operation 2
0004	10/22/2023	3:36:47 PM	172.23.60.1...	NLB-1	Update 2 succeeded [double click for details...]
0005	10/22/2023	3:36:47 PM	172.23.60.1...	NLB-1	End configuration change

Host Configuration Information:

Host (interface)	Status	Dedicated IP address	Dedicated IP subnet mask	Host priority	Initial host state
NLB-1(Ethernet0)	Converged	172.23.60.160	255.255.255.0	1	started

Add Host to Cluster: Connect dialog box:

- Host: NLB-2
- Connection status: Connected
- Interfaces available for configuring the cluster:

Interface name	Interface IP
Ethernet0	172.23.60.160

Log:

Log Entry	Date	Time	Cluster	Host	Description
0001	10/22/2023	3:35:48 PM	NLB-1		NLB Manager session started
0002	10/22/2023	3:36:37 PM	172.23.60.1...	NLB-1	Begin configuration change
0003	10/22/2023	3:36:37 PM	172.23.60.1...	NLB-1	Waiting for pending operation 2
0004	10/22/2023	3:36:47 PM	172.23.60.1...	NLB-1	Update 2 succeeded [double click for details...]
0005	10/22/2023	3:36:47 PM	172.23.60.1...	NLB-1	End configuration change

Network Load Balancing Manager

File Cluster Host Options Help

Network Load Balancing Clusters

- NLB-Cluster (172.23.60.160)
 - NLB-1(Ethernet0)

Host configuration information for hosts in cluster NLB-Cluster (172.23.60.160)

Host Interface	Status	Dedicated IP address	Dedicated IP subnet mask	Host priority	Initial host state
NLB-1(Ethernet0)	Converged	172.23.60.150	255.255.255.0	1	started

Add Host to Cluster : Host Parameters

Priority (unique host identifier): 2

Dedicated IP addresses

IP address	Subnet mask
172.23.60.155	255.255.255.0

Add... Edit... Remove

Initial host state

Default state: Started

Retain suspended state after computer restarts

< Back Next > Cancel Help

Log Entry Date Time Cluster Host Description

- 0001 10/22/2023 3:29:47 PM NLB-1 NLB Manager session started
- 0002 10/22/2023 3:29:37 PM NLB-1 Begin configuration change
- 0003 10/22/2023 3:29:37 PM NLB-1 Waiting for pending operation 2
- 0004 10/22/2023 3:29:47 PM NLB-1 Update 2 succeeded [double click for details...]
- 0005 10/22/2023 3:29:47 PM NLB-1 End configuration change

3:30 PM 10/22/2023

Network Load Balancing Manager

File Cluster Host Options Help

Network Load Balancing Clusters

- NLB-Cluster (172.23.60.160)
 - NLB-1(Ethernet0)
 - NLB-2(Ethernet0)

Host configuration information for hosts in cluster NLB-Cluster (172.23.60.160)

Host Interface	Status	Dedicated IP address	Dedicated IP subnet mask	Host priority	Initial host state
NLB-1(Ethernet0)	Converged	172.23.60.150	255.255.255.0	1	started
NLB-2(Ethernet0)	Converged	172.23.60.155	255.255.255.0	2	started

Log Entry Date Time Cluster Host Description

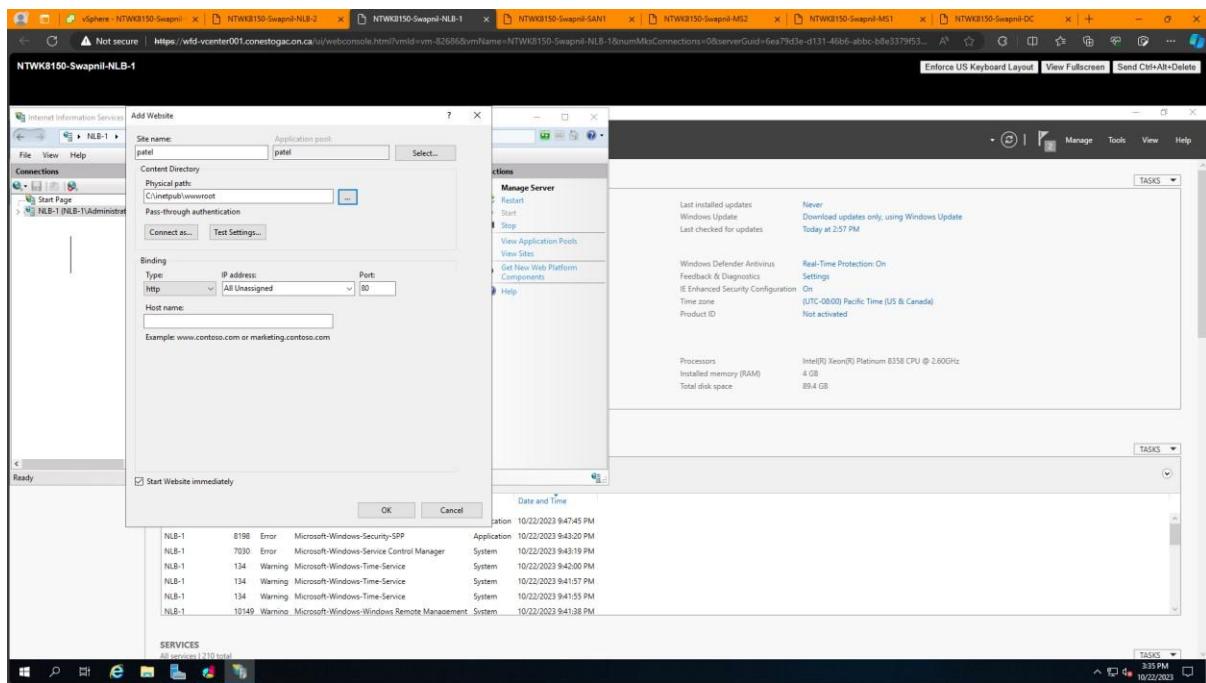
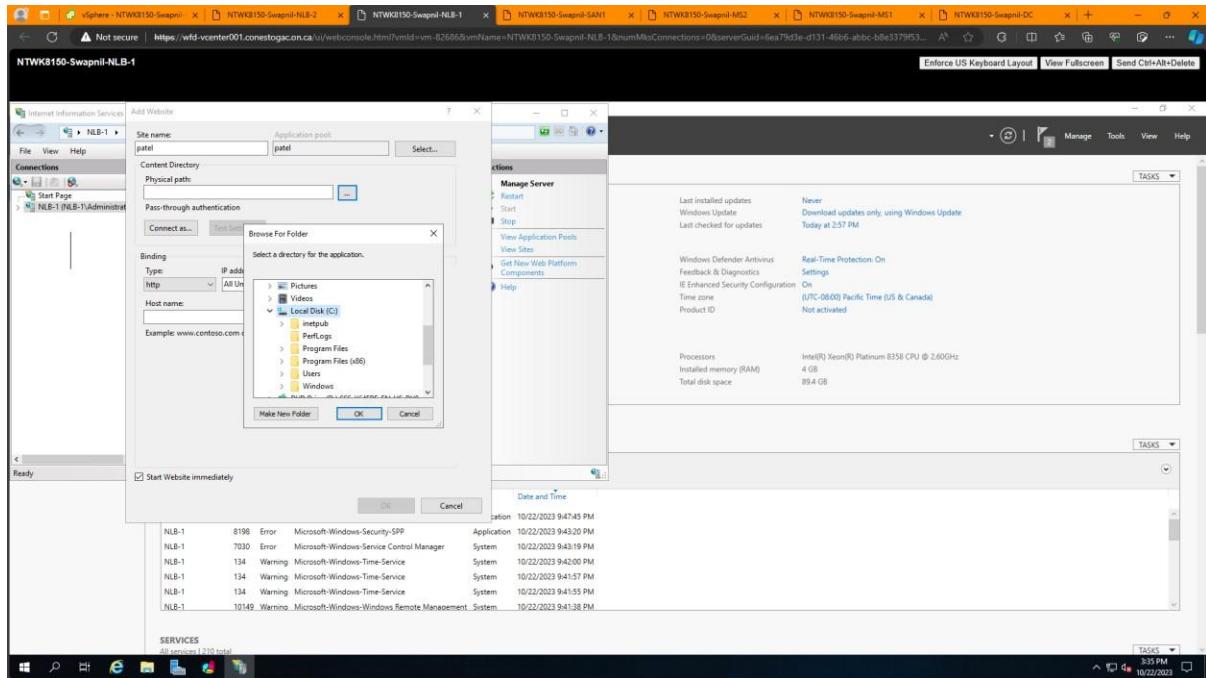
- 0001 10/22/2023 3:29:48 PM NLB Manager session started
- 0002 10/22/2023 3:29:37 PM NLB-1 Begin configuration change
- 0003 10/22/2023 3:29:37 PM NLB-1 Waiting for pending operation 2
- 0004 10/22/2023 3:29:47 PM NLB-1 Update 2 succeeded [double click for details...]
- 0005 10/22/2023 3:29:47 PM NLB-1 End configuration change
- 0006 10/22/2023 3:31:01 PM NLB-2 Begin configuration change
- 0007 10/22/2023 3:31:01 PM NLB-2 Waiting for pending operation 2
- 0008 10/22/2023 3:32:40 PM NLB-2 Update 2 succeeded [double click for details...]
- 0009 10/22/2023 3:32:40 PM NLB-2 End configuration change

3:30 PM 10/22/2023

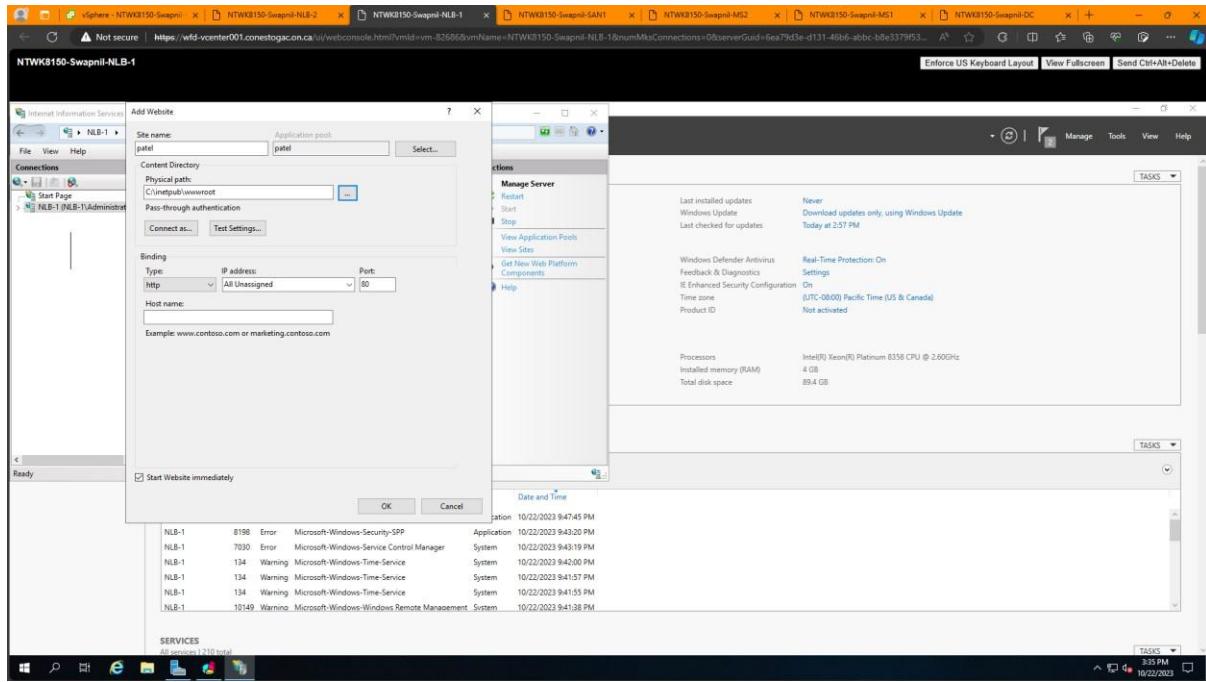
Adding website in the load balancing system

The screenshot shows the Windows Server Manager interface. The left sidebar has 'Local Server' selected under 'All Servers'. The main area displays the 'PROPERTIES' tab for 'NLB-1'. In the 'Connections' pane on the left, 'Add Website...' is highlighted. The right pane shows various server management tools like Component Services, Computer Management, and Event Viewer.

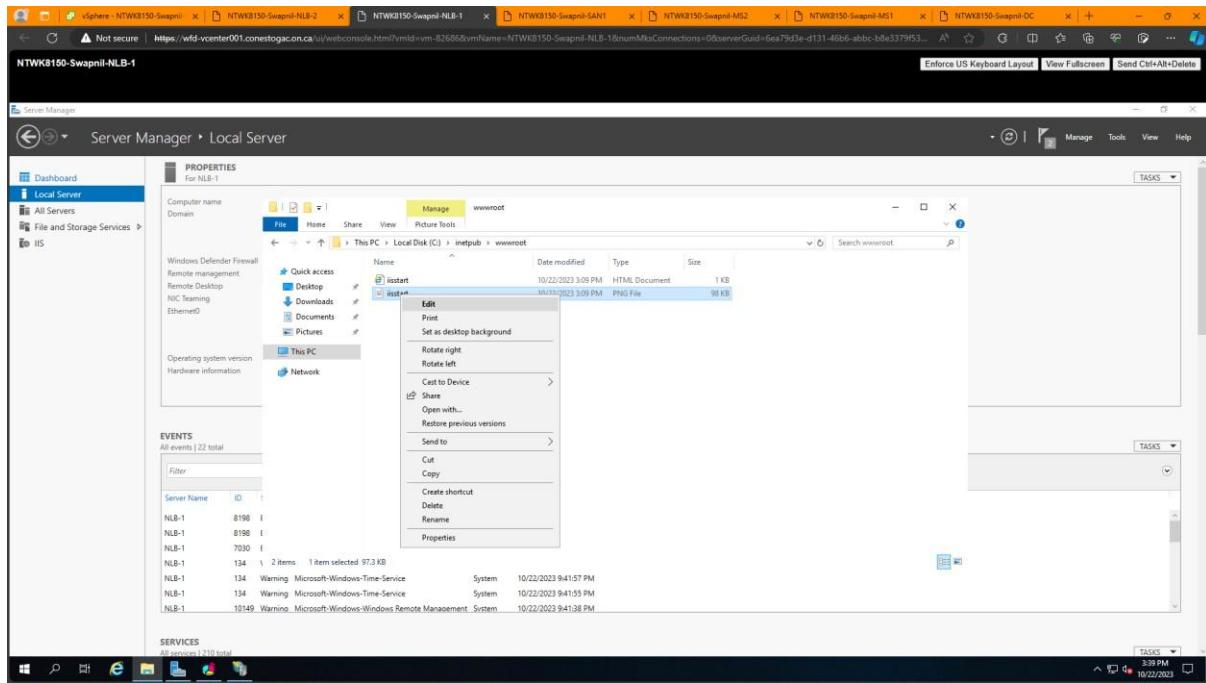
The screenshot shows the IIS Manager interface. The left sidebar has 'NLB-1' selected. The main area shows the 'NLB-1 Home' node. A context menu is open over the node, with 'Add Website...' highlighted. The right pane displays server properties and event logs.

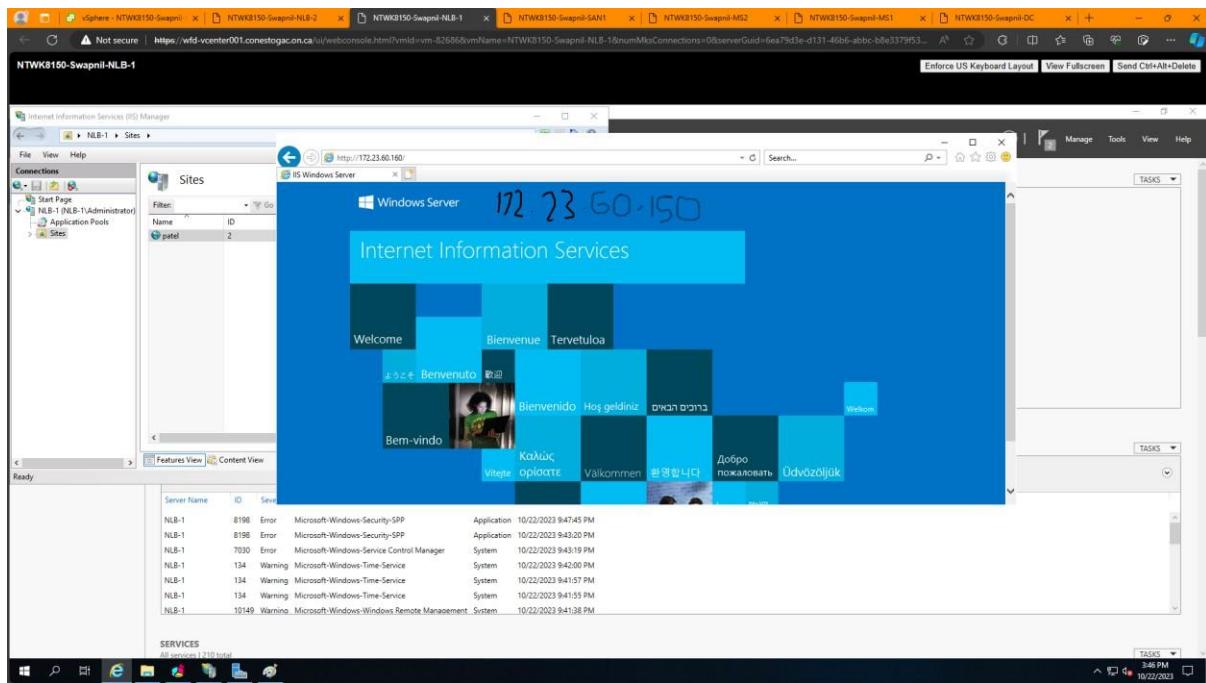
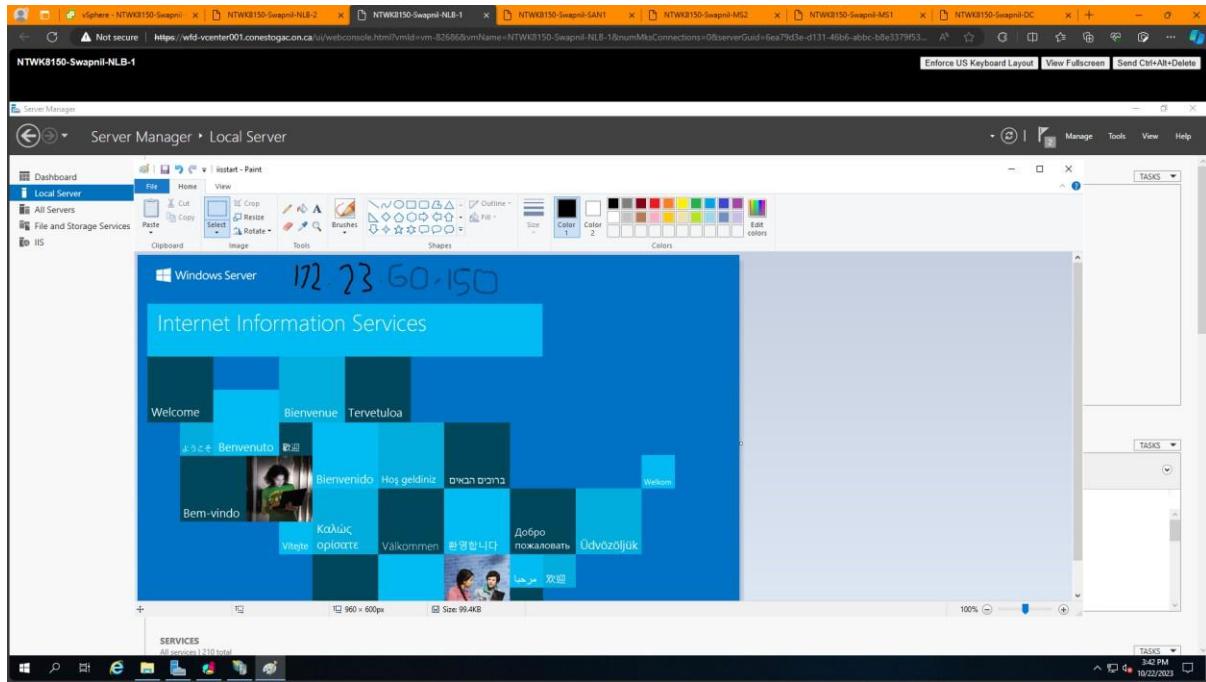


Website created successfully.

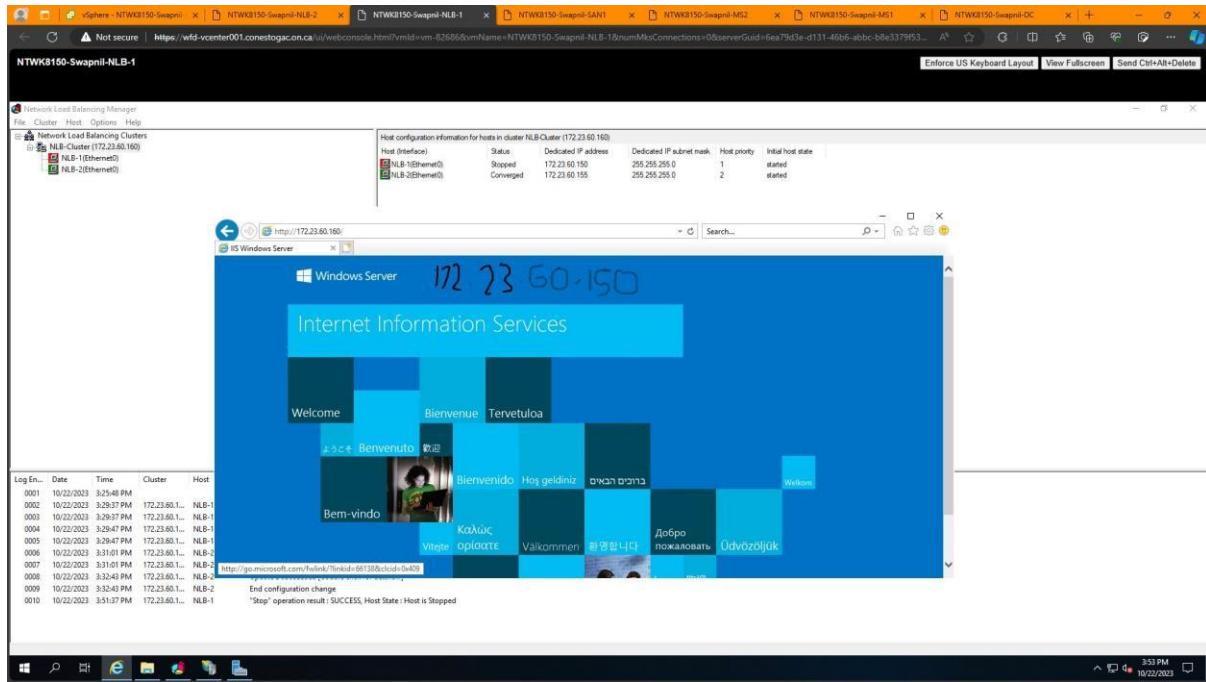


Editing the root webpage:

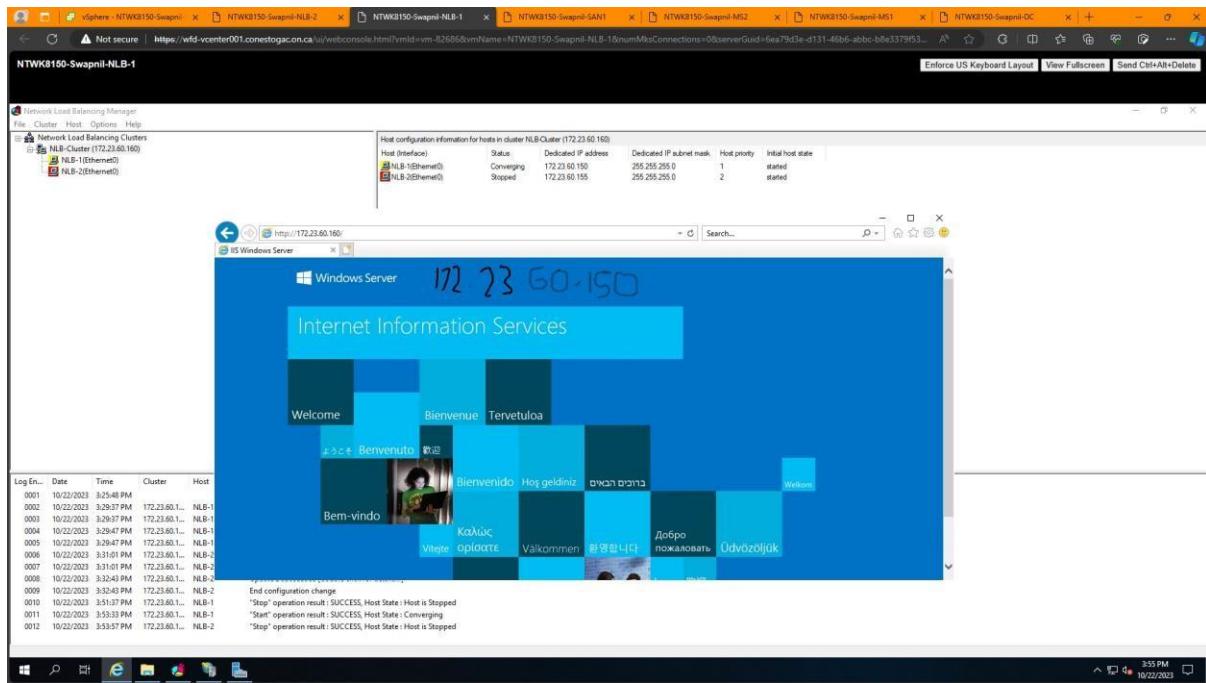




Using only one of the NLB and stopping the other one



NLB-1 Stopped, NLB-2 Running



NLB-1 Running, NLB-2 Stopped.

The website can run even though one of the NLB is stopped.