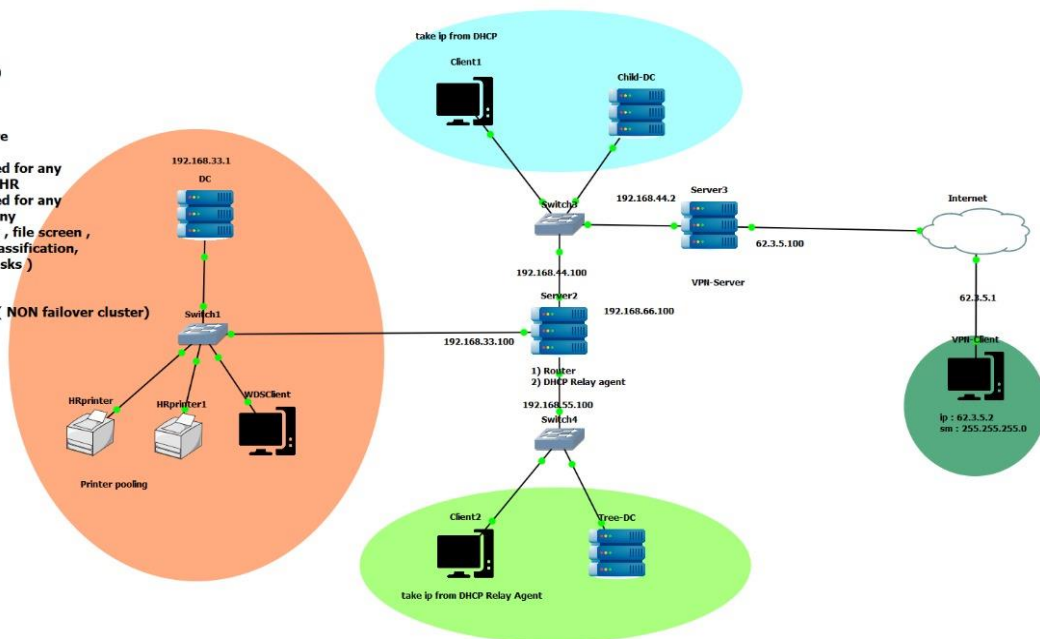




Windows Server® 2016

- 1) DC (Company.org)
- 2) DNS
- 3) DHCP
- 4) NPS (AAA)
- 5) private folder share for each use
- 6) public folder shared for any user at the group HR
- 7) Public folder shared for any user at the company
- 8) FSRM role (Quota , file screen , storage reports , classification, file management tasks)
- 9) WDS Server
- 10) printer admin
- 11) High Availability (NON failover cluster)



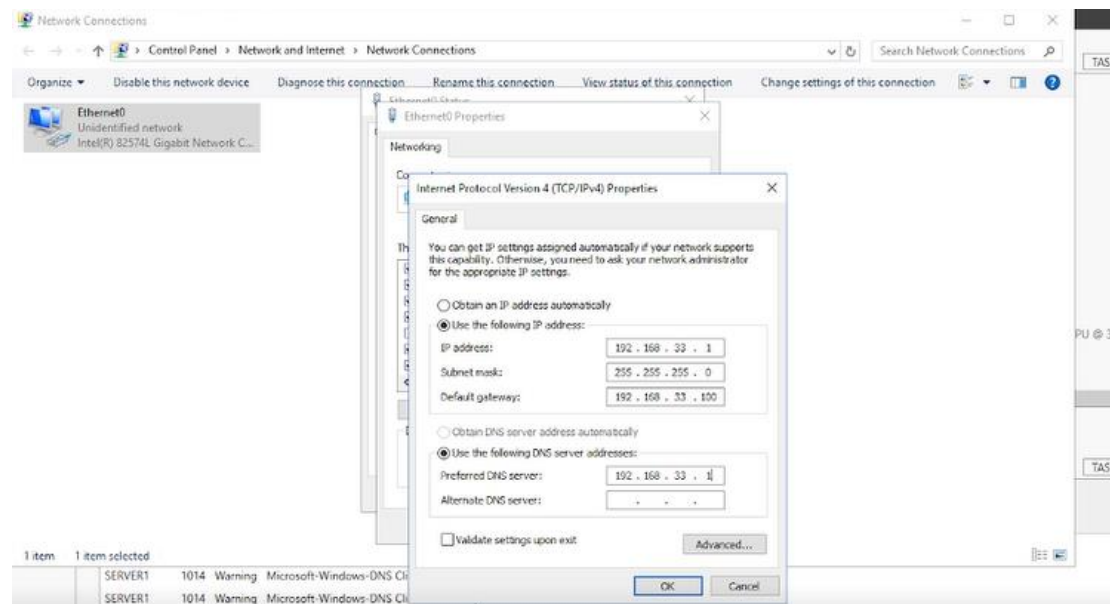
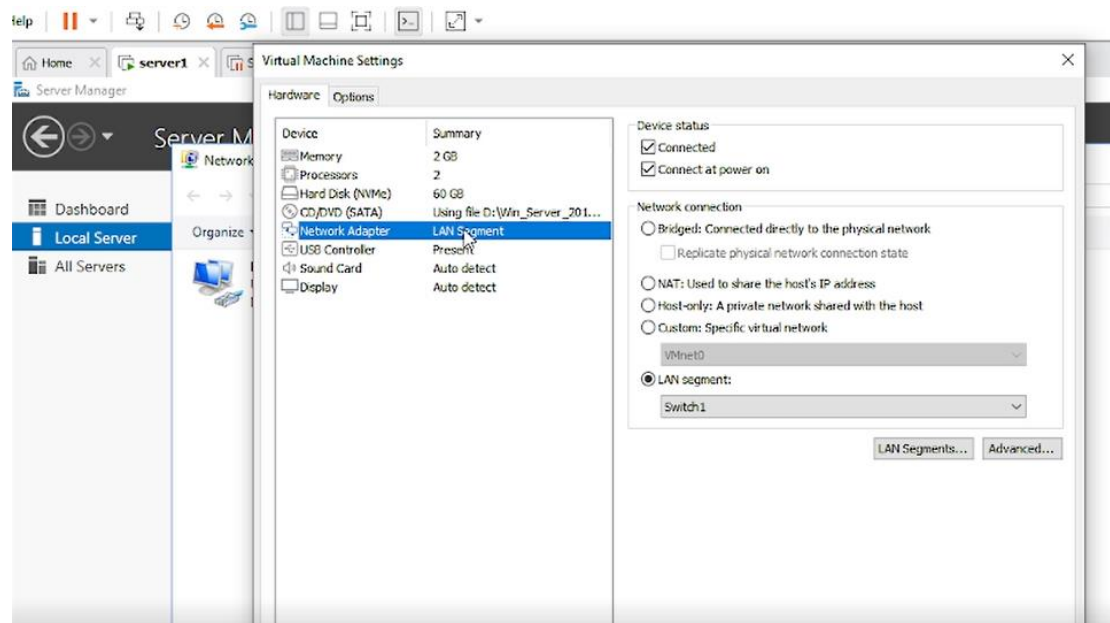
The lab covers most of the topics I studied in the Windows Server course.

At National Telecommunication Institute (NTI) 4 Months

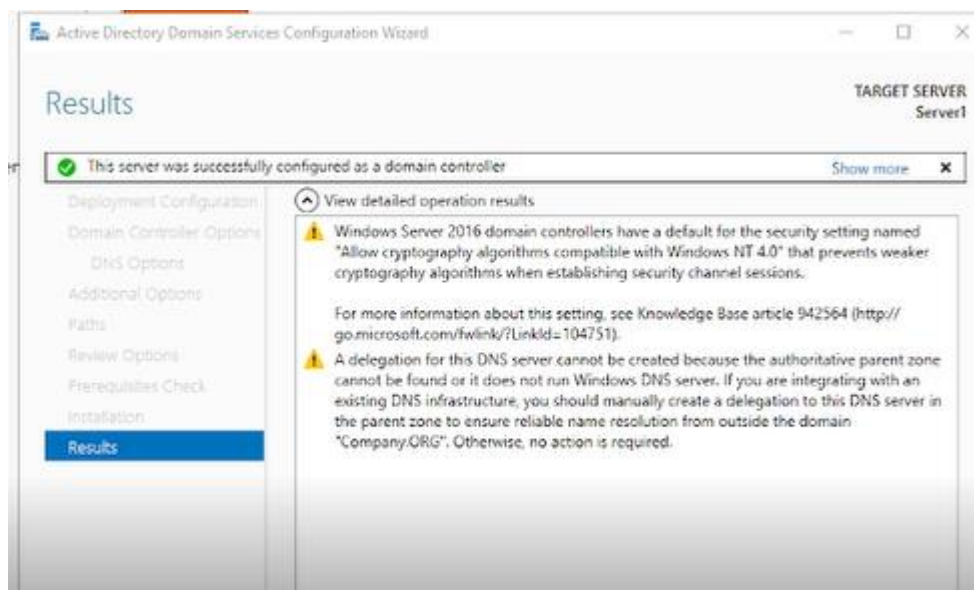
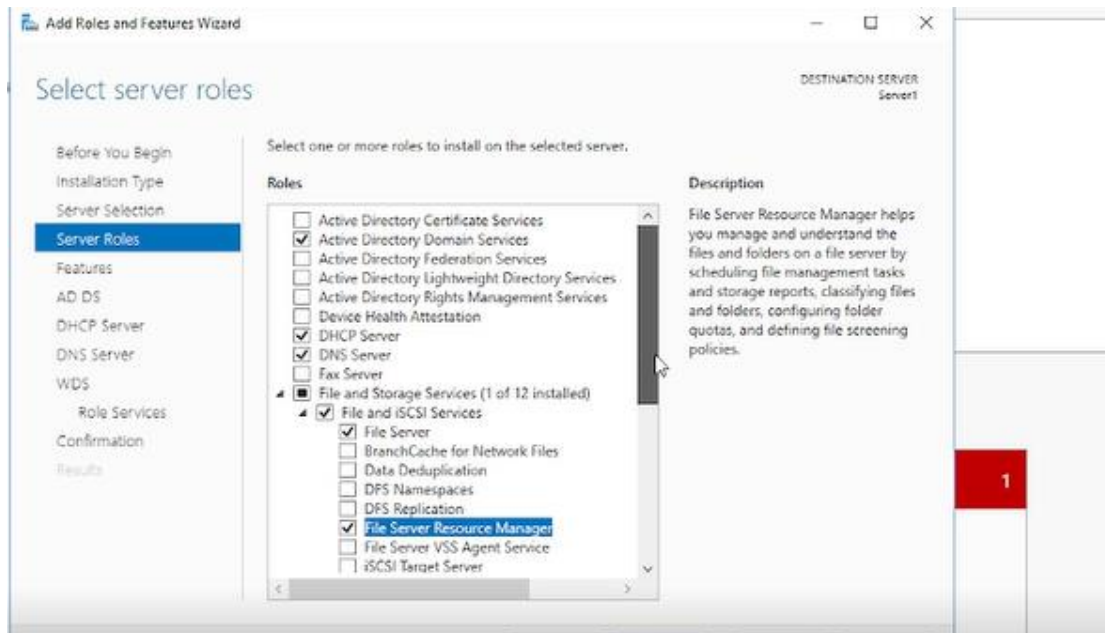
By : Rawda Gamal Marei

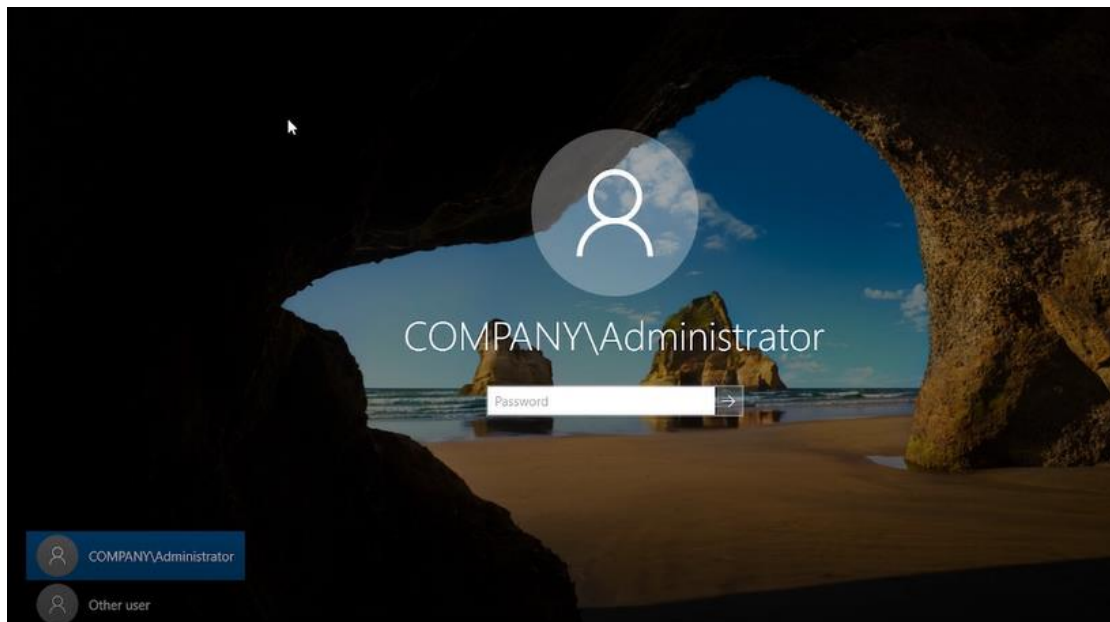
Guided by Eng. Khaled Yehia Marzok

Server1 (DC)

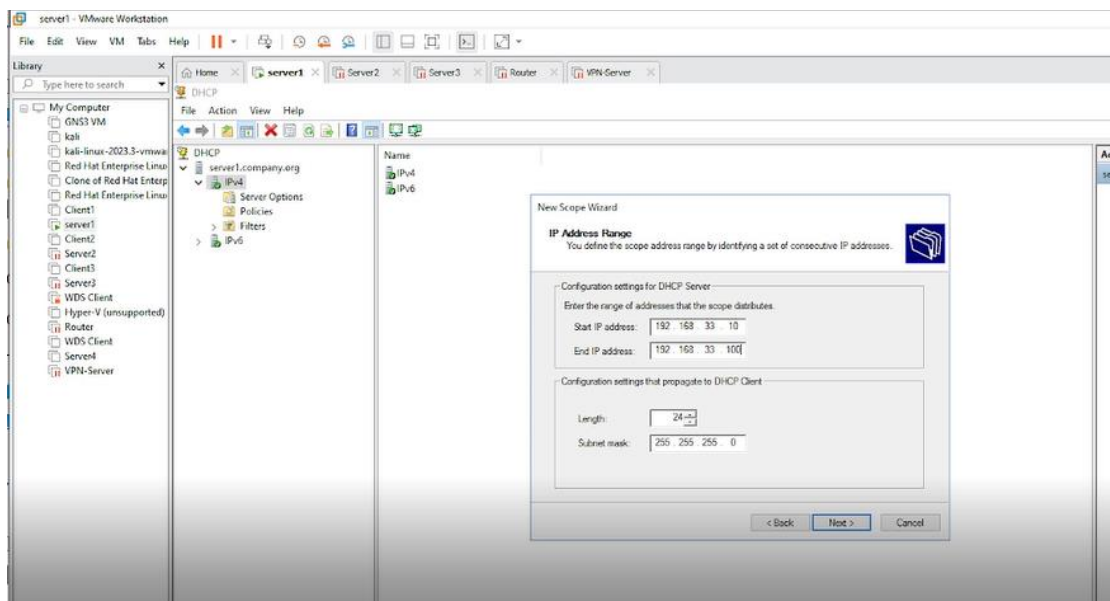


Install (AD DS , DHCP , DNS ,FSRM , NPS , WDS)

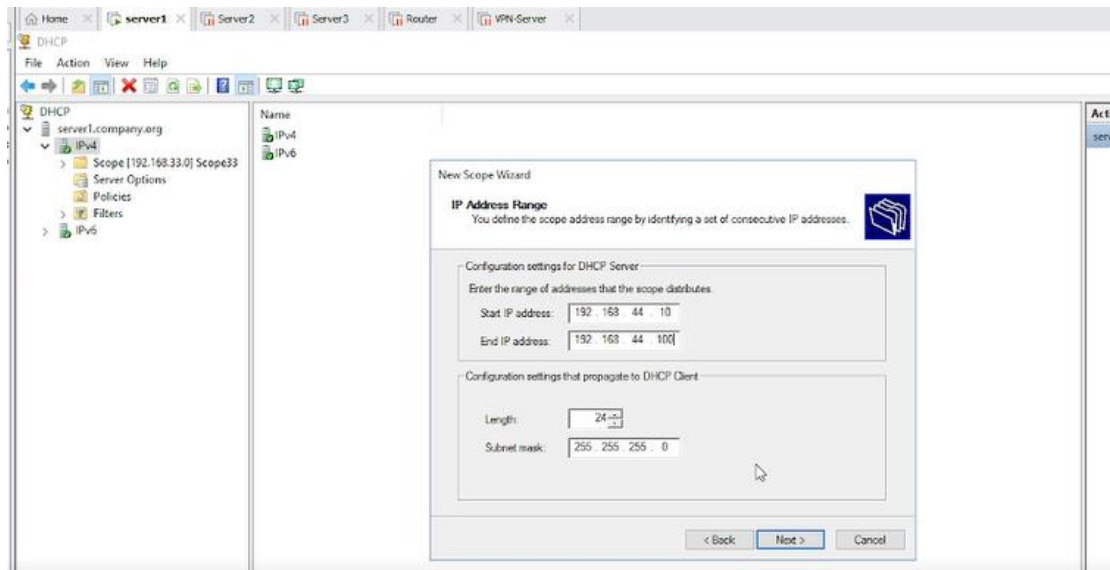




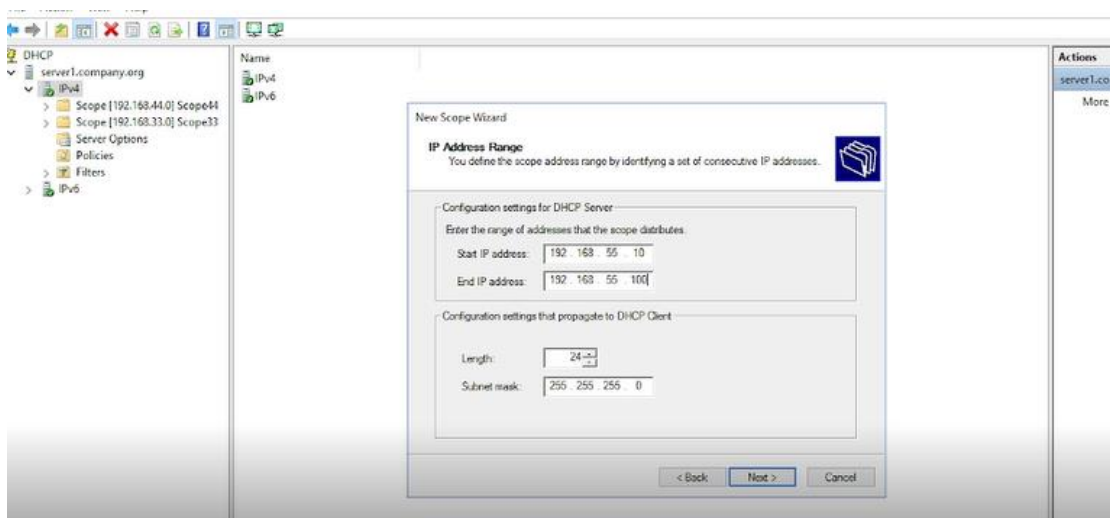
DHCP Scope1 for Network (192.168.33.0/24)



DHCP Scope2 for Network (192.168.44.0/24)



DHCP Scope3 for Network (192.168.55.0/24)





Server Options

Server options are additional configuration addresses for default gateways (routers). With

Server options act as defaults for all scopes.

To set the server options, on the Action menu

For more information about server options,

Available Options	Description
<input type="checkbox"/> 005 Name Servers	Array of nam
<input checked="" type="checkbox"/> 006 DNS Servers	Array of DN
<input type="checkbox"/> 007 Log Servers	Array of MIT
<input type="checkbox"/> 008 Cookie Servers	Array of coo

Data entry

Server name:

IP address:

Buttons: Add, Remove, Up, Down

Buttons: OK, Cancel, Apply

are commonly used options in

pe Options.

WDS Service

Virtual Machine Settings

Hardware Options

Device	Summary
Memory	2 GB
Processors	2
Hard Disk (NVMe)	60 GB
CD/DVD (SATA)	Using file D:\Win_Server_201...
Network Adaptor	LAN Segment
USB Controller	Present
Sound Card	Auto detect
Display	Auto detect

Device status

☐ Connected

☒ Connect at power on

Connection

☐ Use physical drive:

Auto detect

☒ Use ISO image file:

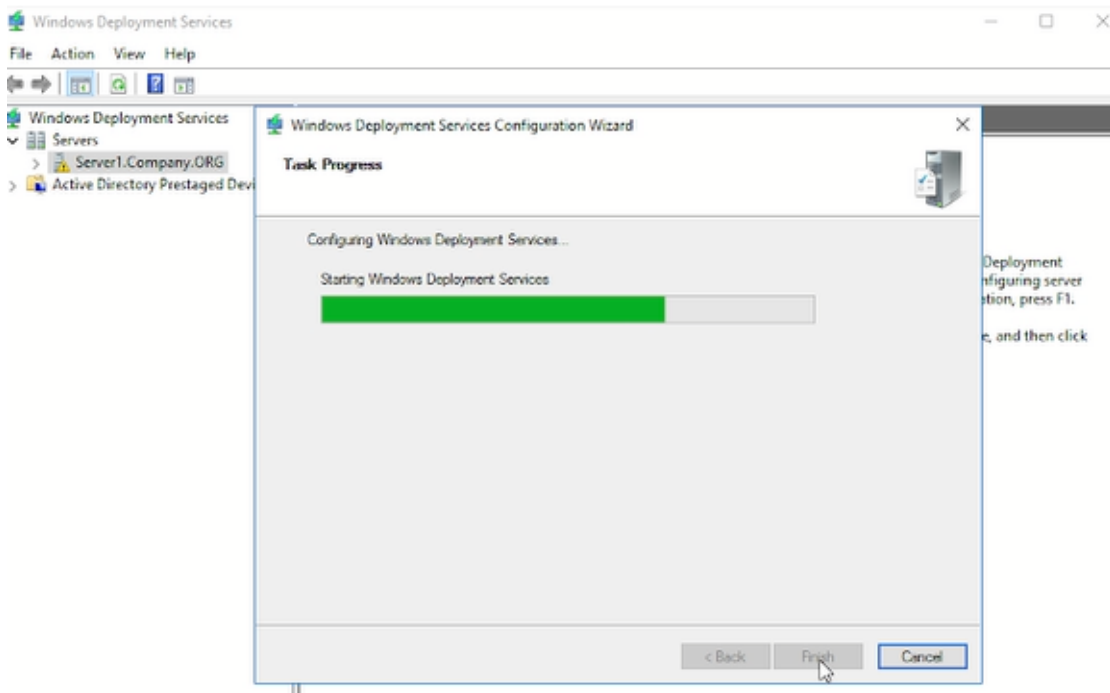
D:\My Network\Win_Server_2016_v1607.iso

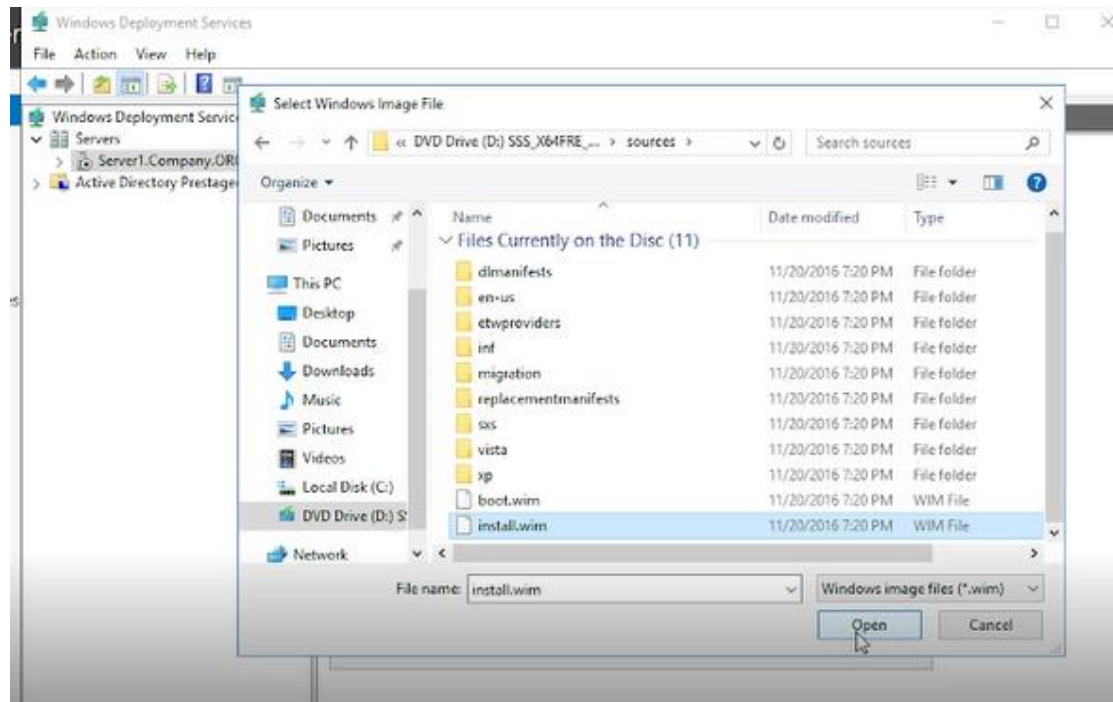
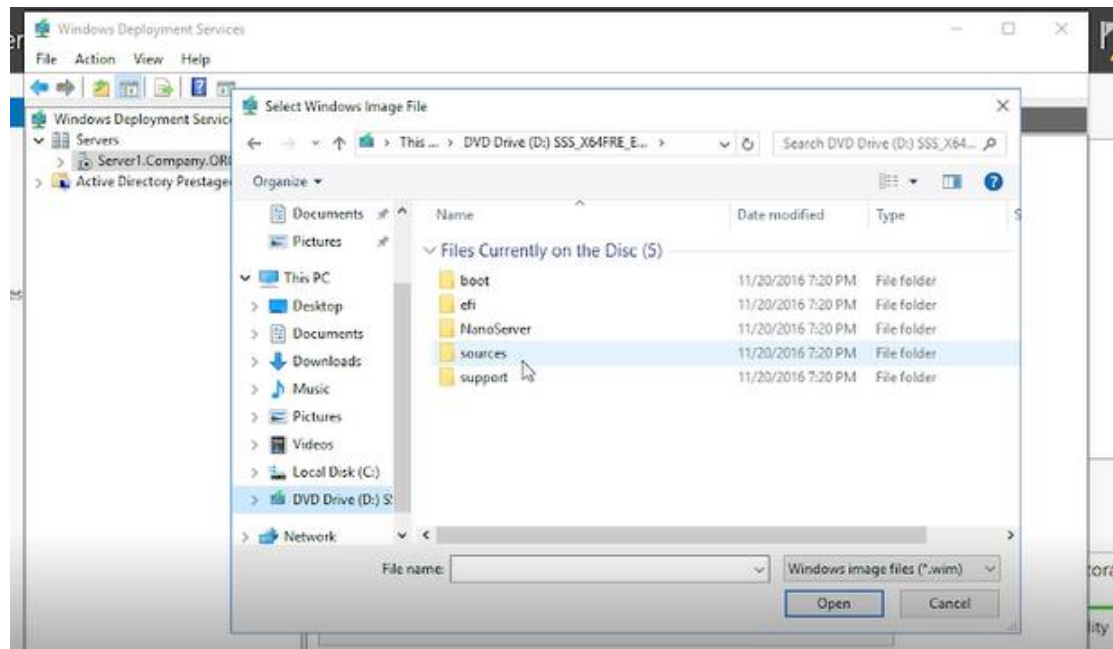
Browse...

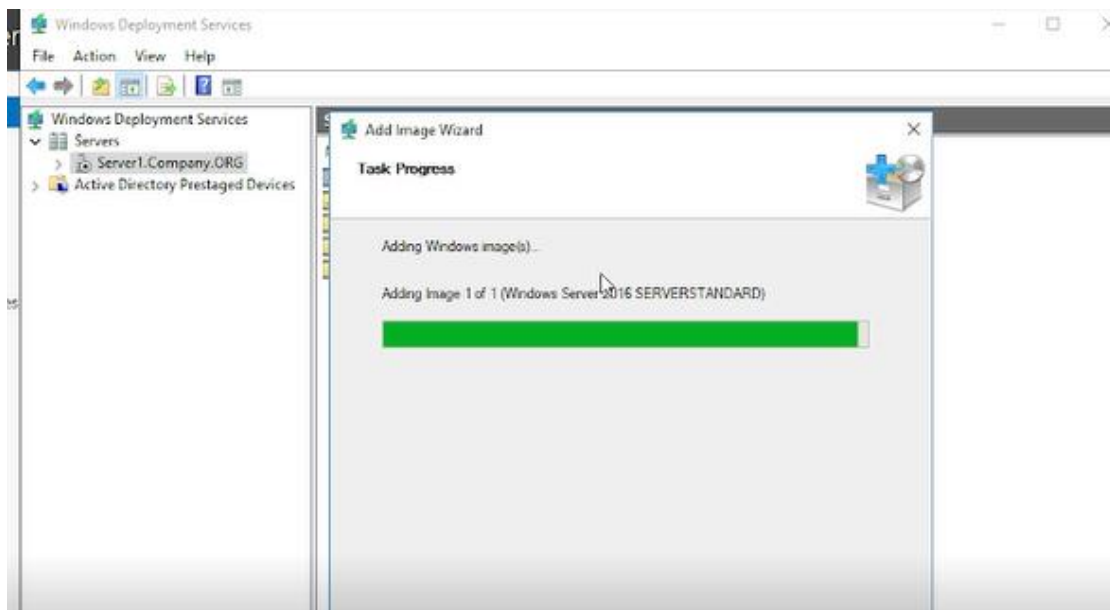
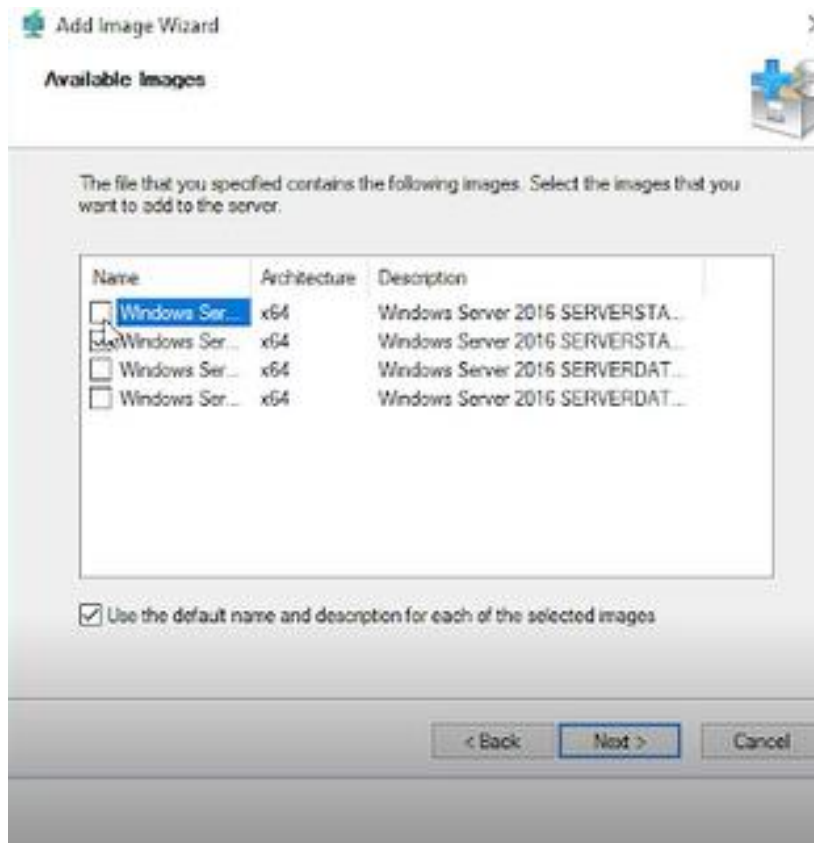
Advanced...

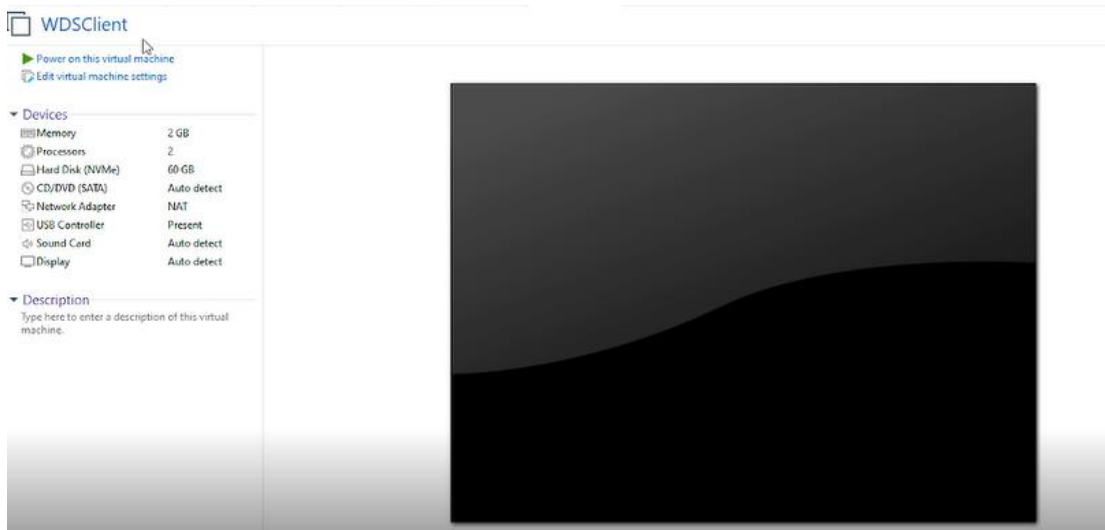
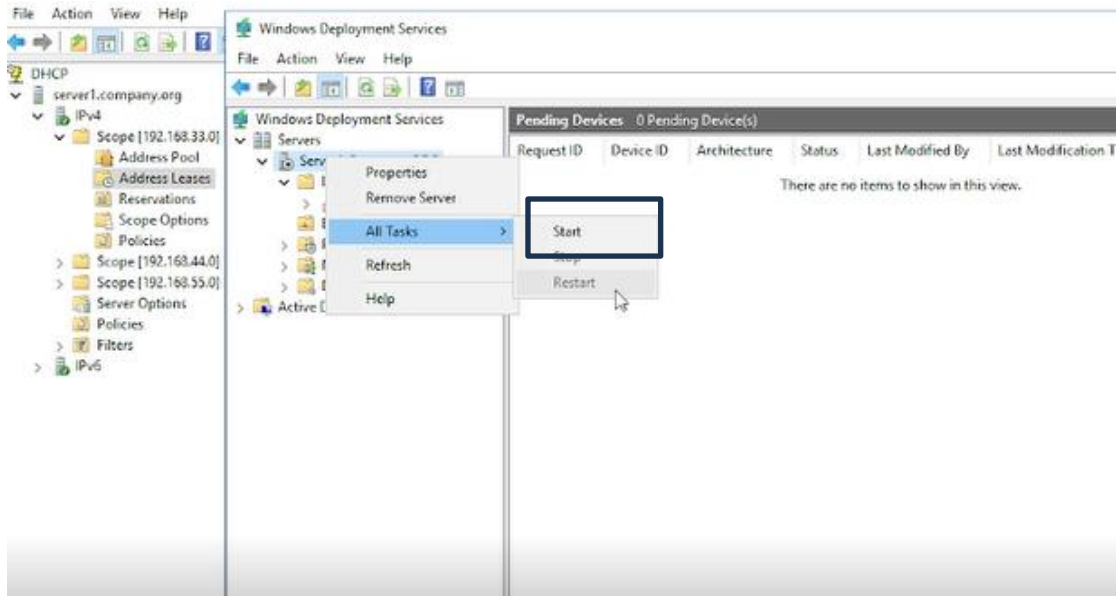
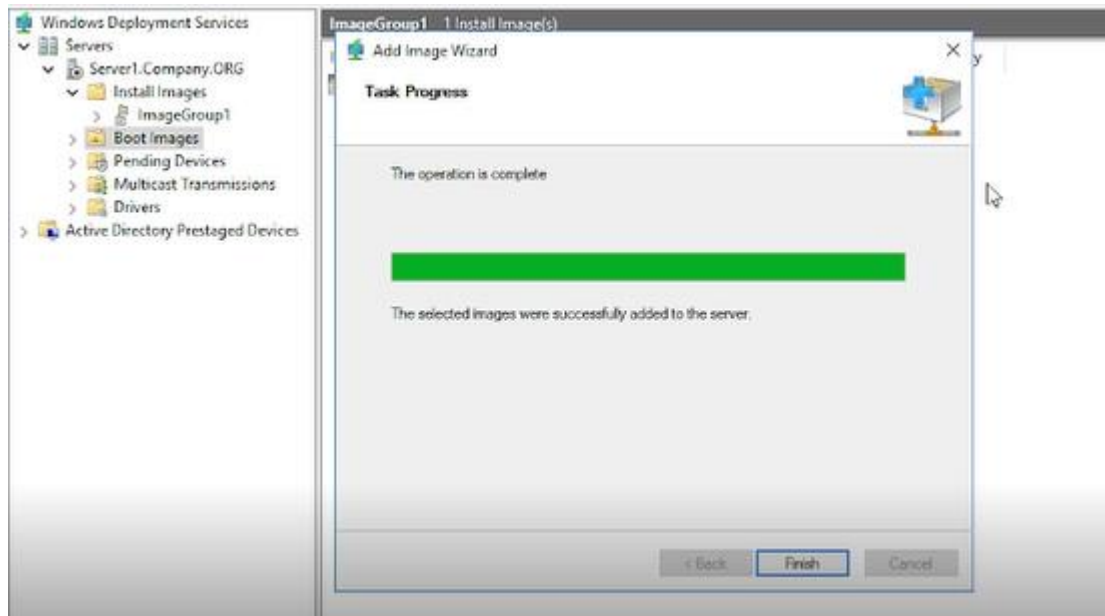


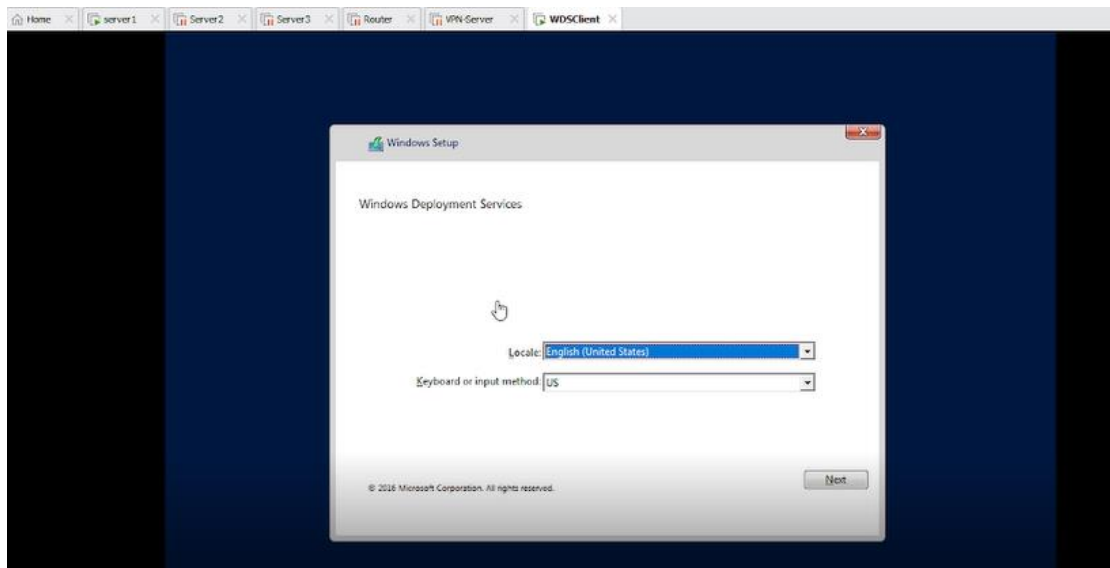
Next → Next → finish



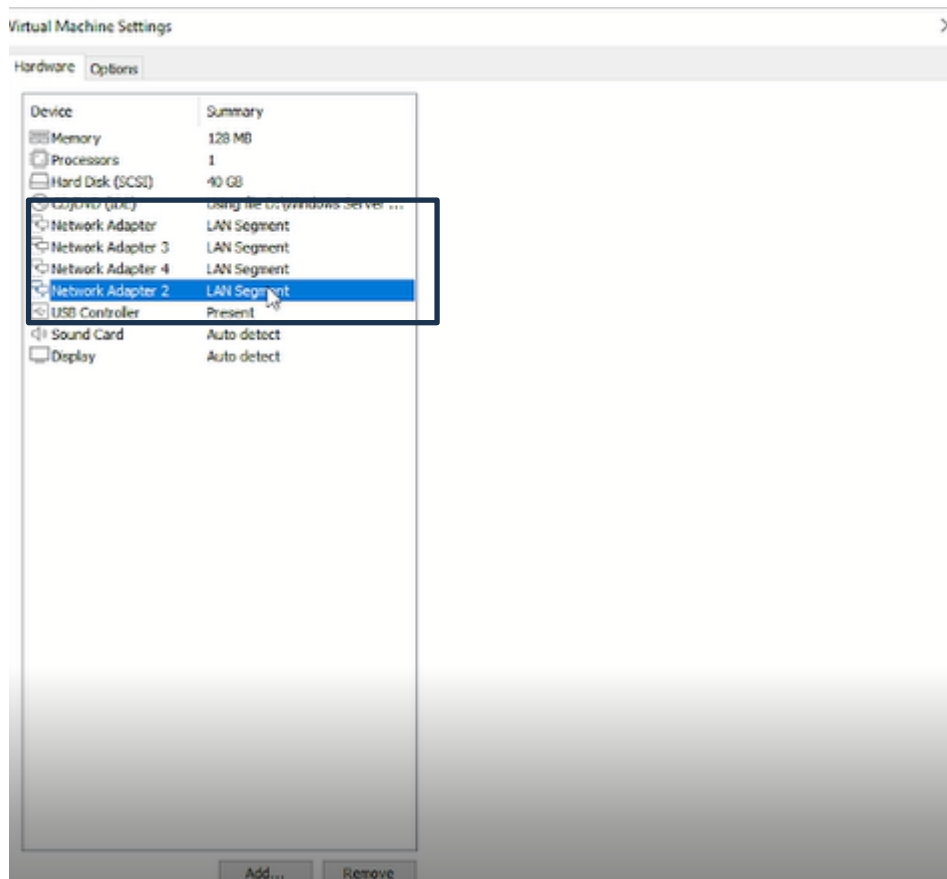


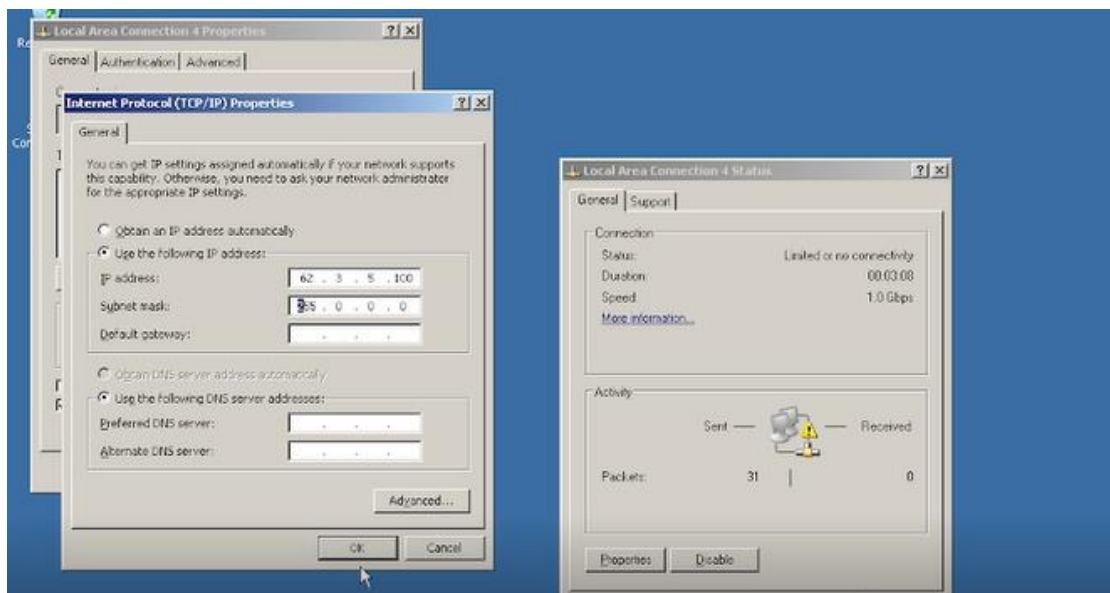
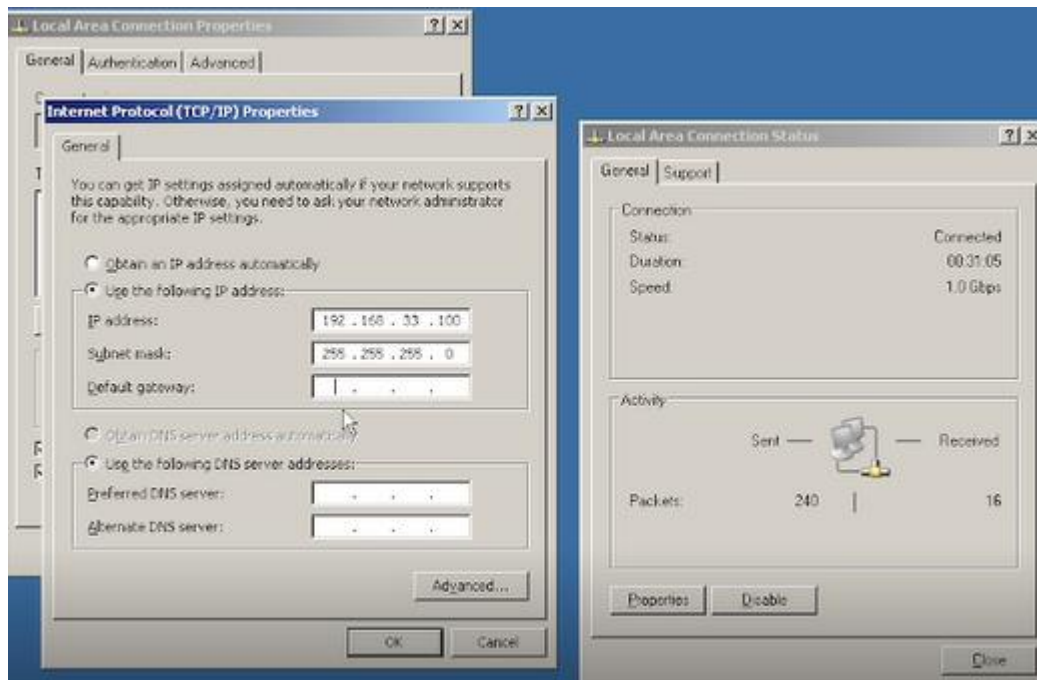




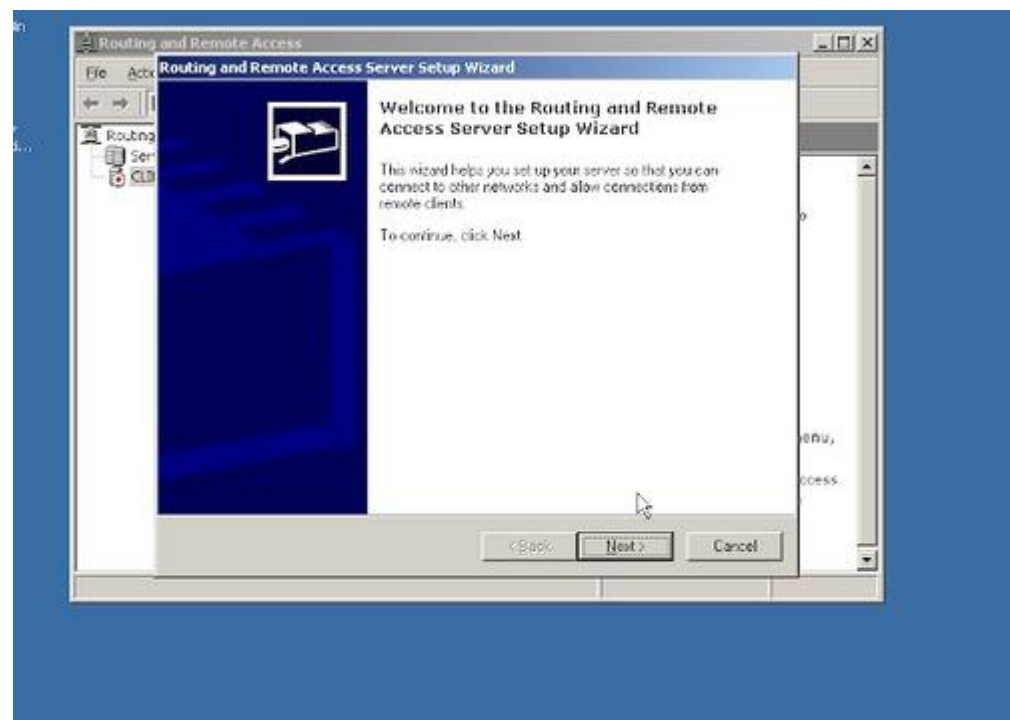
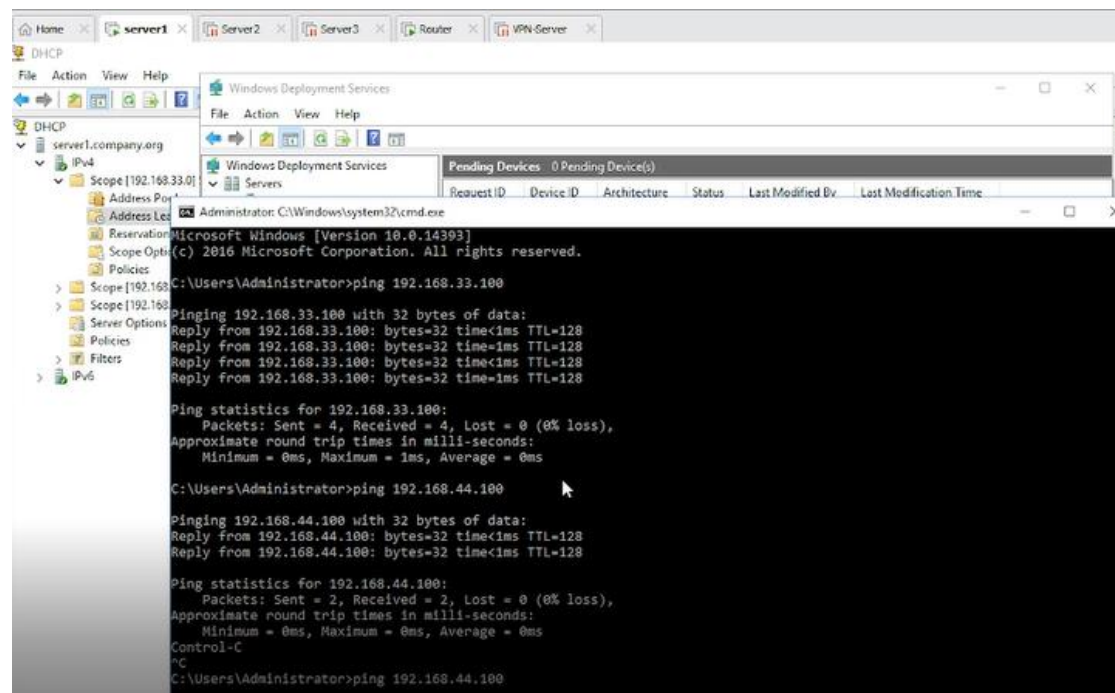


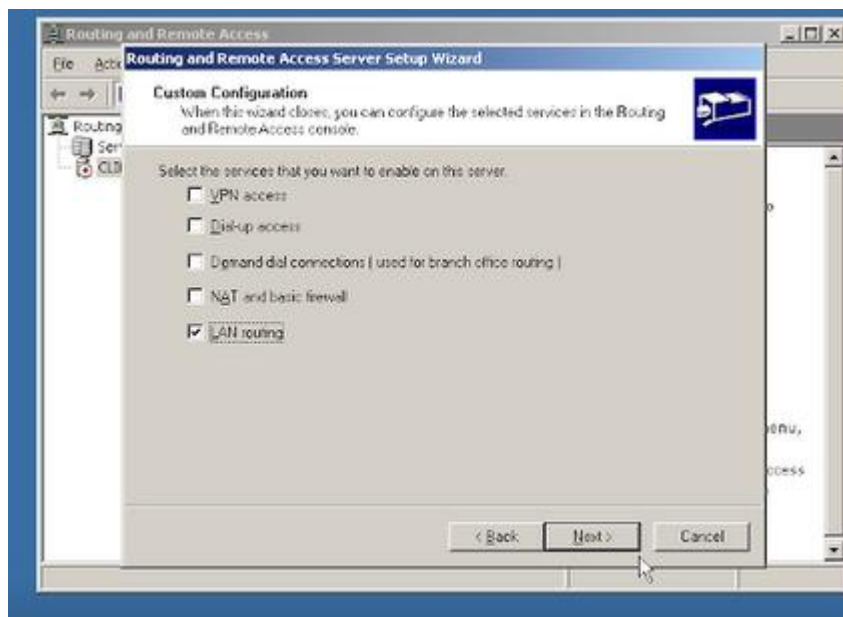
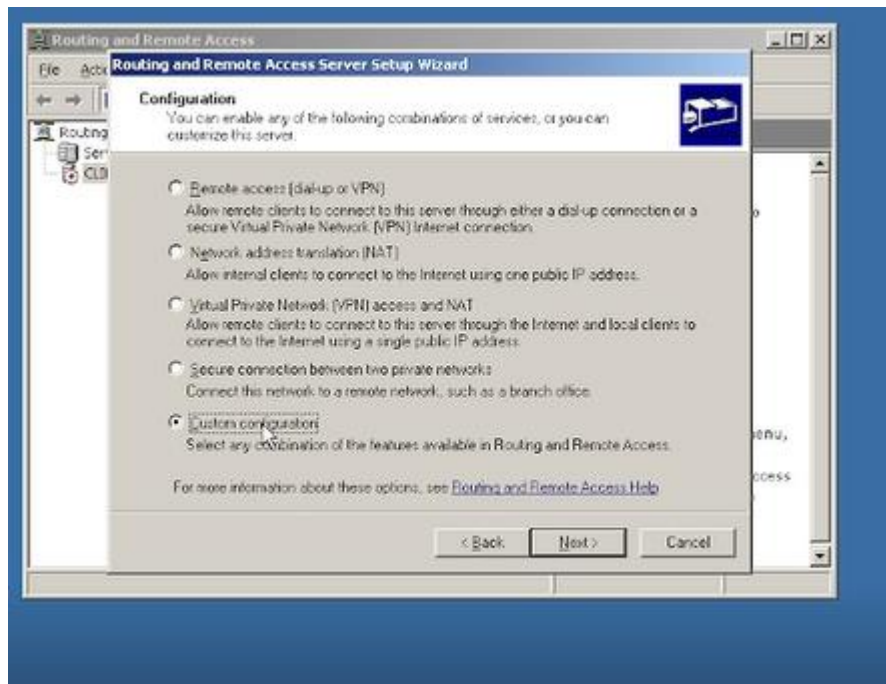
Router(Server) (create LAN segment SW1 , SW2 , SW3)



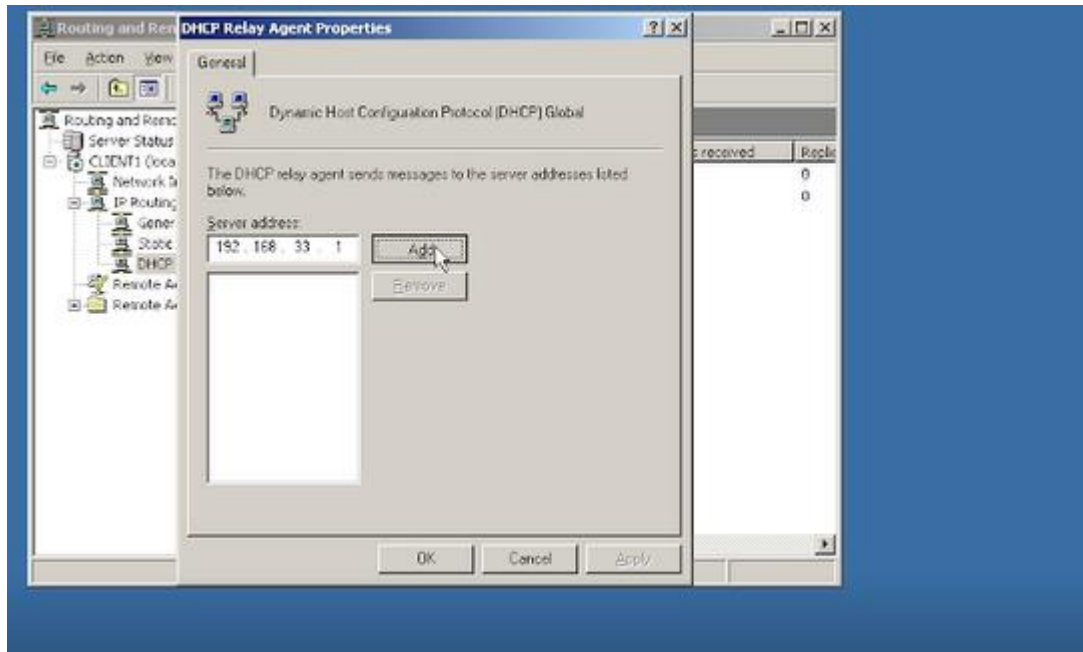
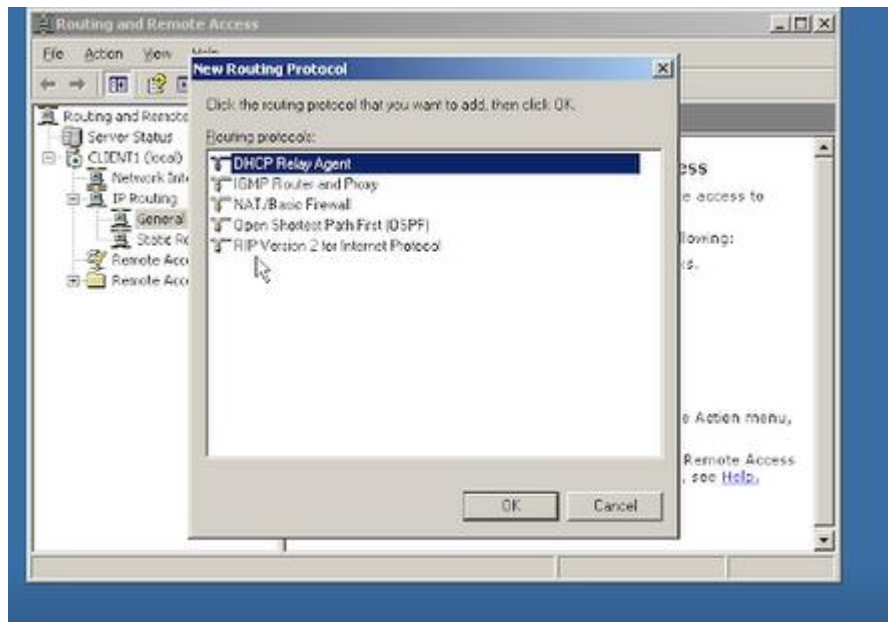


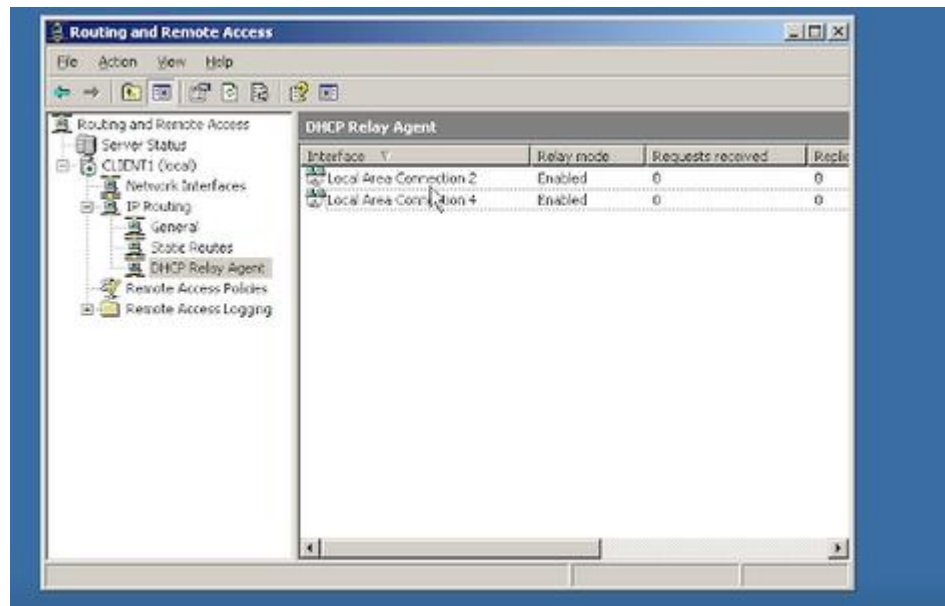
Server 1 can ping on Router



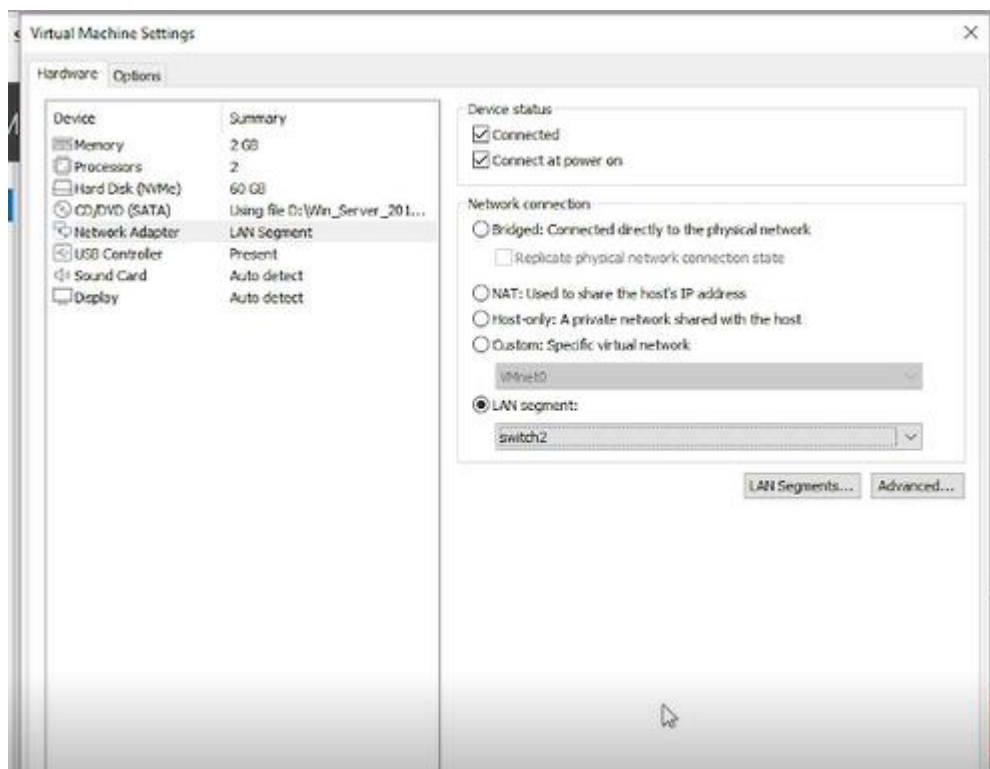


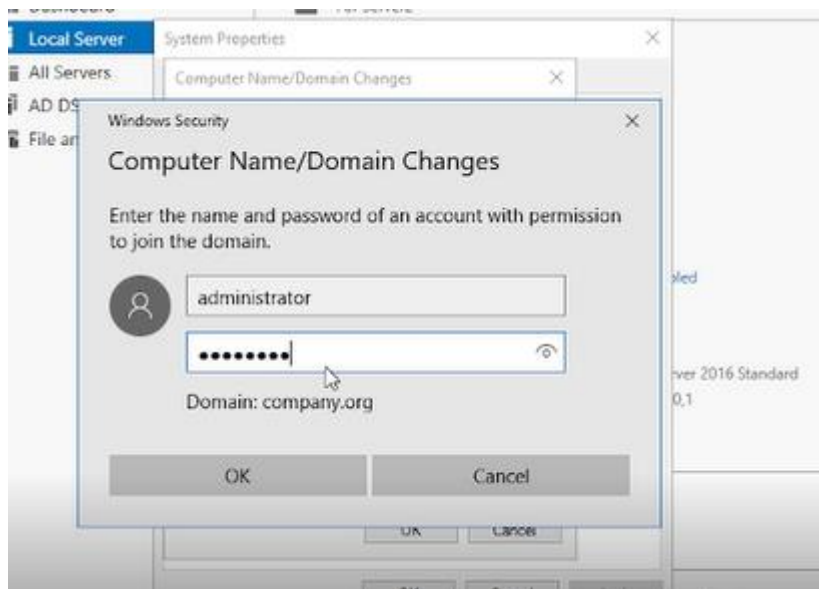
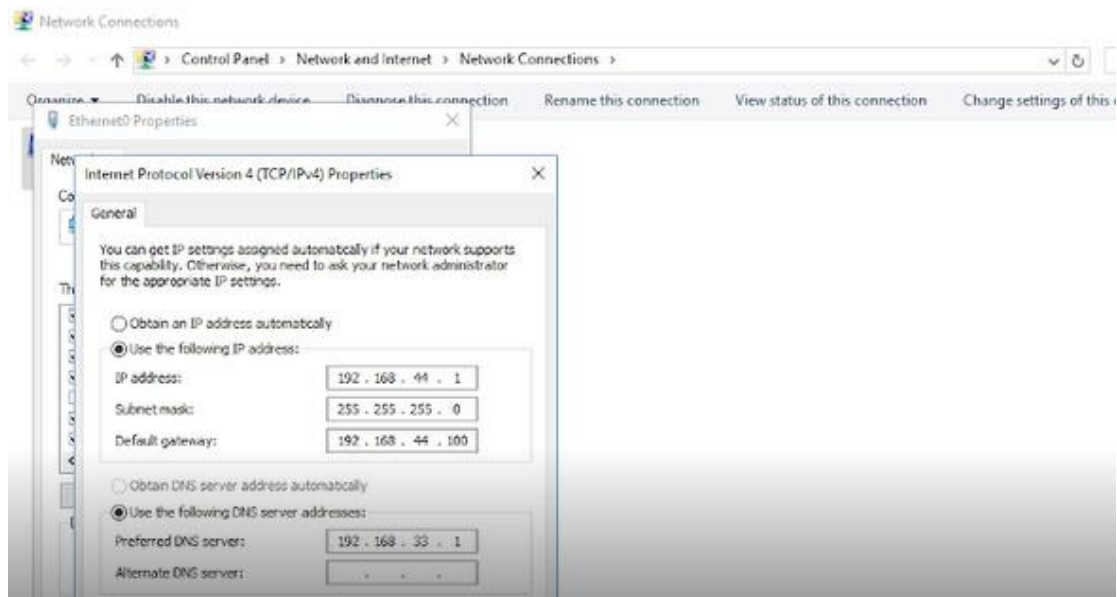
DHCP Relay Agent

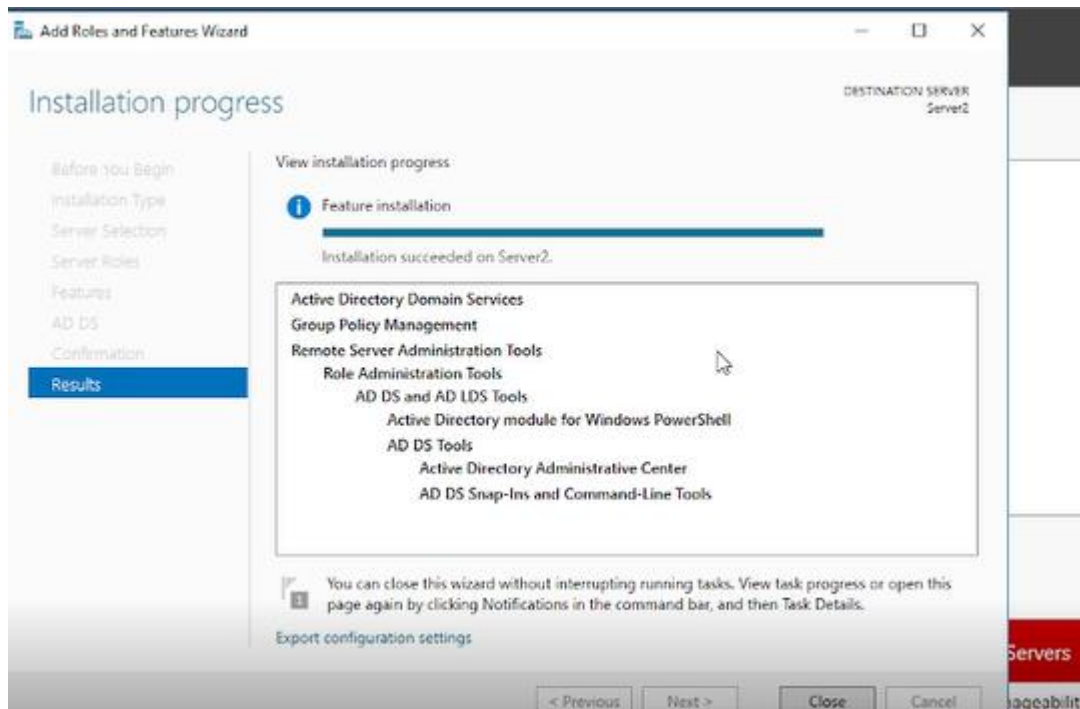




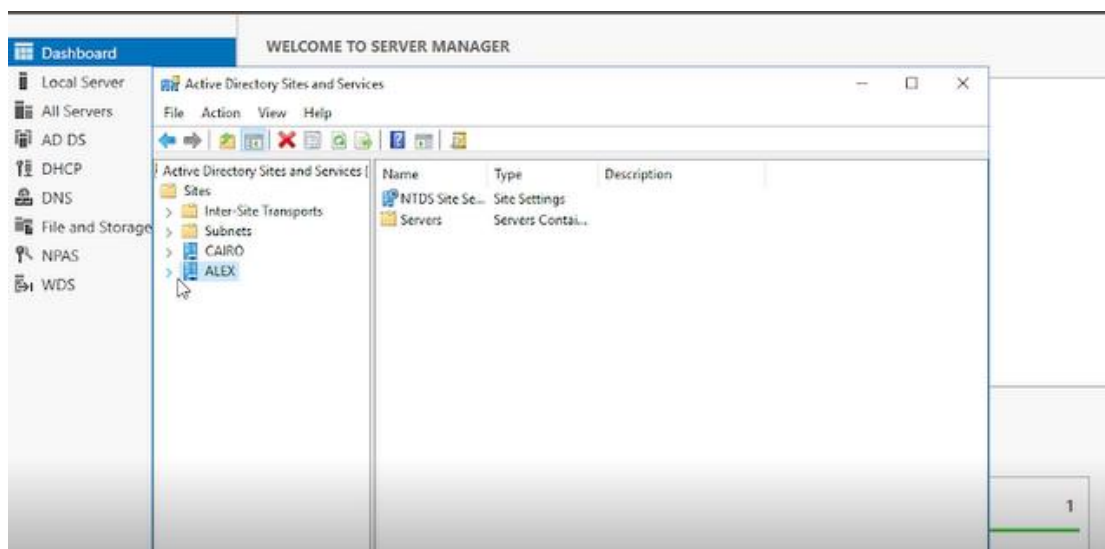
Server2 (Child DC)







Create new site on DC Server (ALEX Site)



Active Directory Domain Services Configuration Wizard

Deployment Configuration

TARGET SERVER
Server2.Company.ORG

Deployment Configuration

Domain Controller Options

Additional Options

Paths

Review Options

Prerequisites Check

Installation

Results

Select the deployment operation

☐ Add a domain controller to an existing domain

☒ Add a new domain to an existing forest

☐ Add a new forest

Specify the domain information for this operation

Select domain type: Child Domain

Parent domain name: Company.ORG Select...

New domain name: CHILD1

Supply the credentials to perform this operation

SERVER2\Administrator (Current user) Change...

Active Directory Domain Services Configuration Wizard

Domain Controller Options

TARGET SERVER
Server2.Company.ORG

Deployment Configuration

Domain Controller Options

Additional Options

Paths

Review Options

Prerequisites Check

Installation

Results

Select functional level of the new domain

Domain functional level: Windows Server 2016

Specify domain controller capabilities and site information

☐ Domain Name System (DNS) server

☐ Global Catalog (GC)

☐ Read only domain controller (RODC)

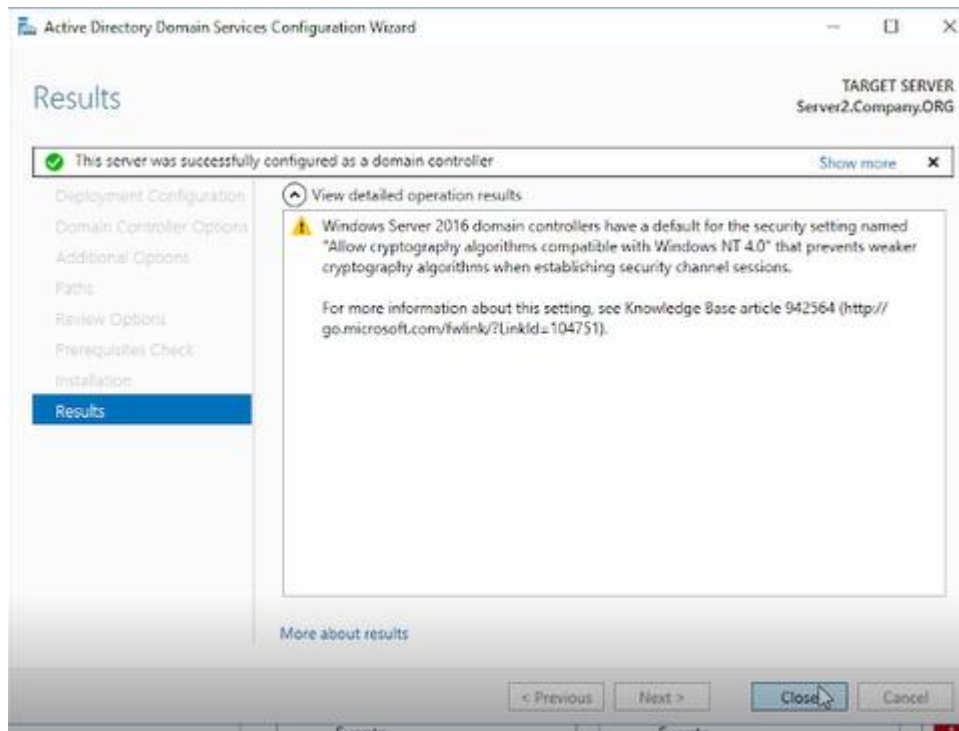
Site name: ALEX

Type the Directory Services Restore Mode (DSRM) password

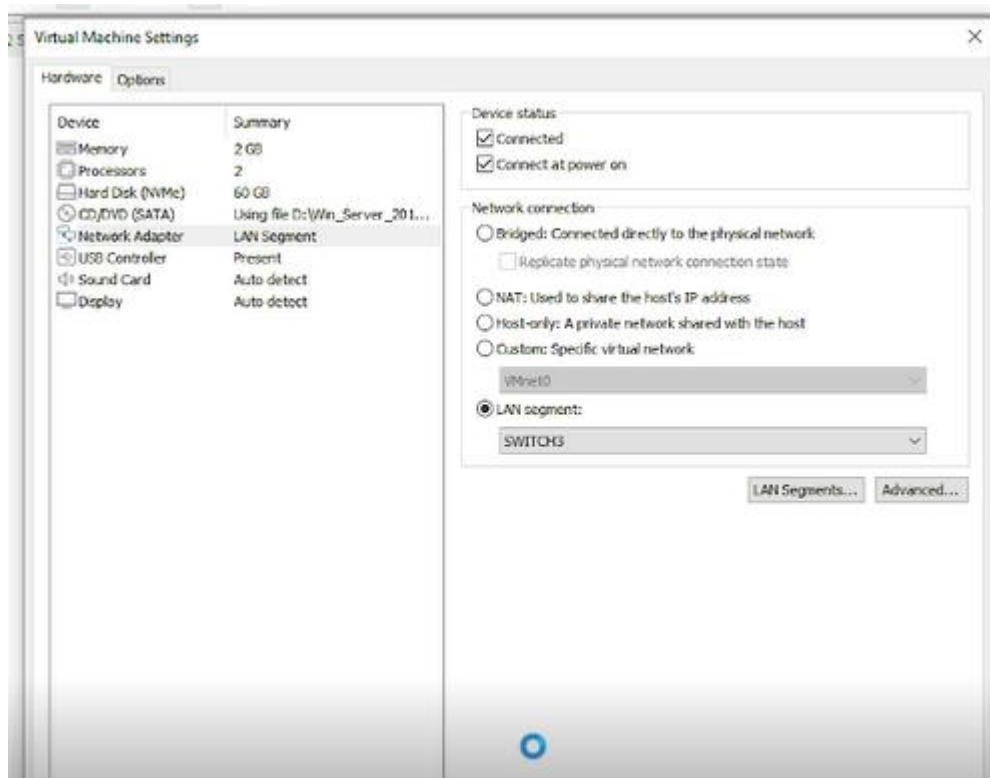
Password:

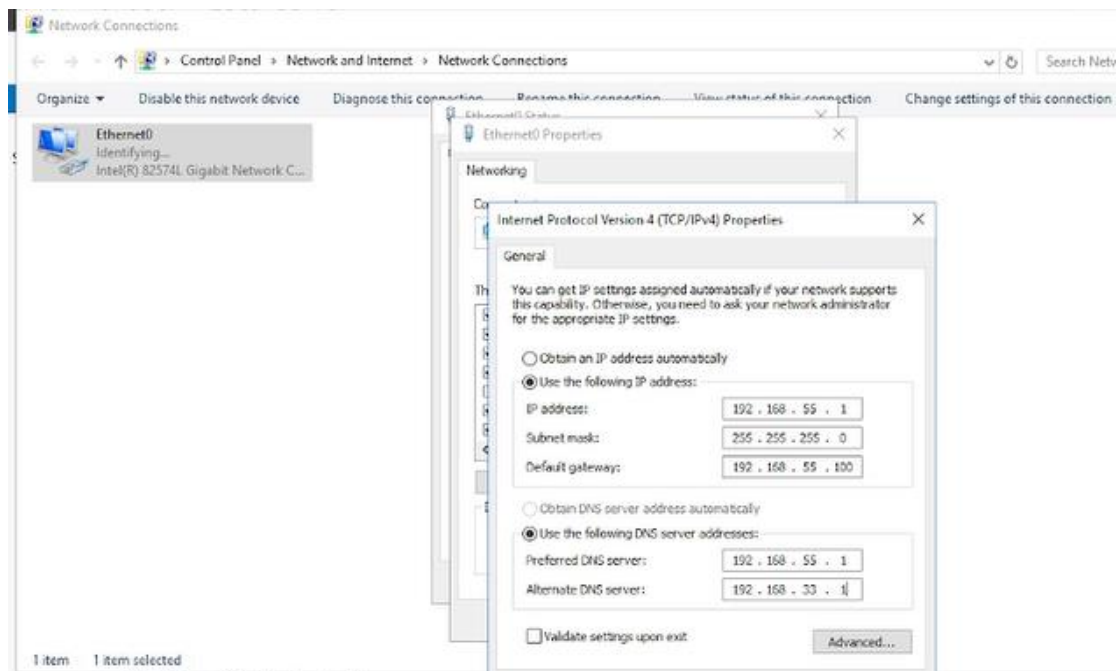
Confirm password:

More about domain controller options

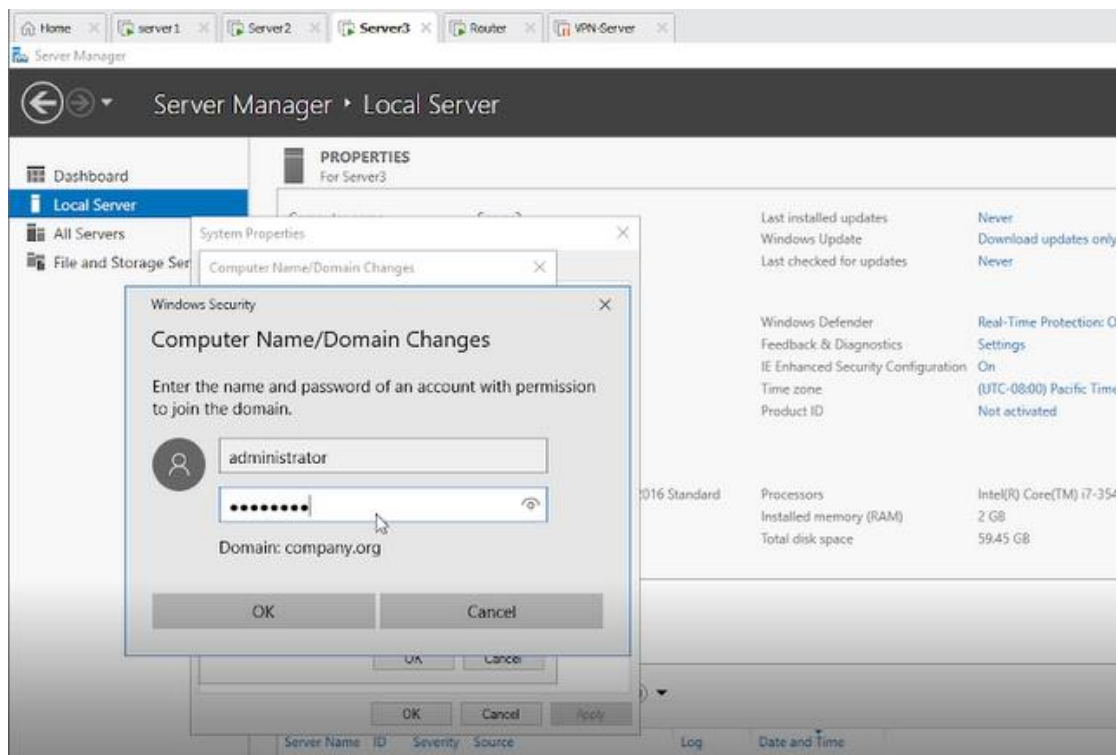


Server 3 (Tree DC)

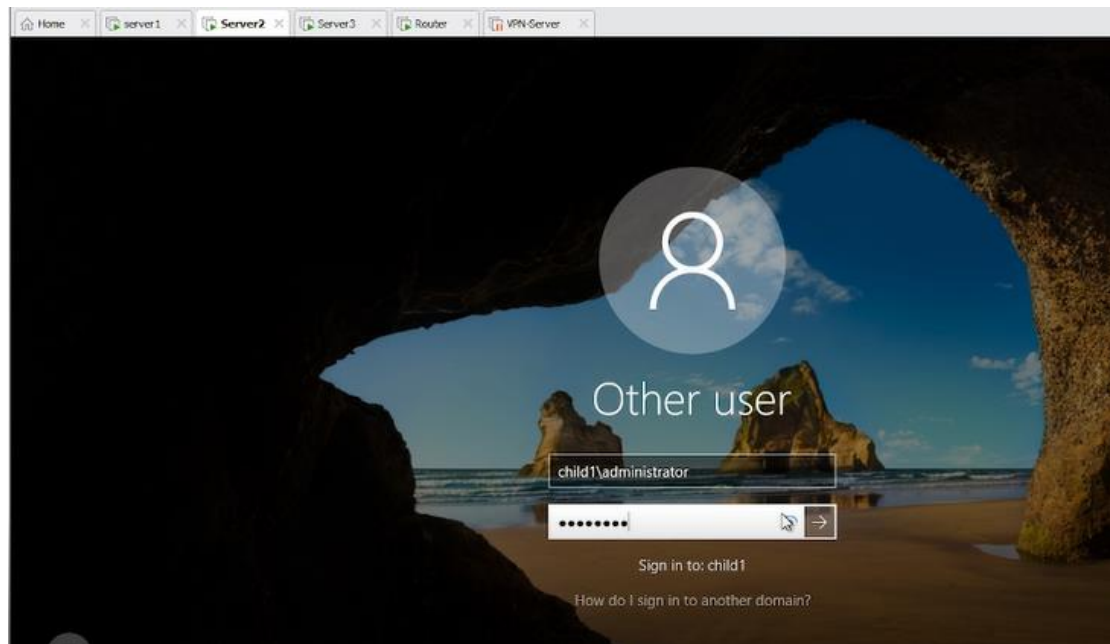




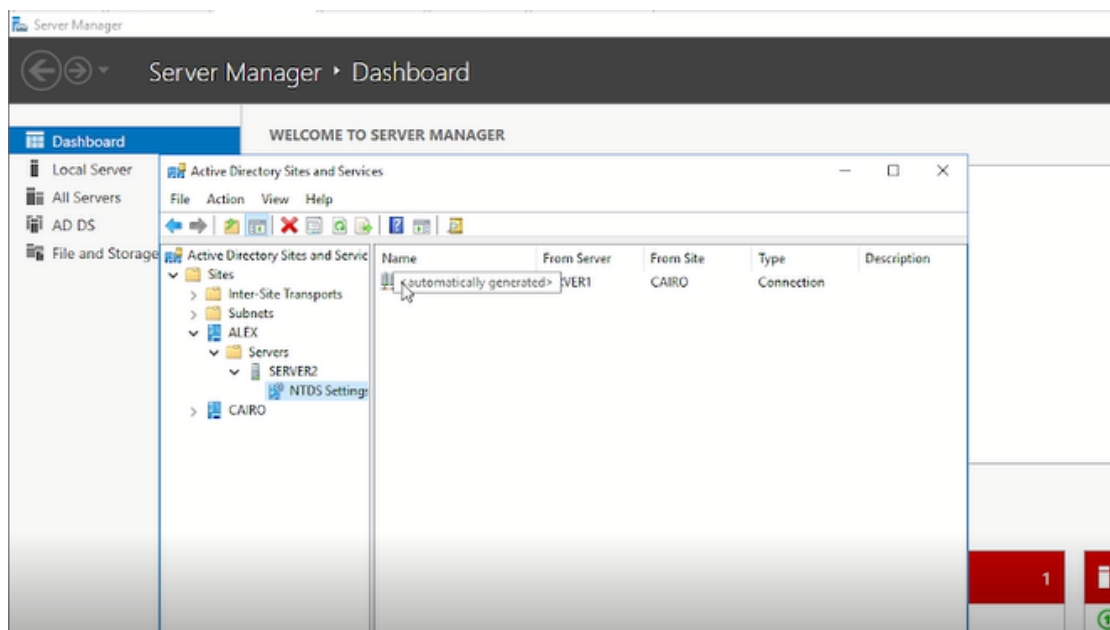
Join To DC (company.org)



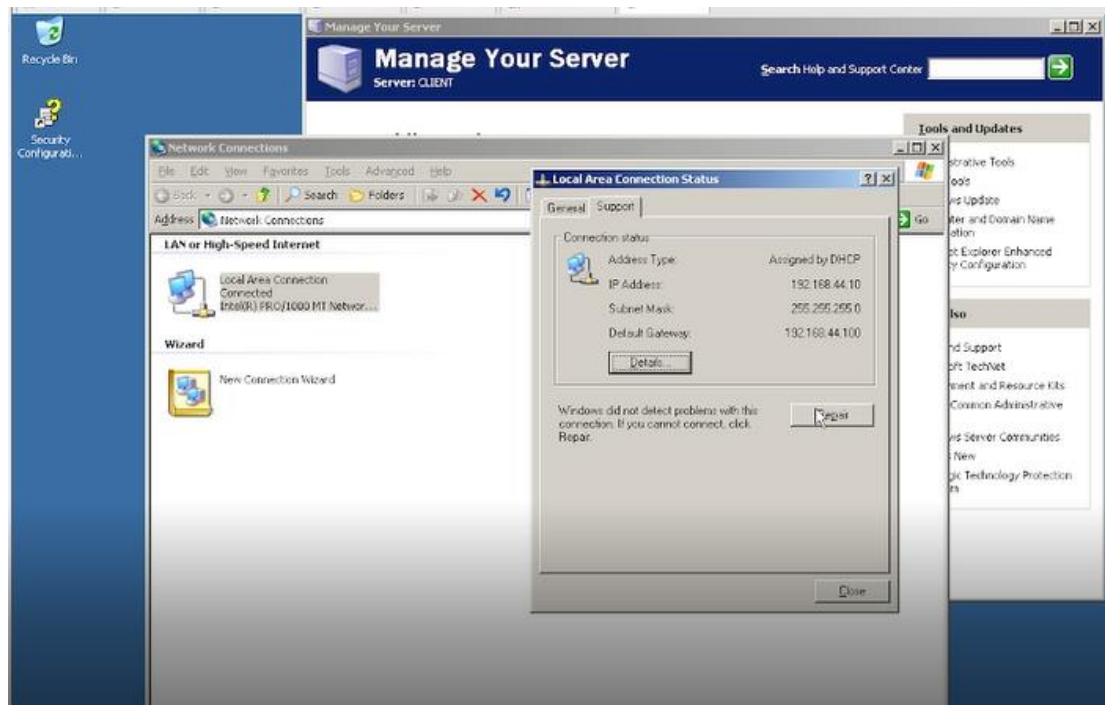
Child DC



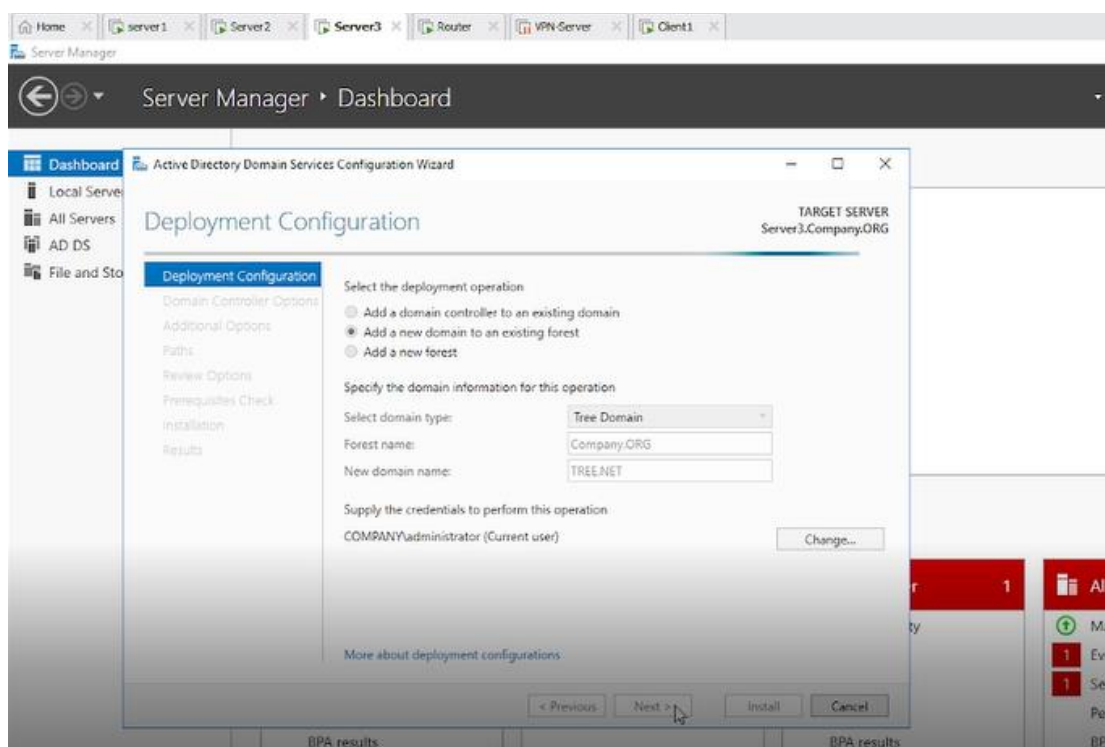
Replication Between Site Cairo & ALEX



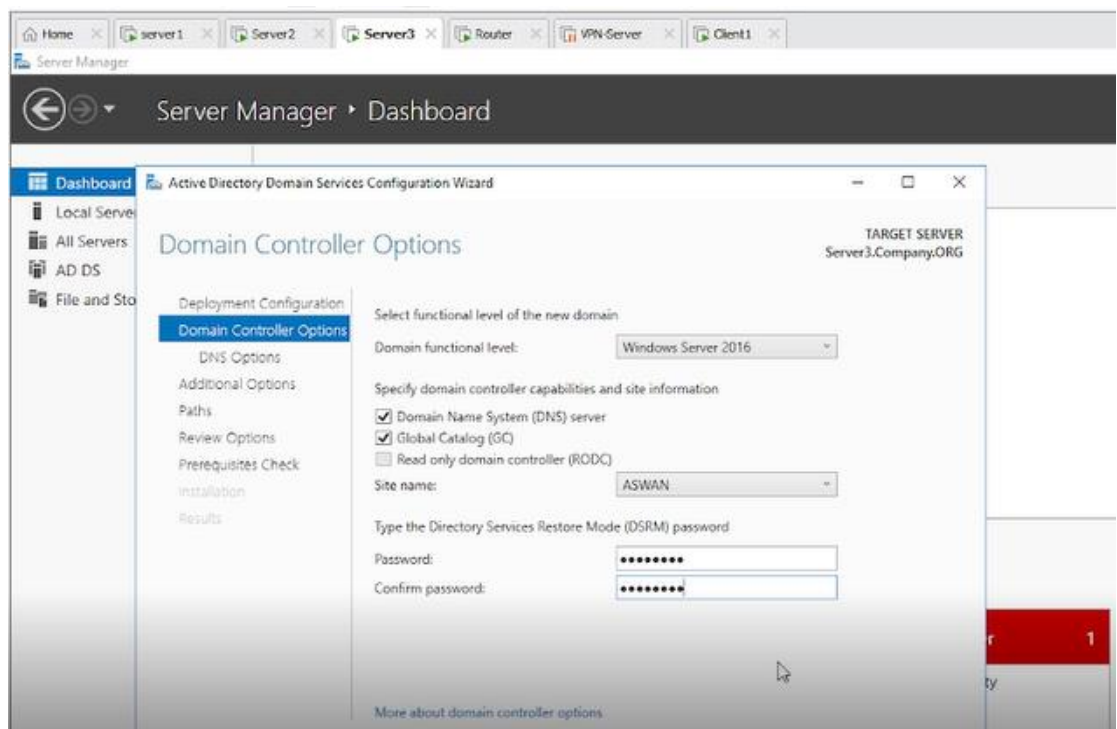
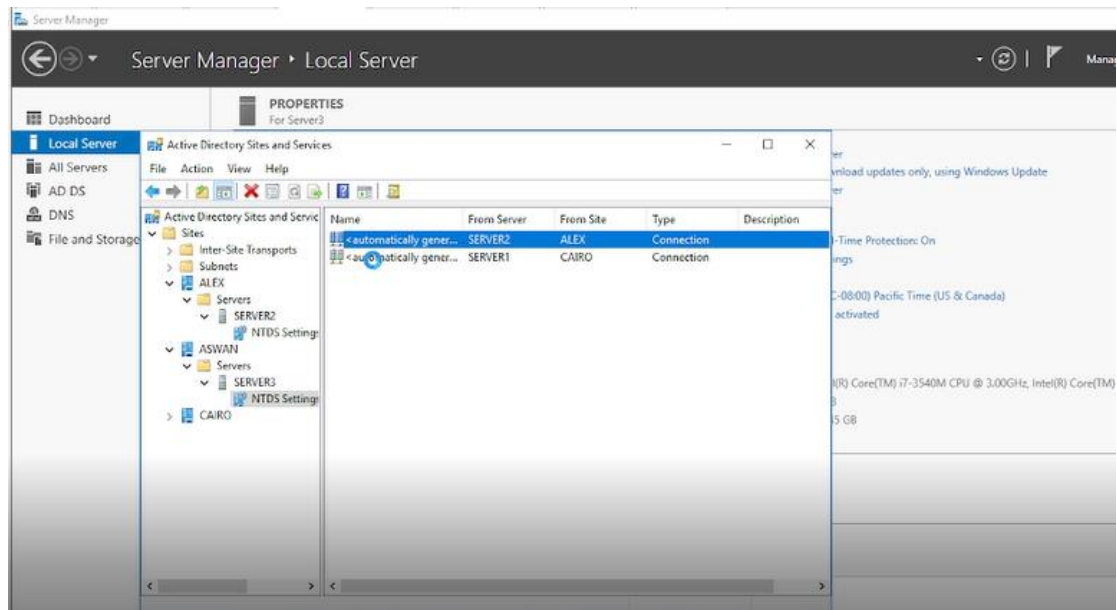
Client1 Can Take IP address from DHCP



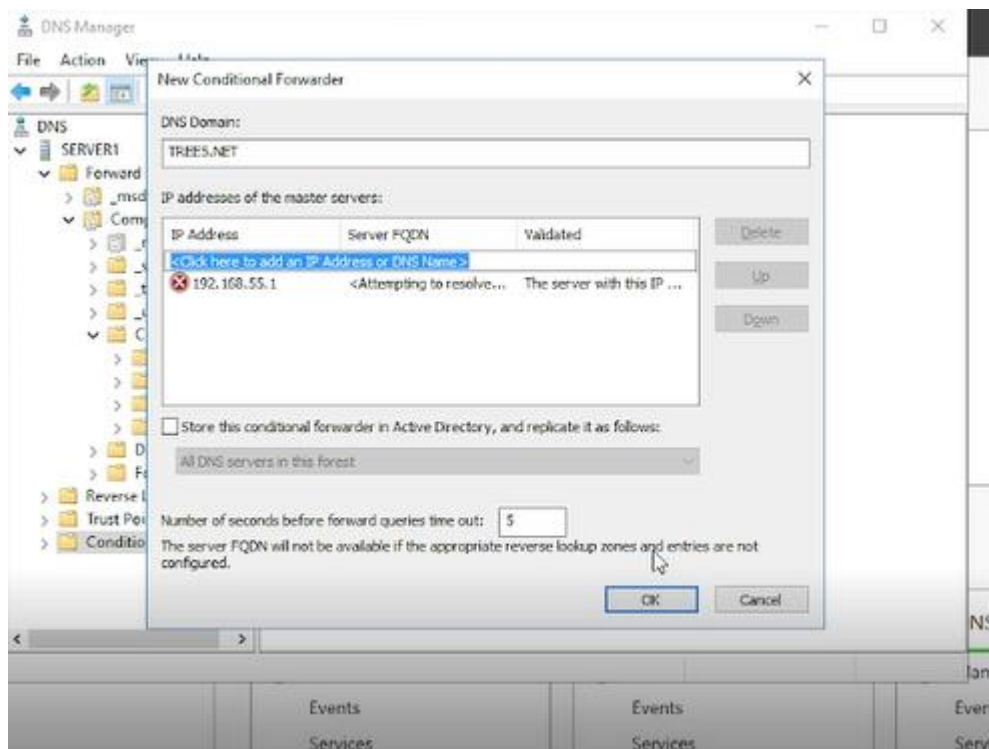
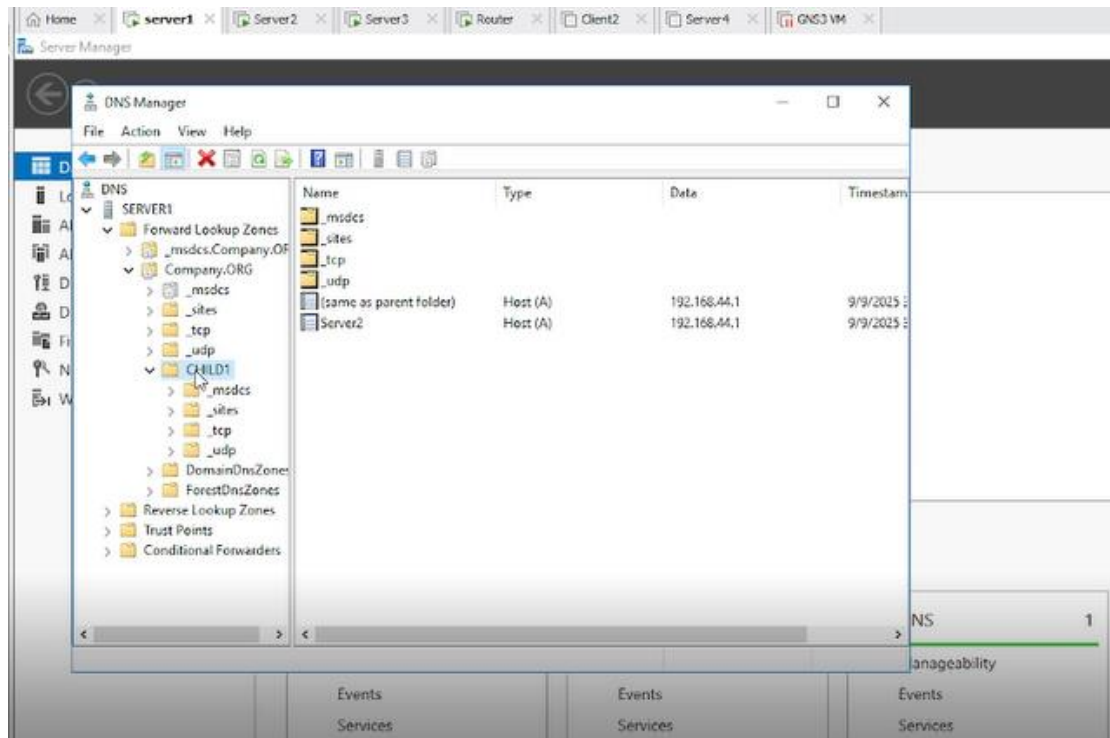
Server3 (Tree DC)

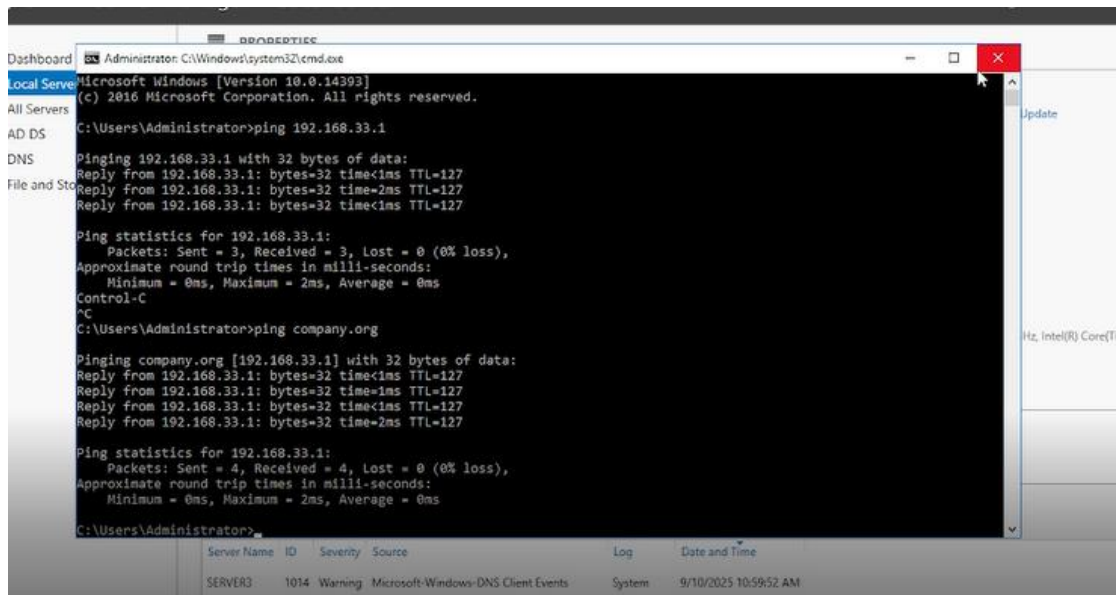


New Site (ASWAN Site) & Replicate between sites

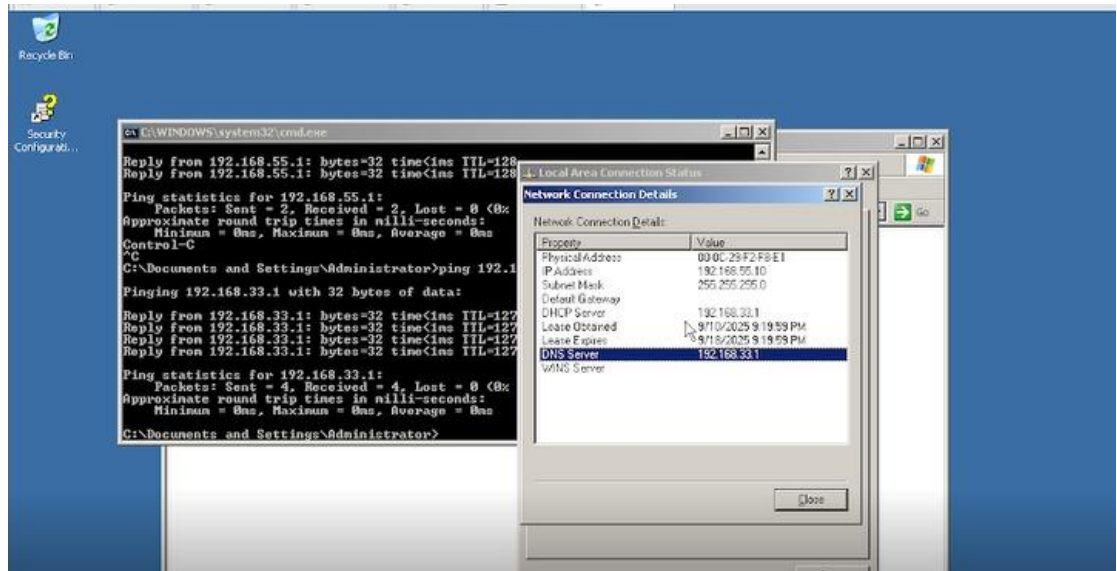


DNS



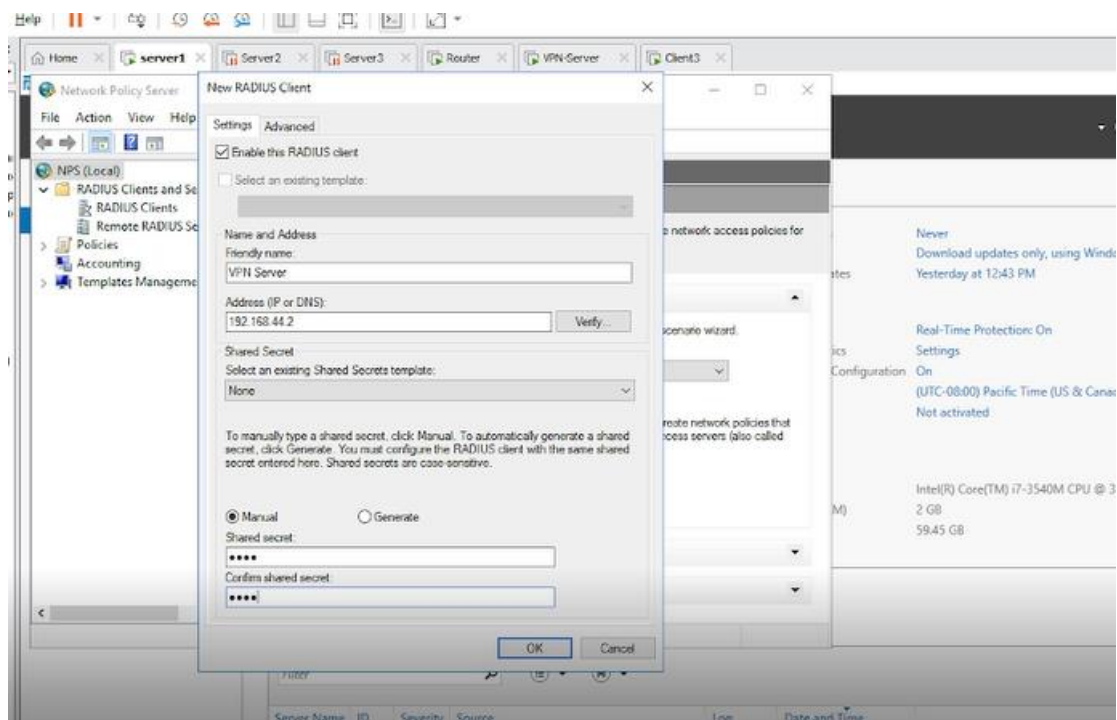
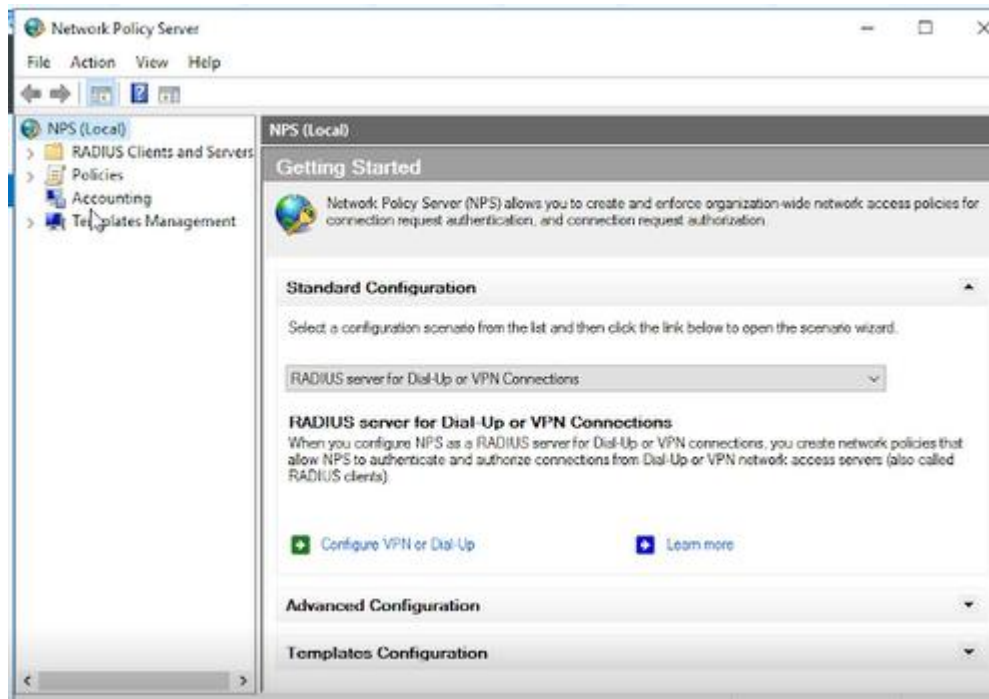


Client 3 can Take IP address From DHCP Relay Agent

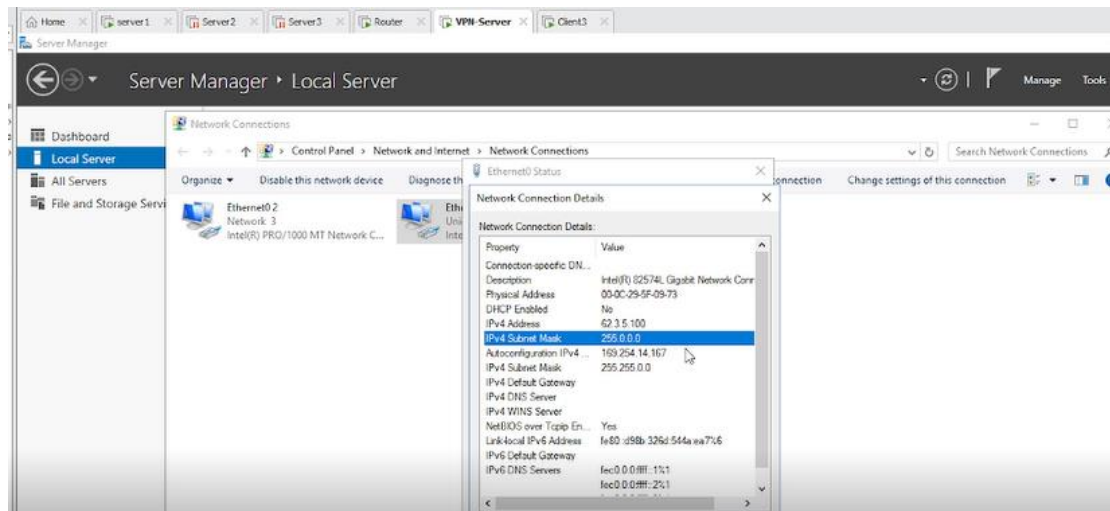


VPN Service

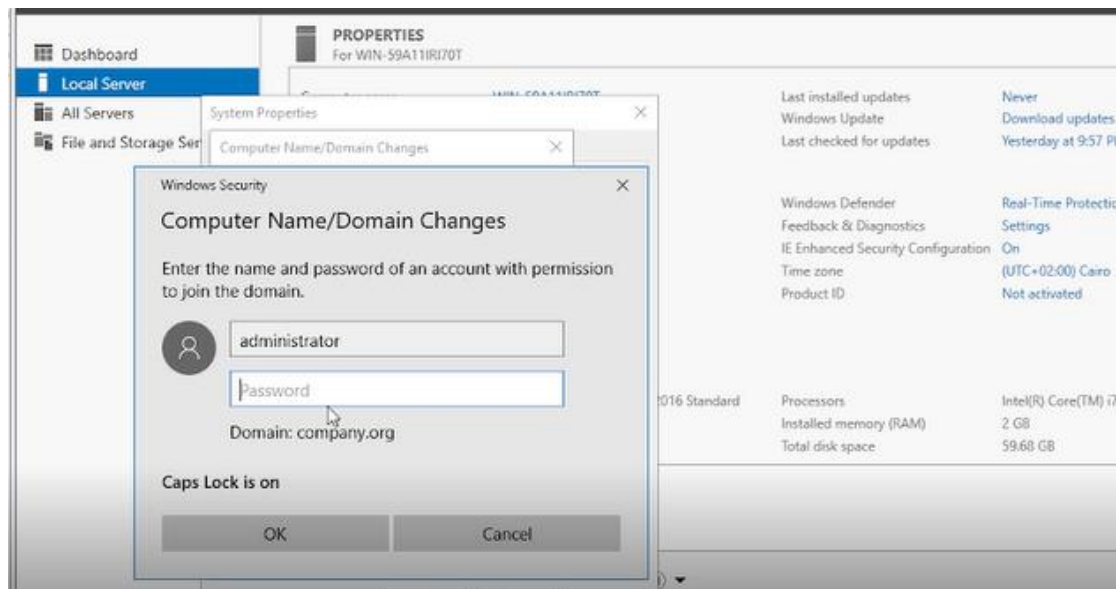
NPS Service on Server1



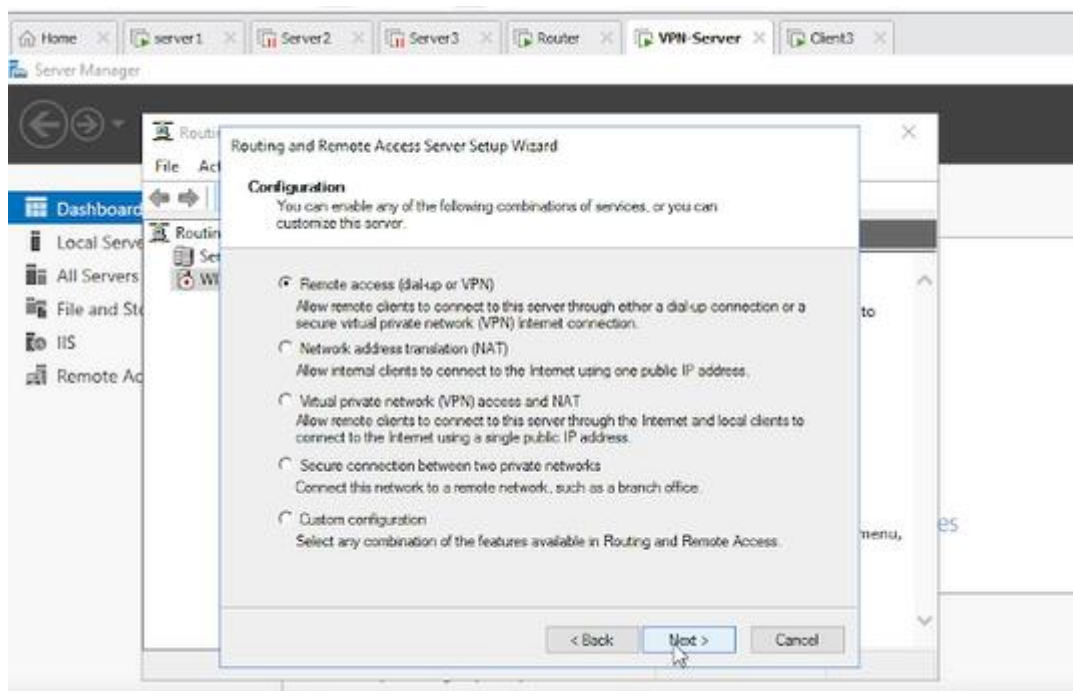
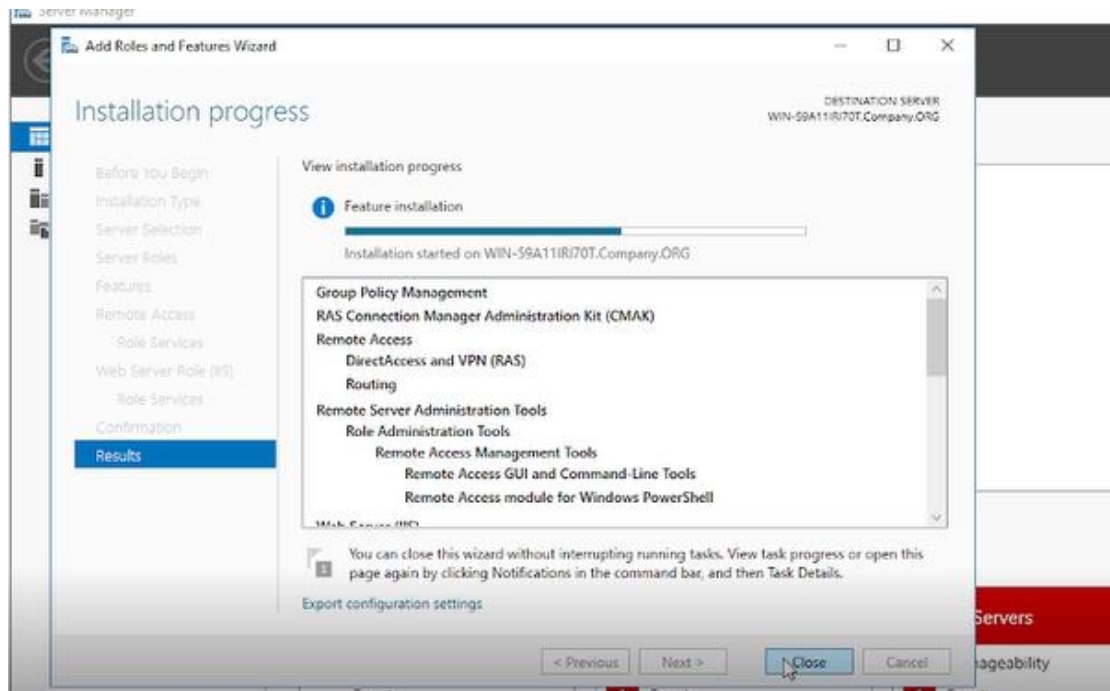
VPN server

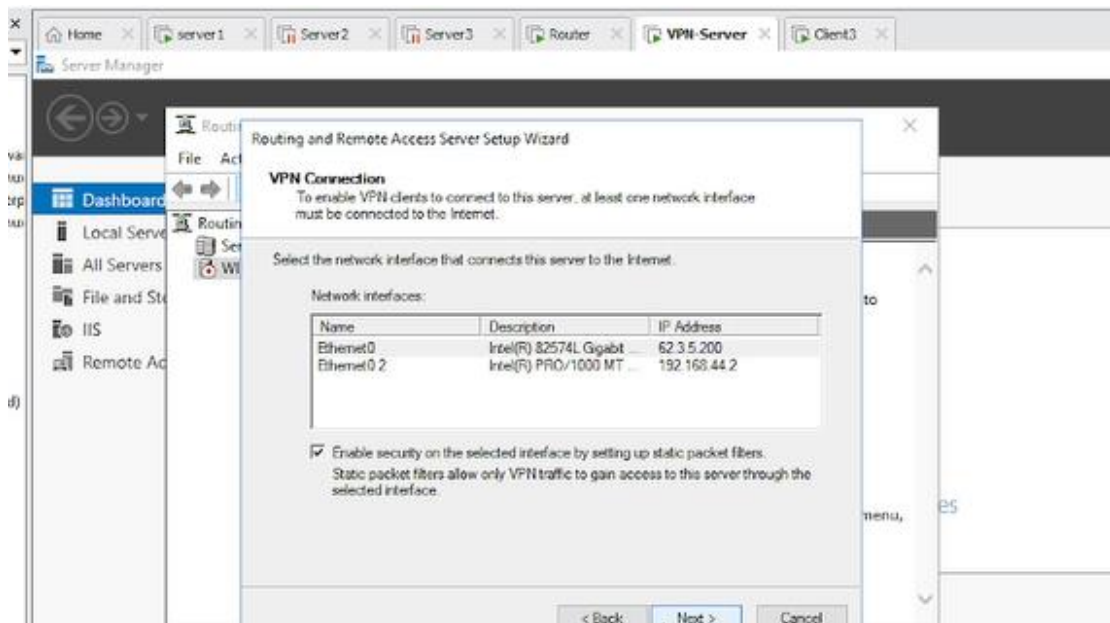
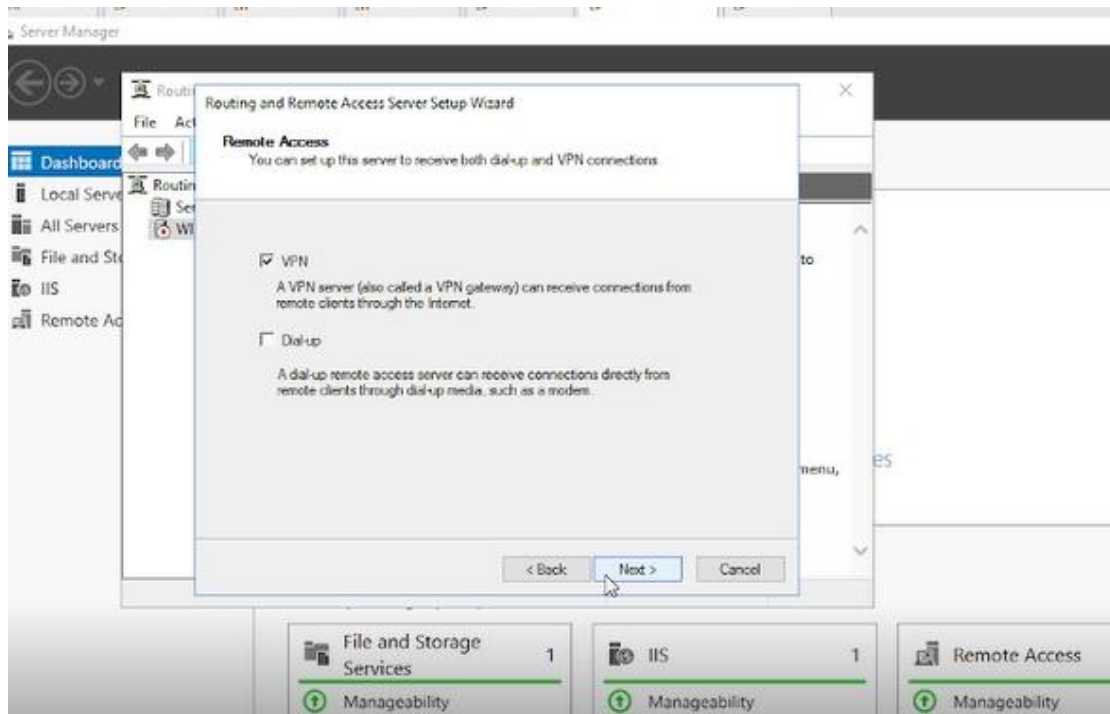


Join To DC (Company.org)

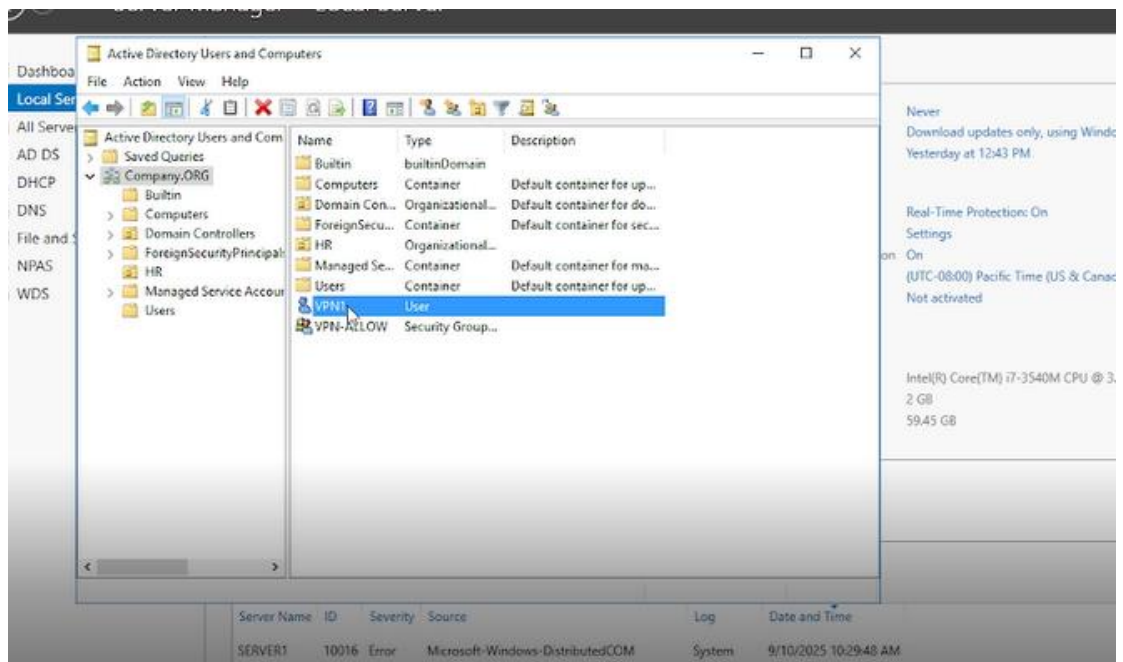
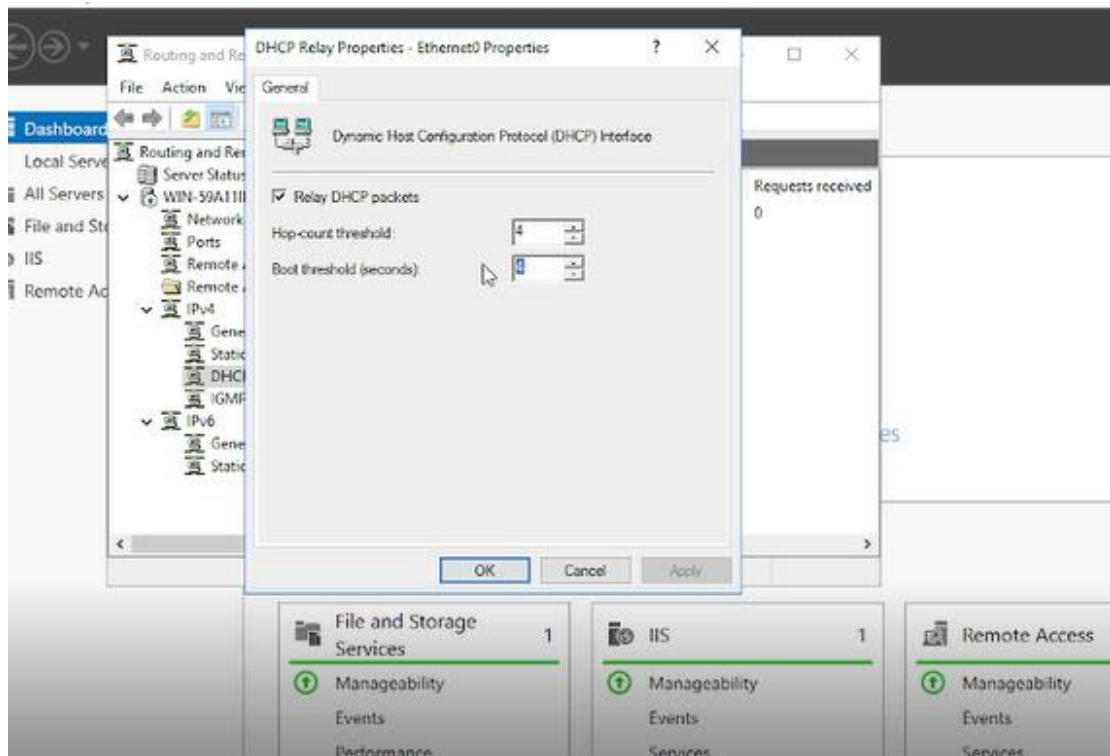


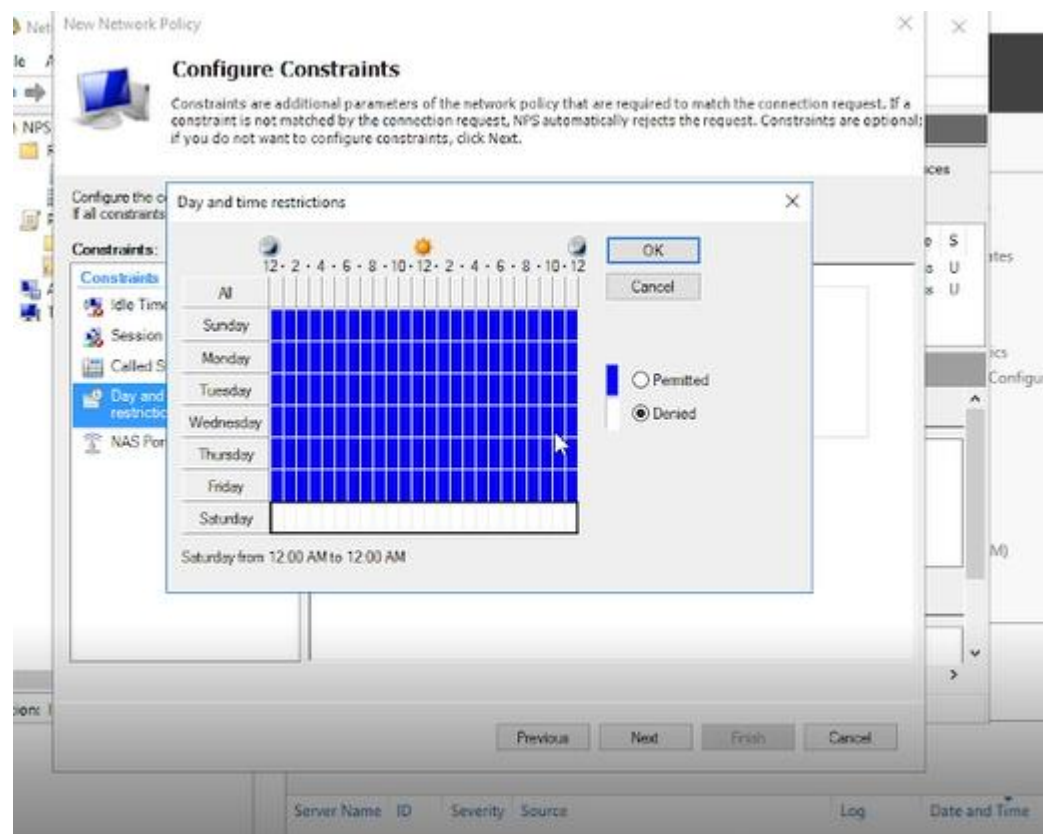
Add remote Access Role



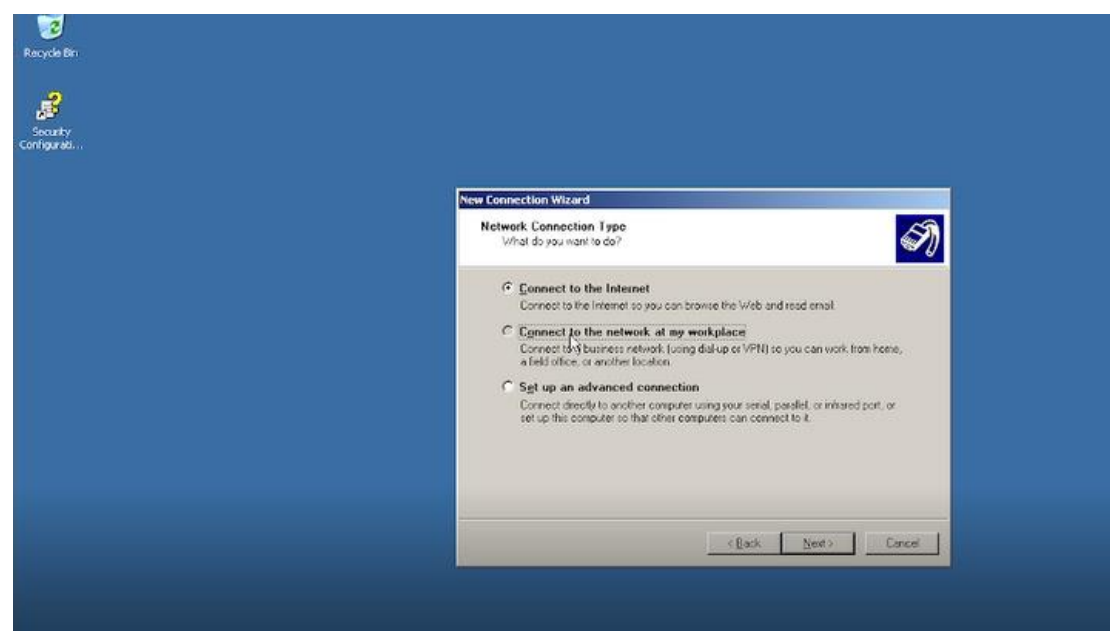


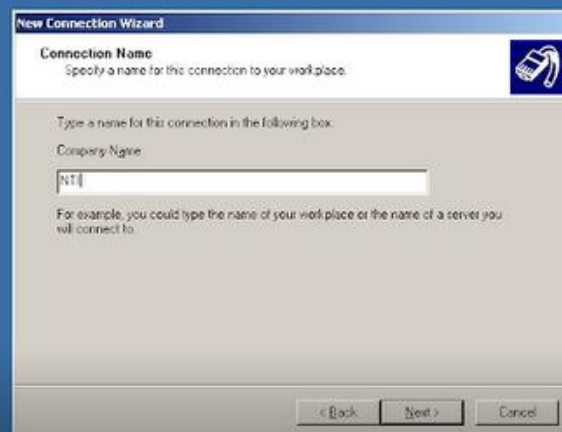
DHCP relay agent on VPN Server

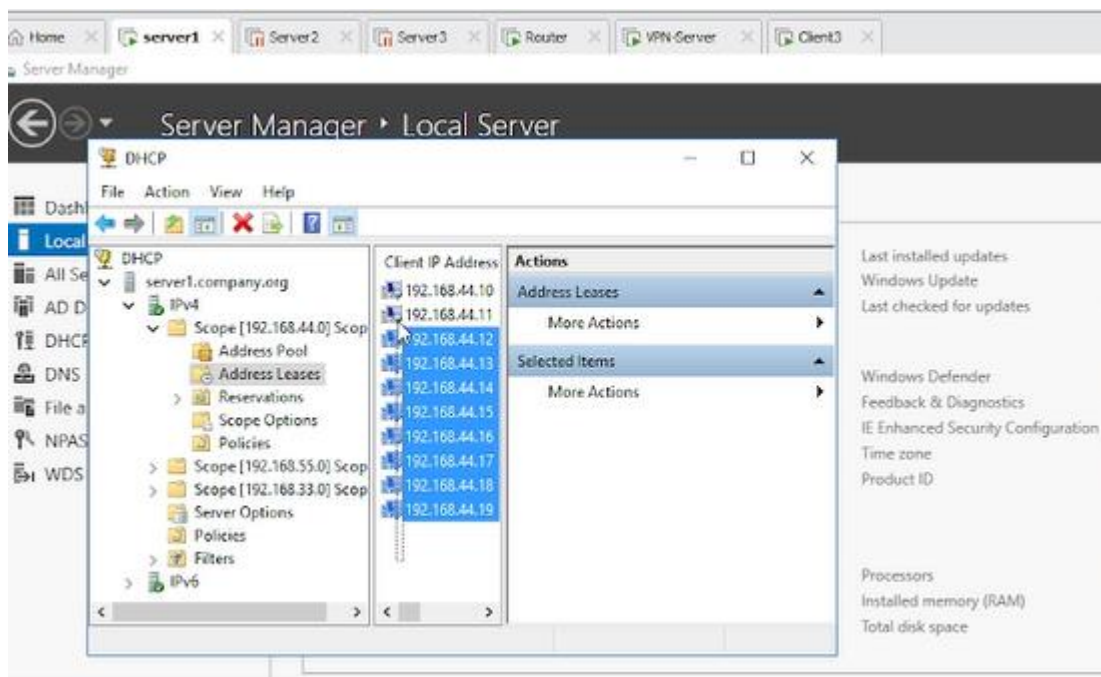
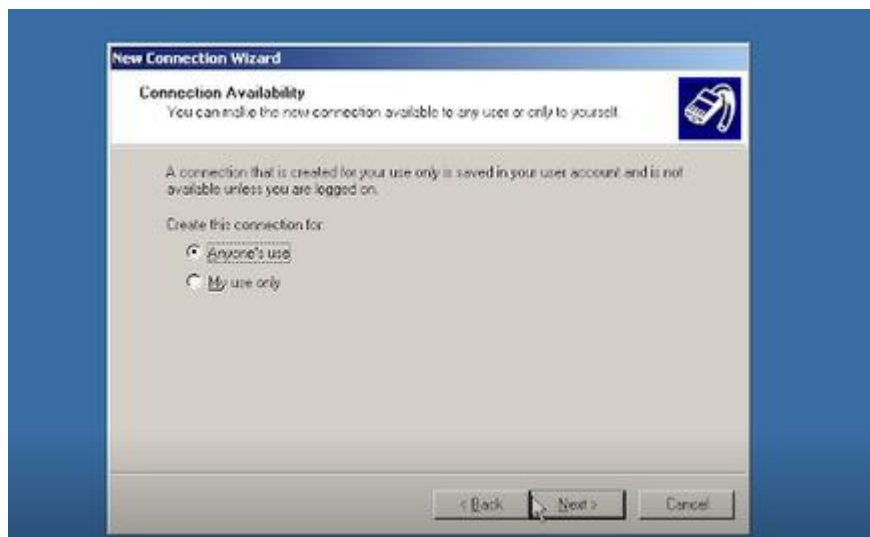
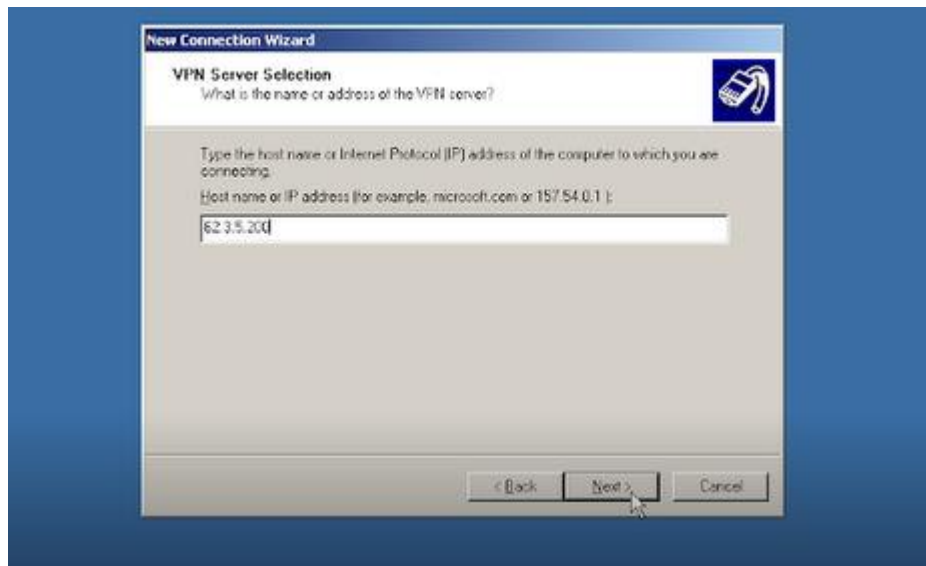


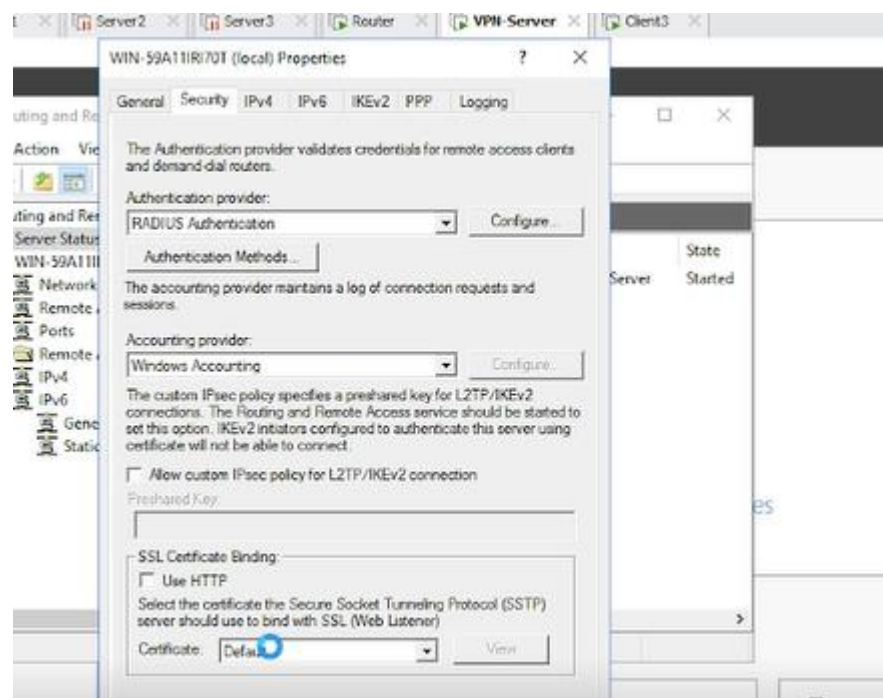
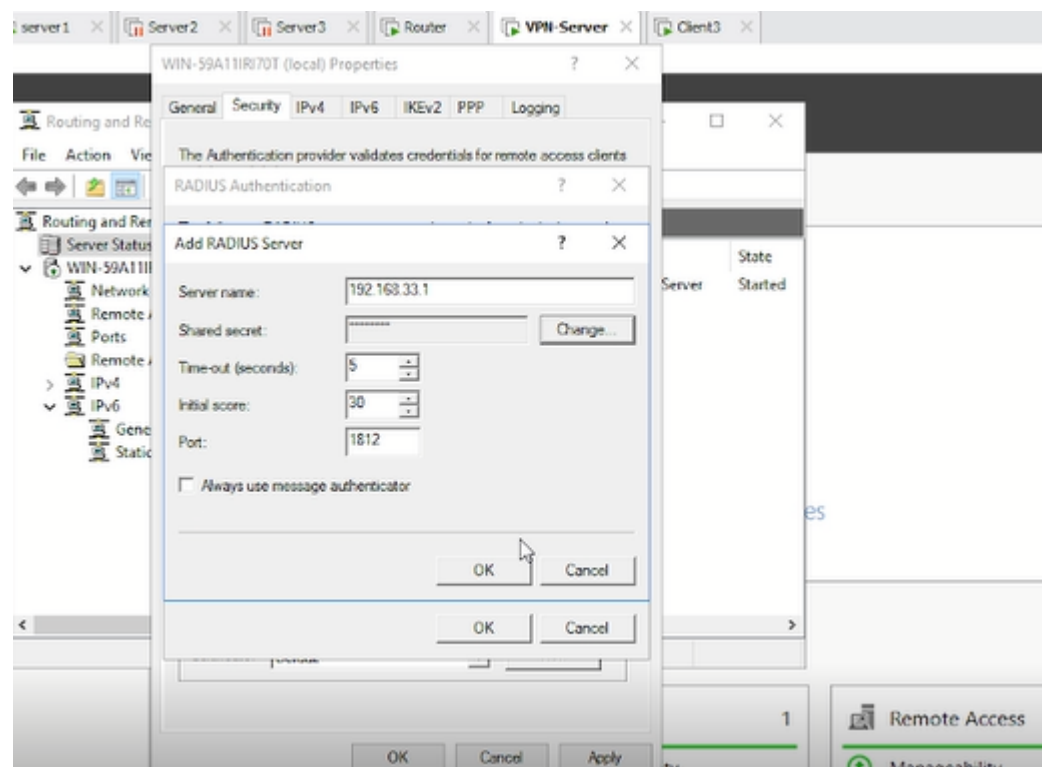


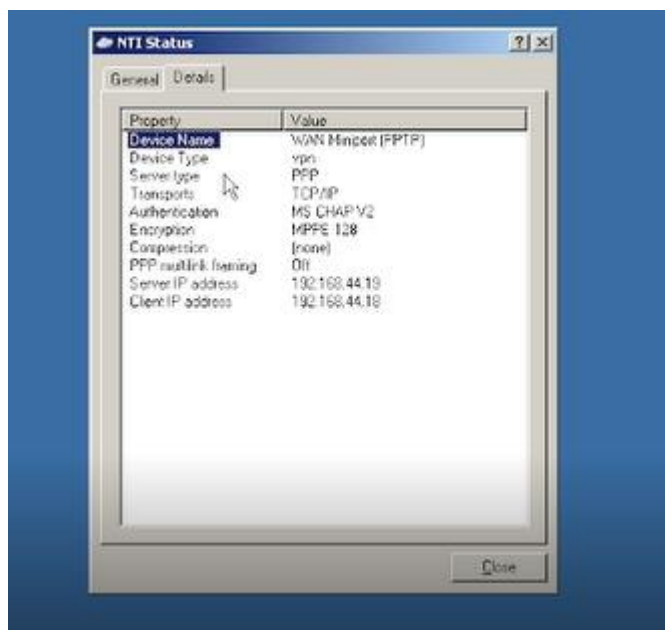
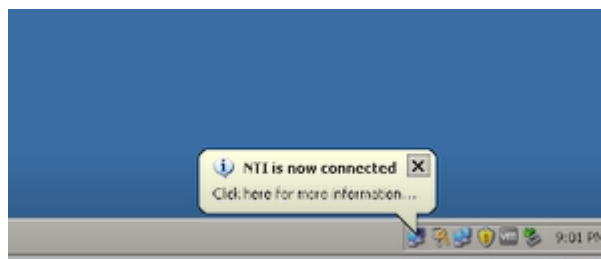
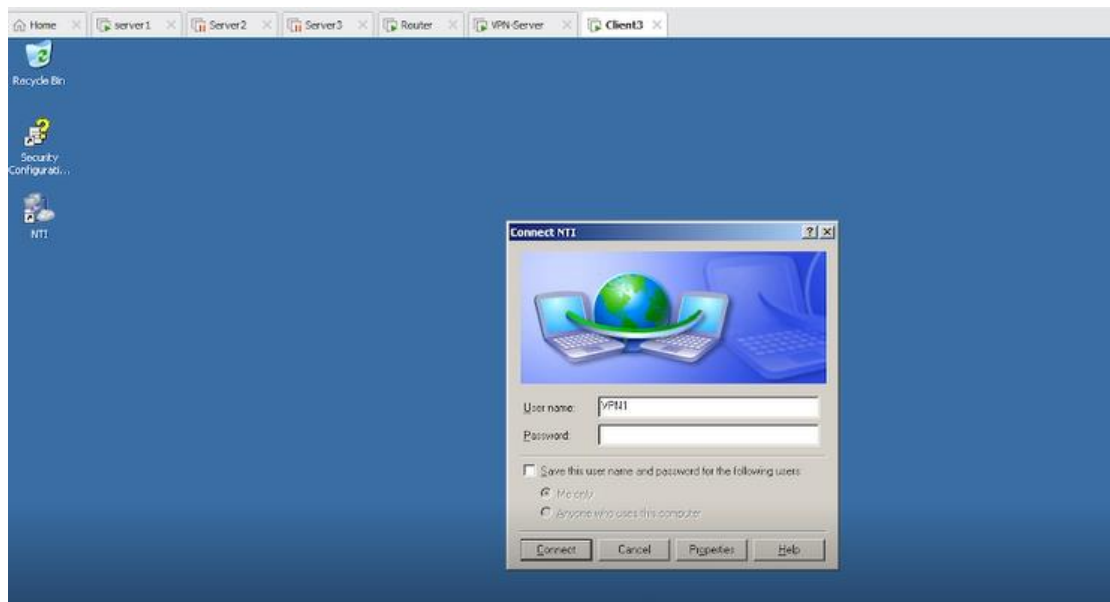
VPN Client



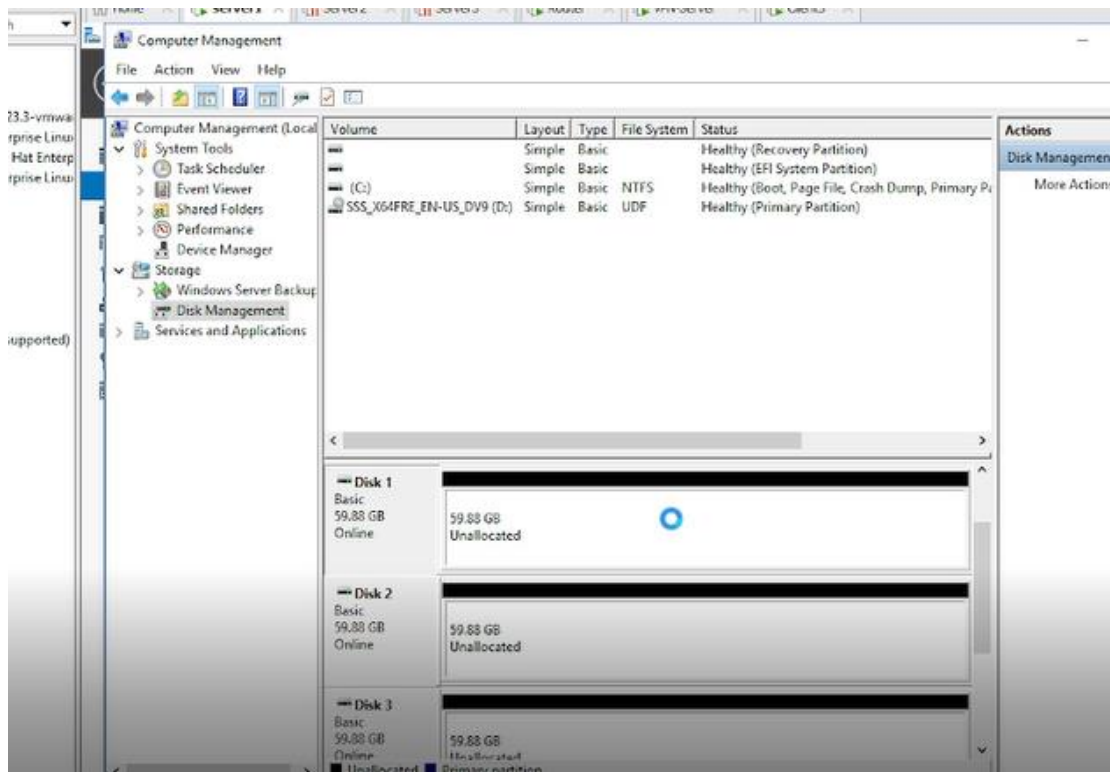
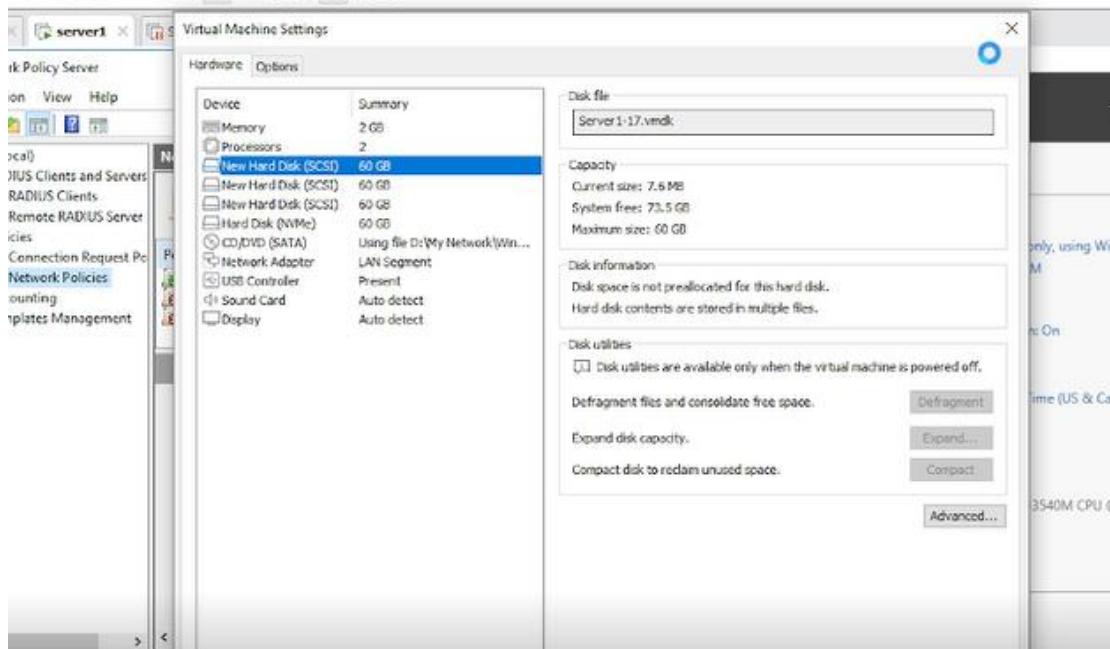


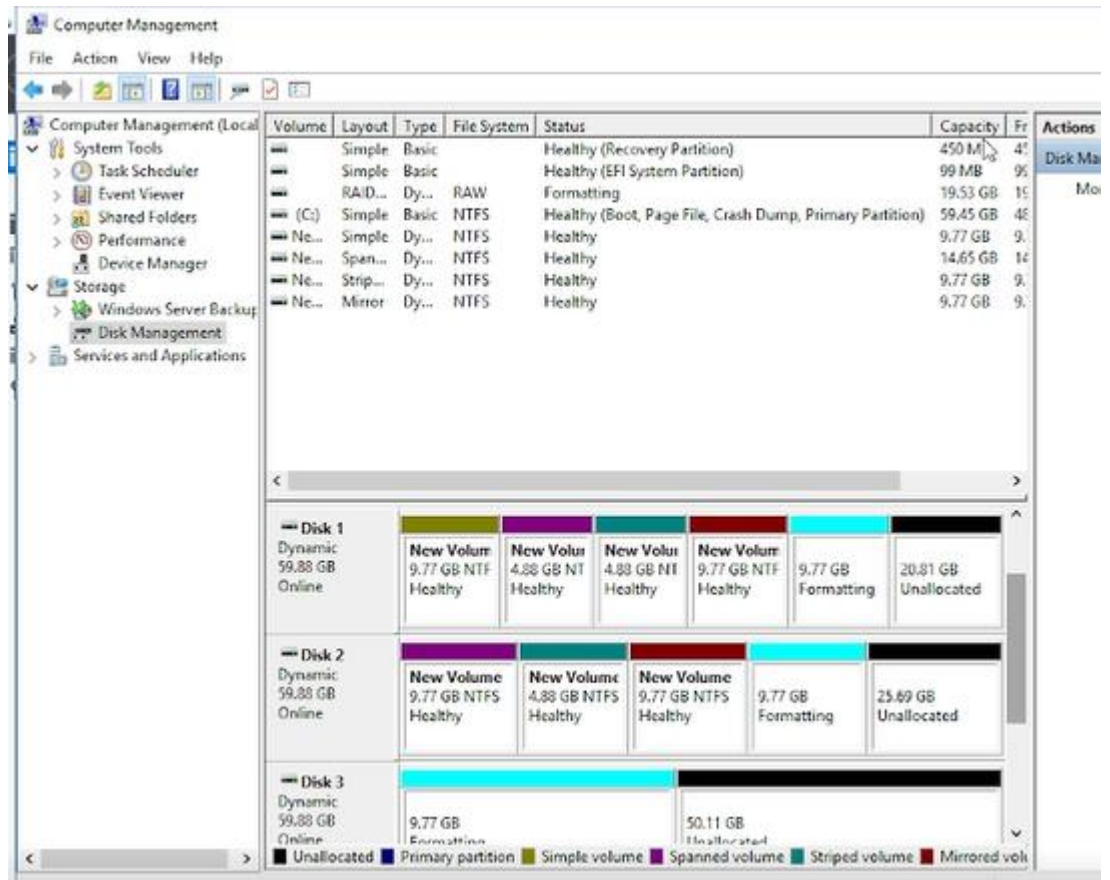
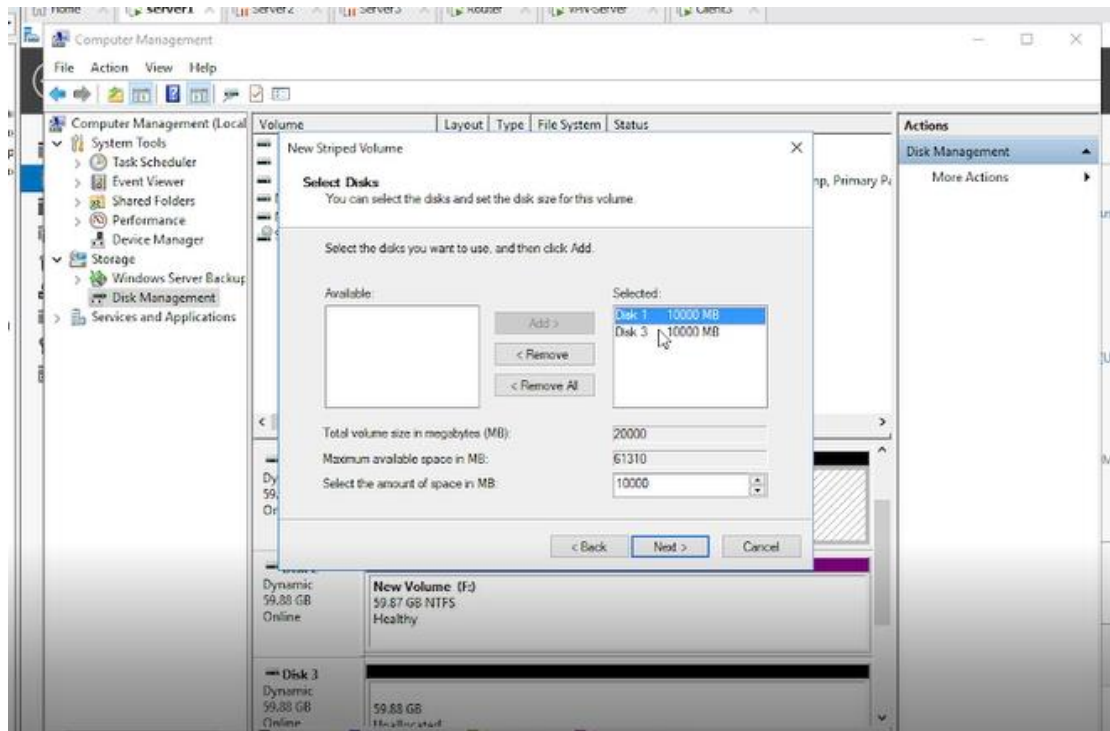


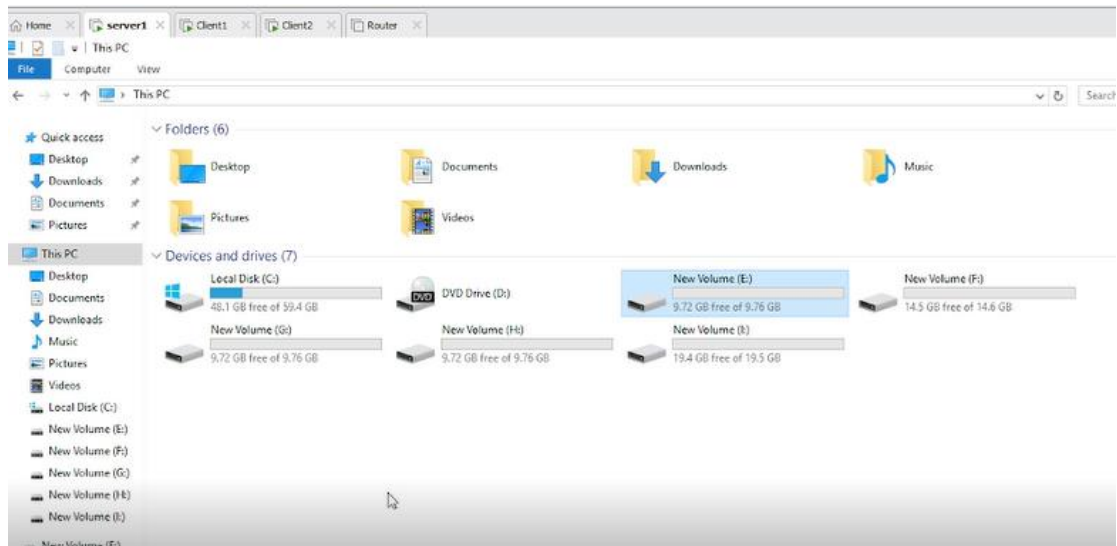




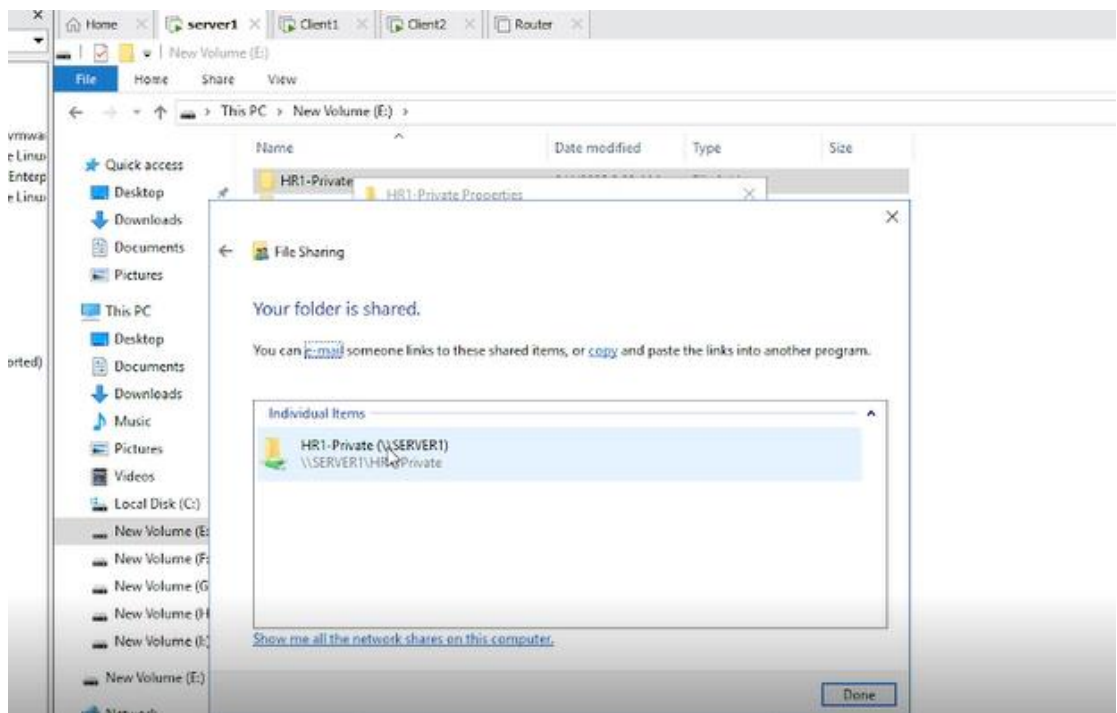
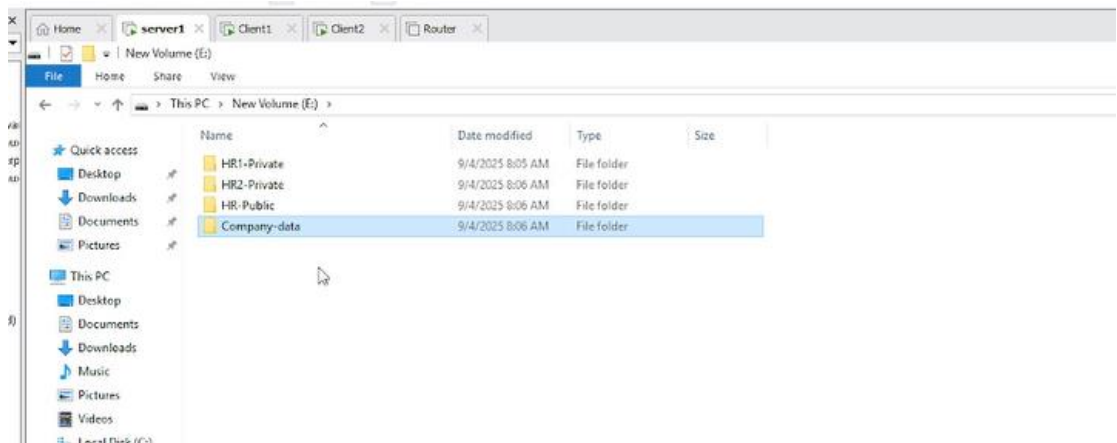
On server1 Create 3 New Hard Disk

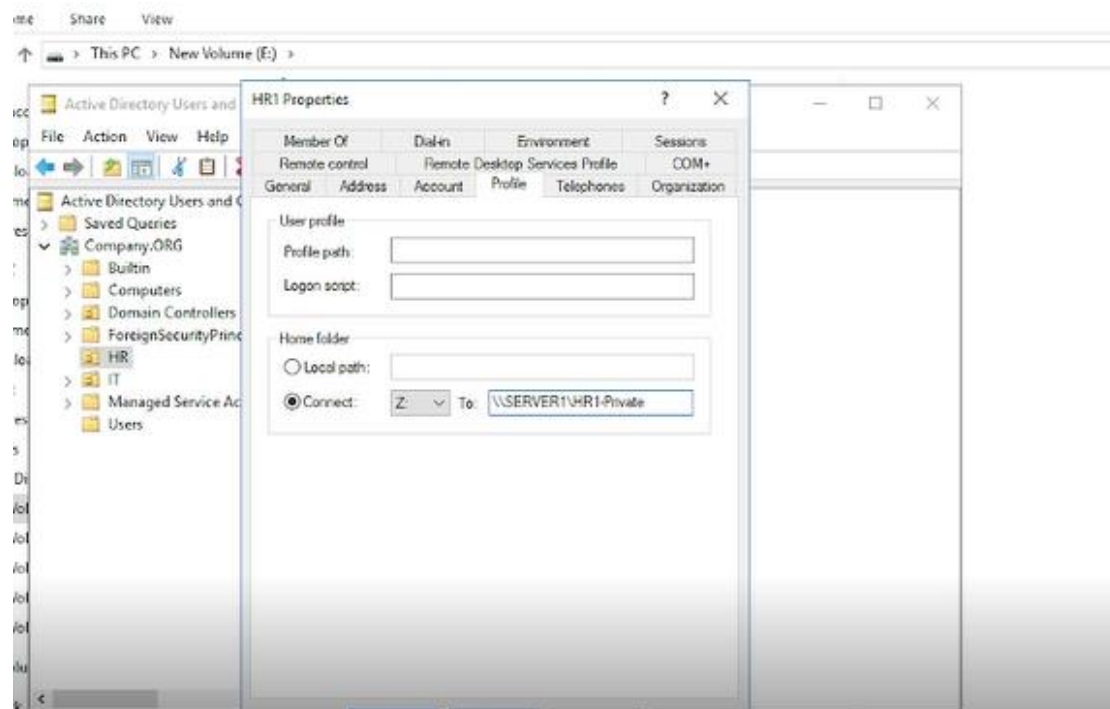




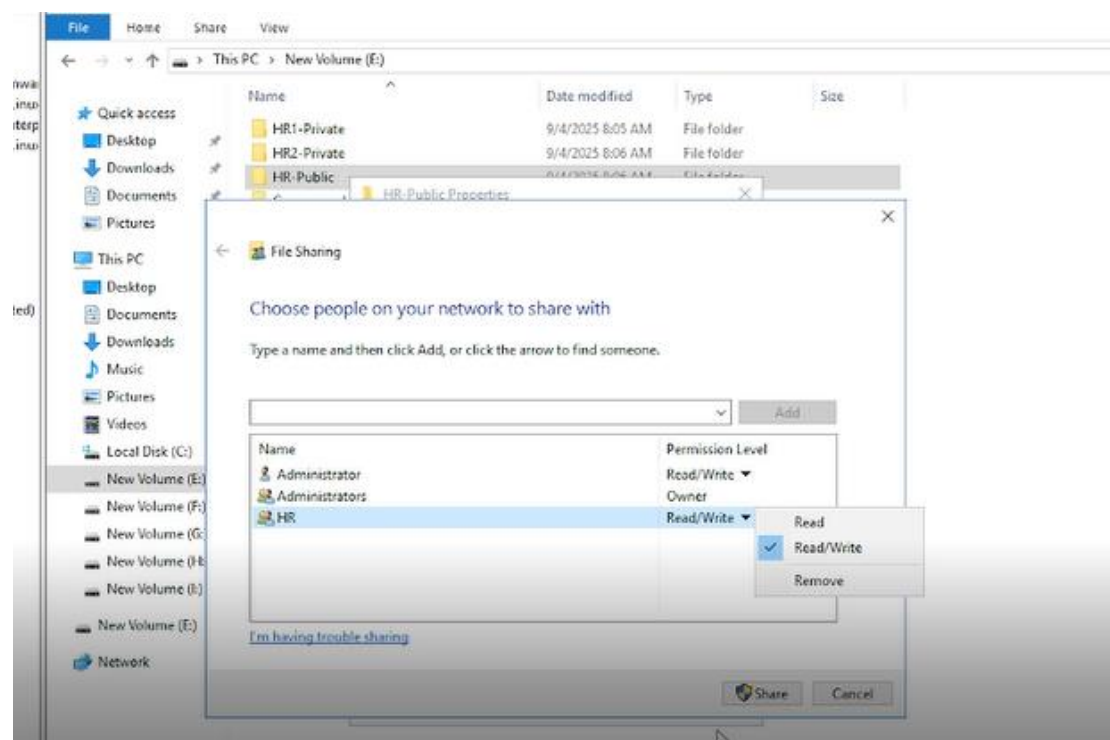


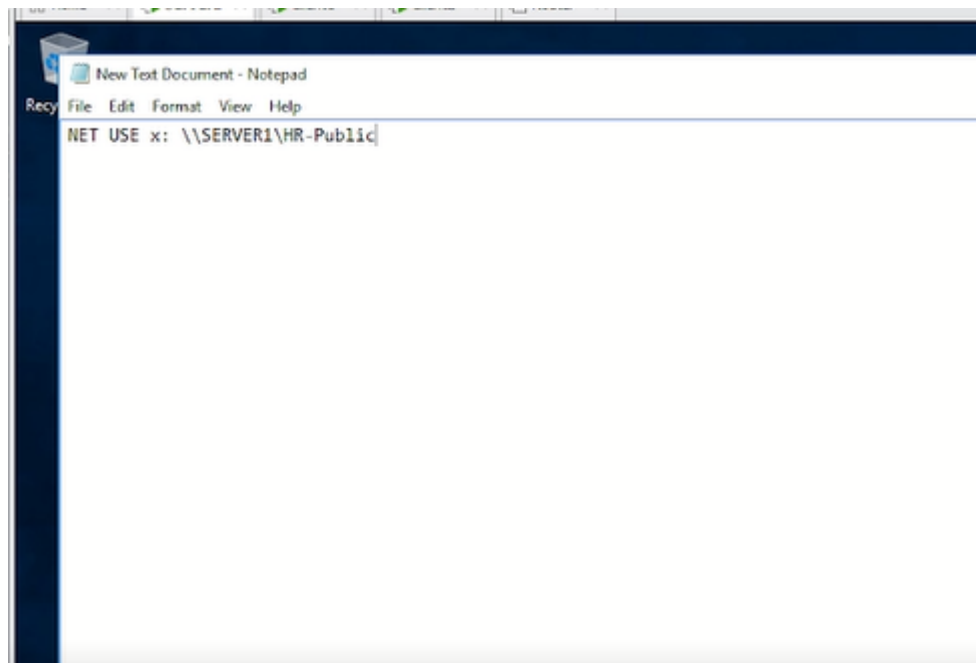
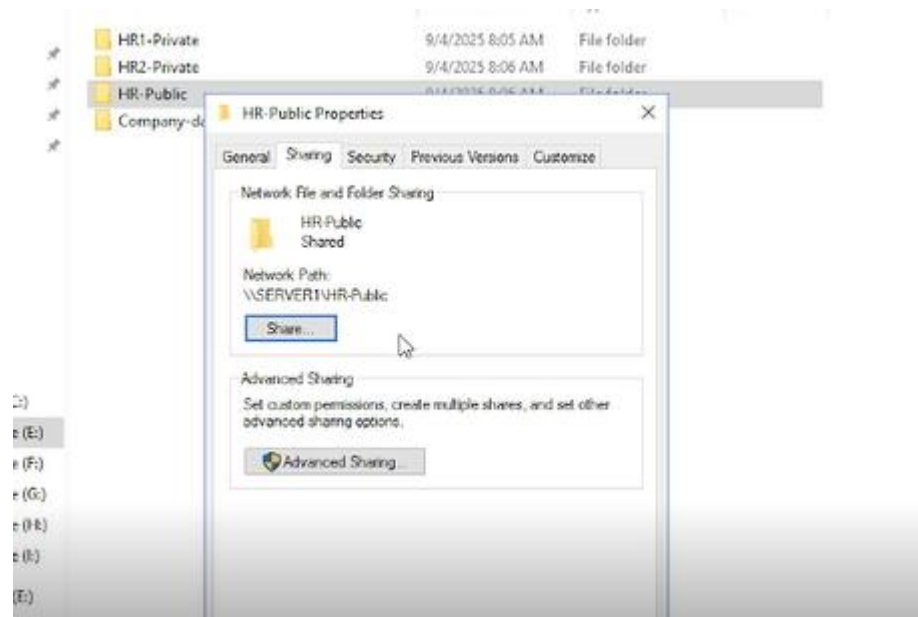
Create Public & Private Folder

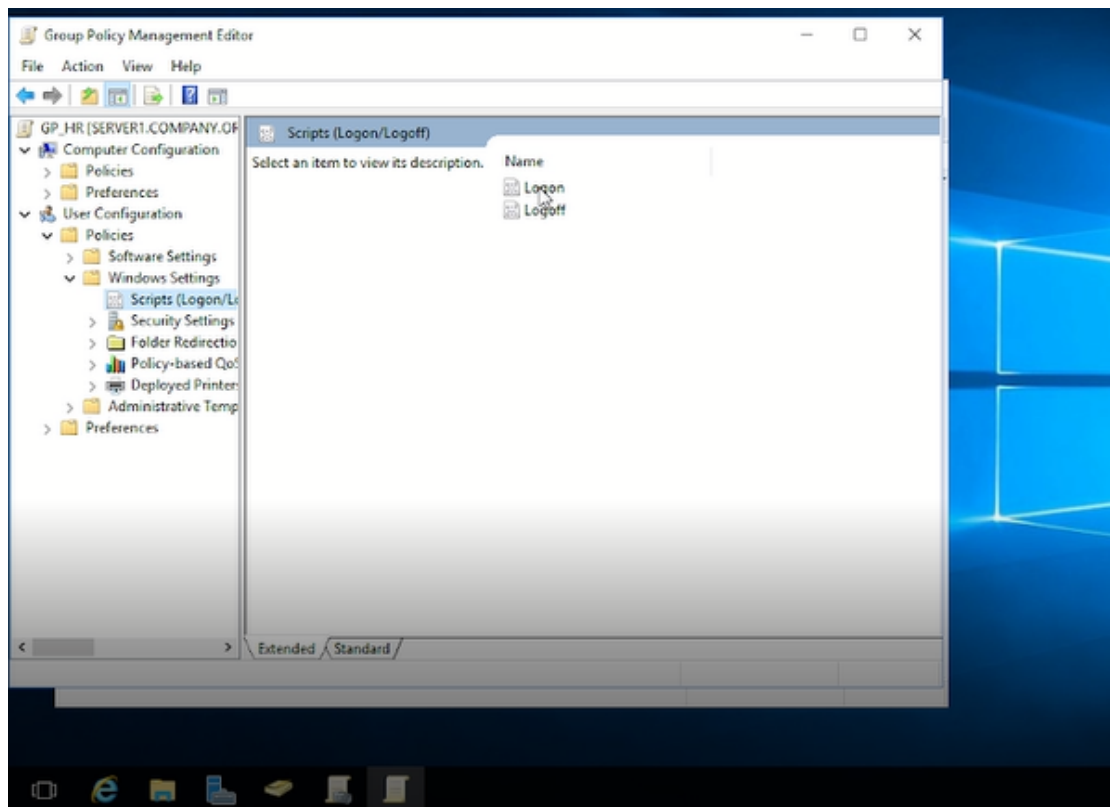
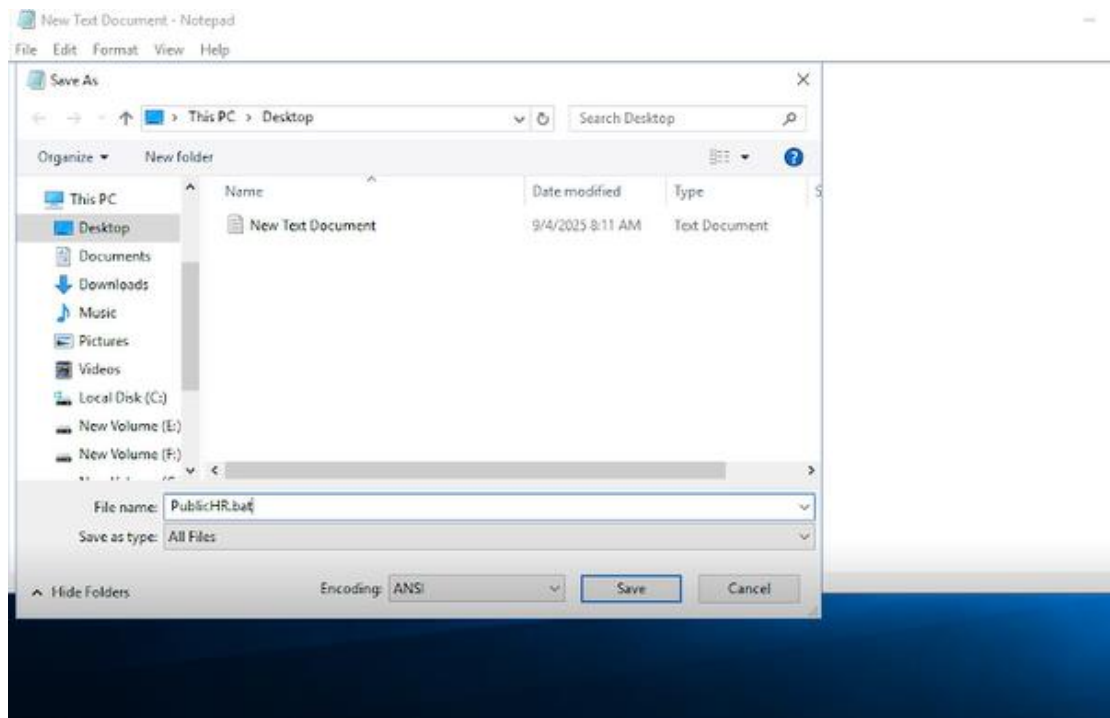


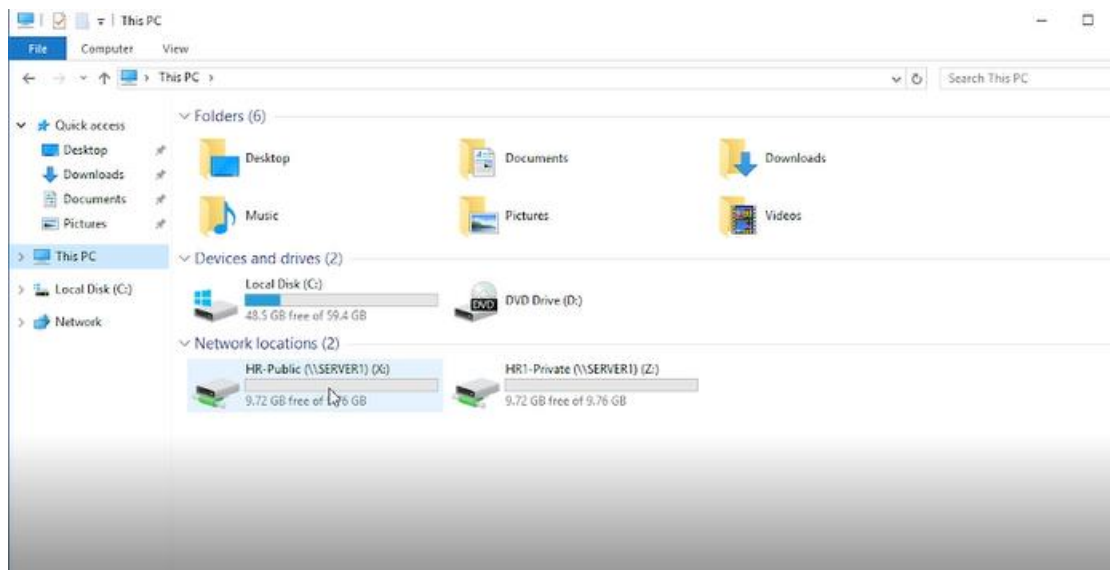
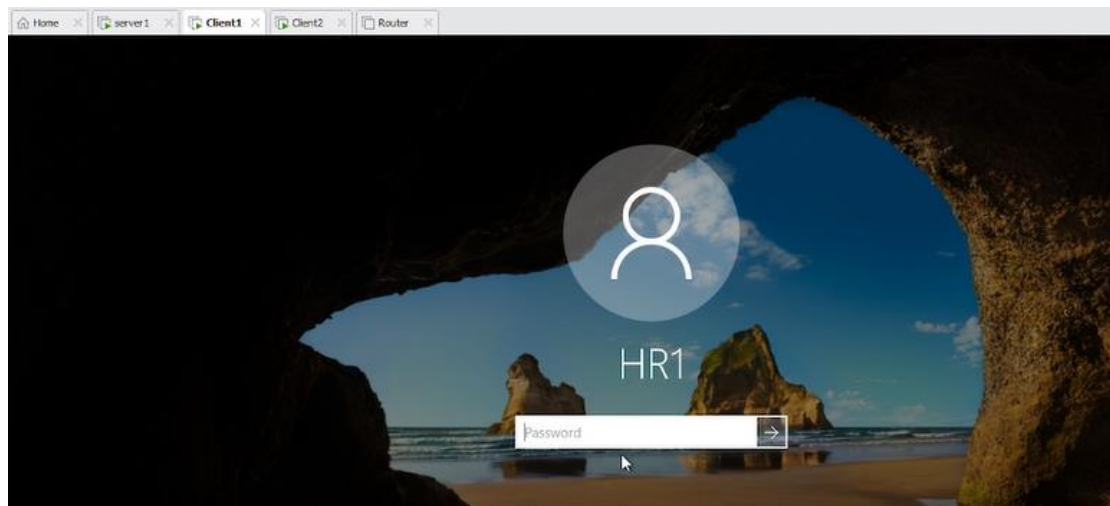
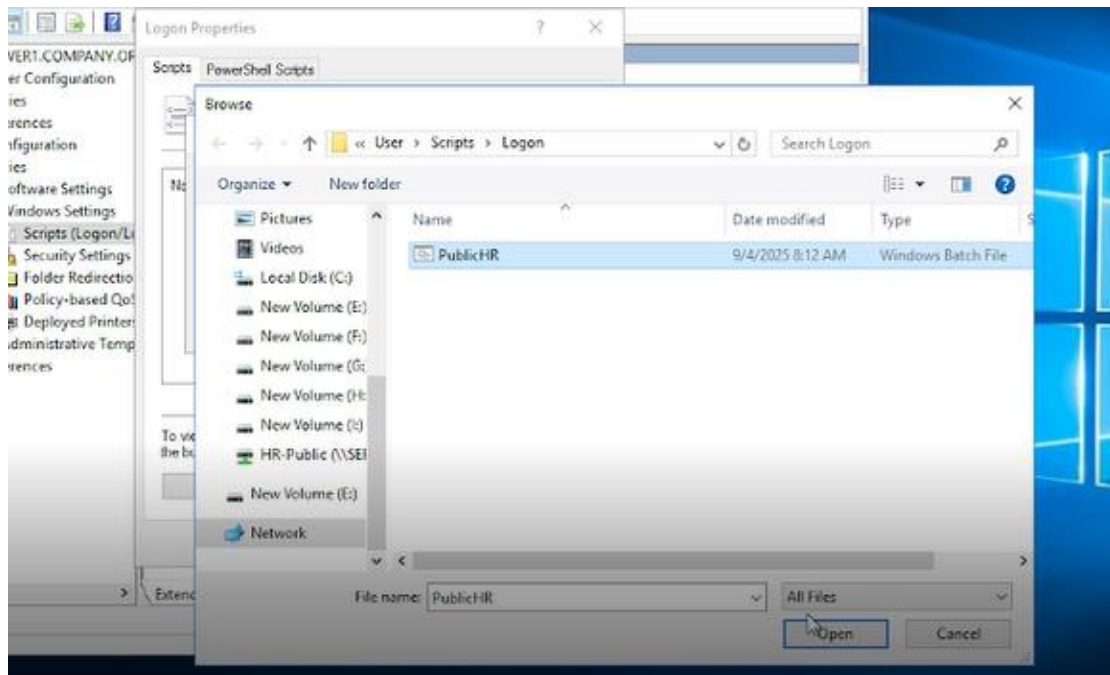


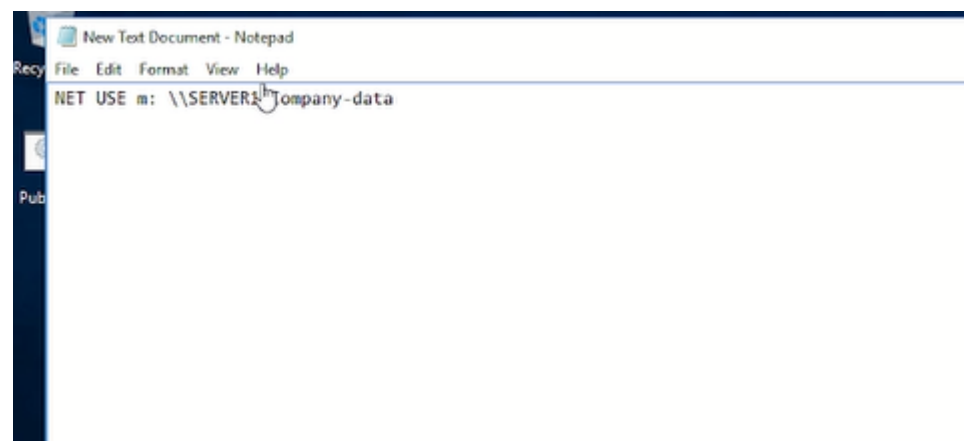
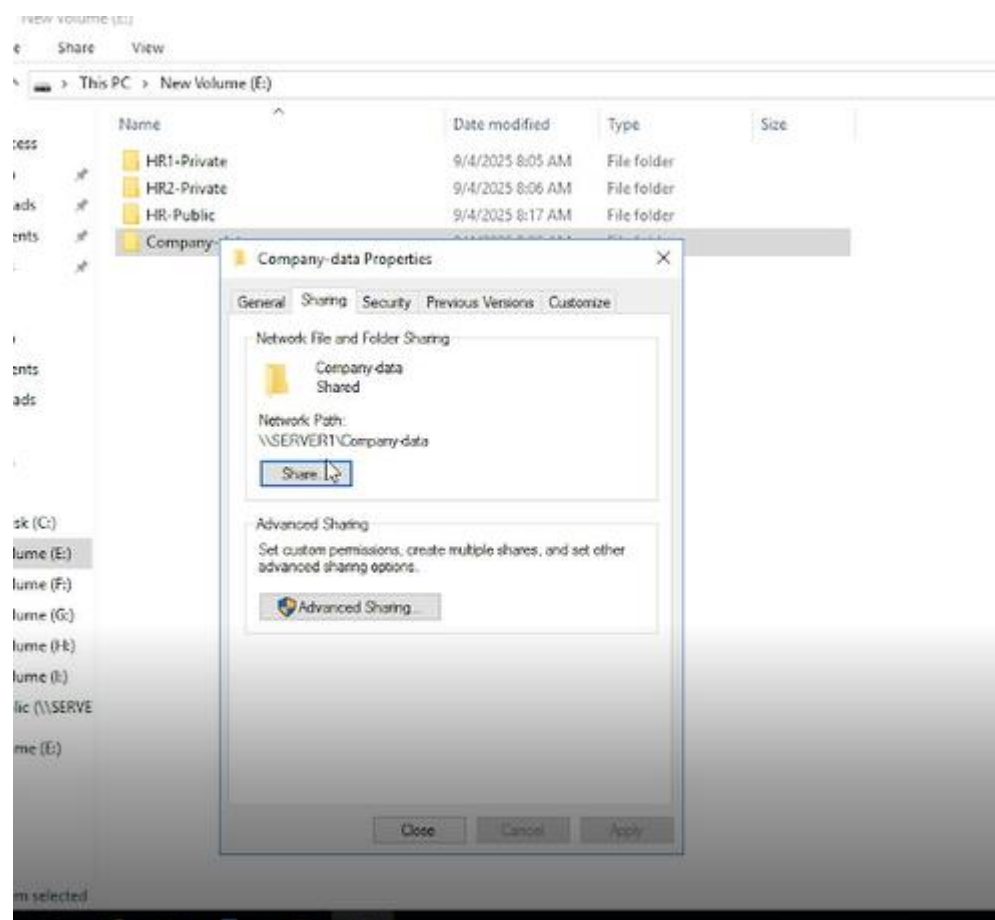
Share Folder HR-public For HR

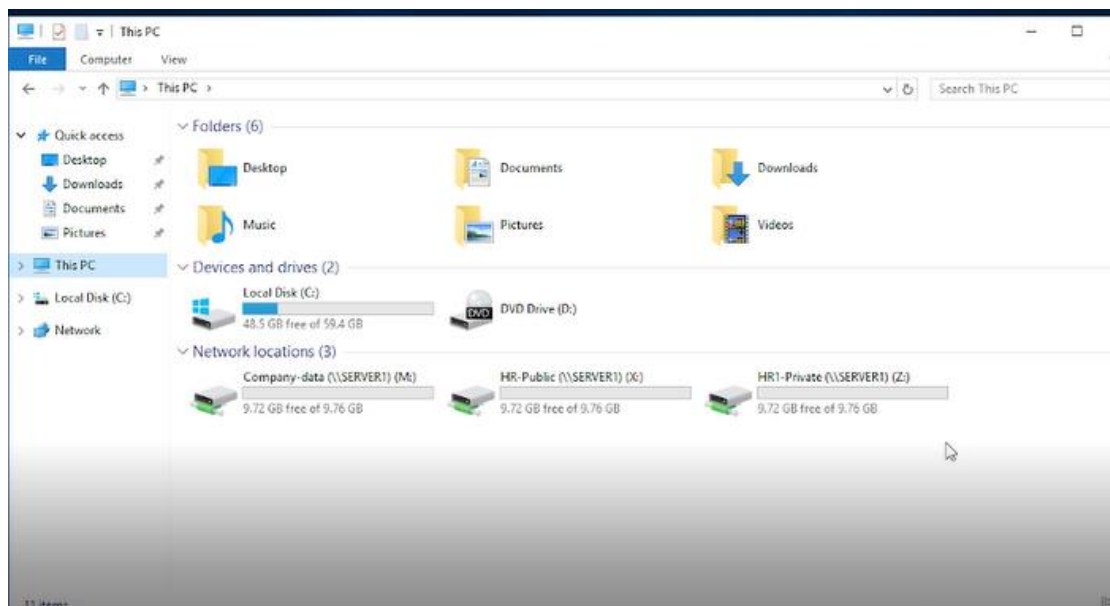
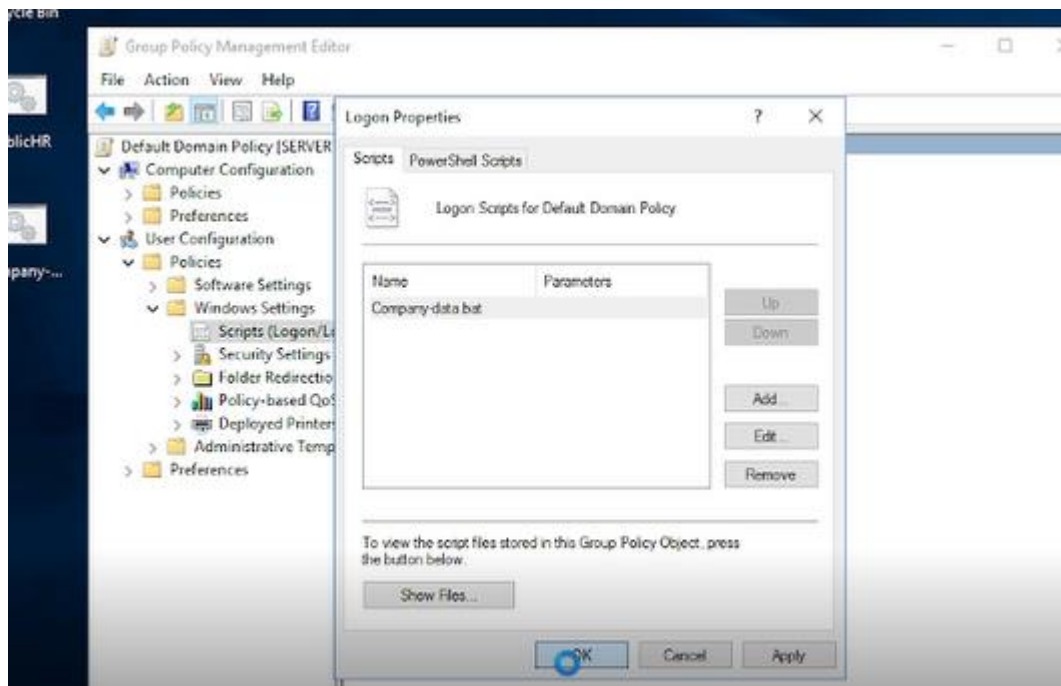




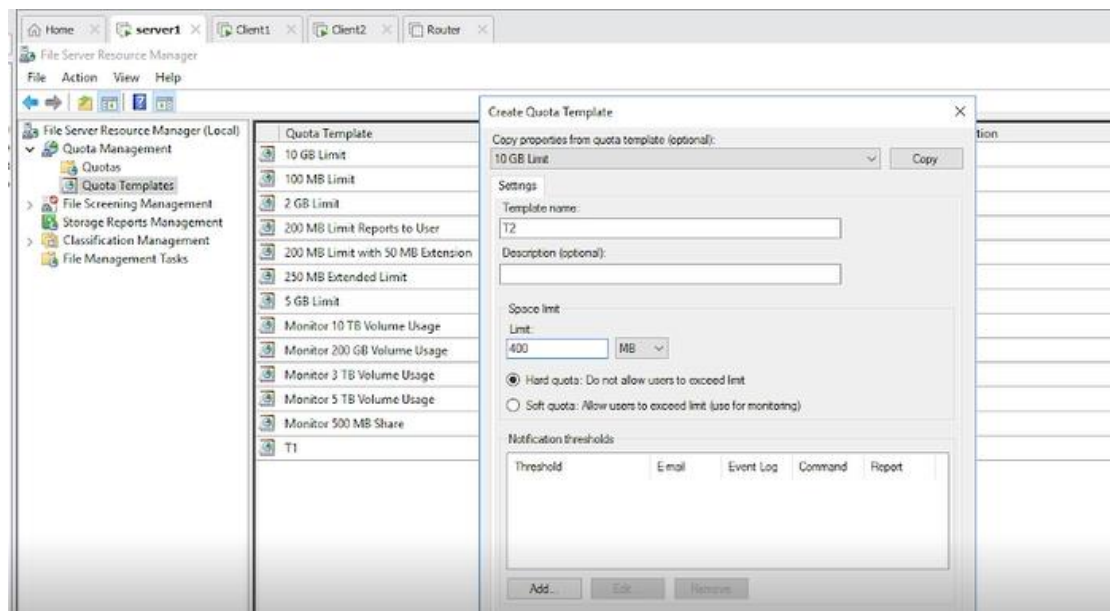
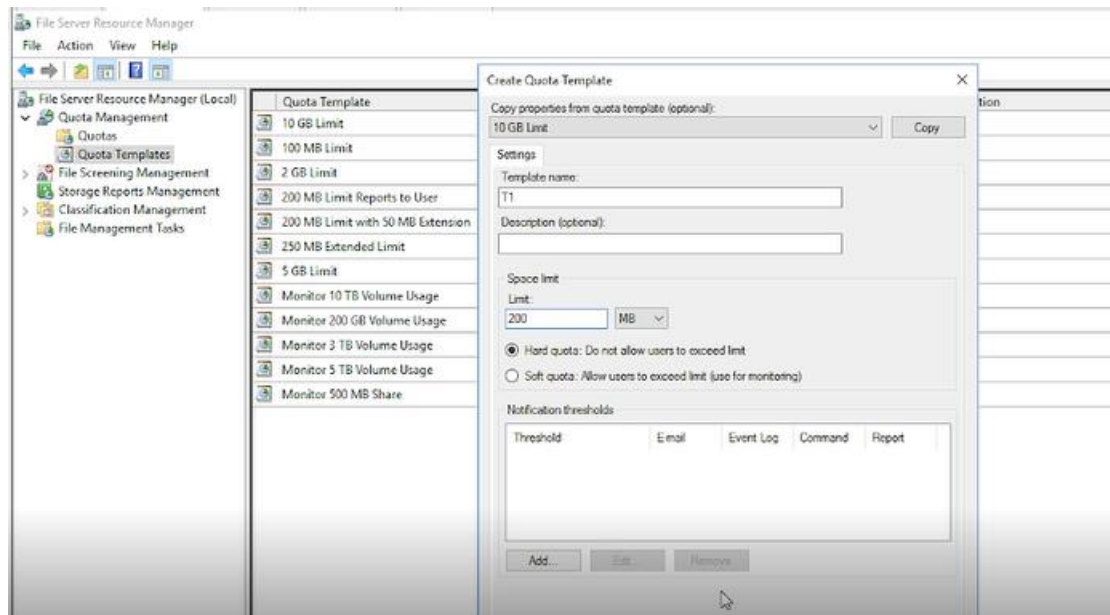


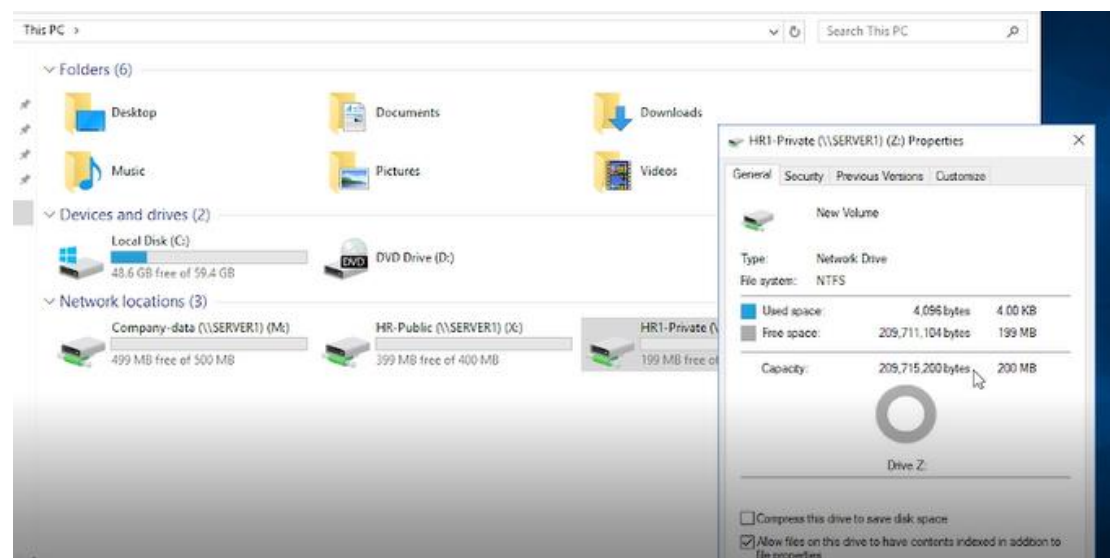
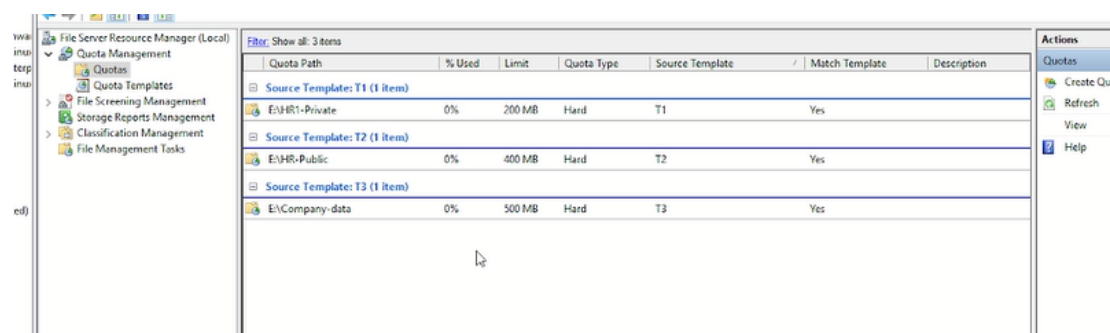
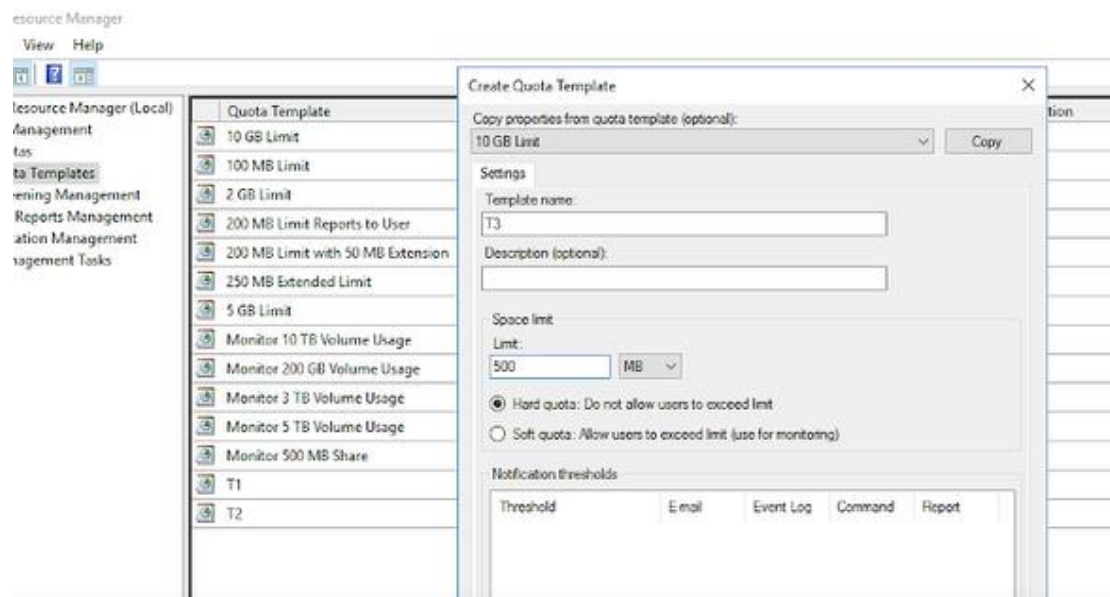




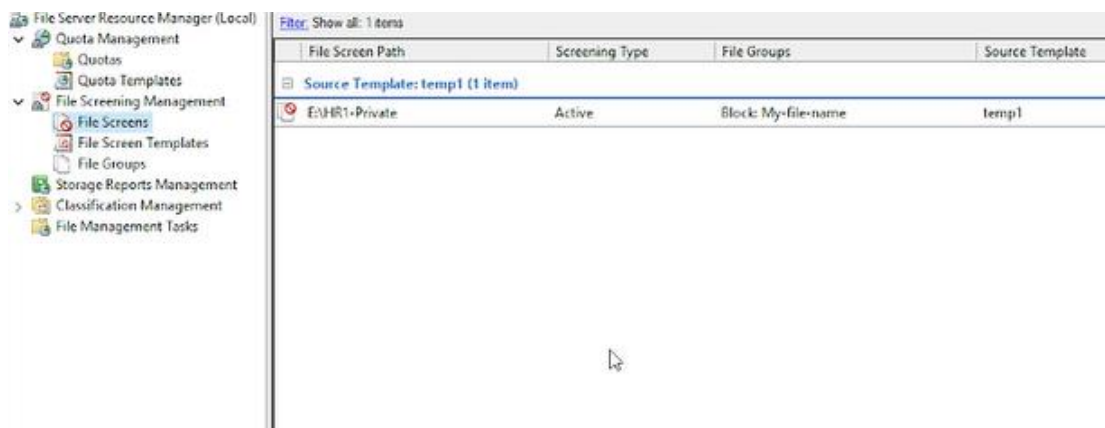
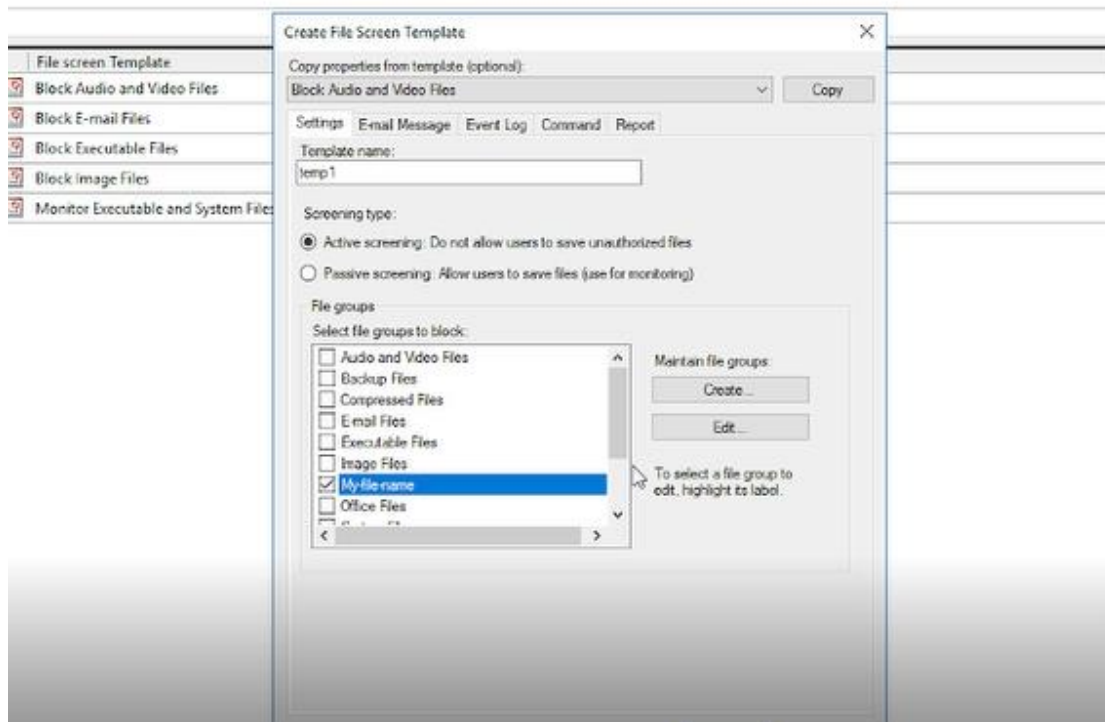
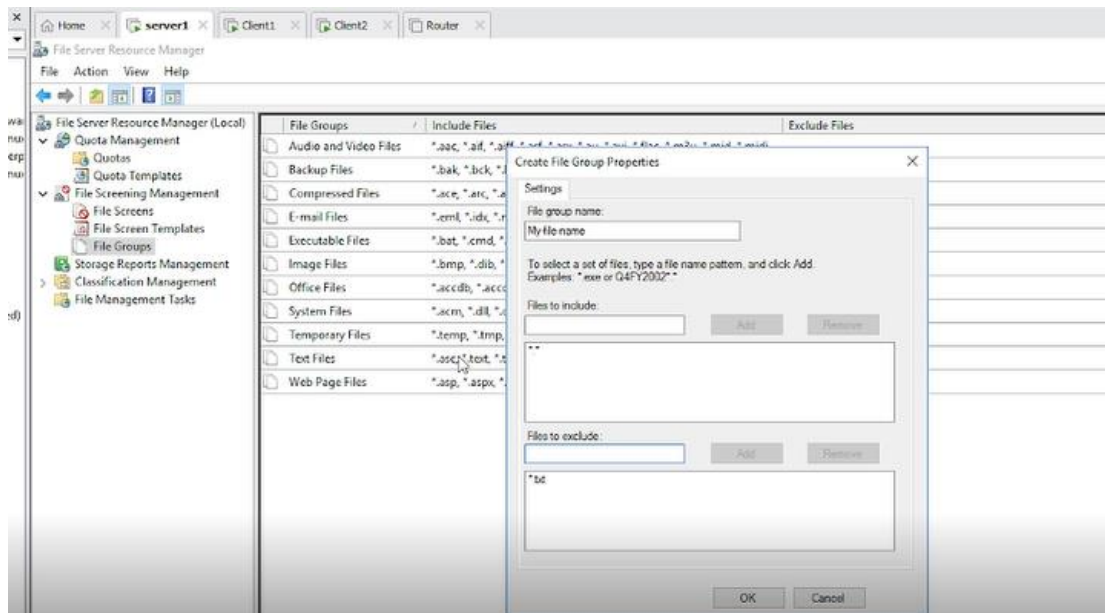


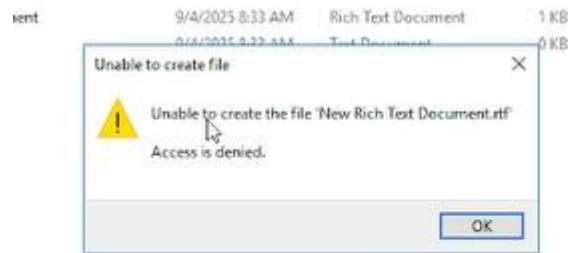
FSRM Role





File Screening





Report

Action View Help

\\server1\c\$\StorageReports \\server1\c\$\StorageReport... Waiting for go.microsoft.com

Files by Owner Report

Generated at: 9/4/2025 8:37:52 AM

Report Description: Lists files by users who own them. Use this report to understand usage patterns on the server and to quickly identify users who use large amounts of disk space.

Machine: SERVER1

Report Folders: "E:\Company-data"

[Files by Owner Report Table of Contents](#)

[Report Totals](#)
[Size by Owner](#)
[Size by File Group](#)
[Owner: COMPANY\IT1 Statistics](#)
[Owner: COMPANY\HR1 Statistics](#)
[Owner: BUILTIN\Administrators Statistics](#)

Report Totals					
Files shown in the report			All files matching report criteria		
Owners	Files	Total size on Disk	Owners	Files	Total size on Disk
3	6	0.01 MB	3	6	0.01 MB

[To top of the current report](#)

Size By Owner

Owner	Size	Percentage
COMPANY\IT1	0.01 MB	58.33 %
COMPANY\HR1	0.00 MB	25.00 %
BUILTIN\Administrators	0.00 MB	16.67 %

2 items 1 item selected 17.8 KB

Printer

