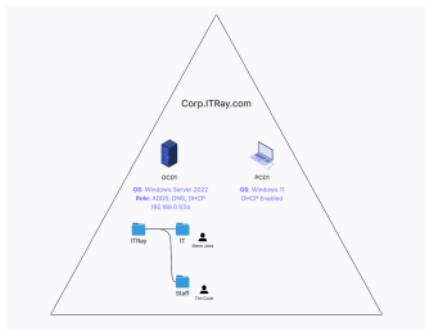


# Installing Active Directory Domain Services in Windows Server 2022, along with DNS and DHCP

Wednesday, April 2, 2025 4:11 PM



Server Manager

Server Manager • Local Server

PROPERTIES For DC01

Computer name		Last installed updates	
DC01	WORKGROUP	Windows Update	4/24/2025
Workgroup		Last checked for updates	Today at 4:11 PM
Microsoft Defender Firewall		Microsoft Defender Antivirus	Real-Time Protection
Public	On	Feedback & Diagnostics	Setting
Remote management	Enabled	IE Enhanced Security Configuration	On
Remote Desktop	Disabled	Time zone	(UTC-0)
NIC Teaming	Disabled	Product ID	00455-
Ethernet0	192.168.0.1, IPv6 enabled		
Azure Arc Management	Disabled		
Operating system version		Processors	AMD Ryzen 5 5600U
Hardware information		Installed memory (RAM)	8 GB

Renamed machine to DC01

Statically assigned the IP address to 192.168.0.1

Best practice for Domain controller to have static IP or any server

Server Manager

Server Manager • Dashboard

WELCOME TO SERVER MANAGER

1 Configure this local server

2 Add roles and features

3 Add other servers to manage

4 Create a server group

5 Connect this server to cloud services

QUICK START

WHAT'S NEW

LEARN MORE

ROLES AND SERVER GROUPS

Roles: 1 | Server groups: 1 | Servers total: 1

File and Storage Services 1

Local Server 1

Manageability

Events

Performance

BPA results

Manageability

Events

Services

Performance

BPA results

Click on Dashboard tab and Add roles and features

Add Roles and Features Wizard

Before you begin

DESTINATION SERVER  
DC01

This wizard helps you install roles, role services, or features. You determine which roles, role services, or features to install based on the computing needs of your organization, such as sharing documents, or hosting a website.

To remove roles, role services, or features:  
Start the Remove Roles and Features Wizard

Before you continue, verify that the following tasks have been completed:

- The Administrator account has a strong password
- Network settings, such as static IP addresses, are configured
- The most current security updates from Windows Update are installed

If you must verify that any of the preceding prerequisites have been completed, close the wizard, complete the steps, and then run the wizard again.

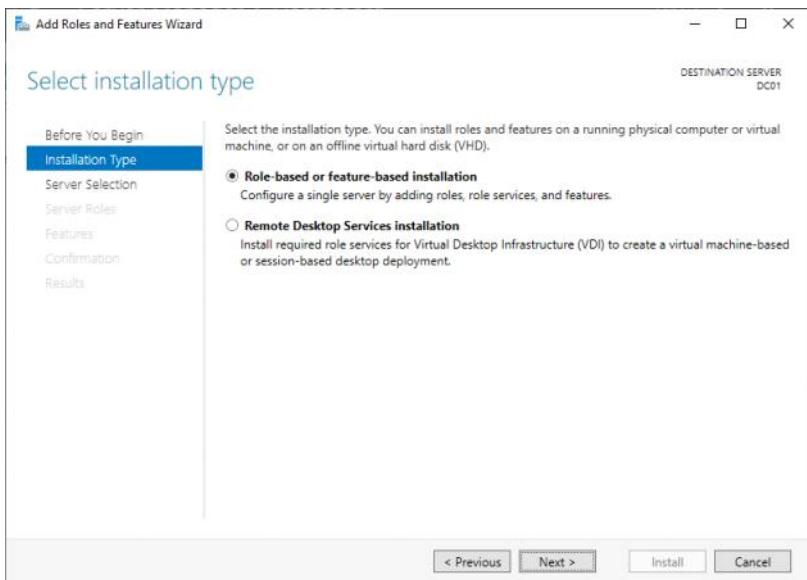
To continue, click Next.

Skip this page by default

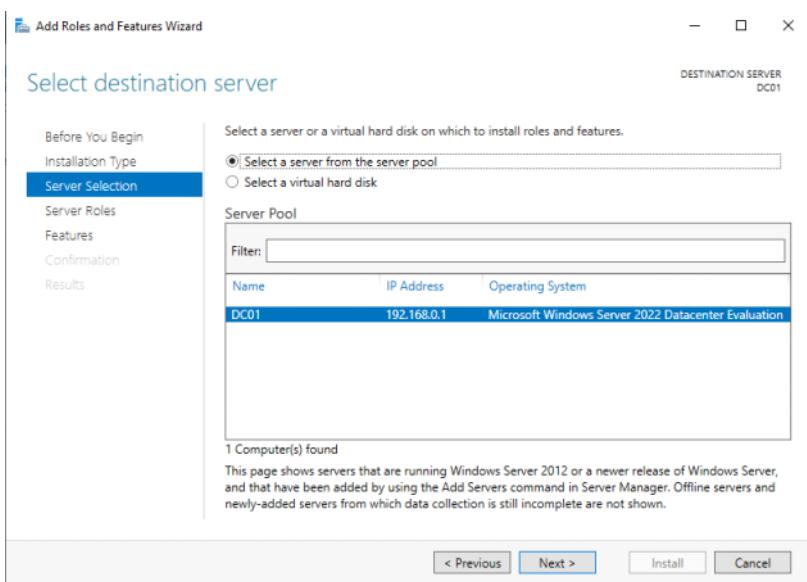
< Previous    Next >    Install    Cancel

Performance    Services

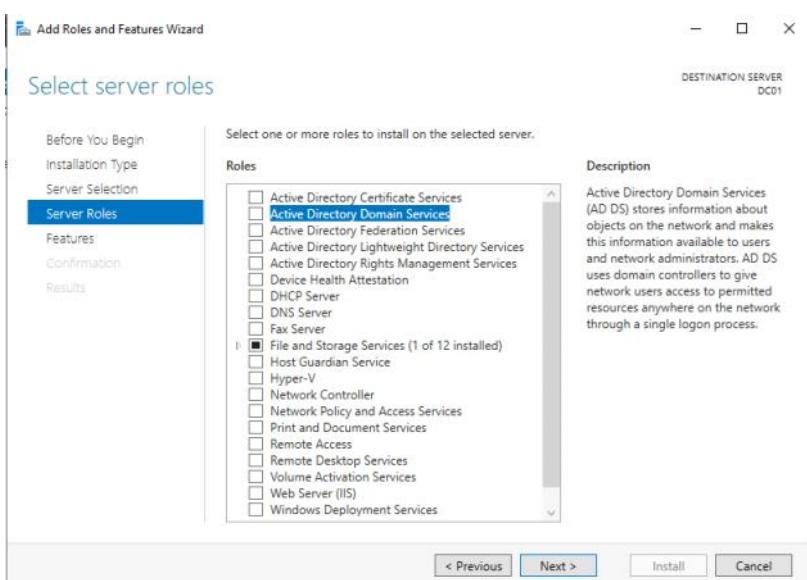
Follow through wizard



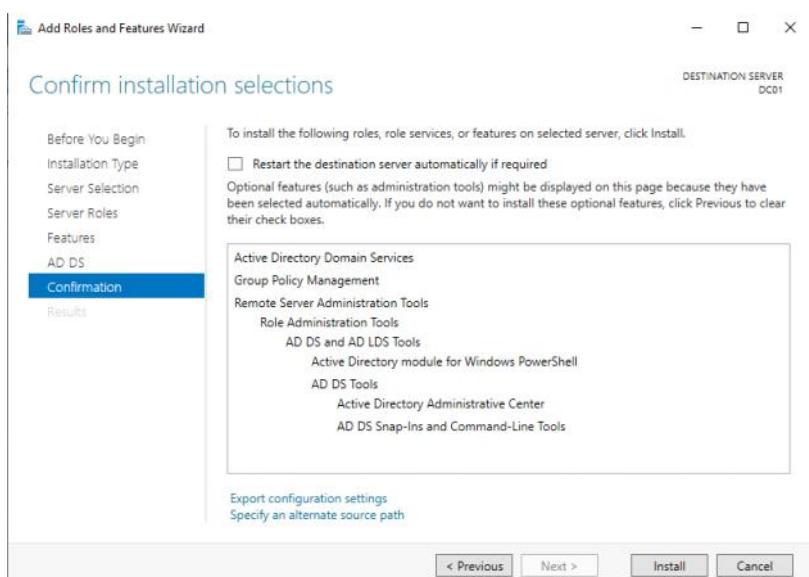
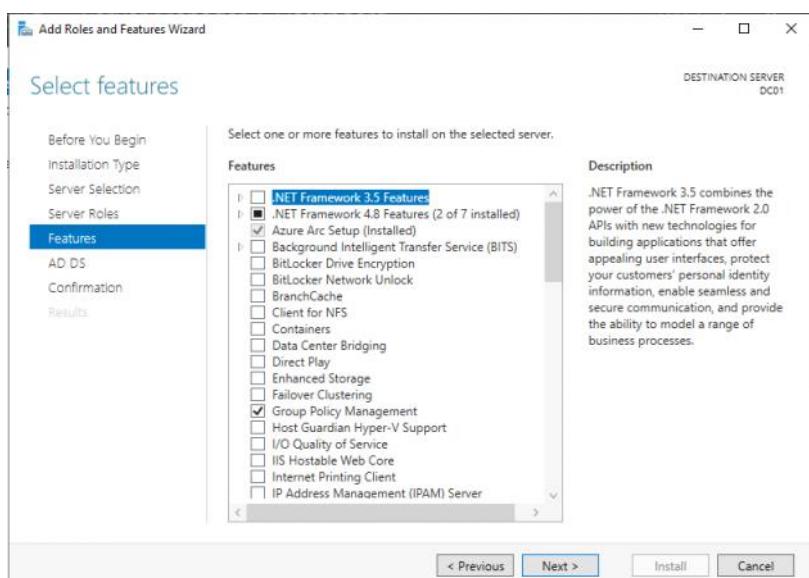
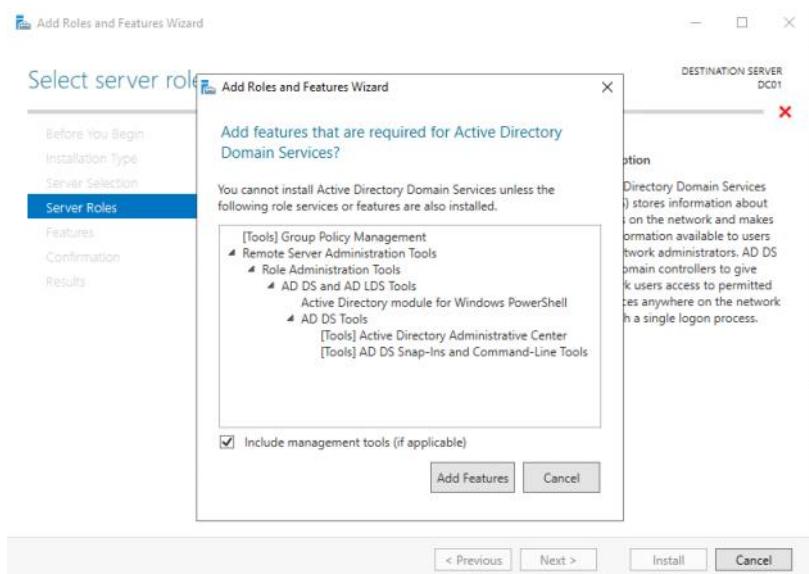
Role based installation



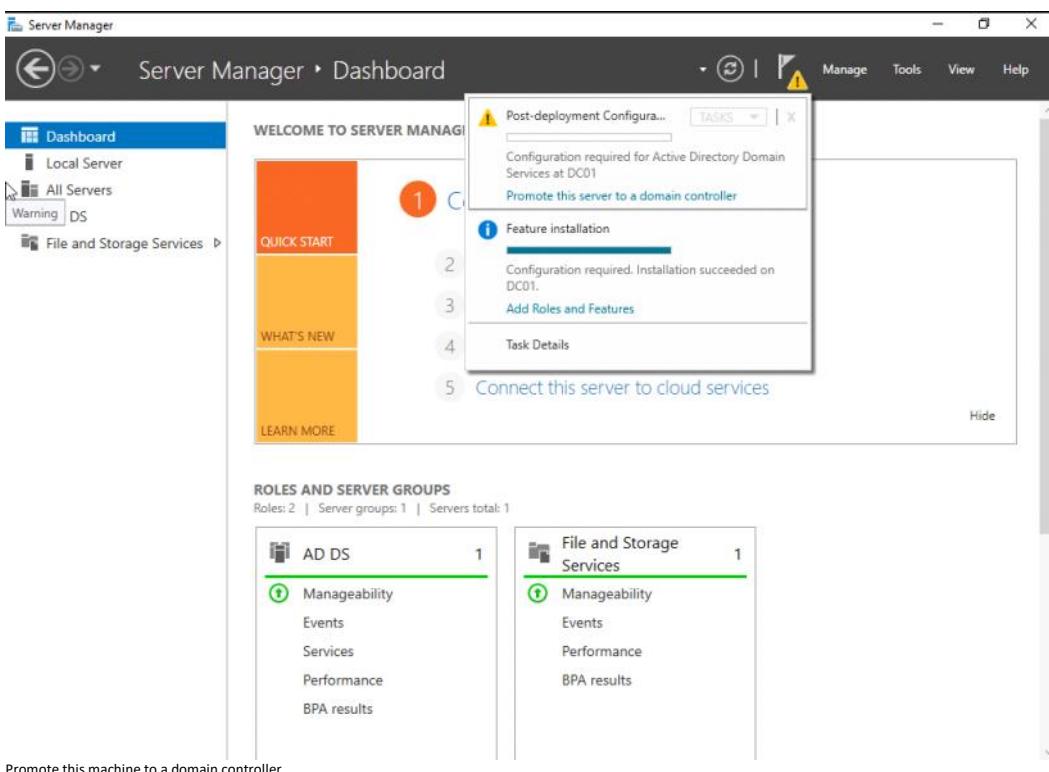
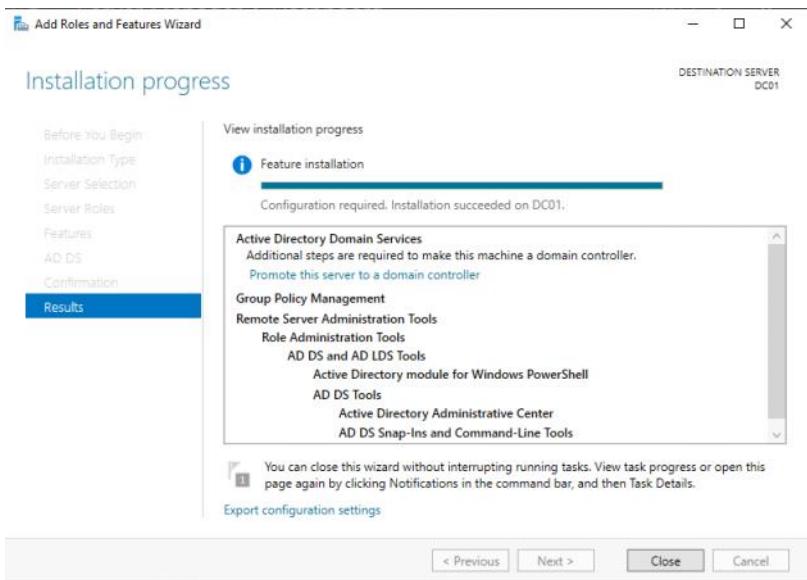
Verify server pool is showing

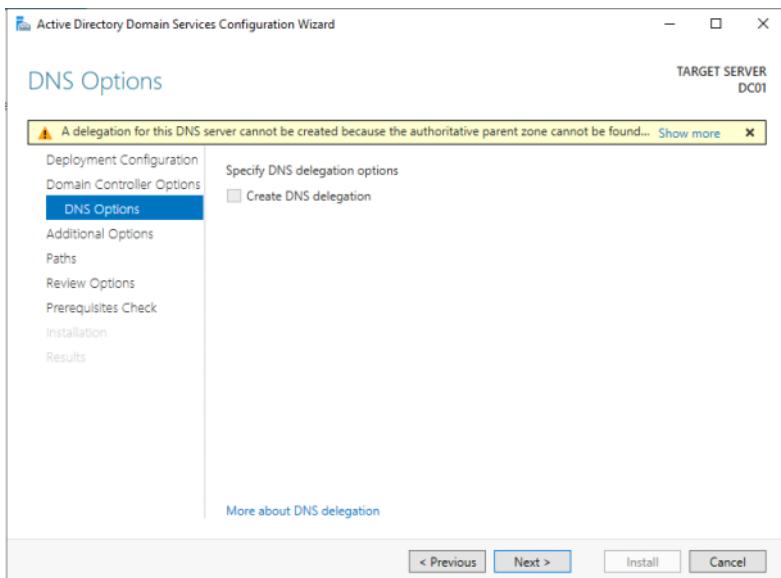
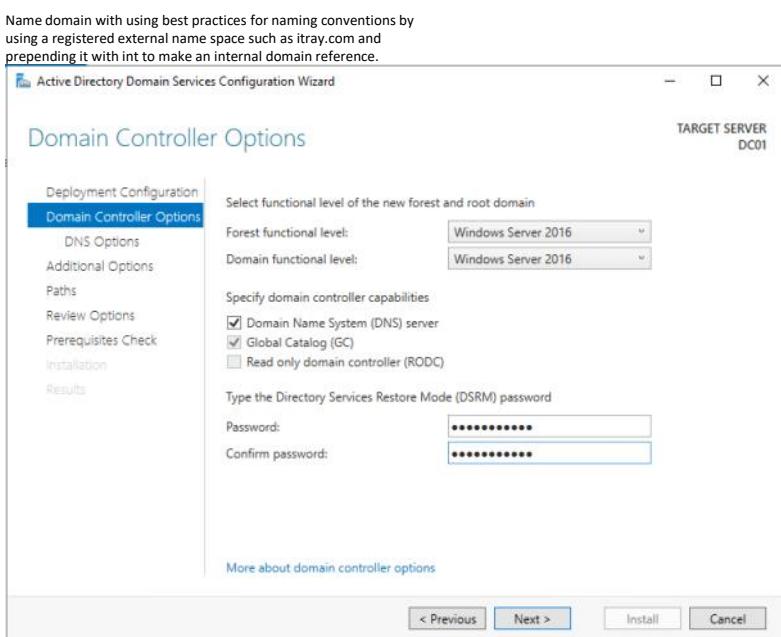
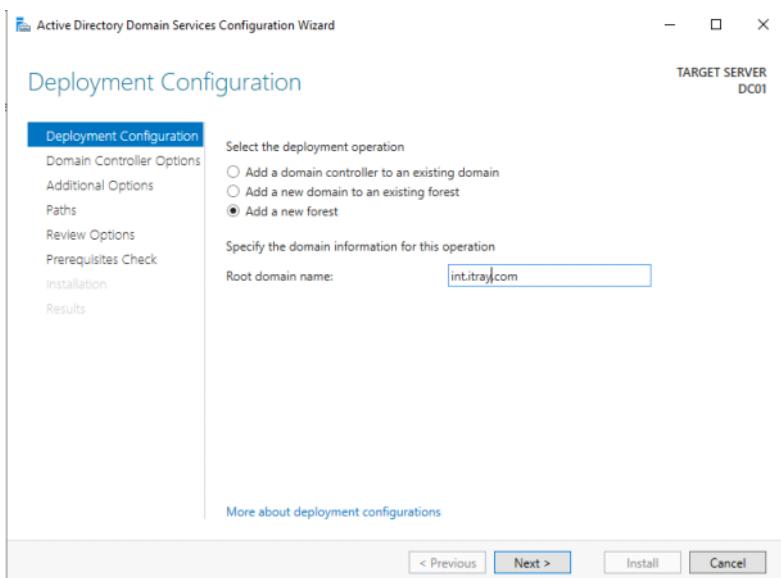


Check Active Directory Domain Services

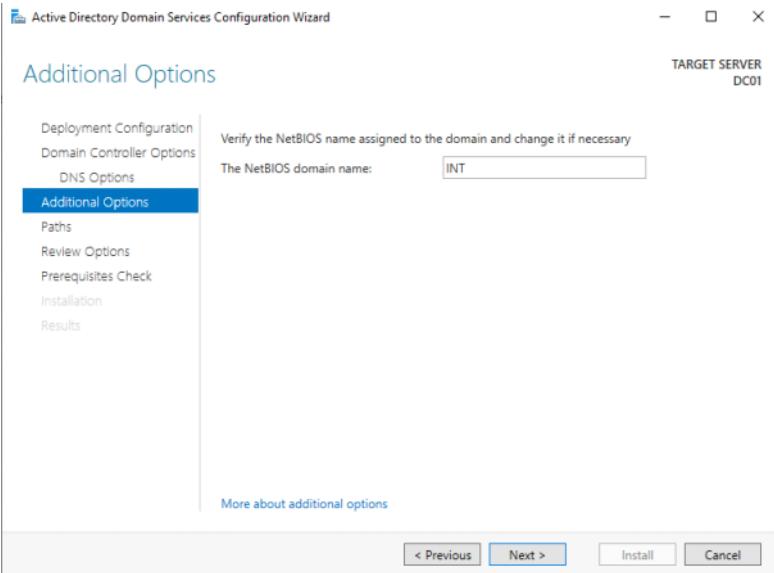


In production environment I would restart the server but since it is in a lab environment you don't need to

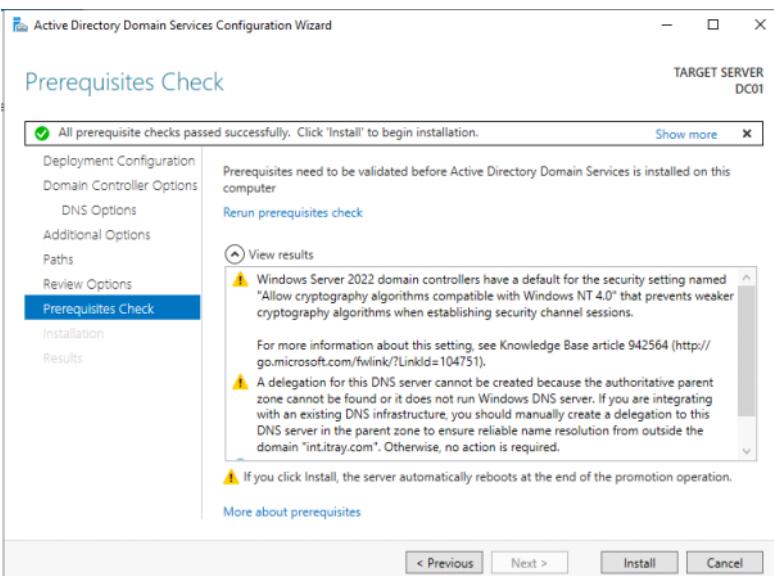
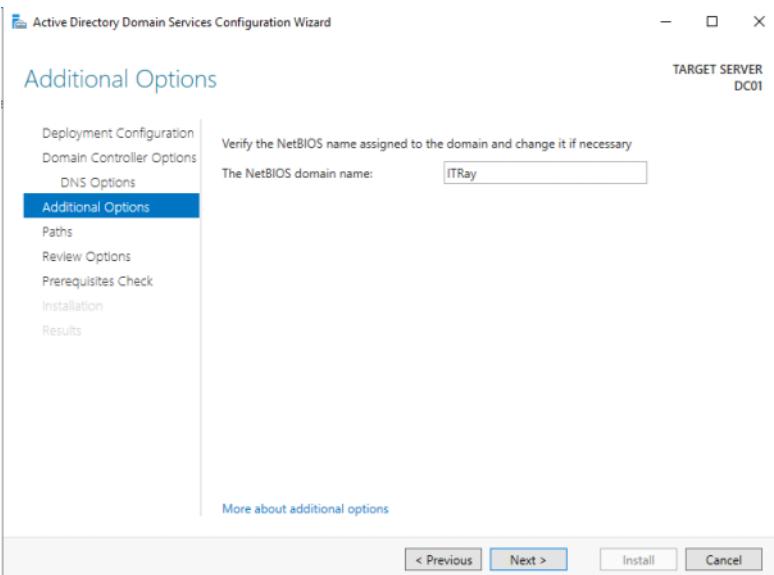




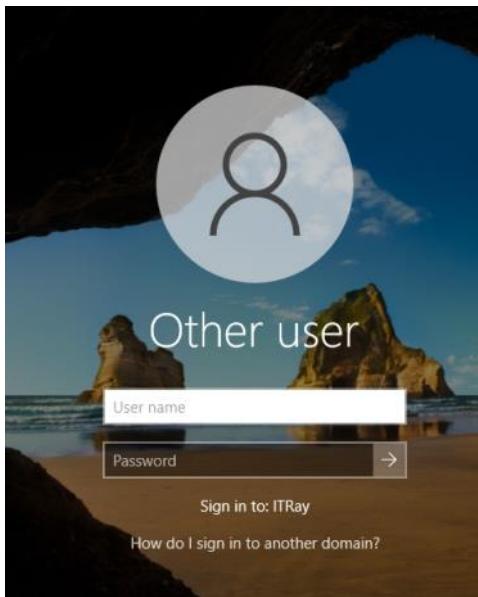
Going to leave Create DNS delegation unchecked because we are going to install DNS later



Setup pulls prepending name from our domain name but we don't want INT as we want a sensible name for our users as this is what our users see when logging in.



Machine passes all prerequisite checks. Hit Install. Machine will then reboot



After restarting we can now see we can sign into our NetBIOS name  
ITRay

A screenshot of the Windows Server Manager Dashboard. The left sidebar shows "Dashboard" is selected, along with "Local Server", "All Servers", "AD DS", "DNS", and "File and Storage Services". The main area is titled "WELCOME TO SERVER MANAGER" and contains a "QUICK START" section with numbered steps: 1. Configure this local server, 2. Add roles and features, 3. Add other servers to manage, 4. Create a server group, and 5. Connect this server to cloud services. Below this is a "WHAT'S NEW" section and a "LEARN MORE" button. Under "ROLES AND SERVER GROUPS", it shows "Roles: 3 | Server groups: 1 | Servers total: 1". There are two sections: "AD DS" with 1 item (Manageability) and "DNS" with 1 item (Manageability). Other items listed under AD DS include Events and Services, and under DNS include Events and Services.

We can now see AD DS and DNS is installed on the left hand panel

Server Manager

Server Manager ▶ Local Server

PROPERTIES For DC01

Computer name	DC01	Last installed updates	4/24/2024
Domain	int.itray.com	Windows Update	Downloaded
		Last checked for updates	Today at 12:00 PM
Microsoft Defender Firewall	Public: On	Microsoft Defender Antivirus	Real-Time Protection
Remote management	Enabled	Feedback & Diagnostics	Setting
Remote Desktop	Disabled	IE Enhanced Security Configuration	On
NIC Teaming	Disabled	Time zone	(UTC-04:00) Eastern Time (US & Canada)
Ethernet0	192.168.0.1, IPv6 enabled	Product ID	00455-XXXXXX
Azure Arc Management	Disabled		
Operating system version	Microsoft Windows Server 2022 Datacenter Evaluation	Processors	AMD Ryzen 9 5900X Processor
Hardware information	VMware, Inc. VMware20.1	Installed memory (RAM)	8 GB

TASKS

EVENTS

All events | 20 total

Filter	Log	Date and Time			
Server Name	ID	Severity	Source		
DC01	10016	Warning	Microsoft-Windows-DistributedCOM	System	5/11/2025 1:29:36 PM
DC01	1796	Error	Microsoft-Windows-TPM-WMI	System	5/11/2025 1:23:37 PM
DC01	1014	Warning	Microsoft-Windows-DNS Client Events	System	5/11/2025 1:22:25 PM

Domain now says int.itray.com instead of WORKGROUP

Server Manager

Server Manager ▶ Local Server

PROPERTIES For DC01

Computer name	DC01	Last installed updates	4/24/2024
Domain	int.itray.com	Windows Update	Downloaded
		Last checked for updates	Today at 12:00 PM
Microsoft Defender Firewall	Public: On	Microsoft Defender Antivirus	Real-Time Protection
Remote management	Enabled	Feedback & Diagnostics	Setting
Remote Desktop	Disabled	IE Enhanced Security Configuration	On
NIC Teaming	Disabled	Time zone	(UTC-04:00) Eastern Time (US & Canada)
Ethernet0	192.168.0.1, IPv6 enabled	Product ID	00455-XXXXXX
Azure Arc Management	Disabled		
Operating system version	Microsoft Windows Server 2022 Datacenter Evaluation	Processors	AMD Ryzen 9 5900X Processor
Hardware information	VMware, Inc. VMware20.1	Installed memory (RAM)	8 GB

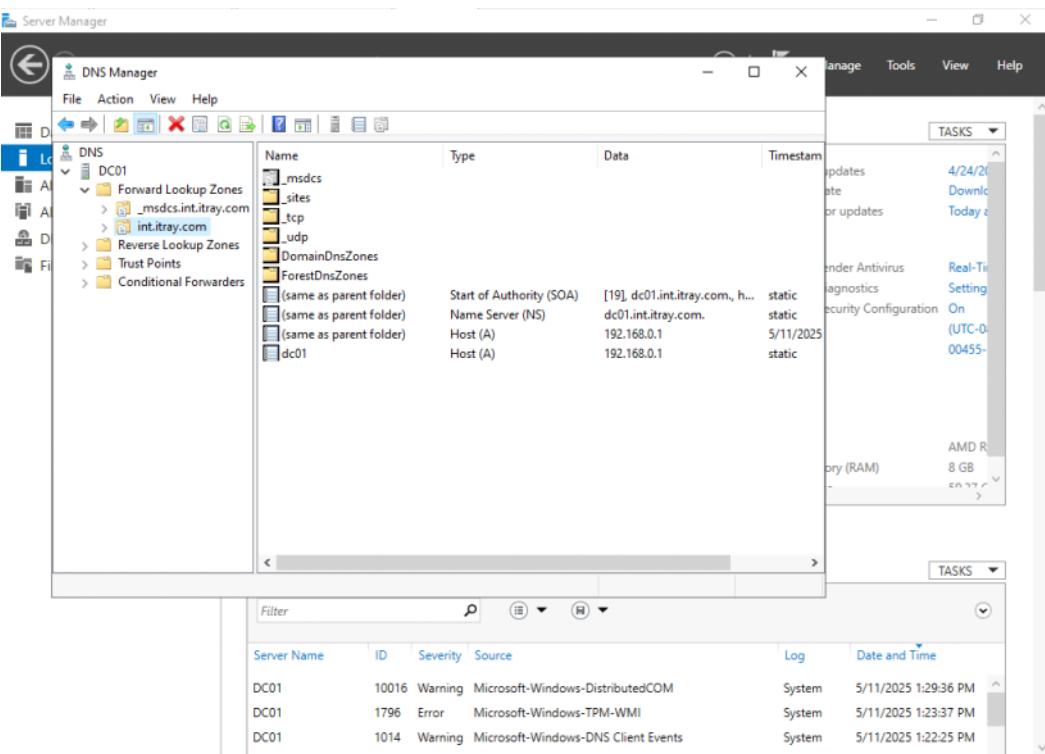
TASKS

Events

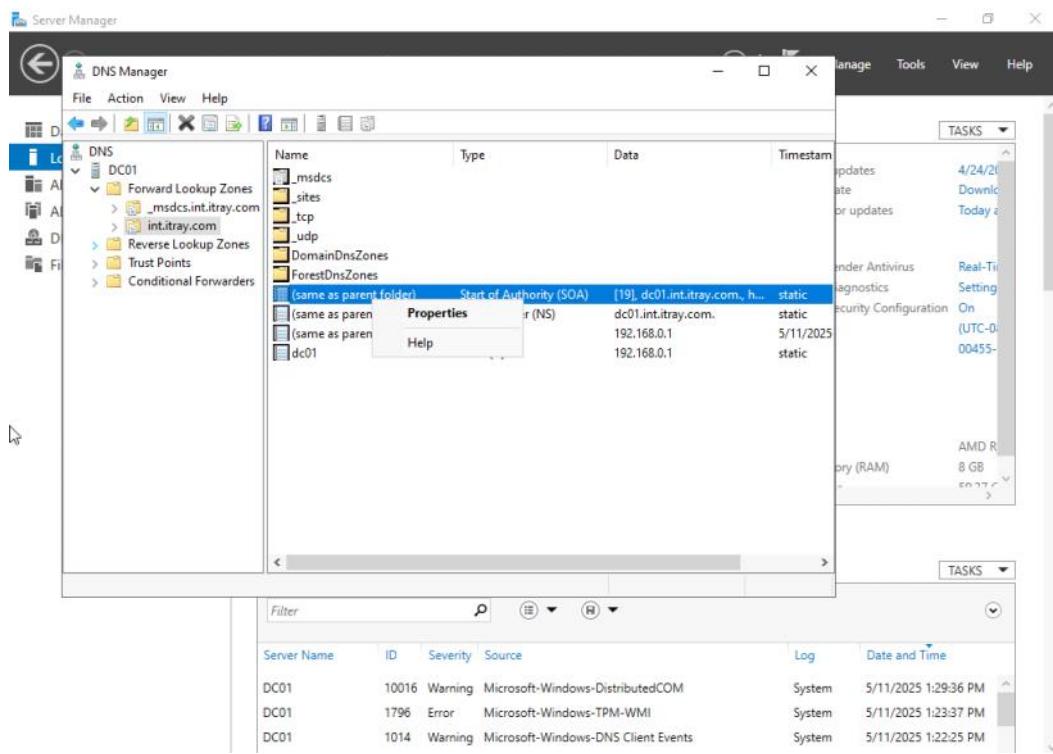
All events | 20 total

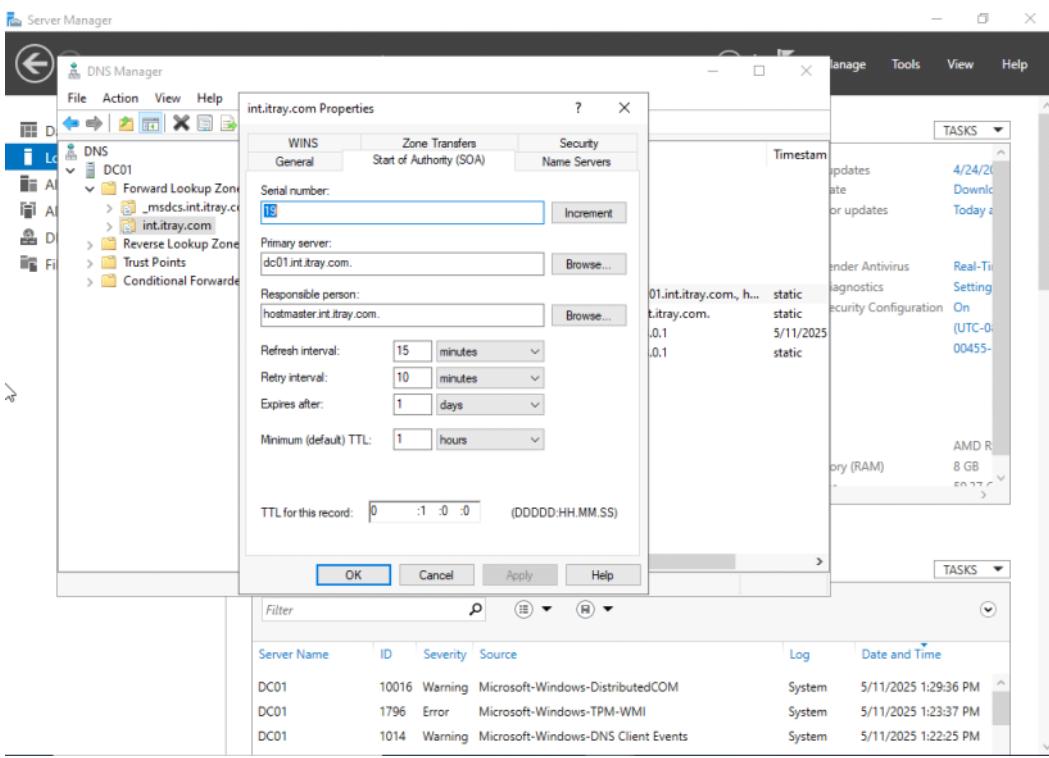
Filter	Log	Date and Time			
Server Name	ID	Severity	Source		
DC01	10016	Warning	Microsoft-Windows-DistributedCOM	System	5/11/2025 1:29:36 PM
DC01	1796	Error	Microsoft-Windows-TPM-WMI	System	5/11/2025 1:23:37 PM
DC01	1014	Warning	Microsoft-Windows-DNS Client Event	System	5/11/2025 1:22:25 PM

Go into DNS

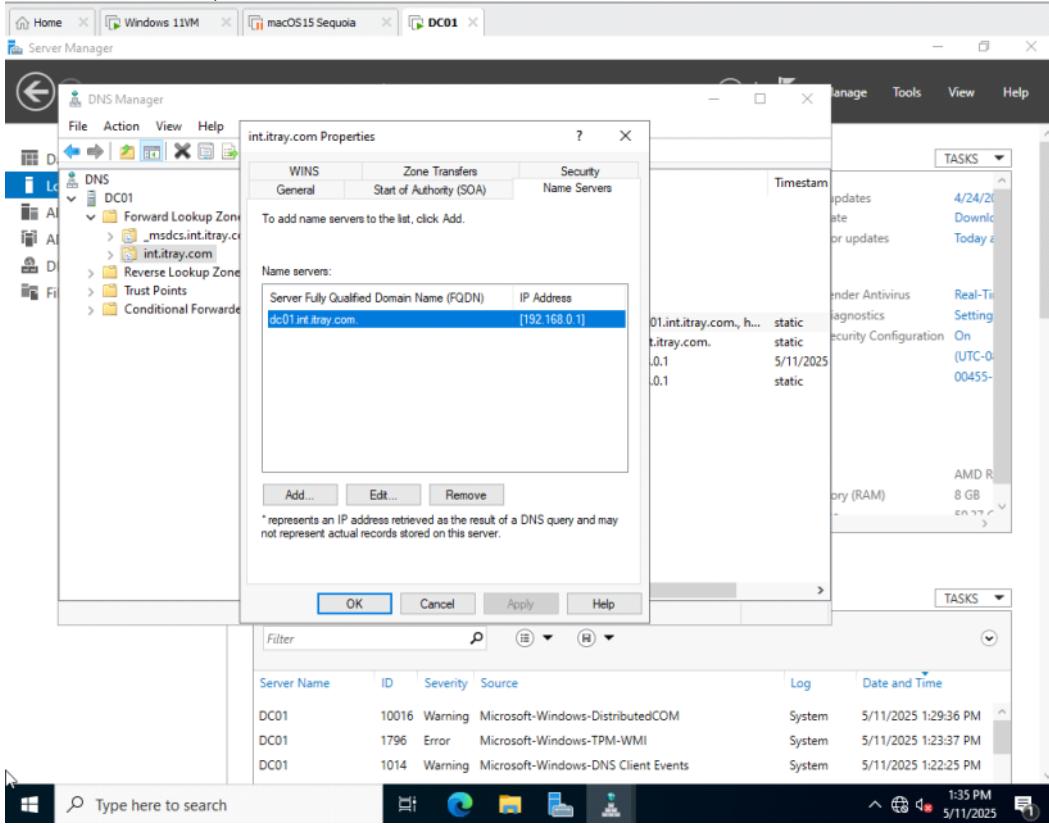


We can see that this machine DC01 has been properly added to dns

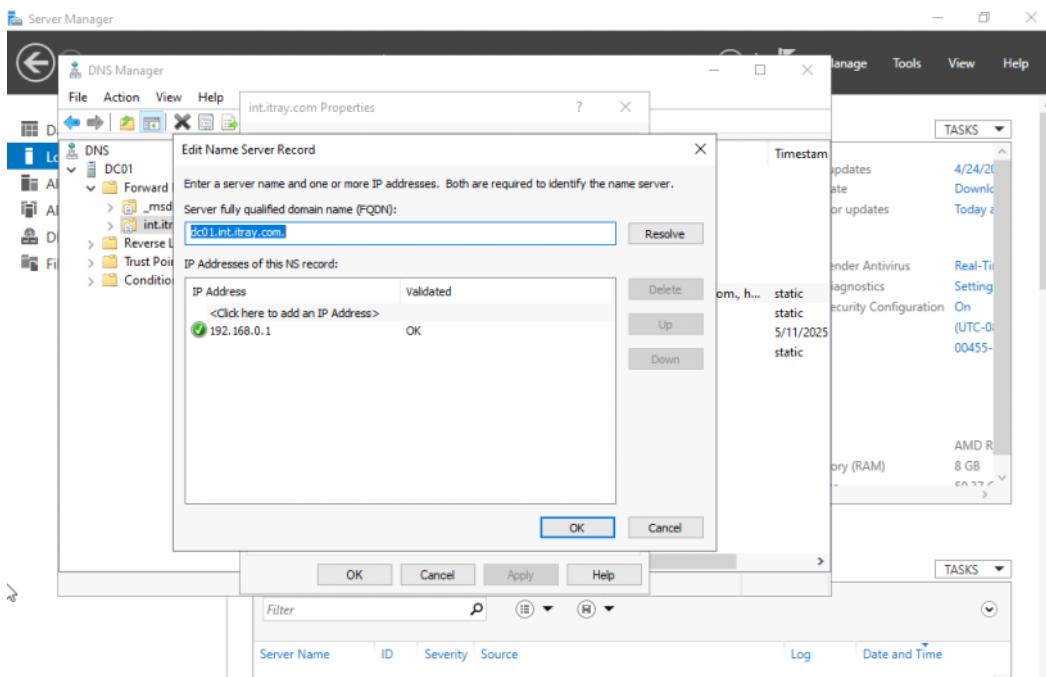




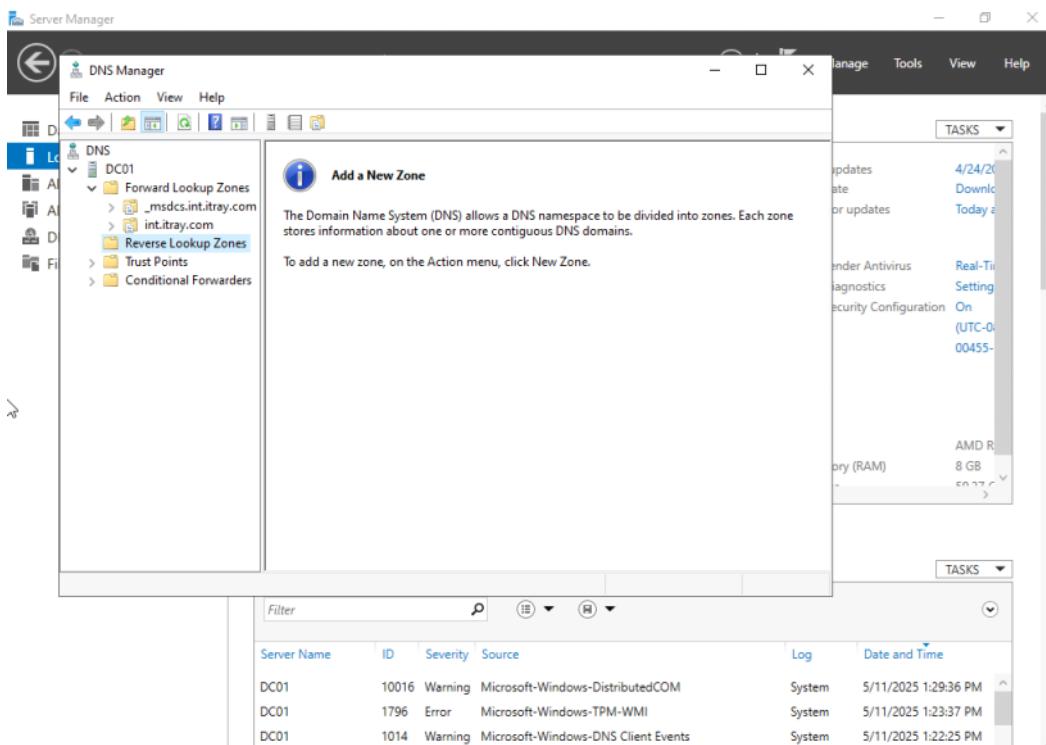
We can see it the start of authority



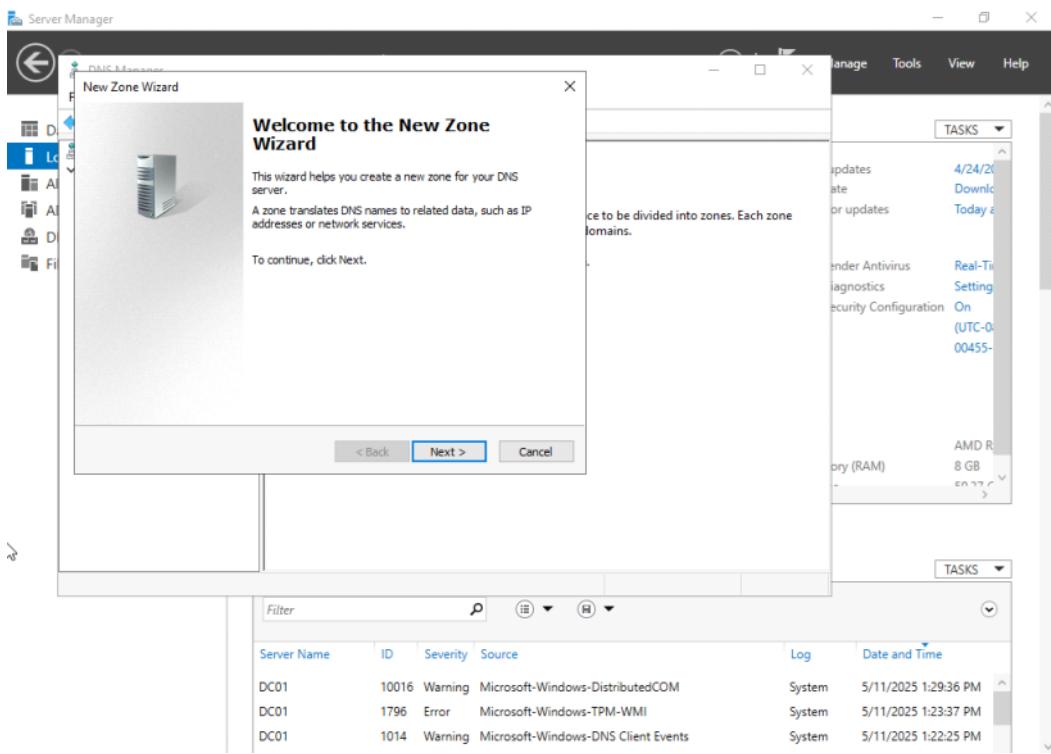
It is a qualified name server for this environment



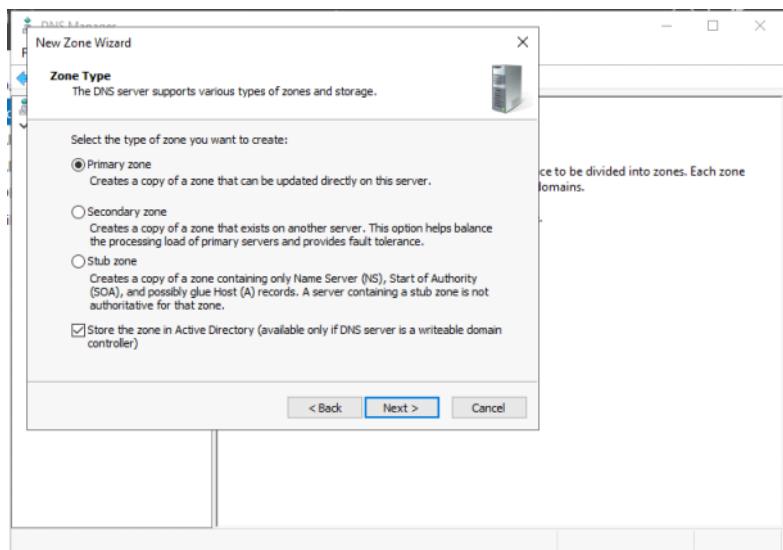
Fully validated



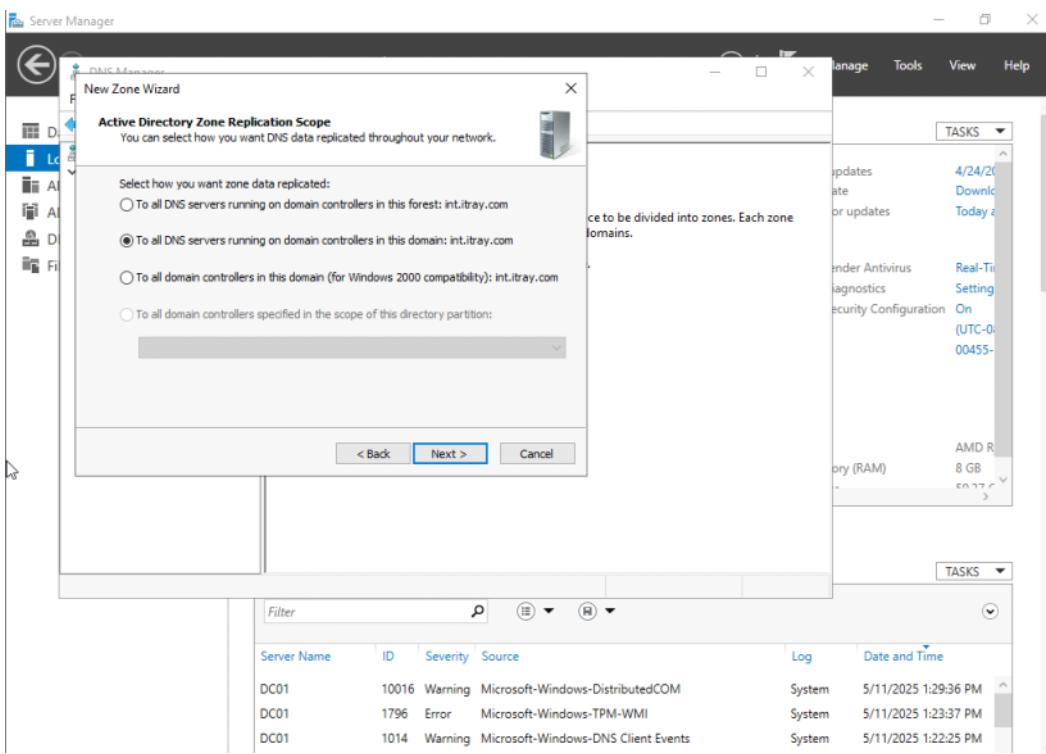
We can see it doesn't have a Reverse look up zone.



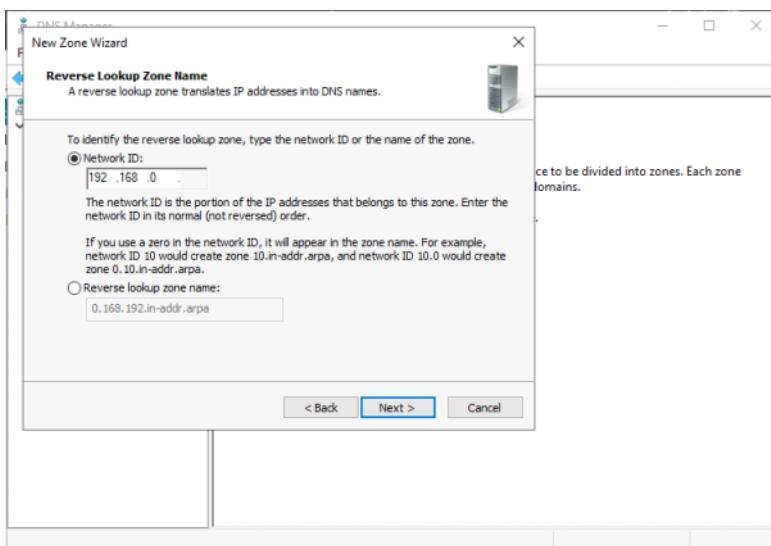
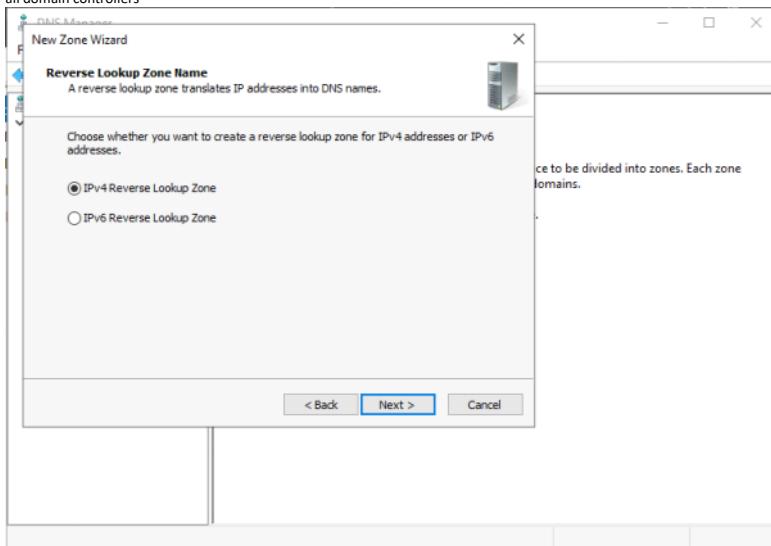
We can create a New Zone



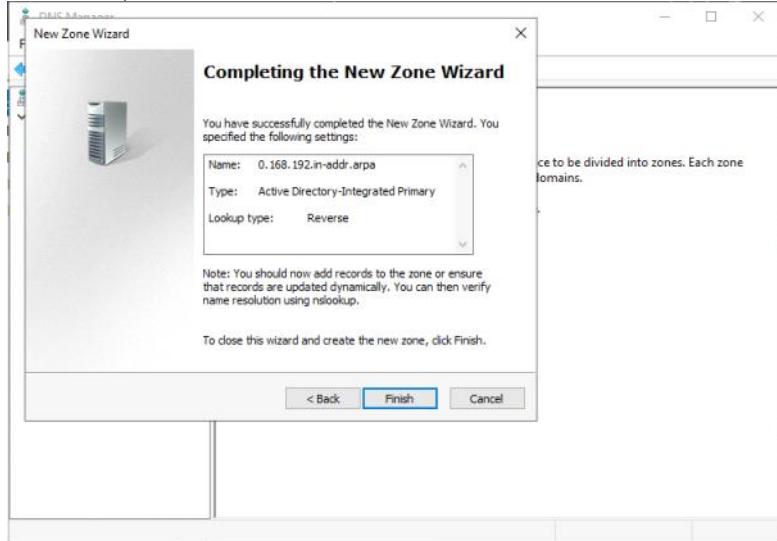
It will be a primary zone



We can have a replication scope by having all dns to be replicated to all domain controllers

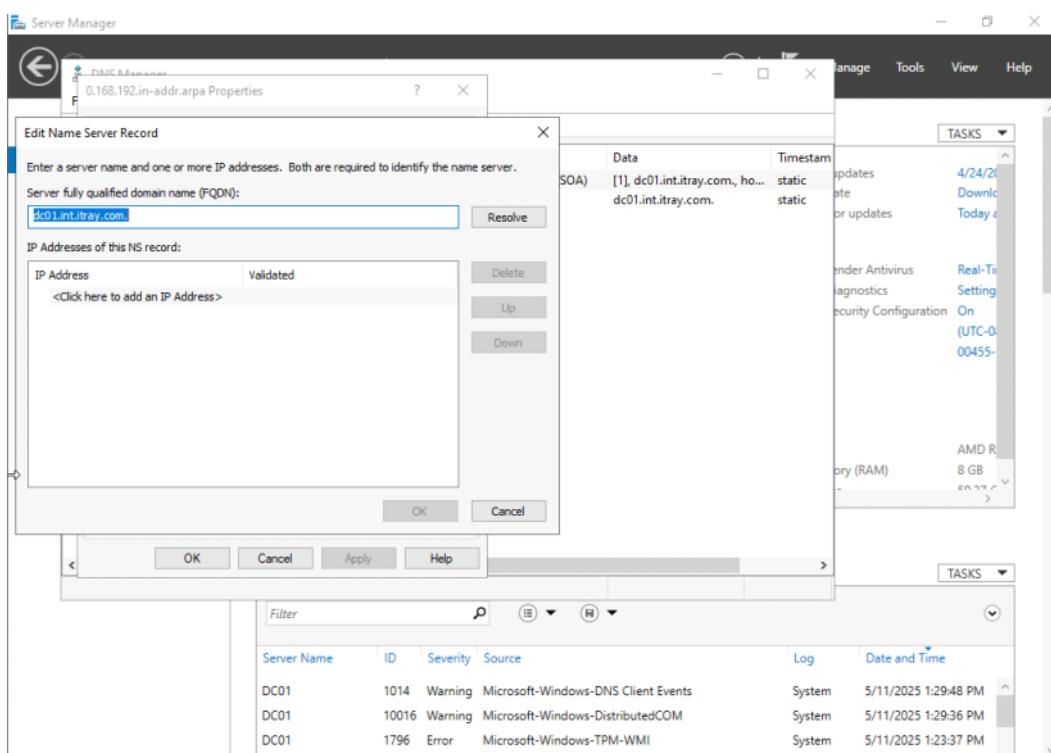
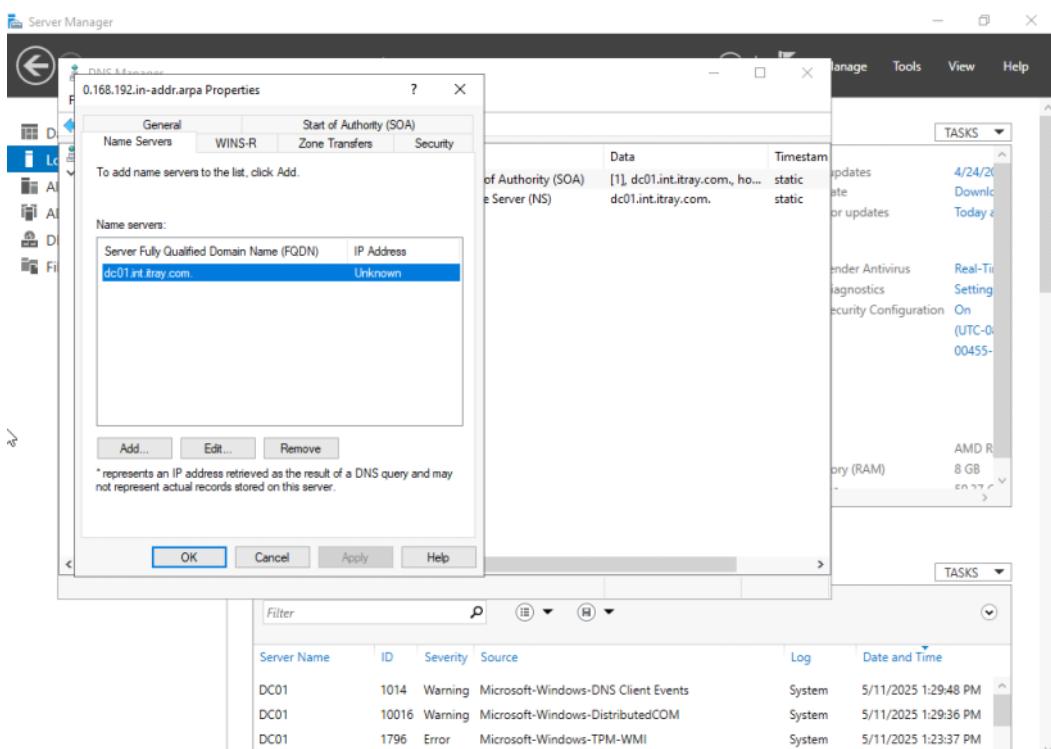


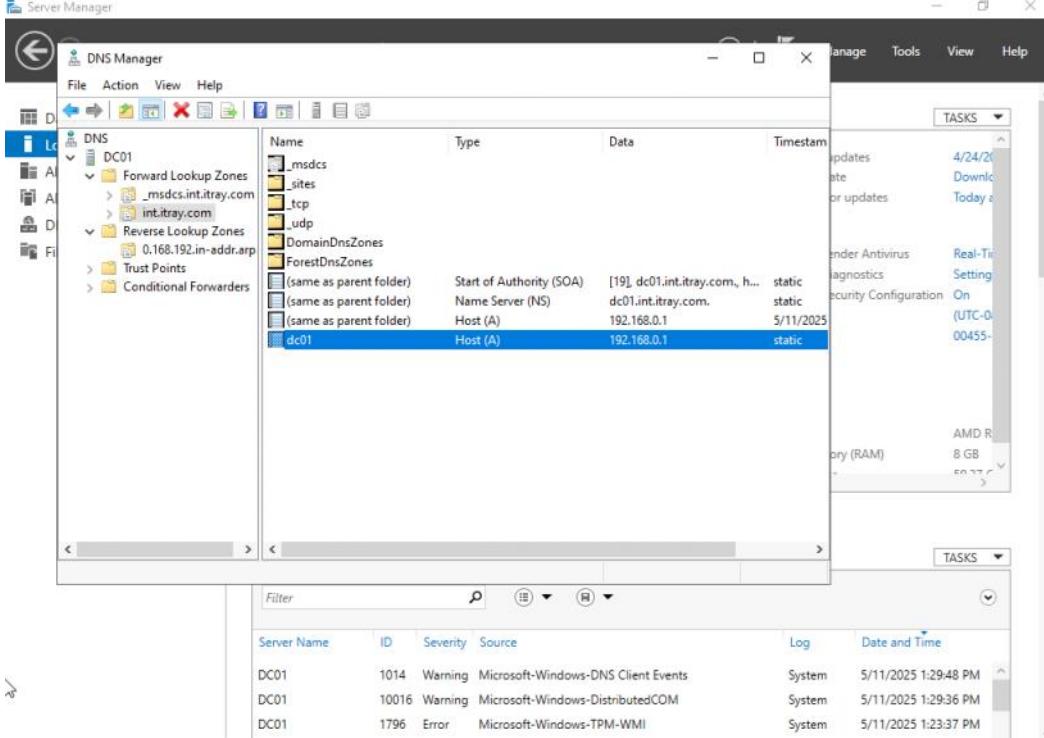
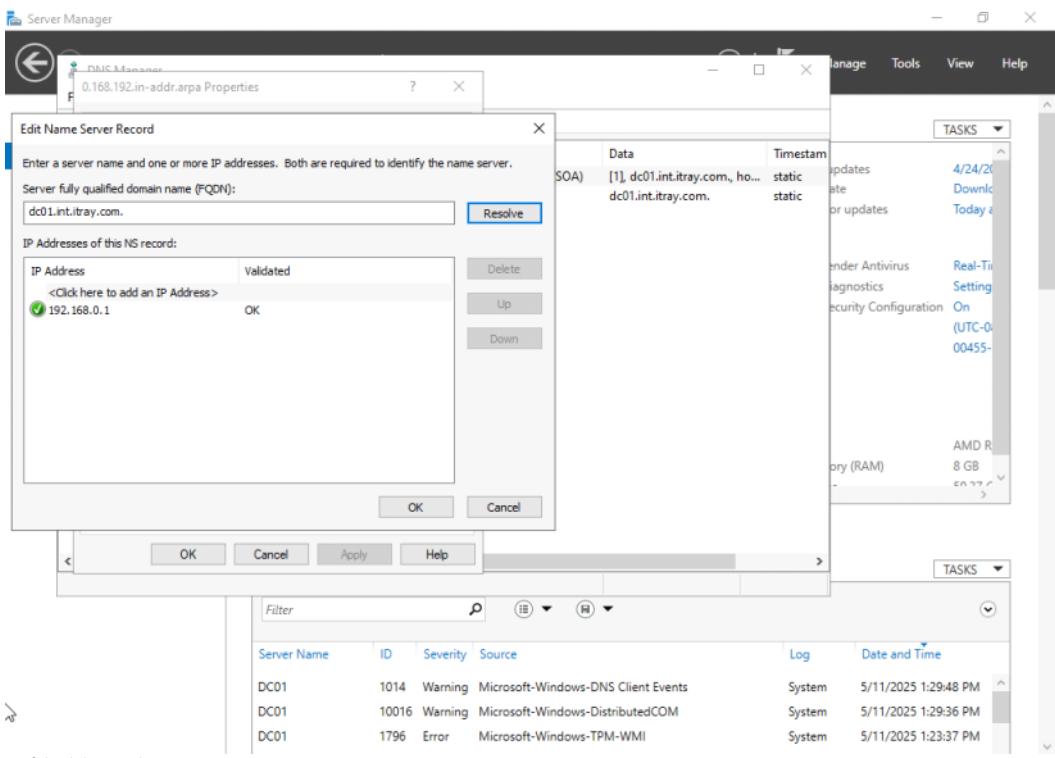
As machines are added to AD, records will be created for those resources inside my dns

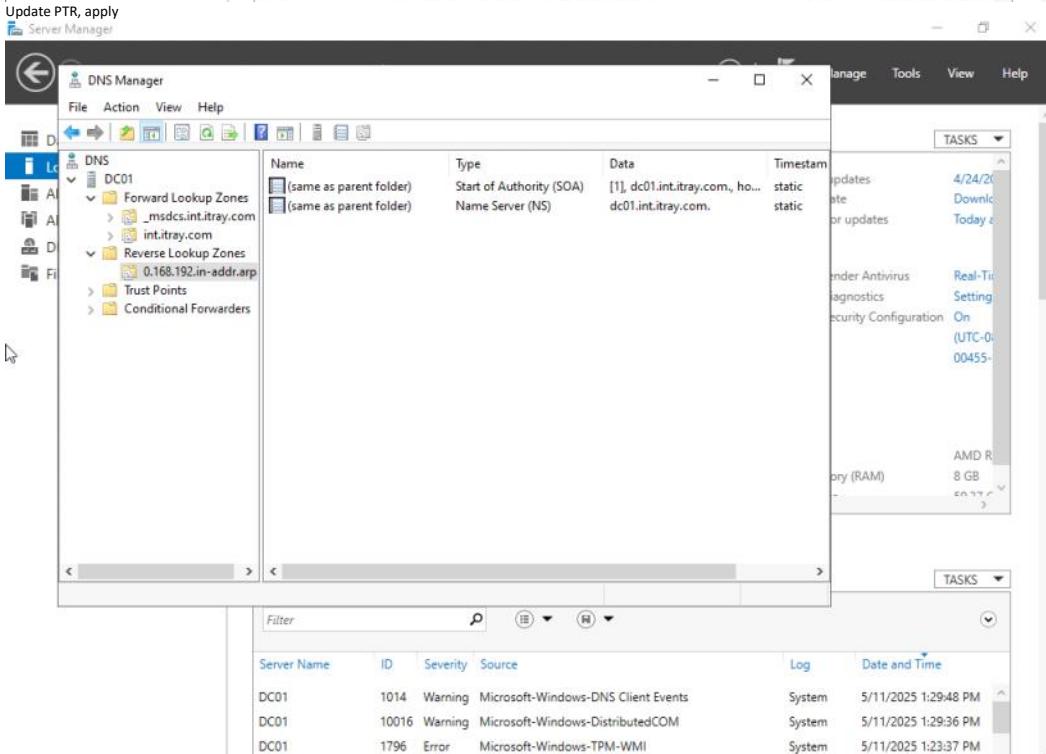
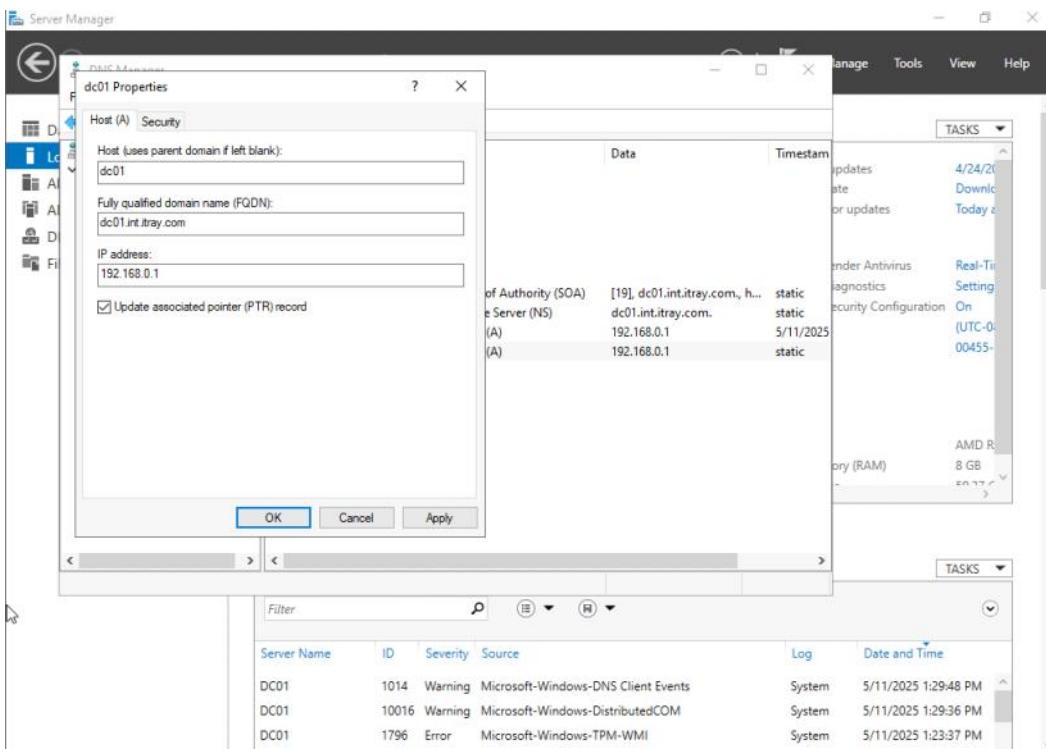


The screenshot shows the DNS Manager interface. The left pane displays the tree structure under the 'DC01' domain controller, including 'Forward Lookup Zones' (msdc01.int.itray.com, int.itray.com) and 'Reverse Lookup Zones' (0.168.192.in-addr.arpa). The right pane shows a table of records for the 0.168.192.in-addr.arpa zone:

Name	Type	Data	Timestamp
(same as parent folder)	Start of Authority (SOA)	[1], dc01.int.itray.com., ho...	static
(same as parent folder)	Name Server (NS)	dc01.int.itray.com.	static







Refresh

Server Manager

DNS Manager

File Action View Help

DC01

- Forward Lookup Zones
  - \_msdcsls.int.itray.com
  - int.itray.com
- Reverse Lookup Zones
  - 0.168.192.in-addr.arpa
  - Trust Points
  - Conditional Forwarders

Name	Type	Data	Timestamp
(same as parent folder)	Start of Authority (SOA)	[3], dc01.int.itray.com, ho...	static updates 4/24/2025
(same as parent folder)	Name Server (NS)	dc01.int.itray.com.	static date Downl...
192.168.0.1	Pointer (PTR)	dc01.int.itray.com.	static or updates Today

TASKS

4/24/2025

Download

Real-Time Security Configuration

On (UTC-0:00:455)

AMD R

8 GB

Memory (RAM)

Filter

Server Name	ID	Severity	Source	Log	Date and Time
DC01	1014	Warning	Microsoft-Windows-DNS Client Events	System	5/11/2025 1:29:48 PM
DC01	10016	Warning	Microsoft-Windows-DistributedCOM	System	5/11/2025 1:29:36 PM
DC01	1796	Error	Microsoft-Windows-TPM-WMI	System	5/11/2025 1:23:37 PM

DNS is now validated

So far:

Installed Active Directory Domain Services role  
 Promoted this machine to be the domain controller for a new active directory domain environment for int.itray.com  
 During installation Active Directory built me a DNS environment and I have now gone in and validated those records  
 Primary look up zones were already established, however I had to go in and build my own reverse lookup zone to make this work and correct that host record for my domain controller which is called dc01

Time to install DHCP

Go back to server manager and Add roles and features

Server Manager

Add Roles and Features Wizard

Before you begin

DESTINATION SERVER DC01.int.itray.com

This wizard helps you install roles, role services, or features. You determine which roles, role services, or features to install based on the computing needs of your organization, such as sharing documents, or hosting a website.

To remove roles, role services, or features:  
[Start the Remove Roles and Features Wizard](#)

Before you continue, verify that the following tasks have been completed:

- The Administrator account has a strong password
- Network settings, such as static IP addresses, are configured
- The most current security updates from Windows Update are installed

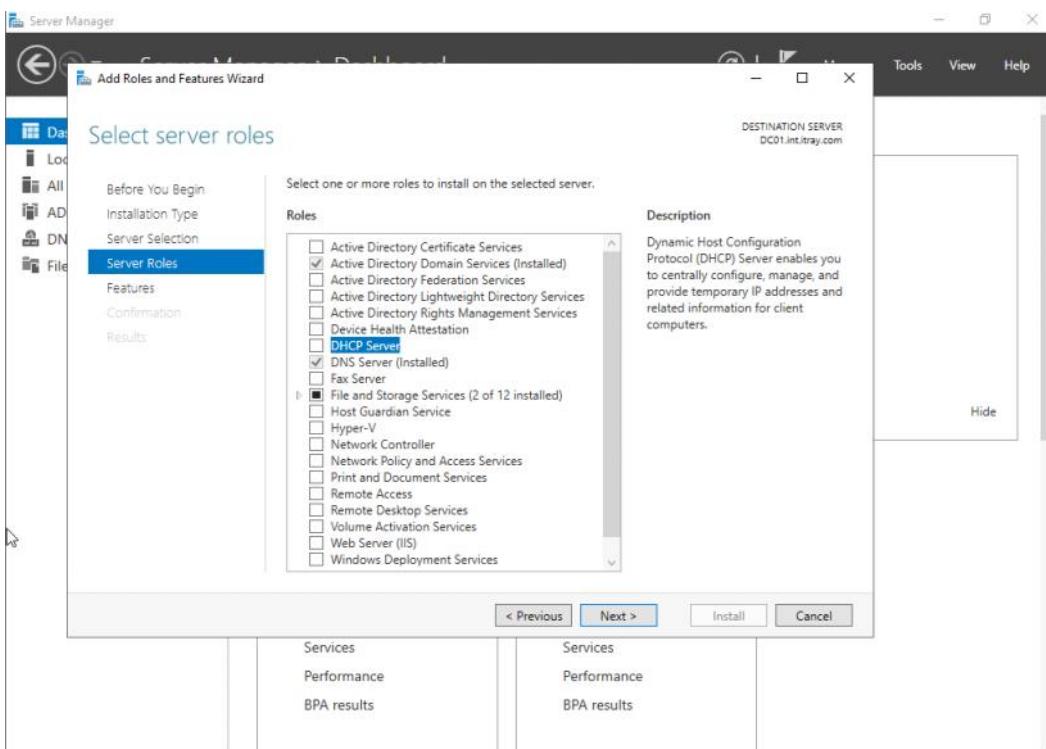
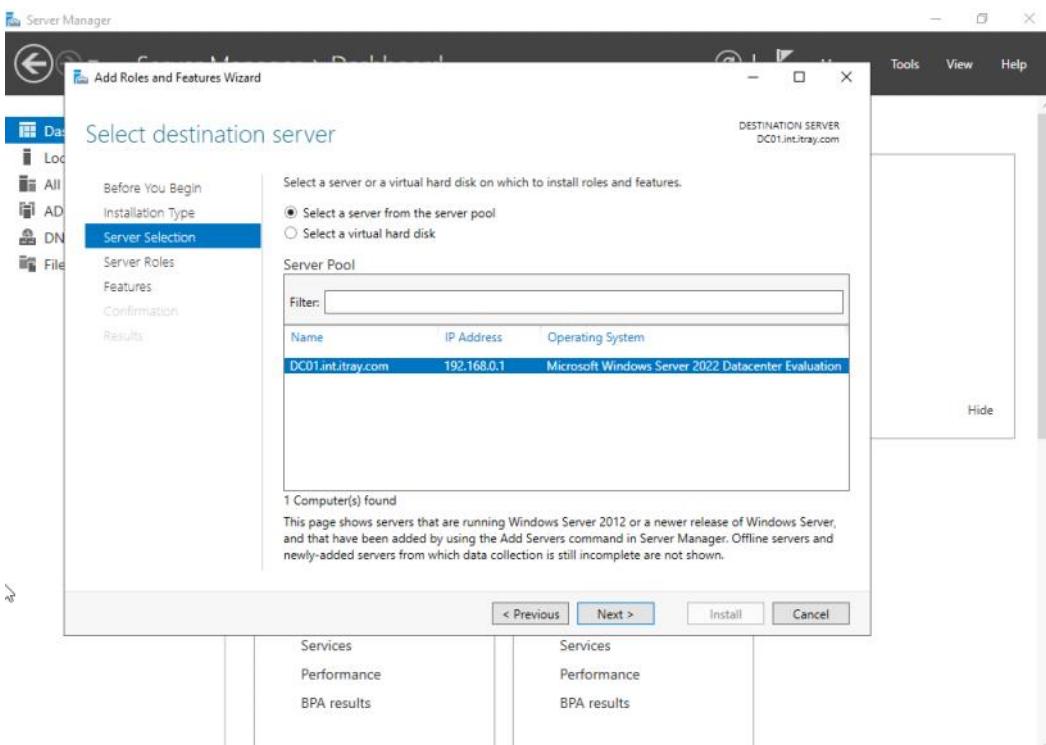
If you must verify that any of the preceding prerequisites have been completed, close the wizard, complete the steps, and then run the wizard again.

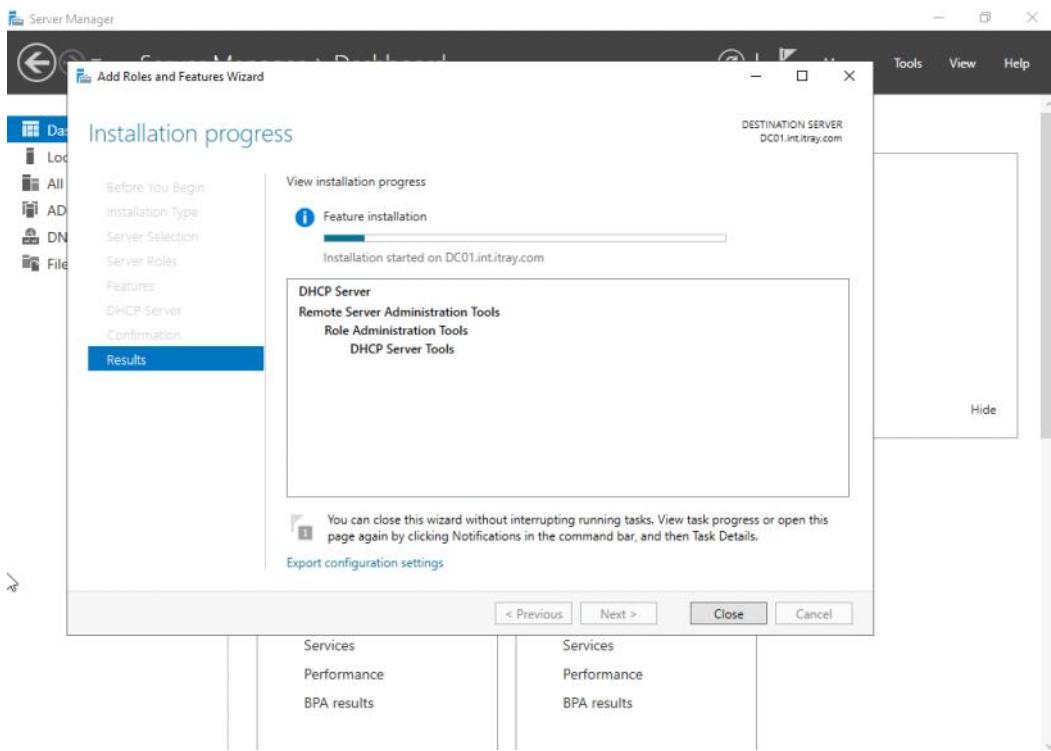
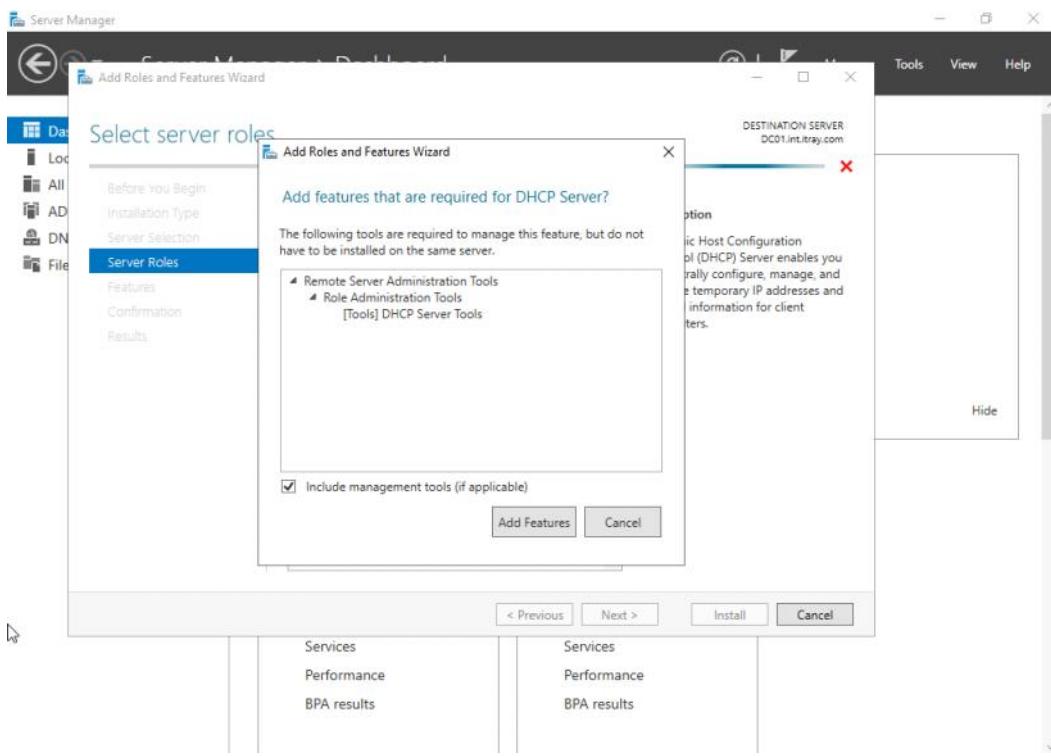
To continue, click Next.

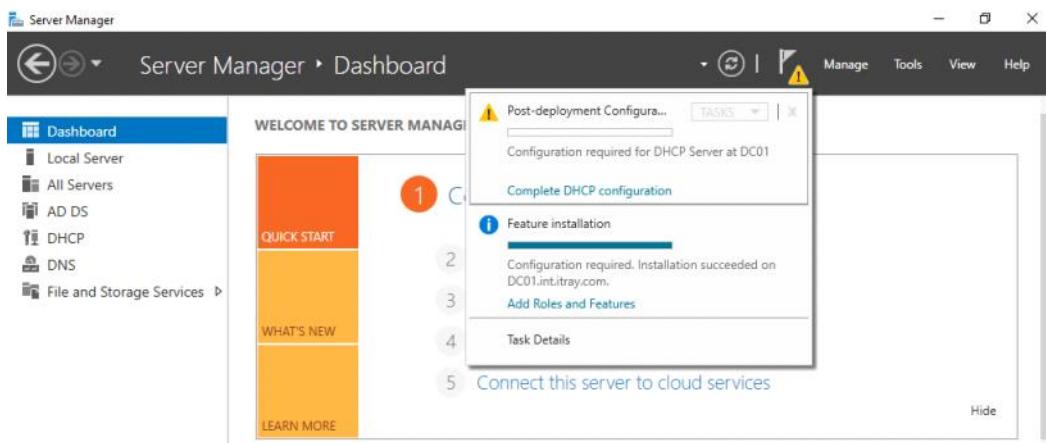
Skip this page by default

< Previous | Next > | Install | Cancel

Services	Performance
Performance	Performance
BPA results	BPA results







#### ROLES AND SERVER GROUPS

Roles: 4 | Server groups: 1 | Servers total: 1

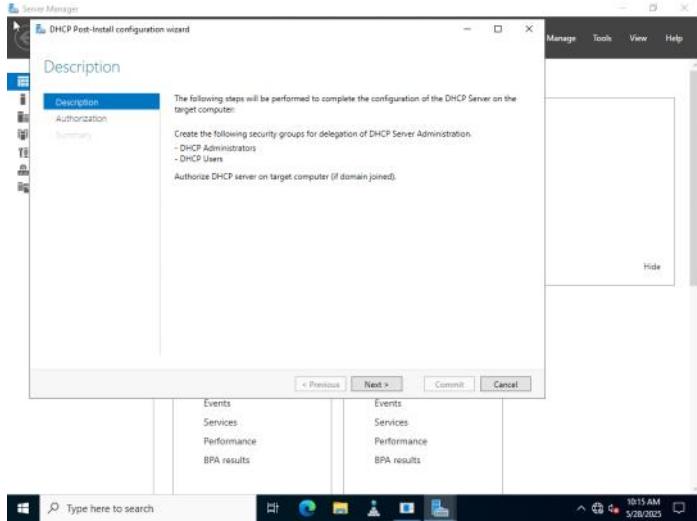
AD DS	1
<span style="color: green;">●</span> Manageability	
Events	
Services	
Performance	
BPA results	

DHCP	1
<span style="color: green;">●</span> Manageability	
Events	
Services	
Performance	
BPA results	

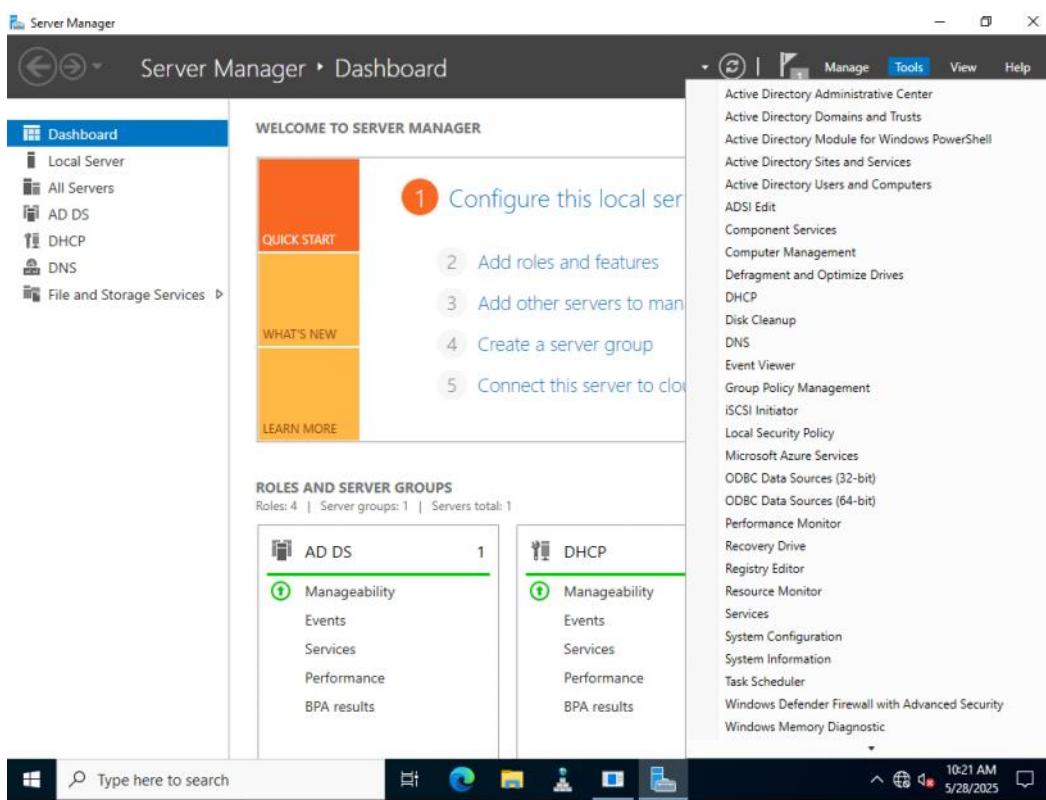
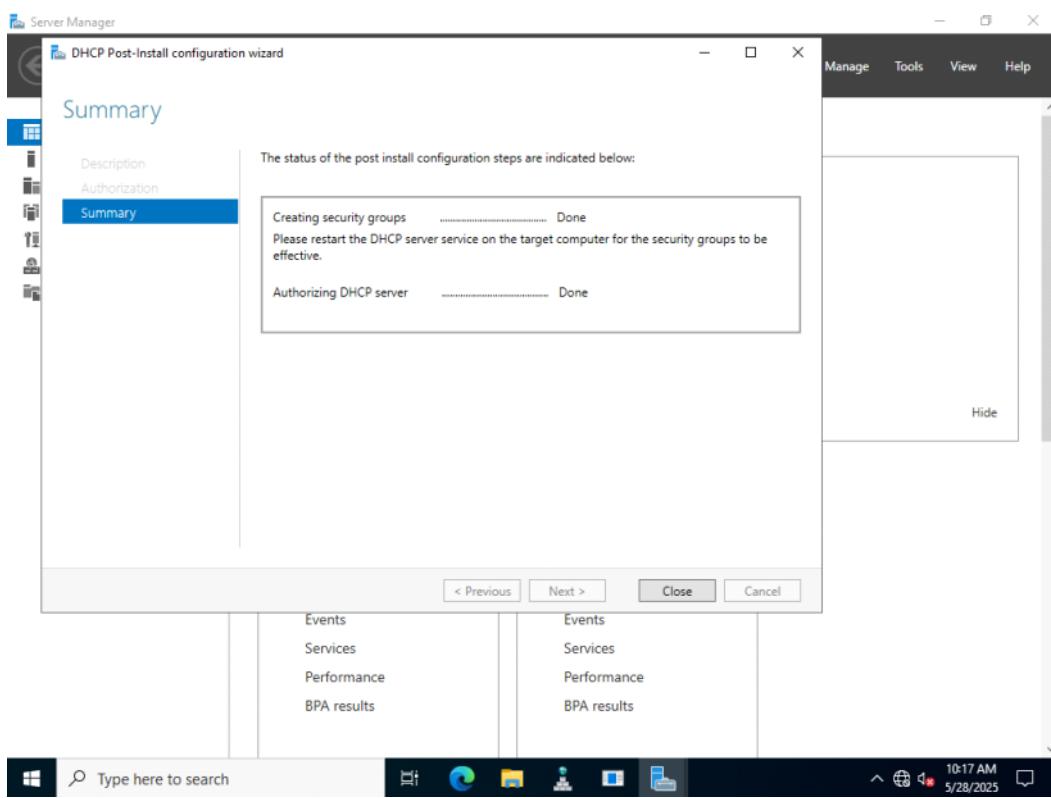
Start  
Installed and now we to complete DHCP configuration by creating security groups inside environment

Its good that we install DHCP after AD installation because it recognizes the AD credentials to manage and monitor my DHCP



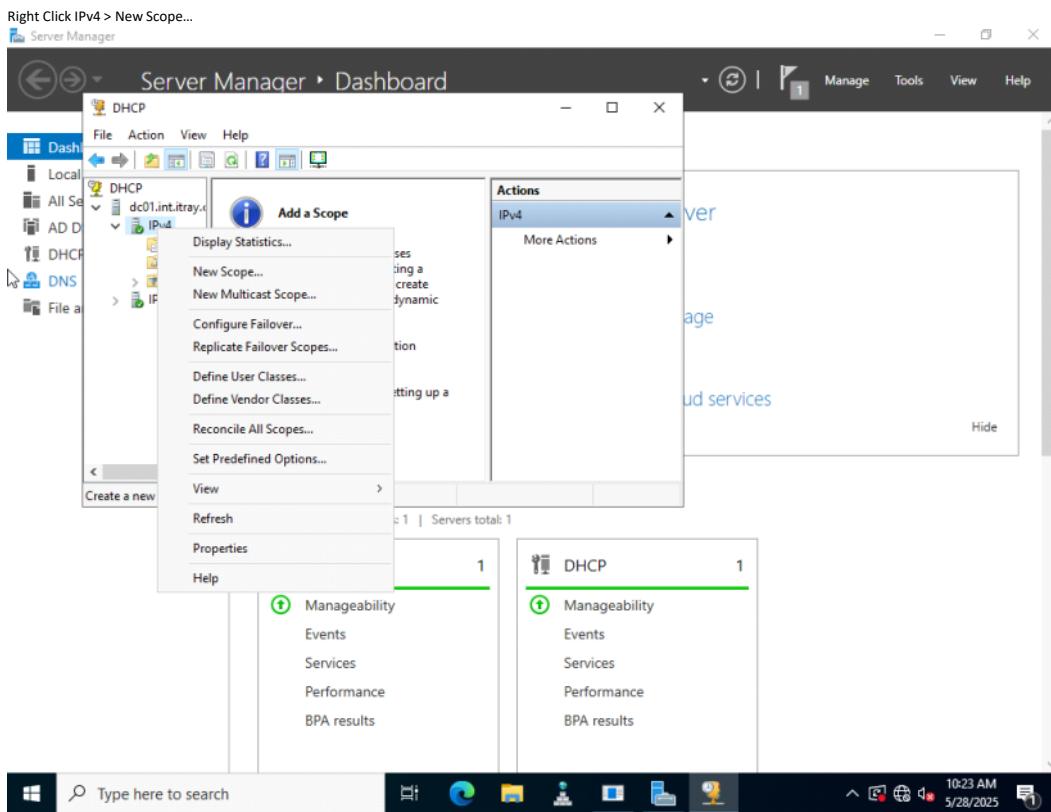
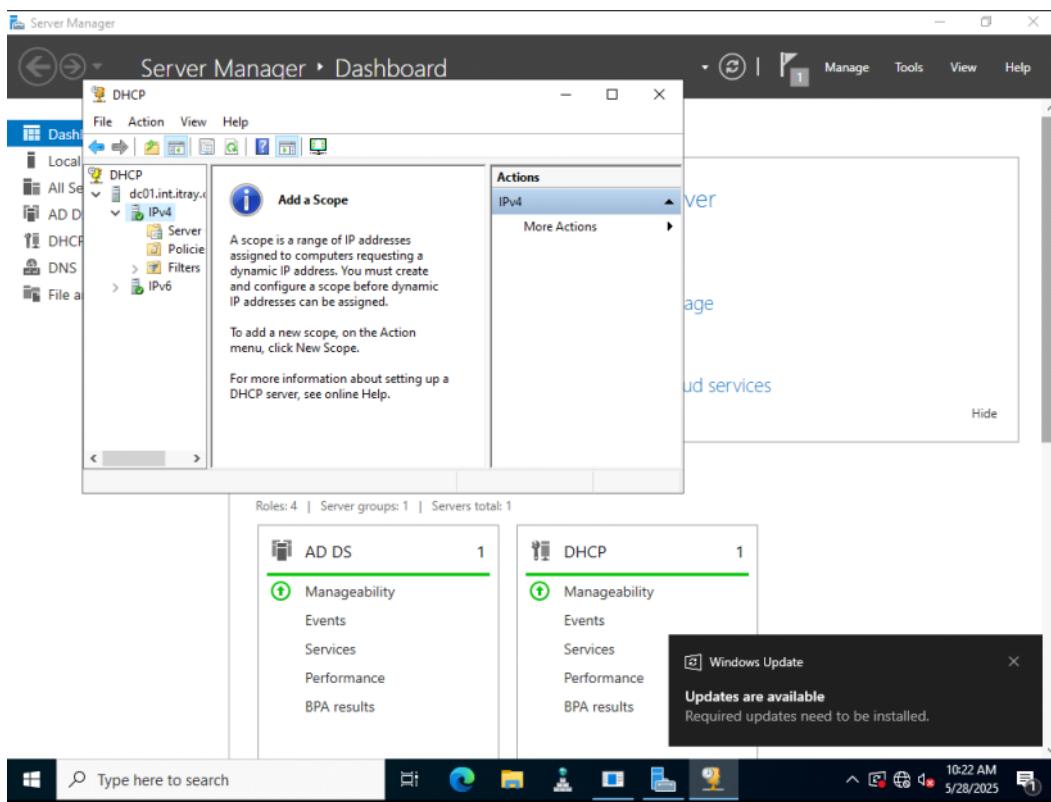
\*NO SCREENSHOT\* Specify the credentials to be used to authorize this DHCP server is AD DS.

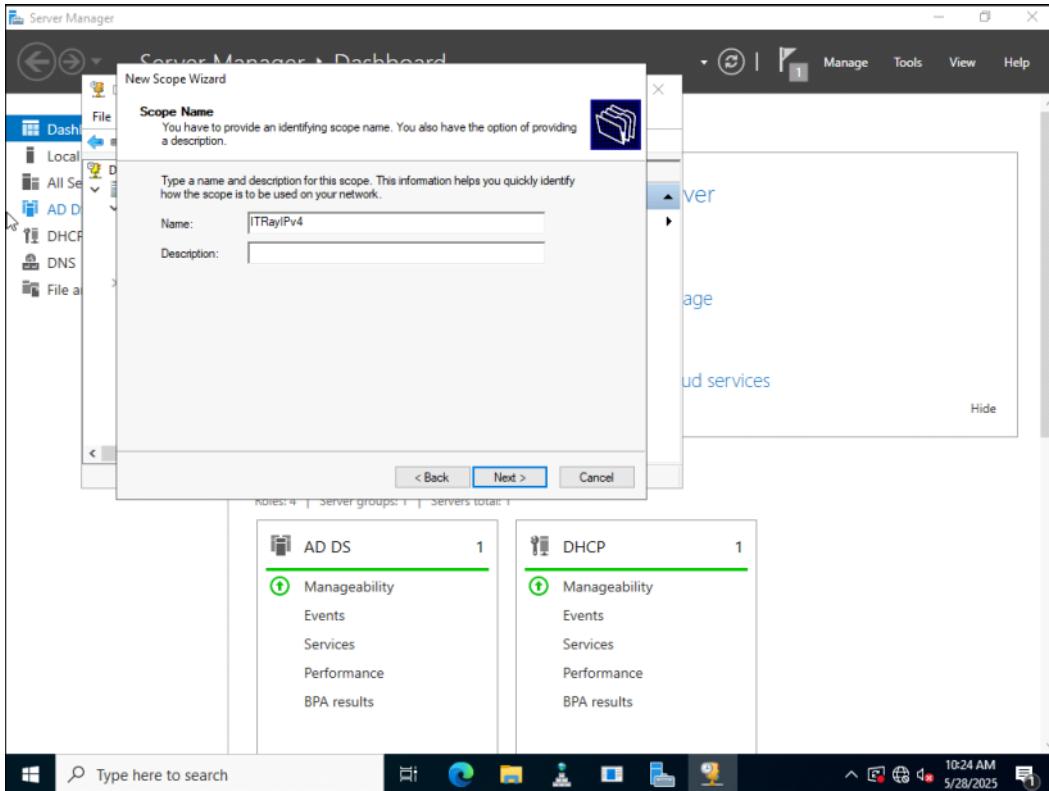
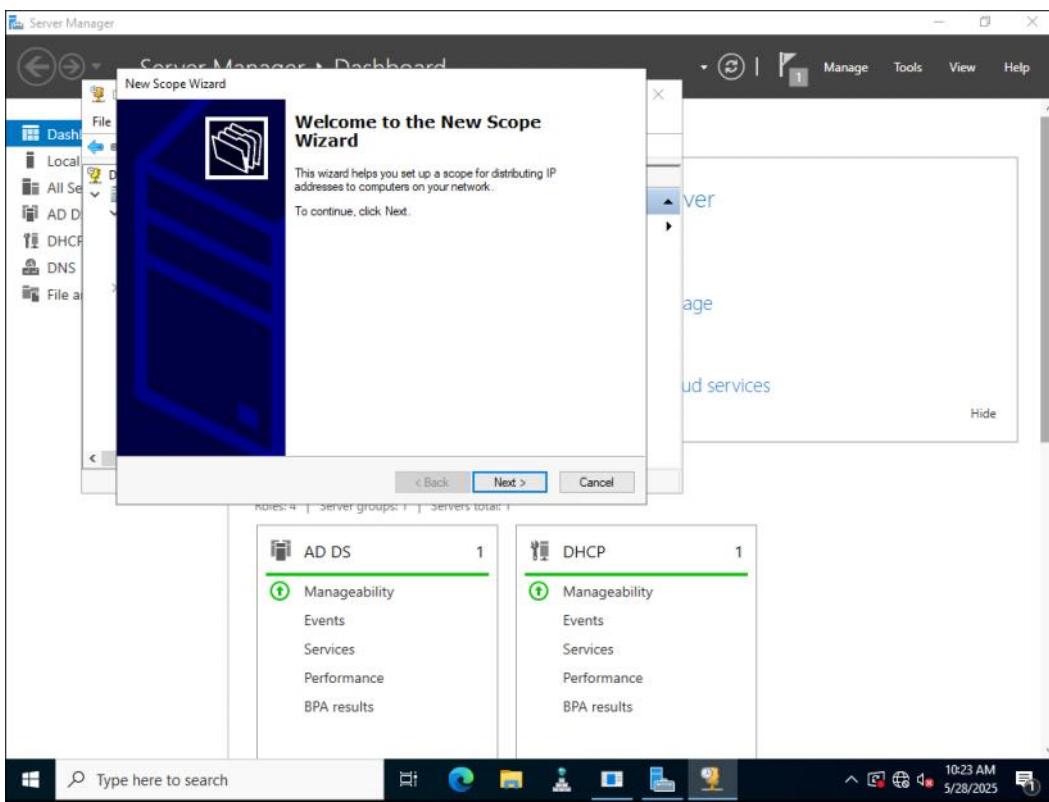
- Use the following user's credentials  
User Name : ITRay\administrator

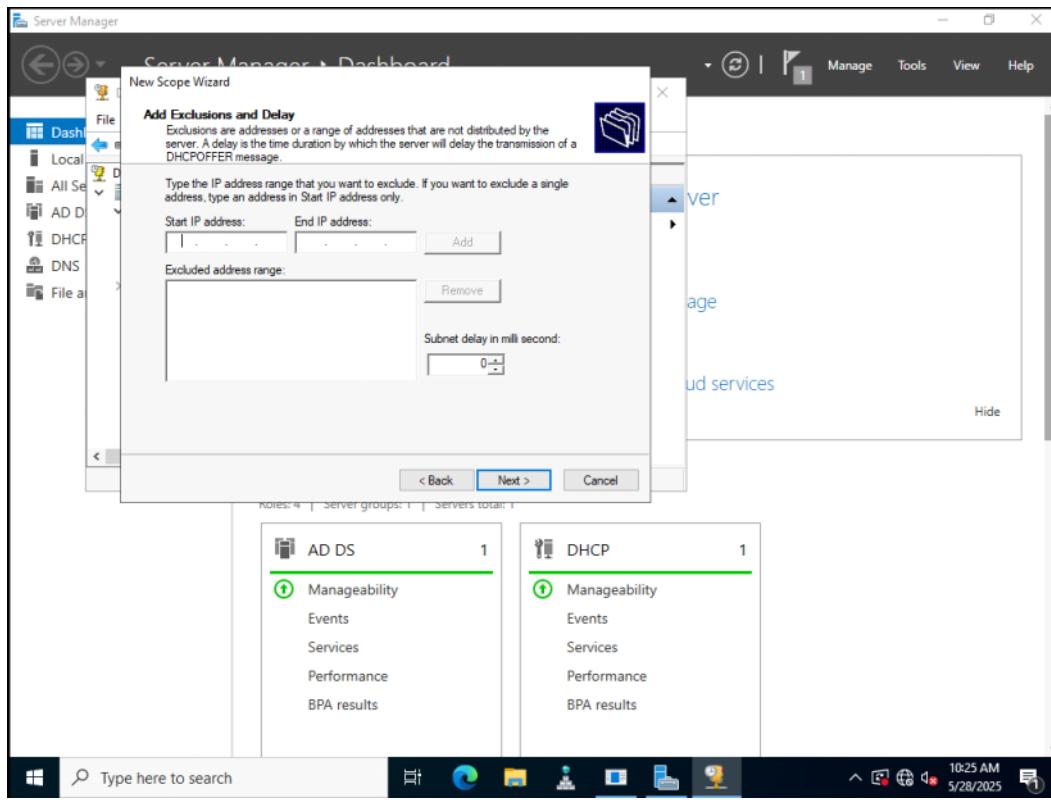
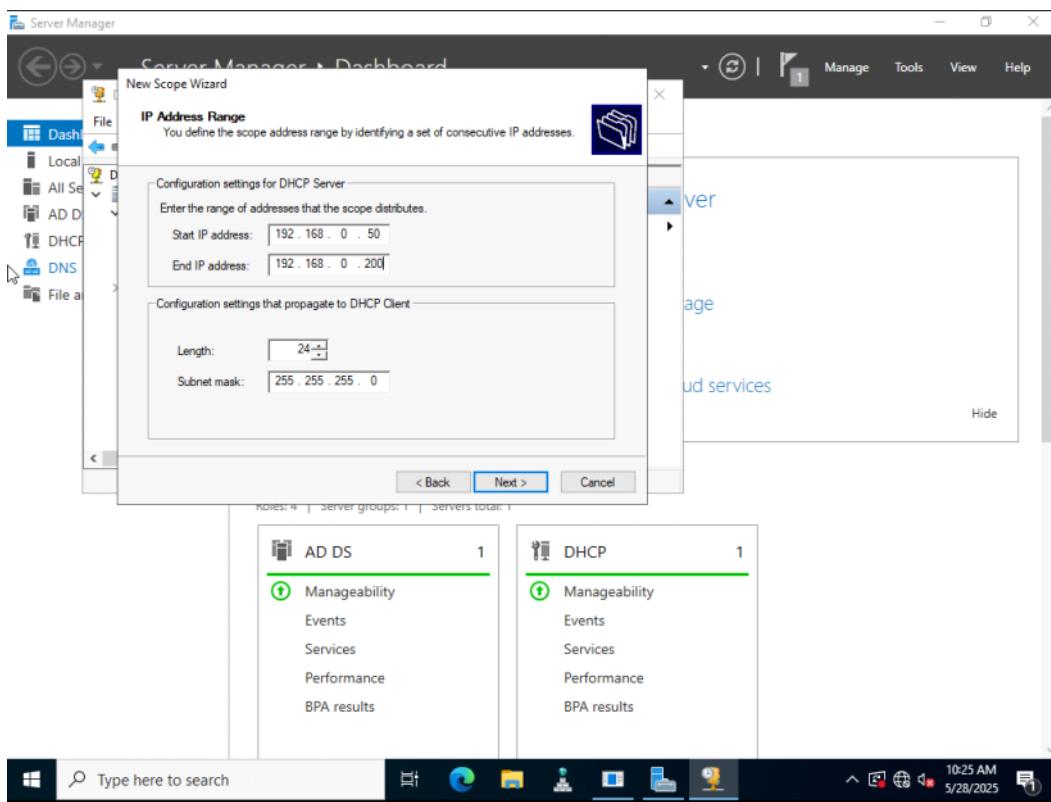


Build a scope

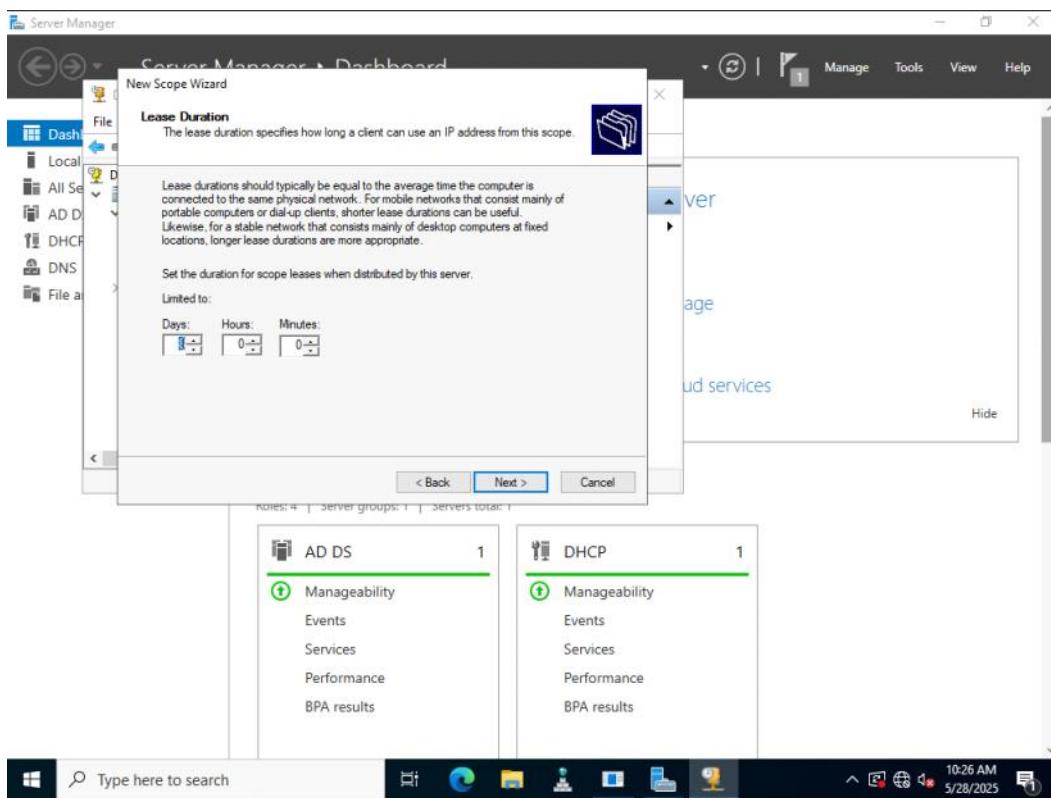
Click Tools > DHCP



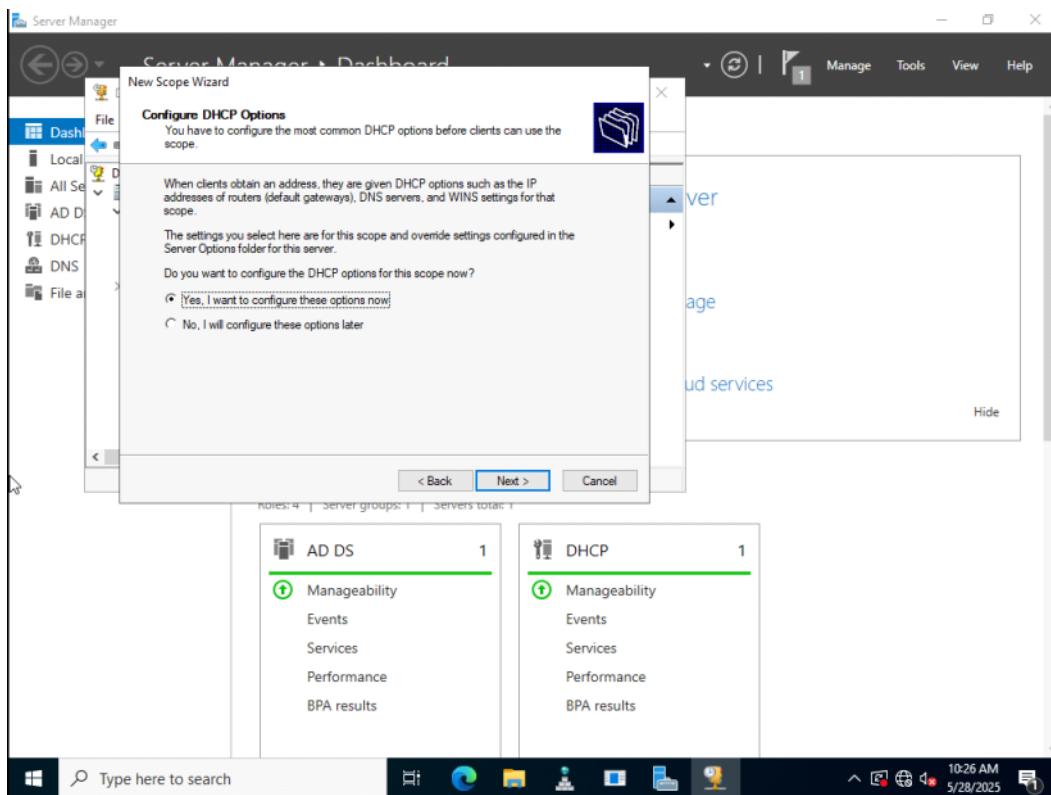


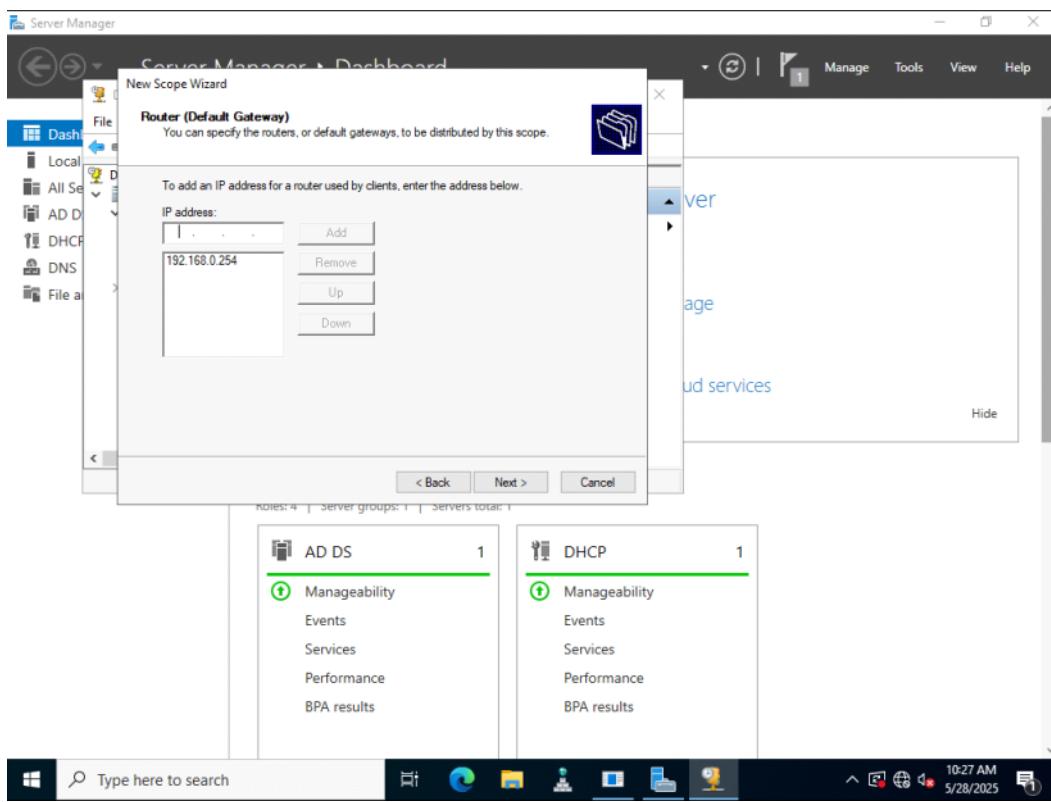


No exclusions

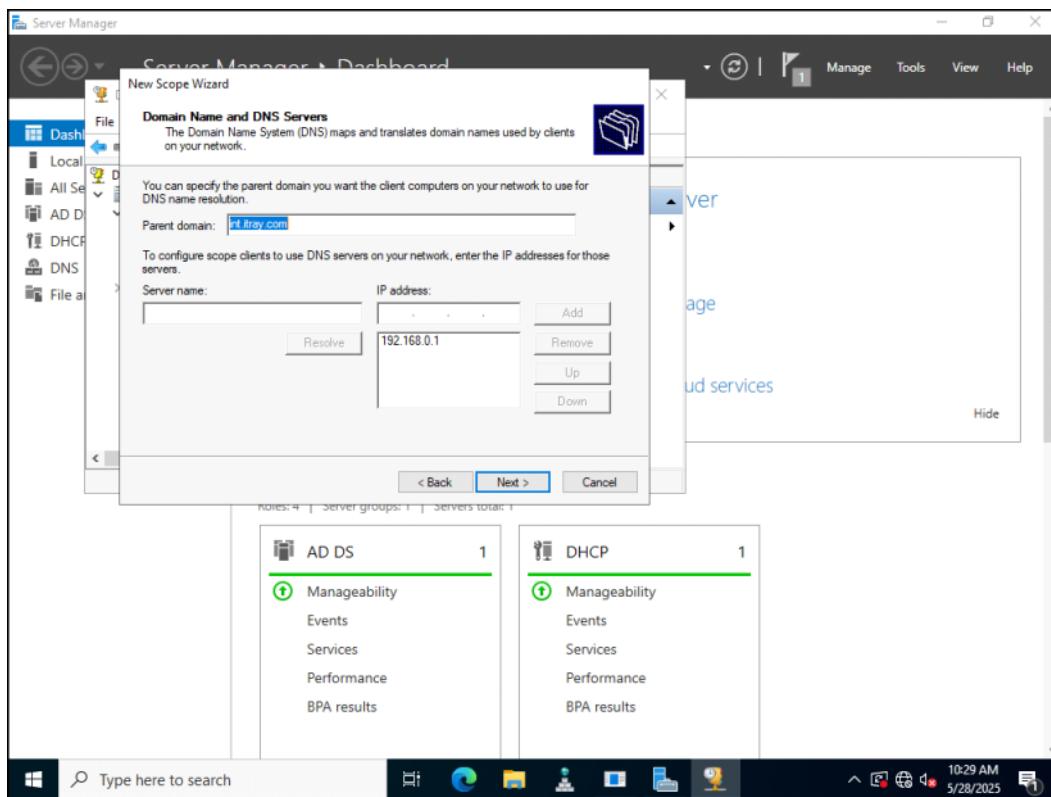


Regular lease

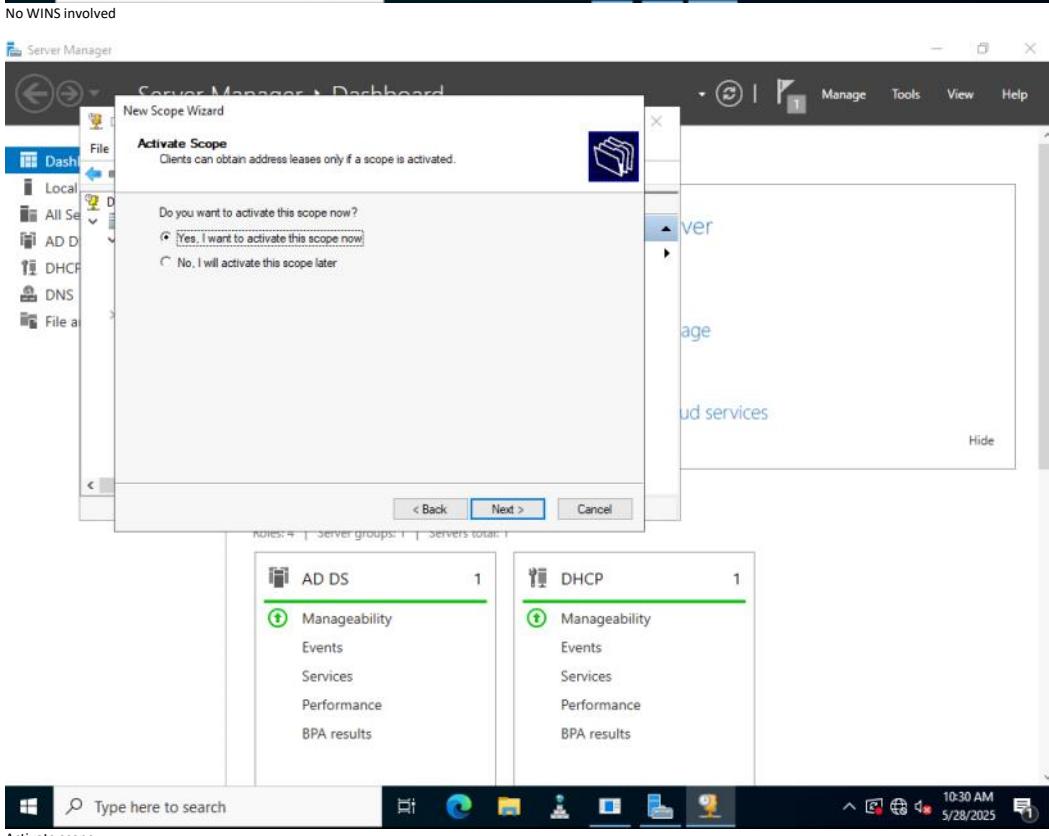
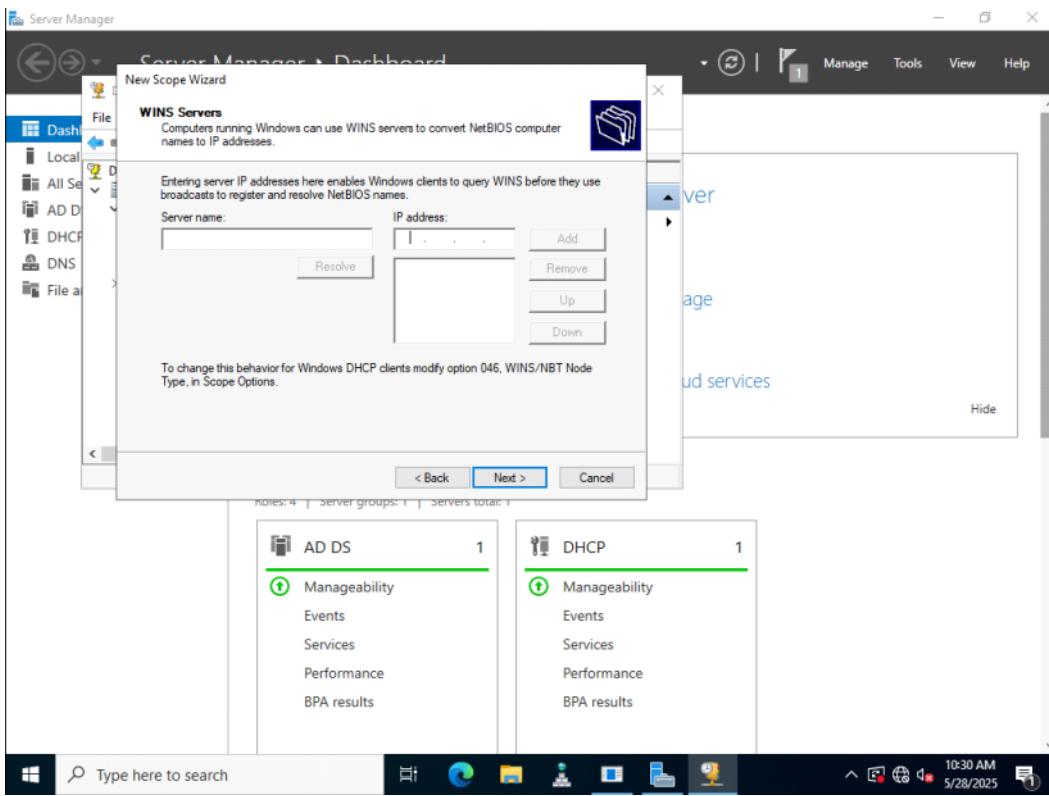




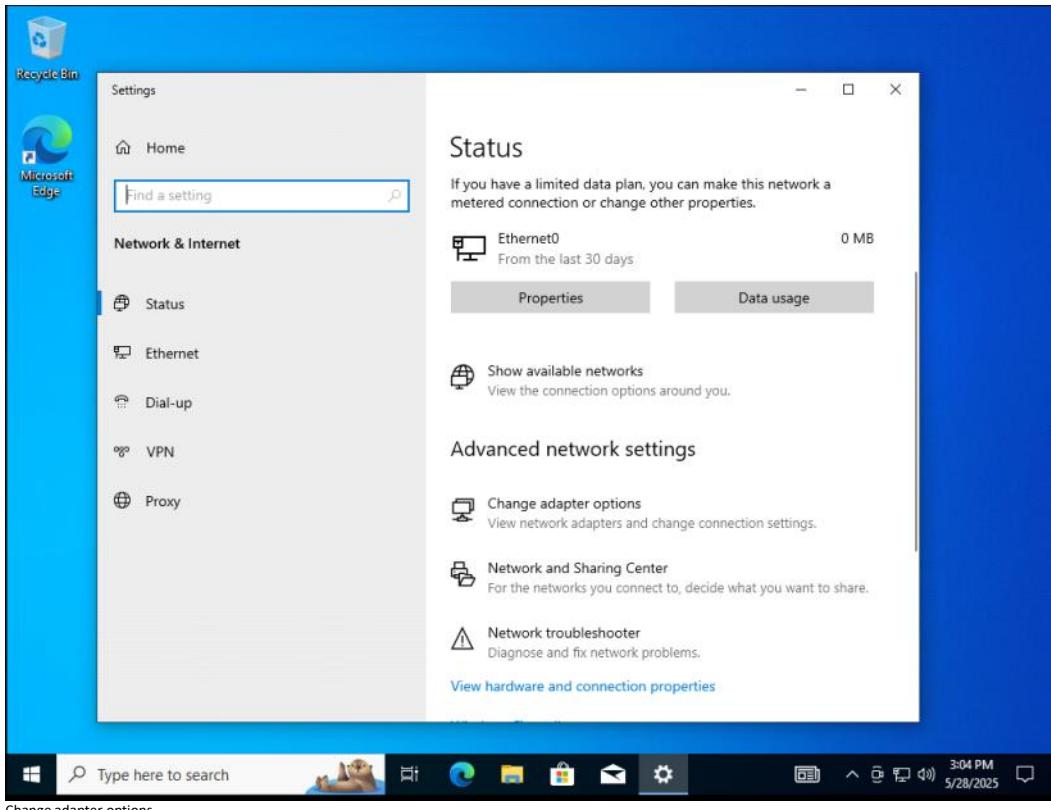
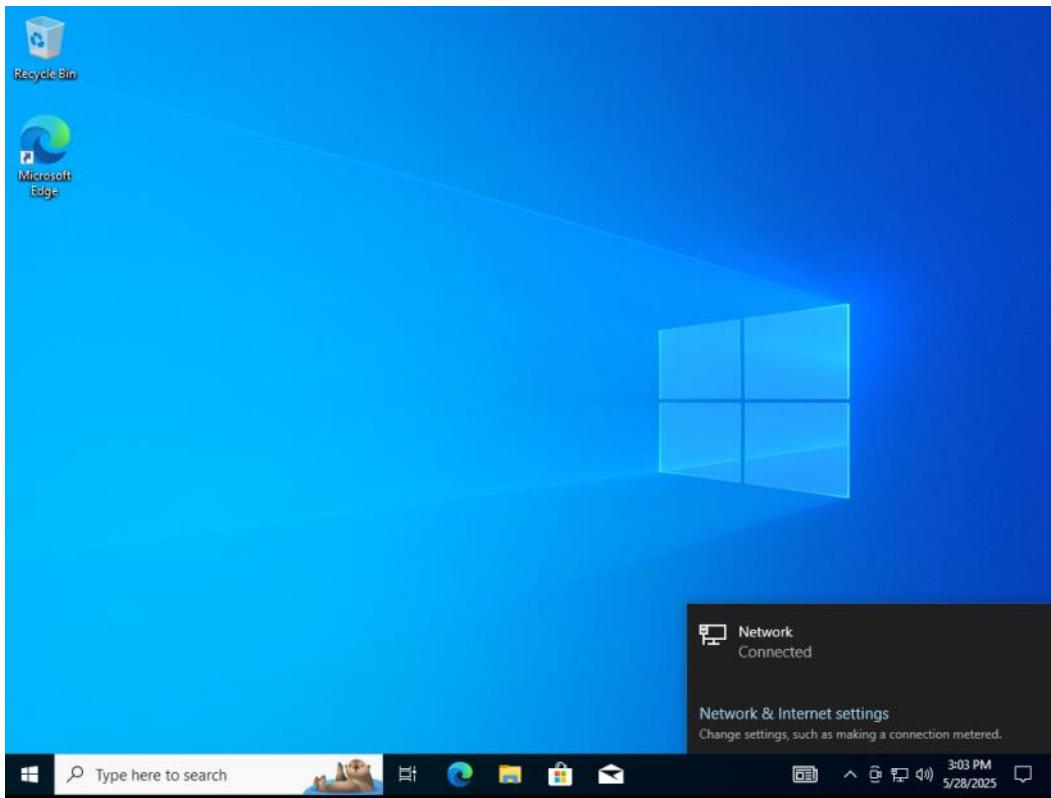
Pretend gateway that I will hand out to my clients and that router is  
192.168.0.254



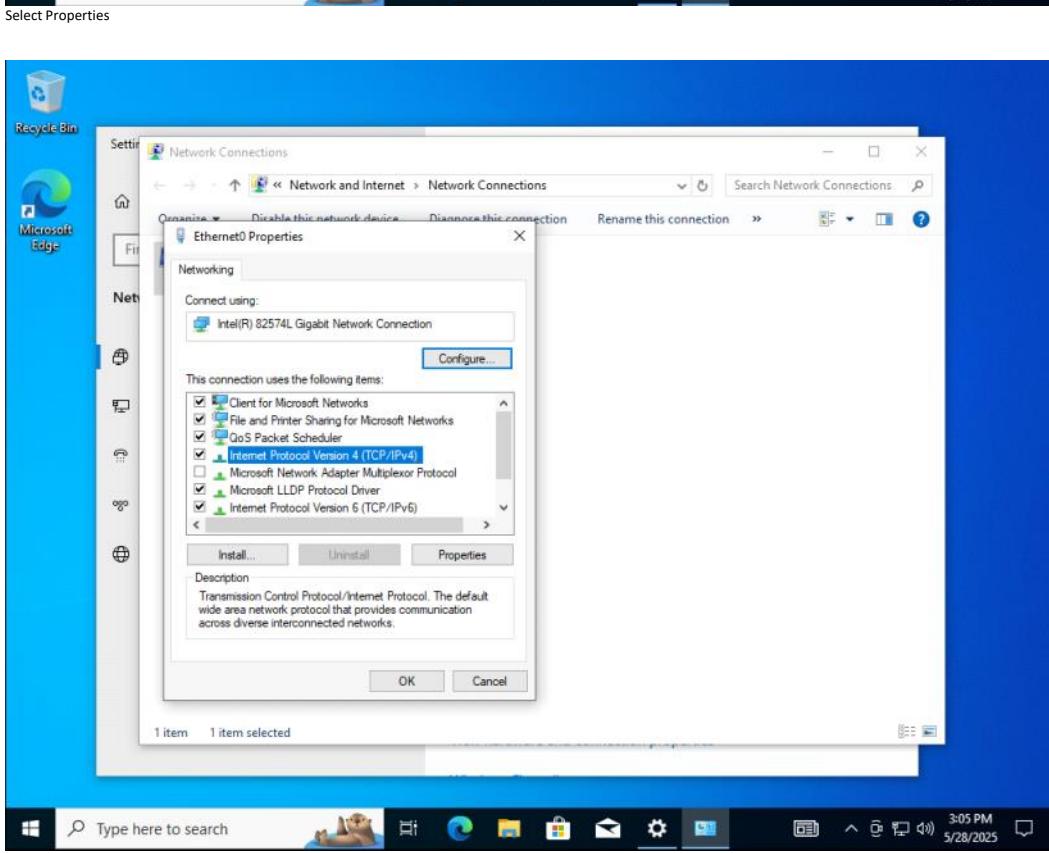
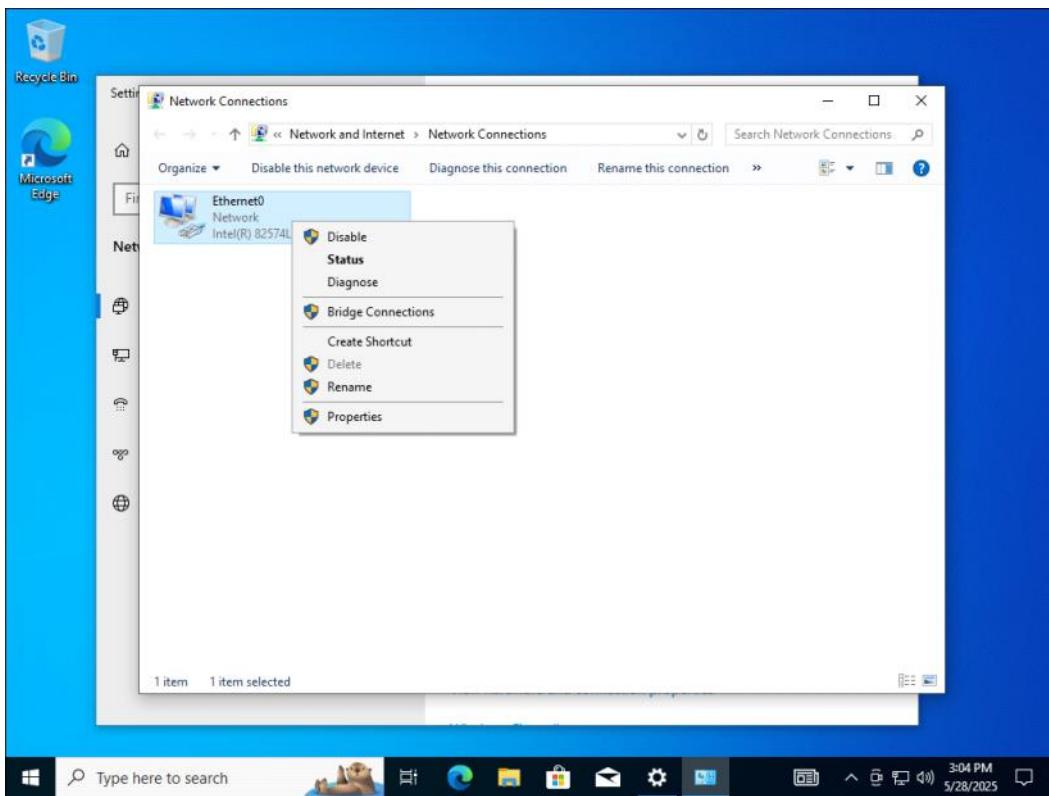
Already has DNS server in prompt, click next



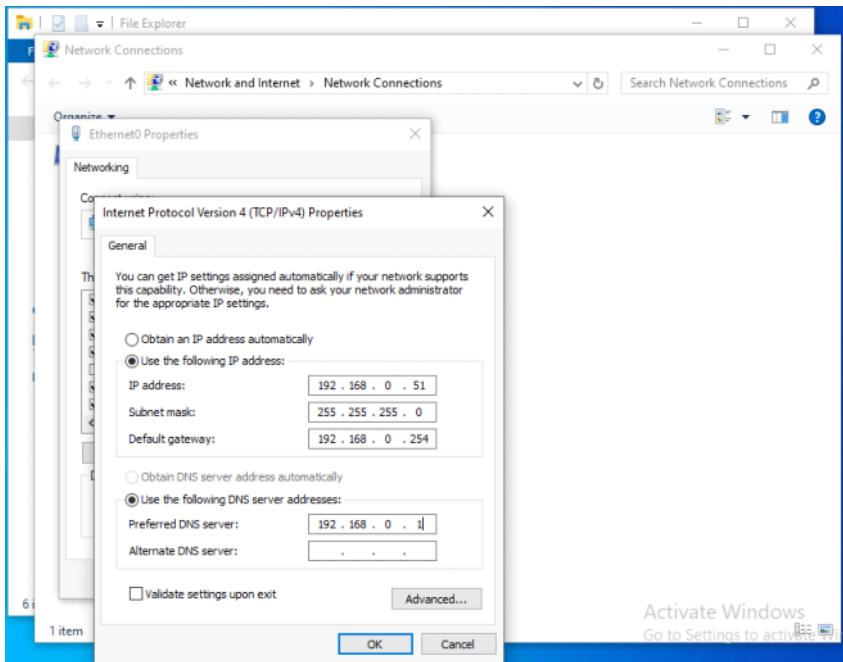
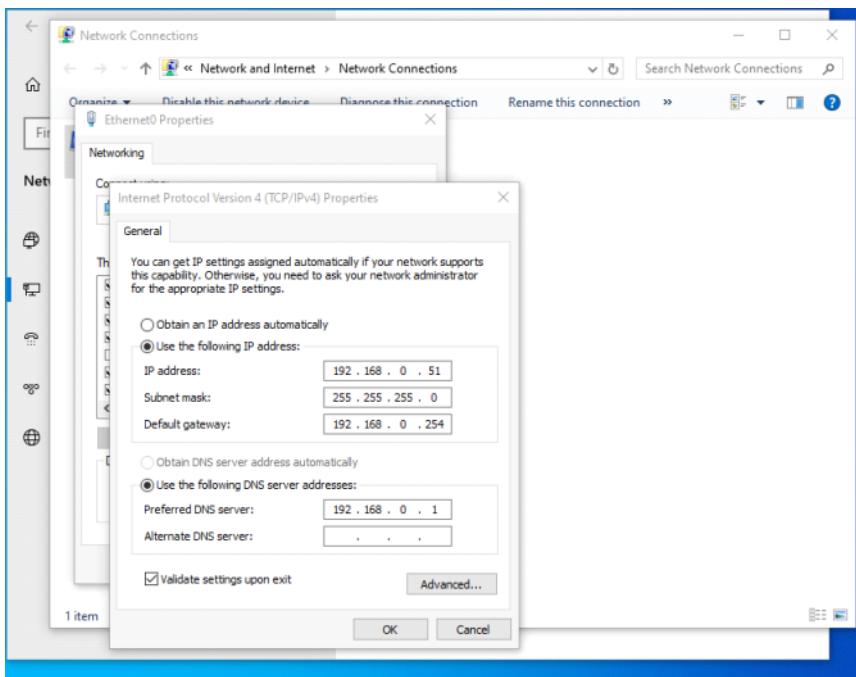
Now to hop over to PC01



Change adapter options



Select IPv4 then Properties



Recycle Bin

File Explorer Network Connections

Command Prompt

```
Microsoft Windows [Version 10.0.19045.3803]
(c) Microsoft Corporation. All rights reserved.

C:\Users\PC01>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet0:

  Connection-specific DNS Suffix . :
  Link-local IPv6 Address . . . . . : fe80::a181:7c79:f79:1f61%6
  IPv4 Address. . . . . : 192.168.0.51
  Subnet Mask . . . . . : 255.255.255.0
  Default Gateway . . . . . : 192.168.0.254

C:\Users\PC01>
```

Activate Windows  
Go to Settings to activate Windows.

Command Prompt

```
Microsoft Windows [Version 10.0.19045.3803]
(c) Microsoft Corporation. All rights reserved.

C:\Users\PC01>ipconfig /all

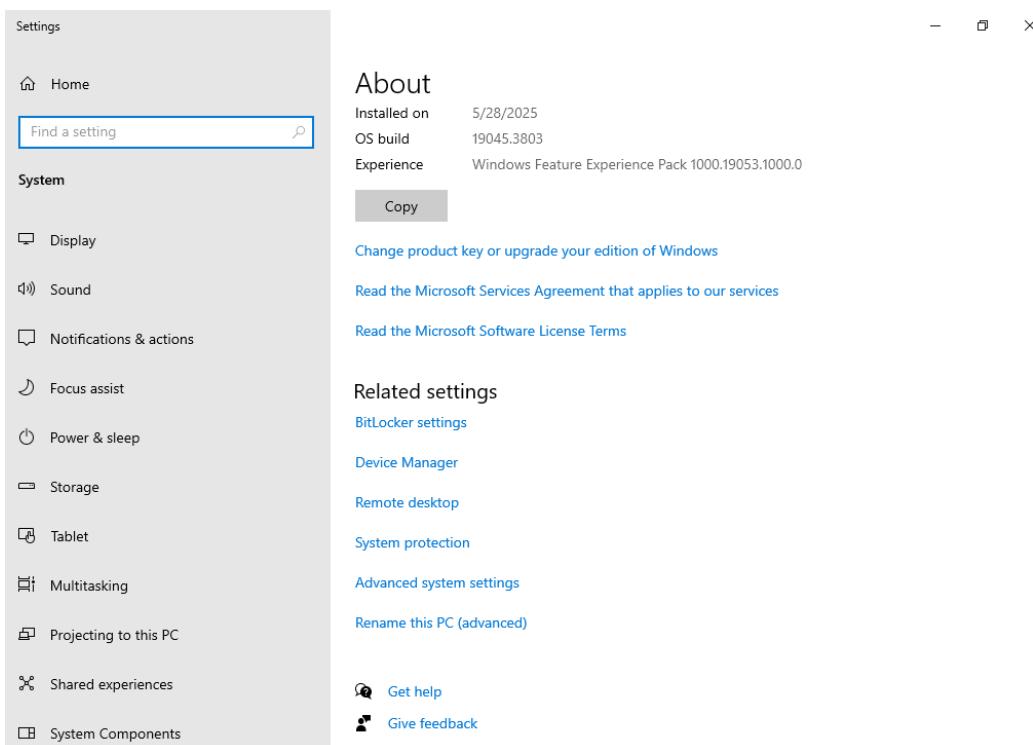
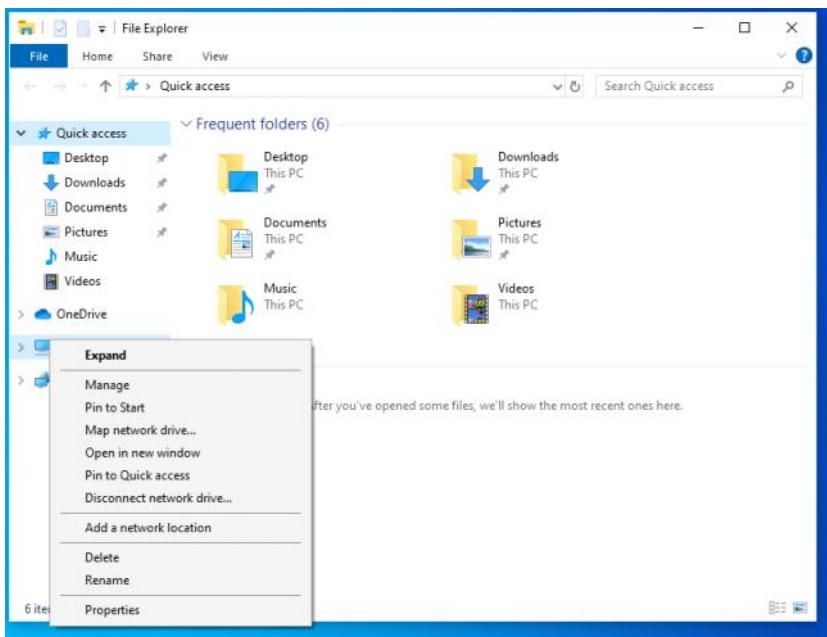
Windows IP Configuration

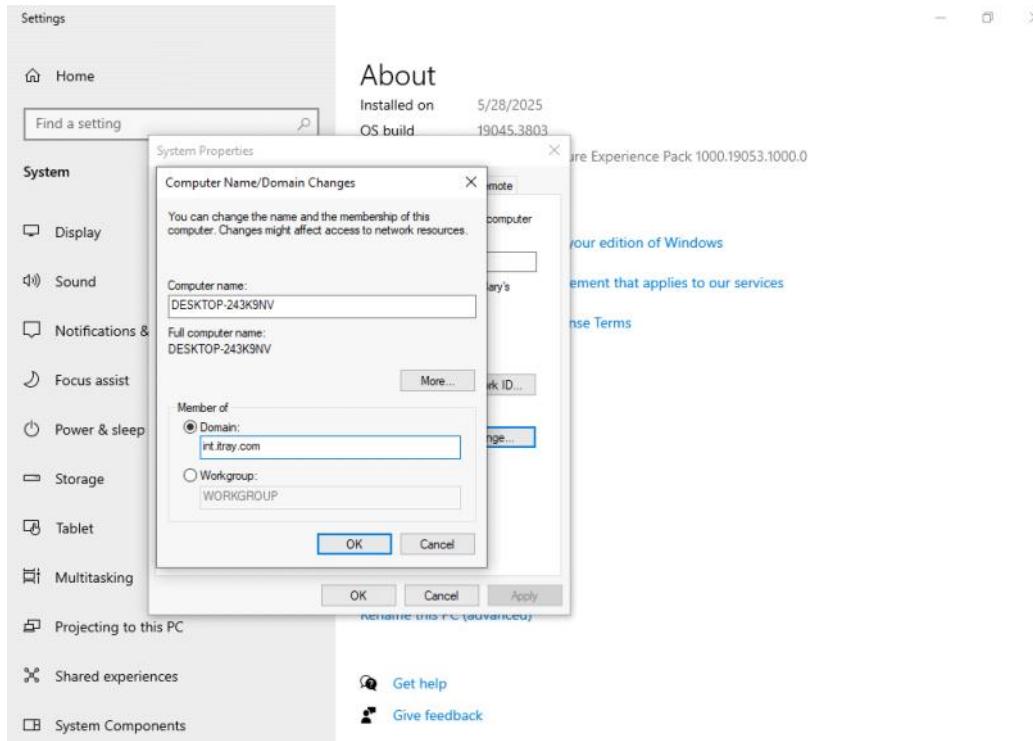
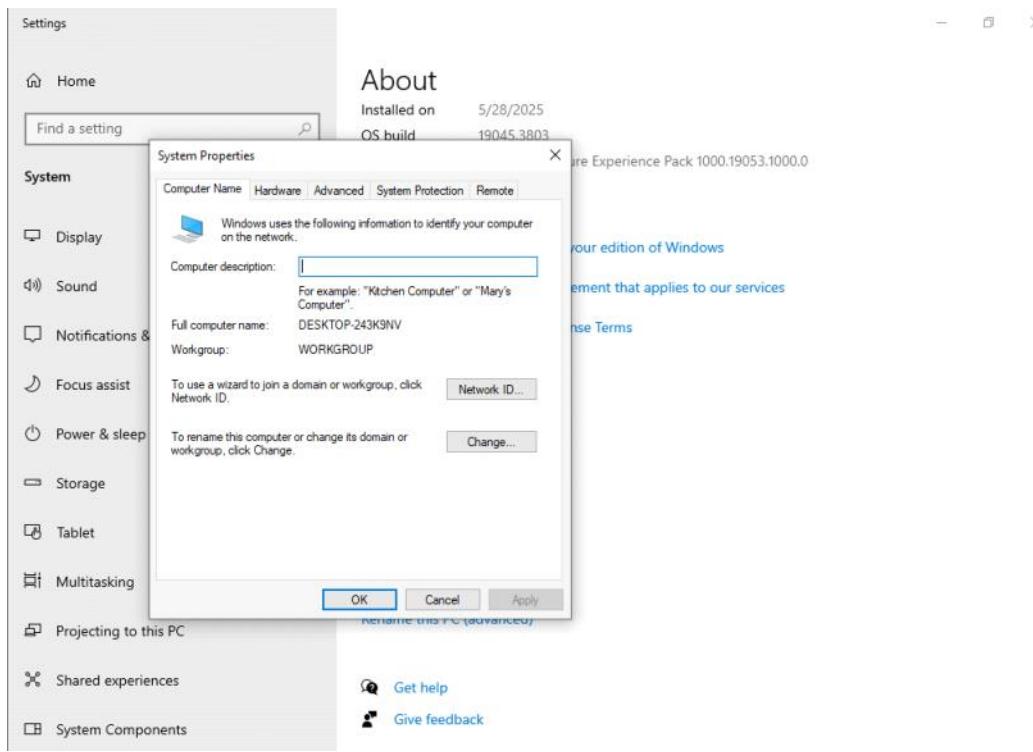
Host Name . . . . . : DESKTOP-243K9NV
Primary Dns Suffix . . . . . :
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No

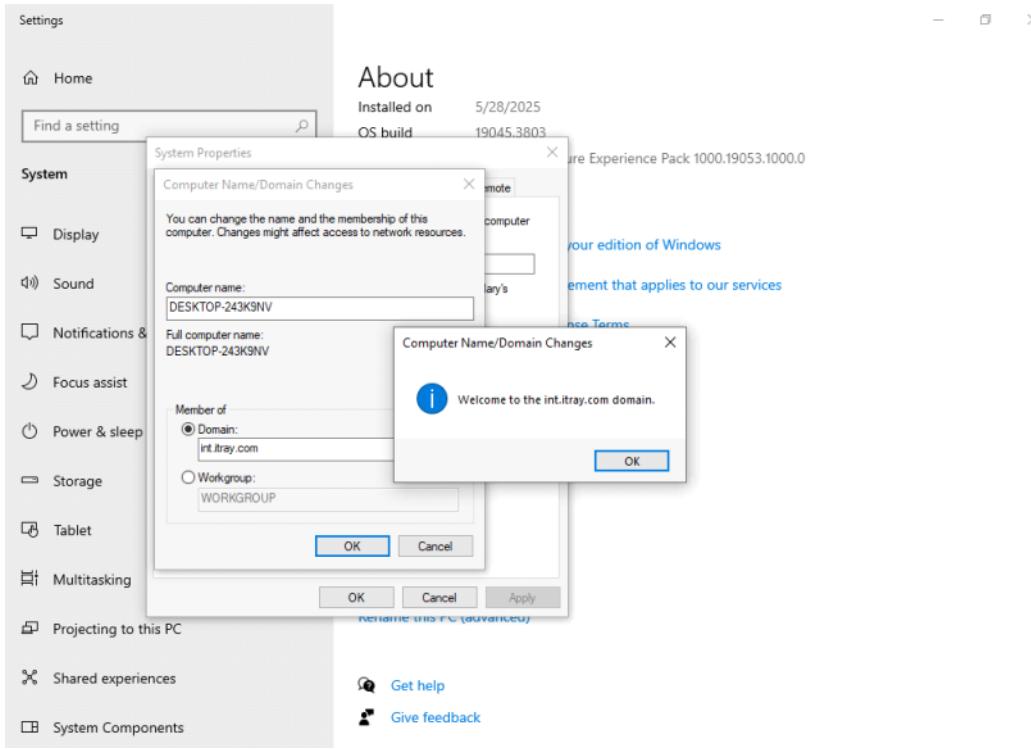
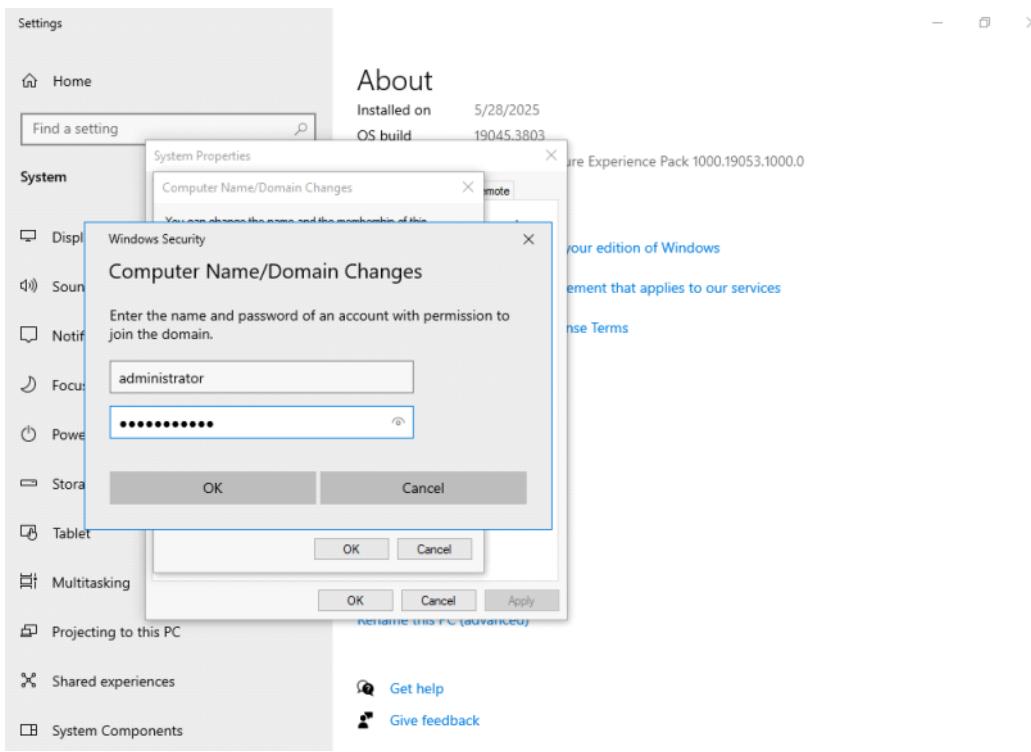
Ethernet adapter Ethernet0:

  Connection-specific DNS Suffix . :
  Description . . . . . : Intel(R) 82574L Gigabit Network Connection
  Physical Address . . . . . : 00-0C-29-CD-56-DC
  DHCP Enabled. . . . . : No
  Autoconfiguration Enabled . . . . . : Yes
  Link-local IPv6 Address . . . . . : fe80::a181:7c79:f79:1f61%13(Preferred)
  IPv4 Address . . . . . : 192.168.0.51(Preferred)
  Subnet Mask . . . . . : 255.255.255.0
  Default Gateway . . . . . : 192.168.0.254
  DHCPv6 IAID . . . . . : 100666409
  DHCPv6 Client DUID. . . . . : 00-01-00-01-2F-C9-2F-38-00-0C-29-CD-56-DC
  DNS Servers . . . . . : 192.168.0.1
  NetBIOS over Tcpip. . . . . : Enabled

C:\Users\PC01>
```







Create users in AD

Server Manager

Server Manager • Dashboard

WELCOME TO SERVER MANAGER

1 Configure this local server

2 Add roles and features

3 Add other servers to manage

4 Create a server group

5 Connect this server to cloud

QUICK START

WHAT'S NEW

LEARN MORE

ROLES AND SERVER GROUPS

Roles: 4 | Server groups: 1 | Servers total: 1

AD DS	1
Manageability	
Events	
Services	
Performance	
BPA results	

DHCP	
Manageability	
Events	
Services	
Performance	
BPA results	

Active Directory Administrative Center

Active Directory Domains and Trusts

Active Directory Module for Windows PowerShell

Active Directory Sites and Services

Active Directory Users and Computers

ADSI Edit

Component Services

Computer Management

Defragment and Optimize Drives

DHCP

Disk Cleanup

DNS

Event Viewer

Group Policy Management

iSCSI Initiator

Local Security Policy

Microsoft Azure Services

ODBC Data Sources (32-bit)

ODBC Data Sources (64-bit)

Performance Monitor

Recovery Drive

Registry Editor

Resource Monitor

Services

System Configuration

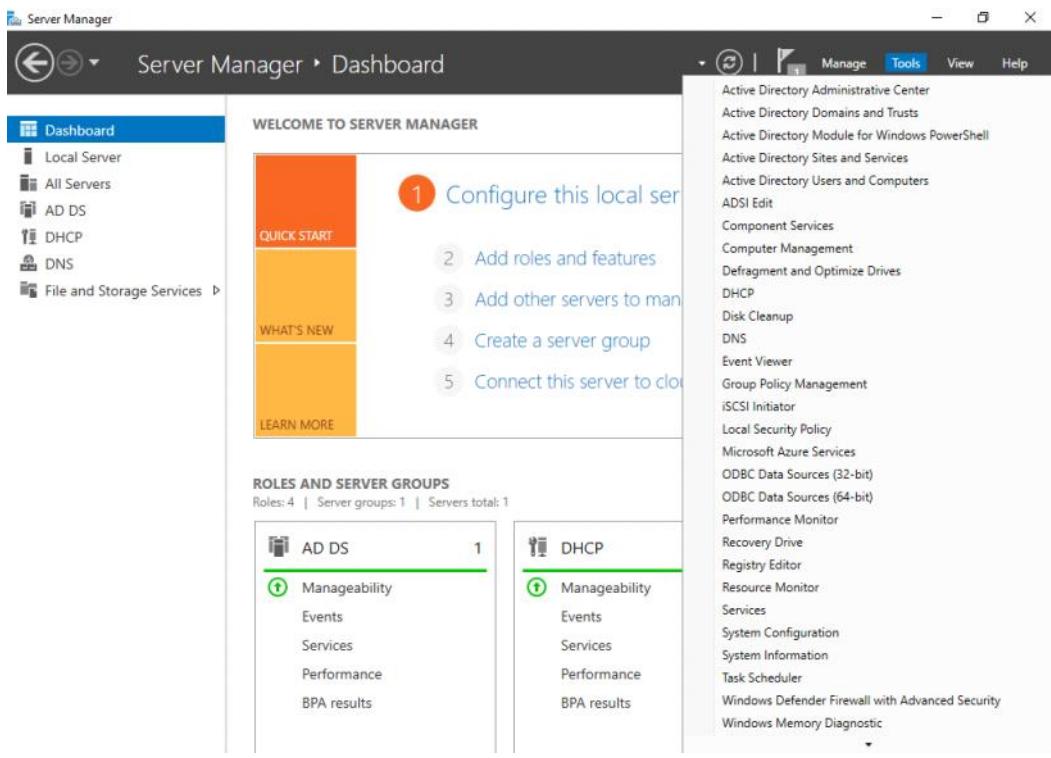
System Information

Task Scheduler

Windows Defender Firewall with Advanced Security

Windows Memory Diagnostic

Click Tools > Active Directory Users and Computers



Server Manager

Server Manager • Dashboard

Active Directory Users and Computers

Name Type Description

int.itray.com Domain Folder to store your favo...

Services

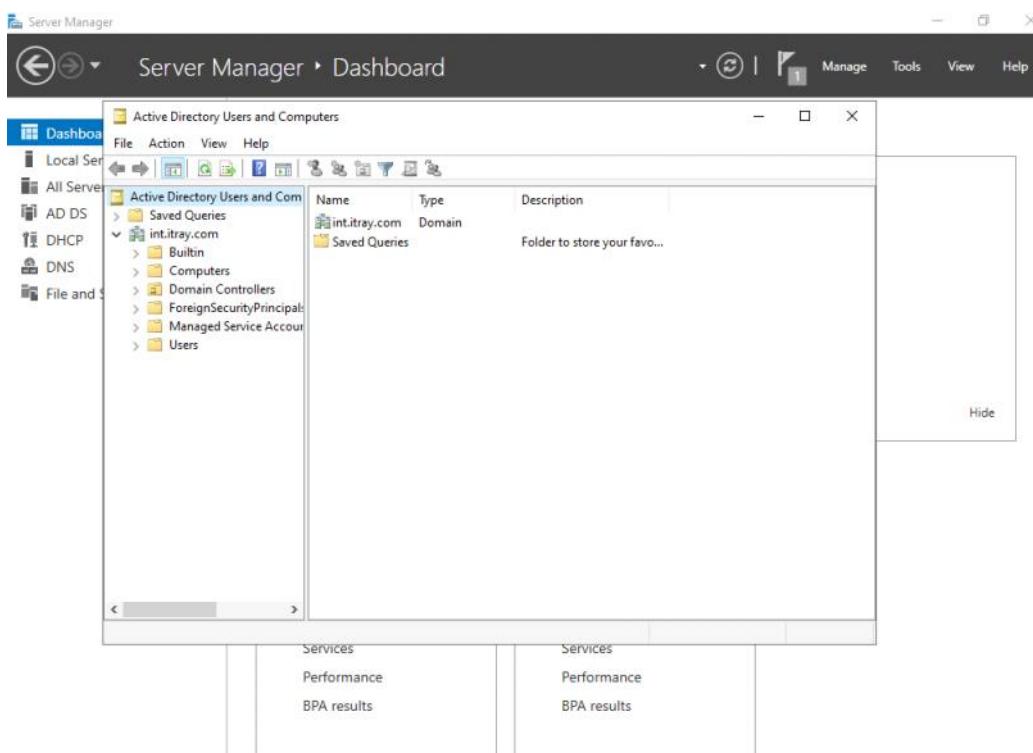
Performance

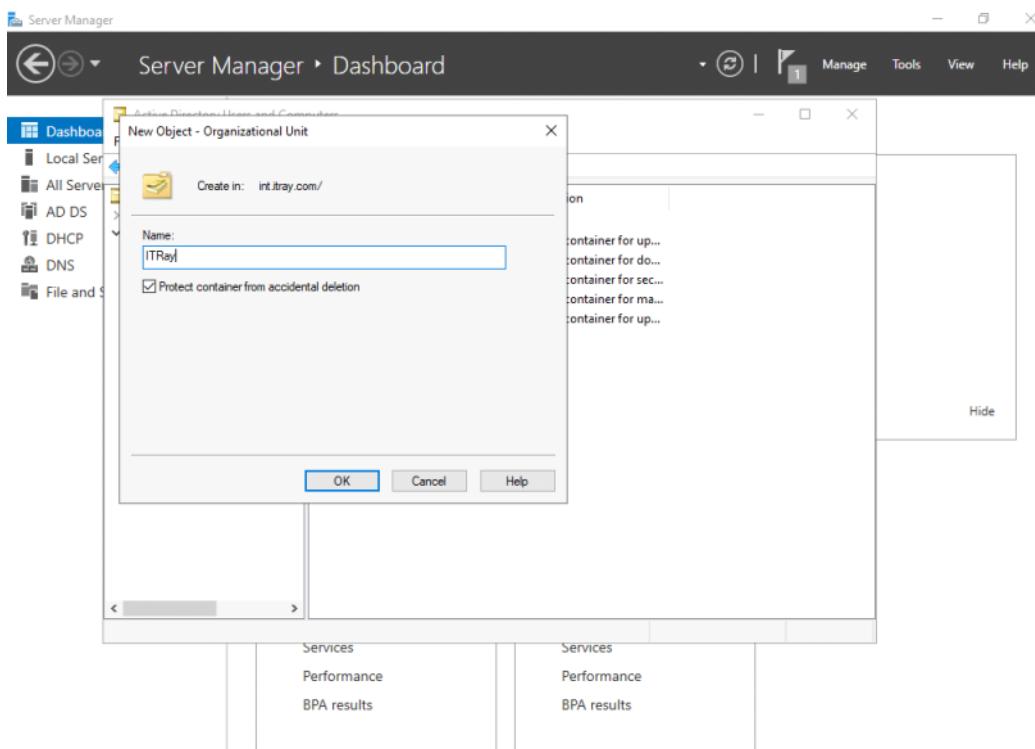
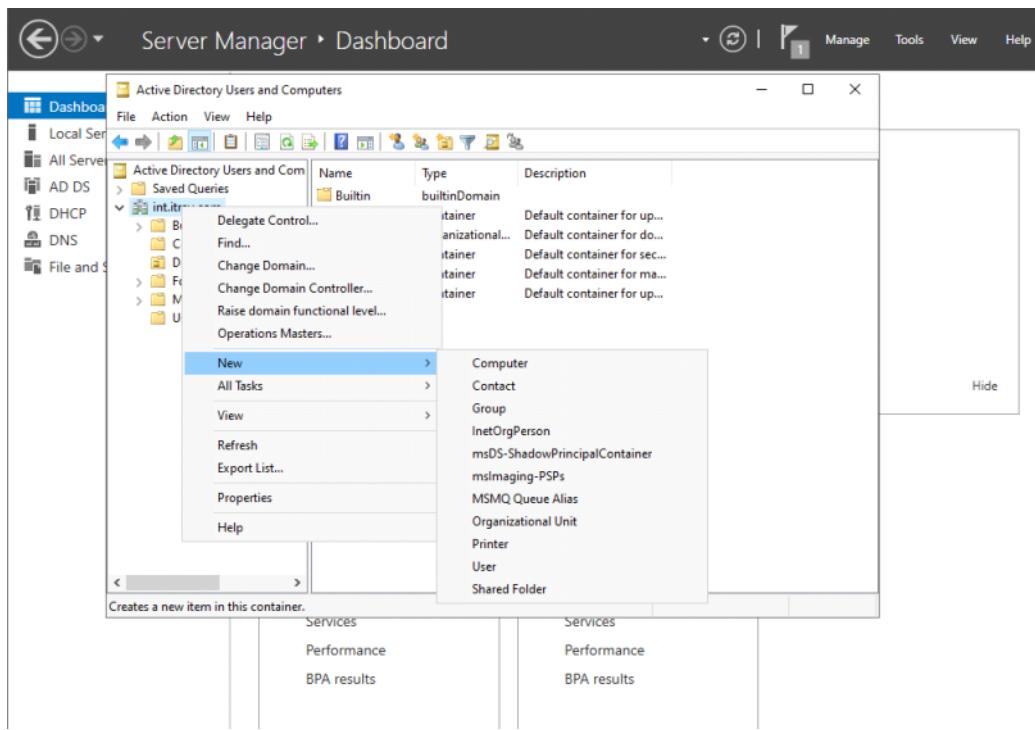
BPA results

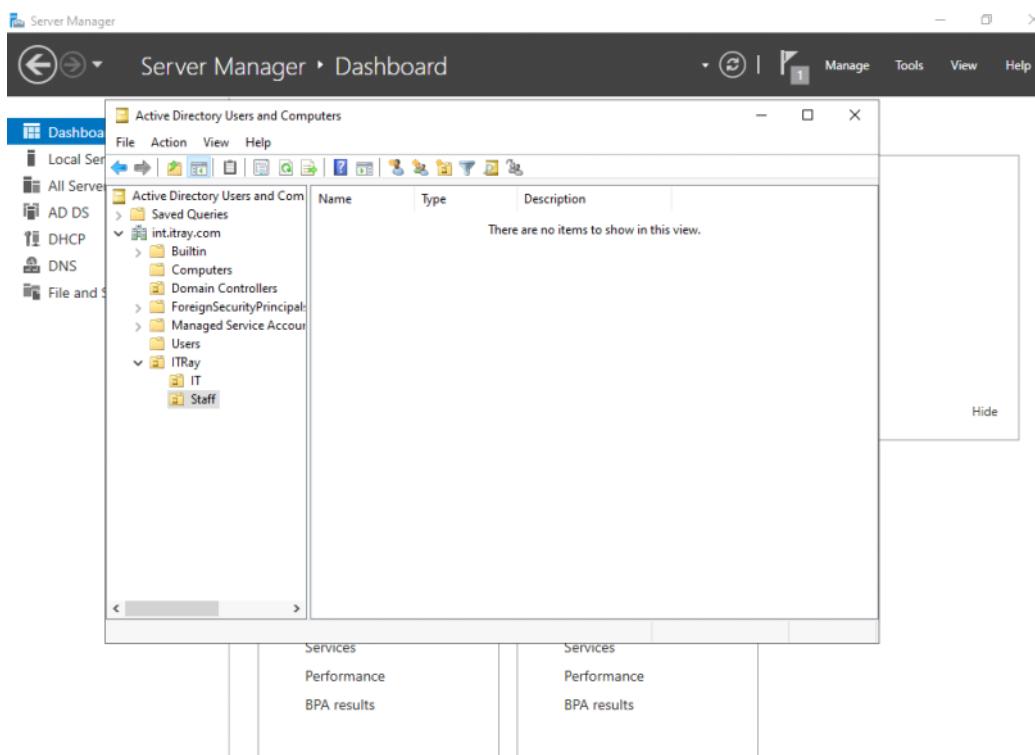
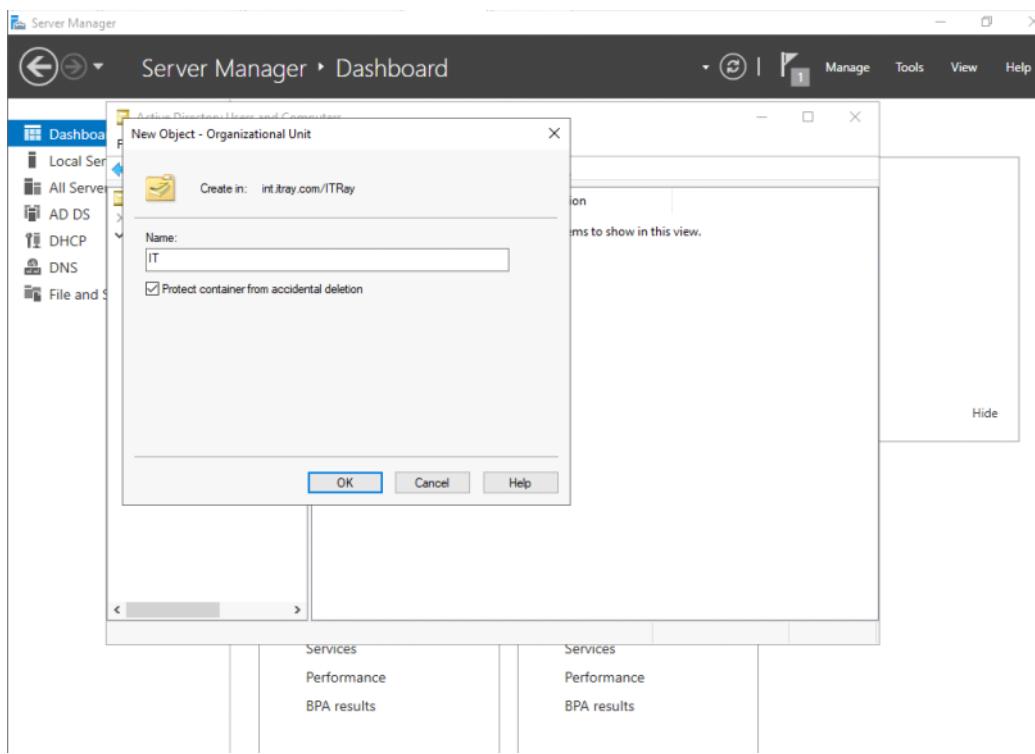
Services

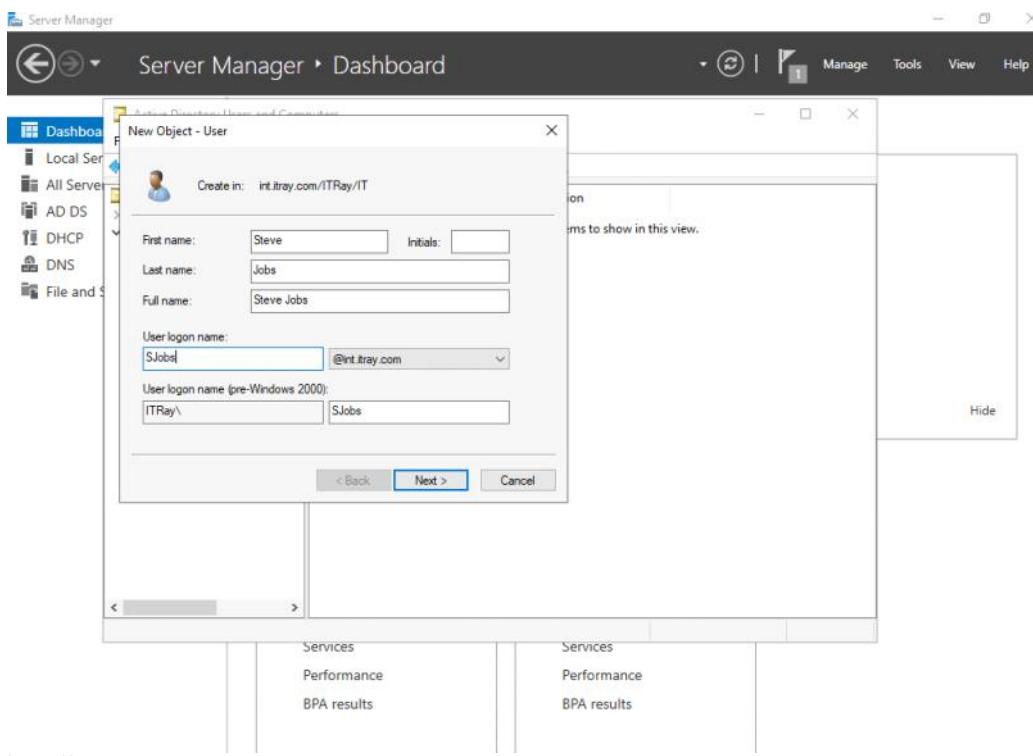
Performance

BPA results

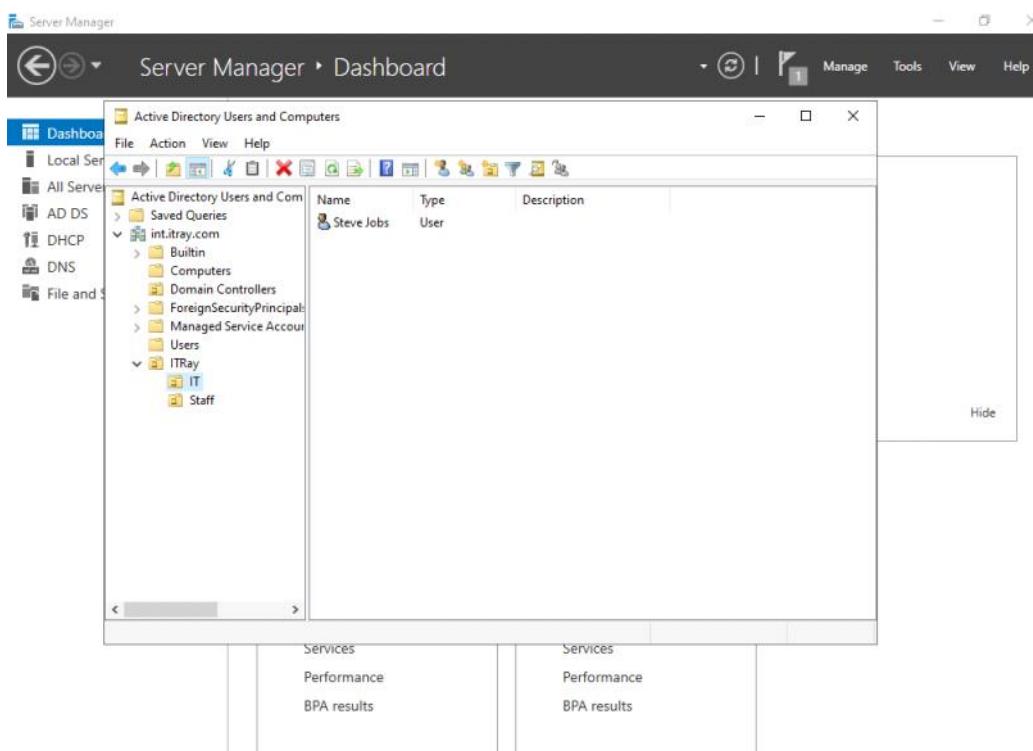








!502231dd



Server Manager

Server Manager • Dashboard

Active Directory Users and Computers

File Action View Help

Local Server All Services AD DS DHCP DNS File and S

Active Directory Users and Computers

Name Type Description

Tim Cook User

int.itray.com

- Builtin
- Computers
- Domain Controllers
- ForeignSecurityPrincipal
- Managed Service Account
- Users
- ITRay
  - IT
  - Staff

Services Performance BPA results

Hide

This screenshot shows the Active Directory Users and Computers window in the Server Manager. The left navigation pane lists Local Server, All Services, AD DS, DHCP, DNS, and File and S. The main pane displays a table with one row for Tim Cook, categorized as a User under int.itray.com. The right pane contains tabs for Services, Performance, and BPA results, with a 'Hide' button at the bottom.

Server Manager

Server Manager • Dashboard

Active Directory Users and Computers

File Action View Help

Local Server All Services AD DS DHCP DNS File and S

Active Directory Users and Computers

Name Type Description

Steve Jobs User

int.itray.com

- Builtin
- Computers
- Domain Controllers
- ForeignSecurityPrincipal
- Managed Service Account
- Users
- ITRay
  - IT
  - Staff

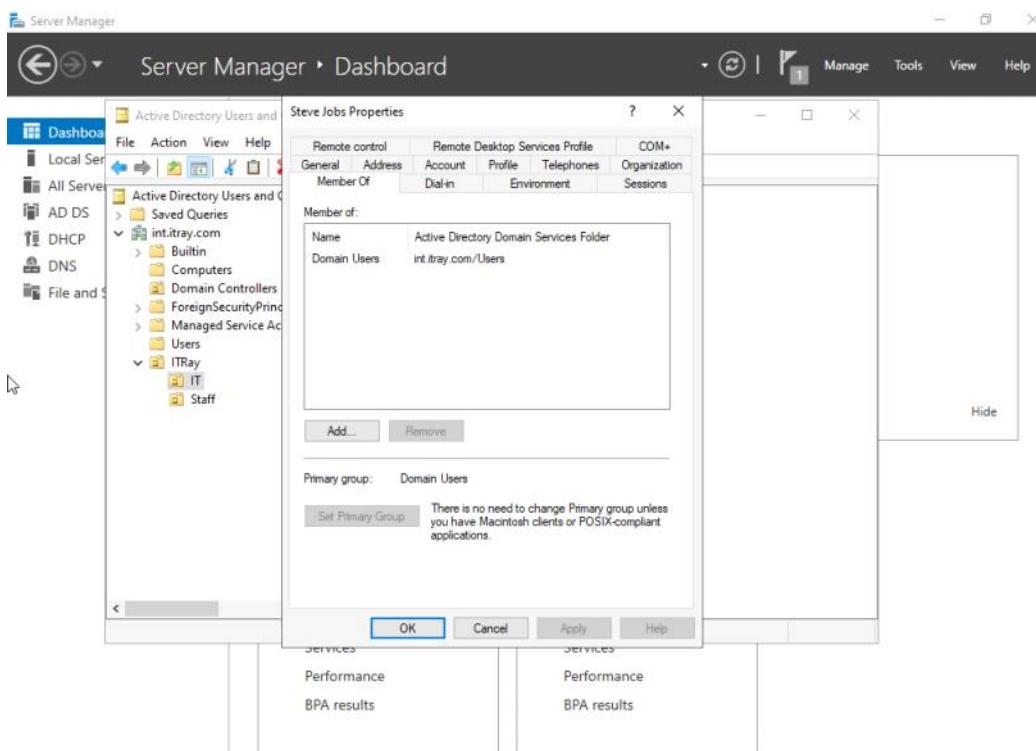
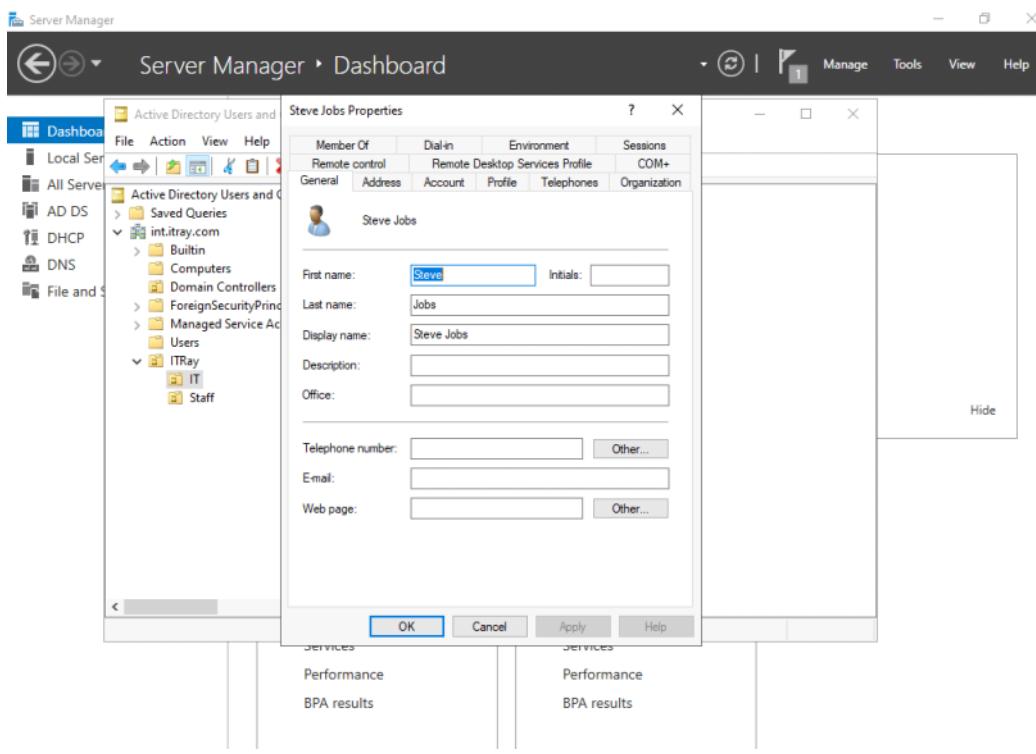
Copy... Add to a group... Disable Account Reset Password... Move... Open Home Page Send Mail All Tasks > Cut Delete Rename Properties Help

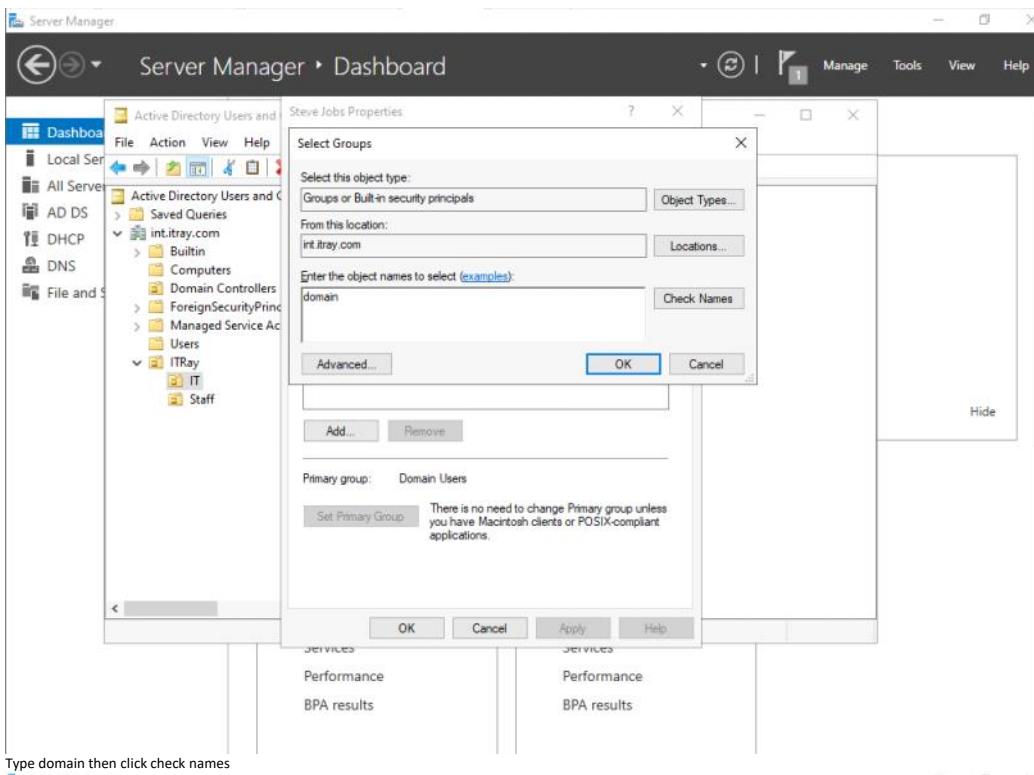
Opens the properties dialog box for the current selection.

Services Performance BPA results

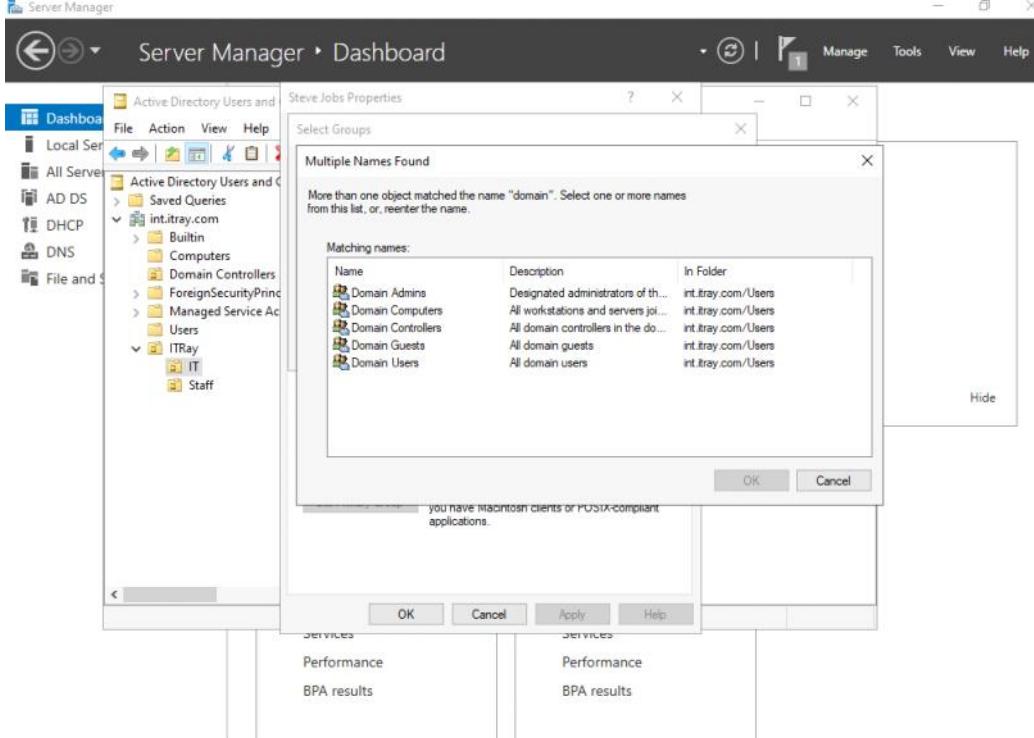
This screenshot shows the same Active Directory Users and Computers window as the previous one, but with a context menu open over the entry for Steve Jobs. The menu includes options like Copy..., Add to a group..., Disable Account, Reset Password..., Move..., Open Home Page, Send Mail, All Tasks, Cut, Delete, Rename, Properties, and Help. A tooltip at the bottom of the menu says "Opens the properties dialog box for the current selection."

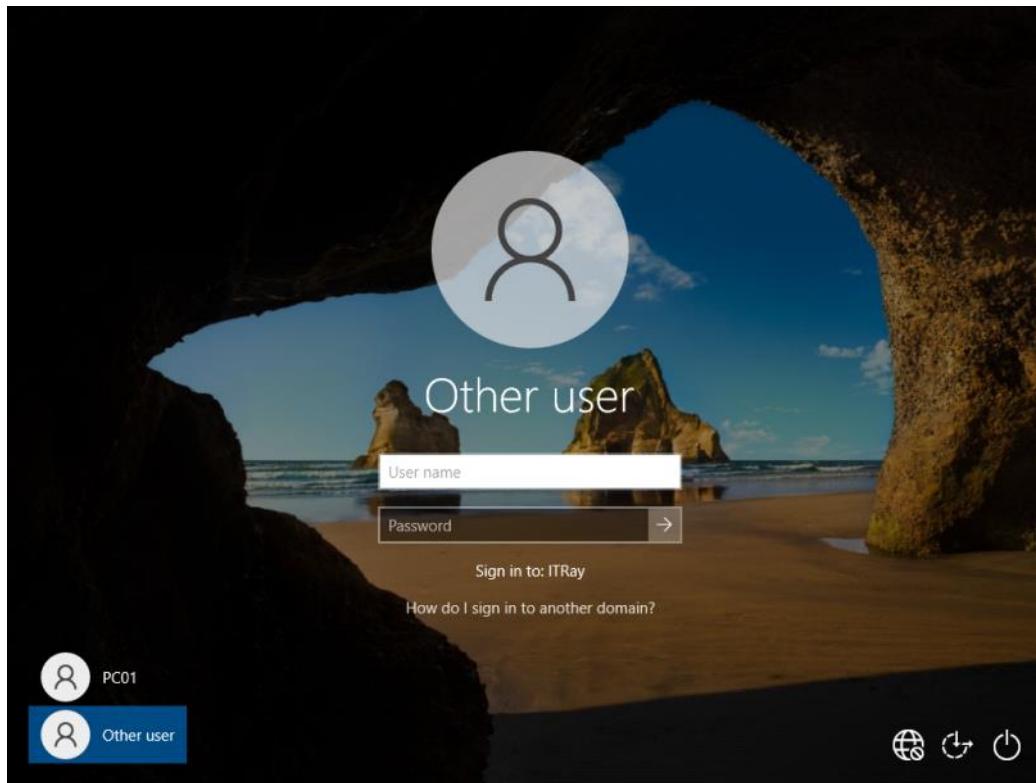
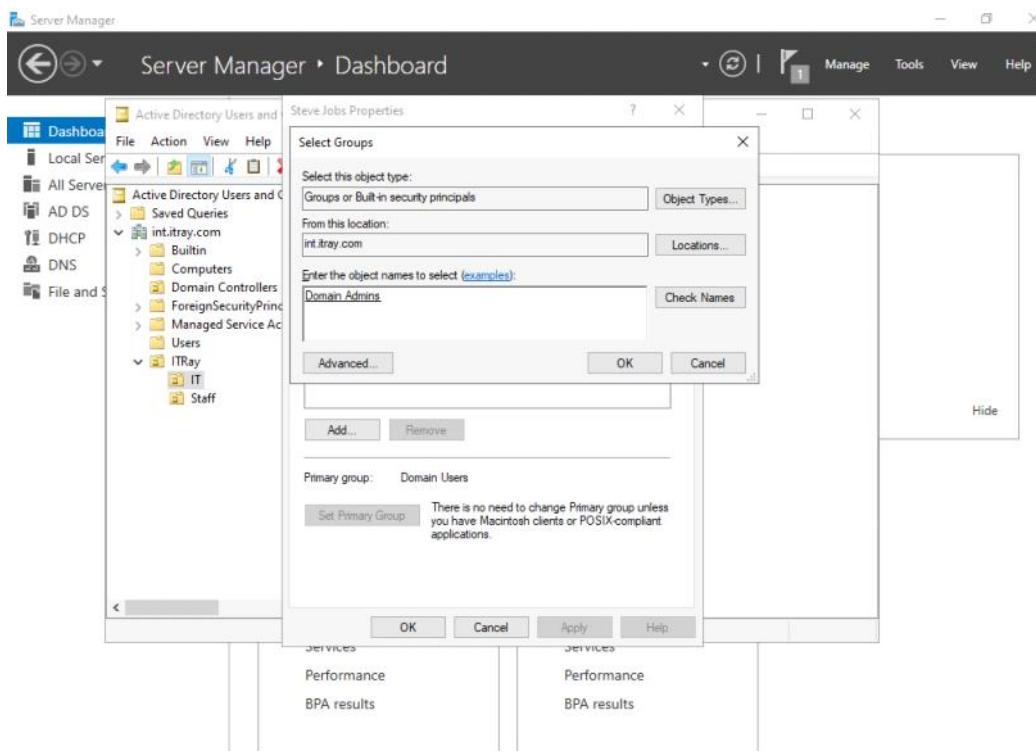
We want steve to be a member of administrator

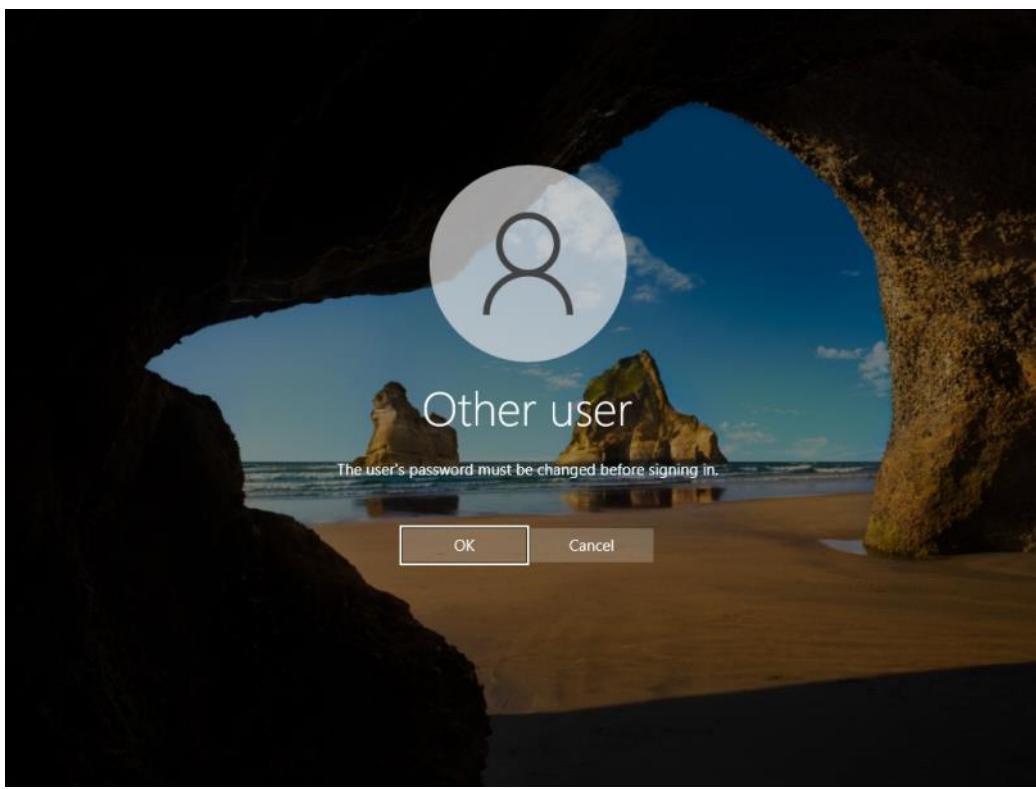
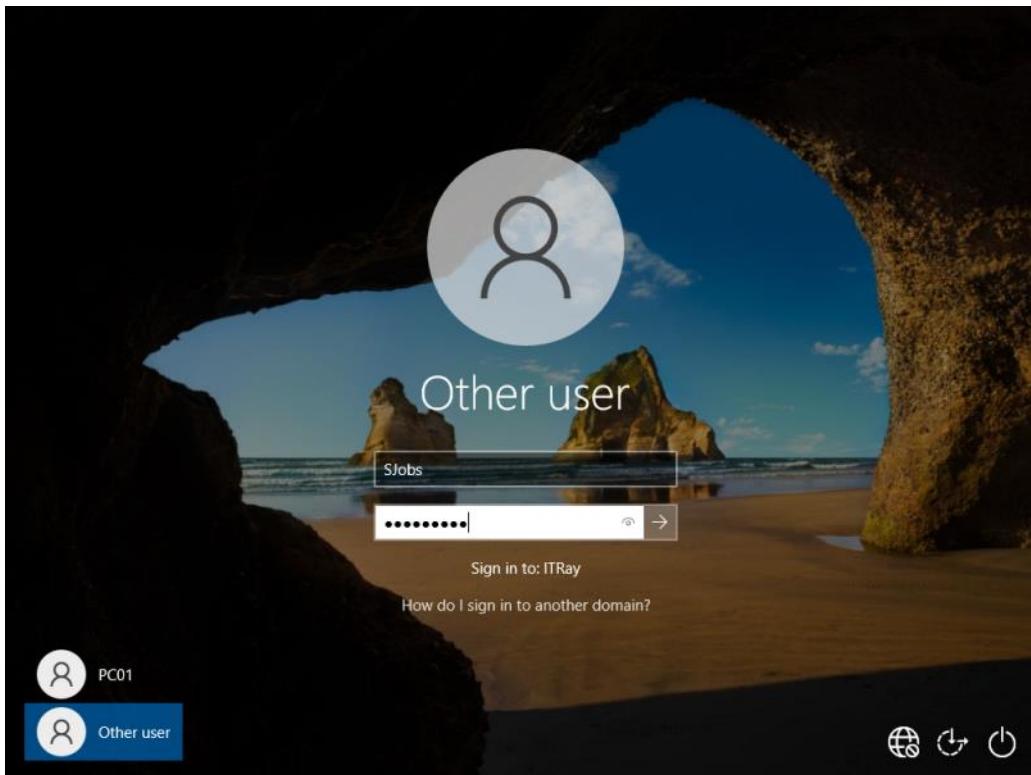




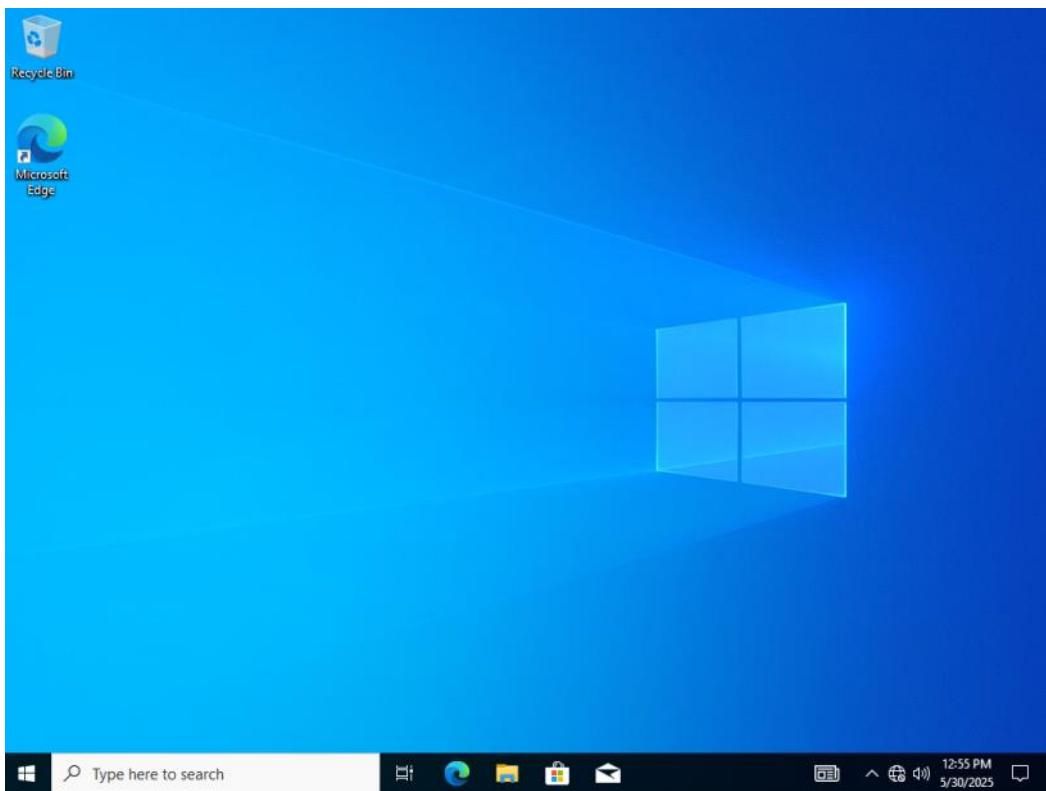
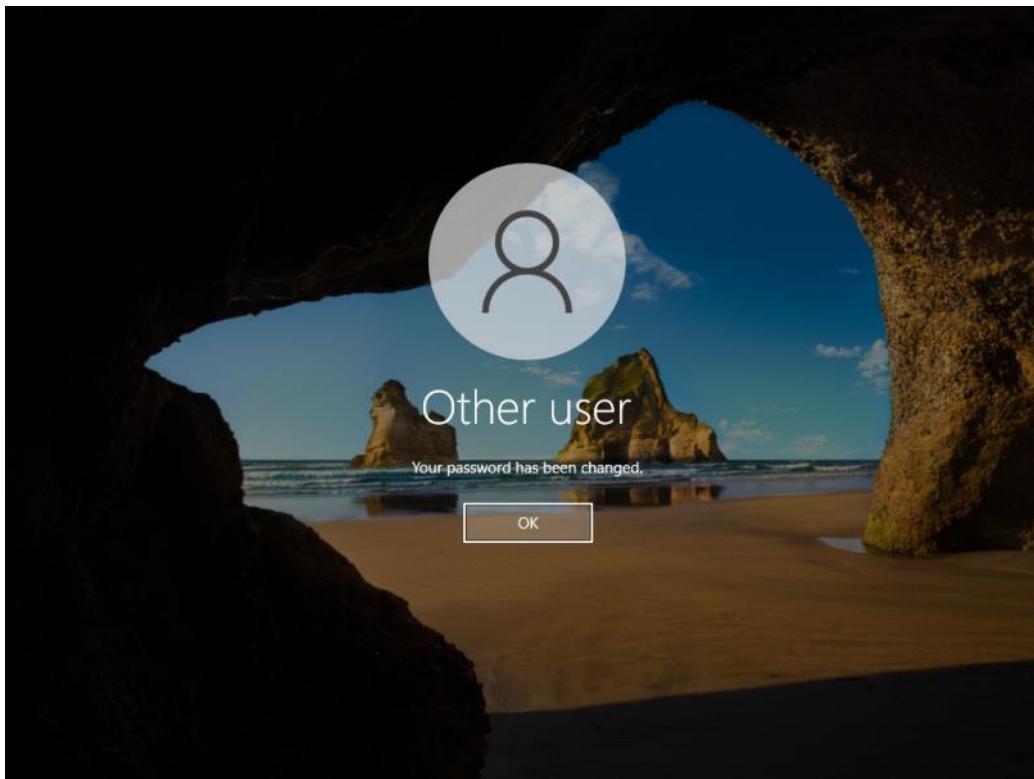
Type domain then click check names

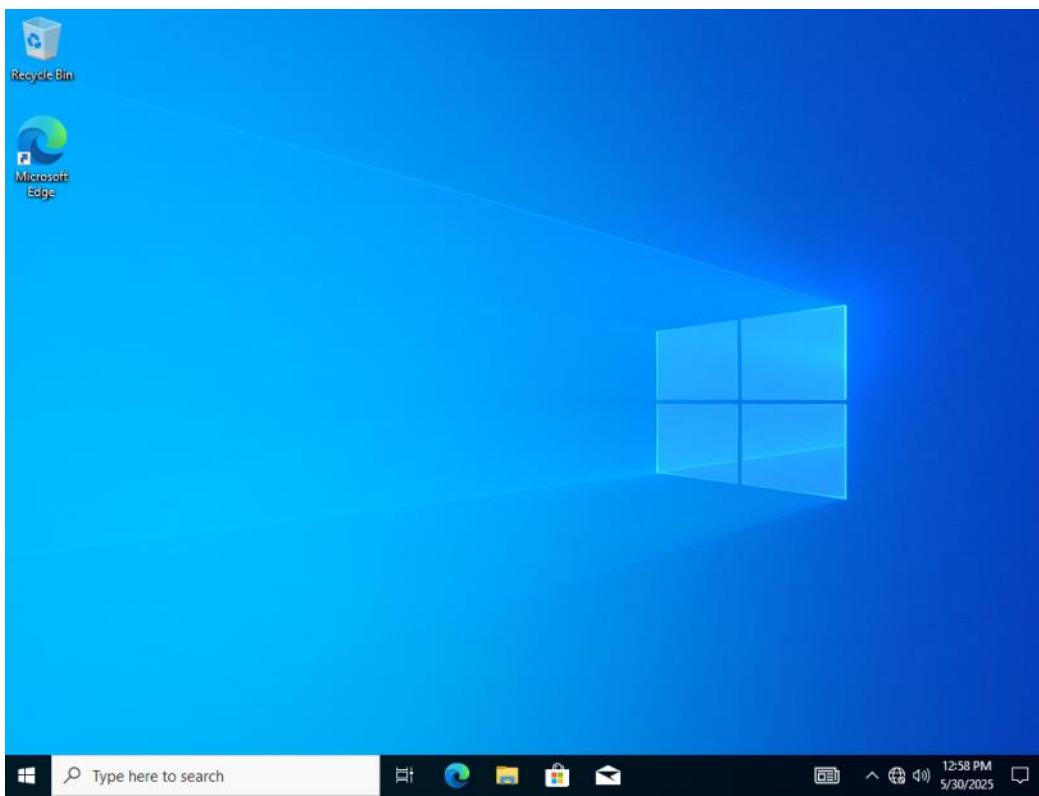
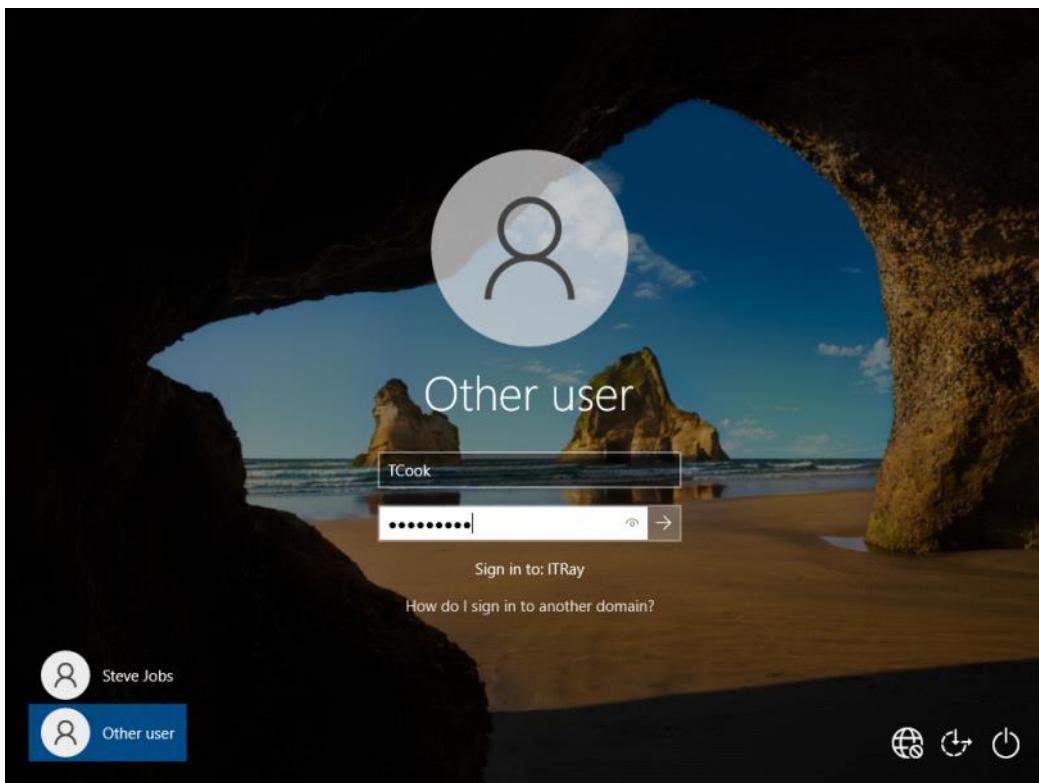




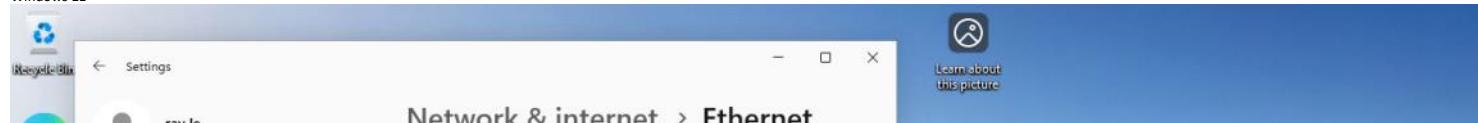


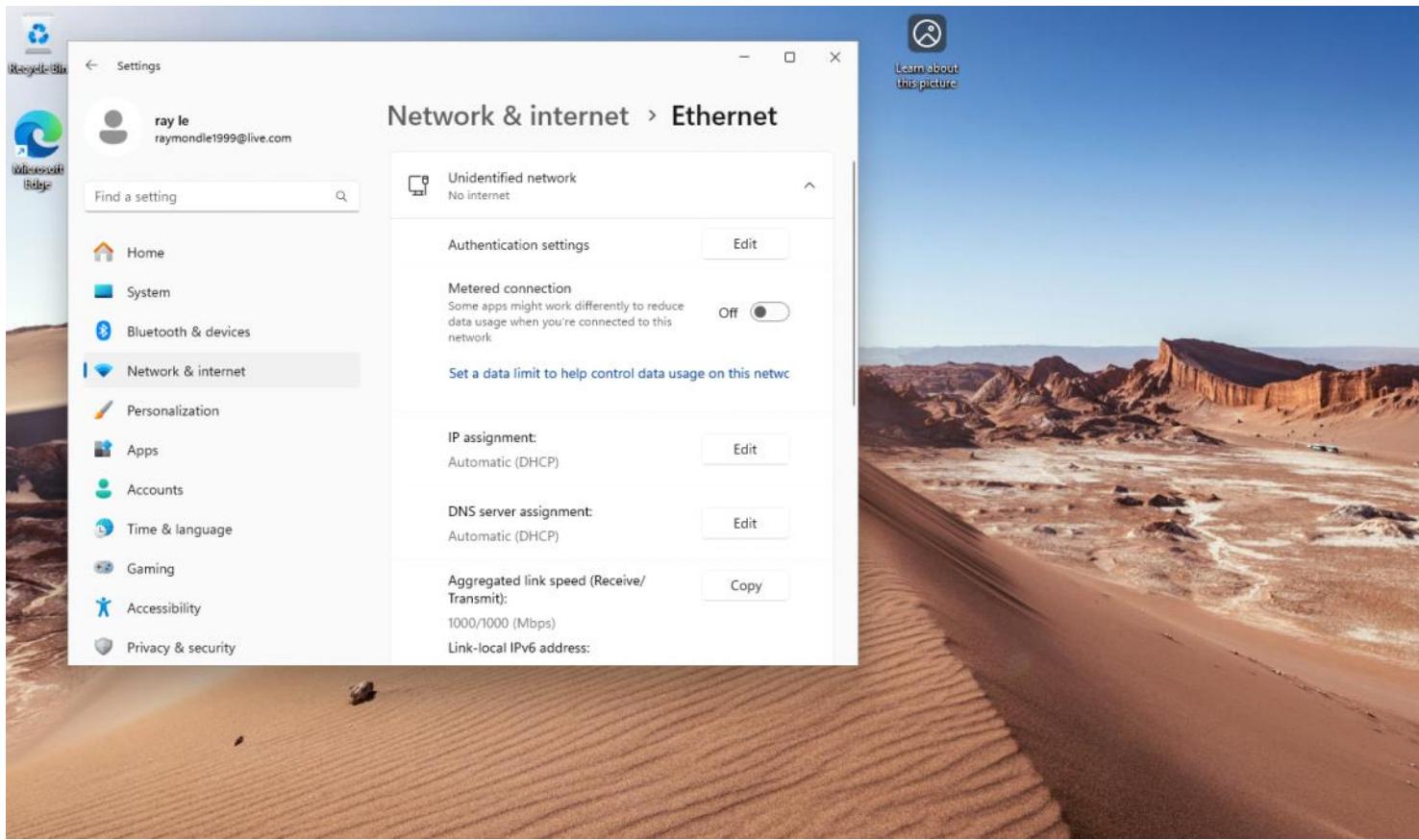
!1...Bdd





Windows 11





Here we can see this is on Windows 11. IP and DNS server assignment is set to automatic.

A screenshot of a Command Prompt window titled 'Select Administrator: Command Prompt'. It shows two commands being run: 'ipconfig /release' followed by 'ipconfig /renew'. The output shows the configuration for the 'Ethernet adapter Ethernet0' interface, including the connection-specific DNS suffix (localdomain), link-local IPv6 address (fe80::a0e8:d199:39a1:c24a%13), IPv4 address (192.168.19.128), subnet mask (255.255.255.0), and default gateway. The background of the Command Prompt window is a desert landscape.

```
Link-local IPv6 Address . . . . : fe80::a0e8:d199:39a1:c24a%13
IPv4 Address . . . . . : 192.168.19.128
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . :

C:\Windows\System32>ping 192.168.0.1

Pinging 192.168.0.1 with 32 bytes of data:
PING: transmit failed. General failure.

Ping statistics for 192.168.0.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Windows\System32>ping DC01

Pinging DC01.local [fe80::2d1c:6a9:83c2:bee5%13] with 32 bytes of data:
Reply from fe80::2d1c:6a9:83c2:bee5%13: time<1ms
Reply from fe80::2d1c:6a9:83c2:bee5%13: time<1ms
Reply from fe80::2d1c:6a9:83c2:bee5%13: time<1ms
Reply from fe80::2d1c:6a9:83c2:bee5%13: time<1ms

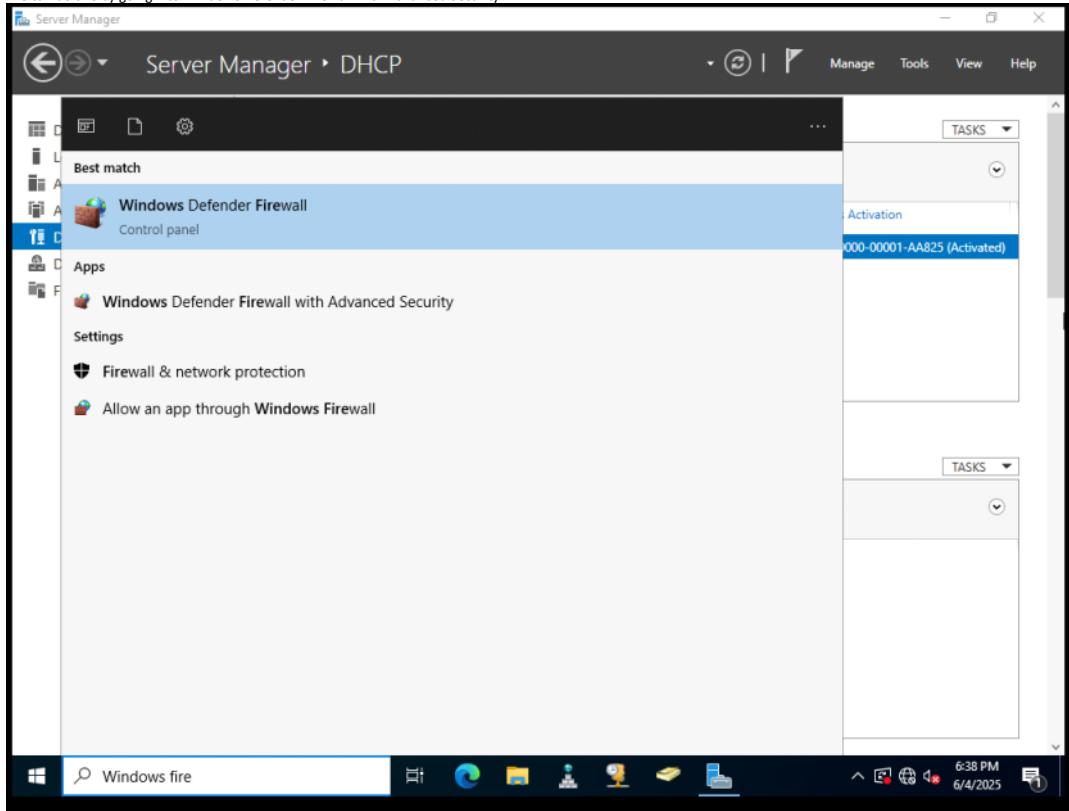
Ping statistics for fe80::2d1c:6a9:83c2:bee5%13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

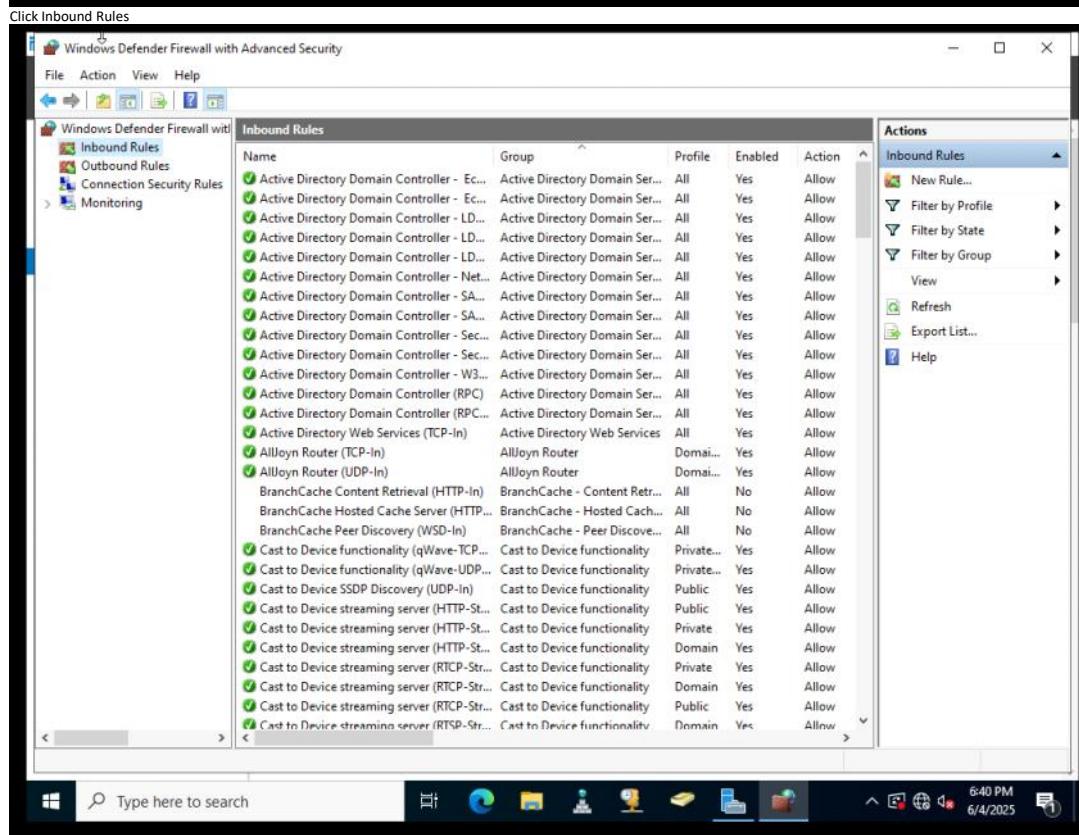
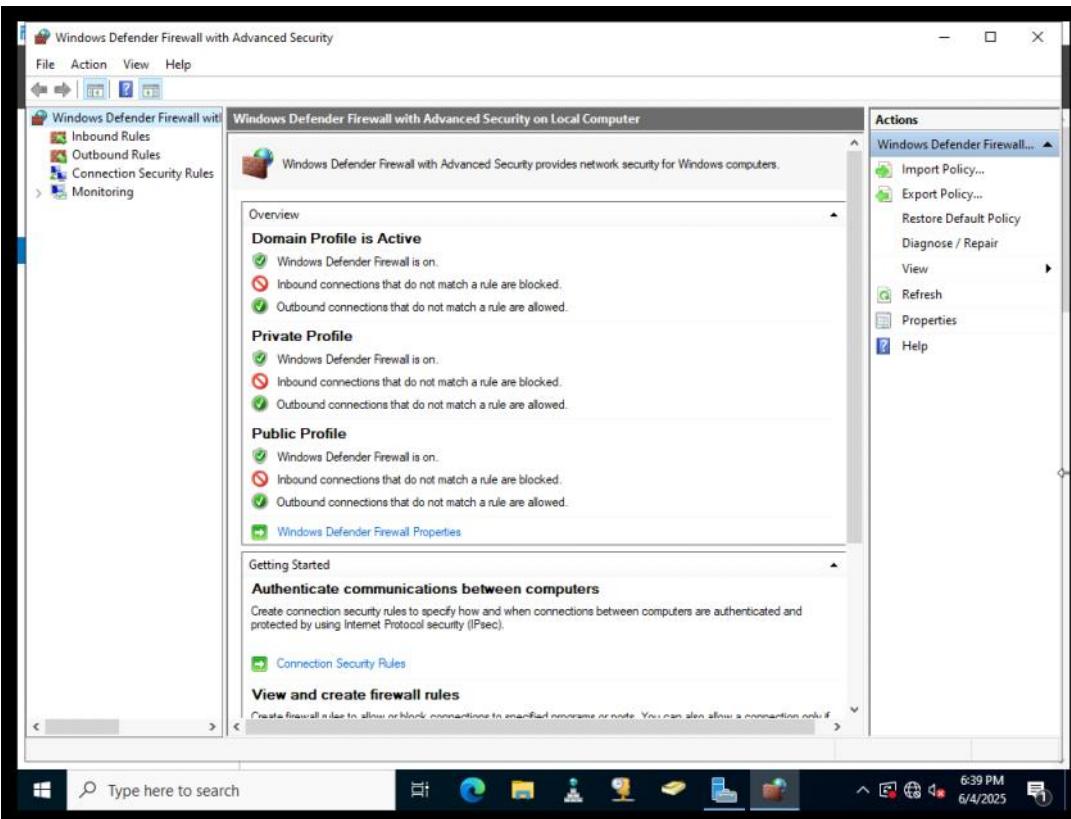
C:\Windows\System32>
```

We can see that pinging 192.168.0.1 doesn't work but pinging DC01 works. This can be due to default firewall settings in the server.

We can fix this by allowing ICMP Ping

We can do this by going into Windows Defender Firewall with Advanced Security





Noticed that File and Printer Sharing (Echo Request - ICMPv4-In) is enabled so, we now look at Core Networking Diagnostic - ICMP Echo Request (ICMPv4-In). We can see it is Not enabled, lets try enabling.

Windows Defender Firewall with Advanced Security

**Inbound Rules**

Name	Group	Profile	Enabled	Action
DHCP Server v4 (UDP-In)	DHCP Server	All	Yes	Allow N
DHCP Server v4 (UDP-In)	DHCP Server	All	Yes	Allow N
DHCP Server v6 (UDP-In)	DHCP Server	All	Yes	Allow N
DHCP Server v6 (UDP-In)	DHCP Server	All	Yes	Allow N
DHCP Server - Remote Service Mana...	DHCP Server Management	All	Yes	Allow N
DHCP Server (RPC-In)	DHCP Server Management	All	Yes	Allow N
DHCP Server (RPCSS-In)	DHCP Server Management	All	Yes	Allow N
DHCP Server (SMB-In)	DHCP Server Management	All	Yes	Allow N
DHCP Server Failover (TCP-In)	DHCP Server Management	All	Yes	Allow N
DIAL protocol server (HTTP-In)	DIAL protocol server	Private	Yes	Allow N
DIAL protocol server (HTTP-In)	DIAL protocol server	Domain	Yes	Allow N
Distributed Transaction Coordinator (...)	Distributed Transaction Coo...	All	No	Allow N
Distributed Transaction Coordinator (...)	Distributed Transaction Coo...	All	No	Allow N
Distributed Transaction Coordinator (...)	Distributed Transaction Coo...	All	No	Allow N
DNS (TCP, Incoming)	DNS Service	All	Yes	Allow N
DNS (UDP, Incoming)	DNS Service	All	Yes	Allow N
RPC (TCP, Incoming)	DNS Service	All	Yes	Allow N
RPC Endpoint Mapper (TCP, Incoming)	DNS Service	All	Yes	Allow N
File and Printer Sharing (Echo Requests...)	File and Printer Sharing	All	Yes	Allow N
File and Printer Sharing (Echo Requests...)	File and Printer Sharing	All	Yes	Allow N
File and Printer Sharing (LLMNR-UDP...)	File and Printer Sharing	All	Yes	Allow N
File and Printer Sharing (NB-Datagra...	File and Printer Sharing	All	Yes	Allow N
File and Printer Sharing (NB-Name-In)	File and Printer Sharing	All	Yes	Allow N
File and Printer Sharing (NB-Session-In)	File and Printer Sharing	All	Yes	Allow N
File and Printer Sharing (SMB-In)	File and Printer Sharing	All	Yes	Allow N
File and Printer Sharing (Spooler Servi...	File and Printer Sharing	All	Yes	Allow N
File and Printer Sharing (Spooler Servi...	File and Printer Sharing	All	Yes	Allow N
File and Printer Sharing (SMB-QUIC-In)	File and Printer Sharing over...	All	No	Allow N
File and Printer Sharing over SMRDire...	File and Printer Sharing over...	All	No	Allow N

**Actions**

- New Rule...
- Filter by Profile
- Filter by State
- Filter by Group
- View
- Refresh
- Export List...
- Help
- Enable Rule
- Cut
- Copy
- Delete
- Properties
- Help

Core Networking Diagnos...

Windows Defender Firewall with Advanced Security

**Inbound Rules**

Name	Group	Profile	Enabled	Action
Core Networking - Multicast Listener ...	Core Networking	All	Yes	Allow N
Core Networking - Multicast Listener ...	Core Networking	All	Yes	Allow N
Core Networking - Multicast Listener ...	Core Networking	All	Yes	Allow N
Core Networking - Neighbor Discov...	Core Networking	All	Yes	Allow N
Core Networking - Neighbor Discov...	Core Networking	All	Yes	Allow N
Core Networking - Packet Too Big (IC...	Core Networking	All	Yes	Allow N
Core Networking - Parameter Proble...	Core Networking	All	Yes	Allow N
Core Networking - Router Advertise...	Core Networking	All	Yes	Allow N
Core Networking - Router Solicitatio...	Core Networking	All	Yes	Allow N
Core Networking - Teredo (UDP-In)	Core Networking	All	Yes	Allow N
Core Networking - Time Exceeded (I...	Core Networking	All	Yes	Allow N
Core Networking Diagnostics - ICMP ...	Core Networking Diagnostics	Private...	Yes	Allow N
Core Networking Diagnostics - ICMP ...	Core Networking Diagnostics	Domain	No	Allow N
Core Networking Diagnostics - ICMP ...	Core Networking Diagnostics	Private...	No	Allow N
Core Networking Diagnostics - ICMP ...	Core Networking Diagnostics	Domain	No	Allow N
Delivery Optimization (TCP-In)	Delivery Optimization	All	Yes	Allow N
Delivery Optimization (UDP-In)	Delivery Optimization	All	Yes	Allow N
Desktop App Web Viewer	Desktop App Web Viewer	All	Yes	Allow N
DFS Management (DCOM-In)	DFS Management	All	Yes	Allow N
DFS Management (SMB-In)	DFS Management	All	Yes	Allow N
DFS Management (TCP-In)	DFS Management	All	Yes	Allow N
DFS Management (WMI-In)	DFS Management	All	Yes	Allow N
DFS Replication (RPC-EPMAP)	DFS Replication	All	Yes	Allow N
DFS Replication (RPC-In)	DFS Replication	All	Yes	Allow N
DHCP Server v4 (UDP-In)	DHCP Server	All	Yes	Allow N
DHCP Server v4 (UDP-In)	DHCP Server	All	Yes	Allow N
DHCP Server v6 (UDP-In)	DHCP Server	All	Yes	Allow N
DHCP Server v6 (UDP-In)	DHCP Server	All	Yes	Allow N
DHCP Server - Remote Service Mana...	DHCP Server Management	All	Yes	AllRw N

**Actions**

- New Rule...
- Filter by Profile
- Filter by State
- Filter by Group
- View
- Refresh
- Export List...
- Help
- Disable Rule
- Cut
- Copy
- Delete
- Properties
- Help

Core Networking Diagnos...

```
C:\Windows\System32>ipconfig /release
Windows IP Configuration

Ethernet adapter Ethernet0:

Connection-specific DNS Suffix . :
IPv6 Address . . . . . : 2607:fea8:4a65:4200::bafe
IPv6 Address . . . . . : 2607:fea8:4a65:4200:9ddc:ab6f:1802:958d
Temporary IPv6 Address . . . . . : 2607:fea8:4a65:4200:6821:52c2:70dc:1367
Link-local IPv6 Address . . . . . : fe80::ae08:d199:39a1:c24a%13
Default Gateway . . . . . : fe80::ae4c:a5ff:fe4b:2a37%13

C:\Windows\System32>ipconfig /renew
Windows IP Configuration

Ethernet adapter Ethernet0:

Connection-specific DNS Suffix . : int.itray.com
IPv6 Address . . . . . : 2607:fea8:4a65:4200::bafe
IPv6 Address . . . . . : 2607:fea8:4a65:4200:9ddc:ab6f:1802:958d
Temporary IPv6 Address . . . . . : 2607:fea8:4a65:4200:6821:52c2:70dc:1367
Link-local IPv6 Address . . . . . : fe80::ae08:d199:39a1:c24a%13
IPv4 Address . . . . . : 192.168.0.50
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : fe80::ae4c:a5ff:fe4b:2a37%13
192.168.0.254

C:\Windows\System32>
```

