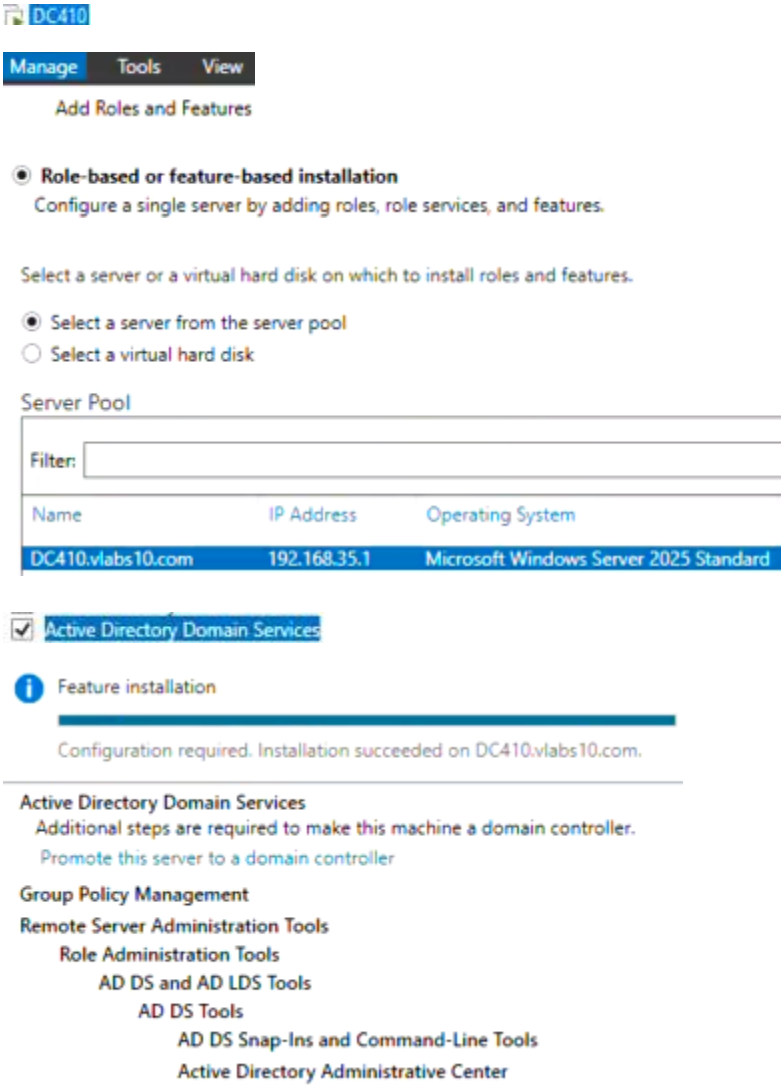
Jacob Chedore

Lab Assignment (Part 1) – Managing AD Domains, Forests, and Trusts

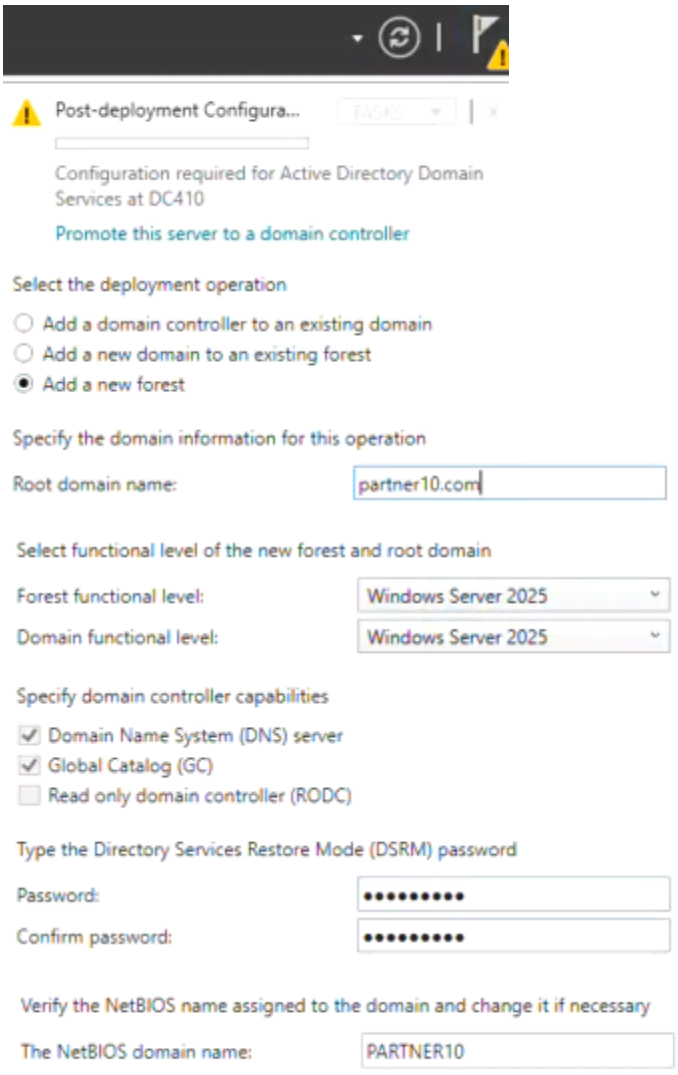
Task 1: Promote DC4XX as a New Domain Controller in a New Forest

1. Promote DC4XX as a new DC in a New Forest named partnerXX.com using GUI

- Install AD DS role on DC4XX.



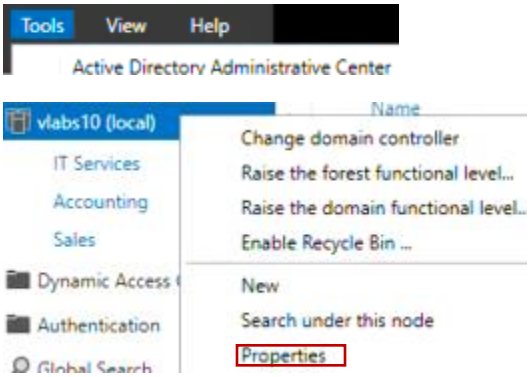
- Create a new forest partnerXX.com.



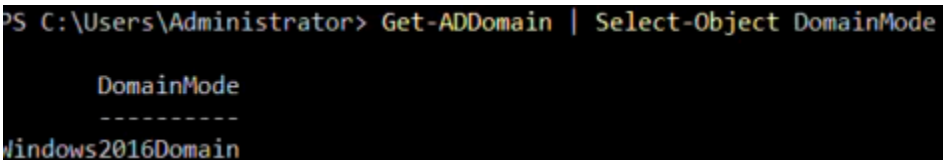
Task 2: Verify Domain and Forest Functional Levels

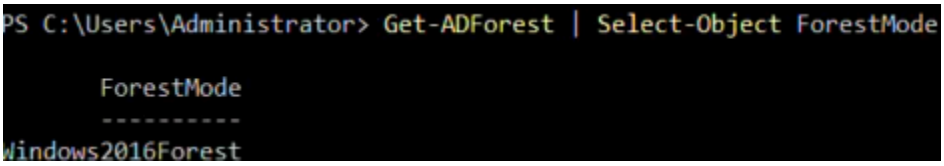
1. Check the Domain and Forest Functional Levels on vlabsXX.com

- Using Active Directory Administrative Center



- Using PowerShell

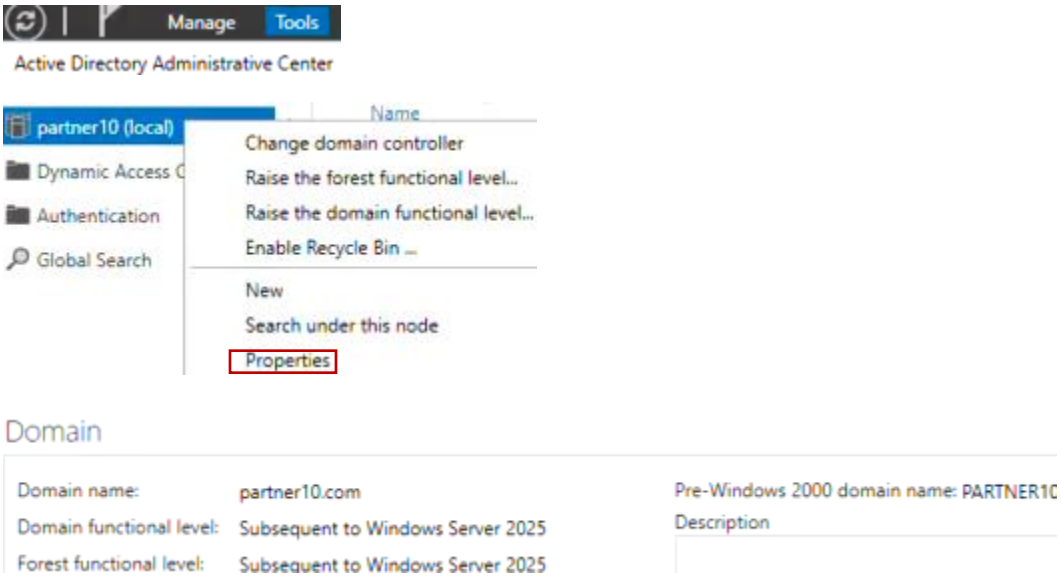




Task 2: Verify Domain and Forest Functional Levels

2. Check the Domain and Forest Functional Levels on partnerXX.com

- Using Active Directory Administrative Center



- Using PowerShell

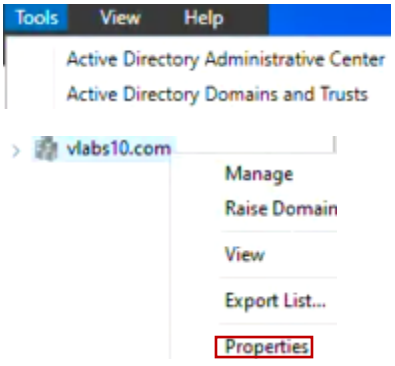
```
PS C:\Users\Administrator.SRV110> Get-ADDomain | Select-Object DomainMode

       DomainMode
       ----------
Windows2025Domain
```

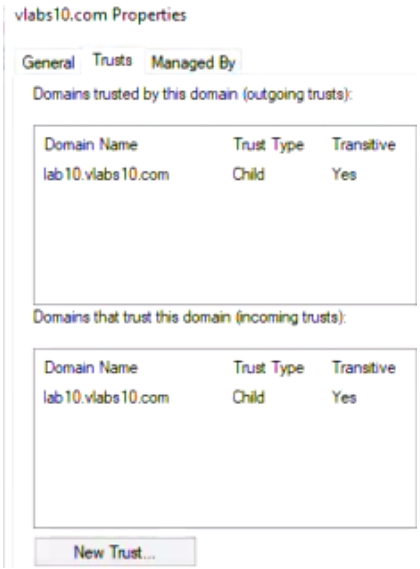
```
PS C:\Users\Administrator.SRV110> Get-ADForest | Select-Object ForestMode

       ForestMode
       ----------
Windows2025Forest
```

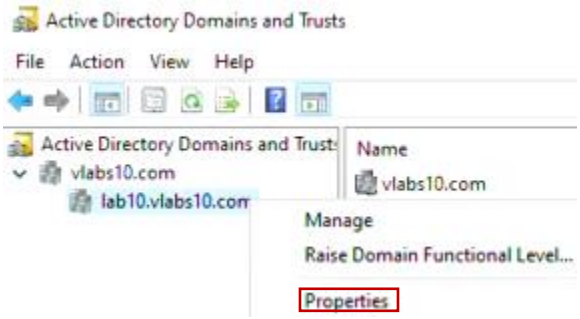
Task 3: Listing Trusts

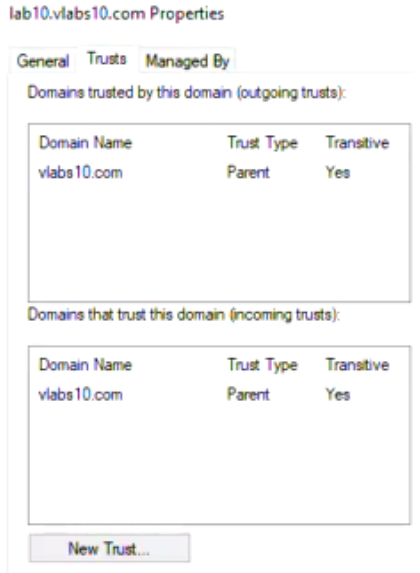
1. List all Trusts on vlabsXX.com and labsXX.vlabsXX.com

- Using Active Directory Domains and Trusts.







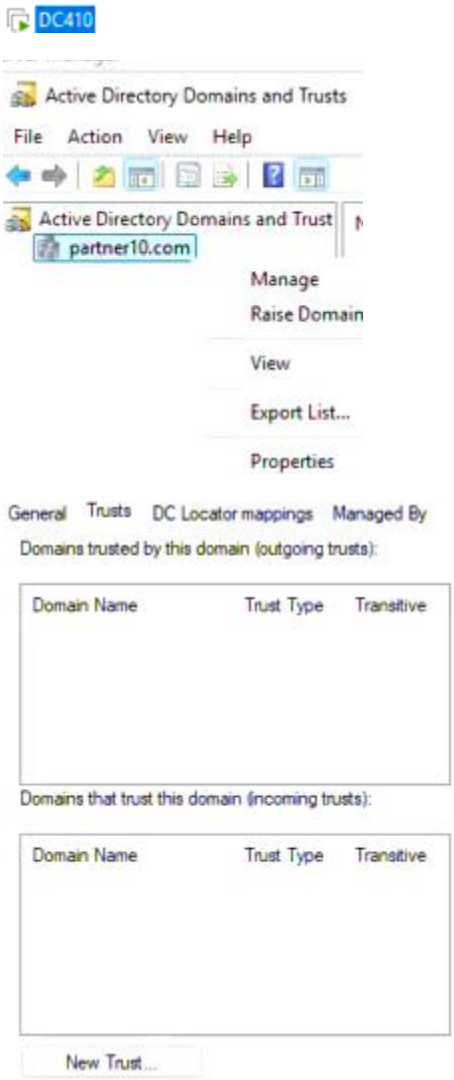


- Using PowerShell.

```
PS C:\Users\Administrator> Get-ADTrust -Filter * | Select-Object Name, Target, TrustType, Direction

Name              Target            TrustType     Direction
----              ------            ---------     ---------
lab10.vlabs10.com lab10.vlabs10.com   Uplevel BiDirectional
```

2. List all Trusts on partnerXX.com

- Using Active Directory Domains and Trusts.



- Using PowerShell.

```
PS C:\Users\Administrator.SRV110> Get-ADTrust -Filter * | Select-Object Name, Target, TrustType, Direction
```

Task 4: Creating Trusts

1. Create DNS Conditional Forwarders to ensure both forests can resolve each other's domains.

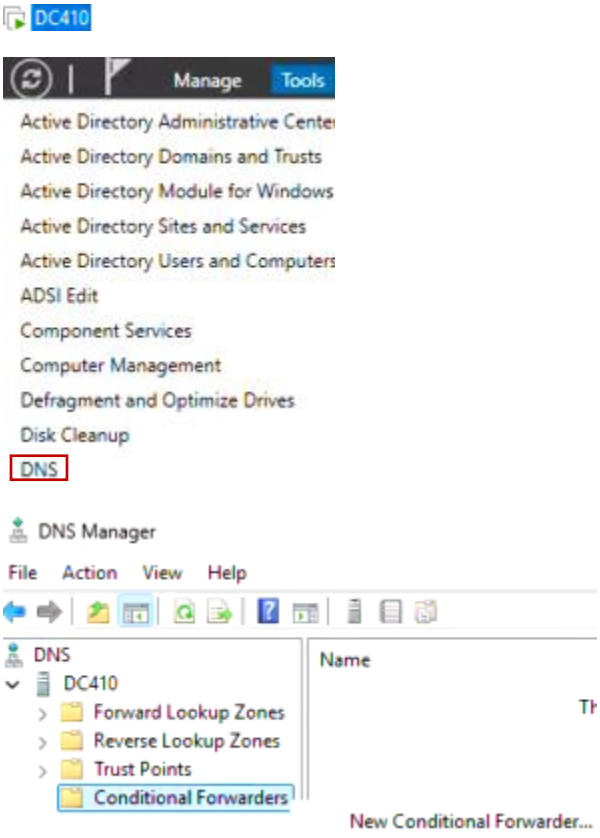
- On the DNS server of DC1XX create a Conditional Forwarder for partnerXX.com using PowerShell

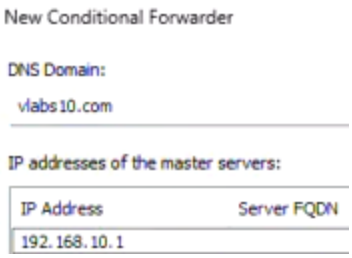
```
PS C:\Users\Administrator> Add-DnsServerConditionalForwarderZone -Name "partner10.com" -MasterServers 192.168.35.1 -Replication
Scope Forest
```

- Verify using nslookup.

```
PS C:\Users\Administrator> nslookup partner10.com
DNS request timed out.
    timeout was 2 seconds.
Server:  UnKnown
Address:  ::1

Non-authoritative answer:
Name:    partner10.com
Address:  192.168.35.1
```

- On the DNS server of DC4XX create a Conditional Forwarder for vlabsXX.com using GUI



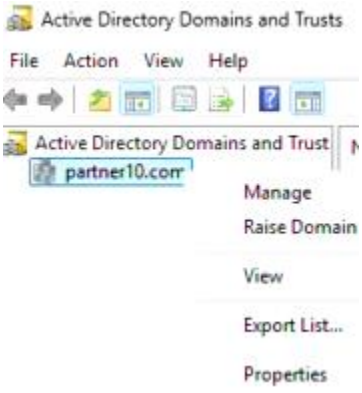


- Verify using nslookup.

```
PS C:\Users\Administrator.SRV110> nslookup vlabs10.com
DNS request timed out.
    timeout was 2 seconds.
Server:  UnKnown
Address:  ::1

Name:    vlabs10.com
Address:  192.168.10.1
```

2. Using GUI:

- Create a Two-Way Transitive Forest Trust between vlabsXX.com and partnerX.com



partner10.com Properties

General Trusts DC Locator mappings Managed By

Domains trusted by this domain (outgoing trusts):

Domain Name	Trust Type	Transitive

Domains that trust this domain (incoming trusts):

Domain Name	Trust Type	Transitive

New Trust...

New Trust Wizard

Trust Name

You can create a trust by using a NetBIOS or DNS name.

Type the name of the domain, forest, or realm for this trust. If you type the name of a forest, you must type a DNS name.

Example NetBIOS name: supplier01-int
Example DNS name: supplier01-internal.microsoft.com

Name:

vlabs10.com

New Trust Wizard

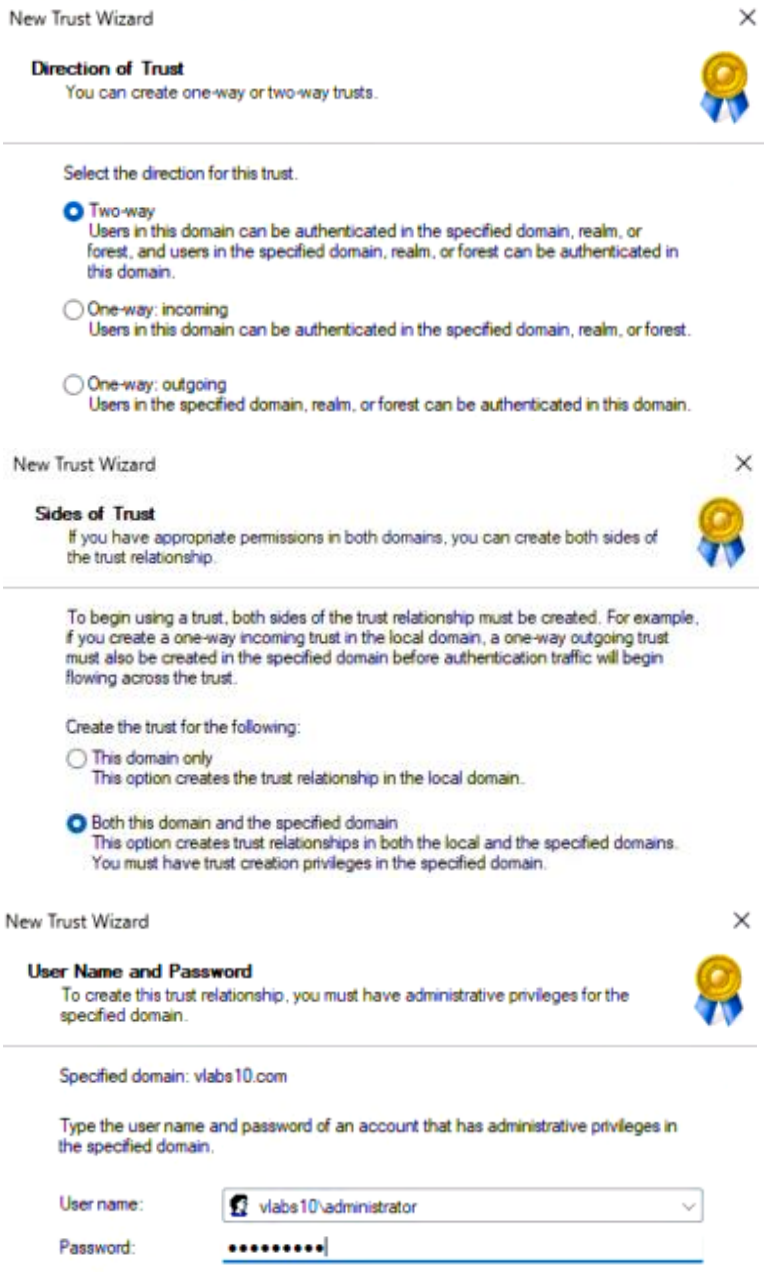
Trust Type

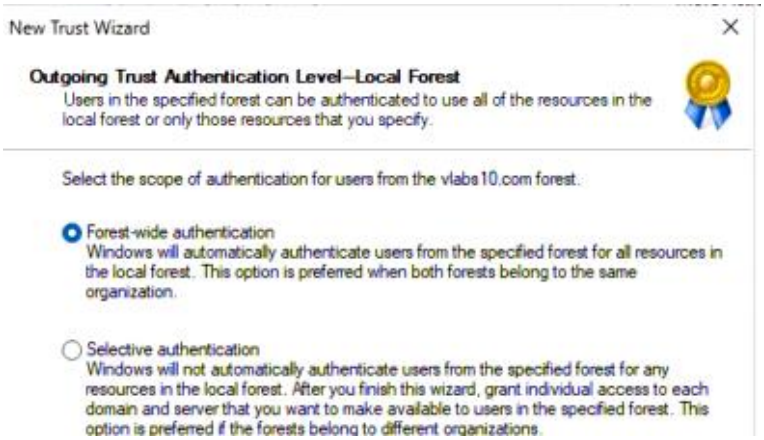
This domain is a forest root domain. If the specified domain qualifies, you can create a forest trust.

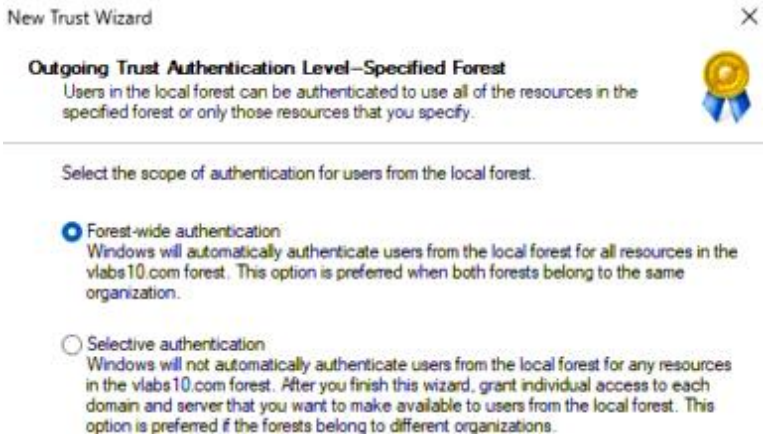
Select the type of trust you want to create.

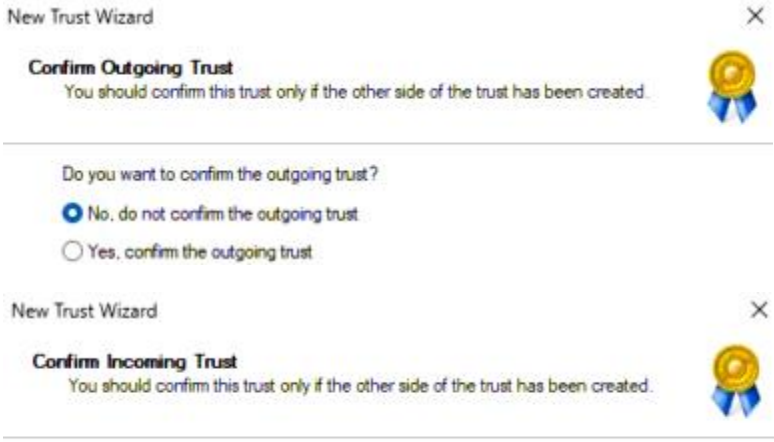
- ○ External trust
  An external trust is a nontransitive trust between a domain and another domain outside the forest. A nontransitive trust is bounded by the domains in the relationship.

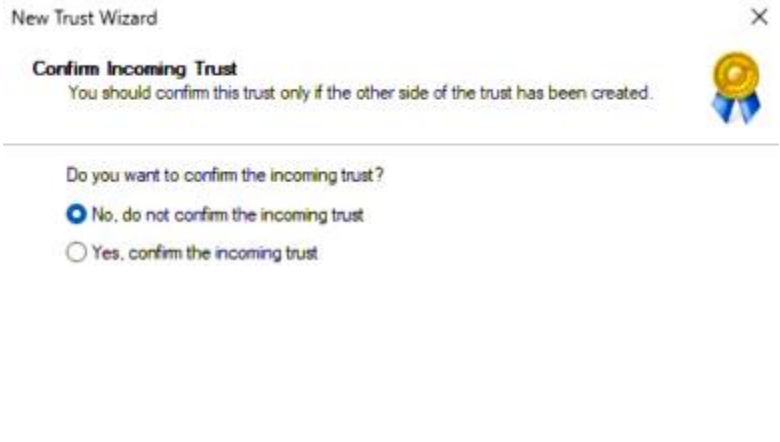
- ◉ Forest trust
  A forest trust is a transitive trust between two forests that allows users in any of the domains in one forest to be authenticated in any of the domains in the other forest.


New Trust Wizard
Direction of Trust
You can create one-way or two-way trusts.
Select the direction for this trust.
Two-way
Users in this domain can be authenticated in the specified domain, realm, or forest, and users in the specified domain, realm, or forest can be authenticated in this domain.
One-way: incoming
Users in this domain can be authenticated in the specified domain, realm, or forest.
One-way: outgoing
Users in the specified domain, realm, or forest can be authenticated in this domain.
New Trust Wizard
Sides of Trust
If you have appropriate permissions in both domains, you can create both sides of the trust relationship.
To begin using a trust, both sides of the trust relationship must be created. For example, if you create a one-way incoming trust in the local domain, a one-way outgoing trust must also be created in the specified domain before authentication traffic will begin flowing across the trust.
Create the trust for the following:
This domain only
This option creates the trust relationship in the local domain.
Both this domain and the specified domain
This option creates trust relationships in both the local and the specified domains. You must have trust creation privileges in the specified domain.
New Trust Wizard
User Name and Password
To create this trust relationship, you must have administrative privileges for the specified domain.
Specified domain: vlabs10.com
Type the user name and password of an account that has administrative privileges in the specified domain.
User name:
vlabs10\administrator
Password:
••••••••••


New Trust Wizard
Outgoing Trust Authentication Level–Local Forest
Users in the specified forest can be authenticated to use all of the resources in the local forest or only those resources that you specify.
Select the scope of authentication for users from the vlabs10.com forest.
Forest-wide authentication
Windows will automatically authenticate users from the specified forest for all resources in the local forest. This option is preferred when both forests belong to the same organization.
Selective authentication
Windows will not automatically authenticate users from the specified forest for any resources in the local forest. After you finish this wizard, grant individual access to each domain and server that you want to make available to users in the specified forest. This option is preferred if the forests belong to different organizations.


New Trust Wizard
Outgoing Trust Authentication Level–Specified Forest
Users in the local forest can be authenticated to use all of the resources in the specified forest or only those resources that you specify.
Select the scope of authentication for users from the local forest.
Forest-wide authentication
Windows will automatically authenticate users from the local forest for all resources in the vlabs10.com forest. This option is preferred when both forests belong to the same organization.
Selective authentication
Windows will not automatically authenticate users from the local forest for any resources in the vlabs10.com forest. After you finish this wizard, grant individual access to each domain and server that you want to make available to users from the local forest. This option is preferred if the forests belong to different organizations.


New Trust Wizard
Confirm Outgoing Trust
You should confirm this trust only if the other side of the trust has been created.
Do you want to confirm the outgoing trust?
No, do not confirm the outgoing trust
Yes, confirm the outgoing trust


New Trust Wizard
Confirm Incoming Trust
You should confirm this trust only if the other side of the trust has been created.
Do you want to confirm the incoming trust?
No, do not confirm the incoming trust
Yes, confirm the incoming trust

3. Using PowerShell:

- Verify the Trust Status on both Servers.

DC110

```
PS C:\Users\Administrator> Get-ADTrust -Filter * | Select-Object Name, Target, TrustType, Direction

Name              Target            TrustType     Direction
----              ------            ---------     ---------
lab10.vlabs10.com lab10.vlabs10.com   Uplevel BiDirectional
partner10.com     partner10.com       Uplevel BiDirectional
```

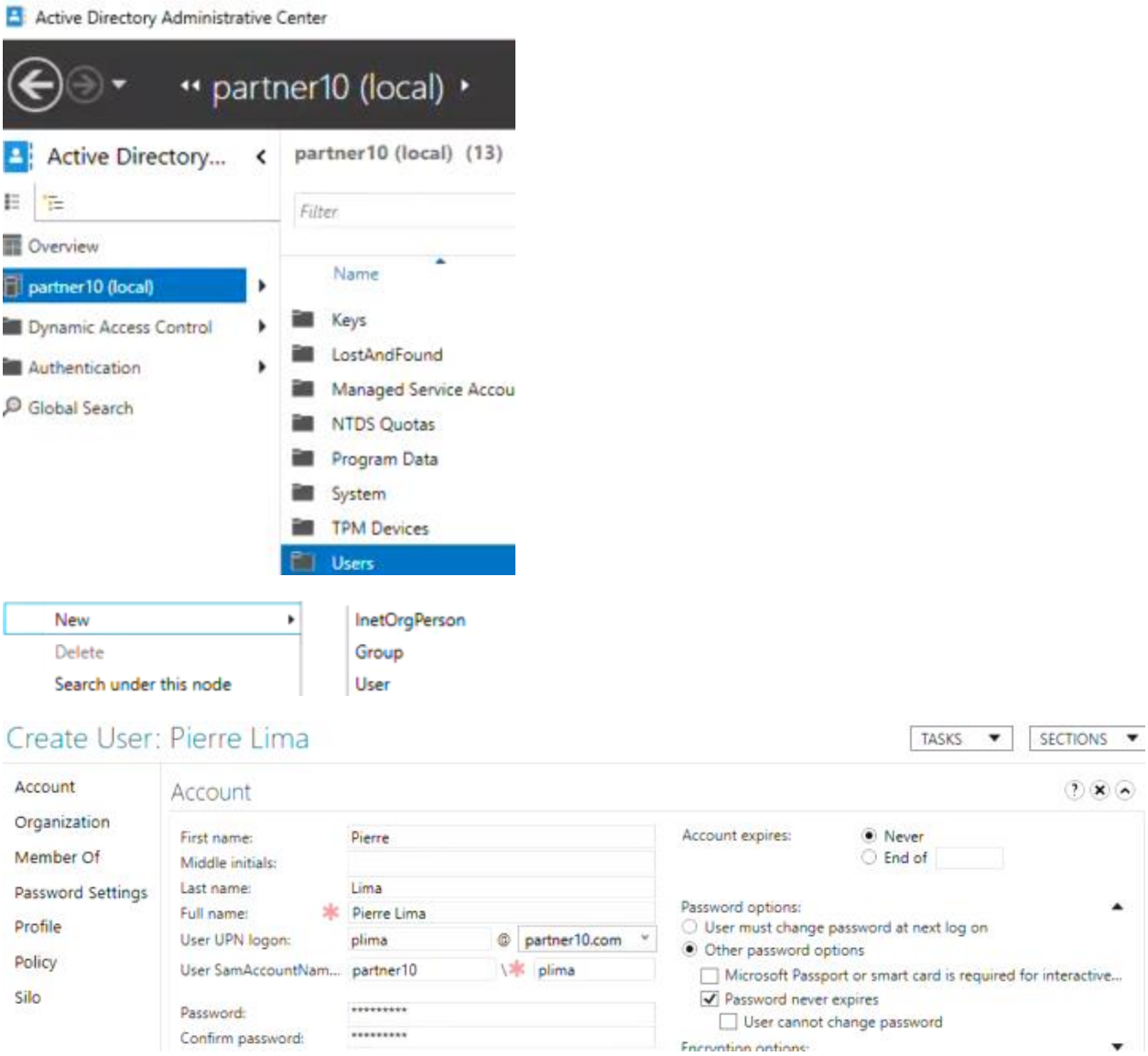
DC410

```
PS C:\Users\Administrator.SRV110> Get-ADTrust -Filter * | Select-Object Name, Target, TrustType, Direction

Name        Target      TrustType     Direction
----        ------      ---------     ---------
vlabs10.com vlabs10.com   Uplevel BiDirectional
```

Task 5: Testing Trust Between Two Forests

1. On DC4XX.partnerXX.com:

- Create a new user in partnerXX.com → Pierre Lima / Passw0rd$



2. On DC2XX.vlabsXX.com (Windows Server Core, RODC):

- Verify the trust relationship with partnerXX.com using PowerShell.

DC210

```
PS C:\Users\Administrator.VLABS10> Get-ADTrust -Filter {Name -eq "partner10.com"}


Direction               : BiDirectional
DisallowTransivity      : False
DistinguishedName       : CN=partner10.com,CN=System,DC=vlabs10,DC=com
ForestTransitive        : True
IntraForest             : False
IsTreeParent            : False
IsTreeRoot              : False
Name                    : partner10.com
ObjectClass             : trustedDomain
ObjectGUID              : 83bb2a3f-81c6-4a51-b38d-16d391fb2d99
SelectiveAuthentication : False
SIDFilteringForestAware : False
SIDFilteringQuarantined : False
Source                  : DC=vlabs10,DC=com
Target                  : partner10.com
TGTDelegation           : False
TrustAttributes         : 8
TrustedPolicy           :
TrustingPolicy          :
TrustType               : Uplevel
UplevelOnly             : False
UsesAESKeys             : False
UsesRC4Encryption       : False
```

```
PS C:\Users\Administrator.VLABS10> Get-ADTrust -Identity "partner10.com" | Format-List *


Direction               : BiDirectional
DisallowTransivity      : False
DistinguishedName       : CN=partner10.com,CN=System,DC=vlabs10,DC=com
ForestTransitive        : True
IntraForest             : False
IsTreeParent            : False
IsTreeRoot              : False
Name                    : partner10.com
ObjectClass             : trustedDomain
ObjectGUID              : 83bb2a3f-81c6-4a51-b38d-16d391fb2d99
SelectiveAuthentication : False
SIDFilteringForestAware : False
SIDFilteringQuarantined : False
Source                  : DC=vlabs10,DC=com
Target                  : partner10.com
TGTDelegation           : False
TrustAttributes         : 8
TrustedPolicy           :
TrustingPolicy          :
TrustType               : Uplevel
UplevelOnly             : False
UsesAESKeys             : False
UsesRC4Encryption       : False
PropertyNames           : {Direction, DisallowTransivity, DistinguishedName, ForestTransitive...}
AddedProperties         : {}
RemovedProperties       : {}
ModifiedProperties      : {}
PropertyCount           : 23
```

- Create a folder C:\Secret

```
PS C:\Users\Administrator.VLABS10> New-Item -Path "C:\Secret" -ItemType Directory -Force


    Directory: C:\


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d-----         5/14/2025   8:29 PM                Secret
```

- Share C:\Secret and assign permissions Read/Write to plima@partnerX.com.

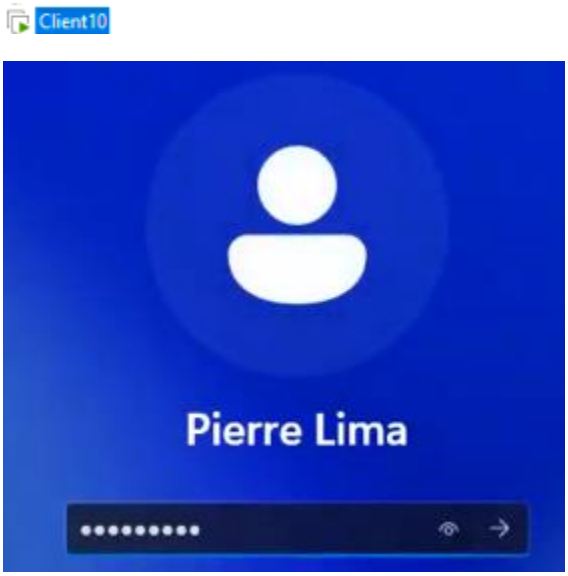
```
PS C:\Users\Administrator.VLABS10> New-SmbShare -Name "Secret" -Path "C:\Secret" -FullAccess "plima@partner10.com"

Name   ScopeName Path      Description
----   --------- ----      -----------
Secret *         C:\Secret
```

- Verify the shared folder and NTFS permissions.

```
PS C:\Users\Administrator.VLABS10> Get-SmbShareAccess -Name "Secret"

Name   ScopeName AccountName     AccessControlType AccessRight
----   --------- -----------     ----------------- -----------
Secret *         PARTNER10\plima Allow             Full
```

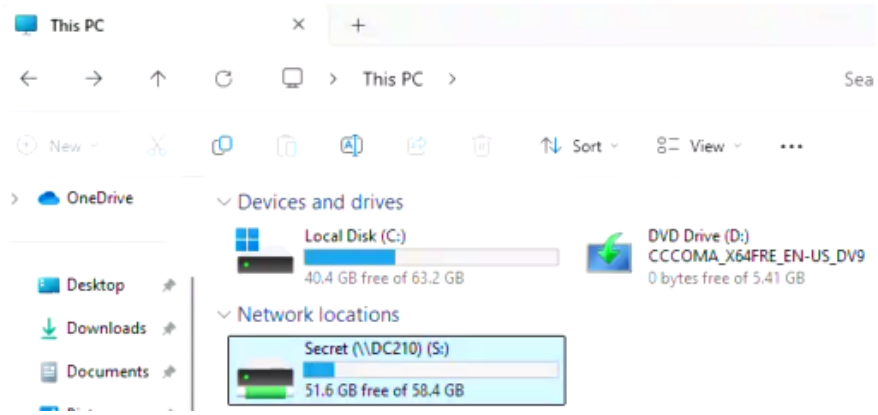
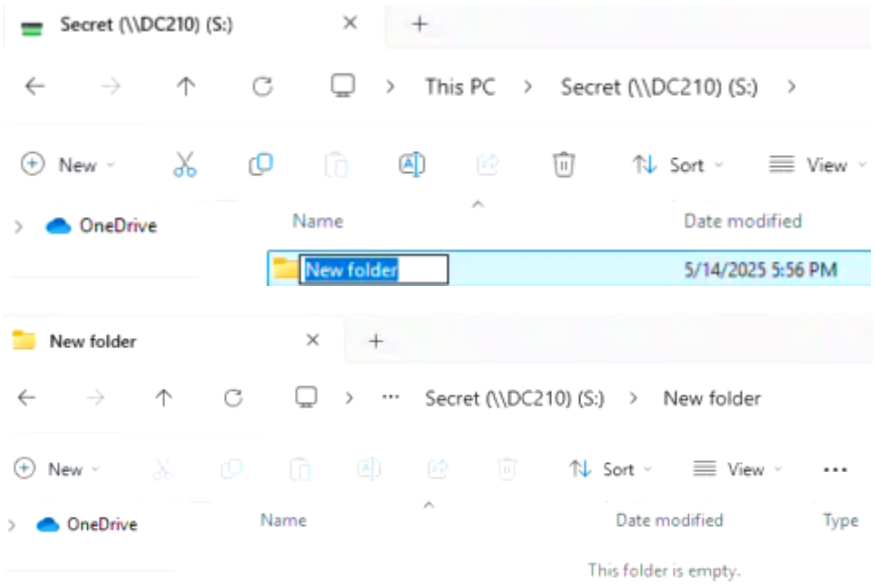
3. From ClientXX:

- Log in with Pierre Lima from partnerXX.com



- Map the shared folder \\DC2XX\Secret as drive S:

```
PS C:\Users\plima> New-PSDrive -Name S -PSProvider FileSystem -Root "\\DC210\Secret" -Persist

Name           Used (GB)     Free (GB) Provider      Root
----           ---------     --------- --------      ----
S                   6.81         51.64 FileSystem    \\DC210\Secret
```



- Test file creation and access.