

# Lab Assignment 2 (Part 2) – GPO

## Task 1: Creating a Central Store for Administrative Templates

- Create a central store for Administrative Templates on DC1XX.

This PC > Local Disk (C:) > Windows > SYSVOL > sysvol > vlabs10.com > Policies

Local Disk (C:) > Windows > SYSVOL > sysvol > vlabs10.com > Policies >

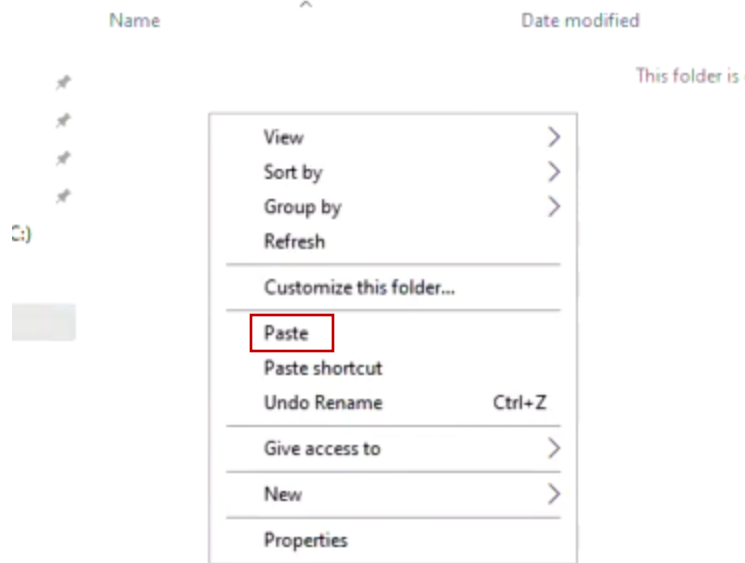
Name	Date modified	Type
{6AC1786C-016F-11D2-945F-00C04FB984...}	5/2/2025 6:11 PM	File folder
{31B2F340-016D-11D2-945F-00C04FB984...}	5/2/2025 6:11 PM	File folder
{A3A3129E-15F7-4882-A282-BA9E077839...}	5/21/2025 8:17 PM	File folder
{BDBAFB7E-F7B1-4429-A663-D73DC456C...}	5/21/2025 5:42 PM	File folder
{D51ED069-E62E-4FD0-9905-1317DFB8BF...}	5/21/2025 9:31 PM	File folder
{FD6221F1-3A23-4A97-9999-2E94944F235...}	5/21/2025 9:07 PM	File folder
PolicyDefinitions	5/24/2025 4:42 PM	File folder

- Copy all ADMX and ADML files to this Central store.

This PC > Local Disk (C:) > Windows > PolicyDefinitions >

Name	Date modified	Type
en-US		Folder
ActiveXInstallService.admx		File
AddRemovePrograms.admx		File
AllowBuildPreview.admx		File
AppCompat.admx		File
AppPrivacy.admx		File
appv.admx		File
AppxPackageManager.admx		File
AppXRuntime.admx		File
AttachmentManager.admx		File
AuditSettings.admx	5/8/2021 4:15 AM	ADMX File
AutoPlay.admx	5/8/2021 4:15 AM	ADMX File
AVSValidationGP.admx	5/8/2021 4:14 AM	ADMX File
Biometrics.admx	5/8/2021 4:15 AM	ADMX File
Bits.admx	5/8/2021 4:15 AM	ADMX File
Camera.admx	5/8/2021 4:15 AM	ADMX File
CEIPEnable.admx	5/8/2021 4:15 AM	ADMX File
CipherSuiteOrder.admx	5/8/2021 4:15 AM	ADMX File
CloudContent.admx	5/8/2021 4:15 AM	ADMX File
COM.admx	5/8/2021 4:15 AM	ADMX File

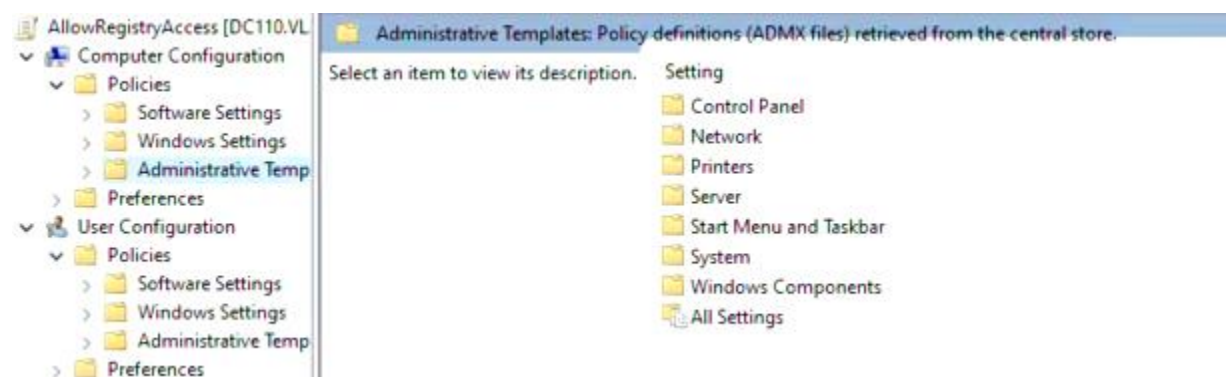
« Windows > SYSVOL > sysvol > vlabs10.com > Policies > PolicyDefinitions



« Windows > SYSVOL > sysvol > vlabs10.com > Policies > PolicyDefinitions >

Name	Date modified	Type
en-US	5/24/2025 4:45 PM	File folder
ActiveXInstallService.admx	5/8/2021 4:15 AM	ADMX File
AddRemovePrograms.admx	5/8/2021 4:15 AM	ADMX File

- Verify that Group Policy Management Console (GPMC) loads templates from the central store.



## Task 2: Managing and Configuring Administrative Templates

- Download and install Microsoft Office Administrative Templates (You will need to add the NAT NIC to download this package. Remove it after completing the download).

# Administrative Template files (ADMX/ADML) for Microsoft Office

This download includes the Group Policy Administrative Template files (ADMX/ADML) for Microsoft 365 Apps for enterprise, Office LTSC 2024, Office LTSC 2021, Office 2019, and Office 2016 and also includes the OPAX/OPAL files for the Office Customization Tool (OCT) for Office 2016.

Important! Selecting a language below will dynamically change the complete page content to that language.

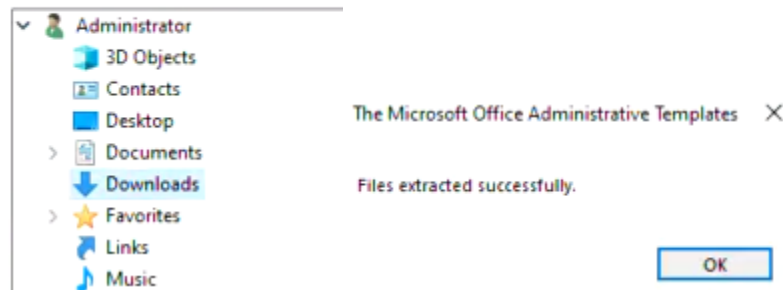
Select language

English ▼

Download

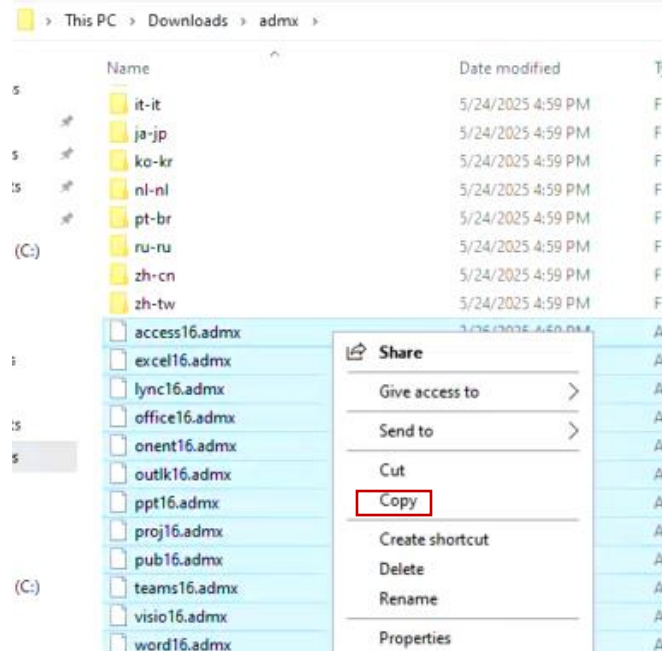
Browse For Folder

Select a folder to store the extracted files

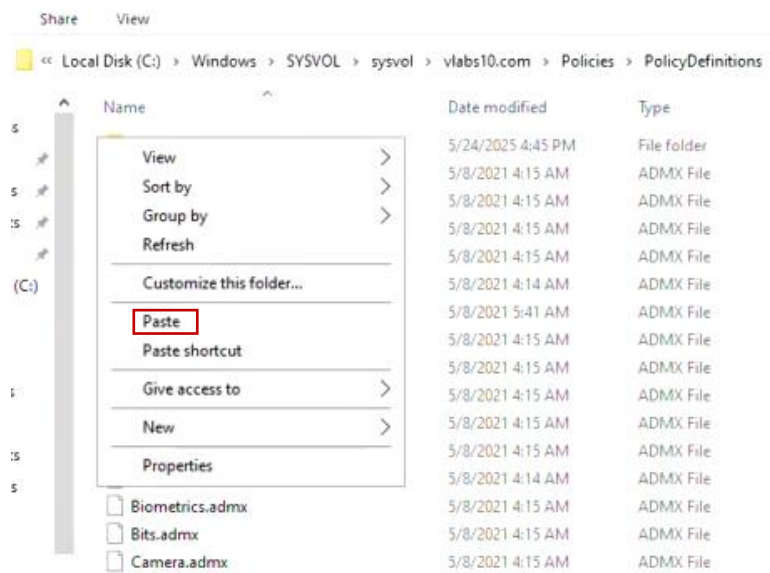


admx

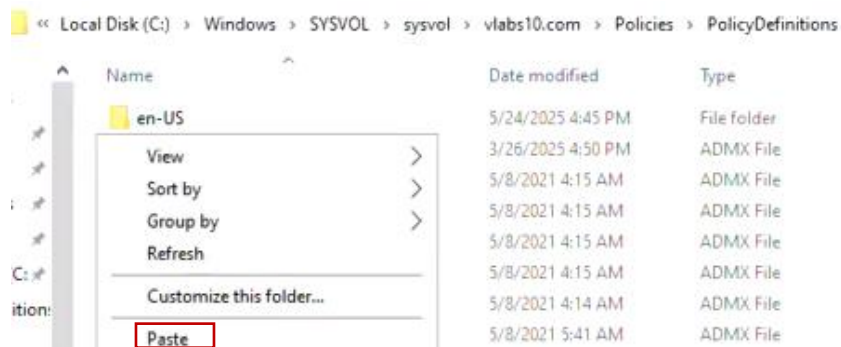
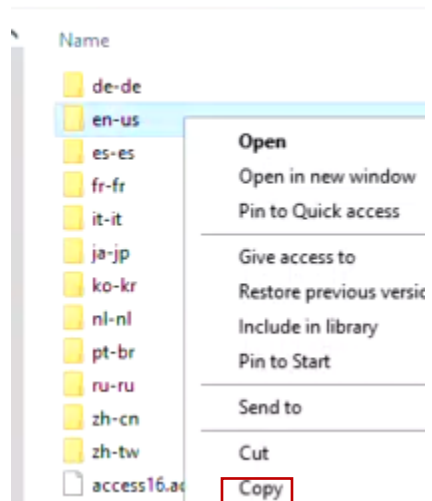
Share View



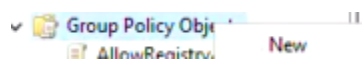
## PolicyDefinitions



## This PC » Downloads » admx



- Create a new GPO named RestrictTeamsStarting.



New GPO X

Name:

Source Starter GPO:

- Use Filter Options for User Configuration to locate Microsoft Teams settings.

☒ User Configuration
 

- ☒ Policies
  - > Software Settings
  - > Windows Settings
  - > Administrative Templates
  - > Preferences

☒ Enable Keyword Filters

Filter for word(s):

Within: ☒ Policy Setting Title ☒ Help Text ☒ Comment

**Administrative Templates: Policy definitions (ADMX files) retrieved from the central store.**

Select an item to view its description.

Setting

- ☒ Microsoft Teams
- ☐ All Settings

- Enable Prevent Microsoft Teams from starting automatically after installation.

Setting	State
Restrict sign in to Teams to accounts in specific tenants	Not configured
Prevent Microsoft Teams from starting automatically after in...	Not configured

Prevent Microsoft Teams from starting automatically after installation

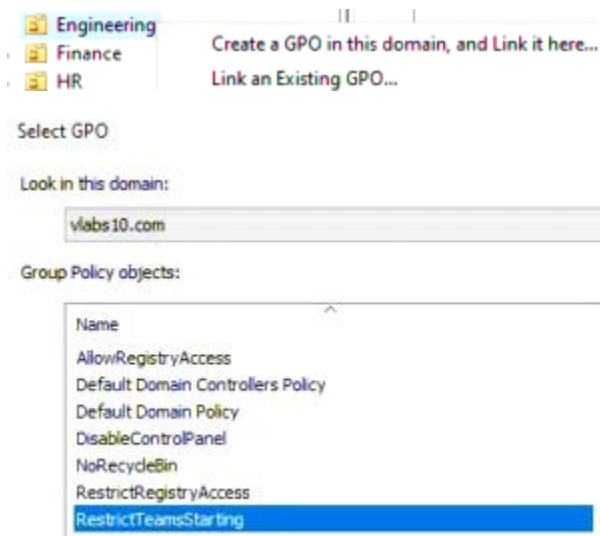
☐ Not Configured
 ☒ Enabled
 ☐ Disabled

Comment:

- Add a comment to document this setting.

Comment:

- Link to Engineering OU (to be tested in Task 8 Managing Software Installation task).



- Run `gpupdate /force` to apply changes.

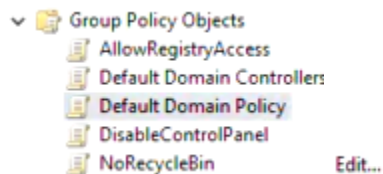
Agathe.Bonnet

```
PS C:\Users\Agathe.Bonnet> gpupdate /force
Updating policy...

Computer Policy update has completed successfully.
User Policy update has completed successfully.
```

### Task 3: Managing Account Policies

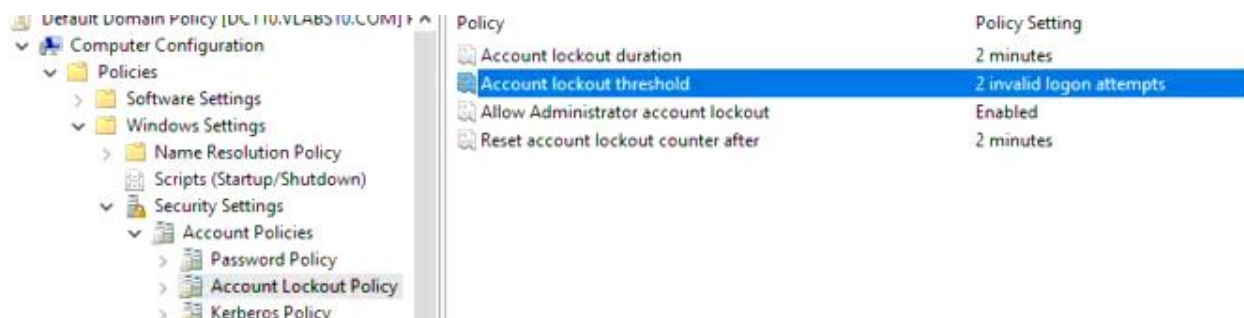
- Modify password policies in the Default Domain Policy GPO:
  - o Minimum password length: 12 characters.
  - o Password complexity: Enabled.
  - o Password expiration: 60 days.







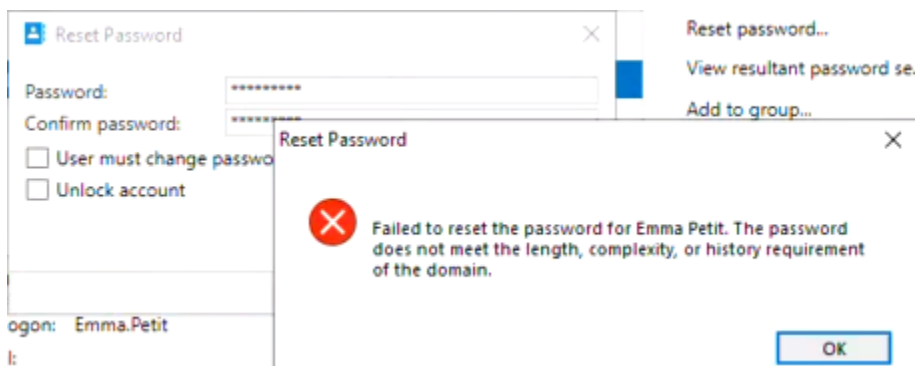
- Apply Account Lockout Policy:
  - o Lock account after 2 failed login attempts.
  - o Lockout duration: 2 minutes.

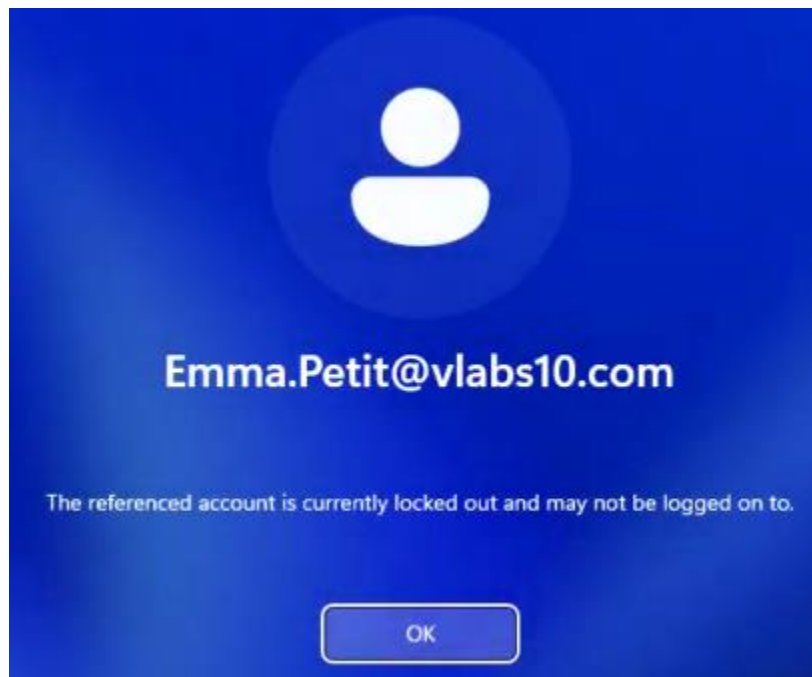


- Run gpupdate /force to apply changes.

```
PS C:\Users\Administrator> gpupdate /force
```

- Restart the ClientXX.
- From ClientXX, test with Emma Petit by attempting password modification and simulating an account lockout.





**Reset Password** [X]

Password:

Confirm password:

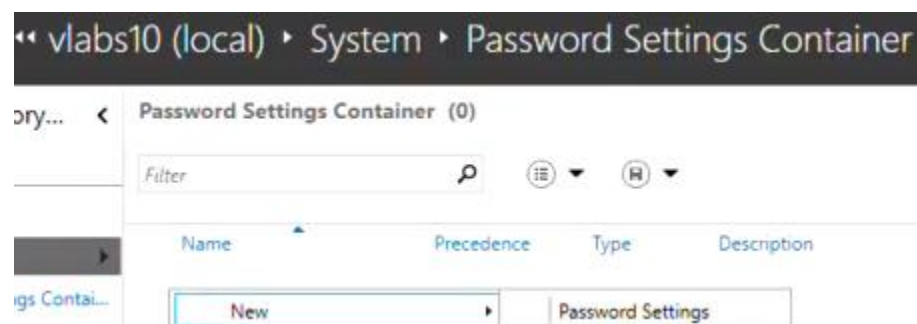
☒ User must change password at next log on

☒ Unlock account

[OK] [Cancel]

#### Task 4: Implementing Fine-Grained Password Policies

- Create a new Fine-Grained Password Policy named IT\_FGPPolicy.





## Create Password Settings: IT\_FGPPolicy

### Password Settings

#### Directly Applies To

### Password Settings

Name: \* IT\_FGPPolicy  
Precedence: \* 1

- Modify password settings:
  - o Minimum password length: 10 characters.
  - o Password complexity: Disabled.
  - o Password expiration: Never.

Name: *	IT_FGPPolicy
Precedence: *	1
<input checked="" type="checkbox"/> Enforce minimum password length	
Minimum password length (characters): *	10
<input checked="" type="checkbox"/> Enforce password history	
Number of passwords remembered: *	24
<input type="checkbox"/> Password must meet complexity requirements	
<input type="checkbox"/> Store password using reversible encryption	

Password age options:

<input checked="" type="checkbox"/> Enforce minimum password age	
User cannot change the password wit...	* 1
<input type="checkbox"/> Enforce maximum password age	
User must change the password after...	* 42
<input type="checkbox"/> Enforce account lockout policy:	
Number of failed logon attempts allowed: *	
Reset failed logon attempts count after (... *	30
Account will be locked out	

- Directly apply it to the IT Group.

### Directly Applies To

Name

Mail

Add...

Remove

### Select Users or Groups



Select this object type:

Users or Groups

Object Types...

From this location:

vlabs10.com

Locations...

Enter the object names to select (examples):

IT

Check Names

Advanced...

OK

Cancel

### Directly Applies To

Name

Mail

IT

Add...

Remove

#### Password Settings Container (1)

Filter <input type="text"/>			
Name	Precedence	Type	Description
IT_FGPPolicy	1	Password S...	

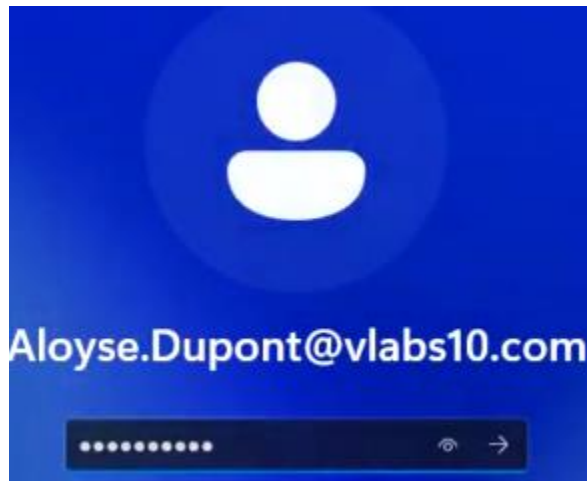
- Run gpupdate /force to apply changes.

```
PS C:\Users\Administrator> gpupdate /force
Updating policy...

Computer Policy update has completed successfully.
User Policy update has completed successfully.
```

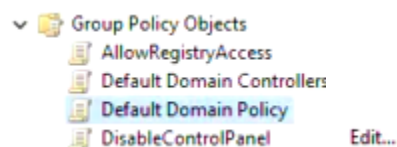
- From ClientXX, test with a user from the IT group by attempting password modification.

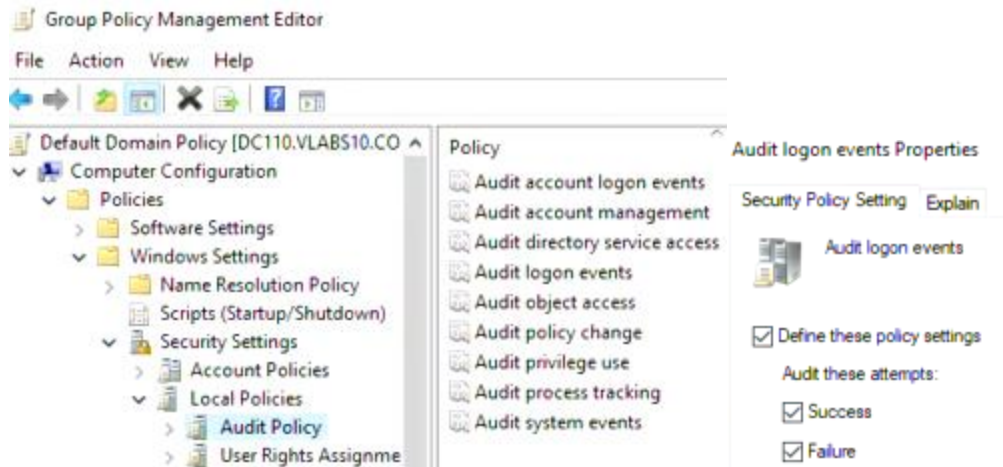
Client10



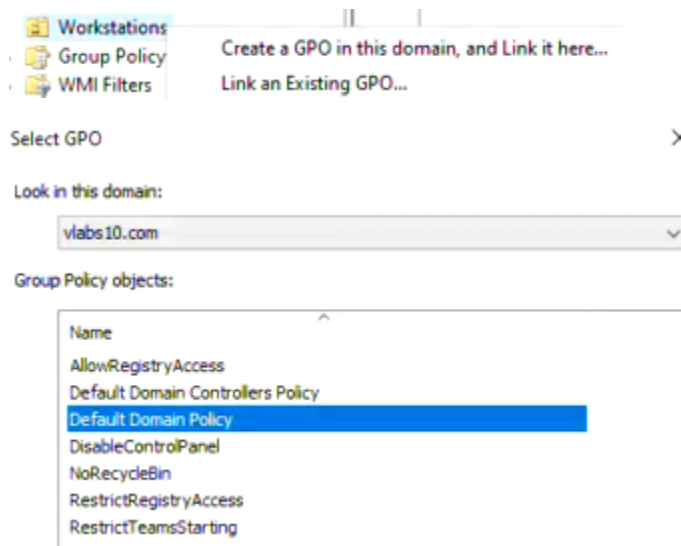
#### Task 5: Managing Audit Authentication

- Modify Default Domain Policy GPO to enable Audit Logon Events (Success and Failure).





- Link the GPO to Workstations OU (where ClientXX is located).

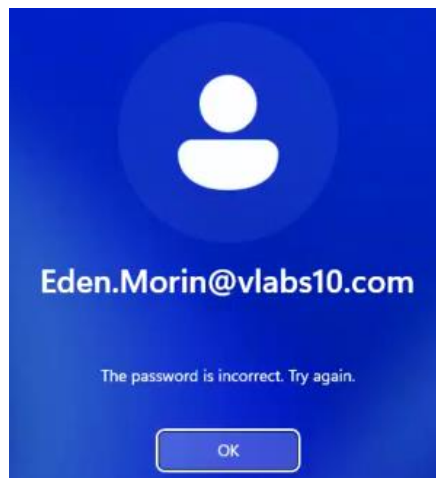


- Run gpupdate /force to apply changes.

```
PS C:\Users\Administrator> gpupdate /force
Updating policy...

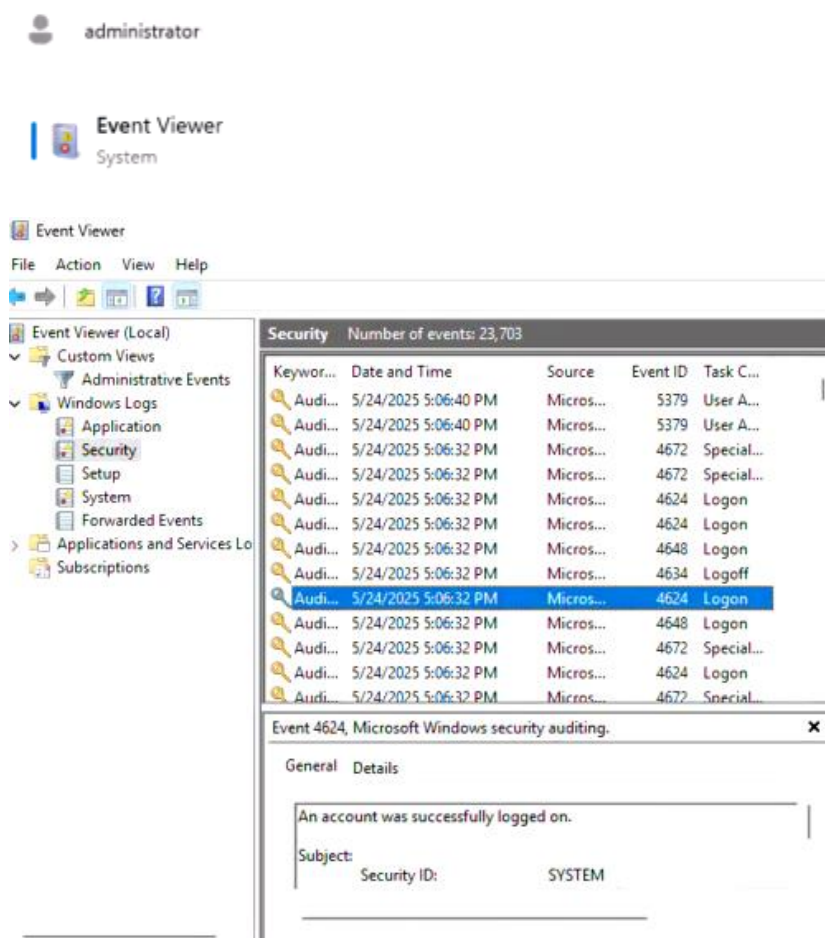
Computer Policy update has completed successfully.
User Policy update has completed successfully.
```

- Test by failing and successfully logging in with any user on ClientXX.



```
PS C:\Users\Eden.Morin>
```

- Open Event Viewer on ClientXX using an Administrator account and verifying logged events.



Audi...	5/24/2025 5:06:32 PM	Micros...	4648	Logon
Audi...	5/24/2025 5:06:32 PM	Micros...	4672	Special...
Audi...	5/24/2025 5:06:32 PM	Micros...	4624	Logon

Event 4648, Microsoft Windows security auditing.

General Details

A logon was attempted using explicit credentials.

Subject:

Audi...	5/24/2025 5:06:32 PM	Micros...	4624	Logon
Audi...	5/24/2025 5:06:32 PM	Micros...	4648	Logon
Audi...	5/24/2025 5:06:32 PM	Micros...	4672	Special...
Audi...	5/24/2025 5:06:32 PM	Micros...	4624	Logon

Event 4624, Microsoft Windows security auditing.

General Details

An account was successfully logged on.

## Task 6: Managing Security Templates

- Create a security template named OpenSSH\_Auth.

mmc.  
Run command

Console1 - [Console Root]

File Action View Favorites Window

New Ctrl+N

Open... Ctrl+O

Save Ctrl+S

Save As...

Add/Remove Snap-in... Ctrl+M

Options...

Add or Remove Snap-ins

You can select snap-ins for this console from those available on your computer and configure the selected set of snap-ins. For extensible snap-ins, you can configure which extensions are enabled.

Available snap-ins:

Snap-in	Vendor
IP Security Policy M...	Microsoft Cor...
Link to Web Address	Microsoft Cor...
Local Backup	Microsoft Cor...
Local Users and Gro...	Microsoft Cor...
Performance Monitor	Microsoft Cor...
Resultant Set of Policy	Microsoft Cor...
Routing and Remote...	Microsoft Cor...
Security Configurati...	Microsoft Cor...
Security Templates	Microsoft Cor...
Services	Microsoft Cor...
Shared Folders	Microsoft Cor...
Task Scheduler	Microsoft Cor...
Telephony	Microsoft Cor...

Add >

Selected snap-ins:

- Console Root
- Security Templates

Edit Extensions...

Remove

Move Up

Move Down

Advanced...

Security Templates

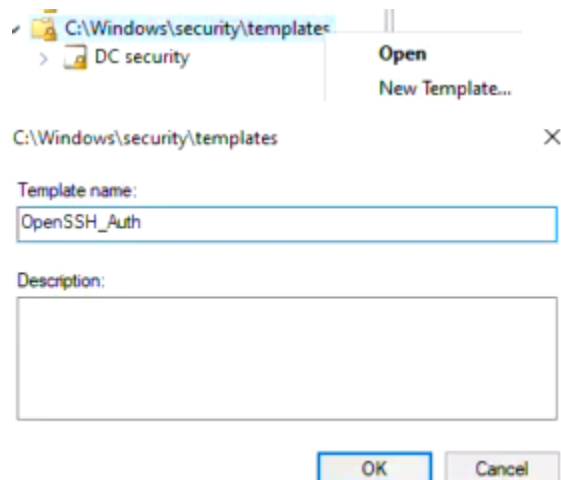
> C:\Users\Admi

Open

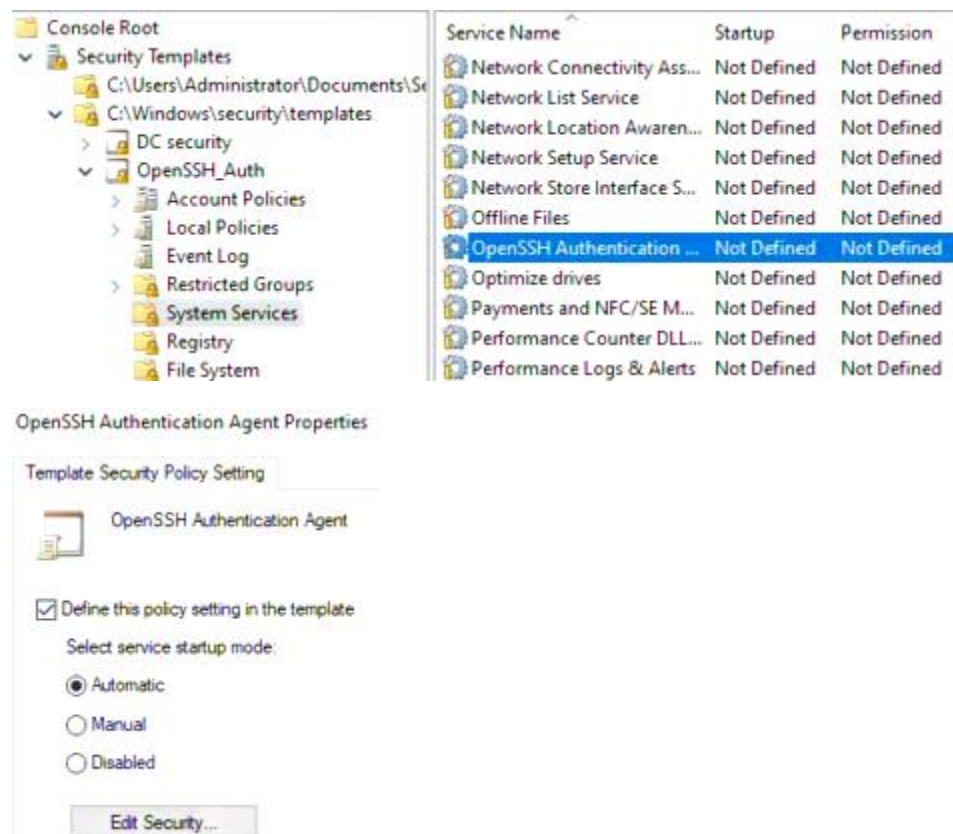
New Template Search Path...

Security Templates

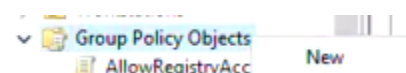
- C:\Users\Administrator\Documei
- C:\Windows\security\templates



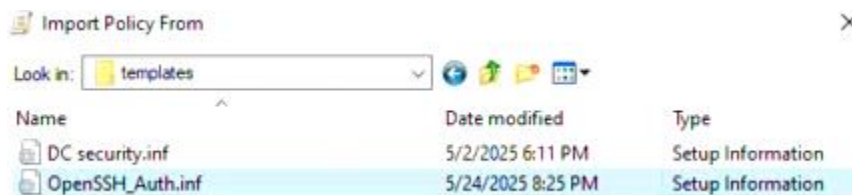
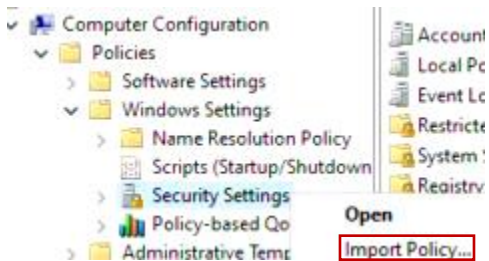
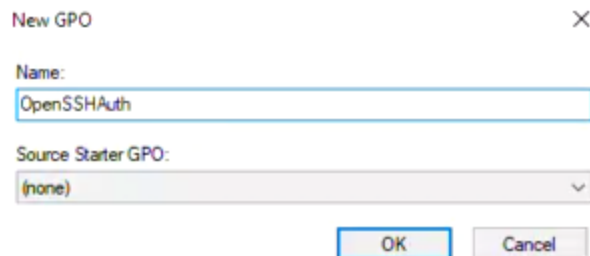
- In this template, modify OpenSSH Authentication Agent under System Services to start automatically.



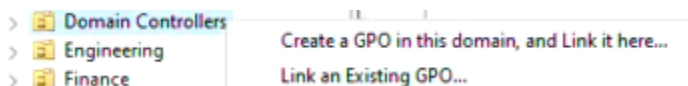
- Import this new template into a new GPO named OpenSSHAUTH.







- Link the GPO to DomainControllers OU.

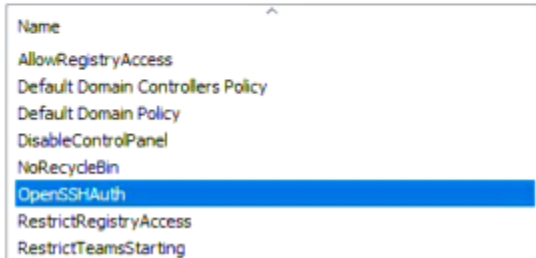


Select GPO

Look in this domain:

vlab10.com

Group Policy objects:

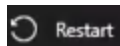


- Run gpupdate /force on DC1XX to apply changes.

```
PS C:\Users\Administrator> gpupdate /force
Updating policy...
Computer Policy update has completed successfully.
```

- Restart DC1XX and verify in Services that OpenSSH Authentication Agent has started.





Run



Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.

Open:

services.msc



This task will be created with administrative privileges.

OK

Cancel

Browse...



OpenSSH Authentication A... Agent to ho... Running Automatic Local Syste...

## Task 7: Configuring Folder Redirection

- Use DC3XX as the file server.



DC310



Power on this virtual machine



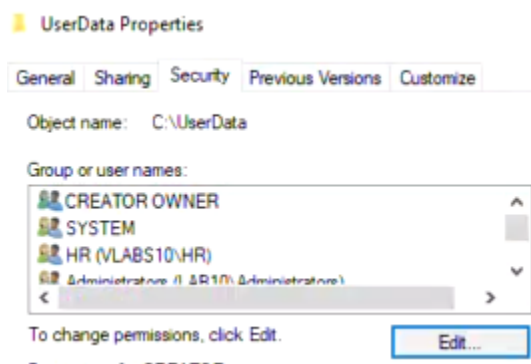
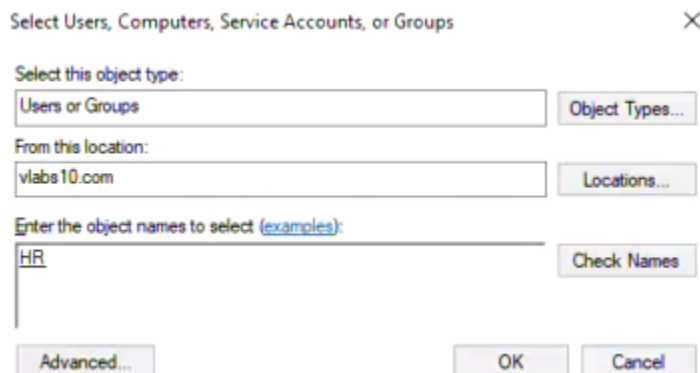
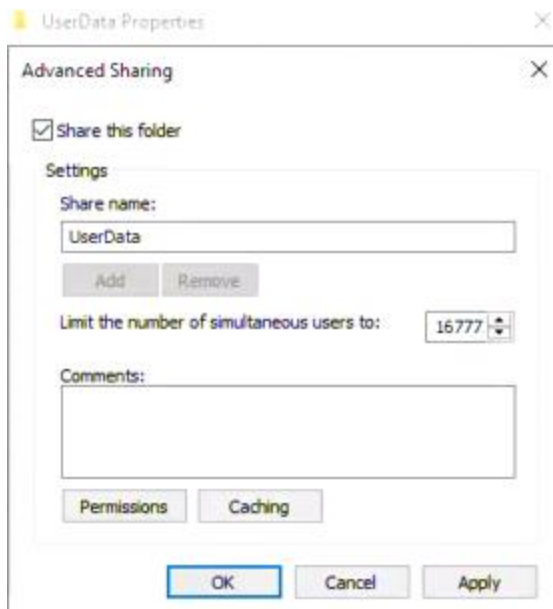
Edit virtual machine settings

- Create a shared folder: \\DC3XX\UserData to the HR Group (r & w).

This PC > Local Disk (C:) >

Name

- PerfLogs
- Program Files
- Program Files (x86)
- Users
- Windows
- UserData




Select Users, Computers, Service Accounts, or Groups ✕

Select this object type:  
 Object Types...

From this location:  
 Locations...

Enter the object names to select (examples):  
 Check Names






Advanced... OK Cancel

 Permissions for UserData ✕

Security

Object name: C:\UserData

Group or user names:

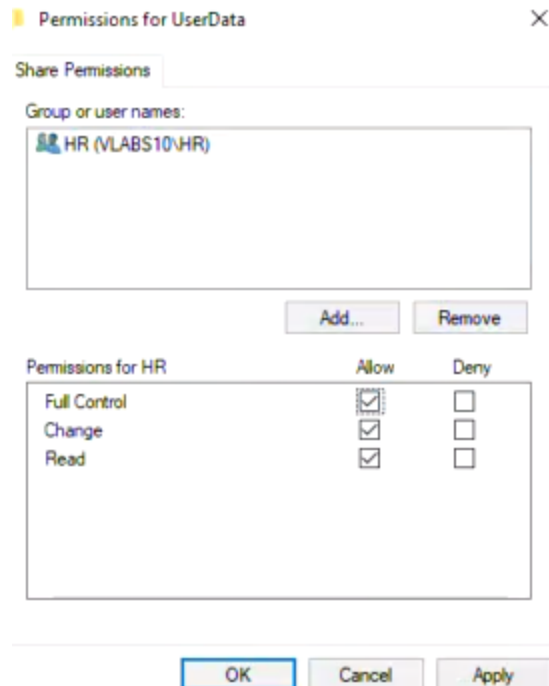
-  CREATOR OWNER
-  SYSTEM
-  HR (VLABS10\HR)
-  Administrators (LAB10\Administrators)
-  Users (LAB10\Users)

Add... Remove

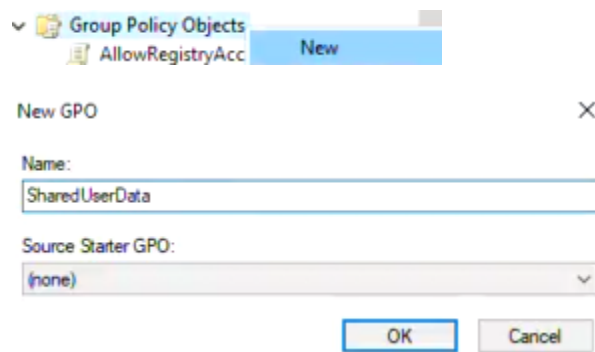
Permissions for HR

	Allow	Deny
Full control	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Modify	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Read & execute	<input checked="" type="checkbox"/>	<input type="checkbox"/>
List folder contents	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Read	<input checked="" type="checkbox"/>	<input type="checkbox"/>

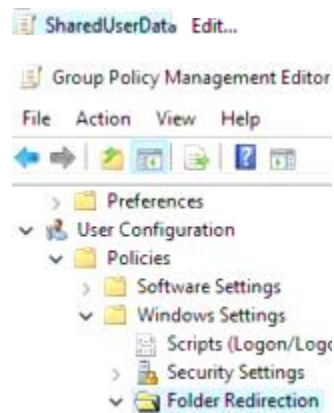
OK Cancel Apply



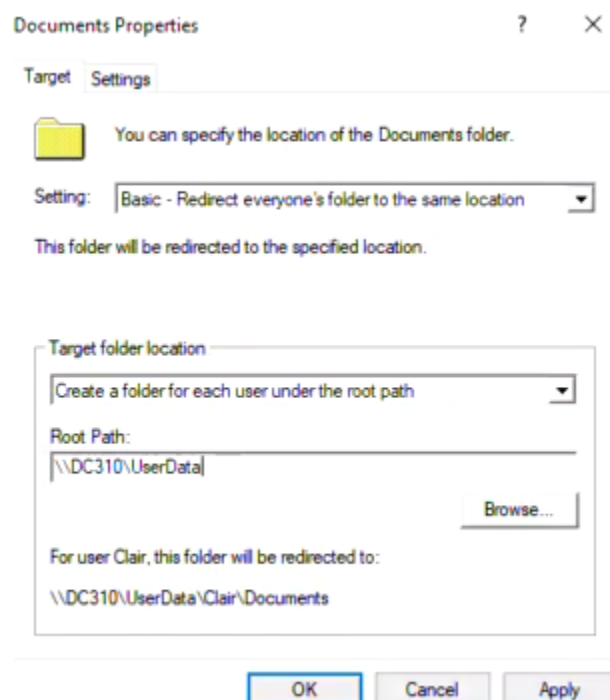
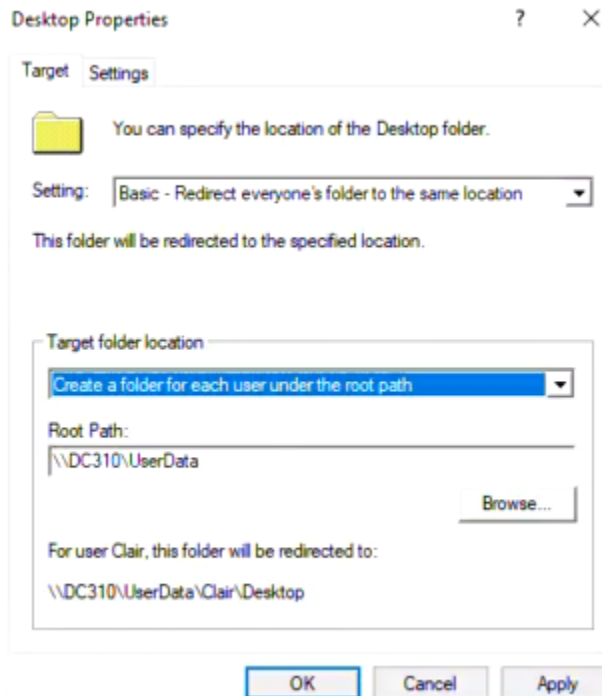
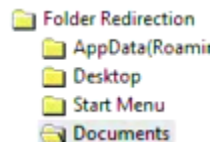
- Create a new GPO named SharedUserData



- Use Basic redirection to Create a Folder for Each User Under the Root Path.



- Redirect Documents and Desktop to the user's respective folder under \\DC3XX\UserData.



- Link GPO to HR OU

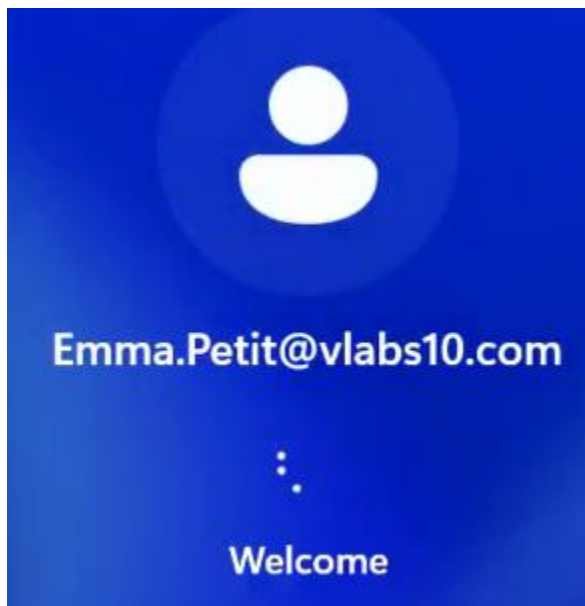


- Run gpupdate /force to apply changes.

```
PS C:\Users\Administrator> gpupdate /force
Updating policy...

Computer Policy update has completed successfully.
User Policy update has completed successfully.
```

- Test with a user from the HR OU.



Network > DC310 > UserData >

Sort View

Name	Date modified
Emma.Petit	5/24/2025 6:23 PM

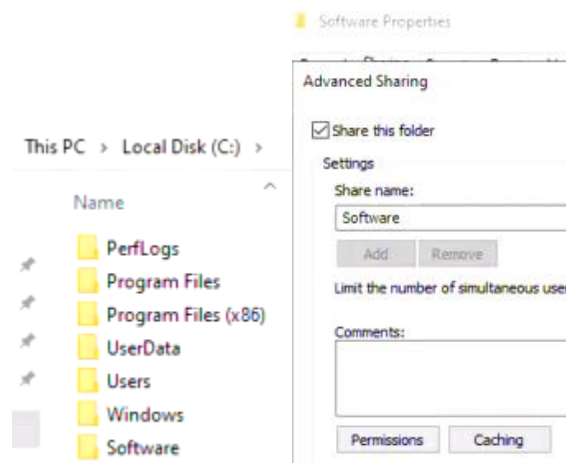
Network > DC310 > UserData > Emma.Petit >

Sort View

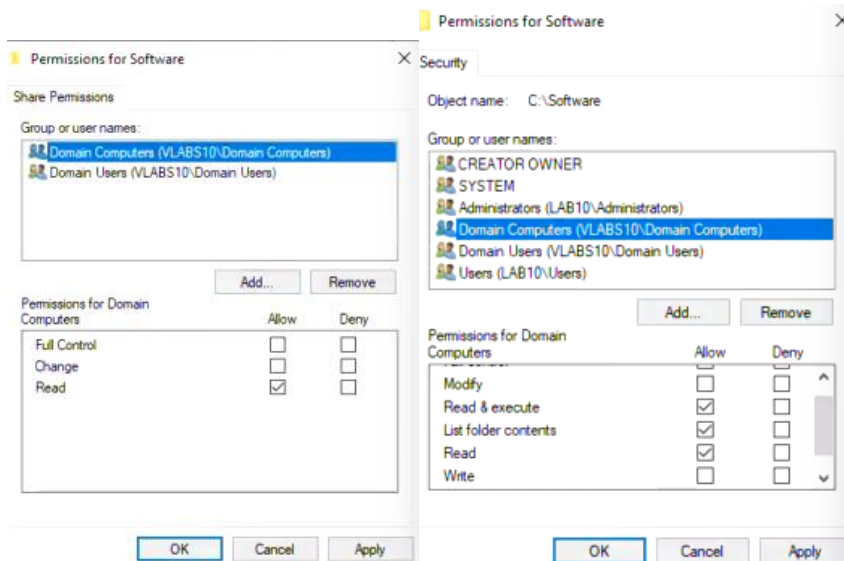
Name	Date modified	Type
Desktop	5/24/2025 6:24 PM	File folder
Documents	5/24/2025 6:24 PM	File folder

## Task 8: Managing Software Installation

- Create a network share: \\DC3XX\\Software.



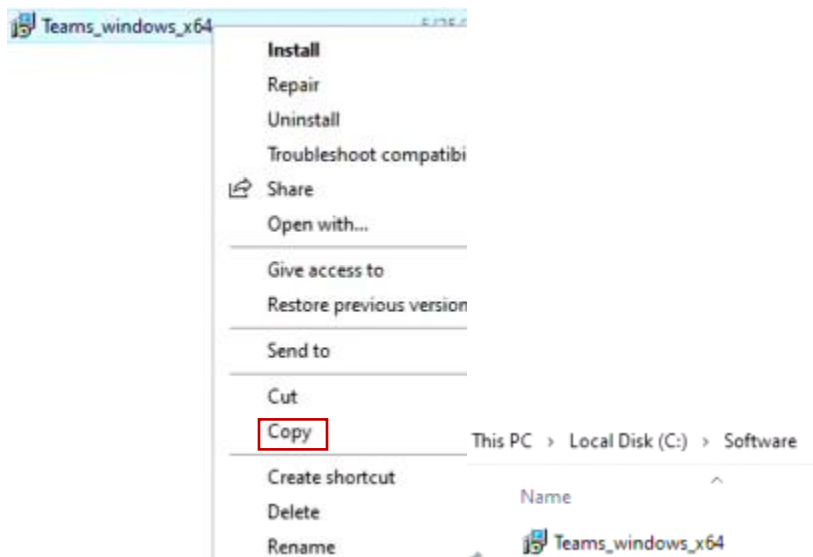




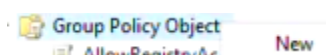
- Download the Microsoft Teams MSI package (You will need to add the NAT NIC to download this package. Remove it after completing the download).

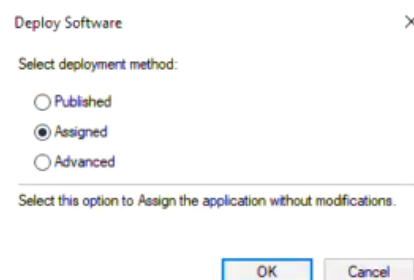
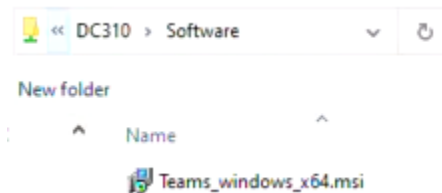
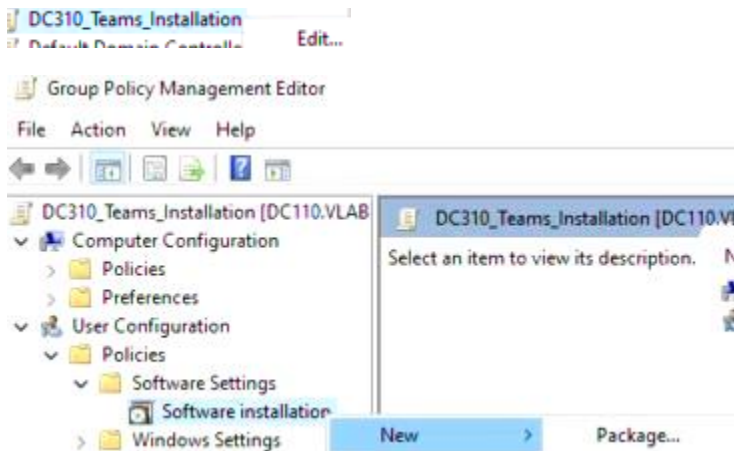
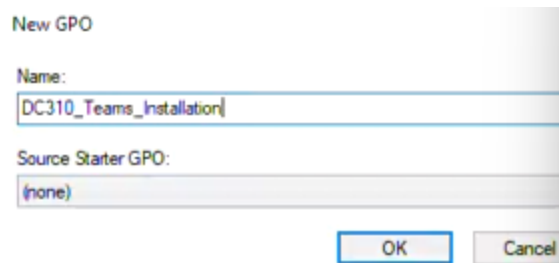
<https://learn.microsoft.com/en-us/microsoftteams/msi-deployment>

Entity	32-bit	64-bit	ARM64
Commercial	<a href="#">32-bit</a>	<a href="#">64-bit</a>	<a href="#">ARM64</a>
U.S. Government - GCC	<a href="#">32-bit</a>	<a href="#">64-bit</a>	<a href="#">ARM64</a>
U.S. Government - GCC High	<a href="#">32-bit</a>	<a href="#">64-bit</a>	<a href="#">ARM64</a>
U.S. Government - DoD	<a href="#">32-bit</a>	<a href="#">64-bit</a>	<a href="#">ARM64</a>

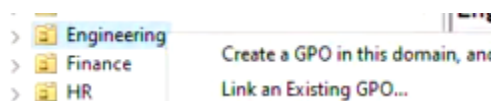


- Create a new GPO named DC3XX\_Teams\_Installation.





- Assign the Teams MSI package installation to the Engineering OU.



Select GPO

Look in this domain:

vlabs10.com

Group Policy objects:

Name
AllowRegistryAccess
DC310_Teams_Installation
Default Domain Controllers Policy
Default Domain Policy

- Run gpupdate /force to apply changes.

```
PS C:\Users\Administrator> gpupdate /force
Updating policy...

Computer Policy update has completed successfully.
User Policy update has completed successfully.
```

- Restart ClientX, log in with a user from Engineering OU, and verify that Microsoft Teams is installed.

Client10

Restart anyway

Agathe.Bonnet

- Confirm that Teams do not start automatically after installation (to test GPO RestrictTeamsStarting, created in Task 2).

Best match

Microsoft Teams  
App

Settings

Controls visibility of the Share  
button on windows preview

Search the web

teams - See more search results



Microsoft Teams  
App

Open

Run as administrator

Pin to Start

Microsoft Teams

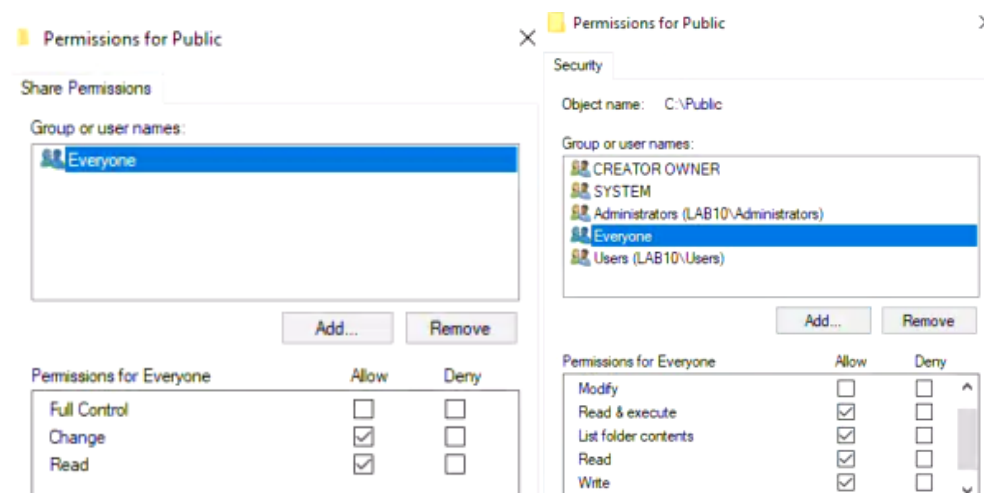
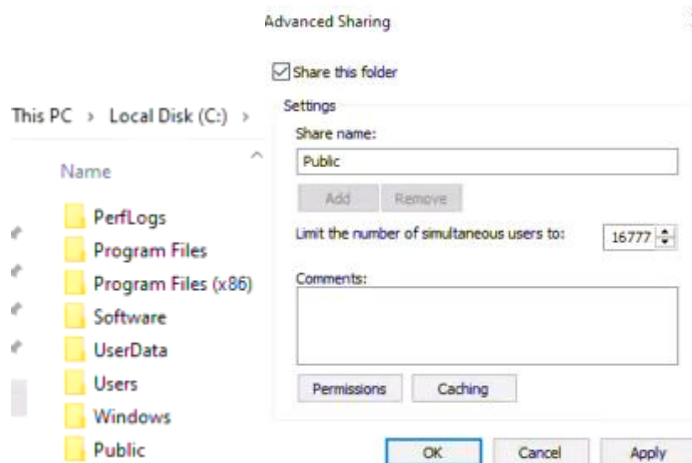
Microsoft

Disabled

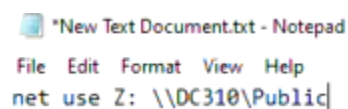
None

## Task 9: Managing Scripts with GPO

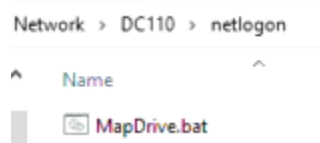
- Create a shared folder on \\DC3XX\Public and share it with Everyone (read and write).



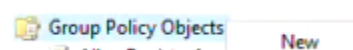
- Create a logon script (MapDrive.bat) to map this shared network drive. Add this text in this file: net use Z: \\DC3XX\Public

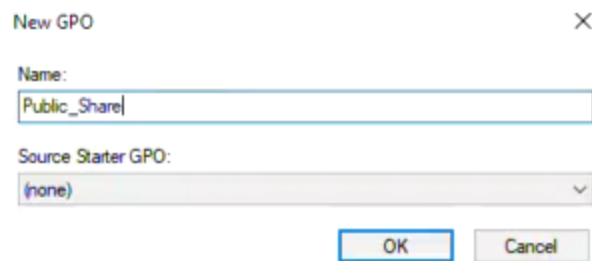


- Store the script in \\DC1XX\NETLOGON.

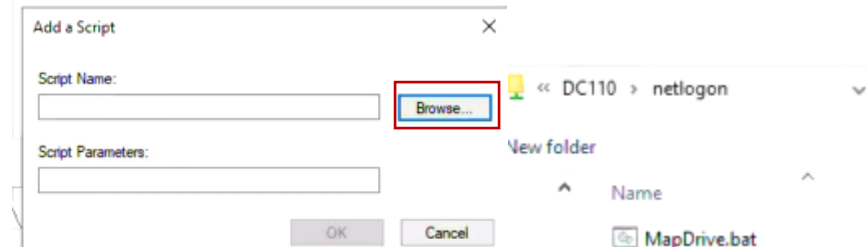
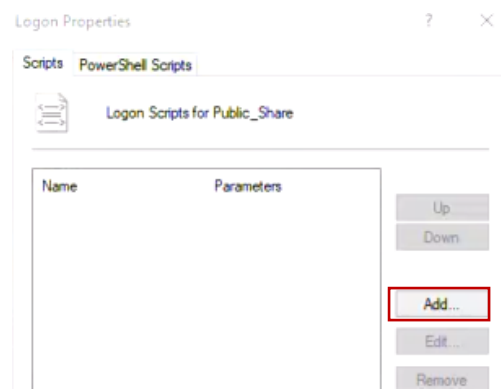
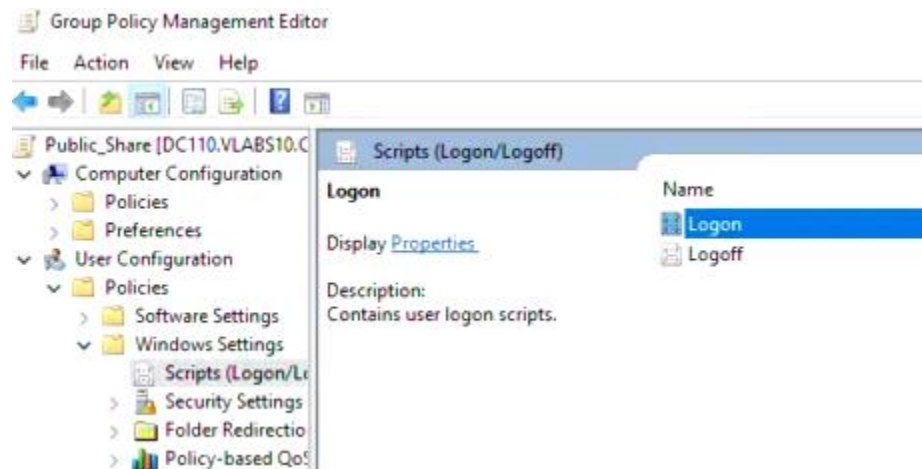


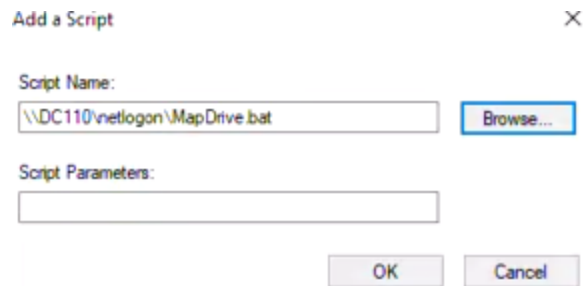
- Create a new GPO named Public\_Share.



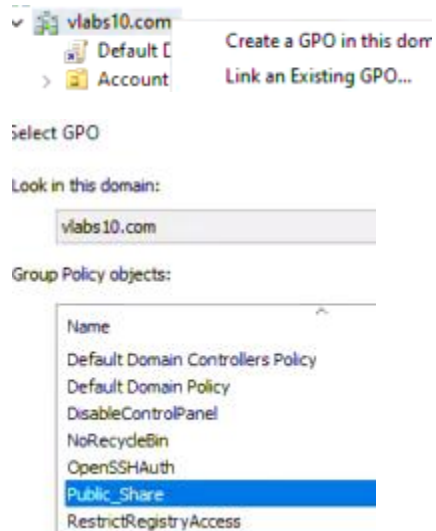


- Add this new logon script to User Configuration Scripts → Logon.





- Link GPO to the Domain.

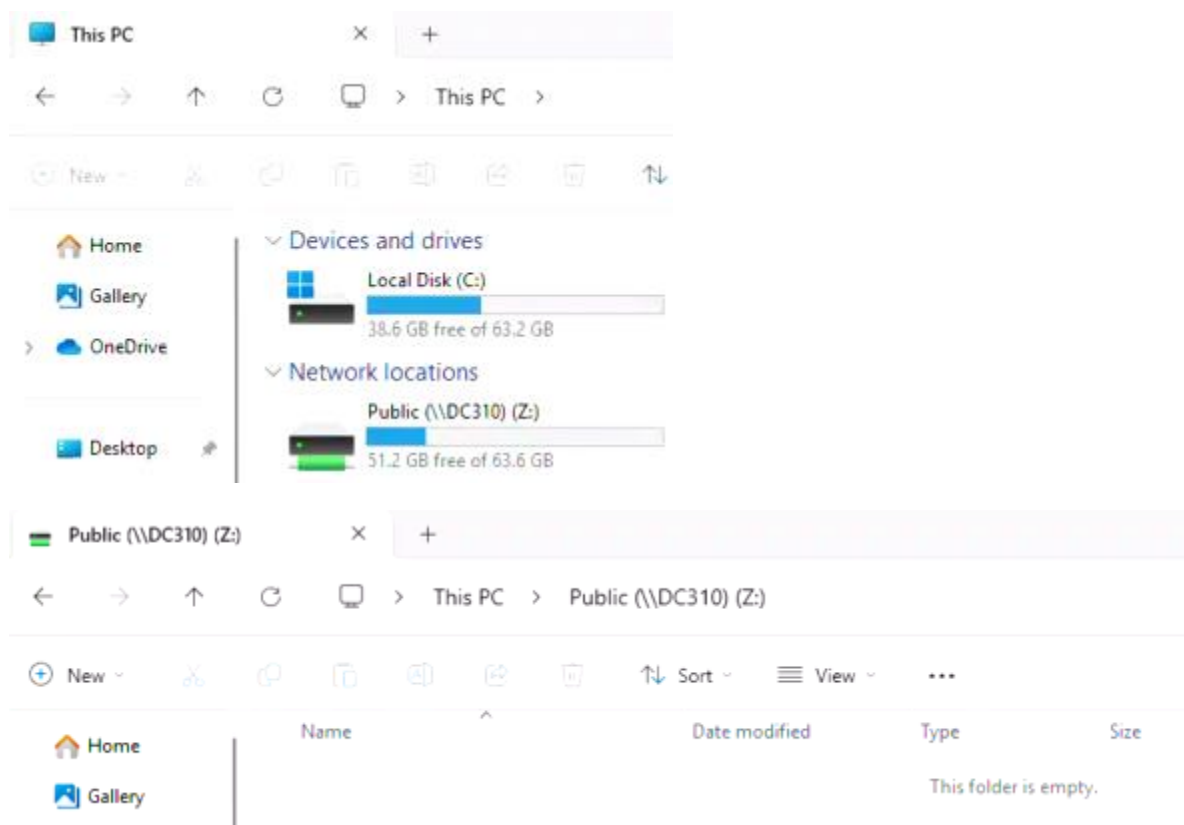
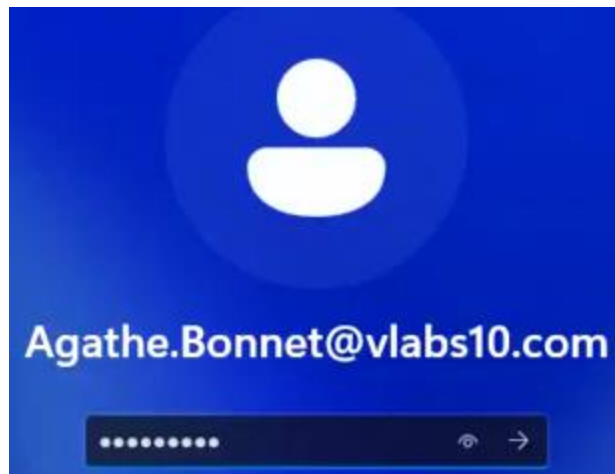


- Run gpupdate /force to apply changes.

```
PS C:\Users\Administrator> gpupdate /force
Updating policy...

Computer Policy update has completed successfully.
User Policy update has completed successfully.
```

- Test with any by logging into ClientXX and verifying the drive mapping.



- Try to create files and folders in this drive.



This PC > Public (\\DC310) (Z:)

Sort

View

^

Date modified

Type

Size

This folder is empty.

View

Sort by

Group byNewFolder

> This PC > Public (\\DC310) (Z:) >

^	
Name	Date modified
Test	5/25/2025 7:33
New Text Document	5/25/2025 7:33