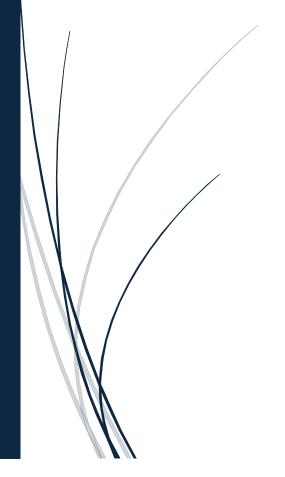
8/5/2025

Lab 5

Managing Group Accounts in Active Directory



Mohammed, Laetitia, 0931512
NETWORK INSTALLATION AND ADMINISTRATION II

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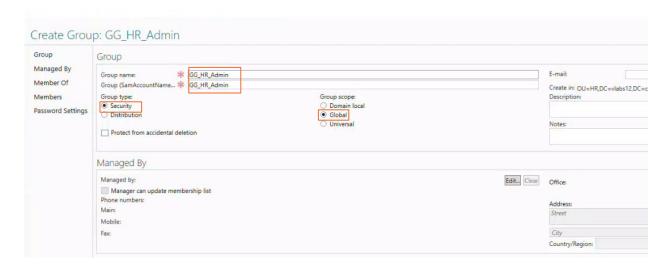
Objective

This lab will help you practice managing Active Directory groups using Active Directory Administrative Center (ADAC) and PowerShell. You will perform tasks related to group creation, membership management, delegation, and permission assignments.

Task 1: Create and Manage Security Groups

Create a Global Security Group (GG_HR_Admins) in the HR OU using ADAC.

Create a Global Security Group (GG_IT_Admins) in the IT OU using PowerShell.



New-ADGroup -GroupCategory: "Security" -GroupScope: "Global" - Name: "GG_IT_Admins" -Path: "OU=IT,DC=vlabs12,DC=com" - SamAccountName: "GG_IT_Admins"

Get-ADGroup -Filter {Name -eq "GG_it_Admins"} | Select DistinguishedName



Task 2: Add Members to Groups

Add **Emma Morel (e.morel)** and **Lucas Bernard (l.bernard)** to **GG_HR_Admins** using **PowerShell**.

Add Chloe Girard (c.girard) and Sophie Lambert (s.lambert) to GG_IT_Admins using PowerShell.

Add-ADGroupMember -Identity "GG_HR_Admins" -Members "e.morel"

Add-ADGroupMember -Identity "GG_HR_Admins" -Members "l.bernard"

Get-ADGroupMember -Identity "GG_HR_Admins"

```
PS C:\Users\Administrator.DC112> Add-ADGroupMember -Identity "GG_HR_Admins" -Members "e.morel"
PS C:\Users\Administrator.DC112> Add-ADGroupMember -Identity "GG_HR_Admins" -Members "l.bernard"
PS C:\Users\Administrator.DC112> Get-ADGroupMember -Identity "GG_HR_Admins"

distinguishedName : CN=Emma Morel,OU=HR,DC=vlabs12,DC=com
name : Emma Morel
objectClass : user
objectGUID : 3a31d06c-840b-4ff6-bbcd-c3dae2c89fc3
SamAccountName : e.morel
SID : S-1-5-21-1463046243-3978224867-743297864-1111

distinguishedName : CN=Lucas Bernard,OU=HR,DC=vlabs12,DC=com
name : Lucas Bernard
objectClass : user
objectGUID : ee95857e-4238-445e-b05e-a6187b340eb0
SamAccountName : 1.bernard
SID : S-1-5-21-1463046243-3978224867-743297864-1113
```

Add-ADGroupMember -Identity "GG_IT_Admins" -Members "c.girard"

Add-ADGroupMember -Identity "GG_IT_Admins" -Members "s.lambert"

Get-ADGroupMember -Identity "GG_IT_Admins"

```
PS C:\Users\Administrator.DC112> Add-ADGroupMember -Identity "GG_IT_Admins" -Members "c.girard
PS C:\Users\Administrator.DC112> Add-ADGroupMember -Identity "GG_IT_Admins" -Members "s.lambert"
PS C:\Users\Administrator.DC112> Get-ADGroupMember -Identity "GG_IT_Admins"
distinguishedName : CN=Sophie Lambert,OU=IT,DC=vlabs12,DC=com
                 : Sophie Lambert
               : user
objectClass
objectGUID
                 : 5885a491-c0db-4e89-8f9a-f841e7b00f51
SamAccountName : s.lambert
                : S-1-5-21-1463046243-3978224867-743297864-1109
distinguishedName : CN=Chloe Girard,OU=IT,DC=vlabs12,DC=com
name
                 : Chloe Girard
objectClass
                 : user
objectGUID
                 : 6565678e-60b9-4eec-a008-1c6bbb71e686
SamAccountName
                 : c.girard
                  : S-1-5-21-1463046243-3978224867-743297864-1115
```

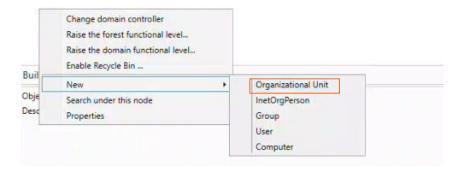
Task 3: Create Organizational Units (OUs) and Domain Local Groups

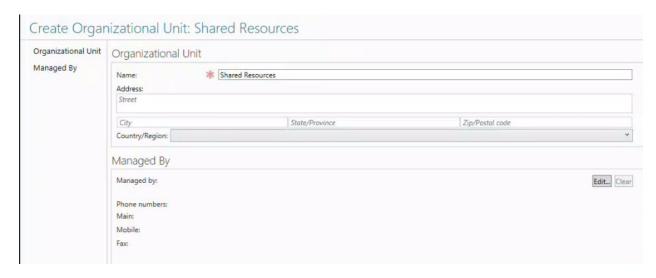
Create an OU named Shared Resources in vlabs12.com domain using ADAC.

Create a **Domain Local Group (DLG_HR_Share)** in **Shared Resources** using **ADAC**.

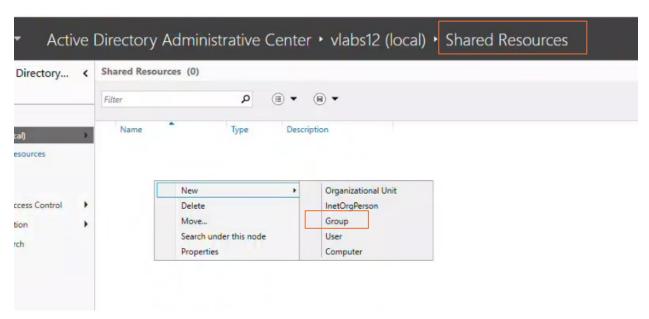
Create a Domain Local Group (DLG_IT_Share) in Shared Resources using PowerShell.

Create Shared Resources by right-clicking → New → Organizational Unit (OU)

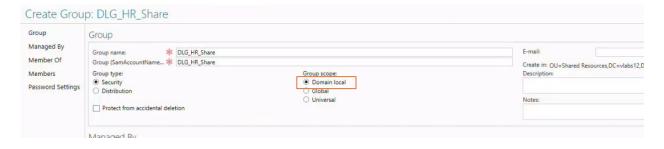




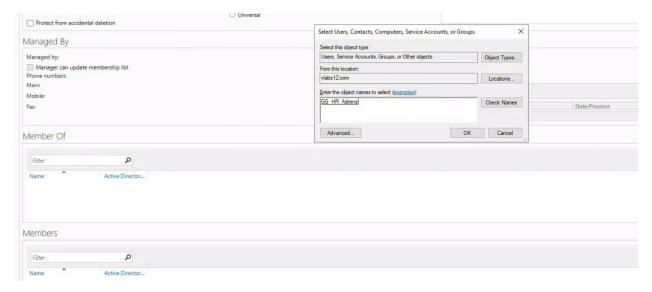
In Shared Resources, create the Domain Local Group \rightarrow DLG_HR_Share



Make sure to select "Domain Local"



Click on Add in the Members section and add GG_HR_Admins



Repeat for the IT groups in Powershell using the commands below

New-ADGroup -Name "DLG_IT_Share" -SamAccountName "DLG_IT_Share" - GroupCategory Security -GroupScope DomainLocal -Path "OU=Shared Resources,DC=vlabs12,DC=com"

Get-ADGroup -Identity "DLG_IT_Share"

```
PS C:\Users\Administrator.DC112> New-ADGroup -Name "DLG_IT_Share" -SamAccountName "DLG_IT_Share" -GroupCategory Security -GroupScope DomainLocal -Path "QU#Shared Resources, DC=vlabs12,DC=com"
PS C:\Users\Administrator.DC112> Get-ADGroup -Identity "DLG_IT_Share"

DistinguishedName : CN=DLG_IT_Share,QU=Shared Resources,DC=vlabs12,DC=com
GroupCategory : Security
GroupScope : DomainLocal
Name : DLG_IT_Share
ObjectClass : group
ObjectGJID : 140e23ec-5091-4c3d-b4ee-5caf922e7794
SamAccountName : DLG_IT_Share
SID : S-1-5-21-1463046243-3978224867-743297864-1120

PS C:\Users\Administrator.DC112>
```

Add-ADGroupMember -Identity "DLG_IT_Share" -Members "GG_IT_Admins"

Get-ADGroupMember -Identity "DLG_IT_Share"

```
PS C:\Users\Administrator.DC112> Add-ADGroupMember -Identity "DLG_IT_Share" -Members "GG_IT_Admins"
PS C:\Users\Administrator.DC112> Get-ADGroupMember -Identity "DLG_IT_Share"

distinguishedName : CN=GG_IT_Admins,OU=IT,DC=vlabs12,DC=com
name : GG_IT_Admins
objectClass : group
SipctGUID : f17e7bce-fdd1-4443-ba67-23a1449d6aec
SamAccountName : GG_IT_Admins
SID : S-1-5-21-1463046243-3978224867-743297864-1117

PS C:\Users\Administrator.DC112>
```

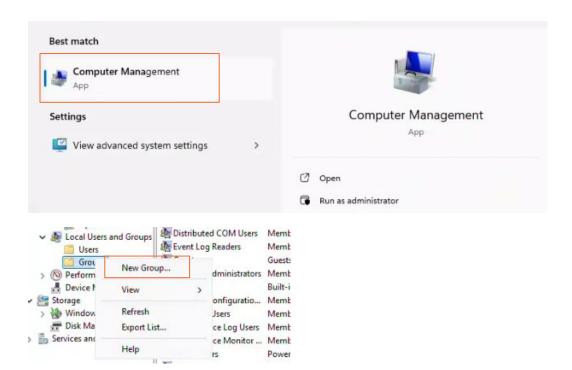
Task 4: Create a Local Group and Manage Membership

On SRV12, create a Local Group (LG_HR_Files) using GUI.

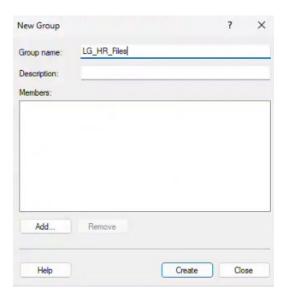
Add **DLG_HR_Share** group into **LG_HR_Files** group using **GUI**.

Verify the membership of LG_HR_Files group using PowerShell.

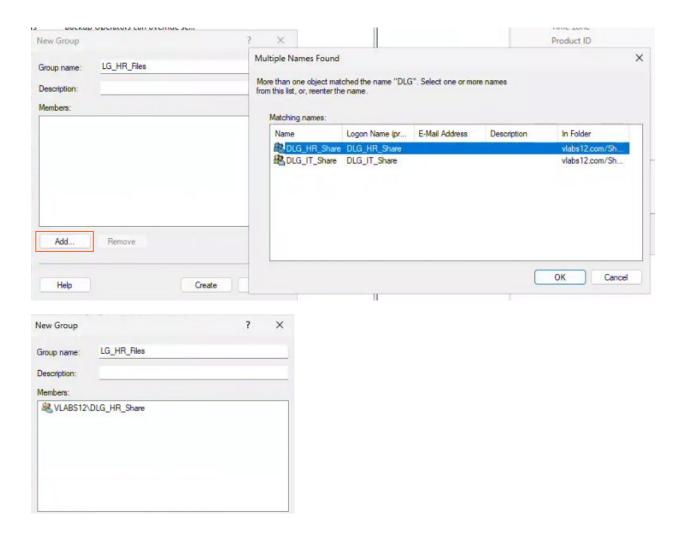
Go to Computer Management \rightarrow Local Users and Groups. Right click and select New Group.



Create LG_HR_Files and then Add



Add the group DLG_HR_Share



Get-LocalGroupMember - Group "LG_HR_Files"

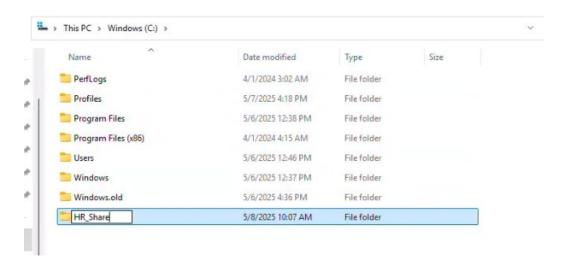
Task 5: Share and Set Permissions on SRV12

On SRV12, create and share a folder C:\HR_Share using GUI.

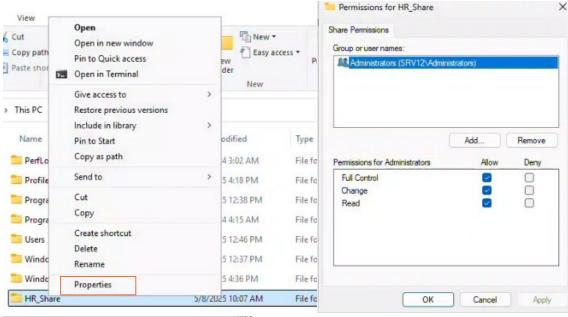
Assign **Change** permissions (Read/Write) to **LG_HR_Files** group, and remove the **Everyone** group using **GUI**.

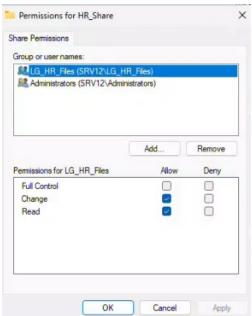
Verify the share and permissions using PowerShell.

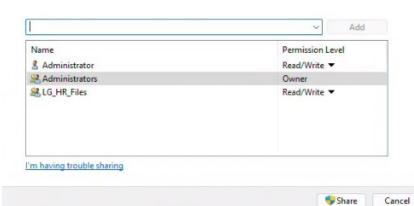
On the C: drive, right click and create the new folder HR_Share that we will use as our shared folder



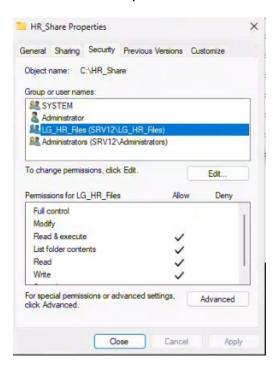
Right-click and select Properties \rightarrow Share and edit the permissions for specific groups. We want to give LG_HR_Files "change" permissions and we also want to remove "Everybody"







In the Security tab, go to Edit and make sure the group, administrator and SYSTEM all have correct permissions.



Verify with PowerShell using the commands below

Get-SmbShare -Name "HR Share"

Get-SmbShareAccess -Name "HR_Share"

Get-Acl -Path "C:\HR_Share" | Format-List

```
Copyright (C) Microsoft Corporation. All rights reserved.
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows
PS C:\Users\Administrator.VLABS12> Get-LocalGroupMember -Group "LG_HR_Files"
ObjectClass Name
                               PrincipalSource
          VLABS12\DLG_HR_Share ActiveDirectory
Group
PS C:\Users\Administrator.VLABS12> Get-SmbShare -Name "HR_Share"
        ScopeName Path
                           Description
HR Share *
                 C:\HR_Share
PS C:\Users\Administrator.VLABS12> Get-SmbShareAccess -Name "HR_Share"
        ScopeName AccountName
                                        AccessControlType AccessRight
HR_Share *
               BUILTIN\Administrators Allow
```

```
PS C:\Users\Administrator.VLABS12> Get-Acl -Path "C:\HR_Share" | Format-List

Path : Microsoft.PowerShell.Core\FileSystem::C:\HR_Share
Owner : BUILITN\Administrators
Group : VLABS12\Omain Users
Access: NT AUTHORITY\SYSTEM Allow FullControl
BUILITN\Administrators Allow FullControl
SRV12\LG_HR_Files Allow Write, Read, Synchronize
VLABS12\Administrator Allow FullControl
Audit :
Sddl : O:BAG:DUD:PAI(A;OICI;FA;;;SY)(A;OICI;FA;;;BA)(A;OICI;0x12019f;;;S-1-5-21-363679278-1750503931-45209311-1000)(A;OICI;FA;;;S-1-5-21-1463046243-397822)

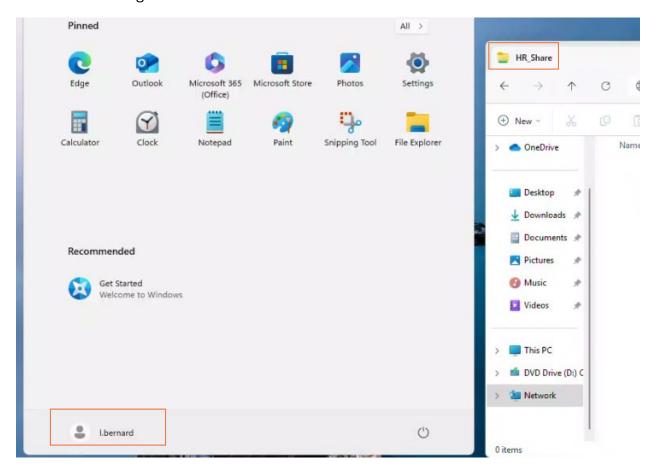
PS C:\Users\Administrator.VLABS12>
```

Task 6: Test HR Share Access from ClientX

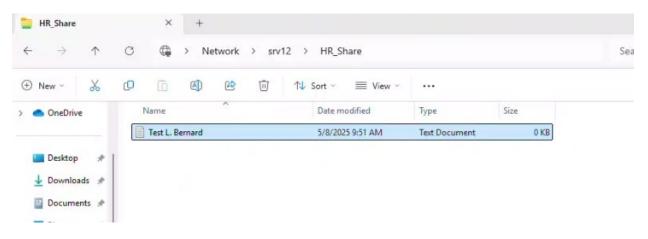
Log in as Lucas Bernard (l.bernard) on Windows 11 (ClientX).

Access the shared folder \\SRVXX\HR_Share\$ and verify permissions by creating and deleting files in this share.

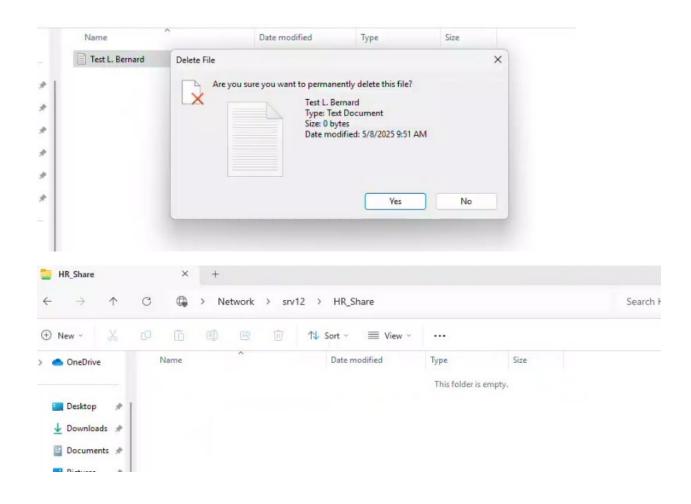
Log in as Lucas Bernard (l.bernard) on Client12 and access the HR_Share folder we just created and configured to share



Create a test file. This must work as we gave the group that Lucas is part of change permissions.



Now delete the file.



Task 7: Remove a User from a Group and Delete a User

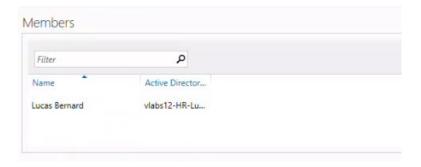
 ${\bf Remove\ Emma\ Morel\ (e.morel)\ from\ GG_HR_Admins\ using\ ADAC.}$

 $\label{lem:condition} \textbf{Remove Chloe Girard (c.girard) from GG_IT_Admins using PowerShell.}$

Remove Emma Morel from GG_HR_Admins using Active Directory Administrative Center. Scroll down to Members → select Emma Morel → Remove



Confirm only Lucas Bernard remains.



Repeat for Chloe Girard and group GG_IT_Admins on PowerShell

Remove-ADGroupMember-Identity "GG_IT_Admins" - Members "c.girard"

```
PS C:\Users\Administrator.DC112> Get-ADGroupMember -Identity "GG_IT_Admins"

distinguishedName : CN=Sophie Lambert,OU=IT,DC=vlabs12,DC=com
name : Sophie Lambert
objectClass : user
objectGUID : 5885a491-c0db-4e89-8f9a-f841e7b00f51
SamAccountName : s.lambert
SID : S-1-5-21-1463046243-3978224867-743297864-1109
```

Get-ADGroupMember -Identity "GG_IT_Admins"

```
PS C:\Users\Administrator.DC112> Remove-ADGroupMember -Identity "GG_IT_Admins" -Members "c.girard"

Confirm

Are you sure you want to perform this action?

Performing the operation "Set" on target "CN=GG_IT_Admins,OU=IT,DC=vlabs12,DC=com".

[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend [?] Help (default is "Y"): y
```

Task 8: Create IT OU and Configure Groups on DC312 and DC112

On DC312, create an OU named IT using ADAC.

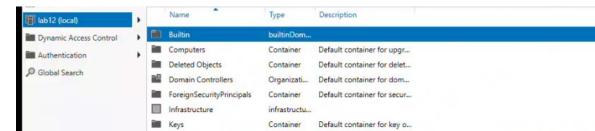
Inside IT OU, create a user Fadi Tora (f.tora) using ADAC.

Inside IT OU, create a Global Group GG_IT_Admins and add Fadi Tora as a member using ADAC.

On DC112, create a Universal Group UG_IT_Global.

Add GG_IT_Admins from both vlabs12.com and lab12.vlabs12.com to UG_IT_Global.

Add UG_IT_Global to the Domain Local group DLG_IT_Share using PowerShell.



Managed Service Accounts Container Default container for man...

msTPM-Inf...

Change domain controller

Raise the forest functional level...

Raise the domain functional level...

Enable Recycle Bin ...

Search under this node

Properties

lostAndFou... Default container for orph...

msDS-Quo... Quota specifications conta...

Container Default location for storag...

Container Default container for upgr...

Organizational Unit

Mod

InetOrgPerson

Group

Container Builtin system settings

On DC312 (child domain) right click and create the OU IT

LostAndFound

Program Data

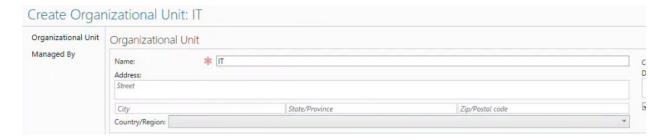
TPM Devices

System

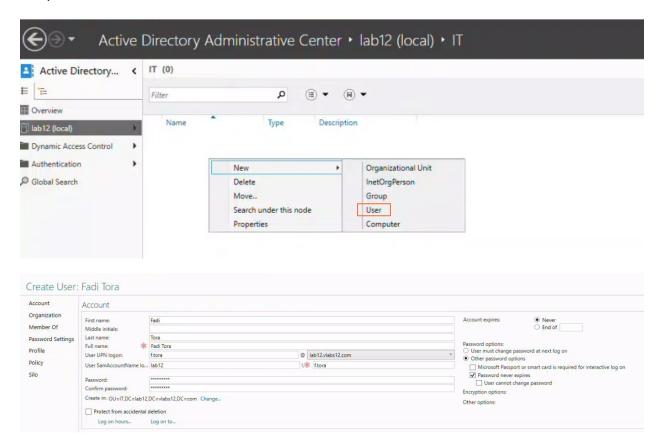
Builtin

Description:

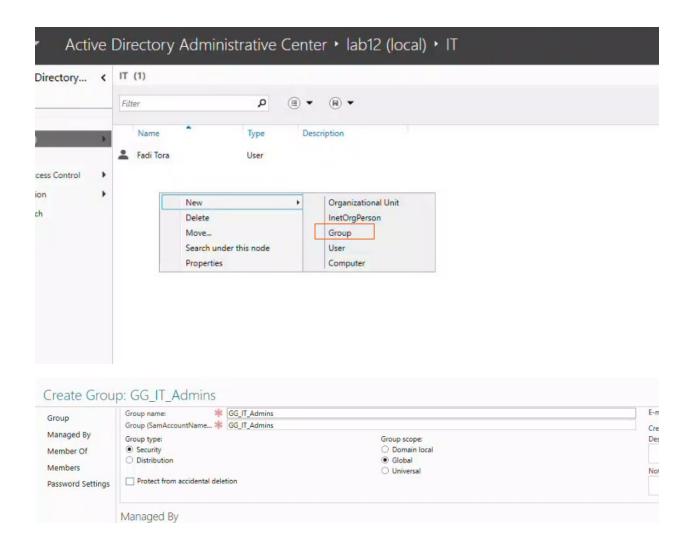
Object class: builting



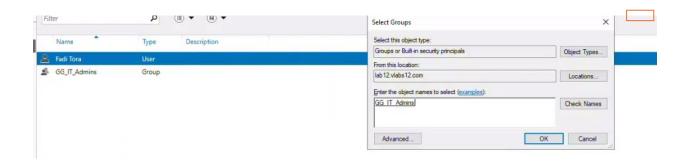
In IT, create the user Fadi Tora as usual with the UPN f.tora



Create the Global group GG_IT_Admins

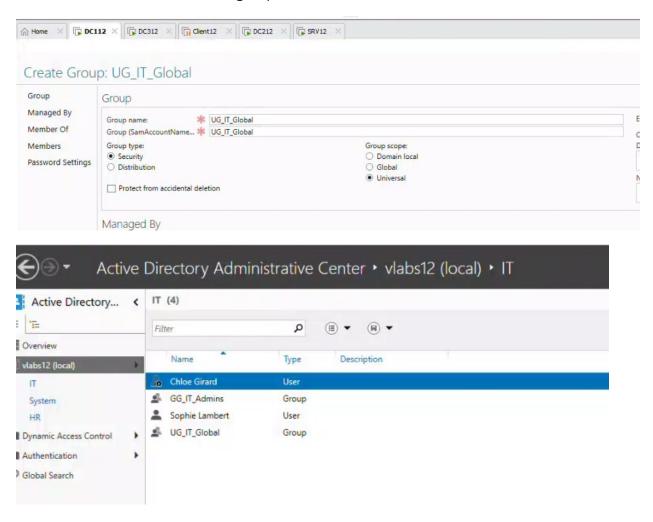


Add Fadi Tora by right clicking on his name → Add to group → GGT_IT_Admins



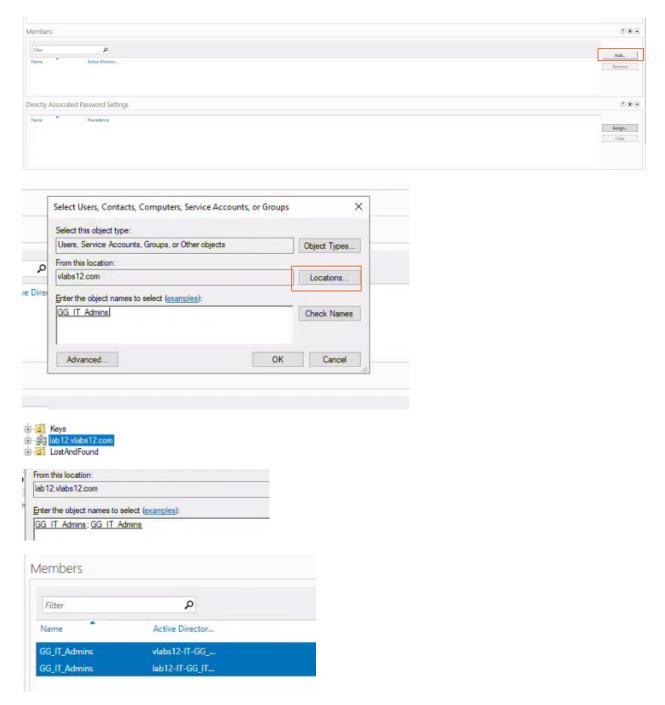
Filter	ρ	
Name	Active Director	
Fadi Tora	lab12-IT-Fadi T	

On DC112, create the Universal group UG_IT_Global



We want to add as members both Global groups GG_IT_Admins from domain vlabs12 and lab12.vlabs12.com

Click on Add in the Members section and add the first GG_IT_Admins from vlabs12, then click on Locations and switch to lab12.vlabs12. Add the GG_IT_Admins group from that domain also.



Add UG_IT_Global to the Domain Local group DLG_IT_Share using PowerShell.

```
PS C:\Users\Administrator.DC112> Add-ADGroupMember -Identity "DLG_IT_Share" -Members "UG_IT_Global"
PS C:\Users\Administrator.DC112>
PS C:\Users\Administrator.DC112>
```

```
PS C:\Users\Administrator.DC112> Get-ADGroupMember -Identity "DLG_IT_Share"

distinguishedName : CN=UG_IT_Global,OU=IT,DC=vlabs12,DC=com
name : UG_IT_Global
objectClass : group
objectGUID : 2d35ec92-c3b6-4385-994b-9ce560080376
SamAccountName : UG_IT_Global
SID : S-1-5-21-1463046243-3978224867-743297864-1123

distinguishedName : CN=GG_IT_Admins,OU=IT,DC=vlabs12,DC=com
name : GG_IT_Admins
objectClass : group
objectGUID : f17e7bce-fdd1-4443-ba67-23a1449d6aec
SamAccountName : GG_IT_Admins
SID : S-1-5-21-1463046243-3978224867-743297864-1117
```

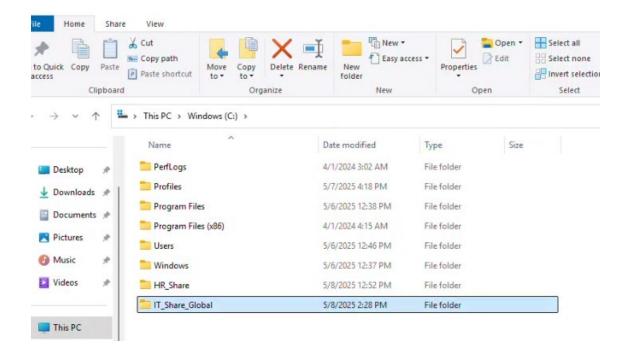
Task 9: Share and Set Permissions for IT Global Share

On SRV12, create and share C:\IT_Share_Global using GUI.

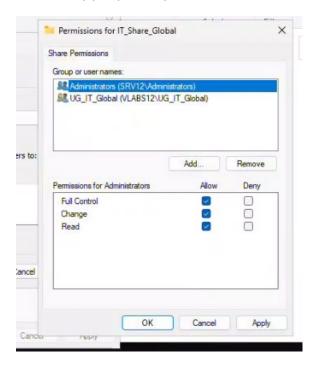
Assign Change permissions (Read/Write) to **UG_IT_Global** group, and remove the Everyone group using GUI.

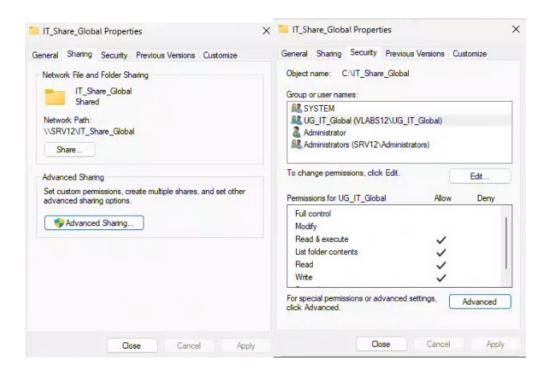
Verify the share and permissions using PowerShell.

Like what was done for HR_Share in the previous task, create IT_Share_Global on the SRV12 C: drive



Set the appropriate permissions, which are the same as the previous task.





Confirm the permissions using PowerShell:

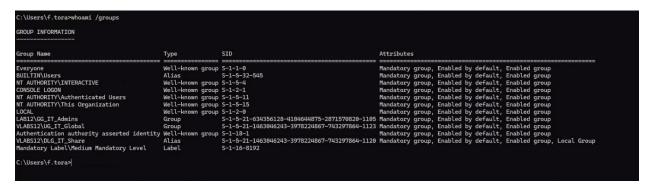
Task 10: Test IT Share Access from ClientX

Log in as Fadi Tora (f.tora) on Windows 11 (Client12).

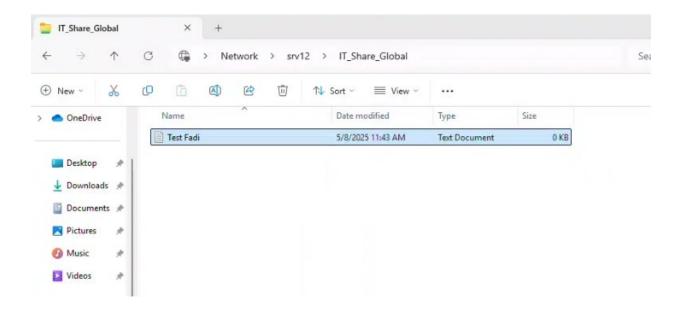
Check which groups Fadi Tora is a member of using Command Prompt.

Access the shared folder \\SRVXX\IT_Share_Global\$ and verify permissions by creating and deleting files in this share.

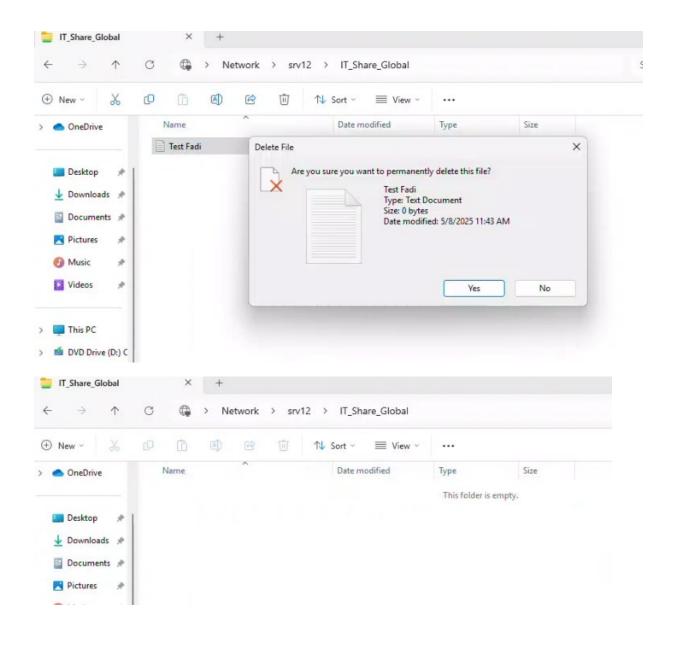
Log in as Fadi Tora and use CMD to see which groups he's a member of. Enter "whoami /groups"



Go to the \\SRV12\IT_Share_Global folder and create a test file.



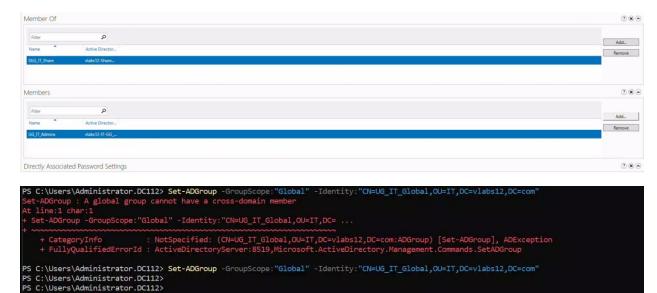
Delete the test file



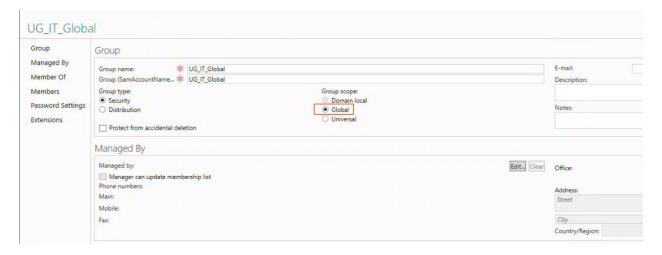
Task 11: Change Group Scope

- 1. On DC1XX, convert UG_IT_Global from Universal to Global using PowerShell.
- 2. Verify that the group scope has changed correctly using GUI.

Since Global groups cannot have cross-domain users, we have to remove membership from lab12.vlabs12.com before converting



Conversion from Universal to Global successful.



```
PS C:\Users\Administrator.DC112> Get-ADGroup -Identity:"CN=UG_IT_Global,OU=IT,DC=vlabs12,DC=com"

DistinguishedName : CN=UG_IT_Global,OU=IT,DC=vlabs12,DC=com
GroupCategory : Security
GroupScope : Global
Name : UG_IT_Global
ObjectClass : group
ObjectGUID : 2d35ec92-c3b6-4385-994b-9ce560080376
SamAccountName : UG_IT_Global
SID : S-1-5-21-1463046243-3978224867-743297864-1123

PS C:\Users\Administrator.DC112>
```