



Server Configuration

Lab16

Group Policy Objects (GPOs)

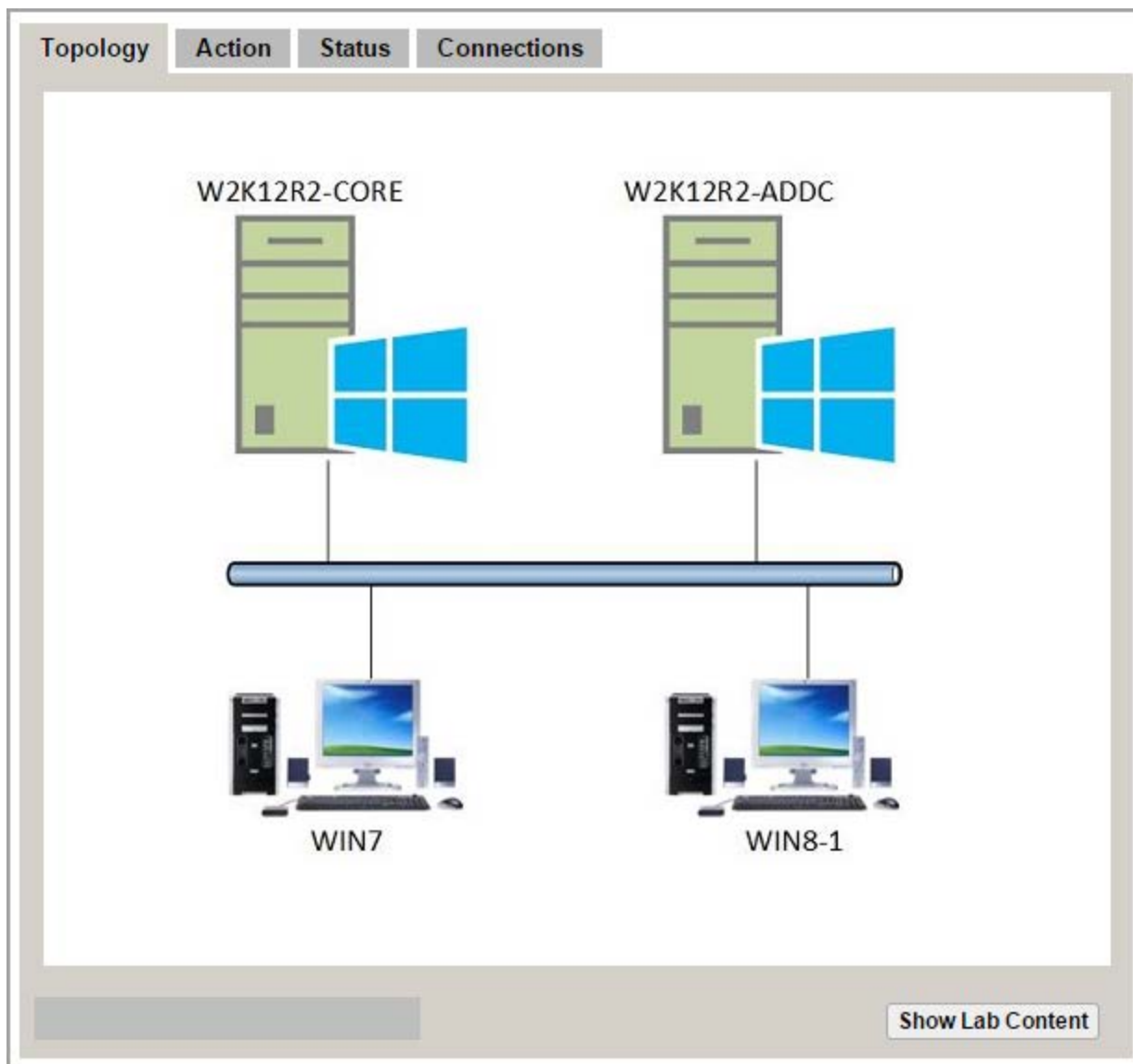


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Topology



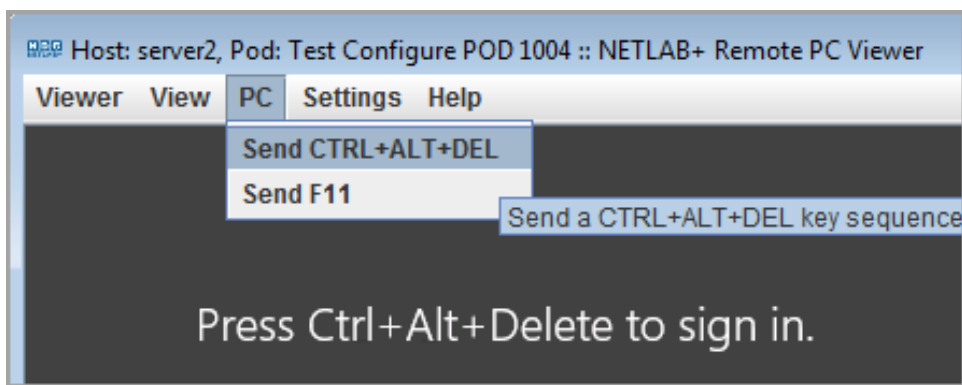
1 Group Policy Objects (GPOs)

Group Policy is a set of rules and settings for users and devices on the domain network.

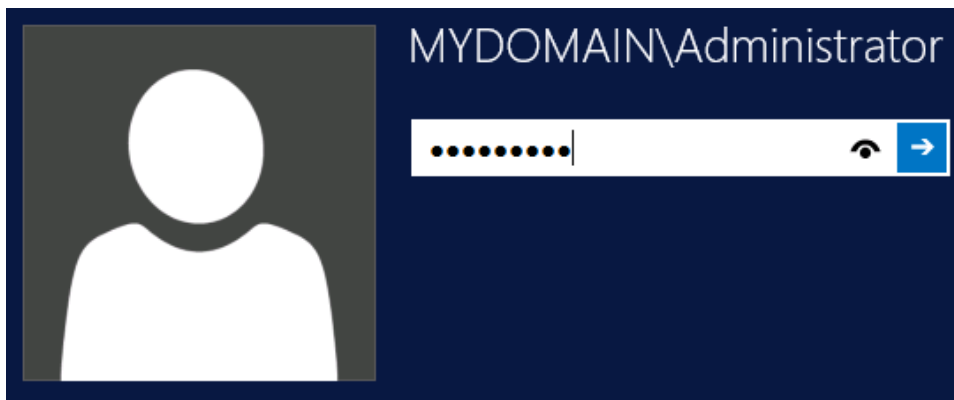
1.1 Starter GPOs

Starter GPOs are used as baselines to store common policy settings that can then be reused for multiple GPOs.

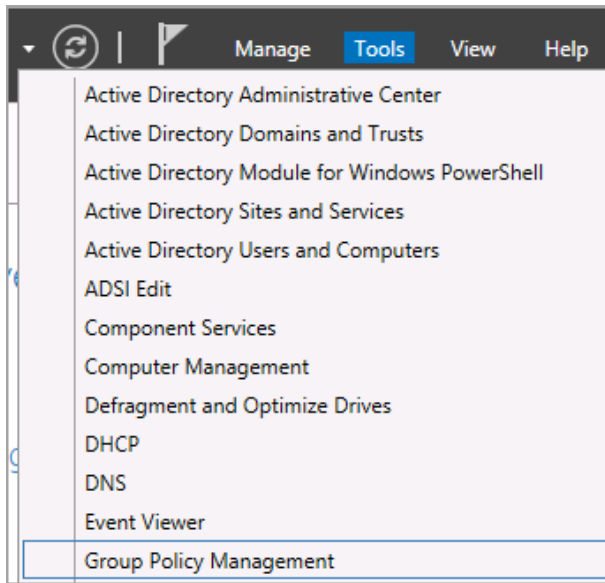
1. Open a console to the Windows W2K12R2-ADDC server by clicking the icon in the topology. Click “PC > Send CTRL+ALT+DEL”.



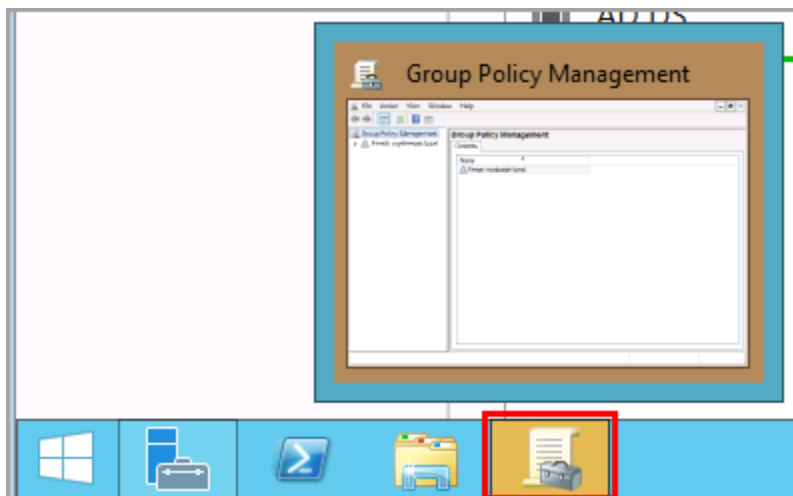
2. Type **P@ssw0rd1** as the administrator password and hit “Enter”.



3. On the “Server Manager –Dashboard” navigate to “Tools > Group Policy Management”.



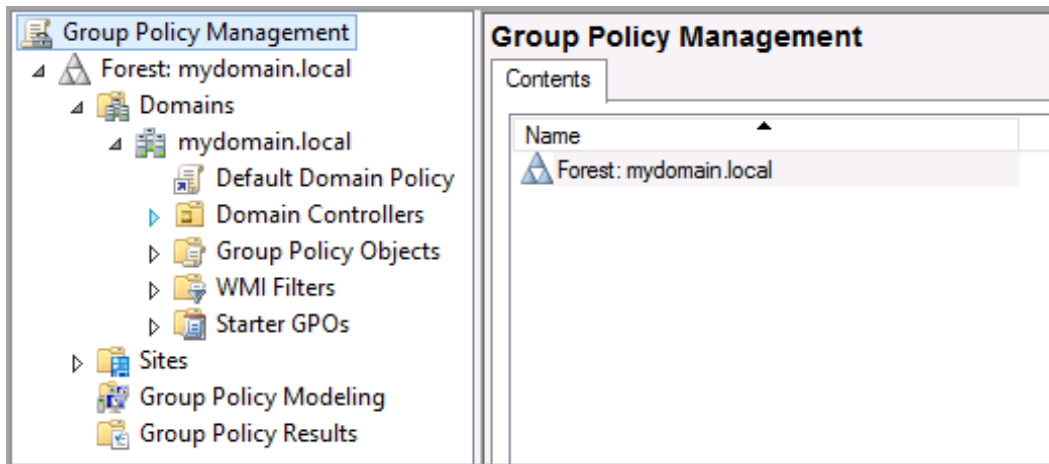
4. Click the “Group Policy Management” link that is flashing in the taskbar.



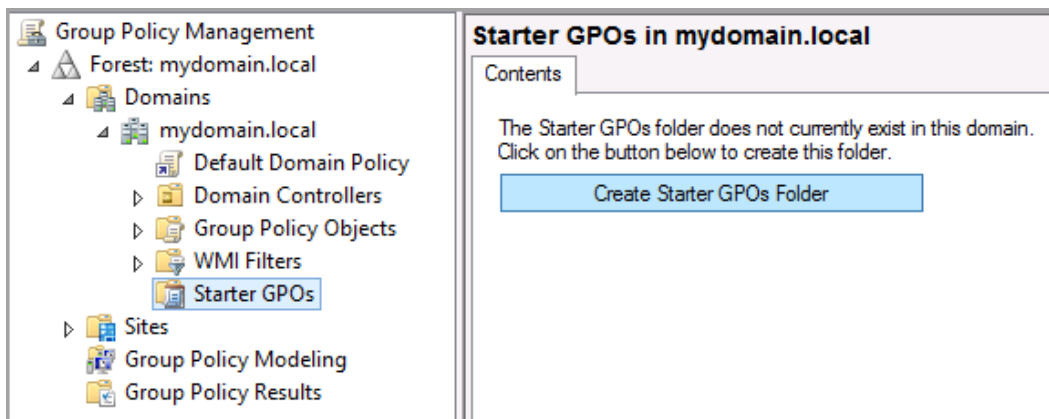
5. Expand the size of the window by clicking the Maximize square.



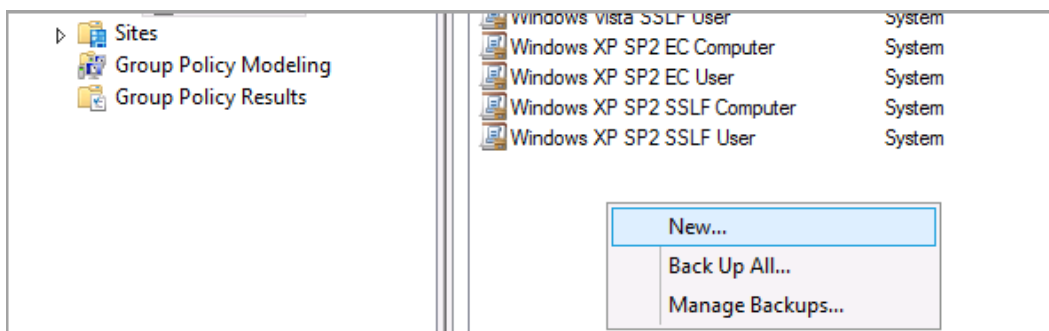
6. On the “Group Policy Management” window, expand “Forest: mydomain.local”, expand “Domains” and expand “mydomain.local”.



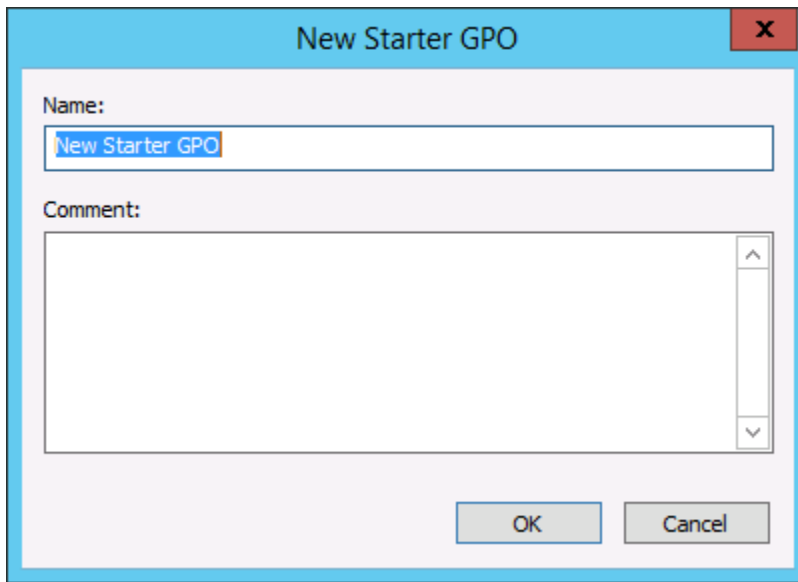
7. Click on the “Starter GPOs” folder and click “Create Starter GPOs Folder”



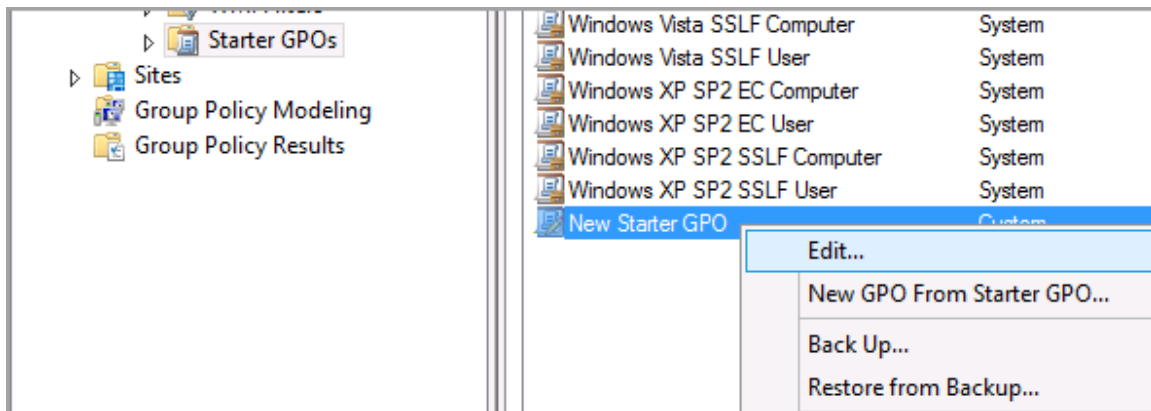
8. Right click the white area under “Windows XP SP2 SSLF User” and select “New”.



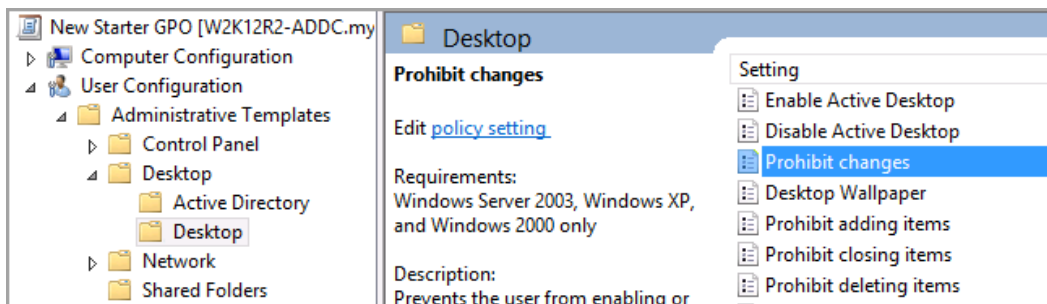
9. Leave the default name “New Starter GPO” and click “OK”.



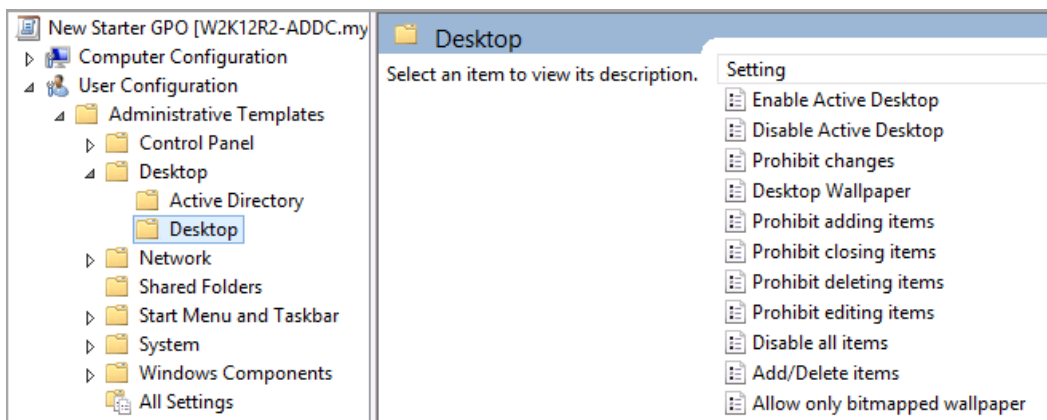
10. Right click on “New Starter GPO” and click “Edit”.



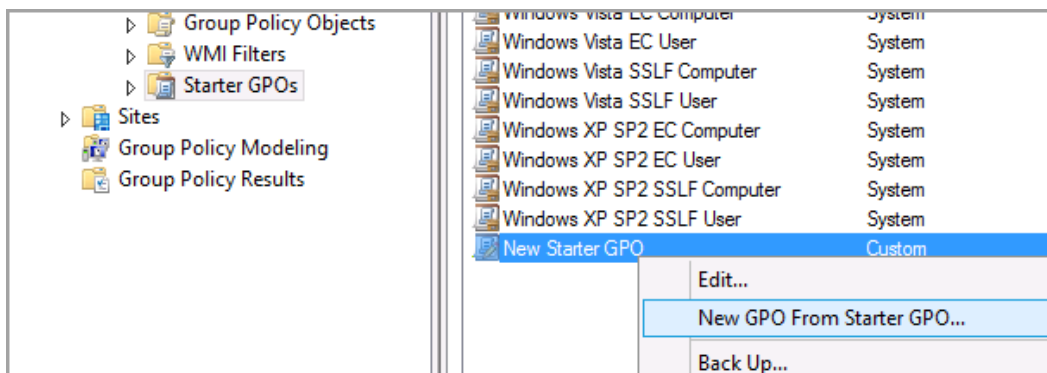
11. Under “User Configuration”, expand “Administrative Templates”. Expand “Desktop” and click on the “Desktop” folder.



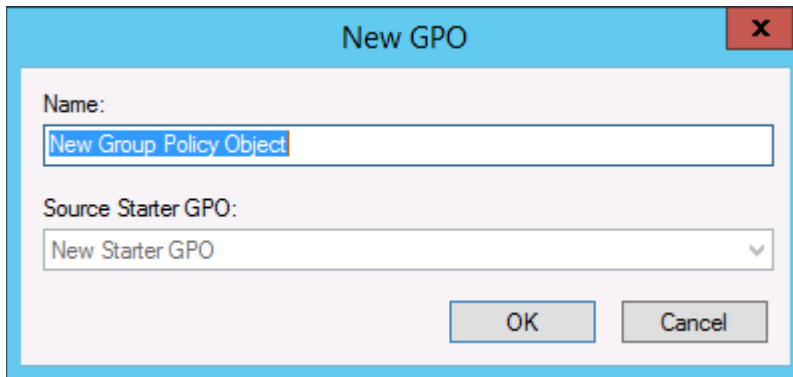
12. The list in the right hand pane contains examples of settings that can be applied within a group policy object. Click on any of the settings to read info about the specific setting. Close the GPO Editor when you are finished.



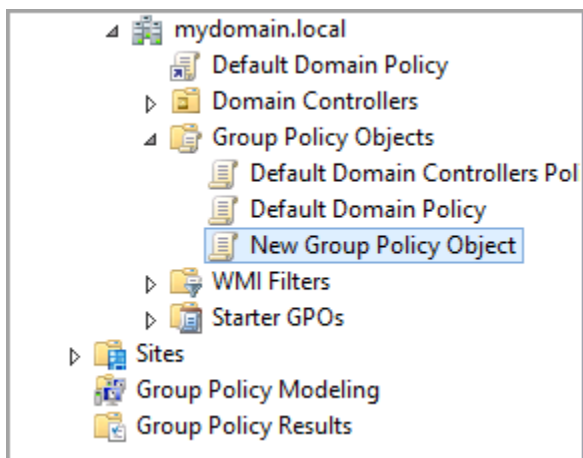
13. On the “Group Policy Management” window, right click on the “New Starter GPO” and select “New GPO From Starter GPO”.



14. Leave the default name “New Group Policy Object”. Notice the source starter GPO and click “OK”.



15. In the left pane, expand “Group Policy Objects” to see the new GPO created from the Starter GPO. The GPO is ready to be linked to an organizational unit or even the entire domain.

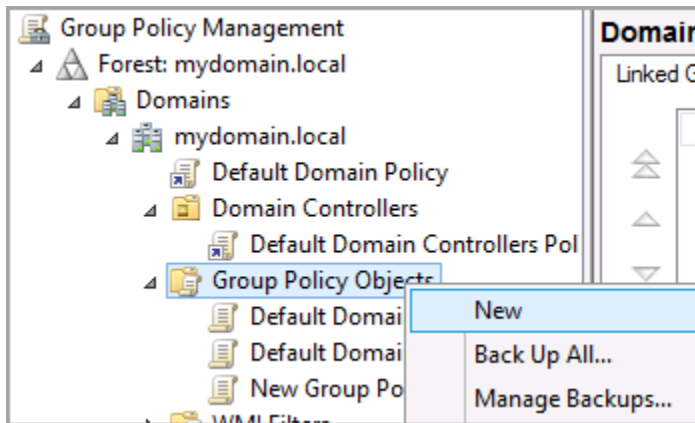


2 Central Store

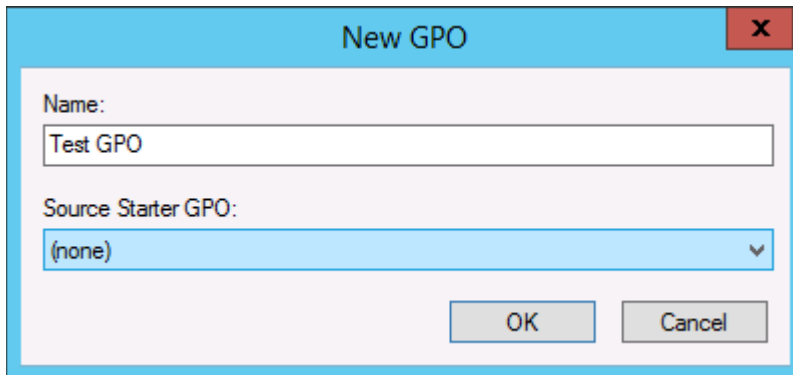
As new operating systems are released, Microsoft will release new template files or ADMX files. Creating a Central Store will allow you to create a single installation that is then replicated to all domain controllers.

2.1 Converting Local Store to Central Store

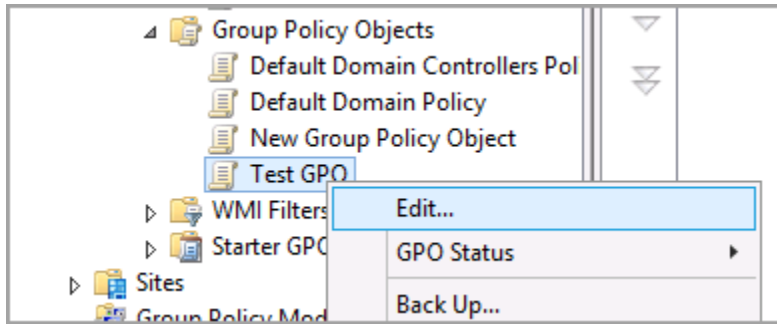
1. We can also create GPOs without using starter GPOs. Right click on “Group Policy Objects” and click “New”.



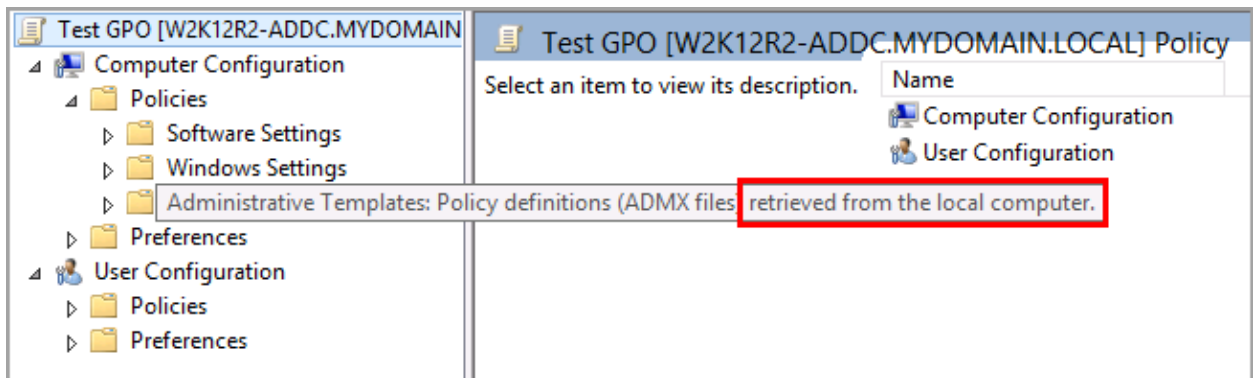
2. Type **Test GPO** as the name. The “New GPO” window gives us the option to source from a starter GPO, but we will leave that set to none. Click “OK”



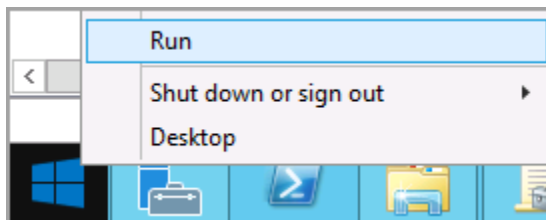
3. Right click on “Test GPO” and click Edit.



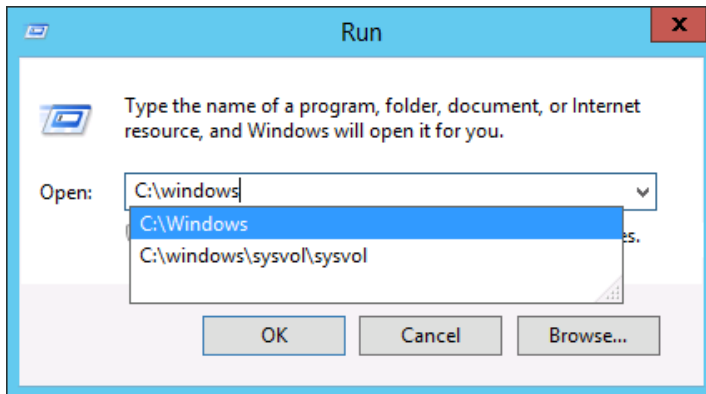
4. Under “Computer Configuration”, expand “Policies” and hover the mouse over “Administrative Templates”. Notice that the administrative templates are being retrieved from the local computer. Close the “Group Policy Management Editor”.



5. Right click the “Start Button” and select “Run”.



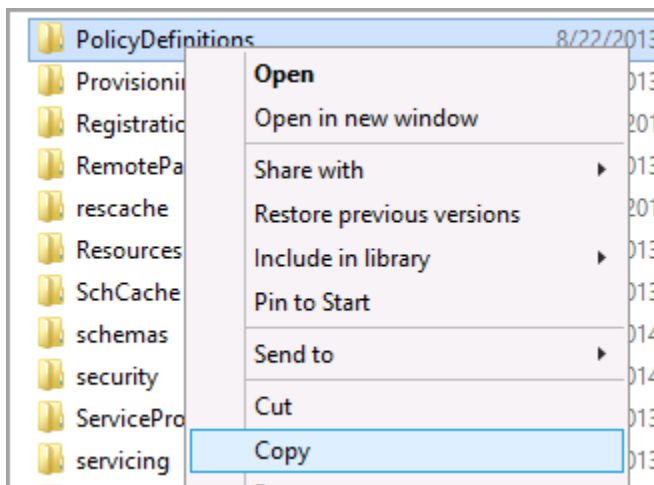
6. Type **C:\windows** in the run box and click “OK”. (This will open the windows folder in file explorer)



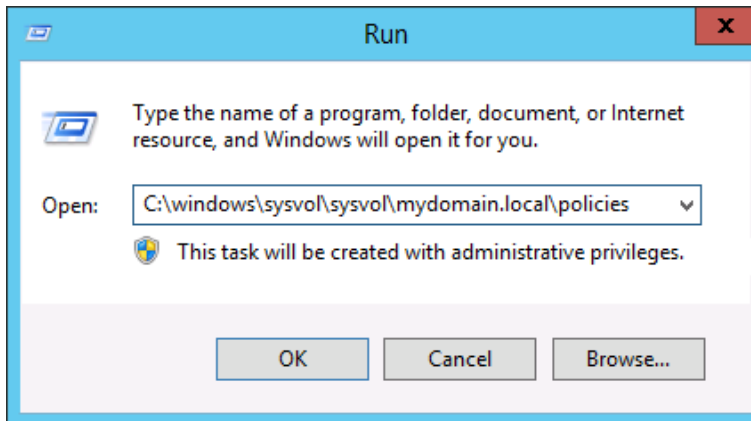
7. Scroll down to “Policy Definitions”. This is the local storage for the Administrative Templates.

	Name			Date modified	Type
★ Favorites	Desktop				
	Downloads				
	Recent places				
This PC	Desktop				
	Documents				
	Downloads				
	NTDS			11/26/2014 9:13 AM	File folder
	Offline Web Pages			8/22/2013 11:39 AM	File folder
	Panther			9/16/2014 11:13 PM	File folder
	PLA			8/22/2013 11:39 AM	File folder
	PolicyDefinitions			8/22/2013 11:46 AM	File folder
	Provisioning			8/22/2013 11:39 AM	File folder
	Registration			11/26/2014 9:14 AM	File folder
	RemotePackages			8/22/2013 11:39 AM	File folder

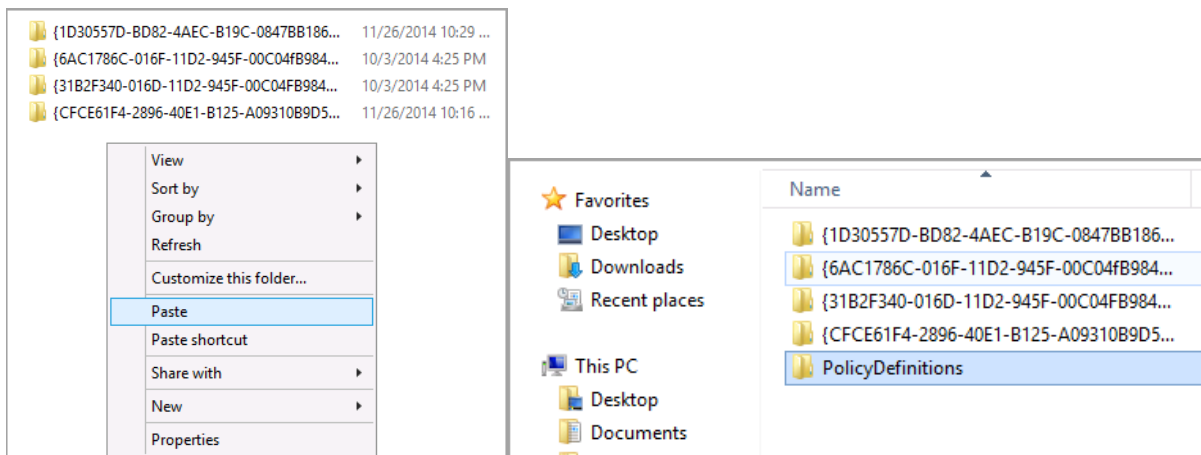
8. Right click on the “Policy Definitions” folder and select copy.



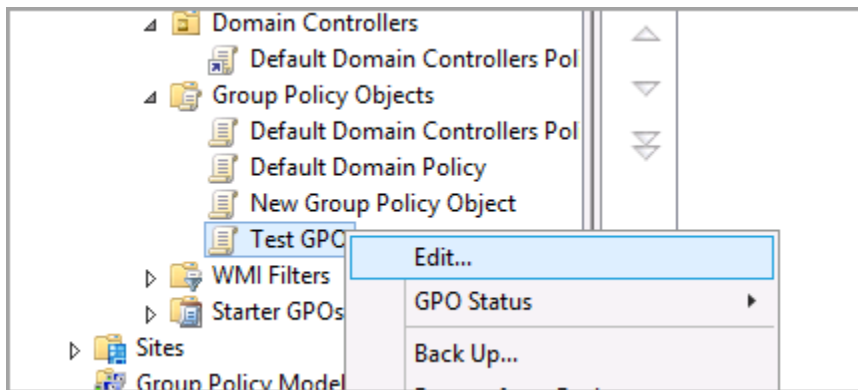
9. Right click on the “Start Button” and select “Run”. This time, type **C:\windows\sysvol\sysvol\mydomain.local\policies** and click “OK”.



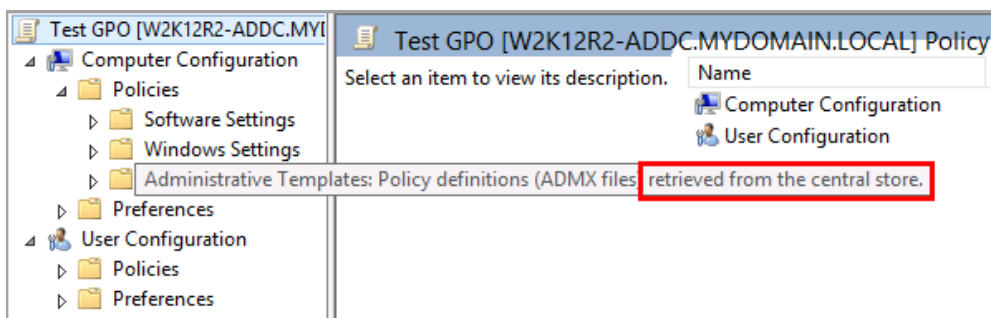
10. Right click in the white area under the last folder and click “Paste”. Close the file explorer windows.



11. Right click on “Test GPO” and select “Edit”.

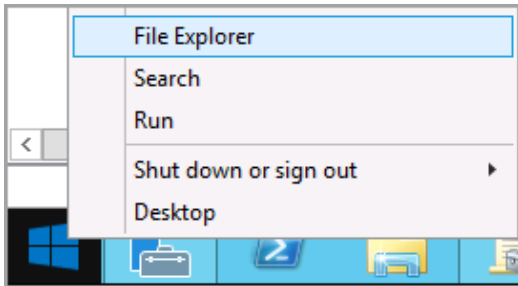


12. Expand Policies and hover the mouse on “Administrative Templates”. We can now see that the ADMX files are being retrieved from the central store. These files will now be replicated to all domain controllers on the domain.

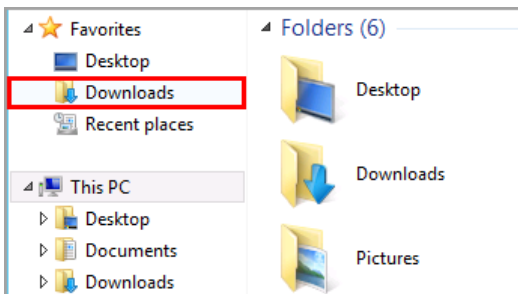


2.2 Updating the Central Store

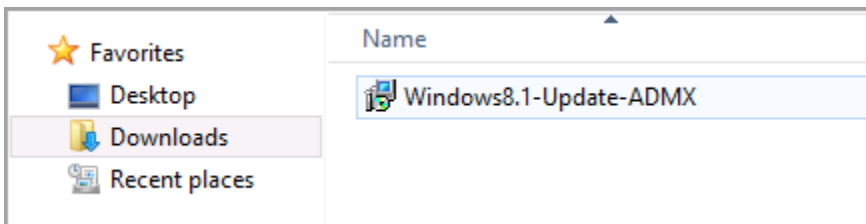
1. Right click the start button and select “File Explorer”.



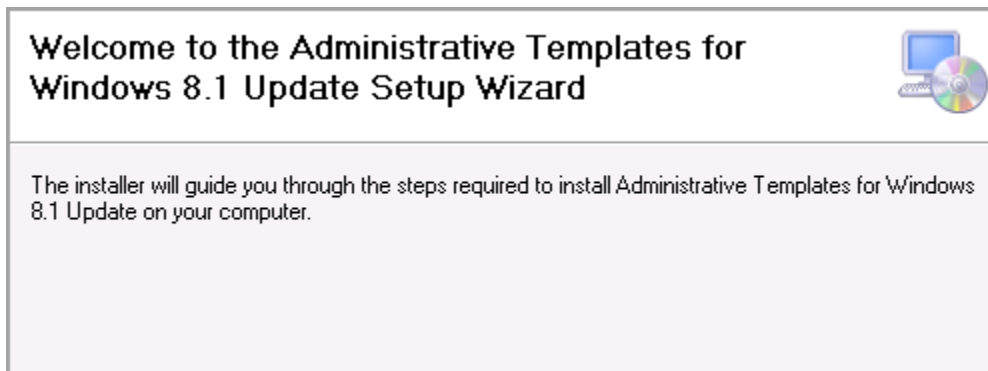
2. Click on the “Downloads” link in the left pane.



3. Double click on the ADMX update file that was downloaded from Microsoft for this lab.



- Click “Next” at the Update Setup Wizard window.

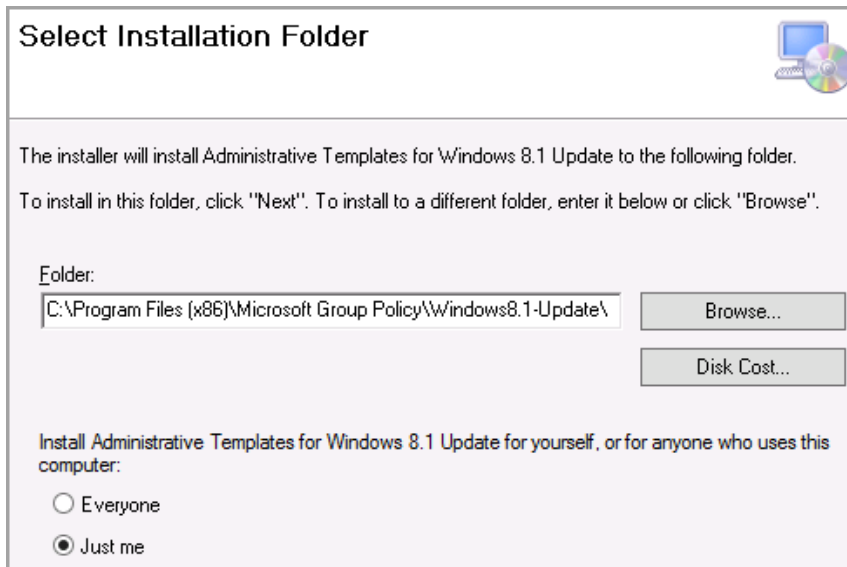


- Click the radio button next to “I Agree” and click “Next”.

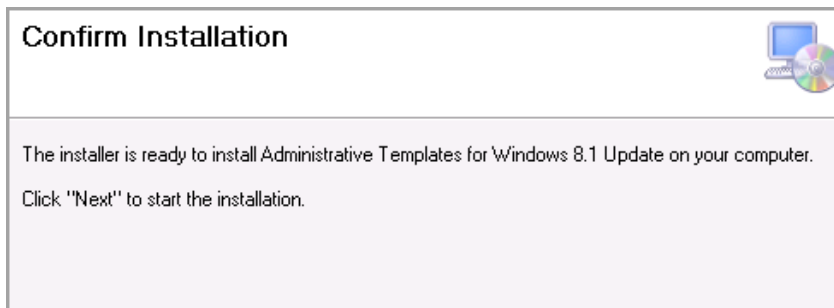


(Note: An administrator may not want to upgrade all of the Central Store, so you can use the default installation path and move templates to the Central Store as needed.)

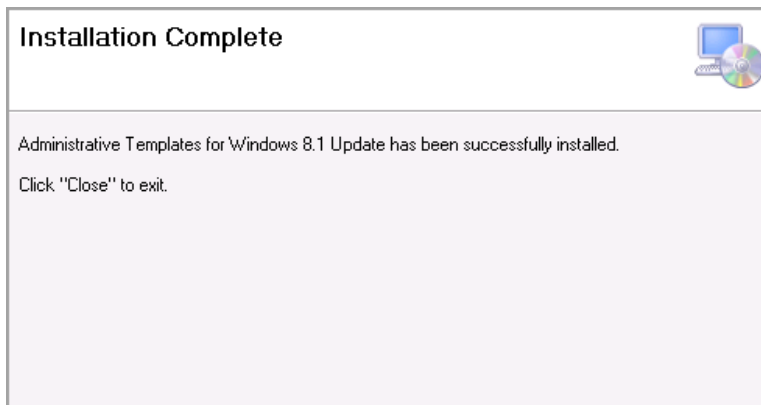
6. On the “Select Installation Folder” window, click “Next”. (Make note of the installation folder.)



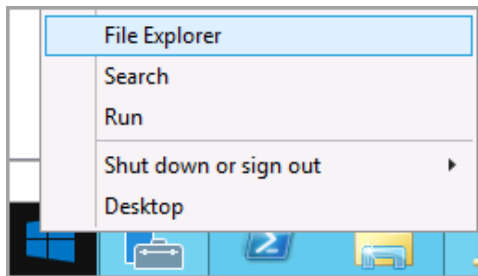
7. On the “Confirm Installation” window, click “Next”.



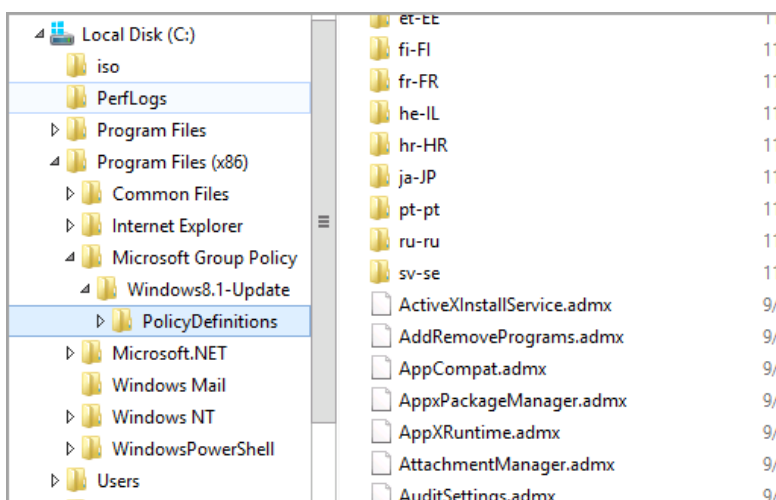
8. On the “Installation Complete” window, click “Close”.



9. Right click the start button and select “File Explorer”.



10. In the left pane, expand “Local Disk (C:)”, expand “Program Files (x86)”, expand “Microsoft Group Policy”, expand “Windows8.1-Update” and left click on the “Policy Definitions” folder. These are the new Policies and can be copied over to the Central Store as needed. Close the “File Explorer” windows.

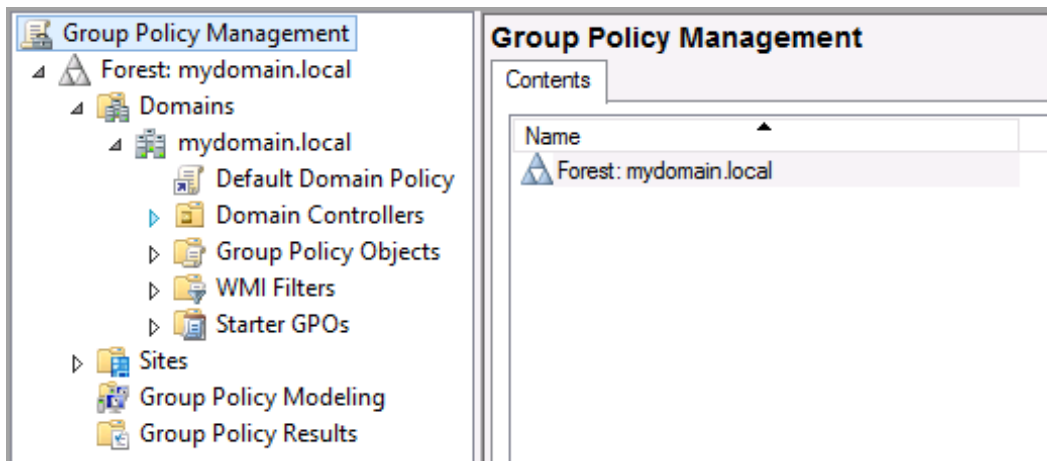


3 GPO Links

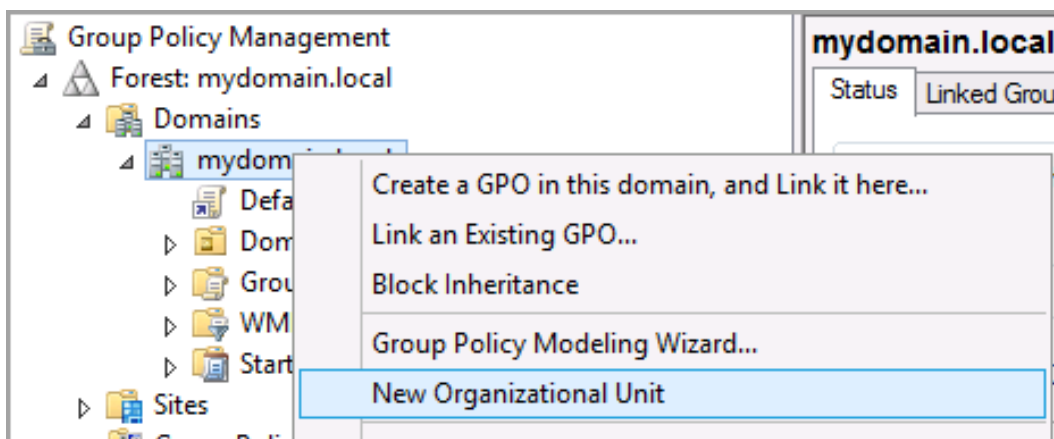
Group Policy Objects are dormant until linked to an OU, a site or a domain. Any OUs created under “Group Policy Management” will show up in “Active Directory Users and Computers” and vice versa.

3.1 Linking Group Policy Objects

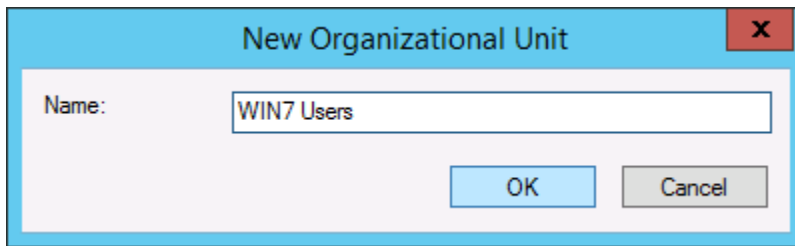
1. On the “Group Policy Management” window, expand “Forest: mydomain.local”, expand “Domains” and expand “mydomain.local”.



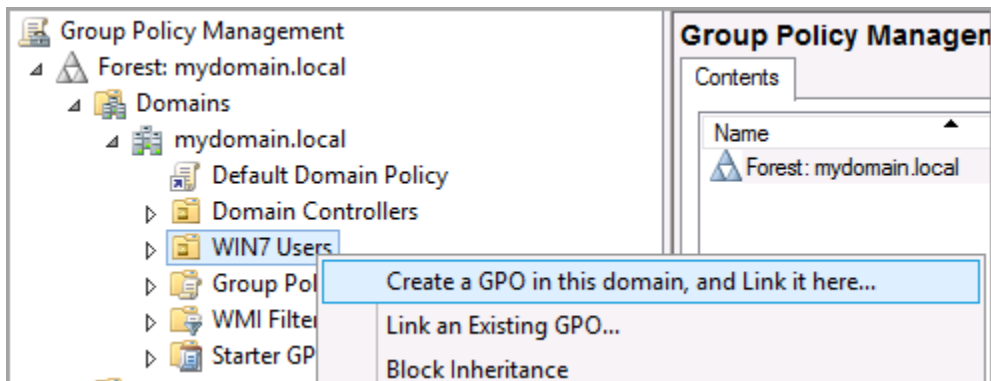
2. Right click on “mydomain.local” and select “New Organizational Unit”.



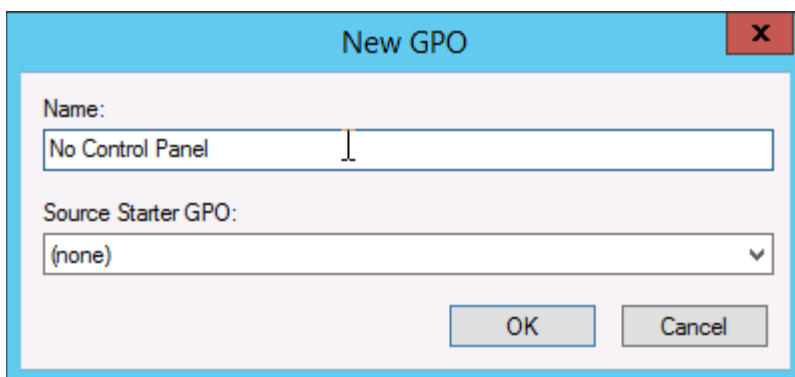
3. Type the name **WIN7 Users** and click “OK”.



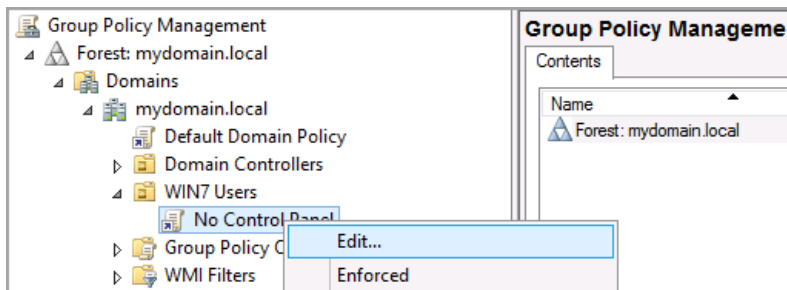
4. Right click on the “WIN7 Users” OU and select “Create a GPO in this domain, and Link it here”.



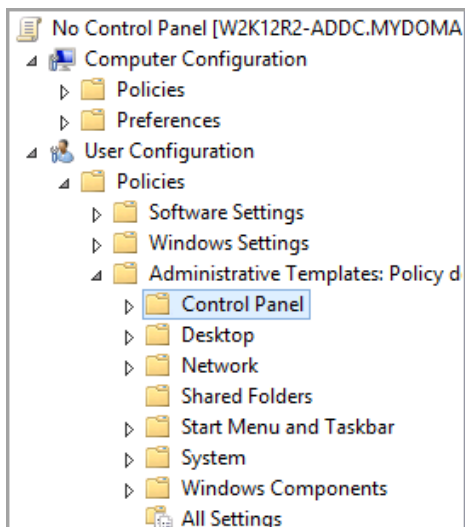
5. Type **No Control Panel** as the name and click “OK”.



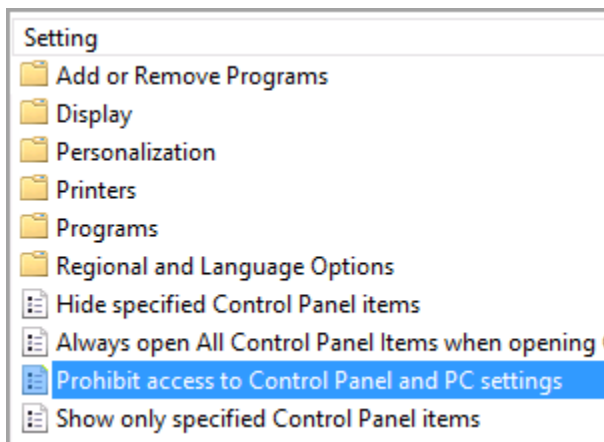
6. Expand the “WIN7 Users” OU, right click on the “No Control Panel” GPO and click “Edit”.



7. Under “User Configuration”, expand “Policies”, expand “Administrative Templates” and click on the “Control Panel” folder.



8. In the right pane, double click on “Prohibit access to Control Panel and PC settings”.



9. On the settings page, select the radio button next to “Enabled” and click “OK”.

Prohibit access to Control Panel and PC settings

Previous Setting Next Setting

☐ Not Configured Comment:

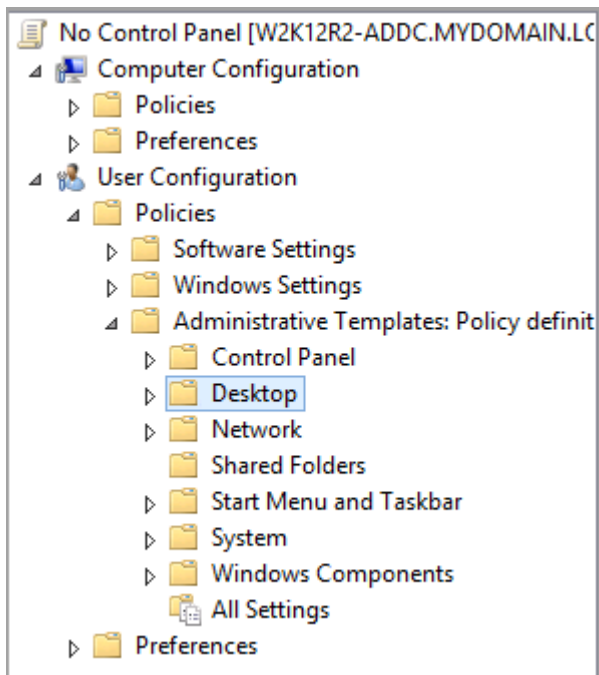
☒ Enabled

☐ Disabled

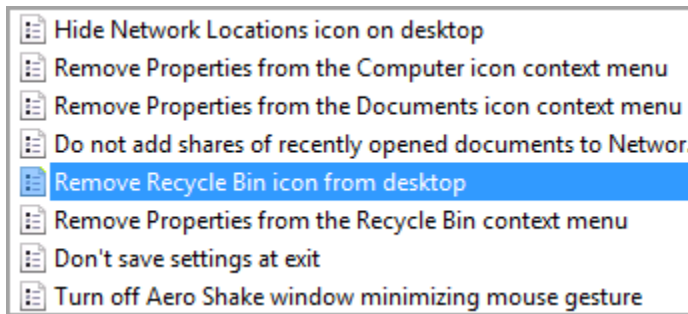
Supported on: At least Windows 2000

Options: Help:

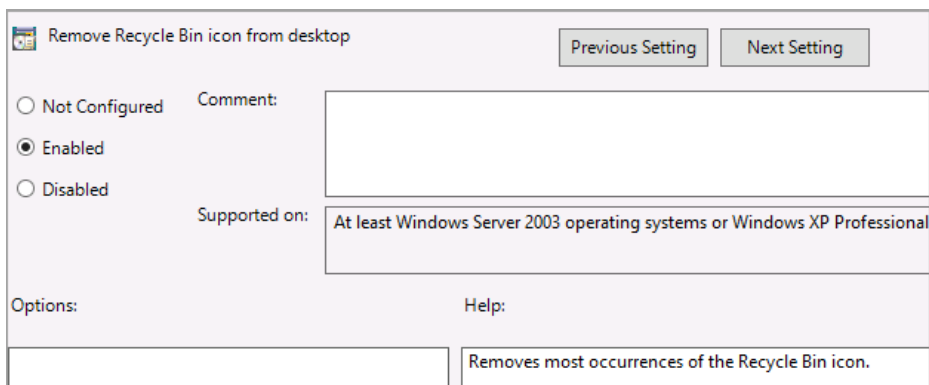
10. While we're at it, let's remove the recycle bin from the desktop. Under “Administrative Templates”, click on the “Desktop” folder.



11. In the right hand pane, scroll down and double click on “Remove Recycle Bin icon from desktop”.



12. On the settings page, select the radio button next to “Enabled” and click “Ok”.



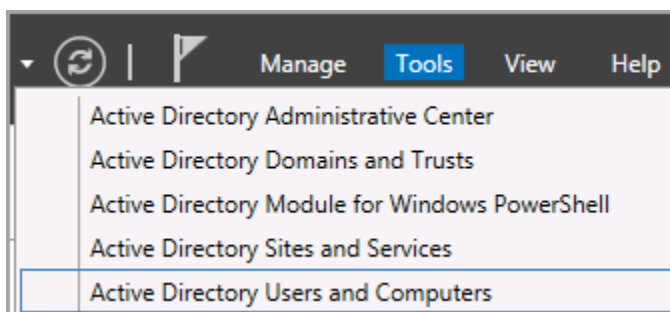
13. Close the GPO Editor.

3.2 Moving Objects into the OU

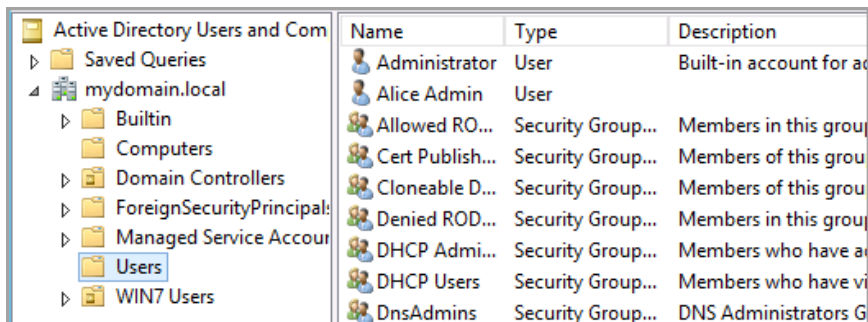
1. So we have our GPO, and it's linked to an OU, but we don't have anything in the OU. Open the "Server Manager – Dashboard" by clicking the link in the taskbar.



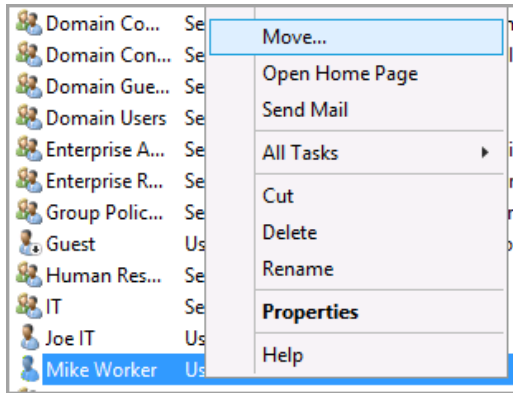
2. On the "Server Manager – Dashboard", navigate to "Tools > Active Directory Users and Computers".



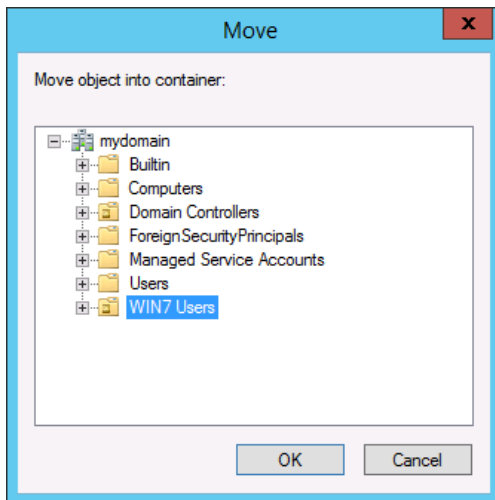
3. Expand "mydomain.local" and click the "Users" container.



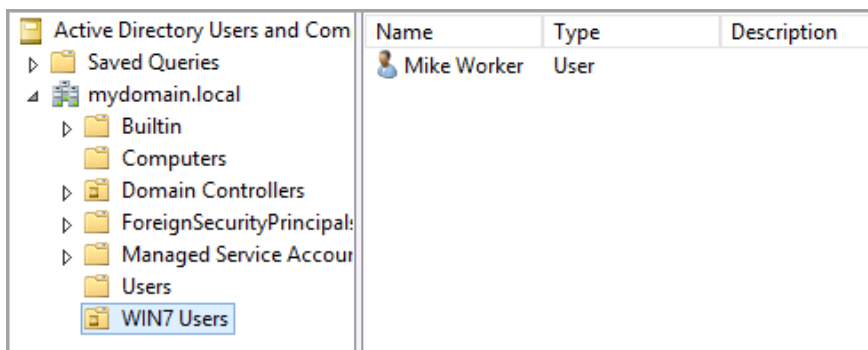
4. Scroll down and right click on the user “Mike Worker” and select “Move”.



5. Highlight the “WIN7 Users” OU and click “OK”.

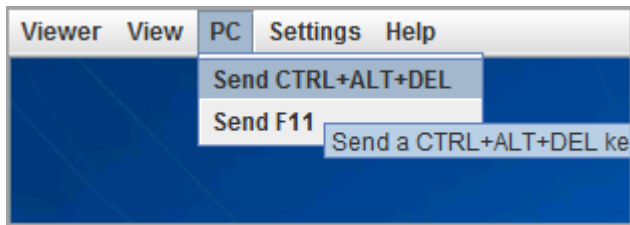


6. Click on the “WIN7 Users” OU to verify the user object moved.

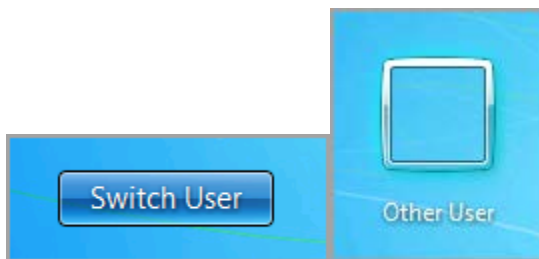


3.3 Verify the GPO

1. Open a console to the WIN7 machine. Click “PC > Send CTRL+ALT+DEL”.



2. Select “Switch User”, then select “Other User”.

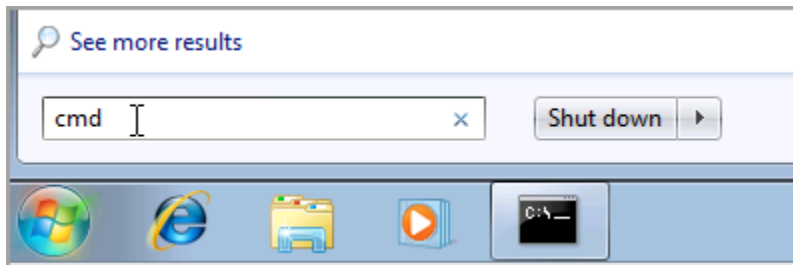


3. As the username, type **mydomain\mikeworker** and use **Password1** as the password. Hit “Enter”.



(Note: Group Policy can take up to 5 minutes to update. We will force the update with the **gpupdate** command.)

4. On the WIN7 machine, left click the start button and type **cmd** in the search bar. Hit “Enter”.



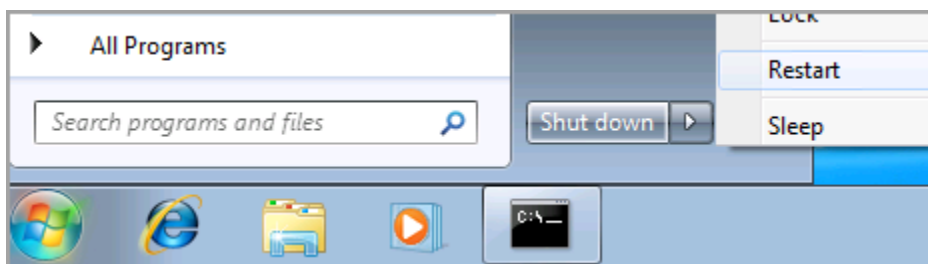
5. On the Command Prompt type, **gpupdate /force** and hit “Enter”.

```
C:\Users\mikeworker>gpupdate /force
Updating Policy...

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

C:\Users\mikeworker>_
```

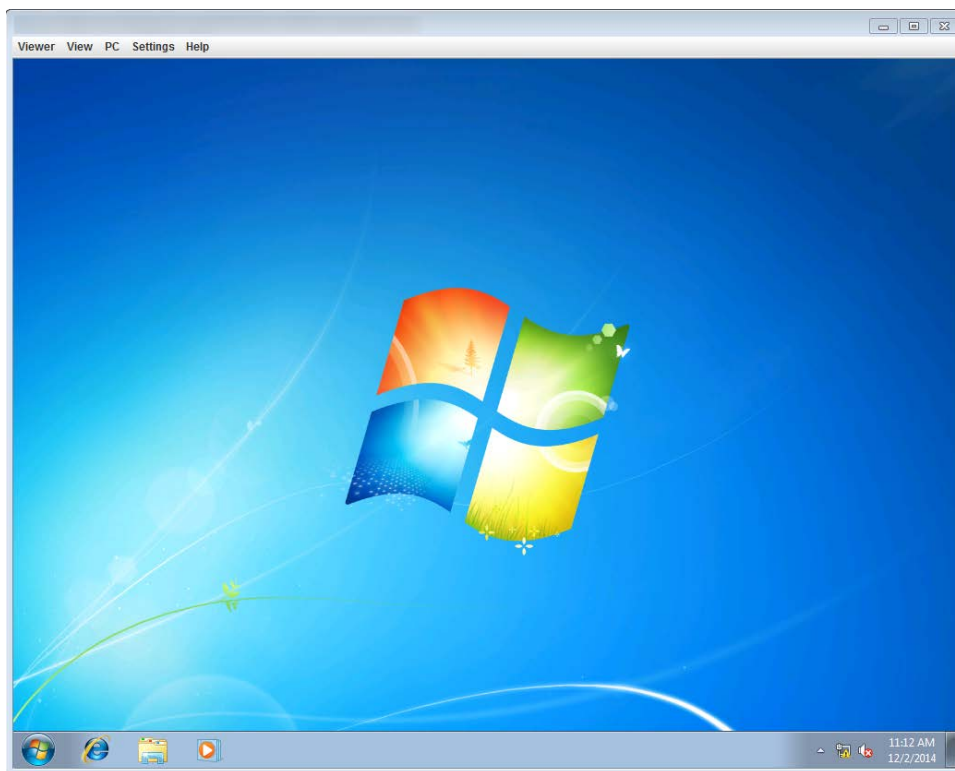
6. Reboot the WIN7 machine by left clicking the start button and clicking the arrow to the right of shut down and selecting “Restart”.



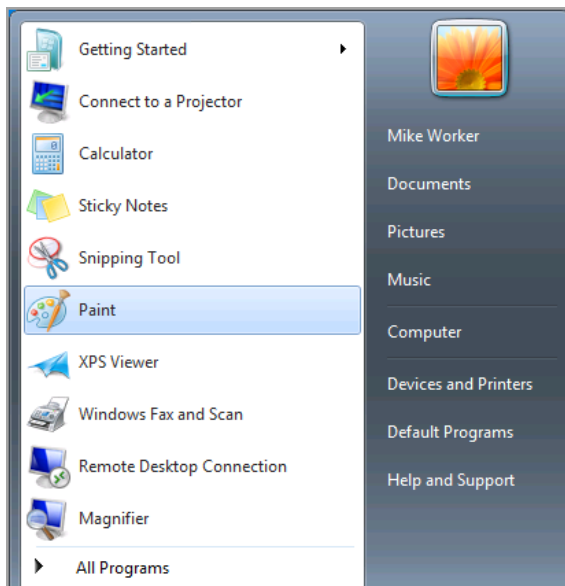
7. Log on to the WIN7 machine by clicking “PC > Send CTRL+ALT+DEL” and entering **Password1** as the password for mydomain\mikeworker.



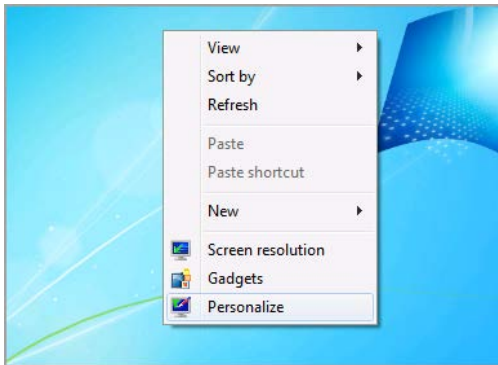
8. Once logged in, we can see that the “Recycle Bin” icon is no longer showing on the desktop.



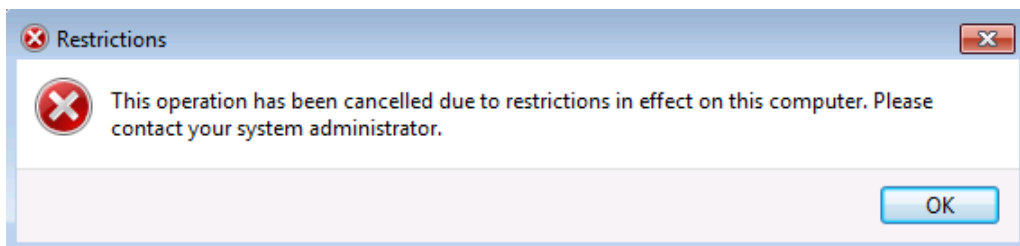
9. Left click on the start button and we can see that “Control Panel” is no longer listed.



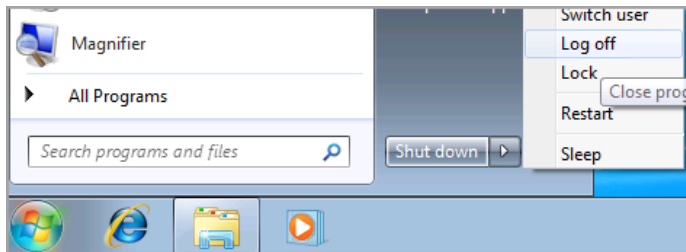
10. Right click the desktop and select “Personalize”.



11. You will receive a restrictions alert because of the GPO we linked to the WIN7 Users OU.

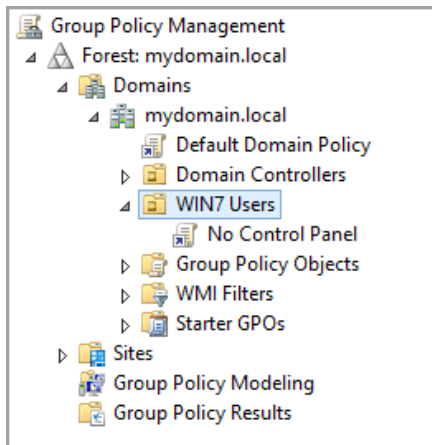


12. Log out of the WIN7 machine by left clicking the start button, clicking the arrow to the right of shut down and selecting “Log Off”.

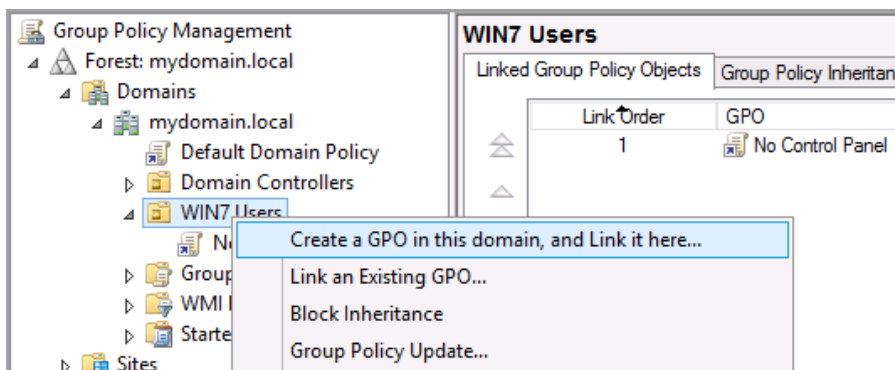


3.4 Managing Multiple GPOs

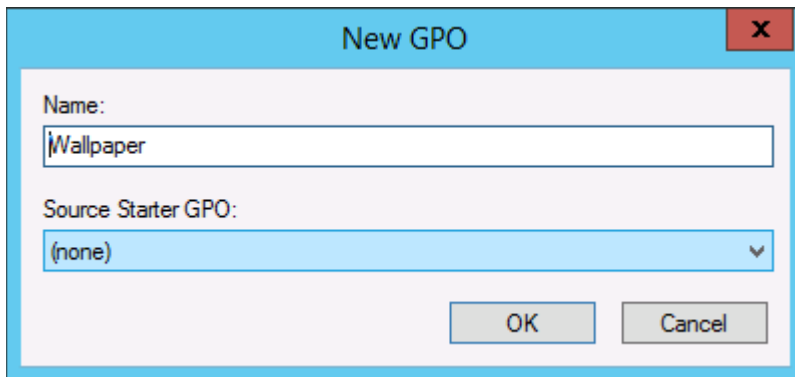
1. Return to the W2K12R2-ADDC. On the “Group Policy Management” window, left click on the “WIN7 Users” OU.



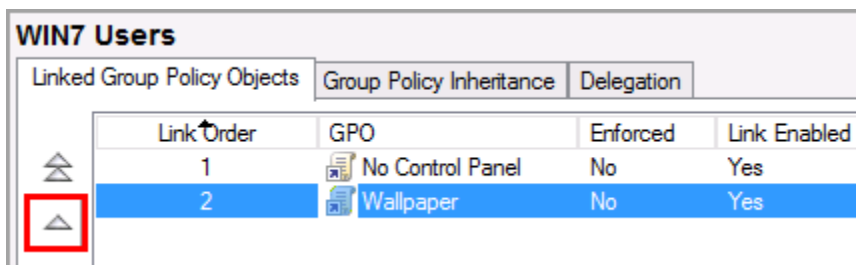
2. In the right pane, we can see that only one GPO is linked here. Right click “WIN7 Users” and select “Create a GPO in this domain, and Link it here”.



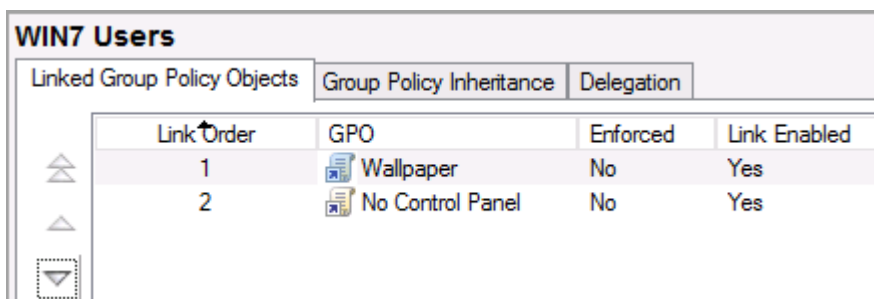
3. Type **Wallpaper** as the name and click “OK”.



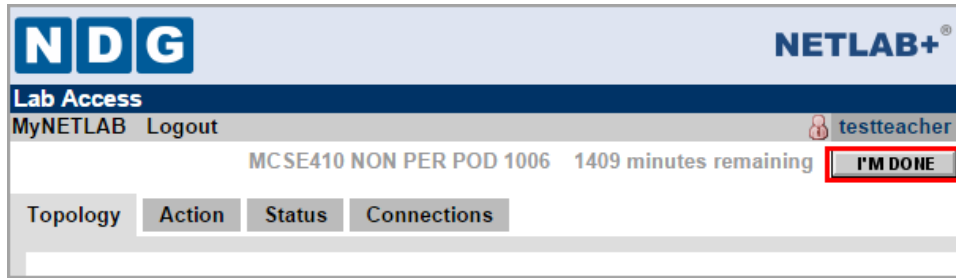
4. Left click on “Wallpaper” and click the single “Move Up” arrow to the left.



5. This setting allows the administrator to select the order in which GPOs are applied to an object.



Take any screenshots and notes required by your instructor and click “I’M DONE” at the top of the topology page. You may complete this lab as many times as you wish by making a new reservation.



4 Research (Optional)

1. LSDOU (Local, Site, Domain, Organizational Unit)
2. Group Policy Inheritance

References

1. Group Policy Overview
<http://technet.microsoft.com/library/hh831791>
2. Managing AMDX files
<http://technet.microsoft.com/en-us/library/cc709647.aspx>
3. Designing a Group Policy Infrastructure
<http://technet.microsoft.com/en-us/library/c75e3e6f-c322-4220-b205-46c6e9ba7674>

