Module 6: Troubleshooting Group Policy

Lab: Troubleshooting Group Policy

**Scenario**

A number of users have reported problems with their computers. The helpdesk thing these problems might be related to Group Policy settings. They have insufficient permissions to investigate further and have escalated the problems to you for resolution.

**Objectives**

After completing this lab, you will be able to:

* Configure GPOs
* Troubleshoot a GPO issue (1)
* Troubleshoot a GPO issue (2)
* Troubleshoot a GPO issue (3)

Exercise 1: Configuring GPOs

Task 1: Use the GPMC

1. Switch to [**LON-DC1**](urn:gd:lg:a:select-vm) send the [**CTRL+ALT+DEL**](urn:gd:lg:a:send-vm-key-combo) command and login as [**ADATUM\AdatumAdmin**](urn:gd:lg:a:send-vm-keys) with the password [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys)
2. On **LON-DC1**, in the Server Manager console, select the **Tools** menu, and then select **Group Policy Management**.
3. Expand **Forest: Adatum.com**, expand **Domains**, and then select **adatum.com**.
4. Select the **Linked Group Policy Objects** tab. Notice that the Default Domain Policy GPO links to the root of the adatum.com domain.
5. Right-click **adatum.com**, and then select **Create a GPO in this domain, and Link it here**.
6. In the **New GPO** dialog box, in the **Name** text box, enter [**Preferences**](urn:gd:lg:a:send-vm-keys), and then select **OK**.
7. In the navigation pane, expand **adatum.com**.
8. Select **Preferences**.
9. Select **OK** to close the warning pop-up window.
10. On the **Scope** tab, verify that no WMI filters are applied.
11. On the **Settings** tab, verify that no settings are defined in this GPO.
12. In the navigation pane, right-click **Preferences**.
13. In the context menu, select **Edit**.
14. In the Group Policy Management Editorwindow, under **User Configuration**, expand **Preferences**, expand **Windows Settings**, and then select **Shortcuts**.
15. Right-click **Shortcuts**, point to **New**, and then select **Shortcut**.
16. In the **New Shortcut Properties** dialog box, enter the following information, and then click **OK**:
    * Action: **Create**
    * Name: [**Notepad**](urn:gd:lg:a:send-vm-keys)
    * Target type: **File System Object**
    * Location: **Desktop**
    * Target Path: **C:\Windows\System32\notepad.exe**
17. Close the Group Policy Management Editor.
18. Close the Group Policy Management Console.
19. Switch to [**LON-CL1**](urn:gd:lg:a:select-vm) and login as [**ADATUM\AdatumAdmin**](urn:gd:lg:a:send-vm-keys) with the password [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys)
20. Right-click **Start** and then click **Windows Terminal (Admin)**.
21. Click **Yes** at the User Account Control prompt.
22. In the Windows PowerShell Command Prompt window, at the command prompt, run the following command:
23. gpupdate /force
24. When the Group Policy update completes, close the Command Prompt window. Notice that the Notepad shortcut now displays on the desktop. Note that the shortcut might appear earlier.

**Results**: After completing this exercise, you will have successfull configured GPOs.

Exercise 2: Resolving Group Policy Application (1)

**Scenario**

In this exercise, you will resolve the reported GPO application problem that tier 1 help-desk staff could not resolve.

| **Incident Record** |
| --- |
| **Incident Reference Number:** 743219 |
| Date and time of call: October 29, 15:27 |
| User: Claire |
| Status: OPEN |
| **Incident Details** |
| The user reports that the Research computer lab configuration is not applying properly to a new computer named LON-CL2. |
| **Additional Information** |
| The user reports that a new computer in the Research computer lab is not configured properly. The standardized settings are applying correctly to all other Research lab computers. |
| I have verified that the computer is joined to the domain properly. |
| On the other computers, there is a desktop shortcut for the Research Lab application. If this icon appears on the desktop, then we know that the settings are applying properly. This setting should apply regardless of the user who signs in. |
| **Plan of Action** |
| **Resolution** |

Task 1: Review the help-desk Incident Record for incident 743219

* Review the help-desk Incident Record 743219 in the Student Handbook exercise scenario.

Task 2: Update the Plan of Action section

1. Review the **Additional Information** section of the Incident Record in the Student Handbook's exercise scenario.
2. Update the **Plan of Action** section of the Incident Record with your recommendations.

Task 3: Attempt to resolve the problem

1. Switch to [**LON-CL2**](urn:gd:lg:a:select-vm) and login as [**ADATUM\AdatumAdmin**](urn:gd:lg:a:send-vm-keys) with the password [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys)
2. On **LON-CL2**, verify that the desktop shortcut for the Research application is not present.
3. Switch to [**LON-DC1**](urn:gd:lg:a:select-vm) and send the [**CTRL+ALT+DEL**](urn:gd:lg:a:send-vm-key-combo) command then login as [**ADATUM\AdatumAdmin**](urn:gd:lg:a:send-vm-keys) with the password [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys)
4. Select **Tools** and then select **Active Directory Users and Computers**.
5. In Active Directory Users and Computers, expand **Adatum.com**, and then select **Computers**.
6. Right-click **LON-CL2** or activate its context menu, and then select **Move**.
7. In the Move window, expand **Research**, select **Lab**, and then select **OK**.
8. Close Active Directory Users and Computers.
9. Switch to [**LON-CL2**](urn:gd:lg:a:select-vm) and login as [**ADATUM\AdatumAdmin**](urn:gd:lg:a:send-vm-keys) with the password [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys)
10. Right-click **Start**, point to **Shut down or sign out**, and then select **Restart**.
11. On [**LON-CL2**](urn:gd:lg:a:select-vm) and login as [**ADATUM\AdatumAdmin**](urn:gd:lg:a:send-vm-keys) with the password [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys)
12. Right-click **Start** or activate its context menu, and then select **Windows Terminal (Admin)**.
13. At the command prompt, run the following command:
14. gpupdate /force
15. After the policy update completes, right-click **Start**, point to **Shut down or sign out**, and then select **Sign out**.

**Note:** The shortcut might already be available.

1. On **LON-CL2**, sign back in by using the following credentials:
   * Username: [**Adatum\Claire**](urn:gd:lg:a:send-vm-keys)
   * Password: [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys)
2. Verify that the desktop shortcut **ResearchApp** displays.

**Note:** You might need to repeat steps 10 through 15 several times.

1. Sign out from **LON-CL2**.
2. Update the **Resolution** section of the Incident Record in the Student Handbook:
   * LON-CL2 is located in the Computers container and will not apply the ResearchLabs GPO.
   * Moved LON-CL2 computer account to the Adatum.com/Research/Lab OU, and then restarted the computer.

**Results**: After completing this exercise, you will have resolved GPO application issues successfully.

Exercise 3: Resolving Group Policy Application (2)

**Scenario**

In this exercise, you will resolve the reported GPO application problem that the tier 1 help-desk staff could not resolve.

| **Incident Record** |
| --- |
| **Incident Reference Number:** 746211 |
| Date and time of call: October 30, 16:10 |
| User: Anthony (Marketing Department) |
| Status: OPEN |
| **Incident Details** |
| The user reports that his desktop settings are not applying as per his departmental standards. |
| **Additional Information** |
| The user (Anthony) is not receiving Group Policy settings on his computer, LON-CL1. |
| Other people in his department are not experiencing any issues. I have checked with the Active Directory administrators, and his computer account is in the correct location (Computers). Therefore, the location of the computer account is not an issue. |
| It appears as if GPOs are not applying, as the **gpupdate** command did not work. |
| We rebooted the computer with no improvement. |
| **Incident Record** |
| --- |
| **Plan of Action** |
| **Resolution** |

Task 1: Review the help-desk Incident Record for incident 746211

* Review the help-desk Incident Record 746211 in the Student Handbook's exercise scenario.

Task 2: Update the Plan of Action section

1. Review the **Additional Information** section of the Incident Record in the Student Handbook's exercise scenario.
2. Update the **Plan of Action** section of the Incident Record with your recommendations:
   * Visit the user's computer and attempt to determine why Windows is not applying the new policy.
   * Run the **gpupdate** command to review the error.

Task 3: Simulate the problem

1. Switch to [**LON-CL1**](urn:gd:lg:a:select-vm)
2. Open **Windows Terminal (Admin)** and then run the **D:\Labfiles\Mod06\Scenario1.cmd** script.
3. D:\Labfiles\Mod06\Scenario1.cmd
4. Wait while **LON-CL1** restarts.

Task 4: Attempt to resolve the problem

1. [**LON-CL1**](urn:gd:lg:a:select-vm) and login as [**ADATUM\AdatumAdmin**](urn:gd:lg:a:send-vm-keys) with the password [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys)
2. Right-click **Start** and then select **Windows PowerShell (Admin)**.
3. At the Windows PowerShell (Admin) command prompt, run the following command:
4. gpupdate /force
5. Notice that Group Policy fails to update.
6. Close the Windows PowerShell window.
7. Open File Explorer, right-click **This PC**, and then select **Properties**.
8. In Settings, click **Domain or workgroup**.
9. In the **System Properties** dialog box, on the **Computer Name** tab, select **Change**.
10. In the **Computer Name/Domain Changes** dialog box, select **Workgroup**.
11. In the **Workgroup** text box, enter [**TEMP**](urn:gd:lg:a:send-vm-keys), and then select **OK**.
12. To acknowledge the warning, select **OK**.
13. To clear the welcome message, select **OK**.
14. To clear the message about restarting, select **OK**.
15. In the **System Properties** dialog box, on the **Computer Name** tab, select **Change**.
16. In the **Computer Name/Domain** **Changes** dialog box, select **Domain**.
17. In the **Domain** text box, enter [**Adatum.com**](urn:gd:lg:a:send-vm-keys), and then select **OK**.
18. In the Windows Security window, sign in as [**AdatumAdmin**](urn:gd:lg:a:send-vm-keys) by using the password [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys).
19. To clear the welcome message, select **OK**.
20. To clear the message about restarting, select **OK**.
21. In the **System Properties** dialog box, select **Close**, and then select **Restart Now**.
22. Sign back in by using the following credentials:
    * Username: [**Adatum\Anthony**](urn:gd:lg:a:send-vm-keys)
    * Password: [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys)
23. Verify that you can refresh GPOs:
    * Right-click **Start** or activate its context menu.
    * Select **Windows PowerShell (Admin)**.
    * In the **User Account Control** dialog box, sign in as [**AdatumAdmin**](urn:gd:lg:a:send-vm-keys) by using the password of [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys).
    * At the Windows PowerShell command prompt, run the following command:
24. gpupdate /force
25. Sign out from LON-CL1.
26. Update the **Resolution** section of the Incident Record:
    * Ran **GPUpdate**, and saw error related to processing for computer account.
    * Group Policy event log indicated that account information could not be retrieved.
    * The System event log had a NETLOGON error indicating that the computer password might be a problem.
    * Rejoined the domain and the problem is now resolved. The user was signing in with cached credentials.

**Results**: After completing this exercise, you will have resolved GPO application issues successfully.

Exercise 4: (optional) Resolving Group Policy Application (3)

**Scenario**

In this exercise, you will resolve the reported GPO application problem that tier 1 help-desk staff could not resolve.

| **Incident Record** |
| --- |
| **Incident Reference Number:** 741138 |
| Data and time of call: October 30, 16:10 |
| User: Alfie Power (Sales Department) |
| Status: OPEN |
| **Incident Details** |
| The user reports that his desktop settings are not applying as per his departmental standards. |
| **Additional Information** |
| The user (Alfie) is not receiving Group Policy settings on his computer, LON-CL1. |
| Other people in his department are experiencing the same issue. |
| It appears as if GPOs are not applying, as **gpupdate** did not work. |
| We rebooted the computer with no improvement. |
| **Plan of Action** |
| **Resolution** |

Task 1: Review the help-desk Incident Record for incident 741138

* Review the help-desk Incident Record 741138 in the Student Handbook's Exercise Scenario.

Task 2: Update the Plan of Action section

1. Review the **Additional Information** section of the Incident Record in the Student Handbook's Exercise Scenario.
2. Update the **Plan of Action** section of the Incident Record with your recommendations.

Task 3: Attempt to resolve the problem

1. On **LON-CL1**, sign in by using the following credentials:
   * Username: [**Adatum\Alfie**](urn:gd:lg:a:send-vm-keys)
   * Password: [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys)
2. Verify that the Desktop folder SALES does not display.
3. Right-click **Start**, and then select **Windows Terminal**.
4. At the Windows PowerShell command prompt, run the following command:
5. gpupdate /force
6. Verify that the desktop folder SALES still does not display.
7. Switch to [**LON-DC1**](urn:gd:lg:a:select-vm) and if necessary send the [**CTRL+ALT+DEL**](urn:gd:lg:a:send-vm-key-combo) command and and login as [**ADATUM\AdatumAdmin**](urn:gd:lg:a:send-vm-keys) with the password [**Pa55w.rd**](urn:gd:lg:a:send-vm-keys)
8. In Server Manager, select **Tools**, and then select **Group Policy Management**.
9. In Group Policy Management, expand **Forest:Adatum.com**, expand **Domains**, expand **Adatum.com**, and then expand the **Sales** OU.
10. Select the **Sales** GPO.
11. In the **Group Policy Management Console** dialog box, select **OK**.
12. On the **Scope** tab, in Security Filtering, select **Add**.
13. In the **Select User, Computer, or Group** dialog box, enter **Authenticated Users**, and then select **OK**.
14. Close the Group Policy Management Console window.
15. Switch to [**LON-CL1**](urn:gd:lg:a:select-vm)
16. At the command prompt, run the following command:
17. gpupdate /force
18. Verify that the **SALES** folder now displays on the desktop.
19. Sign out from **LON-CL1**.
20. Update the **Resolution** section of the Incident Record in the student handbook:
    * Security filtering not configured for Sales GPO.
    * Added Authenticated Users to security filtering, and then reapplied Group Policy.

**Results**: After completing this exercise, you will have resolved GPO application issues successfully.

**Congratulations!** You have now completed this lab. To continue to the next lab click End Lab in the Tools Menu . If you wish to contiue with this lab at a later date ensure you save the lab environment rather than ending it.