



**NETWORK
DESIGN &
ADMINISTRATION
(NDA) - LAB**

NOTTINGHAM
TRENT UNIVERSITY



Network Design and Administration Lab Book.

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Part 2:

Managing the Network

Lab 6: Group Policy Management

6.1 Creating Group Policy Objects

1. Start the “Windows Server 2008 R2 AD” virtual machine.
2. Type the password into the “password” box and press enter or click on the round blue arrow button. The password should be **P@ssword**. If you have previously received a message prompt that says “Your password has expired and must be changed” then following the instruction given in Lab1, you must have changed the password to P@ssword1. However, use whichever one is the case based on action you have previously performed.
3. Start “Active Directory Users and Computers”.

*Note that **Reporters** and **Editors** Organizational units have been created in the previous labs.*

4. Start the “Group Policy Management” console from the “Administrative Tools” menu.
5. Expand the “Domains” and “dailyplanet.com” sections of the forest.
6. Locate the “Reporters” OU and right-click on it.
7. Select the “Create a GPO in this domain and Link it here...” option.
8. In the “Name” section of the “New GPO” window, enter Reporters Policy and then click on “OK”.
9. **Explain what a group policy is and what it can be used for.**

6.2 Editing group policies

1. Double click on the “Reporters Policy” in the Group Policy Management console.
2. If you get a message from Internet Explorer - click on the “Close” button.
3. In the “Group Policy Management Console” dialogue pop up, click on the “OK” button.
4. The Reporter’s policy will now be displayed. There are four tabs (**Scope, Details, Settings and Delegation**). Look at each of the tabs to see what they do.
5. Click on the “Settings” tab.
6. Right-click over the “User Configuration (Enabled)” option and select “Edit”.
7. In the “Group Policy Object Editor”, expand “User Configuration”, “Policies” and then “Administrative Templates”. Click on the “Start Menu and Taskbar” option.
8. In the details pane on the right, locate and double-click on “Remove Run Menu from Start Menu”.
9. Examine the “Remove Run menu from Start Menu” window and read the help information to understand what “Not Configured”, “Enabled” and “Disabled” options will do.
10. Click on “Enabled” and then click on “OK”.
- 11. Explain what will happen to a users’ account when they log into a computer.**

12. Check to see if the state has changed for this setting.

- 13. Explore what other settings are available and what other options are available under the Policies section.**

14. Explain what the User Configuration section is for.

15. Now expand “System” which is listed under the “**Administrative Templates**” option on the left-hand side and highlight “**Ctrl+Alt+Del Options**”. In the details pane, double-click on “**Remove Lock Computer**”.

16. Explain what will happen if you enable this setting.

17. Select “Enabled” and click on “OK”.

18. Close the “Group Policy Management Editor”.

19. Check to see if the state has changed for this setting.

20. Explain if the Group policies you have created will affect users or computers.

6.3 Testing group policy settings

1. In “Active Directory Users and Computers”, highlight the “Reporters” Organisational unit and then right-click and select “New” and then “User”.

2. Create a new user account for **Donald Joe (DJoe)** and add a password for the account.

3. In the “Active Directory Users and Computers” window, right-click on “**Donald Joe**” and select “Add To A Group”. Add to the “**Reporters**” group.

4. Type en in to the “**Enter The Object Name To Select**” and then click on the “Check Names” button.

What you have typed in will then be replaced with “**Enterprise Admins**”. Click on “OK”.

5. Click on “OK” in the “Active Directory” message box confirming that the operation was successful.

6. Start the “**Windows 7 Client**” virtual machine. Log into the domain using the **DJoe** account and see if the “Run” option available.

6.4 Remove Lock Computer

1. First carry out the instructions in **steps 1- 6** of in Section 6.2.
2. Now expand “System” which is listed under the “**Administrative Templates**” option on the left-hand side and highlight “**Ctrl+Alt+Del Options**”. In the details pane, double-click on “**Remove Lock Computer**”.
3. **Explain what will happen if you enable this setting.**

4. Select “Enabled” and click on “OK”.
5. Close the “Group Policy Management Editor”.
6. Check to see if the state has changed for this setting.
7. **Explain if the Group policies you have created will affect users or computers.**

6.5 Adding Group Policies using PowerShell

1. Start PowerShell from the icon on the desktop.
2. Create a new group policy for the editors OU by typing in the following:

new-gpo -name "Editors Policy"
3. View the help information associated to this cmdlet.
4. Switch back to the "Group Policy Management" console and refresh the "Editors" OU. Is the new policy visible?
5. Expand the "Group Policy Objects" container and refresh the results. Is the new policy visible?
6. **Explain why you think the Editors Policy is not associated with the Editors OU.**

7. In PowerShell, type:

new-gplink -name "Editors Policy" -target "ou=Editors, dc=dailyplanet, dc=com"
8. View the help information associated to this cmdlet.
9. At this point it would be good to view all GPO's available within the current domain. Instead of viewing GPO's using the "Group Policy Management" console, type into PowerShell:

get-gpo -all
10. View the help information associated to this cmdlet.
11. **Work out what parameters are needed to view the "Reporters Policy" only. Explain what your cmdlet call looks like:**

12. Another way to create and link a GPO to an OU is to output the result from one cmdlet to another. First, create a new OU by typing in the following:

```
new-adorganizationalunit -name "Publishers" -path "dc=dailyplanet, dc=com"
```

13. Now create a new GPO and link it to the "Publishers" OU by typing in:

```
new-gpo -name "Publishers Policy" | new-gplink -target "ou=publishers, dc=dailyplanet, dc=com"
```

14. To check to see if the policy is linked to the OU, type:

```
get-gpinheritance -target "ou=publishers, dc=dailyplanet, dc=com"
```

15. Now check the **Reporters** and **Editors** OU to see if policies are linked to them.

16. If you wish to test that the "GPOLinks" data really is being set when you link the GPO, create a new OU and then check its default details using "get-gpinheritance".

6.6 Copying files between Host OS & Guest VM

1. Click on the link below and download the file **7z465.msi**.

<https://osdn.net/projects/sevenzips/downloads/37443/7z465.exe/> and convert to .msi

or

<https://olympuss.ntu.ac.uk/cmp3owak/PublishingSoftware/blob/master/7z465.msi>

2. You need to copy the downloaded file "**7z465.msi**" to the Server 2008 R2 VM.

3. This could be achieved in two options:

4. **Option 1:** Investigate on how to share files between host OS & guest VM.

Hints: First install VM tool if it is not already installed.

5. **Option 2:** Ensure that your window server is re-configured back to DHCP address so that it can be able to access the internet. Then the file can be downloaded using the link above directly to the Server 2008 R2 VM. Then configure back to static address.

6.7 Publishing software to users using a group policy

1. In the Server 2008 R2 virtual machine, open Windows Explorer.
2. Create the “**C:\Network\software**” directory and share it allowing everyone read access.
3. Copy the **7z465.msi** file to the **software** folder.
4. Now open “Group Policy Management”.
5. In the “Group Policy Management” console locate the “Reporters Policy”.
6. Click on the “Settings” tab for the policy and edit the “User Configuration (Enabled)” option.
7. Expand the “**Software Settings**” container in the “**User Configuration**” section. Right- click on the “Software Installation” option and click on “New” and then “Package”.
8. Enter **\\DailyPlanetServer\Network\software\7z465.msi** into the “File name” text box. Click on “Open”.
9. Select the appropriate deployment method; then click OK.
10. A package called “7-Zip 4.65” will now be displayed in the main pane.
11. Switch back to the Windows 7 client. Log into the client if you have not done so already.
12. Open the “Control Panel”, Click on “Programs” and then “Programs and Features”.
13. Click on the “**Install a program from the network**” option.
14. You will now see the “7-Zip 4.65” program.
15. Click on it and then click on the “Install” option.
16. In the “7-Zip 4.65 Setup” dialog, click on “Next”.
17. Tick “**I accept the terms in the License Agreement**” and click on “Next”.
18. In the “Custom Setup” dialog box, click on “Next”.
19. In the “Ready to install” dialog box, click on “Install”.
20. In the “Completing the 7-Zip 4.65 Setup Wizard”, click on “Finish”.
21. From the “Start”, point to “All Programs” and select “7-Zip File Manager”.