Lab 3

Troubleshooting Login Problems

This lab contains the following exercises and activities:

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| Exercise 3.1 | Troubleshooting Login User Rights |
| Exercise 3.2 | Troubleshooting Disabled and Locked Accounts |
| Exercise 3.3 | Looking at Computer Accounts |
| Exercise 3.4 | Troubleshooting Credential Manager |

BEFORE YOU BEGIN

The lab environment consists of student workstations connected to a local area network, along with a server that functions as the domain controller for a domain called contoso.com. The computers required for this lab are listed in Table 3-1.

Table 3-1

Computers required for Lab 3

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| Computer | Operating System | Computer Name |
| Server | Windows Server 2008 R2 | RWDC01 |
| Workstation1 | Windows 7 Enterprise | NYC-CL1 |

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| NOTE | In a classroom lab environment, there will be one classroom server and the students will have workstations named using consecutive numbers in place of the xx and yy variables. In a virtual lab environment, each student will have three virtual machines, named RWDC01, NYC-CL01, and NYC-CL02. |

In addition to the computers, you will also require the software listed in Table 3-2 to complete Lab 3.

Table 3-2

Software required for Lab 3

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| Software | Location |
| Remote Server Administration Tools for Windows 7 | \\rwdc01\dowloads\ KB958830-x64-RefereshPkg.msu |
| Lab 3 student worksheet | Lab03\_worksheet.rtf (provided by instructor) |

Working with Lab Worksheets

Each lab in this manual requires that you answer questions, make screen shots, and perform other activities that you will document on a worksheet named for the lab, such as Lab03\_worksheet.rtf. Your instructor will provide you with access to the worksheets. We recommend that you use a USB flash drive to store your worksheets, so you can submit them to your instructor for review. As you perform the exercises in each lab, open the appropriate worksheet file using WordPad, fill in the required information, and save the file to your flash drive.

SCENARIO

You are a Windows 7 technical specialist for Contoso Ltd. supporting hundreds of Windows 7 computers. Routinely, you receive calls that users are having problems logging in or having authentication problems while accessing network resources.

After completing this lab, you will be able to:

Resolve user login problems

Correct disabled and locked accounts

Reset a computer account

Work with Credential Manager

Estimated lab time: 60 minutes

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| Exercise 3.1 | Troubleshooting Login User Rights |
| Overview | When users access a computer or network resource, they will need to be authenticated and authorized. To log in to a Windows computer, you will need to use an account with the correct user privileges. During this exercise, you will be reviewing user privileges that apply to Windows login rights. |
| Completion time | 15 minutes |

1. Turn on the **NYC-CL1** workstation and log on using the **contoso\Administrator** account and the password **Pa$$w0rd**.
2. Click the **Start** button and type **mmc** in the *Search programs and files* text box. Press the **Enter** key. If it asks are you sure that you want to make this change, click **Yes**.
3. Open the *File* menu and select **Add/Remove Snap-in**.
4. Select the **Group Policy Object Editor** and click the **Add** button. When the *Local Computer* appears, click the **Finish** button.
5. Click the **OK** button to close the *Add or Remove Snap-ins* dialog box.
6. Expand *Local Computer Policy* and *Computer Configuration*, under *Windows Settings* expands *Security Settings*, then expand *Local Policies* and under that click *User Rights Assignments*.
7. Scroll down through the list to see how many user rights are assigned to the administrator.
8. Double-click **Allow log on locally**.

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| Question 1 | What groups are assigned the Allow log on locally user right? Administrators, backup operators, guest, users |

1. Click **Cancel** to close the *Allow log on locally Properties* dialog box.
2. Close the **MMC**. If it asks to save the console settings, click **No**.
3. Open the *Computer Management* console by clicking the **Start** button, right-click **Computer**, and select **Manage**. Expand Local Users and Groups. Right Click Users select New User. Then create a local user called **AdminTest** with the password of **Password01**. Be sure to deselect the *User must change password at next logon* option. Click Create and Click Close.
4. Click the Users folder, right-click **AdminTest** and select **Properties**.
5. Select **Member Of** and click the **Add** button. Type **Administrators** and click **OK**.
6. Click OK and Close all open windows.
7. Log off as administrator and log in as **NYC-CL1\AdminTest** where CL1 is your student number for your computer.

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| Question 2 | Why was AdminTest able to log in? AdminTest was able to login as the deselected user must change password at login |

1. On **NYC-CL2**, To open the *Computer Management* console Click **Start** button, right-click **Computer**, and select **Manage**. Expand Local Users and Groups. Right Click Users select New User. Then create a local user called **AdminTest** with the password of **Password01**. Be sure to deselect the *User must change password at next logon* option. Click Create and Click Close.
2. Click the Users folder, right-click **AdminTest** and select **Properties**.
3. Select **Member Of** and click the **Add** button. Type **Administrators** and click **OK** to close the dialog box.
4. Now that NYC-CL2 also has an AdminTest Account created, try to log in to your partner’s computer with the **NYC-CL2\AdminTest** account using Remote Desktop Connections where CL2 is your partner’s computer.

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| Question 3 | What error message did you get? The trust relationship between the workstation and the primary domain failed. |

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| Question 4 | Why could you not log in using remote desktop? I couldn’t login as the AdminTest account was set up on different machines. |

1. Log in as **Administrator on NYC-CL2.** Click the **Start** button, right-click **Computer** and select **Properties**. Select **Remote settings**. Select the **Allow connections only from computers running Remote Desktop with Network Level Authentication (more secure)** option. Click the **OK** button to close the *System Properties* dialog box.
2. Assuming your partner has enabled Remote Desktop, try to log in with Remote Desktop Connections on your partner’s computer with the **NYC-CL2\AdminTest** account.

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| Question 5 | What error message did you get now? An authentication error has occurred, the local security authority cannot be contacted. |

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| Question 6 | What are the different ways you can fix this problem?  / |

1. Leave the computer logged on for the next exercise.

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| Exercise 3.2 | Troubleshooting Disabled and Locked Accounts |
| Overview | Account policies are used to protect your user accounts from being easily guessed. Therefore, depending on your domain environment, you will most likely have to deal with disabled and locked user accounts. |
| Completion time | 25 minutes |

1. On **NYC-CL1,** to install the Windows 7 Remote Administrative tools, click **Start**, and in the *Search programs and files* box, type **\\rwdc01\downloads\Windows6.1-KB958830-x86-RefreshPkg.msu** and press **Enter**. A *Windows Update Standalone Installer* message box appears, asking you to install the update for KB958830.
2. Click **Yes**. The *Download and Install Updates* Wizard appears, displaying the *Read these license terms* page.
3. Click **I Accept**. The wizard installs the update, and the *Installation complete* page appears. In addition, the *Windows 7 Remote Administration tools help file* appears.
4. Close the help file window and click **Close** to terminate the wizard.
5. Click the **Start** button and open the **Control Panel**.
6. In Category view, click **Programs** and click **Turn Windows features on or off** in the *Programs and Features*section. Note: It may take a minute or two for the programs to be populated.
7. Expand *Remote Server Administration Tools*. Expand *Feature Administration Tools* and select **Group Policy Management Tools**. Expand *Role Administration Tools* and expand *AD DS and AD LDS Tools*, expand *AD DS Tools* and select **Active Directory Administrative Center** and **AD DS Snap-ins and Command-line Tools**. Click **OK**. It will take a couple minutes to load the Windows features.
8. Close the Control Panel.
9. Click the **Start** button and type **mmc** in the *Search programs and files* text box. Press the **Enter** key. If it asks are you sure that you want to make this change, click **Yes**.
10. Open the **File** menu and select **Add/Remove Snap-in**.
11. Select the **Group Policy Object Editor** and click the **Add** button. When the *Local Computer* appears, click the **Finish** button.
12. Click the **OK** button to close the *Add or Remove Snap-ins* dialog box.
13. Expand *Local Computer Policy*, *Computer Configuration*, *Windows Settings*, *Security Settings*, *Account Policies*, and *Password Policy*.

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| Question 7 | What are the settings for Password Policy?  Enforce password history: 24 passwords remembered  Maximum password age: 42 days  Minimum password age: 1 days  Minimum password length: 7 characters  Password must meet complexity requirements: Enabled  Store passwords using reversible encryption: Disabled |

1. Under *Account Policies*, select **Account Lockout Policy**.

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| Question 8 | What are the settings for Account Lockout Policy?  Account lockout duration: Not applicable  Account lockout threshold: 0 invalid logon attempts  Reset account lockout counter after: Not applicable |

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| Question 9 | Can you change the Account Lockout settings. If not, why?  No I can’t change the Account Lockout settings as I did not have permission. |

1. Click the **Start** button, click **Administrative Tools**, and select **Group Policy Management**.
2. Under **Group Policy Management**, Expand **Forest: Contoso.com, Domains and Contoso.com**
3. Right-click the **Default Domain Policy** and select **Edit**.
4. Expand *Computer Configuration*, *Policies, Windows Settings*, *Security Settings*, *Account Policies*, and *Account Lockout Policy*.

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| Question 10 | What are the settings for Account Lockout Policy?  Account lockout duration: 30 minutes  Account lockout threshold: 3 invalid logon attempts  Reset account lockout counter after: 30 minutes |

1. Click the **Start** button, click **Administrative Tools**, and select **Active Directory Users and Computers**.
2. Expand *contoso.com*.
3. Right-click **Users** and select **New> User**. Create a user called **TestUser01** where 01 is your student number. Click the **Next** button.
4. Assign the password of **Password01**. Deselect the *User must change password at next logon* option. Click the **Next** and Click Finish

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| Question 11 | What is the Full Name?  TestUser01  What is the user logon name?  TestUser01 |

1. Right-click the **TestUser01** account and select **Add to a Group**. Type in **Domain Admins** in the Enter the objects names to select and click **OK**. Close the Console.
2. Log out as Administrator and log in as **TestUser01@contoso.com** with the password of **Password01** on **NYC-CL2.**
3. Log out as TestUser01.
4. Attempt to log in as **TestUser01** with the password of **password** three times.
5. Attempt to log in as **TestUser01**with the password of **Password01**.

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| Question 12 | What error message did you get?  The referenced account is currently locked out and may not be logged onto. |

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| Question 13 | What is the first and most obvious thing you should check when a user is having problems logging in to any computer, application or website?  Make sure the password is correct. |

1. Log in as **Administrator**.
2. Open **Active Directory Users and Computers**.
3. Right-click **TestUser01** and select **Properties**.
4. Click the **Account** tab. Deselect the *Unlock account* option and click the **OK** button.
5. Log out as Administrator.
6. Log in as **TestUser01** on **NYC-CL2**
7. Log out as TestUser01.
8. Log in as **Administrator** on **NYC-CL1.**
9. Right-click **TestUser01** and select **Disable Account**.
10. Log out as Administrator and try to log in as **TestUser01** on **NYC-CL2.**

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| Question 14 | What error message did you get?  Your account has been disabled, please see your system administrator. |

1. Log in as **Administrator** on **NYC-CL1.**
2. Open the **Active Directory Users and Computers**.
3. Right-click the **TestUser01** account and select **Enable Account**.
4. Right-click the **TestUser01** account and select **Properties**.
5. Select the **Account tab** and click **Logon Hours**.
6. Select the current hour and click **Logon Denied**.
7. Click **OK** to close the *Logon Hours* dialog box and click **OK** to close the *TestUser01 Properties* dialog box.
8. Log out as Administrator and log in as **TestUser01** on **NYC-CL2.**

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| Question 15 | What error message did you get? Logon denied. |

1. Log in as **Administrator** on **NYC-CL1.**
2. Open the **Active Directory Users and Computers**.
3. Right-click the **TestUser01** account and select **Properties**.
4. Select the **Account tab** and click **Logon Hours**.
5. Highlight the hour that you restricted before and click **Logon Permitted**.
6. Click **OK** to close the *Logon Hours* dialog box and click **OK** to close the *TestUser1 Properties* dialog box.
7. Log in as **Administrator on NYC-CL1**.
8. Leave the computer logged on for the next exercise.

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| Exercise 3.3 | Looking at Computer Accounts |
| Overview | To enhance overall security, computers also have accounts within Active Directory. Because of this, you will be asked to troubleshoot them from time to time. During this lab, you will look at how to reset a computer account. |
| Completion time | 10 minutes |

1. Open **Active Directory Users and Computers**.
2. Find and right-click your computer. Delete the computer account.
3. Click Start, Right click **Computer** Select **Manage** Expand **Local Users and Groups** Select **Users**. Double Click on Administrator and verify the option *Account is disabled*. If it is checked, uncheck the option. Click OK and Close the Computer management console. Log out as **Administrator**.

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| Question 16 | What error message did you get? There was no error message. |

1. Log in as **NYC-CL1\administrator** with the password **Pa$$w0rd**
2. Click **Start**. Then click **Control Panel**. The *Control Panel* window appears.
3. Click **System and Security** > **System**. The *System* control panel appears.
4. Click **Change settings**. The *System Properties* sheet appears.
5. Click **Change**. The *Computer Name/Domain Changes* dialog box appears.
6. Select **Workgroup** and type **Workgroup** for the *Workgroup* name. Click the **OK** button.
7. When it gives you a warning saying that you must know the password of the local administrator account, click **OK**.
8. Specify the **Administrator** username and the **Pa$$w0rd** password. Click **OK**.
9. Click **OK** when the *Windows Security* dialog box appears.
10. When the *Welcome to the Workgroup* window appears, click **OK**.
11. When it says to restart your computer, click **OK**. Restart the Virtual Machine and Login using **NYC-CL1\administrator** with the password **Pa$$w0rd**
12. Right Click **My Computer** and select **Properties**, Click the **Change** Settings. The System properties sheet appears, click **change** button again.
13. Select the *Domain* option, and type **contoso** in the text box. Then click **OK**. A *Windows Security* dialog box appears.
14. Authenticate with the user name **Administrator** and the password **Pa$$w0rd** and click **OK**. A message box appears, welcoming you to the domain.
15. Click **OK**. Another message box appears, prompting you to restart the computer.
16. Click **OK**.
17. Click **Close** to close the *System Properties* dialog box.
18. A *You must restart your computer to apply these changes* message box appears.
19. Click **Restart Now**. The computer restarts.
20. Log in as **contoso\Administrator** and type Password as **Pa$$w0rd**.
21. Open **Active Directory Users and Computers** from **Start** Menu.
22. Find your computer account and right-click your computer account. Select **Reset Account**. When the account has been successfully reset, click **OK**.
23. Try to log on to the computer again.

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| Question 17 | What error message did you get? Did not get an error message, was able to log in successfully. |

1. Once more, log in as a local administrator and add your computer back to the domain again.
2. Leave the computer logged on for the next exercise.

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| Exercise 3.4 | Troubleshooting Credential Manager |
| Overview | While the local and Active Directory user accounts and passwords are used often within an organization, they are not the only usernames and password used. As a worker with the Contoso Ltd. you have users who need to manage their usernames and passwords. |
| Completion time | 10 minutes |

1. On **NYC-CL1**. Open the **Control Panel** Click **System and Security** and Select **System**. Click on **Remote Settings** and Enable the option *Allow connections from computers running any version of Remote Desktop (less secure)*. Click **OK.**
2. ON **NYC-CL2** Open the **Control Panel**.
3. Click **User Accounts** and then click **Credential Manager**.
4. Click **Add a Windows credential**.
5. Type in your partner’s computer name **(NYC-CL1)** for the *Internet or network address* text box. Then specify User name and password of **contoso\TestUser01** and the password of **Pa$$w0rd**. Click the **OK** button.
6. Open **Remote Desktop Connection**. Specify the name of your partner’s computer in the *Computer* text box. Make sure it is the same name that you specified in the *Credential Manager*. Notice the User name that appears. Click the **Connect** button.

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| Question 18 | So why did the login fail? The computers are not on the same homegroup. |

1. Go back to Credential Manager.
2. If necessary, expand the entry for your partner’s computer by clicking the small down arrow button.
3. Click the **Edit** option under your partner’s computer entry.
4. Specify the password of **Password01**. Click the **Save** button.
5. Open **Remote Desktop Connection**. Specify the name of your partner’s computer in the *Computer* text box. Make sure it is the same name that you specified in the *Credential Manager*. Click the **Connect** button. Click **Yes** if any warning message appears for Remote Desktop Connection.

Note: **IF** the Error *“The Trust relationship between this workstation and the primary domain failed.* Please Perform below Steps

1. Log on NYC-CL1 as Contoso\Administrator Click **Start**. Right Click Computer Select Properties. Click **Change settings**. The *System Properties* sheet appears.
2. Click **Change**. Select **Workgroup** and type **Workgroup** for the *Workgroup* name. Click the **OK** button.
3. When it gives you a warning saying that you must know the password of the local administrator account, click **OK** and **OK** Again. Click on Restart Now.
4. Log in as **NYC-CL1\Administrator** username and the **Pa$$w0rd** password. Click **Start**. Right Click Computer Select Properties. Click **Change settings**.
5. Select the *Domain* option, and type **contoso** in the text box. Then click **OK**. A *Windows Security* dialog box appears.
6. Authenticate with the user name **Administrator** and the password **Pa$$w0rd** and click **OK**. A message box appears, welcoming you to the domain. Click on Restart Now.
7. Log on to your partner’s computer **(NYC-CL1**) and on **NYC-CL2** you will see Remote Desktop Connection Message again for **NYC-CL1.**