CISCO Academy

Answers: 13.3.2.5 Lab – Configure Windows Local Security Policy

Introduction

In this lab, you will configure Windows Local Security Policy. Windows Local Security Policy is used to configure a variety of security requirements for stand-alone computers that are not part of an Active Directory domain. You will modify password requirements, enable auditing, configure some user rights, and set some security options. You will then use Event Manager to view logged information.

Recommended Equipment

• A computer with Windows installed.

Note: Accessing the Local Security Policy tool is slightly different, depending on the version of Windows. But after it is open, the configurations are the same for the remaining steps in this lab.

Instructions

Step 1: Review the security requirements.

A customer needs to have six stand-alone Windows computers at a branch office configured according to the security policy for the organization. These computers are not part of an Active Directory domain. The policies must be manually configured on each computer.

The security policy is as follows:

- Passwords must be at least 8 characters.
- Passwords must be changed every 90 days.
- A user may change their password once a day.
- A user must use a unique password for at least 8 changes of the password.
- A password must consist of three of the following four elements:
 - At least one lower case alpha character.
 - At least one upper case alpha character.
 - At least one numerical character.
 - At least one symbol character.
- Users are locked out of the computer after 5 attempts to enter the correct password. A user must wait 5 minutes for the lookout counter to reset.
- Each security setting for Audit Policy should be enabled.
- After 30 minutes of inactivity, the user will be automatically logged out. (Windows 8.1 and 8.0 only)
- Users must log in before removing a laptop from a docking station.
- At log in, users should be presented with the following title and text:
 - Title: Caution:
 - Text: Your activity is monitored. This computer is for business use only.
- Users will receive a reminder to change the password 7 days before it expires.

The Windows Local Security Policy tool provides many more settings that are beyond the scope of this course.

Step 2: Open the Windows Local Security Policy tool.

a. To access Local Security Policy in Windows 10, you can use the following two paths:

Administrative Tools > Local Security Policy

Or, Search > secpol.msc and then click secpol.

b. The Local Security Policy window opens. This lab will focus on the Account Policies and Local Policies, as highlighted in the figure below. The rest of the Security Settings are beyond the scope of this course.

Step 3: Configure the Password Policy security settings.

The first six requirements of the company's security policy are configured in the **Account Policies** section of the **Local Security Policy** tool.

- a. Click the arrow next to **Account Policies** to expand it, and then click **Password Policy**. Six policies are displayed in the right panel with their associated default security settings.
- b. The first policy, Enforce password history, is used to set the number of unique passwords the user must enter before being allowed to reuse a password. According to the organization's security policy in Step 1, the security setting for this policy should be 8. Double-click Enforce password history to open the Enforce password history Properties window. Set the value to 8.
- c. Using the security policy requirements in Step 1, fill in the values you should set in **Local Security Policy** for the remaining **Password Policy** security settings.

Policy	Security Setting
Enforce password history	8
Maximum password age	
Minimum password age	
Minimum password length	
Password must meet complexity requirements	
Store passwords using reversible encryption	Disabled

Note: The **Store passwords using reversible encryption** security setting should always be disabled. Storing passwords using reversible encryption is essentially the same as storing plaintext versions of the passwords. For this reason, this policy should never be enabled unless application requirements outweigh the need to protect password information.

d. Double-click on each of the policies and set the values according to your entries in the table above.

Step 4: Configure the Account Lockout Policy security settings.

a. According to the security policy in Step 1, how many times is a user allowed to attempt to login before the account is locked?

Type your answers here.

b. How long should the user have to wait before attempting to log back in?

Type your answers here.

c. Use the **Account Lockout Policy** security settings in **Local Security Policy** to configure the policy requirements.

Hint: You will need to configure the Account lockout threshold first.

Step 5: Configure the Audit Policy security settings.

- a. In Local Security Policy, expand the Local Policies menu, and then click Audit Policy.
- b. Double-click **Audit account logon events** to open the **Properties** window. Click the **Explain** tab to learn about this security setting.
- c. Click the Local Security Setting tab, and then click the check boxes for Success and Failure. Click OK to close the **Properties** window and apply the security settings.
- d. Continue modifying the rest of the **Audit Policy** security settings. Click the **Explain** tab for each and read what it does. Click the **Success** and **Failure** check boxes in each **Properties** window.

Step 6: Configure additional Local Policies security settings

- a. In Local Security Policy, click User Rights Assignment under Local Policies to view the security settings.
- b. Although none of the security settings need to be modified to meet the security policy requirements, spend some time viewing the default settings.

Question:

Are there any you would recommend changing? Why?

Type your answers here.

- c. In Local Security Policy, click Security Options under Local Policies to view the security settings.
- d. For the remaining security policy requirements in Step 1, list the policy and security setting values you need to change in **Security Options** in the table below. The first one is done for you.

Policy	Security Setting
Interactive logon: Machine inactivity limit	1800 seconds

Step 7: Test the password policy security settings.

Test your password policy security settings by attempting to change the password. Try a new password that does not meet the length or complexity requirements.

Control Panel > User Accounts > Make changes to my account in PC settings > Sign-in options, and then click Change under Password.

You should be presented with a message that your new password does not meet password policy requirements.

Step 8: Export and import security policy settings.

The customer has another 5 stand-alone computers that must meet the same security policy requirements. Instead of manually configuring the settings each computer, export the settings on this computer.

- a. From the menu bar in Local Security Policy, click Action > Export policy...
- b. Choose a name for the **.inf** file and save it to a location of your choice.
- c. Copy the security policy .inf file to a flash drive. Take the flash drive to another computer. Insert the flash drive, open Local Security Policy, and click Action > Import Policy... Locate the .inf on the flash drive and open it to apply the security policy to the new computer.