

Answers: 11.6.2.4 Lab - System Restore and Hard Drive Backup

Introduction

In this lab, you will create a restore point and use it to restore your computer. You will also configure a hard drive backup.

Recommended Equipment

- A computer running Windows
- A second partition to store backup or an external drive

Instructions

Part 1: System Restore

Step 1: Create a restore point.

- Open **Control Panel** > select **System** > select **System Protection**.
- In the System Protection tab, click **Create**.
- Click the **System Protection** tab in the **System Properties** window and then click **Create**.
- In the Create a restore point window, enter **Application Installed** and click **Create**.
- You will be notified in the **Systems Protection** window when the restore point has been created successfully. Close the message window when done.
- Click **OK** to close the **System Properties** window.

Step 2: Work in the System Restore utility.

- In the Control Panel, select **Recovery**. Click **Open System Restore**.
- The **System Restore** window opens, click **Next**.
- A list of restore points is displayed in the **System Restore** window. Search for the one named **Application Installed** if there is more than one in the list.

Question:

What type of restore point did you create in the previous step?

Type your answers here.

- Close all open windows.

Step 3: Enable Windows web server.

In this step, you will enable the Windows web server, Internet Information Services.

- Open the **Control Panel**. In the Small icon view, select **Programs and Features** Click **Turn Windows features on or off** in the left panel to access Windows Features.
- In the Windows Features window, select the **Internet Information Services**. Click **OK** to continue.
- When the message displays **Windows completed the requested changes**, click **Close**.

- d. Close all remaining open windows.
- e. Open a web browser. Navigate to <http://localhost>. The IIS default page will open.
- f. Close the browser.

Step 4: Verify that you successfully installed the IIS service.

- a. Click **Control Panel > Administrative Tools > Internet Information Services (IIS) Manager**.
- b. If the **Internet Information Services (IIS) Manager** window opens asking **Do you want to get started with Microsoft Web Platform to stay connected with latest Web Platform Components?** Click **No**.
- c. Close all open windows.

Step 5: Save a new document in the Documents folder.

- a. Create a text document with the following text: **This is a test for a Restore Point**.
- b. Save the document as **Restore Point Test file** in the Documents folder.

Step 6: Restore the computer back to the restore point you created in a previous step.

- a. Click **Control Panel > Recovery > Open System Restore**.
- b. In the **System Restore** window, select the **Application Installed** restore point that was created in step 1 and click **Next**.
- c. The **Confirm your restore point window** opens. Click **Finish**.
- d. A warning message window opens telling you that the **System Restore** process should not be interrupted once it begins, and asks if you want to continue. Click **Yes** to start the system restore process.

Note: Windows will restart the computer to complete the System Restore process.

Step 7: Verify that the System Restore process completed successfully.

The operating system restores to the point before the IIS application was installed. This can take several minutes to complete.

- a. Log on to the computer if required.
- b. Click **Close** when the **System Restore** window opens to inform you that the System Restore completed successfully.
- c. From the **Control Panel**, click **Administrative Tools**.

Question:

Is the IIS Manager application listed?

Type your answers here.

- d. Open a web browser and navigate to <http://localhost>.

Question:

Did the IIS Server page display?

Type your answers here.

- e. Close the web browser.
- f. Open **File Explorer** or **Windows Explorer**, and navigate to the **Documents** folder

Question:

Is the **Restore Point Test File.txt** in this folder? If so, are the contents the same in this document? Why?

Type your answers here.

- g. Close all open windows.

Part 2: Hard Drive Backup (Windows 8 and 10)

Microsoft introduced a new way to protect your data files in Windows 8 called File History. File History supersedes the Backup and Restore features of Windows 7 and functions similarly to Apple's Time Machine application, where it periodically (hourly by default) scans the file system and copies any changed files to another partition or external drive. Over time, a complete history of file changes can be viewed and restored, using the new Restore personal files utility. In this lab, you will turn on the File History utility and allow it to back-up your data files. You will then use the Restore personal files utility to restore some of your data files.

Step 1: Open the File History tool.

- a. Log on to the computer as an administrator.
- b. Navigate to the Control Panel. In the Small Icon view, click **File History**. (In Windows 10, **Settings > Update & Security > Backup**)
- c. In the File History window, click **Turn on** to turn on File History. File History is turned off by default.

Question:

Where will File History save files?

Type your answers here.

- d. Note the options that are available on the left side of the window. In Windows 10, these options are also available: **Backup > More options**)

File History will save your data files when you turn it on. It displays a timestamp of the save in the **File History is on** box. You can click Run now, at any time, to have File History save your files immediately.

Step 2: Create and save two text files on the desktop.

- a. Save a text file with the text **This is the original text in file one** on the desktop named **File One**.
- b. Save a text file with the text **The text in this file will be changed** on the desktop named **File Two**.

Step 3: Run File History a second time.

- a. Navigate to **File History**. (**Control Panel >** in Small icon view, click **File History**.)
- b. Click **Run now** to create a backup of the newly created files.

Step 4: Use the Restore personal files utility to view File History.

- a. In the File History window, click **Restore personal files**.
- b. The Home – File History window displays the date and time of the last backup, along with file folder and library icons to navigate the backup locations. There is also file history navigation controls at the bottom of the window. Double-click on the Desktop folder.
- c. The Desktop – File History window displays the two text files that you saved to the desktop. Notice at the top of the window, to the right of the date and time of the backup, it displays 2 of 2. These numbers are telling you that this is the second backup of two backups. Click the left arrow icon on the bottom of the window.

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- d. Notice the timestamp changes to an earlier date and time, and the numbers to the right of the timestamp change to 1 of 2. You are now looking at the first backup, made immediately after you turned on File History. File One and File Two are no longer showing.

Question:

Why are the two text files missing from the desktop folder of the first backup?

Type your answers here.

- e. Close the Desktop – File History window.

Step 5: Make changes to the text files on the Desktop and create another backup history.

- a. Right-click File One and select Delete. To delete it permanently, empty the Recycle Bin.
- b. Edit File Two by adding the following text: **This was added in step 5 of the lab**. Save your changes.
- c. Navigate to the File History window and click **Run now** to create another save to the File History.

Step 6: Open the Restore personal files utility to review the File History.

- a. In the File History window, click **Restore personal files**. Navigate to the Desktop folder.

Question:

What files are shown in the desktop folder for the most recent backup?

Type your answers here.

- b. Click the Previous version icon at the bottom of the screen to view the way the desktop looked before the last save.

Step 7: Restore user files.

- a. Select **File One** from the 2 of 3 File History window, then click the green Restore icon at the bottom-center of the window.
- b. When the Desktop window opens, notice that File One is back on the Desktop. Close the Desktop window.
- c. Navigate back to the Desktop – File History window, select and restore **File Two**. In The Replace or Skip Files window, click **Replace the file in the destination**.
- d. The Desktop window opens with File Two highlighted. Close all open windows.
- e. You should be able to locate both File One and File Two on your Desktop. Open **File Two**.
- f. Notice that the second line that you added to File Two is now missing.

Question:

How would you use File History to restore the second line back into File Two?

Type your answers here.

- g. Close all open windows.

Step 8: Delete text files and turn off File History.

- a. Delete **File One** and **File Two** from the Desktop.
- b. Turn off **File History**. (**Control panel > File History**)

Part 3: Hard Drive Backup (Windows 7)

Step 1: Create back up files.

- Log on to the computer as an administrator.
- Create a text file on the desktop called **Backup File One** with the following text: **The text in this file will not be changed.**
- Create another text file on the desktop called **Backup File Two** with the following text: **The text in this file will be changed.**

Note: Remove all extra folders and files from the computer's Desktop. This will help to reduce the length of time to complete the backup for this lab.

Step 2: Open the Backup and Restore tool

- Navigate to the **Control Panel** > In Small icon view, click **Backup and Restore**.
- Click **Set up backup** to start a new backup or click **Change settings** to edit the settings. Select the location where the backup will be stored. Click **Next**.

Note: If you are using the second partition, you will receive a warning message about using the same physical disk. You can ignore the message for the purpose of this lab. This is not a recommended practice outside of the classroom.

- Select **Let me choose** on the What do you want to back up? screen. Click **Next** to continue.
- Expand the current user account so you can view the different libraries that you can backup.

Question:

Click **What files are excluded by default from the backup?** and list the excluded files.

Type your answers here.

- Close the Windows Help and Support window.
- Expand **Additional Locations** and make sure only **Desktop** is selected. Make sure no other location is selected. Remove the check mark from **Include a system image of drives**. Click **Next** to continue.
- In the **Review your backup settings** screen, click **Change schedule**.
- In the **How often do you want to back up?** Screen, select **Run backup on a schedule (recommended)**. Set the following conditions and then click **OK** to continue.

How often: **Daily**

What day: blank

What time: **2:00 AM**

Question:

Which files will be backed up?

Type your answers here.

Step 3: Run the backup.

- To test the backup configuration, click **Back up now**. To view the progress of the backup, click **View Details**. The Windows Backup is currently in progress screen is displayed. When the Windows Backup has completed successfully message appears, click **Close**.
- Review the information beneath the Backup section of the Backup and Restore window.

Question:

When will the next backup take place?

Type your answers here.

What is the state of the schedule?

Type your answers here.

Step 4: Delete and restore files.

- a. Navigate to the Desktop and delete **Backup File One** and **Backup File Two** permanently by emptying the Recycle Bin.
- b. Navigate back to the **Control Panel** > click **Backup and Restore**. Under the Restore heading, click **Select another backup to restore files from**.
- c. In the Select the backup that you want to restore files from screen, select the location where the files are stored. Click **Next** to continue.
- d. In the Browse or search your backup for files and folders to restore screen, click **Browse for files**.
- e. In the Browse the backup for files window, click the current user's backup. Open the Desktop folder and locate the files Backup File One and Backup File Two. Select both files and click **Add files**.
- f. Verify that the two files are listed for restoration. Click **Next** to continue.
- g. In the Where do you want to save the restored files? Screen, select **In the original location**. Click **Restore** to continue. Review the message in the Your files have been restored screen, click **Finish**.
- h. Navigate to the Desktop.

Question:

Are the two files restored to the Desktop?

Type your answers here.

Step 5: Modify, back up, delete, and restore a file.

- a. Edit file Backup File Two. Add the following text **More text added.** to the file. Save the file.
- b. Navigate back to the Backup and Restore window and click **Back up now**.
- c. Permanently delete **Backup File Two** from the Desktop.
- d. Navigate back to the Backup and Restore window and click **Select another backup to restore files from** to restore **Backup File Two**. Refer to the previous step as needed.

Question:

Navigate to the Desktop. Open file Backup File Two. What text is in the file?

Type your answers here.

Step 6: Clean up

- a. Delete the files **Backup File One** and **Backup File Two**.
- b. Perform a System Restore using the saved restored point from a previous part in this lab.

Reflection Question

1. When would be a good time to create a manual restore point? Why?

Type your answers here.

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2. When File History has been activated, how often does it automatically save your data files?

Type your answers here.

3. How would you change the default save settings in File History?

Type your answers here.