Answers: <u>12.3.1.3 Lab - Configure Data Backup and Recovery in</u> <u>Windows 7 andVista</u>

Introduction

In this lab, you will back up data. You will also perform a recovery of the data.

Recommended Equipment

• A computer with Windows 7 or Vista installed.

Part 1: Data Backup and Recovery in Windows 7

Step 1: Create back up files.

- a. Log on to the computer as an administrator.
- b. Create a text file on the desktop called **Backup File One**. Open the file and type the text "**The text in this** file will not be changed."
- c. Create another text file on the desktop called **Backup File Two**. Open the file and type the text "**The text** in this file will be changed."

Note: Remove all extra folders and files from the computers 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

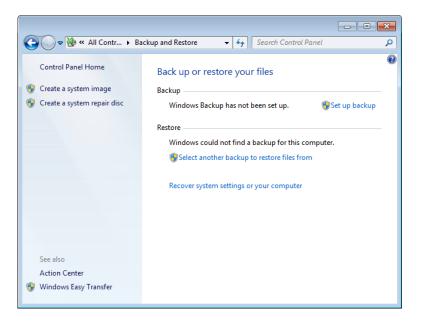
a. To open Backup and Restore in Windows 7, use the following path:

Control Panel > Backup and Restore

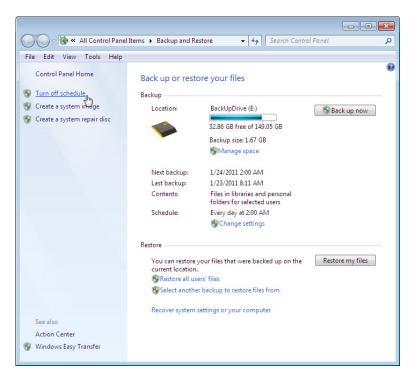
In Vista, use the following path:

Control Panel > Backup and Restore Center

b. If backup has never been configured, your window will look like the following:

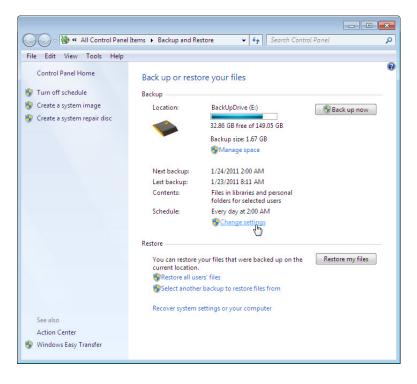


c. If a backup is scheduled to run, click Turn off schedule, as shown below.



Step 3: Complete the Set up backup wizard.

a. If a backup method is already configured, click **Change settings**, as shown below, to start the **Set up backup** wizard. If a backup has never been configured, click **Set up backup** to start the wizard.



b. Select the location where the backup will be stored. In this example, an external hard drive is used. Click **Next**.

| 🐌 Set up backup | | | | |
|---|---------------------------------------|-----------------------|--|--|
| Select where you want to save your backup | | | | |
| Sciece where you want to save yo | ur buckup | | | |
| We recommend that you save your backup destination | on an external hard drive. Guidelines | for choosing a backup | | |
| | | | | |
| Save backup on: | Transversion de marce en la | | | |
| Backup Destination | Free Space | Total Size | | |
| DVD RW Drive (D:) | | | | |
| BackUpDrive (E:) | 32.86 GB | 149.05 GB | | |
| 🛹 Removable Disk (F:) | 289.18 MB | 1.91 GB | | |
| Interpretension (M:) | 4.83 GB | 4.88 GB | | |
| International States (N:) | 4.83 GB | 4.88 GB | | |
| | | | | |
| ~ | | | | |
| Refresh | Sa | ve on a network | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | Next N Cance | | |

c. Select Let me choose on the What do you want to back up? screen. Click Next.

| | × |
|--|--------|
| 🚱 😸 Set up backup | |
| What do you want to back up? | |
| Let Windows choose (recommended) | |
| Windows will back up data files saved in libraries, on the desktop, and in default Windows f Windows will also create a system image, which can be used to restore your computer if it : working. These items will be backed up on a regular schedule. <u>How does Windows choose</u> files to back up? | stops |
| Let me choose | |
| You can select libraries and folders and whether to include a system image in the backup. The items you choose will be backed up on a regular schedule. | |
| | |
| | |
| | |
| | |
| | |
| | |
| Next | Cancel |

d. Expand the current user account so you can view the different libraries that you can bac kup. Click **What** files are excluded by default from the backup? and list the excluded files.

| () | 😝 Set up backup |
|----------------|--|
| 0 | What do you want to back up? |
| | Select the check box of the items that you want to include in the backup. What files are excluded by default from the backup? |
| | Back up data for newly created users Back up data for newly created users John_Computer2's Libraries John's Libraries Documents Library Pictures Library Pictures Library Videos Library Computer Local Disk (C:) Include a system image of drives: System Reserved (S:), (C:) A system image is a copy of the drives required for Windows to run. You can use it to restore your computer if it stops working. |
| | Next Cancel |

e. 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**.

| What | do you want to l | back up? | | |
|------|--|---|--|--------------|
| | ne check box of the it from the backup? | ems that you want to inclu | ude in the backup. <u>What files are e</u> | excluded by |
| 4 | 🗐 🏭 John's Librarie | 25 | | |
| | Document | s Library | | |
| | 🔲 🎝 Music Libr | | | 1 |
| | Pictures Lil | | | |
| | Videos Libi | 1 A A A A A A A A A A A A A A A A A A A | | E |
| | Additional | | | |
| | AppDat | | | |
| | Contac | | | |
| | V Deskto | | | |
| | Downlo | | | |
| | E Favorit | 25 | | |
| Inch | ide a cystem image o | f drives: System Reserved | (5) (C) | |
| | | | | |
| | | | Windows to run. You can use it to | restore your |
| com | puter if it stops worki | ng. | | |

f. The Review your backup settings screen is displayed. Click Change schedule.

| Backup Location: BackUpDrive (E:) Backup Summary: | | |
|--|--|-------|
| Items | Included in backup | * |
| O Pictures Library | Not in backup | |
| 🚫 Videos Library | Not in backup | |
| Additional Locations | | = |
| 🚫 AppData folder | Not in backup | - 53. |
| S Contacts | Not in backup | |
| 🧫 Desktop | All local data files | |
| S Downloads | Not in backup | - |
| Schedule: Every dddd, MMI | MM dd, yyyy at 12:00 AM <u>Change schedule</u> 선거 | |

g. The **How often do you want to back up?** screen is displayed. Place a check mark in the checkbox **Run backup on a schedule (recommended)**. Set the following conditions and then click **OK.**

How often: Daily

What day: blank

What time: 2:00 AM

Which files will be backed up?

| | × |
|---|----------|
| 😥 Set up backup | |
| How often do you want to back up? | |
| Files that have changed and new files that have been created since your last backup will be a your backup according to the schedule you set below. | dded to |
| ✓ Run backup on a schedule (recommended) | |
| How often: Daily 🔹 | |
| What day: | |
| What time: 2:00 AM | |
| | |
| | |
| | |
| ок Д | Cancel |

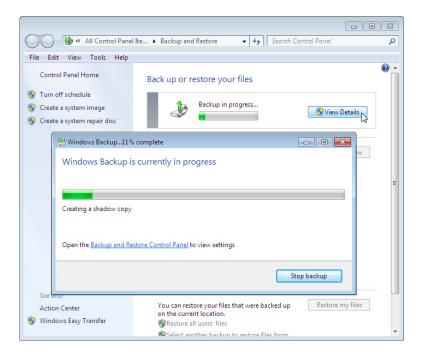
h. The Review your backup settings screen is displayed. Click Save settings and exit.

Note: If a backup schedule has never been created, then the button label is **Save settings and run backup**. Clicking the button will immediately start the backup process. If this is the case, move to Step 4b.

| Backup Location: | BackUpDrive (E:) | | |
|-------------------|--------------------------|----------------------|---|
| Backup Summary: | | | |
| Items | | Included in backup | |
| O Pictures Librar | у | Not in backup | |
| 🚫 Videos Library | | Not in backup | |
| 📄 Additional Loc | ations | | = |
| 🚫 AppData fo | lder | Not in backup | |
| 🚫 Contacts | | Not in backup | |
| 🧮 Desktop | | All local data files | |
| S Downloads | | Not in backup | - |
| Schedule: | Every day at 2:00 AM Chi | ange schedule | |

Step 4: Run the backup.

a. 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.



b. When the Windows Backup has completed successfully message appears, click Close.

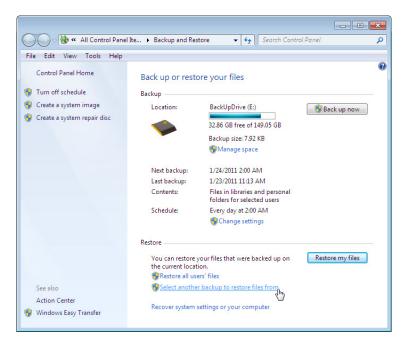
| | | | | 8 |
|---|--------------------------|----------------------------|---------------|---|
| All Control Panel | Ite 🕨 Backup and Re | estore 🔹 🍫 Search Con | trol Panel | Q |
| File Edit View Tools Help | | | | |
| Control Panel Home | Back up or rest | ore your files | | |
| 😗 Turn off schedule | Backup | | | |
| 😵 Create a system image | Location: | BackUpDrive (E:) | 🖲 Back up now | 1 |
| 😗 Create a system repair disc | | 32.86 GB free of 149.05 GB | | |
| 👑 Windows Backup1009 | 6 complete | | | |
| Windows Backup h Finished Open the <u>Backup and Res</u> See anso Action Center See anso Action Center | tore Control Panel to vi | ew settings | Close S |] |

c. Review the information beneath the **Backup** section of the **Backup and Restore** window. When will the next backup take place?

What is the state of the schedule, on or off?

Step 5: Delete and restore files.

a. Navigate to the Desktop and delete **Backup File One** and **Backup File Two**. Empty the Recycle Bin. In the **Backup and Restore** window, click **Select another backup to restore files from**.



b. The **Select the backup that you want to restore files from** screen is displayed. Select the location where the files are stored. Click **Next**.

| Select the backup that yo | ou want to restore files fro | m |
|---|---|------------------------------|
| If the backup location you want i computer, and then click Refresh | is not listed below, connect the di n. | rive with the backup to this |
| Backup Period | Computer | Backup location |
| 1/23/2011 to 1/23/2011 | COMPUTER2 | BackUpDrive (E:) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Refresh | | Browse network location. |
| Refresh | | Browse network location |

c. The Browse or search your backup for files and folders to restore screen is displayed. Click Browse for files.

| 0 | 🌆 Restore Files | (Advanced) | | |
|---|------------------|------------------------------------|---|------------------|
| | | stored to their version backed | les and folders to restore up on 1/23/2011 11:10 AM. | |
| | Select all files | from this backup | | |
| | Name | In Folder | Date modified | Search |
| | Click Browse | e for files, Browse for folders, c | or Search to add files to this list. | Browse for files |
| | | | | Remove |
| | | | | Remove all |
| | | | | Next Cancel |

d. The **Browse the backup for files** window opens. Click the current user's backup. In the example, this user is **John.** Therefore, the folder is labeled **John's backup**. Double-click **Desktop** and locate files

Backup File One and Backup File Two. Select both files by clicking Backup File One and then holding down the Ctrl key while clicking Backup File Two. Click Add files.

| 🕹 Browse the backup for files | | × |
|--|---------|---|
| Coor Coor Coor Coor Coor Coor Coor Coor | | ٩ |
| Organize 🔻 | - 🔳 | 0 |
| Microsoft® Windows Backup on BackUpD John's backup | | |
| File name: All Files Add files | Cance | • |

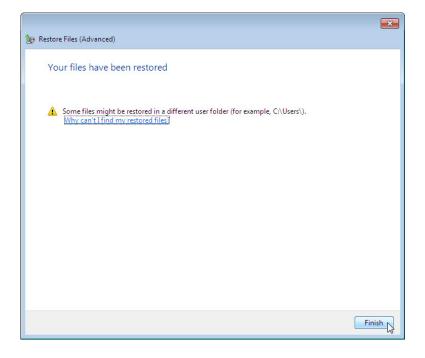
e. The two files are listed in the **Browse or search your backup for files and folders to restore** screen. Click **Next**.

| All files will be restored to Choose a different date | their version backed up on | 1/23/2011 11:10 AM. | |
|--|----------------------------|---------------------|-------------------|
| Select all files from this | backup In Folder | Date modified | Search |
| 📄 Backup File One | C:\Users\John\Desktop | 1/23/2011 11:09 AM | Browse for files |
| Backup File Two | C:\Users\John\Desktop | 1/23/2011 11:10 AM | Browse for folder |
| | | | Remove |
| | | | Remove all |

f. The Where do you want to save the restored files? screen is displayed. Select In the original location, and then click Restore.

| | × |
|---|---------|
| 🔁 🐅 Restore Files (Advanced) | |
| | |
| Miles de la companya | |
| Where do you want to restore your files? | |
| In the original location | |
| | |
| In the following location: | |
| | Browse |
| | |
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| | |
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| | |
| | |
| | Restore |

g. The Your files have been restored screen is displayed. Click Finish.



h. Navigate to the Desktop. Are the two files restored to the Desktop?

Step 6: Modify, back up, delete, and restore a file.

a. Open file Backup File Two. Add the following text "More text added." to the file. Save the file.

- b. Click the Backup and Restore window so it is active. Click Back up now.
- c. Navigate to the **Desktop**. Delete **Backup File Two**. Empty the Recycle Bin. Click on the **Backup and Restore** window so it is activated. Click **Select another backup to restore files from**.

| File Edit View Tools Help | | | |
|-------------------------------|-------------------|---|------------------|
| Control Panel Home | Back up or resto | ore your files | |
| 😌 Turn off schedule | Backup | | |
| 💡 Create a system image | Location: | BackUpDrive (E:) | 🚱 Back up now |
| 💡 Create a system repair disc | | 32.86 GB free of 149.05 GB | |
| | | Backup size: 12.58 KB 🚱 Manage space | |
| | Next backup: | 1/24/2011 2:00 AM | |
| | Last backup: | 1/23/2011 11:37 AM | |
| | Contents: | Files in libraries and personal folders for selected users | |
| | Schedule: | Every day at 2:00 AM 🛞 Change settings | |
| | Restore | | |
| | the current locat | | Restore my files |
| | Restore all use | | |
| See also | Select anothe | r backup to restore files from | |
| Action Center | 121 11 | settings or your computer | |

d. Select the location where the files are stored and then repeat Step 5:

Next > Browse for files > User's backup > Desktop

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

Part 2: Backup and Data Recovery in Windows Vista

Step 1: Create back up files.

- a. Log on to the computer as an administrator.
- b. Create a text file on the desktop called **Backup File One**. Open the file and type the text "**The text in this** file will not be changed."
- c. Create another text file on the desktop called **Backup File Two**. Open the file and type the text "**The text** in this file will be changed."

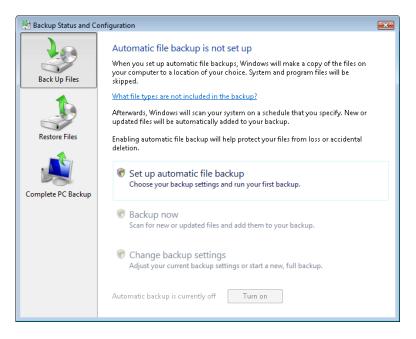
Note: Remove all extra folders and files from the computer's Desktop. This will help to reduce the length of time to complete the backup for this lab.

Step 2: Open the Backup Status and Configuration tool.

a. To open the Backup Status and Configuration tool in Windows Vista, use the following path:

Start > All Programs > Accessories > System Tools > Backup Status and Configuration

b. If backup has never been configured, your window will look like the following:



c. If a backup is scheduled to run, click **Turn off**, as shown below.

| 🔠 Backup Status and Co | nfiguration | | 8 | | |
|------------------------|--|---|---|--|--|
| Back Up Files | backup based on the schedule y | er for new and updated files and add them to your ou set. | | | |
| | What file types are not included Backup status The last file backup was | | | | |
| Restore Files | Backup location: | BackUpDrive (D:) | | | |
| | Last successful backup: Next backup: | 29/09/2009 6:10 PM 30/09/2009 2:00 AM | | | |
| Complete PC Backup | Back up now Scan for new or updated fi | les and add them to your backup. | | | |
| | Change backup settings Adjust your current backup settings or start a new, full backup. | | | | |
| | Automatic backup is currently o | n 🕜 Turn off 🔊 | | | |

Step 3: Complete the Back Up Files wizard.

a. If a backup is already configured, click **Change backup settings > Continue**. If a backup configuration does not exist, click **Setup automatic file backup > Continue**.

| 🕌 Backup Status and Co | nfiguration | × | | | | |
|------------------------|--|---|--|--|--|--|
| Back Up Files | | configured but turned off omputer for new and updated files. | | | | |
| | What file types are not included Backup status () The last file backup was |) | | | | |
| Restore Files | Backup location: Last successful backup: Next backup: | BackUpDrive (D:) 29/09/2009 6:10 PM Disabled | | | | |
| Complete PC Backup | Back up now Scan for new or updated fi | les and add them to your backup. | | | | |
| | Change backup settings Adjust your current backup settings or start a new, full backup. | | | | | |
| | Automatic backup is currently o | ff 🖉 Turn on | | | | |

b. The Where do you want to save your backup? screen is displayed. Select the location where the backup will be stored. In this example, an external hard drive is used. Click Next.

| 🤌 😸 Back Up Files | |
|---|--------|
| Where do you want to save your backup? | |
| On a hard disk, CD, or DVD: | |
| BackUpDrive (D:) 33.2 GB free | • |
| | |
| On a network: | |
| | Browse |
| | |
| Why don't I see my hard disk? | |
| What's the difference between backing up files and copying files to a CD? | |
| | |
| | |
| | |
| | |
| | Next N |

c. The **Which file types do you want to back up?** screen is displayed. Answer the following questions: What file type can be backed up?

What file types will not be backed up?

Only files on what type of disk can be backed up?

d. Select the file type **Documents**. Click **Next**.

| 🚱 🍓 Back Up Files | | × | | | |
|---|--|------|--|--|--|
| Which file types do you want t | o back up? | | | | |
| | it you select will be backed up, including files that belong to mend that you back up all of the file types selected below. | | | | |
| Pictures | Category details | | | | |
| Music | Move the mouse pointer over a category on the left | | | | |
| Videos | or select it with the keyboard to see what types of files will be backed up. | | | | |
| 🔲 E-mail | | | | | |
| V Documents | | | | | |
| TV shows | | | | | |
| Compressed files | | | | | |
| Additional files | | | | | |
| Only files on NTFS disks can be backed up. System files, executable files, and temporary files will not be backed up. <u>What other file types are not included in the backup?</u> | | | | | |
| | Next No | icel | | | |

e. The **How often do you want to create a backup?** screen is displayed. Set the following conditions: How often: **Daily**

What day: **blank** What time: **2:00 AM** Which files will be backed up? f. Place a check mark in the checkbox Create a new, full backup now in addition to saving settings. Click Save settings and start backup.

| 0 | 🗑 Back Up Files | | × |
|---|---------------------------------|---|----------|
| | How often do y | /ou want to create a backup? | |
| | New files and files t below. | hat have changed will be added to your backup according to the schedule you set | |
| | How often: | Daily | |
| | What day: | Ţ | |
| | What time: | 2:00 AM 🔹 | |
| | | II backup now in addition to saving settings te a new, full backup? | |
| | | Save settings and start backup | :el |

g. The **Creating a shadow copy** progress screen is displayed. When the backup is done, **The backup has finished successfully** screen is displayed. Click **Close** to finish the **Back Up Files** wizard.

| 🖄 Back Up Files | |
|---------------------------------------|-------------|
| The backup has finished successfully. | |
| | |
| | |
| | |
| | |
| | |
| | |
| | Stop backup |
| | |

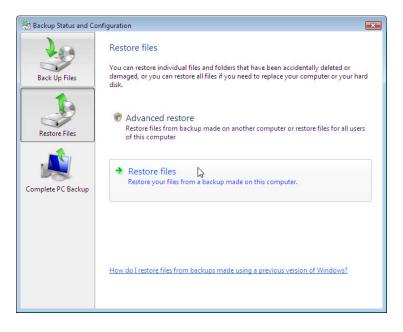
h. The **Backup Status and Configuration** window opens. Answer the following questions: When will the next backup take place?

What is the state of automatic backup? On or Off?

| 🔠 Backup Status and Co | onfiguration | | × | | |
|------------------------|---|--|---|--|--|
| Back Up Files | Automatic file backup is Windows will scan your comput backup based on the schedule y | ter for new and updated files and add them to your | | | |
| | What file types are not included in the backup? | | | | |
| - | Backup status | | | | |
| | 🕦 The last file backup was | s successful. | | | |
| Restore Files | Backup location: | BackUpDrive (D:) | | | |
| | Last successful backup: | 29/09/2009 7:30 PIM | | | |
| | Next backup: | 30/09/2009 2:00 AM | | | |
| Complete PC Backup | Change backup setti Adjust your current backu | p settings or start a new, full backup. | | | |
| | Automatic backup is currently c | on 🕜 Turn off | | | |

Step 4: Delete and restore files.

- a. Navigate to the **Desktop**. Delete **Backup File One** and **Backup File Two**. Empty the Recycle Bin.
- b. In the **Backup Status and Configuration**, click **Restore Files** in the left panel. Click **Restore Files** in the main window, as shown below.



c. The **Restore Files** wizard starts and the **What do you want to restore?** screen is displayed. Select **Files** from the latest backup. Click Next.

| 🚱 🏚 Restore Files | |
|--|-------------|
| What do you want to restore? | |
| Files from the latest backup | |
| Files from an older backup | |
| | |
| | |
| Other options: | |
| Repair Windows (System Restore) | |
| See recently deleted files (Recycle Bin) | |
| Learn how to restore from backups created on older versions of Windows | |
| | |
| | Next Cancel |

d. The Select the files and folders to restore screen is displayed. Click Add files..., and then navigate to the Desktop to locate files Backup File One and Backup File Two.

| Name | ~ | In Folder | Date modified | Add files |
|------|------------------|-----------------------|-------------------------------|-------------|
| | Click Add files, | Add folders, or Searc | ch to add files to this list. | Add folders |
| | | | | Search |
| | | | | Remove |
| | | | | Remove all |

e. Select both files by clicking **Backup File One** and then holding down the Ctrl key while clicking **Backup File Two**. Click **Add**.

| 👃 Add files to restore | | | | | × |
|--|---|---|----------------|---------------|--------|
| C: ► Us | sers 🕨 John I | Desktop | - 4 ∳ § | Search | ٩ |
| 🌗 Organize 👻 📰 Views | 🌗 Organize 🔻 🚆 Views 👻 🃑 New Folder | | | | |
| Favorite Links Desktop Computer Documents Pictures Music Recently Changed Searches | Ac 30 0 H 29 17 8a 29 17 | Size /06/2009 9:11 A lvance network /09/2009 6:32 P sytes ckup File One /09/2009 4:46 P bytes ckup File Two | ing M | Date modified | » * |
| Folders | 47 29 31 Pri 02 | /09/2009 5:30 P bytes inter name /07/2009 9:58 A bytes inter test page /08/2009 11:45 bytes | M | | E |
| File name | : "Backup File | Two" "Backup F | ile One" 🔻 | All Files | Cancel |

f. The two files should show up in the Select the files and folders to restore screen. Click Next.

| In Folder | Date modified | Add files |
|--|--|--|
| C:\Users\John\Desktop C:\Users\John\Desktop | 29/09/2009 4:46 PM 29/09/2009 4:46 PM | Add folders |
| | | Search |
| | | Remove |
| | | Remove all |
| | | |
| 0 | :\Users\John\Desktop | C:\Users\John\Desktop 29/09/2009 4:46 PM |

g. The Where do you want to save the restored files? screen is displayed. Select In the original location. Click Start restore.

| 🚱 😥 Restore Files | X |
|---|----------|
| Where do you want to save the restored files? | |
| In the original location | |
| In the following location: Browse | |
| Restore the files to their original subfolders Create a subfolder for the drive letter | |
| | |
| | |
| | |
| Start restore Ca | incel |

h. When the Successfully restored files screen is displayed, click Finish.

| te Restore Files | × |
|-----------------------------|------|
| Successfully restored files | |
| | |
| | |
| | |
| | |
| | |
| | |
| Fin | sh 💦 |

i. To verify that the files are restored, navigate to the Desktop. Are the two files restored to the Desktop?

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

a. Open file **Backup File Two**. Add the following text "**More text added**." to the file. Save the file.

b. Click Backup Status and Configuration, and the click Back Up Files.

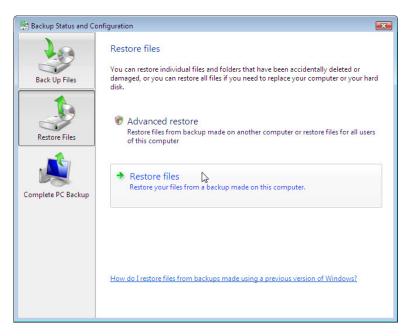
| 🔠 Backup Status and Co | nfiguration | | 83 |
|------------------------|--|--|----|
| Back Up Files | Automatic file backup is Windows will scan your compu backup based on the schedule y | ter for new and updated files and add them to your | |
| Restore Files | What file types are not included Backup status The last file backup wa | | |
| Restore Files | Backup location: | BackUpDrive (D:) | |
| Complete PC Backup | Last successful backup: Next backup: | 30/09/2009 5:18 PM 01/10/2009 2:00 AM | |
| Сотрые РС Васкор | 🗑 Back up now 🔓 Scan for new or updated f | iles and add them to your backup. | |
| | Change backup settings Adjust your current backup settings or start a new, full backup. | | |
| | Automatic backup is currently o | on 💽 Turn off | |

c. Click **Back up now > Continue**. The progress bar opens. When the backup is complete click **Close**.

| Stop backup Close |
|-------------------|
| |

d. Navigate to the Desktop. Delete Backup File Two. Empty the Recycle Bin.

e. Click **Backup Status and Configuration**. Click **Restore Files** from the left panel. Click **Restore files** in the main window.



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