Configuring Disk Space Usage is a matter of individual judgment, although the general guidelines are that it should be set to a low volume for system disks and a high value for data disks. When the disk space allocated to system protection is used up, the oldest previous versions are overwritten. If you are in an environment where users want to access versions of files that are several months old, you might need to allocate a lot of disk space for that purpose. If users seldom need to access previous versions that are more than a week old, you can allocate a lower percentage.

Similarly, you need to think carefully about which of the Restore Settings options you choose. Although you typically select Restore System Settings And Previous Versions Of Files for a drive that holds system files, you might have a computer with a single hard disk and your priority might be to store as many previous versions of files and folders as possible. In this case, you could decide to select Only Restore Previous Versions Of Files and accept the fact that a system restore might not solve the problem of a misconfigured system setting or roll back a problem driver.

> **NOTE SYSTEM PROTECTION SETTINGS ARE NOT RETROSPECTIVE**
>
> If previous versions of files and folders have been deleted because of the Disk Space Usage limitation, they will not be restored by increasing the Disk Space Usage percentage setting. If you want to access the previous version of a file you created four weeks ago but you find previous versions going back only two weeks, you cannot retrieve the older previous versions by changing the Disk Space Usage setting. You need to restore the file from the backup set created four weeks ago (or as soon after that time as possible). Backed-up files can also be considered to be previous versions.

Recovering a File You Have Renamed

In this practice, you recover the previous version of a file you have renamed.

EXERCISE   Recovering a Renamed File

In this exercise, you select a file that has a number of previous versions and rename it. You then discover that you need to recover an older version of the file. You recover the previous version with its original file name. You do not need to elevate privileges to complete this exercise. However, the procedure, as written, asks you to log in by using an administrator-level account. Unless you have sophisticated users, recovering a renamed file would typically be an administrative function.

The procedure asks you to find a file (such as a Word document or an Excel spreadsheet) that has a number of previous versions. Hopefully, several such files exist on your computer. If not, you need to create a file, perform a file and folder backup, edit the file, and create a restore point. The procedures for performing backups and manually creating a restore point are described earlier in this chapter. The figures in the exercise show a file called *Lesson 2.docx* being used for this purpose. You can choose a suitable file on your Canberra computer. To recover a previous copy of a renamed file, perform the following steps:

1. If necessary, log on to the Canberra computer using the Kim_Akers account
2. Open Windows Explorer by double-clicking Computer on the Start menu.
3. Navigate to a folder in which you store personal files.
4. Open the folder and right-click a file that you amend regularly. Select Restore Previous Versions.
5. Check that previous copies of the file exist, as shown in Figure 14-27.
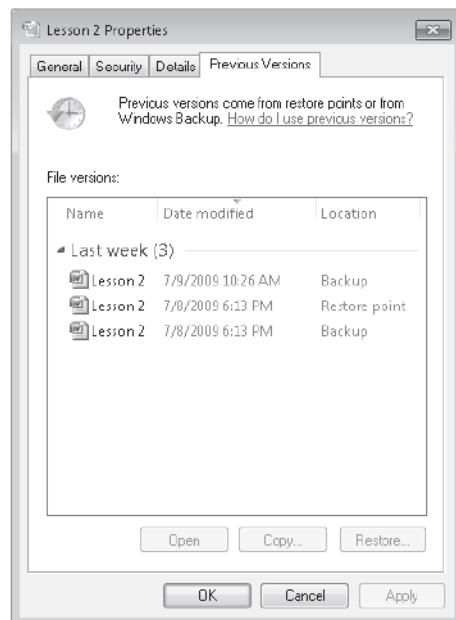
FIGURE 14-27 Previous versions of a selected file

6. Close the file Properties dialog box.
7. Right-click the file and rename it.
8. Right-click the renamed file. As shown in Figure 14-28, the Restore Previous Versions option is no longer available.
9. To restore a previous version of the file, right-click the folder in which it is saved in the left-hand Windows Explorer pane, as shown in Figure 14-29, and choose Restore Previous Versions.
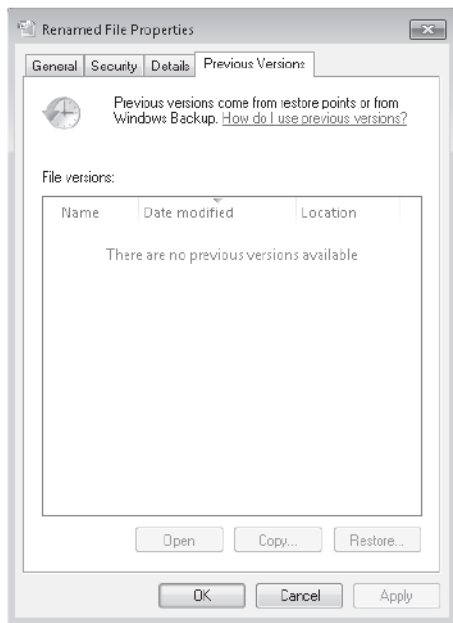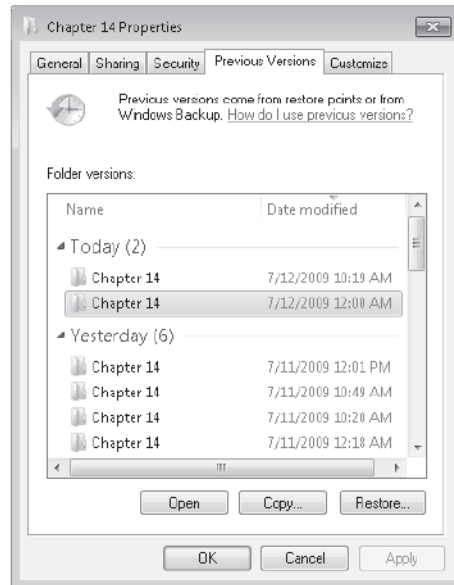
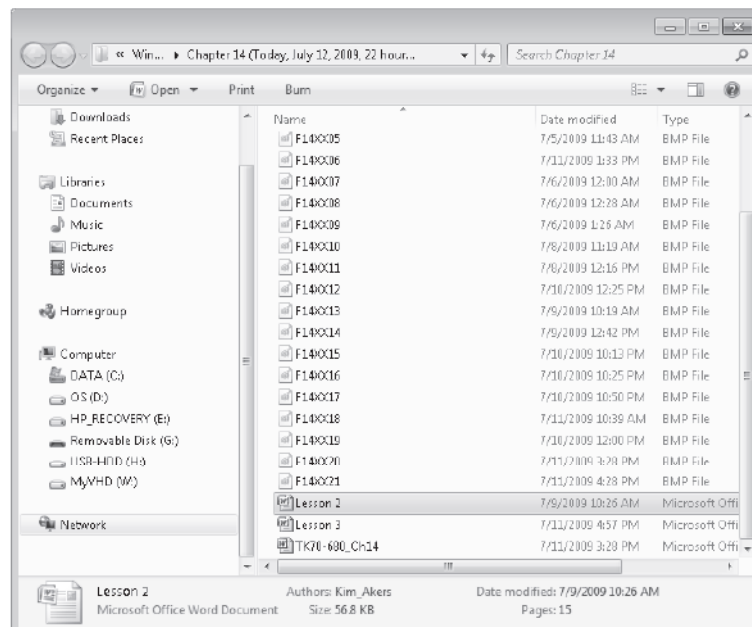**FIGURE 14-28** No previous versions of the renamed file
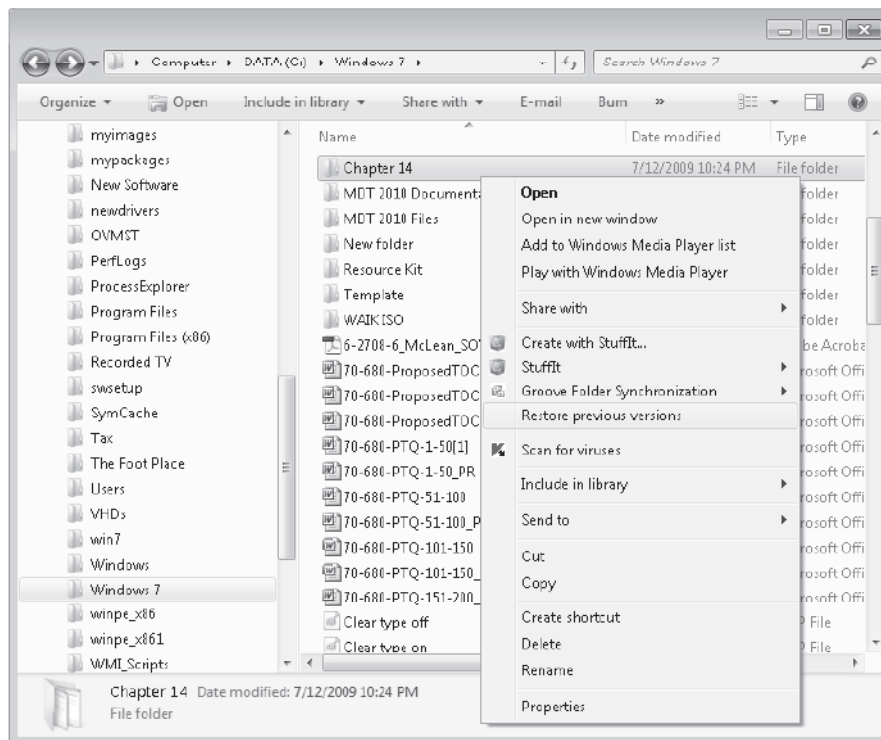
FIGURE 14-29 Restoring previous versions of a folder

10. Select a previous version of the folder that is likely to contain the file you want to restore, as shown in Figure 14-30, and then click Open.

FIGURE 14-30 Selecting the previous version of a folder that contains the file you want to restore

11. As shown in Figure 14-31, the previous version of the file that you want to restore should be in the previous version of the folder. Right-click the file and copy it.

FIGURE 14-31 The previous version of the file you renamed in the recovered folder

12. Close the previous version of the folder. Paste the file to wherever you want to store it. It is a good idea to open it and make sure it is the version that you want.

Lesson Summary

- You can recover a previous version of a file or folder from shadow copies created when a restore point was created or from backup sets.

- You can restore a renamed or deleted file by restoring a previous version of the folder in which the original file was saved.

- You can restore user settings and user-related data such as desktop settings, contacts, and favorites by restoring a user profile.

- You can configure system protection on internal and external hard drives and VHDs formatted using the NTFS file system. Previous versions of files and folders are created when you create a restore point on a drive where system protection is configured.

Lesson Review

You can use the following questions to test your knowledge of the information in Lesson 3, "Recovering Files and Folders." The questions are also available on the companion DVD if you prefer to review them in electronic form.

> **NOTE ANSWERS**
>
> Answers to these questions and explanations of why each answer choice is correct or incorrect are located in the "Answers" section at the end of the book.

1. A user telephones your help desk. She has just accidentally deleted a file she was working on earlier that day. You have configured her computer to carry out backups every evening, and you installed a new graphics driver two days ago. How should you advise the user to retrieve her file?

   A. Open the Backup And Restore console and restore the file from backup.

   B. Use the Restore Previous Versions feature to restore the file.

   C. Open her Recycle Bin, right-click the file, and choose Restore.

   D. Perform a system restore.

2. An employee who works from home telephones your help desk. A virus attack has deleted his computer's single internal hard disk. He carried out a System Image backup on his computer three months ago and automatically backs up his personal files every night. He uses an external USB hard drive formatted with the NTFS file system to hold his backups. All his personal files are in his Documents library. What do you advise? (Choose all that apply; the answers form a complete solution.)

   A. Carry out a System Image restore.

   B. Carry out a system restore.

C. Use Restore Previous Versions to restore his Documents library from a shadow copy.

D. Use Restore My Files in the Backup And Restore console to restore his Documents library folder.

3. Your computer running Windows 7 Enterprise has two internal hard disks. System protection is configured by default on the C: drive, which holds the operating system and installed applications. The D: drive is a 500-GB hard disk formatted with the NTFS filing system, and you use it to store your personal files. You want to store previous versions going back several months and therefore intend to reserve 200 GB of this disk for system protection. You are not using either of your internal disks for backup; instead, you store your backups on a 1-TB external USB hard disk. How do you configure system protection on your D: drive? (Choose all that apply; each answer forms part of the complete solution.)

A. Select Restore System Settings And Previous Versions Of Files

B. Select Only Restore Previous Versions Of Files

C. Set the Max Usage slider control to 40 percent

D. Set the Max Usage slider control to 4 percent

4. Your company's chief accountant consults you with a question about a financial spreadsheet. She needs to recover the version of this particular spreadsheet that existed six months ago because it is needed for a financial audit. Using Restore Previous Versions, you find that the oldest version stored is dated three months ago. How can you recover the required file?

A. Edit the System Protection properties for the volume that hosts the file. Use the Max Usage slider to increase the maximum proportion of the hard disk capacity used for system protection to 70 percent.

B. Perform a system restore. Select a system restore point that was created six months ago.

C. Edit the System Protection properties for the volume that hosts the file. Select the Only Restore Previous Versions Of Files setting.

D. Use the Backup And Restore console to recover the file from a backup set generated six months ago.

5. A user telephones your help desk. Her Favorites list is corrupt and she is having problems accessing the Web sites she visits regularly. All the computers in your organization are backed up every night with a file and folder backup that uses default settings. A restore point was created on all the company's client computers 24 hours ago because a new device driver was installed. You performed a System Image backup on all the computers in your organization three weeks ago. The user is not

computer-literate and you need to fix the problem for her. What is the most efficient way to do so?

A. Perform a system restore.

B. Perform a System Image restore.

C. Use the Restore Files Wizard to restore the Favorites folder in the user's backed-up profile.

D. Access the History tab under Favorites on the user's browser. Browse to recently visited sites and add them to Favorites.