

Windows Me Disk Management

OBJECTIVES

1. Use ScanDisk.
2. Defrag your system.
3. Use files archived to a folder.

RESOURCES

1. Marcraft 8000 Trainer with Windows Me installed



Operating
System
Technology

DISCUSSION

This lab discusses some common disk management procedures. ScanDisk is a utility that runs automatically at the beginning of Windows Setup, before running disk defragmentation, and when Windows detects an improper shut down of the operating system. Windows runs the application in a default configuration, where only the data is scanned and fixed automatically. You can also set ScanDisk to check for hard disk errors, and repair them either automatically or by prompting you first.

Disk fragmentation is a leading cause of poor computer performance. Fragmentation occurs when the data on the hard drive is constantly changing from the reads and writes. When some data is removed from a section of the hard drive because you uninstalled a program, for example, it leaves a hole. That blank spot on the disk between the other data will be filled by the next program files that need to be stored. The problem occurs when the new program is larger than the empty spot on the disk can hold. So part of the program is stored there, and the rest is carried on down to the next available spot. When programs are broken up and stored here and there instead of directly in order, the hard drive is forced to work more, slowing it down dramatically. The Windows Defragmenter utility not only takes all of the programs and puts them back in order, but it goes by the rate of access to each program and puts the ones that you use the most nearest the front of the hard drive, thus increasing access speeds. Disk defragmentation should be done at least once a month, or more if you do a lot of adding/removing programs.

One more very important part of disk management is backing up your important data on such storage media as CD-R, high capacity floppy, tape drive, DVD-R, or another hard drive. Windows 98 has a backup utility that can be used for one file or the entire hard drive. Windows Millennium uses compressed folders and archiving to accomplish this task. Compressed folders make it easy to organize or archive projects, folders, and files. Just drag a file onto a compressed folder to compress it, and drag the file out of the compressed folder to extract it. You can also extract all of the files or folders in a compressed folder by using the Extract wizard.

In this lab you will scan your hard drive for errors, defrag your hard drive, create a compressed folder, add a text document to it as a backup, and extract the archived document from the compressed folder.

PROCEDURE - 23



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PROCEDURE

1. Run the ScanDisk utility

- a. Boot the computer to Windows Me.
- b. From the desktop, use the path Start/Programs/Accessories/System Tools/ and then select ScanDisk from the System Tools menu.
- c. In the ScanDisk window, check the settings Thorough and Automatically fix errors as shown in Figure 23-1.

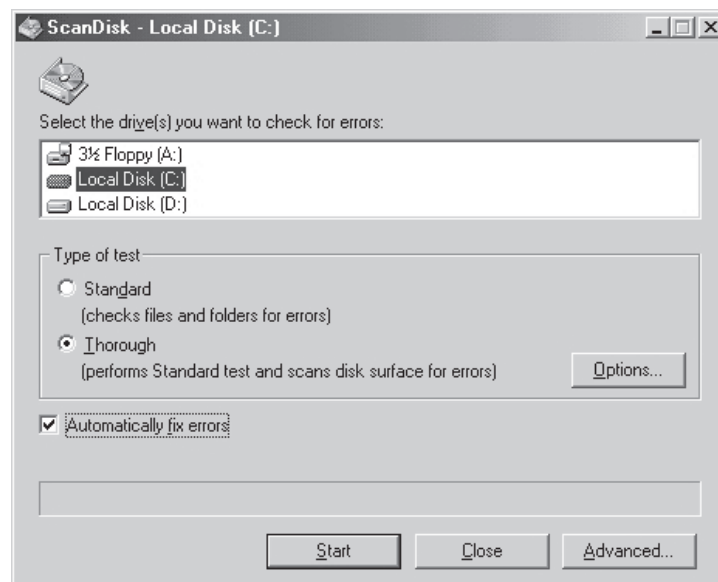


Figure 23-1:
ScanDisk Window

- d. Click the Advanced button and in Table 23-1 list the five different settings sections shown in the Advanced window.
- e. Click Cancel to close the Advanced window.
- f. With the C:\ drive highlighted in the drive selection window, click the Start button to begin scanning the hard drive.

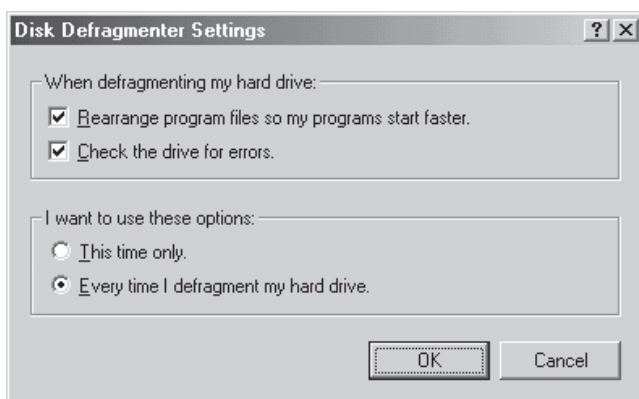


Figure 23-2: Disk Defragmenter Settings

- g. Once ScanDisk is done, in Table 23-2, record the total disk space, number of bad sectors, and the size of each allocation unit from the ScanDisk Results window.
- h. Click Close twice to close the ScanDisk Results window and the ScanDisk Properties window.

2. Defragment the hard drive

- a. From the desktop, use the path Start/Programs/Accessories/System Tools/ and then select Disk Defragmenter from the System Tools menu.
- b. Click the Settings button and in the Disk Defragmenter Settings window, make sure Rearrange programs and Check the drive for errors are checked, as shown in Figure 23-2.
- c. Click the OK button to return to the Select Drive window.

- ___ d. With the C:\ drive selected for the defragmentation, click the OK button to begin disk defragmentation.
- ___ e. Click the Show Details button and watch the defragmentation process.
- ___ f. Click the Legend button in the lower right portion of the screen to bring up the Defrag Legend dialog. The Defrag Legend should be similar to that shown in Figure 23-3.
- ___ g. In Table 23-3, list the color of the Unoptimized data that belongs at beginning of the drive, the Optimized (defragmented) data, and the Data that's currently being written.
- ___ h. Close the Defrag Legend by clicking the Close button.
- ___ i. When defragmentation is complete, click Yes to exit the program.

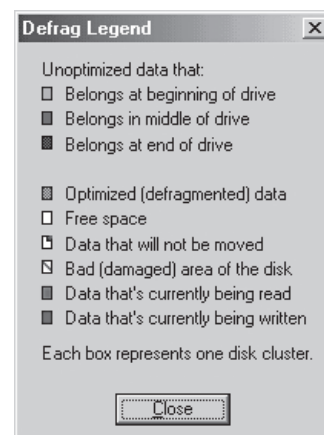


Figure 23-3: Defrag Legend

3. Install Compressed folders

- ___ a. From within the Control Panel, click on Add/Remove Programs.
- ___ b. Click the Windows Setup tab.
- ___ c. Click on System Tools and then the Details button.
- ___ d. Place a checkmark in the box next to Compressed Folders and click OK.
- ___ e. Click Apply to install the compressed folders.
- ___ f. Click Yes to reboot the computer.

4. Create a compressed folder

- ___ a. On the desktop, double-click My Computer.
- ___ b. Double-click the C:\ drive.
- ___ c. Double-click My Documents.
- ___ d. On the File menu, point to New, and then click Compressed Folder, as shown in Figure 23-4.

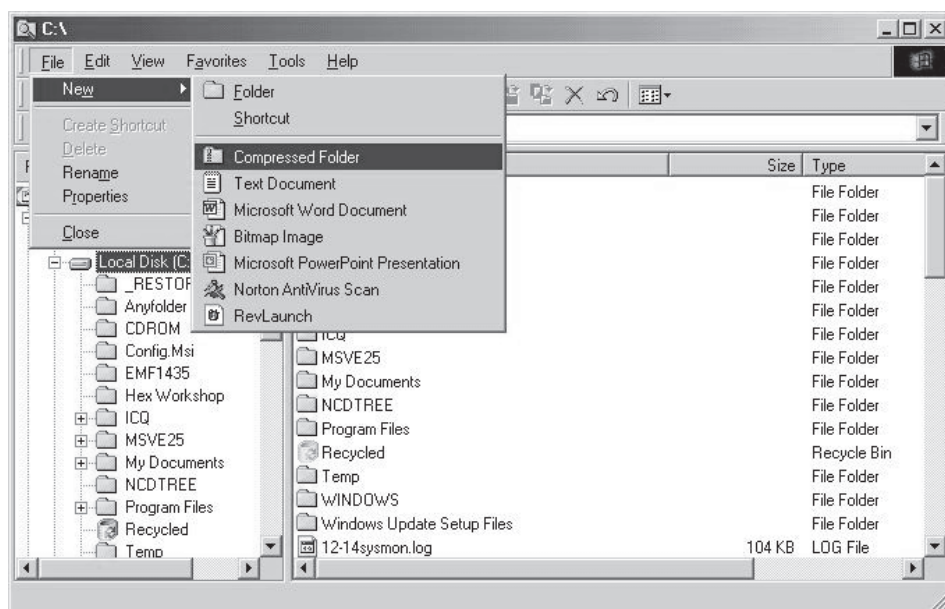


Figure 23-4: Compressed Folder Option

- ___ e. Type **YourName.zip**, YourName being you and your partner's first and last name, as the name for the new folder, and then press ENTER.

5. Create a file

- ___ a. In the left pane, click on the MY DOCUMENTS folder.
- ___ b. Create a *WordPad* Document by clicking File/New/text document.
- ___ c. Type **YourName.txt** as the name of the document.
- ___ d. Close all windows.

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6. Add a file to the compressed folder for archiving

- ☐ a. Open Windows Explorer.
- ☐ b. Click the My Documents subdirectory.
- ☐ c. Right-click the file "*YourName.txt*" and hold down the right mouse button.
- ☐ d. Drag the file to the compressed folder named YOURNAME.ZIP and release the right mouse button.
- ☐ e. Select Copy Here from the menu.
- ☐ f. Enter the compressed folder by clicking View menu and selecting Details.

7. Extract a file from a compressed folder

- ☐ a. From within Windows Explorer, double-click the compressed folder YOURNAME.ZIP. Your window should look similar to Figure 23-5.

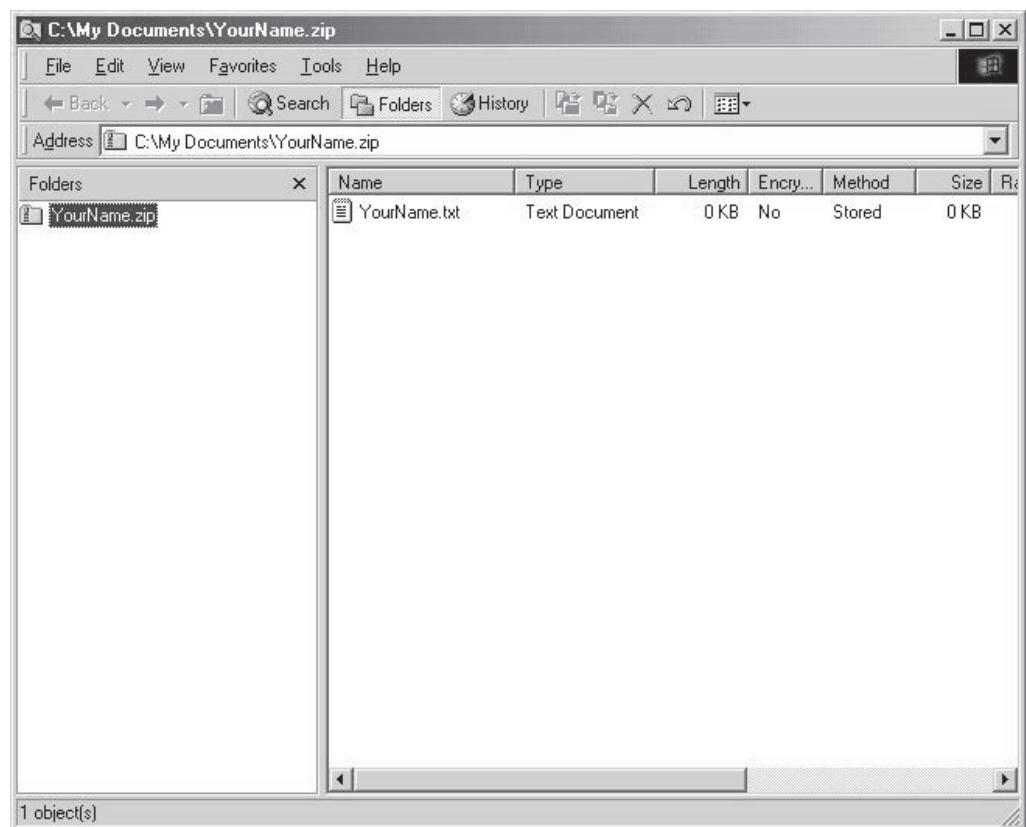


Figure 23-5: Your Compressed Folder

- ☐ b. Right-click the file "*YourName.txt*" and drag it to the MY PICTURES folder located within the MY DOCUMENTS folder.
- ☐ c. Release the mouse button and select Copy Here, to extract the file to the specific location.
- ☐ d. Close all open windows, and shut down the computer.

TABLES

Table 23-1

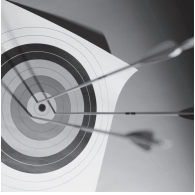
The 5 Settings in the ScanDisk Advanced Section:	

Table 23-2

ScanDisk Results	
Total Disk Space:	
Number of Bad Sectors:	
Size of Each Allocation Unit:	

Table 23-3

Select Colors From Defrag Legend	
Unoptimized data that belongs at beginning of drive:	
Optimized (defragmented) data:	
Data that's currently being written:	



Feedback

LAB QUESTIONS

1. What are some storage media?
2. What is one of the leading causes for a computer system slowing down?
3. What are two ways to access Add/Remove Windows components?
4. By what ratio was a file compressed in this procedure?
5. Using the methods in this lab, can you encrypt and compress a file at the same time?