

Windows 2000 Disk Management

OBJECTIVES

1. Use Disk Cleanup.
2. Backup a file.
3. Restore a backup.
4. Compress a file.
5. Encrypt a file.

RESOURCES

1. Marcraft 8000 Trainer with Windows 2000 installed
2. A blank 1.44MB floppy disk

DISCUSSION

This lab will discuss some common disk management procedures. You can use storage media such as CD-R, high capacity floppy, tape drive, DVD-R, or a secondary hard drive. Windows has a backup utility that can be used to schedule backups of your files. It is a good practice to clean unnecessary files off your hard drive. Windows has a utility called Disk Cleanup that can delete some of these files for you. Windows has a built-in file compression utility, but there are many third-party utilities available as well. For security reasons you may need to encrypt your files. The Encrypting File System (EFS) included with Microsoft Windows 2000 is based on public-key encryption. Each file is encrypted using a randomly generated file encryption key. Each file has a unique file encryption key, making it safe to rename. If you move a file from an encrypted folder to an unencrypted folder on the same drive, the file remains encrypted. If you copy an unencrypted file into an encrypted folder, the file remains unencrypted. You don't have to decrypt a file to open it and use it. EFS automatically detects an encrypted file and locates a user's file encryption key from the system's key store to open the file. In this lab you will create, back up, restore, compress, and encrypt a WordPad Document.

PROCEDURE

1. Disk Cleanup

- a. Boot the computer into Windows 2000.
- b. Use the path Start/Programs/Accessories/System Tools and select Disk Cleanup.



Troubleshooting



Troubleshooting

PROCEDURE - 25

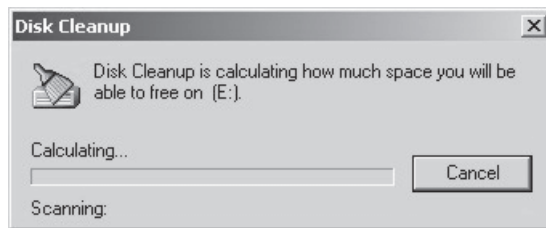


Figure 25-1: Calculating Cleanup Space

- ___ c. When prompted to select the drive to Clean up, select the E: Drive and click OK. You will see a window similar to Figure 25-1 calculating the space to clean up.
- ___ d. After the calculation has completed, record the entries in "Files to delete:" that have a check mark in Table 25-1.
- ___ e. Select Recycle Bin and Temporary files by clicking in the box to the left of their respective icons. A check mark will appear.
- ___ f. Click the More Options tab. You will see two areas: Windows components and Installed programs.

- ___ g. Click the Clean up button under Windows Components. You will see a window similar to Figure 25-2.

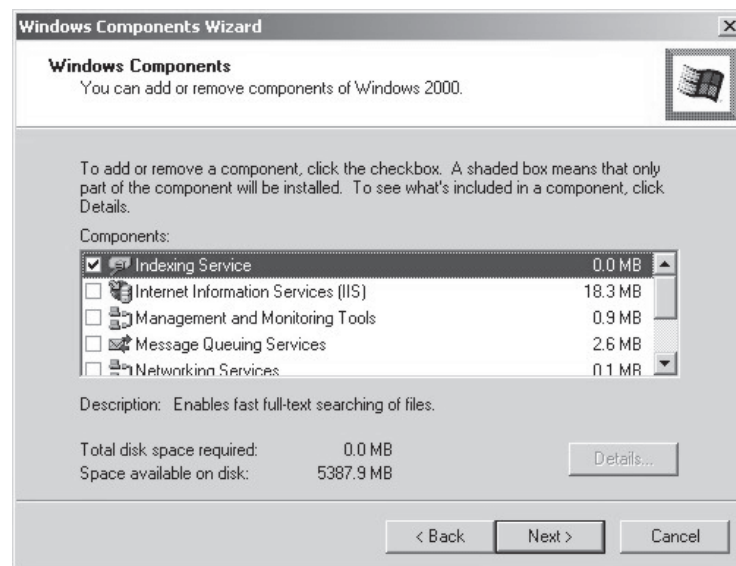


Figure 25-2:
Add/Remove
Windows
Components

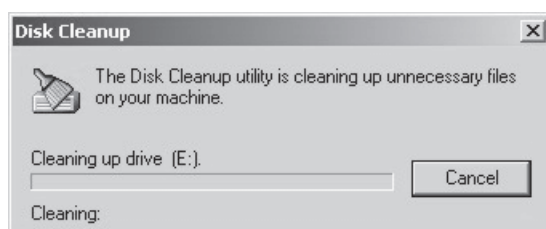


Figure 25-3: Cleaning Up Files

NOTE: You can check or uncheck items from this window to add or remove Windows Components. This window can also be accessed through Control Panel/Add/Remove Programs.

- ___ h. Click Cancel.
- ___ i. Click OK to close the *Disk Cleanup* window for E:.
- ___ j. Confirm the "Are you sure" question by clicking Yes. You will see a window similar to Figure 25-3.
- ___ k. When the cleanup has completed close all windows.

2. Create a file

- ___ a. From the Windows 2000 desktop double-click on My Documents.
- ___ b. Create a *WordPad* Document by clicking File/New/WordPad Document.
- ___ c. Type **YourName** as the name of the document.
- ___ d. Close all windows.

3. Backup

- ___ a. Use the path Start/Accessories/System Tools/ and then select Backup from the System Tools menu. You will see the *Welcome* screen.
- ___ b. Click the Backup tab. You will see a window similar to Figure 25-4. From this area you can select drives or folders to back up on one of the media types.

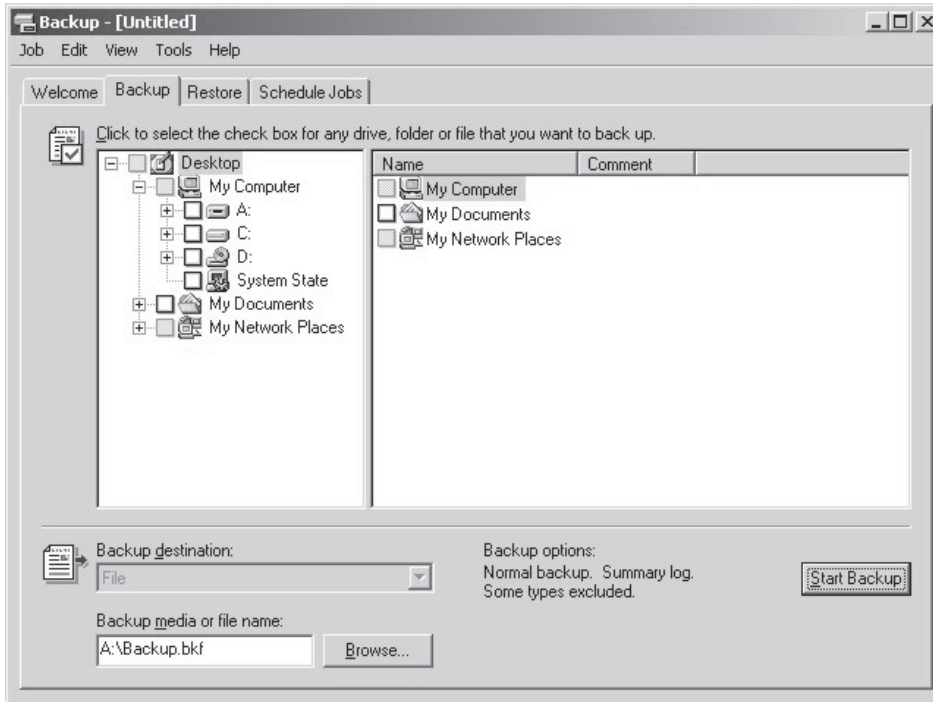


Figure 25-4: Select Items to Back Up

- ___ c. In the left pane, click on System State to highlight it but do not place a checkmark in the box next to it.
- ___ d. Record the items that appear in the right-hand window pane in Table 25-2.
- ___ e. Click the MY DOCUMENTS folder and put a checkmark in the box next to the icon.

NOTE: You will be able to do this backup on a floppy as long as the MY DOCUMENTS folder is small enough.

- ___ f. Record the drive and filename of the backup (in the bottom left of the window) in Table 25-3.
- ___ g. Insert a blank floppy into the floppy drive.
- ___ h. Click the Start Backup button. You will see a window similar to Figure 25-5.
- ___ i. Enter “**your name**” for the Backup description.
- ___ j. Enter “**your name**” for the label to identify the media if it is overwritten.
- ___ k. Click the Start Backup button. You will see a *Backup Progress* window.
- ___ l. When it has completed, click Close.
- ___ m. Close the *Backup* window.

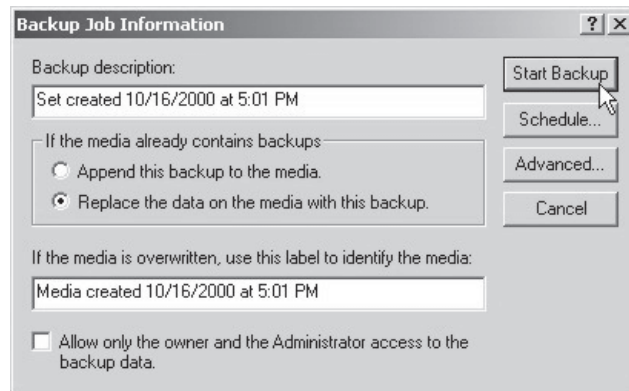


Figure 25-5: Backup Job Information

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4. Delete a file

- ___ a. From the Windows 2000 desktop double-click the My Documents icon.
- ___ b. Right-click on the document that you created earlier and select Delete.
- ___ c. Confirm by clicking Yes.
- ___ d. Close all windows.

5. Restore the backup

- ___ a. Open the *Windows Backup* utility using the path Start/Programs/Accessories/System Tools/ and then selecting Backup. You will see the Welcome screen.
- ___ b. Click the Restore tab.

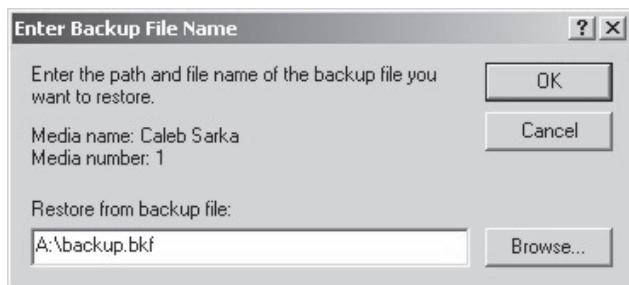


Figure 25-6: Confirm Restoration Dialog

- ___ c. In the right window pane, double-click File; to expand it.
- ___ d. Expand the Backup with Your Name on it by double-clicking it.
- ___ e. Place a check mark next to the E: drive to restore the files that were backed up.
- ___ f. Click the Start Restore button.
- ___ g. Confirm Restoration by clicking OK. You will see a window similar to Figure 25-6.
- ___ h. Make sure the source file to backup has the correct filename and path, and click OK.
- ___ i. After the restore has completed, click Close.
- ___ j. Close all windows.

6. Test the restoration

- ___ a. From the Windows 2000 desktop double-click on My Documents.
- ___ b. Record your observations about the files in this folder in Table 25-4.

NOTE: The remainder of this lab can be performed only if you have an NTFS partition on your hard disk. Consult your instructor before performing Steps 7 and 8 below.

7. Compress a file

- ___ a. From the Windows 2000 desktop double-click on My Documents.
- ___ b. Double-click on your *WordPad* document that was just restored.
- ___ c. To add some size to the file, enter 10 lines of the character X with the keyboard. (You can hold down the key for one line, and copy and paste the rest.)
- ___ d. Close the document. When prompted, click Yes to save the changes.

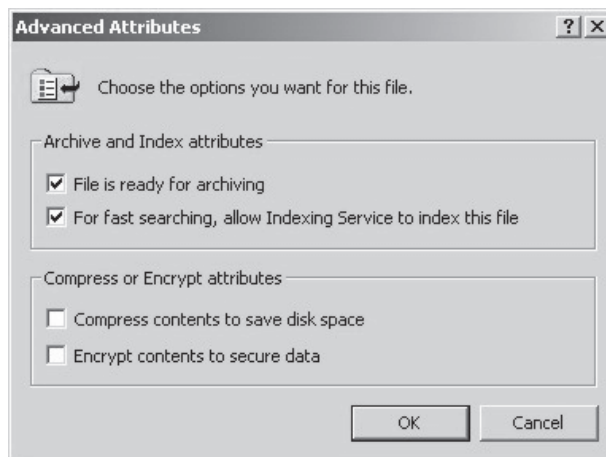


Figure 25-7:
Advanced Attributes

- ___ e. Right-click on the document and choose Properties.
- ___ f. Record its "Size on disk" in Table 25-5.
- ___ g. Click the Advanced button. You will see a window similar to Figure 25-7.
- ___ h. Select "Compress contents to save disk space". Click OK.
- ___ i. Click the Apply button.
- ___ j. Record the new "Size on disk" in Table 25-6.

8. Encrypt a file

- ___ a. From the properties of the document click the Advanced button again.
- ___ b. Select "Encrypt contents to secure data", which will turn the compression option off.
- ___ c. Click OK to close the *Advanced Attributes* window.
- ___ d. Click OK to close the *File Properties* window. You will see a window similar to Figure 25-8.

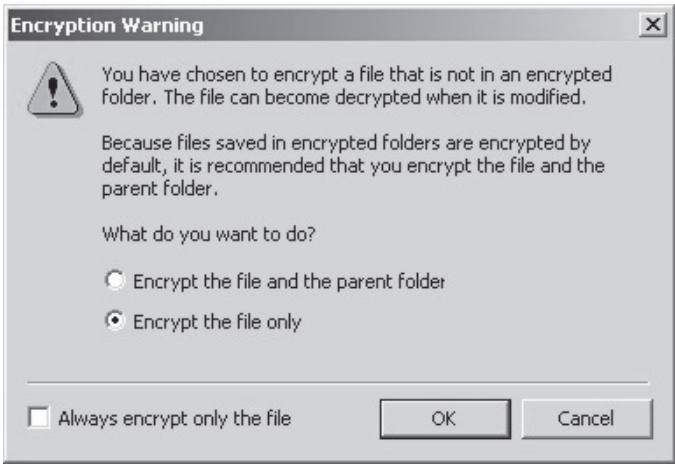


Figure 25-8: Encryption Warning

- ___ e. Click the radio button next to "Encrypt the file and the parent folder" to select it and click OK.
- ___ f. While the file is selected you will see "Attributes: Encrypted" in the right-hand portion of the *My Documents* window.
- ___ g. Close all open windows, and shut down the computer.

TABLES

Table 25-1

“Files to Delete”:	

Table 25-2

System State (right-hand pane):	

PROCEDURE - 25

Table 25-3

Backup Drive and Filename:	
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Table 25-4

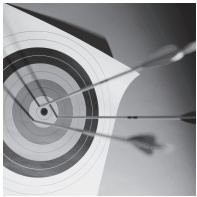
Observation About Files:	
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Table 25-5

File Size on Disk:	
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Table 25-6

New File Size on Disk:	
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Feedback

LAB QUESTIONS

1. What are some storage medias?
2. What does EFS stand for?
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?