

Maintenance

<i>Basic Computer Maintenance (Win95/98)</i>	<i>1</i>
Delete Temporary Files (Temp, Temp Internet Files, History, Cookies).....	1
Empty the Cache, History & Location Bar (Netscape 4.x)	3
Empty the Cache, History & Address Bar (Internet Explorer 5.x).....	4
Empty the Recycle Bin	6
Run ScanDisk	6
Deleting *.chk files (errors found byScan Disk)	7
Run Disk Defragmenter	8
<i>Using Disk Cleanup</i>	<i>9</i>
To Start Disk Cleanup	9
Disk Cleanup Choices.....	10
More Options	10
Settings	10
<i>How to Backup Important Files</i>	<i>11</i>
Why Backup?.....	11
What Files Should I Backup?	11
Where and How Often Should I Save My Backups?	11
What Program Should I Use?	11
How to Install Microsoft Backup	12
Using Microsoft Backup (Window 98 Version).....	12
Using Microsoft Backup (Windows 95 Version)	15
<i>Free Hard Drive Space on Your Computer</i>	<i>18</i>
<i>Shutting Down the Computer</i>	<i>19</i>
<i>Removing Online Services</i>	<i>21</i>
<i>Maintenance Record Cards</i>	<i>22</i>
<i>Technology Team Cards</i>	<i>24</i>

Basic Computer Maintenance (Win95/98)

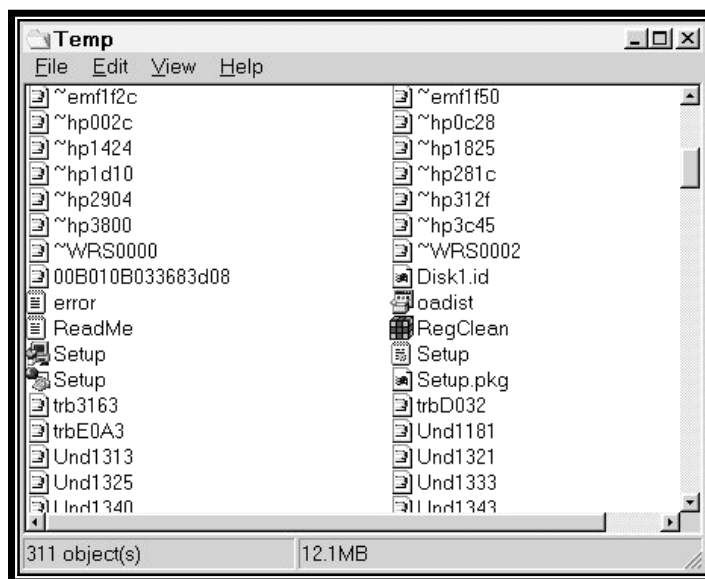
*In Windows98, you can use Disk Cleanup to delete the Temporary Internet and Temp Files and to empty the Recycling Bin – see Using Disk Cleanup A9

Delete Temporary Files (Temp, Temp Internet Files, History, Cookies)

- Double-click the **My Computer** icon on the desktop
- Double-click **C:**
- Double-click the **Windows** folder
- The *Windows* window will appear
- Double-click the **Temp** folder

Press **F5** to
Refresh the
screen

If access is
denied, hold the
CTRL key to
deselect denied
files and then
delete the
remaining files.

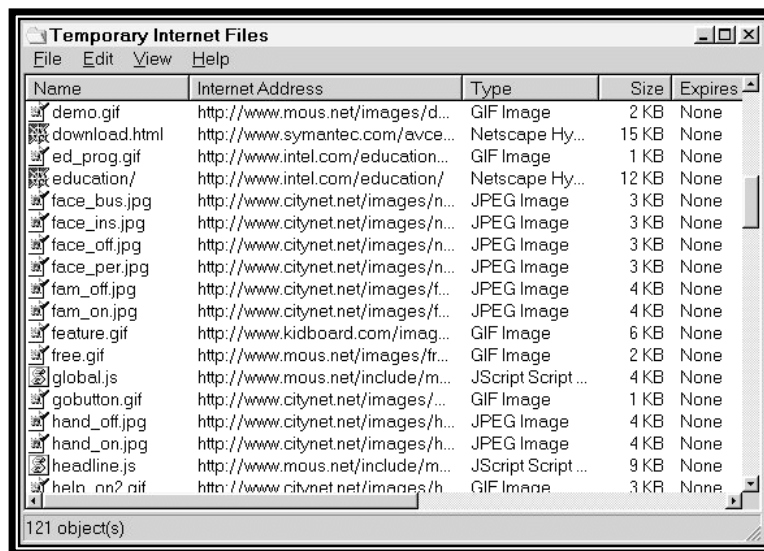


- From the top **File** menu, click **Edit|Select All**
- On the keyboard, press the **Delete** key
- The *Confirm File Delete* window will appear



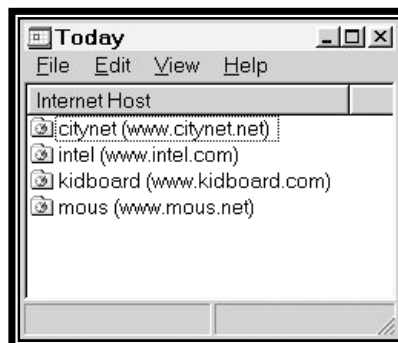
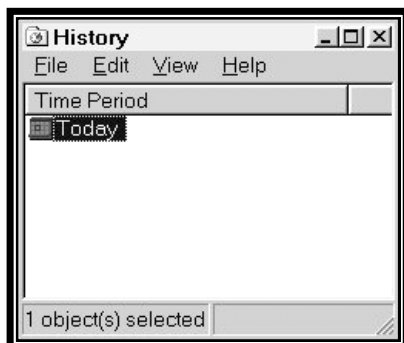
- Click the **Yes** Button (Note: If you get a message that says access is denied, try deleting files one at a time by highlighting (click once))
- **Close** the *Temp* window (click X in the top right corner)
- In the *Windows* window, double-click **Temporary Internet Files**

Troubleshooting Technology

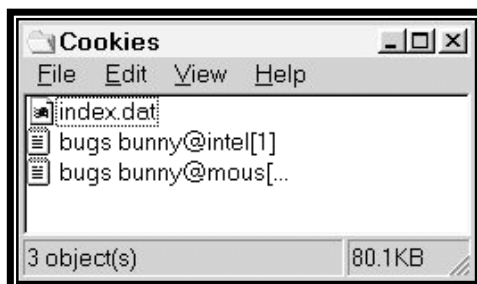


- From the top **File** menu, click **Edit|Select All**
- On the keyboard, press the **Delete** key
- The *Confirm File Delete* window will appear
- Click the **Yes** Button
- **Close** the *Temporary Internet Files* window (click X)
- In the *Windows* window, double-click the **History** folder

F5 to refresh
the screen



- From the top **File** menu, click **Edit|Select All**
- On the keyboard, press the **Delete** key
- The *Confirm File Delete* window will appear
- Click the **Yes** Button
- **Close** the *History* window (click X)
- In the *Windows* window, double-click the **Cookies** folder



Index.dat is always there.

If Access denied, use the
CTRL key to deselect the
denied files and delete the
remaining files.

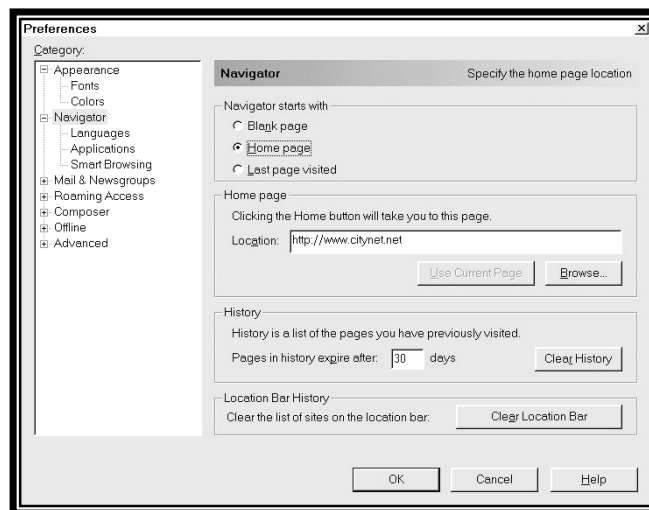
F5 to refresh the screen

- From the top **File** menu, click **Edit/Select All**
- On the keyboard, press the **Delete** key
- The *Confirm File Delete* window will appear
- Click the **Yes** Button
- Close the *Cookies* window
- Close all other windows

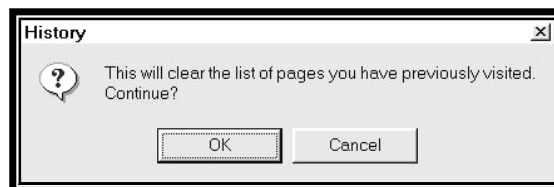
Empty the Cache, History & Location Bar (Netscape 4.x)

(cache and history - holds info from websites; location bar – sites typed in)

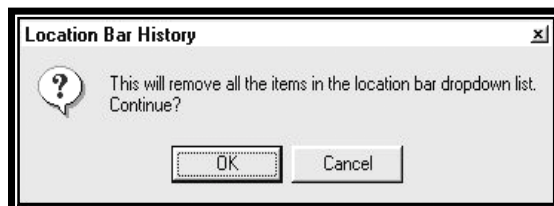
- Open Netscape
- Click **Edit** on the top menu
- Click **Preferences...**



- In the History section of the *Preference* window, click the **Clear History** button



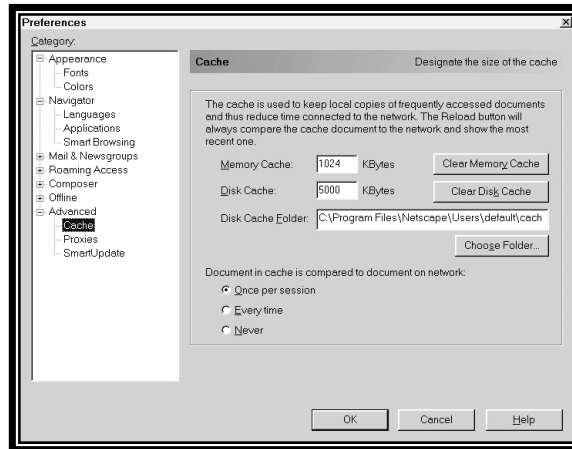
- Click the **OK** button
- In the Location Bar History section, click the **Clear Location Bar** button



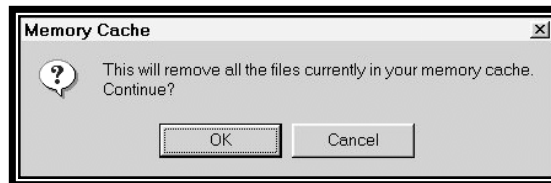
- Click the **OK** button

Troubleshooting Technology

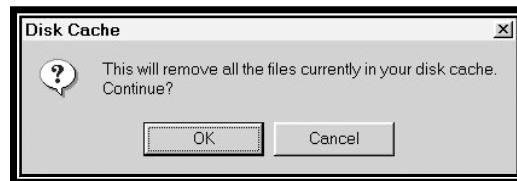
- In the *Category* box, click the + beside **Advanced**
- Click **Cache**



- Click the **Clear Memory Cache** Button



- Click the **OK** button
- Click the **Clear Disk Cache** Button



- Click the **OK** button
- In the *Preferences* window, click the **OK** button

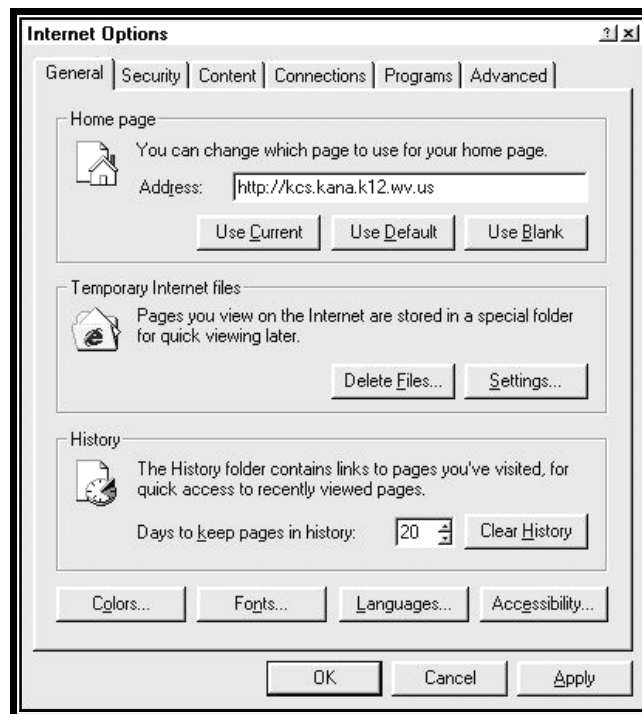
Empty the Cache, History & Address Bar (Internet Explorer 5.x)

(cache and history - holds info from websites; address bar – sites typed in)

- Open Internet Explorer
- Click **Tools** on the top menu
- Click **Internet Options**

Troubleshooting Technology

- The *Internet Options* window appears.



- In the *Temporary Internet files* section (cache), click the **Delete Files** button



- Click the **OK** button
- In the *History* section, click the **Clear History** button (address bar & history folder)



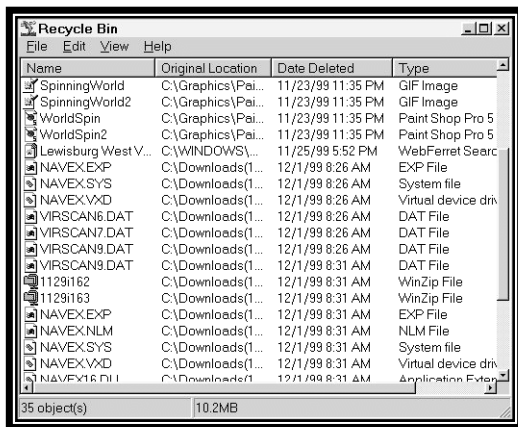
- Click the **OK** button

Troubleshooting Technology

Empty the Recycle Bin

(holds deleted files)

- Double click the **Recycling Bin** icon on the desktop




Shortcut: Right click the Recycling Bin and select Empty Recycling Bin

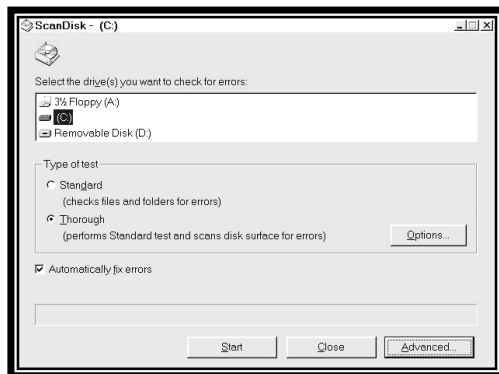
- Click **File**
- Click **Empty Recycling Bin**

Run ScanDisk

(scans the hard drive for any errors and fixes them)

Beware, this can take a while; do when you don't need the computer

- Turn off your screensaver
 - Double-click **My Computer**
 - Double-click **Control Panel**
 - Double-click **Display**
 - Click the **Screensaver tab**
 - Set screensaver to **None**
- Disable Norton's Anti-Virus
 - Right-click the  in the system tray (bottom right)
 - Left-click **disable**
- Click **Start|Programs|Accessories|System Tools**
- Click **ScanDisk**

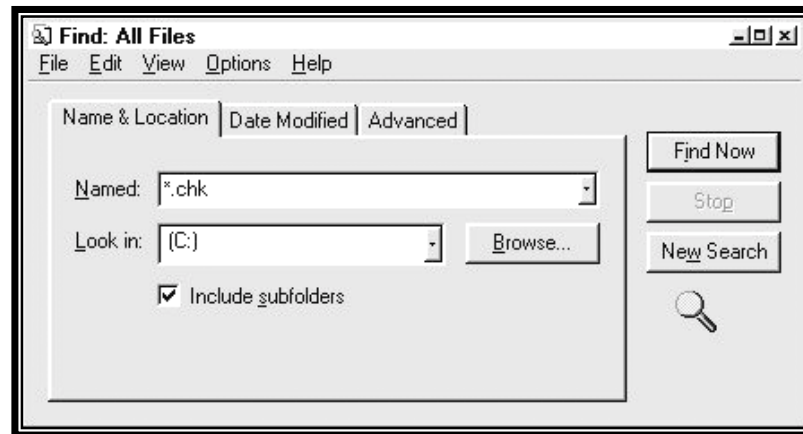


Troubleshooting Technology

- Click **C:** (this may already be highlighted)
- Click **Thorough** (may already be selected)
- Make sure the **Automatically fix errors** box is **checked**
- Click the **Start** button in the *ScanDisk* window

Deleting *.chk files (errors found by Scan Disk)

- Click the **Start** button
- Click **Find**
- Click **Files or Folders**



1. Type *.chk in the Named: box

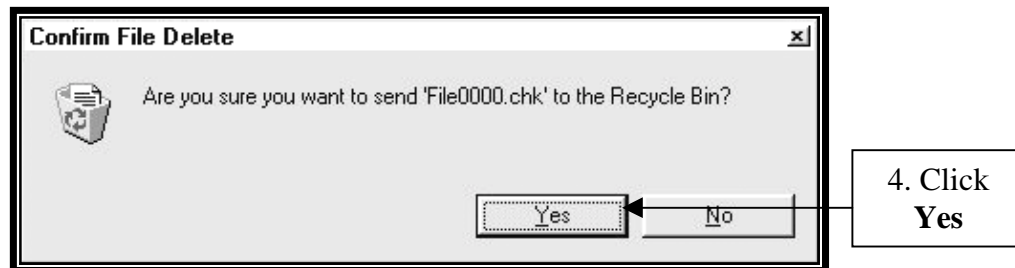
2. Click Find Now

3. Click the first file and choose Edit|Select All

The screenshot shows the 'Find: Files named *.chk' dialog box. The 'Named:' field is set to '*.chk'. The 'Look in:' field is set to '(C:)'. The 'Include subfolders' checkbox is checked. The 'Find Now' button is highlighted. Below the dialog box, a table lists the found files:

Name	In Folder	Size	Type	Modified
File0000.chk	C:\	2,560...	CHK File	10/6/01 11:27 AM
File0001.chk	C:\	184KB	CHK File	10/6/01 11:27 AM
File0002.chk	C:\	4KB	CHK File	10/6/01 11:27 AM
File0003.chk	C:\	252KB	CHK File	10/6/01 11:27 AM
File0004.chk	C:\	512KB	CHK File	10/6/01 11:27 AM
File0005.chk	C:\	12,28...	CHK File	10/6/01 11:27 AM

6 file(s) found



- Repeat for the rest of the *.chk files

Run Disk Defragmenter

(rewrites the drive to put files together - speeds it up)

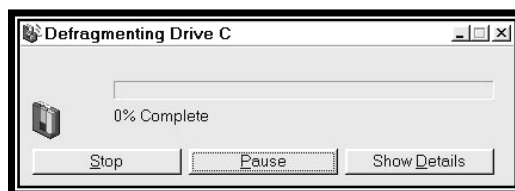
Beware, this can take a while, do when you don't need the computer

Always run scandisk first

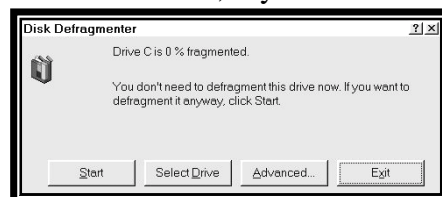
- Turn off screensaver and disable Norton's AntiVirus as before
- Click **Start|Programs|Accessories|System Tools**
- Click **Disk Defragmenter**
- Click **C:** should be selected....if not, click the down arrow and choose it



- Click the **OK** button



- Click the **Start** button, if you receive the following message:

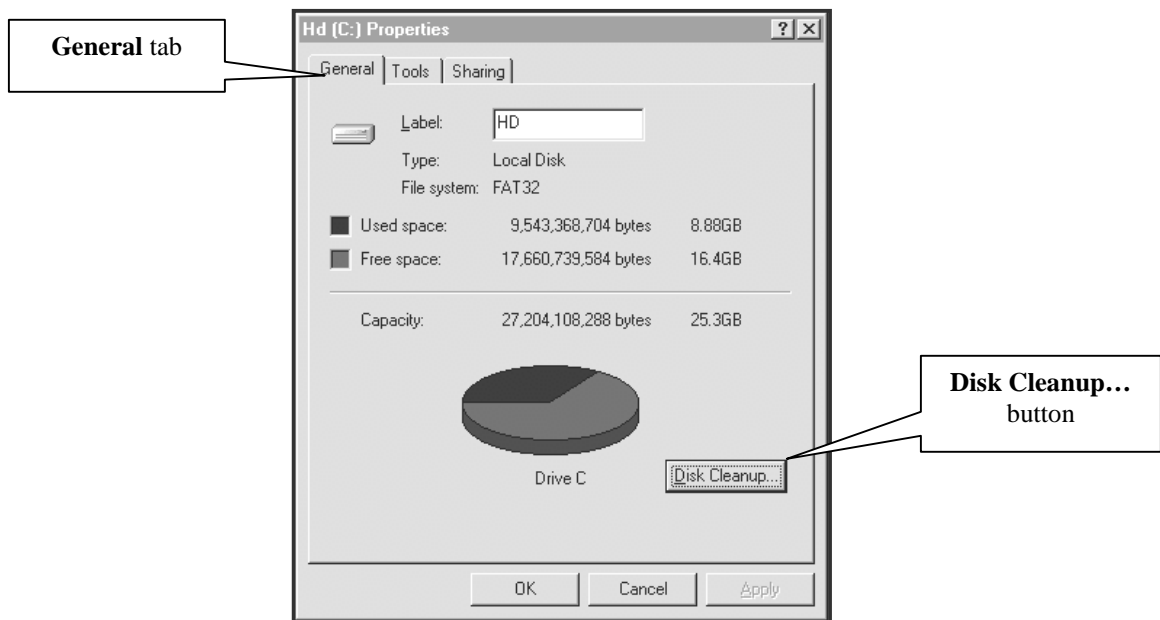


Using Disk Cleanup

Disk Cleanup is a **Windows 98** program that helps free up space on your hard drive. Disk Cleanup searches the hard drive, and then lists temporary files, Internet cache files, unnecessary program files, and other files that can be safely deleted.

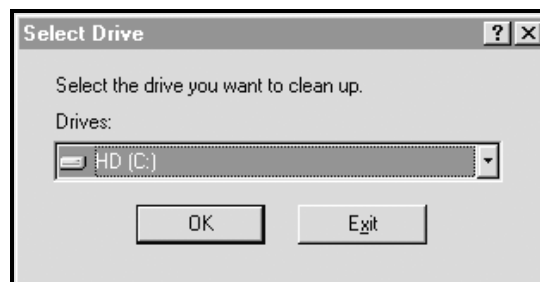
To Start Disk Cleanup

- Open **My Computer**.
- Right-click the disk you want to clean (usually C drive), and then click **Properties**.
- On the **General** tab, click the **Disk Cleanup** button, as pictured below.



OR

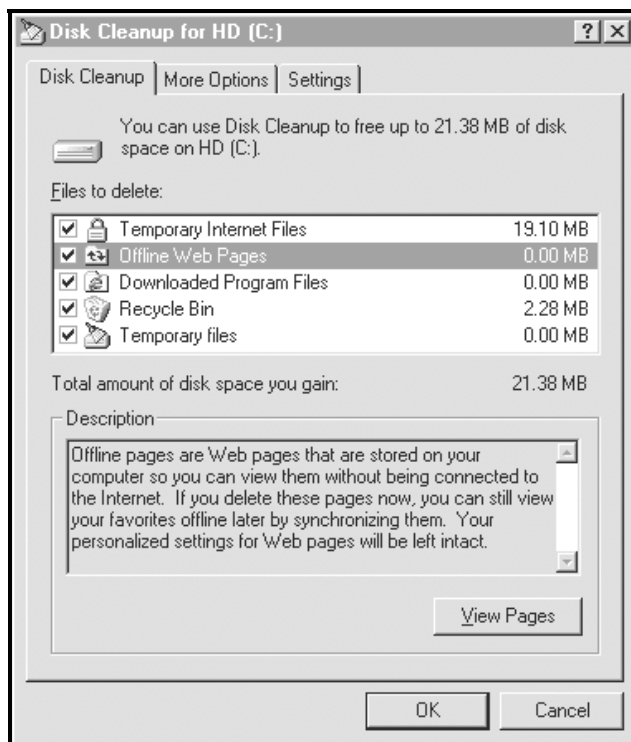
- Click Start> Programs> Accessories> System Tools> and then click **Disk Cleanup**.
- The following *Select Drive* window appears. Choose the drive to clean from the drop-down menu and click **OK**.



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Disk Cleanup Choices

After calculating how much disk space is available for cleanup, the following window appears:



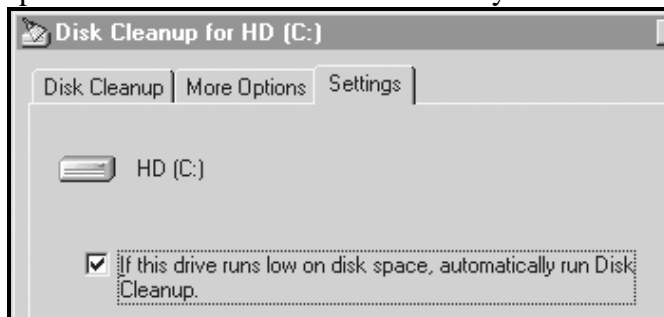
- Leave all boxes checked unless you want to keep some of the files. **Note:** You can click items in the list and then read a description of each file type in the area under the list.
- Make your choices and then click **OK**
- Click **Yes** when asked “Are you sure you want to delete files?”

More Options

The *More Options* tab takes you to the Add/Remove Control Panel’s *Install/Uninstall* programs and the *Windows Setup* options, where unwanted programs and utilities can be removed. It also allows the user to convert the hard drive to FAT32, a more efficient file storage system than FAT16. This option is not available if the drive already uses FAT32.

Settings

The *Settings* tab allows the user the choice of running Disk Cleanup automatically if the hard drive becomes low on space. This box should be checked by default.



How to Backup Important Files

Why Backup?

You never know what could happen to your computer and all of the files stored on it...one minute it's working fine and the next minute...poof, everything's gone! An electrical power surge, a virus, a flood, a fire, lightning, theft, corrupted data, a corrupted hard drive... to name a few possibilities...and suddenly you wish you had taken the time to make a copy of those files you spent hours creating. Unfortunately, it is usually too late. Don't let this happen to you. Make a backup plan and follow it.

What Files Should I Backup?

If you lost all of your files, what files would you be upset over losing? Those are the files you should backup. Think about the applications on your computer. Have you created files with Word, Excel, PowerPoint, Access, or similar programs? If so, then you'll probably want to have a copy of the folder that contains all of your data files, such as My Documents. Do you have email messages or address books that would be difficult, if not impossible, to replace? If so, find out where these items are stored and add them to your list. What about bookmarks or favorites? Do you have a photo-editing program, such as Paint Shop Pro, that you used to create your own graphics? What about photo albums of scanned pictures? Or web pages? If it would upset you to lose it, back it up.

Don't backup programs unless you are making a backup copy of the installation files. Programs need reinstalled from scratch.

Where and How Often Should I Save My Backups?

The answer to this question depends upon the type and number of files that need backed up. If you only have a few files, then you could copy them to a floppy disk. If you have a lot of files that include graphics and/or sounds, then you need to save the backup to a second hard drive, to a different partition on the hard drive, to a network drive, to a zip drive, or burn them to a CD-R. Another option is to move your backup files to an Internet site that offers free drive space, which is a nice option, since the backups will be at a totally different location than the originals. As a last resort, save them to a different folder on the C: drive.

How often you run a backup depends upon how important the files are to you and how much you are willing to lose. If you make major changes, back the files up that day, if possible. Otherwise, consider a weekly, biweekly or at a minimum, a monthly backup.

What Program Should I Use?

Windows 95/98 comes with a free program called *Backup* for backing up your important files. To find out if Backup is installed on your computer, go to Start, Program Files, Accessories, System Tools, and look for Backup. If it's there, then skip *How to Install Microsoft Backup* and go on to *Using Microsoft Backup*. If it is not listed in the System Tools menu, then you need to install it.

Troubleshooting Technology

How to Install Microsoft Backup

For Windows 95, click Start>Settings>Control Panel>Add/Remove Programs>Windows Setup tab and Disk Tools. For Windows 98, click Start>Settings>Control Panel>Add/Remove Programs>Windows Setup tab>Accessories and System Tools. Click the Details button and check the box beside Backup. Click OK twice. Backup will appear in the System Tools folder.

Using Microsoft Backup (Window 98 Version)

Start the Backup program: **Start>Programs>Accessories>System Tools> Backup**

The **first time** you use *Backup* a window appears asking if you have backup devices installed. Choose **No**.

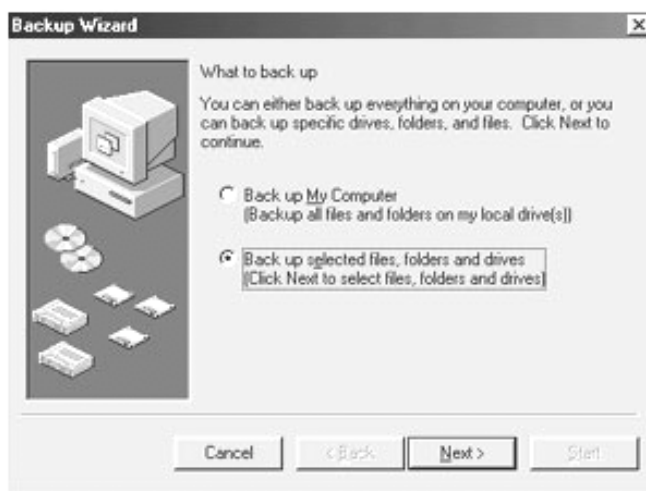


The next screen will ask you if you want to **Create a new backup job, Open an existing backup job, or Restore backed up files**. If this is the first time you have used Microsoft Backup, then you will need to *create a new backup job*. If you've already created one, then choose to either *open an existing backup job* or to *restore backed up files*.



Click **OK**.

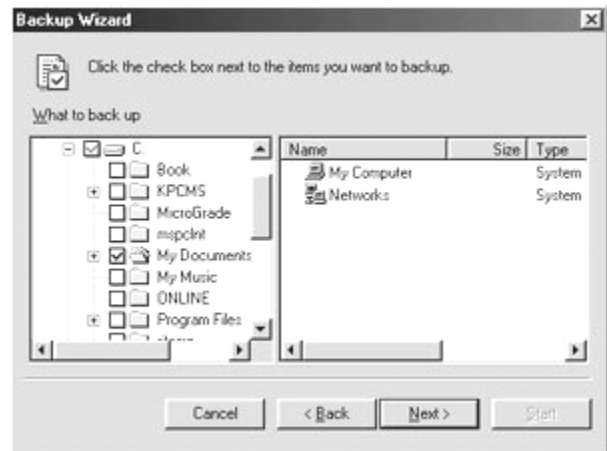
On the *What to back up* screen, choose **Back up selected files, folders, and drives**, unless you want to backup your entire computer. If you backup the entire hard drive, be sure you have a large storage device, such as a tape drive, a Jazz drive, or 2nd hard drive attached.



Click **Next**.

On the next screen, you will choose which files to backup. The left frame contains a list of all the folders on your hard drive. If you click the + sign next to a folder, it will expand and show the sub-folders. If you click a folder in the left frame, its contents will be shown in the right frame. Click the + sign beside the C: drive.

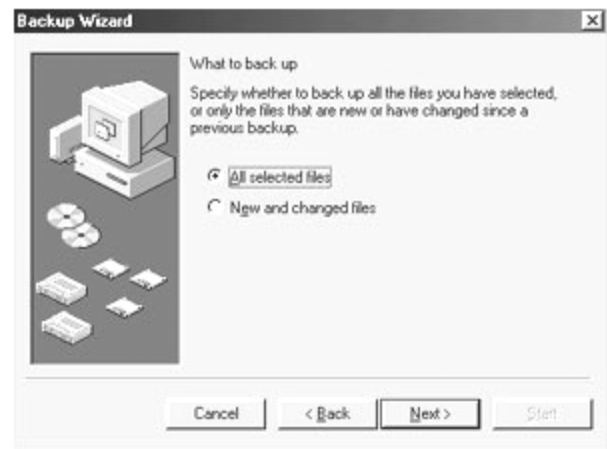
Click the boxes beside any files or folders you want to backup. A ✓ checkmark should appear in the chosen boxes. See next box for suggestions.



Suggestions:

- Consider: ✓ checking *My Documents*
- In the Windows folder: ✓ *Desktop* and *Favorites*
- +Windows +Local Settings +Application Data + Microsoft ✓Outlook (if you want your mail and address book)
- For Netscape clear the cache first, then: +C +Program Files +Netscape +Users ✓your folder name (sometimes called default)
- Click **Next** when finished.

The window gives you a choice of backing up ***All selected files***, which is what you want to do the first time, or ***New and changed files*** for subsequent backups.



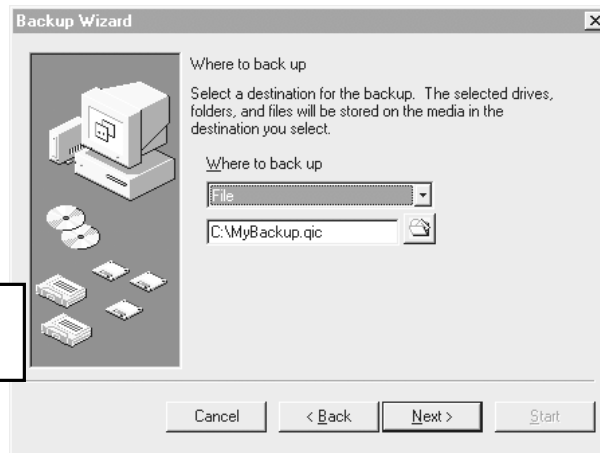
To **select a destination** for the backup,

Troubleshooting Technology

click the folder icon and navigate to the backup location. The destination can be a zip drive or any other location.

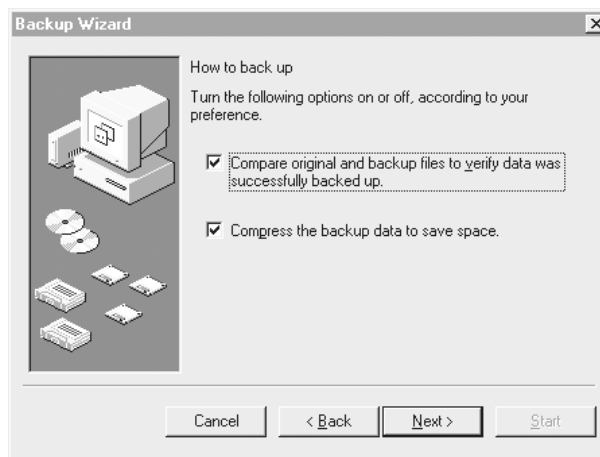
Click **Next**.

Click folder icon to choose destination.

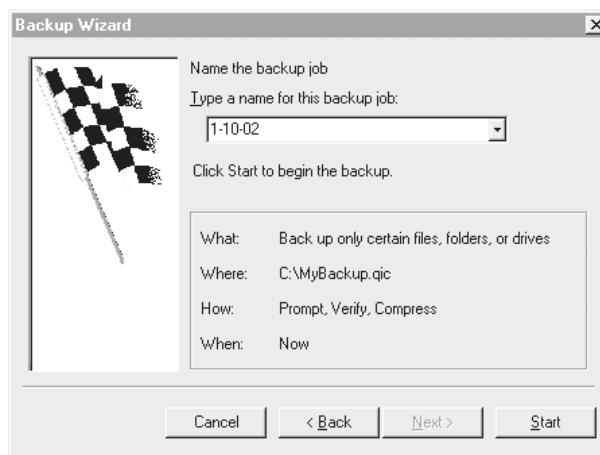


Leave both options in this window checked. The first option will examine the backup and report any errors. The second one will compress the file to make it smaller.

Click **Next**.



Type a name for the backup and then click **Start**. Note: You may want to type a date with the name and any other pertinent information.



When the backup is complete, an

Operation Complete message pops up. Click **OK**.

The status box reports if any errors occurred. If there were any errors, click the **Report...** button to see them. Click **OK** when finished.

You can move files to a different location, such as a CD, for safe keeping, or burn them to a CD, etc.

Errors reported

	Estimated	Processed
Files	3,004	2,996
Bytes	353,518,586	353,487,783
Compression		1.20 : 1

To restore or update your backups, start the Backup program and choose the *restore* or *open* options instead of *A new backup job*. Open the backup file and follow the steps.

Using Microsoft Backup (Windows 95 Version)

Start the Backup program: **Start>Programs>Accessories>System Tools> Backup**

A **Welcome Screen** appears. Click **OK**.

You can use Microsoft Backup to copy (i.e. "back up") important files from your computer's hard disk to a floppy disk or tape.

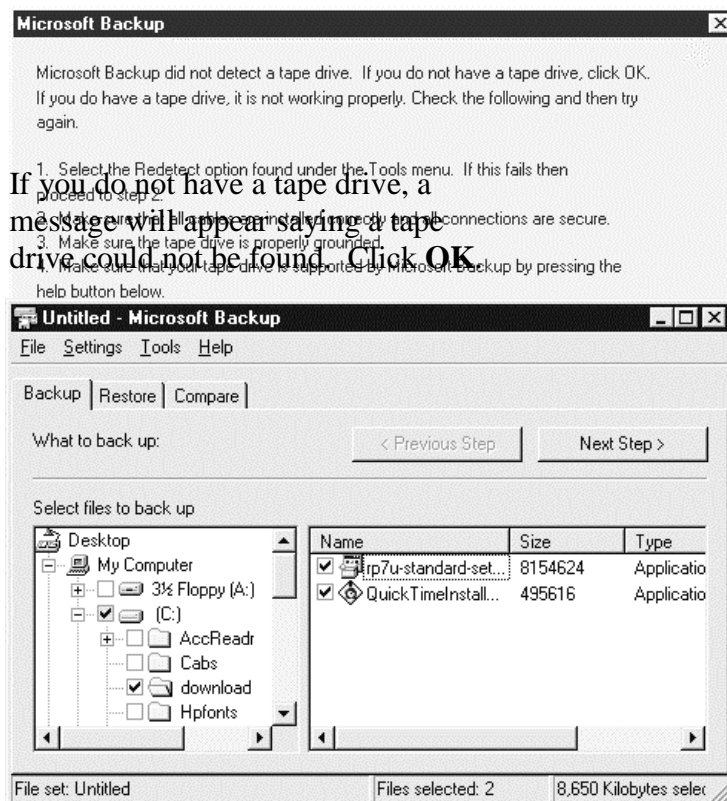
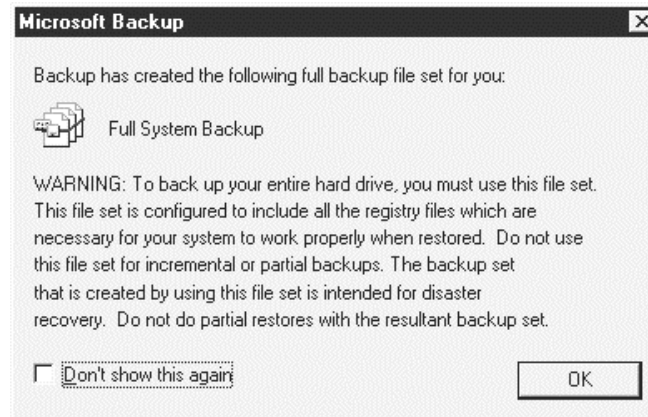
The three steps in backing up are:

1. Choose each file or folder you wish to back up by clicking the check box(✓) to the left of it.
2. Select the destination, such as floppy drive A, where the backup copies will be placed.
3. Start the backup process.

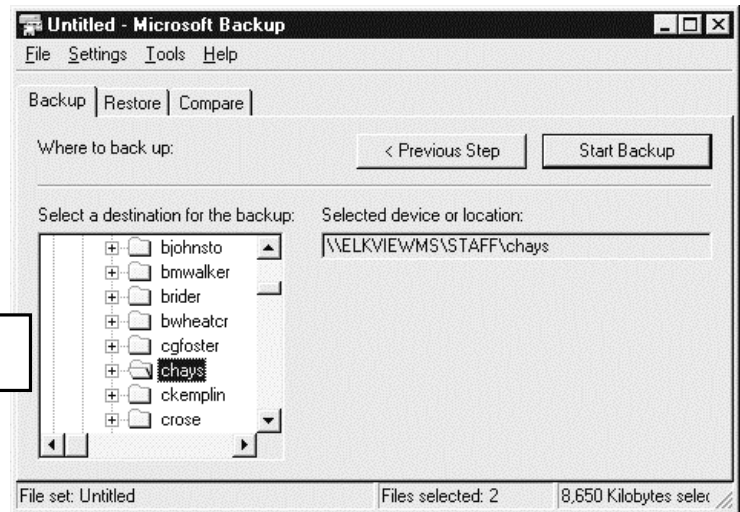
For more information, click on the Help button below.

☐ Don't show this again

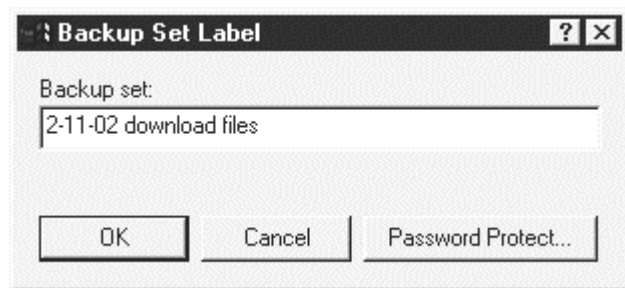
A **Full System Backup** message appears. Click **OK**.



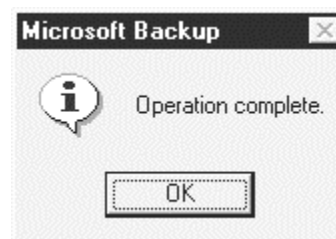
Select a destination for the backup up by using the + sign to open drives and folders and to navigate to the folder where you want the backup file stored. The path should appear in the box on the right. Click the **Start Backup** button.



Give the backup set a name. You may want to include the date along with an identifying name. Click **OK** and wait until the backup is complete.



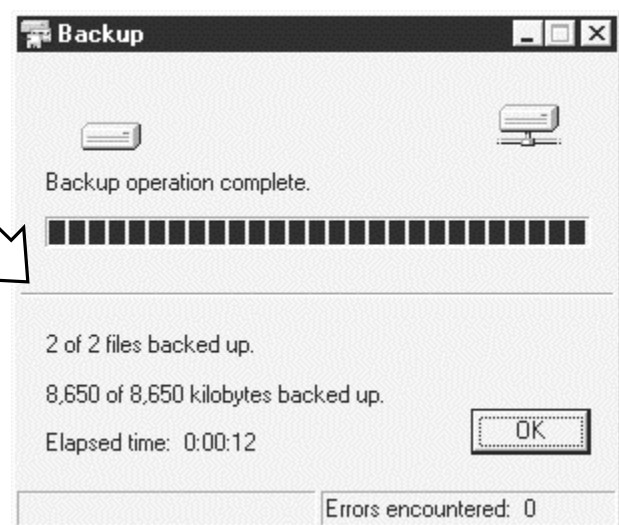
When the **Operation complete** window appears, click **OK**.



Before exiting the program, look at the status line at the bottom of the summary window to see if there were any errors.

If there are no errors, click **OK**. If there were errors, you can read about them in the *error.log* file, which is stored in the **Windows\Accessories** folder.

The 95 version does not compress the file. You may want to use a compression program, such as

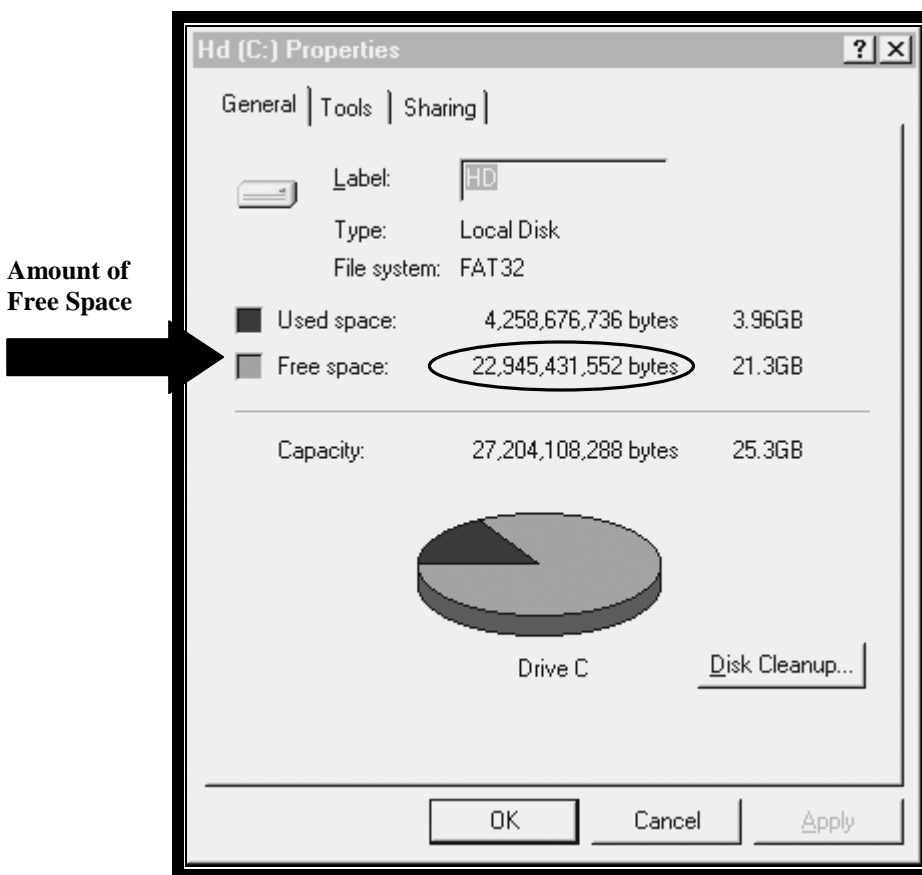


WinZip, to make it smaller.

Free Hard Drive Space on Your Computer

Windows 95/98 needs at least 25-50 megabytes of free space on your hard drive to work properly. If you do not have enough free space, you will see a marked decline in your computer's performance. It will become very slow and eventually, if space gets too tight, programs will not open. Follow these steps to check the amount of hard drive space available on your computer:

1. Double-click **My Computer**.
2. **Right-click on C: drive** (the hard drive that contains your Windows software).
3. Choose **Properties**.

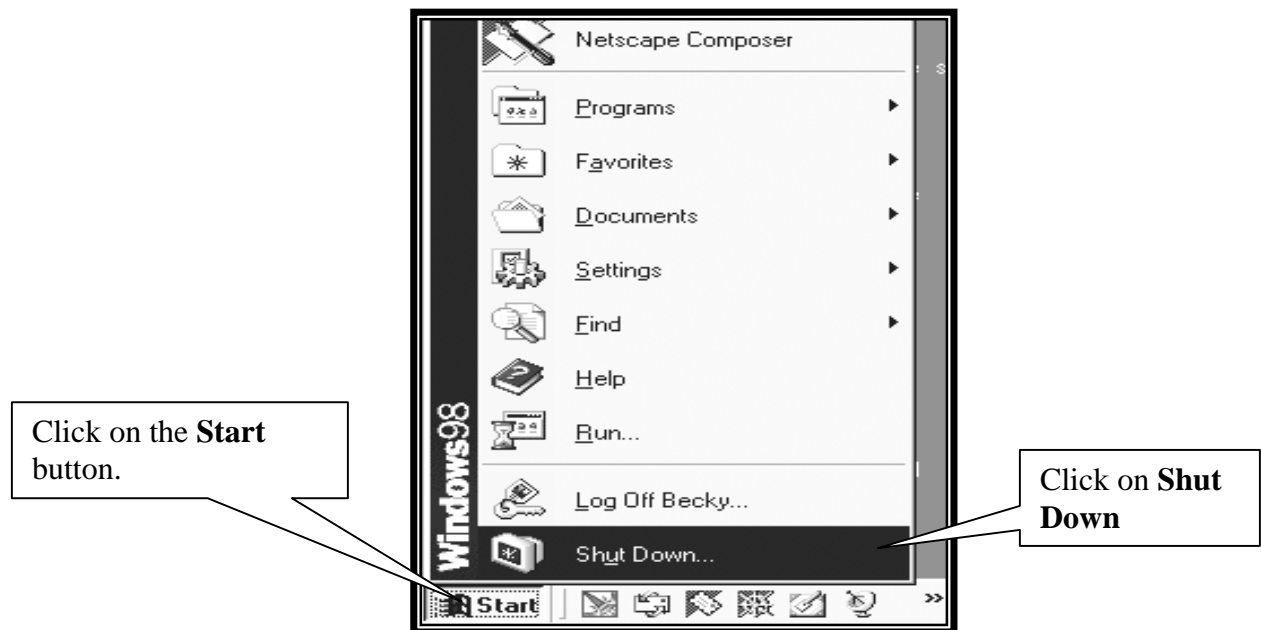


4. Look at the amount of **Free Space** on the hard drive. It should have at least 25,000,000 bytes or more (50 million preferable) to run effectively.
5. Click **OK** to close the Properties window.
6. If there is not enough space, see *Basic Computer Maintenance* (Maintenance) and/or *Uninstalling Software* (Software). Also consider buying a larger hard drive.

Shutting Down the Computer

It is very important that you correctly shut down a computer that runs Windows 95 or 98. This allows the operating system to close all files that might be open.

Close any programs you might have open. Click the **Start** button and then click **Shut Down**.



Click in the **Shut down** radio button.

Click on the **OK** button



Troubleshooting Technology

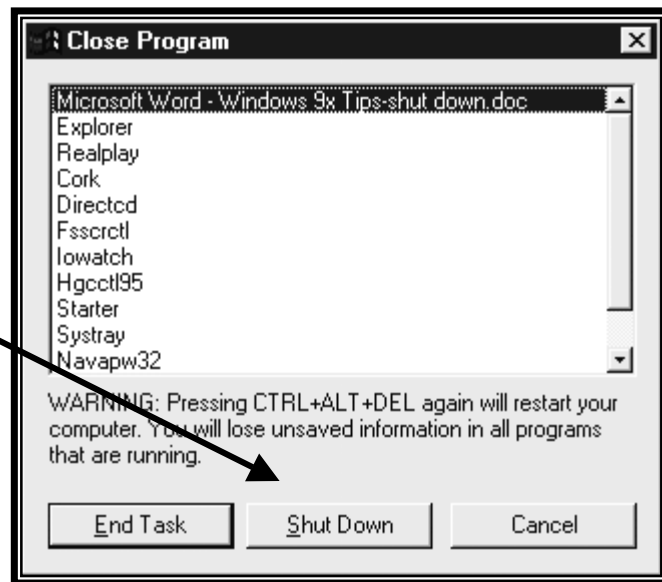
Troubleshooting:

If your computer freezes and you wish to shut it down, press the **CTRL+ALT+DELETE** keys at the same time.

Click on the **Shut Down** button.

Warning:

You will loose any unsaved information in all programs that are running.



Removing Online Services

Frees up to 1 MB of disk space

When Windows 95 or Windows 98 is installed on a computer, it automatically adds a folder called *Online Services* to your computer. The *Online Services* folder contains the *installation files* for America Online, Prodigy, CompuServe and AT&T. These files are added so that it will be easy for users to install any of these services without having to download the files.

The problem is that students often see the America Online icon, double-click it, and attempt to install it; but, instead, they usually end up messing up your Internet connection. Not only are these files a disaster waiting to happen, they are also outdated and take up hard drive space. If you do decide to install one or more of these programs, you can still get rid of the installation files and save disk space as well as avoid someone reinstalling over newer files.

To Remove Online Services:

If there is a shortcut on the desktop to the Online Services folder, drag it to the Recycle Bin.

For Windows 98:

- From the **Start** button, go to **Settings, Control Panel** and **Add/Remove Programs**.
- Click the **Windows Setup** tab.
- **Uncheck** Online Services.
- Click **OK**.
- Continue on and **follow the Windows 95 steps** below; because, even though they are suppose to be deleted, the files still remain on the hard drive.

For Windows 95:

- **Right-click** on the **Start** button and then click **Open** from the menu.
- Open the **Programs** folder.
- Find the **Online Services** folder, **right-click** it and choose **Delete**.
- Open **My Computer, C: drive**, and **Program Files**.
- Find the **Online Services** folder, **right-click** it and choose **Delete**.
- Empty the *Recycle Bin*.



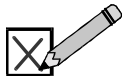
Maintenance Record Cards



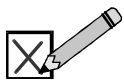
Copy Maintenance Record Card sheet on heavy paper (i.e. OakTag)



Cut the cards apart



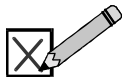
Write the name of the Computer and IP address at the top



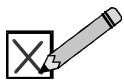
Leave the Card with the Computer



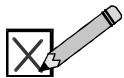
Adhesive plastic cardholders can be purchased to put on the side of the computer. These can be viewed at www.staples.com (item number SMD68123)



Do this monthly and check off (See Basic Computer Maintenance)



The back or the card can be used for writing updates, loaded software, etc.



Ask your Area Technology Teacher to train your students to do this

Months, Starting
with August

Maintenance Record	A	S	O	N	D	J	F	M	A	M	J	J
TEMP												
INTERNET TEMP												
HISTORY												
COOKIES												
CACHE												
RECYCLING BIN												
SCAN DISK												
DEFRAG												
NORTON UPDATE												
NORTON SCAN												

Troubleshooting Technology

Maintenance Record	A	S	O	N	D	J	F	M	A	M	J	J
TEMP												
INTERNET TEMP												
HISTORY												
COOKIES												
CACHE												
RECYCLING BIN												
SCAN DISK												
DEFRAG												
NORTON UPDATE												
NORTON SCAN												

Maintenance Record	A	S	O	N	D	J	F	M	A	M	J	J
TEMP												
INTERNET TEMP												
HISTORY												
COOKIES												
CACHE												
RECYCLING BIN												
SCAN DISK												
DEFRAG												
NORTON UPDATE												
NORTON SCAN												

Maintenance Record	A	S	O	N	D	J	F	M	A	M	J	J
TEMP												
INTERNET TEMP												
HISTORY												
COOKIES												
CACHE												
RECYCLING BIN												
SCAN DISK												
DEFRAG												
NORTON UPDATE												
NORTON SCAN												

Maintenance Record	A	S	O	N	D	J	F	M	A	M	J	J
TEMP												
INTERNET TEMP												
HISTORY												
COOKIES												
CACHE												
RECYCLING BIN												
SCAN DISK												
DEFRAG												
NORTON UPDATE												
NORTON SCAN												

Technology Team Cards

Technology Team



School



is trained/training in Technology Maintenance & Trouble Shooting

_____ (Area Technology Teacher)

_____ (Computer Specialist)

Technology Team



School



is trained/training in Technology Maintenance & Trouble Shooting

_____ (Area Technology Teacher)

_____ (Computer Specialist)