Reduce Disk Space Usage

Contents

Reduce Disk Space Usage

Purpose of this document and audience

This document describes how you can reduce disk space usage.

Definitions

CD   Compact Disc

Process overview

1. Use utilities to identify duplicate, old, and large files.

2. Delete duplicates and old or large files, or archive them to a storage device.

Concepts

Why it is important to manage disk space

*   Careful management of disk space reduces the need for disk and backup storage capacity.

*   It is less frustrating and time consuming to find the file you want when there are fewer of them.

Document retention times for legal documents

From a legal perspective, it is important to retain certain documents (e.g., tax records) for the required period of time and delete them when the time period expires.

In general, do not delete a file unless you are *absolutely sure* that the file is unnecessary.

Document size

When you are faced with the need to reduce disk space usage, concentrate on large documents (e.g., 5 megabytes [5000KB] or more) that give you a big payoff in reduced space requirements. After you delete the biggest documents, review smaller documents for possible deletion.

Tip: Typically, deleting one .PPT file has more impact than deleting 20 Word documents. Word files that contain many graphics are an exception to this rule. In the following example, note the file size of the .PPT file relative to the sizes of the Word .DOC files. You would have to delete many Word files to reduce disk space by the same amount as just the one .PPT file:

Name	Size	
BakgrdForm.doc	23KB	
Dates.doc	21KB	
EmailsTT2.doc	24KB	
ESS Presentation.ppt	656KB	— Note the file size.
ESS Services Request Form0204.doc	51KB	
ESS-29Nov01.doc	47KB	
ESS-HirePlan Nov01.doc	25KB	

File types (extensions)

Web site reference	The http://filext.com web site offers a convenient list of file extensions that you can use to determine file purpose if you see file types that you do not recognize.
.DLL files	In your folders, you will probably see a number of Dynamic Link Library (DLL) files, which you should *NOT* delete unless you are absolutely certain that you do not need them. DLL files are usually companions to .EXE (executable) files and are required for their companion applications to run.

Assumptions

This document assumes that you:

- Know how to use Windows Explorer, including how to copy, move, and delete files.
- Have access to the Dupfindr.exe utility.

  Depending on your computer operating system, you will copy this utility to the C:\WINNT\System32, C:\WinXP\System32, or C:\Windows folder on your computer.
- Have a Windows 2000 or Windows XP computer (the described search windows are not available on older versions of Windows).
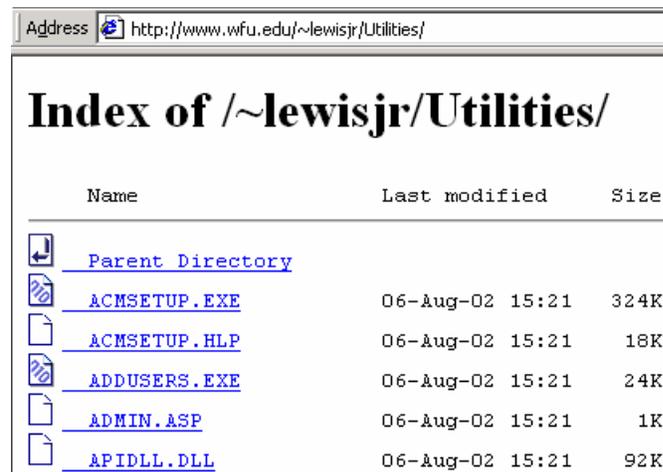
Procedures

Use Dupfindr.exe to find duplicate files

Download a copy of Dupfindr.exe

You should have a copy of the Dupfindr.exe utility on your computer in the system path. From there you can use it to find duplicates in your folders.
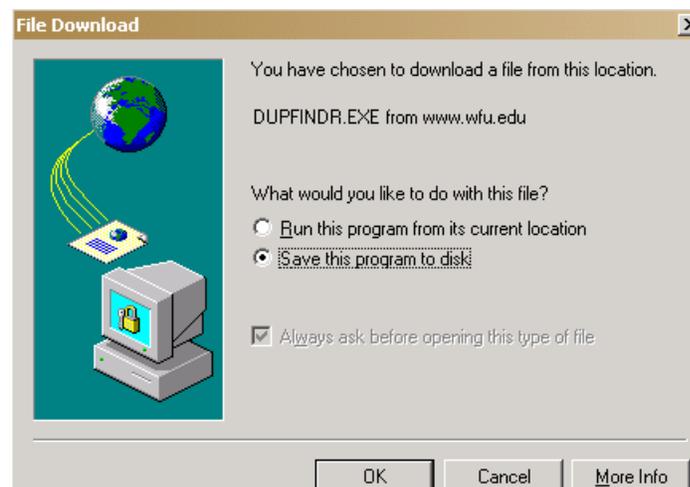
1. Launch Internet site http://www.wfu.edu/~lewisjr/Utilities/.
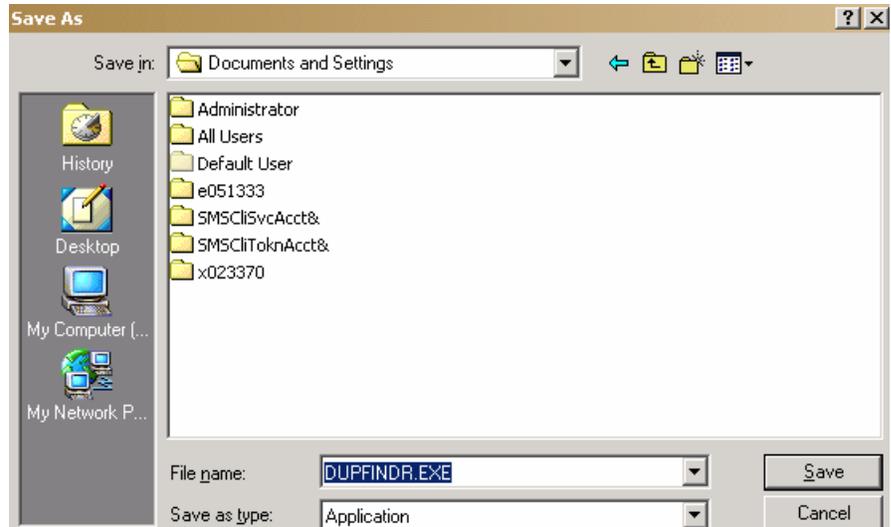
   Result:

2. Scroll down until you see **DUPFINDR.EXE**.

3. Click **DUPFINDR.EXE**.

   Result:

4. Ensure that **Save this program to disk** is selected.
    Click **OK**.

    Result: The Save As window allows you to select a destination folder. Example:

5. Depending on your computer operating system, navigate to the proper folder:

    For Windows 2000, use folder **C:\WINNT\System32**.
    For Windows XP, use folder **C:\Windows\System32**.
    For Windows 95 or 98, use folder **C:\Windows**.

6. Click **Save**.

    Result: DUPFINDR.EXE is copied to your disk. A window shows progress.
    When download is complete, the progress window automatically closes and the
    web site is re-displayed. Example of the progress window:
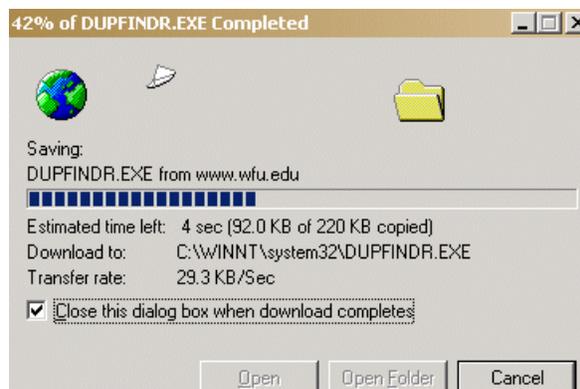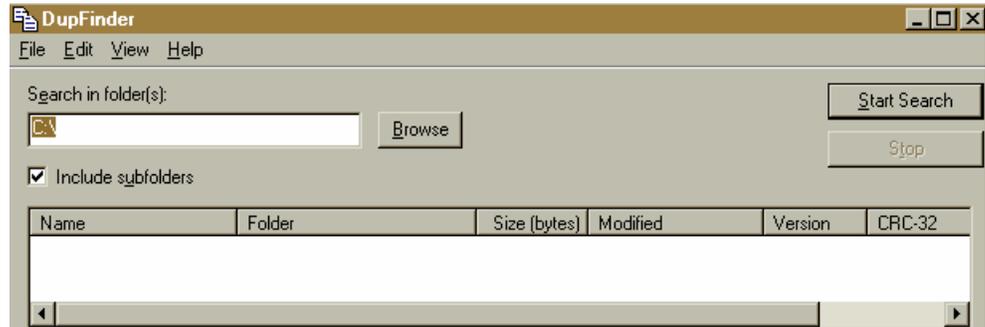

7. Close the web site.

Find duplicate files

Use Dupfindr.exe to find multiple copies of the same file so that you can delete the
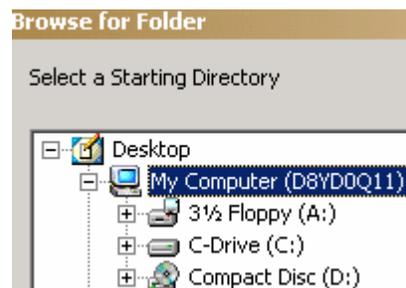unnecessary duplicates.

1. In the folder where you stored Dupfindr.exe, double click **Dupfindr.exe**.

    Result: The DupFinder window appears.

2. Click the **Browse** button.

    Result: Dupfindr.exe allows you to select the folder where you want to find duplicates. Example of a user's folder display:

3. Click folders until you open the folder that you want to check.
   Click **OK**.

    Result: The folder that you selected appears in the upper left box in the DupFinder window.

4. If you do *NOT* want to search all subfolders under the folder that you selected, click the **Include subfolders** box to remove the checkmark.

5. Click ⬚ Start Search .

    Result: Dupfindr.exe searches the folder that you selected and optionally all subfolders under it depending on your selection. If there were no duplicates, a message in the lower left corner of the DupFinder window reports "0 duplicates":

    0 duplicates consuming 0 KB of disk space found.

    If the folder and/or its subfolders contain duplicates, the DupFinder window shows where they are. Example:
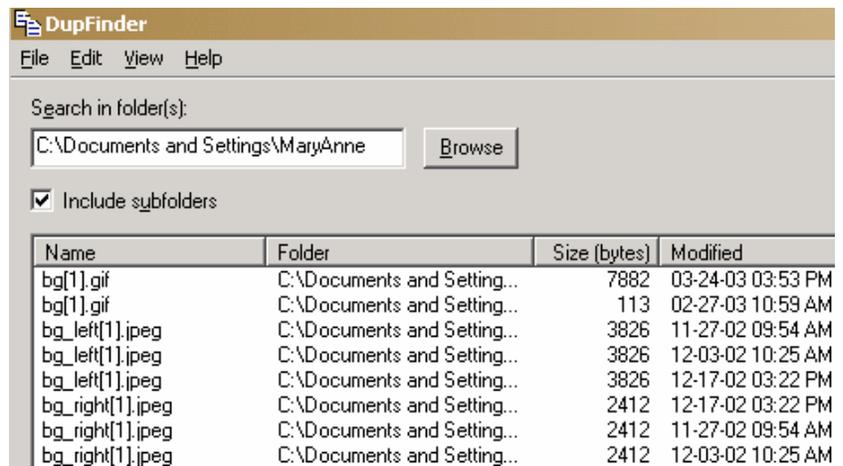
Use Dupfindr.exe results to manage files

1. If you need to make the Folder column wider so that you can see the paths better, drag the bar between the Folder and Size columns to the right.

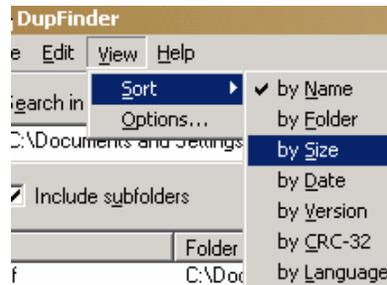*Result:* Example of wider Folder column:

2. If you have numerous duplicates and you want to print the results of the search, in the menu bar click **File**, then **Print Report**.
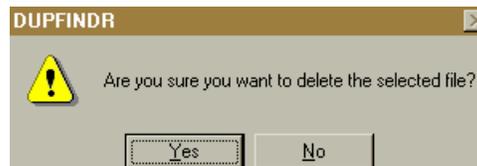

Result: The Print window allows you to select a printer as usual.

3. If you want to sort the files in a different order, in the menu bar click **View**, then **Sort** and the sorting criterion that you wish:

4. If you see a file that you want to delete, you can delete it from the DupFinder window:

    A. Click the file name.
    B. In the menu bar, click **File**, then **Delete**.

    Result:

   C. If you are sure that you want to delete the selected file, click **Yes**.

Find old, obsolete files

You may be able to delete or archive old files. Your goal is to find files that were last accessed or modified more than one to three years ago.

Note: You may have a reference file that you *ACCESS* periodically but that you do not *MODIFY*. In searching for files to delete or archive, it is recommended that you first search for **files Last Accessed** over a year ago so that you do not delete files that you might need to read. If you wish, you can then search for files that have not been modified in the past few years.

Example: You wish to search for files last accessed more than 2 years ago because you probably do not need these files. Always use a date in 1980 as the start of your time span. Subtract 2 years from today's date and use that as the end date in your time span. The search will find the files that were last read between 1980 and the date two years ago that you specified.

1. Click **Start**, then **Search** and **For File or Folders**:
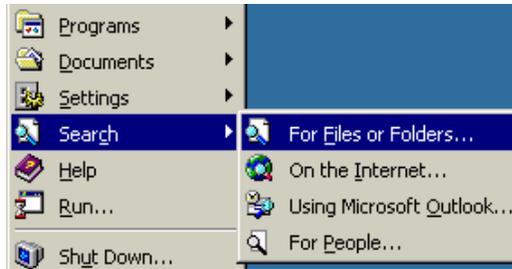
Result: The Search Results window allows you to define your search:
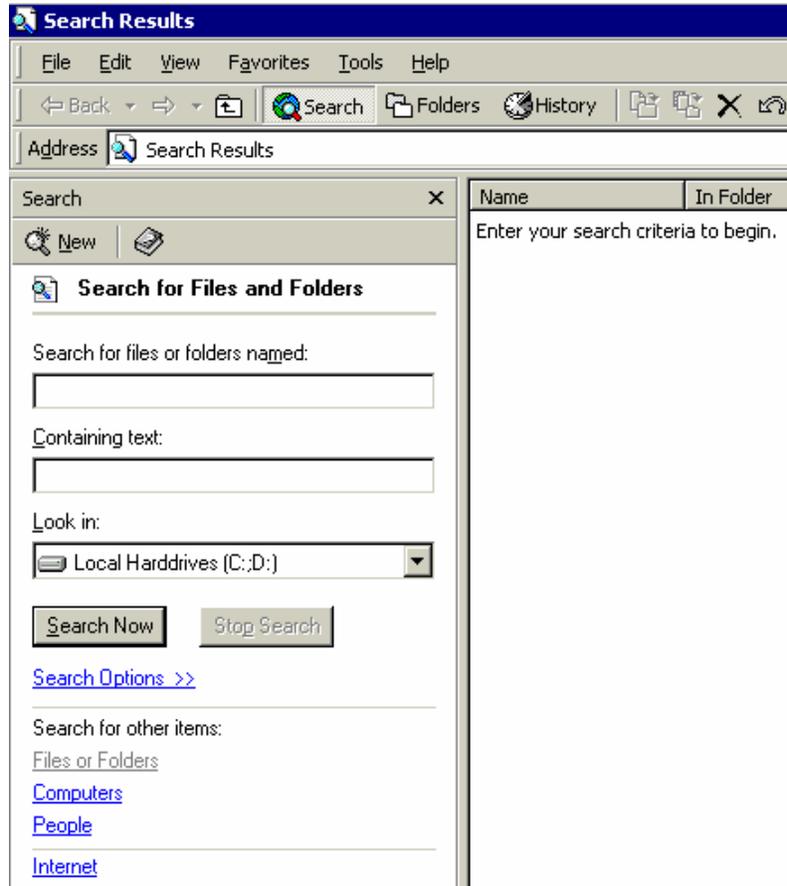
2. In the *Look in:* field, select the folder that you want to search.

   Note: You'll probably want to click **Browse** near the bottom of the window.

3. Click **Search Options >>**.

   Result: The Search Options box opens:

4. Click the **Date** check box.

   Result: The Search Options box expands to include selections for date range:

5. Select the type of file property to look for from the pulldown menu:

6. Set up your date range as you wish.

   Tip: By clicking on the month, day, or year of the default dates, you can highlight them and then overwrite them.

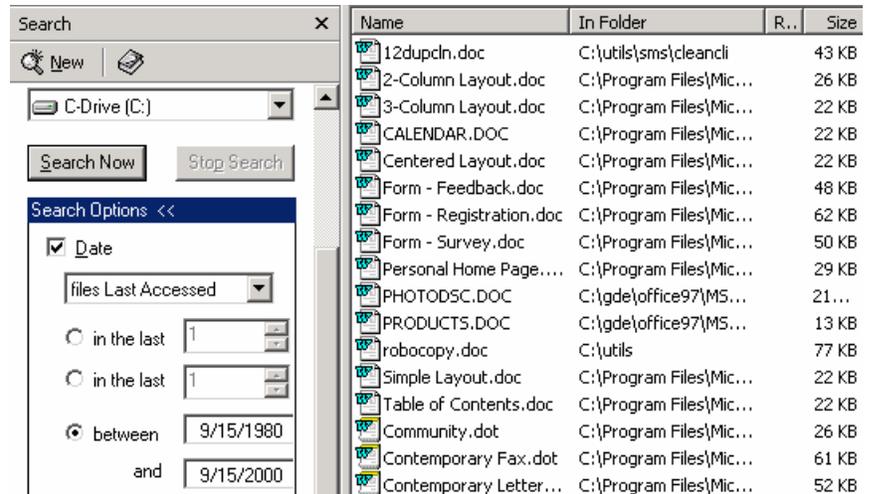7. Click .

   Result: The files that meet your criteria appear on the right.

   Example of a search by date for files last accessed between September 15, 1980 and September 15, 2000.

    Do *NOT* use dates older than 1980 because the search function does not process them properly.

8. If file details (such as the In Folder column) do not appear, in the menu bar, click **View**, then **Details**.

9. Use the results to investigate old files.

Find large files

In deciding which documents to delete, first go after large files (e.g., those over 5 MB [5000KB]) that will substantially reduce your disk space. Then review smaller files that do not provide such a significant payoff in reduced space.

Find large files in a single folder

If you have just a few folders to check, you can use Windows Explorer.

1. Open **Windows Explorer**.
   One method is to hold down the ⊞ key on your keyboard and press the letter **e** once.

2. Click and double click folders until you open the folder with the documents that you want to review.

3. If not already done, in the menu bar click **View**, then **Details** to display file details.
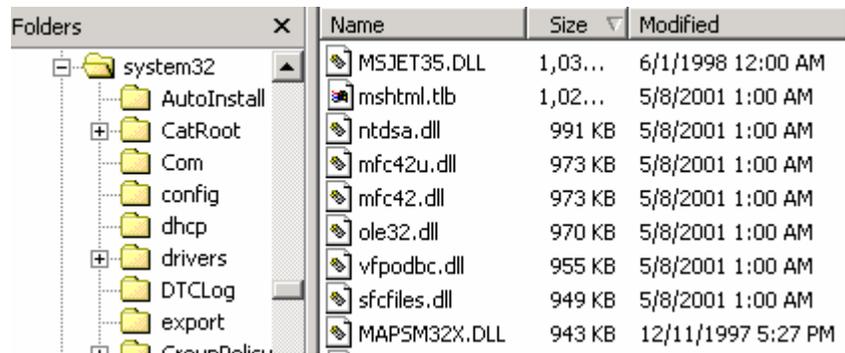

Example of file display. Files normally appear in alphabetical order by name.
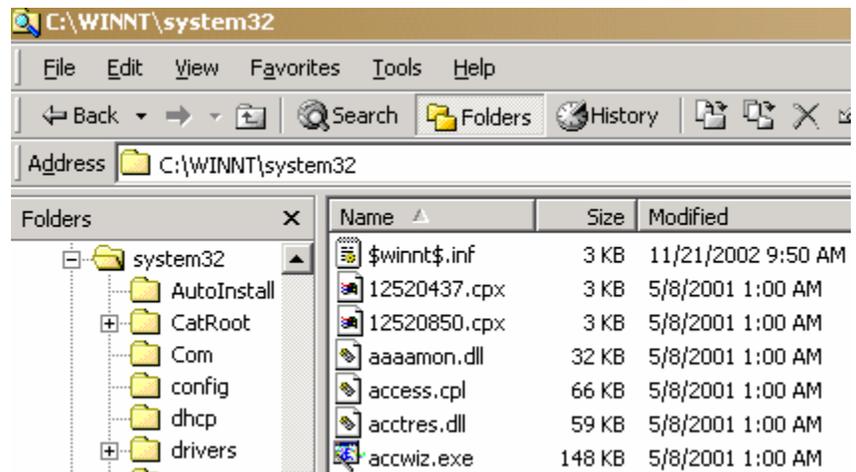
4.   Click the **Size** column header.

Result: Windows Explorer sorts the files by size from smallest to largest.

5.   Click **Size** again to sort from largest to smallest.
Example:

Search a folder structure for large files

If you have a complex folder structure (top-level folder with multiple subfolders), use the Search function to search for large files.
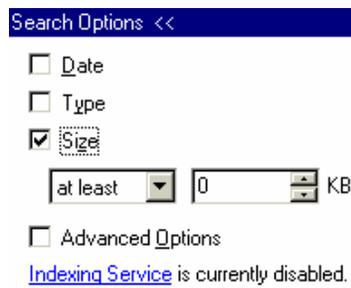
1. Click ![Start], then **Search** and **For File or Folders**.

2. In the *Look in:* field, select the top-level folder that you want to search.

3. Click **Search Options >>**.

   Result: The Search Options box opens:

4. Click the **Size** checkbox.

   Result: Search Options provides fields to enter size specification

5. In the KB box, type the minimum file size that you want to search for (e.g., 5000 for 5-megabyte files).

6. Click the **Search Now** button.

   Result: Files that are at least the size that you specified appear on the right. Example:

Name	In Folder	Size	Type
ntdelete.log	D:\GUD_Scripts	1,436,432 KB	Text Document
ntcreate_2002031...	D:\GUD_Scripts\Log...	12,857 KB	Text Document
ntdelete_2002080...	D:\GUD_Scripts\Log...	77,850 KB	Text Document
ntdelete.log	D:\GUD_Scripts\Scri...	8,209 KB	Text Document
GLOBUSR.mdb	D:\GUD_Scripts\Scri...	5,058 KB	Microsoft Acces...
globusr2.mdb	D:\GUD_Scripts\Scri...	7,604 KB	Microsoft Acces...
sitesrv.chm	D:\Microsoft Site Se...	6,691 KB	Compiled HTML ...

   Note: If you do not see this detailed display, click **View**, then **Details**.

7. To reverse the current sorting order, click the **Size** column heading.
   To return to the displayed sorting order, click **Size** again.

A note about deletions in Microsoft Word

When you delete something from a Word document, Word doesn't actually let go of the deleted material. It just marks it as deleted and does not display it. Eventually as you work with a document and make subsequent changes, Word notices that it is accumulating deleted blocks and it lets go of them and reduces file size. So even though you delete big chunks of text or graphics, your file size may not shrink immediately.

Turning off "fast saves" forces Word to unload deleted text when you delete and save. To turn off fast saves:

1. With any Word document open, in the menu bar click **Tools**, then **Options**.

2. Click the **Save** tab.

   Result:
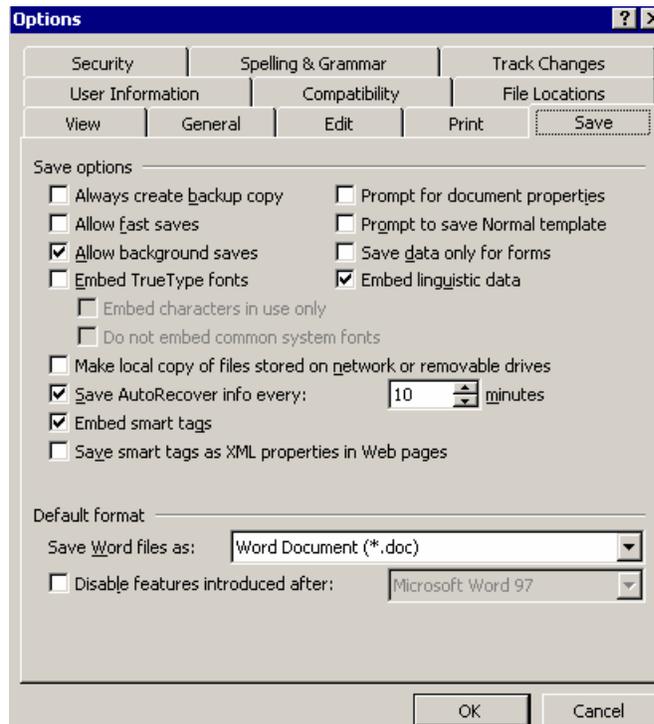
3. Remove the check mark from "Allow fast saves":

4. Click **OK**.