



PC Tech/Utilities

By Michael J. Mefford

FDFiles: Find Dead Files

Find and delete unused files on your system.

Over time, old, unused files can accumulate on your system. These can be files from old applications you've upgraded or no longer use, or undeleted temporary files, to name a few possibilities. It would be nice to get rid of those old dead files, but figuring out what you still need and what you don't has never been easy—until now.

This issue's utility, **FDFiles** (Find Dead Files), makes it easy to find the files on your hard disk that haven't been accessed in a long time. **FDFiles** is a 32-bit Windows utility that works only under Windows 95 and Windows NT (Version 3.51 or higher). The file systems in these newer operating systems include a last-access-date stamp that is not available under DOS. In the DOS file system, a single date stamp is saved in a file's directory entry—the date when the file was last written to or saved. But some files, such as DLLs, are not normally saved when they are used, and the DOS system doesn't tell you anything about when such a file was last accessed. 32-bit file systems include two additional file-date stamps: creation and last access. The last-access-date stamp keeps track of when a file was last read and thus provides a means of detecting unused files. **FDFiles** uses the access date to help you find dead files and delete them from your system, freeing up valuable disk space.

You can obtain **FDFiles** by downloading it from PC Magazine Online. (Refer to the sidebar "Getting the Files" for details.) The source code for **FDFiles**, which was written with Delphi 2.0, Borland's visual programming tool, is provided for those interested in seeing how it works.

USING FDFILES

To install **FDFiles**, copy the program files **FDFiles.exe** and **FDFiles.hlp** to a subdirectory on your hard disk and create an icon for

FDFiles in your shell. When you launch **FDFiles**, you'll see a tree view of your computer's directory on the left and two list pages on the right. The Search Spec page lets you set search criteria and specify the directories to search; the Files Found page displays the search results.

The directory tree looks and operates much like Explorer's directory tree. You can refresh a highlighted branch on the directory tree by selecting File | Refresh. This is useful if you change floppy disks or create a new directory. The directory tree can be used as a drag-and-drop source for the directory list on the Search Spec page or as a copy/move target for

optionally, its subdirectories), drag the drive letter to the Search Spec page. If you want to search a particular subdirectory, expand the drive tree by clicking on the plus sign to the left of the drive, double-clicking on the drive icon or letter, or navigating with the arrow keys to the desired subdirectory and hitting Enter. Continue expanding until the desired subdirectory path is visible and then add the path to the Search Spec page by dragging it or clicking on the Add button. You can add as many paths to the Search Spec page as you like.

The next step is to specify what you want to find in the selected directories by modifying the parameters in the top line of the Search Spec page. This top line reads like a sentence; for example: "Find *.* where Last Access is <= Sep 19, 1996" (see Figure 1). The first parameter is the Find filespec. It defaults to *.* which instructs **FDFiles** to look for files of any type in the directories you selected. You can narrow the search to only DLLs, for example, by changing the filespec to read *.DLL.

The second parameter lets you select from the three available date stamps. The default is last access, which will find files according to the last-access date—the best choice for finding unused files. You can also select creation date or last write date. The creation date never changes, and the last write date should never change for nondata files like DLLs; those dates are less useful as criteria for finding unused files.

The third parameter lets you select whether to search for files with dates before (< or <=), after (> or >=), or equal to (=) the date stamp, or to search without regard for the date stamp (All).

The last parameter, the date button, lets you select the date. When you click on the button, a calendar appears from which you

IN THIS ISSUE

FDFiles

FDFiles finds files that have not been accessed recently and helps you remove them from your system.



the files listed on the Files Found page. A splitter bar between the directory tree and the page lists lets you control the space allotted to each side of the display.

To start a search, you must specify one or more directories by dragging a directory from the Search directory tree and dropping it on the Search Spec page, or by selecting a directory in the tree and then clicking on the Add button. If you want to search the root directory of a particular drive (and,

FOR PROGRAMMERS ONLY **FDFiles** goes a long way toward emulating Explorer's use of the TreeView control, which was introduced with Windows 95. The full source code for **FDFiles**, along with an expanded article that discusses the programming techniques used in the utility, can be found on PC Magazine's World Wide Web site (www.pcmag.com).

FDFiles demonstrates

- how to populate a TreeView with drive and directory information;
- how to obtain the small icon symbols used by Explorer;

- how to emulate Explorer's use of the plus and minus symbols.

Support for the free utilities offered by PC Magazine can be obtained electronically in the Utilities section of ZD Net's TIPS Forum (GO ZNT:TIPS). The authors of current utilities generally visit this forum every day. You may find an answer to your question simply by reading the messages already posted in the forum. If the author is not available and the forum sysops can't answer your question, the Utilities column editor, who also checks this forum each day, will contact the author for you.

WWW.PCMAG.COM

make your selection. (If you have selected All dates with the third parameter, the date button is disabled.)

The Search Spec page has two check boxes. If you check the Include Subdirectories box, FDFiles will search the selected directories plus any subdirectories beneath them. To search an entire disk, drag the drive letter to the Search Spec page and check Include Sub-

removed from the list. The Clear button clears the list box, so you can start over. When you are done specifying your parameters, click on the Search button to start the search.

FILES FOUND

When you click on the Search button, FDFiles automatically switches to the Files Found page and starts filling it with filenames that match the criteria of the Search Spec. You can sort the list by clicking on the column header buttons: Name, Creation, Last Access, or Last Write. A second consecutive click on the same button sorts the list in descending order. You can size the columns by dragging the left or right edge of the header button above it.

FDFiles also lets you manage the files found in the search. If you're looking for unused files, you will probably want to delete some or all of them. Just select the files and then click the Delete button. A dialog box will tell you which file will be deleted (or how many files, if there are more than one) and ask you to confirm your choice.

If you are unsure whether the files are really unneeded, archive them by moving them to a temporary directory instead of deleting them right away. If your system continues to work properly, you can delete them later. To copy or move files, select the ones you want, then drag them to the desired location in the directory tree. When you drop the files on the destination directory, a pop-up menu allows you to choose whether to copy or move the files to the destination (you can also cancel). If you choose to continue, the pop-up menu will be followed by a confirmation dialog box telling you exactly which file is going to be copied or moved (or how many files, if there are more than one), and to where.

You can also copy and move files via the Windows Explorer-style copy-and-paste technique. After selecting the desired files, click on the Copy button to copy their names. Next, select a destination in the directory tree and click on the Paste button. The Copy or Move pop-up menu will appear, just as it does when you use drag-and-drop. Although Explorer doesn't use a confirmation dialog box, I do. FDFiles tells you what's going to happen and gives you a chance to change your mind.

Like Explorer, FDFiles lets you rename files using in-place editing. To shift into edit mode, select a filename, wait a moment, then click on it again, or, click on the Rename button. To save the name after changing it, press Enter; to cancel the change, press Esc. Like the buttons on the Search Spec page, the buttons on the Find Files page (except for the Paste button) are drag-and-drop-aware, so you can drop a filename onto the Rename button, for example, to activate in-place editing. Both the Files Found page and the destination directory tree have right-click context menus from which you can quickly access file functions.

So that you don't have to reenter frequently used settings, FDFiles remembers the position and size of the FDFiles window, your Search Spec page specifications, and any column-sizing changes you may have made to the Files Found page. Each time you launch FDFiles, it will recall the last settings you used.

IN CLOSING

The Last File Access date in the Windows 95 and Windows NT file systems is handy to have, but it's not of much use if you don't look at it. FDFiles gives you an easy way to take advantage of this feature of 32-bit Windows operating systems. □

Michael J. Mefford is a contributing editor of PC Magazine.

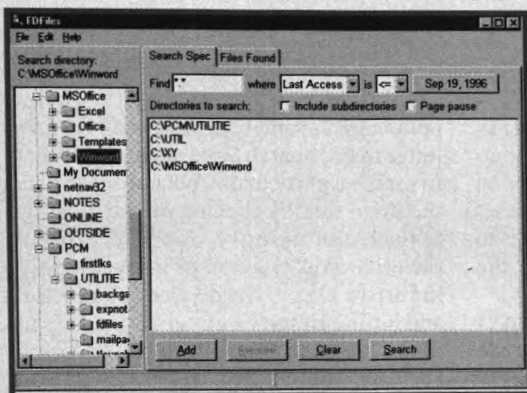


FIGURE 1: The Search Spec page in FDFiles is where you set your search parameters.

directories. If you check the Page Pause box, FDFiles will pause each time it fills the File Found page with filenames, giving you a chance to decide if you want to continue or to abort the search.

There are also some buttons at the bottom of the page. I've already mentioned the Add button; it's drag-and-drop-aware, so you can drag a path from the directory tree and drop it onto the Add button to add it to the list. You can use the Remove button to remove selected directories from the search criteria, in case you've added one in error. Optionally, you can drag a directory from the list and drop it onto the Remove button or the directory tree to remove it from the list. Don't worry—nothing actually happens to the files when you drop them; their names are merely

GETTING THE FILES



Here's how you can access PC Magazine Online, where you'll find all our utilities and other PC Tech files:

ZD NET To join CompuServe/ZD Net (formerly Ziff-Net), call 800-895-4596 (voice) and request the PMZ offer. CompuServe members can join ZD Net by typing GO ZIFFMEM at any CompuServe ! prompt. If you're already a member of ZD Net, you can get the current utility free of connect charges by typing GO FREEUTIL at any CompuServe ! prompt. Other PC Tech Files are available individually, in the Utilities/Tips and Programming Forums, and bundled, within volume archive files.

INTERNET You can obtain the utility and a volume archive file by visiting our World Wide Web site, at www.pcmag.com, and choosing Download from the navigation bar found at the bottom of every page.

You can also get the files through anonymous FTP from our Internet site. The address is [ftp.zdnet.com](ftp://ftp.zdnet.com). Use the word anonymous as your log-on name and any of your e-mail addresses as the password. Look in the subdirectory [pcmag/1996/1217/](ftp://ftp.zdnet.com/pcmag/1996/1217/). The volume archive filename is v15n22.zip. The utility and archive are compressed with PKZIP, Version 2.04.

BY FAX OR MAIL If you don't have a modem or Internet access, you can fax 508-368-0141 or write to PC Magazine Utilities, c/o Image Software Services, 55 Green St., Clinton, MA 01510-3099.

The programs presented in PC Magazine can be copied but are copyrighted. You may make copies for others if no charge is involved, but making copies or using any portion for any commercial purpose is strictly prohibited.

PC Solutions

TIPS AND TECHNIQUES TO INCREASE YOUR PRODUCTIVITY

User-to-User

By Neil J. Rubenking

HIGHLIGHTS



HARDWARE Factors to consider when you're planning on upgrading your PC's microprocessor from a lower-speed 486. *Page 260.*



SPREADSHEETS Our custom Excel function, YTD, can be made even more powerful—for example, by adding one more line of code, you can have it recalculate automatically. *Page 276.*



DATABASES How to replace the splash screen that is displayed when Paradox for Windows starts up with one of your own. *Page 276.*

OUR ADVISORS

Douglas Boling is a contributing editor and the author of many PC Magazine utilities.

Frank J. Derfler, Jr., is senior networking editor and the author of the PC Magazine Guide to Connectivity.

Alfred Poor is a contributing editor and the author of *The Underground Guide to Hardware*.

Brian Proffitt is a senior contributing editor of *OS/2 Magazine* and the author of *OS/2 Warp Survival Kit*.

Jeff Prosize is a contributing editor and the author of *DOS 6 Techniques & Utilities*.

Sal Ricciardi is a contributing editor and the author of the *Running FoxPro* series from Microsoft Press.

Neil J. Rubenking is technical editor and the author of *Delphi Programming Problem Solver*.

Luisa Simone is a contributing editor and the author of *Microsoft Publisher by Design*.

Craig Stinson is a contributing editor and the coauthor of *Running Windows 3.1* and *Running Microsoft Excel*.

M. David Stone is a contributing editor and the coauthor of *Word for Windows Companion, Second Edition*.



PC DIRECT starts here with exciting offers from top direct vendors. See index, page 260.

Auto-Start a Recorder Macro

I'm still using DOS and Windows 3.1, and I wanted to find a way to execute certain commands automatically after start-up. Specifically, I wanted to start Windows and run an AOL FlashSession. If I hadn't received any e-mail, I wanted to exit from AOL and Windows back to DOS, but if e-mail messages had been downloaded, I wanted to remain in Windows, with AOL up but off-line.

Using the Windows Recorder utility, I was able to create a macro called RUNAOL.REC that did what I wanted. From DOS, I could give the command WIN RECORDER.EXE RUNAOL.REC, and the computer would load first Windows, then Recorder, and then the macro file. The only problem was I hadn't yet found a way to tell Recorder to go ahead and execute the macro file. Recorder just sat there stupidly in a window, waiting for me to tell it to run via keyboard or mouse input. When I told it RUN, Recorder executed the macro perfectly, loading AOL and executing a FlashSession without any additional input on my part.

I then found out about an undocumented switch for Recorder that permits execution of Recorder macros without user interaction, and it works! I can now invoke

presents no specific reasons for discouraging use of the -h parameter; this parameter, in fact, extends the usefulness of Recorder macros substantially.

Remember that when recording user activity with Recorder, it's always best to use the keyboard rather than the mouse. Keystrokes are unambiguous, while a mouse-click's meaning can change if the window involved has a different size or position at playback time. This rule applies all the more when preparing a macro that you intend to execute automatically using the -h switch. If you find yourself recording a macro again and again to get the keystrokes just right, consider using our RECEDIT utility, which permits direct editing of Recorder macros. You can download RECEDIT from PC Magazine Online. (For details, refer to the sidebar "Getting the Files" in this issue's Utilities column.)

The value following the -h parameter is an encoding of the macro's hotkey, not the macro's name. It appears that only single-word hotkey names can be activated from the command line; two-word names, such as "Page Down," don't work. The key name can be prefixed with up to three characters representing shift keys: % for Alt, ^ for Ctrl, and + for Shift. The reader's example uses the string ^F10, meaning that the desired macro is associated with the keystroke Ctrl-F10.

Cleaning Up the Run Command's List

If you use the Windows 95 Run command a lot, after a while you may find it has become cluttered with a bunch of commands you no longer need. Here's how to clean up the list using the Windows 95 Registry Editor (you may want to make a copy of the files USER.DAT and SYSTEM.DAT just in case something goes wrong): Run REGEDIT.EXE to edit the contents of the Registry. Go to the key HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Explorer\RunMRU. In the right-hand panel, you'll find a list of your most recently used commands—just delete the ones you don't want any more. You can do this by right-clicking on the letter of the value you want to delete and then selecting Delete from the

```
WIN RECORDER D:\WINDOWS\RUNAOL.REC -h  
^F10
```

either from the DOS command line or at the end of my AUTOEXEC.BAT file, and the computer will load Windows and Recorder, then execute a session that logs on to AOL, sends and receives any e-mail messages, and logs off of AOL—all while I am setting up my morning coffee. Now I just need to set the macro up so it retrieves my morning Dilbert cartoon as well!

ED UNGER
Houston, Texas

PC MAGAZINE: Microsoft's Windows 3.x knowledge base (article Q72439) refers to the -h command line parameter for Recorder as "undocumented and unsupported" and states that Microsoft "does not support or encourage the use of this parameter." But the article