DOCUMENTATION

FOR

"OPEN FILES"

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1   PURPOSE

The "OPEN FILES" (openf.exe) program allows the user to determine which files are open at any given moment. "OPEN FILES" reads the System File Table (SFT) determining which files are open and then presents the user with a display containing filename, reference count and filesize.

The reason I wrote this program was so I could determine which programs were creating the temporary files that were being left undeleted in my c:\temp directory.

2   SYSTEM REQUIREMENTS

386 or better processor
Windows 3.1
DOS 5.0 +

3   THE SYSTEM FILE TABLE   (SFT)

The System File Table (SFT) is a data structure maintained by the operating system that is used to facilitate the access of open files. Each open file matches to an entry in the SFT. Each SFT entry contains information that the operating system needs to read and write an open file.

3.1   DOS AND THE SFT

The size of the SFT is determined by the "FILES= " statement in the config.sys file. It is DOS, even with windows running, that maintains this table, updating and deleting entries, providing programmers with the memory address of the table.

3.2   WINDOWS AND THE SFT

Windows 3.0+ uses the same basic SFT presented to it by the underlying MS-DOS operating system, but does make some characteristic changes to the table and to its intended use.   Enhanced mode Windows extends the size of the SFT and maintains cached file entries, which one might consider a hybridized form of an open file.

3.2.1   CACHED FILE HANDLES

To improve file handling speed, Windows maintains a list of cached file handles that refer to the most recently closed files. These cached entries are displayed in "OPEN FILES" dump of the SFT. The key to spotting them is that they have zero for a reference count whereas other SFT entries have one or more. The size of the file handle cache is determined by the "cached file handles= " entry in the [boot] section of the system.ini file.

3.2.2   MODULES ABSENT FROM SFT

Krnl386 seems to do some specialized handling of DLL files during module loading which is beyond my ability to explain. The end result is that some DLL's that are loaded into memory will not show up in the SFT listing by "OPEN FILES."

4   COPYRIGHT AND DISCLAIMER

The "OPEN FILES" program as implemented via openf.exe shall be considered   " public domain freeware" that is copyrighted. Anyone, anywhere can use it provided no charge is made and the authors copyright is respected.

That said if you do find any problems, bugs or irritants please pass that information to me and I will see what I can do to remedy the matter. See the appendix of this document for my e-mail address.

5 APPENDIX

5.1 REFERENCES

Prosise, Jeff. "WHAT FILES= DOES." PC Magazine, 12 Nov 1991, pp 469
Jim Kyle, David Maxey, and Andrew Schulman, <u>Undocumented DOS SECOND EDITION</u>
   chapter 8, pg 401

5.2 HOW TO CONTACT THE AUTHOR

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