



## Wipe it Out!

by Scott Holstad

Ever wonder what happens to those files you delete? It seems so easy to just drag your file to Mac's Trash Can or to Win95's Recycle Bin, doesn't it? Well, listen up kids -- here's a tidbit that might surprise you. When you drag your file (or, if you're still using DOS, when you type "del") to delete it, the file is not deleted! Rather, the file is marked as unused by your OS (operating system) and it is effectively removed from your sight. However, your file still exists!

Big deal, you say? Big deal indeed! Remember that dirty joke your chum emailed you last week? What about that account info you were working on? The account with the really, really sensitive data? Oh, and that, umm, "artistic" photograph you downloaded from Usenet -- the one you don't really want your kids seeing (or parents, or significant other, as the case may be)? Then there are those plans you made to destroy your company's competition, and some political satire you wrote about the senator's niece. Anyway, you get the picture.

Well, fear not, dear friends; there is hope. Programs, often referred to as utilities, exist which make secure file deletion possible for your Mac or PC. A file-deletion utility overwrites a file, essentially encrypting your data with junk. (As an analogy, imagine typing random junk over words on a printed page -- this is overwriting data.) A good utility will allow you to overwrite your data several times (i.e., typing over your page several times, all with different types of random junk, making the original words illegible), making it virtually impossible to recover. (The Department of Defense recommends a "three-pass" method of overwriting data as a means of attaining reliable file deletion.) It is important to note that deletion is never absolute. However, the more rewrites, the more difficult you make data recovery.

Most file deletion utilities are DOS-based. Real Delete is an interesting utility because it is a TSR (Terminate and Stay Resident program), meaning it runs in the background, intercepts delete commands, and overwrites the specified files on its own. (A tiny warning: once the file is overwritten, no one can recover it -- including you. That means that if you accidentally delete something and try to retrieve it with a utility like Norton's Undelete, all you'll get is junk. Keep this in mind before installing a TSR overwrite utility.) Three additional DOS-based programs are Delete, Nuke 1.11, and Wipe Util (none of these are TSRs). My personal favorite -- and the one I use -- is Garbage Can. Simply specify your preferences, drag your file into its window, and it is gone!

Meanwhile, Mac-heads fear not. Two handy dandy (although seemingly interchangeable) utilities exist for you, too. FlameFile 1.38 and Burn 2.3 are both excellent products. Like the DOS-based programs, they overwrite data with varying security levels which you specify (i.e., do you want the program to overwrite your file one time, three times, six times, etc.). Simply drag your file onto the FlameFile or Burn desktop icons and poof! They're gone!

There are a couple of things to note when using this type of software, irregardless of the OS. First of all, whatever you delete using these methods is history -- so be careful!!! Second, if you drag a Mac alias or W95 shortcut into some of these programs, the actual program/file itself is deleted (so, read the documentation)! Third, some of these utilities allow you to wipe your hard drive's free sectors -- all of the space not in use. This

is great for maximum protection, but (obviously enough) be careful when you employ this option -- you don't want to accidentally delete your entire hard drive.

While this article has focused on secure file deletion, there are other ways to protect yourself. Hard disk encryption (i.e., encrypting existing files you want to keep so that no one can read them without your secret code) is a valuable tool, and perhaps worthy of its own column. Saving files as something, rather than actually saving, also allows for each version of a file to be properly addressed (saving over an old file rather than saving it anew using the "save as" method can result in bits of sensitive, recoverable data floating around your hard drive). Remember, the old axiom about treating email as a postcard can hold true for other things as well. If you want to strive for hard drive security, download a file deletion utility, learn to use it properly, and start resting easy.



**Daily Home**



**The Vault**



**Contest**



**bLink Home**

Copyright 1996. EarthLink Network, Inc.