A Simpler Safe-Save Strategy

When the user saves a changed version of a document, most applications perform a "safe save"-a sequence of updating, renaming, saving, and deleting files that preserves the contents of the old file until the new version is safely recorded. Typically, an application saves the new version of the file under a temporary name, renames both files, and then discards the original.

Version 7.0 introduces the **FSpExchangeFiles** and **PBExchangeFiles** functions, which simplify a safe save. Both functions exchange the contents of two files by altering the catalog entries for the files. To save a new version of a file using file exchange, you save the copy, exchange the contents of the two files, and discard the newly saved file, which now holds the original version of the file. See **Updating Files** under the section,

<u>Using the File Manager</u>, for a description of how to update files with <u>FSpExchangeFiles</u>.

Updating a file with **FSpExchangeFiles** preserves the file's ID, which is used by the **Alias Manager**. (See **File IDs** under the section entitled See **New Special-Purpose Features in the File Manager** for a description of file IDs; see the **Finder Interface** for a description of Finder aliases and see the section called **Alias Manager** for a description of the underlying software.) Although the **Alias Manager** is usually able to resolve an alias with an obsolete file ID, you can improve the reliability of aliases by preserving file IDs on all saves.