
About the File Manager and System 7.0 Changes for the new OS version

Most of the features described in this section are available only in system software version 7.0 or later. To determine which features are available in a specific operating environment, use the **Gestalt** function. The availability of some features depends on the characteristics of the volume rather than on the system software. To determine which features a volume supports, use the **PBHGetVolParms** function. A complete description of how you check for various new features appears at the beginning of the section entitled **Using the File Manager**.

To use this section you must be familiar with the file system documentation.

The **File Manager** is the part of the Operating System that gives your application access to data storage devices such as disk drives. You use the **File Manager** to create, write, and read files.

To fully exploit system software version 7.0, your application should adopt two new **File Manager** features:

- the file system specification record, a new convention for identifying files and directories (see the section entitled **Identifying Files, Directories, and Volumes**)
- the strategy of updating a stored file by changing the catalog entries (see, **A Simpler Safe-Save Strategy**)

The **File Manager** in version 7.0 also introduces a number of special-purpose functions that you can use to

- search an entire volume quickly, matching entries in almost any of the catalog information fields, such as file creation date or file length
- track files by assigning and resolving file identification numbers
- mount volumes
- manipulate access-control privileges in foreign file systems

Version 7.0 supplies high-level versions of some functions previously available only as low-level functions. These functions have been available historically in some development environments but have not been documented before in *Inside Macintosh*.

The **PBHGetVolParms** function, which reports volume information, has been expanded and updated to reflect features in version 7.0. Some **File Manager** routines have been modified to accommodate file identification numbers.

System software version 7.0 includes a local version of Apple's file-server application, AppleShare. This feature allows the user to make some or all of the files on a local volume available over a network, increasing the chance that your application may be used in a shared environment. As long as you follow the standard guidelines for Macintosh programming, your application should work in a shared environment. If you want to exploit the full power of a shared environment, follow the guidelines in the section, **File Manager Extensions**.

To help you understand and use the version 7.0 **File Manager**, the first few sections of this section introduce the new features you should use: the new convention for identifying files and directories and the new strategy for updating stored files safely. The "New Special-Purpose Features" section introduces an assortment of other powerful but more specialized features.

The **Using the File Manager** section contains instructions for using the new features of the **File Manager** to

- recognize and use a standard file identification convention
- update a stored file safely
- search a volume for one or more files or directories
- assign and resolve file ID numbers
- manipulate the permission information that controls access to files on volumes controlled by different operating systems, such as A/UX.