



# Tech Info Library

## System 7: Limitations of the Finder (6/95)

Revised: 6/9/95  
Security: Everyone

System 7: Limitations of the Finder (6/95)

=====  
Article Created: 5 February 1993  
Article Reviewed/Updated: 9 June 1995

TOPIC -----

This article gives the limitations of the System 7 Finder and the HFS limits.

DISCUSSION -----

### Finder Limits

- Number of open files: 346
- Number of Apple Menu Items: 52 (more items can added, but only 52 appear when clicking on the Apple Menu icon)
- Number of files supported by the Desktop: Unlimited (limited to the available disk space -- see HFS limit)
- Number of applications in memory: The Finder does not limit the number of applications, but the amount of available RAM does.
- Number of volumes available on the Desktop: 32
- Number of items in a folder by list view: Up to 32,000 depending on the computer and RAM. (See the note at the bottom of this article.)
- Number of resources in the System File: 32,767 or 16 Megabytes
- Number of System Extensions or Control Panels that can be loaded into memory: The Finder does not limit these, but hard disk space and RAM can limit them.
- RAM allocated to an application with Finder = 99,999K
- The Finder supports 24-bit color, BUT icons are only 8-bit.
- QuickDraw supports 48-bit color, but the current operating system maximum is 32-bit color.
- Disk cache: 320 KB per megabyte of installed RAM

### HFS Limits

- 64K items or 65,536 items per volume
- The maximum length of a pathname under the Finder--including the Volume

# ..TIL11574-System\_7-Limitations\_of\_the\_Finder\_6-95.pdf

and Folder--is 255 characters, including colons. For example:

InternalHD:Folder1:Folder2:Filename = 35 characters

"Inside Macintosh, Volume IV" states that there is no limit to the number of levels of subdirectories. Because of pathname limitations, it is not always possible to specify a file using its full pathname.

This limitation has nothing to do with the Finder; it is a limitation of the file system.

Note: Attempting to view large numbers of files in one window, something in the range of 500 - 1500 files creates very slow opening times and drop-out viewing problems. The specific number depends on RAM and CPU.

## Article Change History:

09 Jun 1995 - Made grammatical correction.

11 Jan 1995 - Incorporated information from article 5188.

21 Sep 1994 - Changed spec for Disk Cache.

Support Information Services

Copyright 1993-95, Apple Computer, Inc.

Tech Info Library Article Number:11574