

# Apple II File Type Notes



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## Developer Technical Support

**File Type:**            **\$CA (202)**  
**Auxiliary Type:**    **Reserved**

Full Name:    Finder Icons File  
Short Name:   Icons

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July 1989

Files of this type and auxiliary type contain icons.

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The Apple IIGS Finder keeps the icons it uses in files of type \$CA. The Finder searches for these files in a directory named Icons on each volume mounted. Each icon contains information not only describing the icon and its mask (both regular and “small icon” sizes), but also information to match the icon to files from their file type, auxiliary type, and filename.

The Finder first attempts to load the file Finder.Icons from the Icons directory on the boot disk, stopping with a fatal error if it is not present (this file contains icons for devices as well as the icon to match files with no other icon). It then loads other icon files from that directory, and then from other disks.

The format of icon files is as follows:

+000	iBlkNext	<b>Long</b>	When loaded by the Finder, this is the handle to the next icon file (a linked list terminated by zero). On disk, this field should be zero.
+004	iBlkID	<b>Word</b>	ID number of this type of icon file. This field must be \$0001 for the Finder to recognize the icon file.
+006	iBlkPath	<b>Long</b>	When loaded by the Finder, this is the handle to the pathname of this icon file. On disk, this field should be zero.
+010	iBlkName	<b>16 Bytes</b>	A 16-byte <b>String</b> of the name of the icon file.
+026	iBlkIcons	<b>IconData</b>	A list of Icon Data records.

The format of Icon Data records is as follows:

+000	iDataLen	<b>Word</b>	The length of this Icon Data record. A value of zero in this field terminates the list of Icon Data records.
+002	iDataBoss	<b>64 Bytes</b>	The pathname of the application that owns this icon. If this <b>String</b> has non-zero length, and the file this icon is associated with is a document (not an application, folder, device, or trash can), the Finder attempts to launch a file with this pathname when this icon is opened or printed. This string should be empty for non-documents. This is a full pathname, and most

+066	iDataName	<b>16 Bytes</b>	<p>developers creating icons will wish to set this to the full pathname of the application on the shipping disk.</p> <p>A 16-byte <b>String</b> containing a file name. Files on disk must match the specification of this string or this icon will not be displayed for the files. The asterisk (*) serves as a wildcard character. For example, the string *.ASM matches all filenames ending with the characters .ASM.</p>
+082	iDatatype	<b>Word</b>	<p>File type associated with this icon. Files on disk must have this file type for this icon to be displayed. A file type of \$0000 in this field matches any file type on disk. As an example, an application icon would want to have the filename of the application in the iDataName field and the file type \$00B3 (GS/OS Application) in this field. Without the file type specification, the icon would show up for any file with the application's file name, including a folder on a hard disk in which the user has placed the application.</p>
+084	iDataAux	<b>Word</b>	<p>Auxiliary type associated with this icon. Similar to the file type field, a value of \$0000 here matches any auxiliary type on disk.</p>
+086	iDataBig iDataSmall	<b>Icon</b> <b>Icon</b>	<p>The normal size icon image data.</p> <p>The small size icon image data.</p>

The format of Icon records is the same as that listed in the QuickDraw II Auxiliary chapter of the *Apple IIGS Toolbox Reference Manual*. Previous icon structure documentation stated the `iconType` field of the Icon record (also known as the `imType` field) had to be zero. This is no longer true; the Finder respects color icons (bit 15 of `iconType` set) by not coloring the icon in funny ways, even if the user asks for it. The Finder still does this if bit 15 of `iconType` says the icon is a black-and-white icon.

### Further Reference

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- *Apple IIGS Toolbox Reference, Volume 2*
- *Apple IIGS Icon Editor*