

(Apple, C-G)

As with the control panels section, below and in the next two chapters are descriptions of nearly every Apple Extension ever released. If you're curious what the different extensions do, here's your source. If you're interested in whether or not you need various INITs, use the descriptions below to decide whether or not you want/need them. Most are from Apple; however a few are things that are so universal that I included them here (for most non-Apple extensions, check out the "Third-Party Extensions" chapter).

- CapsLock (7.1.5): Mainly useful for PowerBooks which do not have an indicator light on the caps lock key; puts an icon in the menu bar when the Caps Lock key is engaged (some PowerBooks and the Duo series all have a light on the caps lock key to let you know it is engaged; the 100-series and newer PowerBooks don't). This file is no longer needed under Mac OS 8, as it has been incorporated into the System file. Incorporated into the Finder under OS 8.
- CDRemoteINIT: under system 7.1P3, this extension was necessary to use the CD Remote DA.
- CFM Update: Installed by older versions of QuickDraw 3D. CFM stands for Code Fragment Manager. With native-code applications, CFM loads parts of the program as it needs them, one of the vaunted features of PowerMacs. This is some sort of an "update" to the CFM built into the system. Some users have reported less crashing and less hard disk grinding under low-memory situations. Incorporated into the System software under System 7.5.3
- CFM-68K Runtime Enabler (v4.0) [[72/544](#)]: integrated into the System file under Mac OS 8 for 68k Macs. Regardless of the version of the OS, this file is not needed on PowerMacs. The file name actually begins with a space to allow it to load early in the startup sequence. Enables the "runtime architecture" for 680x0 implementation of "Code Fragment Manager" support for shared libraries, which was formerly only available for PowerPC computers. Installed by LaserWriter 8.4.x, Desktop Printer 2.0.x, OpenDoc, Cyberdog, the Apple Media Tool, and some versions of AOL 3.0, in addition to some third-party applications. The code fragment manager allows applications to share code through "shared libraries." This extension makes it easier for developers of applications to design their programs to run on both 680x0 and PowerPC computers without having to write separate programs for both processor families. Requires System 7.1 or later and 32-bit addressing to be turned on in the Memory control panel. It does not run on 68000 Macs. Note that there is a major bug in early versions of the CFM-68K Runtime Enabler (under OS 7.6.1 or earlier). Some applications which rely on this file will not function properly, which according to Apple can result in crashing and loss of data. Apple recommends disabling these early versions (prior to v4.0). NOTE: Version 4.0 of the CFM-68K package was designed to fix these problems, but there is a bug in the latest version (1.2) of ObjectSupportLib (a component of CFM-68K 4.0) as it relates to CFM-68K. The bug causes system crashes to occur if CFM

applications are quit in a different order than they were launched. This whole mess only affects 68K Macs running Mac OS 7.6.1 or earlier. A new version of this file (v4.0 with bugs fixed) is incorporated into the System file under OS 8, so this extension is not needed if you are using OS 8. In fact, if you are running OS 8 and still have this extension installed, it will show up on the screen with a red "X" through it when extensions are being loaded.

- Clipping Extension (v7.1.4) (a.k.a. Finder Clipping Extension) [NA]: no longer needed under Mac OS 8, as it has been incorporated into the Finder file. Under OS 7.6.1 and earlier, allows you to create text "clippings" when you drag selections from Drag & Drop-savvy applications to the desktop. These clippings can be viewed by themselves, or dragged into documents. If this is disabled, drag-and-drop editing within and between applications will still work. Will not load on computers using pre-System 7 Pro system software. Requires the Drag Manager, which is built into the Macintosh Drag and Drop extension under System 7.1.x and built into the system software under System 7.5 and later.

- Color Classic Update: fixes a bug that prevented Apple IIe cards from working under System 7.5. Adds the correct video mode for the Apple IIe-type display to the video driver.

- ColorPicker (v2.0.1/v2.1.1) [25/384]: presents a standard interface for color selection, so that any application can ask the user to choose a color using the standard "choose color" dialog. Also provides additional color "pickers" (i.e. Red/ Green/Blue and Hue/ Saturation/ Lightness) in "choose color" dialogues (i.e. in the "Label" and "Color" control panels when you try to customize the color choices; enacted with the "more choices" button). Version 2.1 adds "eyedropper" support and "Crayon" and CMYK pickers. EASTER EGG: under Mac OS 8, open any "choose color" dialog (for example, in the Appearance control panel) and use the Crayon color picker. Examine the crayons. Close the dialog, they go to the Date & Time control panel and move the date a few years ahead. Now go back to the color chooser dialog and look at the crayons again...

- Color SW 2000 Series CMM (v1.0): allows you to use ColorSync with the Color StyleWriter 2400. NOTE: If you have a 68000 Mac, this extension will not allow it to start up. You should start up with extensions off, remove this file, then restart.

- Color Sync (v2.5) [40/384]: enables the ColorSync system (see the "Color Sync System Profile" entry in the "Control Panels" chapter).

- Contextual Menu Extension (v1.0.2) [18/192]: provides support for Mac OS 8's "contextual menus," pop-up menus which vary in their contents/choices depending upon the context in which they are called upon. Contextual menus are activated by holding down the control key and then clicking the mouse on a file, in a window, etc. For example, when control-clicking in a Finder window, a pop-up menu appears which allows you to choose how to view the window. Additional Contextual Menu functionality can be added via "plug-ins" which are stored in the "Contextual Menu Items" folder in the System Folder. Third-party developer can add their own Contextual Menu functionality via "Plug-Ins" which are stored in the "Contextual Menu Items" folder in the System Folder. NOTE: in order for Contextual Menu plug-ins to work properly, the "SOMobjects"™ for Mac OS" extension must be installed. NOTE: apparently the Contextual Menu Manager, which ADD uses to send commands via Contextual Menus, turns itself off if you are not using a standard keyboard layout. Thus people using custom keyboard layouts, such as a Dvorak keyboard layout, cannot use contextual menus properly. OS8

- Contextual Menu Enabler (v1.0.3): provides support for Contextual Menus in applications other than the Finder. NOTE: because of the way this extension works, if an application has its own control-click functionality (which does not follow the "official" contextual menus guidelines), the Contextual Menu Enabler may interfere with this functionality. You should disable Contextual Menus (from the "Help" menu) in these applications. OS8

- DAL: enables network activity using Data Access Language, formerly called CL/1. From Apple's Tech Info Library:
Data Access Language is Apple's client/server protocol for remote data access and is based on ANSI standard SQL (Structured Query Language). DAL is optimized to provide decision-support applications with uniform access to data, regardless of the different brands of databases, the different host platforms, or the different types of networks.

The DAL client software is included as a part of System 7.0 and can be transparently accessed by applications written to the Data Access Manager API. These applications can access data from DAL servers running on host computers, across all DAL-supported networks. Therefore, with the Data Access Manager and the included DAL client software in System 7, applications can "speak" in an identical fashion to many different types of host databases. Apple Computer Inc. is currently delivering DAL servers through APDA for the following environments:

- o VAX/VMS (for DEC Rdb, Informix, Ingres, Oracle, and Sybase)
- o MVS/TSO (for IBM DB2)
- o VM/CMS (for IBM SQL/DS)

DEC also provides DAL as a part of the DEC PathWORKS product. Apple is also working with software and hardware vendors to extend DAL client and server support to other industry platforms.

- Default Calibrator (v1.0): part of the ColorSync 2.5 package. Adds a new "calibration" option to the Monitors & Sound control panel which allows you to custom-calibrate a ColorSync profile for your monitor. Requires v2.5 of the ColorSync extension and Monitors & Sound v1.3.
- Demo click&drag, Demo drag/lock, and Demo single.click: these files, found in the Extensions folder, are actually QuickTime movies. They are used by the Mac OS help system to demonstrate the use of the TrackPad on PowerBook computers.
- Desktop Manager Fix (v1.0): part of the AppleShare server software package. Supposedly improves desktop interaction in a multi-user environment.
- Desktop Manager INIT (v2.0.1): on older Macs which were supported by Systems 6.0.x and 7.0.x, you could switch between System software versions in order to run applications which were only compatible with one or the other system versions. However, when you switched from 7.0.x to 6.0.x, the system software would automatically rebuild the desktop file. This file allowed you to switch back and forth without the automatic rebuild. This file should be placed in the System 6 System Folder. DO NOT put it in your System 7.x System Folder. NOTE: The Desktop Manager INIT is not available to everyone. It is licensed only to users who have AppleShare 2.0.1. You can find the Desktop Manager 2.0.1 INIT on the AppleShare Server disk inside the System Folder.
- Desktop Printer Extension (v2.0.2), Desktop Printer Spooler (v2.0.2/v2.1), Desktop PrintMonitor (v2.0.2/v2.1): Under LaserWriter 8.3 and higher, these extensions (PrintMonitor is actually an application) allow you to have a printer icon on your desktop, to which you can drag and drop documents to be printed. Double-clicking the icon brings up a PrintMonitor specifically for that printer. If you have more than one Desktop Printer, you can drag and drop/schedule documents between them. Version 2.0 included the option of selecting printers from the menu bar, control strip, or Print dialog box. Also, the desktop printer icons can be moved to anywhere on the hard drive. If you are using this software on a 68k Mac under pre-OS 8 System software, you will also have the "CFM-68K Runtime Enabler" extension installed (see its own entry in this "Extensions" section). NOTE: the Desktop Printer Extension is no longer needed under Mac OS 8, as its functionality has been incorporated into the Finder file. The other two files are still necessary for desktop printing to function. NOTE: it may be necessary for some people to increase the memory allocation for the Desktop Print Monitor application (using the "Get Info" command) in order to enable background printing with LW8.4.x. NOTE: if you have Desktop Printing installed and have not selected a printer in the Chooser, it is possible that you may see two System Folders on your hard drive. The second is not an actual System Folder, but to be safe, select a printer in the Chooser and restart. NOTE: Under OS 8 and OS 8.1, At Ease 4.0.1 will supposedly crash if the Desktop Printing extensions are not installed. NOTE: some users have reported that AppleShare is required for the Chooser to create a Desktop Printer. NOTE: the Color StyleWriter 4100 & 4500 are not compatible with Apple's desktop printing. This is because they are actually Hewlett-Packard printers with an Apple label. NOTE: if at startup you get an "error -192 at 18" message, this means that you have a corrupted print job (i.e. you attempted to print something, and somewhere along the line it got "garbled"). Apple's solution to get rid of this error message is this: disable the Desktop Printer Spooler and Desktop PrintMonitor extensions and restart. At the end of the startup process you should then get a message about a "damaged print job." Choose the button to "delete" the damaged print job. Turn the two extensions back on, restart, and everything should be fine.

- Desktop Printer Menu: provides a menu in the menu bar which enables you to quickly change the default printer without having to use the chooser or manually select the Desktop Printer icon.
- Display Enabler (v 2.2.2): provides multiscan/multisync support, especially for AppleVision monitors. Adds functionality to Energy Saver, and to the Monitors control strip module by allowing you to switch resolutions on-the-fly. Version 2.2.2 corrects a problem where a 1710AV monitor attached to a PowerBook might not be recognized when the PowerBook wakes up from sleeping and the display's external buttons would no longer function. It also fixes a bug where some AV 6100/7100/ 8100 PowerMacs would only be able to display screens at 640x480 resolution. Finally, it fixes a problem on 6300/6400/6500 series computers where the microphone "playthrough" function would be disabled when using the monitor's built-in microphone. While Display Enabler 2.2.2 supposedly works with AppleVision software versions 1.0.2, 1.5.1, and 1.5.3, Apple recommends updating to v1.5.3. Version 2.0 was built into the System under System 7.5.3. However, version 2.0.3 supposedly fixed a bug with Now Startup Manager and incorporated fixes from v2.0.2 for AppleVision and AudioVision displays. NOTE: on the MacFixIt page, Ted Landau has tried to clarify information on this file. I would recommend visiting his site for the best summary of this issue (see the "Resources" section of Chapter 1). This file actually has a space at the beginning and end of its name to allow it to load first in the startup process.
- DoubleTrouble (v1.0): for use under pre-System 7.5 systems. When using a debugging utility, the DoubleTrouble extension will break into the debugger to alert you whenever the code in a project attempts to free a "handle" that has already been freed. An unsupported Apple extension. NOTE: do not use this extension with System 7.5 or later. It is intended only for pre-7.5 use.
- Drag&Drop Extension (a.k.a. Macintosh Drag & Drop) (v1.1): provides Drag and Drop support under Systems 7.0.x and 7.1.x. These two files are still installed by numerous software packages, such as Now Utilities and ccMail, for universal compatibility, but are not needed under System 7.5 and later. NOTE: Macintosh Drag and Drop is incompatible with the graphics acceleration of the 8•24 GC video card. With the 8•24 card and the 8•24 GC control panel installed, Drag and Drop operations may leave bits on the 8•24-driven screen.
- Dragging Enabler (a.k.a Drag Enabler): provides Drag Manager support under System 7.0 and 7.1. When used with the Macintosh Drag and Drop extension, provides inter-application drag and drop support under System 7.1. Integrated into the Finder under System 7 Pro and later, so it is no longer needed on those systems. NOTE: if you have AppleGuide installed under System 7.0 and 7.1, you must disable this file. The AppleGuide extension supposedly has a version of Dragging Enabler built-in, and if you have AppleGuide and this file installed at the same time, it may crash your computer.
- Drive Firmware Update Extension (v1.2): only useful for Macs with IDE hard drives. Fixes a bug with audible drive noise. You must restart twice after installing this extension to activate its features.
- Duo Battery Patch: fixed a conflict with PowerBook Duo 210, 230, and 250 computers which had an Express Modem installed and which were using version 1.0 of the PowerBook Duo Enabler. In this configuration, the Duo battery would not recharge. This problem was fixed by a newer version of the PowerBook Duo Enabler, and is no longer needed under System 7.5.5 and later.
- EM Extension (v3.0.3): allows the "Extensions Manager control panel to load before any other startup files. Also allows you to open the Extensions Manager control panel at startup by holding down the space bar.
- EM Sound Update: provides added sound support on 630 series Macs with internal Express Modems, so that your modem's sound will play through your Mac's speaker.
- Energy Saver Extension (v2.0.4/v2.0.7): used in conjunction with the Energy Saver Control Panel. See the "Energy Saver" entry in the Control Panels chapter.
- ENET Compatibility (v1.0.3): fixes a bug with PCI Macs on a Novell Netware network where the computer would crash at shutdown or restart. With this extension installed you will be able to use

Netware, but your machine will take quite a bit longer to shut down (like about two minutes!). The delay can be avoided by logging out of the Netware tree before shutting down or restarting. Some users have reported bus errors, "illegal instruction" error messages, freezing, bombing, and crashing which they attributed to having this extension installed when it was not needed. Apparently, some other software, such as the HomeDoor package also require this extension when used on a PCI Mac running Open Transport.

- Ethernet (Built-In) (v1.0.5/v2.0.2): provides support for the built-in Ethernet port on PCI Macs. However, there is some confusion between this file and the "Apple Built-In Ethernet" file (see the appropriate entry). Versions 2.0 and 2.0.1 are used by the newer G3 PowerMacs. Versions earlier than 1.0.4 contained several bugs which have supposedly been fixed in 1.0.4 and 1.0.5. NOTE: OS 7.6 and 7.6.1 install v1.0.4 of this extension, while AppleShare IP 5.0.2 and AppleShare client v3.7.2 install v1.0.5. If you have problems with Ethernet access, especially on a PCI Mac, you should try to get a copy of v1.0.5 from a 7.5.5 computer. NOTE: Version 2.0.1 is only needed on desktop PowerMac G3 systems (not the PowerBook G3) which shipped with version 2.0. Version 2.0 could cause data corruption when connected to a very busy Ethernet network, and would sometimes fail to attach to a network when connected to an auto-sensing hub. Version 2.0.1 fixes these problems. In addition, some people have reported that it also fixes a problem where the computer would freeze when attempting to access servers through the Chooser.
- EtherTalk Phase 2 (v2.5.7/v2.5.7): driver software which allows you to connect your Mac to an Ethernet network. Supposedly no longer needed under System 7.5.3 and later, but several readers claim that they still need it when running Classic Networking. NOTE: some users contend that it is even needed under Open Transport when using Powerport Platinum PCMCIA cards.
- EtherTalkPrep: on older systems, worked with EtherTalk Phase 2 to establish and maintain Ethernet connections. Supposedly no longer needed under 7.5.3.
- External CD Sound: on pre-7.5.1 systems, allowed you to listen to audio CD's on an external Apple CD-ROM drive. Integrated into the system software under 7.5.1.
- FaceSpan: Applescript Development environment extension that allows you to create graphical user interface (GUI) front-ends to Applescripts.
- Fax Terminal 7.5 compatibility: provides compatibility for Apple's Fax Terminal software when running under System 7.5. This file is not needed if you are using Apple Express Modem Software v1.5.5 or later.
- File Sharing Extension (v7.6.2) [3.5/0]: enables your Mac to share files with other computers on a network. If you are not connected to any other Macs via a network, or if you are on a network but don't need to allow other computers to access files on your computer, this file is not necessary.
- File System Manager (v1.2.4): File System Manager (FSM) is an obscure part of the Macintosh operating system that was proposed for System 7.0 but didn't officially ship until System 7.5.1, when it was part of the System itself. Providing support for external file systems, the extension was used on earlier systems by developers to support FSM functionality and to utilize its features without having to rewrite the entire Macintosh File Manager system. It is used by the System for cross-platform exchange with ProDOS and PC systems and is used by Macintosh PC Exchange. It also supports "plug-in" file for different types of media/file systems.
- Find File Extension (v1.1.1) [0/0]: allows you to access the new System 7.5 "find file" by typing command-F. Without this installed, it brings up the older "Find File" in the system. However, you will still be able to access the newer find feature through the Apple Menu. For some strange reason it also disables the alert box which says that the functionality of "Find File" is limited when the Finder Scripting Extension is not installed. This file is no longer needed under Mac OS 8, as it has been incorporated into the Finder file.
- Finder Help (v7.5.6) [NA]: provides balloon help for the Finder. Most of its info is contained in the

newer Apple Guide, but if you plan on installing LaserWriter 8.4, you must have this installed (who knows why?). Fortunately, Apple has included a copy of Finder Help with the newer LaserWriter installers. NOTE: Desktop Printing 2.0.1 installs a "new" version of Finder Help (newer than the version included in System 7.5.5), but the version number is still 7.5.5. One neat trick that Finder balloon help provides is that if you open the "About This Macintosh" or "About This Computer" box from the Apple Menu with balloon help turned on, pointing at an application's memory usage will show how much unused memory is being tied up by that application. This file is no longer needed under Mac OS 8, as its functionality has been incorporated into the Apple Guide.

- Finder Scripting Extension (v7.5.5) [0/0]: needed if an application uses Finder functions in its AppleScript. Allows you to write scripts which use the Finder. Also allows you to perform operations on "Find" search results (i.e. dragging a folder/file from the "find" window to the desktop, trash, or to another folder). Supposedly, if this extension is not installed, the Shutdown Items folders in the System Folder won't "work" (i.e. items placed in the folder will not open at shutdown) and multiple desktop printer icons may appear! This file is no longer needed under Mac OS 8, as it has been incorporated into the Finder file.
- Finder Update (v7.5.3) [NA]: formerly called "PowerPC Finder Update" but name was changed in System 7.5 Update 1.0. Provides support for PowerMac native code in the Finder. Corrects some memory-related problems. Also puts that "Memory will decrease by xxx if virtual memory is turned on..." message in the "Get Info" box. With the release of System 7.5.3, this update is integrated into the Finder itself.
- FireWire (v1.0): provides support for third-party hardware and software which uses the new IEEE 1394 High Performance Serial Bus standard (FireWire). FireWire is basically a new standard for high-speed serial devices, such as digital video cameras and printers. Since there are very few FireWire hardware and software products right now, this extension is not installed in the Extensions folder, but is instead located in the Apple Extras folder on your hard drive under OS 8. [OS8](#)
- FM Radio(v1.1/v1.2): provides support for the FM radio tuner which is built-in on some Macs. You must have v1.2 under OS 8 and OS 8.1. NOTE: v1.2 of this extension is required in order to use the Apple FM Radio under Mac OS 8.1. NOTE: if you are using v1.2 of this extension, you must use version 1.4.1 of the Apple FM Radio application; if you use an older version of the application, you will get an "FM Radio Extension is not compatible with this system" error when you try to launch the application. NOTE: if this file is installed on a PowerBook 3400, the computer will crash on startup.
- Font Extension 3 (vj-1.0.4): prevents one cause of a system hang on systems running Japanese Language Kit 1.2. Included with the Japanese Language Kit as well as with KanjiTalk.
- FontSize Patch (v1.1): fixes problems with font corruption when using the Asian language kits under System 7.5.3 and later.
- Foreign File Access (v5.2) [[114.5/153](#) NOTE: RAM usage will vary depending upon which components are installed (see the description that follows); if you'd like to keep your RAM usage down, you should only activate the components for the file formats you actually use.]: enables your Mac to work with CD-ROM discs which don't use the standard Macintosh file system, by using the corresponding component files. This includes audio CD's, ISO 9660, PhotoCD, and High Sierra formats (see "COMPONENTS"). Note that this means you need this extension along with the respective component in order to read a non-Mac format CD-ROM. If Foreign File Access is installed, but no FFA components are installed, you will get an error that you are missing the "File System Access module." If you have the correct components installed, Foreign File Access also allows you to mount both the Mac and PC sectors of multi-format CD-ROMs.
- Frontmost Extension: Frontmost is an application package (that comes with the full AppleScript commercial product) that allows you to create sophisticated user interfaces for AppleScript applications. The Frontmost Extension acts as a run-time assistant for projects saved as miniature applications.

- GetInfo (v1.0b4): for use only under System 7.0. Provides extra information about files which depend on other files by modifying the "Get Info..." box. Only works with applications which use QuickTime. Also, if you have a file that contains data on which another file depends and you drop it in the trash, GetInfo won't allow you to delete the file.
- Global Guide Files: not an extension but a folder. This folder holds Apple Guide mixins which are used by Finder- and System-related applications and utilities or which are used by more than one application (see "Apple Guide" in the "Groups" section). Not all users will have this folder; it is only supported by newer versions of Apple Guide.
- Graphics Accelerator (v1.1): provides video acceleration for PCI Macs using an ATI video card. Version 1.0.5 caused a problem with windows and toolbars in WordPerfect; this bug was fixed in version 1.0.7. Note that this extension conflicts with the ATI XClaim VR graphics card and will cause a freeze at startup. Unfortunately, System 7.6 will often mistakenly install it on machines with an XClaim VR card. If this happens to you, you should restart with extensions off (by holding down the shift key), throw this extension away, then restart.
- GXGraphics (v1.1.3/v1.1.6): provides the advanced graphics, typography and printing capability of the QuickDraw GX system without requiring that the entire GX package be installed. On pre-OS 8 systems (i.e. v1.1.3 of the extension), this includes limited support for QuickDraw GX printing, while under OS 8 and later (i.e. v1.1.6 of the extension), it provides only GX graphics and typography support. Contains both the GXGraphicsLib and QuickDrawGXLib shared libraries for early versions of QuickDraw GX. Only supported on PowerPC machines. NOTE: Although QuickDraw GX printing is no longer supported under OS 8, the advance graphics and typography capabilities of QuickDraw GX are still supported, and will eventually be rolled into the standard Mac QuickDraw environment. NOTE: there are a few incompatibilities between v1.1.6 and ATM, as well as some slow/garbled printing problems. For complete information, visit the Tech Info Library (see the "Other Resources" section of InformINIT) and read article #1101.