

These "inits" do not take up RAM at startup in and of themselves; they are used/ loaded by other extensions and by applications whenever they are needed. Some are loaded at startup by other extensions, while some just sit there waiting to be used, either by another init or by an application. However, they must still be "active" (in the "Extensions" folder) at startup to be used/loaded, and when they are loaded, they do increase RAM consumption.


SHARED LIBRARIES:

Also known as Dynamically Loaded Libraries. They are called "shared libraries" because they provide sets of common code which can be used by different applications, rather than each application having to contain the code within itself. They are loaded only as needed, not necessarily at startup:

- AppleScriptLib (v1.2.2) **PM**: I originally thought that like most "Lib" files, this file provided native code AppleScript support. However, an Apple employee who has worked on the AppleScript system claims that there is no native version of AppleScript. AppleScriptLib is basically a "glue library" for calling on the non-native AppleScript code from within native code (in an application, for example). PowerPC native applications which utilize AppleScript, as well as AppleScript itself, need this. Version 1.1 is installed by the latest system software; version 1.2.2 is installed by Apple Telecom 3.0.
- ColorSyncLib 68k (v2.0.1): Code Fragment Manager file for the Color Sync software included with the LaserWriter 8.4 installation on 680x0 Macs (see the "Nuxxx.lib" files below).
- DragLib: a shared library used by the Drag Enabler on PowerMacs. This was only necessary under earlier systems, and is no longer needed.
- DrawSprocketLib (v1.0): provides PowerPC native support for the "DrawSprocket" Game Sprocket system.
- LibMotoSh **PM**: a third party shared library which accelerates mathematical operations on PowerMacs (see "MathLibMoto" below). This is the official Motorola release. It is slower on some operations than MathLibMoto, but is more accurate. It also conflicts with the GeoPort/Express Modem software, while MathLibMoto did not. Motorola has outlined a solution for the conflict at:
<http://www.mot.com/SPS/PowerPC/library/fact_sheet/libmoto_geofix.html>
- MathLib (v2.0.1) **PM**: Provides PowerPC numerics routines for native applications. Installed with system update 7.5.1, but incorporated into the system in 7.5.2.
- MathLibMoto **PM**: a third-party shared library extension written by a Motorola employee. It contains a PPC-native shared code library for floating-point math operations which is more efficient than Apple's own code. It is useless on 680x0 Macs, but on PowerMacs it will improve the performance of applications which use a great deal of floating-point calculations (such as rendering/ray-tracing apps, statistical software, and graphic imaging programs) as long as the applications are PPC-native. Also, QuickDraw 3D will gain some noticeable speed. On the other hand, word-processing, DTP, database work, etc. will gain very little from using MathLibMoto. Motorola has asked those distributing this extension to stop, because they have released an "official" version, LibMoto (see above).

- NuDragLib.slb (v1.1)
- NuQuickTimeLib.slb (v2.0.1)
- NuThreadsLib.slb (v2.0.1)
- NuTranslationLib .slb (v1.0.1)
- ColorSyncLib68K

These files are CFM68K shared libraries which are only useful on 68K machines with the "CFM-68K Runtime Enabler" extension installed (see an important note about this file in the "Extensions" chapter). Code Fragment Manager (CFM) is the PowerPC standard method for loading code from a file into RAM and preparing it for execution. These files, when used with the above extension, provide CFM functionality on 680x0 machines. They are loaded by the CFM-68K Runtime Enabler extension if a CFM68K-based application needs them. The CFM68K libraries are identifiable by the prefix "Nu" (".slb" is the older way of naming shared libraries). The CFM68K system is part of OpenDoc (see the "Groups" chapter) and is needed by the various OpenDoc "parts." The "QuickTime," "ColorSync" and "Threads" libraries are also installed by the LaserWriter 8.4.x package. CFM68K is not usable on PowerMacs. Future system versions (most likely 7.6 and beyond) will have a new version of the "CFM-68K Runtime Enabler" built into the System file. Eventually the libraries will be rolled into the System software and applications themselves and the separate files will no longer be needed.

- ObjectSupportLib (v1.1) **PM**: Provides services to allow applications to send, receive and exchange Apple Events that conform to the "object model" -- e.g.  provides support for AppleScript on PowerMacs; some native applications require this library. There are a number of versions of this library floating around, but at the time of the release of The Informant v1.3, the "best" version, and the only one officially supported by Apple, seemed to be 1.0.2 or 1.1. According to Apple, ObjectSupportLib 1.1 is functionally identical to ObjectSupportLib 1.0.2 (v1.1 originally shipped with AppleScript 1.1 and its version number was mistakenly labeled as 1.1 to match AppleScript 1.1's version string). As of October, 1996 the newest "official" version of ObjectSupportLib was 1.0.4. Quite a few applications seem to install variations of ObjectSupportLib with strange version numbers. However, quite a few people have had problems using any version other than 1.0.2 or 1.1. If you have applications that look for a different version than the one you have, the applications will not be able to correctly map Apple Events. Supposedly, System 7.6 will include a "new" version, ObjectSupportLib 1.1.8. However, it will actually be version 1.0.2 (which, again, is the same as v1.1) renamed so that "undesirable interim versions" ("versions" 1.1.1 through 1.1.6) will not install over the Apple version.

- PrintingLib (v8.4.1): provides shared library support for the LaserWriter 8.4.x software. Needed on both 680x0 Macs and PowerMacs.

- QuickTimeLib: actually not a separate file, but a shared library which is incorporated into the QuickTime PowerPlug extension. On a PowerMac, some applications, such as Graphic Converter, will display an error such as "Can't find QuickTimeLib" if QuickTime PowerPlug is not installed.

- Serial (Built-in) (v1.2.2): configures the serial ports/allows the serial ports to be used by communications programs and Open Transport. Installed by the GeoPort/Express Modem software on 5400/6400/6360 series computers using the GeoPort Telecom Adapter.

- SoundLib: actually not a separate file anymore (it used to be -- the last version was 3.1); a shared library which is incorporated into the Sound Manager extension (3.0 or later). Some applications, such as Sparkle 2.4.5, will display an alert like "Can't find SoundLib" if SoundManager is not installed.

- SoundSprocketLib (v1.0): provides PowerPC native support for the "SoundSprocket" Game Sprocket system.

- ThreadsLib (v2.1.2) **PM**: Provides native Thread Manager support for native applications (cooperative threads only). Provides additional information for developers on PowerMacs. Incorporated into the System or System Update 7.5.2 under System 7.5.3.

- XTND Power Enabler: a Power Macintosh shared library system extension enabling native Power Macintosh applications to call the Claris XTND System. Only the interface library has become native,

the remaining parts of XTND, like Claris XTND System remain the same 68K code.

DOCUMENTS:

Similar to Shared Libraries, these are used by the Shared Library Managers, and are not loaded into system RAM at startup:

- Serial Extension (v2.2): installed by the QuickTake package to enable the serial port to be used by the QuickTake camera. Also installed by the Apple GeoPort/Express modem software on the PowerMac 6100/7100/8100 series.
- SNMP Macintosh Agent, SNMP MacTCP Agent, SNMP Manager, SNMP TCP/IP Transport (all v1.0.2): these files, along with the MacSNMP Client, were installed for SNMP support by the MacTCP 2.0.2 Installer. They are no longer needed if you have the latest version of MacTCP (2.0.6).
- StdCLibInit **PM**: an Apple init installed by CodeWarrior 9. Contains updates to the StdCLib shared library which is contained in the PowerMac ROMs. It is necessary in order to run the PPC-native version of MPW (Macintosh Programmer's Workshop). It is actually more than just updates: it is a full replacement library with a small INIT code resource to install the replacement library. The init code is needed because of a combination of a bug in the PowerMac ROM-based Code Fragment Manager (CFM) and the fact that the ROM/System already contain a previous update to the basic StdCLib library. The update library is incompatible with the replacement library and CFM gets very confused when it tries to apply the update to the replacement library in StdCLibInit.

COMPONENTS:

These are used by other apps/inits. They are loaded at startup, but most don't take up system RAM until they are called upon (the exception being the Foreign File Access Files; see the Foreign File Access entry in the "Extensions" section for details):

- Apple Photo Access (v2.1): necessary only for KODAK PhotoCD access. Needs the Foreign File Access extension in order to function.
- Audio CD Access (v5.1): necessary to listen to audio CD's in your Mac's CD-ROM drive. Needs the Foreign File Access extension in order to function.
- AV Setup (v1.0): under 7.5.2, allowed the Sound & Displays control panel to talk to the Mac's hardware; also allowed control of the AppleVision displays. However, Sound & Displays has been replaced by Monitors & Sound which no longer needs this file.
- High Sierra File Access (v5.1): for CD-ROM's encoded in the High Sierra language (fairly rare nowadays). Needs the Foreign File Access extension in order to function.
- Internet Config Extension (v1.2): used by certain Internet applications, such as Anarchie and Claris Em@iler; allows you to use standard preferences across all compatible applications. See documentation for details.
- ISO 9660 File Access (v5.1): for CD-ROM's encoded in the non-HFS ISO 9660 standard (again, rare for the average user). Needs the Foreign File Access extension in order to function.
- KODAK files: installed by some graphics programs (PhotoShop, etc.).

- Macintalk 2/3/Pro (v1.4): part of the Speech installation, allows the computer to read text in human voices (2 and 3 require Speech Manager and the "Macintalk 2/3 Voices" files; Pro requires Speech Manager and the "Voices" folder in the System Folder with voice files installed); . Pro is for 68040 and PowerPC Macs; 3 is for 68030, 68040, and PowerPC Macs; 2 is for 68020 Macs and Macs running pre-System 7 system software. For more information on Speech, see the "Groups" chapter.
- SoundSprocket Filter (v1.0): when used with games that incorporate the "SoundSprocket" Game Sprocket, this file acts as an effects filter used to produce 3D audio.
- SystemAV (v1.1): provides components for the A/V capabilities of your Macintosh. Allows the Monitors & Sounds (and the older Sound & Displays) control panel to talk to the Mac's hardware; also used for audio-video input on the PCI Macs.

COMMUNICATIONS TOOLS:

These are used by communications apps. Again, they don't take up RAM, and don't affect your system until called upon:

- Apple ADSP Tool (v1.0.1): enables ADSP (Apple Data Streaming Protocol) connections. Allows Comm Toolbox connections over an AppleTalk network. Allows ADSP data transfer (including game playing) over a remote network. Installed by the Newton software to allow ADSP transfers between the Mac and Newton. Needed for Macs that run ResNova server software. Built into the system since System 7.1, but some older applications don't recognize the built-in version, and require that the actual extension be installed (for example, some Newton connection utilities and older versions of ClarisWorks).
- Apple ISDN Telephone Tool (v1.0.2): for use with the Apple ISDN NuBus Card. This version is part of the Telephone Manager 1.1.1 update.
- Apple Modem Tool (v1.5.5): supports 115.2K and 230.4K connections on those Macs that support SerialDMA (for SerialDMA information, see the SerialDMA entry in the "Extensions" chapter).
- AppleTalk-DECnet Tool: used to communicate with servers running the VMS operating system from Digital (also known as VAX/VMS or Alpha/VMS). DECnet is a network protocol used by VMS to copy files, establish terminal sessions, etc. with VMS servers (similar to TCP/IP in the Unix/Internet world). There are a few rare emulators which use this file. If you are using one of them, you'll know. Most people nowadays use TCP/IP to communicate with VAX machines.
- AppleTalk-LAT Tool: used to communicate with servers running the VMS operating system from Digital (also known as VAX/VMS or Alpha/VMS). LAT (Local Area Transport) is a non-routed network protocol used by VMS. It is used only to establish terminal sessions with VMS servers. There are a few rare emulators which use this file. If you are using one of them, you'll know. Most people nowadays use TCP/IP to communicate with VAX machines.
- Claris Kermit Tool: necessary for Kermit file transfers under the ClarisWorks terminal program.
- CRC TelePort TelTool: allows you to use the MegaPhone software with an internal Global Village Teleport Platinum modem.
- DAL: an extension from System 7.0.1 that allows you to access databases on Unix platforms that support the DAL (Data Access Language) protocol. Chances are, unless you have a DAL server (\$4000 or more) and know how to set it up, you'll never need this extension. This extension was originally developed/ owned by Apple, but was later sold to another company.

- Express Modem Tool: allows communications over the Apple Express Modem.
- MacPAD: allows access to MacX25 servers using the X25 protocol. It serves no useful function unless it is actually selected as a comm tool from within a communications program. So unless you are actually using it for a network connection, you can get rid of it. How does it get installed? Probably by Claris EMailer. Why? AppleLink is run over X25. In order to retrieve mail over AppleLink, EMailer users at Apple's main campus must use the MacPAD tool to allow EMailer to connect to AppleLink. Although most users at Apple should already have the MacPAD tool installed, it is included in the EMailer installation to ensure that all EMailer users at Apple would have it. Unfortunately, lots of non-Apple people also get it.
- Serial Tool: used by PowerTalk allow the PowerTalk software to make a modem connection automatically.
- TCPack for AOL / TCPack for SalesAgent / TCPack for eWorld / TCPack for Compuserve: allow you to access these services over a direct TCP/IP connection, instead of having to directly dial into them.
- Text Tool (v1.0.1): allows direct, uncorrected file transfers. Used to send files directly as text. Nearly obsolete.
- TTY Tool (v1.0.1): provides support for a teletypewriter-emulation connection. Also provides an alternative to ANSI and VT-120 protocols when connecting to a BBS or for direct modem-to-modem connections.
- VT 102: presumably allows your Mac, using compatible telecom software, to emulate a VT102 terminal.
- XMODEM: provides support for transferring files using the XMODEM protocol.

CHOOSER EXTENSIONS:

These are extensions which allow access/connection to various types of networks, services, printers, etc. using the Chooser.

- Apple ColorOne: chooser extension which is required if using the supplied Dispatcher application software to scan using the Apple ColorOne scanner.
- AppleTalk ImageWriter: a chooser extension for the AppleTalk ImageWriter dot matrix printer. This printer requires that AppleTalk be turned on.
- CG Maker 1.1.2: a chooser extension which allows you to prepare a "Common Ground" document for distribution. Similar to the Adobe PDF Writer (below).
- Color SW 2200 (v2.1.1): a chooser extension for the Color StyleWriter 2200.
- Color SW 2400 (v2.1.1): a chooser extension for the Color StyleWriter 2400.
- Color SW 2400 GX: a QuickDraw GX chooser extension for the Color StyleWriter 2400.
- Color SW Pro (v1.5.2): a chooser extension for the Color StyleWriter Pro.
- EPSExtension (Ext): Encapsulated Post-Script printing extension. Allows you to save a file printed using the LaserWriter GX driver as an Encapsulated PostScript file for importing into applications that

do not support QuickDraw GX, such as Aldus PageMaker and QuarkXPress.

- Fax Sender: a chooser extension which allows faxing from within applications using the Geoport modem.
- Fax Sender GX: a QuickDraw GX chooser extension which allows faxing from within applications using the Geoport modem.
- Genigraphics: a chooser extension which allows you to prepare files for Genigraphics service bureaus. Genigraphics is a computer graphics system which started in the late 70's. They have service bureaus which will take your Genigraphics files and convert them to professional quality prints and slides. However, in many industries, PostScript files have taken over as the dominant file format. This file is installed by Microsoft PowerPoint and Office, as well as by Astound 2.0.
- GlobalFax: if this driver is chosen in the Chooser, the "Print" command in applications will be replaced by a "Fax" command. If you would like to do occasional faxing, hold down the Option key as you select the "File" menu, and the "Print" command will temporarily change to "Fax."
- GlobalFax GX: The QuickDraw GX driver for direct faxing. If this driver is chosen in the Chooser, the "Print" command in applications will be replaced by a "Fax" command. If you would like to do occasional faxing, hold down the Option key as you select the "File" menu, and the "Print" command will temporarily change to "Fax."
- ImageSaverIII: chooser extension installed by Delrina Fax PRO which allows the File: Print command to send a fax message.
- ImageWriter (v7.0.1): chooser extension used for the dot matrix ImageWriter printer. This printer is a serial printer, and thus does not require AppleTalk to be turned on (see AppleTalk ImageWriter, above).
- ImageWriter GX: QuickDraw GX chooser extension for the dot matrix ImageWriter printer.
- ImageWriter LQ GX: a QuickDraw GX chooser extension for the ImageWriter LQ.
- LaserWriter 300 & LaserWriter 300/LS (v1.2): chooser extension to be used with the Personal LaserWriter 300, LaserWriter Select 300, and the Personal LaserWriter LS.
- LaserWriter 300 GX: QuickDraw GX chooser extension to be used with the Personal LaserWriter 300, LaserWriter Select 300, and the Personal LaserWriter LS.
- LaserWriter (v8.4.1): chooser extension for the LaserWriter, LaserWriter Plus, Personal LaserWriter NT/NTR, LaserWriter II NT/NTX, LaserWriter IIf/g, LaserWriter Pro, LaserWriter Pro 600/630/810, LaserWriter Select 360, Personal LaserWriter 320 and the LaserWriter 16/600. The latest versions of the LaserWriter 8 driver (8.3.4 and 8.4) are recommended for anyone using System 7.5.3 and/or anyone with a PCI-based PowerMac. Version 8.3.4 contains the LaserWriter driver only, and fixes problems with printing to a network printer or a dedicated print spooler. Version 8.4.x is a full installation of the newest LaserWriter 8 package. It is PowerPC native (but works on 680x0 Macs as well), features single-pass printing, and includes new Print and Page Setup dialog boxes which work better with desktop printers. The installation also includes the latest version (2.0) of the Desktop Printing software. NOTE: the "Finder Help" extension is required for LaserWriter 8.4 to install properly. If you are missing this file, it can be found on Disk 2 of the LaserWriter 8.4 installation. Drag it to the Extensions Folder and then install again. NOTE #2: If you are using Open Transport, in order to print to a LaserWriter you need the Shared Library Manager, Shared Library Manager PPC (if you are on a PowerMac), and the appropriate Open Transport and Open Transport AppleTalk files for your machine (see "Shared Libraries" and "Documents" above). Note: the 8.4.x package installs a number of shared library files in your Extensions folder, one of which is the CFM-68K Runtime Enabler. Be sure to read the description of this file in the "Extensions" chapter.

- LaserWriter GX: QuickDraw GX chooser extension for use with all printers supported by the LaserWriter driver.
- LW Select 310: chooser extension for the LaserWriter Select 310. This is one of the few non-AppleTalk LaserWriters.
- HP Accupage (1.08): a chooser extension used by the Hewlett-Packard ScanJet 4C.
- HP LaserJet (8.2.1): a chooser extension used with HP laser printers.
- MacX25 2-1.3: allows you to connect to a MacX25 server.
- PaperPort Writer: allows you to "print" documents as PaperPort Viewer files, which can then be viewed by anyone with the PaperPort Viewer application.
- PDD Maker GX: a GX extensions which allows you to create a PDD file when printing from applications.
- PDF Writer: a chooser extension which you can select to "print" (save) documents in the Adobe ".pdf" format (Portable Document Format) using the print dialog. The file can then be sent/copied etc. in a form readable by the Acrobat Reader (freeware) on anyone's machine, no matter what application created it. (Holding down the control key when selecting "Print..." from the file menu is the usual temporary shortcut, instead of using the Chooser). This is installed by PageMaker, Acrobat, and other Adobe products, and requires Adobe Type Manager.
- PSPrinter (8.2.1): a chooser extension, originally developed by Adobe, used by some third-party postscript laser printers, such as the Texas Instruments line of printers. Also supports Apple-branded printers. In addition to the standard laser printer features, it also provides "virtual printer" support, allowing you to print to a PS file without having a printer connected.

MODEM FILES:

These are documents installed by various telecom applications/devices which are used to allow connections over various modems.

- Modem LinkTool Personal documents: these files are used to connect over ARA using various modems. They do not show up in any startup manager utilities. However, they are stored in your "Extensions" folder and have the following icon:

If you "Get Info" on one of these files, the "Kind" will be listed as "Modem LinkTool Personal document." When you use the "Remote Access Setup" control panel, the pull-down "Modem" menu will list these files and allow you to choose the modem you are using. For the most part, you can remove any of these that do not correspond to a modem you are using (or might use!).