- What files do you have & what does it mean to "manage" them?
- Why should you care which files load at startup?
- Conflict testing
- Making it easier: startup file management utilities
- Utility summaries

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If you've read the "Introduction" chapter, you know all about control panels and extensions. Now that you know what they are, and how they work, how can you manage them better? This chapter gives a brief introduction to startup file management, and presents some information on startup file management utilities.

WHAT FILES DO YOU HAVE & WHAT DOES IT MEAN TO "MANAGE" THEM?

The first step to managing startup files is knowing which ones you actually have. Control panels and extensions are located in special folders within the System Folder. Strangely enough, these folders are called "Control Panels" and "Extensions," respectively. Any INITs that are located inside these two folders will be used by the system (loaded) at startup. There are also two other folders which you probably have, called "Control Panels (Disabled)" and "Extensions (Disabled)." These folders are used by startup file management utilities, such as Apple's Extensions Manager, to "disable" startup files (see below). Any control panel which is moved to the "Control Panels (Disabled)" folder will still be on your computer, but will not load at startup -- it will just sit there. Likewise with extensions, any extension file which is moved to the "Extensions (Disabled) folder will not load at startup. So if you are having trouble with a particular startup file or if you find out that you don't really need it, moving it to the corresponding "Disabled" folder will "turn it off," so to speak. Conversely, moving a file from the Disabled folder to the "normal" folder will "turn it on" by causing it to load the next time you startup your computer.

Any changes made by "enabling" and "disabling" extensions and control panels will not be implemented until you restart your computer. This makes sense if you think about it -- since an active

extension was loaded at startup, if you disable it you have to startup the computer again so that it doesn't load. On the other hand, if a file is not loaded at startup, if you enable it you'll have to restart so that it does load.

This is what is meant by the term "startup file management." It is managing which extensions, control panels, etc. you want to load at startup.

NOTE: Keep in mind that the ability to enable and disable startup files with such ease is a powerful ability. Make sure that you are comfortable with the process. If you accidentally disable a driver or extension which is needed for your computer to operate, you could have major headaches (for example, if your have an add-on video card which requires special extensions, and you turn these extensions off, your monitor may no longer work until those extensions are turned back on).

WHY SHOULD YOU CARE WHICH FILES LOAD AT STARTUP?

Some INITs don't get along very well, and should not be loaded at the same time. For example, there are several different startup files which give you a "hierarchical" Apple menu, including one provided by Apple with your System software ("Apple Menu Options"). If you later install a third-party file, such as Now Menus, MenuChoice or BeHierarchic, which provides this same functionality, it will "compete" with Apple's file and could cause problems. In this scenario, you would want to disable one or the other to avoid conflicts.

Some startup files actually slow your computer down when loaded. For example, utilities which "watch" your actions, such as an interactive spell-checker which automatically notifies you when you misspell a word, actually slow down your computer by using up processor cycles which could otherwise be used by other applications or the System itself.

Other startup files take up a lot of memory at startup, leaving you with less to use for applications, so you may only want to load them when they are absolutely necessary.

For a comprehensive example, if you are running a PowerBook off of a battery, you probably don't want files loaded which slow your computer down, since the PowerBook already automatically slows itself down to conserve battery power when not plugged in. In addition, you may prefer to have more RAM available to use for a RAM disk when traveling. You could thus speed up your machine, and reduce the amount of RAM used by System files, by disabling all but the essential startup files when running off the battery. When you return to your home or office, where you have an AC outlet, you could then restart with the full complement of files active. Along those same lines, many people choose to turn "off" spurious extensions and control panels when they are using their computers for games, video capture, or other uses which demand the full speed of the processor or lots of free RAM.

You can see from these examples that there are several good reasons why knowing what's in your System Folder and how to deal with these items are important. However, for many people, the most important reason is knowing what to do when problems arise. Which leads me to...

CONFLICT TESTING

As I mentioned above, one reason to be moving startup files around is to solve what are commonly called "extension conflicts." These occur when two or more startup files (not necessarily extensions, despite the vernacular), for reasons which are too complex to get into here, don't work properly when they are loaded together. This can result in problems as minor as cosmetic blemishes (a menu which doesn't appear in the right place or a window which does not redraw itself on the screen properly) or as major as a "system crash" or "freeze," necessitating a restart.

The Number 1 rule in Mac troubleshooting: if you are having a problem with your Mac, restart and hold the "shift" key down until you see the message "Extensions Disabled." This will startup your computer with no extensions, control panels, startup items, etc., including Apple files. If the problem still exists, you've got other problems :-). But if the problem is gone, a conflict between startup files is the most likely culprit for the cause of your problems.

When an extension conflict occurs, the only solution is to find out what combinations of files are causing the problem, and prevent them from loading together. There are two main approaches you can take to this problem:

• Test newer files: if the problems you are experiencing have started recently, the chances are good that a recently-installed file is causing the problem. You should disable files that you recently installed and see if the problem goes away. If it does, you can add the newer items one at a time until you find out which one (or more) caused the problem.

Often figuring out which files have been installed recently is difficult, because many software installers will install startup files without informing you, or you may forget about that shareware control panel you installed last week. One suggestion is to put the "Labels" menu to use. While few people seem to use this feature of the Mac OS, it can be very useful in keeping track of files. Using the "Labels" control panel, you can set up a label name for each color. Before you have problems, you could name one of the colors "no problems," and label all of your control panels and extensions with this color (open the "Control Panels" folder, press command-a to select all of the files, then select your label color from the "Labels" menu. Then do the same with the "Extensions" folder). If you add new files, and after a few weeks everything is still working fine, label the new files "no problems" as well. This way, if you ever do have problems, you can view your Extensions and Control Panels folders "by Label" and see which files have been added recently, and which files haven't earned your "seal of approval" yet!

Along those same lines, MacUser online offers a neat utility, "MacUser's Install Tracker," which tracks installations and keeps a record of when and where every file gets installed. You can get it from:
    <http://www5.zdnet.com/mac/download.html>

nother possibly useful utility is "SysCompare," which helps you keep track of what is installed in the System Folder. You run this utility before an installation, peform the installation, and then run the utility again, and SysCompare lists what file were installed.

Yet another utility which could be useful, at least if you are trying to get rid of an application and its files, is "Yank" v2.0, which can supposedly uninstall any application and associated files created by that application by moving them to the trash. However, be careful with this utility, because it can be dangerous if not used properly.

You can get SysCompare and Yank from any Info-Mac software archive, such as:
    <http://hyperarchive.lcs.mit.edu/HyperArchive.html>

• Test combinations of files: if the problems you are having cannot be explained by or tracked to newer files, or if you just don't know when and which files have been added, you can methodically test all files yourself. This approach can take a while, but if done properly can usually isolate a problem file. The process involves testing different "sets" of files until you have isolated the file or files which are responsible. The best way to do this is to start out by loading half of your startup files. If the problem is gone, these files are not causing the problem and can be eliminated from the testing process. If the problem exists, the half that were not loaded can be eliminated. You should then split the "problem" group of files in half, and then test both sub-groups for problems. You should continue this process, eliminating half of the files at every restart, until you have narrowed the conflict down to one or two files. In the past, before the advent of startup file management utilities, this process involved manually moving groups of files between folders, a process which was both tedious and frustrating. However, these utilities have made life easier for many a Mac user, as is discussed in the next section.

It should be noted here that there are times when two or more startup files cause a problem which only shows up when all of them are loaded. In this scenario, it is difficult to manually find the offending files using the above method. This is one area where the commercial utility Conflict Catcher (discussed below) excels.

MAKING IT EASIER: STARTUP FILE MANAGEMENT UTILITIES

If every time you wanted to move System files around, you had to manually open folders and drag files back and forth, and then hope to keep track of it all, no one would blame you for throwing your arms up in frustration and deciding to go back to your Brother word processor. Fortunately, there are quite a few utilities designed to make this process easier. These utilities, which I call "startup file management utilities," allow you to enable and disable various System files from within the utilities themselves. The utilities will then do all the tedious moving for you. They also allow you to set up different "sets" of INITs which you can load in different circumstances.

There are several different startup file management utilities out there, each with different features, each with a different cost, and each designed for different types of file management. The most basic ones merely move files around, and only support the management of control panels and extensions. The more advanced ones provide information on files, allow you to manage things such as application plug-ins, and even automatically test for conflicts. Somewhere in the middle is one that is free and, conveniently enough, already on your Mac: Apple's Extensions Manager.

UTILITY SUMMARIES

Below I have included a brief summary of each of the major startup file management utilities, including a list of features, price, whether the product is commercial, shareware or freeware, and web site information if available. Take these summaries as advice, rather than gospel: I have gathered this information from each utility's own documentation and "P.R." If you want further information you should contact the author/developer directly. If you were to ask me to endorse a particular product, I personally would recommend Conflict Catcher. Its conflict-solving abilities are unmatched and truly set it apart from the others (I don't work for them, but have been a satisfied user for years).

NOTE: I've also seen a few other startup file management utilities; however, most of them are so old (for example: INITPicker, from 1992) that I have declined to even list them for fear of incompatibilities.

Conflict Catcher (v4.1.1)
Casady & Greene
    <http://www.casadyg.com/>

ommercial product -- approximately $60-$80

• Mac OS 8.1 compatible
• Allows you to enable/disable startup items.
• Allows you to create "sets" of startup items to load in different circumstances.
• Can be opened at startup to modify the startup process.
• Pre-configured "Apple-Only" sets.
• Allows you to compare two "sets" of startup files side-by-side.
• Controls: extensions, control panels, apple menu items, control strip modules, fonts, files loose in the System Folder, Startup Items, Shutdown Items, web browser plug-ins, Photoshop plug-ins, Contextual Menu Items, Location Modules, AppleTalk extensions, and any other folder of items you choose.

• Automatically tests for startup crashes (i.e. rather than System problems that occur after startup)
• Can save and restore conflict tests.
• Tests are not limited by the number of conflicting files.
• Tests recently installed items first to find out if a new problem is caused by them.
• Easy step-by-step conflict testing process.
• Allows you to delete files directly from within the utility.
• Allows you to open files directly from within the utility.
• Allows you to use the "Get Info" command directly from within the utility.
• Provides the ability to "Find" items in the window by typing in the item's name.
• Allows you to change the load order of files.
• Contains pre-set file "links" (files which are incompatible, or should be loaded together, or which should load in a certain order) and allows you to create your own.
• Supports single-item group links and allows completely overlapping group links.
• Provides information on startup files via a "reference library." Many file information entries include live internet links to web pages, email addresses, software update addresses, vendor addresses and vendor phone numbers.
• Reference library is updated by downloading new library files.
• Supports Internet Config
• Displays the names of startup files at startup.
• Displays files at startup which are usually invisible.
• Allows the following views of file information: name, date installed, date modified, RAM usage, file type, enabled/disabled, folder in which file resides, load order, load time, package (what software package it belongs to).
• Allows you to view two of the above attributes at once via two columns (so you can view files by name, and select any of the above categories for the second column of information)
• Allows you to scan startup files for damaged resources.
• Allows you to protect preferences with a password dialog
• Can test whether or not it is causing any problems
• Provides the ability to restart, shutdown, pause, or bypass all startup files during the startup process via key combinations.
• Provides a detailed System report upon request.
• Supports AppleScript.
• PowerPC native.
• Repairs damaged files installed by the OS 8.1 updater.
• Under OS 8 and 8.1, knows not to disable the Appearance extension and Text Encoding Converter, which are required for operation.

Now Startup Manager
Now Software/Qualcomm
    <http://now.qualcomm.com/>

ommercial product -- approximately $50-$60

• Allows you to enable/disable startup items.
• Allows you to create "sets" of startup items to load in different circumstances.
• Can be opened at startup to modify the startup process.
• Pre-configured "Apple-Only" sets.
• Controls: extensions, control panels, apple menu items, control strip modules, fonts, files loose in the System Folder, Startup Items, Shutdown Items, web browser plug-ins and Photoshop plug-ins.
• Tests are limited to three conflicting files.
• Allows you to delete files directly from within the utility.
• Allows you to open files directly from within the utility.
• Allows you to change the load order of files.
• Contains pre-set file "links" (files which are incompatible, or should be loaded together, or which should load in a certain order) and allows you to create your own.
• Provides information on startup files via a "reference library." Many file information entries include live internet links to vendor web pages.
• Reference library is updated by downloading new library files.

• Displays the names of startup files at startup.
• Displays files at startup which are usually invisible.
• Allows you to compare two "sets" of startup files side-by-side.
• Supports Apple Guide.
• 24-hour "automated" help desk.

Apple Extensions Manager
Apple Computer, Inc.
Part of the standard System software installation -- FREE

• Mac OS 8.1 compatible
• Allows you to enable/disable startup items.
• Allows you to create "sets" of startup items to load in different circumstances.
• Can be opened at startup to modify the startup process.
• Pre-configured "Apple-Only" sets.
• Controls: extensions, control panels, files loose in the System Folder, Startup Items, Shutdown Items.
• Allows you to use the "Get Info" command directly from within the utility.
• Provides the ability to "Find" items in the Extensions Manager window.
• Provides information on startup files via information which is part of the file itself. If a startup file does not provide this info, Extensions Manager will not show any info.
• Allows the following views of file information: name, enabled/disabled, package (what software package it belongs to), file type, file creator.
• Provides the ability to restart during the startup process.
• Supports AppleScript.

ExAminer
Mike Weasner
     <http://members.aol.com/mweasner/examiner.html>

hareware -- $10

ExAminer is an application, rather than a control panel or control panel/extension combination. This has two major consequences, one good, one bad. The good is that since it does not interfere with the System at startup by interrupting the startup process or loading its own code, it cannot cause conflicts itself, nor conflict with other startup files. The bad is that this means it is not available at startup to modify the startup process.

• Allows you to enable/disable startup items.
• Allows you to create "sets" of startup items to load in different circumstances.
• Controls: extensions, control panels, apple menu items.
• Displays different folders of files (control panels, extensions, etc.) separately.
• Supports Apple Guide.
• PowerPC native.

Symbionts (v2.8.2)
B. Kevin Hartman, Nivek Research
     <http://www.kagi.com/authors/nivek/>

hareware -- $20

• Mac OS 8.1 compatible

• Allows you to enable/disable startup items.
• Allows you to create "sets" of startup items to load in different circumstances.
• Can be opened at startup to modify the startup process.
• Controls: extensions, control panels, apple menu items, control strip modules, fonts, Startup Items, Shutdown Items.
• Allows you to delete files directly from within the utility.
• Allows you to open files directly from within the utility.
• Allows you to use the "Get Info" command directly from within the utility.
• Displays the names and memory usage of startup files at startup.
• Displays files at startup which are usually invisible.
• Provides information on startup files: name, RAM usage, file type, file size, file version, enabled/disabled.
• Provides the ability to restart during the startup process.
• Supports Balloon Help.
• Patches no traps, so cannot conflict with other startup files.

System Sculptor
Commercial Product -- $29.95
        <http://users.aol.com/ccsoftware>

ystem Sculptor is an application, rather than a control panel or control panel/extension combination. This has two major consequences, one good, one bad. The good is that since it does not interfere with the System at startup by interrupting the startup process or loading its own code, it cannot cause conflicts itself, nor conflict with other startup files. The bad is that this means it is not available at startup to modify the startup process.

• Controls: extensions, control panels, apple menu items, fonts, files loose in the System Folder.
• Allows you to save "sets" only for each type of file: one set for control panels, another for extensions, etc. Some people find this convenient, others find it very inconvenient.
• Allows you to delete files directly from within the utility.
• WARNING: allows you to manage all files in the System Folder, including the System file itself, the Finder, the Clipboard, etc., so you could accidentally "disable" the System file!
• NOTE: For every System Sculptor purchased, the authors donate $1.00 to the American Humane Society.