

WHAT DISK UTILITY SHOULD I GET FOR OS X?

This was written during mid-August 2003, updated mid-February, late April-mid May 2004, June and August 2004, and mid-February 2005. It is as current as it can be made on that date. Panther related updates/upgrades are now included. So as not to indicate favoritism, each product is listed alphabetically (yes, forum members definitely have their favorites, many of which are pointed out in the "Comment" for each product. These comments are my own). All of the products are OS X native, or soon will be. Not all are "repair" utilities, and some are even free. Descriptions that are posted in italics below were taken from the web, either from the manufacturers' sites, or from another source such as VersionTracker or MacUpdate.

"Switcher's" note concerning defragmentation and OS X: [Added 5/18/04] In as few words as possible, don't worry about it. It is the general consensus in the forums that it isn't usually necessary. In spite of that, OS X 10.3 (Panther) has a new built-in defragmentation utility that works in the background to defragment files that are 20 MB in size or smaller, and does it "on-the-fly." The sole exception is for power users who work heavily in audio and/or video applications. Doing so on the same drive that the System is located on will probably cause slowdowns that require defragging. Most therefore use separate partitions or drives that can be wiped clean when a project is finished.

BatChmod v. 1.32: (freeware) <http://www.versiontracker.com/dyn/moreinfo/macosx/12057>
Overall Version Tracker rating: 4.7 Stars (of 5)

BatChmod is a Cocoa utility for manipulating file and folder privileges in Mac OS X (10.1 or later recommended). It allows the manipulation of ownership as well as the privileges associated to the Owner, Group or others. Here are some of the characteristics of BatChmod: It's simple and elegant. It allows one to change any specific privilege or ownership without affecting the others (i.e., changing the group without affecting the owner, or adding or removing a specific privilege without affecting all the others). It can recursively affect enclosed folders. It's basically a mix of the UNIX commands chown, chgrp and chmod ... it can Force Empty the Trash.

[Comment] The Force Empty Trash command is useful as is its ability to change permissions in one go. Unlike Apple's Apply to Enclosed Items in Get Info, BatChmod will change permissions of files in a folder to match those of the enclosing folder. My personal thought (not having downloaded and used this utility) is that the permissions feature is the more useful. At least one other of the apps listed herein will force empty the trash and I will post a method, courtesy of Chris Breen, for deleting files you cannot even put into the Trash using the Terminal later in this section of FAQ. A separate FAQ item tells how to use Terminal to Force Empty the Trash.

Carbon Copy Cloner v. 2.3: (\$5 donationware) <http://www.bombich.com/software/cccl.html>
Overall Version Tracker rating: 4.9 Stars for version 2.2

Have you ever wanted a simple, complete, bootable backup of your hard drive? Have you ever wanted to upgrade to a larger hard drive with minimal hassle and without reinstalling your OS and all of your applications? Have you ever wanted to move your entire Mac OS X installation to a new computer? Then CCC is the tool for you! CCC makes these tasks simple by harnessing the Unix power built into Mac OS X. In addition to the features that CCC has provided in the past, version 2 offers synchronization of the source and target as well as scheduled backup tasks. Now you can setup a regular backup regimen that occurs in the background, even if you are not logged in! Version 2 also offers enhancements for lab administrators, including the option to run pre and post-flight shell scripts, the ability to modify the list of items to be removed at the end of a clone, and the ability to create a disk image on the fly. One of CCC 2's most exciting features is the ability to create a NetBoot image from a fully customized Mac OS X installation. Version 2.1.1 offers the ability to create ASR-ready disk images and includes some minor bug fixes and improvements to the documentation.

[Comment] The above just about covers it. CCC is simply outstanding at what it does -- two forum readers, myself included, have reported using CCC to reverse clone onto reformatted drives with no degradation of the files and with a fully bootable OS X. CCC is also the only way to install a bootable Mac OS X 10.x system on an iPod. Although the initial cloning cycle can be quite lengthy for large/full drives, the synchronizing feature shortens the cloning time a great deal for future backups; a good time-saver. CCC can be set to repair permissions prior to cloning. If you leave your Mac running and prefer to do backups at night, CCC can be scheduled to do it for you. You don't have to be there! There have been NO negative comments in the forums.

Cocktail v. 3.4.9 (Jaguar) or v.3.5.2 (Panther): (\$15 shareware) <http://www.macosxcocktail.com/index.html>
Overall Version Tracker rating: 5.0 Stars for version 2

Cocktail is a general purpose utility for Mac OS X 10.2 or later. The application serves up a scrumptious mix of maintenance tools and interface tweaks, all accessible via a comprehensive graphical interface and toolset. It is a smooth and powerful utility that simplifies the use of advanced UNIX functions. All of Cocktail's major features are arranged in five basic

categories. In addition, a "Pilot" lets you optimize your system with one click of the button and schedule miscellaneous maintenance tasks.

[Comment] If you shut your computer off at night (or put it to sleep), you need this utility! [Note added 8/13/04: Another price hike from \$12 to \$15, and the availability of OnyX for free, makes me rescind that statement. Both do the same things and, although Cocktail has a simpler, somewhat more "elegant" interface, my recommendation now would be to go for OnyX instead]. [Additional note added 2/17/05: Due to changes in OnyX that most users probably shouldn't use, I once again recommend Cocktail as this type of utility "of choice." I regret that the price hasn't changed]. Apple has pre-programmed OS X to run several maintenance procedures "during the wee hours." Called cron scripts, if your Mac is not on or is asleep, they won't be run. Cocktail takes care of that by allowing you to run any or all of them at any time. But perhaps its best feature is Auto Pilot (now called simply "Pilot.") It combines permissions repair, cache deletion, cron script runs, and deleting archived log files into one utility with options to stop on errors (tell you what it's doing), and shut down or restart automatically when done. This most recent version also allows these tasks to be scheduled to suit your own needs. Cocktail is one of the apps here that will force empty the trash although the feature is somewhat hidden. Other utilities exist that do things similar to what Cocktail does, but there have been NO negative comments in the forums about this utility.

Disk Utility (included with OS X in the Applications/Utility folder)

[Comment] A tidy little application for tending to (mostly) minor problems, but with stronger things included. You can get basic Information about specific drives or partitions; First Aid allows you to Verify or Repair Permissions (and if you're using it from your OS X installer CD, to Verify or Repair the volume or partition); you can Erase (reformat only) a volume or an individual partition; you can create Partitions (which requires that the entire drive be reformatted). The main rap on this product is its lack of robustness in First Aid mode. Offsetting that, though, is the fact it will straightforwardly tell you when it cannot repair a problem it detected, and suggest you use a stronger (third party) utility.

DiskWarrior v. 3.0.2: (\$80 commercial software, available with slight discounts if you shop around, upgrade from v.2.x \$40; Panther CD about \$20 including S&H for v.3.0 owners) (NOTE: G5 owners and owners of Macs that were built after Jul 03 that will only boot into a late version of Jaguar, or Panther, *must* use either v.3.0.1 or 3.0.2. DW v.3.0 boots into an early version of Jaguar and is not suitable for these Macs. If your Mac is older than this, you can safely use v.3.0 -- even if you've upgraded Jaguar all the way, or gone on to Panther. Only booting is an issue, not the work it does).

<http://www.alsoft.com/DiskWarrior/index.html>

Macworld rating 4.5 Mice out of 5 (v.3.0). Their comment: *"Even a modern, memory-protected, and preemptively multitasking operating system such as Mac OS X can't prevent bad things from happening to the data on your hard drive. And when an unfortunate event occurs -- such as a kernel panic that forces you to reboot your machine without shutting down properly -- you want a tool that can downgrade a major disaster to a mere inconvenience. DiskWarrior 3.0, the long-awaited OS X-native version of Alsoft's disk utility, offers Jaguar users repair capabilities and maintenance features that will significantly reduce the likelihood and severity of many drive-related mishaps. DiskWarrior never harmed any of the volumes it worked on during our testing. This clearly Hippocratic utility does only good for your hard drive's health. DiskWarrior users pondering an upgrade to 3.0 should delay no further."*

Conquer Disk Damage!

DiskWarrior is the safest, the most technologically advanced, and the most powerful utility to eliminate directory damage available for any computer. DiskWarrior uses a different approach to disk directory repair than other programs.

DiskWarrior is not a disk repair program in the conventional sense. Instead of patching the original directory, it uses a patent-pending technology to quickly build a new replacement directory using data recovered from the original directory, thereby recovering files and folders that you thought were lost and that no other program could recover.

[Comment] THE essential utility for the Macintosh. This is the utility that, when a person new to our forums arrives with a problem, is always suggested first. DiskWarrior is limited in scope, a classic example of a "one trick pony," but directory maintenance is so critical that it is simply a "must have" application. DW also has the ability to activate internal diagnostics that are built into disk devices to help determine if a drive is in danger of physical malfunction (the feature must be installed onto your hard drive). If so, DW will notify you, giving you a chance to back up your data before the drive fails. These tests can either be run manually, or on a schedule. Most forum members who have tried v. 3.0 not only universally like it, but almost all have reported that it is much faster than v. 2.x was (and I find the Panther version to be much quicker yet). DW 3.0, though OS X native (v.3.0.1 is now Panther native as well), has lost none of its ability to resurrect OS 9 and earlier volumes. Indeed, the CD contains an installer for OS 9 users (not tested). In the olden days of OS 9 and earlier, many people used DW on a regular basis, i.e., monthly (or even weekly in some cases). In OS X however, it is recommended that DW only be used when it becomes apparent the System isn't functioning perfectly, such as slowing to a crawl, or too many "the application so-and-so has unexpectedly quit" 's happening. If DW is the only gun in the armory, you've made a great choice; if you also have Norton Disk Doctor or TechTool Pro (see below), it should also be run *following* DW.

Macaroni v. 2.0.3: (\$9 shareware)

<http://www.versiontracker.com/dyn/moreinfo/macosx/16593>

MacUpdate's overall rating 5 out of 5 stars.

Macaroni is a tool which handles regular maintenance for Mac OS X's UNIX core. Normally these tasks run on a regular schedule, in the middle of the night. However if you don't leave your Mac on all night, they never run. Your Mac won't wake from sleep to handle this. Macaroni solves this problem. If a scheduled maintenance task is not run when it's normally scheduled, Macaroni automatically ensures that it's run at the next opportunity, whenever the Mac is on.

[Comment] I have not personally used this program, but if it does what it says it's worth the shareware fee. Cocktail does more (a *lot* more for a little more money), so is my personal choice. For those of you not yet into Panther (or Jaguar), Macaroni works in 10.1.2 or higher. I am informed by reader **berg** that also does a couple of things not documented in the developer's blurb above: it repairs permissions on a weekly basis, and gets rid of localized files monthly.

Norton Utilities v. 8.0: (\$100 commercial software, discounts probably available, upgrade rebate \$50)

<http://www.symantec.com/>

Macworld rating 3.5 Mice (v. 7.0.1, current version not yet reviewed). Their comment: "Data loss is not something that happens only to other people. Misadventure will cause you, too, to lose files, folders, or even entire disks -- if it hasn't already. A package such as Norton Utilities 7.0.1 for Macintosh -- Symantec's OS X-only update to its well-known set of tools for file and disk recovery and maintenance -- can save your day."

Also available as part of Norton SystemWorks, a "4-pack" that includes Norton AntiVirus™ 9.0, Dantz Retrospect Express Backup, and Aladdin Spring Cleaning for \$130.

[Note added 4/18/04: Symantec announced last week that it is discontinuing development of Norton Utilities for the Mac. They will continue to develop Norton AntiVirus, however].

Symantec's Norton Utilities™ 8.0 for Macintosh® maximizes your computer's performance. It finds and repairs disk problems at the click of a button, and can alert you to potential problems before they cause trouble. Lost a file through a disk problem or accidental deletion? Norton Utilities can rebuild damaged disks, then help you identify and recover vital files. It also improves hard drive performance by defragmenting and organizing files more efficiently. Now all components run natively on Mac® OS X, and you can boot the Norton Utilities CD into either Mac OS X or Mac OS 9 during disk emergencies.

[Comment] No program in the Forums causes more discussion, pro and con, than does Norton Utilities, a mix of several disk and file utilities. As an old saying goes, "Some swear by it, others swear at it." It is not totally OS X native, and the CD can be booted in either OS 9 or OS X. Speed Disk, its defragmentation software, gets very high marks, even from detractors of the rest of the program. A year or so ago, Chris Breen did an impromptu test of a badly damaged drive -- lost files, wouldn't boot, the whole works -- and Norton's Volume Recover software was in that instance clearly superior to TechTool Pro 3.0.9, per Chris. Norton recovered most of the lost files, while TTP could not even find most of them. The mainstay of the suite, Norton Disk Doctor, is the utility that draws the heat from some. In my own experience (going back to v. 3.5 and prior), I found it worked well on *current operating systems*. Problems arose when I tried to use it after Apple upgraded the OS; Symantec was usually quite slow keeping up. It (Disk Doctor) became buggy and actually caused problems rather than fixing them. If Speed Disk and Volume Recover were available separately, I would have them in my arsenal. As an overall utility, however, my *personal* preference is TechTool Pro. As with DiskWarrior and TechTool Pro, Norton Utilities should be used only when a problem is suspected in OS X. [Late note: v.8 was released prior to Panther's release. Symantec claims full compatibility with Panther through use of its LiveUpdate. They do not state if it will boot into Panther, however].

OnyX v.1.4.9: (Freeware)

<http://www.titanium.free.fr/us/onyx/>

4.5 Star Version Tracker all-time rating.

OnyX is a utility of maintenance, of optimization and personalization for Mac OS X. It also makes it possible to configure certain hidden parameters of Finder, Dock, Safari, to remove a certain number of files and folders that become cumbersome, preview the different logs and CrashReporter, and more...

[Comment] Similar in what it can do to Cocktail (above), except this one is free. Other than the \$15 cost of Cocktail, there is no compelling reason to pick one over the other, although personally I find Cocktail's interface easier to use, if just slightly. This has all the individual tests and scripts that the other does, as well as an "Automate" feature that works like Cocktail's "Pilot." It not only has a Force Empty Trash function, it will do so "with destruction." Presumably that is identical to OS X's Secure Empty Trash, which not only deletes the file's directory, but overwrites the file itself with zeroes. Both a Jaguar and a

Panther version of OnyX are available at the download site. [Note added 2/17/05: OnyX has added several features since I last looked into it. They're not all good, and are turned OFF by default. However, because of the potential harm they can do if you're not a power user and are unsure of them, I am changing my position re: OnyX vs. Cocktail and am once again recommending the \$15 Cocktail even though OnyX is free. Some of the things it now is programmed to do if you check the appropriate box: Delete links between documents and applications (why would *anyone* want to do this systemwide?); Delete Virtual Memory files (what if you haven't saved everything?); delete System CrashReporter Logs (what if you crash again, and you need to find out if there's a pattern?) My objection is that since these options are there, some people will think "well, it must be a good thing." Sometimes it isn't].

Preferential Treatment v.1.1.1: (Freeware — donations welcomed)

<http://macupdate.com/info.php/id/14450>

4 Star MacUpdate rating

This application will check your preference files (both in your user's preference folder and the system's preference folder) for corruption by using the "plutil" command line tool. If it finds suspect files, it will list the files and allow you to reveal them in the Finder or move them to the trash. You may also double-click on a file in the found files table to open it in the application of your choice (you can designate the default application from the preferences). There is also an option to save the results of a scan to a text file.

[**Comment**] Recommended by moderator and contributing Macworld Editor **Rob Griffiths** in the January '05 edition, I immediately tried it and love it. A corrupted preference file is one of the most frequent causes of downtime on a Mac, especially when an application "unexpectedly quits" frequently. They can also make the entire System misbehave. This little jewel looks for and identifies preference files that are no longer in the correct format, and makes it easy to trash them (the System will create a new one the very next time you open the application). Power users can also have the file opened in a text editor for correction, so that settings in the faulty application aren't lost.

TechTool Pro v. 4.0.3: (\$98. Upgrade pricing from versions 2.x or 3.x of TTP, Drive 10, or TechTool Deluxe, included with Apple Care, is \$50)(OS 9 native v.3.09 is still available at the same price of \$98; it has not been updated for more than a year). (**Added 4/26/04:** Norton SystemWorks and Norton Utilities owners now get \$40 off when moving on to TTP 4).

http://www.micromat.com/tt_pro_4/tt_pro_4.html

Macworld rating 3.5 Mice out of 5.

Introducing TechTool Pro 4, the next generation of the best-selling problem-solving utility for Macintosh. The best utility for Macintosh just became better. TechTool Pro 4 is a completely new program, built from the ground up for Mac OS X. The program was completely created in Cocoa, ensuring maximum performance and stability in Mac OS X. The program also features a new, easy-to-use aqua interface and streamlined window for easy navigation. TechTool Pro 4 now features a suite of S.M.A.R.T tests (Self Monitoring Analysis And Reporting Technology). Most modern hard drives now support this industry standard that employs predictive diagnostics and analysis to help foresee a drive failure BEFORE it happens. TechTool Pro 4's SmarTest allows you to automatically monitor this vital data and be forewarned of impending danger to your data, allowing you to back up critical information before disaster strikes.

[**Comment**] Panther native. Prior to further comment, be forewarned: TTP 4 is *extremely slow* starting up from the CD — be very patient, as it can take five minutes or longer. My advice: Install TTP 4 on a bootable external hard drive. or if you don't own an external Firewire drive, use TTP to create an internal *eDrive*. This is a 4 GB "virtual partition" on your regular drive, that will run at whatever is the speed of your Mac. Once the CD is started up, however, it performs as advertised, although the interface is confusing at first. People used to running v.3.x's suite of tests will find it cumbersome to do so in v.4. One would hope this will be ironed out in future updates. I found that running the individual tests instead gave me much greater flexibility and control. Reporting has been improved in the latest update. However, instead of the familiar separate report form of v.3, v.4 uses Panther's divided Finder style window format. You must click on an item in the left pane to see if any repairs were done ... they appear in the right pane below a detailed description of the test itself. As with DiskWarrior and Norton Utilities, TechTool Pro 4 should be used only when a problem is suspected in OS X.

MISCELLANEOUS BUT USEFUL INFO

Zapping PRAM and NVRAM

Something to try when your Mac acts up all at once, such as apps that won't stay open. It's a simple yet awkward keyboard function. Locate the Command (Apple), Option (Alt), P and R keys and figure out the most comfortable way to hold all of them down at once. Restart your Mac. As soon as the screen goes dark, hold those four keys down and continue to hold them. The computer will seem to begin to restart and you'll hear the chime (if you have a separate speaker system, make sure it is active).

Continue holding the keys until you hear another chime (PRAM) and then a third one (NVRAM). Release the keys and your restart will resume. Very likely you will have to reset the date and time and perhaps some other systemwide items, as they will have reverted to system defaults (Cupertino remember). You may even find that you have rebooted into OS 9, if yours is an OS 9 native Macintosh. Not a cure-all, but often helpful when you can't think of what to do, and FSCK (below) reports no problem found.

Single User Mode and fsck -y (upon boot or reboot. This method can be used instead of restarting onto your OS X Installer CD or DVD and running Disk Utility. This is faster, and they both do exactly the same thing using a different interface).

When your Mac is acting a bit goofy, but you're not ready to pull out the heavy artillery yet, start up or restart the computer. As soon as you hear the chime, hold down the Command and 's' keys -- hold them until you see code beginning to appear on your screen. There will be about a half page of it. When it stops with the cursor at the # prompt, type

```
fsck -y (Jaguar)
fsck -y -f (Panther) [do NOT type the names, just the codes]
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Yes, there are spaces in there. Hit the enter or return key. It will instantly spit out a few more lines of code then start searching for problems. One of three things will happen. In worst-things-first order, here they are:

1) It will search (and search) endlessly, forcing you to use your hard restart or shutdown button. If it does that, then definitely the heavy artillery is in order (see DiskWarrior, Norton Utilities, and TechTool Pro above. Apple's Disk Utility application cannot help in this circumstance). [8/13/04 addition: a variation of this is when it will search, then report that the drive has problems that Disk Utility cannot repair. Once again, see DW, NU, and TTP].

2) It will search and report problems, eventually telling your that "the hard drive so-and-so has been modified." If it does this run it again (and again) until finally ...

3) It will search and report that "the hard drive so-and-so appears to be okay." When you get this, type reboot or exit, and hit the enter or return key. A normal restart will occur, back into OS X so you can see if this worked.

Repairing Permissions

For when the computer or an application won't respond the way it should, or an app won't start, saying "you do not have sufficient privileges." Especially valuable following installations of software, or updating/upgrading it. Many forum members believe this should also be done on a regular basis, such as weekly or monthly. Apple is silent on that issue, but does recommend it after software installs. You can run this without having to restart from your OS X CD. It can only be run on a volume that contains a bootable OS X system.

In your Applications folder, find the folder Utilities. Inside that locate Disk Utility and double click to open it. There will be a list of all your available drives in the left panel. Select the one with OS X (if you pick an incorrect one, permissions repair will be grayed out). First Aid (formerly Disk First Aid under OS 9) will appear in the right panel, and two buttons called "Verify Permissions" and "Repair Permissions" will be active. You may safely disregard Verify. Click on the Repair button. It will take several minutes and will report any repairs it makes. Don't be alarmed if it tells you "We are using special permissions 33261" or something like that. [2/17/05: Added now is "UID 1" which also shows up every time]. It's normal and will probably occur every time you run it. When it's finished, Quit Disk Utility and check to see if your problem was solved.

Terminal and getting rid of items you can't trash (included with OS X in the Applications/Utility folder)

You can temporarily grant yourself the power of OS X's "root user" (a kind of Super User) by opening the Terminal application and issuing the sudo command. If you're not careful, you can destroy the data on your Mac. You can also use Terminal to perform some important tweaks. One such tweak is forcing recalcitrant items into oblivion, and here's how, courtesy of **Chris Breen**: If the files are on the Desktop and refuse to be moved to the Trash, launch Terminal and type

```
sudo rm -r
```

The command breaks down this way:

sudo = Temporarily grant me the power of root for this command.

rm = Remove the following item.

-r = Recursive. Invoke this command on this directory and everything in it without double-checking with me that I really want it done.

Note the spaces. After typing the command press the Space Bar one more time. Then drag the file or folder you want to delete to the Terminal. The path to the folder will be copied to the command in Terminal. Press Return. If prompted for your password, enter it. The files will disappear. Quit Terminal.

[Comment] It cannot be stressed enough how dangerous it can be to muck about in Terminal when granting yourself root privileges (either permanently or temporarily). Be sure you know what you're doing before executing a Terminal command.

MORE TROUBLESHOOTING IDEAS

1) If you can't figure out why your computer is sluggish or you're getting out-of-memory messages, try testing the installed RAM. There are several ways to do this. Newer systems include a Hard Disk Test CD that has a test procedure for RAM. TechTool Pro tests RAM in MultiTester (v. 3.0.x) and also has a more exhaustive individual RAM test. Another is Apple System Profiler, contained by default in the Dock but also in the Applications/Utilities folder. ASP will not only tell you how much RAM is recognized but each stick's individual characteristics and what slot it's in. Unrecognized RAM either isn't properly seated or is bad -- but ASP sometimes also recognizes bad RAM (as being installed), so this isn't a sure thing. Almost all RAM comes with a lifetime warranty, so bad RAM isn't the end of the world. Finally, you can remove RAM sticks one-by-one to see if system performance improves (on the new G5 models, they would have to be removed in pairs). ***CAUTION: RAM is not hot-swappable!*** The computer must be shut down during each removal or installation of RAM, and you should ensure that you're properly grounded so as not to fry your Macintosh.

2) If the Mac is acting goofy, try unplugging all USB devices. If the system gets better, it's one of them (USB has a reputation for sometimes causing problems). Just attach them back one-by-one until the system gets goofy again, and that's the culprit. A USB device might also cause a computer not to sleep. USB devices *are* hot-swappable; you need not shut down the computer to plug them in or disconnect them.

3) Sleep problems can be caused by PCI cards too. They can also cause erratic behavior. This is included simply as general information. If you suspect a problem you're having is PCI related, please post it in the forums.

4) Failing hard drives can cause apps not to open from the Dock, system sluggishness, and other problems. It's always good advice to back-up anything you can't afford to lose ... often (see Carbon Copy Cloner and Norton Utilities, above). [2/17/05: If you think your hard drive is headed south, open Disk Utility in Panther (sorry, older Systems didn't support this). Click on the very top line (hardware) in the left panel, then check the volume information at the bottom for S.M.A.R.T. If it says "verified," your drive is probably all right. If it says anything else ...]

5) If an application acts up, but otherwise your system seems to be normal, try getting rid of the offending app's preferences (also see Preferential Treatment above). Ninety nine percent can be located in your Home folder, under Library > Preferences. Scroll down until you see a very large group of files beginning with "com." (com dot) and look for com.mfgname.appname.plist. An easy sample would be com.apple.safari.plist. Quit the application and drag this file to your desktop. Then restart the application, which will make a new .plist file at this point. If the app's strangeness disappears, trash the .plist on the desktop. You will need to reset any personal preferences you've set up along the way. If the strangeness doesn't go away, then likely the application itself is corrupted and you'd be better off reinstalling it. In this case, hang on to the .plist that you removed and use it to replace the new one after reinstalling -- that way you don't lose any special prefs you've done.

UNINSTALLING APPLICATIONS

Many OS X applications are installed by simply dragging an icon off of a disk image (.dmg) to your hard drive. Most suggest that you put the icon in your Applications folder. Applications that are installed in this fashion can be very easily uninstalled by simply dragging that same icon to the Trash icon in your Dock. Empty the Trash and it's gone for good.

Some applications require the use of an Installer program (Apple's or Installer Vise). Such programs also include an Uninstaller most of the time, and you should use that to get rid of an unwanted application because of the way these items are installed. "Application Support" files are scattered here and there, and there might be more than a simple .plist Preferences file/folder. To run the Uninstaller, you must actually run the Installer. Once past the intro screens, at the top there will usually be a drop down item that normally reads something like "Easy Install." Drop it down and in there you'll find the Uninstaller. A very few applications include a separate Uninstaller application.

Randy B. Singer, "The Mac Attorney" and coauthor of several of The Macintosh Bible's earlier editions suggests a simple tool that you can use. It's called Desinstaller, and it reads the package receipts generated when you install an application with Apple's Installer. It will allow you to uninstall or archive installed software in a sophisticated way. Here's the URL:

<http://krugazor.free.fr/software/desinstaller/DesInstaller.php>

By Grant_G