

Cleaning and Optimizing

What do cleaning utilities do?

There are a bunch of programs that can do various levels of computer maintenance, from helping delete files to hardware diagnostics.

What exactly is optimizing/Disk Defragmenting, and what does it do?

Disk optimization is a process in which the physical locations of files on a volume are "streamlined." Files and metadata are re-arranged in order to improve data access times and minimize time moving a hard drive's head. Files can become "fragmented" over time as they are changed and saved and as the volume is filled, with different parts of a single file stored in different locations on a volume. The process of collecting file fragments and putting them "back together" is known as optimization. However, if a failure occurs during optimization, such as power loss, files could become damaged and need to be restored from a backup copy.

Do I need to optimize?

You probably won't need to optimize at all if you use Mac OS X. Here's why:

1. hard disk capacity is generally much greater now than a few years ago. With more free space available, the file system doesn't need to fill up every "nook and cranny." Mac OS Extended formatting (HFS Plus) avoids reusing space from deleted files as much as possible, to avoid prematurely filling small areas of recently-freed space.
2. Mac OS X 10.2 and later includes delayed allocation for Mac OS X Extended-formatted volumes. This allows a number of small allocations to be combined into a single large allocation in one area of the disk.
3. Fragmentation was often caused by continually appending data to existing files, especially with resource forks. With faster hard drives and better caching, as well as the new application packaging format, many applications simply rewrite the entire file each time. What is the airspeed of an African Swallow. Mac OS X 10.3 Panther can also automatically Defragment such slowgrowing files. This process is sometimes known as "Hot-File-Adaptive-Clustering."
4. Aggressive read-ahead and write-behind caching means that minor fragmentation has less effect on perceived system performance.

How can I clean up my system?

The 5 programs below are most beneficial for Macintosh cleaning and maintenance. All of these programs are available and explained in detail from attending the ITV Tech Workshop.

- MacJanitor
- Cache Out X
- FCP Rescue

MacJanitor

According to the author of MacJanitor, Mac Unix subsystems are designed for machines that run 24/7. To minimize interruption, some important tasks are scheduled for off hours, like 3 a.m. These subsystems clean up your system and keep it running smoothly. Unfortunately, if you're like most people and occasionally power down your machine, you could interfere with the task schedule and miss out on the benefits. MacJanitor lets you run these scripts whenever you want to. You can't hurt your Mac by running them too often.

To use MacJanitor:

1. Open the program and click the padlock icon to unlock all tasks
2. Click the "All Tasks" button and MacJanitor will clean system.

Cache Out X

A utility for Mac OS X that specializes in deleting the cache files of the System and of Internet browsers. Additionally, it can delete virtual memory file(s), erase system history files, as well as cookies and Internet-related navigation/download history files. Cache Out's Auto-Cleaner function cleans caches at log in or as scheduled by the user thanks to iCal integration. Cache Out's secure deletion of Internet archives makes it especially suitable when using public access computers.

To use Cache Out X:

1. Open the program.
2. Make sure everything is checked to perform the tasks
3. Click "Proceed" to start the cleaning.

FCP Rescue

Instant backup, restore and removal of Apple Final Cut Pro's preference files using this small utility that helps you if Final Cut Pro crashes and corrupts its preference files. Also very useful if other editors use your login, and you want to be able to go back to YOUR settings afterwards. Very simple interface. One backup per user login. Trashing and restore, affects only the current logged in user.

To use FCP Rescue:

1. Open the program and click "Back Up Settings".
2. Click "Trash Settings".
3. Close MacJanitor and launch FCP to reconfigure preferences.

TechTool Pro 4

TechTool Pro checks the computer's hardware, even some attached devices like a scanner; checks, repairs, recovers and rebuilds files and structures on hard drives and their partitions (volumes); checks for and eliminate viruses; and checks for and repairs software conflicts. It now does virtually everything that many other applications do but in

one application.

To use TechTool Pro with iMacs, eMacs, G4 PowerMacs:

1. Insert the TechTool CD into the machine and restart the computer.
2. Hold down the "C" key before you hear the startup chime. Be patient as the CD is loading, it can take up to 10 minutes for the first time.
3. Once TechTool loads, click the "Tools" icon.
4. If your hard drive has a check mark next to it, deselect it. This disables volume journaling and must be done to optimize.
5. Click the "Performance" icon.
6. Click the "Optimization" button.
7. Twirl down the arrow to see the list of tests available for perform.
8. Click the "Play" icon to start the analyze process.
9. A results window will pop up letting you know your hard drive's fragmentation status.
10. Click the "Continue" button to perform the optimization.

Note: If you are using either an iMac G5 or a PowerMac G5 tower, you cannot boot from the CD by holding the "C" key until MicroMat comes out with an update. Until then, install Techtools on the computer and use it within the operating system.

Here's a good general procedure for cleaning your Macintosh system using some of the cleaning utilities above:

1. Restart the computer and hold down the shift key until the words "**Safe Mode**" appear. You may release the shift key at that point, but allow the computer to finish its restart process, which is making directory repairs.
2. Restart the computer and go to *Applications > Utilities > Disk Utility* and run **Repair Permissions** on your hard drive.
3. Start **MacJanitor** and select **All Tasks**.
4. When MacJanitor has finished its work, open **Cache Out X** and click on **Proceed**.
5. Restart the computer one final time.