

**PLCC Mac Group SIG July 21, 2008**  
**Basic Troubleshooting Procedures**  
**Presenter: Bob Snow**

**When your Mac running is unusually slowly**

- Restart Quit Applications you are not actively using
- Look for rogue background processes (use the Activity Monitor)
- Prune login items Consider adding RAM Check for third-party software updaters

**Software Sources & Hardware Sites**

From "Take Control of Maintaining Your Mac" and "Take Control of Troubleshooting Your Mac" by Joe Kissell Brian Tanaka's "Take Control of Permissions in Mac OS X"

**Uninstaller and Large-File Finder Utilities**

If you prefer not to muck around in your Library folders looking for individual files to delete, consider picking up a utility that can do all the hard work for you. Uninstallers can automatically delete files associated with particular programs (such as Application Support files, startup items, caches, and preference files) without requiring you to find them manually.

Here are some examples:

- AppDelete: <http://reggie.ashworth.googlepages.com/appdelete> (free)
- AppZapper: <http://www.appzapper.com/> (\$13)
- CleanApp: <http://www.synium.de/products/cleanapp/> (\$10)
- Hazel: <http://www.noodlesoft.com/hazel.php> (\$22)
- Spring Cleaning: <http://www.allume.com/mac/springcleaning/> (\$50)
- Uninstaller: <http://macmagna.free.fr/Uninstaller/> (\$25)

I should also mention several utilities that don't uninstall software, but simply help you identify and delete large files on your drive that you may not need:

- Disk Inventory X: <http://www.derlien.com/> (free)
- GrandPerspective: <http://grandperspectiv.sourceforge.net/> (free)

- JDiskReport: <http://www.jgoodies.com/freeware/jdiskreport/> (free)
- OmniDiskSweeper: <http://www.omnigroup.com/applications/omnidisksweeper/> (\$15)
- WhatSize: <http://www.id-design.com/software/whatsize/> (free)

And finally, I know of one program that performs a special decluttering task: searching for duplicate files and folders on your disk so that you can delete them easily. It's called:

- Tidy Up! (<http://www.hyperbolicsoftware.com/TidyUp.html>, \$30).

Hazel, mentioned above, can also find and delete duplicates.

### **About Removing Cruft**

If you want to remove language files use Monolingual:

- <http://monolingual.sourceforge.net/>) every once in a while. It saves a bit of disk space and makes backups a little faster.

### **Making Backups**

"Take Control of Mac OS X Backups"

- TidBITS Prosoft's Data Backup: [http://www.prosofteng.com/products/data\\_backup\\_info.php](http://www.prosofteng.com/products/data_backup_info.php) (\$59)
- Tri-Edre's Tri-Backup 4: <http://www.tri-edre.com/english/tribackup.html> (\$49)
- Crash Plan Pro: Might be preferable if you have more than one computer: <http://www.crashplan.com/> (\$60)
- SuperDuper: <http://www.shirt-pocket.com/SuperDuper/> (\$28)
- Carbon Copy Cloner: <http://www.bombich.com/software/cccl.html> (free, donations accepted)
- (Off site) CrashPlan: <http://www.crashplan.com/>
- (Off site) Mozy: <http://www.mozy.com/>

### **Apple Hardware Tests**

Disk Utility on your Mac (free)

- TechTool Pro: [http://www.micromat.com/index.php?option=com\\_content&task=view&id=31?](http://www.micromat.com/index.php?option=com_content&task=view&id=31?) (\$98)
- Rember: <http://www.kelleycomputing.net/rember/> (free)
- Disk Warrior: (<http://www.alsoft.com/DiskWarrior/>) \$100)

## **Maintenance Programs**

- Anacron: This utility runs the maintenance scripts whenever they're overdue, with no user intervention required. <http://members.cox.net/18james/anacron-tiger.html> (free)
- Cocktail: Cocktail (Figure 4) provides a single, simple interface for performing a wide range of maintenance tasks, including running the maintenance scripts, deleting cache files and old logs, adjusting hidden Finder, Dock, Safari, and Exposé settings, and more. Some tasks can run on a recurring schedule.  
<http://www.maintain.se/cocktail/> (\$15)
- MacJanitor: If you want nothing more than a simple utility that lets you run the daily, weekly, and monthly maintenance scripts manually, MacJanitor does that nicely.  
[http://personalpages.tds.net/~brian\\_hill/macjanitor.html](http://personalpages.tds.net/~brian_hill/macjanitor.html) (free)
- MainMenu: Like most of the other utilities in this list, MainMenu performs a wide variety of functions, including running the maintenance scripts, clearing caches, and deleting log files. Unlike the others, it puts all these commands into a single, always-accessible menu, so that you can run any of them with a single click.  
<http://santasw.com/> (free; donations accepted)
- Maintidget: This Dashboard widget gives you a quick way to run any or all of the maintenance scripts. <http://www.giantmike.com/widgets/Maintidget.html> (free)
- OnyX: Another multipurpose utility, OnyX can run the maintenance scripts manually (but not on a schedule), delete various caches and log files, adjust hidden Finder, Dock, and Safari settings, display log files, run Unix commands, and more.  
<http://www.titanium.free.fr/pgs/english.html> (free)

## **Antivirus Software**

- ClamXav: <http://www.markallan.co.uk/clamxav/> (free)
- Intego VirusBarrier X5: <http://www.intego.com/virusbarrier/> (\$70)
- Norton AntiVirus:  
<http://www.symantec.com/norton/products/overview.jsp?pcid=ma&pvid=nav10mac>  
(\$50)

## **Surge Protection**

- APC (American Power Conversion). <http://www.apcc.com/template/size/apc/> Other UPS manufacturers that offer Mac-compatible software include:
- Belkin:  
[http://catalog.belkin.com/IWCatSectionView.process?IWAction=Load&Section\\_Id=76](http://catalog.belkin.com/IWCatSectionView.process?IWAction=Load&Section_Id=76)
- MGE UPS Systems: <http://www.mgeups.com/selector/ups/index.php?lang=us>
- Xantrex: <http://www.xantrex.com/>

## **Cleaning Up the Desktop and Snippet Helpers**

- Hazel (<http://www.noodlesoft.com/hazel.php>) is a \$22 utility that helps you automate many maintenance tasks, such as cleaning off your Desktop.
- DEVONthink: <http://www.devon-technologies.com/products/devonthink/> (Personal edition, \$40; Professional edition, \$80; Pro Office edition, \$150)
- NoteBook:  
[http://www.circusponies.com/store/index.php?main\\_page=notebook&sub=organize](http://www.circusponies.com/store/index.php?main_page=notebook&sub=organize)  
(\$50)
- SOHO Notes: (see Figure 5) <http://www.chronosnet.com/Products/sohonotes.html>  
(\$70)
- Yojimbo: <http://www.barebones.com/products/yojimbo/> (\$40)

## **Updating Third-Party Software**

- App Update, a free Dashboard widget, can scan your disk periodically for programs and then check for updates at sites like VersionTracker and MacUpdate. A companion product, Widget Update, does roughly the same thing for Dashboard widgets. <http://blog.gkaindl.com/downloads/app-update/>  
<http://blog.gkaindl.com/downloads/widget-update>
- Another way to check for the latest software is to subscribe to VersionTracker Pro. This service includes software that runs on your Mac and alerts you if updates to any of your installed software are available, at which time you can download and install

them with a couple of clicks. VersionTracker Pro monitors up to three Macs for an annual fee of \$50. <http://www.versiontracker.com/subscribe/mactrial/>

### **Clearing Caches**

See article at <http://www.macworld.com/2006/02/features/software-speed/>.

Author has had good results with iKlear screen cleaning products from Klear Screen (<http://www.klearscreen.com/>).

### **About Notebook Batteries**

For more information about Apple's notebook batteries, see

<http://www.apple.com/batteries/>.

### **Cleaning Your LCD Screen**

To clean a screen, use a soft, lint-free cloth-not a paper towel- moistened slightly with water to prevent static buildup. (You can also use cleaning solutions designed expressly for computer displays, but avoid anything containing alcohol or ammonia.) Wipe the screen gently; LCD displays, especially, can be damaged by excessive force.

### **Backing Up with DVDs and other Media**

To archive your data, obtain a big stack of recordable DVDs and follow these steps: Make sure you have a backup application that can create duplicates and span data across multiple discs. Examples include:

- Data Backup: [http://www.prosofteng.com/products/Data\\_backup\\_info.php](http://www.prosofteng.com/products/Data_backup_info.php) (\$59)
- Intego Personal Backup X5: <http://www.intego.com/personalbackup/> (\$70)
- Retrospect Desktop Edition:  
[http://www.dantz.com/en/products/mac\\_personal/index.shtml](http://www.dantz.com/en/products/mac_personal/index.shtml) (downloadable copy, \$119; boxed copy, \$129)
- Retrospect Express: <http://www.dantz.com/en/products/express.shtml> (free with the purchase of selected third-party hard drives, or available as part of Allume's \$100 CheckIt suite: <http://www.allume.com/mac/checkit/>)
- Toast 8 Titanium: <http://www.roxio.com/en/products/toast/> (\$100)

## **Passwords (Changing)**

Author provides extensive advice about choosing, using, and changing passwords-and finding utilities to help you with these tasks-in his book "Take Control of Passwords in Mac OS X".

- Apple's Password Assistant (Look in your utilities folder)
- You can also use a free utility (which confusingly goes by the same name, Password Assistant) to display this window at any time, even if you don't see a button; download it from <http://www.codepoetry.net/products/passwordassistant>

## **Repair Permissions**

The best and most helpful account the author has read about repairing permissions was written by Take Control editor Dan Frakes in "Repairing permissions: What you need to know," published in Macworld at

<http://www.macworld.com/2006/08/secrets/repairpermissions/>.

For much more detail about permissions, He also recommends reading Brian Tanaka's TidBITS book "Take Control of Permissions in Mac OS X".

## **Working with Preferences**

Use Preferential Treatment, a free utility by Jonathan Nathan

<http://www.jonn8.com/html/pt.html> scans all your preference files looking for obvious syntax errors. If it finds a file with problems, it lets you delete it immediately or reveal it in the Finder so that you can disable it manually.

## **Starting in Safe Mode - Details**

Apple's Web site has complete information about what happens (or doesn't) during a Safe Boot. If you want to know the details, see

<http://docs.info.apple.com/article.html?artnum=107392>.

## **Defragmenting and Cloning Your Hard Disk**

- Disk Defrag: Part of SpeedTools Utilities <http://www.SpeedTools2.com/STUS.html> (\$100)

- Drive Genius: Shown in Figure 9  
[http://www.prosofteng.com/products/drive\\_genius\\_info.php](http://www.prosofteng.com/products/drive_genius_info.php) (\$100)
- iDefrag: <http://www.coriolis-systems.com/iDefrag.php> (\$30)
- TechTool Pro: <http://www.micromat.com/index.php?>(\$98)
- Note that you can't make a bootable clone simply by dragging files onto another drive. You must use a utility designed to do that, such as SuperDuper  
<http://www.shirt-pocket.com/SuperDuper/> \$28)
- Carbon Copy Cloner (<http://www.bombich.com/software/cccl.html>; free, donations accepted), or most full-featured backup programs.

### **Upgrading to Leopard OS X 105**

Apple shipped Mac OS X 10.5 Leopard on October 26, 2007. Also available on that day was TidBITS "Take Control of Upgrading to Leopard" a book by the author that walks you through every step of the upgrading process.

### **Deciding Which Files to Delete**

If you're running desperately low on disk space, it may be time to buy a larger hard drive. In the meantime, you can delete files you no longer need.

Begin by repeating the procedure in Clean Out Accumulated Cruft. If that still leaves you with too little free space and you're stuck for ideas, try removing these items:

- Cache files: Mac OS X automatically re-creates these files if needed, so feel free to trash the contents of both /Library/ Caches and ~/Library/Caches.
- Downloads: Do you hang onto installers or other downloaded files that you could download again if needed? If so, out they go.
- Classic resources: If you're running Tiger or earlier and you never use Mac OS X's Classic environment, you can get rid of the Mac OS 9 System Folder (but not the folder named System, which belongs to Mac OS X!) and Classic applications (usually stored in a folder named "Applications (Mac OS 9)").
- Because Classic doesn't run at all under Leopard, if you've upgraded to Mac OS X 10.5, you can delete all your Mac OS 9 applications.

- Developer tools: If you installed Apple's Xcode Tools but aren't developing any software, you can remove all its components and regain several gigabytes of space. The proper way to do this is to open Terminal and enter: `◇ In Leopard: sudo /Developer/Library/uninstall-devtools ◇ In Tiger: sudo perl /Developer/Tools/uninstall-devtools.pl`
- Re-rippable music: As a last resort, look in the folder `~/Music/iTunes/iTunes Music` for music you still have on CD (and which, therefore, you can re-import). Be careful not to trash music you purchased from the iTunes Music Store! When you're finished deleting files, don't forget to empty the Trash (Finder > Empty Trash) to free up the space formerly occupied by those files.

### **Monitoring utilities**

Activity Monitor: This utility, included with Mac OS X (in `/Applications/Utilities`) displays CPU load, RAM usage, disk activity and usage, and network traffic (Figure 10). Activity Monitor also displays memory and CPU usage statistics for each running application and enables you to quit individual applications.

Although it includes an optional floating CPU window, Activity Monitor is not the best choice for background operation.

- CheckUp: This beautifully designed new utility provides real-time information about RAM, disk, CPU, and network usage, as well as temperature and active processes; it also performs several maintenance tasks.  
[http://www.app4mac.com/action\\_product.lasso?-token=14](http://www.app4mac.com/action_product.lasso?-token=14) (\$49)
- Hardware Monitor: This utility can display a wide variety of statistics in your menu bar, a Dock icon, or several other formats, including heat sensor readings, power supply voltage and current, fan speeds (in RPM), battery level, and other data.  
<http://www.bresink.com/osx/HardwareMonitor.html> (€7)
- iStat pro: This Dashboard widget displays a single panel with the following information: CPU load, RAM usage, network traffic (and bandwidth), disk usage, battery level, and system uptime. <http://www.islayer.net/viewWidget.php?id=7> (free)
- MemoryStick: This simple utility from Matt Neuburg displays a floating bar graph showing your current RAM usage. <http://www.tidbits.com/matt/> (free)

- Memory Usage Getter: Somewhat like Activity Monitor, this utility displays overall RAM usage, plus per-application RAM and CPU usage, and enables you to quit individual applications <http://homepage.mac.com/simx/mug.html> (\$10)
- MenuMeters: My favorite of the group, MenuMeters, adds tiny, customizable indicators to your menu bar to display any or all of the following: CPU load, RAM usage, disk access activity (with usage on a drop-down menu), and network traffic (Figure 11). <http://www.ragingmenace.com/software/menumeters/> (free)
- miniStat: This six-widget collection shows CPU load, free RAM, free disk space, CPU temperature, battery level, and system uptime. <http://shockwidgets.com/?widget=miniStat> (free)
- Temperature Monitor: This application displays readings from your Mac's internal heat sensors, and even produces a graph of the temperatures over time. <http://www.bresink.com/osx/TemperatureMonitor.html> (free)
- ThermographX: This utility displays the readings of all internal heat sensors in your Mac and even keeps a graph of the temperature over time. But it's not compatible with every Mac model. <http://www.kezer.net/shareware/> (\$7)
- X Resource Graph: XRG provides highly customizable graphs of CPU usage, RAM usage, disk access activity, network traffic, internal heat sensors (up to three), and battery level, plus the weather (in a city of your choice) and even stock market data. <http://www.gauchosoft.com/Software/ResourceGraph/> (free)
- MenuMeters utility from Raging Menace <http://www.ragingmenace.com/software/menumeters/> after it is installed it's included in the System Preferences and shows up on the file menu bar. In the CPU view of this pane, check the Display CPU Menu Meter box and choose a style for your CPU meter (my favorite is Percentage and Thermometer If your computer has more than one processor or core, each one gets its own meter).

## **Troubleshooting Resources**

Web sites:

- Apple's support site: Your first stop should be Apple's official support site, where you can search for FAQs, technical notes, and downloads that may address your problem. <http://www.apple.com/support/>
- Apple's discussion forums: Another Mac user may have discovered, and solved, a similar problem. Connect with other users at these forums.
- <http://discussions.apple.com/>
- MacFixIt: Check the MacFixIt site daily for information about newly identified problems and solutions for all sorts of Mac hardware and software.  
<http://www.macfixit.com/>
- MacInTouch: Keep current with Mac news and real-world reports from users around the world. <http://www.macintouch.com/>
- MacOSXHints: This site is geared more toward tips and tricks than troubleshooting, but it does contain solutions to many unusual problems as well.  
<http://www.macosxhints.com/>
- Software update sites: VersionTracker and MacUpdate provide up-to-the-minute info on updates for thousands of applications, along with user comments.  
<http://www.versiontracker.com/> and <http://www.macupdate.com/>

### **Books:**

- Joe Kissel's book about solving those Mac problems that have evaded all your careful maintenance steps. When something goes wrong, start with this guide, which walks you through all kinds of common solutions and helps you find professional assistance for more serious problems.  
<http://www.takecontrolbooks.com/troubleshooting-mac.html> (\$10 ebook)
- Take Control of Maintaining your Mac by Joe Kissel (\$10) <http://www.takecontrolbooks.com/maintaining-mac.html>
- Take Control of Permissions in Mac OS X (\$10) by Biran Tanaka  
<http://www.takecontrolbooks.com/permissions-macosx.html>
- Take Control of Upgrading to Leopard by Joe Kissel (\$10)  
<http://www.takecontrolbooks.com/leopard-upgrading.html>

- Troubleshooting Mac OS X by “Dr. Smoke” (Gregory E. Swain) is a 600-page ebook that goes into great detail about solving a wide variety of Mac problems.  
<http://www.thexlab.com/booktroubleshootingmacosx.html> (\$20)
- Mac OS X Help Line, Tiger Edition by Ted Landau and Dan Frakes contains a wealth of troubleshooting and repair information.  
<http://www.amazon.com/gp/product/0321334299/> (\$50 retail; Amazon.com price, \$33)
- Degunking Your Mac, Tiger Edition, Joli Ballew, O'Reilly Publishing, \$24.99