#### Running Your Mac Lean, Clean, and Mean

with Dave Hamilton

(by the way, please get a survey form before we start)

Who are we?

- Dave says: I'll go first
  - Mac Observer 9 years
  - Mac Geek Gab Podcast almost 3 years
  - Geek... forever!

Who are we?

- Your turn
  - Mac owners?
  - Less than one year?
  - More than 5 years?
  - Consider yourself a geek?
  - Geek in Training?

#### What you'll learn

- How to keep your Mac running clean
- Preventative steps to take before problems hit
- What to do when things aren't right
- Tip-filled bonus round, if time

#### What you won't learn

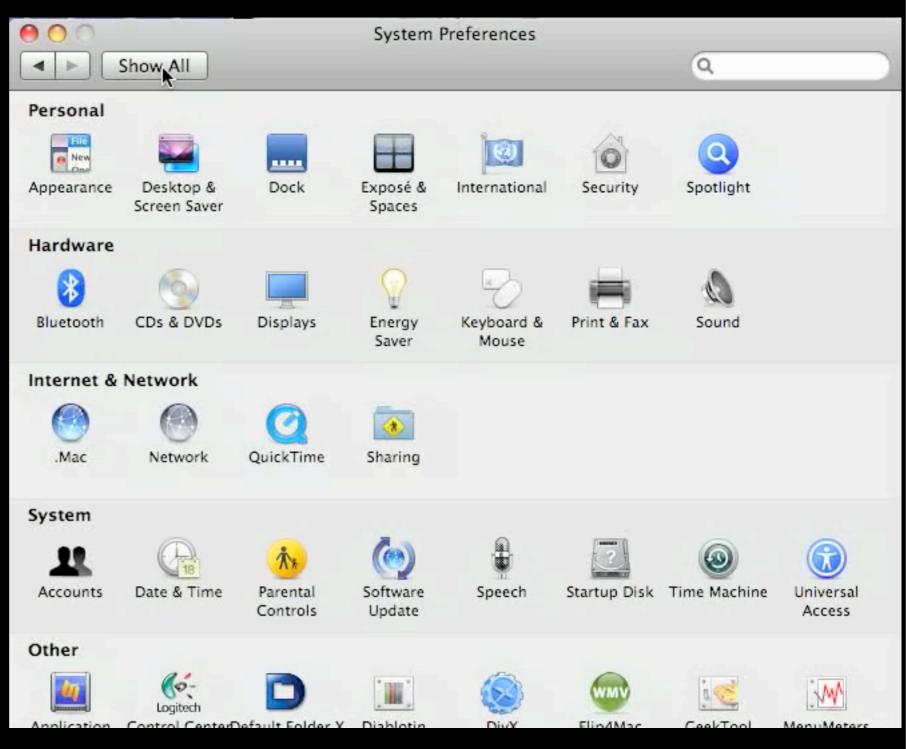
- Not focused on pushing your Mac to its limits
- Goal is to keep a machine running safe and sound so you can get your work done.

## But first... why? What are the benefits?

- Mac builds up cruft over time.
- The more stuff you have on your Mac, the more space it takes up.
- You probably don't use everything on your Mac.
- Prep your Mac -- and yourself -- for the day when disaster \*does\* strike.

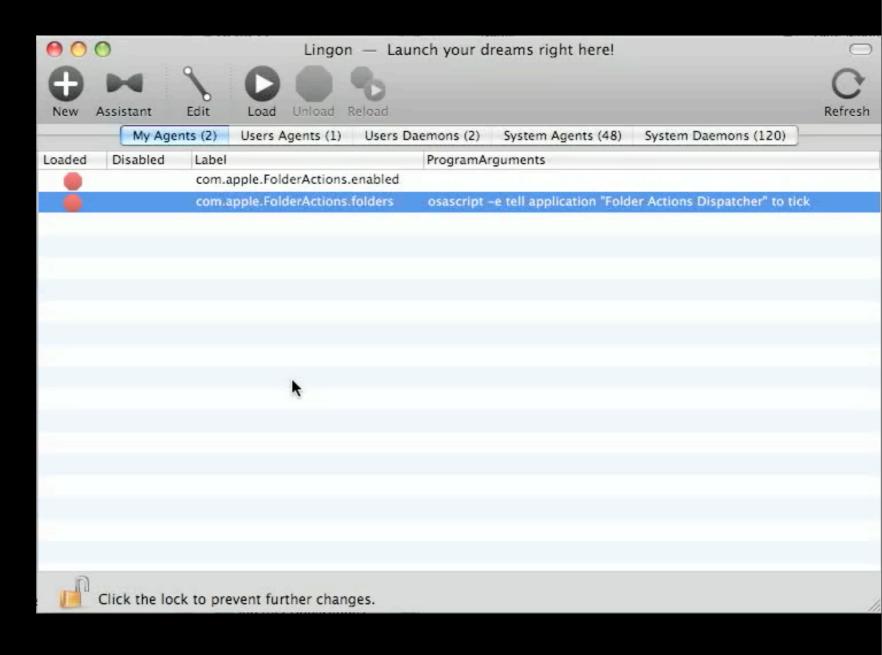
# Running Clean Startup Cleanup

- System Preferences >Accounts
- Login items tab
  - Check everything
     here
  - Google what you don't know before removing



## Running Clean Startup Cleanup

- Check 'launchd'
- Use Lingon http:// lingon.sourceforge.net
- Be careful -- ONLY:
  - My Agents
  - Users Agents
  - Users Daemons

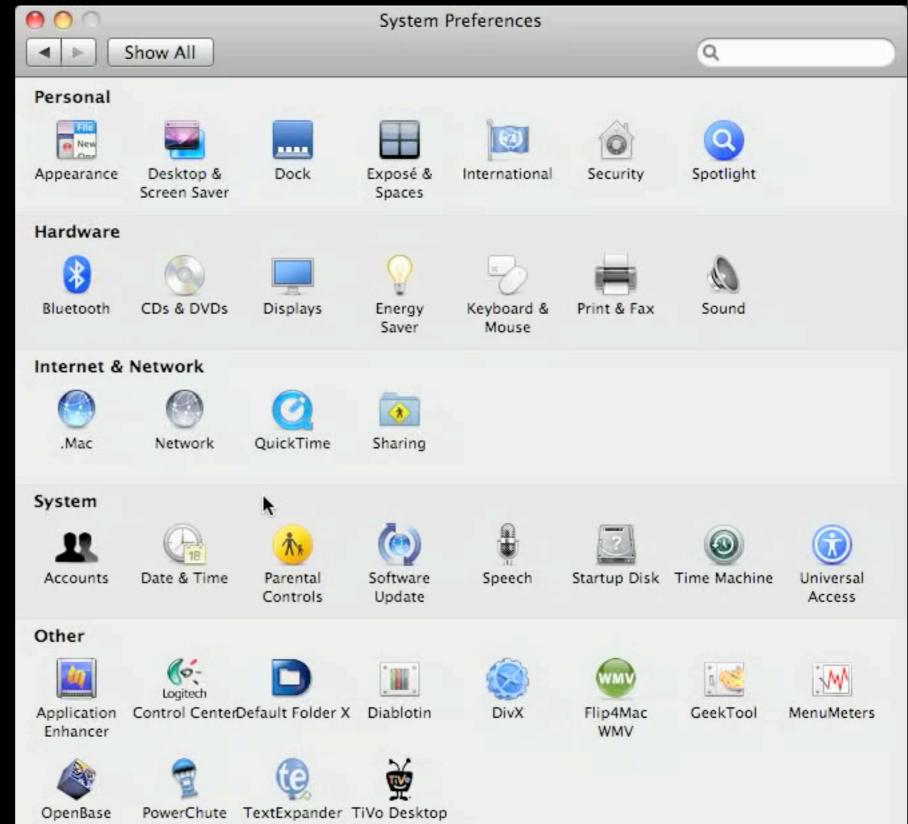


# Running Clean File/Module Cleanup

- Check and delete specific items from:
  - ~ & /Library/Internet Plug-Ins
  - ~ & /Library/Input Managers
  - ~ & /Library/Application Enhancers
  - ~ & /Library/Contextual Menu Items
  - ~ & /Library/PreferencePanes
  - /Library/StartupItems
  - /Library/QuickTime

# Running Clean Diablotin

- http://s.sudre.free.fr/
   Software/Diablotin.html
- Lets you edit Startup Items \*and\* Plug-ins, including QuickTime, Internet, Sounds, Fonts
- You can Disable and Re-Enable
- Demo->



## Running Clean File/Cache Cleanup

- OnyX http://www.titanium.free.fr/
- Delete caches automatically

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# Running Clean Spotlight smoothing

- Optimize Spotlight
- System Preferences
   >Spotlight
- Choose only those data types that you search, disable the rest
- Doesn't change indexing, but does change results
- Leopard tip: iChat messages are "Mail" now, not "Documents"

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2	System Preferences	
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5	🔣 Mail Messages	
6	🗏 📔 Contacts	
7	📃 📩 Events & To Do Items	
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# Running Clean Spotlight smoothing

- Skip external drives and unnecessary folders
- Drag/Add to Privacy

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Sho	ow All	٩
	Spotlight helps you quickly find things o located at the top right corner of the scr Search Results Priv	reen.
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	Spotlight window keyboard shortcut:	¥℃ Space

# Running Clean Spotlight smoothing

- Rebuild Spotlight database
- Use 'mdutil' via Terminal
  - sudo mdutil -E [path/to/disk]' path= / or /Volumes/ [disk name]
- Or ... just use OnyX



## Running Clean The BIG secret

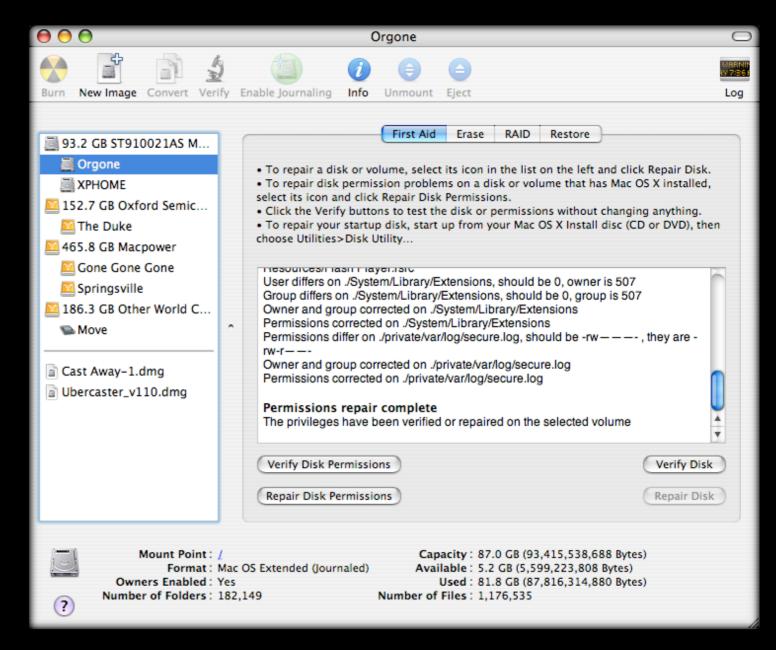
- Unix was built for apps to start up and run for months or even years
- Consumers use computers differently: multiple apps, opened and closed regularly/ daily
- As such, Mac OS X's RAM, virtual memory and caches can become full and fragmented
- The BIG secret:
  - REBOOT!

## Running Clean What we've learned

- Clean up system startup
  - Login Items
  - Launchd (with Lingon)
- Clean old installed modules and apps from specific locations
- Clean caches (manually or using OnyX)
- Tweak and rebuild Spotlight
- Reboot regularly!

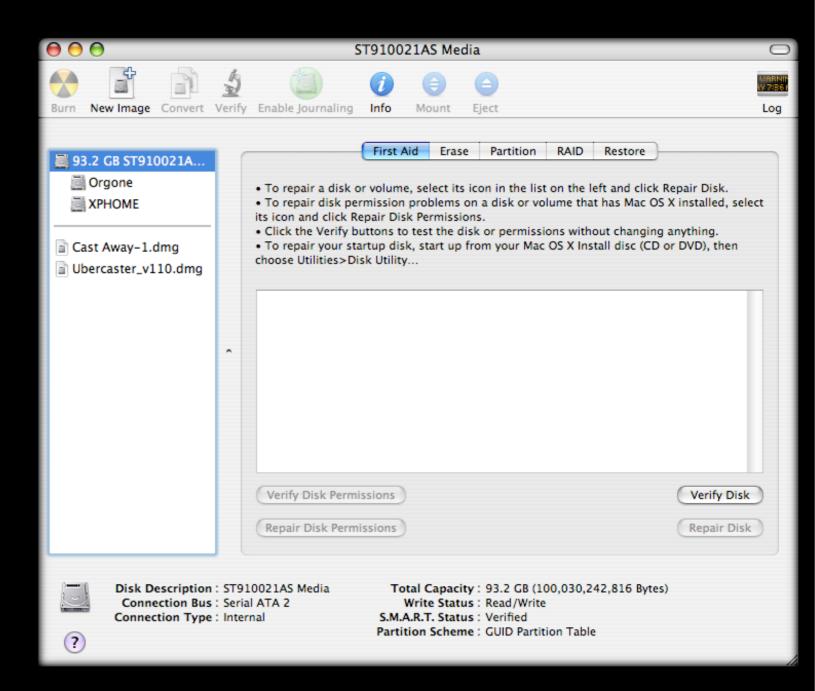
# Preventative Maintenance Disk Utility

- Repair File System and Permissions
- File System Repair needs to be run from different boot drive or DVD



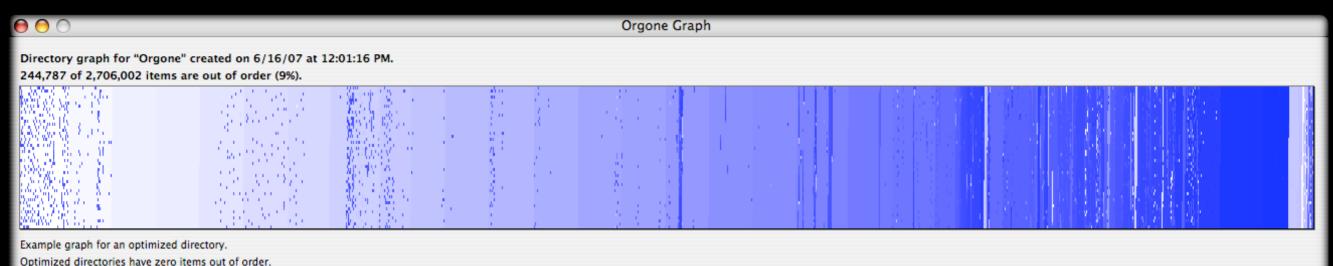
# Preventative Maintenance The SMART way

- Hard drive is important piece of the pie.
- Most drives report their health if asked
- Self-Monitoring, Analysis and Reporting Technology
- Disk Utility shows status
  - Check regularly



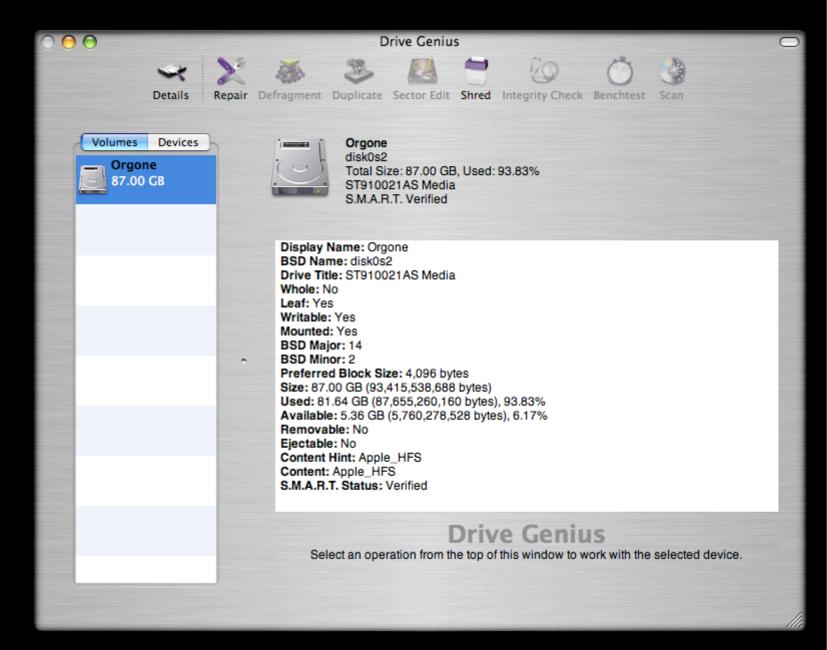
## Preventative Maintenance Disk Warrior

- DW is utility for rebuilding damaged or fragmented directories.
- Not repair... just rebuild. Subtle difference.
- Also Automatic SMART-testing agent
- Available at www.alsoft.com \$99.95



## Preventative Maintenance Drive Genius

- Repair Directory
- Defragment Disk
- Surface Scan (Integrity Check)
- www.prosofteng.com
   \$99.00



## Preventative Maintenance Command Line Startup

- Boot to Single User Mode with Command(Apple)-S on startup
- Then run 'fsck / -fy' -- that will check and, if necessary, repair your boot volume
- Bonus is that you can do this without booting from a separate disk!

# Preventative Maintenance AppleJack

- Command-line Only utility.
- Meant to fix major problems.
- Install NOW -- \*before\* disaster strikes!
- http://applejack.sourceforge.net/

```
Enter the associated number or letter to choose your maintenance task.
It is strongly recommended you do them in the order listed!
[a] auto pilot. Script will do all tasks sequentially.
[1] repair disks
[2] repair permissions
[3] cleanup cache files
[4] validate preference files
[5] remove swap files
[q] : Just quit, thank you very much.
Your choice:
```

## Preventative Maintenance Disk Overview

- Directory Repair
  - Disk Utility
  - Disk Warrior
  - Drive Genius
  - 'fsck' from command-line/Terminal
  - AppleJack from command-line/Terminal

# Preventative Maintenance System Scripts

- What they do
  - daily removes log files, temporary files, backs up the NetInfo database, rotates your system.log
  - weekly rebuilds locate and 'whatis' unix databases, rotates less-frequently filled logs
  - monthly reports per-user accounting and rotates even more logs.
- 'daily' script is the key to happy life on your Mac

## Preventative Maintenance System Scripts

- Running them
  - If your machine is on all the time, they run no problem
  - If not, they may or may not run, so manually run them
    - Terminal 'sudo periodic daily weekly monthly'
  - Or... Onyx, of course!

## Preventative Maintenance Test Account

- Go to System Preferences->Accounts
- Create new "Test" user with Administrative Privileges
  - Remember the password

 Good when your system starts acting funky. You can log in as this user. If successful with test operations, you know it's a user preference and not a system-wide issue

## Preventative Maintenance The BIG secret

- Well, rebooting doesn't hurt
- But Backing Up is better
  - Time Machine Built into Leopard
  - Prosoft Data Backup http:// www.prosofteng.com/
  - Retrospect http://www.emcinsignia.com/
    - Great for network backups of multiple machines

#### Preventative Maintenance What we've learned

- Keep our drives happy
- Install AppleJack for a rainy day
- Run system maintenance scripts
- Create a test user
- Let's say it together...
  - BACKUP!
- and as a bonus...
  - REBOOT!

## Disaster Strikes Machine Won't Boot

- Go to command line, run 'fsck' or AppleJack (you did install it, right?)
- If those find problems, run them \*again\* until they run clean
  - Tiger and Leopard do this automatically.
- Boot from Mac OS X CD/DVD and run Disk Utility
- Boot from DiskWarrior and rebuild directory
- FireWire target-disk mode to another Mac to copy data and punt!

Disaster Strikes Data Recovery

- FireWire Target Disk Mode
  - Copy Data to other Mac, then reformat, reinstall.
- Prosoft's Data Rescue
  - For when the files can't simply be copied

- Don't trust a failed drive again
  - They're too cheap to roll those dice

# Disaster Strikes Taking it in

- If under AppleCare and \*not\* accidental damage, call AppleCare or visit local Apple Store.
  - Aside: Buy AppleCare
- 3rd parties for non-AppleCare and damagerelated issues
  - TechRestore http://www.techrestore.com/
  - iResQ http://www.iresq.com/ Formerly MacResQ

## Disaster Strikes What We've Learned

- Try command-line solutions first
- Boot from CD/DVD and run Disk Utility
- Then Disk Warrior and/or Drive Genius
- Then boot from another Mac, if available, and user Target Disk Mode to copy files
- Reformat and restore from Backup
- Send it in!

## Wrap Up/Q&A Software/sites mentioned

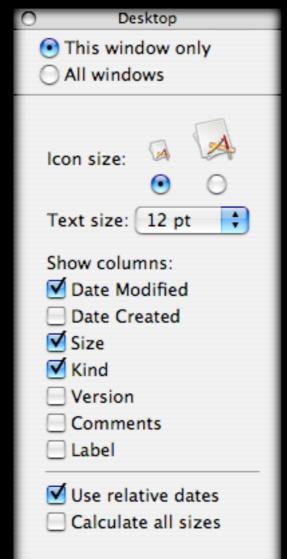
- Onyx http://www.titanium.free.fr/
- AppleJack http://applejack.sourceforge.net/
- DiskWarrior http://www.alsoft.com/
- Drive Genius, Data Backup http:// www.prosofteng.com/
- dave@macobserver.com -- http:// www.davethenerd.com/
- Please fill out your survey forms. :-)

# Bonus Round Defragmenting/Optimization

- Used to be all but mandatory
- Unix changes a lot of that
  - Mac OS X keeps a "hot list" and optimizes smaller, recently-used files for you
- If you repeatedly push up against the full size of your drive, fragmentation will exceed acceptable limits
- Prosoft's Drive Genius defragments
  - But rebuild directory with Disk Warrior first!

# Bonus Round Speeding up Finder

- Disable "Calculate all sizes" in list view
- Reduces disk access when browsing folders



## Bonus Round - OmniDiskSweeper

- Finds sizes of everything on your drive
- Registered Version lets you delete
- www.omnigroup.com
   \$14.95
- Demo->

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11.4 GB 4.7 GB 3.3 GB 2.4 GB 945.5 MB 945.5 MB 9.2 MB 9.2 MB 9.2 MB 5.6 MB 960.0 kB 960.0 kB 576.0 kB 80.0 kB 16.0 kB 16.0 kB 16.0 kB 4.0 kB	Users Applications Library Previous Systems private System Warez usr Temp mach_kernel.ctfsys mach_kernel.ctfsys mach_kernel bin sbin Installer Log File .hotfiles.btree Desktop DF Desktop DF Desktop DB TheVolumeSettin Volumes .DS_Store etc Icon mach tmp User Guides And Int var .Archived_Directc .com.apple.timema .fseventsd .Spotlight-V100 .TemporaryItems .Trashes							
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## Bonus Round - Activity Monitor

- Built into Mac OS X
- /Applications/Utilities/ Activity Monitor
- Real-time output of CPU, RAM, Network usage, also shows emulation
- Demo->

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65	dave	loginwindow	0.1	7.34 MB	8.34 MB	326.32 MB	Intel	
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	% System:	8.50	Processes:	98				

% Idle: 73.50

## Bonus Round MenuMeters

- At-a-glance access to System State/health
- Memory, Network, Disk, CPU Usage in the menu bar
- http://www.ragingmenace.com/



# Bonus Round Backup from Command Line

• Create a "Clone" backup from command line:

 sudo rsync -avrogx / /Volumes/[Backup Volume]

# Bonus Round Battery Tweaking

- Disable all networking and Bluetooth
- Turn off IR receiver... in Security pref pane
- Install SpeedIt. Allows better power management/SpeedStep in Intel CPUs - http:// speedit.increw.org/
- Tiger (10.4) only



# You rang?

- Question Time
  - Ask away! It's free (sort of)
  - Fill out that survey form!

## Wrap Up/Q&A Software/sites mentioned

- Onyx http://www.titanium.free.fr/
- AppleJack http://applejack.sourceforge.net/
- DiskWarrior http://www.alsoft.com/
- Drive Genius, Data Backup http://www.prosofteng.com/
- MenuMeters http://www.ragingmenace.com/
- SpeedIt http://speedit.increw.org/
- dave@macobserver.com -- http://www.davethenerd.com/
  - Please remember that Survey Form!