

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.

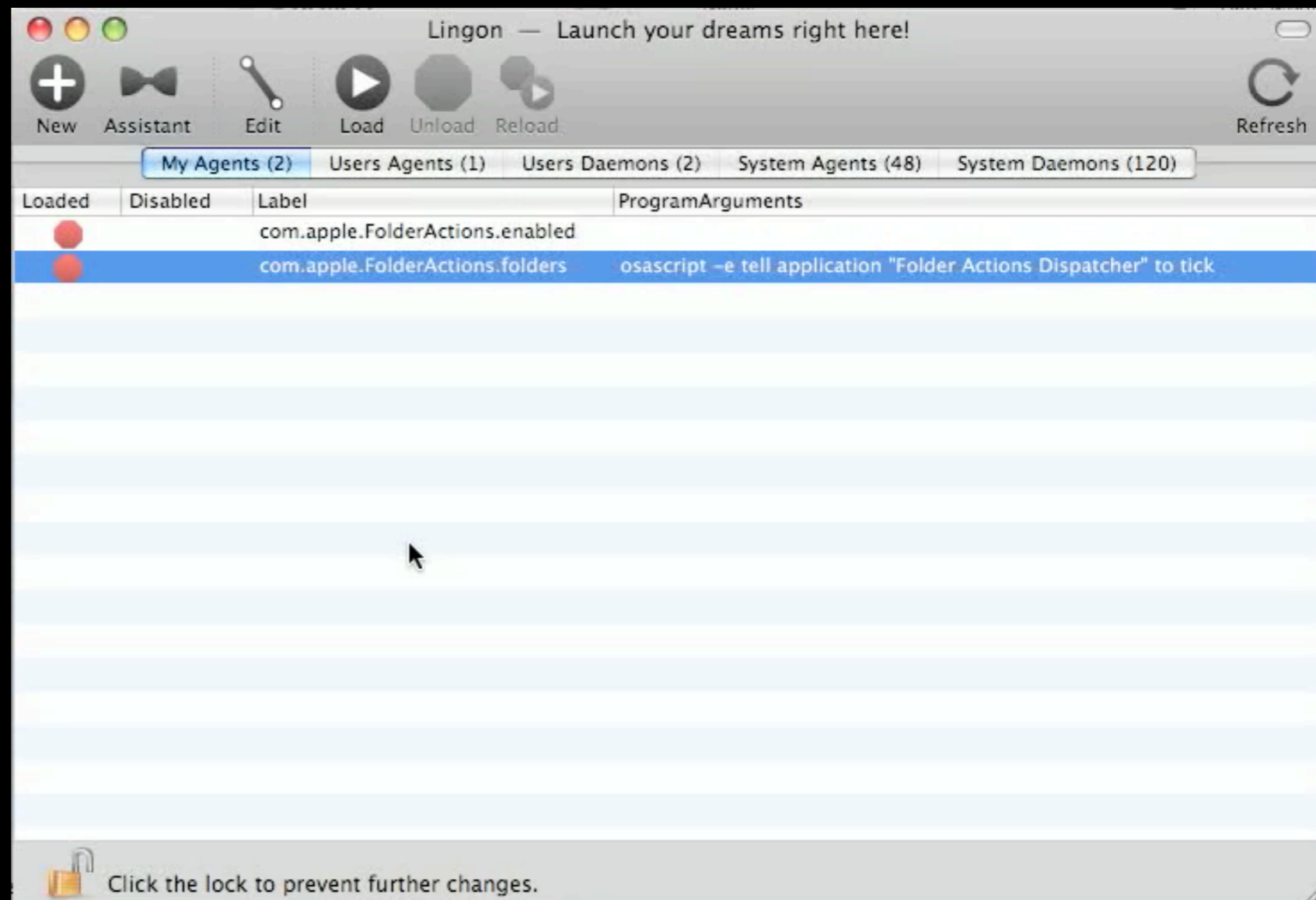
Running Clean Startup Cleanup

- 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

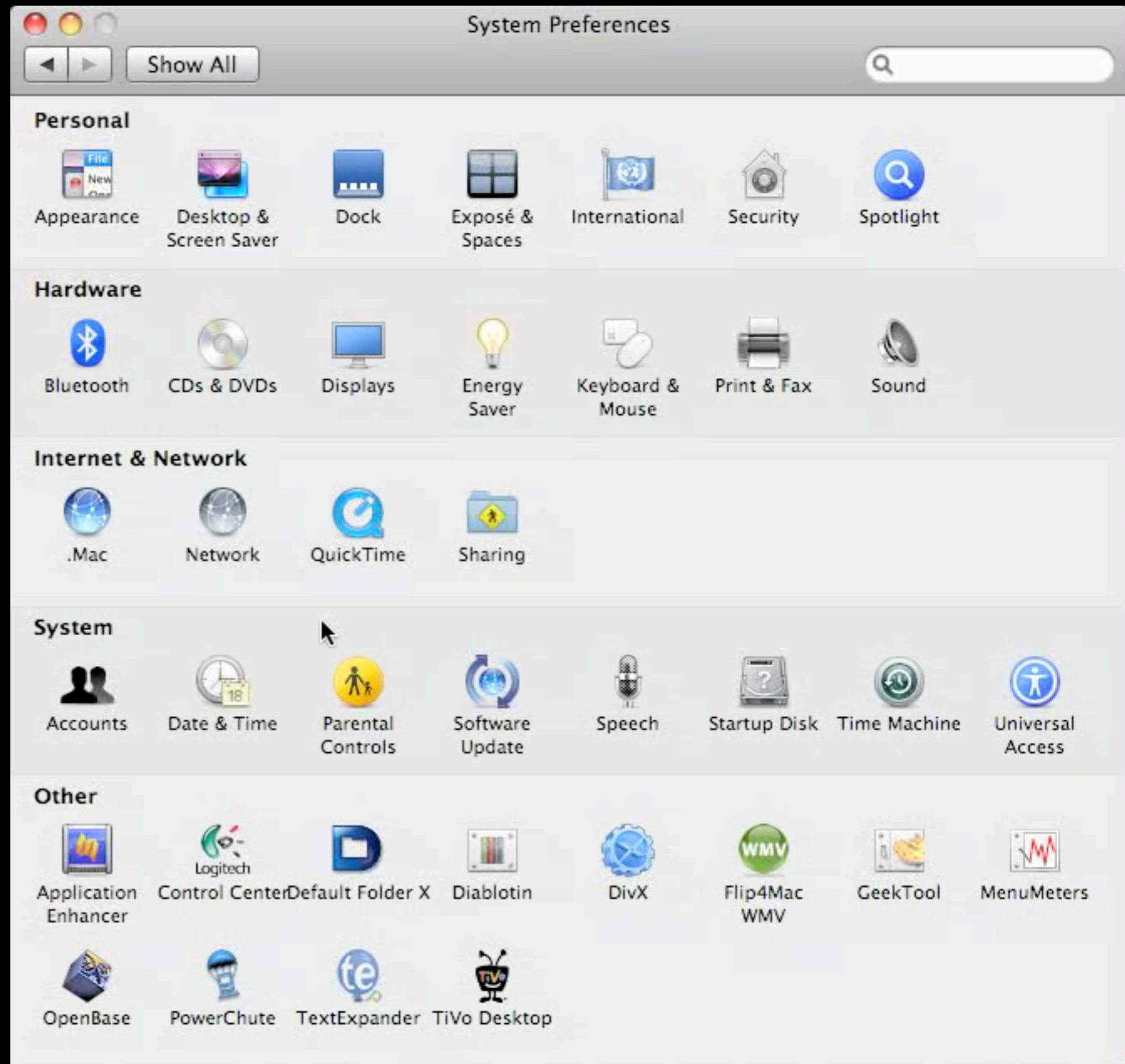


Running Clean File/Module Cleanup

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



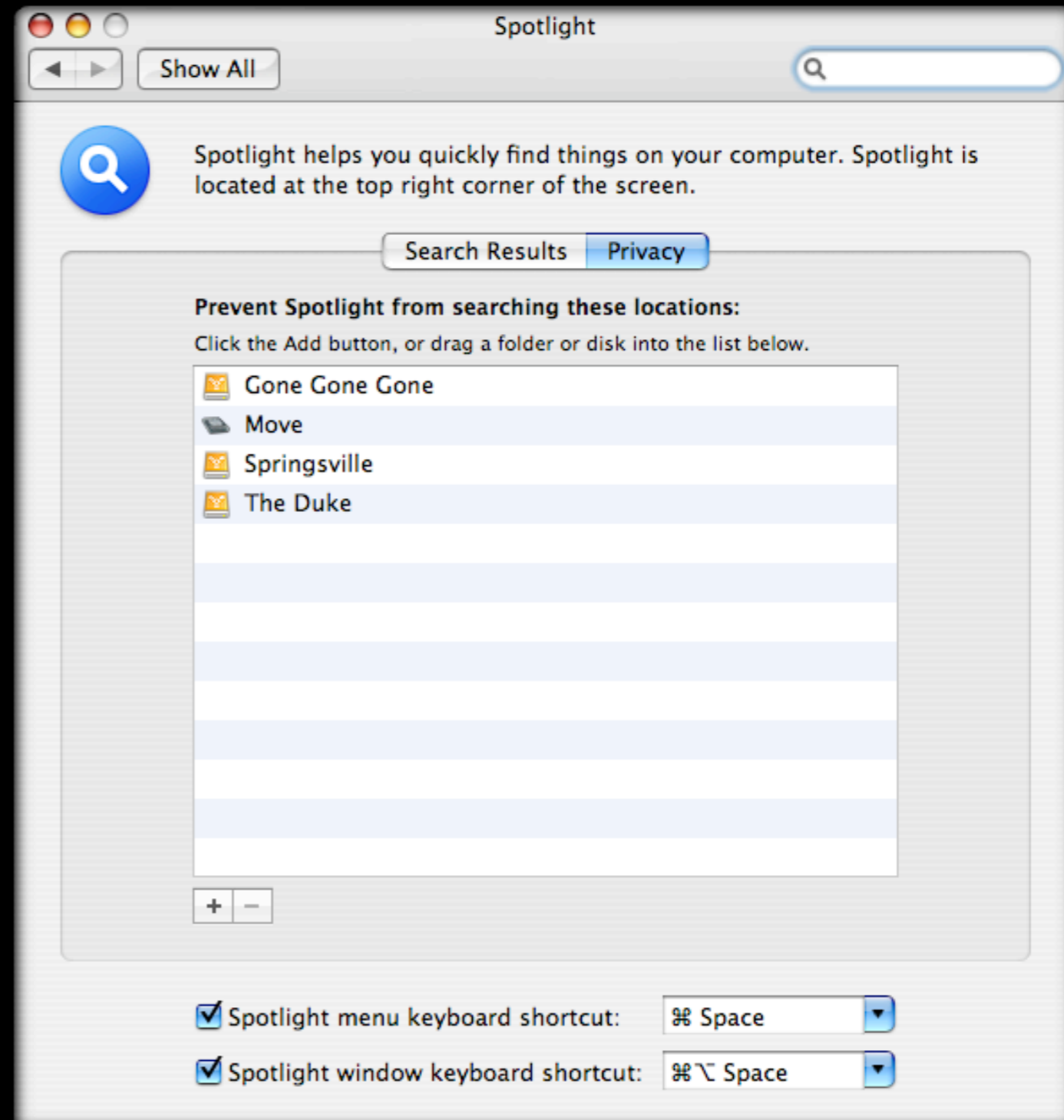
Running Clean Spotlight smoothing

- 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"



Running Clean Spotlight smoothing

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



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

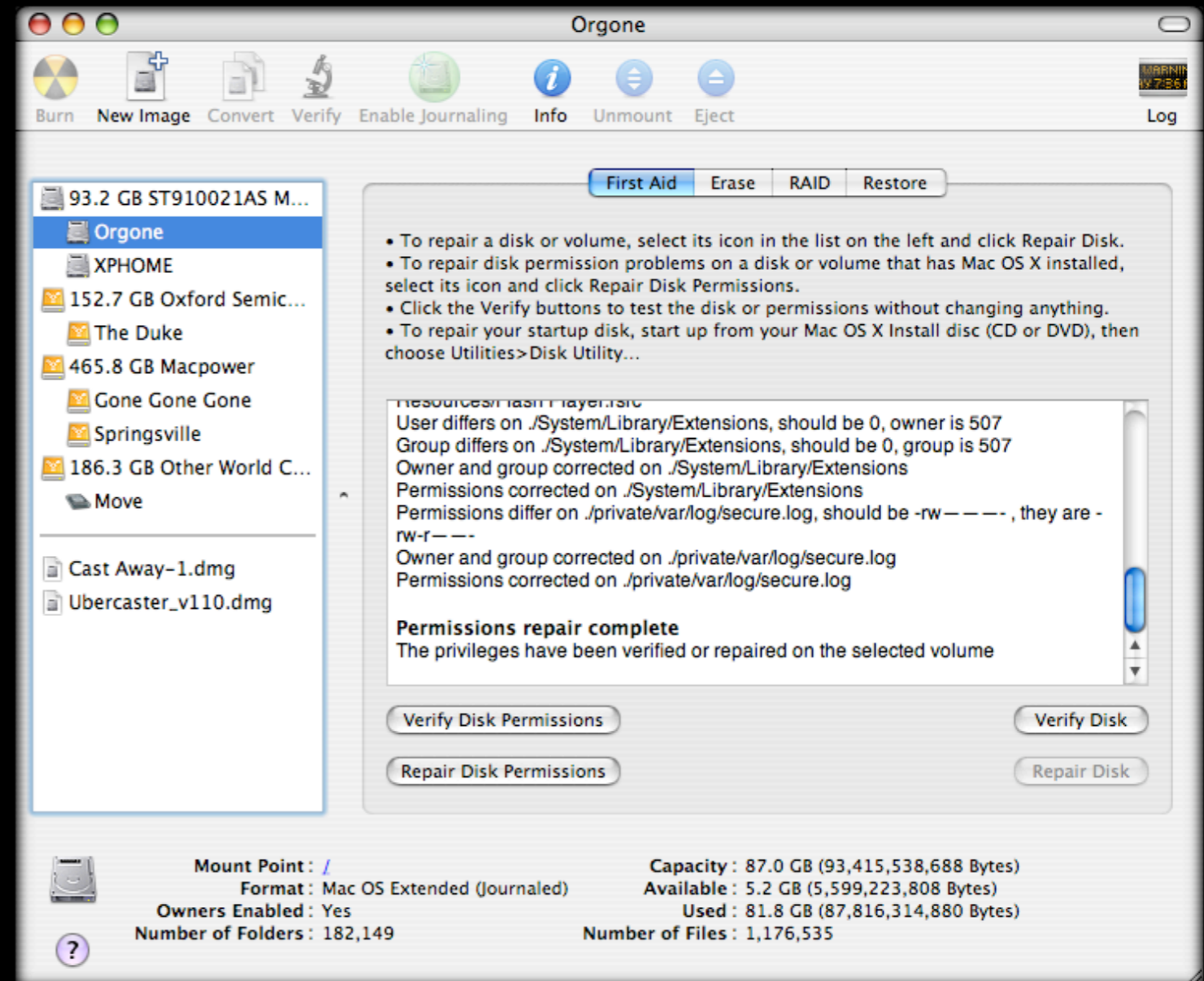
What we've learned

- 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

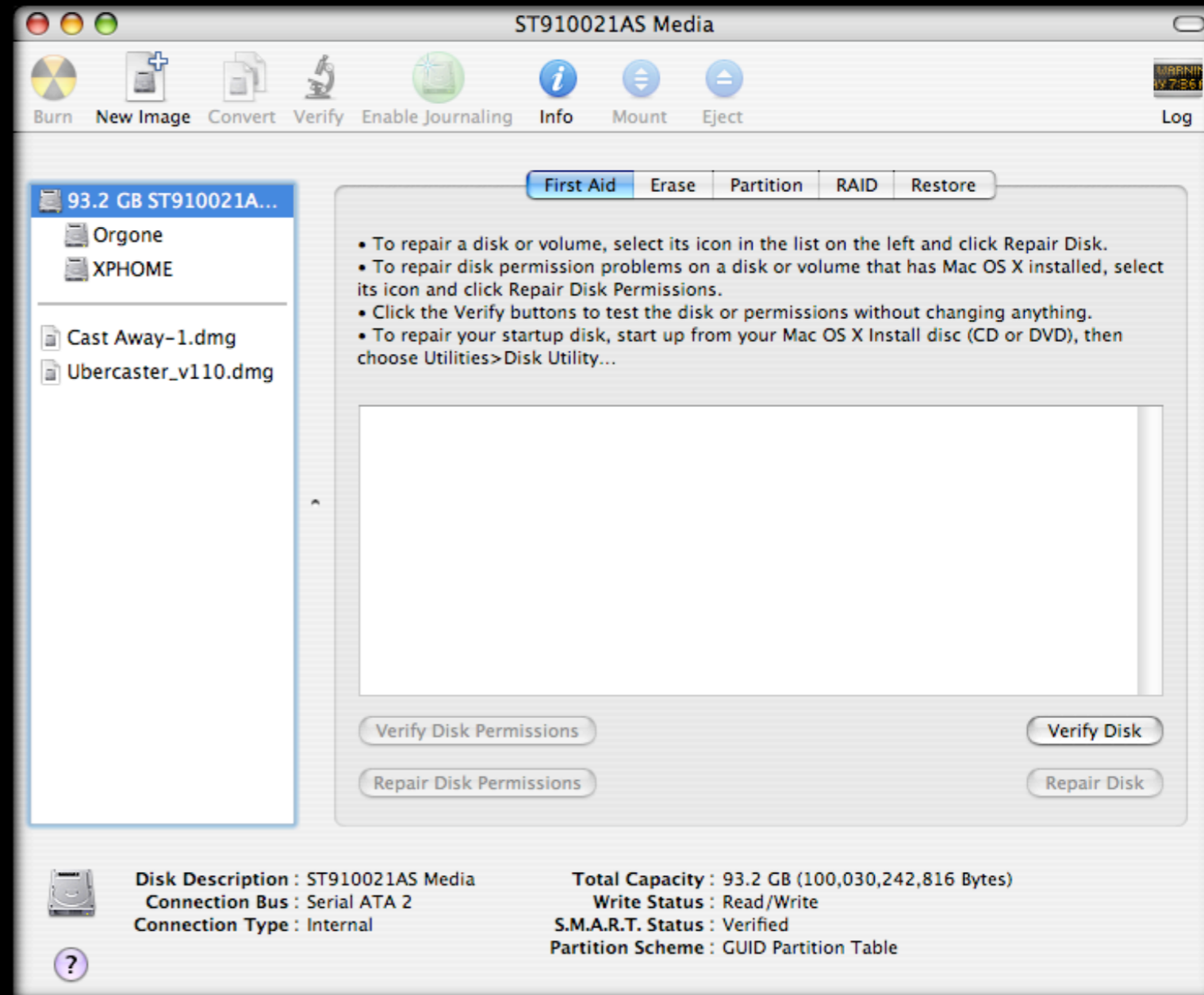
- Repair File System and Permissions
- File System Repair needs to be run from different boot drive or DVD



Preventative Maintenance

The SMART way

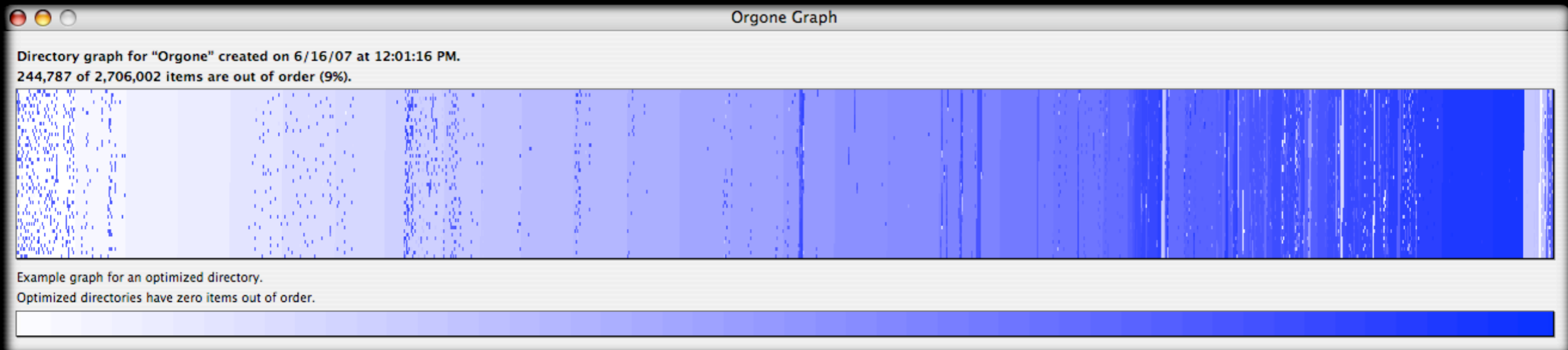
- Hard drive is important piece of the pie.
- Most drives report their health if asked
- Self-Monitoring, Analysis and Reporting Technology
- Disk Utility shows status
 - Check regularly



Preventative Maintenance

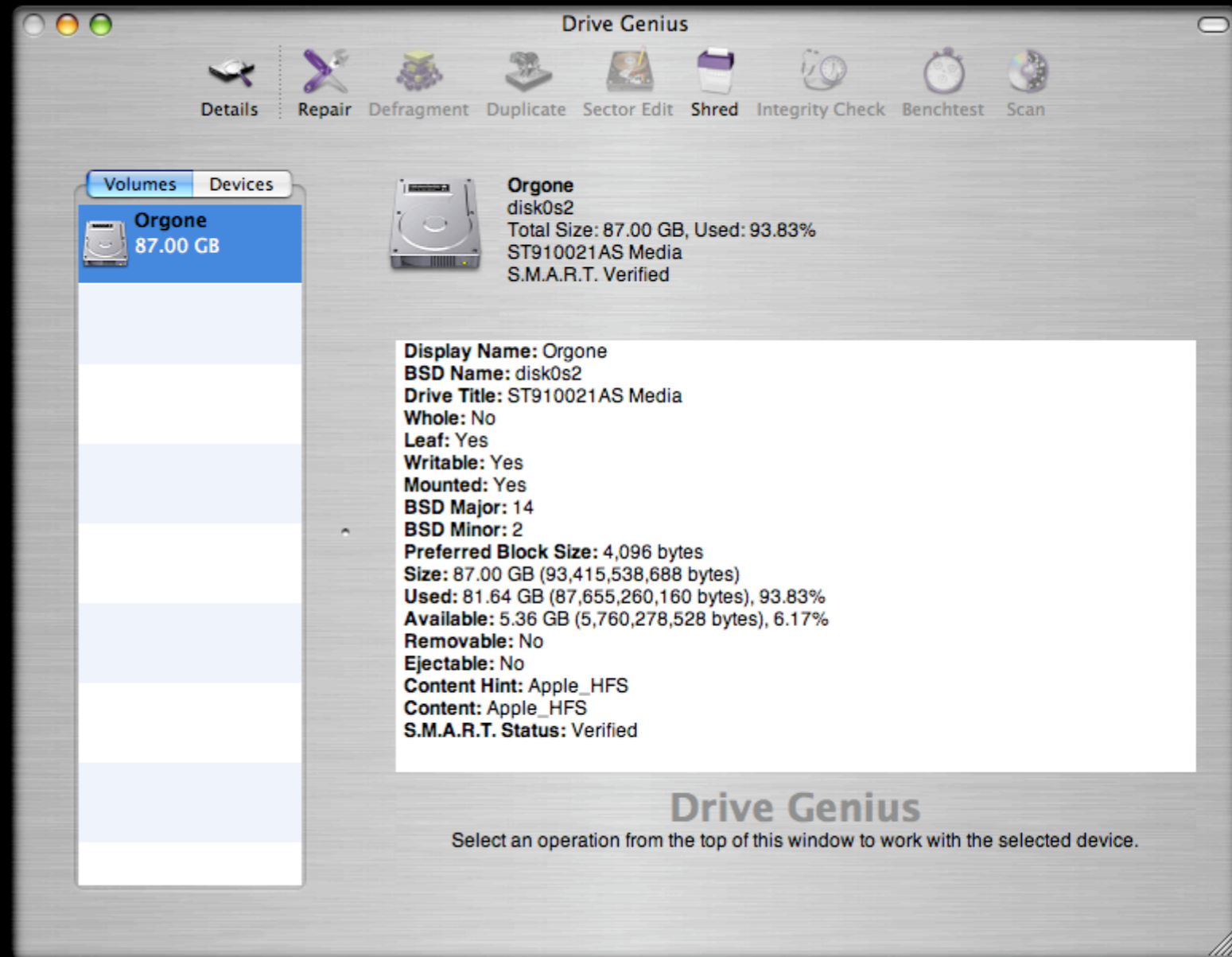
Disk Warrior

- 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 damage-related 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 use 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

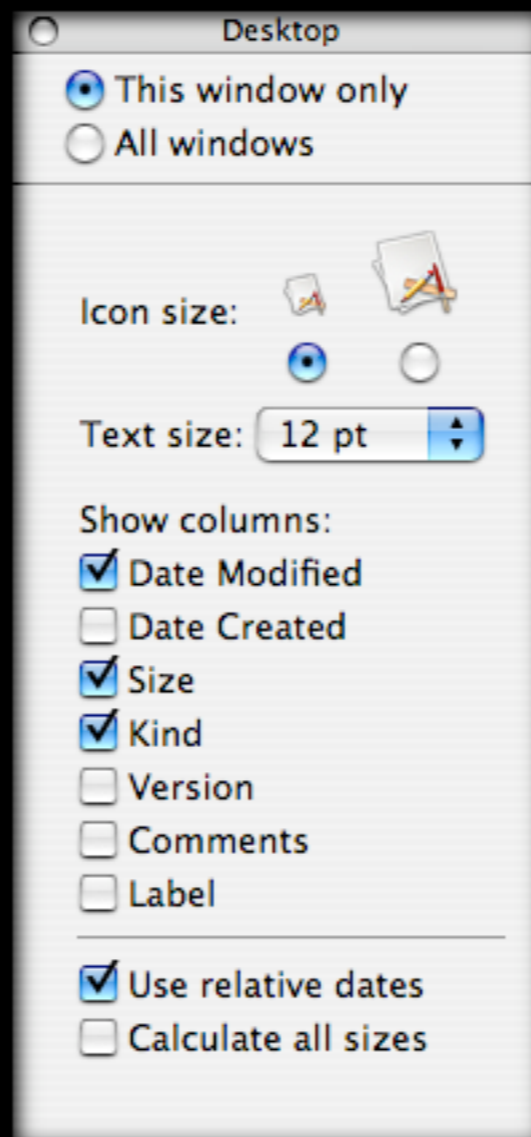
Defragmenting/Optimization

- 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

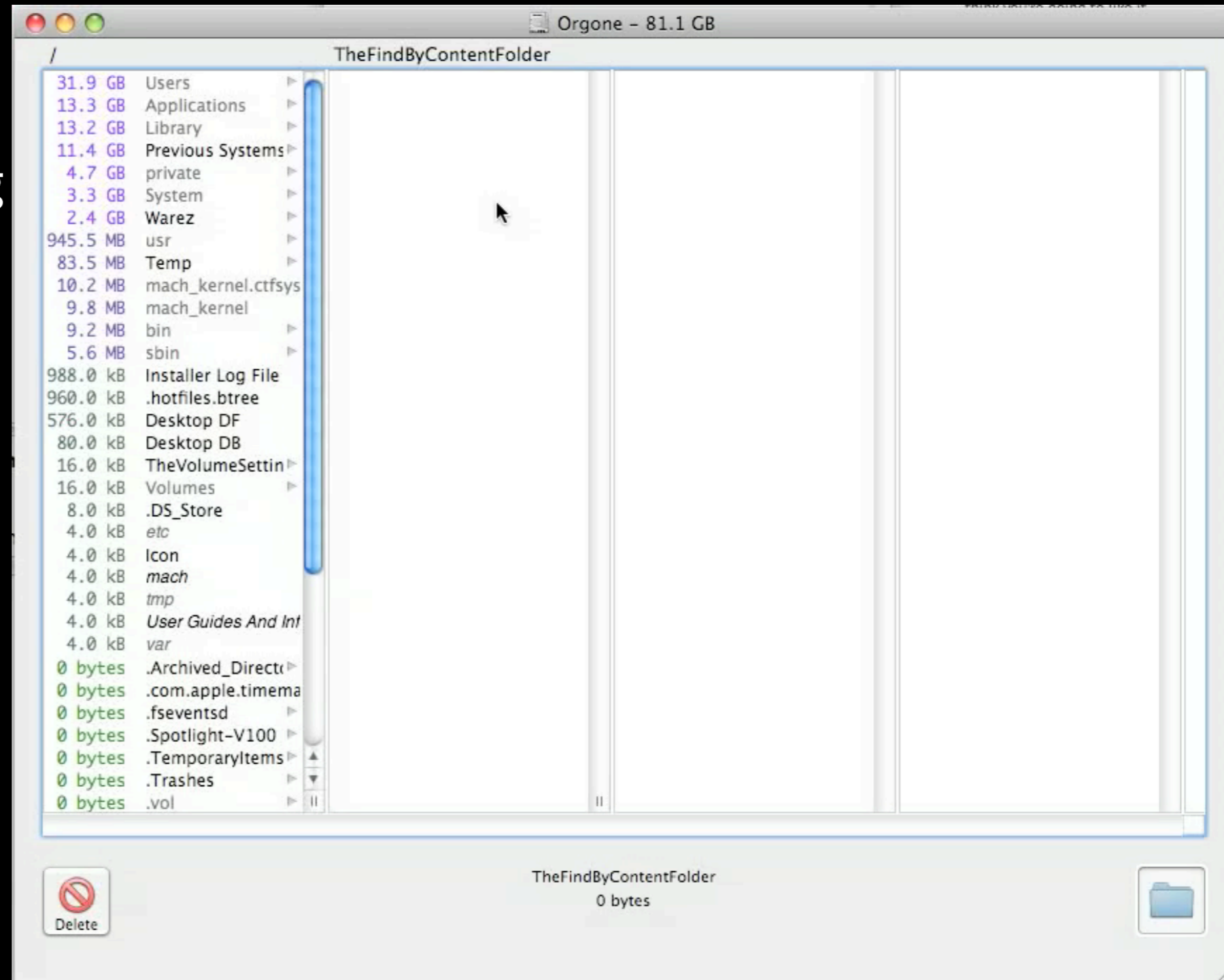
Speeding up Finder

- 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->



Bonus Round - Activity Monitor

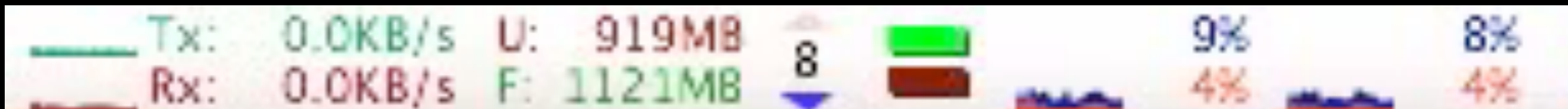
- Built into Mac OS X
- /Applications/Utilities/Activity Monitor
- Real-time output of CPU, RAM, Network usage, also shows emulation
- Demo->



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!