

# Running Your Mac Lean, Clean, and Mean

with Dave Hamilton

# Who are we?

- Dave says: I'll go first
  - Mac Observer - Over 17 years
  - Mac Geek Gab Podcast - almost 11 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?
  - Seen my Lean/Clean/Mean before?

# 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
- Mac Bliss & Cool Stuff Found: Some of Dave's favorite tips and apps he uses to keep his Macs running smooth

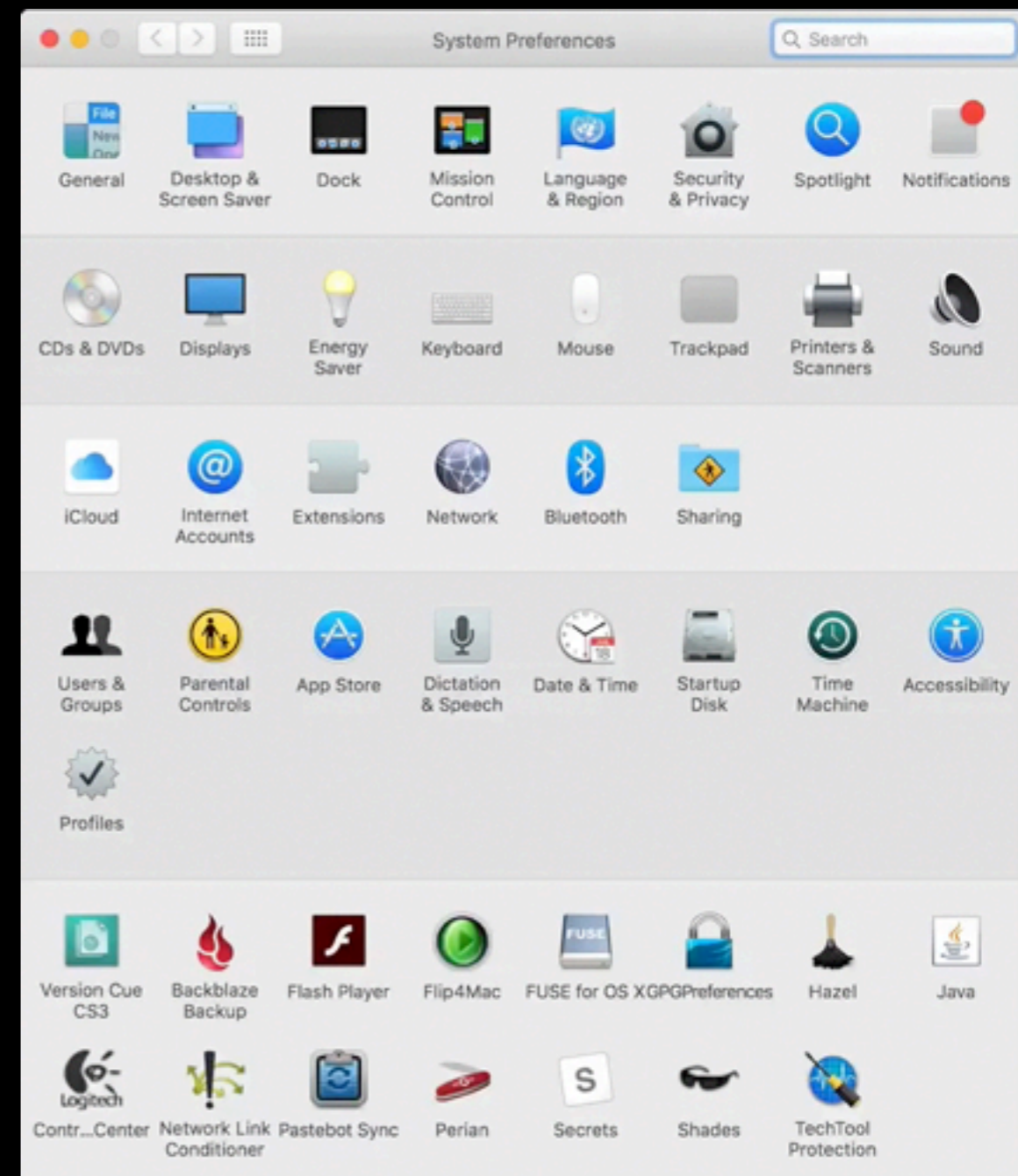
# But first... why?

## 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.

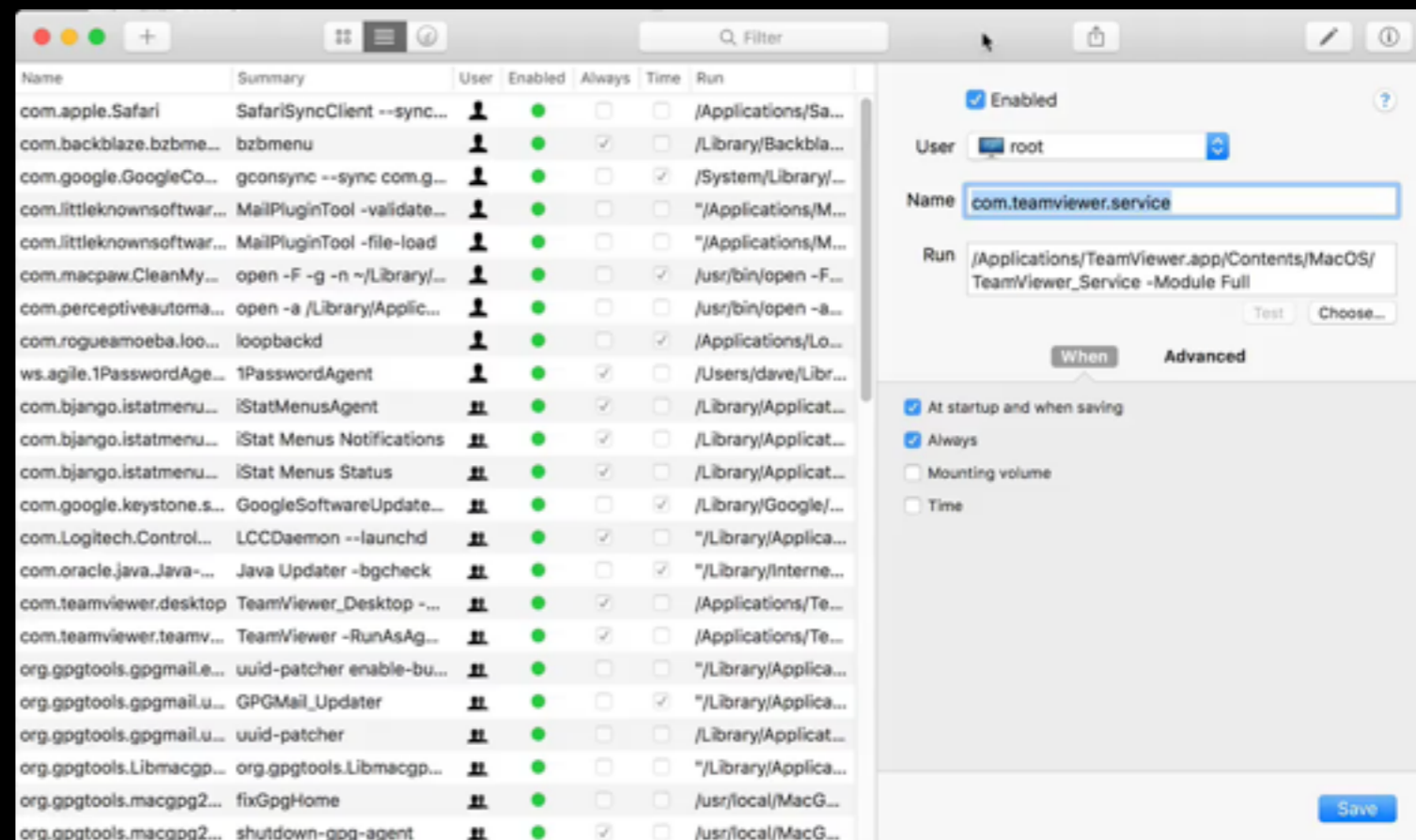
# Running Clean Startup Cleanup

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



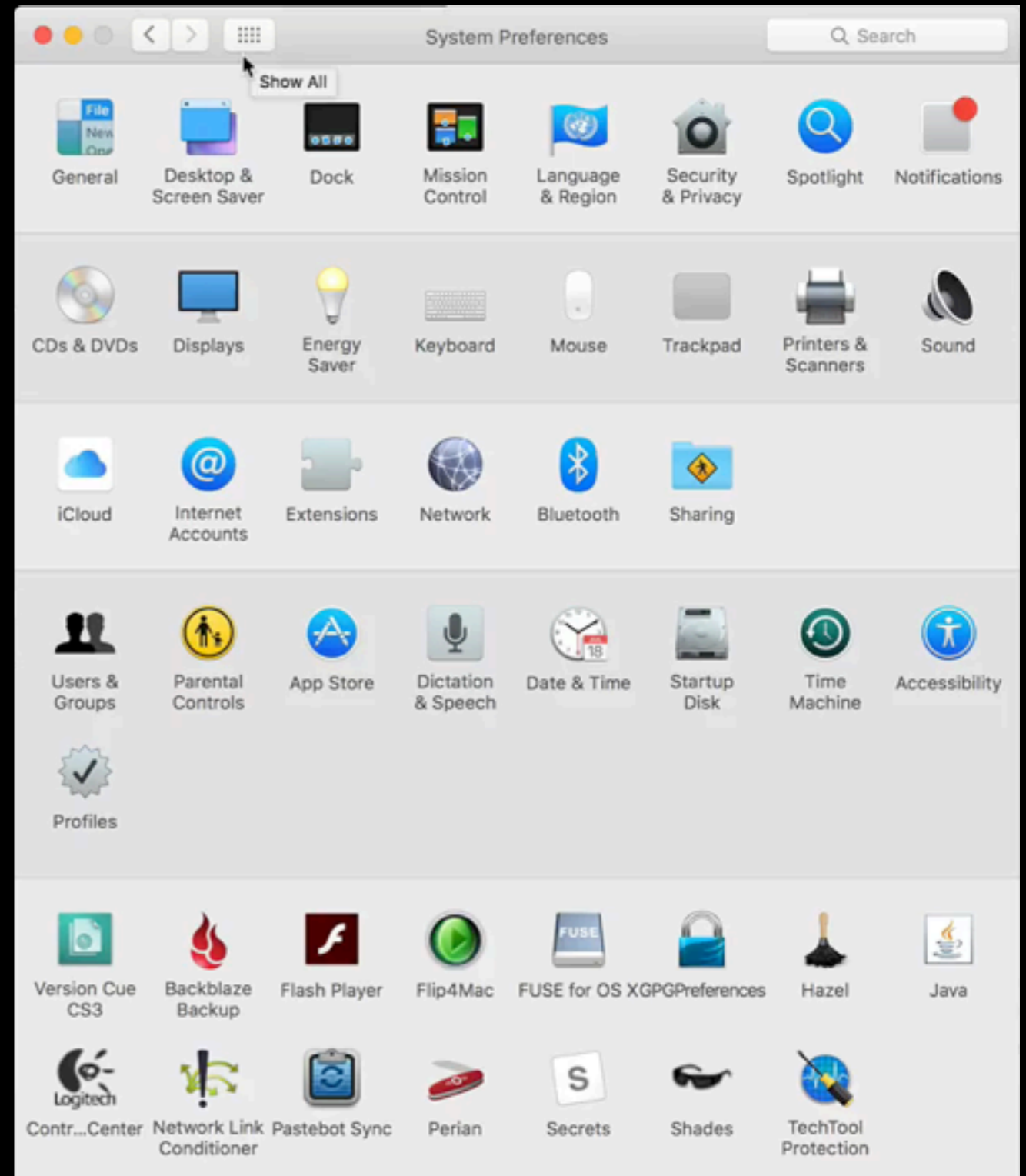
# Running Clean Startup Cleanup

- Check 'launchd'
- Use Lingo - [peterborgapps.com/lingon/](http://peterborgapps.com/lingon/)
- Be careful!



# Running Clean Extensions

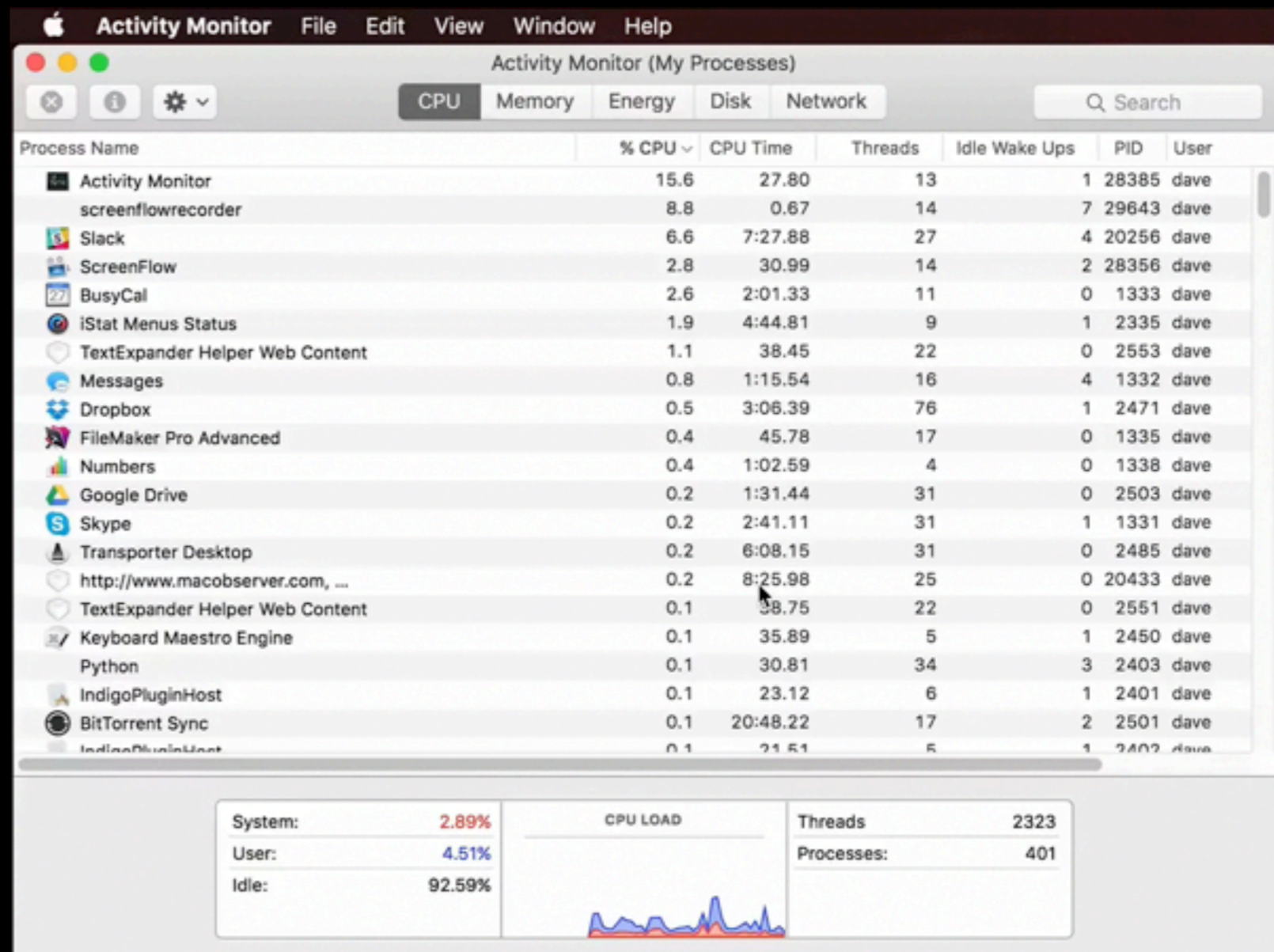
- You can Disable and Re-Enable
- Demo->





# Running Clean Activity Monitor

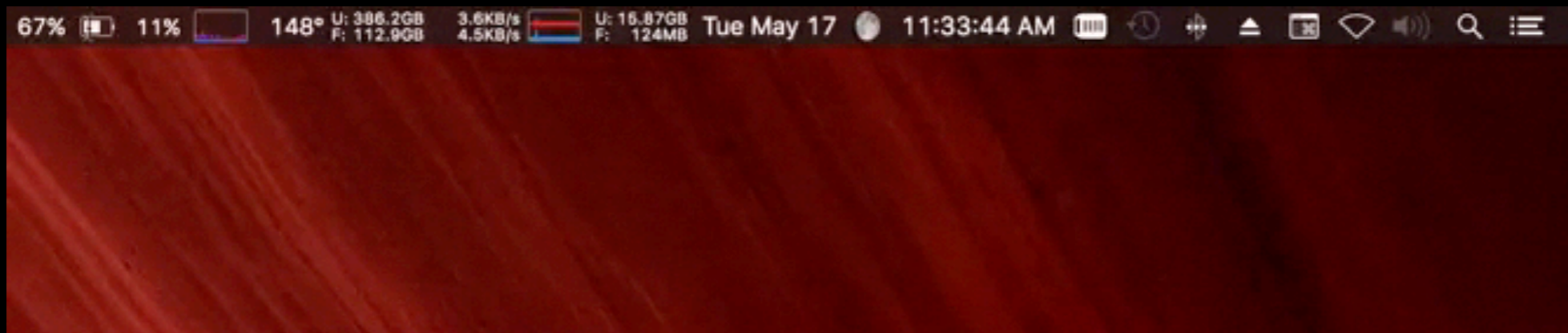
- Built into OS X
- /Applications/Utilities/Activity Monitor
- Real-time output of CPU, RAM, Network usage, also shows emulation
- Demo->



# Tangent - Cool Stuff Found

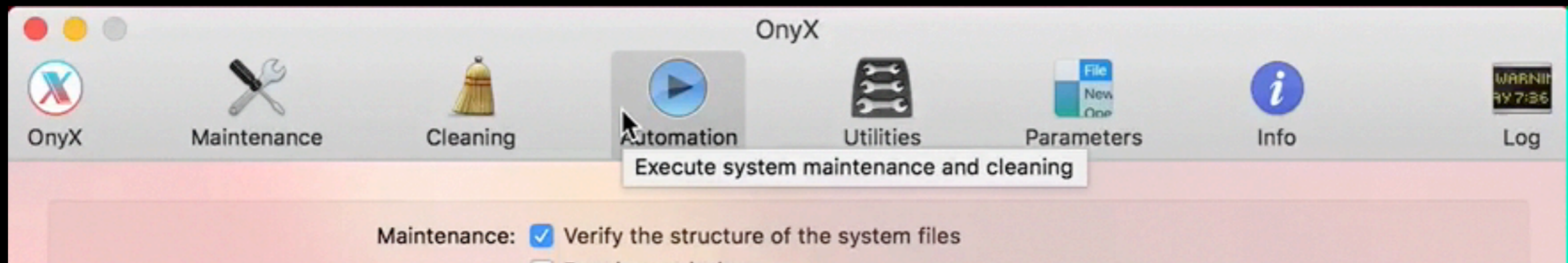
## iStat Menus

- At-a-glance access to System State/health
- Memory, Network, Disk, CPU Usage, Temperature in the menu bar
- <http://bjango.com/mac/istatmenus/> - US\$18



# Running Clean File/Cache Cleanup

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



# Tangent - Cool Stuff Found

## OmniDiskSweeper

- Finds sizes of everything on your drive
- Free at [www.omnigroup.com](http://www.omnigroup.com)
- Demo->

# 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, OS X's RAM, virtual memory and caches can become full and fragmented
- The BIG secret:
  - REBOOT!

# Running Clean

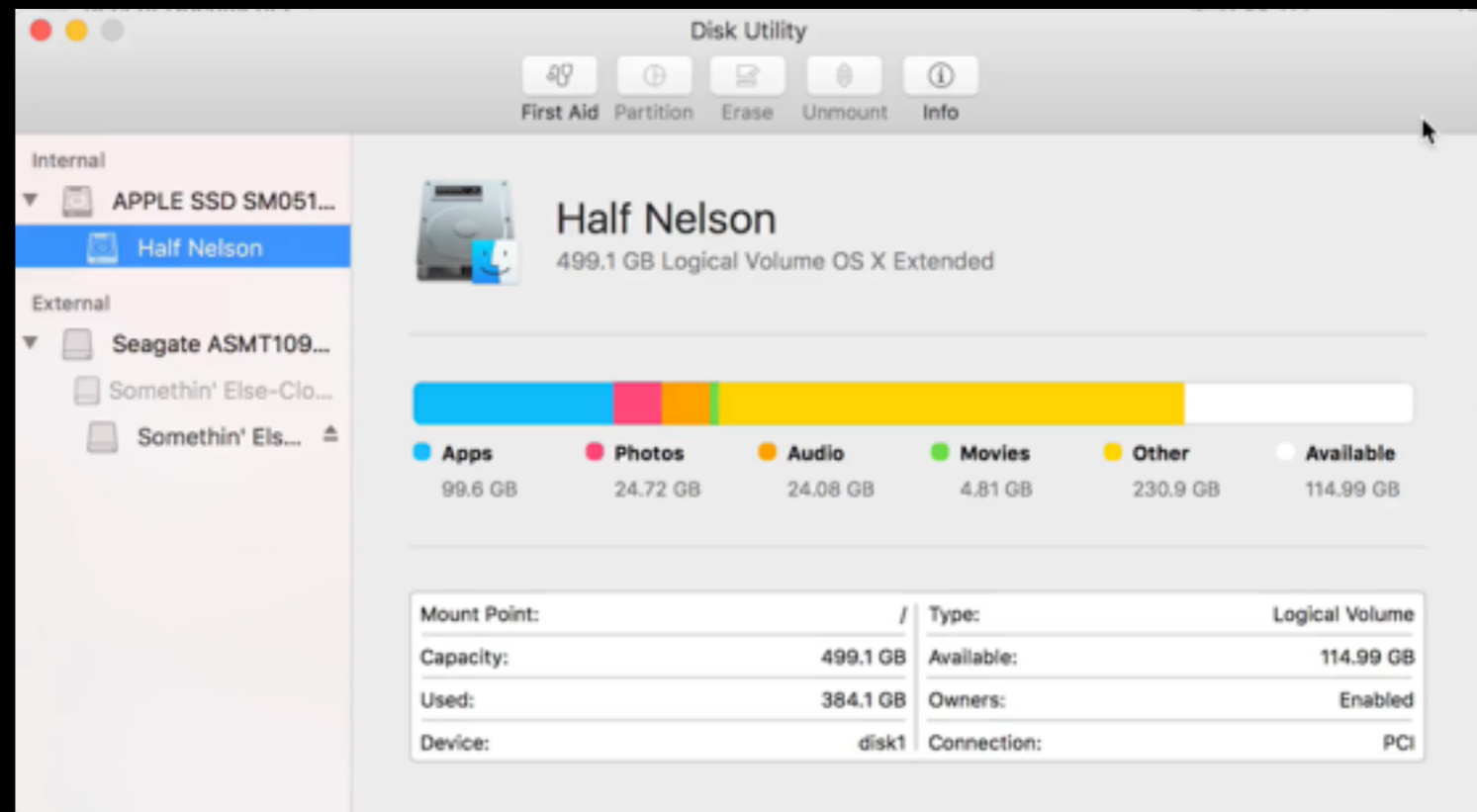
## What we've learned

- Clean up system startup
  - Login Items
  - Launchd (with Lingon)
- Clean caches (manually or using OnyX)
- Reboot regularly!

# Preventative Maintenance

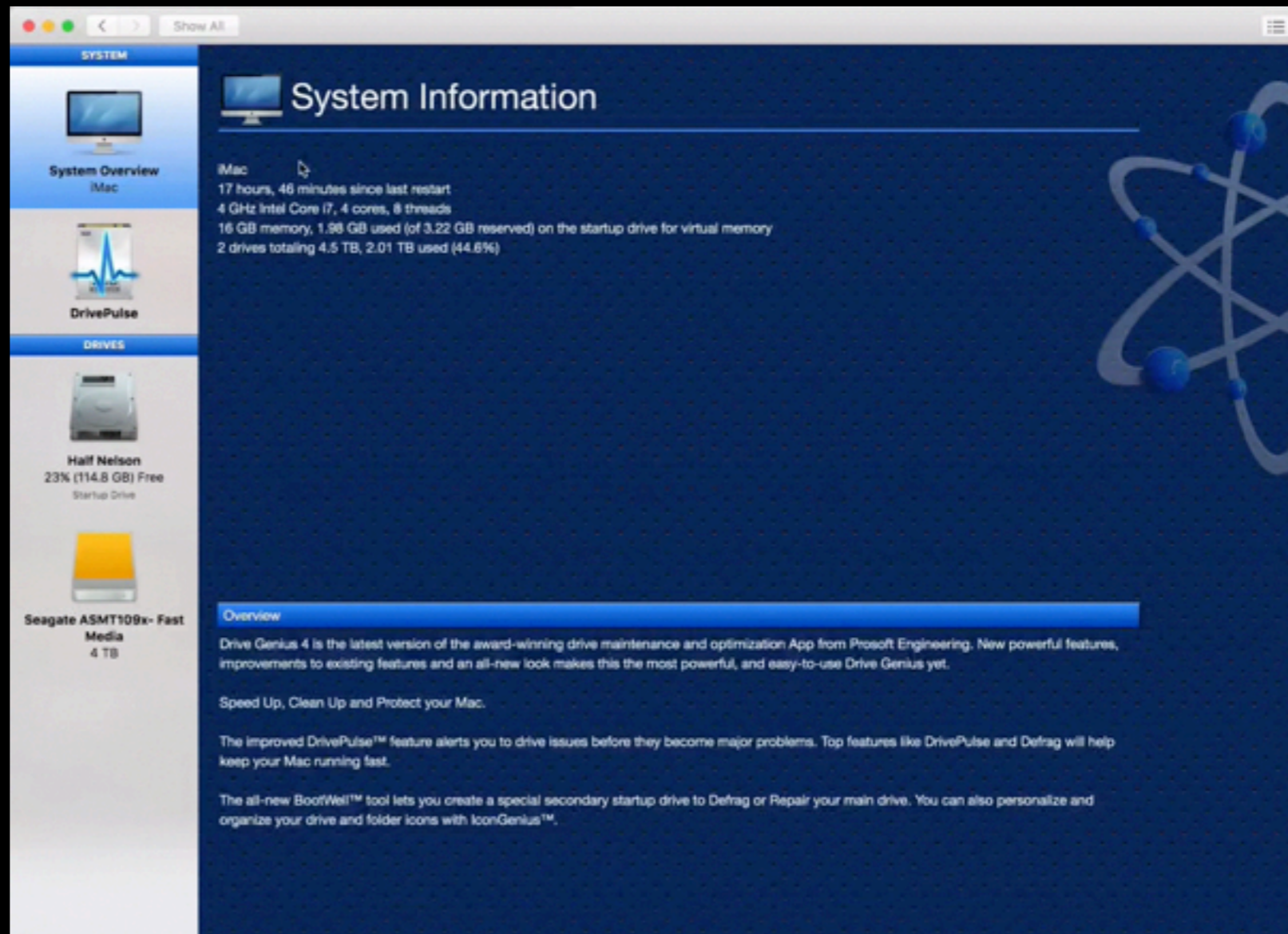
## Disk Utility

- Repair File System
- File System Repair can be run from boot drive. Better if run from Recovery Partition with CMD-R at boot.



# Preventative Maintenance Drive Genius 4

- Rebuild Directory
- Repair Directory
- Defragment Disk
- Surface Scan (Integrity Check)
- Repartition
- Duplicates
- Drive Pulse
- [www.prosofteng.com](http://www.prosofteng.com)  
\$99.00





# Tangent

## Defragmenting/Optimization

- NOT FOR SSDs!
- Used to be all but mandatory
- Unix changes a lot of that
  - 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 first!

# Mac Bliss

## SSD Drives

- Ongoing MGG Obsession
- Less and less expensive
  - 240 GB = \$70
  - 480 GB = \$129
  - 960 GB = \$269
- System-wide Speed Upgrade
  - Reduces seek latency to (nearly) zero
- Don't defrag!
- Kingston, Crucial, OWC, OCZ, Samsung

# Preventative Maintenance Command Line Startup

- Boot to Single User Mode with Command-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

## Disk Overview

- Directory Repair
  - Disk Utility
  - Drive Genius
  - 'fsck' 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 *\*should\** 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->Users & Groups
- 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

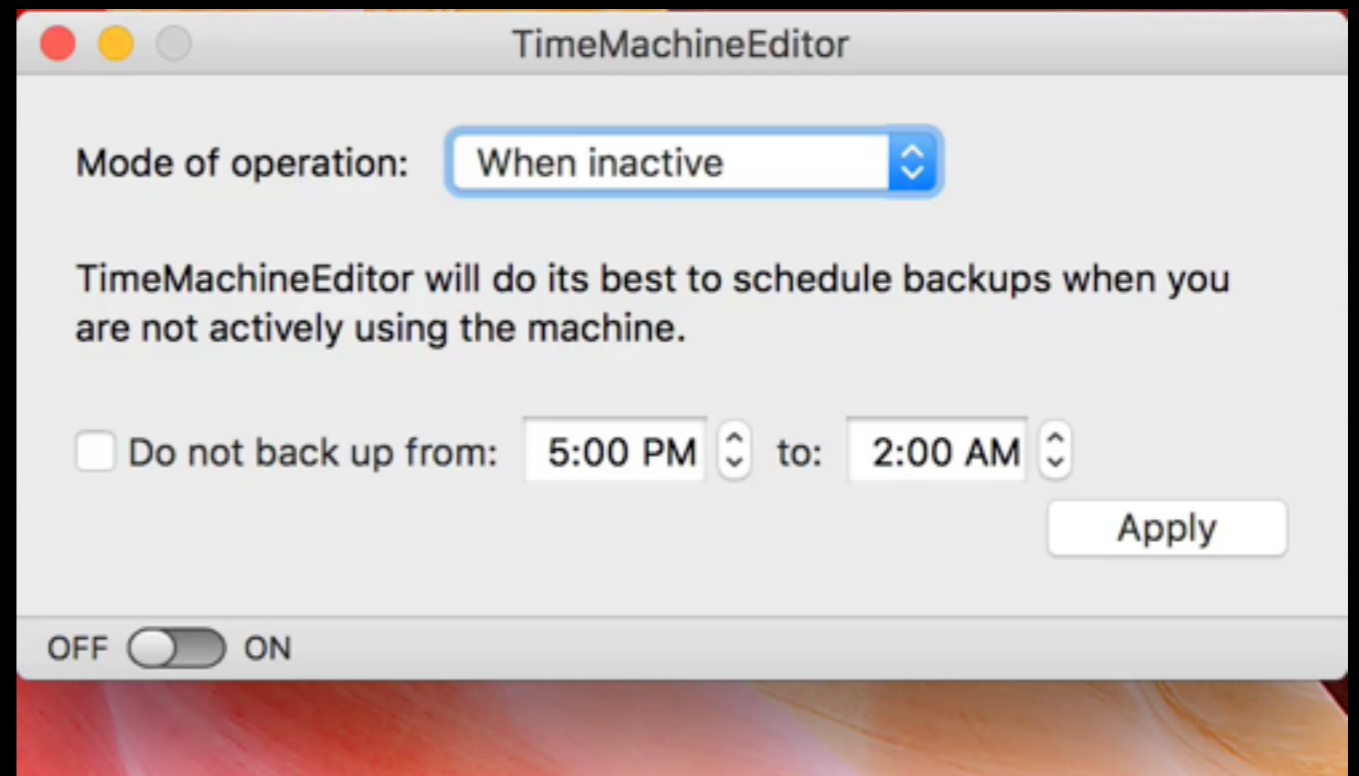
- Well, rebooting doesn't hurt
- But Backing Up is better
  - Time Machine - Built into OS X
  - Carbon Copy Cloner - <http://bombich.com>
  - Prosoft Data Backup - <http://www.prosofteng.com/>



# Tangent - Cool Stuff Found

## TimeMachineEditor

- Time Machine Backs Up Every Hour
- Can slow down your machine
- <http://timesoftware.free.fr/timemachineeditor/>
- Must Turn Time Machine Off
- Demo->



# Preventative Maintenance

## What we've learned

- Keep our drives happy
- Run system maintenance scripts
- Create a test user
- The Secret:
  - **BACKUP!**
- and as a bonus...
  - **REBOOT!**

# Disaster Strikes Machine Won't Boot

- Go to command line, run 'fsck'
- If that finds problems, it will fix them and automatically run again until it runs clean.
- Boot from Recovery Mode (Cmd-R) and run Disk Utility
- Boot from Drive Genius and rebuild directory
- Target-disk mode to another Mac to copy data and punt!

# Disaster Strikes

## Data Recovery

- 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 Genius Bar.
  - Genius Bar diagnostics are FREE
  - 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/single-use mode first
- Boot from Recovery Mode and Run Disk Utility
- Then 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!

# Mac Bliss - Battery Conditioning

- Check System Profiler for Full charge capacity (mAh) and Cycle count
- Full charge capacity Max is different for each. Most above 5000 (4000 for Airs) when new. Apple allows for 20% degradation.
- If cycle count is <300 on removables or <1000 on built-in, still covered if you have AppleCare or Warranty.
- Don't Leave Charging 100% of time.
- Apple says discharge once/month, I say twice, at least.
- Abuse your battery. Run FruitJuice!
  - <http://fruitjuiceapp.com>

# Mac Bliss

## Hazel

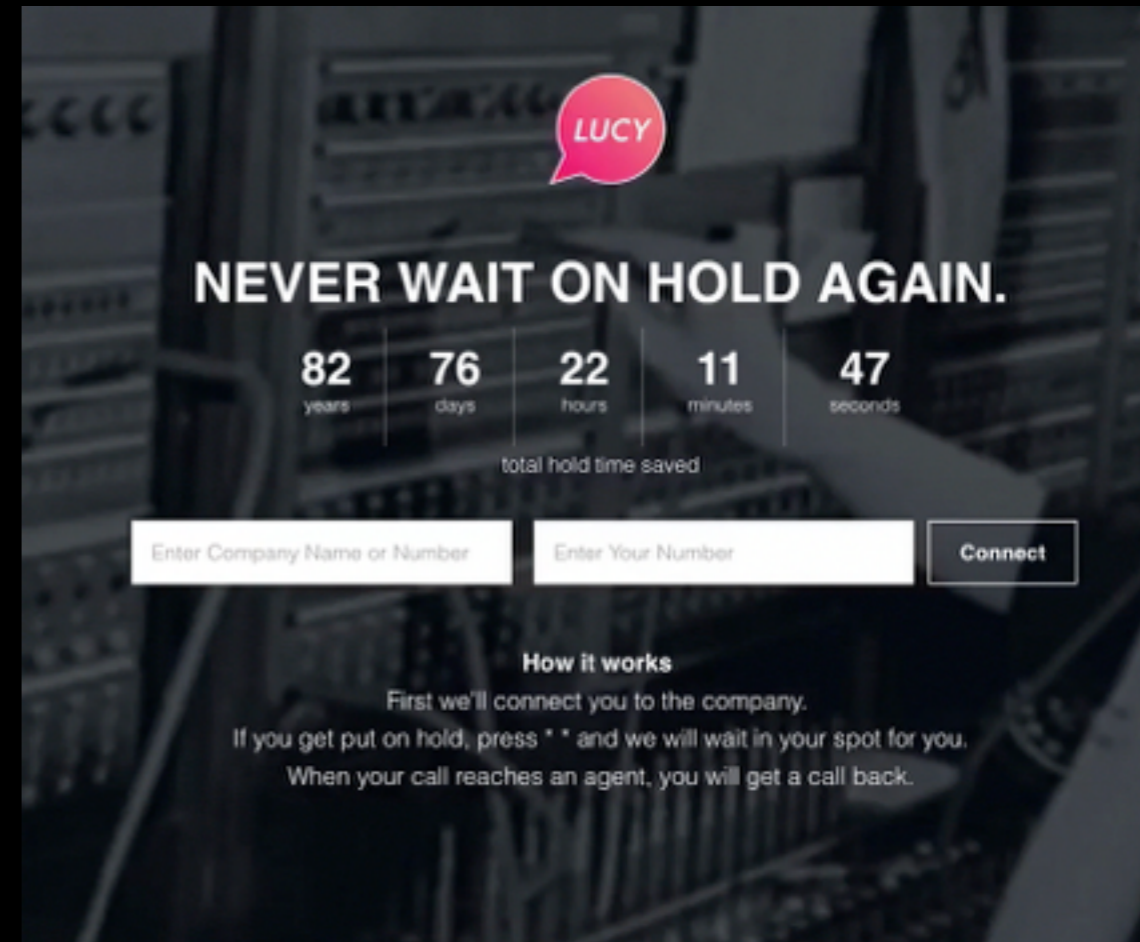


- Automated Organization for your Mac
- Watches your files and folders so you don't have to
- Auto-sort downloads
- Delete support files along with apps
- Auto-empty trash on schedule
- \$32 from [Noodlesoft.com](http://Noodlesoft.com)
- Demo(s)! ->



# Mac Bliss LucyPhone

- Waits on hold so you don't have to.
- Calls you back when you're needed.
- Free!
- From your Mac (lucyphone.com) or iDevice (dedicated app)
- Demo->

A screenshot of the LucyPhone website. The background is a dark, blurred image of a city skyline. At the top center is a pink speech bubble logo with the word "LUCY" in white. Below the logo, the text "NEVER WAIT ON HOLD AGAIN." is displayed in white. Underneath this text is a statistics section showing "82 years", "76 days", "22 hours", "11 minutes", and "47 seconds" in white, with "total hold time saved" written below them. Below the statistics are two white input fields: "Enter Company Name or Number" and "Enter Your Number", followed by a dark "Connect" button. At the bottom, the text "How it works" is followed by a paragraph explaining the service: "First we'll connect you to the company. If you get put on hold, press \* \* and we will wait in your spot for you. When your call reaches an agent, you will get a call back."

# Mac Bliss

## PowerLine Networking

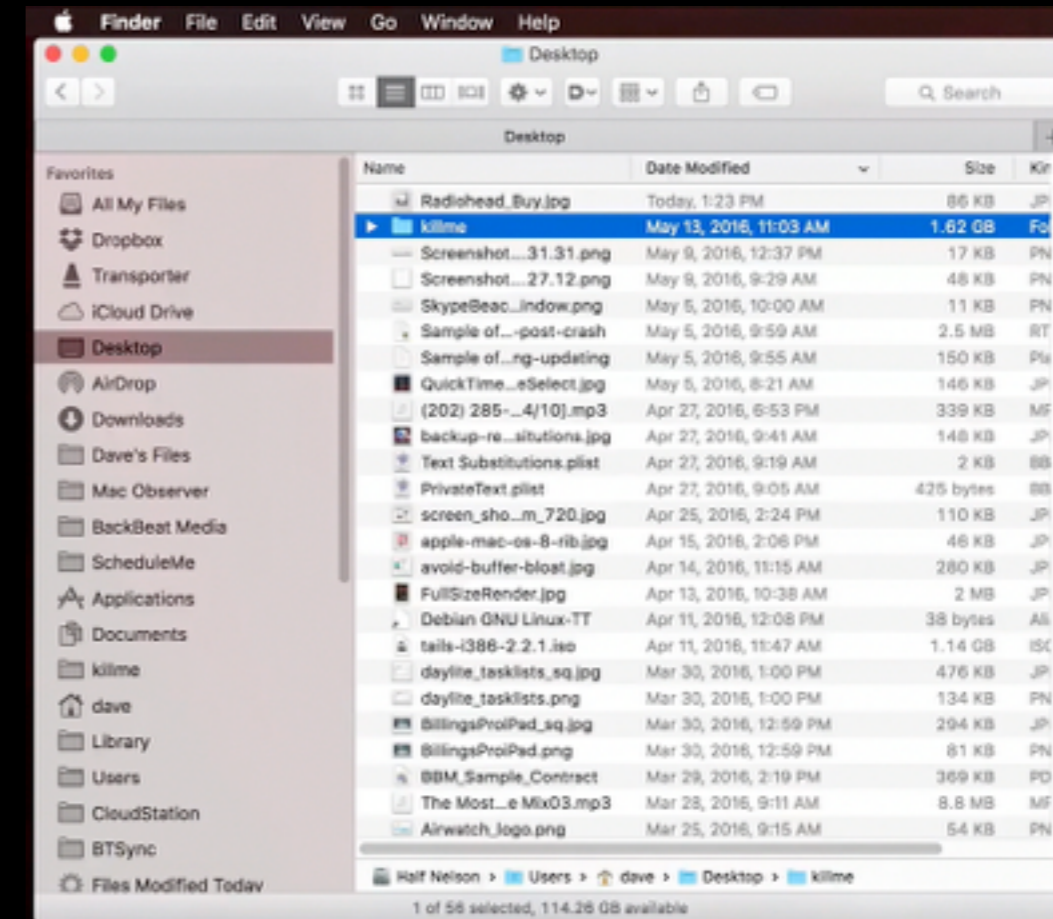


- Use your electrical system to transmit Ethernet signals
- Get PowerLine AV, not previous models
- 200Mbps max, usually about 100Mbps
- Can span circuits now
- Connect two WiFi Access Points Together
- \$35/pair for TP-Link AV500 2-pack at [amazon.com](https://www.amazon.com)

# Mac Bliss

## Speeding up Finder

- Disable “Calculate all sizes” in list view
- View->As List
- View->Show View Options
- Reduces disk access when browsing folders



# Wrap Up/Q&A

- Visit <http://www.macobserver.com/>
- [dave@macobserver.com](mailto:dave@macobserver.com)
- [feedback@macgeekgab.com](mailto:feedback@macgeekgab.com)
- Yes, [feedback@macgeekgab.com](mailto:feedback@macgeekgab.com)