Backing Up Our Apple Devices

with Dave Hamilton

Who are we?

- Dave says: I'll go first
  - Mac Observer - Over 20 years
  - Mac Geek Gab Podcast - celebrating our 14th year
  - Geek... forever!

Who are we?

- Your turn
  - Mac owners?
  - Less than one year?
  - More than 5 years?
  - Do you back-up?

What you'll learn

- Why we backup

- What to backup

- Different types of backups

- How (and how often) to backup

- How to make sure you're backups will help!

First... why?
What are the benefits?

- Start with the obvious:

    you don't want to lose data

- You also don't want to lose time

- Save you if hardware dies/malfunctions

- Save you when hardware goes missing/stolen

- Save you if YOU make a mistake

What should I back up?

- Anything you're not willing to lose
  - Pictures, Movies, Data created by others
- Anything you don't want to recreate
  - Work documents, presentations, spreadsheets
- Your system files, Applications, and Settings
- Anything else?

Definitions of a Back-up

- Automated

- Verified

- Restorable
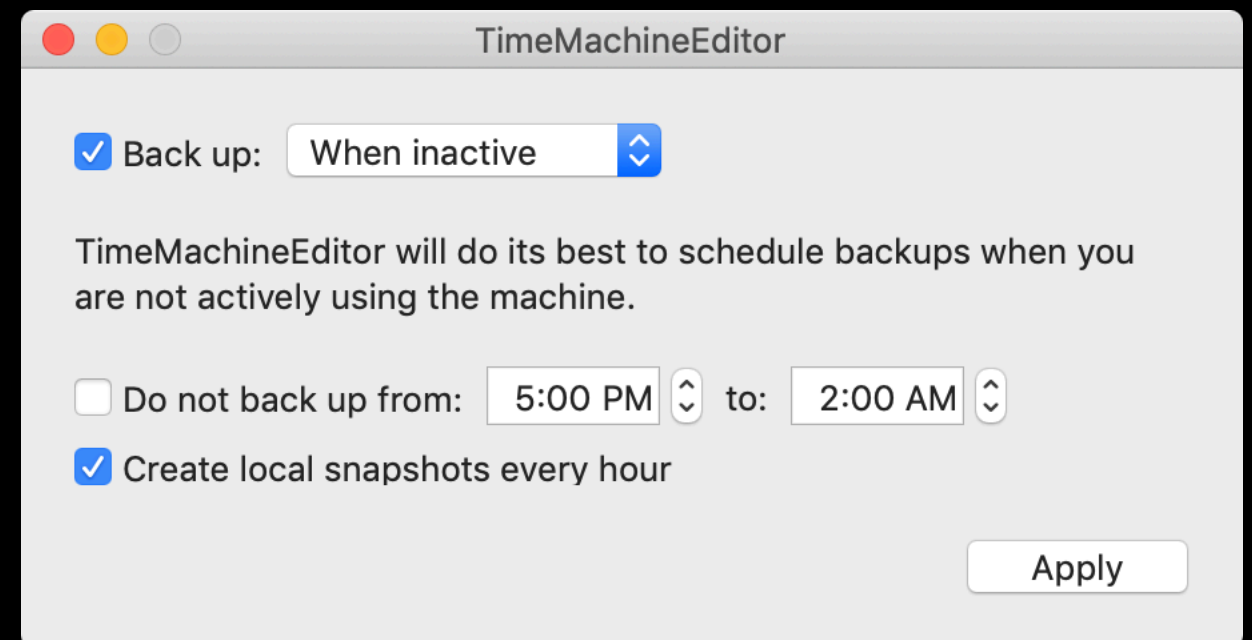
Time Machine

- Hourly, Daily, Weekly, Monthly

- Requires additional drive as destination

  - Internal

  - External

  - Network

  - To Restore, you have to copy files back to original/other drive

- Pros: Automated, Incremental, Easy, Free

- Cons: Non-bootable, Not (really) Verified
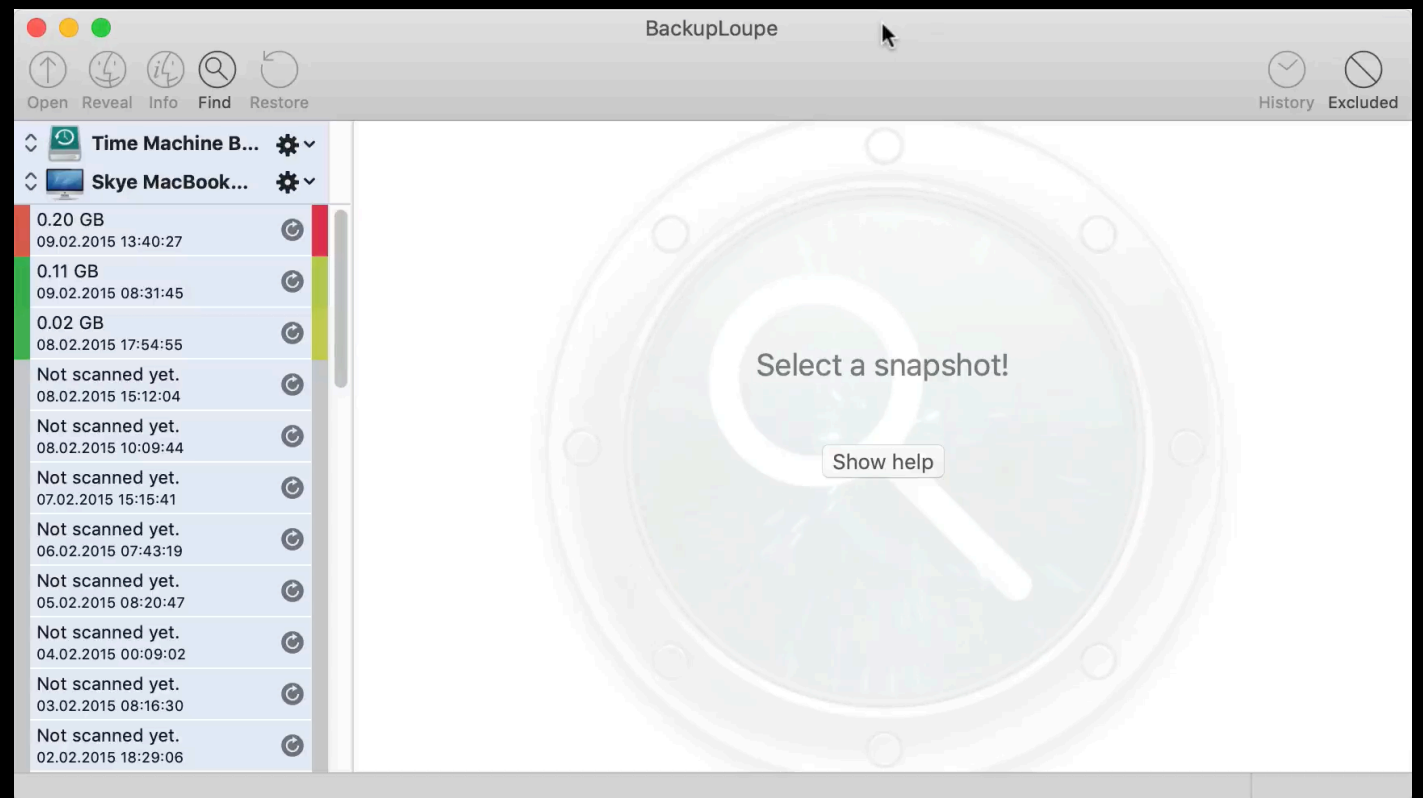
Cool Stuff Found
TimeMachineEditor

- Time Machine Backs Up Every Hour

- Can slow down your machine

- http:// timesoftware.free.fr/ timemachineeditor/

- Must Turn Time Machine Off

- Demo->

Cool Stuff Found BackupLoupe

- Time Machine is rather secretive

- If only you knew WHAT was being backed up...

- BackupLoupe from http://soma-zone.com/ $5

- Demo->

SuperDuper & Carbon Copy Cloner

- Clone Backup to disk, folder, or disk image

- Requires additional drive (internal, external)

- Can be time-scheduled, or when device connected

- Smart Update, incremental copy

- Restore: copy back OR boot from backup

- SD: US$27.95, http://www.shirt-pocket.com/
  CCC: US$32+, http://www.bombich.com/

- Pros: Bootable backup

- Cons: not versioned

"Cloud" Backups

- "Cloud" is simply some server somewhere else
- Pros:
  - Protects against fire/theft.
  - Don't need a destination drive
  - Can backup from (almost) any location with Internet
- Cons:
  - Need Internet
  - Speed (1000 GB @ 10 Mbps upstream = 10 days).
  - Be aware of security.
  - Cost: Monthly/Annual subscription

"Cloud" Backups

- Two types of Cloud backups

- Immediate

  - Something always running, syncs as soon as file is created/changed

- Timed

  - Like Time Machine

  - On a schedule

  - Simply saves to the Cloud instead of locally

- Some more secure than others

SYNC IS NOT BACKUP

- Except, well, kinda it is.

iCloud Drive as Sync

- iCloud Drive can Sync anything you put in its folder: "iCloud Drive" in Finder sidebar

- Everything's available from all iCloud-connected Macs and iOS devices

- Also can specify to have your Documents and Desktop Folders Synced

DropBox

- Immediate Backup

- "Freemium" model

  - 2GB Free, pay for more

  - 1TB = $99/yr, 2TB = $199/yr

- Designate one folder, contents of which are synced

- Share sub-folders with other users

- Access files from the web

  - Version Control

- Sync amongst all your Macs/Windows/iOS Devices

- Secure until a subpoena

- http://www.dropbox.com/

Cloud Sync Comparison

Cloud	Free	200GB	1TB	2TB	More
iCloud Drive	5GB	$36		$120	
Dropbox	2GB		$99	$199	$720 ("Unlimited")
Google Drive	15GB	$30		$100	$1200 (10TB)
box.net	10GB		$120		$540 (Unlimited)

Timed Cloud Backups
Lots o' Options

- All pricing annualized

- BackBlaze: Unlimited for $72

- Carbonite: Unlimited for $72

- Arq Cloud: 1TB for $60

Arq Backup

- Arq: Backup to Almost Any Cloud.

- Buy the software for $50, bring your own cloud.

  - Amazon S3

  - Wasabi

  - Backblaze B2

  - Google Drive

  - Dropbox

- https://ArqBackup.com

Time Capsule Alternatives

- The reality: Time Machine is much more reliable on **direct-attached storage**.

- Network storage still works, just not as easily.

- One caveat for all: Time Machine will eat 100% of the storage you show it.

Network Attached Storage

- Device shared on your network

- Multiple users

- Always on

- Often RAID or other redundancy

- Often Additional features

  - Streaming music, movies, file sharing, more

"Smart" NAS Options

- ~~Time Capsule - $275 for 2TB~~

- WD MyCloud - 4TB for $170

  - Auto-backup for computer and phone

- Buffalo LinkStation 4TB for $190

 - Similar, adds some more "NAS" type features like Bittorrent client and DLNA server

Smart RAID/NAS

- Redundant disks, easily configurable

- Synology 2-bay=$170, 4-bay= $370

- QNAP 2-bay=$170, 4-bay=$260

- Drobo 5N2 5-bay=$455

- Comes empty, Multiple drives required

- Two 4 TB drives at $109 ea net 3.8 TB storage

- Protected against failing drive(s)

- Can upgrade storage by adding/replacing drives at any time

- Hot-swappable

Private Cloud - Synology Drive

- Just like Dropbox, except you host it yourself.

- Works local and remote.

- Synology Drive is one Example

- It's free, so long as you have a Synology DiskStation.

- Demo ->
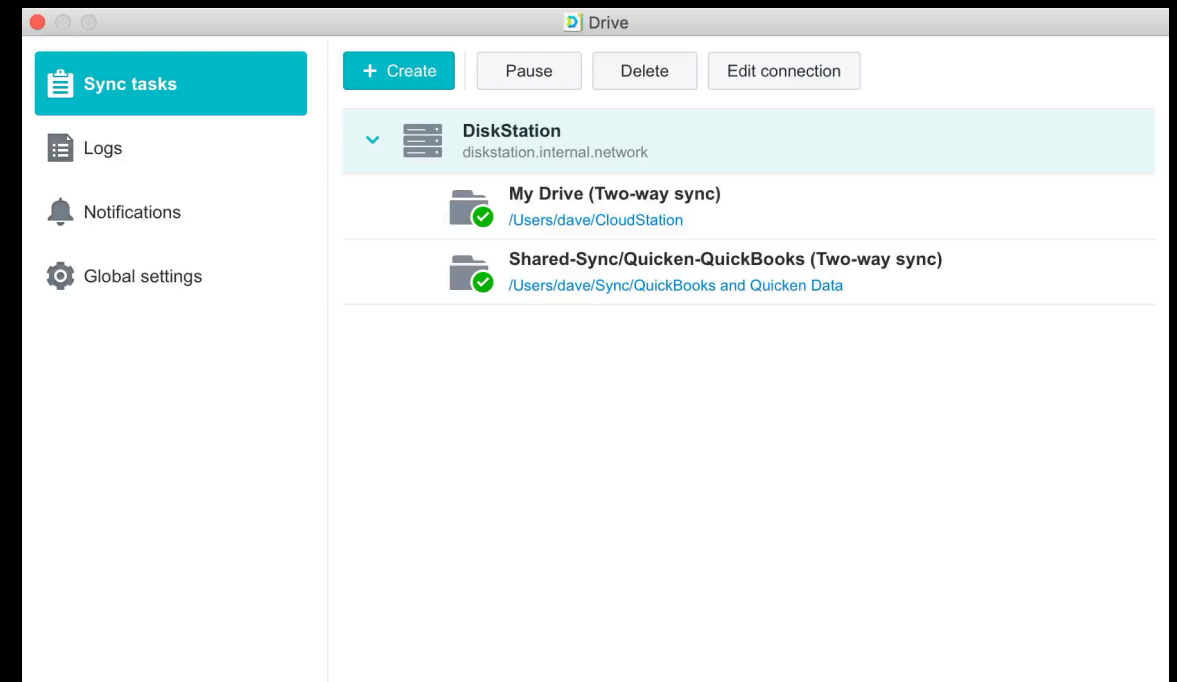
Private Cloud - Resilio Sync

- No server required. Syncs peer-to-peer.

- Used to be called "Bittorrent Sync"

- Works local and remote.

- Basic is free, for selective controls, $60 one-time fee ($99 for families)

What does Dave use?

- Time Machine -> Synology DiskStation

- Nightly (automated) Carbon Copy Cloner clone

- Synology Drive (all my user docs)

  - Backup & Multi-computer Sync

- Backblaze to the Cloud

- Quarterly to disk image on DiskStation

- Also DiskStation via CCC for Movies, Music, Photos

- Individual Application Backups

Individual Application Backups

- Some apps back up their own data

- Quicken, Quickbooks, BusyCal, More.

- Benefit: Easy, controlled access.

- Bigger benefit: restores are generally flawless and painless.

- Demos ->

Dave's Policies and Practices

- Automated or it doesn't happen!

- Practice Restoration *before* you have a problem.

- Calendar a Monthly Checkup.

  - Confirm they've been running

  - Test a Restoration

iOS – Backup

- Apple provides two methods of backing up iOS devices

- iTunes for local backups.

- iCloud for cloud backups.

 - 5GB isn't enough, so you'll almost certainly need more.

iOS – Backup - iMazing

- Better way to manage local iOS backups.

- Selective restore.

- iMazing mini = Free. Just backup and restore.

- iMazing = $45 for full version, manage apps, export data, more.

- Demo->

Acronis True Image Mobile

- Cloud backup for iOS Devices

- Limited to data that is accessible to apps

- Contacts, Photos, Videos, Calendars, Reminders
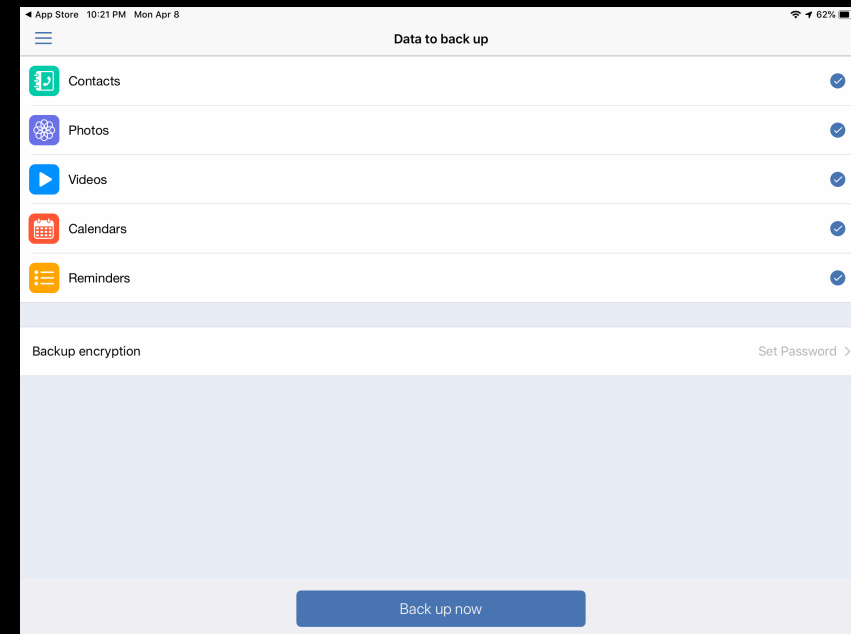
What's Your Tolerance?

- How much data can you afford to lose?
  - This determines your backup frequency.

- How much downtime can you tolerate?
  - Consider restoration time of Time Machine vs. Clone
  - vs. a Spare computer?

Wrap Up/Q&A

- dave@macobserver.com

- http://www.macgeekgab.com/

- http://www.macobserver.com/

- feedback@macgeekgab.com

- yes, he said feedback@macgeekgab.com