

Dr. Strangelove or: How we learned to stop worrying and love the cloud

Washington Apple Pi General Meeting
February 22, 2014

Presenters:
Larry Kerschberg and Roy Wagner



Peter Sellers as
Dr. Strangelove

Your Privacy in the Cloud

- ✦ How private do you want to be?
- ✦ What is wrong with being public?
- ✦ Are you afraid of “The Future”?
- ✦ Know how to control ***your presence*** in the Cloud(s).



What the Government Might Know:

The companies will have to delay releasing the number of national security orders by six months. They also had to promise that if they come up with new technology or new forms of communication, they are not able to reveal that the government can tap into that new technology for two years.

Topics



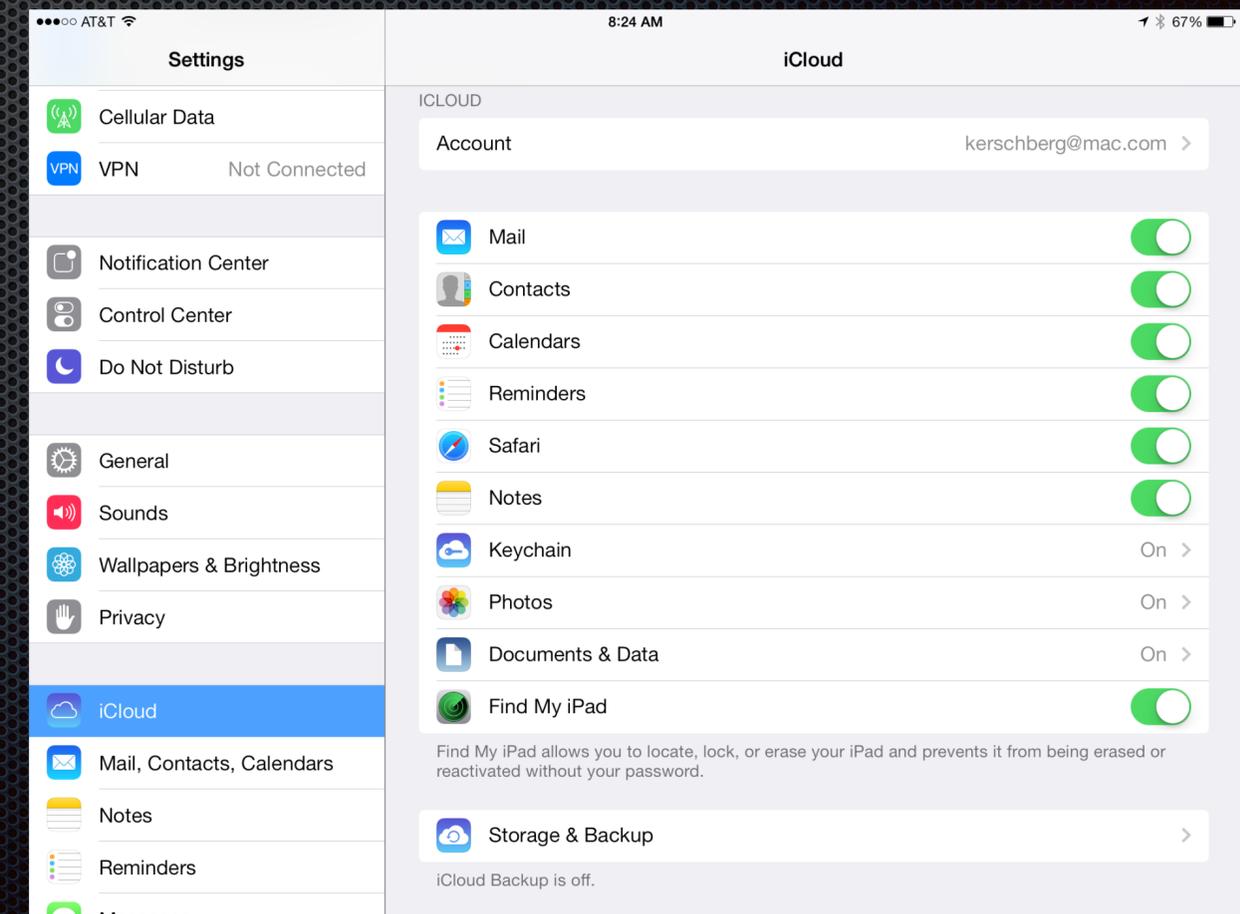
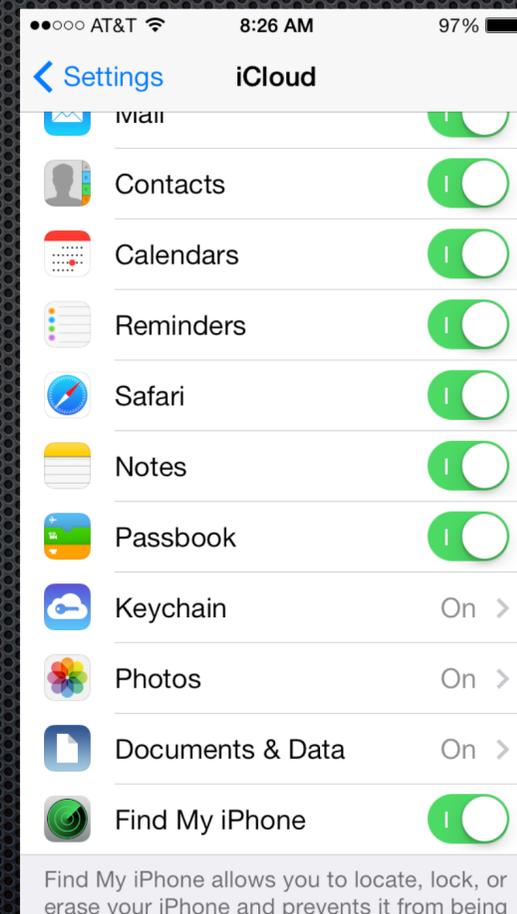
- ✦ iCloud: Getting to know you!
 - ✦ iCloud System Preference Panel
 - ✦ iCloud Keychain (new in OS Mavericks)
 - ✦ iCloud services for iWorks, iTunes, App Store, Photo Stream, etc.
- ✦ Cloud Services for Storage, Synchronization, Backup, and Encryption
- ✦ Demos

Demonstrations

- ✦ iCloud Demos
 - ✦ Apple ID 2-step verification - Larry
 - ✦ iCloud-supported Photography — Roy
 - ✦ iTunes and App Store — Roy
- ✦ Storage and Backup demos
 - ✦ Bitcasa — Roy
 - ✦ Crashplan — Larry
- ✦ Encryption Demos
 - ✦ nCryptedCloud for Dropbox — Larry
 - ✦ TOR for secure browsing — Larry

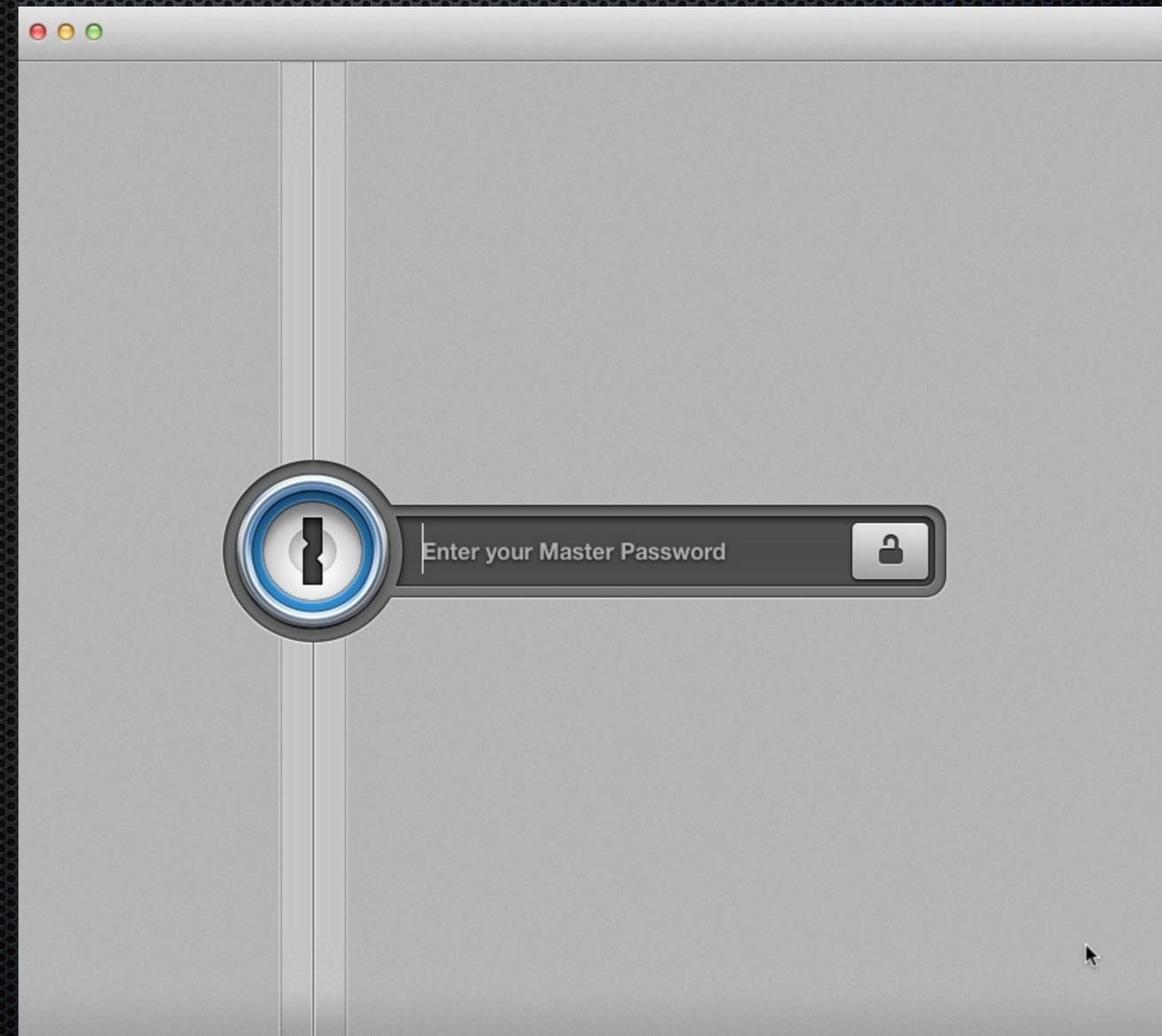
iCloud: Getting to Know You

- ✦ iCloud is Apple's way of providing *the fabric that stitches and syncs our favorite apps together*;
- ✦ iCloud syncs data across apps on Macs and iOS devices;
- ✦ iCloud provides a new feature in Mavericks: Keychain.
- ✦ Keychain that stores your logins and passwords securely, and can log you in to your favorite web sites.



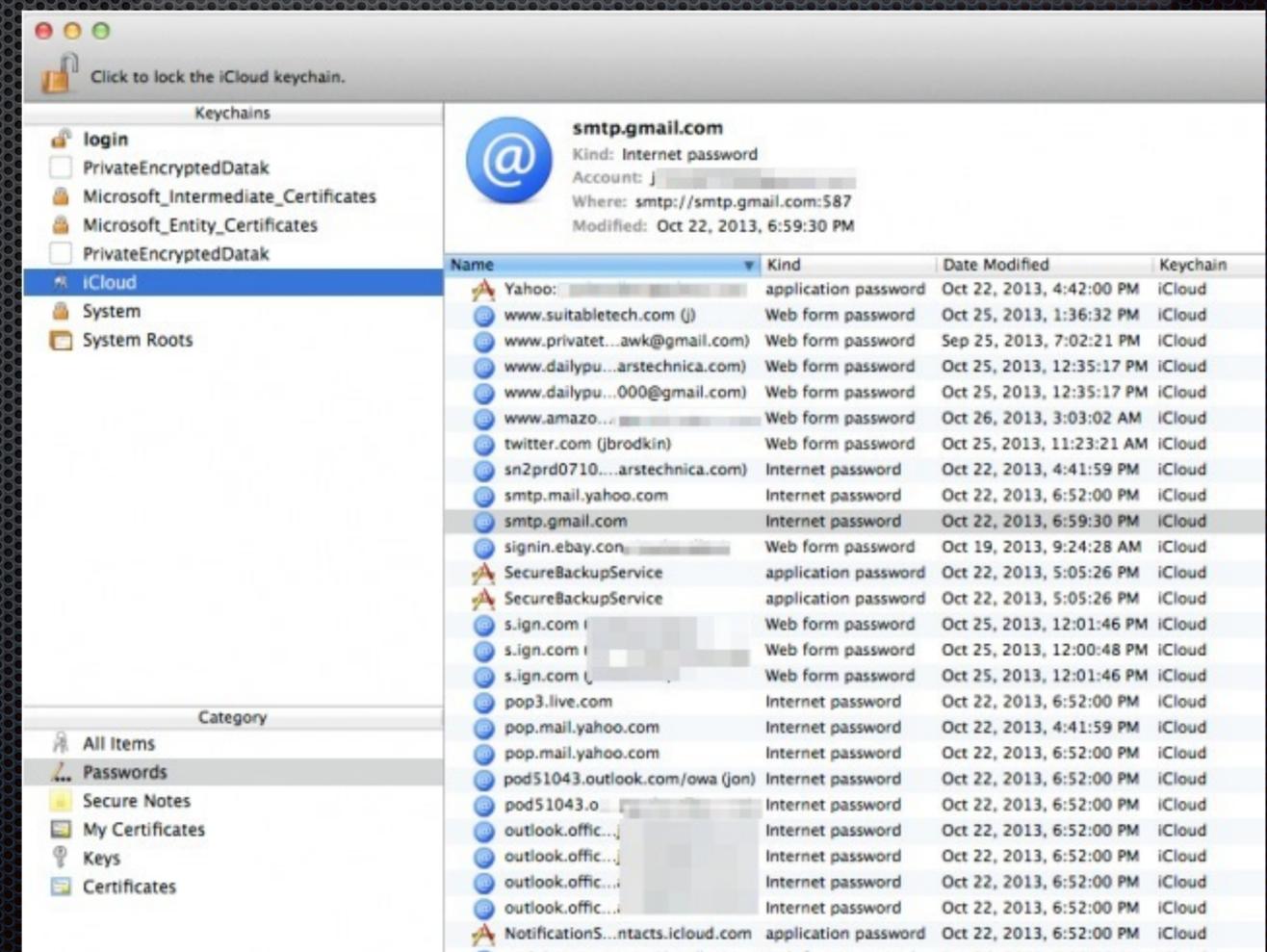
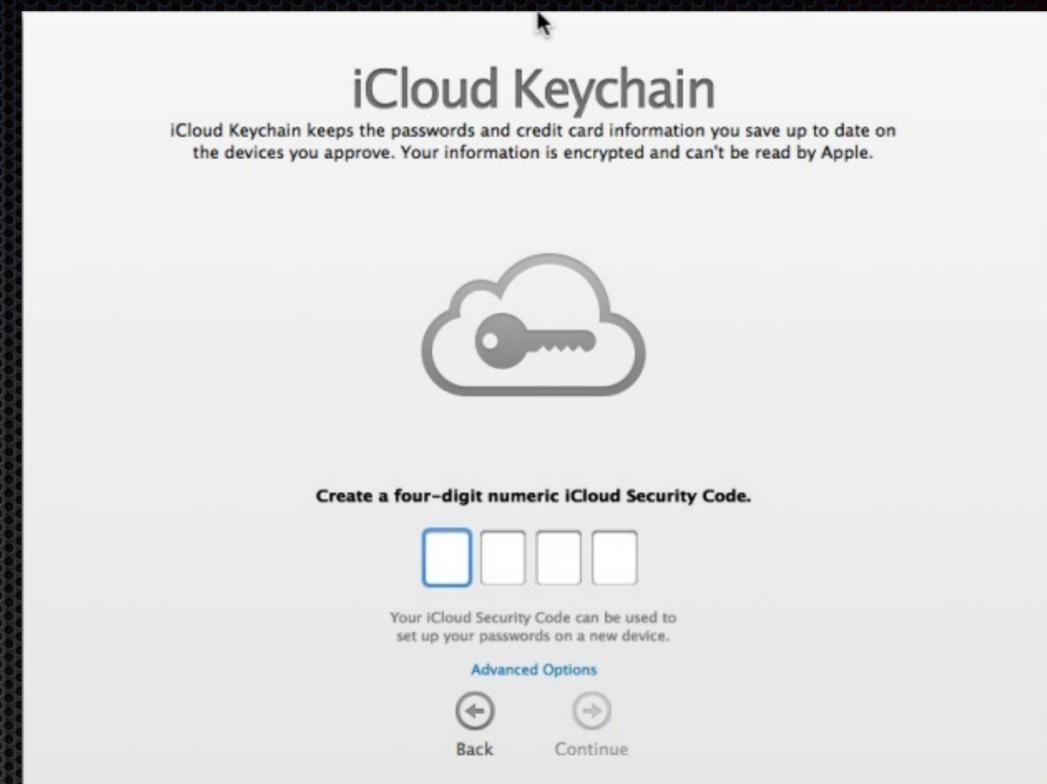
Choosing a Strong Password for your Apple ID

- What is your Apple ID Password?
- How about one that's easy to remember like '1984'?
- Your Apple ID password should be a *strong* password!
- Use 1Password to generate one for you. Pronounceable ones are 'easy' to remember.
- You can also perform 2-step verification for your Apple ID via SMS messages to your phone.
- Now a brief demo on how to do it!



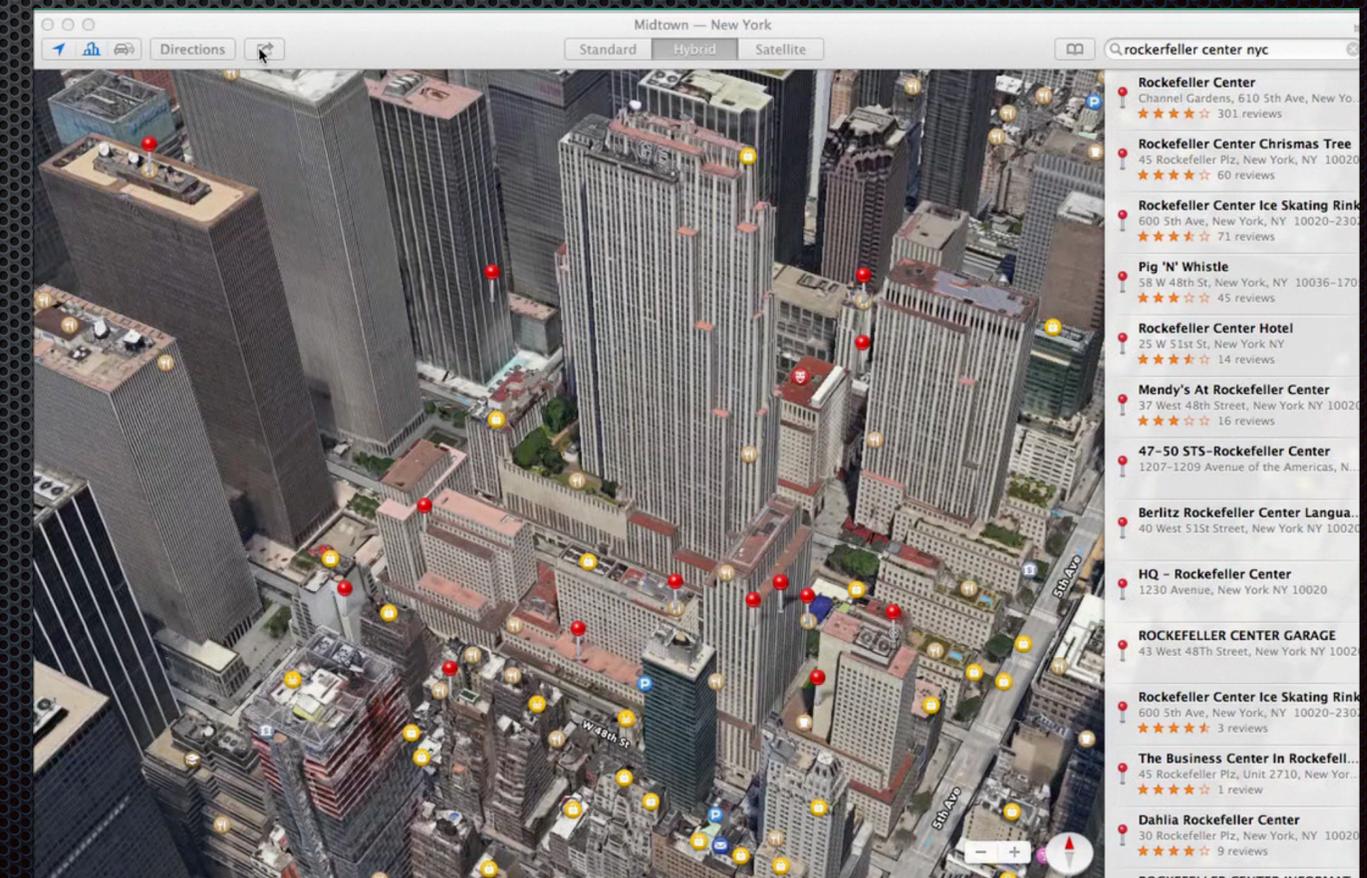
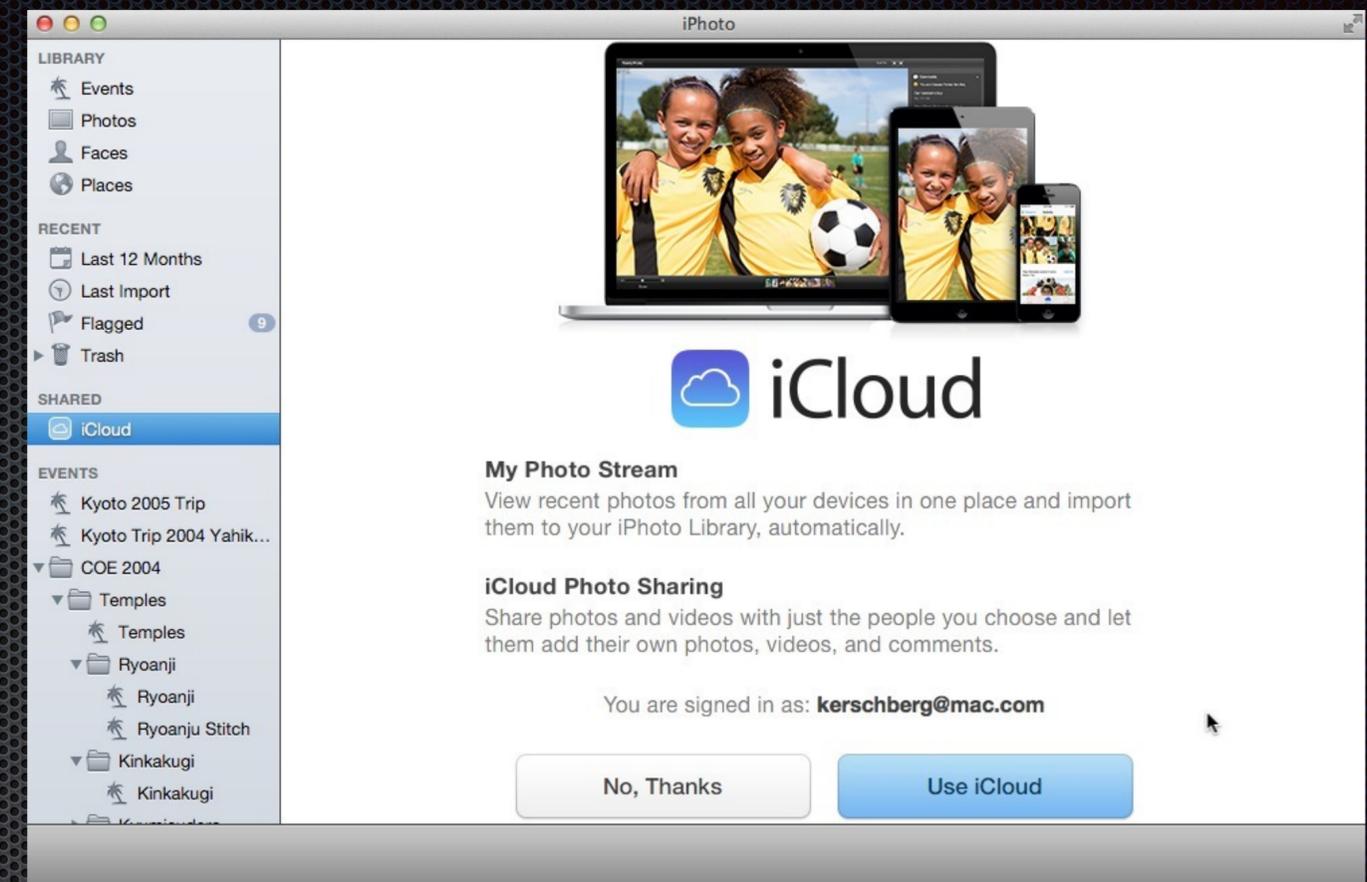
iCloud Keychain

- Available for Mac OSX Mavericks and iOS 7.0.3 for iPhones, iPads, and iPod Touch.
- Choose a 4-digit numeric code to access the keychain across all your devices;
- Keychain will fill in login and password information at a web site;
- Keychain may say it will not save the password because the site asked it not to.
- TIP: You can *override this* by going to Safari preferences for Passwords and clicking on: “Allow AutoFill even for websites that request passwords not be saved”
- You may still want to use 1Password to access your logins and credit card information.



iCloud Services

- ❖ **iWorks** — Keynote, Pages, Numbers, web-based collaboration;
- ❖ **iTunes** — iTunes Match, Stream iTunes-purchased movies and TV episodes to Apple TV, Macs, iPhone and iPad;
- ❖ **App Store** purchases downloadable to all Macs; iTunes store purchases to iPhone and iPad;
- ❖ **Photo Stream** — sharing photos and albums with friends;
- ❖ **Find my iPhone, iPad or Mac**;
- ❖ **iMessages** are encrypted and sync on Mac, iPhone and iPad; Start a conversation on one and finish on another!
- ❖ **Find Friends** — share your location with friends;
- ❖ **Send Map.app addresses** to iPhone and iPad



iCloud

All your latest photos. On all your devices.
Shared with all your favorite people.

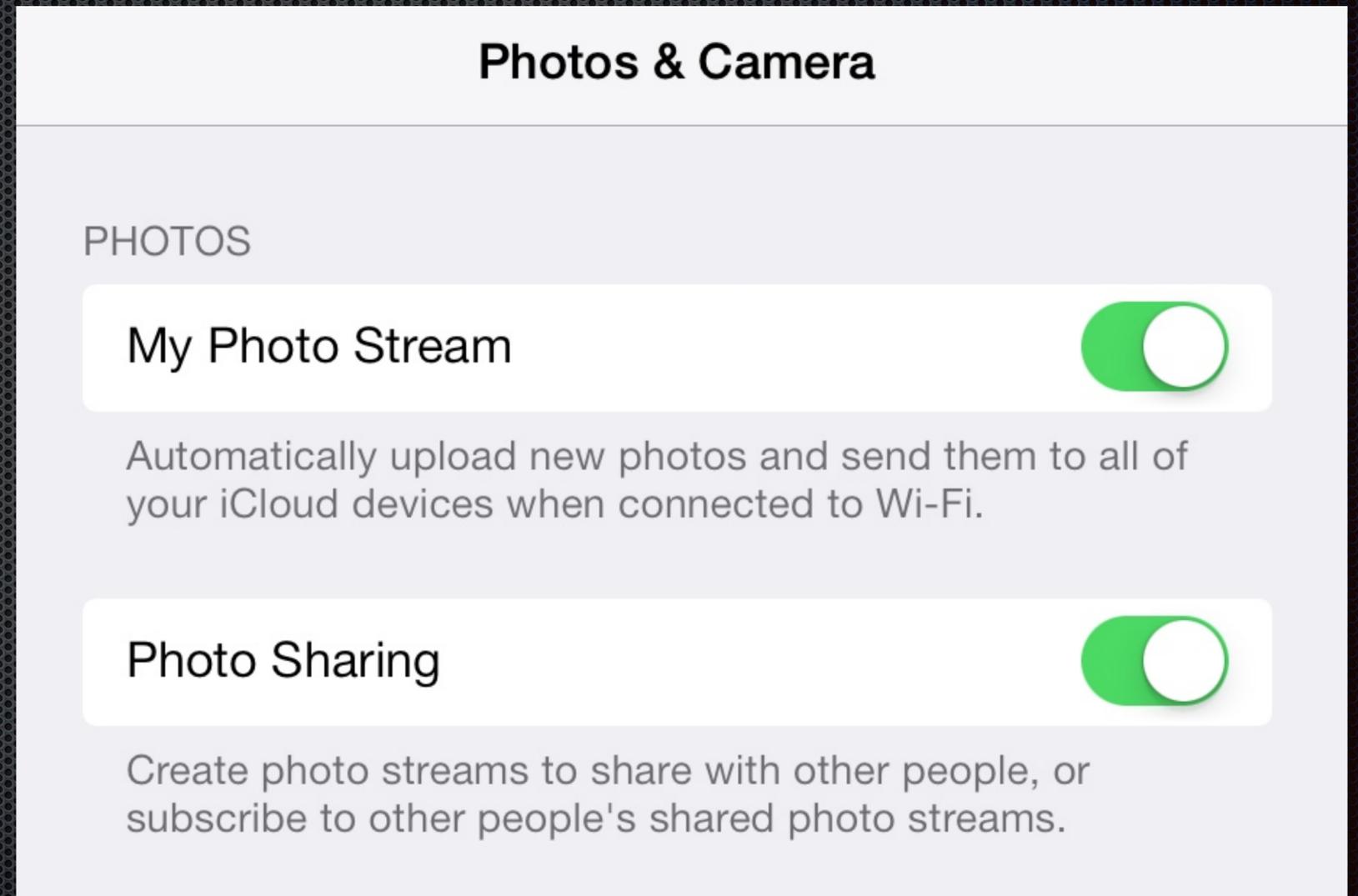
When you take a photo on your iPhone, iPod touch, or iPad, it automatically appears in My Photo Stream, a rolling collection of your last 1000 photos that you can view on all your devices. If you want to keep photos on your Mac, iPhoto can automatically import them into your library. You can also add photos from your library to My Photo Stream so they'll appear on all your other devices. And with iCloud Photo Sharing, you can even create a shared stream and invite friends and family to add their photos, video clips, and comments as often as they want.

[Learn more about iCloud Photo Sharing >](#)



Camera and Photo Stream:

- Settings>Photos & Camera
- Turn On “My Photo Stream”
- Optional: “Photo Sharing”
- Your Last 1000 Photos
- Also Share with Others



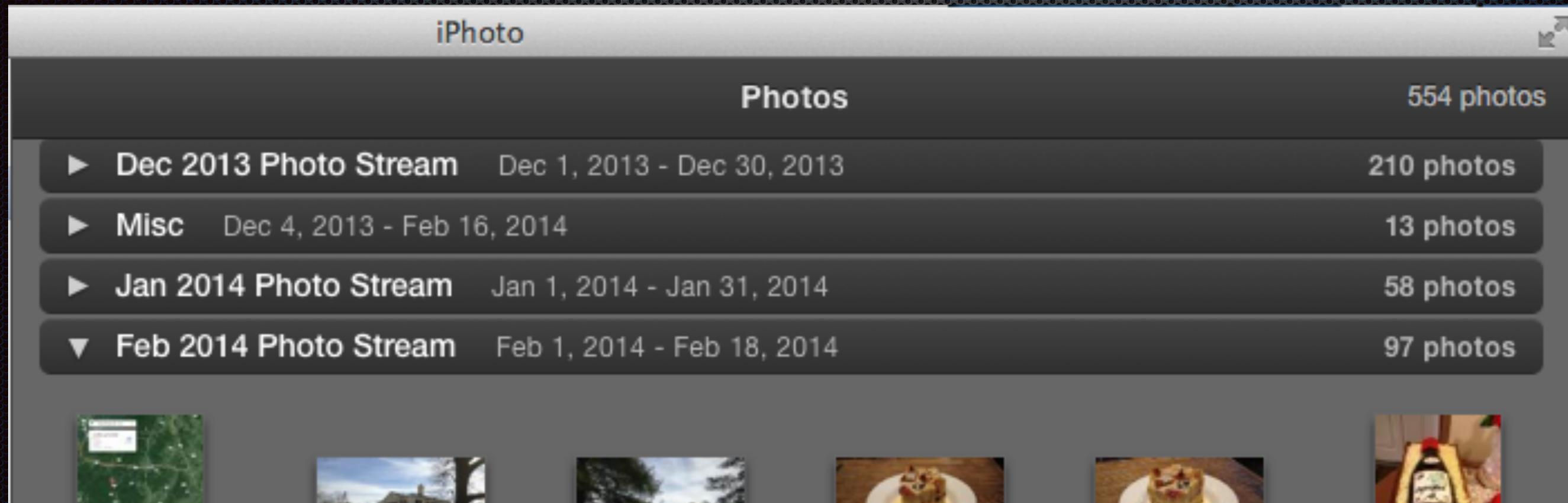
iPhoto and Photo Stream:

- ✦ Preferences>iCloud
- ✦ Select “My Photo Stream”
- ✦ Select “Automatic Import”
- ✦ Optional: “Photo Sharing”
- ✦ Share your Photo Streams with other People



iPhoto and Photo Stream:

- All Your Photos Grouped Together each Month



iTunes and AppleTV:

- ✦ Music, Movies, TV Shows, Podcasts,
- ✦ Audiobooks, Books, Magazines;
- ✦ Apps, and More..
- ✦ Backed Up, even Enhanced;
- ✦ Available Anytime on Any Device.

Windham Hill Sampler '88 ▶ | 🔁 | ⏸
Various Artists (1987)

1	Schonherz And Scott - Wishing Well Schönherz & Scott	4:50	⬇	7
2	Unseen Rain W. A. Mathieu	4:37	⬇	8
3	Road To Hanna Shadowfax	4:03	⬇	9
4	Angel Steps Scott Cossu	3:17	⬇	10
5	Toys Not Ties Nightnoise	4:01	⬇	11
6	Because It's There Michael Hedges	3:16	⬇	

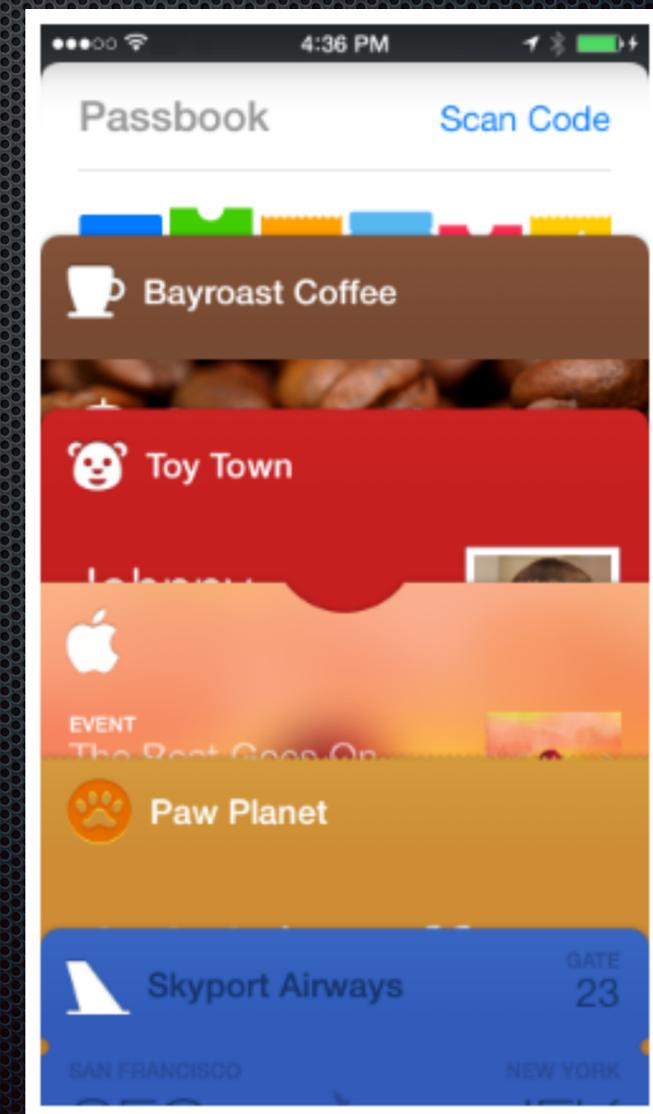
A Winter's Solstice III
Various Artists

A Winter's Solstice IV
Various Artists

60 Great Jazz Classics...
Various Artists

iCloud Money

- ✦ Airline Boarding Passes;
- ✦ Movie Tickets;
- ✦ Gift Cards (Example);
- ✦ Apple: Passbook;
- ✦ Google Wallet; Secure Verification on new iPhones



Cloud Services for Storage, Synchronization, & Backup

- ✦ Dropbox, Google Drive, Box, etc;
- ✦ Dropbox used to sync apps settings and data across Macs and iOS devices: 1Password, Papers 3, DevonThink Pro Office, etc.
- ✦ 1Password syncs wirelessly to iCloud and Dropbox;
- ✦ Bitcasa provides infinite storage!
- ✦ Crashplan provides cloud-based backup for Macs, iPads, iPhone.



iCloud Storage with Bitcasa:

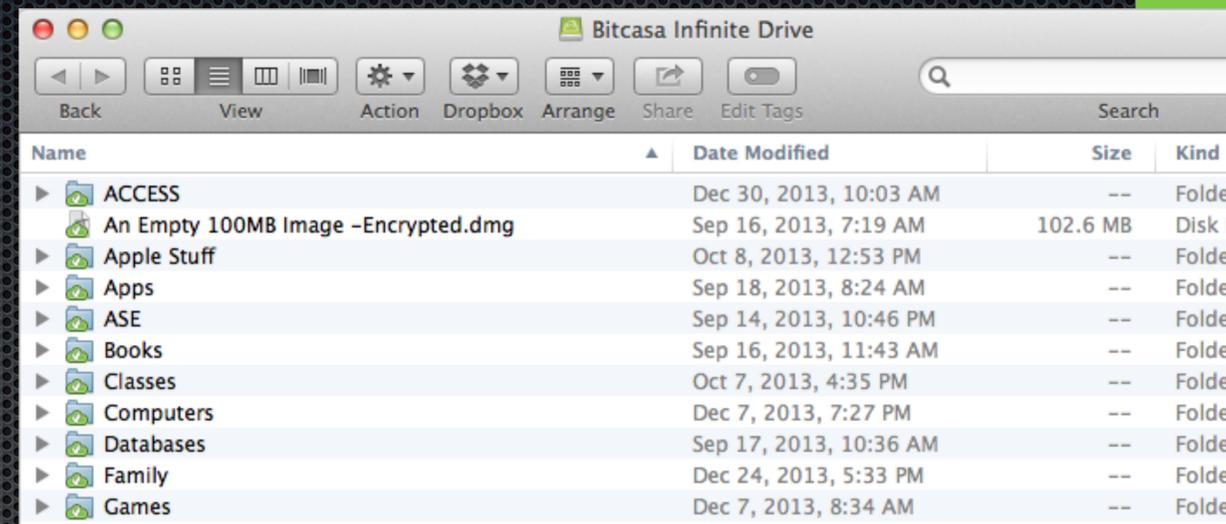
- ✦ Encrypt locally;
- ✦ Save in the Cloud;
- ✦ Access from Any Device (Apple or PC);
- ✦ Photo Stream — sharing photos and albums with friends;
- ✦ Negative: Now Costly



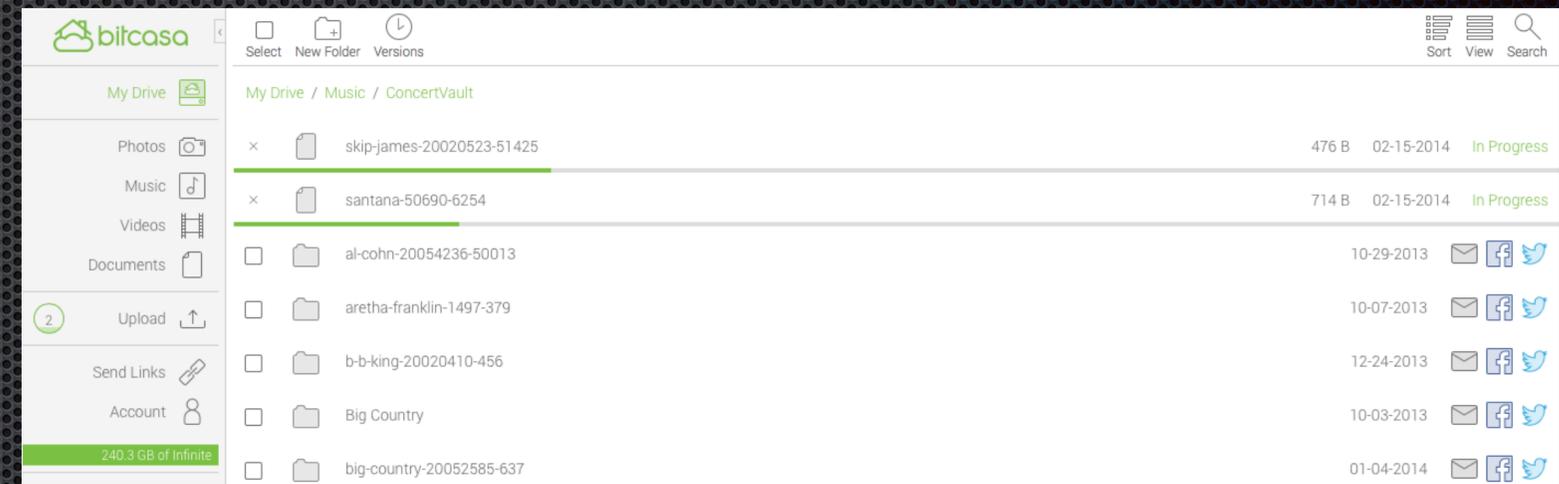
Bitcasa Examples:



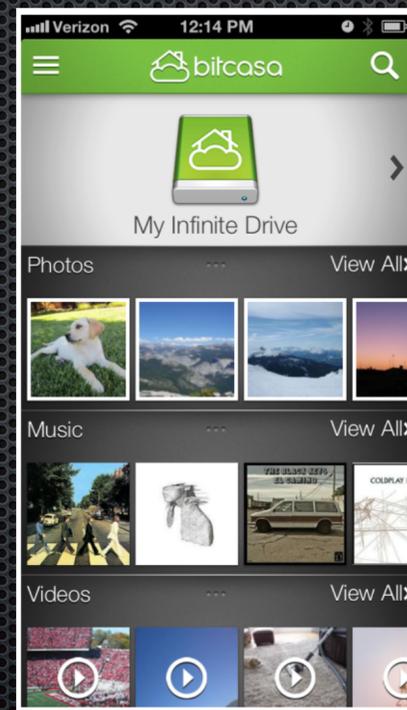
• Desktop;



• Browser;



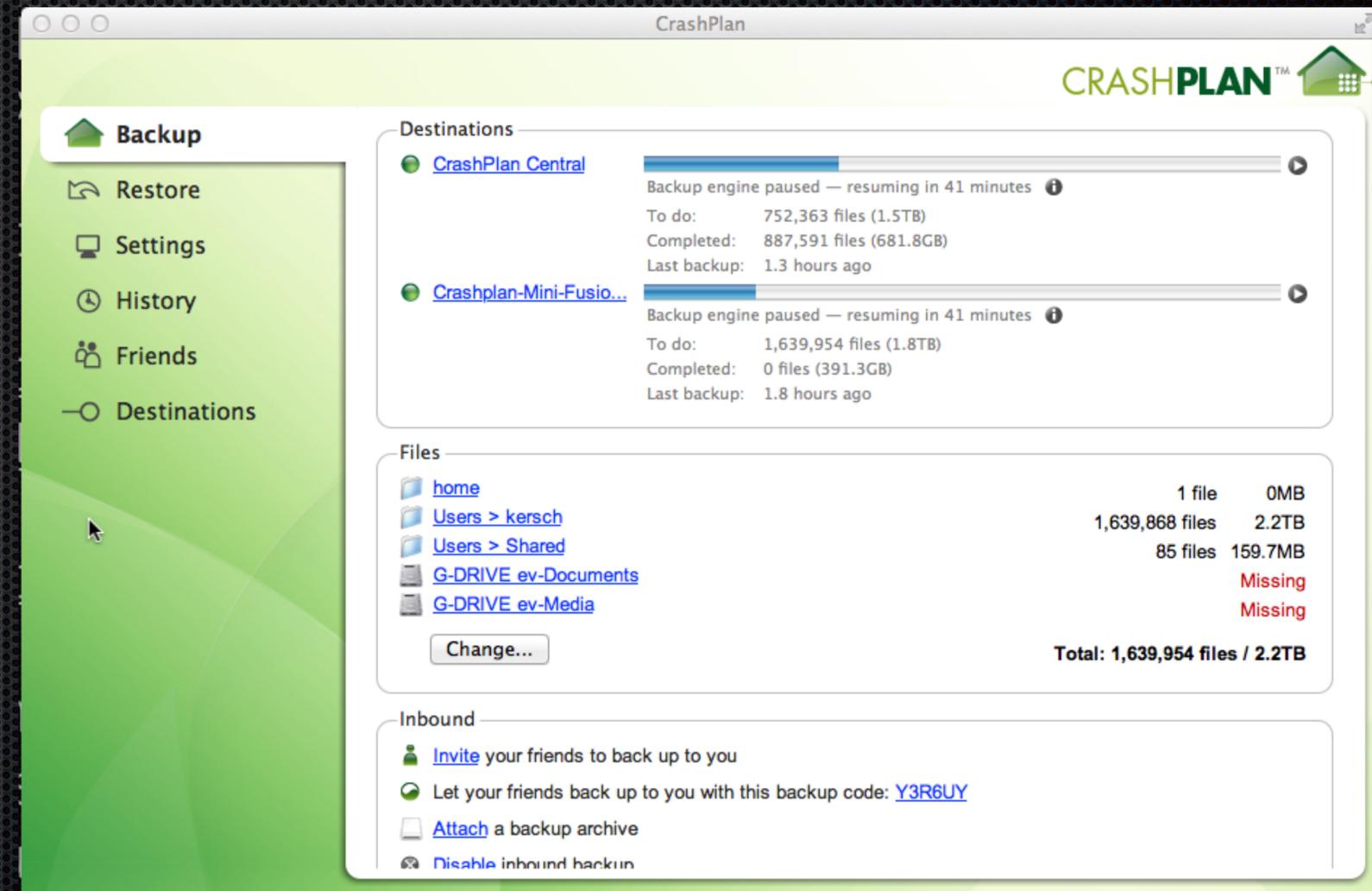
• iPhone or iPad;



• Even a PC.

Cloud Backup with Crashplan

- ❖ Crashplan has two plans: Free and Subscription
 - ❖ <http://www.code42.com/crashplan/>
 - ❖ <http://www.code42.com/crashplan/features/compare/>
 - ❖ <https://www.code42.com/store/>
- ❖ Recommended by Joe Kissell in his TidBits book "[Take Control of Crashplan Backups](#)"



Larry's Safe Computing Strategy

- Apple's iCloud is very handy and fairly secure. iMessages are fully-encrypted.
- Store your most precious files on your own storage devices;
- Larry's devices include a G-Dock ev Thunderbolt with two removable 1TB USB3 drives, Promise R6 RAID with 12TB, Transporter with 2TB, and Time Capsule with 3TB.
- Keep multiple copies and backups using Time Machine and Crashplan;
- Create a Dropbox-like **Personal Cloud** using Drobo's Transporter and/or Sync;
- Use Strong Passwords for all accounts and store them in 1Password;
- **Encrypt** your most important files in Dropbox and other cloud services. More on this later.



Encryption Solutions for Cloud Storage

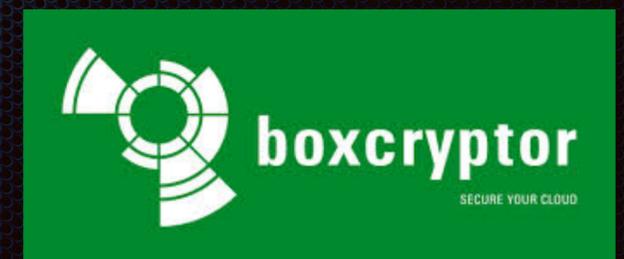


✦ *nCrypted Cloud*

- ✦ Massachusetts startup with novel encryption strategy that uses your registration email plus your password to encrypt files.
- ✦ Handles Dropbox now; Google Drive and Box coming soon.
- ✦ Free account is more powerful than BoxCryptor.
- ✦ Company account handles audits, and they claim to be HIPPA-compliant.

✦ *Boxcryptor*

- ✦ German Company with free, personal and company plans.
- ✦ Handles Dropbox, Google Drive and Box, among others.
- ✦ Must install the FUSE OS before you can install Boxcryptor



Celebrating 30 Years of Macintosh

NOW

iMAC
2014



CPU Speed
3,400 MHz



40 |

| 41

THEN

Macintosh
1984



•
CPU Speed
8 MHz

Conclusions

- Whether or not you use cloud services, be safe and secure through the use of strong passwords and store them in 1Password.
- Examine how cloud services fit your workflow and then decide which services work for you;
- Apple's iCloud services make it easier to share your digital life with your family and friends and co-workers and others;
- Adopt a *storage and backup policy* to ensure that all your precious files are safe.
- Learn to love the cloud, but do it in a way that protects your privacy.

Readings

- ✦ Take Control of 1Password
- ✦ Take Control of iCloud, Second Edition
- ✦ Take Control of Crashplan Backups
- ✦ Take Control of Your Online Privacy