

Storage

PMUG June 2021

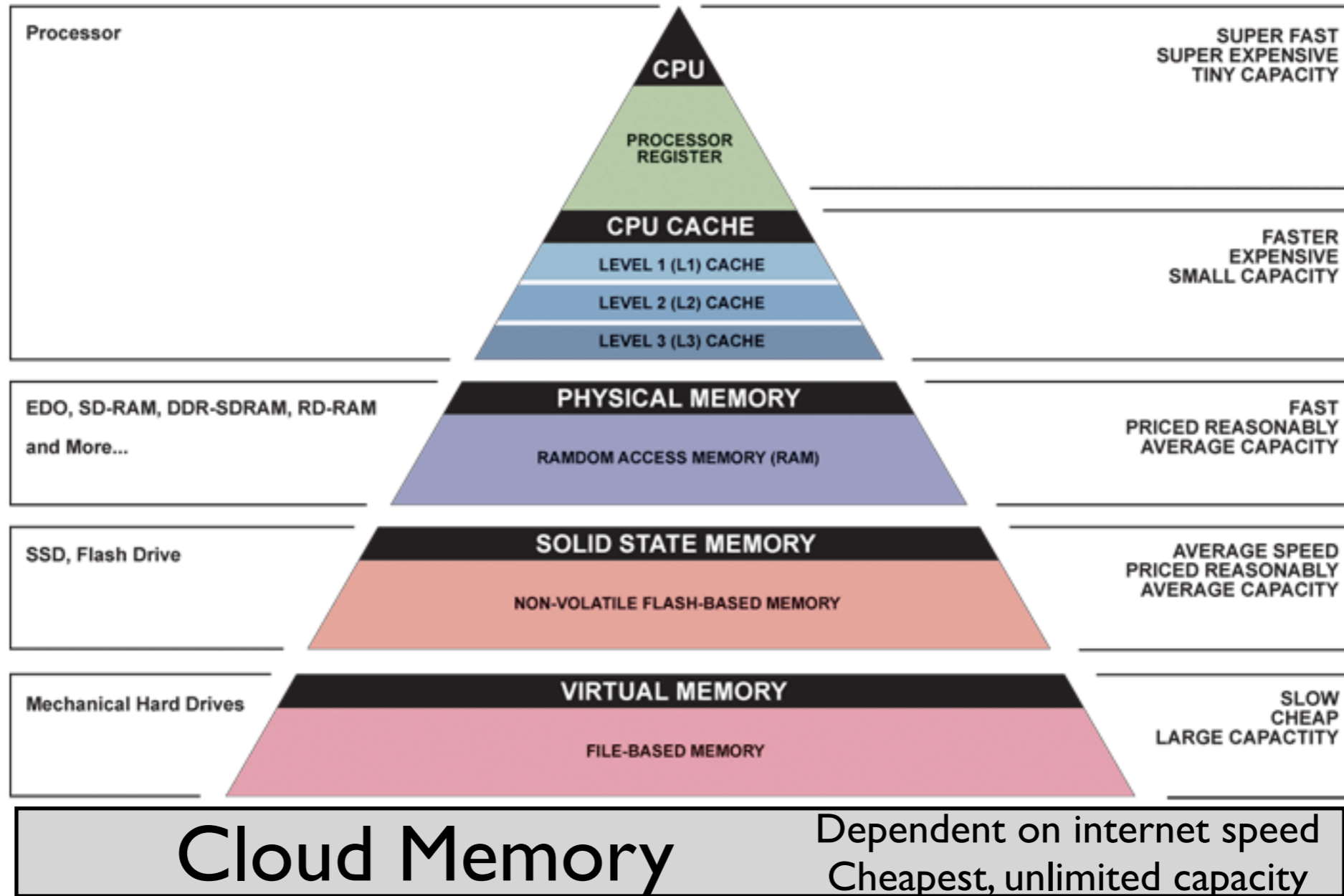
Storage

- Internal Mac
- Internal iOS device
- External Mac & iOS Device
- iCloud

RAM vs Storage

- RAM is limited (4,8,16,32,64GB)
- Cache is fastest, RAM next fastest
- Storage (SSD, HDD) slower
- Internal storage is where all files & Apps reside & can be expanded externally

Storage Speeds



Internal Mac

- Older Macs used spinning Hard Disk
- Newer Macs use SSD
- Basic models have minimum SSD
- Increases of internal SSD cost \$\$\$
- 512GB basic, 1TB +\$200, 2TB +\$600

Internal Mac

- Some RAM & SSD's have been soldered in since 2012
- Can not upgrade if soldered in once purchased
- Get maximum RAM that you can afford when purchasing
- Can always add external storage

Internal iOS Device

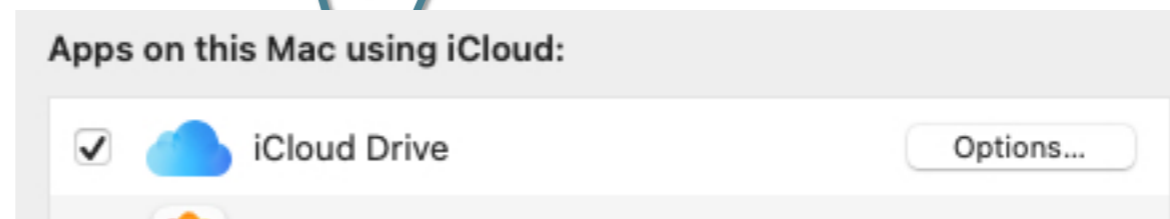
- RAM is fixed (iPhone 12 - 4GB, 12 Pro - 6GB)
- Storage is similar to SSD
- Fixed upon purchase (no upgrade)
- iPhone 12: 64, 128 or 256GB
- iPhone 12 Pro: 128, 256 or 512GB

External Storage

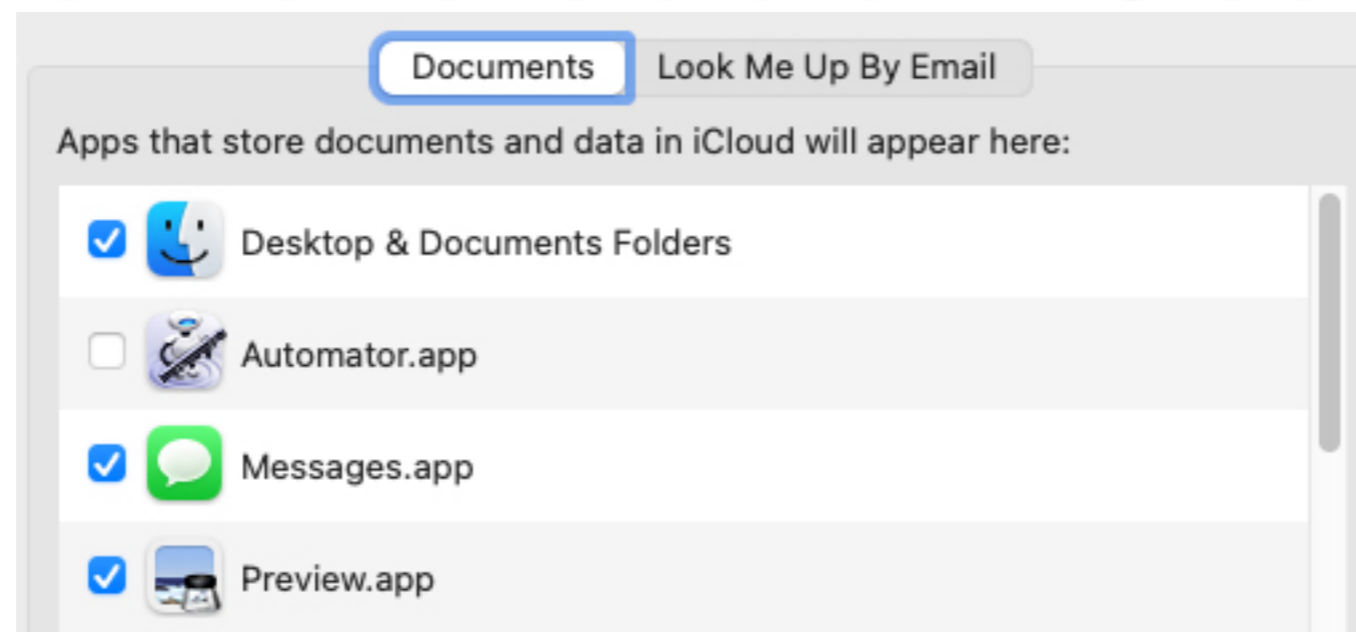
- Similar for Mac & iOS device
- Difference is Lightning or USB-C connection
- iOS devices may also need to be plugged into power outlet depending on power requirements of external device

iCloud

- Set up via Mac (System Preferences/
Apple ID:

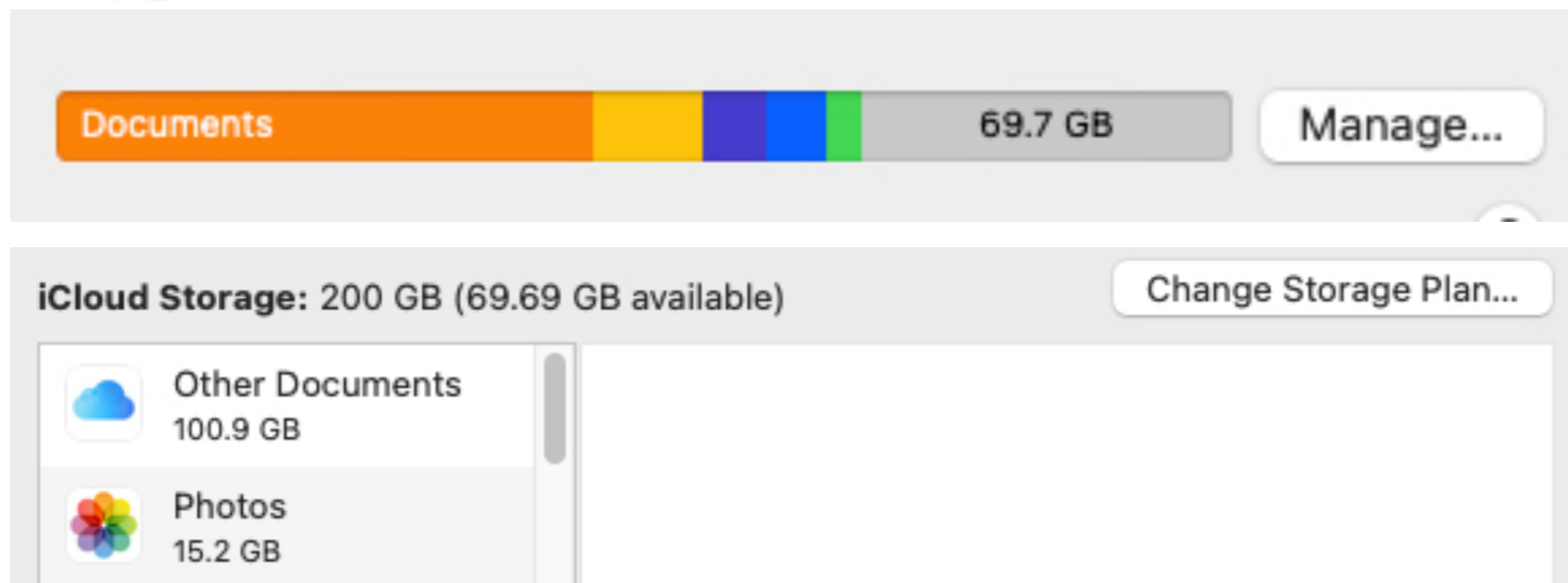


- Check items to store in iCloud)













iCloud Storage

- Can use 5GB free storage, or upgrade to 50GB for \$0.99/mo, 200GB for \$2.99/mo, or 2TB for \$9.99/mo


















MacOS iCloud iOS

Apps on this Mac using iCloud:

<input checked="" type="checkbox"/>		iCloud Drive
<input type="checkbox"/>		Photos
<input checked="" type="checkbox"/>		Mail
<input checked="" type="checkbox"/>		Contacts
<input checked="" type="checkbox"/>		Calendars
<input checked="" type="checkbox"/>		Reminders
<input checked="" type="checkbox"/>		Notes
<input checked="" type="checkbox"/>		Safari
<input checked="" type="checkbox"/>		Keychain
<input checked="" type="checkbox"/>		Find My Mac

APPS USING ICLOUD

	Photos	On >
	Mail	<input checked="" type="checkbox"/>
	Contacts	<input checked="" type="checkbox"/>
	Calendars	<input checked="" type="checkbox"/>
	Reminders	<input checked="" type="checkbox"/>
	Notes	<input checked="" type="checkbox"/>
	Messages	<input checked="" type="checkbox"/>
	Safari	<input checked="" type="checkbox"/>
	News	<input checked="" type="checkbox"/>
	Home	<input checked="" type="checkbox"/>
	Health	<input checked="" type="checkbox"/>
	Wallet	<input checked="" type="checkbox"/>
	Game Center	<input type="checkbox"/>
	Siri	<input checked="" type="checkbox"/>
	Keychain	On >

iCloud Access

- Storing documents in iCloud allows Universal access by all devices
- Create a file on iPad, store in the cloud, accessible by Mac
- Use “File App” on iOS devices
- Select iCloud Drive in Mac Finder Window

Summary

Table 1

Criteria	Internal	External	iCloud
Speed	Fast	Fast	Dependent on internet connection
Internet Required	No	No	YES
Size	512-2TB	512-4TB	5GB free, up to 2TB
Cost	2TB \$600	4TB \$650	2TB \$120/year
Security	Multiple issues	Easily lost or stolen	More secure
Backups	Dependent on you	Dependent on you	Multiple
Access by iOS Dev	Difficult	Nearly impossible	Simple

Summary

- Internal storage fastest access
- External storage for backups & larger infrequently used data
- Cloud for secure, off-site backup
- iCloud for sharing among all devices!!!!

