

CHRIS BEARD, SYSADMIN NSMS

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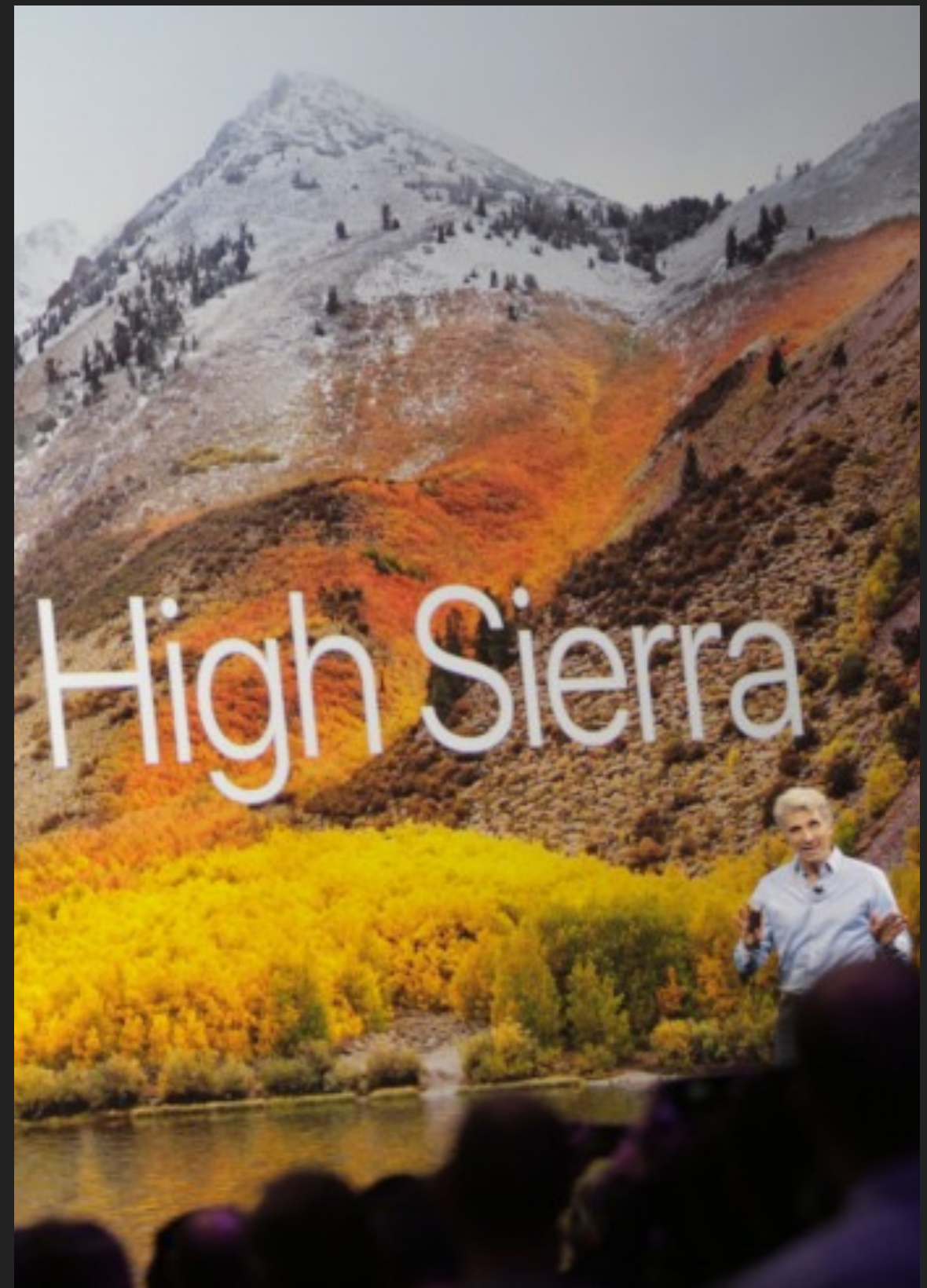
**HI, HIGH SIERRA!**

**WHAT WE KNOW SO FAR**

(and isn't restricted  
by the NDA)

# HIGH SIERRA?

- ▶ macOS 10.13
- ▶ Refinement update to macOS Sierra 10.12
  - ▶ Snow Leopard, Mountain Lion
- ▶ Most significant changes are to underlying technologies
- ▶ Some updates to standard apps e.g. Safari, Mail, Siri
- ▶ No major changes to UI



## WHEN, HOW MUCH AND WHO?

- ▶ Developer beta available now  
<https://developer.apple.com/programs/how-it-works/>
- ▶ Public beta at end June, sign up now  
<https://beta.apple.com/sp/betaprogram/>
- ▶ Autumn 2017: Free download from App Store for all compatible Macs
- ▶ Compatibility same as for Sierra



# MACOS 10.13 HIGH SIERRA: WHAT WE KNOW SO FAR

## CONSIDERATIONS ON UPGRADING

- ▶ Will it run well on older Macs?
  - ▶ 2009/10 Macs need 8/16GB RAM and/or SSD  
<https://forums.macrumors.com/threads/how-is-macos-sierra-running-on-older-macs.2000968/>
  - ▶ Test if possible; use Time Machine to downgrade
- ▶ Can I stop users upgrading?
  - ▶ Users need admin rights to upgrade via App Store
  - ▶ Orchard (jamf Casper Suite): Configuration Profile to kill the macOS Installer.app process
  - ▶ Boot from USB stick if no firmware password





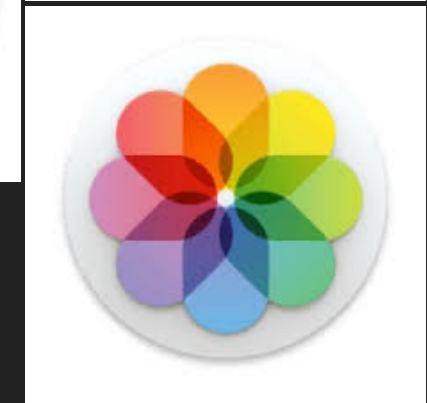
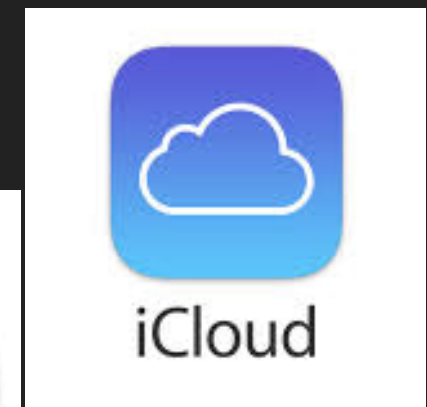
## APFS FILE SYSTEM

- ▶ Replacing 30 year old HFS(+)
- ▶ Mandatory for boot drive
- ▶ 64-bit file system optimised for modern storage
  - ▶ File format aware
- ▶ Supports clones and snapshots
- ▶ Crash-safe protections
- ▶ Native encryption, single/multiple keys



## CHANGES TO STANDARD APPS

- ▶ Safari
- ▶ Mail
- ▶ iCloud Drive
- ▶ Photos
- ▶ Messages



- ▶ [see MacRumours article in resources for details]

# GRAPHICS IMPROVEMENTS

- ▶ HEVC / h.265 video support
  - ▶ Roughly double compression
  - ▶ 4K support
  - ▶ Hardware acceleration (for some)
- ▶ HEIF support
  - ▶ High Efficiency Image File Format
  - ▶ Replaces GIF and JPEG on macOS
  - ▶ Native container for multiple images
  - ▶ Smaller file sizes, less artefacts
- ▶ Both require licences

# HEVC

H.265 - HIGH EFFICIENCY VIDEO CODING



# .HEIF

## METAL 2: THE FUTURE, VIRTUALLY HERE

- ▶ Apple's 3D graphics API
- ▶ Cross platform compatibility
- ▶ VR and AR support
- ▶ Games engines: Unreal Engine, Steam VR
  - ▶ ILM Star Wars Demo
  - ▶ Wingnut AR Demo
- ▶ External GPU via Thunderbolt 3





## RESOURCES

### ► Overviews

- Must read: <https://arstechnica.co.uk/gadgets/2017/06/macos-high-sierra-tech-preview/>
- Must read: <https://www.macrumors.com/roundup/macos-10-13/>
- <http://www.macworld.co.uk/feature/mac-software/best-new-features-in-macos-high-sierra-3660179/>
- <http://www.iphonehacks.com/2017/06/macos-high-sierra-features.html>

### ► APFS

- <https://arstechnica.com/apple/2016/06/a-zfs-developers-analysis-of-the-good-and-bad-in-apples-new-apfs-file-system/>

### ► VR & AR Demos

- ILM Star Wars: <https://www.youtube.com/watch?v=S48T-cOG0ks>
- Wingnut Films: <https://www.youtube.com/watch?v=S14AVwaBF-Y>