

EDITOR COMMENTS

Summarize lengthy documents. You can summarize the documents webpages in OS X through preference settings. tinyurl.com/ya2zuapg.

Don't buy a Smart TV. Buy a Roku instead. tinyurl.com/y8tbmpjt.

Mass Delete Apps. You can easily mass delete apps from your iOS device. The app to use is iMazing. tinyurl.com/yam2gcrm.

Little Snitch. A review of this almost ancient app lets you monitor and control Mac inbound and outbound traffic. tinyurl.com/ycukqfqe.

Encrypt your email. It's a bit complicated, but it's doable. tinyurl.com/y8d2gtzp.

iOS 11 Multitasking is a bit hairy. Jeff Butt's article links to a helpful 4 minute video. tinyurl.com/y7ocpwhq. Worth reviewing again.

Portrait Lighting. Apple has a new video how-to on YouTube for using Portrait Lighting on an iPhone 8 Plus.

AT TIMES IMAGES MAY BE A BIT FUZZY IF ORIGINAL IMAGES WERE FUZZY. IF YOU NEED TO READ THEM, PLEASE GO TO THE ORIGINAL ARTICLE.



FOUNDED MAY 1989
MEETINGS - SECOND
SATURDAY OF THE MONTH

iOS 11 & HIGH SIERRA FOCUS iOS 11 PRESENTATION

Our main presenter at Saturday's meeting will be Mark Bazrod who will discuss iOS 11, an extraordinary major upgrade of the operating system for the iPad, iPhone and iPod Touch. It is the most substantial upgrade of iOS that he has seen in years. It has a host of new and improved features which will make your devices much more useful and also enjoyable. Among the most important new functionalities are the improved Dock, Control Center, Markup, Notes, Photos Formats, Keyboards, Do Not Disturb While Driving, and Apple Pay. He also says the multitasking aspects of the improved Slide Over and Split View are mind-boggling for those who need to see two apps simultaneously on the screen.



He recommends you install it immediately unless you are using a much needed app that does not yet run under iOS 11.

Mark Bazrod is currently MLMUG Secretary and has been Newsletter Editor since March 2004. He also has been President, Treasurer and a Board member (the last since 2004). He has many times been a presenter to both MLMUG and Macs@PACS, and has written more than 100 monthly columns for our Newsletter.

MLMUG NOVEMBER

We are back to meeting at the Community Center in Hershey's Mill in West Chester Take Greenhill to the Hershey's Drive entry and go up the hill to the Community Center. Map is at tinyurl.com/mrmtnd7.

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Typical Meeting Agenda

9:00 - 9:05: Call to order in main meeting room.

9:05 - 10:05: Three Concurrent Special Interest Groups (SIGs) convene in separate rooms. The three current SIGs are:

Newer Users- We cover the most basic questions you may have about your Mac/iDevices and how to use them.

Multimedia - We discuss using your Mac/iDevices and applications for photo, video, audio, and print media.

OS - We go beyond basics to discuss Apple's current operating systems, using your Macs & iDevices, & various applications, & have Q&A.

10:05 - 10:15: Continuation of Q&A for all attendees.

10:15 - 10:30: Welcome and other business.

10:30 - 11:50: Main Presentation (by a member or guest)

11:50 - Noon: Raffles and silent auctions.

Come join some fellow MLMUG members for lunch after the meeting at a nearby restaurant.

MLMUG Email list

The Main Line Macintosh Users Group has its own email list. Compose your letter and email it to mlmug@yahoogroups.com and your message will be sent to everyone on the mailing list. Posting to this list is restricted to MLMUG members. Contact Bob Barton if you are a member and you are not on the list.

Please observe rules of etiquette. See the Yahoo Groups Terms of Service. The MLMUG list may be used to post Apple/Macintosh-related items for sale, but any solicitation of members through the list is forbidden without the written consent of a MLMUG officer. The list is hosted at Yahoo Groups.

New Users SIG

You don't have to wait a whole month to get answers to your basic Mac questions! Get together with other members on the fourth Saturday (i.e., two weeks after each regular meeting) for the Startup Folder Lite.

Many new users have said that they can learn much more from face-to-face meetings than they do from manuals or other sources. That's what this meeting is all about. Go to www.mlmug.org/nusfl.html for details.

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Membership Information

Membership dues are \$25 for individuals and \$35 for families. Memberships are based on your anniversary date, which is the month you joined. You will be e-mailed reminders when membership fee is due.

If you're just visiting to check us out, or if you've been visiting for some time, but haven't joined, consider these **BENEFITS OF MEMBERSHIP**:

- **Monthly meetings**, where you can learn, share, and meet everyone from working Mac professionals to new Mac users from all backgrounds.
- **Monthly newsletter**, which is full of interesting Mac news, tips, and information.
- Useful free items at the monthly **Raffles**.
- **Discounts**. Vendors offer special prices to User Group members.
- **Web Site** with 2-3 years of MLMUG newsletters, meeting information, a member directory, directions to our meetings, and much more! Our web site is www.mlbug.org.
- **MLMUG Mailing List**, to post technical questions or comments to each other and the experts within the group.
- **Reviewers** keep items reviewed.

Are you ready to join? Please make a check payable to MLMUG and bring it to a monthly meeting or mail it to:

Treasurer, MLMUG

P.O. Box 1374

Southeastern, PA 19399



Bookmarks

By Mark Bazrod

Some Experiences on iOS 11

iOS 11 has many new or improved functionalities; most are really great; a number are pretty good; and a few have frustrated me.

I installed iOS 11 about five weeks ago, soon after it was available. The installation took between 15 and 30 minutes and was uneventful. Since I've spent a good bit of time reading articles in preparation for the October and November newsletters, I probably knew more about iOS 11 than the average user. However, I suspect that my experiences are not that much different from those of others who have devoted some time to learn the system.

The redesign of **Control Center**, from three panels to only one, is a welcome improvement. Most importantly, you can customize it. By going to Settings > Control Centers I've taken out several controls and added controls for Flashlight, Screen Recording, and Apple TV Remote. I can quickly access these controls by swiping up from the bottom of the screen. It's a very simple process and I expect to add more controls in the near future.

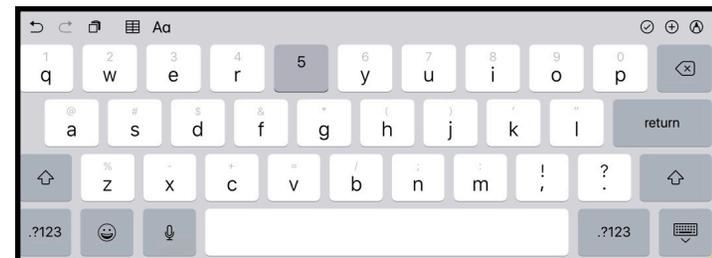
If you have iTunes open on the iPad, the Music widget is very handy to turn songs on and off and to move from one track to another. I think which track is played depends on what playlist is playing, but I haven't checked this out because I don't use iTunes that much. The iPhone doesn't have a Music control, but has a Podcast control which operates similarly and is a real advantage when walking and listening.

Also, the new Low Power Mode for the iPhone (but not the iPad) is something often worth using before your battery runs down.

The new **Dock** with up to 15 app icons is a game changer, making the use of the iPad in this respect somewhat similar to the Mac. Since almost all of the apps I moved to the Dock were from my Home Page, I ended up totally revising my Home Page, for the most part moving up items that had been in my second Home Page. I initially found I could put more than 13 apps in the Dock, but after going to Settings > Multitasking & Dock and turning off Show Suggested and Recent Apps, I should have had a full 15 apps in the Dock based upon what I read), but I didn't. More to come. Not seeing the most recent two or three applications used is no big deal. I also put two webpages that I access two or three times a day into the Dock. Very helpful.

The new **Smart Keyboard** with the screen cover is fantastic when you have your iPad Pro positioned on a flat surface. It seems overpriced at \$150, but it's worth it. (The Logitech competitor is about \$140.) It has a top row of numeric keys and symbols so there is no necessity to flip to a second keyboard. In addition it has shift, caps, control, option, and command keys so your typing experience is very similar to a Mac.

Unfortunately, it doesn't work that well when positioned on your lap. I then fold the keyboard under the screen and use the new onscreen **QuickType keyboard**. Above each key's primary label is a different symbol in a smaller type size and shaded gray. This is the alternate character for that key which you can access with a slight downward swipe. It takes no time to get used to this move and it very handy.



Multitasking, The ability to have two apps running simultaneously on your iPad, is absolutely fantastic. Slide Over

View is very handy. Just drag a second app to the right or left side of the screen and you are in Slide Over View. However, I had tons of trouble trying to drag the little tab at the top of Slide Over view down to convert it into Split View. I finally found that if you dragged a second app to the extreme right or left side and kept your finger on the screen, the first app moved away from the margin allowing you to drag the second icon into the blank space where it opened directly into Split View.

Drag-and-drop has continued to be a problem. I can select words or an image and do a copy/paste operation, but for the life of me I can't get drag-and-drop to work. Hopefully, I'll figure it out by the end of November

I find the **App Switcher** more useful to close apps than to open new ones. Although the tiles in the App Switcher are larger than the icons in the Dock, the icons are immediately available while I have to swipe up to go to the App Switcher.

The **Podcasts** app has been totally redesigned, but I find it didn't take too much time to get used to the new format. The unplayed apps are in a new tab, Listen Now, which also shows the recently played episodes and, if selected, all played episodes that haven't been deleted.

I like the idea of **Offload App** which allows your device to automatically delete long unused apps, but still save the data and settings from the app on your device. It's handy if you're running low on storage availability, but I haven't gotten to that point yet.

The functionality which I find most frustrating is Files. I understand that it has nowhere near the functionality of Finder on the Mac and that it is a start for a Finder-like application. Nonetheless, I find it very difficult to find files in Files so I normally search within an application for files I have created. You can't create subfolders so its usefulness is very limited to me. I suppose you can use tags as a substitute for folders, but with hundreds of files, that doesn't seem feasible or worthwhile. In

addition, I created a number of test folders that I've yet to find a way to delete. I recognize that part of the problem is due to its newness, but it does seem that Apple has a lot to do to make Files usable.

All in all, I find many of the functionalities in iOS 11 very useful, sometimes exceedingly useful, and I highly recommend it to everyone - unless you are using a much needed app that does not yet run under iOS 11.

Next month - More experiences!

SPEAKER ROSTER FOR MLMUG'S 2017 MEETINGS	
January 14	Mark Bazrod - Siri
February 11	Stan Horwitz - MacBook Pro
March 11	Lisa Rysinger - VR 360
April 8	Dave Hamilton - Better WiFi
May 14	Michael Inskeep - Securing Your Mac II
June 11	Picnic
July	Recess - Summer
August	Recess - Summer
September 9	Paul Del Rossi - Virtual Machines
October 14	Fiona Keyes - iPhotography Part II
November 11	Mark Bazrod - iOS 11
December 10	Pot Luck Brunch, Swap Meet, Members' Show & Tell, & Election of Officers

Bryan Chaffin posted the following article to MacObserver.com on September 26, 2017. tinyurl.com/y9fq7q3p. © The Mac Observer Inc. Bryan is the Cofounder of The Mac Observer and currently serves as Afternoon Editor. He has coauthored Incredible iPad Apps for Dummies with Bob LeVitus.

Here's How To Get Better Battery Life In iOS 11

By Bryan Chaffin

If you're one of the people having iPhone battery life issues in iOS 11, I've got some tips for improving its performance. As is the case with every new iOS release, there have been significant complaints about reduced battery life, and these tips can help you make the most of your iPhone battery while Apple gets it sorted out.

iPhone Battery and Low Power Mode

Your iPhone and iPad have a Low Power Mode that can be a real life saver, and that may be even more true in iOS 11. Introduced in iOS 10, Low Power Mode effectively halts almost all background processes in third party apps, and it reduces power in unused components on your iPhone. It also makes your screen go dark faster.

Low Power Mode is great way to get the most battery life out of your iPhone or iPad, and it does so with minimal disruption in usability.

To turn it on, got to Settings > Battery > Low Power Mode.



You can also tweak some individual behaviors when Low Power Mode is on at Settings > Battery > Low Power Mode (on) > Display and Brightness. This is great because the changes you make here don't affect how your iOS device behaves when not in Low Power Mode.

Options include Brightness, Night Shift, Auto-Lock timing (restricted to 30 seconds), Raise to Wake (on/off), Text Size for apps that support Dynamic Type, Bold Text (on/off).

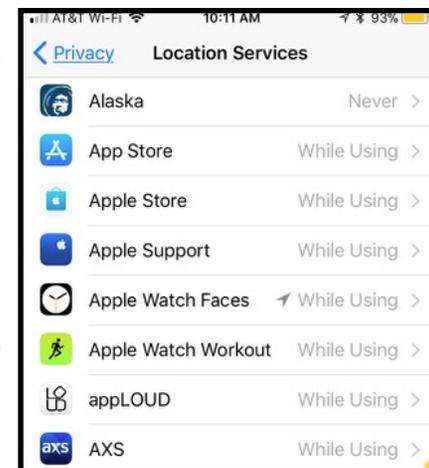
The most important option here is Brightness. Low Power Mode automatically reduces brightness to a dimmer level, but you can control precisely how dim it gets.

Location Services

Location services allow apps to know where you are, data they (theoretically) use to provide you information or services. This has been a key part of the mobile revolution, but it comes with a power price. Turning off location services can save power, but it will dramatically decrease your iPhone's usability.

What you can do, though, is turn off Location Services on individual apps you aren't using, especially apps that require an "Always On" setting.

Check Settings > Privacy > Location Services. In the screenshot below, I've got all my apps set to "While Using."



Screen Brightness

This is a simple tip, but it's easily overlooked. Turning your screen brightness down can save power. I noted that Low Power Mode section will automatically dim your screen, but you can also permanently dim your screen to save power.



To control how bright your screen is in iOS 11, swipe up from the bottom right of the screen. It's the tall slider with a sun icon, as shown below, where my screen is set to be pretty dim.

You can also go to **Settings > Display & Brightness** to control your screen brightness, Auto-Lock, Night Shift, Raise to Wake, and other features.

Background App Refresh

[iPhones](#) allow apps to refresh in the background. This is great, but it uses power, and turning it off can definitely save power. The bad news is you have to check on an app-by-app – worse, many apps don't have this setting at all because they don't update in the background, so you'll have to hunt and peck.



That may sound intimidating, but it really only matters on launched apps. In the screenshot below, I have the Alaska Airlines app (Settings > Alaska) Background App Refresh setting turned off. If I was flying Alaska on a given day, I'd want to make sure that was on.

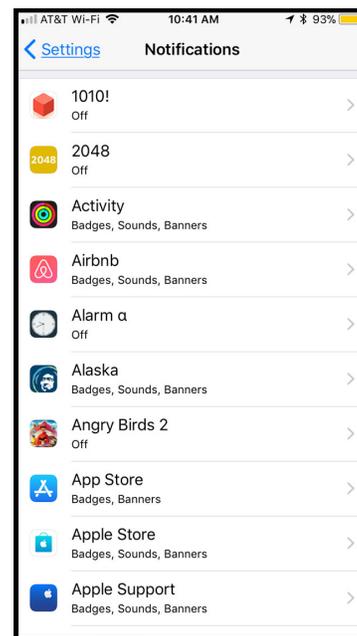
Auto-Lock

How fast your iPhone or iPad's screen shuts off is controlled by the Auto-Lock setting. Low Power Mode forces Auto-Lock to be

30 seconds. Setting it to 30 seconds for the rest of the time can save power.

Go to **Settings > Display & Brightness** to set Auto-Lock. Shorter settings save the most power.

Notifications and iPhone Battery



Notifications are another one of those areas where you can save power by turning them off, but you're greatly reducing your iOS device's usefulness.

If you're in an emergency power situation, you might want to turn them off entirely. If you're wanting to get more battery life on your iOS device in general, optimize which apps are allowed to use notifications, and which kinds of notifications they're allowed to use.

To see your Notifications settings, go to **Settings > Notifications**, where you'll see a long list of app installed on your iOS device. Tweaking all your apps is time consuming, but worth it if you want more battery life and more control over your iOS device.

Vibrate and Haptic Feedback

Your iPhone's ability to vibrate and give haptic feedback uses a physical motor. Apple has a custom chip called Taptic Engine for this haptic feedback, and turn off haptic feedback can save

power. Again, however, it comes with a reduction in usefulness, and you may need to experiment to find an acceptable trade-off if you want to save power by turning off or reducing Vibrate or Haptic Feedback.

There are two main settings for Vibrate: Vibrate on Ring and Vibrate on Silent. You can find both in **Settings > Sounds & Haptics**, as shown below.

Turning off either or both will save power.



Scroll down to the bottom of **Settings > Sound & Haptics** and you'll find **System Haptics**. Turn that off to eliminate most—but not all—system-wide Haptic Feedback. For instance, if you have the buttonless-Home Button on iPhone 7/8 and iPhone 7/8 Plus, the Taptic Engine will continue to make it feel like a real button even if you turn off System Haptics.

Bluetooth, Wi-Fi, Cellular, Personal Hotspot

The radios in your iPhone or iPad consume a lot of power. Bluetooth, Wi-Fi, Cellular (including Cellular Data), and operating a Power Hotspot all suck up the juice. If you aren't using any one of these features and want to save power, turn it off.

As with every other setting, however, turning it off will greatly reduce what your iOS device can do.

To control these settings, go to Settings because turning them off in Control Center [leaves them active for Apple's own services](#) and may not save much battery life. October 7, 2017

The following article was posted to osxdaily.com on October 7, 2015. tinyurl.com/ya9mvcvk. © OSX Daily. Try the site. Lots of tips and good info.

How To Enable Offload Unused Apps In iOS To Save Storage Space Automatically



If you frequently run out of storage space on an iPhone or iPad, you will appreciate a new feature in iOS that automatically saves storage for you. Called Offload Unused Apps, the toggle allows the iPhone or iPad to perform housekeeping and delete apps that have gone unused for a while, just as the name implies. Offloading used apps can noticeably help to reduce storage constraints on a device, since most of us have a handful of apps that may not be getting any usage but are taking up storage space on an iOS device anyway.

The ability to use Offload Unused Apps is limited to modern versions of iOS on iPhone and iPad, meaning you will need to have iOS 11 or later to have this feature available to you.

How to Offload Unused Apps on iPhone and iPad

A simple iOS settings adjustment will enable this feature on an iPhone or iPad:

- 1. Open the “Settings” app and visit the ‘iTunes & App Store’ section

2. Scroll down to locate “Offload Unused Apps” and toggle to the ON position

Once the feature is enabled, apps that are going unused will be removed when the devices storage is running low. For example, maybe you have Garageband, Keynote, and Pages on your device but you have never used any of them, then those apps would be removed automatically to make sufficient storage available.

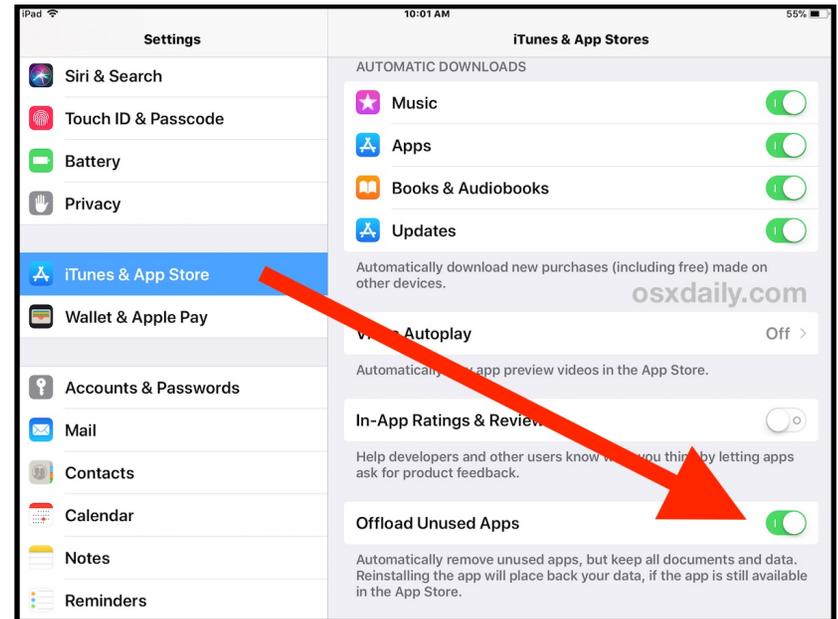
You’ll notice that while the feature will remove the app, it will maintain data and documents related to the applications that are offloaded. This allows for the app to be re-downloaded again in the future and for all existing settings and app data to be preserved, allowing to resume where you left off if you do want to use the app again down the road. In case you were wondering, that means you would need to manually intervene with the app in question if you wanted to [clear the Documents & Data for that app from iOS](#) too, which can often be the source of significant storage usage as well.

This basically helps to automate a common recommendation for freeing up storage in iOS, which is to [delete apps](#) that are old and unused or just no longer needed. Now you don’t need to spend much time thinking about what apps to delete, since with this feature enabled the apps will be deleted automatically.

If you can’t recall when you want to get an idea of what apps will be deleted when this is enabled, you can open the storage settings on the iPad or iPhone and look for apps that are labeled as “Never Used”.

Users will find the “Offload Unused Apps” feature will also be a frequent recommendation in the iPhone Storage or iPad Storage section of your device under the “Recommendations” list. When it is listed as a recommendation, it will also tell you exactly how much storage will be saved by enabling the feature, and it’s often multiple GB at a minimum.

Keep in mind that any offloaded unused apps can be re-downloaded again at any time, assuming they’re available on the iOS App Store anyway.



Jeff Butts posted the following article to MacObserver.com on March 6, 2017. tinyurl.com/yakqg7fh. © The Mac Observer Inc. He is pursuing a master's in Computer and Information Systems, but he's been working on computers since before he ever thought about teaching.

How To Use iOS 11 Screen Recording

By Jeff Butts

Quite a few people have heard that screen recording is now native to iOS 11, but don't know how to access it. Even though [iOS 11 has been out](#) for a little more than a week, the feature is still baffling many. In this video, Jeff Butts demonstrates where to find the Screen Recording controls. He also shows you how to turn on the microphone for screen recordings so you can do voice-overs. After the video, you'll find a pictorial walkthrough demonstrating how to enable and use iOS 11 Screen Recording.



Learn how to take advantage of the iOS 11 Screen Recording feature, and make the most of it

Go to YouTube for a video of how to do it. youtu.be/qPnrpqNhdpw.

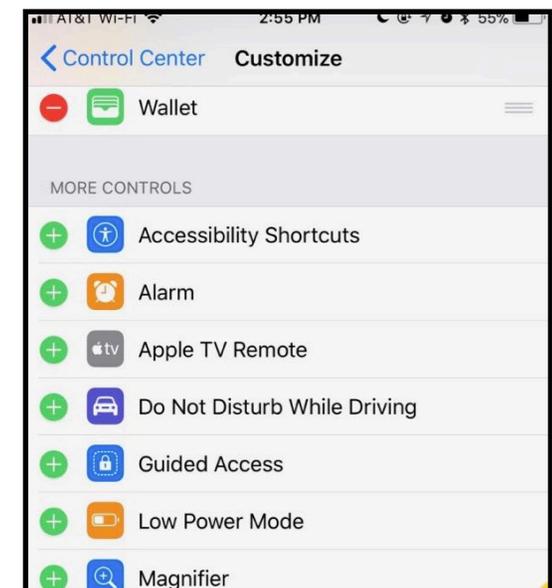
If you prefer more of a screenshot walkthrough of setting up iOS 11 Screen Recording, here are the steps you need to take.

A Walkthrough of iOS 11 Screen Recording in Pictures



First, open Settings and tap on Control Center.

Next, tap on Customize Controls



Now tap the green plus sign next to Screen Recording to add it to Control Center, and move it where you like

Using Screen Recording, and Getting Your Microphone to Work

Once you have placed the right button in your Control Center, you'll be able to start using iOS 11 Screen Recording. Just swipe up from the bottom of the screen to access the Control Center. From there, you can tap once on the Screen Recording button to start recording.



Now you should have the toggle for iOS 11 Screen Recording in your Control Center

That's not all, though. If you long-press or 3D Touch press on the Screen Recording button, you'll get an advanced control. Here, you'll be able to turn on your microphone for recording voice-overs with your screen.



Yes, you actually can turn on your microphone in a screen recording.

Josh Centers posted the following article to tidbits.com on October 5, 2017. tinyurl.com/yays9ope. © TidBITS Publishing Inc. He is the managing editor of TidBITS, as well as a contributor to Macworld and Sweethome.

Five Major New Capabilities In Notes In iOS 11

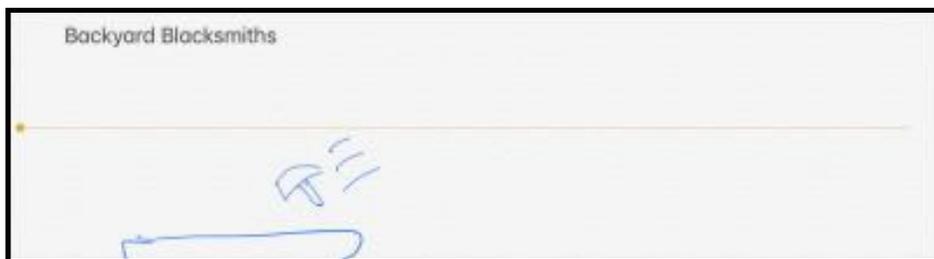
By Josh Centers

iOS's bundled Notes app used to seem like a throwaway feature list item. With its skeuomorphic ruled paper, Marker Felt font, and sketchy syncing, it was worthwhile for only the most casual of uses. But Apple has focused a lot of attention on Notes for the past few iOS releases, and it has become my constant companion for everything from shopping lists to tracking changes for the "[Take Control of iOS 11](#)" manuscript.

In iOS 11, Apple has again packed Notes with new features but hasn't promoted many of them other than Instant Notes, which I covered in "[11 Things You Should Know about iOS 11](#)" (20 September 2017). Here's what else is new in Notes in iOS 11.

Inline Sketching -- If you own an iPad Pro and an Apple Pencil, sketching inside a note is as simple as tapping the Apple Pencil on a large, empty spot. If you tap in the middle of some text, however, you'll just move the cursor.

Notes indicates the sketching area with a yellow line at the top. Touch and drag the dot at the end of the line to move the content above the sketch up or down. Tap the Markup icon to see the full lineup of sketching tools.

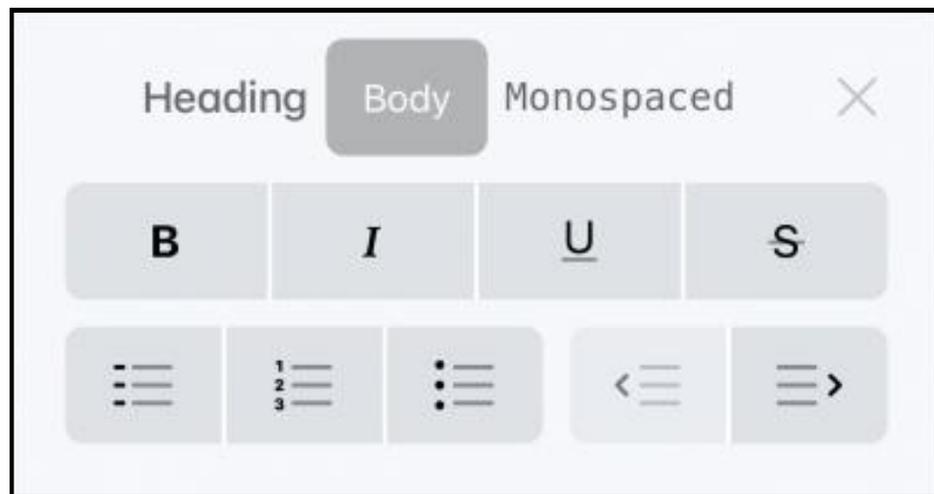


If you want to get rid of the inline drawing entirely, tap in a blank area in the sketch and choose Delete from the popover.

Formatting Improvements -- Notes has offered simple text formatting for some time, but it was always clunky to use. In iOS 11, Notes presents most of its formatting options (apart from creating a checklist) in a single pane, accessible by tapping the new Aa button in the QuickType bar above the onscreen keyboard or on a standalone toolbar if you have an external keyboard attached.



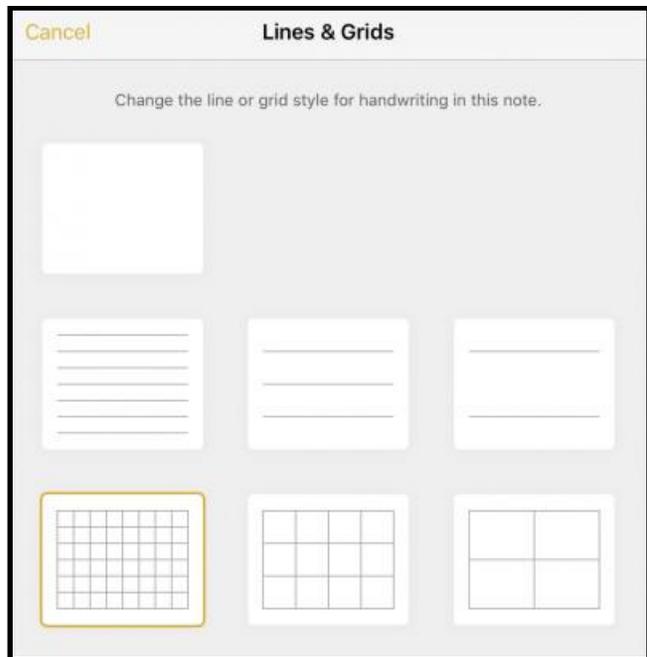
In addition to the body, heading, bold, italic, and underline styles, the pane offers two new styles: strikethrough and monospaced. From the formatting pane, you can also create bulleted, dashed, and numbered lists. Finally, buttons in this pane help you indent and outdent lists.



Unfortunately, indenting and outdenting list items doesn't change their markers, so it's not ideal for outlines. But here's a tip: you can now indent and outdent checklist items. That makes it

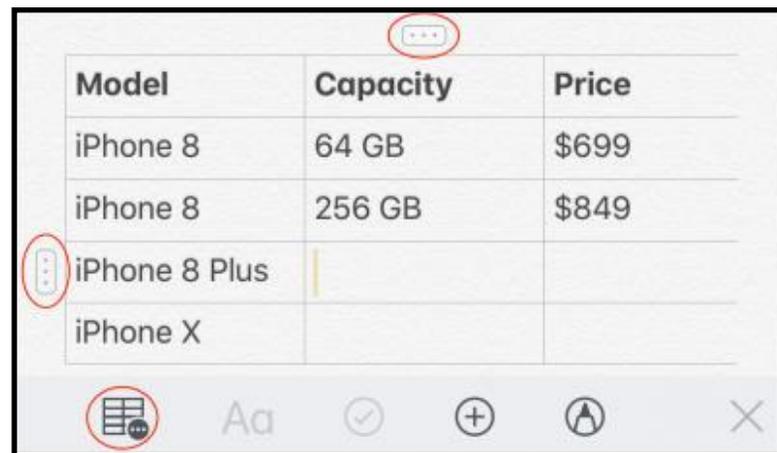
possible to create hierarchical to-do lists, such as those used in the [Getting Things Done](#) system.

Another new formatting option in iOS 11 lets you choose the paper style of a note when using the Apple Pencil to write or sketch. To do so, tap the share icon while viewing a note and choose Lines & Grids, which gives you six different line and grid background options.



You can change the default handwriting background in Settings > Notes > Lines & Grids.

Tables -- Notes now lets you create simple tables. In a note, tap the table icon in the toolbar to create a simple two-by-two column. Tap inside a cell to edit the text there. When you do so, an ellipsis (...) button appears over the current column and next to the current row — tap one of those buttons to reveal options to add or delete columns and rows. You can also drag those buttons to move the associated column or row.



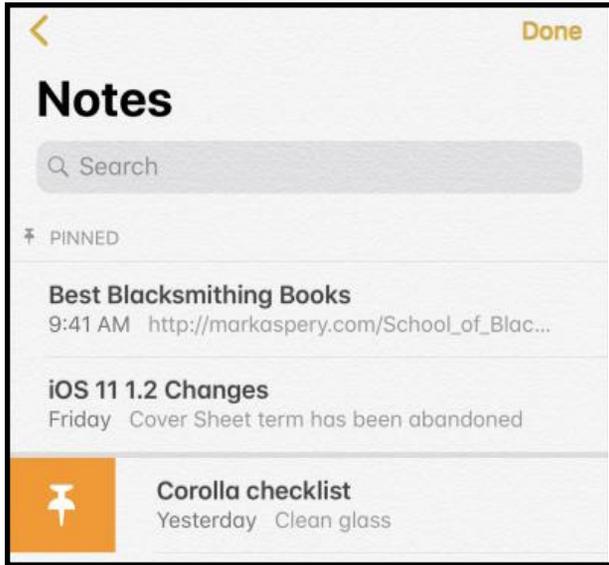
Here are a few more tips:

- When editing text in a cell, the Aa button is grayed out, but you can still format text by tapping in the cell to bring up the text popover, and then choosing BIU to reveal formatting options.
- While editing in the lower-right cell, tap the Next key to create a new row.
- While editing in a cell, notice that the table button now has an ellipsis over it. Tap it to copy, share, or delete the table, or to convert it to text.

Alas, tables in Notes don't allow calculations or advanced sorting like spreadsheets in Numbers do.

Pin Notes -- Typically, Notes sorts your notes with the most recently edited ones at the top. In iOS 11, you can now pin specific notes so they remain at the top of the list.

To pin a note, right-swipe its listing to reveal a thumbtack icon. Tap that icon to pin the note. However, if you keep swiping the note listing after the thumbtack icon appears, you can pin it without tapping the icon.



Pinned notes remain at the top of the list in the order you pinned them in. To unpin a note, swipe it right again to reveal a thumbtack icon with a line through it. Tap that button to unpin it or keep swiping to unpin it without tapping.

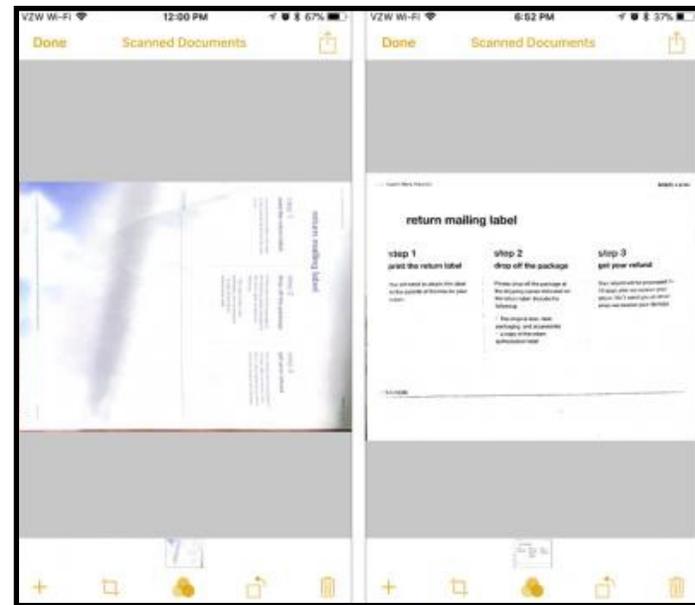
Document Scanner -- Over the years, apps like [PDFpen Scan+](#) and [Scanbot](#) have become indispensable on the iPhone for quickly scanning documents. Those developers will have to up their games because Notes now has a document scanner built in. Lay a piece of paper on a flat, well-lit surface, and inside a note, tap the + button and choose Scan Documents. It's too bad you can't initiate scanning from the Camera app as well, since that's a more obvious location for such a feature.

The viewfinder will search for a document, and once it identifies one, it will automatically capture it. Controls at the top of the screen let you adjust the flash, choose color filters, and turn off auto capture if you want to press the shutter button yourself.

Notes lets you keep scanning documents into the same note until you tap Save. Scans are saved at the bottom of the note, and you can tap one to edit it right away. Editing controls let you crop, adjust color, and rotate it. In the screenshot below, I took a



document I scanned in color, cropped the excess, converted it to black and white, and rotated it to portrait orientation. After saving, you can also tap the scan to edit it.



To share a scanned document, while it's open for editing, tap the share icon in the upper-left corner and choose Create PDF. From that view, you can mark up the PDF, or tap the share icon in the lower-left corner to send that PDF. I discuss marking up PDFs more in "[Take Control of iOS 11.](#)"

There are two ways to mark up a scan while viewing it. The

simplest is to tap an Apple Pencil to the screen of an iPad Pro. The other way is to tap the share icon and choose Markup. You can use this to sign documents, among other things.

Notes doesn't have OCR capabilities like PDFpen Scan+ and Scanbot, and it certainly won't replace a quality scanner, like a [Fujitsu ScanSnap](#) (a TidBITS sponsor), but if you only need to scan the occasional document, its handy scanner feature may be more than adequate.

Overall, Notes may not have a feature set that's competitive with something like Evernote or other long-standing note-taking apps, but it has sufficient capabilities for most everyday situations, especially if you have an iPad Pro with an Apple Pencil. The new features in iOS 11 make Notes worth a second look, if you don't already have a note-taking app you love.



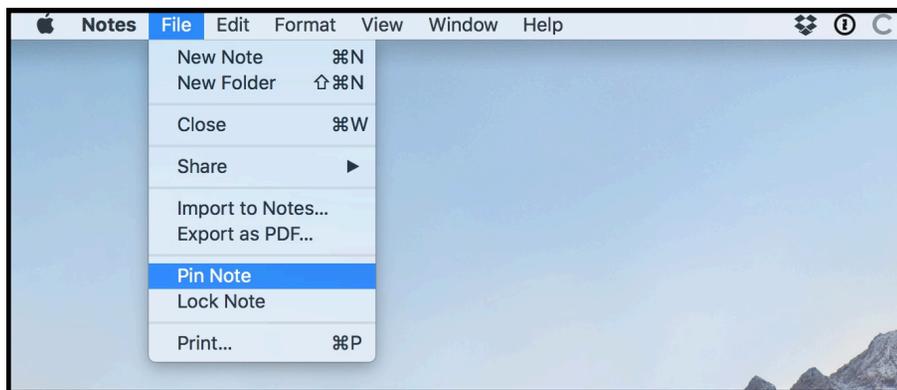
Melissa Holt posted the following article to macobserver.com on September 27, 2017 tinyurl.com/y8xadjhc. © The Mac Observer, Inc. She is an Apple Consultant who lives and works along the Front Range in Colorado.

How To Pin Notes Under iOS 11 And High Sierra

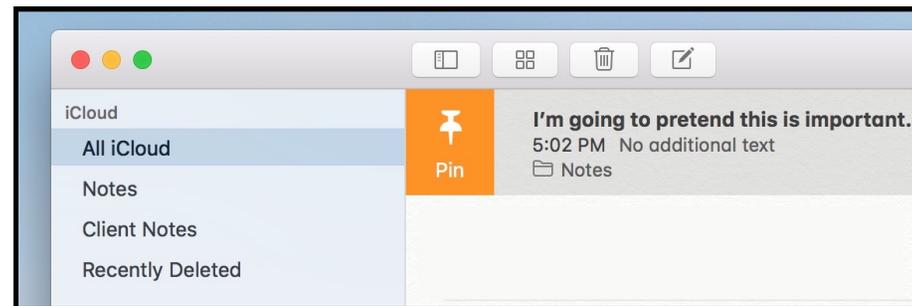
By Melissa Holt

With macOS High Sierra and iOS 11, you can now pin notes to the top of your lists in the default Notes app, so if you have one note (or a dozen) that you refer to pretty often, this'll help quite a bit. I have approximately a million notes, only about four of which I need, so I'm very happy about this! (It should go without saying, but don't be like me. No one actually needs a million notes.)

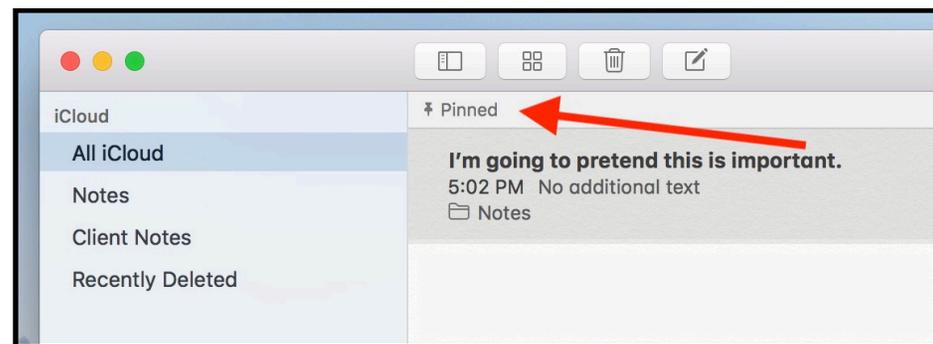
To use this feature on your Mac running High Sierra, you can either select the note you'd like to pin and choose **File > Pin Note...**



...or you could instead swipe on the note from left to right across your trackpad to do the same thing. A hard swipe will pin it automatically; a gentler one will give you the option to then click the "Pin" icon.



After you do either of those things, your selection will appear at the top of your list, as I mentioned.



To unpin an item, just reverse these steps; choose **File > Unpin Note** or swipe across and pick "Unpin," whichever suits your fancy.

Under iOS 11, you can also swipe from left to right across a note to pin or unpin it.

And no more will your notes be lost in your list! No more searches will you do! No more cleaning out must you undertake! ...But seriously, I really need to clean out my notes. I can practically hear the app wheezing when I use it.



Bob LeVitus posted the following article to macobserver.com on September 28, 2017. tinyurl.com/ycb9f7oy. © The Mac Observer. Bob is the author of more than 75 books, a computer columnist, and Mac expert. He writes a weekly column for The Mac Observer and is one of my favorite authors and speakers.

Bob Levitus: Don't Be In A Rush To Upgrade Your Mac Or iPhone

By Robert LeVitus

It seems I have to write a column reminding you it's never a good idea to upgrade an OS before the "point" release every year. This year I dedicate it to the perfect storm of four new Apple [operating systems](#) becoming available in September 2017: macOS 10.13 High Sierra; iOS 11 (and already, 11.0.1); tvOS 11; and watchOS 4. Here's my curmudgeonly advice (which is the same every year).

Don't Be in a Rush to Upgrade an OS

As much as you might want to try its shiny new features, you should never rush to install a new version of an operating system on any device you expect to use today.



Never install a new OS before the X.1 release.

See, installing a new OS is like performing a brain transplant: It replaces pretty much all of the vital software parts that bring your

Apple device to life. Without an OS, your Mac, iPhone, iPad, AppleTV, or Apple Watch isn't much more than a pile of components that are dumber than a toaster. Good-looking and pricey toasters, but without an OS they'd be dumber than a rock.

So, replacing an entire operating system is an operation fraught with opportunities for things to quickly go to heck in a handbasket. While that doesn't happen often, it does happen. And when it does, you can pretty much count on spending at least a few hours trying to get back to where you were.

Will Your Old Hardware and Software Still Work?

Another thing to consider is the impact an OS upgrade will have on your third-party hardware and software. For example, High Sierra will only support versions 15.35 and later of [Microsoft Office](#). For those still using Office 2011, as many (including my wife) are, you'll either have to downgrade macOS 10.12 Sierra or upgrade to a newer version of Office. The same goes for many older Adobe apps.

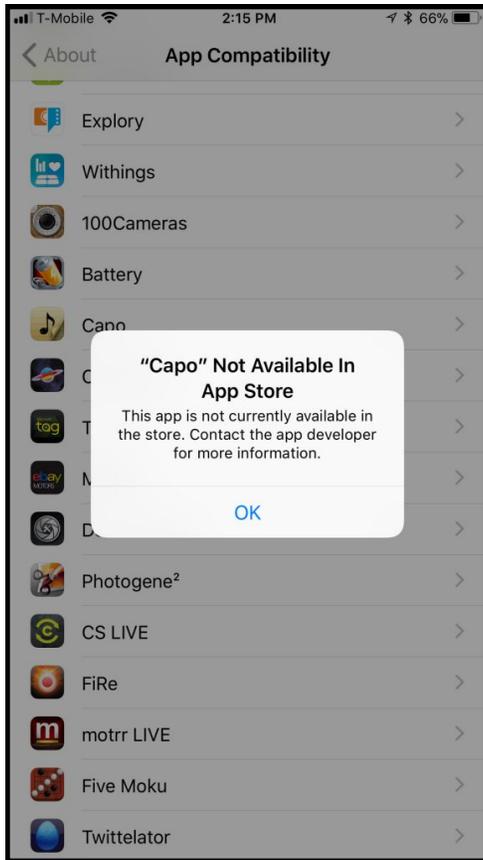
So, before you upgrade to macOS 10.13 High Sierra, might I suggest you make sure that your favorite apps and utilities are going to work? The best place to start is the crowd-sourced application compatibility website www.RoaringApps.com, which already offers High Sierra compatibility information on thousands of Mac apps.

Older apps may be even more of a problem under iOS 11, which no longer supports 32-bit applications. On my iPhone, for example, that resulted in more than 50 apps that are incompatible and have no updates available. While these are mostly older apps I won't miss much, there are a few—like Trivial Pursuit, You Don't Know Jack, XLR8, Capo, and WordsWorth, to name a few—I'm going to miss a lot.

iOS App Compatibility Tip

To find out which of your iOS apps are going to cease to function after you upgrade to iOS 11, launch the Settings app and tap General→About→Applications to see a list of incompatible 32-

bit apps (requires iOS 10.3 or later).



At least 50 apps on my iPhone don't work anymore...

My Recommendation

I recommend you not install any OS upgrade the first time you see it. Rather, think it through and proceed with caution. Don't forget to make one or more backups, just in case, and do your homework by scouring the Internet for appropriate phrases like, "macOS High Sierra issues" or "iOS 11 problems."

One last thing: Don't forget that it's always harder to downgrade than it was to upgrade in the first place, so think before you click.

John Martellaro posted the following article to John Martellaro posted the following article to macobserver.com on September 25, 2017. tinyurl.com/y94hj55k. © The Mac Observer, Inc. A scientist and author, he has worked for NASA, the Oak Ridge National Laboratory, & Apple.

Preparation Guide For macOS High Sierra Installation

By John Martellaro

Here's everything you need to know before upgrading to [macOS \(10.13\) High Sierra](#). macOS upgrades usually go fairly smoothly, but it's always wise to take a methodical approach.



macOS High Sierra is rolling out on September 25.

Day One Decision

The first step in this process is to decide if you even want to upgrade on the day High Sierra is released. On the plus side, you'll be taking advantage of all the security upgrades at the earliest opportunity. On the other hand, it's often wise to monitor the situation to see if there are any grave issues cropping up.

In the process of installing the public betas, I never had any problems with my MacBook. High Sierra appears to me to be a very stable upgrade.

However, there will always be some users who, for some reason, have a problem. The trick is to determine if the problem is specific to that user or is widespread enough to wait for a community consensus and perhaps a fixed release from Apple. The major Apple websites, including this one, will report on any serious issues. Things should sort themselves out by the evening of launch day.

Prior to making this go/no-go decision, there are some important steps you can undertake in the meantime.

App Compatibility

Almost all users have favorite apps. Many have a workflow for their professional work or even a hobby. The first thing to think about before you even decide to upgrade your OS is to make a list of what we call “mission critical” apps and then determine if they’re all compatible with High Sierra.

Chances are good that the apps you have in your dock are the apps you need to check, but there may be some important but seldom used utilities or applications not kept in the dock. Places to look are /Applications, /Applications/Utilities and /Users//Applications. In the latter case, if multiple users have often used accounts, say, other family members, you may have to check with those other users.



Roaring Apps is a crowd sourced database of app compatibility with max OS.

To determine if an app is compatible with High Sierra, a good place to start is [RoaringApps](#). If the information there isn't

definitive, you will have to go to the developer's website and look for affirmations or notes on the support page as to whether the app is supported in High Sierra.

An equally valuable approach, before you start the upgrade, is to reboot your Mac and then re-launch your mission critical apps one-by-one to see if they're inviting you to update to a new version.

Finally, see Jeff Gamet's "[Here are Some Apps that Are \(or Maybe Aren't\) macOS High Sierra Compatible.](#)"

System Integrity

From time to time, rarely, the Mac's file system, HFS+, can become corrupted. If you try to upgrade the OS with a corrupted file system, some very bad things can happen, the least of which is a failed install. The way to check this is with /Applications/Utilities/Disk Utility.app. Select your Internal drive's boot partition, and then at the top of the main window, select "First Aid."



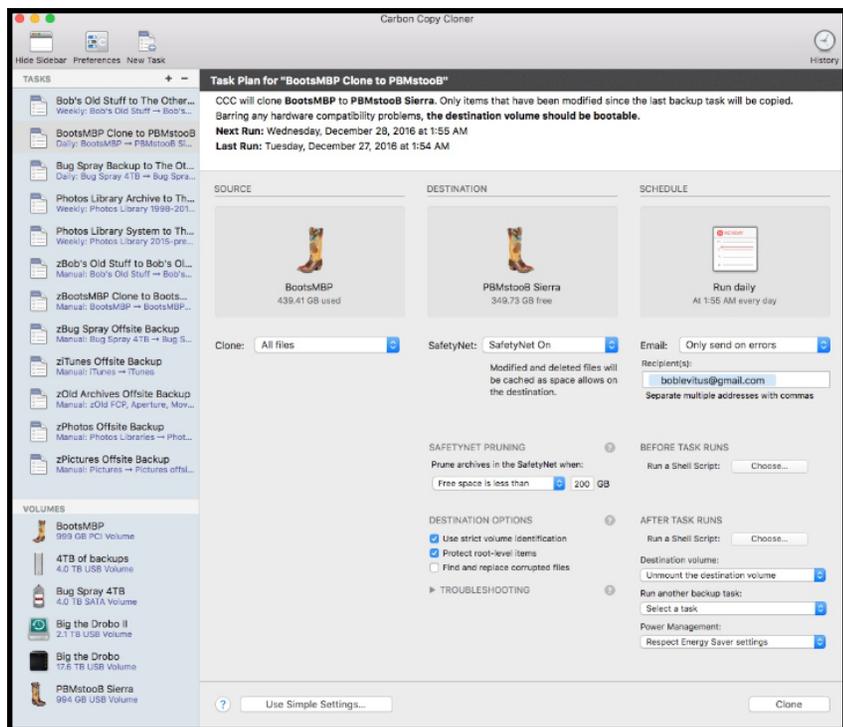
First Aid looks for directory/volume corruption.

Disk Utility can usually fix any minor problems. If it cannot, you

may need a more powerful disk repair utility. These are the kinds of utility apps I mentioned above that need to be checked for High Sierra compatibility. That's because, depending on the kind of Mac boot drive you have, your file system may be force-upgraded during the install from HFS+ to APFS. More on that later.

Back Up Your Mac

Okay, all your mission critical apps are ready and your boot drive is in good shape. There's one more critical task before you can go for the upgrade. And that's the critically important backup in case something goes wrong during the install.



Carbon Copy Cloner is just one example of a great backup tool. Creates a bootable clone.

There are many ways to back up your Mac. There's also the issue of how many different ways to do it. Here are some general recommendations.

[Cloud backup services](#) are increasingly popular, and they're either attractive to you or not. I tend to steer away from them because 1) If your Mac cannot get on the internet after an install, you may lose access to the backup data on that Mac, 2) Depending on your broadband bandwidth, it can be frustrating to wait for backups and restores. Accordingly, your first line of defense should be a local backup.

The easy, obvious and fast way to back up your Mac locally is with Apple's own Time Machine. Go to your System Preferences, select Time Machine, and make sure Time Machine has been on and your latest backup is current.

While [Time Machine](#) is, in the opinion of some, not the greatest backup system ever, it's also every Mac user's first line of defense.

But you shouldn't be satisfied with that because a Time Machine archive could have become corrupted or be uncooperative at the very moment you need to restore your Mac. I recommend a second local method.

Apps that can make a backup of your boot drive (and in some cases a bootable clone) include [Data Backup Mac](#) (Prosoft Engineering), [Super Duper](#) (Shirt Pocket), and [Carbon Copy Cloner](#) (Bombich Software). There are many others. I am most familiar with CCC and know that it is fully ready to continue your (bootable clone) backups with High Sierra.

A bootable clone is very helpful because if the upgrade fails and the Mac somehow won't boot properly, you can connect that drive with its bootable clone, hold down the option key at power on, and select it to boot from. From there, you can begin the diagnosis (and/or restore) of the internal drive. More on that process is beyond the scope of this overview.

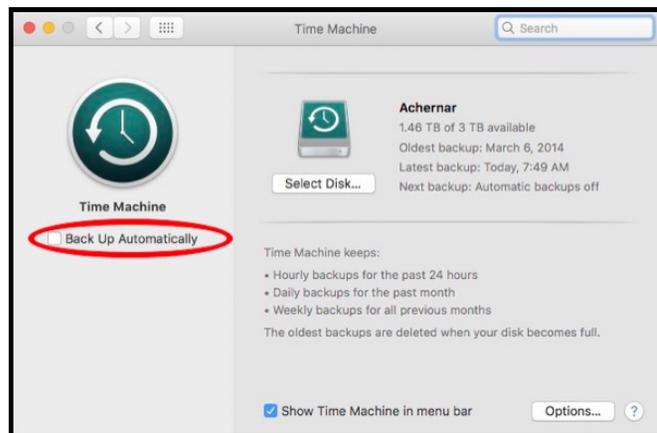
With your Mac backed up to Time Machine and well as a second method, you should be in good shape to proceed. If you've been using a cloud backup, this is a good time to also make sure you have a recent update of your critical data.

The Upgrade to High Sierra

In the past, it's been recommended that you disconnect all peripherals except the keyboard and mouse. That's to make sure there are no conflicts with older device drivers. Lately, most users have not had to do this, but it's not a bad idea. Reconnecting your devices after the upgrade, one-by-one will help isolate a problem. But it's a judgment call.

The simplest way to upgrade your Mac is with the Mac [Apple Store](#). On September 25, it's expected that you'll be able to go to the Apple Menu on your Mac, select App Store... and see the beautiful graphic that accompanies the High Sierra upgrade.

Before you start the upgrade process, having made sure you have the most recent Time Machine archive, turn off Time Machine. If any other automatic back up operations are scheduled, disable them.



Turn Time Machine and other scheduled backups off.

It's expected that even if you've been a beta tester of High Sierra, this upgrade process will work without any additional steps of fuss to get to the final release.

The Mac App Store will download a file to your /Applications folder that will have a name something like: "Install macOS High Sierra.app." This file is usually deleted after the upgrade, so if

you want to preserve it, before you start the install process, make a copy of this file and put it on a Flash drive or somewhere else safe.

Depending on how fast your Mac is, the upgrade could take the better part of an hour. Make sure you also upgrade to Safari 11. It has important security updates.

If you decide instead to do what's called a clean install, [here's a tutorial for Sierra](#) that should still work. That article has some guidance on whether a clean install is advisable.

HFS+ and APFS

There aren't many major changes going from Sierra to High Sierra. But one of the most exciting and significant is the introduction of a new file system to replace the aging HFS+. It's called the Apple File System (APFS). If you'd like to read more about APFS, I recommend this overview by Peter Cohen. "[APFS: What You Need To Know About Apple's New File System](#)"

If your Mac boots from an SSD, it will be automatically converted to APFS during the upgrade. Unlike the developer betas, you cannot opt out of this automatic update to APFS. Not to worry. APFS has been tested extensively on hundreds of millions of and iPads already, and it's ready for prime time. Even if you have File Vault turned on, the conversion will occur.

If you have a Fusion drive, the installer won't upgrade it to APFS. Some developer betas supported this upgrade for testing, but the final release of High Sierra will not support Fusion Drives.

If you boot from a standard hard disk, the installer will not upgrade the drive to APFS. For more clarifications, see this Macsales blog written by Steve Sande. "[Translating Apple's New High Sierra & APFS Compatibility Document.](#)" [This Apple document](#) says that APFS, while not optimized for hard disks, will work with them if you [elect to do the upgrade later](#).

What About External Time Machine Drives?

You should not attempt to upgrade your Time Machine drive to

APFS with Disk Utility. Time Machine only works on drives formatted as HFS+. Also, if you format a *new* drive as APFS for other uses, your Mac won't recognize it as a Time Machine destination—at least for the current implementation of TM.

For some additional details, see this article by our Jeff Butts. [“Time Machine and APFS: What You Need to Know.”](#)

Mop Up Operations

It's reasonable to turn Time Machine back on at this point. But if you made a bootable clone before upgrading, you may want put it in a drawer and start your new backups on a new drive instead of overwriting it. That's just to be sure you can return to your previous state with an archived bootable clone.

The Future is 64-bit

Apple has said that High Sierra is the last version of macOS that will support 32-bit apps. Our Macs a littered with these aging apps, and they won't run in macOS 10.14, the next version after High Sierra, likely due out this time in 2018.

Going forward. you'll probably want to catalog your 32-bit apps and monitor the developer's website or the Mac App Store for the upgrades to 64-bit versions. Some apps may never be updated, so you'll want to research modern, functional replacements.

To see which apps on your Mac are 32-bit, go to the Apple Menu, then About This Mac, then System Report... Under the Software section, select “Applications.” This may take a few minutes while the Mac searches for all apps. Then sort by the column “64-Bit (Intel)”. Those listed as “No” will have to be updated or replaced by this time next year.

macOS System Report identifies 32-bit apps.

Exploring High Sierra

There are lots of good, detailed, technical articles that provide an

Application Name	Version	Obtained from	Last Modified	64-Bit (Int... ^
atmsupload	1209.12.2806.0	Identified Developer	8/14/14, 10:04 AM	No
atmsupload		Unknown	8/14/14, 10:04 AM	No
atmsupload		Unknown	8/1/17, 11:01 AM	No
atmsupload		Unknown	8/12/15, 9:59 AM	No
atmsupload		Unknown	8/10/16, 8:57 AM	No
atmsupload		Unknown	8/14/14, 10:04 AM	No
Audio Hijack Pro		Unknown	12/20/13, 3:16 PM	No
Audio Hijack Pro (2.11)	2.11.4	Identified Developer	10/27/14, 5:52 PM	No
Audio Hijack Pro (2.11)	2.11.4	Identified Developer	10/27/14, 5:52 PM	No
Audio Hijack Pro (2.11)	2.11.4	Identified Developer	10/27/14, 5:52 PM	No
Audio Hijack Pro (2.11)	2.11.4	Identified Developer	10/27/14, 5:52 PM	No
Audio Hijack Pro (2.11)		Unknown	10/27/14, 5:52 PM	No
Backup	3.1.2	Unknown	6/16/08, 3:38 PM	No
Barnes & Noble eReader	1.1	Unknown	12/9/09, 11:37 AM	No
Barnes & Noble eReader	1.1	Unknown	12/9/09, 11:37 AM	No
Barnes & Noble eReader		Unknown	12/9/09, 11:37 AM	No
Barnes & Noble eReader		Unknown	12/9/09, 11:37 AM	No
Barnes & Noble eReader		Unknown	12/9/09, 11:37 AM	No
Barnes & Noble eReader		Unknown	12/9/09, 11:37 AM	No
BBEdit	11.6.7	Identified Developer	6/13/17, 10:09 AM	No
BBEdit	11.6.7	Identified Developer	6/13/17, 10:09 AM	No
BBEdit	11.6.3	Identified Developer	12/7/16, 2:21 PM	No
BBEdit		Unknown	6/2/14, 4:28 PM	No
Bean	2.4.2	Unknown	11/28/09, 7:27 AM	No
Bean	2.4.2	Unknown	11/28/09, 7:27 AM	No

accounting of the most visible (and invisible) features of macOS High Sierra. [Here's a good one.](#)

Phew! All done for another year!



Roman Loyola posted the following article to macworld.com on October 11, 2017. tinyurl.com/ycaxatuk. © IDG Consumer & SMB. A Senior Editor, Macworld, he has covered technology since the early 1990s. Michael Simon has been a Contributing Writer at Macworld since 2014. He is a graduate of Binghamton University.

Macos High Sierra: Everything You Need To Know About Apple's Latest Mac Operating System

From a new file system to powerful graphics improvements, to how to perform an installation, here's all you need to know about Apple's new desktop OS.

By Michael Simon and Roman Loyola



The next version of Apple's operating system for the Mac is called [macOS High Sierra](#). While the OS is mostly about software refinements, it also lays the foundation for future innovations in the worlds of VR (virtual reality) and AR (augmented reality).

You can learn more by taking a look at our favorite High Sierra

features listed below. That's followed by an FAQ, where you can get details on High Sierra's release date, system requirements, installation instructions, and more.

Editor's note: We've updated this story with a link to our APFS macOS High Sierra: The Macworld review

Here's our [full review of macOS High Sierra](#). High Sierra is mostly an under-the-hood upgrade that sets the Mac up for the future. There are cool features in Photos and Notes, and Safari 11 has controls for autoplay videos. Read our review to learn more.

A new file system

Ever since System 8, the Mac has used the HFS+ file system to keep our documents and directories running smoothly, but at last year's WWDC, a new [Apple File System](#) (APFS) was announced. It made it into iOS with the [iOS 10.3 update](#), and with High Sierra it's also coming to the Mac. But where the changes to iOS are largely behind the scenes, you'll really get it see it in action in the new macOS.

One of the main tenets of High Sierra, APFS will be new the new default file system, bringing an advanced 64-bit architecture and a responsive design to cut down on the time it takes to do common tasks. Apple VP Craig Federighi quickly demoed how fast files are copied, and it should save quite a bit of time, even on older Macs. APFS also brings some heavy-duty security, including built-in encryption, crash-safe protections, and simplified data backup on the go.

APFS works with SSDs, and when you [upgrade to High Sierra](#), the SSD will automatically be converted from HFS+ to APFS. APFS does not work with Fusion Drives and hard drives, so those storage devices will continue to use HFS+.

A recent [AppleInsider report](#) states that some games have problems running on APFS. Unity recommends that developers working on games based on the Unity Engine (such as *Cities: Skylines*) should not upgrade to High Sierra or upgrade to Unity 5.5. *AppleInsider* also states that other games that have

problems since the APFS upgrade include *Civilization V*, *Counter-Strike: Global Offensive*, *Half-Life 2*, and *Team Fortress 2*.

[Learn more about APFS in our APFS FAQ.](#)

Better Photos

Photos is rapidly becoming one of the most used apps on our Macs, and in High Sierra it looks we'll be spending even more time with it. A slew of new features await us in the new OS, including better organization, looped Live Photos, and new Memories categories. It'll also be easier to identify who's in your photos with more accurate People identification and cross-device syncing for albums.



The new Photos app in High Sierra features new pro-level editing tools.

But the coolest feature may be a set of new built-in editing tools. Photos already lets us make some awesome adjustments to our snapshots, but High Sierra seriously ups the game with powerful pro-level tools—like a curves palette for fine-tuning color and contrast, a selective color dropper to home in a specific hue, and new filters that will make your photos fit for an art gallery. And for all your gallery- and album-worthy photos, Apple has now partnered with third-party apps to give you more publishing and

printing options.

Speedier, smarter Safari

Apple's browser always gets a tune-up whenever a new version of macOS comes out, but this time around Federighi says the improvements coming in High Sierra actually make it the world's fastest desktop browser. It features 80 percent faster JavaScript performance when compared to Chrome, which should help us surf way quicker. [We have benchmarks of the Safari 11 beta, and it definitely is the fastest Mac browser available](#)

But we're more interested in two new features that address what it's like to use the Internet in 2017. The first will eliminate one of the more annoying features of the modern web: autoplay videos. Where Safari in Sierra tells you which tab is playing audio, in High Sierra, it will shut the video down before it can start. Autoplay blocking will detect which sites are delivering unwanted videos, and then press the pause button for you. [See how it works.](#)

Along with our ears, the new Safari will also protect our privacy. A new system of intelligent tracking will use machine learning to identify prying advertising trackers that track your online behavior and remove the cross-site tracking data they leave behind. That means you won't get hit up with three dozen vacuum ads the next time you buy one on Amazon.

Safari 11 also has the option to let you view sites in Reader mode all the time. [Here's a look at the always-on Reader mode.](#)

Smoother video

We watch a lot of video on our Macs, and High Sierra is making the experience even better. In addition to supporting 4K where available, it's also upgrading to the new industry standard, High Efficiency Video Coding (or H.265 for short). The new system compresses video up to 40 percent more than H.264, the current video standard. Under the new codec, videos will stream smoother and take up less space, both of which will make experience much more pleasant. And if you're a video creator, the new standard will also be built into Pro Tools so your projects

will be able to take full advantage of it right from the start.

Next-level Metal

When Metal was introduced in [El Capitan](#), it brought a slew of under-the-hood changes to make games and graphics sing, and now it's ready to deliver the next generation, appropriately called Metal 2. The new technology will open up games to a whole new world of power, with a new API and powerful tools for developers. Metal 2 will bring 10 times the draw call throughput that Metal delivered, enabling graphics that are far more robust while adding external GPU support for hard-core gamers.



Metal 2 will let developers create even more powerful games and apps.

But Metal 2 also brings support for something sorely missing from today's Macs: virtual reality. High Sierra lets developers create interactive and immersive virtual reality experience on the Mac for the very first time that will work with the HTC Vive and Unreal Engine for VR. And to show how serious it is about VR, Apple is even offering developers an external graphics dev kit to get started, featuring a Thunderbolt 3 enclosure with an AMD Radeon RX 580 GPU. You know, until the [iMac Pro](#) arrives in December.

You can learn more about Metal 2 by watching these Apple

videos from the Worldwide Developers Conference. These presentations are targeted at developers.

- [Introducing Metal 2](#)
- [VR and Metal 2](#)

Software issues

Apple announced at WWDC that the company will start to phase out support for 32-bit software in macOS. In January 2018 (High Sierra will be released months before that), new apps submitted by developers to the App Store must be 64-bit apps. Also, all apps and app updates must be 64-bit by June 2018. Eventually, 32-bit support will no longer exist in macOS, probably in a version after High Sierra.

That's important for developers to note, but it's also important for users. If you have old software you like to use and never update, it's possible they are 32-bit apps and they won't work in a future version of macOS. Now's the time to update those apps and get used to them, or find alternatives.

If you're using Apple's Final Cut Studio and Logic Studio, Apple is sending notifications to registered user regarding compatibility issues with High Sierra. According to [MacRumors](#), Apple is informing those users that Final Cut Studio and Logic Studio are 32-bit apps that "will not launch on a **computer** running macOS High Sierra." Users running these two apps will need to upgrade to Final Cut Pro X and Logic Pro X.

The following pro apps are compatible with High Sierra:

- Final Cut Pro X 10.3.4 or later
- Motion 5.3.2 or later
- Compressor 4.3.2 or later
- Logic Pro X 10.3.1 or later
- MainStage 3.3 or later

If you use Microsoft Office with the macOS High Sierra beta, take note. Microsoft announced that Word, Excel, PowerPoint, and

other Office apps may have problems with the High Sierra beta; Office 2016 should run, but users may encounter crashes. Office 2011 will not work. Office will have [full support](#) of the final version of High Sierra, as [Microsoft has clarified in a support document](#).

Other features

Since High Sierra is a maintenance release, there will be lots of little improvements all over your desktop that you might not even notice at first.

- In Notes, you can better organize your information by using a formatted table. Got note you need to access frequently and quickly? Now you can pin it.
- Siri has a more natural voice that sounds more like a person rather than a machine.
- Spotlight will provide flight information, and can show multiple Wikipedia results when there's more than one answer to your question.
- Get a sneak peek at the [new emoji coming to macOS](#).
- In Mail, Search will now use Spotlight to quickly identify top hits, and you'll be able to split your inbox and your compose window when in full-screen view. Also, Mail has been optimized so it uses less space on your storage device.
- When you're in a FaceTime call, you'll be able to easily turn a special moment into a Live Photo so you can remember it forever.
- There are a bunch of [improvements that IT professionals will appreciate, too](#).

macOS High Sierra FAQ

What is the name and version number of the new macOS?

Apple names its macOS versions after California locations. This time, it named the new version *High Sierra*. The name follows Apple's pattern of slightly changing the name of the previous version of the OS if the upgrade isn't considered a big one. (See

for example, Leopard and then Snow Leopard, Lion and then Mountain Lion.)

Apple senior VP Craig Federighi joked during the [WWDC keynote](#) that the name could be "misconstrued," but Federighi was reassured that the name High Sierra was "fully baked."

If you're into version numbers, then you'll be happy to know that this one is version 10.13.

When will macOS High Sierra be released? Apple announced at its iPhone X event that macOS High Sierra will be available on September 25, 2017.

How much will macOS High Sierra cost? Apple makes its operating systems free, so macOS High Sierra is a free upgrade for users who have macOS Sierra installed.

From what operating systems can I upgrade to macOS High Sierra? If you have macOS Sierra (the current macOS version), you can upgrade straight to High Sierra without doing any other software installations.

If you are running Lion (version 10.7.5), Mountain Lion, Mavericks, Yosemite, or El Capitan, you can upgrade directly from one of those versions to Sierra. Chances are this will still be the case with High Sierra.

How do I get macOS High Sierra? Apple will make the High Sierra upgrade available in the Mac App Store.

Apple also has a beta available to the general public, which is now available. Public betas are released on a regular cycle and the betas are free, but come with the caveat that the software isn't as stable as it would be at release—meaning it *could* cause problems on your Mac. However, if you do decide to try the beta, you can provide Apple with valuable feedback. The public beta is not the same versions as the developer beta; it's a few cycles behind.

[Learn more about the macOS High Sierra Public Beta](#), or you can

go ahead and [sign up for the public beta program online here](#). You need to make a Time Machine backup before you install the beta in case you need to restore your system.

If you try out the beta and decide later that you don't want to use it anymore and want to go back to macOS Sierra, Apple has instructions on [How to unenroll from the public beta](#) and [how to restore your system](#).

You can continue to participate in the beta program after the High Sierra golden master has been released. You'll get beta versions of the High Sierra updates.

What Macs are compatible with macOS High Sierra?

- MacBook Pro (2010 and later)
- MacBook (Late 2009 and later)
- MacBook Air (2010 and later)
- Mac Pro (2010 and later)
- iMac (Late 2009 and later)
- Mac mini (2010 and later)

Should I upgrade to macOS Sierra? Whether you upgrade to High Sierra or not is up to you. First, you need to check to see if your Mac is compatible.

Then, you also need to make sure the software you use most often will work. As High Sierra's ship date approaches, developers may release updates to insure compatibility.

Check the Mac App Store on a regular basis to install updates on apps you have bought there. (To do this in the Mac App Store app, click on the Updates tab. This will check the store for any updates.)

If you have software you didn't get in the Mac App Store, launch the app and look in the preferences or other menus for an option to check for updates. You can also look on the developer's website.

Make a backup of your Mac before you install High Sierra. You

might even save your important documents separately from your primary backup, just in case. If you install High Sierra and encounter problems, you can revert back using the backup.

How do I install macOS High Sierra? After you download High Sierra from the App Store, there are several ways to run the installation.

- Go to the High Sierra product page in the Mac App Store. The Download button will be replaced by an Open button. Click on it to start the installation.
- In the Mac **App Store** app, click on the Purchased tab. You should see the macOS High Sierra installer in the list of purchased apps. Click on the Install button.
- Go to your Applications folder and look for a app called "Install macOS High Sierra" and double-click on it.



SMARTPHONES *The evolution of Mac OS X*

Jeff Butts posted the following article to *MacObserver.com* on October 25, 2017. tinyurl.com/lyd2ulv86. © The Mac Observer Inc.

Comparing HEVC Versus H.264 Video File Sizes

By Jeff Butts

It's time now to run a comparison of HEVC versus H.264 file sizes. Chances are, you've heard about the [H.265 video codec](#), otherwise known as High Efficiency Video Coding (HEVC). You've likely heard that it is, in many ways, superior to H.264, its predecessor. If you hadn't heard about those factoids before, you have now, but they were first talked about in reference to the Mac during the [macOS High Sierra announcement at WWDC 2017](#). HEVC is also the default recording mode for iOS 11 and macOS High Sierra. Any videos you record with your iPhone running iOS 11 will use the new H.265 codec. One of the goals of this new format is to create smaller files, but does HEVC live up to that claim?



When shooting video with your iOS 11 device, you're now using a new video format

The Test: Videos Created for Entertainment, not Evaluation

To gauge the file size differences between HEVC and H.264, I chose to use videos I'd recorded for other purposes. My reasoning is that I didn't want to record specifically for the test, since I might subconsciously do something that would favor one or the other. I figured it was good to use existing video shot for other purposes, to make the testing as objective as possible.

With that in mind, I chose three videos from my Photo Library: a night video of a drone flying and then landing (44 seconds), a slo-mo video of Dave Hamilton's son playing asparagus ninja (45 seconds), and a longer video of yours truly assembling a Raspberry Pi (seven minutes 23 seconds).

The H.264 File Sizes

To generate the H.264 files and then get their file sizes, I exported the videos as 1080p files from Photos on my macOS High Sierra installation. This gives you a .m4v file, encoded in H.264 to ensure compatibility with computers and mobile devices not yet compatible with the HEVC standard. Here are the file sizes:

- 44 second video drone_landing.m4v: 58.8MB
- 45 second slo-mo video asparagus_ninja.m4v: 51.2MB
- the 7:23 video raspberry_pi.m4v: 590.1MB

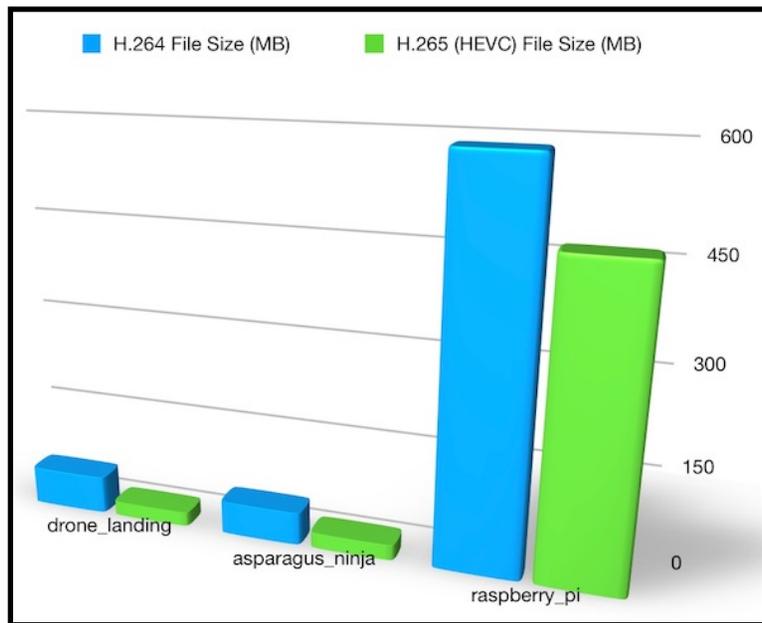
What About H.265, the HEVC Files?

For the HEVC videos, I simply chose **File > Export > Export Unmodified Original** for the videos. This generates a .MOV file, maintaining the HEVC encoding. Here are the file sizes:

- 44 second video drone_landing.MOV: 22.1MB
- 45 second slo-mo video asparagus_ninja.MOV: 23.8MB
- 7:23 video raspberry_pi.MOV: 467.3MB

To visualize those size differences, look at the chart below. It's

quite remarkable, because there is very little lost in the way of video quality. It's also strange that the longer video doesn't offer much improvement in the file size. However, that video is zoomed in on fairly intricate objects, which may explain the inability of the iPhone to encode it at a higher compression ratio.



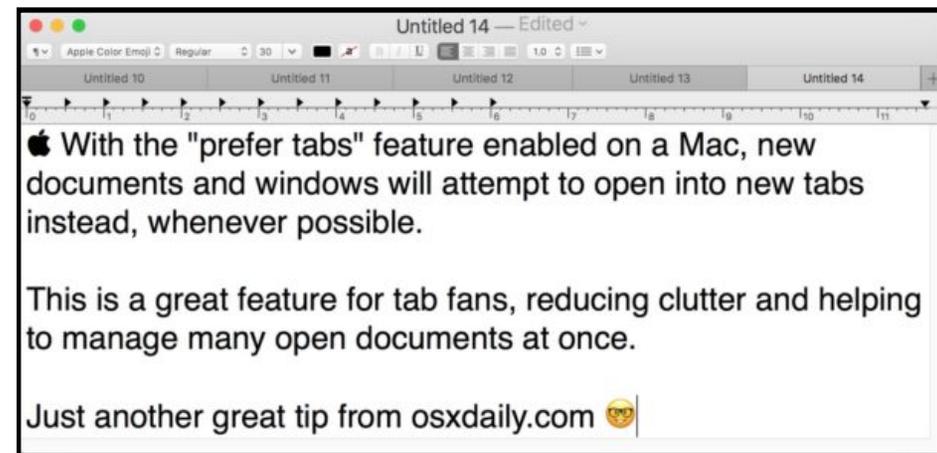
A comparison of HEVC versus H.264 file sizes

Summing Up HEVC Versus H.264 File Sizes

Compression isn't precisely twice as good with HEVC, but it's certainly a dramatic difference. The file sizes of HEVC files are consistently smaller, almost twice as small if not more than that. Since there's little to no quality loss, I can definitely make a strong argument for maintaining your videos in HEVC whenever possible. Hopefully, the new standard will become more widely-supported in the near future. It didn't take long for Cupertino get its own software up to the new standard, delivering [iMovie for Mac does support HEVC](#) with HEVC support the day macOS High Sierra released.

The following article was posted to [osxdaily.com](#) on October 24, 2017. [tinyurl.com/lyb5jqggy](#). © OSX Daily. Try the site. Lots of tips and good info.

How To Set All Mac Apps To Prefer Tabs With New Document And Windows



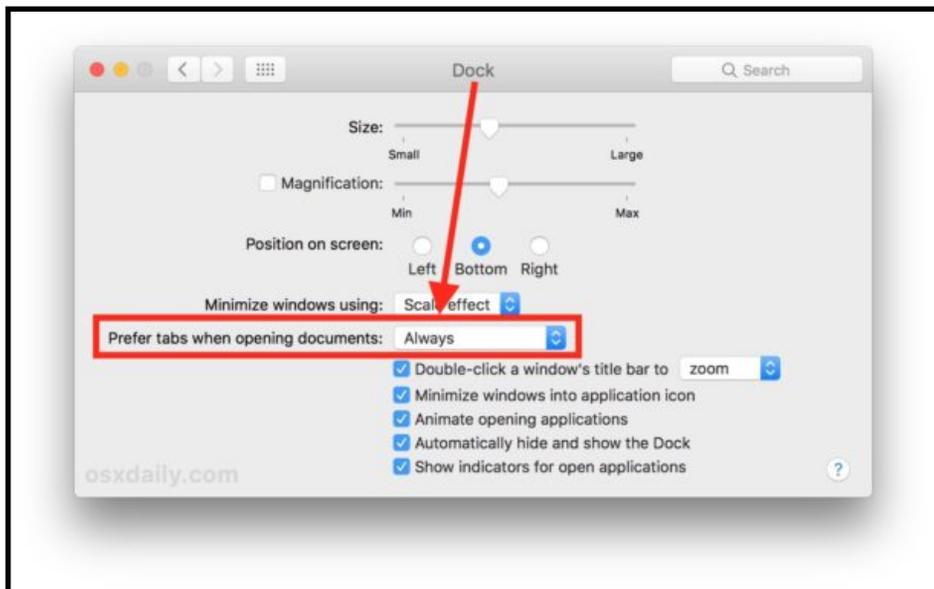
Tabs are useful and ubiquitous, whether for web browsing, the Finder, text editing and word processing, Mail, or any other apps they may appear, tabs help to reduce window and document clutter by bringing many different documents or windows into a single window with a tab bar. Many modern Mac apps support tabs nowadays, but often you have to manually set each app to use tabs when opening additional documents or new windows.

But there's another way, by using a little-known Mac system setting that tells Mac apps to prefer using tabs for new windows and documents whenever possible.

Precisely, this trick offers a single setting for all possible apps apps to prefer tabs with opening documents new or old, or creating new documents. If the Mac app supports tabs, it should respect this system setting toggle and not require individual app-specific fiddling.

How to Prefer Tabs When Opening Documents Across Mac OS Apps

1. From anywhere on the Mac, go to the  Apple menu then choose “System Preferences”
2. Go to the “Dock” preference panel
3. Look for “Prefer tabs when opening new documents” and click the contextual menu, then choose “Always” *



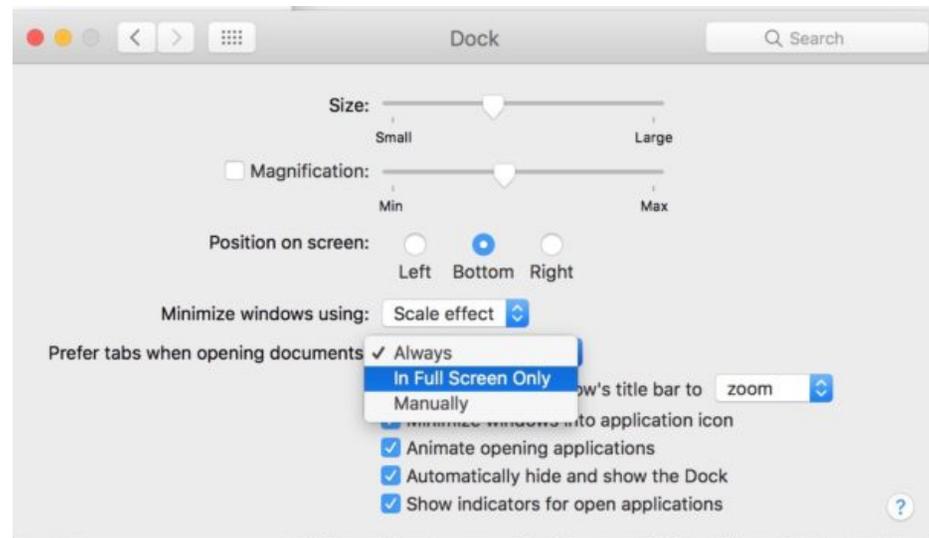
4. Close out of System Preferences

Now open any app which supports tabs; [TextEdit](#), [Maps](#), [Finder](#), [Safari](#), [Pages](#), [Keynote](#), etc, and open a new window or open a document. The opened item will appear as a tab by default, rather than as a separate window.

The great thing about this setting is that you can enable it once in System Preferences, and it will carry over to all apps that support tabs whenever possible, so you won't need to fidget with individual app preferences and settings for defaulting to tabs.

* There are other settings options available for “Prefer tabs when

opening documents” to suit your user preferences; “Always”, “In Full Screen Only”, and “Manually”, if you only want to prefer tabs when apps are full screen then choose that option instead, and if you don't like tabs much you'll probably want to go for “Manually” so that you can avoid them. Obviously this tutorial is aiming for the Always option, which is why we're focusing on that here.



Remember, this is “prefer” tabs, not “require” tabs. That means not all apps will respect the preference, and obviously if an app does not support tabs in the first place this setting will have no effect on that app too.

Note this tab preference feature is only available in the more modern versions of Mac OS, and older Mac system software does not support the capability.

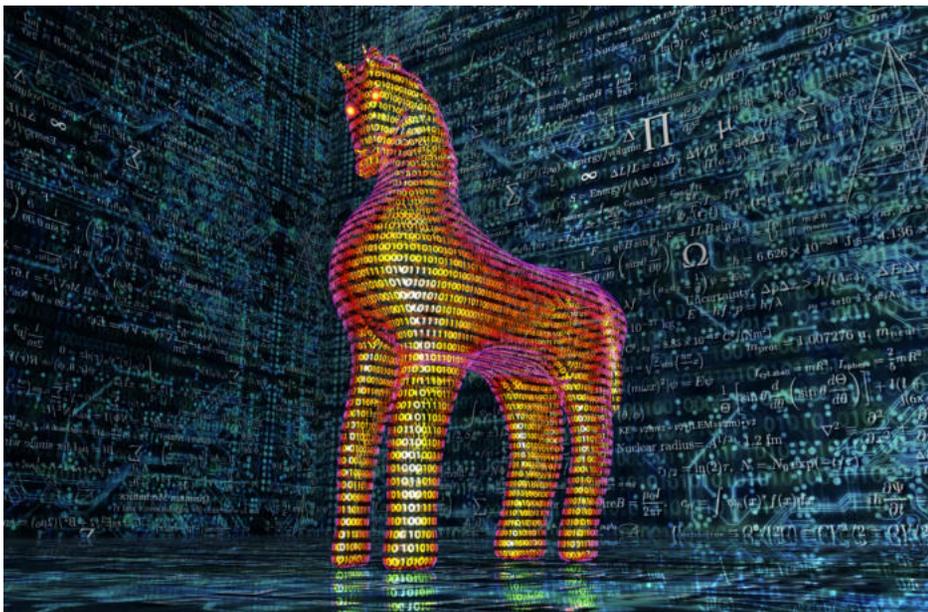
Personally I really like tabs and find them very useful for managing individual apps with many documents and items open. If you're in the same boat, you'll likely enjoy [our many other tabs tricks covered here](#), which span across many apps and both major Apple OS platforms.

Luana Pascu posted the following article to macworld.com on October 2, 2017. tinyurl.com/yah74zov. © Mac Publishing.LLC. She is a Content Marketing Strategist, currently with BitDefender, with interests in cybersecurity and IoT threats

The Age Of Modern Mac Malware

Over the past 2 decades, Mac-specific malware has grown in volume, variety, and sophistication.

By Luana Pascu



Apple fans might remember 2010 mostly for the launch of the iPad, rather than the Boonana Trojan that hit Macs the same year. Boonana was one of the first pieces of malware to leverage the increased popularity of social media networks like Facebook to spread itself from one wall to another.

Although most computer users are now familiar with threats and more careful with what they download, back in 2010, before the Mac App Store, hackers used screensavers and various free applications to spread spyware and scrape systems for information.

In 2011, hackers took advantage of the lack of information among Mac users and developed MACDefender, a fake antivirus that was extremely well crafted and presented. Most damaging, though, was BlackHole RAT that authorized remote access to all infected devices.

Shortly after, in 2012, a Java vulnerability led to the infection of 600,000 Mac users with Flashback Malware, which hackers used to steal data and download more malware onto the compromised device. This was one of the largest malware epidemics at the time, even when compared to Windows computers.

In 2013, Lamadai was reported after hacking Tibetan NGOs. Lamadai was a Mac payload that tricked users into visiting malicious websites and dropped a payload through a Java vulnerability. That same year saw the emergence of HackBack, mainly used to steal information and send it to a remote machine.

2014 started getting interesting in terms of Mac malware, after the sophisticated iWorm backdoor was identified on over 17,000 computers. To run undetected, hackers used subreddit pages of the popular Reddit website to instruct the computers where to connect so they could be herded by botmasters.

Around the same time, Chinese hackers designed Wirelurker, which spread through applications downloaded from unofficial stores, mostly targeting Chinese Mac and iPhone users. Other annoying Trojans worth mentioning are CoinThief, designed to steal Bitcoin from an infected computer, and LaoShu, which created a backdoor to harvest information.

The threat landscape suffered yet another major shift in 2015, with Mac malware peaking at almost 2,000 unique malware samples created specifically for Apple. That means *five* times more malware was detected in 2015 than in the previous five years combined. 2015 also revealed some interesting proof-of-concept attacks targeting Macs: Thunderstrike, Dark Jedi, and Mabouia ransomware, the first ransomware designed for Mac.

In 2016, however, ransomware finally made it into the wild. KeRanger, believed to be a variant of Linux.Encoder ransomware, was specifically designed to target Macs. It affected some 7,000 users. KeRanger spread through a compromised Transmission kit, a BitTorrent client. Also from 2016, Backdoor.MAC.Eleanor, [detected](#) by Bitdefender researchers, exposed Mac OS users to data theft and full remote control of the device.

In 2017, malware has reached new levels of sophistication in its ability to circumvent operating system defenses and outsmart even the savviest of users. As Apple devices have turned into an attractive target, cyber-criminal gangs the world over have unleashed highly advanced families of malware such as Dok, which poses as a Word document and FruitFly (a piece of surveillance malware). And let's not forget Proton RAT, which spread after hackers managed to compromise the website hosting the HandBrake media conversion application. The hack was so well executed and disguised that it even tricked experienced, tech-savvy users, drawing even more attention to the importance of security software.

Macs are an important part of our daily lives. And just like any important device, they need care and attention. Make sure you keep yours protected with [Bitdefender's best-in-class security solution for Macs](#).

Glenn Fleishman posted the following article to [macworld.com](#) on October 24, 2017. [tinyurl.com/y83p9wnb](#). © IDG Consumer & SMB. He is a Senior Contributor to Macworld and a regular contributor to the Economist, Fast Company, and Boing Boing. He appears regularly on public radio to discuss the tech industry.

What To Do When Ransomware Strikes Your Mac

By Glenn Fleishman

When ransomware strikes, it's hard not to panic. A ransomware attack may cause your Mac to shut down and then restart into a lock screen. A message appears, demanding ransom to provide a six-digit unlock code, which can't be bypassed. This can occur even with two-factor [authentication](#) enabled.

Crackers appear to be making use of passwords from other sites that have had password breaches in the past—and iCloud account holders re-use those passwords with their iCloud account. With Find My Mac enabled and your password, a criminal can log into iCloud.com and use Find My Mac (even without confirming with a second factor) to put your Mac into Lock mode with a six-digit code they create. Lock mode restarts a Mac into Recovery and locks out a normal boot.

Paying the ransom is inadvisable, because not all extortionists honor the terms, and there's a workaround. I recommend the following:

- Bring your Mac to any [Apple authorized service center](#)—Apple Stores and third parties—as they can unlock it from Lost mode if you provide proof of purchase.
- Even before you take your Mac in, change your password for iCloud.
- Enable two-factor authentication if you haven't already. It doesn't help with this crack, but will prevent any further access to your [account](#) if someone obtained the password.

iOS isn't susceptible to this with its Lost Mode in Find My iPhone/iPad, unless you have no passcode set. In that case, a criminal can set a four-digit code and lock you out of your phone or tablet.

If this attack seems familiar, it's because [it was previously used in 2014](#).

John Martellaro posted the following article to macobserver.com on October 6, 2017. tinyurl.com/y82ocjzk. © The Mac Observer, Inc.

Roku Beats Up On Apple TV 4K And Loves It. Here's How

By John Martellaro

Roku is consciously working to remain one step ahead of the Apple TV 4K. On October 2nd, Roku unveiled five new streaming boxes, with the lowest cost one at US\$29.99. They're available at Walmart starting October 8th. You can read about them here: "[Roku Bows New Devices, Upgraded Operating System.](#)"

That's the news that got me thinking about how Roku competes in this market.



The Roku Ultra.

First of all, Roku keeps its prices down. The Roku Ultra with 4K/UHD at 60 fps and HDR10 sells for US\$99.99. Reviews of the new Apple TV 4K consistently point out how expensive Apple's product is in comparison (\$179-\$199). Of course, the Apple TV 4K includes a scaler and support for Dolby Vision, but all modern TVs have their own scaler. For some reason, Apple declines to tell the consumer, in this market, why they ought to pay more. That leads to the next item.

Roku has six products to choose from (seven if you include the Roku TV) and presents a very useful [product comparison chart](#) on its website. Customers can match their needs to their budget.

Apple has one choice.

Roku sells its products online and at Amazon, Best Buy, Target and Walmart. Apple has a lot of retail stores, but not that many.

Roku has a keen sense of timing. The company comes out with its latest and greatest products about the time Apple does, both leveraging from customer awareness of Apple's new products yet always one-upping Apple.

Roku devices are fine looking devices and have extraordinarily well designed remotes. When customers find that two competing products have almost the same features, the one that costs less and looks and feels better is going to win.

The car makers figured this out years ago. All cars operate the same, are subject to the same federal regulations, and typically have similar features. The cars that win on the low end win on price. On the higher end, they win, at equal performance, on the design language. Yet Apple charges more for a plain black brick and a [problematic remote](#) without a convincing rationale.



Not a winning product born of a winning strategy.

Apple's strategy doesn't seem designed to compete and win. Instead, Apple seems happy to go its own way and remain comfortable with its declining market share of Apple TV brand loyalists. That's an odd stance to take in the home entertainment market where the company has always shown a strong interest.

The following article was posted to osxdaily.com on January 25, 2017. tinyurl.com/y7dedz86 © OSX Daily. Try the site. Lots of tips and good info.

How To Record A Movie Directly Into iMovie On Mac



Have you ever wanted to record a movie directly into iMovie on Mac? It's easy to capture live video from a Mac built-in camera and have it instantly imported into iMovie, from there you can edit it with the iMovie tools, incorporate it into another video project, or export the recorded movie as a file or to various social media sites.

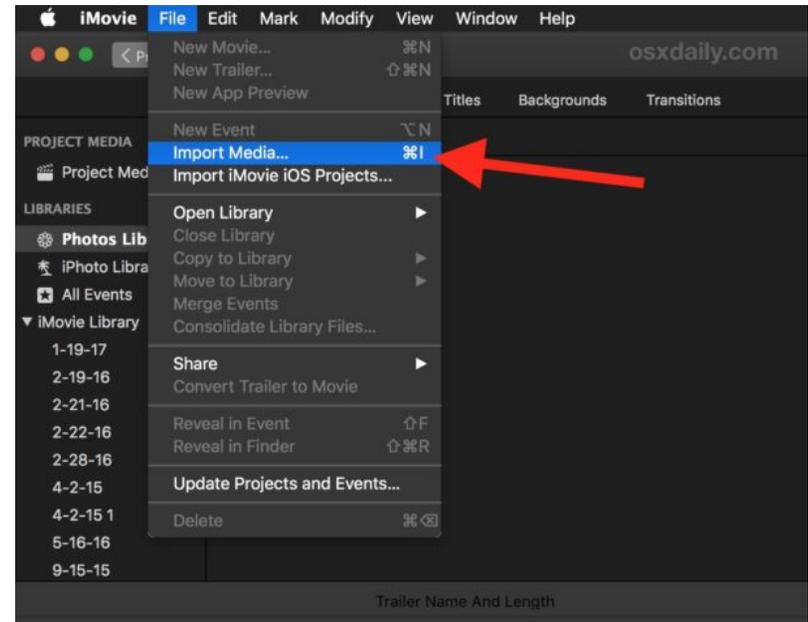
Note that recording a movie directly into iMovie is not necessarily the easiest way to capture a video recording on the Mac. If you just want to record a video and don't have any reason to use iMovie for editing or creating a broader project, it's [easier to record a video on Mac with QuickTime](#), which has a much simpler interface for recording and saving.

How to Record a Movie in iMovie on Mac

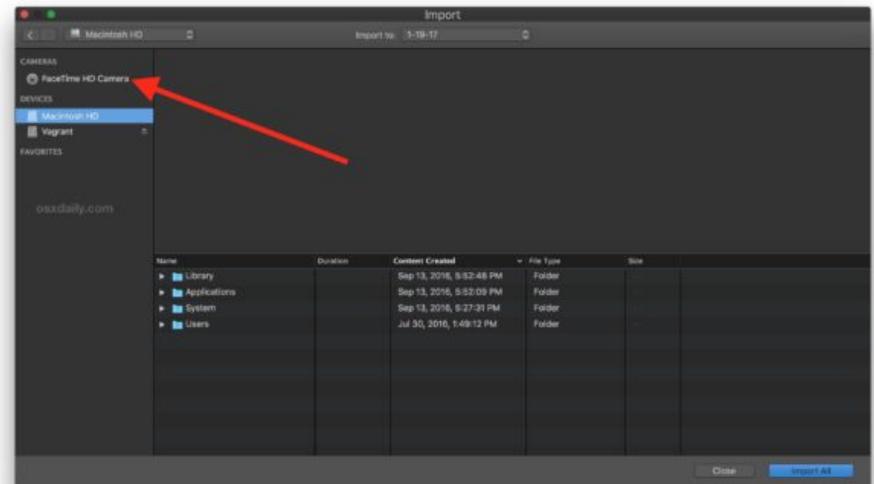
As long as the Mac has a modern version of iMovie and a front-facing FaceTime or iSight camera, this method to directly capture video into iMovie will work fine. Here's what you need to do:

1. Open iMovie if you have not done so already, you can then either be in an existing movie project or create a new one

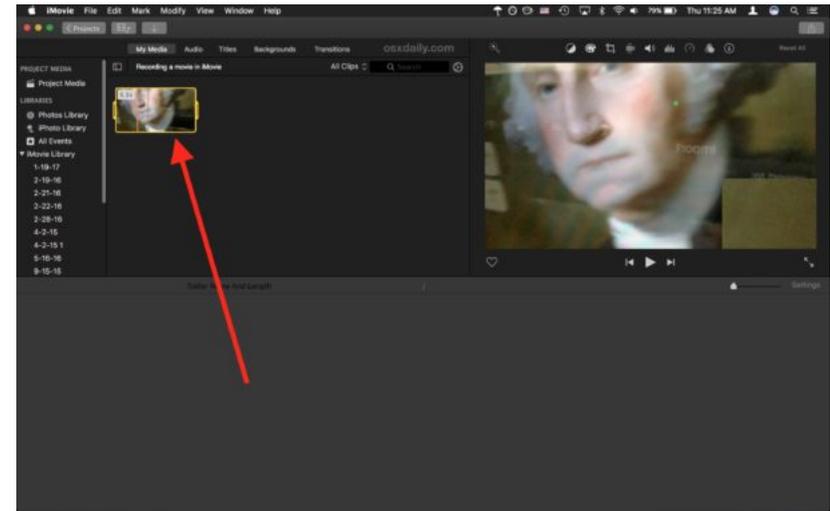
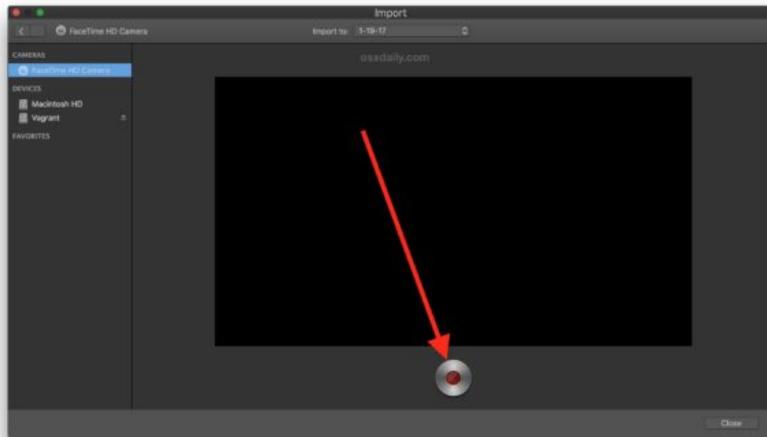
2. Go to the "File" menu and choose "Import Media"



3. At the "Import" screen choose "FaceTime HD Camera" from the left side menu option under 'Cameras'

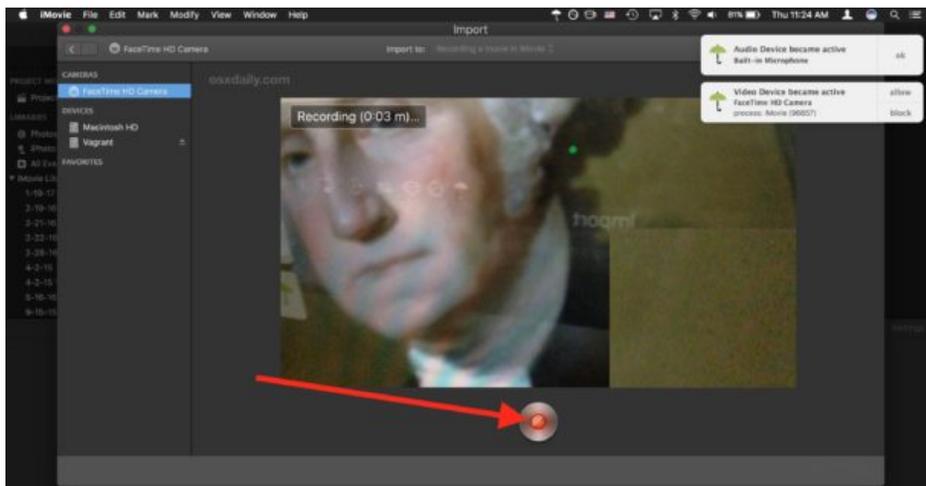


4. At the the top of the import screen choose “Import To” and select which project or event you want to record the movie to, then click on the “Record” button to start recording a movie with the FaceTime camera



From here you can place the recorded movie into an existing iMovie project, edit the video, [crop it](#), [add a text overlay](#), or save it.

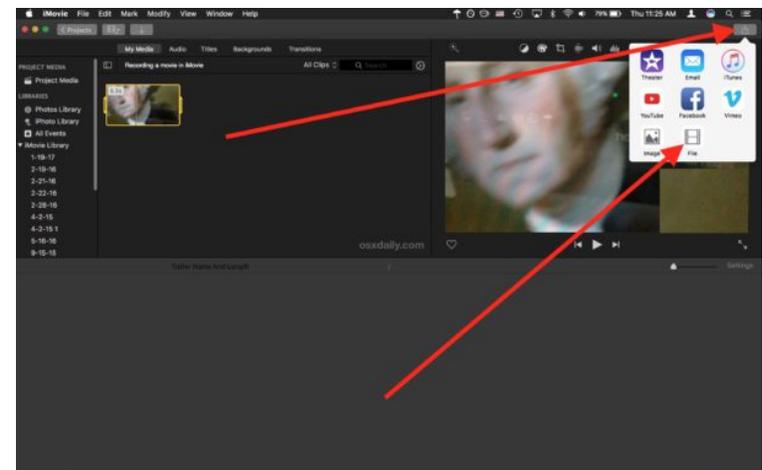
5. When finished recording the movie, click on the Record button again to stop recording



How to Save the Recorded iMovie as a Movie File

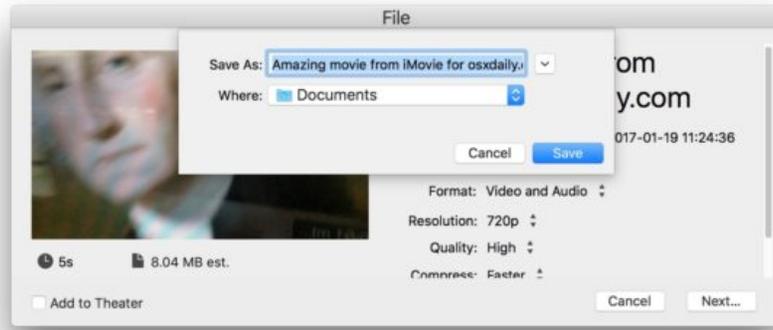
To save the recorded movie from iMovie directly as a file, to YouTube, to FaceBook, or to other options.

1. Choose the Sharing button in the upper right corner of the iMovie window



6. The captured video will now appear as a movie clip in the project event library you chose to import the movie into

2. Select where or how you wish to save the movie (Email, Facebook, YouTube, File, etc)



As mentioned before, using iMovie to capture video directly is best if you're aiming to place the movie into a broader video project or want to use the editing tools. If you have no need to edit the video, it's [probably quicker and easier to use this approach to record video with QuickTime instead](#), which is a much more barebones but faster solution.

MLMUG October 14, 2017 Meeting Minutes

By Mark Bazrod, Secretary

Maria Arguello, our President, opened the MLMUG meeting at 9:10 AM at the Hershey's Mill Community Center near West Chester. There were about 35 attendees.

Bob LeVitus will do a session on Skype in January for us and I will do a session on iOS 11 In November

MAIN PRESENTATION - FIONA KEYES

The Art Of iPhoneography

Fiona Keyes gave an excellent presentation on The Art of iPhoneography, including a number of tips. A fair amount of her presentation was photographs which, unfortunately, these minutes can not do justice to.

She organize her photography apps into two folders - Shoot and Edit.

When shooting, she closes the background apps to preserve battery, but leaves the camera apps open. She also goes into Airplane Mode and doesn't process when shooting.

You should check battery usage settings before starting shooting. She uses the native iPhone Camera, Camera+ and Hipstamatic apps. These produce separate camera rolls, although these camera rolls may be turned off. All photos will still go to the generic camera roll.

She uses Snapseed (free) for almost all editing.

She use the highest resolution possible. If the photo is just going to social media, you can use lower resolution.

Doesn't upgrade your iOS until your camera or editing apps upgrade first.

Street photography. You can be a bit discreet by using volume buttons to snap pictures.

Sometimes it is better to edit on the iPad's larger screen . Most of time she edits on the iPhone.

Your camera is almost always with you if you use an iPhone.

Light is usually not an issue.

The camera's tic-tac-toe board is helpful for better composition of the photo. Normally, keep the horizon in the top third.

Processing. Start with Snapseed. Tune for brightness, contrast, saturation, shadows. You must save result using *Save As* so you retain the original.

if you post to social media, sign your photos. Use a color that blends into the photo.

She shoots with the native iPhone Camera, Camera+, and Hipstamatic apps. Hipstamatic produces square photos. Use same subject with the 3 apps to try them out. Hipstamatic has extras that have different effects. You can purchase film packets for additional effects. Possible subjects include people, signs, cars, reflections, storefronts, still lifes, close ups, flower, trees, pets, food, and shadows.

Fiona uses some of the following apps:

Shooting. Native Camera, Camera+, and Hipstamatic apps.

Processing. Snapseed and Camera+.

Painting. Glaze for a more impressionistic look.

Printing. Mosaic produces a book of your photos.

Utilities. Impression for signatures and watermarks.

At this point Fiona showed many photos, demonstrating different effects.

Fiona uses the following apps for processing, depending on the effect she wants: Moku Hanga, Snow Daze, Photo Wizard, Tangled FX (great for animals and petals), PhotoCopier Pic Grunge, LensLight, Mextures, and Photo Book Creator:Mosaic.

The Olio Clip macro lens is helpful for close up shots.

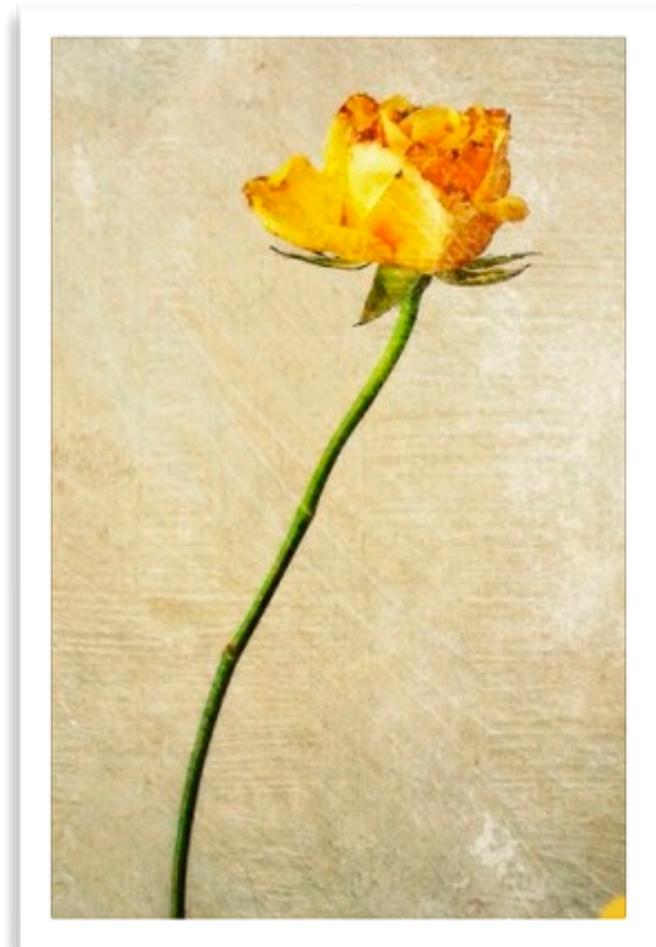
You should be careful that your attachments work with a new iPhone.

Camera+ is more of a photographer's app. She always shoots in color and use Snapseed to get the result you want.

Snapseed. Fiona gave an extended demo about how to use Snapseed and its effects. Photoshop can do many local changes,

although in Snapseed, you can select area you want to affect with a circle. You vary intensity of the option by sliding your finger left and right. Snapseed can add text.

All in all, a very informative session, but you really had to be there to get the full effect of the presentation.

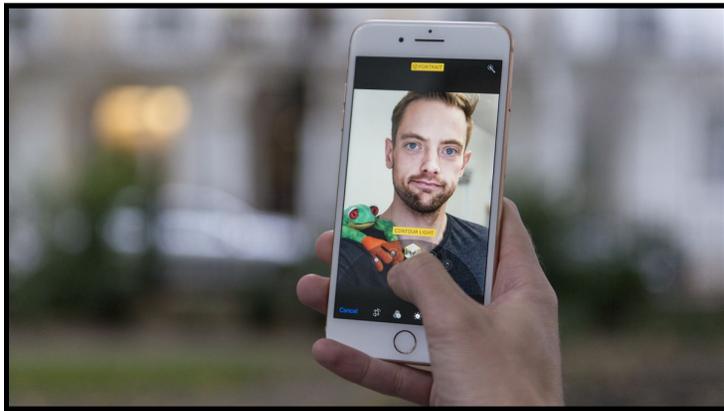


Gareth Beavis posted the following article to techradar.com on October 27, 2017. tinyurl.com/lyac4nj38. © Future US, Inc. He has been Phones and Tablets Editor at TechRadar for more than 7 years. and is a graduate of Kingston University in the UK.

iPhone 8 Plus Review

It's no iPhone X, but the 8 Plus is a safe - if pricey - bet

By Gareth Beavis



OUR VERDICT

A solid iPhone, but a clear evolution from previous Plus models. Compared to the iPhone X it's unexciting, but it offers the far better experience over the iPhone 8.

FOR

- Wireless charging is useful
- Glass back feels premium
- Dual camera is powerful

AGAINST

- Dated design
- No mobile HDR
- Battery life average

Apple's making it harder and harder to review the iPhone every year. Once again, the new iPhones are iterative.

IPHONE 8 PLUS SPECS

Weight: 202g

Dimensions: 158.4 x 78.1 x 7.5 mm

OS: iOS 11

Screen size: 5.5-inch

Resolution: 1080 x 1920

CPU: Apple A11 Bionic

RAM: 3GB

Storage: 64/256GB

Battery: 2,961mAh

Rear camera: Dual 12MP

Front camera: 7MP

The [iPhone 8 Plus](#) looks like the [iPhone 7 Plus](#), which looks like the 6S Plus, which looks like the 6 Plus. The only thing that marks out the newer model visually is the addition of the glass back and the two-tone effect it creates... if it wasn't for that, it would be impossible to tell this and the 7 Plus apart.

That said, maybe this is more of a statement about the state of the industry. Apple has never changed things for the sake of it, and with the 8 Plus it feels like Apple saying there's nothing truly fundamental out there to move to.

Except... we also have the [iPhone X](#), which *does* move the dial dramatically, plug in reams of new technology and alter the way we think about the iPhone.

Read our [iPhone 8 review](#)

So one can only surmise that this is the 'default' iPhone, the one that the people not willing to spend exorbitant sums of money on a handset will look to.

Despite not being in the X's price bracket, however, the iPhone 8 Plus is still one of the most expensive flagship phones on the market – so it needs to have something a little different to command interest over the previous models.

There are some strong upgrades: the camera has been enhanced, the internal workings are now among the most powerful in the industry, and little tweaks throughout smooth off rough edges in a way that makes us feel Sir Jony Ive climbed inside his computer and lathed them off himself.

Add to that a better battery and screen, and the iPhone 8 Plus is the better iPhone compared to the smaller 8.

But today's smartphone user is getting more discerning, and holding onto their handsets for longer than ever before... so the new phablet from Apple needs to deliver.

iPhone 8 Plus price and release date

Launch price (64GB): \$799 / £799 / AU\$1,229

Launch price (256GB): \$949 / £949 / AU\$1,479

Launched September 22, 2017

It's probably no surprise to you, but the iPhone 8 Plus price is high – if you're going for the 64GB model it's \$799 / £799 / AU\$1,229, while the 256GB option comes in at \$949 / £949 / AU\$1,479.

There really needs to be a middle ground option for those who want to stick a few high-power apps on there, record a fair amount of video and download reams of music – that's where a 128GB model would have fitted in nicely.

The average user might struggle to fill the 64GB variant with photos, apps and music, and it's good to see that Apple is starting to get back ahead of how much storage most people need.

However, given that the iPhone 8 Plus can record in 4K at 60fps, and three minutes of that comes in at 2.16GB, if you're going to do much filming at that quality you'll fill the 64GB variant fairly easily.

The iPhone 8 Plus release date was September 22 – so if you're

looking to get your hands on one, you can do so now.

Glistening gold back offers new powers

Glass back allows for wireless charging

Looks luxurious in gold

The main thing you'll notice about the iPhone 8 Plus from an aesthetic point of view is the outer coloring. The new gold version is the main event, with a gold aluminum rim and a gold/white glass back mixing together.

It's a striking combination, and compared to the 7 Plus is really rather visually different, creating a more luxurious effect. The silver and space gray colors don't quite have the same visual punch, but in the hand those phones still feel different with the glass back.

[iPhone 8 colors](#): what shades does it come in?

The reason for the glass back isn't primarily aesthetic, though. Apple has finally jumped on the wireless charging bandwagon, just when it looked like it might be losing steam. Samsung has been the main promoter of the technology for the last couple of years, and now that Apple's on board wireless charging is very likely to become mainstream.

There's no denying it's convenient, as popping your iPhone down on a charging pad is so much simpler than connecting and disconnecting a cable. But it's hardly revolutionary – the tech has been baked into phones for years.

It would, perhaps, be more impactful here if there was a wireless charging pad in the box, but you'll need to spend \$59.95 / £54.95 / AU\$99.95 to buy one from Mophie or Belkin right now, with Apple's own AirPower pad coming later this year.

The speed of charging is impressive though, as it's not too far off that of a wired connection. We can still remember the trickle charge you used to get with wireless, so you can see why Apple waited until the experience was good enough to put it in its

handsets.

New Portrait Lighting mode

Portrait mode is faster and better than before

Portrait Lighting is a small but impressive new feature

The headline feature of the 12MP dual sensor on the rear camera is the enhanced bokeh mode – dubbed Portrait Lighting.

The abilities here are pretty astounding, and show how powerful the new A11 Bionic is inside – being able to algorithmically work out the contours of the face and change the lighting dynamically is impressive.

This can be done either while the picture is being taken or after, via the gallery – although while it's a powerful tool, it's not one that really impressed anyone we showed it to.

And that's kind of indicative of the iPhone 8 Plus as a whole – while the overall experience is smoothed and enhanced, the headline features aren't really there. Portrait Lighting is, well, fine – and we almost feel guilty for not evangelizing about it more, given how much intelligence has gone into creating it.

But taking a Portrait mode picture takes some setting up as it is – so achieving the level of quality where Portrait Lighting makes a big difference to the outcome is rare.

However, the new Portrait mode is one of the places where the iPhone 8 Plus is a significant upgrade over its predecessor – it's brighter, faster to recognize the object you're trying to snap, and it's also got that Portrait Lighting feature, which isn't coming to the older model.

The Portrait Lighting modes change things slightly, but nothing mega – and the Studio and Studio Mono modes look a little too cut-out, despite the edge detection being really accurate.

If you spend some time setting up a subject to take the perfect photo, you can get some decent results – but modern smartphone cameras need to take a brilliant quick snap, and we

can see this feature being shunted off to the 'rarely used' section of your phone.

Image 1 of 4

Image 2 of 4 Image 3 of 4 Image 4 of 4

Low light portrait options can work very well

The 'Contour' lighting effect works very nicely

The speed of working out the object is much improved over the 7 Plus

The mono stage lighting is a favorite

A11 Bionic engine

Brilliant benchmark results

Doesn't seem speedier in practice than 7 Plus or Note 8

It's hard not to like the names Apple is appending to its chips these days. Following A10 Fusion, A11 Bionic doesn't really make a lot of sense in terms of what it actually does, but it's evocative.

Anyway – that's that dealt with. The new chipset inside has six cores, with four efficient ones doing the basic stuff and the other two doing the heavy lifting, whether that's photo-editing, intensive multi-tasking or providing real-time camera effects.

Those previously mentioned Portrait Lighting effects need some real power, and that's where the A11 chip comes in. Any app that uses high levels of photo manipulation worked pretty flawlessly in our tests, with no lag when working with multiple image layers.

It's hard to convey the usefulness of all this power for the average user, one who might not use such features regularly – but it'll keep your iPhone singing more sweetly for the next two or three years compared to the previous generations.

Everything feels fast under the finger – although that seems like a redundant thing to say given that most iPhones feel that way

when taken out of the box. The real test comes when you start loading it up with apps and content.

This is one of the most powerful phones out there

Generally, even when loaded up the iPhone was zippy as anything, with nothing flickering under the finger. However, we had a few moments where the interface juddered and bounced a bit – it still moved swiftly, but the frame rate slowed so it looked jagged.

It righted itself quickly, but it was surprising to note for an iPhone – it's not something we're used to.

What's *more* surprising is that the iPhone 8 Plus didn't perform any better in testing than the iPhone 7 Plus – we opened and closed apps on the two phones simultaneously, and the response times were identical - and was similar in performance to the [Samsung Galaxy Note 8](#).

In fact, when saving a large video to Files, the iPhone 7 Plus was actually faster at completing the task, despite being older and having more storage taken up. The A11 Bionic chip is certainly powerful, but we've not seen anything that shows off the raw power in terms of regular interaction – it's only evident in extra features like the Portrait Lighting.

In terms of out-and-out power though, this is the most powerful phone we've ever benchmarked. The Geekbench results are off the chart, powering past 10,000 for the multi-core score and easily beating anything from the Android world.

Will you notice the power of the iPhone in day-to-day use? Nope. iPhones have been rapid enough for years – but people are starting to expect even more and more from their device, whether that's adding filters to photos, exporting content to friends, or playing the most powerful games around, and you'll be glad of the bionic chip in a year's time.

Apple doesn't make a song and dance about the raw power in its devices, but it does build its reputation on phones just working

as they should, and the iPhone 8 Plus will carry on working as it should longer than any phone Apple's selling right now. True Tone screen and better speakers

True Tone screen and better speakers

- **Improved color reproduction and temperature**
- **Speakers are noticeable louder**

It would be wrong to look at the iPhone 8 Plus' screen, see a 5.5-inch Full HD display, and assume nothing has changed.

In terms of size and resolution, that's true, but it's missing a big point: the upgrades to the color reproduction and temperature.

These are things you won't really notice day to day, but move to another model of phone and you'll probably lament their loss.

While it's not the sharpest screen on the market, the fact that the display feels so close to the glass really gives it some pop, and the colors are strong and vivid without being overpowering.

True Tone, technology taken from the iPad Pro, is definitely understated – you won't notice it much, but it'll change the color temperature of the screen to match the ambient lighting better.

It's a symbol of the luxury you're getting when buying an iPhone; yes, it changes the color and a warmer iPhone screen in lamplight is nice, but it's not a reason to buy – it's just an enhancement to the whole experience.

It's a shame that the iPhone X exists, as that's got a more impressive screen than that on the iPhone 8 Plus, with more vivid colors and a deeper contrast ratio – but the way the iPhone 8 Plus offers more natural color reproduction is going to appeal to many.

Only the [Samsung Galaxy S8 Plus](#) or Note 8 could rival it for sheer technical ability and performance, but for day to day use it's brilliantly clear, bright and fun to look at.

In direct sunlight it's clear, watching videos is possible in nearly

every situation, and the size is just about right – the large bezels around the display are the only downside compared to the bezel-less phones of the [Galaxy S8](#) pair, the [Essential Phone](#)... and the iPhone X.

Mobile HDR is also *supported* on the iPhone 8 Plus, where it's not on the iPhone 7 Plus – the reason for the italics there is that it's not a Mobile HDR screen, but it can play back HDR content.

It's a shame, because Mobile HDR really does make a massive difference to shows, especially in the darker scenes. It's going to be available on the iPhone X, and that's going to be another possible reason to pay for the upgrade.

The dual speakers on the iPhone 8 Plus are also upgraded over the previous model – we've tested them on a decibel meter, and they are indeed louder.

Apple is claiming the new phone is 25% louder, and in our blind testing alongside the iPhone 7 Plus and Samsung Galaxy Note 8 the new version was clearly the loudest phone.

While the upgrade year on year isn't hugely marked the quality of the speaker output is rich enough though, and the sound fills a wider space than the mono sound on the bottom of the Galaxy Note 8 – it's another refinement on the new iPhone.

New AR effects

- **AR implementation is cool but flawed**
- **AR works just as well on the iPhone 7 Plus**

Augmented reality is nice, but not specific to the iPhone 8 Plus

Augmented reality (AR) is a curious thing for Apple – there's a big move towards the tech, but it's hard to see why at this point, if you look at the apps and games available.

For instance, we played *The Machines*, a tower defense-style game where you have to strategically deploy forces to win battles, and in AR you'll need to move around the playing surface to play the game.

It's... fine. It reminds us a lot of when the first gyroscope games on the iPhone 4 appeared. It was cool that you could move the phone around and play first-person-shooter games, but it wasn't easier or more immersive than what was out there already.

The same with AR – it's cool to be able to move around the playing space, but it's quickly tiring. We can imagine playing in multiplayer it would be cool, with a large table playing space and someone else with a similar iPhone doing the same, but by yourself, it would just be easier to use the screen.

Also, the experience was the same on the iPhone 7 Plus as it was on the iPhone 8 Plus, so clearly the more powerful innards aren't that necessary to enable this capability.

For Apple AR is clearly in its infancy. You wouldn't buy an iPhone at the moment for its capabilities in this area, but it is something Apple wants to push to get developers thinking about what can be done.

Because imagine the same game of *The Machines* played with a pair of glasses instead, you and a chum moving around the table and playing the game in real time – that's the future Apple is reportedly envisioning.

If that's the case, AR now makes perfect sense – and you can expect more titles to appear this year that show off the technology's capabilities in niche ways.

The iPhone 8 Plus' camera is an evolution rather than a revolution, but Apple didn't need to reinvent anything here, as it was already one of the best phone cameras on the market. It's incredibly capable on the new iPhone.

The thing that defines Apple's cameras is how easy they are to use – with every release of a new iOS they gain new, if not necessarily spectacular, features to improve the power of the camera, and the sensor gets imbued with some new capabilities.

In this case, it's not the two 12MP cameras that have made the biggest step up, but the processor inside – Apple's rammed its

own image signal processor (ISP) into the A11 Bionic chipset, and that leads to greater texture reproduction as more detail is captured.

The results are certainly evident – take a picture of clothing or a rough, stony floor and you'll retain so much more of the depth in those textures. Most snaps look a touch sharper, and there's definitely more background defocusing going on, even when you're not using the aforementioned Portrait mode.

It's actually quite hard to activate Portrait mode intuitively – you have to swipe to the mode in the camera interface, and then wait for the camera to pick up the subject – which sometimes requires you to move the phone around.

The results can be awesome, but sometimes they can look a little average. However, there's no doubting that the camera tech is excellent at working out the subject, and more often than not we had snaps we wanted to share.

The overall performance of the camera is a cut above previous iPhone snappers, with the sharpness in mixed conditions impressive – you can make out plenty of detail in both the brighter and darker sections of the photo.

But what's most impressive with the new iPhone 8 Plus – combined with the new iOS 11 software – are the editing capabilities, and what you can do with your photos post-capture.

The first is the new Loop, Bounce and Long Exposure options that come with iOS 11 and make real use of Live Photos. It's fun to play with the effects, and the phone will analyze an image and suggest which option you should use to get the best effect.

Long Exposure doesn't really add a huge amount to most Live Photos, but static images with a very singular, bright piece of motion would work well. Bounce and Loop work nicely, and you can even set the resulting image as a Watch face with a single tap.

The editing effects are powerful too – yes, they're mostly filters,

but Apple has popped some excellent choices in there, and the color/brightness tweaks you can make are the perfect mix of simple and effective – the balance Apple strives to seek.

One of the things we didn't quite understand is the Slow Sync feature, which captures pictures of objects in low light with high brightness. The flash doesn't seem to react any differently than normal in these moments, and the difference wasn't particularly clear.

Low light performance in general is mixed, as the HDR capabilities aren't as evident here. Perhaps we're expecting too much from the iPhone, but when taking pictures of a candle in the darkness we had to work hard to get the flame clear by manually adjusting the exposure.

Overall, we noticed that the iPhone 8 Plus tends to overexpose every photo a little, with the picture captured looking brighter than the subject or scene in real life. There's very little processing going on, so the detail is reproduced incredibly faithfully at times.

The autofocus, in particular, is very strong. Almost too much so – we wanted to take a snap of a fast-moving car in front of a static fence, but the iPhone 8 Plus was too rapid because the AF kicked in so quickly - and with no capability to decrease the shutter speed in the main camera app, the choices were limited.

It's no bad thing though, and in general having this level of sharpness is excellent.

The new video modes are another example of Apple just bringing effects that actually make a difference to the camera phone party. The 4K 60 frames per second (fps) filming is really smooth and clear, and a nice way to future-proof your videos.

However, it munches up storage, as mentioned above, so you'll need to constantly sluice the files off if you want to leave space on your phone. The Full HD slow motion capabilities are also great – that means super-clear footage of the things you want to capture in exquisite detail.

It's not quite at the Super Slo-Mo level of the [Sony Xperia XZ Premium](#), but then again the iPhone 8 Plus' camera performs much better in low light and in rendering detail... plus you can fully choose where the slow mo works.

To summarise: you'll get some *amazing* photos with the iPhone 8 Plus. Maybe not every single time – we did get some poorer efforts on occasion – but on the whole you'll look at the results and be wowed by the performance.

Battery Life

- **Middling battery life**
- **No fast charger in the box**

The battery life on the iPhone 8 Plus has been pleasing – the day-to-day tasks, those that don't require intense effort on the part of the phone – don't eat away the battery anywhere near as much.

If we were just playing graphically easy games, using WhatsApp or browsing social networks we were easily able to make it to the end to the day without a problem.

A day of taking photos, moving around a lot (which triggers the motion sensor) and playing (non-intensive) games saw us with over 20% of battery life still left at 8pm. Add in a wireless charging pad for regular top-ups and you'll rarely have a battery emergency.

That said, between 8pm and midnight the battery level slipped rather rapidly – you'll want to switch to Low Power Mode at this point, and it's still irritating that you can't set this as the default.

It's also frustrating that while the iPhone 8 Plus supports fast charging – 50% in half an hour from dead – you'll need to buy a dedicated cable and charger in order to take advantage of it, which sucks.

Most rivals offer fast charging right out of the box, and it's a shame that Apple hasn't joined the revolution.

The speed of wireless charging is impressive though. It's not linear, in that your phone will start charging rapidly but can then slow a little, but the general speed isn't too far off that of a wired connection, which is what you'd hope for if you're going to be picking up and putting down your phone regularly.

In our standard battery run-down test, where we loop a Full HD video for 90 minutes at full brightness, the performance was about average. We expected the iPhone 8 Plus to perform better to be honest... it dropped 23%, which is similar to many other flagship phones.

It's hard to see why it didn't do better - with a more efficient processor, it's actually a slightly worse score than on the [iPhone 6S Plus](#). It just shows that Apple hasn't really improved the battery performance much - although, given it's got a lot smaller battery than in previous Plus models (for some reason) that's actually an impressive feat of engineering.

Apple has gone from a large 2900mAh battery to the smallest its ever shoved into its phablet, presumably to facilitate the wireless charging. It's still a shame that's the case though, as we always want more battery life in the handset.

If you're a regular user of an iPhone, especially one who's not used a Plus model before, you'll be happy with the amount of battery on offer, and the ability of the iPhone 8 Plus to hold onto power when it's not doing much.

However, its battery life is a long way from being the best on the market, with many Android handsets able to last much longer.

Verdict and Competition

The iPhone 8 Plus is a great phone – there's no doubt about that. It's a better phone than anything Apple has produced before, and it's, well, just done in a very Apple way.

That's not fawning over the brand, it's a nod to the effort that Apple puts into making sure its phones just work, and in a way that adds in flourishes that impress.

Whether that's a subtle haptic double buzz when pressing the shutter on the camera, or being able to 'feel' the numbers clicking when selecting the time on the alarm, it's those little delights that... delight.

The glass back on the new iPhone Plus is probably the most noticeable change, to enable wireless charging – it's a different look, and if the drops we inadvertently subjected the phone to are anything to go by, it's pretty robust.

The wireless charging is a handy addition, but it's not earth-shattering... you'll enjoy it if you've got a pad, but it's not as rapid as connecting a lead.

The camera enhancements are subtle, but impressive, as is the speed boost the A11 Bionic chip offers – you won't notice much out of the box, but the little extras it brings do offer something different.

The Portrait Lighting mode is a nice upgrade from Apple, especially in decent light, and a genuine highlight over the [iPhone 7 Plus](#).

Battery life has sadly not taken the leap forward we're desperate to see from Apple – if you've always lived within the iPhone ecosystem you'll be pleased with the battery performance on offer, but there's still the feeling that more could be done here.

In short, the iPhone 8 Plus is a great phone. Based on the spec list, it's too expensive, but it's filled with the little touches Apple is known for that smooth the smartphone experience to such a degree that you'll feel glad you paid more.

The thing is, the presence of the [iPhone X](#) renders the 8 Plus unexciting. It's an old design with the same features as before, just a bit more refined *again*. The iPhone X is exciting, the 8 Plus just more of the same.

Who's it for?

The iPhone 8 Plus is a phone for the Apple fan who wants the longest battery life possible, and the most screen to look at,

without having to pay the premium the iPhone X costs.

That said, if you're going to pay this much, you should think hard about spending a little more to get the headline new iPhone... the [iPhone 8](#) and 8 Plus are using the rapidly-tiring shape that Apple has been offering for years, where the X is a whole new experience.

Also, if you're a video fiend, you should only buy the iPhone 8 Plus if you're happy to fork out for the 256GB model, otherwise you'll run out of space within a few months if you don't siphon off your movies.

Should I buy it?

This is a tough one... because, right now, we're not sure there's a huge upgrade here over the iPhone 7 Plus. The power doesn't seem *that* much better in the iPhone 8 Plus over last year's model, which is odd given the disparity in benchmarks.

The camera is just a touch improved (although noticeably so in some scenarios) and the screen tech a subtle boost.

In short, you should really only go for the iPhone 8 Plus if you especially want wireless charging and you intend to keep the handset for a number of years... if that's the case, future-proofing yourself as much as possible is a smart move.



AI And Humans World Shift

By Kathy Garges

The United States dominates in the theory, research, and development of artificial intelligence, but that could be changing. English mathematician Alan Turing was the foremost early AI theorist, but the U.S. quickly took the lead in practical development. Recent data confirms the concentration of AI knowhow in the U.S., and reveals other strong AI centers in Europe, China, and other Asian countries.

Two recent events highlight the globalization of AI. In July, China announced an ambitious AI plan. Earlier, in June, the United Nations held the first AI for Good Global Summit in Geneva, Switzerland. The Summit brought together academics, nonprofits, large for-profit companies like Facebook, and start-up ventures to promote development of AI for global human benefit. In addition to remote participants, there were 500 in-person delegates. A social robot attended too.

The most important international AI issue is the potential use of autonomous weapons and drones in warfare and aggression. Currently, military use of drones is controlled remotely by human operators, and drone use has been limited, but there are at least three instances of autonomous military drones in development, limited deployment, or ready to go, in the U.S., Russia, and South Korea.

Deep concern about this use of AI surfaced at the UN Summit. Then, in August, over 100 founders of robotics and AI companies from 26 countries signed an open letter to the U.N. stressing the urgent need to ban lethal autonomous weapons worldwide. In September, Russian President Vladimir Putin addressed the issue

in a lecture to students, noting the danger and unpredictability of military use of AI, and expressing the view that no nation should have a monopoly in autonomous weapons.

Fears about the use of AI for violence are not just about big nation states. There are no significant science or technology thresholds in AI as there have been in nuclear energy and space exploration. Smaller countries, terrorists, or hackers could make or control autonomous weapons and seek to use them against, civilian, infrastructure, or environmental targets.

There is another national security AI issue, foreign country access to commercial AI innovations to adapt them to military uses. Vision perception and image recognition are two such cutting-edge AI areas. The U.S. is updating and strengthening regulations covering technology transfer and foreign investment in U.S. companies because it believes China has been circumventing existing restrictions by investing in early-stage U.S. companies and using joint venture and minority ownership structures. As AI knowhow develops globally, however, the U.S. and China will not be the only players in this shortcut game.

On the international business scene, current U.S. dominance in AI comes from decades of experience in operating research and development enterprises and in attracting and educating intelligent humans to work in the field. One key consequence is U.S. control of chip hardware technology (semiconductors), but this advantage is limited because the value of chips depends on using them with software and, increasingly, big data.

Big data is even bigger in populous countries like China and India. The AI voice recognition technology of Chinese company iFlytek learns daily as it is used by over 500 million customers. The company also has a less-advanced, but improving, application for language translation.

More populous countries also have a bigger pool of human talent. IBM now employs about one-third of its workers in India, more than in any other country, including the U.S. Many of them work in AI. Recent changes in U.S. immigration policies mean

fewer visas are being granted to foreign technology workers, and countries like France, China, and Canada are using the opportunity to attract science and technology employees.

Some participants at the U.N. Summit went as far as to suggest that AI is a “post-sovereign” technology, or that it is inherently democratizing and globalizing. The XPrize Foundation, co-organizer of the Summit, has a vision of crowdsourcing the best ideas for global benefit from the more than 7 billion human individual intelligences on earth. XPrize is offering \$5 million in prize funds. One Summit participant expressed the view that promoting good uses of AI will naturally reduce the likelihood of bad uses. With the thresholds for AI development so low in comparison with technologies like nuclear weapons and space exploration, it does seem unrealistic to think of AI as an international “race” or competition among countries.

Summit participants showed many AI applications for good. Health applications included image analysis for malnutrition diagnosis (more accurate than measuring arm circumference), and analysis of babies’ cries to identify those with serious oxygen disorders. Applications were also promoted for agriculture and education. Although many were focused on alleviating the greatest poverty and illness in the world, most of these had uses that could be broadened to benefit all humans.

Other applications were clearly of universal benefit. One example is Roboticists Without Borders, a start-up for developing a clearinghouse for robots that could be diverted from their usual activities to respond to disasters around the world.

Bad uses or good? Violent conflict or beneficial interconnection? International competition, collaboration, or an optimal balance of the two? For artificial intelligence, these questions are open.

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