MLMUG Journal

MAIN LINE MACINTOSH USERS GROUP

NEW iPHONE SE & iPAD PRO ISSUE

iOS SECURITY & PRIVACY TOOLS

Our main presenter at Saturday's meeting will be Michael Inskeep. As most people are aware, attacks on computers have become dramatically more sophisticated in the last several years. Mike will review security vulnerabilities of iPads and iPhones and suggest simple steps that users can take to protect themselves against attack. These strategies are based on reports of current and emerging threats, his familiarity with the security features of Apple products and his practical experience helping users, both naive and experienced. His presentation will be aimed at people using an iDevice for personal purposes both at home and on the road.

Mike Inskeep has been supporting Macintosh computers and other Apple products for 26 years: as a Microcomputer Support and then Director of Microcomputing for the University of Pennsylvania's School of Arts and Sciences; as Technology Coordinator/Teacher for Friends School Haverford; and since 1999 through his independent consulting business, Gentle Computer Helpers.

Adam Rice, OS SIG Chair, will join Mike after his presentation for a joint Q &A session. If time allows, Adam will demonstrate some privacy tools for the Mac: an ad-blocker, a VPN, and the Tor browser.

REMEMBER -THIS MONTH WE ARE MEETING AT LUDINGTON LIBRARY BECAUSE OF CONSTRUCTION AT GOOD SAM.

CONTENTS

Contributors & Authors
Baba Mail
Mark Bazrod
Jeff Gamet
Kathy Garges
Thorin Klosowski
Roman Loyola
Hadley Markoski
John Martellaro
Darren Murph
Daniel Nations
Tom Nelson
Susie Ochs
Andy O'Donnell
OSX Daily
Jason Snell
Heinz Tschabitscher

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.

Macintosh Programming SIG/ Philly Mac Programming Group

The objective of this group is to help members become more familiar with the concepts of Macintosh and iOS programming, i.e., the elements of the Macintosh GUI, user interaction, file system, etc., and the main Mac programming tools: AppleScript, Java, C, and Objective C.

The Philly Mac Programming SIG meets at 10:30 AM on the first Saturday of each month, but usually skips January and July. Contact Deivy Petrescu, Chair, for venue information. www.phillymacprog.org. The next meeting will probably be at Ludington Library in Bryn Mawr.

President, Program Director & Vendor Liaison
Maria O. Arguello

mariarguello@icloud.com

Vice President & Promotion Director
Susan Czarnecki

sparsefur@yahoo.com

Treasurer, Membership & Facilities Coordinator
Elliott Cobin

eicobin@yahoo.com

Secretary & Newsletter Editor
Mark Bazrod

msb@lpilease.com

Member-at-Large
Larry Campbell

lcampbell9@me.com

Multimedia SIG Co-Chair & Educational Liaison
Linda McNeil

mcneil.linda@gmail.com

Newsletter Copy Editor & Apple User Group Ambassador
Deane Lappin

deanezl@verizon.net

Multimedia SIG Co-Chair
Dale Fletcher

cryptobyte@aol.com

Newer Users SIG Co-Chair & Deputy Webmaster
Bob Barton

barton@bee.net

Newsletter Graphics Editor
Sally Bazrod

sallybazrod@mac.com

OS SIG Chair
Adam Rice

adam@adamrice.org

Social Secretary
Gail Montgomery

gailemontgomery@comcast.net

Webmaster
Deivy Petrescu

mlmug_2004@dicas.com

Apple User Group

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 12 months of MLMUG newsletters, meeting information, a member directory, directions to our meetings, and much more! Our web site is **www.mlmug.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

Bookmarks

Does Your Mac Need Antivirus Software?

By Mark Bazrod

Should you run antivirus (AV) software on your Mac? Possibly, but you probably will need to do so in the future. That's about as definitive answer as you are going to get. Almost all of the more technically knowledgeable members of MLMUG will tell you they do not use AV software. You would thus think that this would be an extremely short column, but I wanted to take the opportunity to explore how antivirus programs work and the difference between the Microsoft and Apple operating systems. Understanding this will help you be more prepared when AV software is necessary.

Different forms of malware tend to get lumped together under the general rubric "virus". A virus is a program which replicate itself in a computer or across the network. A trojan says it will do one thing, but does another, such as sending your address book to a data center somewhere in Estonia. Adware is software which displays or downloads ads when you run the software. Spyware is software which takes data from your computer or takes control of your computer. Ransomware is software which encrypts files against your wishes and requires you to pay a ransom to decrypt them.

The first piece of Mac ransomware appeared in March 2016, distributed along with a version of a piece of legitimate software: the Transmission torrent client. Transmission has since updated to remove this malware (and Apple has taken steps of its own), but not before a number of unlucky users got stung.

Your Mac is very secure. Unlike Windows, Mac apps don't share a common file (called the Registry) containing configuration setting which apps can access. Mac apps use individual preference files.

Thus, global configuration changes which enable so much of Windows malware is simply not as feasible on a Mac. Also, root access is needed in order for malware to interact with other programs (i.e. steal passwords, intercept transmissions, etc.). Java already has root access so for most of us it's best to disable Java.

Malware writers are less likely to target Macs because they have a far smaller market share than Windows. Also, the Mac OS is Unix-based, which has a number of security features. Apple has added more security measures that make attacking a Mac particularly difficult. These include Gatekeeper, which blocks any software than hasn't been digitally signed and approved by Apple. However, a security flaw was discovered in late February 2014 that meant that an attacker could intercept your data if you are using your Mac on an unprotected hotspot, such as a local Starbucks outlet. It's been fixed.

Thus, the amount of malware which targets Macs is a fraction of the malware targeting Windows.

Whether you should use AV software also depends on how you feel about security and how you use your Mac. If you rely on the Mac App Store and Gatekeeper security, I doubt whether AV software is necessary. Current versions of OS X incorporate a malware scanner called XProtect that can detect known malware, but it isn't perfect. However, if you download software off the Internet without knowing where it's coming from or visit odd sites, AV software might be useful.

No AV software is perfect. It can not detect most new malware, of which tens of thousands are issued daily The new malware must become widespread enough to be noticed by AV software companies so they can add it to their malware lists. And you have to download the update. So even if a particular AV program is 100% efficient, it wouldn't immediately catch new malware.

AV software detects a malware signature, a unique segment of code within the malware. Most scanners include more than

250,000 signatures and the numbers of new viruses being discovered continues to dramatically increase.

AV software has evolved. A single signature may be consistent among a large number of viruses. This allows the scanner to detect new members of a virus family. Signature detection is often bolstered with more sophisticated techniques, but it often takes an expert to understand the warning.

AV software decreases the performance of a computer as it checks codes. The extent of the decrease varies with the particular AV package.

Running Windows software on your Mac is the same as running Windows on a PC. You must use AV software.

Be very careful about what you download and always be suspicious when your computer asks you to type your admin password out of the blue.

But the bottom line is this: EVERY computer is vulnerable to attackers in one way or another. Hackers can eventually find a way into just about any computer, given enough time and computer resources, no matter how secure the machine.

A long term analysis by AV-Test.org antivirus software testing suggests that paid products tend to demonstrate higher levels of prevention and removal than do free antivirus software. On the flip side, free antivirus software tends to be less feature-rich, thereby consuming fewer system resources which suggests it may run better on older computers or computers with limited system capacity.

If you decide to install AV software, do some research before installing it. There is a lot of very bad AV software out there. Many AV packages are renowned for their ability to bring a healthy Mac to its knees. Others are practically scams, detecting very little Mac malware (or even none). Also, beware of anti-virus "review" sites, which may be fake or paid advertorials (advertisements disguised as editorial comment).

Conclusion: For the present, it's highly doubtful that a non-commercial user needs to run AV software on a Mac unless he is an adventuresome traveler on the web. If you decide to run AV software, free AV software is probably sufficient. At the present!

SPEAKER ROSTER FOR MLMUG'S 2016 MEETINGS

January 9	Podcasts - Mark Bazrod
February 13	MS Office & Apple TV - Stan Horwitz
March 12	Special Interest Groups
April 9	iOS Security - Mike Inskeep
May 14	Tips & Tricks To Make Your Images"Pop" - Bill Achuff
June 11	Picnic
July 9	Recess - Summer
August 13	Recess - Summer
September 10	MLMUG University - Member Presos
October 8	Be Your Own IT - Sue Czarnecki
November 12	Bob "Dr. Mac" LeVitus
December 10	Holiday Party, Swap Meet, Members' Show & Tell & Election of Officers

Jason Snell posted the following article to macworld.com on March 21, 2016. tinyurl.com/h25moat. © Mac Publishing, LLC. Jason has been a technology writer for more than 20 years, has a Master's degree in journalism. He was Macworld Editorial Director.

iPhone SE First Look: Where 2012 Meets 2016

Apple's latest iPhone brings back memories of the iPhone 5.

By Jason Snell

iPhone 5s (left) and iPhone SE (right).

I remember the first time I held the iPhone SE in my hand: The year was 2012, and it was called the iPhone 5.

To be sure, there are a few very subtle design differences between the iPhone 5 and the iPhone SE, announced Monday by Apple. But when you hold the iPhone SE in your hand, as I did after Apple's media event, you'll be taken back to the iPhone 5 and iPhone 5s. Apple's newest iPhone model is not a new take on the classic 4-inch smartphone; it's an upgrade to Apple's flagship phone design of three and a half years ago.

If you're curious about the style differences between the iPhone 5s and the phone replacing it in Apple's product line, I'm here for you: I brought my gold iPhone 5s to Apple so that I could compare the two models directly. The Apple logo on the back of the iPhone SE is a stainless steel cut-out, like the iPhone 6 family; the iPhone 5s Apple logo is a silver screenprint. The chamfered edges on the front and back of the iPhone SE are matte, compared to the shiny chamfers on the iPhone 5s.

And that's it. No, seriously. The iPhone SE comes in the Rose Gold color option never offered on the iPhone 5s, but otherwise these two phones are identical cousins. If you upgraded your iPhone 5s to the same color iPhone SE, nobody but the most attentive Apple aficionado would ever know. (Sherlock Holmes, on the other hand, would take one look at those matte chamfers and deduce the truth —you did go to the Apple Store on March 31 and acquire a new iPhone!)

I admit, it's been a while since I held a four-inch iPhone model in my hand. I've been using the 6 series since day one, and generally loving it, though I had to put on a case because I felt the phone was just too slippery. Gripping the iPhone SE reminded me just how blocky and solid this design is, and in a good way! It fits more comfortably in my hand than the iPhone 6 or 6s, let alone the extra-large Plus models.

The trade-off for this, of course, is a much smaller screen. The iPhone SE's 1136x640-pixel display is a far cry from the 1334x750-pixel display of the iPhone 6 and iPhone 6s. If you've gotten used to the iPhone 6 display, it will be hard to even consider moving to the iPhone SE. But if you've been holding out for a replacement for your iPhone 5s, your day has come.

The iPhone 5s (left) has shiny chamfered edges while the iPhone SE's (right) edges are matte.

I suspect there's another class of users who will update to the iPhone SE: People who got an iPhone 6 or 6s because it was the latest and greatest tech, not because of the larger size. While the iPhone SE looks like 2012 or 2013's vintage on the outside, it's pure 2015 on the inside. From the A9 processor with M9 coprocessor to the advanced wireless radios and support for Apple Pay, the iPhone SE is a modern iPhone in many ways that the iPhone 5s couldn't be. The processor advance alone boosts the SE to twice the speed of the 5s. And so far as I could tell based on my viewing of the spec sheet and quizzing of Apple employees, the iPhone SE's camera is basically the same one found in the iPhone 6s, right down to support for 4K video.

But the iPhone SE is not a perfect match for the iPhone 6 and 6s. The display, while still a bright IPS screen, is more in line with the screen on the 5s—it's got a lower contrast ratio and reduced viewing angle compared to the next-generation screens on the iPhone 6 and 6s. And the Touch ID sensor is unchanged from the 5s, so it's slower than the new second-generation Touch ID sensor found on the iPhone 6s and 6s Plus. The iPhone SE's 1.2-megapixel selfie camera is a match with the one found on the iPhone 6, not the upgraded 5-megapixel model found on the iPhone 6s. And there's no built-in barometer, so forget thinking of using the iPhone SE to track how many sets of stairs you've climbed or how many vertical feet of snowboarding you got in over the weekend.

The iPhone SE goes on sale March 31, so you can hold one in your hand yourself and decide if you want it. But really, if you or someone you know has an iPhone 5 or 5s, just hold that phone in your hand and imagine what it would be like to have iPhone 6s power in a design from 2012. That, in a nutshell, is the truth about the iPhone SE.

———————————————

Roman Loyola posted the following article to macworld.com on March 28, 2016. tinyurl.com/gwl5fb9. © IDG Consumer & SMB. A Senior Editor, Macworld, he has covered technology since the early 1990s.

iPhone SE Early Reviews: Retro On The Outside, Modern On The Inside

The iPhone SE is like the iPhone 5s... But it's also not like the iPhone 5s.

By Roman Loyola

On the surface, the fascination with the size of the iPhone SE seems odd. It's not like we've never seen a 4-inch iPhone before. To understand what the big deal is, you have to go underneath the surface—you have to experience what's behind the 4-inch screen to understand what the hype is all about.

Form the looks of the early reviews, the consensus is that the iPhone SE packs a lot of power in a smaller package. iPhone SE preorders began on March 24, and actual phones won't reach the general public until March 31. In the meantime, a few media outlets got their hands on the iPhone SE and posted their reviews after a day or two of use. Here's what they have to say. (Our review of the iPhone SE is in the works. Look for it soon.)

The obvious

Every early review points out that the iPhone SE looks just like the iPhone 5s. Sure, that seems obvious, but it's a clear point of reference for iPhone users. It lets you know almost exactly what the iPhone SE looks like—almost, because there are a few cosmetic changes that don't change the overall design. (In fact, I wasn't able to find a review that didn't mention the iPhone 5s.)

In a world where phones have increased in size, *Mashable's* Christina Warren reminds us why many people prefer a 4-inch phone. "Apple used to vaunt the one-handed nature of its 4-inch phones. And it's true, there is something to be said about a phone

that can truly be used with one hand. No need for reachability, no need for adjusting your hands."

BuzzFeed's Nicole Nguyen put the iPhone SE to the pocket test: "The SE fares better than, er, other phones I've tried to put in my pants, but it's no Motorola Razr, you know what I mean?"

Performance

Spec-wise, the iPhone SE is similar to the iPhone 6s, but The *Verge's* Lauren Goode says, "It's a little trite to describe the new phone as an 'iPhone 6s in the body of an iPhone 5s,' because that's not exactly true." The iPhone SE is missing a lot of features found in the iPhone 6s, such as 3D Touch and a barometer.

The iPhone SE, with its A9 processor and 2GB of RAM is fast, though. "The SE, as I heard one person refer to it, is a little pocket rocket. It's corny, but it's true," wrote Goode. Mashable's review provides GeekBench benchmark results, which are practically identical. The Wall Street Journal's Geoffrey A. Fowler says that the iPhone SE is about 70 percent faster than the iPhone 5s, based on GeekBench results.

Camera

iMore's Rene Ritchie points out that the A9 chipset's image signal processor has improvements that make "your photos look more like real life and less like oversaturated, level-crushed hyper-life."

CNET's Scott Stein doesn't dive deeply into the iPhone SE's camera performance, but he does say "its speed and features are identical to that of the iPhone 6S—which remains, with the exception of the newer, far more expensive Samsung Galaxy S7 line, the best smartphone camera out there."

Battery life

The Wall Street Journal says that the iPhone SE's battery life is "the standout news." "The SE lasted 10 hours—more than two hours longer than both the iPhone 6s and iPhone 5s, and nearly three hours longer than the Galaxy S7," wrote Geoffrey A. Fowler.

Lauren Goode of The Verge said the iPhone SE performed better than the iPhone 6S; after 12 hours, she still had 44 percent battery life left. Christina Warren of Mashable and BuzzFeed's Nicole Nguyen also got better battery life than her iPhone 6s.

Bottom line

Conventional wisdom says that a smaller phone comes with compromises, but the early reviews say you aren't making serious sacrifices with the iPhone SE. As iMore's Rene Ritchie wrote, you get "the best experience possible in as small an inexpensive an iPhone as possible."

Stay tuned for the definitive Macworld review of the iPhone SE.

———————————

Susie Ochs posted the following article to Macworld.com on March 21, 2016. tinyurl.com/pmsupb9. *© Mac Publishing.LLC. She is Executive Editor, Macworld, a proud Mac geek and writer who has been covering Apple since 2006..*

FAQ: What You Need To Know About The 4-Inch iPhone SE

It starts at $399, it does Live Photos but no 3D Touch, and the battery should even outlast the bigger iPhones.

By Susie Ochs

It turns out that in today's "go big or go home" world, plenty of people didn't want a bigger iPhone. So they did go home, back to their 4-inch iPhone 5s and 5c models, to wait for Apple to make a pocket-sized iPhone once again. Now that wait is (nearly) over.

On Monday, Apple unveiled the iPhone SE, which has the form-factor of an iPhone 5s, but the speedy components of an iPhone 6s. Here is everything we know so far about Apple's newest little thing.

Important thing first: When can I get it?

Let's get this out of the way right now! Apple will start taking preorders for the iPhone SE on Thursday, March 24, and will start shipping the devices a week later, on Thursday, March 31.

How much will it cost me?

The iPhone SE comes in two storage capacities. The 16GB version is $399 unlocked, and the 64GB version is $499 unlocked.

(Nope, there's no 32GB iPhone SE, and nothing bigger than 64GB. If you need more storage, the iPhone 6s comes in 128GB size for $849 unlocked, or $949 for an unlocked 128GB iPhone 6s Plus.)

Can I pay in installments?

Of course you can. This is America.

First, the bad news: The iPhone SE is not eligible for Apple's iPhone Upgrade Program, which only covers the iPhone 6s and 6s Plus, and only when you buy it from the Apple Store.

But there is also good news! The new iPhone SE is eligible for the "trade up with installments" program Apple announced in February, but you can only get this deal by bringing your old device to the Apple Store. Depending on which model you're trading up from, your iPhone SE could be as little as $10/month.

"Carrier financing" is available—those are installment plans from the carriers, like T-Mobile Jump on Demand or AT&T Next. You can purchase your iPhone from Apple and then compare plans from multiple carriers, including Sprint Easy Pay, T-Mobile Equipment Installment Plan, and Verizon Device Payment. Or you can purchase the iPhone SE directly from your carrier of choice.

Apple also has a financing program through Barclaycard, so you could put your new iPhone SE on installments that way. That's not the same as the iPhone Upgrade Program, which is an 18-month financing term that lets you upgrade after 12 months and includes AppleCare+. Financing an iPhone SE through Barclaycard just lets you spread out the payments of the full retail price.

What's the screen like, besides 4 glorious inches?

It's a 4-inch screen, just like the iPhone 5s, 5c, and 5. (iPhones before that had a 3.5-inch screen.) The resolution is the same, too: 1136x640 at 326 pixels per inch.

That's the same ppi density as the 4.7-inch iPhone 6 and 6s—the iPhone SE screen won't look any worse, just smaller. The really big iPhones (the 5.5-inch 6 Plus and 6s Plus) have 1920x1080 screens at 401ppi.

Does it have 3D Touch?

No. You can take Live Photos, and tap and hold the screen to see them animate, but the iPhone SE doesn't have the full 3D Touch feature. You can't deep-press home screen icons for Quick Actions, or use the Peek and Pop gestures. Bummer.

3D Touch is currently exclusive to the iPhone 6s and 6s Plus.

Physically, how close is it to the iPhone 5s?

Extremely close. Apple mentions some incredibly subtle differences, like "bead-blasted aluminum for a satin-like finish," but the size and shape are the same. Both the iPhone SE and the now-discontinued iPhone 5s are 4.87 inches tall, 2.31 inches wide, and 0.30 inch thick. You should even be able to use the same cases on both.

The iPhone SE weighs 3.99 ounces, and the iPhone 5s weighs 3.95 ounces. Almost the same.

What colors does it come in?

The four you'd expect, same as the iPhone 6s and 6s Plus: silver, gold, rose gold, and space gray. The space gray version has a black bezel around the screen, while the other three have white bezels. The ring around the home button matches the color of the metal back.

And yes, "rose gold" could be colloquially known as "pink," but it has a golden undertone that makes it look a little more sophisticated than a pure cotton-candy pink.

Apple's iPhone SE has the processing power of the iPhone 6S Tell me about the cameras

The rear-facing "iSight" camera has a 12-megapixel sensor with Apple's Focus Pixels and True Tone flash. It can shoot 4K video and up to 63-megapixel panoramas.

The iPhone SE's front-facing "FaceTime HD" camera takes 1.2 megapixel stills and records 720p video. It gets the Retina Flash feature, which lights up the phone's entire screen for a more natural looking flash, great for selfies. The front camera even has burst mode, like the rear camera does.

To compare, the iPhone 6s and 6s Plus have all these features, but on those flagship devices, the front camera is 5-megapixels, not 1.2. The iPhone 6s Plus has optical image stabilization for both photos and video, but it's the only device that does. (The iPhone 6 Plus does for photos but not video.)
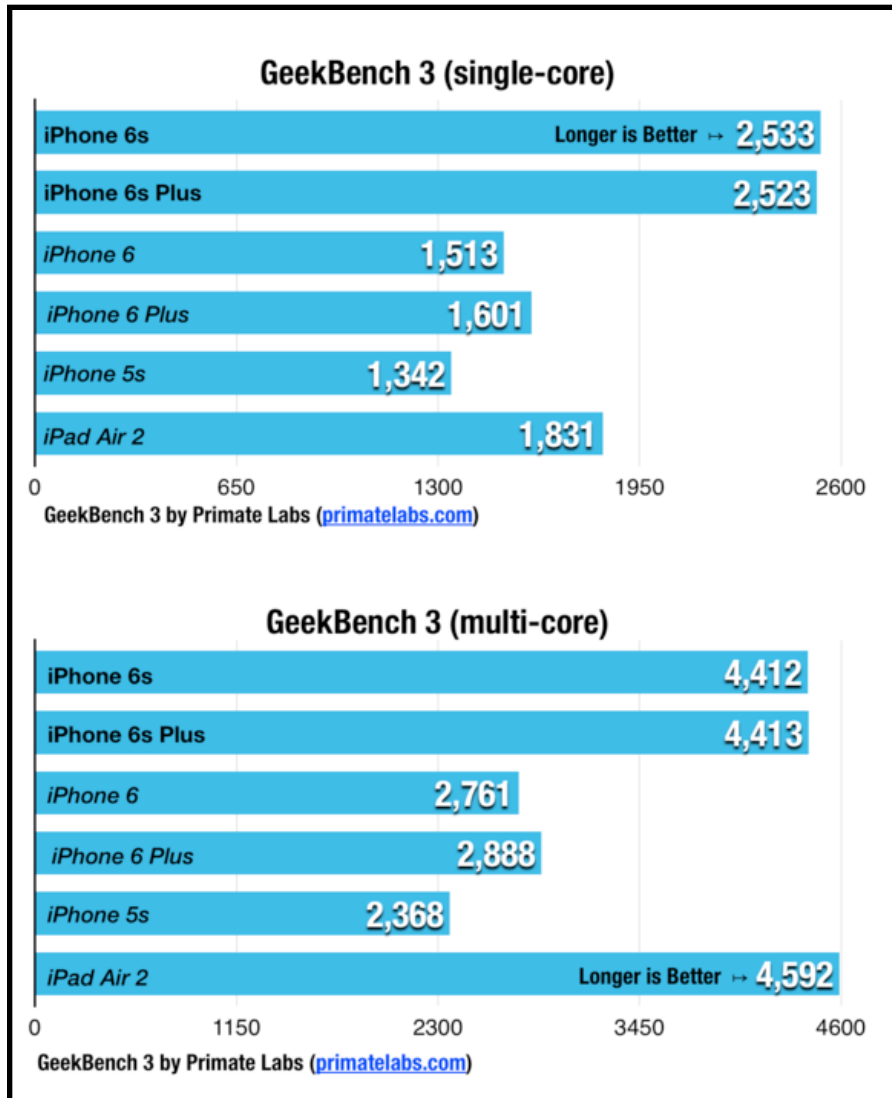
4K video? Does it have the same video modes as the bigger iPhones?

Yep! You can record 4K video at 30 frames per second (fps). If you go down to 1080p video, you can opt to shoot at 30fps or 60fps, but 720p video is always 30fps. Slo-mo is supported, at 120fps for 1080p, or 240fps for 720p. The time-lapse mode is here, and you get cinematic video stabilization in 1080p and 720p modes, but the iPhone SE lacks the optical image stabilization for video that's exclusive to the iPhone 6s Plus. You can even take 8-megapixel still images while you're recording video.

What kind of chip does it use?

The iPhone SE has the same 64-bit A9 system-on-a-chip, featuring the M9 motion coprocessor, as the flagship iPhone 6s and 6s Plus.

When we reviewed the iPhone 6s and 6s Plus, we tested the A9 with GeekBench 3 and found it smoked all other iPhones—especially the iPhone 5s, which this new iPhone SE replaces. You can see those results below—longer bars mean faster performance. It's a speedy little chip.

GeekBench 3 (single-core)

iPhone 6s	Longer is Better ↦ 2,533
iPhone 6s Plus	2,523
iPhone 6	1,513
iPhone 6 Plus	1,601
iPhone 5s	1,342
iPad Air 2	1,831

0   650   1300   1950   2600
GeekBench 3 by Primate Labs (primatelabs.com)

GeekBench 3 (multi-core)

iPhone 6s	4,412
iPhone 6s Plus	4,413
iPhone 6	2,761
iPhone 6 Plus	2,888
iPhone 5s	2,368
iPad Air 2	Longer is Better ↦ 4,592

0   1150   2300   3450   4600
GeekBench 3 by Primate Labs (primatelabs.com)

What about the the battery life?

So glad you asked. One huge advantage of using the powerful A9 chip on a device with a smaller screen is that iPhone SE users should actually see better battery life than the larger-screened iPhone 6s and 6s Plus.

Apple quotes up to 50 hours of audio playback, or up to 13 hours of video. Using the Internet, you should get 13 hours of LTE or Wi-Fi, and 12 hours of 3G. You could talk for up to 14 hours on the 3G network, if you still use your iPhone for actual phone calls. And it should last up to 10 days in standby mode. We'll test all these when we get our review unit.

Can it use Apple Pay?

Yes. Thanks to Touch ID, built-in NFC, and the Secure Enclave, the iPhone SE is compatible with Apple Pay, which debuted with the iPhone 6 and recently spread to more countries, including Canada, the United Kingdom, and China.

Does it have a headphone jack?

Yes! We've heard rumors that the iPhone 7 may ditch the 3.5mm headphone jack, restricting users to Bluetooth or Lightning headphones instead. But the iPhone SE has the same headphone jack you've been using for decades now. Whew.

9.7-Inch iPad Pro Early Reviews: Better iPad Comes In Smaller Package

The 9.7-inch iPad Pro won't be available until March 31, but a few media outlets were able to review it.

By Roman Loyola

When Apple released the 9.7-inch iPad Pro, the iPad lineup became a little more complicated. Which model should you get? A product review can help you make a decision.

There are plenty of first looks and hands-on reports from the March 21 event (including our own), but there are a few media outlets that got review units and were able to go in-depth with the 9.7-inch iPad Pro. Here's a summary of what they have to say. (We're working on our own review of the 9.7-inch iPad Pro, which we'll post soon.)

Ars Technica

In his review for Ars Technica Andrew Cunningham addresses whether any iPad Pro can replace a Windows PC, which was a selling point that Apple VP Phil Schiller made during the March 21 Apple event. He wrote:

> For many active but less-demanding users, the strength of the hardware and the relative simplicity of the software could be enough to recommend it, though for the time being there are things that regular old Windows PCs are just better at than iOS is (including running legacy apps and connecting to just about anything that needs a standard USB port). It really depends on how you work and what you need to do, and we can't answer all of those questions for you.

Considering the 9.7-inch iPad Pro against the other iPads is more definitive. If you are a heavy user of an iPad Air 2 or older 9.7-inch iPad, "the iPad Pro is a no-brainer upgrade."

iMore

Rene Ritchie's review for iMore is a work in progress. He notes that the review will be updated with more in-depth analysis. His initial impressions are upbeat:

> This can still be your everyday iPad, and better so than ever, but it can also be your ultra-mobile productivity machine, with little in the way of compromises. Sure, you lose some display and keyboard real estate, but you gain portability and an excellent camera system.

Independent

Across the pond, David Phelan wrote a review for the U.K.'s Independent. He's impressed:

> And it turns the iPad Pro into an extremely effective laptop alternative, complete with touchscreen, unlike Apple's own laptops. In fact, the touchscreen works so well with the iPad Pro and keyboard, it's hard to think Apple isn't considering making a MacBook with touch-sensitive display. We'll see. After all, at the product's launch, Apple's Phil Schiller said that the majority of people coming to the bigger iPad Pro had come from Windows PCs. Proof, if of nothing else, that the iPad Pro series are immensely powerful machines and can be taken seriously.

Mashable

Lance Ulanoff's review for Mashable is very positive. He calls the 9.7-inch iPad Pro the "best flagship iPad you can buy." He goes on to say:

I don't know if this new Pro model will revitalize the iPad market, but with the 9.7-inch iPad Pro, Apple has certainly given it its best effort. I know I will find it hard to switch back to using an iPad Air 2.

Stay tuned for the definitive Macworld review of the 9.7-inch iPad Pro.

———————————

Darren Murph posted the following article to techradar.com on March 22, 2016. tinyurl.com/z9q5uvm. © Future US, Inc.. He is Global Editor-in-Chief, techradar, Guinness World Record-holding journalist, author and consultant.

Hands On: iPad Pro 9.7 Review

It looks like an iPad Air, but it's wearing a suit on the inside

By Darren Murph

OUR EARLY VERDICT *The 9.7-inch iPad Pro is probably a look at the future of iPad — it's a manageable size, has an industry-leading display, and is a joy to create art on. That said, we wonder if it'll truly attract Windows converts without running a full operating system. iOS only gets you so far.*

For
   Way easier to handle
   True Tone display is gorgeous
   More power is better

Against
   Base model only has 32GB of storage
   Apple still won't sell a tablet with OS X
   What do you do with that 12.9-inch iPad Pro you bought?

This is the new 9.7-inch iPad Pro. Or, if we had to guess, the future incarnation of the iPad.

Now, we're getting our first look at the iPad Pro 12.9's downsized sibling. With a diagonal screen size of 9.7-inches, the new iPad Pro matches the screen size already found on the iPad Air 2 (which will remain in the lineup, by the way, but the iPad Air is sadly dead).

This unit, however, gets a few niceties that were previously reserved for the Big Man on Campus, as well as one new element altogether: four speakers instead of two, a brighter True Tone display, a snazzy new connector for a snazzy new keyboard, a high-octane A9X processor, more memory, and of course, support for Apple's Smart Pencil.

Those speakers are supposed to be twice as loud as on the previous Air 2, and with the impressive performance that comes from the larger, older iPad Pro giving us hope that the iPad Pro 9.7 will be a mean media machine indeed, especially when combined with that improved screen.

The 9.7-inch iPad Pro is a premium machine, through and through. As with the original iPad Pro, this one feels dense and rigid -- almost too nice to just toss in your briefcase sans protection. The anodized aluminum body is cool and comfortable to the touch, and per usual, Apple's attention to detail on button machining is obvious here.

Exterior vibes

If you're thinking it looks a lot like the iPad Air 2, you aren't crazy. Outside of a gently massaged camera element layout, it's the same exterior. Same thickness, same materials. If you didn't know any better, you could grab a 9.7-inch iPad Pro and assume you'd just picked up an iPad Air 2.

So, as you'd imagine, handling the new iPad Pro is a lot like handling the iPad Air 2. The only notable difference is the input mechanisms.

With the iPad Pro, you'll be interacting a lot more - ideally, anyway - with the Apple Pencil and Smart Keyboard, whereas you'd spend most of your time pinching and zooming on the iPad Air line.

The 9.7-inch iPad Pro looks great when docked in the new Smart Keyboard. Unlike the 12.9-inch iPad Pro, which actually requires a bit of forethought on where you can put it, this unit would fit quite nicely on a coach airline tray table. And if we're honest, isn't that the sizing measure that all slates should be judged by?

There's the same Smart Connector that debuted on the larger Pro, which is one of the few design differences compared to the Air 2. Clipping that magnetically to the Smart Keyboard will allow the transfer of data and power to the otherwise dumb accessory, and means you'll never need to worry about running out of charge.

True Tone Display

The True Tone Display is the feature Apple's most proud of here, and rightfully so. It's engineered to automatically measure ambient light and tones, and adjust the screen accordingly.

The parallel is simple: white paper looks different depending on the room you're in and depending on the light that's above and around. If you're inside near a lamp, it'll 'reflect' that by making a warmer-looking screen, in the same way actual like refracts into your eye. Go outside, and it'll revert to the harsher bluer look that accompanies your surroundings.

So your iPad Pro will follow those some real-world cues, which Apple claims will make everything a lot easier on your eyes. It's no e-ink, but it's moving in the right direction - but it's something we'll need to use for a few weeks to work out if it's really a big change.

The new device also sports a brighter and less reflective screen than the iPad Air 2 - given the previous Air was already one of the

best around, it's going to be cool to test out the new improvement on that when we give the iPad Pro 9.7 a full review.

Which size is for you?

In our humble opinion, a 9.7-inch form factor is far more approachable for a tablet. Lest you believe Tim Cook would go back on his 2012 spiel - which saw him inform financial reporters that Apple had no interest in producing a "converged" laptop/tablet hybrid - the new 9.7-inch iPad Pro runs iOS (and iOS alone).

In other words, those praying for an iPad Pro that runs OS X should remain by their bedside, knees firmly planted.
That said, it runs iOS like a champ. Performance simply wasn't an issue as we whisked through apps, loaded up Procreate for iPad, and proceeded to get our doodle on. As you'd expect, given the A9X power plant, speed was right in line with what we saw in the original 12.9-inch iPad Pro.

It's so fast, in fact, that it makes it even tougher for us to deal with the operating system of Apple's choosing. It's impossible not to wonder how well this thing would run OS X, and frankly, we're

yearning for a proper Surface vs iPad Pro comparison with each unit running a desktop OS.

A good camera... on a tablet?

Interestingly, Apple bolstered the optics on the 9.7-inch iPad Pro, despite the fact that we would never, ever advise anyone holding up a tablet to take a photo.

There's a 12-megapixel iSight camera, a True Tone flash, a revamped image signal processor, 4K video support, and the ability to capture Live Photos. Around front, there's a 5-megapixel FaceTime camera for selfies and video chats.

At any rate, it seems a bit silly for Apple to sell both a 9.7-inch iPad Pro and an iPad Air. There's currently a $200 price difference between the two ($399 for the base 16GB iPad Air 2 vs $599 for the base 32GB 9.7-inch iPad Pro), but we suspect that the Pro will consume the Air in due time.

It's also worth pointing out that the $599 base unit ships with only 32GB of storage, which is far too small for the target market.

The $749 model should be considered the actual base, with 128GB of storage. That said, we're beyond thrilled that Apple added a

256GB confirmation for both iPad Pro sizes, and we're love to see this transfer over to the new iPhone range that's likely on tap for this fall.

That said, in our time spent with the larger iPad Pro, hitting the 128GB storage limit for a device that's not got the heavy media collection of a laptop isn't as easy as you'd think.

In the UK, it starts at £499 for the 32GB Wi-Fi smaller iPad Pro, £619 for 128GB and £739 for 256GB. In Australia, its costs AU$899 for 32GB, AU$1,149 for 128GB and AU$1,399 for 256GB.

Early verdict

Curiously, Apple told us that many iPad Pro owners are coming over from Windows. Somehow, they view the iPad Pro as a legitimate Windows replacement, despite the fact that neither size ships with OS X. It's tough to see iOS truly replacing a full-fledged copy of Windows, but it also speaks to the changing needs of a customer base.

Whether this is enough of an invigoration of the tablet market remains to be seen. It seems we all need a lot more convincing of the need for digital slates in our life at times, and that's hampering the upgrade cycles Apple desperately wants to keep pushing.

That said, the iPad Pro 9.7 is a logical step for Apple to take, and it's got enough upgrades to actually make it more than a re-imagining of the larger Pro.

Hadley Markoski posted the following article to the Kibbles & Bytes Newsletter #976 on March 25, 2016. tinyurl.com/mu939qj. © Small Dog Electronics, Inc. He is a developer at Small Dog Electronics.

iOS 9.3 Rundown

By Hadley Markoski

It's hard to tell in advance whether or not a new iOS release will get me excited. With iOS 8 I was really excited about Continuity, and I always like the addition of Safari improvements. In iOS 9, we got proactive assistance so spotlight and Siri were more context sensitive. I think I was most excited by slide over, split view and picture-in-picture. Those features seemed to really solidify how Apple was going to be handling multitasking in iOS going forward.

So when I started hearing rumors about what would be included in the latest iOS 9.3 update, I was immediately pretty excited. Now that it was released earlier this week, I'll go over the new features here and give my impressions.

Night Shift

Admittedly, this was the most interesting thing to me. I hear a lot of complaining (from my mom mostly) about how I shouldn't be reading/watching movies/web browsing in bed on my iPad. Most modern displays, especially on mobile devices are notoriously "cool" meaning they tend to be towards the blue end of the color spectrum. This helps the displays to be brighter in direct sunlight, and also more vibrant, but if you're in the dark, getting ready for bed, it's not so great. The brightness and the "cool" tint sends signals to your brain that mimic sunlight. It's basically telling your brain, "hey, the sun's up, it's time to get active." Night Shift helps to correct that problem. It re-tunes the display to exaggerate "warmer" tones in the spectrum like red and orange. With iOS 9.3, you can turn it on manually, or on a schedule. You can also specify how much or how little "warmth" you want to use. It looks weird at first, but after as little as 15-30 seconds, you'll adjust and won't be able to tell the difference.

Notes

I'll admit I've started using Notes a lot now that you can have checklists, formatting, drawing and more. In iOS 9.3 Apple added secure notes. You can secure notes using a password or Touch ID. This is great if you have some confidential information you want doubly protected both by your device's PIN and Notes itself. I haven't had a use case for this yet, but I expect I will very soon.

I think Night Shift and secure Notes are the most notable changes in iOS 9.3 for me, but other additions included improved personalization in the News app, more information about third party apps in the Health app, and additional 3D Touch context menus. I'm particularly fond of the menu on the Settings app which allows me to quickly jump to bluetooth, wifi, or battery settings in one quick motion.

One last thing to note is that the Night Shift feature isn't available on every single device. While it is supported all the way back to the iPad 4th generation, the original iPad mini does not support it. The performance of the original iPad mini isn't quite enough to allow for Night Shift without reducing performance and stability on the rest of the device.

Overall, I definitely give iOS 9.3 my seal of approval.

―――――――――

Daniel Nations updated the following article at about.com on January 29, 2016. tinyurl.com/p7x8t4w. © About.com. He has been writing, programming and following technology since back in the Commodore Vic 20 days.

The Best External Hard Drives For The iPad

Expand Your Storage With Wi-Fi External Hard Drives

By Daniel Nations

An external hard drive is a great way to expand the storage of an iPad, but unfortunately, you cannot hook up just any external drive to the iPad. As with Flash drives, any external drive that requires a USB connection won't be recognized by the iPad, even if you have the camera connection kit hooked up to your tablet. The key to buying an external hard drive for the iPad is built-in Wi-Fi, which allows the drive to connect with an app on the iPad.

Another downside is the inability to launch apps from an external drive. But you will be able to stream music and movies, and because external drives can hold so much more than even the highest model iPad, most will be able to access their entire music or movie library.

• Seagate Wireless Plus

For most people, the best external hard drive for the iPad is the Seagate Wireless Plus. Offering 1 TB of storage, the Wireless Plus is a USB 3 external drive, which means you can hook it up to a PC with a USB 3 slot and transfer data much faster than normal external drives. But the biggest feature for the iPad is the ability to connect via Wi-Fi. And because Wi-Fi is built into the drive, you don't need an Internet connection to use it. The iPad and drive communicate by creating their own Wi-Fi network. The Wireless Plus also supports AirPlay, which means you can stream media to your Apple TV.

The free Seagate Media app is used to connect and communicate with the drive, allowing you to stream your media library, view photo albums or read documents. You can also transfer photos and videos from your iPad to the Wireless Plus, freeing up precious storage space on your iPad.

The Wireless Plus replaces the GoFlex Satellite in Seagate's lineup. While the GoFlex Satellite doesn't allow you to upload files from your iPad, it's a cheaper alternative to the Wireless Plus. However, because it is no longer being manufactured, it may be more difficult to find in store or online.

• Seagate Central

An alternative to the Wireless Plus, Seagate Central creates local cloud storage that can be accessed by your PCs or your iPad. This means you can access your storage through your Internet connection, which means you can connect to the Seagate Central through any Wi-Fi hotspot or with your 4G connection. This makes it great for a backup solution, and an excellent way to get at your entire music collection, but if you are streaming movies, you'll want to be careful to only do so if you are connecting to the Internet via Wi-Fi. It's easy to use up all the data on your 4G data plan with just a few movies.

The cheaper price compared to the Wireless Plus is also a bonus, but remember, this drive doesn't connect directly to your iPad via Wi-Fi. Instead, you are using your home network or using the Internet to connect to it. This means you'll need an iPad with a 3G or 4G data connection to get access to your external data when you aren't at home or near a Wi-Fi hotspot.

• LaCie Fuel

The LaCie Fuel is the best alternative to the Seagate external drives, though with Seagate in the process of purchasing LaCie,

this will only be true for a short while. The LaCie Fuel uses the same Seagate Media app to communicate with the iPad, so you'll get a similar set of features compared to the Seagate Wireless Plus, including AirPlay compatibility to stream music and movies to your Apple TV.

The LaCie Fuel is also capable of sharing its data connection, which means it can connect to the Internet via a nearby Wi-Fi hotspot and then share that connection with your wireless devices. However, this could open up the files stored on the Fuel to anyone on the Wi-Fi hotspot's network, so it isn't recommended. It is also important to set a password on the device in order to secure it from anyone else accessing it.

• AirStash

While not an external hard drive, the AirStash does provide a storage solution for those who do not need 500 GB of external storage. The AirStash is essentially a Flash drive reader that connects to your iPad via Wi-Fi, similar to the external drives on this list. The advantage of this solution is that you can choose the size of your Flash drive, or even use multiple Flash drives to supplement your external storage. The downside is that Flash storage is more expensive, and if you want to come close to the storage of an external drive, you'll need multiple cards.

Still, AirStash is a rather cool solution that offers benefits beyond an external drive. You can use AirStash to transfer photos from a friend or relative's camera or transfer important documents from work. Because it can read any standard Flash drive, it creates a more versatile solution to storage.
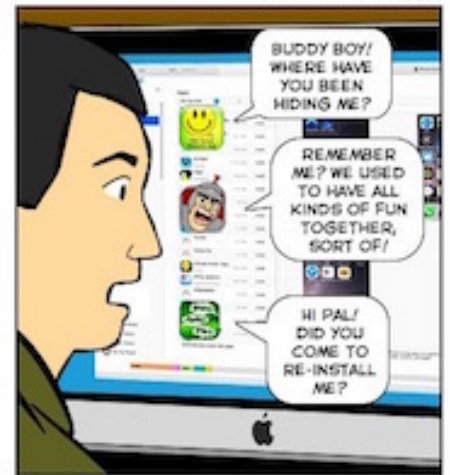
Daniel Nations updated the following article at about.com on March 03, 2016. tinyurl.com/hapcufw. *© About.com. He has been writing, programming and following technology since back in the Commodore Vic 20 days.*

How To Sell Your iPad And Get The Best Price For It
Tips on Getting the Best Price and Making the Process Easy

By Daniel Nations

One of the best ways to pay for a brand new iPad is to sell your old one, but the process of selling an iPad can be a little intimidating if you don't often sell items like computers or tablets. After all, you don't usually see items like an iPad being sold at a garage sale, and that's how we usually get cash for all of our old stuff. So how do you go about selling your iPad?

The first rule is not to stress about it.

There are a number of ways to sell your iPad, and many of them are very easy. In fact, the hardest part may not even be the actual selling of your iPad. The hardest part might be setting a good and fair price for it.

How to Price Your iPad

How much is your iPad worth? The iPad has been around for five years and every year the number of available models expands.

 You can even get the iPad in three different sizes now. But while this might sound very confusing when trying to figure out the value of your older iPad, there's a website that will help pinpoint it: eBay.

One very useful feature of eBay is the ability to search "sold" listings. Basically, this allows you to find out exactly how much an item is selling for on the website. And that's a great way to figure out how much your iPad is worth on the market.

You can find sold listings for your iPad by searching eBay for your exact iPad model. It is important to include the storage. And if you have a 3G or 4G model, include that information as well in your search. Your search string should end up looking something like "iPad 3 16 GB" or "iPad 4 32 GB 4G".

$37-$47/hr Real Work at home Job Requirements: Must Have Computer.

After the search results appear, click on the "Advanced" link next to the search button at the top of the page. This will take you to a page with some options. Click on the box next to "Sold listings" and hit the Search button again.

You will want to pay attention to the"best offer taken" notification.

 This means the buyer made an offer for the item that is cheaper than what is listed. You will need to disregard these listings. You will also want to scroll through several pages worth of sales to get a general idea of the price range for your iPad.

How to Find Your iPad's Model Number

Don't Forget Your Friends and Family

It's easy to forget that we may know someone who wants an iPad. And selling to friends or family is one of the safest ways to get money for you iPad. If you don't want to simply ask around for interest in the device, you can send out a mass email to your friends and family to find out if anyone is interested in buying your iPad.

You may want to price the iPad slightly less than the basic price range you found on eBay. This gives the friend or family member a nice little discount on it.

Sell on eBay

In addition to being a great way to price your iPad, eBay is perhaps the easiest way to sell your iPad outside of knowing a friend or family member who wants to buy it. One thing to keep in mind when selling on eBay is the price of shipping. eBay has a system that allows you to put in the weight of the item to calculate system, but you can also put in an exact price for shipping. Some people include shipping for free, which can help the iPad sell

faster, but if you want to be reimbursed, I would suggest charging $10. This may not cover the complete shipping cost, but it isn't so high that it will ward people away.

You will also need to decide if you want to sell the iPad for an exact price or allow people to bid on it. Many listings use the "Buy Now" option, and the advantage of setting an exact price is that you know exactly for how much the iPad will be sold.

Of course, eBay is an auction site and most people put items up for bid. This is a great way to make sure you sell it quicker, and you may be suprised at just how many people will bid on your iPad. You can also put the iPad up as a "Buy Now" listing, and if it doesn't sell, list it again with a lower price that allows bids.

Get More Help Selling on eBay

Sell on Craigslist

The most popular alternative to eBay is Craigslist, which is essentially the classified ads section of the Internet. Craigslist can be a great way to sell items, but you do need to take certain steps to protect yourself, especially when selling electronics.

First, the price. You should price the iPad about $25-$50 higher than the price you figured out from looking at eBay listings. You might get lucky and someone will offer you the exact amount, but oftentimes, people buying on craigslist will ask you to sell it to them for a lower price.   If you've already built in a little extra breathing room in your price, it is a lot easier to give these offers a thumbs up.   If the iPad doesn't sell, you can always edit the price and relist it later.

Next, the exchange.   Check to see if your town or city has an official eBay or item exchange location.   These locations are usually in a police station or in the parking lot of a police station. If your city doesn't have an official eBay location, you should contact the police department and ask if you can perform the exchange in the lobby. Many police departments will allow this.

If neither of these work out, you should do the exchange inside a public location. Do not sell your iPad in a parking lot. Tablets and smartphones are small enough that people can grab them and run away, and unfortunately, this does happen sometimes.   You should also plan to stay in the location after the exchange, so if it is a coffee house, plan to drink a cup of coffee after you've sold the iPad. The perfect location is a shopping mall where you can go shopping after selling the iPad.

Pro Tips: Learn to Navigate the iPad Like a Pro

The Easiest Way to Sell Your iPad

Don't want to deal with the hassle of eBay or Craigslist? I don't blame you. It can take a lot of time and energy to put something up for sale on either of those websites, and ultimately, you don't have a guarantee of making the sell.

Luckily, there is a good alternative. Amazon has an electronics trade-in program that is similar to those sell-your-iPad except for two very important facts: (1) It's much easier to trust Amazon than a random fly-by-night website and (2) Amazon will give you a much better price for your used iPad.

Amazon offered $375 for my "like new" iPad 2. Not only is that much better than the $260-$290 offered by the sell-your-iPad websites, it also hits the same neighborhood as the same iPad model selling on eBay. So if you want to maximize how much cash you get and minimize the work it takes to get it, selling your iPad to Amazon is your best bet.

The one drawback to Amazon's program is that it offers credit for future Amazon purchases rather than cash. If cash is your goal, you can check out some of the other trade-in programs.

Before You Sell:

It is important to erase your iPad completely and set it back to a "default factory settings" state before selling your iPad. You don't need to do this immediately, but you should do it before the actual exchange. If you are selling to a family member or friend, you may

want to let them see and play around with the iPad before resetting it. If you are selling the iPad some other way, you should reset it before the exchange.   You can reset the iPad by going to settings and navigating to General -> Reset -> Erase All Content and Settings. *Get Help Resetting Your iPad to Factory Default*.

The following article was posted to osxdaily.com on November 19, 2015. tinyurl.com/jfuf6tr *© OSX Daily. Try the site. Lots of tips and good info.*

How To Silence Siri With The Mute Switch On iPhone & iPad

The ever helpful and sometimes comical Siri is a rather vocal virtual assistant, defaulting to speaking back a response to directions and commands. But if you want to hush that Siri voice feedback response while still using the feature for commands and queries, you can enable an optional setting that causes Siri to obey the broader iPhone and iPad hardware mute switch.

Muting Siri with the hardware switch is an easy setting to turn on, but it's a bit buried and worded a little strange, so don't be surprised if you overlooked it when wandering around in Settings.

Enable Siri Muting & Unmuting with the Hardware Switch on iPhone & iPad

1. Open Settings and go to "General" then to "Siri"

2. Choose "Voice Feedback" and select "Control with Ring Switch" (yes, the Mute switch on the side of the iPhone and iPad is referred to as the 'Ring Switch' here, but it's the mute button you know and love)

3.
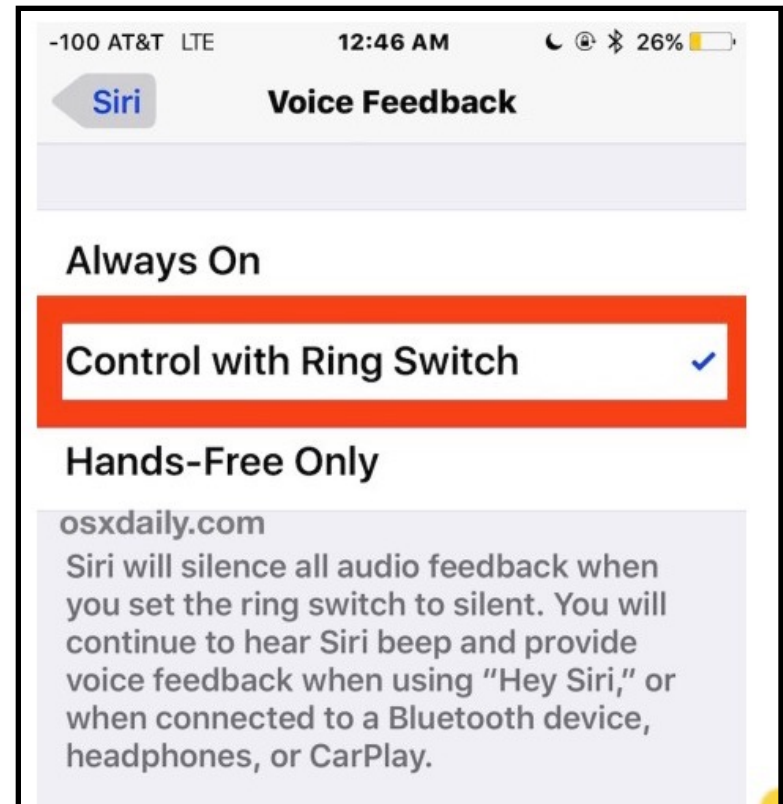
4. Leave Settings and activate Siri with the mute switch enabled, Siri will respond in text and on screen only, without blabbing the answer to the world.

Siri works exactly the same as it did before, but you won't hear any voice feedback if the mute switch is toggled on, even if you use the Hey Siri command handsfree from afar.

Silence Siri with the Mute Switch

Flipping the Mute switch (or the ring switch, or the silent switch, both of which Apple sometimes calls it) will make Siri completely quiet in responses.

Note that if on iPad you have the mute switch set to orientation lock

Letting Siri Talk Again by Unmuting

Toggling the mute switch again will allow Siri to blab aloud just as you'd expect, perhaps ready to interrupting a press conference or vocalizing opinions and statements out of nowhere again if you're lucky.

This trick is aimed at a friend of mine who I noticed was actually turning off Siri completely because they didn't want the voice feedback, a bit overkill and unnecessary if all you want is to read the text on screen rather than having the iPhone or iPad talk back to you. Instead, just enable the switch setting, then you can hush and mute Siri whenever you want, and let Siri talk again when you do want to have voice feedback.

John Martellaro posted the following article to macobserver.com on November 10, 2015. tinyurl.com/h4ot7ue. © The Mac Observer, Inc. A scientist and author, he has worked for NASA, the Oak Ridge National Laboratory, & Apple.

How To Create Fast And Easy Checklists In OS X El Capitan's Notes App

By John Martellaro

To Do apps are great, but they can often have too much technology wrapped around them for mundane tasks. Simple text files are okay for fast to do lists, but your favorite app may not be cross-platform and sync via iCloud. In OS X El Capitan, Apple has added the ability to create simple checklists which might be all you need for short-term to do items. Here's how to do it.

First off, there is some context for writing this tip. In my experience, there are two different kinds of To Do lists. The first, I call it Type I, is more formal and has, for example, deadlines, catagories, alerts, supporting data, and needs to be kept as an archive. One very good app for doing that is the app called Things from Cultured Code. It's in the Mac App Store. I've been using it for years.

The second kind of list, Type II, in my opinion, is a shorter, perhaps daily list of small things to do. It's even less formal than reminders and doesn't need alerts. You just want to make a list, make it nice, and then check off the items as you go. If you use a formal To Do app like Things, it's just be over kill, and the mechanics data entry may cause you to stop using it for Type II lists.

And so, without further ado, here's how to make a tidy checklist of things to do, Type II, in the OS X El Capitan Notes app.

———————————————

1. Launch the Notes app in your Applications folder. El Capitan may want to upgrade it so that it has the new features, but also wants you to have the same version running in all the devices you sync with. If you're not ready to do that, just go to System

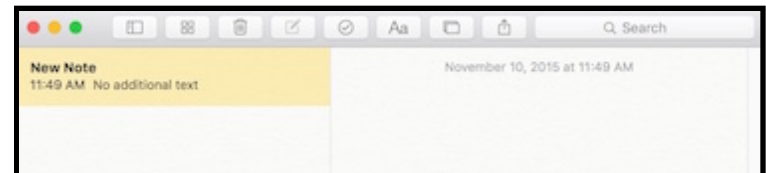Preferences > iCloud > Notes and turn off cloud sync. Later when all your Macs are on the same version of OS X, you can sync across all of them.

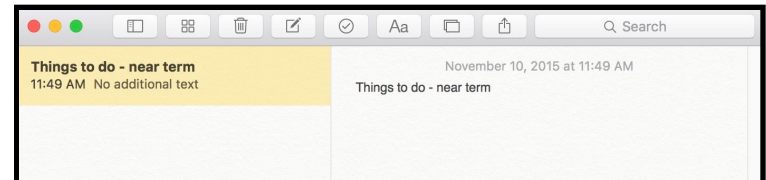Click the create button (small pen) to start a new entry.
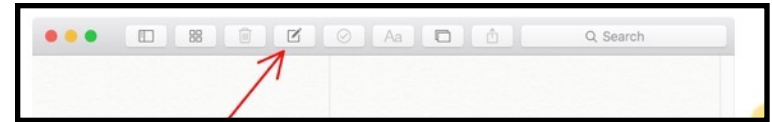
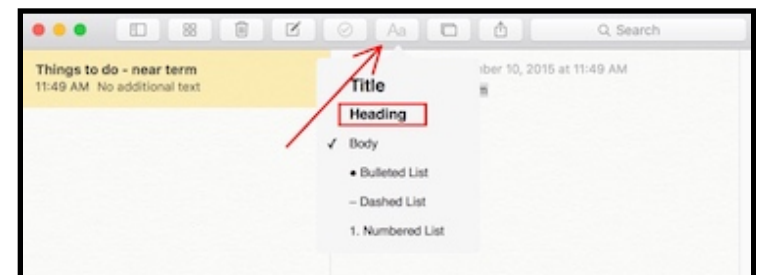Note: The following screen shots will just show the top of the window for brevity.

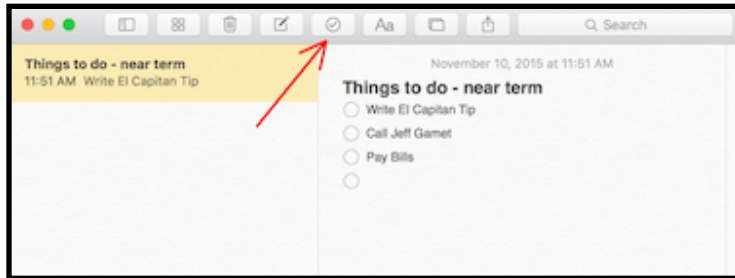2. You'll see a new entry in the left pane called "New Note."

3. A cursor will appear in the right pane. Type a title for the checklist.


4. Optional. Select the title you just created, and from the style icon (Aa), select "Heading" to make it bolder and easier to read.

5. Hit return to create a new blank line. Now click on the checklist icon (√) to create a new entry. Note the leading circle.


6. When you're done creating the list, you can then go back at any time and click in the small, leading circle to mark the item as done. (You, of course, can uncheck if need be.) Continue to add or delete items in the normal select/delete fashion.
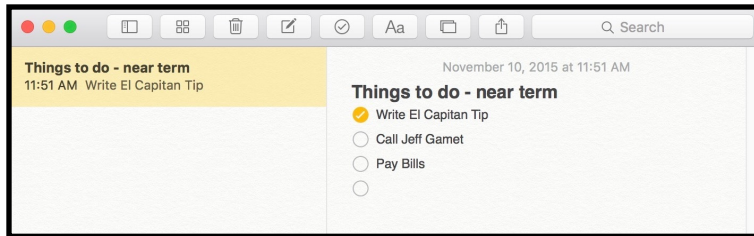
I have particular affection for this app and technique because I know I'm going to use it every day. It's fast, accessible, easily added to, and very visual. For daily checklist of minor tasks to be done, it's very handy.

Of course, there are many ways to get this kind of job done, but a consideration here is that it's common in Apple devices, simple, fast and syncs across all your iOS and OS X devices (that are on El Capitan). Perhaps it'll simplify your life as it did mine.
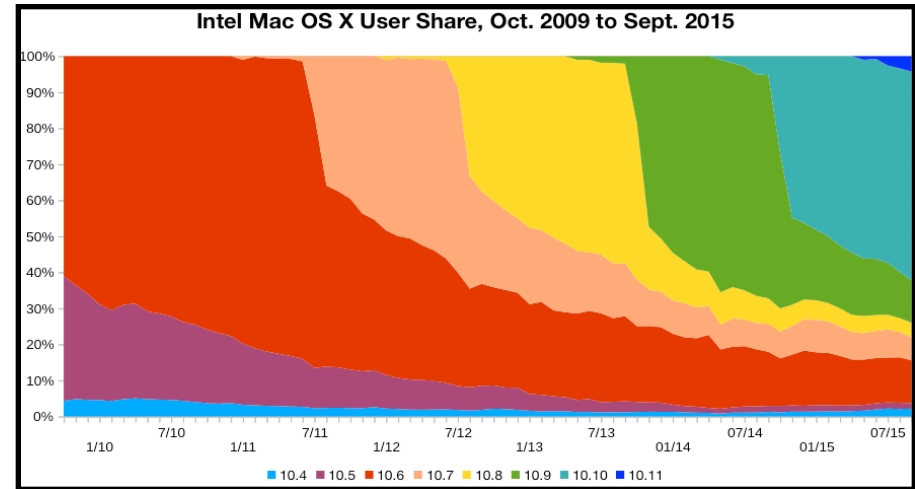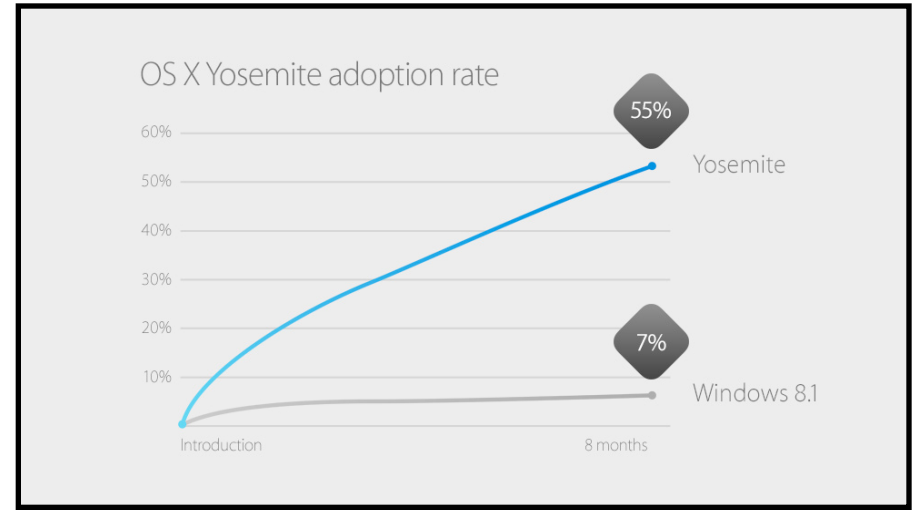
*The following article was posted to osxdaily.com on March 24, 2016. tinyurl.com/z8opnud. © OSX Daily.*

How To Password Protect Notes On Mac OS X

The Notes app is an excellent place to store clips of useful information, and now that you can password protect notes within the Mac app, you can securely keep more personal information within the Notes app of Mac OS X as well.

This is a great feature available to new versions of the Notes app, and it allows for a convenient place to maintain all sorts of data you want kept in an additional locked layer away from prying eyes. Whether it's a little diary, a list of login details or email addresses, insurance information, or whatever else you can imagine that is best left with a password to protect it and lock out peepers, the Notes app for Mac offers this functionality.

How to Lock Notes with Password Protection in Mac OS X

1. Open the Notes app on Mac OS X if you haven't done so already

2. Create a new note as usual, or select an existing note within the app

3. Click on the Lock icon button in the toolbar of the Notes app
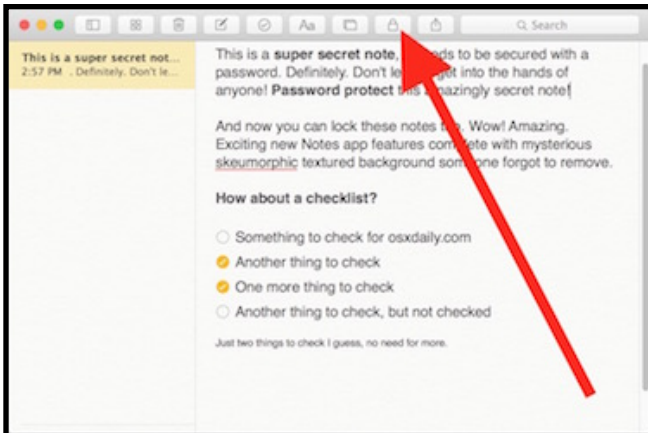
4. Choose "Lock This Note" from the drop down menu
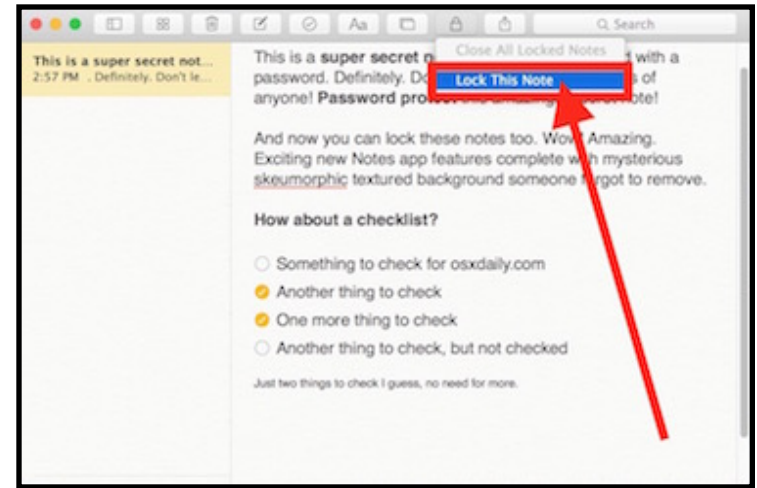
5. Now enter the password you want to use to lock *all locked notes in Notes app* (this is separate from the general user login password, though you can use the same password if you want to).
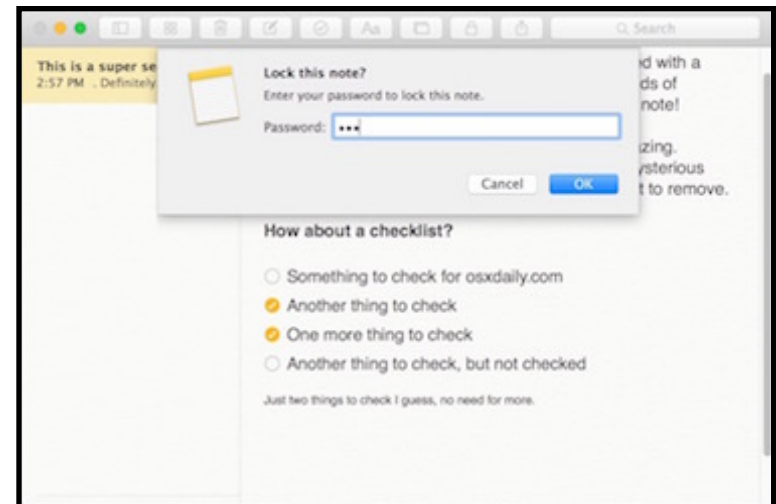
6. When finished reading, adding to, or editing the note, you can now lock it with the aforementioned set password by clicking on the Lock icon button and choosing "Close All Locked Notes", or by quitting out of Notes app.

This immediately locks the note(s), like so:
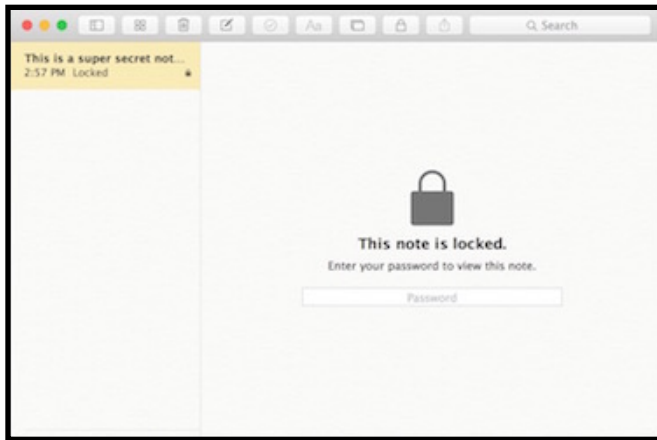
Once you have either Quit the Notes app, or chosen "Close All Locked Notes" from the Lock menu, *all notes that have been locked* will now require the password to access them again. It's important to remember to quit the app or close the locked notes like this in order to set the password protection on the notes in question. It's also important to remember that unlocking one locked note unlocks them all, and locking one note locks all other locked notes. Currently, a different password can not be assigned to different notes.

The proper password now must be entered before the lock(ed) notes can be accessed within Notes app again. Without the correct password, the notes content will remain locked and inaccessible, multiple failed entries will show the password hint if one was offered, however.

Do keep in mind that even if you choose to password protect a note, this should not substitute for broader security measures on a Mac. All Mac users should have password locked screen savers that activate quickly upon inactivity, and should strongly consider using FileVault disk encryption on the Mac as well, particularly if the computer is new enough to support the feature without any performance hit (most modern Macs with SSD drives are fine).
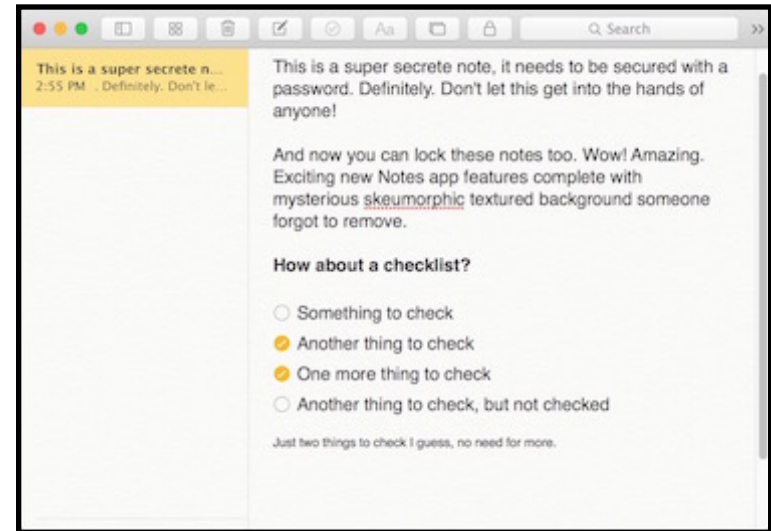
Another great feature of password protecting Notes is that if you use iCloud Notes to sync them, those password locked notes will also sync and carry over to any Apple ID related iPhone or iPad, where they will also be password protected as well. To be able to password protect a note in Notes for Mac, you'll need to be running at least OS X 10.11.4, and to sync with an iPhone or iPad those devices will need to run at least iOS 9.3, as earlier versions do not support the feature.

Tom Nelson updated the following article to about.com on March 15, 2016. tinyurl.com/j8mfdm2 .© About.com. He is a consultant and writer providing Macintosh training, advice, and support. He has written hundreds of articles, tutorials, and product reviews.

Using The Mac's Hidden Archive Utility To Control Compression

The Archive Utility Offers a Wide Array of Options

By Tom Nelson
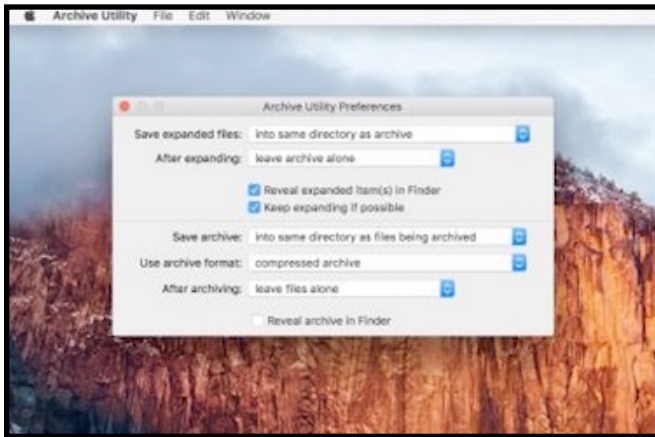
The Mac has built-in support for zipping and unzipping files. You can simply double-click a zipped file to expand it, or select multiple files and compress them, all from the Finder. There are no apps to launch, or so it seems. But behind the scenes, Apple's Archive Utility is hard at work, carrying out the compression or expansion of files, as required.

It's nice to have such an easy-to-use compression tool integrated into the Mac, but you may not know that there are a handful of options you can configure for Archive Utility that may meet your needs better than the defaults Apple has set up.

Archive Utility and the Finder

The Finder uses the Archive Utility to perform compression (archiving) and expansion of files. However, the defaults the Finder uses are hard-wired; you can't make changes to them. For example, the Finder will always use the ZIP format and will always save archives in the same folder as the original.

When you want a bit more control over the archive format, what happens to the original files, or where expanded or compressed files are stored, you can use the Archive Utility directly.

The Archive Utility is pretty basic, but it can handle quite a few file formats for expansion, and three popular file formats for compression.

Launching and Using the Archive Utility

If you're using OS X Mavericks or earlier, the Archive utility is located at:

/System/Library/CoreServices

For those using OS X Yosemite and later, the Archive Utility can be found at:

/System/Library/CoreServices/Applications

When you find Archive Utility, double-click the app to open it. Archive Utility will open without presenting a window; instead, there's just a set of menus that contain three important items.

In the File menu, you'll find the Create Archive and Expand Archive options. These two commands will work on the files and folders you select in any Finder window.
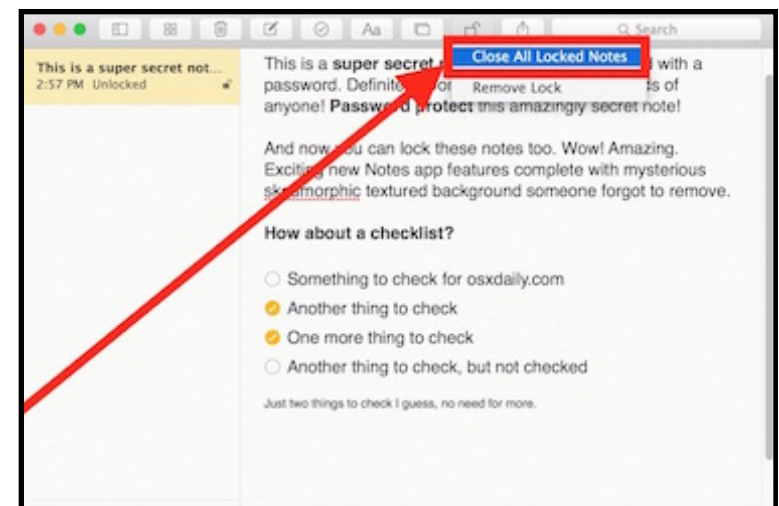
The other important menu item, the one we're going to spend the most time on, is in the Archive Utility menu, and is called preferences.

To open Archive Utility's preferences, click the Archive Utility menu and select Preferences.

Managing Archive Utility Preferences

The Archive Utility Preferences window is broken into two sections. The upper section contains options for expanding files; the lower section contains options for compressing them.

Archive Utility Expansion Options

Save Expanded Files: You can select where you want to store expanded files on your Mac. The default location is the same folder that holds the archived file you're expanding.

To change the destination for all file expansions, click the "Save expanded files" drop-down menu and select "into." Navigate to the folder on your Mac that you want to use as the destination for all expanded files.

After Expanding: You can also control what should happen with the original archive file after the files it contains are expanded. The default action is to leave the archive file in its current location. You can use the "After expanding" drop-down menu to instead move the archive file to the trash, delete the archive, or move the archive file to a folder of your choice. If you choose the last option, you'll be asked to navigate to the target folder. Remember, this folder will be used as the target location for all archived files that you expand. You can change your selections at any time, but it's usually simpler to select one location and stick to it.

Reveal Expanded Item(s) in Finder: When checked, this option will cause the Finder to highlight the files you have expanded. This can be handy when the files in an archive don't have the names you were expecting, or at least names that are similar to what you were expecting.

Keep Expanding if Possible: This box is checked by default, and tells the Archive Utility to keep expanding items it finds within the archive. This is helpful when an archive contains other archives.

Archive Utility Compression Options

Save Archive: This drop-down menu controls where the archive file is stored after the selected files are compressed. The default is to create the archive file in the same folder where the selected files are located.

You can also select the Into option to pick a destination folder to be used for all created archives.

Archive Format: The Archive Utility supports three compression formats.

> **compressed archive,** which is the same as a UNIX compression method called cpgz.

> **regular archive,** also known in the UNIX world as cpio. This method actually doesn't perform any type of compression; instead, it just creates a container file made up of all of the selected files.

> **ZIP** is the final option, and the one most Mac users are familiar with. This is the standard ZIP format that has been used on Macs and Windows PCs for years.

After Archiving: Once you finish archiving files, you have some options for what to do with the original files. You can leave the files alone, which is the default option; move the files to the trash; delete the files; or move the files to a folder of your choice.

Reveal Archive in Finder: When checked, this box will cause the archive file to be highlighted in the current Finder window.

By using the above options, you can control how files are compressed and expanded when you manually use the Archive Utility. Finder-based compression and expansion will always use the same default options, no matter how you set the preferences here. These preferences only apply when you launch the Archive

Utility and use the Create Archive and Expand Archives commands found in the app's File menu.

Using the Archive Utility

To use the Archive Utility, launch the app, if it's not already open.

To compress a file or folder, select File, Create Archive. A window will open that you can use to navigate to the folder that contains the items you wish to compress. Make your selection, and then click the Archive button.

To expand an existing archive, select File, Expand Archive. A window will open that you can use to navigate to the folder that contains the archive you wish to expand. Make your selection, and then click the Expand button.

The following article was posted to ba-bamail.com on March 14, 2016. *tinyurl.com/jhg96es.*

9 Benefits Of Using Google Drive

Google Drive is a free data storage service offered by American search giant, Google. It offers you up to 15 gigabytes of storage space that you can use to store important files, documents, pictures and so on. It uses cloud computing technology, which means that your precious data is stored on one of Google's servers so that you can access it from anywhere you may be. Here are 9 benefits of using Google Drive:

1. Backup Your Precious Files

Do you have photos of a family vacation that mean the world to you, or some important business documents that you just cannot afford to lose? Google Drive is a better storage alternative than an external hard drive or USB stick because they can both begin to malfunction or become corrupted over time, meaning that you' can lose your precious files forever. Not with Google Drive, though.

2. Send Large Files to Family, Friends or Co-Workers

If you happen to use Gmail, also using Google Drive will allow you to send large files to your contacts directly from your email account.

3. Use Google Drive App to Access Documents

Should you need to access any files while on the go, you can download the Google Drive app to your smartphone. You can use this if you need to give a presentation or show proof of purchase.
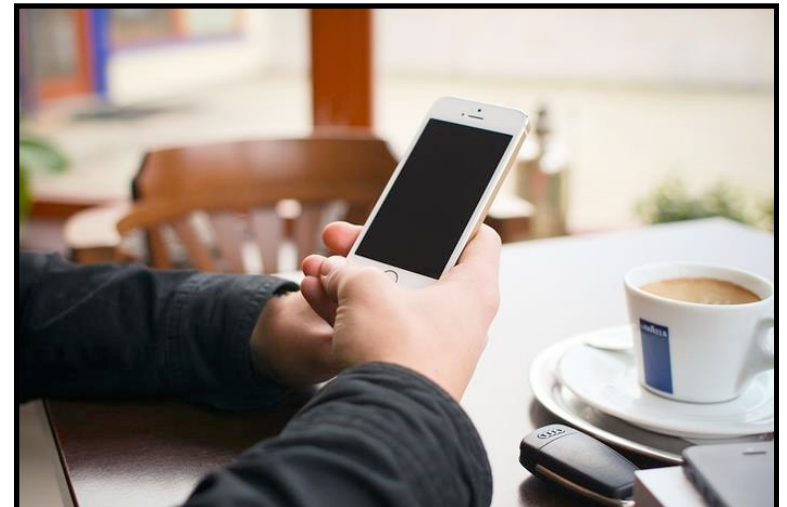
4. Efficient Built-in Search Engine

Google Drive has its very own built-in search engine, which allows you to search by file type, such as image, Word document or video, as well as by keyword. It also allows you to search by owner.

5. Optical Character Recognition Feature

Do you happen to be look up someone or something in particular? Google Drive's optical character recognition technology is capable of scanning through documents saved by other users and finding the word (or name) that you searched for. It can also be helpful if you're conducting research on a historical topic.

6. Share Photos and Videos with Your Contacts

If your family members or friends also have their own Google Drive accounts, you can all share files with each other. This is especially handy if you have to travel for your occupation and need to work on a project simultaneously with colleagues while in completely different locations.

7. Open and Edit Various Kinds of Document

Are you using a computer that doesn't have the software you need to open a certain kind of file? Don't fret – upload it to your Google Drive account and open it from there. Google Drive allows you to open anything from Adobe Suite files, to spreadsheets and Microsoft Word documents.

8. Fantastic Built-in Image Recognition Technology

This one is more of a neat feature than a benefit, but it's still worth mentioning. Google Drive's image recognition technology can actually recognize the content of your pictures. If you've visited a famous landmark on a recent vacation and upload a picture of you in front of it, the picture will come up when other users search for that landmark using Google Drive's search.

9. Completely Free to Use

Google Drive offers you all these benefits, while being entirely free to use. Thank you, Google!

Google Drive Safety Tips

1. Make sure that you use a password that will not allow others to guess it easily.

2. Do not share your password with anyone.

3. If you're accessing files stored on Google Drive from a public computer, make sure you log out of your account as soon as you leave.

_____

Heinz Tschabitscher updated the following article at about.com on March 29, 2016. tinyurl.com/hbs4taq. © about.com. Since 1997, he has been covering all aspects of email and other forms of online communication for about.com.

Top 10 Tips To Find Anybody's Email Address

By Heinz Tschabitscher

Start finding that email address right now with these strategies.

Wanted: a Working Email Address

You know how elusive email addresses are: even if once you had a friend's address, you may not be able to locate or recall it now that you need it; maybe—though that never happens, right?—the address has changed.

No matter whose email address you are looking for or how much you know about the person, here are ten strategies that you can use right now to help you find it. You will look in new places, and in obvious but oft-overlooked corners too.

1. Find Email Addresses in Previous Email Correspondence

If you have emailed them before, you probably have their address. Go find it now. More »

2. Find People in Email Address Directories or White Pages

From public records to Myspace.com to email address directories and change of address services: find people and their email addresses using dedicated search engines. More »

3. Find Somebody's Email Address by Searching the Web

Search somebody's email address like you search for anything else on the Web (and successfully). More »

4. How to Guess Somebody's Email Address

Most organizations do not let people choose email addresses freely but assign by name. You can take advantage of that by guessing the address of the person whom you seek. More »

5. Find People & Email Addresses in 6 Degrees of Separation

Five people or less, in theory if not in practice, separate you from anybody else on earth. In practice, find people and their email addresses by asking smartly. More »

6. Search for Email Addresses in Usenet Newsgroups

Find the person whose email address you are looking for in discussion groups. More »

7. Find an Email Address by Making it Find You

If the person you are looking for is searching for herself, she will find you, and her email address will find its way to you. More »

8. Find Email Addresses on Business Cards

Go through your collection of business cards to find email addresses of more people than you probably know. More »

9. Ask Somebody for Their Email Address

Yes, that's obvious, but asking is still the easiest way to find an email address. More »

10. Find Somebody's Email Address Using soc.net-people

If all other means to find somebody's email address fail, you can turn to the Usenet newsgroup soc.net-people. More »

_____

Andy O'Donnell updated the following article to about.com on March 03, 2016. tinyurl.com/pkpm32o. *© about.com. He is a senior security engineer & analyst who has focused the last 13 years developing, managing, auditing, and securing systems.*

Encryption 101: Understanding Encryption

A hands-on approach for those of us who aren't good at math

By Andy O'Donnell

WPA2, WEP, 3DES, AES, Symmetric, Asymmetric, what does it all mean, and why should you care?

All these terms are related to encryption technologies used to protect your data. Encryption and cryptography in general, can be difficult topics to wrap your head around. Whenever I hear the words cryptographic algorithm, I picture some nerdy professor writing equations on a chalkboard, muttering something to himself about the Medulla Oblongata as my eyes glaze over from boredom.

Why should you care about encryption?

The main reason you need to care about encryption is because sometimes it's the only thing between your data and the bad guys. You need to know the basics so that you will, at the very least, know how your data is being protected by your bank, e-mail provider, etc.

You want to make sure they're not using outdated stuff that hackers have already cracked.

Encryption is used just about everywhere in all kinds of applications. The main purpose for the use of encryption is to protect the confidentiality of data, or to aid in the protection of the integrity of a message or file. Encryption can be used for both data 'in transit', such as when it is being moved from one system to another, or for data 'at rest' on a DVD, USB thumb drive, or other storage medium.

I could bore you with the history of cryptography and tell you how Julius Caesar used ciphers to encode military messages and all that type of stuff, but I'm sure there are a million other articles on the net that could provide far more insight than I could give, so we'll skip all that.

If you're like me, you want to get your hands dirty. I'm a learn-by-doing type of person. When I started my study of encryption and cryptography before I took the CISSP exam, I knew that unless I could "play" with encryption, then I would never truly understand what was happening behind the scenes when something is encrypted or decrypted

I'm not a mathematician, in fact, I'm horrible at math. I didn't really care to know about the equations involved in the encryption algorithms and whatnot, I just wanted to know what's happening to the data when it's encrypted. I wanted to understand the magic behind it all.

So, What's the best way to learn about encryption and cryptography?

While studying for the exam, I did some research and found that one of the best tools to use to get hands-on experience with encryption was am application called CrypTool. CrypTool was originally developed by the Deutsche Bank back in 1998 in an effort to improve its employees understanding of cryptography. Since then, CrypTool has evolved into a suite of educational tools and is used by other companies, as well as universities, and anyone else who wants to learn about encryption, cryptography, and cryptanalysis.

The original Cryptool, now known as Cryptool 1 (CT1), was a Microsoft Windows-based application. Since that time, there have been several other versions released such as Cryptool 2 (a

modernized version of CrypTool, JCrypTool (for Mac, Win and Linux), as well as a purely browser-based version called CrypTool-Online.

All of these apps have one goal in mind: make cryptography something that non-mathematician-type folks like me can understand.

If studying encryption and cryptography still sounds a little on the boring side, fear not, the best part of anything crypto-related is the part where you get to code-break. Cryptanalysis is a fancy word for code-breaking, or trying to figure out what the decrypted message is, without having the key. This is the fun part of studying all this stuff because everyone likes a puzzle and wants to be a hacker of sorts.

The CrypTool folks even have a contest site for would-be code-breakers called MysteryTwister. The site lets you try your luck against ciphers requiring only pen and paper, or you can step up to more complicated challenges that require some programming skills coupled with some serious computer power.

If you really think you've got what it takes, you can test your skills against the "Unsolved Ciphers". These ciphers have been analyzed and researched by the best of the best for years and have still not been cracked. If you crack one of these then you might just earn yourself a place in history as the guy or gal who cracked the uncrackable. Who knows, you might even land yourself a job with the NSA.

The point is, encryption doesn't have to be a big scary monster. Just because someone is awful at math (like me) doesn't mean they can't understand encryption and have fun learning about it. Give CrypTool a try, you could be the next great code-breaker out there and not even know it.

CrypTool is free and is available at the CrypTool Portal.

All The Special Key Combinations That Change Your Mac's Startup

By Thorin Klosowski

The startup sound is a Mac's way of letting you know everything is okay, but sometimes, things go bad and you need to boot into a different mode then usual. Mac's have a bunch of options for this, and all they require is that you hold down a keyboard shortcut at boot.

To boot into one of these modes, press and hold these key combinations immediately after you turn on your Mac. Keep holding them until your Mac boots into the mode you need. Here are the key combinations and what you'd use them for:

Shift: Starts your Mac in safe mode. This helps you troubleshoot because it only loads the minimum necessary kernel extensions at boot then disables startup items, user-installed fonts, font caches, kernel caches, and other system cache files. Safe mode also runs

a file system check automatically, which should help with troubleshooting.

Option: This loads up the startup manager where you can pick between different hard drives or discs to boot into. If you need to boot from a hard drive different than your primary one, or you're booting into Boot Camp, this is the key you push.

C: Boots from a bootable CD, DVD, or USB. This is useful when you're installing a new operating system.

Dor Option+D: Starts the Apple Hardware Test on pre-2013 Macs or Apple Diagnostics on newer Macs. Both are meant to help troubleshoot hardware issues.

N or Option+N: Starts up from a Netboot server. Most average users will never need to use this as it's meant for running OS X off a network instead of a hard drive or disc drive.

Command+R: Starts up in Recovery mode. If you have problems with your hard drive, OS X Recovery allows you to restore your Mac from a backup, verify and repair your disc, check your internet connection, or reinstall OS X.

Command+Option+R: Starts up the internet version of Recovery mode, which works the same as regular Recovery mode, but is online.

Command+Option+P+R: This resets the NVRAM. NVRAM stores information about speaker volume, screen resolution, startup disk selection, and recent kernel panic information. If you're having issues with sound or video, it's usually a good idea to reset the NVRAM before panicking.

Command+S: Starts up in single-user mode. This is meant mostly for developers and IT as a means to troubleshoot startup issues and basically drops you into the command line where you can run tests without worrying about the GUI in OS X.

Command+V: Starts up in verbose mode. Verbose mode is similar to single-user mode but is meant more as a way to watch what a computer is doing to help with troubleshooting.

T: Starts your Mac in target disk mode. This is a useful way to share files between two Macs when one of them is broken or the display isn't working.

Eject button, F12, mouse button,or trackpad button: Force eject an optical disk.

With all those options, you should be able to troubleshoot your way through some of a Mac's worst problems.

———————————————

Adopted and condensed from wikihow.com tinyurl.com/ jxcglpw.

How To Force Quit An Application

When a program on a Mac crashes. you'll need to Force Quit it. Here are 4 methods.

1. Click Command + Option + Esc simultaneously. Select the app and click the Force Quit button.

2. Click the Apple icon and Select Force Quit from the menu. This will open the Force Quit Applications window.

3. Hold the Option key and right-click on the application's icon in the Dock to open a contextual menu. Select Force Quit.

4. Open Activity Monitor. Select the app Hit the Stop button in the top left.

———————————————

Jeff Gamet posted the following article to macobserver.com on November 10, 2015. tinyurl.com/gmc3zj3. © The Mac Observer Inc. He is the Mac Observer's Managing Editor, and co-host of the Apple Context Machine podcast.

There's A New Apple ID Phishing Scam, But You Don't Have To Fall For It

By Jeff Gamet

There's a new phishing scam making the rounds that tries to trick victims into giving up their Apple ID, account password, and credit card information. The looks more legit than many others The Mac Observer has seen, but it's still fake, and fairly easy to spot.
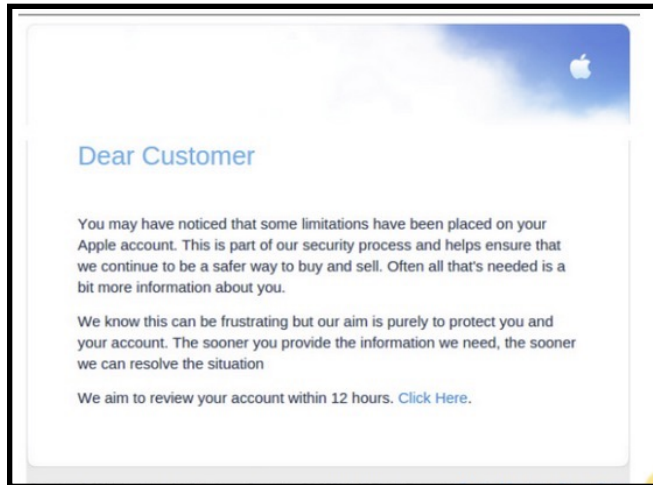
The latest phishing scam trying to steal your Apple ID and credit card

The threat, spotted by Comodo Antispam Labs, targets potential victims with an email claiming their account has been "limited." It goes on to say that providing personal information will fix the problem, and includes a link to a website that looks surprisingly legit. Once there, you're asked to enter your Apple ID, name, birthdate, address, social security number, and credit card information.

If you aren't paying close attention, the email sounds legit, and the website looks like something Apple would design. The easy tells for the scam, however, are in the email message.

The email message doesn't have the usual misspellings, random punctuation, or Yoda-like grammar. What it does have is a stilted feel that and an unprofessional tone that wraps up with an agressive push to get you to give up your Apple ID.

Two stand-out sentences all but scream, "I'm a scam email." Here's the first:

> This is part of our security process and helps ensure that we continue to be a safer way to buy and sell.

The sentence makes it sound like Apple is eBay, and feels like an incomplete thought.

The second sentence reads:

> The sooner you provide the information we need, the sooner we can resolve the situation

It feels like a desperate threat, and the even bigger tell is the missing period at the end of the sentence.

If you get an email telling you there's a problem with your Apple ID and you think there's a chance it's legit (hint: it probably isn't), don't click the links in the message. Instead, go to Apple's website where you can manage your Apple ID yourself. The URL Apple uses for managing Apple IDs is https://appleid.apple.com.

If you think you've been tricked into giving up your Apple ID, go to the Apple ID management webpage and change your password. Also contact your bank in case the credit card linked to your Apple ID has been compromised.

The Mac Observer Spin

Phishing scams often use tactics like saying your account has been limited or locked in some way to trick you into giving up personal information. Always question messages making those claims. If they're legit, you're simply being cautious, and if they aren't you just saved yourself from accidentally giving away your personal information.

AI
Cybergadgets

By Kathy Garges

In the early 1980s, a Brookstone store came to the city where I was working. For weeks, the store was jammed at lunchtime with slow-moving lines of humans taking a few minutes to admire the gadgets – gadgets for gardening, golf, auto, personal care, cooking, humor, and every area of life.

Humans love cool gadgets. They highlight human intelligence and ingenuity, making something useful from a tiny, clever idea. Artificial intelligence has entered the gadget arena, creating a new burst of cool stuff. Here are a few AI gadgets.

The Smart Jump Rope displays your jump count in front of your eyes in mid-air. You can focus completely on keeping your feet from tangling in the rope since you don't have to distract yourself with counting. No more schoolyard arguments about whether the count is accurate. The Smart Jump Rope links to an app that tracks your fitness data and makes it easy to engage in friendly fitness competitions.

Fitting mannequins are used daily around the world for design and manufacture of clothing. Each smart mannequin, iDummy, replaces individual fitting mannequins of different sizes that would otherwise be used, saving storage space as well as materials and manufacturing costs. Invented by staff and students at Hong Kong Polytechnic University, iDummy is now available from Winswin. A user-friendly interface allows adjustment of the mannequin to hundreds of human shapes and body measurements which are based on big data from the worldwide population.

iRobot, the maker of the useful but expensive Roomba robot vacuum cleaner, has come out with a mopbot, the Braava, only $199, for hard floors like tile, linoleum and wood. Braava has three pads for different surfaces and functions, and it costs only $199. Braava uses a gyroscope and sensor to map the room.

Now in prototype, but coming soon to a sidewalk near you is DRU, Domino's autonomous pizza delivery robot. DRU has separate hot and cold compartments, GPS for navigation and camera and sensors for autonomous movement. Why bother with drones? But I hope Domino's is developing a dog-proof latch for the food compartments.

Also in the food gadget category, is the cupcake ATM at Sprinkles bakery locations in the U.S. A robotic arm locates your favorite flavor from among 700 or more cupcakes stocked in the machine, and keeps your selection level inside the box while it brings it to your eager hands. The cupcakes are a bit more expensive than those available inside the store, but the robot is open round the clock.

To market its self-parking car feature, Nissan adapted the same technology to self-parking chairs that align themselves around a conference table in response to a human hand clap. Think of the uses for classrooms, meeting centers and restaurants.

There may come a time when self-driving cars reduce human driving to the sport and hobby level, like horseback riding has become today. For the time being, however, many humans will learn to drive and every one will go through a dangerous inexperienced driver phase. Many will also experience reduced judgment capacity and physical limitations with older age.

Car manufacturers have started to use AI and other technology innovations in a teen driver mode that limits operating speed and music volume, adds warning buzzers and lights for keeping attention on the road, and prohibits phone use. Chevy has gone an

extra step with a cybergadget for the Malibu, a Teen Driver report card for each trip that records times the speed limit was exceeded, total distance driven, maximum speed, and number of times other teen mode safety features were activated, available for parental review with a secret password.

Why do humans love gadgets? One reason might be that we can easily understand and appreciate the technology. Most of the websites for the gadgets noted above include entertaining videos. Many feature details about the construction and technology.

On any given day, any human might be able to come up with a clever, even money-making, innovation that makes an everyday activity easier, less expensive or more enjoyable. Gadgets give us more power and control in daily life. Using cool gadgets shows we are up to date and smart. Showing off our gadgets makes us a positive center of attention and sharing with other humans.

Sources and additional information:

Laughing Squid (frequently features cool gadgets, some of which use AI): http://www.laughingsquid.com

The Smart Jump Rope, http://smartrope.tangramfactory.com/

Glen Tickle, "A Smart Jump Rope That Displays a Jump Count in Mid-Air Using LEDs on the Swinging Rope," Laughing Squid, March 4, 1016, http://tinyurl.com/h2bloke

iDummy, http://www.idummy.com/en/aboutus/about-winswin

Lori Dorn, "A Programmable Smart Mannequin That Robotically Adjusts to a Wide Range of Body Measurements," Laughing Squid, February 11, 2016, http://tinyurl.com/zxym77u

Braava, http://tinyurl.com/gmm5wue

Molly McHugh, "The Braava Is iRobot's New Roomba. And This One Mops," Wired, March 2016, http://tinyurl.com/hceoem6

DRU - Domino's Robotic Unit, http://tinyurl.com/z5qfhm6

Glenn Tickle, "Domino's Introduces the DRU (Domino's Robotic Unit), An Autonomous Pizza Delivery Robot," Laughing Squid, March 21, 2016, http://tinyurl.com/j7ven78

Cupcake ATM, http://sprinkles.com/cupcake-atm

Brian McKechnie, "Cupcake ATM opens in NYC," Global News, March 27, 2014, http://tinyurl.com/jv5wdoh

Lori Dorn, "Intelligent Office Chairs That Automatically Park Themselves Around the Conference Room Table," February 15, 2016, http://tinyurl.com/z3hge89

Jonathan Takiff, "Gizmo Guy: New devices keep a close watch on teen drivers," The Philadelphia Inquirer, March 7, 2016, http://tinyurl.com/j2tx4sr

MLMUG PHOTO OF THE MONTH

Sunset At Redding Beach, Florida

Taken by Nancy Bloomfield

Nancy used an iPad Air 2 to take this picture early February 5, 2016. Amazing what pictures you can take with your iPhones and iPads. Just like a good camera.

Sally Bazrod
Photo Editor

Technical Specs

Camera: iPad Air2
Shutter: 1/500
F-Stop: 2.4