Macworld

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4 tidbits we learned from Apple's record quarterly results

A deeper look into Apple's record quarter revenue.

BY JASON SNELL

Months ago, Apple boldly asserted that the holiday quarter of 2017, its first financial quarter of this fiscal year, would be the company's biggest in history. It wasn't wrong. Apple's holiday quarter generated $88.3 billion in revenue (go.macworld.com/883b), blowing past even the high side of Apple's estimates.

By just about any way you measure it, this was a great quarter for Apple. But of course, the devil's in the details, whether it's line items in the corporate reports (go.macworld.com/arfq) or in tidbits revealed during the company's regular phone call with analysts (go.macworld.com/toaq). So
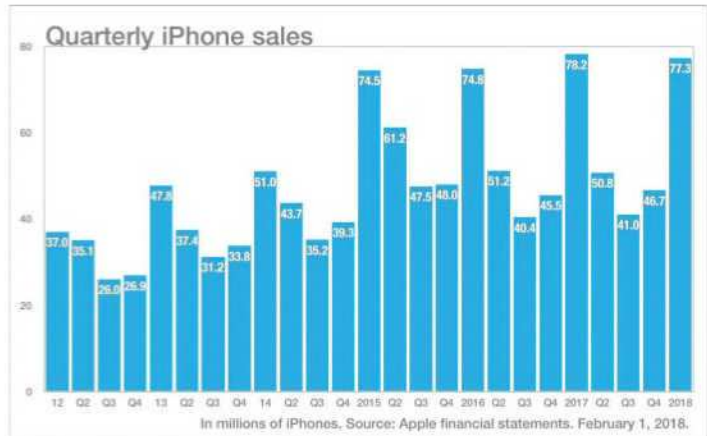
IMAGE: APPLE

here's a look at four tidbits we learned about Apple's big quarter.

THE LONG AND SHORT OF IT

Apple's previous holiday quarter (which was in fiscal year 2017, but calendar year 2016) saw solid results, with slight sales growth. But as many observers pointed out at the time,

Quarterly iPhone sales were slightly down year-over-year, but only because the quarter was shorter.

Apple was buoyed by a slightly longer quarter (go.macworld.com/arcq). The holiday quarter for calendar 2016 was 14 weeks long, meaning that the slight growth was really a slight *decline* if you considered the weekly averages.

That quirk of the calendar worked to Apple's benefit last year, goosing its results. But it also meant that for the holiday quarter of 2017, the bar would be that much higher—the company's sales would have to beat a longer time period to show quarterly growth.

It turned out to be quite good timing for Apple, because the company did beat last year's numbers in most areas. In one area, however, it didn't: iPhone unit sales. Apple CEO Tim Cook declared the quarter's sales "the highest number ever for a

13-week quarter," and pointed out that "Average weekly iPhone sales were up six percent compared to the December quarter last year."

In other words, Apple sold more phones per day than last holiday quarter... but last quarter had seven more days. And Apple wants to make sure that you know it.

THE iPHONE X STRATEGY SEEMS TO HAVE WORKED

If you see a story that says iPhone sales in the holiday quarter were disappointing, check to see if they mention the number of weeks in the quarter, or if they cite overheated analyst estimates. Because the numbers make it clear that this is a strong validation of Apple's somewhat

risky strategy to restructure the contents of its most popular product line.

In terms of sheer numbers, Apple sold 850,000 iPhones per day on average during 91 days in late 2017, compared to 798,000 iPhones per day during 98 days in late 2016, meaning that unit sales went "down" by increasing by 6.5 percent.

But look a little deeper: In terms of revenue, the iPhone generated $61.6 billion, compared to $54.4 billion in the year-ago quarter. That's a 13 percent revenue increase...or a 22 percent increase if you correct for the week disparity.

How to explain this? Pretty simple: The iPhone X strategy, to release an even higher-end iPhone above the "standard" iPhone 8 and iPhone 8 Plus models, worked. The average selling price of a holiday-quarter iPhone jumped by $100. "Since the launch of iPhone X it has been the most popular iPhone every week since, and that is even through today actually, through January," said Cook. (Keep in mind that iPhone X only started shipping in November, so it could only impact the quarterly results for a portion of the time.)

In addition, the iPhone 8 and 8 Plus appear to have continued to sell well. "In urban China and the U.S., the top five smartphones last quarter were all iPhones," Cook said. Sales were not, apparently, slowed down by the late shipment of the iPhone X. Some people bought the iPhone 8, other people bought the iPhone X, and Apple cashes the checks.

A RECORD NUMBER OF ACTIVE USERS

One of the huge bits of information in the conference call with analysts was Cook's reveal that Apple now has an installed base of 1.3 billion devices, which is "an all-time high for all of our major products" and a 30 percent growth in two years.

So, there are more iPads, iPhones, and Macs currently in use than ever before. How does that work? One reason—and
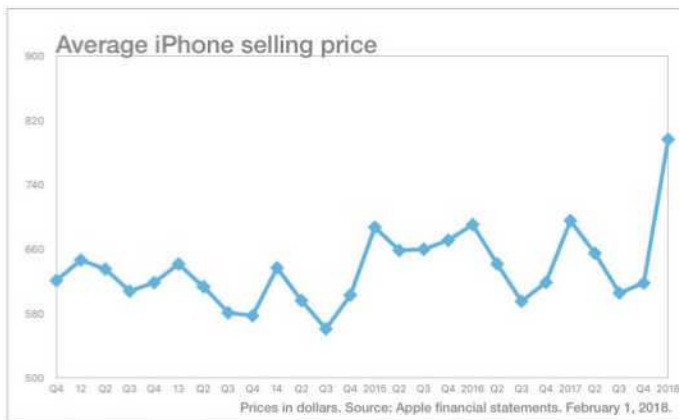
iPhone average selling price went way up thanks to the iPhone X.

Cook didn't shy away from mentioning it—is the long product life of Apple products, and the resale market. When Apple sells a new iPhone, the old iPhone it's replacing often goes to someone else.

"The reliability of iPhone is fantastic," Cook said. "The previously-owned market has expanded in units over the years. And you see in many cases carriers and retailers having very vibrant programs around trading an iPhone in, and because iPhone has the largest residual rate on it, it acts as

> While Apple doesn't necessarily make money directly from the sale of a used iPhone, it benefits by having more people in its ecosystem, as evidenced by the continued growth in Apple's Services category.

a buffer for the customer to buy a new one, and it winds up with another customer somewhere else that is perfectly fine with having a previously owned iPhone. And so I view all of that to be incredibly positive. [The] more people on iPhones, the better."

While Apple doesn't necessarily make money directly from the sale of a used iPhone, it benefits by having more people in its ecosystem, as evidenced by the continued growth in Apple's Services category. That person on a used iPhone still buys apps, rents movies, and maybe

even subscribes to Apple Music.

ANALYSTS STILL THINK THEY CAN TRICK TIM COOK

Piper Jaffray's Mike Olson apparently drew the short straw at the Analyst Club meeting this quarter, so he got to be the one to vainly attempt to get Tim Cook to spill secrets about future Apple products, which Apple, never, ever does.

"I know you don't talk about future products, which is often the preface to questions about future products, and I'll give it a shot," Olson said. "When you think conceptually about the path for iPhone X–style devices going forward, is there any reason the roadmap wouldn't consist of multiple devices, as we've seen with past iPhone upgrades?"

Good try, Olson. And to be fair, Cook threw him a bone—by restating something that was said at the iPhone X launch last fall.

"As we said when we launched it, we were setting up the next decade," Cook said. "So you can bet that we're pulling that string."

You heard it here, folks: There will be future iPhones and they'll build on the iPhone X. Aren't you glad you asked, Mike? ∎

The 10 Mac games you need to play now

Survival, sailing, sneaking around, and plenty of other fresh Mac experiences.

BY ANDREW HAYWARD

On the hunt for a fresh and exciting game to play this month? Luckily, there's always something new worth checking out in the world of Mac games, and we've put together our picks for the 10 biggest and most interesting-looking titles recently released.

Survival smash *Rust* recently exited Early Access, while *Descenders* is a frenetic new downhill biking game, *Never Stop Sneakin'* is a speedy take on stealth-action classics, and *Sailaway* lets you explore the world's oceans on a digital dinghy. Find out more about those games and others here, and don't miss our earlier

picks (go.macworld.com/jnmp) as well if you're looking for further recent gaming options.

1. RUST ($35)

Rust (go.macworld.com/rust) is easily this month's biggest full release, and it's one that has already been available via Steam Early

Access for more than four years now...and has sold several million copies along the way. Facepunch Studios' game is all about survival: from the moment you emerge into the world, naked and alone, you'll have to fend for yourself.

And you'll have to do so while playing on online servers, as you harvest resources from the world, build tools, craft weapons, battle (or cooperate) with other players, and hunt animals for food.

It's a big, rough, yet seemingly appealing experience that has drawn in loads of players up 'til now, but while Steam reviews are largely positive (go.macworld.com/lgps), critical appraisals have been more mixed (go.macworld.com/bnmm).

2. DESCENDERS ($25)

Holy cow does this game look fast. *Descenders* (go.macworld.com/desc) fills a gaming void by delivering a freestyle downhill mountain biking game, and it looks thoroughly intense, flinging you through forests and down steep slopes as you try to stay upright and zipping ahead. And you'll never run out of new terrain to ride across, as the game is fully procedurally generated.

3
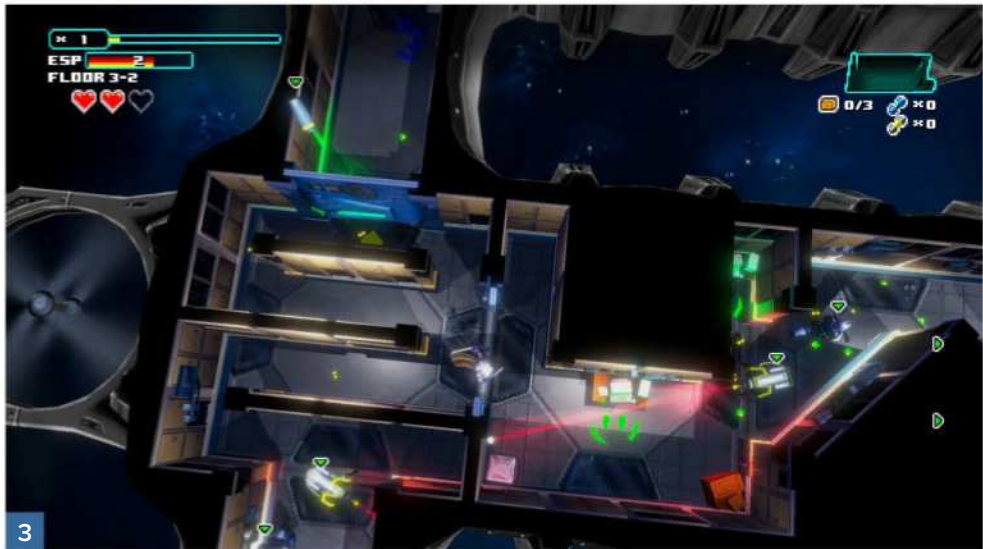
You can also ride at night and across snow, which should only make the high-speed antics even more exhilarating. *Descenders* just launched in Steam Early Access, so it's not fully complete—but even so, the initial user reviews are strongly positive, praising the game for its impressively realistic trick and handling systems as well as the polished physics.

3. NEVER STOP SNEAKIN' ($12)

Konami's beloved *Metal Gear Solid* stealth-action series may never make its way over to the Mac, but *Never Stop Sneakin'* (go.macworld.com/stsn) looks like an admirable substitute. It's the latest game from the creator of *Dust: An Elysian Tail* (go.macworld.com/daet), and it's built

in the mold of the original *Metal Gear Solid* from the first PlayStation—albeit much simpler, much faster, and somehow even wackier.

For example, one of the main bosses you'll face is Vice President Helicopter, an *actual helicopter*, while another is Dr. Acula ("probably a vampire"). This is a super-streamlined take on stealth action, tasking you with speedily rushing through levels while avoiding guards and surveillance cameras...and probably enjoying a few laughs along the way.

4. DUNGREED ($10)

What happens when a peaceful village and all of its inhabitants are sucked into a mysterious dungeon? Well, you dive in and

rescue them…or try to, at least. *Dungreed* (go. macworld.com/dngd) puts you into the tiny pixel shoes of the adventurer tasked with that unfortunate objective, and you'll need to fight your way through the dungeon and restore the town and its people to their former glory.

Dungreed resembles an old-school, side-scrolling action game, and the dungeon takes a new form every time you jump in. And you'll do that often, since your hero dies for good each time he falls, plus there are no checkpoints in the mix. Luckily, you can improve your hero's stats over time and employ a wide array of weapons to keep things interesting.

5. FARM TOGETHER ($15)

Farming games are surprisingly popular, and they come in varying shapes and sizes—from the serious realism of *Farming Simulator 17* (go. macworld.com/fs17) to the charming life simulator approach of

Stardew Valley (go.macworld.com/stvl). But *Farm Together* (go.macworld.com/fmtg) seems to find its own niche in the space: it's colorful, cartoonish, and targeted at casual players, plus it's best enjoyed cooperatively with pals.

As the name suggests, you can play *Farm Together* online with friends and plant crops, raise animals, and expand your farmstead alongside allies. And it seems pretty chill: Steam reviewers

waves any time you please with *Sailaway* (go.macworld.com/slwy). This simulation offers up painstaking recreations of the world's oceans, with varying waves and water color, plus wind and weather conditions pulled in real time from the National Oceanic and Atmospheric Administration.

You can sail solo if you please, or you can chat with fellow sailors, invite them onboard to help run the ship, or even take part in boat races. *Sailaway* includes an array of customizable boats to command, and the game claims to ease in newcomers while also allowing more serious sailing aficionados some tougher conditions to contend with.

suggest that it feels like a casual-minded, almost *FarmVille*-esque mobile game, albeit without freemium annoyances in the mix. It's in Steam Early Access now, as well, so it still could see deeper gameplay and larger features added in the future.

6. SAILAWAY ($40)

Sailing isn't easy, cheap, or necessarily accessible to everyone—but if you have a capable-enough Mac, you can hit the

7. DELVER ($15)

As with *Rust,* you might have encountered *Delver* (go.macworld.com/dlvr) before now— that's because it has been available in Steam Early Access for more than four years, plus it started life on Android

before that. But this dungeon-crawling role-player only just hit a full 1.0 version on the Mac, which means it's worth putting fresh eyes on whether or not it's already been on your radar.

It might be tough to tell from a still screenshot, but *Delver*

is a 3D game made with crisp, pixel-packed 2D graphics—almost Minecraft-esque, but with more detail and personality. Despite the colorful look, *Delver* promises to be tough as nails, dropping you into a newly-generated dungeon with each attempt, plus death is permanent. But even with the challenge, Steam reviewers (go.macworld. com/dlrv) say it's not overwhelmingly complicated, as some RPGs can be.

8. ORWELL: IGNORANCE IS STRENGTH ($10)

Modern technology has us plugged in and sharing our lives in new and seemingly exciting ways—but our social network feeds and internet activity only add to the amount of ongoing surveillance on us. *Orwell: Ignorance Is Strength* (go. macworld.com/oiis) turns that modern surveillance state into a game, as you use and even manipulate data to protect a

fictional nation.

As a top-secret agent, you'll investigate a journalist who is inciting riots and unrest in a neighboring country. That includes reading his private communications and stories, as well as spying on his family and allies and fabricating information as needed. It's a moral quandary; what are you willing to do to protect your country? It's a sequel, so check out the original first (go.macworld. com/orwl). Also, *Orwell: Ignorance Is Strength* is spread out over three episodes releasing biweekly, with the $10 purchase price granting access to everything.

9. STELLARIS: APOCALYPSE ($20)

Stellaris was one of the biggest Mac game releases of 2016 (go.macworld.com/bm16), and if you've been itching for more reason to set sail across the stars (and blast the heck out of rival ships), then here's a good

9

expansion has been timed alongside the game's 2.0 version release, which itself is surely worth exploring if you haven't played in a while.

10. EXILED KINGDOMS ($8)

We've seen newer games like *Tyranny* (go. macworld.com/trny) and *Pillars of Eternity* (go.macworld.com/plet) update the old-school, isometric computer role-playing game (CRPG) format—but *Exiled Kingdoms* (go.macworld.com/xkng) is a new game that looks as old as its inspirations. There's no modern gloss here: it has the look and feel of a game like Blizzard's original *Diablo,* as if it was 1996 all over again.

On the other hand, it's eight dollars, and Steam reviewers have been pretty

excuse. The game's Apocalypse (go. macworld.com/stap) expansion released in February, and it adds some significant new elements to the core experience.

The 4X real-time grand strategy affair sees additions like a Colossus planet-killer unit, which can wipe out entire worlds, as well as Titan ship units and nomad Marauders that can be either friend or foe. Ascension Perks and Civics bring some non-combat enhancements, as well, plus the Apocalypse

positive about *Exiled Kingdoms* so far. It offers up a huge fantasy world to explore as you battle, take on quests, and chat up the locals, promising 120+ hours of content to take in. It's like a blast from the past, albeit one that was just released on the Mac. ∎

10

Should you upgrade your Fusion Drive iMac to macOS High Sierra?

Users are concerned with Apple's new APFS format.

BY GLENN FLEISHMAN

Someday far in the future, Apple will have settled fully into using its new macOS filesystem, APFS (go.macworld.com/apf5), and *Macworld* readers will stop being nervous and confused about it. Until then, I continue to receive queries in our inbox.

APFS is a robust, more efficient, and futureproofed filesystem that has a lot of advantages. But the transition isn't complete by any means.

Reader Bill emailed wondering about the safety of upgrading his iMacs to macOS High Sierra, since each has a

> While you can manually upgrade drives via Disk Utility to APFS, do not upgrade Time Machine volumes.

―――

Fusion Drive, Apple's hybrid of SSD and hard drive. He notes that he'd read Apple's software engineering chief, Craig Federighi, had said at some point that APFS would come to Fusion Drives. (Federighi replied to a Mac user's query via email, which that user then publicized.)

It's not unsafe to upgrade, because High Sierra leaves Fusion Drives in HFS+ format. However, I'm assuming that Apple will release an update to High Sierra at some point that sweeps in Fusion Drives, and that installing that 10.13 update will automatically and without asking convert your HFS+ startup drive to APFS. This was the case with the release version of High Sierra, which upgraded SSD boot drives to APFS without prompting or a way to avoid it. (The beta releases of High Sierra offered a checkbox to opt out.)

That could be problematic, because if Apple's Fusion Drive version of APFS isn't perfect, you could be left with a mess. It may be worthwhile for that reason alone to stick with Sierra until such a point as Apple releases the Fusion Drive APFS update, and then wait to hear from online reports about how well that goes.

Bill also asks about his external Time Machine volumes. High Sierra doesn't convert anything but a startup drive that's an SSD to APFS, so a startup hard drive or Fusion Drive remains untouched, as well as any external drives, no matter what type of drive they are.

While you can manually upgrade drives via Disk Utility to APFS, do not upgrade Time Machine volumes. Apple weirdly released macOS with APFS without figuring out how to manage Time Machine under APFS. Switching from HFS+ to APFS destroys your Time Machine backup, as I write about here (go.macworld.com/hffp). ■

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Lola Silvestri, SINCE 1921. Conversation and good company are her domain. Now, she and 1 in 6 seniors face the threat of hunger and millions more live in isolation. So pop by, drop off a hot meal and say a warm hello. Volunteer for Meals on Wheels at **AmericaLetsDoLunch.org**

SOFTWARE

LOUPEDECK: PUTS ADOBE LIGHTROOM CLASSIC CC'S CONTROLS AT YOUR FINGERTIPS

BY JEFF CARLSON

The next time you're editing photos in Lightroom Classic CC, pay attention to how often your gaze darts to the Develop controls at the right edge of the screen. Nearly every adjustment is a slider, so it's like watching a tennis match: move the mouse pointer to a specific control, change the value, look back at the image to see the effect you made, repeat hundreds of times.

What if you could retrain your muscle memory and keep your eyes on the photo? The Loupedeck (go.macworld.com/lpdk) is a physical control panel, roughly the size of a keyboard, studded with dials and buttons that correspond to Lightroom controls. It plugs into a Mac or PC via USB, and works with Lightroom Classic CC and Lightroom 6

under macOS 10.10 and later and Windows 7 and later; it's not compatible with the Lightroom CC application introduced in late 2017.

Lightroom's Basic, HSL/Color, and B & W controls are all represented on the Loupedeck's array, as well as buttons for assigning star ratings and color labels, rotating and cropping, and performing tasks such as undo, redo, copy, paste, zoom, and navigating between images using arrow keys.

As you'd expect, turning a dial increases or decreases a control's value;

> As you'd expect, turning a dial increases or decreases a control's value; they're free-spinning, so you don't hit resistance when you've topped out at the control's limits.

they're free-spinning, so you don't hit resistance when you've topped out at the control's limits. Pressing down on the dials and color scroll wheels resets the value of a control to zero.

Three toggle buttons can be assigned other tasks in the Loupedeck software that runs on the computer; for example, the C1 dial adjusts the strength of a vignette by
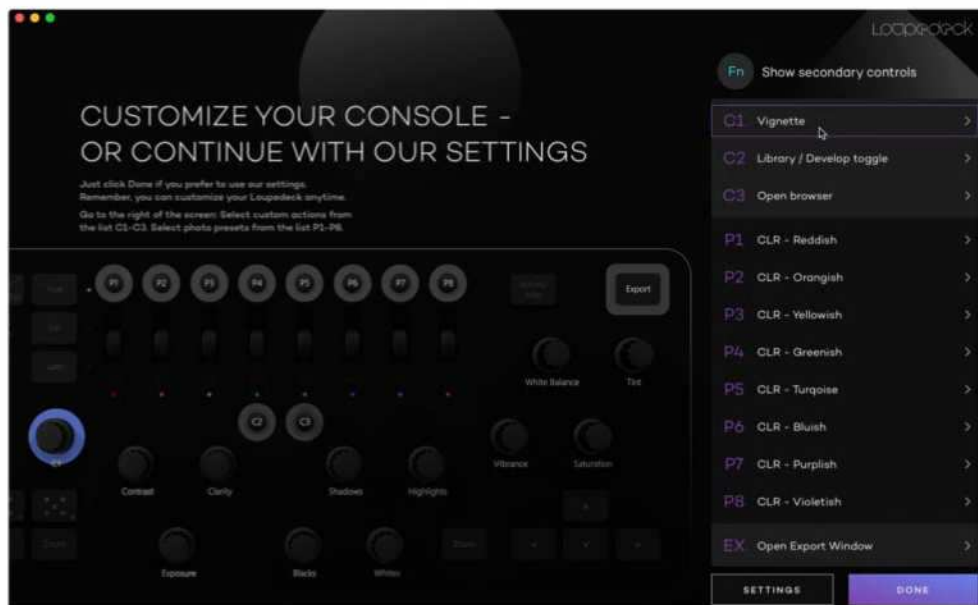
Assign software controls to many of the analog controls in the Loupedeck settings.
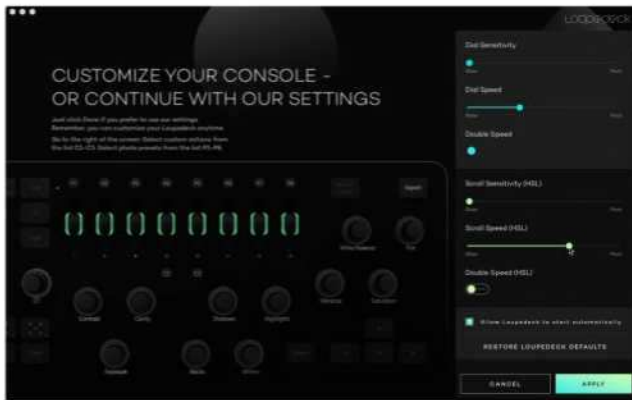
Change the speed and sensitivity of the controls.

default, but you can have it adjust sharpness or noise reduction, or use it to make vertical or horizontal transformations. You can also set the P function buttons to apply any Lightroom presets, not just the Loupedeck default presets that come with the software. Holding a Fn key doubles the number of controls and presets you can access.

The Loupedeck's build quality is very good; nothing feels loose or cheap. For my taste, the toggle buttons feel a bit stiff, but that could be because I've used an Apple wireless keyboard for so long. Although you can't adjust the physical resistance of the dials and scroll wheels, you can modify their speed and sensitivity in the Loupedeck settings.

A notable drawback to the software is that there's no update mechanism, nor even an easy way to learn which is the most recent version on the Loupedeck website; you need to download the installer (go. macworld.com/dnin) to see which is the latest version. Although the company writes, "It is important to constantly update the configuration software to fix bugs and add new functions," it's all on you to remember to "constantly update."

BOTTOM LINE

There's something to be said for not having to hunt for controls or hit small targets with the mouse pointer. If you've built up the muscle memory of editing with a keyboard and mouse, or keyboard and digitizer, switching to a slab of analog controls could be difficult—or you might find that having the controls in consistent locations at your fingertips is an easy transition. If you spend many hours editing in Lightroom Classic CC, I can see how incorporating the Loupedeck could speed up your work. ∎

Loupedeck

PROS
• Well made analog controls for editing.
• Configurable controls and preset toggle switches.
• Mac and PC compatibility.

CONS
• No software update mechanism.

PRICE
$259

COMPANY
Loupedeck

ACCESSORY

ZMI POWERPACK 20000: A SPEEDY CHARGER FOR YOUR USB-C MACBOOK OR MACBOOK PRO

BY GLENN FLEISHMAN

Before the USB Power Delivery 2.0 spec became reality, battery packs maxed out at a charge of about 15 watts (5 volts at 3 amps). PD 2.0 increased the max to 100W, but most of the batteries implementing PD 2.0 strike a balance of performance, heat, cost, and compactness by outputting about 30W. Some recharge at the same rate while others are much slower.

However, the PD 2.0–based ZMI PowerPack 20000 (go.macworld.com/zmpp; $80) offers 40 watts of power over USB-C to charge laptops while they're in active use. And the 72 watt-hour/20,000 milliampere-hour PowerPack 20000 recharges itself at 45W. It's faster in both directions than nearly every USB-C battery pack on the market.

TESTING THE POWERPACK 20000

I used the PowerPack 20000 to charge a drained battery in a 2015 12-inch MacBook over USB-C, and it took about 150 minutes to fill the MacBook's battery, which currently has a 4,220mAh capacity. (The original MacBook battery has over 5,000mAh.) This exhausted about three-quarters of the PowerPack 20000's charge, based on its four LED display system. That works out to about 25 to 35 percent inefficiency—using about 54 watt-hours to pass through about 35Wh—which is reasonable given battery physics and compared to peers.

Recharging the PowerPack 20000 to capacity took about the same time. The battery doesn't come with an adapter, which is a mark against it not on cost, but because it can be tricky to find a good adapter that matches the PowerPack 20000's wattage. However, ZMI offers its own 45-watt charger (go.macworld. com/45wc) for $20.

Because of its high-wattage output over USB-C, you can actively use the battery to maintain a charge or increase stored juice while using a MacBook or MacBook Pro. On more advanced or larger-format MacBook Pro models, the battery pack may not be able to

ZMI PowerPack 20000.

keep up with drain, but you'll still be extending run time by several hours. The effective capacity of the PowerPack 20000 is equivalent to about one and a quarter charges for a fresh 12-inch MacBook, all the way to about two-thirds of the 15-inch MacBook Pro.

AVAILABLE PORTS AND INCLUDED CABLES

The battery pack charges and recharges through the same USB-C port, and

The battery doesn't come with an adapter, which is a mark against it not on cost, but because it can be tricky to find a good adapter that matches the PowerPack 20000's wattage.

includes two USB Type-A jacks as well. Each of them can charge from 5V at 2.4A (12W), 9V at 2A (18W), and 12V at 1.5A (18W), but the two together share a maximum 18W output.

The PowerPack 20000 includes a USB-C power cable that handled charging the MacBook and recharging the internal battery pack. ZMI also includes a nifty USB Type A to USB-C/USB Micro-B—it's a single cable in which the USB-C plug end is really an adapter with a plastic tether you can remove, revealing Micro-B for charging non-Apple smartphones and other devices. The battery measures 6.3 by 3.2 by 0.8 inches and weights just over 14 ounces. The company offers an 18-month warranty.

The only quirk of the battery is that its sole button, when pressed, interrupts charging for a fraction of a second to check its internal

ZMI PowerPack 20000

PROS

• Charges USB-C devices at up to 40W.

• Continues to charge while Mac is in active use.

• Recharges at up to 45W.

• Includes combo USB-C/ Micro-B to Type A cable.

CONS

• Doesn't include high-wattage charger.

PRICE

$79.95

COMPANY

ZMI

status. It's not a big deal, but it's a little odd, and something I haven't seen with other battery packs. The battery can be switched into a USB hub mode by double-pressing the status-check button, which changes a status indicator LED to blue.

BOTTOM LINE

Fast, compact, well-designed, and a good bargain, the PowerPack 2000 battery is on top of the pack. It's a great battery for on-the-road use. ■

HOME TECH

EVODESK XE PRO SIT/STAND DESK: A SMART ADDITION TO ANY HOME OFFICE

BY MICHAEL BROWN

According to the Mayo Clinic, sitting behind a desk for as little as four hours a day increases your risk of cardiovascular disease by as much as 125 percent. And spending a few hours at the gym every week doesn't significantly offset that risk. One of the clinic's first recommendations: Use a sit/stand desk. I work in a home office in my smart home on a near full-time basis and was reluctant to make that investment. The customizable Evodesk XE Pro changed my mind, but not all its options are good values.

Unlike some low-cost solutions that rest on top of your conventional work surface—mine is a six-foot-wide, 30-inch-

deep sheet of ½-inch finished plywood sitting atop a pair of 27-inch-tall file cabinets—the Evodesk XE has a silky smooth motorized lift that goes as high as 18.45 inches to accommodate your height and personal preference. The microprocessor-controlled 24-volt motor can quietly lift up to 100 pounds in precise increments of 1/10th of an inch.

The Evodesk XL Pro in the author's (messy) home office, with a 30-inch monitor attached.

Prices for the Evodesk XE start at $379, but available options can inflate your build quickly—adding every available option to the desk itself boosts its price tag to nearly $750. I chose what I thought were modest and necessary options: The $49 Pro option adds a lower shelf for my keyboard. Just as importantly, it puts me another nine inches away from my monitor. The $39 Programmable Memory upgrade replaces the standard two-button height control and adds a read-out of the desk's elevation while it's in motion.

These options increased the price of the desk to $467, but I quickly discovered that the Programmable Memory option is a complete waste of money. Evodesk says it's their most popular option, because it can store four height positions: Push buttons 1 through 4 and the desk will automatically return to that memorized height. But it only works if you hold the desired button down until the desk reaches that height. The desk stops moving the instant you take your finger off the button.

Incredulous, and convinced that I was not programming the memory correctly, I reached out to Evodesk about the situation. Their response: "...we do that intentionally on our XE and XE Pro models for safety reasons. We do not want the units to become top heavy and hurt someone." I suppose you could pile enough crap on top of the desk to make it top heavy at its full height, but I don't know how you'd be able

The requirement to hold the optional memory buttons down while the desk is in motion negates their usefulness. (This photo does not show the optional keyboard shelf.)

to see the monitor. If you need to hold the button down anyway, save yourself $39 and just hold the up or down button down (unless that display is important to you).

CONSTRUCTION AND OTHER OPTIONAL ADD-ONS

The default material is recycled wood covered in a textured black or white vinyl, but you can upgrade to rubberwood or bamboo for an additional $39. An optional .006-inch-thick, transparent vinyl skin will protect those surfaces from spills and scratches for $67 more. Your next option is to cover the desktop surface in fancier skins, adding $139 to the price tag. You can choose from more than 80 designs, including faux stone and wood grains,

abstract patterns, wallpaper-like surfaces, solid colors, and even a whiteboard surface for dry-erase markers. There are no-charge options to change the frame color from black to silver or white.

Your final option is to choose a single monitor mount (included in the price tag) or to spring for a dual-monitor mount, which adds $69 to the price of the desk. Beyond that, Evodesk offers a host of accessories, including anti-fatigue mats for your feet, cable-management packages, and extended warranties (the standard warranty is a strong five years). A few adhesive-backed cable-routing clips come with the desk, but these came loose shortly after I stuck them on. Looking at the rat's nest of cables dangling from the desk, I wish I had opted for one of the cable-management options.

SOME ASSEMBLY REQUIRED

You'll need to assemble the desk when it arrives in several boxes, an experience I didn't find remotely enjoyable. There are a lot of screws to deal with, and you'll need three different sizes of Allen wrenches

Keep your hands clear while lowering the Evodesek XL. I placed this empty aluminum can under it to see if a sensor would reverse its motor when it encountered an obstacle.

(provided) to do the job. Mounting my 30-inch display was particularly difficult—I'd recommend roping someone in to help you with that step. I didn't try the dual-monitor mount, but you'll want to be aware that the single mount is fixed: You can't tilt, pivot, or rotate the display.

On the bright side, even the recycled wood in the basic model is plenty dense to hold the screws tightly in place. I'm particularly impressed with how well the keyboard tray is holding up given my propensity for pounding the keys (I've been using the desk for about six months).

In addition to my 30-inch monitor, I

have a 14-inch laptop on the desk, along with a pair of Bowers & Wilkins MM-1 speakers and a rotating bunch of other stuff (right now, it's three compact headsets, a spare battery, a screwdriver, and a cup of coffee). There's a full-size gaming keyboard and a mouse on the keyboard tray. Evodesk's motor can elevate the desk from its lowest position to its highest in less than 18 seconds. The motor slows to a smooth stop when you lift your finger off the button or before it reaches its highest or lowest position, so nothing gets jostled.

KEEP HANDS CLEAR WHILE OPERATING

I found the Evodesk extremely stable, even at its highest position and with a 30-inch display mounted to it. It would take a considerable effort to knock the desk over. But you should take care to not leave anything under it. There is no pressure sensor as far as I can tell, and the desk came down with enough force to partially crush an empty aluminum can. This didn't happen immediately, the can gave way when I touched it, but the desk didn't back off when it made contact with the can. Getting your arm or hand pinched between the bottom of the desk and its metal legs or the surface of your regular desk could be painful, though it probably wouldn't cause injury.

A full-size gaming keyboard centered on the keyboard shelf leaves little room for mousing.

I found the keyboard tray problematic in terms of its width. At 27 inches, it's the same width as the desk, but my keyboard is 18.5 inches wide. With the keyboard centered in front of the display, there's less than five horizontal inches on the right-hand side in which to move the mouse. The tray's nine-inch depth isn't a problem, but I'm constantly picking the mouse up when I need to move the cursor longer distances left and right. A slide-out mouse tray would be a welcome addition.

BOTTOM LINE

The science seems settled when it comes to the danger of too much sitting—a sit/stand desk can be good for your health. If you're like me, a motorized model like the Evodesk XE that makes it nearly effortless to change positions throughout the day will encourage you to do just that. This desk is well built and it's convenient to use, but it's easy to get carried away at ordering time, tricking out the desk with lots of fancy options and rapidly inflating its price tag.

The keyboard shelf is a must, even though I wish it were wider. The Programmable Memory option is practically useless. I don't miss having the other options, apart from maybe the cable-management system. But that's more of an aesthetic issue than anything else. The rest of my home office is a chaotic mess most of the time, so why should my cables look pretty? ∎

🔌🔌🔌½

Evodesk XE Pro sit/stand desk

PROS

• Motor lifts and lowers the desk fluidly and quietly.

• Constructed from durable materials.

• Can accommodate up to a 30-inch display.

CONS

• No crush sensor, motor won't back off if it encounters an obstruction (including your hand).

• Too narrow to accommodate a full-size keyboard and mouse.

PRICE
$428

COMPANY
Evodesk

GADGET

SNAPPOWER USB CHARGER 2: DOUBLE THE USB PORTS AND (SORT OF) TWICE THE POWER

BY MICHAEL BROWN

SnapPower is back with yet another clever outlet cover. This time, the company comes full circle with an updated version of its USB charger, the SnapPower USB Charger 2. What's new about it? It's a 2.1-amp charger this time, and it's outfitted with two USB ports— one on each side of the plate.

Before you get too excited, though, know that both USB ports share that 2.1 amps. That's not enough juice to fast-charge any single device, and when you plug in two devices, each will only be able to draw around 1 amp each. I plugged in my Samsung Galaxy S6 Active smartphone

into the left-hand of charger with a good-quality Belkin USB cable and used the Android app Ampere (go. macworld.com/apmr) to measure the net current flowing into the phone's battery (some current is used to operate the phone and whatever processes are running on it, but Ampere does not measure that consumption).

The SnapPower USB Charger 2 can charge two devices at once, but both ports must share the 2.1 amps of current the coverplate supplies.

What Ampere does report is an average value from 50 measurements over a 10-second period, minus the 10 highest and 10 lowest values. The developer admits that its app isn't scientifically accurate, but it's close enough for this purpose. While charging just the phone, Ampere reported that an average of 1,010mA of current was flowing to the phone's battery (peaking at 1,720mA). When I plugged a 4th-generation iPad into the SnapPower's second USB port, Ampere reported that 320mA of current was flowing to the phone's battery. A similarly named iOS app—Ampere Test (go.macworld.com/amts)—from a different developer reported that just 192mA of current was flowing to the iPad.

The USB Charger 2 is just as easy to install as SnapPower's other outlet covers, with two arms that extend from either side of the cover. Copper contacts on those arms draw electricity from the

Before you get too excited, though, know that both USB ports share that 2.1 amps. That's not enough juice to fast-charge any single device, and when you plug in two devices, each will only be able to draw around 1 amp each.

outlet's screw terminals. I once again ignored the manufacturer's recommendation to turn the power off to the outlet before removing the old cover and installing the new one. And once again, I'll say that it's smarter to follow the manufacturer's instructions than it is to follow my example. There is a chance of getting shocked—or worse—installing one of SnapPower's covers on a live outlet (or switch, as the case may be).

The Android app Ampere reporting the average current delivered to a Samsung Galaxy S6 Active connected to the SnapPower USB Charger 2.

SnapPower recently shipped a new version of its LED-equipped GuideLight—the GuideLight 2 Plus for GFCI Circuits (go.macworld.com/gfci)—that can be installed on GFCI outlets, but the USB Charger 2 doesn't have that feature. If your home is wired according to modern electrical code, that could mean you won't be able to install it in your kitchen, bathroom, laundry room, garage, or other areas where there might be wet conditions from faucets and sinks.

Adding the two USB ports to the bottom of the outlet cover results in a slight bump that might prevent you from

The Android app Ampere reporting the average current delivered to a Samsung Galaxy S6 Active connected to the SnapPower USB Charger 2.

plugging a wall wart into the bottom outlet. I had trouble with an angled flush-mount plug from a surge protector—I had to plug it into the upper outlet. But drawing current from the regular plugs didn't diminish the current flowing to the USB ports.

A conventional wall wart will charge most any device faster than the SnapPower USB Charger 2 can, but you'll never need to look for one with this cover on your outlet. I can't say the same about a USB cable, though. Maybe SnapPower's next iteration will include a retractable one. ◼

SnapPower USB Charger 2

PROS
- 2.1 amps of charging power.
- Two USB ports.
- Super easy to install.

CONS
- 2.1 amps is shared between the two USB ports.
- Incompatible with GFCI outlets
- The bulge at the bottom of the cover restricts use of the outlet above it.

PRICE
$23

COMPANY
SnapPower

YOUR BODY
YOUR HOPE

Your immune system may be the key to beating cancer.

Immunotherapy, a new approach to cancer treatment, is bringing hope to cancer survivors everywhere. Immunotherapy works by empowering your body's own immune system to correctly identify and eradicate cancer cells. This approach has been used to effectively fight many types of cancer, with new research leading to greater hope each day. Speak with your doctor and visit **standuptocancer.org/immunotherapy** to learn if immunotherapy may be right for you.

Jimmy Smits, SU2C Ambassador
Photo By: Timothy White
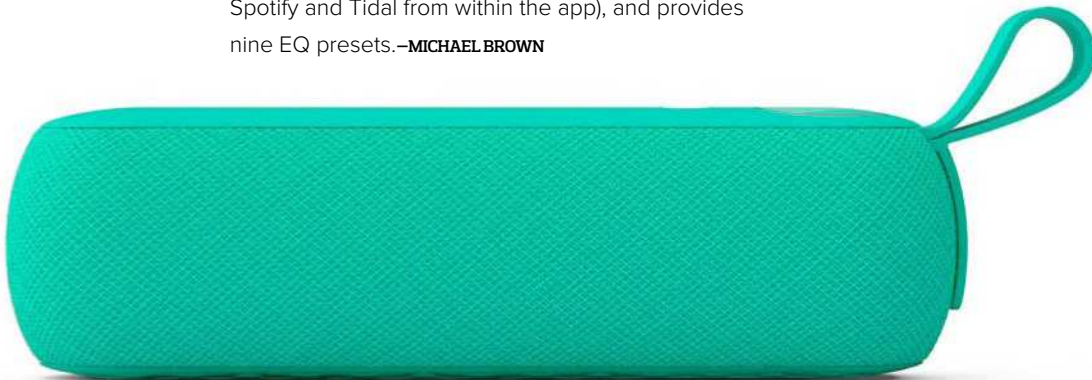
Hot Stuff

APPTION LABS MEATER

meater.com

Like a conventional meat thermometer, Meater monitors the internal temperature of meat while it's being cooked. The smarts come from the app, which has a series of pre-programmed cooks that take the guesswork out of cooking. You select the meat you're cooking, the cut of meat, and how you want to cook it. At the precise moment your meat reaches the correct temperature, an alarm sounds to signal it needs to be removed from the heat. The app continues monitoring the meat while it rests and will give you another signal a few minutes later when it's done. When you're done, you can also see a graph of exactly how the cook progressed, perhaps to take away hints for a subsequent try.—**MARTYN WILLIAMS**

LIBRATONE TOO

libratone.com

The Libratone Too's bottle shape and loop handle make this Bluetooth speaker easy to grab and go—and it'll deliver a strong musical performance all along on the way. The single-speaker, 360-degree sound is surprisingly effective—particularly in a near-field listening situation—in large measure because the drivers are very effective at delivering the full range of frequency response. Libratone's mobile app reports the remaining battery life, streams internet radio stations (you can also launch Spotify and Tidal from within the app), and provides nine EQ presets.**–MICHAEL BROWN**

Hot Stuff

XIAOMI 10,000MAH MI POWER BANK PRO

mi.com

You simply can't go wrong with the Mi Power Bank Pro. This 10,000 milliamp-hour battery pack is sleek and well-designed, and its sturdy housing feels like it can withstand a drop or six. It has one USB-A port for charging your phone or tablet, and a USB-C port for charging the pack itself. In testing, the 10,000mAh (38.5Wh) battery pack had an impressive 90.99-per-cent efficiency. The USB-C port can accept power from up to an 18W power source, putting recharge time at under 4 hours.—**JASON CIPRIANI**
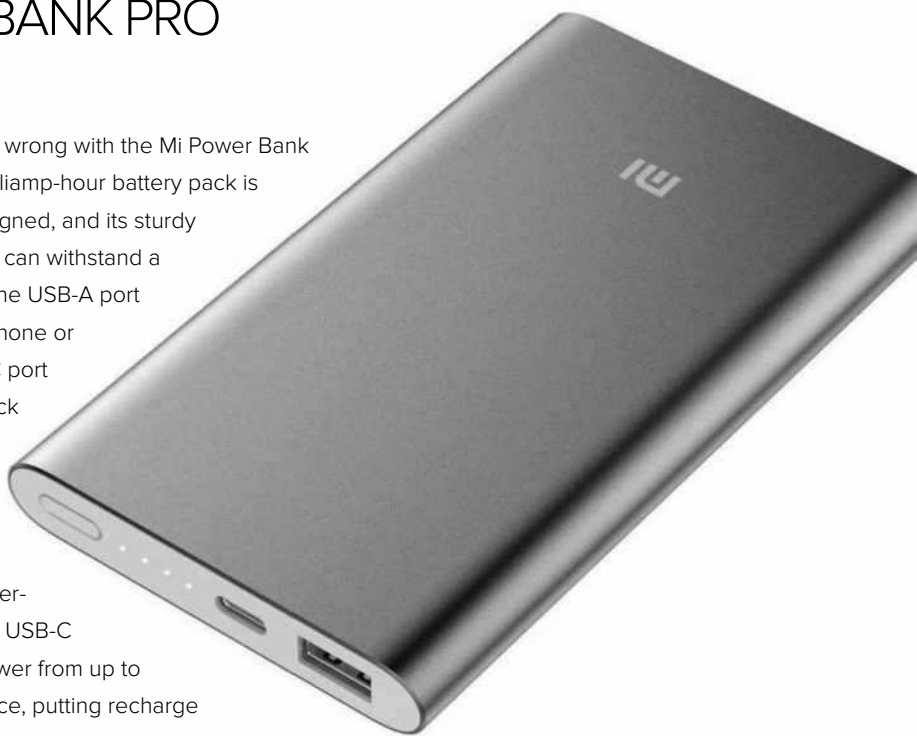
Stand Up with us

Support Stand Up To Cancer today to help cancer patients become cancer survivors.

Give $25 or more to Stand Up To Cancer through the Miles To Stand Up program and you'll receive **10 American Airlines AAdvantage®** miles for every dollar donated. Donate and earn at **standuptocancer.org/americanairlines**

Pictured: *Stand Up To Cancer Ambassador,* **Bradley Cooper** *along with American Airlines team members currently fighting, surviving and co-surviving cancer.*

7 easy tweaks to breathe new life into your Apple Watch

Stopped wearing your snazzy smartwatch? Here's how you can make it meaningful again.

BY ANDREW HAYWARD

was over the moon about the Apple Watch when it was first announced. At the time, I was feeling intense jealousy over Android Wear watches that couldn't work with my iPhone (back then, at least [go.macworld.com/anif]), and had picked up a cheap Pebble to help fill the void (go.macworld.com/pble). And despite some initial shellshock over the

price levels and version differences, I bought the Apple Watch Sport on day one and was excited for its future.

Nearly three years later, that same watch spends more time in my desk drawer than on my wrist. The Apple Watch never felt truly transformative to me, and while I've enjoyed it as a style accessory and for quickly viewing

notifications, I eventually fell out of my steady routine of charging it, wearing it, and deferring to it instead of my phone. It's been at least a year since I've worn it regularly for longer than a week or two at a time, and I've heard similar stories from friends and colleagues who have fallen off the Apple Watch bandwagon.

I'm trying to change that habit, however, and despite newer, smarter models (go.macworld.com/ bwaw), this old ticker still has plenty of life in it. In recent weeks, I've made more of an effort to not only wear the Watch daily, but also to dig deeper into its newer features, functionality, and style options—and sort out my charging routine. Got an Apple Watch that is collecting dust these days? Here are some ways to pump it full of fresh life and make it feel worthwhile again.

1. GET SOME NEW BANDS

It's the most obvious fix, right? Apple made it super easy to swap the bands on your Apple Watch, and has made a lot of money selling very nice (but very pricey) options. Early on, I didn't want to break from the official offerings—and after three years, I have three different Sport band colors and an orange nylon

Give your Apple Watch a style refresh... and consider cheaper third-party bands, too.

band. But given how much cheaper third-party bands are, and how well they compare to the real deal, I decided to give them another look.

I recently ordered my first leather band: a black 42mm Fullmosa band that is impressively cheap at just $11 on Amazon (go.macworld.com/11am). It's soft, comfortable, and pairs well with the Sport's aluminum body, all at a fraction of the cost of Apple's leather options. And it's a nice change of pace after mostly wielding silicone bands to date. Looking for off-brand suggestions? We have a few (go.macworld.com/abnd).

2. UPDATE watchOS

If you haven't been using your Apple Watch regularly, then you might be a

major version or two behind on watchOS. While Apple's wearable interface hasn't changed dramatically over time, it has added some helpful features that spice things up, make the Watch easier to navigate, and potentially provide reasons to use it more.

For example, last fall's watchOS 4 update (go. macworld.com/wos4) brought some fresh watch faces, smarter Activity notifications, expanded fitness tracking abilities, a new list interface for apps, and even flashlight functionality using the

Check out the newer faces, but flip through the older ones too.

screen. Get up to date via the Watch app on your iPhone and then take a few minutes to get familiar with the changes.

3. TRY SOME FRESH FACES

As mentioned, watchOS 4 arrived with new watch faces that might grab your attention. The Siri face is a functional favorite, as it brings a newsfeed-like list of smart alerts, such as calendar events, traffic info, news stories, and contextually appropriate HomeKit commands. The Kaleidoscope face, meanwhile, is a

super-pretty and customizable face that gradually spins through trippy animation, while the *Toy Story* face comes with three options—all of which feature slick CG characters from the films.

You'll find those faces and more from the Watch app on your phone, and it's the easiest way to flip through all of the built-in designs for Apple's smartwatch. Unfortunately, third-party developers still can't make their own faces, but Apple's selection is pretty solid. If you've been using the same face for

ages, maybe now's the time to experiment with other options.

4. EXPLORE COMPLICATIONS

If you haven't played around with watch faces in a very long time, then there's a good chance that you haven't spent much time tweaking your complications—if at all. What are complications? While they might sound ominous, they're actually helpful: they're the little widgets that exist on every watch face, which can show things like the weather, the date, the battery life, or calendar events.

But there's so much more than just those basics, because unlike with the faces themselves, Apple has allowed developers to design their own complications. You can fill those gaps

with a wide array of elements, such as commute estimates from ETA (go. macworld.com/etaa), common foreign language phrases from iTranslate (go. macworld.com/itrt), daily events from Fantastical 2 (go.macworld.com/fnt2), or even the remaining distance to walk to hatch eggs in Pokémon Go (go.macworld. com/pokg).

When swapping faces, tap the Customize button to see which complications are already on your Apple Watch thanks to your installed apps. Beyond that, have a look around to see what other widgets might be useful or entertaining.

5. DOWNLOAD APPS AND GAMES

The idea of having apps on your wrist was enticing at first, but many of us quickly discovered that we don't actually want to spend a lot of time poking and prodding our watches. Why not just pull out our phones instead? It's a big reason why some companies have been removing their Watch companion apps (go. macworld.com/cmap) in recent months—people just aren't using them.

It's not complicated: you can tweak the little widgets with ease.

Cosmos Rings is an inventive game that you might actually want to play on Apple Watch.

But some apps actually are worth having on your wrist for quicker interactions. Our friends over at *Macworld* U.K. have a full list of worthwhile options (go.macworld.com/bsaw), such as Evernote (go.macworld.com/ever) for dictating quick notes, or Calcbot 2 (go.macworld.com/clb2) for speedy calculations—and fitness apps are a pretty perfect fit, as explored in the next section.

Also, while wrist-based gaming didn't end up being a big sensation, we've found some favorites (go.macworld.com/15gm) on the Apple Watch—such as Cosmos Rings (go.macworld.com/csms), a stylish and surprisingly engaging role-playing game that you can play in quick spurts. You can browse around for more wearable app and game options via the

Watch app on your iPhone.

6. EMBRACE ITS FIT FEATURES

For many users, the Apple Watch's biggest hook comes from its fitness abilities—and they are numerous and have grown more useful over time. The waterproof Series 2 (go.macworld.com/srs2) and Series 3 (go.macworld.com/srs3) models bring along swim tracking and have their own GPS to boot, but even the original Apple Watch can do quite a bit to help keep you fit.

The Activity rings remain the Apple Watch's signature, ambient fitness feature, and as mentioned, they've become more nuanced and helpful over time. You can share your daily progress with friends for a little extra motivation, with coaching features and challenges also in the mix. The Apple Watch can also measure workouts, plus the heart rate sensor can keep tabs on your vital signs all the while.

Beyond the Watch's own native abilities, you can also dig into the App Store for further functionality. For

example, Streaks Workout (go.macworld. com/stwk) can generate quick workout routines on the fly, letting you simply glance at your watch screen for the next instruction. And Gymaholic (go.macworld. com/gyma) can walk you through a gym routine without having to pull out your phone every few minutes. Take better advantage of the Apple Watch's fitness assists and you might find good reason to keep it on your wrist most of the time.

7. CONSIDER HOW YOU CHARGE

Honestly, one of my biggest hang-ups has been keeping the Apple Watch charged. That battery only lasts for about a day and a half, and too often, I'll go to put it on before leaving home and realize that it's dead. It's then that the Watch tends to get buried under papers on my desk or tossed into the drawer, shrugged off as inessential. I get along fine without it.

Sound familiar? If so, then you might want to consider how you really use the Apple Watch and when might be the best time to

charge it daily. Many people charge it overnight alongside their phone, which makes a lot of sense—but I often take my Watch off well before my head hits the pillow. Instead, I've put the dongle on my desk next to where I have a wireless charger for the iPhone X, and I'm getting into the habit of just tossing both on their respective chargers while I'm working in my home office.

That said, I'm also tempted to grab a bedside dock for both the iPhone and Apple Watch—like Belkin's Valet Charge Dock (go.macworld.com/bvcd)—so I'm not just bound to the single charger in my office. Your own needs and routine may vary, but whatever they are, you'll need to find the best way to remember to charge every day or so. You won't get very far in trying to revitalize your Apple Watch if it's not ready to wear when you need it! ■

Keeping the Watch charged has been one of my biggest issues.

Siri vs Siri: What Apple's AI can and can't do on every Apple device

Hey Siri, what gives?

BY MICHAEL SIMON

All forms of Siri are not created equal. While Apple's AI assistant is available on no less than six different devices—iPhone (go.macworld.com/ifox), iPad (go.macworld.com/ippr), Apple Watch (go.macworld.com/srs3), Apple TV (go.macworld.com/atv4), Macs (go.macworld.com/imco), and now, HomePod (go.macworld.com/aphp)—its capabilities aren't the same on each. Rather than give Siri the same brain everywhere, Apple has tailored Siri's smarts to the device you're using, so the answers you get will be different depending on what device you're using—and in some cases there are surprising and frustrating limitations. I tested Siri across Apple's

whole family of devices with scads of queries. Here are some topline takeaways on what I found:

> The iPhone and iPad are the kings of Siri. Every request I made was answered best by these two devices, and the responses always matched up (though the language often differed).

> The Apple Watch is the slowest to respond. Oftentimes it would give me an "I'll tap you when I'm ready" message before offering up an answer several seconds later, even when connected to Wi-Fi and tethered to an iPhone.

> The Mac is the worst Siri device. While it's fine for general knowledge questions, It can't set timers or alarms, can't control smart devices through Home-Kit, and can't add songs to a playlist. Plus there's no (official [go.macworld.com/hysr]) "Hey, Siri" functionality.

> The HomePod is by far the best at listening and responding, and it's clear that Apple wants this to eventually be the high-water mark for Siri.

> Siri on the Apple TV is woefully underrepresented. It's missing key Siri components, including "Hey, Siri" summoning and audible responses. And its answering left much to be desired, even when asking about movies.

> Siri really needs a personality boost. Apple has added some fun interjections when asking questions and its responses are very natural, but it doesn't play games, read stories, or tell jokes nearly as well as Amazon Alexa or Google Home.

So without further ado, here's everything I asked Siri, along with the responses I got, snark and all:

BASIC CONVERSIONS

While most of Apple's devices were able to correctly answer the simple conversion questions posed here, the Apple TV could not. In fact, without a voice and "Hey, Siri" abilities, Siri on the Apple TV is pretty much useless in the general knowledge department.

How many quarts in a gallon?
iPhone: It's four quarts.
iPad: It's four quarts.
Apple Watch: It's four quarts.
Apple TV: I'm sorry, I can't do that here.
HomePod: One gallon is four quarts.
Mac: It's four quarts.

How much is $100 dollars in euros?
iPhone: It's 81 euros and 5 cents.
iPad: It's 81 euros and 5 cents.
Apple Watch: It's 81 euros and 5 cents.
Apple TV: I'm sorry, I can't help you with that.
HomePod: $100 is 81 euros and 5 cents according to Yahoo Finance.
Mac: It's 81 euros and 5 cents.

How many ounces in a teaspoon?
iPhone: It's 0.17 fluid ounces.
iPad: It's 0.17 fluid ounces.
Apple Watch: It's 0.17 fluid ounces.
Apple TV: I'm sorry, I can't help you with that here.
HomePod: One teaspoon is 0.17 fluid ounces.
Mac: 0.17 fluid ounces.

NEWS AND INFORMATION

Once again, Apple TV brought up the rear here, but it wasn't a total wipeout. While it surprisingly didn't know who the president was, it did well with sports questions and was able to display the time in another city. However, when it came to questions that Siri couldn't audibly answer, like naming the planets in the solar system, only the iPhone and iPad were able to at least display relevant information. Seems like a missed opportunity for tvOS. And the Mac's lack of knowledge about the Olympics is downright confounding.

Who is the president?
iPhone: The answer I found is Donald Trump.
iPad: The answer I found is Donald Trump.
Apple Watch: The answer I found is

How many kilometers are in a mile?
iPhone: One mile converts to 1.61 kilometers.
iPad: One mile converts to 1.61 kilometers
Apple Watch: It's 1.61 kilometers.
Apple TV: I'm sorry, I can't help you with that here.
HomePod: One mile is 1.61 kilometers.
Mac: One mile converts to 1.61 kilometers.

How many feet in a yard?
iPhone: It's three feet.
iPad: It's three feet.
Apple Watch: Three feet.
Apple TV: Sorry, I can't help you with that here.
HomePod: One yard is three feet.
Mac: Three feet.

Donald Trump.
Apple TV: Sorry, I can't search for that here.
HomePod: According to Wikipedia, it's Donald Trump.
Mac: The answer I found is Donald Trump.

Who won the Super Bowl last year?

iPhone: The Patriots won a close game in overtime against the Falcons in the Super Bowl on February 5, 2017. The final score was 34-28.

iPad: The Patriots snuck past the Falcons in overtime in the Super Bowl on February 5, 2017. The final score was 34-28.

Apple Watch: The Patriots won a close game in overtime against the Falcons in the Super Bowl on February 5, 2017. The final score was 34-28.

Apple TV: The Patriots won a close game in overtime against the Falcons in the Super Bowl on February 5, 2017. The final score was 34-28.

HomePod: The Patriots snuck past the Falcons in overtime in the Super Bowl on February 5, 2017. The final score was 34-28.

Mac: The Patriots snuck past the Falcons in overtime in the Super Bowl on February 5, 2017. The final score was 34-28.

Who has the best record in the NBA this season?

iPhone: The Rockets are in first place in the NBA.

iPad: So far, the Rockets are in first place in the NBA with a record of 44 and 13.

Apple Watch: The Rockets are in first place in the NBA.

Apple TV: So far, the Rockets are in first place in the NBA with a record of 44-13.

HomePod: The Rockets are in first place in the NBA.

Mac: The Rockets are in first place in the NBA with a record of 44 and 13. They must be pretty good.

What planets are in our solar system?

iPhone: Here's what I found on the web

for "What planets are in our solar system."

iPad: Here's what I found on the web for "What planets are in our solar system."

Apple Watch: I can search for "What planets are in our solar system" on your iPhone.

Apple TV: Sorry, I can't search for that here.

HomePod: I can't get the answer to that on HomePod.

Mac: OK, I found this on the web for "What planets are in our solar system."

What time is it in Melbourne (asked at 9:27 a.m. EST)?

Note: My original question was, "What time is it in Pyeongchang, South Korea?" but while every device correctly understood my question, they all retrieved the time in Chuncheon, South Korea, rather than Pyeongchang.

iPhone: The time in Melbourne, Australia, is 1:27 am.

iPad: In Melbourne, Australia, it is 1:27 am.

Apple Watch: In Melbourne, Australia, it is 1:27 am.

Apple TV: (Displays the time in Melbourne, Australia.)

HomePod: In Melbourne, Australia, it is 1:27 am.

Mac: In Melbourne, Australia, it is 1:27 am.

What country has won the most gold medals at the Winter Olympics?

iPhone: Norway leads the Winter Olympics medal count with 13 gold medals.

iPad: Norway leads the Winter Olympics medal count with 13 gold medals.

Apple Watch: Norway leads the Winter Olympics medal count with 13 gold medals.

Apple TV: Norway leads the Winter Olympics medal count with 13 gold medals.

HomePod: Norway leads the Winter Olympics medal count with 13 gold medals.

Mac: Here's what I found on the web for

"What country has won the most gold medals in the winter Olympics."

What's in the news?
iPhone: Here's some news (displays a list of Apple News headlines).
iPad: Here's some news (displays a list of Apple News headlines).
Apple Watch: I can search for "What's in the news" on your iPhone.
Apple TV: I'm sorry, I can't do that here.
HomePod: Here's the latest news from The Washington Post. You can also tell me to switch to NPR, Fox News, or CNN.
Mac: Here's some news (displays a list of Apple News headlines).

MUSIC

Obviously, the HomePod excelled with music controls and questions, but the other devices weren't far behind. The Apple Watch and Mac aren't able to add songs to playlists (and none are able to delete them), but they all identified songs that were playing, save one: the Apple Watch repeatedly thought Lorde's "Team" was "Buzzcut Season." And when asking to play something different than the song that was currently playing, all of the devices deferred to radio stations rather than choosing a song from my library at random, while Siri on the Apple Watch started playing music on my iPhone.

Add this song to my Siri Test playlist.
iPhone: OK, I added "Team" by Lorde to your Siri Test playlist.
iPad: OK, I added "Team" by Lorde to your Siri Test playlist.
Apple Watch: Sorry Michael, I wasn't able to add "Buzzcut Season" to your Siri Test playlist.
Apple TV: OK, I added "Team" by Lorde to your Siri Test playlist.
HomePod: OK, I added "Team" by Lorde to your Siri Test playlist.
Mac: Sorry, Michael, I can't add music to your playlists on this device.

I like this song.
iPhone: OK, got it.
iPad: OK, got it.
Apple Watch: OK, got it.
Apple TV: OK, got it.
HomePod: OK, got it.
Mac: OK, got it.

Who sings this song?
iPhone: This is Lorde, with the track "Team."
iPad: This is Lorde, with the track "Team."
Apple TV: This is Lorde. This track is called "Team."
Apple Watch: This is Lorde, with the track "Buzzcut Season."
HomePod: This is Lorde with the track "Team."
Mac: This is Lorde. This track is called "Team."

What album is this from?

iPhone: You're listening to the album *Pure Heroine* by Lorde.

iPad: This is the album *Pure Heroine* by Lorde.

Apple Watch: This album is *Pure Heroine* by Lorde.

Apple TV: Currently playing: the album *Pure Heroine* by Lorde.

HomePod: This album is *Pure Heroine* by Lorde.

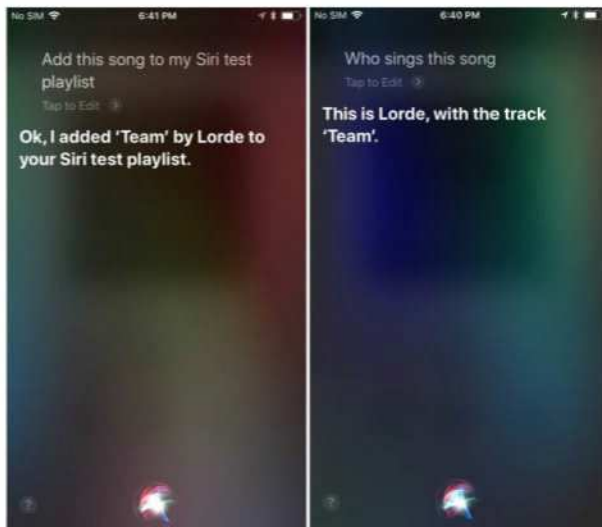**Mac:** Currently playing: the album *Pure Heroine* by Lorde.

Play my Siri Test playlist.

iPhone: Playlist "Siri Test" now playing.

iPad: Playlist "Siri Test" now playing.

Apple Watch: (starts playing)

Apple TV: Playlist "Siri Test" now playing.

HomePod: Playlist "Siri Test" now playing.

Mac: (starts playing)

Play something different

iPhone: OK, here's Donora radio.

iPad: OK, here's Natalie Merchant radio.

Apple Watch: (keeps playing same song, but starts playing a different song on the iPhone)

Apple TV: OK, here's U2 radio.

HomePod: Sure, switching to the Magnetic Fields radio.

Mac: OK... (but doesn't change song).

What song is this?

Note: The HomePod would only identify a song playing on another device when specifically asked, "Shazam this."

iPhone: I believe this is "With or Without You" by U2.
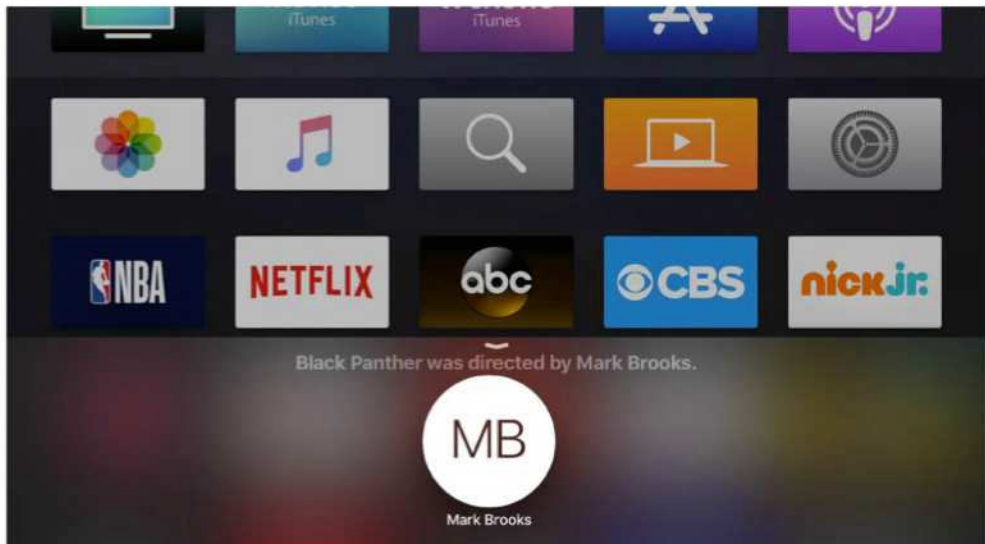
iPad: This sounds like "With or Without You" by U2.

Apple Watch: I can't help you identify this song on your iPhone.

HomePod: I believe this is "With or Without You" by U2.

Apple TV: Sorry, I can't recognize music on your Apple TV.

Mac: Sounds like "With or Without You" by U2...but please don't ask me to sing it.

This may be the director of a Black Panther movie, but not the *Black Panther* movie.

MOVIES

I expected video controls and movie-based queries to be Apple TV's area of expertise, but other than the super-cool "What did they just say?" command that rewinds 30 seconds, it wasn't really the movie authority it seems to be. In fact, it straight up didn't know anything about the week's hottest release, *Black Panther*.

Who stars in *Black Panther*?
iPhone: *Black Panther* features Chadwick Boseman, Michael B. Jordan, and Lupita Nyong'o and others.
iPad: *Black Panther* features Chadwick Boseman, Michael B. Jordan, and Lupita Nyong'o and others.
Apple Watch: *Black Panther* stars Chadwick Boseman, Michael B. Jordan, and Lupita Nyong'o.
Apple TV: I found nine for you to choose from.
HomePod: *Black Panther* features Chadwick Boseman, Michael B. Jordan, and Lupita Nyong'o and others.
Mac: *Black Panther* stars Chadwick Boseman, Michael B. Jordan, and Lupita Nyong'o.

Who directed *Black Panther*?
iPhone: *Black Panther* was directed by Ryan Coogler.

iPad: *Black Panther* was directed by Ryan Coogler.
Apple Watch: (displays Ryan Coogler's name, no voice)
Apple TV: *Black Panther* was directed by Mark Brooks.
HomePod: *Black Panther* was directed by Ryan Coogler.
Mac: *Black Panther* was directed by Ryan Coogler.

Show me comedies with Bill Murray.
iPhone: Here are some comedy selections with Bill Murray.
iPad: Here are some comedy picks with Bill Murray.
Apple Watch: Here are some comedy movies starring Bill Murray.
Apple TV: Here are some comedy picks starring Bill Murray.
HomePod: Sorry, I couldn't find anything like that.
Mac: Here are some comedy movies starring Bill Murray.

What did they just say (while watching a movie)?
iPhone: I'm sorry, I can't do that for you.
iPad: I'm sorry, I can't do that for you.
Apple Watch: N/A
Apple TV: (rewinds 30 seconds)
HomePod: N/A
Mac: That's beyond my abilities at the moment.

Fast forward 10 minutes (while watching a movie).
iPhone: (fast forwards 10 minutes)
iPad: (fast forwards 10 minutes)
Apple Watch: N/A
Apple TV: (fast forwards 10 minutes)
HomePod: N/A
Mac: Fast forwarding 10 minutes.

SMART HOME

Smart home control is pretty even across all of Apple's devices, though you obviously need to have things already set up in the Home app. And you can't control anything with Siri on the Mac yet.

Turn on the bedroom lights.
iPhone: OK, the lights are on.
iPad: OK, the lights are on.
Apple Watch: Coming right up.
Apple TV: OK, the Hue Color Lamp is on.
HomePod: All set.
Mac: Sorry, I can't help you with HomeKit here.

Turn the bedroom lights blue.
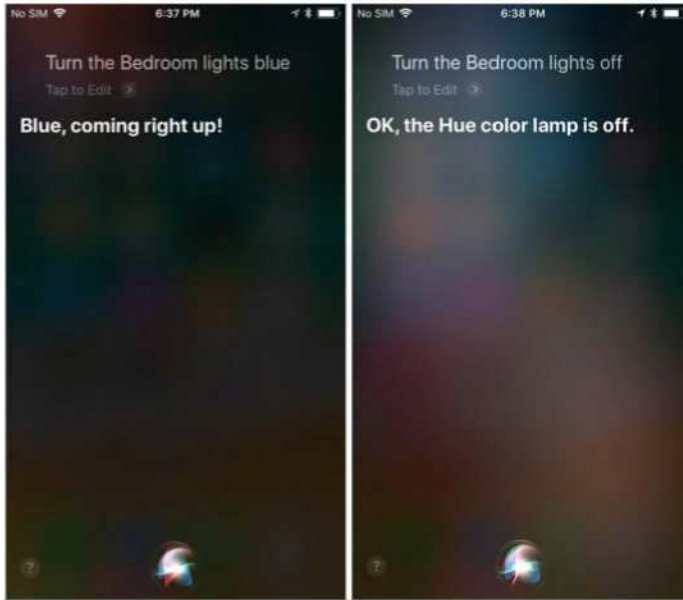**iPhone:** OK turning things blue.
iPad: OK, blue.
Apple Watch: You got it. Coming right up.
Apple TV: Blue, coming right up!
HomePod: Done.
Mac: Sorry, I can't help you with HomeKit here.

Just tell me what you want it to say.

Set an alarm for 6 p.m.
iPhone: The alarm's set for 6 PM.
iPad: OK, I set an alarm for 6 PM.
Apple Watch: Done.
Apple TV: Sorry, I can't help you with Alarms here.
HomePod: OK, I set an alarm for 6 PM.
Mac: I can't set an alarm here. Would you like a reminder instead?

PHONE TASKS

Once again, the Apple TV was a big dud when it came to asking Siri to do common phone tasks, but the Apple Watch's inability to take notes is a glaring omission, as are calendars on the HomePod. And why exactly can't I set a timer or alarm with Siri on the Mac?

Take a note.
iPhone: What do you want it to say?
iPad: What do you want it to say?
Apple Watch: I can help you with notes on your iPhone.
Apple TV: Sorry, I can't help with that.
HomePod: What do you want it to say?
Mac: OK, I can take that note for you.

Set a timer for 5 minutes.
iPhone: Your timer is set for 5 minutes.
iPad: Done. I love a good countdown.
Apple Watch: 5 minutes and counting.
Apple TV: Sorry, I can't help you with Timers here.
HomePod: Five minutes and counting.
Mac: I can't set a timer here. How about a reminder instead?

What's my next appointment?
iPhone: OK, here's your appointment.
iPad: OK, here's your appointment.
Apple Watch: (Displays next appointment)
Apple TV: Sorry, I can't help you with your calendar here.

HomePod: I can't access your calendar here. Sorry about that.

Mac: OK, here's your appointment.

MISCELLANEOUS

Siri on a whole greatly lags Amazon Alexa and Google Assistant when it comes to doing personality-based things like telling jokes and playing games, but I tried anyway. Of note, the HomePod remained completely silent when asked to play a game, never confirming or denying whether it could do it. (Insert thinking-face emoji here.)

Tell me a joke

iPhone: If I told you a joke in my language, I'd have to explain it.

iPad: The past, present, and future walk into a bar. It was tense.
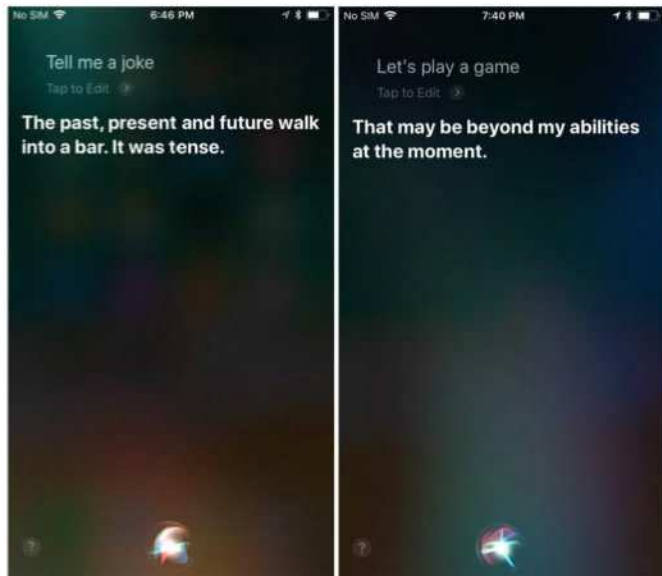
Apple Watch: How many Apple Watches does it take to screw in a light bulb? Two: one to screw it in and another to watch. Get it? Watch! Ha ha!

Apple TV: I would, but I'd wish there was a laugh track.

HomePod: If I told you a joke in my language, I'd have to explain it.

Mac: The past, present, and future walk into a bar. It was tense.

Let's play a game

iPhone: That may be beyond my abilities at the moment.

iPad: That may be beyond my abilities at the moment.

Apple Watch: To find apps for your Apple Watch, go to the Apple Watch app on your iPhone and tap on the App Store at the bottom of the screen.

Apple TV: Sorry, but I can't help you with that here.

HomePod: (silence, despite repeated requests)

Mac: That may be beyond my abilities at the moment. ▪

10 new iPhone and iPad games you need to play

Shred some sand, battle through a fantasy epic, and plenty more in this month's picks.

BY ANDREW HAYWARD

February might be the shortest month of the year, but it had no shortage whatsoever of huge, exciting iOS game releases. Long-awaited games like snowboarding (well, sandboarding) sequel Alto's Odyssey and epic role-player Final Fantasy XV: Pocket Edition were the biggest releases of this past month, but they're hardly alone on this list.

Other games like the heartbreaking Florence, hilarious Run Gun Sports, and super-charming Bring You Home might not have quite the same stature as those aforementioned games, but they're all well worth a look. Read on to find out more about our picks for the 10 most notable iOS game releases this month, and don't

IMAGE: SNOWMAN

1.

majestic backdrops. It's not a hugely different experience, but with new elements like wall-riding and hot air balloons, Alto's Odyssey keeps the familiar whimsy and allure well intact.

miss January's list (go.macworld.com/jlst) if you're seeking other options.

1. ALTO'S ODYSSEY ($5)

Even three years after its debut, Alto's Adventure (go.macworld.com/alav) remains one of our go-to games on iOS and Apple TV—but now the long-awaited Alto's Odyssey (go.macworld.com/alod) is here to take its place. Like the original, Alto's Odyssey is a side-scrolling snowboarding game with dazzling sights and a really chill atmosphere, but now the journey takes you to a different kind of destination.

In fact, you're sandboarding this time around, coasting around some epic dunes as you backflip, grind on bunting lines, and take in some seriously

2. FINAL FANTASY XV: POCKET EDITION (FREE)

Many of the older Final Fantasy games have been ported to iPhone and iPad, but this is something entirely different. Final Fantasy XV: Pocket Edition (go.macworld.com/xvpe) is a complete reworking of the most recent console role-playing adventure, streamlining the quest into a slightly more manageable mobile affair along with a swap to cartoonish graphics.

We dug a bit deeper into Pocket Edition this month (go.macworld.com/flff), but our main takeaways were very

2.

positive. It has the same compelling story and characters as the $60 console game (including the voice acting), but there's less meandering along the way. Final Fantasy XV: Pocket Edition's first chapter is free, with the other nine sold separately or in a discounted bundle within.

3. FLORENCE ($3)

Mobile games are rarely this heart-breaking, but Florence (go.macworld.com/flnc) isn't your average mobile game. It's an incredibly charming tale of the rise and eventual demise of a relationship, as twenty-something Florence Yeoh meets and falls for a man named Krish. We'd call it "short but sweet," but it's only sweet at first. Later on, it aches as the excitement of new love gives way to routine, frustration, and acrimony.

Florence feels more like an interactive graphic novel than a particularly active game: you'll build dialogue bubbles to carry on a conversation, match numbers to

push through Florence's work day, or move items to and from a shelf, for example. There elements are minimal, but they help pull you a little bit deeper into the lovely animation and dreamy soundtrack… right up until the gut-punch of an ending.
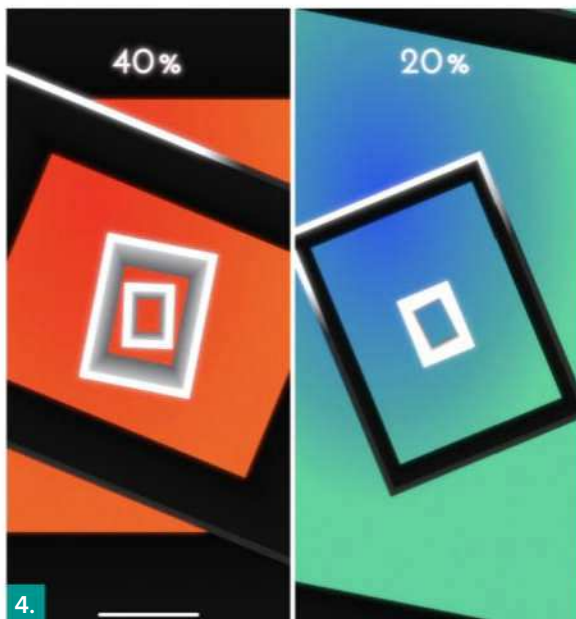
4. A HOLLOW DOORWAY (FREE)

Looking for something that's both mesmerizing and totally free? If so, then be sure to check out A Hollow Doorway (go.macworld.com/hlwd). The premise is super-straightforward: you'll rotate a rectangle left or right to fit into the other rectangles falling into view, and have to continue shifting in either direction to avoid a collision.

That's simple enough, right? It would be, but challenging twists quickly keep things from getting stale. Before long, the approaching doorways come at angles, take on different shapes, or have co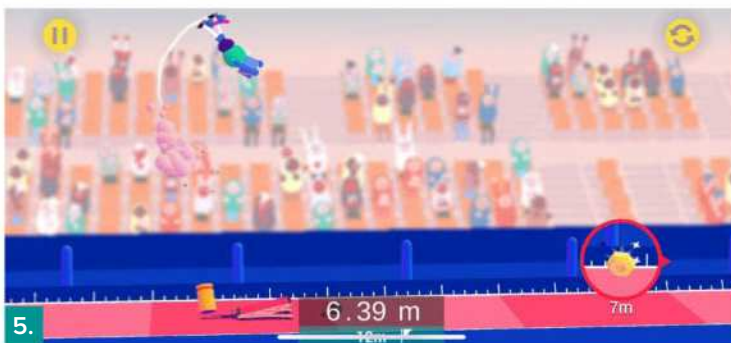lor-coded walls—and the game gets a lot faster, too. It feels like a slightly more approachable Super Hexagon (go.macworld.com/sphx), although it's hardly easy at first… and the back end looks like absolute chaos.

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4.

Yes, it's a delightfully weird one indeed. You'll blast up off the ground, spin through the air, and then use well-timed gun-leg blasts to propel yourself over hurdles or between horizontal bars, for example. There's a funky freemium element around reloading certain weapons, but even so, the wacky concept and amusing twists make Run Gun Sports a very entertaining diversion.

6. PAKO 2 ($2)

The original Pako was a touchscreen delight (go.macworld.com/pako), testing your maneuvering skills as you evaded police cruisers while stuck in a tight parking lot or on a busy highway. Pako 2 (go.macworld.com/pko2) keeps the spirit of that compact game, but expands its horizons pretty significantly: now you're cruising around a

5. RUN GUN SPORTS (FREE)

If the Winter Olympics have reignited your competitive fire, then you might want to give Run Gun Sports (go.macworld.com/rgsp) a look. This is a very different kind of sports game, however. It's focused on track and field events like leaping hurdles and the high jump, only here, the athlete all have guns for legs... and you'll shoot to blast yourself through each competition.


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6.39 m

6.

large open world, still with cop cars hot on your tail.

And that's not the only change: as you escort criminals to various stops on the map, they'll automatically blast the other cars to bits with a steady rain of gunfire. The results are frantic and intense, and each run feels unique thanks to the unpredictable behavior of the police pursuers. It could use some optimization, however: our iPhone X got physically hot and the screen dimmed within five minutes of play.

7. METEORFALL: JOURNEY ($3)

If Reigns (go.macworld.com/rgns) got you keen on single-player card games, then here's something with a similar mechanic but very different results. Meteorfall: Journey (go.macworld.com/

mtrj) also has you swipe cards left or right, Tinder-style, to interact with the game—but instead of living the (brief) life of a ruler, this role-playing game sends you up against monsters as an adventurer

7.
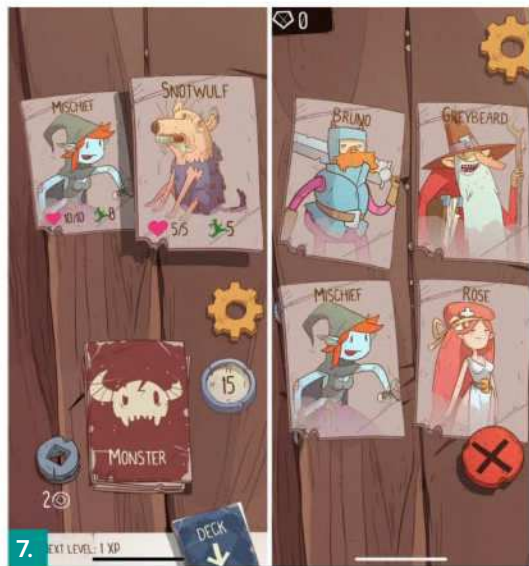
seeking to save the world.

Meteorfall has a strongly Adventure Time-esque look to it, but the approach to combat and deck-building feels unique here. You can grind out battles against the myriad beasts by building the most effective deck, or shrug off conflict and potentially be less experienced for the later, harder skirmishes. In any case, you'll probably die fairly quickly, but each new attempt builds up your hero and deck over time.

8. BRING YOU HOME ($3)

Alike Studio's Love You to Bits (go. macworld.com/lytb) is one of the most charming adventure games we've played in recent years, delivering a gorgeous, whimsical tale of lost love that's loaded with pop culture references and homages. The team's new Bring You Home (go. macworld.com/ bryh) keeps the great hand-drawn look and diverse level designs, but opts for a different kind of gameplay approach.

Here, you'll attempt to direct alien hero Polo across each level by swapping the terrain he travels across. You'll rotate different chunks of the level in an almost Framed (go.macworld.com/fram)-like manner, all in the hopes of creating a safe route to the end. It's totally a trial-and-error affair and not terribly difficult, but Bring You Home's playful tone and dazzling presentation still shine through.

9. DANDARA ($15)

Dandara (go.macworld.com/ddra) looks and in some ways plays like a classic Metroid or Castlevania adventure, but it doesn't move quite like anything you've played before. That's because instead of freely guiding the titular heroine by foot, you'll leap from landing spot to landing spot with simple flicks of the virtual stick, bounding between platforms and hanging off of walls and the ceiling.

It reminds us a bit of the intense HoPiKo (go.macworld.com/hpko), but

8.

Dandara doesn't focus on rapid-fire challenges. Instead, you'll explore a vast collection of caverns as you evade and attack foes, solve puzzles, seek out ability

The ball flies into the air, you doodle a little ramp, and then the ball goes in. It's simple at first, but then Dunk Line ditches the backboard, rapidly bounces the ball between the walls, or tosses in a bomb alongside the ball. You probably won't last long with each attempt, but Dunk Line's arcade-like premise is difficult to resist. ∎

upgrades, and uncover new areas. The $15 price tag is on par with the console and computer releases, but makes the iOS version much pricier than most mobile affairs. Still, if you love picking apart these "Metroidvania" games, Dandara is certainly a compelling one.

10. DUNK LINE (FREE)

Ketchapp specializes in dead-simple games that you'll want to play again and again, and that's definitely true with Dunk Line (go. macworld.com/dunk). Like the great Bouncy Hoops (go. macworld.com/hoop), it's all about trying to sink a ball into a basketball hoop—only instead of "flapping" the ball like in that game, Dunk Line has you quickly drawing pathways to guide the ball into the net.

Sounds easy enough, right?

3 ways tech can improve travel

Technology can make vacations and business travel much more enjoyable.

BY DAN MOREN

Traveling is a great chance to put technology through the wringer. It's a time when you have to be economical about the gear you carry, when your environments challenge you, and when you start seeing places where your devices could go further and do more than they already do.

Last week, my girlfriend and I spent nine days in Iceland (it was supposed to be seven, but a blizzard stranded us for an extra forty-eight hours). During that time we covered roughly half the country, from snowy lava fields in the west to black sand beaches—also with their share of snow—in the south. We carried more than a few pieces of tech with us, which gave us ample time to see what worked well and where we could use some improvement over the status quo.

MORE REAL THAN REALITY

I've waxed on in the past about the possibility of Apple building some sort of smart glasses (go. macworld.com/ smgl) to show off the augmented reality tech that it's been so excitedly pushing for the last year or so. But this trip really put into

With augmented reality, you can spend less time studying maps and guides and more time studying the sights.

relief a few places that such technology could be great for travelers.

At one point during the trip, for example, we were walking through Thingvellir National Park (go.macworld. com/tvlr), a beautiful landscape that also holds a central spot in Iceland's history. While the park does have signage up in many places explaining the significance of those locations, often times the frigid weather meant that parts of the sign were iced over, making them hard to read. An AR display could provide another way for you to get information about the history and importance of your locations. (Not to mention

potentially even translating it from the local language into one you can read.)

Moreover, when combined with GPS and mapping data, it could be a useful way to get details on physical locations as well. Casting our eye out over the landscape showed us several different mountains and glaciers, but even consulting our paper map, it was hard to tell which one was which. I found myself wishing for a heads-up overlay that would tell me, yes, this one is Ármannsfell and that one is Lágafell. And that's even more so when the cold temperatures mean that pulling out your iPhone quickly gets tough on your frigid fingers.

TIRED: WIRES; WIRED: WIRELESS

I've got a Samsung Wireless Charger (go. macworld.com/qiwc) on my desk that I often drop my phone in when I'm working, and while I enjoy the convenience of not having to plug it in, the utility of wireless charging beyond that has been fairly minor so far.

But on one evening of our trip, we stayed at an Airbnb where the bedside lamp was an Ikea model with a built-in wireless charger (go.macworld.com/ikwc). It took me a second to recognize what it was, but when I plopped the phone down on it and it started charging, I realized just how useful this tech can be. When I travel, I carry a four-port Anker PowerPort charger (go.macworld.com/akpp), but on this trip, I brought only a single Lightning cable to share between my iPhone and iPad—I quickly realized that I was running fairly quickly through the battery on both devices. For that evening, however, I was able to charge both my iPad and my iPhone, all thanks to a desk lamp!

All of which is to say that I'm hoping the adoption of the Qi standard by the iPhone helps drive the prevalence of these wireless chargers. And while Apple has already announced plans to add Qi charging to its AirPods, I'm hoping that the company will also roll out support to other devices, like the iPad

line. Hopefully that will mean a future of traveling with fewer cables (or less worry over losing them).

DON'T HOG THE DATA

When I've traveled abroad, I've taken to buying a local SIM card. Most of the countries I've been to have carriers that offer prepaid data plans that you can top-up once you've hit the limit, and it's generally far cheaper than using your U.S. provider's international data.

But you still don't want to chew through that data too fast, and while iOS does let you switch cellular data usage on and off for specific apps, it would be nice if it offered more functionality similar to the handy TripMode app for Mac (go. macworld.com/tpmd). Scrolling through the endless list of apps in the Cellular setting of your iPhone is a pain—there's no way to even sort by amount of data used—and it's hard to tell when you first pop in a new SIM which apps are going to be the data hogs.

I'd like to see Apple add the ability to set data caps, to turn off all apps and selectively re-enable them, or even to create a preset "low data" mode like the corresponding "low power" mode, which disables all but essential cellular data services. That way you don't run out of data when you really need it—like when you're traveling through a snowy mountain pass. ∎

Thanks for leaving your car here last night and not ending my family's lives.

Tara Inskip

iPHONE ACCESSORY

MERGE CUBE: A CLEVER BUT SHORT-LIVED AUGMENTED REALITY TOY

BY ANDREW HAYWARD

Augmented reality got a nice jump-start from Apple's ARKit in iOS 11 (go.macworld.com/akit), which increased the visual quality and responsiveness of digital objects placed into your real-world view. But how about a physical object—one that you can hold, feel, and rotate—that can be transformed into almost anything via your iPhone's camera? That's what the Merge Cube (go.macworld.com/mgcb) has to offer.

As high-tech as that might sound, the actual Merge Cube itself looks and feels like a squeezable stress reliever, making it both durable and kid-safe. It's also impressively cheap—retailers like Walmart (go.macworld.com/wlmc) and Amazon (go.macworld.com/ammc) have it for less than the $15 MSRP as of this writing. The Merge Cube is covered on all sides with shiny silver symbols, which help your phone track its position as you hold it in view of the back camera.

You're not really holding a human heart, of course...but you are holding something.

Once it's in your hand and you have a compatible app or game on your phone, that's when the magic happens. From the view of your iPhone screen, this silly little cube can become a planet, a human organ, or a Rubik's Cube, all of which you can fully rotate and examine on all sides. The Cube can also become a game world (as in the case of a Minecraft clone that lets you build and dig on all sides), or a choose-your-own-adventure narrative game that shows you a new part of the story as you rotate the Cube to a different side.

While the foam Merge Cube itself is designed as a toy and might seem a bit rinky-dink, the digital illusion is often pretty impressive. Examining the human lungs or the planet Mars in your hand is solidly convincing, and the graphics are typically steady even as you flip and rotate the cube in your hand. Interactions can be a bit awkward at times, though, especially when trying to tap the screen while holding the phone in one hand and the Cube in the other.

As of this writing, there are about 25 apps and games that support the Merge Cube, some of which are free and others that typically cost a couple dollars apiece. I enjoyed Tiltball (go.macworld.com/tlbl), in which you rotate the cube to guide a ball around the maze-like levels, as well as the 3D storytelling of 57° North (go.macworld.com/57dn). The planet-viewing Galactic Explorer (go.macworld.com/glcx) and organ-centric AnatomyAR+ (go.macworld.com/anar) were both amusing downloads as well.

The Merge Cube gets a small boost from VR headsets, like Merge's Goggles here.

While the Merge Cube works well enough on its own via your phone screen, you can also strap on Merge's soft-foam VR Goggles (go.macworld.com/mcvr) to merge AR and virtual reality into a slightly more immersive experience. With the Goggles, you can freely look at the Cube without having to keep your phone in your hand, which makes it easier to interact with some of the games and apps. You can also use other smartphone-based VR headsets (like Google Cardboard ones [go.macworld.com/gcdb]), so long as they have an input button.

For the most part, though, they all felt like diversions. Everything I tried was kind of cool at best; nothing truly enthralled me or kept my attention for more than a few minutes. The Merge Cube's target audience is 10+, however, and kids might find these digital creations quite a bit more interesting. But in my estimation, there's no killer app for the Merge Cube—not yet, at least. With luck, third-party creators will keep tinkering and dream up something great. There's real learning potential here, too, but at the moment the aforementioned space and anatomy apps are very superficial.

BOTTOM LINE

The Merge Cube succeeds in making augmented reality feel a lot more tangible, even if it's just in the form of a kid-focused toy. Right now, the Cube lacks compelling content that stays interesting past the initial wow factor—but even so, younger users should get a kick out of it, and the low price makes it an easy pickup for your tech-curious kids. ∎

🔌🔌🔌½

Merge Cube

PRICE
$3.47

COMPANY
Merge

DROPMIX: MAKE AMAZING REMIXES WITH YOUR iPHONE AND PLAYING CARDS

BY ANDREW HAYWARD

Connected toys and games leverage the power of your iPhone or iPad to empower new kinds of physical-meets-digital experiences—but even so, the concept behind DropMix (go.macworld.com/dpmx) sounds a bit absurd. It's a game that finds you placing cardboard playing cards onto a Bluetooth-connected board, and by doing so, you'll mix and match the beats, harmonies, and vocals from various popular songs into one surprisingly cohesive track.

Playing cards and remixes? DropMix might seem convoluted, sure, but it totally works. And that is Harmonix's specialty. This is the same studio that created the

plastic instrument craze with Guitar Hero and Rock Band, and reinvented dance games with the Kinect motion-sensing Dance Central on Xbox. They are the masters of exciting, music-driven play experiences, and that's seen yet again with DropMix.

Described as a "music gaming system," the DropMix package includes a battery-powered, light-up plastic board along with 60 cards, each of which packs in an NFC chip to interact with the board. You'll download the free DropMix app (go.macworld.com/dmap) on an iPhone or iPad, pair it with the board, and then stick your device into the little upright slot at the end of the board. Now you're ready to make music.

Each color-coded card includes a portion of a real-life song: a guitar riff, vocals, or a beat, for example. When you place a card onto one of the five NFC reader pads, that element of the song is automatically added to your ongoing mix, which plays from the iOS device. You can even drop a new card on top of a pile to switch things up, or use FX cards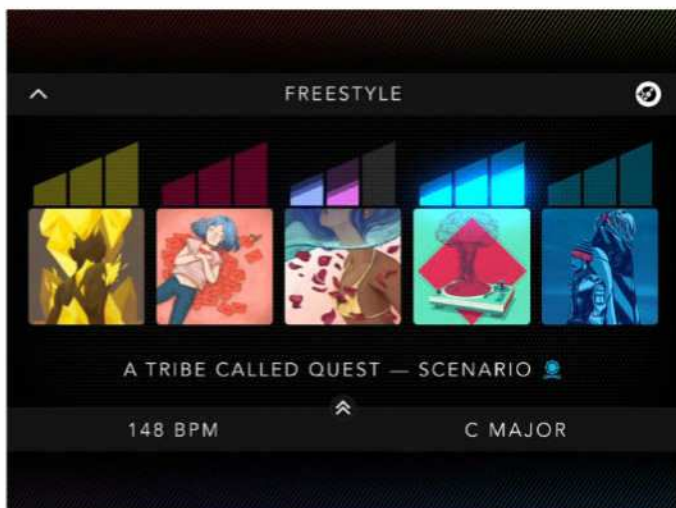 to tweak the output. DropMix also shifts the tempo and key of elements to ensure that everything matches up perfectly into a compelling aural brew, although you can also manually tweak both on the fly.

It's effortless, and even an out-there pairing of very different songs from seemingly opposing genres can sound pretty great. Songs from the likes of Bruno Mars, Ed Sheeran, The Weeknd, Sia, and Imagine Dragons are included in the starter pack, and Harmonix and Hasbro sell additional themed sets that bring in artists like Outkast, MGMT, and The Chainsmokers.

DropMix is at its best when you're just noodling around with cards in the Freestyle mode. It's less a game than a

DropMix brings in bits and pieces from some very different source songs

card's power rating and other modifiers coming into play. Meanwhile, Party mode finds players quickly trying to satisfy requests for certain cards. In both cases, the joy of creation takes a backseat, since you're more focused on game rules that have little to do with making cool-sounding tunes. They're solid enough diversions, but I had a lot more fun freestyling. Hopefully we'll see more modes added in the future.

Fling a bunch of song chunks at DropMix and it'll (somehow) find a harmonious result.

breezy production studio, letting you add and subtract cards to your heart's content to create amazing or audacious results. This is where I spent most of my time, taking the 100-or-so cards I had between the starter kit and expansions and just playing around until I made something great...or wonderfully weird, at least. You can even save your mix and share it as a video.

By contrast, the two game modes—the head-to-head Clash and collaborative Party—aren't nearly as compelling. In Clash, you'll take turns playing cards to build up a score tally, with each

BOTTOM LINE

The starter kit's original $100 price is a bit daunting, which might explain DropMix's seemingly muted launch last fall. But with post-holiday season price drops putting it as low as $50, there's been more buzz building around DropMix—and rightly so. It's an incredibly cool concept that makes you feel like you're creating music just by laying down cards, even if it is more fun to mess around than play the structured game modes. ∎

DropMix

PROS
• Effortless music-making.
• Freestyle experimentation is a blast.
• Results typically sound good.

CONS
• Game modes are less enthralling.

PRICE
$68.99

COMPANY
Hasbro

WHAT'S NEW AT THE
APP STORE

IT'S FULL OF SPARKS

Firecrackers have a rather cruel lifespan: just as they're brought to life with a flame, they promptly explode. But what if they could avoid that fiery fate? That's the amusing question behind It's Full of Sparks (go.macworld.com/ifs), which really isn't quite as philosophical as the premise suggests. In fact, it's a fast-paced, puzzle-tinged platform-hopping game.

Jydge

If you can get past that terrible title, JYDGE (go.macworld.com/jyd) is actually a pretty entertaining shoot-'em-up. You take the role of a judge in this futuristic world, but instead of sitting in a chair and listening to arguments, you'll wield a rifle as you blast bad guys to bits and save hostages. Your gun is even referred to as a gavel.

Slime Pizza

There's little more distressing in life than spilling a pizza all over the place, and that seems especially true if you're the delivery blob working for Slime Pizza (go.macworld.com/spi), an intergalactic restaurant. You've crash-landed on a strange planet, and all of the slices have been scattered around the locale. What can you do? You get the pizza back, of course.

Cytus II

Looking for a more traditional rhythm game than Thumper? Luckily, Cytus II (go.macworld.com/cyt) is here to fit that need, and no, you don't need to know the original game. This frenetic, beat-matched tapping game challenges you to deftly prod different parts of the screen in time with the song, all while a clever bar moves up and down the screen to help you keep your rhythm. **—ANDREW HEYWARD**

6 SWEET CASES FOR THE NEW 10.5-INCH iPAD PRO

Apple's new 10.5-inch iPad Pro hits a sweet spot for many—it's big enough to offer productivity gains, yet small enough to still be pretty portable. If you're using the new 10.5-inch iPad Pro as a laptop replacement and toting it all over town with you, you've probably realized this by now: You need a case or some sort of protection for it. It's still an iPad, after all, not a laptop, and that big, bright, 10.5-inch screen is easily damaged. But don't worry—we've got your back. Here are some of the coolest cases on the market. **By Sarah Jacobsson Purewal**

CASE-MATE EDITION FOLIO

case-mate.com

Case-Mate makes its stylish Edition Folio case in multiple sizes—including for the new 10.5-inch iPad Pro. This chic, clutch-like folio case comes in two colors (black and rose gold) and features a plush faux-leather exterior and a microfiber interior with a built-in document pocket (but no Pencil holder). The case also offers dual viewing angles and a camera hole, so you can snap photos without removing the tablet.

SPECK BALANCE FOLIO

speck.com

—

If you're looking for something a little less flashy than the Edition Folio, Speck's Balance Folio for the new 10.5-inch iPad Pro is simple, sleek, and practical. This slim folio-style case comes in five dual-tone colors (blue, pink/purple, gray, red, and black/gray) and has an easy-to-clean faux-leather exterior and a soft, lined interior. The Balance Folio is designed to protect your iPad Pro from drops of up to four feet, and has a couple of nice safety features, such as a secure clasp and a raised bezel for protecting the screen.

WATERFIELD iPAD PRO SLEEVECASE

sfbags.com

—

Waterfield's iPad Pro Sleevecase is perfect for keeping all of your components together. This ultra-stylish sleeve is roomy enough to fit a 10.5-inch iPad Pro with smart cover and the corresponding Apple Keyboard, and it even has a dedicated slot for the Apple Pencil. The Sleevecase comes in two colors (waxed canvas with "grizzly" leather, and black ballistic fabric with micro trim), is padded with neoprene, and has a secure Velcro closure. The Sleevecase is slim enough to be dropped in a larger bag and stylish enough to be carried on its own; for an extra $22 you can add a padded strap.

LOGITECH SLIM COMBO

logitech.com

—

Logitech's Slim Combo is more than just a case—it's an accessory pack that helps you easily turn your 10.5-inch iPad Pro into more of a laptop. The Slim Combo consists of two parts: A slim, protective case for your iPad Pro (complete with a Pencil holder), and a matching backlit keyboard with dedicated iOS shortcuts. The case even has an adjustable kickstand—similar to the horizontal kickstand on the Microsoft Surface—so you can easily pair your tablet with the keyboard.

LUVVITT CLEAR GRIP SMART COVER COMPATIBLE CASE

luvvitt.com

LUVVITT's Clear Grip case is the perfect nearly-invisible no-frills case for the 10.5-inch iPad Pro. This clear thermoplastic case offers mild protection (mostly from bumps and scratches in your bag) and has ridged edges for extra grip. The current version isn't compatible with the keyboard or the smart cover, but a future version—which the company promises current buyers will receive for free—will be compatible.

OTTERBOX DEFENDER SERIES CASE

otterbox.com

—

The Defender Series case features "triple-layer defense"—while most cases only cover the sides and back of your 10.5-inch iPad Pro, the Defender Series covers everything (including the touchscreen...twice). The case consists of a polycarbonate shell with touch-screen protection, plus a hard plastic "shield" that snaps over the front of the tablet and doubles as a Pencil holder and a hands-free stand. The Defender Series case will protect your iPad Pro from drops, shock, dust, dirt, water, scrapes, and just about every-thing else, but it can't be used with the Apple Keyboard or the smart cover.

APPLE HOMEPOD

Apple's smart speaker sounds great but feels unfinished. **By Jason Cross**

With the HomePod (go.macworld.com/h0mp), Apple is entering a big race after its competitors have already completed several laps. Amazon and Google have been iterating on their smart speaker hardware and software solutions for a couple years and have already sold tens of millions of Echo and Home devices.

After missing its initial "late 2017" release date (go.macworld.com/mi55), the HomePod has landed with glaring omissions and limited functionality. Apple's smart speaker avails itself well with superior audio, but it's a little startling to see a new product ship late, into a highly competitive market, in such an obviously unfinished and uncompetitive state.

The HomePod is tough to recommend, even to Apple enthusiasts, in its current state. Fortunately, its woes are related to software and services, so there's nothing wrong with it that can't be addressed in future software updates.

APPLE DESIGN ON DISPLAY

The HomePod is surprisingly small. It's about the same size as the Sonos One (go.macworld.com/s1rv), only slightly fatter. At 6.8 inches tall, it's only about half an inch taller than an iPhone 8 Plus. And it's exceedingly well-built, too. Typical Apple design and craftsmanship is evident, from the surprising heft to the soft padded mesh wrap to the over-engineered LCD that pulses as Siri listens to your commands.

There are no physical buttons, just a touch interface on top. There are plus and minus signs to adjust volume, and a glowing, undulating middle area for everything else—tap to play/pause, double-tap to skip forward, triple-tap to skip back, tap-and-hold to invoke Siri.

Even the power cord is better-made than that of its contemporaries, with a nice braided cover. But the cord is a great example of how "Apple design" can serve as both compliment and criticism: the cord is attached in such a way that users are not meant to ever remove it. If your dog chews it up, you have to take the whole thing in for a $29 repair, rather than simply buy a replacement power cord yourself. All to make the HomePod look just the slightest bit more uniform and holistic.

Another unfortunate but very-Apple

HomePod looks simple and elegant, and up close displays a level of craftsmanship unmatched by other smart speakers.

The Siri LEDs up top are needlessly fancy, and we love it.

by comparison.

SURPRISINGLY MIGHTY SOUND

When Apple talks about the HomePod, it talks first about its amazing sound quality. With a four-inch woofer, an array of seven tweeters, six microphones, and an A8 processor, it will listen to your room's acoustics and analyze the music playing in real time. It knows where the walls are and bounces some sounds off of them, beaming others directly into the room. The high-excursion subwoofer is constantly monitoring its movement to prevent distortion and keep the bass balanced. Apple says it does all this sophisticated processing to sound amazing, all the time, anywhere in the room.

It really does work, too. Apple's $350 speaker quite often sounds better than the more expensive Google Home Max, and always sounds better than the cheaper Sonos One. I'm not sure how it's done, but a song like "Flight of the Cosmic Hippo" by Bela Fleck, with its heavy lumbering bass, clear plucky banjo, and riding cymbals manages to keep its clarity and sound stage nearly as well on this little pod as it does on the much

design decision is the total lack of input or output ports. This shouldn't come as a surprise from a company who said it took "courage" to eliminate the headphone jack from its phones (go.macworld.com/htrj), but you cannot plug anything into the HomePod. I'd love to see a little USB-C plug on the back as you'll find on the Google Home Max (go.macworld.com/hmrv), if only to serve as a charging port.

It may seem trite to think of the design and craftsmanship of a device like this as a marquee feature, but smart home speakers are inevitably placed on shelves, tables, and countertops where they are seen by everyone in your home. When you talk to them and they answer, all eyes are drawn to it. The wide seams, flashing lights, and chintzy plastic of competing products make them look and feel cheap

bigger and heavier Google Home Max. Sure, Google's big speaker has more low-end oomph, but it also sounds somewhat constrained and hollow.

Over the years I've listened to a lot of technologies that are supposed to use sophisticated processing to expand the sound stage, and they always sound great in demos but fall apart when I get them home to listen to my own music. A track like Jeff Buckley's "Hallelujah" might echo too much and lose all the subtle little squeaks of his fingers sliding along the guitar strings. The HomePod finds a great balance, keeping the live stage ambiance but making every subtle sound clear and distinct. OK Go's "This Too Shall Pass" is murder on small and cheap speakers, and doubly tough for most audio-improvement algorithms. It can easily turn to sonic mush
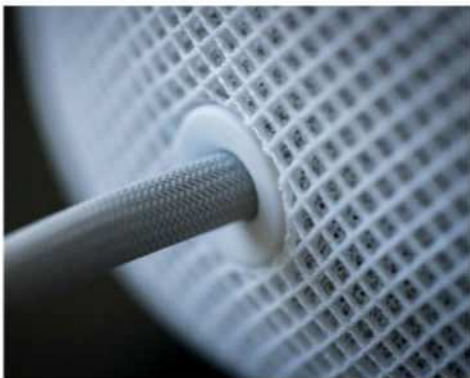
The braided power cord is typical Apple attention to detail, and typical Apple lack of self-serviceability.

with the thundering kick drum, high piano chords, crashing cymbals, echoing vocals, distorted guitar, and backing tracks all layered on top of each other at high volume. I'm shocked at how well the HomePod handles it all.

To be clear, if you're an audiophile with a couple grand invested in a home stereo setup, there's nothing a little sound pod like this could possibly do to compete. A four-inch woofer, no matter how sophisticated the audio processing is, is just not going to kick you in the chest when listening to Daft Punk on high volume the way your 14-inch subwoofer is. But I am constantly surprised by how consistently great the HomePod sounds, especially for its diminutive size, whether listening to hip-hop, electronic, pop, classical, rock, or blues.

And the HomePod gets *loud*, too (I measured just over 90dB at a distance of one meter). Even at max volume I didn't hear much distortion at all, a feat the Sonos One and Google Home Max couldn't match. The HomePod managed to sound great no matter where I was in the room, as advertised. And while $350 is a high price for a smart speaker, it's easy to spend many times that on home audio equipment. If you think of it as a $350 speaker set, the HomePod exceeds expectations.

It should be noted, though, that no

The HomePod doesn't play nice with others. No Bluetooth, not much services besides Apple's.

amount of fancy audio processing is going to change the fact that the sound ultimately emanates from a single location. You just aren't going to get real wide stereo separation without two speakers spaced apart. Some other single speaker units or sound bars can fool your ears, but only when you sit right in the sweet spot—move and the illusion is ruined. The HomePod doesn't exactly sound monaural, and in fact fills the air more than other single-unit smart speakers, but for real stereo you'll need two (and a future software update).

WALLED GARDEN COULD USE A FEW DOORS

For all its vaunted sound quality, the HomePod makes a frustrating home music device. You can ask Siri to do all sorts of stuff—play albums, playlists, "more by this artist," mix moods and genres, and so much more—but only with Apple's own music service. You have to use music purchased through iTunes, or uploaded and matched with iTunes Music Match, or of course Apple Music. You can also play podcasts without a subscription (to either Apple Music or the podcast).

But you can't use it properly with much else. As mentioned, there are no physical inputs or outputs. That wouldn't matter much if you could use it wirelessly with non-Apple products, but you can't. I mean, it's got Bluetooth 5 hardware, but it's only used during setup. You can't use the HomePod as a Bluetooth speaker at all, and there's just no good reason for that.

Siri does not connect to any other music service. No Spotify, no Pandora, no YouTube, nothing.

You can use the HomePod as an AirPlay device, which means anything you play on your iPhone, iPad, or Mac can be output to your HomePod. But this has limited usefulness. AirPlay has a lot of buffering and latency built in, so while it worked fine for beaming Spotify from my iPhone, it was completely out of sync when watching YouTube on my Mac. You can make the HomePod the default audio output for the Apple TV (4th generation or 4K [go. macworld.com/4thg]) but it has the same problems. An app that uses the Apple's native video playback engine (as most video apps do) will delay the video to keep it in sync with the audio, but other sources (like games) are so far out of sync as to be unusable.

The Apple lock-in here is pretty severe, and a little unprecedented. Other "pod" audio devices were made to work best with Apple products and services but still work fine with others. The iPod famously started to sell really well only after Windows support was added, and you could always fill it with MP3s acquired from anywhere. AirPods are easier to set up with Apple devices and have a few extra features when used with them, but they still work as a standard stereo Bluetooth headset with, say, an Android phone.

Amazon has a music service, but lets

I asked the HomePod, 'Who plays Wolverine in *Logan*?' and Siri replied, 'I couldn't find any movies with Wolverine playing in Logan, Utah.' Sigh. *Never mind, Siri.*

you connect Echo devices to multiple services and even choose a competitor as the default. Google does the same with the Home and Assistant. Many other smart home devices have line inputs for other audio sources or output jacks to use your existing speakers. That the HomePod does none of this is more than a little frustrating.

What's more, there are places within Apple's ecosystem where you would expect it to work, but it doesn't. For example, you can't ask the HomePod to

play something on your Apple TV. That works fine on Alexa with the Fire TV or Google Assistant with Chromecast/Android TV. There's really no reason the HomePod shouldn't function as a hands-free Siri remote for your Apple TV, but the two are almost completely unaware of each other.

At least there is one benefit from the HomePod working exclusively with Apple's own iOS devices—the setup process is dramatically faster, simpler, and easier than it is with any other smart speaker I've used. There are no apps to install, no passwords to type. If you've set up AirPods, you know what I mean.

SO MUCH FOR SIRI

Where the HomePod's limitations as a music device are somewhat offset by its exceptional sound quality, it has nothing to mitigate its problems doing non-music smart speaker stuff. To put it bluntly, Siri is at least a year or two behind the competition. The brand that popularized the virtual assistant, backed by the world's most valuable company, simply cannot compete with Alexa or Google Assistant.

Sure you can ask about the weather, but want to call an Uber or Lyft? Siri can't do that.

Trying to place a call? Forget it. The HomePod is tied to your phone, but it can't initiate calls (though you can select it as an audio source on your iPhone during a call, and it makes a great speakerphone).

Want your alarm to play "Walking on Sunshine" in the morning? Surprisingly, such a music-focused device can't wake you up with a song or playlist. Hell, I can't even find a way to change the default alarm tone.

Even setting timers, quite possibly the
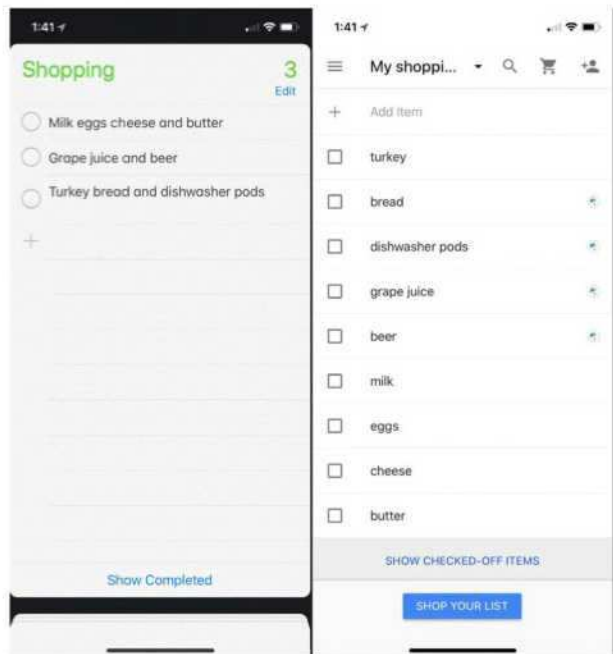
Siri (left) isn't smart enough to separate out shopping list items, while Google Assistant (right) is. Each of these lists were created with the same three requests.

most-used feature of smart speakers, is frustratingly limited on the HomePod. You can set one timer, and you can't name it. Setting multiple concurrent named timers is a cooking crutch I can't live without. Google Assistant and Alexa do it just fine.

Siri can set reminders and make notes, but it can't access your calendar to tell you when your next appointment is, as it can on your iPhone. It can send texts (and messages using SiriKit-enabled apps like WhatsApp), and will read you the reply, but it can't simply read your most recent texts. It also can't read your most recent email like it can on your iPhone. I can't figure out why Siri's integration with your personal data includes some features (notes or

reminders) but not others (calendar or email), except to presume that these baseline features just weren't ready yet.

Siri is terrible at providing answers to general questions on the iPhone. I can't tell you how many times I asked Siri a question and got "here's what I found on the web for..." followed by a list of links. Frustrated, I would ask Google Assistant or Alexa the same question and get a real answer. For example: I can ask Siri, "How do you make bread?" and get a list of search result links, while Assistant and Alexa give me a follow-along recipe. On the HomePod, the situation is worse: Siri says she just can't help me at all. This happens all too often—the HomePod takes the worst of the big

three digital assistants and hamstrings it.

Alexa and Assistant are far better at understanding context to create a flowing conversation, too. I asked Google, "Who plays Wolverine in *Logan*?" and was told it was Hugh Jackman. Then I asked, "How old is he?" and was told that Hugh Jackman is 49 years old. I asked the HomePod, "Who plays Wolverine in *Logan*?" and Siri replied, "I couldn't find any movies with Wolverine playing in Logan, Utah." Sigh. *Never mind, Siri.*

Siri dutifully added items to my shopping list, but only if I gave them one at a time, each separated into its own "Hey Siri" command. If I asked to add several items at once ("Add milk, eggs, cheese, and butter to my shopping list") I got a single shopping list item that read "Milk eggs cheese and butter." Google's Assistant is smart enough to create separate list items for these.

The HomePod controls your HomeKit-enabeled devices just fine. My HomeKit-enabled lights and plugs responded instantly and accurately. However, HomeKit has fallen way, way behind Alexa and Google Assistant in smart home support. Those ecosystems include hundreds of hot products that don't work with HomeKit. I have hope that the new software authentication feature for HomeKit will result in greater support in the near future, but the fact that the HomePod can control HomeKit (go.

macworld.com/ar3p) stuff—and only HomeKit stuff—is currently a reason to get a competing smart speaker instead.

YOUR PERSONAL iCLOUD ACCOUNT, EXPOSED

Some of Siri's limitations may have to do with the HomePod's inability to detect different voices. When you set it up with your iOS device, it uses that device's iCloud account and information. Literally anyone who talks to it is treated like the owner of that phone. As long as your phone is on the same network, anyone can send a message or create a reminder on your account. These Personal Requests, as Apple calls them, only work when your

Until the HomePod can distinguish between voices, you should probably not enable Personal Requests.

phone is home on the same network, and they can be disabled entirely. But the solution to the HomePod not knowing the difference between the account owner and everyone else should not be to shut off a whole bunch of features.

Even if you turn off Personal Requests, anyone within shouting distance of your HomePod can use its music functions, thus influencing your listening preference data on Apple Music. If you have kids, their constant playing of Disney music will pollute your "For You" recommendations. This can be disabled in the Home app, but then your own HomePod use isn't influencing your own recommendations, either. Again, Apple's only solution to the problem is to eliminate a desirable feature.

In the case of music recommendations, I don't feel like you'd be missing much to turn the feature off, anyway. After weeks of using Apple Music on my iPhone and many listening hours with the HomePod, I still don't feel like Apple gives me good music recommendations. I toss aside at least half of the tracks it recommends for me.

It's not all bad news with Siri. The HomePod and Siri together do a couple of very important things with aplomb. When it comes to hearing my voice commands from across the room,

even with loud music playing, the HomePod earns top marks. I never have to yell, and the speaker nearly always understands what I say. I couldn't get any digital assistant to properly recognize my request to play the "Forkin' Bullshirt" podcast (go.macworld.com/fork), but hey, wordplay is always tough.

Siri's voice is quite natural and welcoming, too, with both male and female options and several accents to choose from (American, Australian, and British). Alexa sounds like an 80s robot by comparison.

THE UNFINISHED SYMPHONY

The HomePod simply isn't ready yet. All smart speakers improve over time with software updates, but even in that context, the HomePod is incomplete. It doesn't have two of the major capabilities Apple promised at its unveiling last summer: you cannot use two HomePods in the same room in a true stereo configuration, nor link up several HomePods across your house for whole-home audio. Apple says both features are coming in software updates later this year, but competing products do these things today.

And it amazes me that a company so famously concerned with privacy and security shipped a product made to live out in the open, used by everyone in your home, that treats every voice it

Apple HomePod

PROS
- Excellent sound quality.
- Siri listens well.
- Beautiful, compact design.

CONS
- Siri is dumb.
- Doesn't recognize different users.
- Limited connectivity.
- Limited music sources.

PRICE
$349

COMPANY
Apple

hears as if it were your own. It even defaults to allowing access to personal information like reminders, notes, and messaging. Apple has made no mention of multiple voice detection and user accounts as a future HomePod feature, but it's really hard to recommend the product without it, even to Apple enthusiasts.

The HomePod's hardware is lovingly crafted, its sound quality is top-notch, and its ability to clearly hear you in difficult conditions is a cut above the competition.

But the music service and connection options are too restrictive, HomeKit support is relatively sparse, and Siri is miles behind its competitors as a virtual assistant. Worse, Siri on the HomePod can't even do some of the things Siri on your iPhone can.

It's a little unusual for a major product to suffer a delay and still feel rushed to market, and even more unusual to see that from Apple. And yet, the HomePod clearly needed a few more months of rehearsal before stepping out on stage. ▪
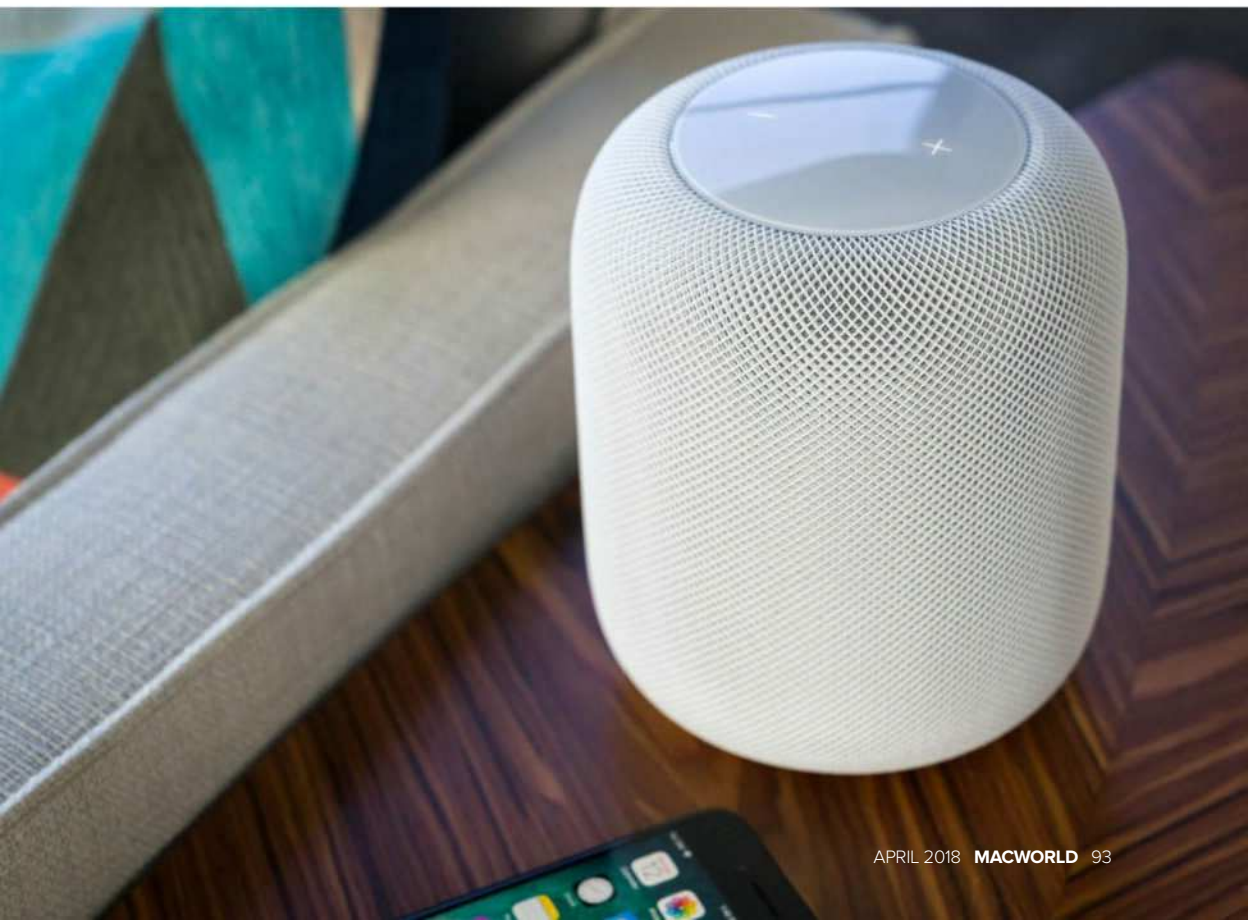
family is why.

As a mom, we know your family is why. Why you work so hard to make healthy choices every day so you can experience more of life's precious moments together. We've got your back; to make sure more of those moments happen. But we can't do it without you. While you're serving more fruits and veggies at home, we're impacting laws that help shape healthier communities — and it doesn't stop there. You see, together we can make an extraordinary impact. Because when moms unite, real change happens.

Join other moms and together let's create a healthier generation of families. Life is Why.

Unite for change at **LifeIsWhy.org/Moms**

#familyiswhy

American Heart Association | American Stroke Association.

life is why™

SIRI:

WHAT APPLE NEEDS TO DO TO IMPROVE ITS VOICE-ACTIVATED DIGITAL ASSISTANT

Siri needs to move forward to stay relevant. **BY JASON SNELL**

The HomePod is here (go.macworld.com/hpd), and with it, even more attention is being paid to Siri, Apple's voice assistant that serves as its primary interface. The early HomePod reviews are in (go.macworld.com/hpdr), and most of them suggest the device is an excellent speaker that's hampered by Siri's limitations.

I haven't used a HomePod yet, so I can't speak to that, but as someone with a constellation of Apple devices, it does seem to me that Siri could stand to use some improvement. (Couldn't we all?) So let's leave the details of the HomePod aside for the moment and think bigger. Where does Siri need to go from here?

FIX THE ANNOYANCES

When I asked a bunch of dedicated Apple users what they'd like to see changed in Siri, I (unsurprisingly) stepped into a long list of grievances. Nobody is more aware of the faults of a piece of software than its most dedicated users. And yes, one of the ways Siri could evolve is by sanding off some of its roughest edges.

I was surprised that several people told me that they're annoyed by Siri's cutesy responses to their commands. Apple apparently thinks it's delightful when Siri makes little jokes as it answers your questions. If this all comes down to personal preference, perhaps the answer is an option that a user can set to force Siri

Apple HomePod

to get down to business. It's an option that I've taken advantage of in the excellent weather app Carrot Weather (go.macworld.com/cw), which by default displays weather information with a hefty dose of attitude. Some people love it, but I hate it—and fortunately, I can just turn it off. Some people don't want personality in their personal assistants.

As has been exposed in initial reviews of the HomePod, Siri doesn't support multiple named timers, which is a problem—especially if you're cooking. The single most used feature of our Amazon Echo is timers, believe it or not. It's incredibly useful to be able to call out with your voice as you're moving pots around on the stove and chopping vegetables, and Siri would benefit from this feature across all its platforms. (Let's also toss in the ability to chain commands, something that Alexa also fails at. I should be able to say, "set a potato timer for 20 minutes and a bread timer for 40 minutes" and have it do the right thing, rather than making those into separate commands.)

Depending on the names of the people in your household, the activation phrase "Hey Siri" might also be accidentally triggered with a frustrating frequency. How about an alternative activation phrase or two? (Amazon, for instance, lets you activate the Echo by saying "Computer," "Amazon," or "Echo" instead of "Alexa.")

Another frustration is Siri's inability to be used without an internet connection. Back before Siri existed, the iPhone offered extremely limited voice control, letting you use your voice to control music playback. If I'm off the internet, shouldn't I still be able to instruct my phone to play a specific playlist? Or open a app? It doesn't seem quite right.

CONTEXT IS FOR KINGS

Apple has reduced the chances of a person who isn't you activating Siri on your devices by adding voice training. What it hasn't been able to do yet is allow multiple people to train Siri—and allow Siri to recognize who is speaking and tailor its responses accordingly.

With a collection of personal devices—iPhone, iPad, Apple Watch, Mac—this is less of a big deal. With the HomePod, which is not a personal device (unless you live alone?), it's a killer. At the very least, Siri should be able to detect when the owner of the linked account is speaking and provide more data to them than to anyone else. But ideally, every speaker should be able to tie in with their own account and related device, so if my wife asks Siri to add an item to her calendar or to-do list, it does so—rather than adding that item to mine.

In general, Siri (and, to be fair, most of its competition) is really bad at understanding context. This is a hard problem to solve, but it's something that needs to be

solved. Siri should know who it's talking to, not just in order to associate an Apple ID with that person, but to remember the context of previous conversations.

Some of this involves basic follow-up information: If I ask Siri for a baseball score and I've got the MLB app installed, maybe it should ask me if I want to listen to the game? Or if it doesn't offer, maybe if I say "can you play the audio of that game," Siri remembers what game we just talked about and kicks off the MLB stream?

And half an hour later, if I say "what's the score of that game," Siri should know what I mean, what the score was the last time I asked, and give me an update. If I send my wife a message by voice while I'm driving, I'd like to be able to ask Siri ten minutes later if she's seen it. Or even, at the time, ask Siri to send the message and alert me when she's seen it.

EXTEND ACCESS TO APPS AND WEB SERVICES

The most powerful feature of Amazon Echo is not in Amazon's platform itself, but in the fact that Amazon has made a large number of partnerships with third-party apps and services, as well as throwing the gates of Alexa wide open via a third-party

Google Home (left) and Amazon Echo.

skills market.

Apple has tentatively introduced extremely light support for Siri from third-party apps via SiriKit. Given the power of iOS apps and the popularity of the app store, SiriKit could use a major expansion. Obvious features like media playback—you still can't control apps like Overcast or Pandora via Siri—are still missing.

But Siri's palette can be dramatically expanded by opening up to web services, not just apps resident on an iOS device. In true Apple fashion, such a move wouldn't come via a wide-open skills market like Amazon's. Instead, I assume Siri web integrations would need to be approved by Apple before being placed in the Siri equivalent of the App Store.

Think about how powerful your iOS devices are because of the third-party apps on them. Now imagine those devices limited to Apple apps and a very small selection of ride-sharing, list-making, and workout-tracking apps. That's where Siri is right now. My Amazon Echo has access to an amazing selection of services, some blessed by Amazon, others not. Are many of them garbage? Absolutely. Apple doesn't roll that way. But as with the App Store,

Apple bought the iOS automation app Workflow a while back; wouldn't it be great if those of us who were so inclined could use a Workflow-like system to train Siri to perform specific workflows for us?

there's a way to open up Siri to industrious third-party developers and services without sacrificing control over the platform.

Finally, consider how much more powerful Siri could be on our devices if the users could use it to perform tasks that we care about. Apple bought the iOS automation app Workflow a while back; wouldn't it be great if those of us who were so inclined could use a Workflow-like system to train Siri to perform specific workflows for us?

The introduction of Siri kicked off the modern era of voice assistants, but these are still the early days. It doesn't really matter who's ahead or behind right now, because we will look back on today's crop of voice assistants in a few years and laugh at how incapable they were. The challenge for Apple is to continue moving forward with Siri, making it more powerful and flexible. That way users of Apple products can have confidence in talking to their devices, knowing they'll receive help in return—not frustration. ∎

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5 reasons why iPad Pro won't make you ask 'What's a computer?'

The iPad Pro is super close to being the laptop replacement Apple wants it to be, but these issues are holding it back.

BY LEIF JOHNSON

"What's a computer?" a young girl asks in Apple's latest change-the-world TV spot for the iPad (go.macworld.com/tvsp). Toss aside your cynicism, and it's easy to buy into Apple's vision as she types stories, scribbles handwritten drafts, and produces precocious paintings on her eminently portable iPad Pro. A computer? The girl might as well be asking about Betamax (go.macworld.com/btmx) or

beepers (go.macworld.com/bper).

And it's a vision that fits well with the lazy Sunday afternoon Apple presents as the girl totes the device around parks and diners. But for work? Were the young girl a few years older and taking notes in college—or for a big meeting at work—she probably would have tossed her beloved iPad Pro aside by now. I should know: I've used the tablet as my primary work device since 2015, and while it's seen some impressive improvements over the years, it's still not ready to fully usurp the MacBook. Here's why.

THE LACK OF MOUSE SUPPORT GETS FRUSTRATING

Let's be blunt: Nothing prevents me from trumpeting the iPad Pro as a laptop replacement quite like the absence of any kind of mouse support. Yes, Apple's touch controls are elegant and graceful, and they're wonderful for flipping through ebooks and scrubbing through Netflix videos. But, alas, they still kind of suck for actual work.

The key element mouse control brings over touch controls is speed. As a writer—a creative profession that uses the iPad's simplest functions—I simply find

precision editing much quicker and simpler with a mouse.

Editing drafts demands constant highlighting and rearrangement of text, and that process drags into eternity when you're forced to hold your finger down to "right-click" and carefully select sentences and words. The Apple Pencil allows for improved precision, no doubt, but in practice it's almost as slow as using your fingers as the time needed to press down on the screen remains the same.

I've heard arguments that adding mouse support diminishes the iPad's nature as a mobile device, but that's just silly. It adds an option. Indeed, even the iPhone supports Bluetooth keyboards and it's a phone.

If anything, adding mouse support for the iPad Pro would hurt the MacBook line
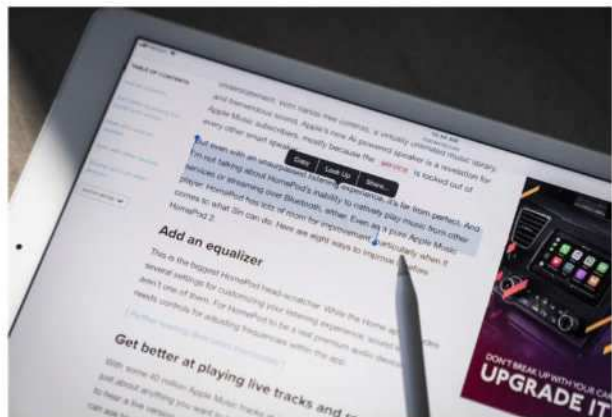
I could have already copied and pasted this text with a mouse in the time it takes to select it on an iPad Pro.

because, after all, Apple would have a true laptop replacement on its hands. Maybe it's not as eager to achieve that reality as it lets on.

HANDWRITING-TO-TEXT TECH STILL ISN'T GREAT

Apple's marketing tends to play up the Apple Pencil as an artist's tool, so its ability to help you use your iPad Pro much as you would use a legal pad with a pen doesn't get as

The iPad Pro makes it easy to type and write by hand at the same time.

much love. That's a shame, especially in an age when—as Scientific American (go.macworld.com/scie) and others report—a growing number of studies show that writing notes by hand helps your brain remember more of what you write down than clacking your fingers across the keys.

Unfortunately, the technology isn't quite yet there to get the most out of it. Only the Notability app (go.macworld.com/ntap) really nails the fluid sensation of writing by hand— alternatives often feel stiff and unwieldy— and, more importantly, handwriting-to-text technology remains in its early phases.

Apps such as Notes Plus (go.macworld.com/npls) and Nebo (go.macworld.com/nebo) allow for some impressive script-to-text transcriptions, but getting the most out of them requires carefully laying down

letters as though you're being graded by how carefully you form your letters in a Big Chief (go.macworld.com/bgch) tablet. And should our iPad girl try to transcribe notes she hurriedly wrote in a meeting? She'll be looking at jumbles of consonants that might feel at home on maps of Wales.

Fortunately, the iPad Pro's split-screen multitasking view makes it really easy to display your handwritten notes from an app like Notes in the left window and transcribe it through a document like iA Writer (go.macworld.com/iart) in the right window.

SOME 'ESSENTIAL' PRODUCTIVITY APPS AREN'T BUILT IN

The strangest thing I discovered while using my iPad Pro as my primary work

You can find several great calculator apps on the App Store, but most of the free ones come with ads.

device is that the iPhone is often a better tool for on-the-go productivity. Bizarrely, for a "Pro" device, Apple's giant, powerful tablet doesn't come with native apps for tracking stocks, taking voice notes, or even a calculator. You won't even find a native weather app. All these come standard on an iPhone.

No matter, you say: There are some worthy third-party alternatives! And that's certainly true, but the problem is that you can't access them through the Control Center. Imagine the disappointment our "What's a computer?" girl will feel in later years when she swipes up her Control Center in order to whip up a quick freelance estimate for her artwork and finds that there's no calculator, forcing her to dig through her piles of apps. So much

for professionalism.

As a journalist, being able to whip out my iPhone, swipe up on Control Panel and start recording a voice note has landed me great quotes more times than I can count. With an iPad Pro, I have to waste a few precious extra seconds to get to an app like Rev (go.macworld.com/revr) or Just Press Record (go. macworld.com/jprc) for the same effect.

The absence of such apps from Control Center thus often translates into a significant productivity speedbump. Fortunately, simply adding the apps would make this problem go away. A (likely apocryphal) story says that the calculator app didn't make it on the iPad because Steve Jobs didn't like the way it looked when all stretched out on the device's screen shortly before launch, but that was years ago. Apple's had plenty of time to fix it since then.

POPULAR APPS WON'T ALWAYS PLAY NICE

Sometimes the iPad Pro's most frustrating limitations have nothing to do with Apple at all. Your Windows-based colleagues may use a popular app for work, but there's no guarantee that the maker of that software is

going to take steps to ensure the app's iPad counterpart stays up to date.

Consider Google Docs. At this point, it's probably the most widely used program for writing, sharing, and editing rough drafts in media, but Google didn't bother to update the iPad app to support split-screen multitasking until August of 2016. That's around a year after Apple introduced the feature (go.macworld.com/mlti), and by that point, you could find it on almost every obscure indie word processing tool.

As a freelance writer, that meant I was constantly switching between whatever source I was looking at and my Google Docs file while writing. In most cases, I'd write the draft in another app and simply paste it into Google Docs for sharing.

Years into the iPad Pro's life cycle, the Gmail app still doesn't support split-screen multitasking, which can make copying info from emails a pain.

Surely, you say, such problems are behind us now. Not really, as Google still hasn't introduced split-screen support for the iPad Pro's Gmail app. Considering the resources available at Google, the delays coming out of Mountain View occasionally feel spiteful.

THE FILE SYSTEM HAS IMPROVED, BUT IT'S STILL A PAIN

Let's be clear. If juggling multiple file types and sending attached files through email is part of your everyday work routine, you're not going to be happy using an iPad Pro as a primary work device.

File management isn't anywhere near as awkward as it was in the dark days before iOS 11 and the introduction of the Files app, but it remains an overly convoluted and messy business compared to the intuitive elegance of handling files on a Mac (or a Windows PC, for that matter).

Essentially, you need to plan ahead for everything as it's usually impossible to make new folders in specific locations in iCloud Drive from an app itself. (There's also an option to save files On My iPad, but that's a bigger headache than it sounds like.)

Let's say I want to save a Pages file as a PDF and send it off later. I'd first have to make a Documents folder in iCloud Drive through the Files app, then head back over to Pages and export the document as a PDF to the new Documents folder. If I wanted to rename that PDF before sending it, I'd have to go back to the Files app (and the iCloud Drive subsection) and do it there. Then I'd have to open the Mail app and send it from there after searching for the proper folder.

Still with me? Keep in mind that this is the easy, breezy scenario. You'll encounter additional frustrations when you try to open Zip files (which need a third-party app, and few of them are ideal). If you need to resize an image to specific dimensions or file size before emailing it, you'll have to get yet another third-party app since Apple doesn't allow for that degree of control itself.

And the list goes on. It's not unworkable, but the need to be "inventive" when sending files off

the iPad Pro serves as the most damning argument against its use as a primary work device.

That said, I managed to deal with it for almost two years and I still find myself reaching for my iPad Pro on occasion even though I'm back to using a MacBook Pro for the bulk of my work. It's handier. It's more portable. Heck, it's lighter.

The iPad Pro is so close to being a truly viable laptop replacement, and all it would take is for Apple to change its mind about a couple of key design commitments. With Apple, though, that's like asking winter to be summer. Here's to hoping. ◼

The Files app greatly simplified file management of the iPad Pro, but the process can still be a pain.

How Apple's Startup Security Utility and Secure Boot works

The new iMac Pro comes with a new set of options for restricting how it starts up.

BY GLENN FLEISHMAN

With the appearance of the fancy new iMac Pro, Apple has also added some startup options available exclusively on this model. If you're a new owner, here's how the new Startup Security Utility (go.macworld.com/stas)

works at providing enhanced protection against people who might gain physical access to your computer.

It's available only through macOS Recovery, Apple's current name for the mini-operating system on a separate partition on your startup macOS volume

that you can start up from in order to fix problems on your main partition. It's been a huge help since it was added way back in Lion, and it's become more advanced and reliable over time.

To launch macOS Recovery, you restart (or start up) your Mac, and hold down Command-R. A window appears on all Macs with a set of options for programs to run or actions to take with additional options in the Utilities menu. On the iMac Pro, you can select Utilities ➜ Startup Security Utility.

Apple has put two special options here that allow you to enhance the physical integrity of your Mac in a way that other Macs lack. (The third is available on all Macs.) This comes through the addition of a separate chip, the T2, which performs a number of component management and security tasks. (Jason Snell details the T2's functions [go.macworld.com/t2cp] in a recent column.)

> Firmware Password Protection. This already exists as Utilities ➜ Firmware
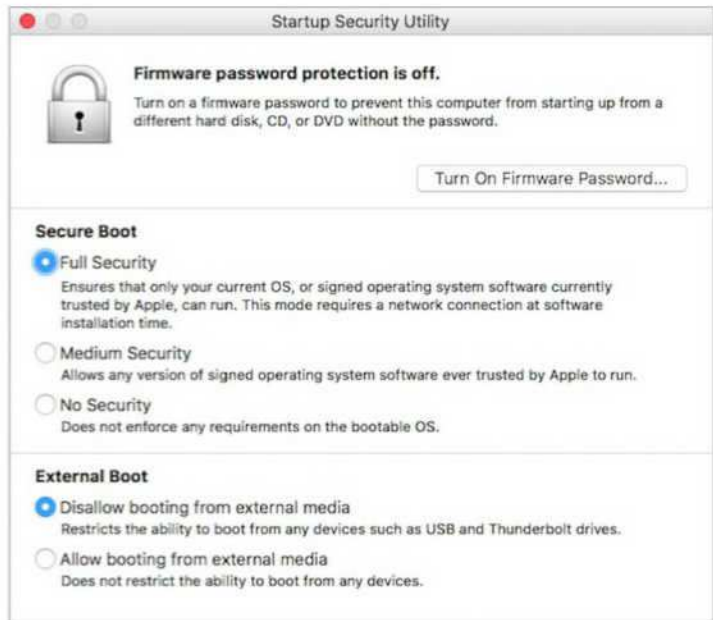
Startup Security Utility.

Password Utility (go.macworld.com/h2fp) on other Macs. It prevents someone without your firmware password from starting up from a disk other than the currently designated startup volume.

> External Boot. You can limit whether or not to let your iMac Pro start up from externally connected drives of any kind. Security minded people might prefer this option, as it prevents a malicious party from booting your Mac to try to access, copy, or decrypt material on your internal drive. (The iMac's internal drive is now deeply integrated with the T2 chip, making it useless if removed without the chip, and

the chip can't be removed.)

The third option, Secure Boot (go. macworld.com/scbt), is the kind of feature that raises the hackles of long-time Mac users, as it can feed the concern that Apple will eventually make Macs as locked-down as iOS in terms of what versions of macOS can run and which apps could thus run on your Mac. However, that concern aside, it's also a significant security enhancement in an era when we've seen exactly how insidious criminal and government-issued malware can be.

In Full Security mode, Secure Boot uses cryptographic verification through digital certificates and signatures to allow only the currently installed version of macOS or a version that Apple marks as currently supported. It also validates effectively that the installed version of macOS hasn't been tampered with. If that can't be validated, it will offer to reinstall macOS (but not erase your data) or startup from a different drive, depending on your other settings. (This mode also allows Windows via Boot Camp.)

Medium Security still validates that a legitimate version of macOS (or Windows) is installed, but doesn't check macOS for signs of modification. With No Security, other operating systems can be installed.

Most of the time, Apple's security measures affect how vulnerable we are to people who aren't standing in front of our computers. These two iMac Pro additions are a step up, making it seem like they're guarding against either a new class of worries to come, or adding features that the company has long itched to put in place as a bulwark— perhaps for folks living and working in repressive countries and at risk of compromise in their own homes and offices. ■

macOS Server: As features are cut, what does the future hold for Apple's server software?

Does this mean Apple is abandoning the network server market? Most likely, yes.

BY DAN MOREN

Apple may have embraced the pro market on the Mac hardware side with the recent release of the iMac Pro (go. macworld.com/bimp) and forthcoming Mac Pro, but the software side, well, that's a slightly different story.

A quiet post on Apple's support site last month (go.macworld.com/pcmo) revealed that the company is significantly dialing back the capabilities of its macOS Server (go.macworld.com/mcos) package, the $20 add-on software that turns your Mac into a full-featured piece of server

IMAGE: APPLE

hardware. Gone are features like web and mail hosting, VPNs, and more. Instead, Apple says it is re-focusing macOS Server on "management of computers, devices, and storage on your network." Or, in other words, on managing all your other Apple devices.

Still, that's a shame for a number of reasons, not least of which that macOS has long been a powerful (if somewhat under-the-radar) network server option. As someone who's dabbled in running servers in the past, I'll be sad to see macOS Server go—but I'm not exactly surprised.

macOS SERVER: A LITTLE HISTORY

The modern version of Server actually pre-dates Mac OS X itself—Mac OS X Server 1.0 came out back in 1999, two years before OS X's consumer release.

For a long time thereafter, Mac OS X Server was an entirely separate product that you had to purchase separately—at a hefty price. The Leopard version of Server, back in 2007, ran for $999. At that price, very few customers who weren't IT professionals were actually ponying up for the product.

After that point, though, the price tag dropped precipitously—by half for the Snow Leopard version. With Lion, the price dropped to just $50, and instead of

being an entirely separate installation it was a package of tools that one added on to a standard OS install. As of Mountain Lion, that price dropped to just $20, and the product had by then transmuted into the Server app, available through the Mac App Store.

At those prices, it was more than reasonable for even a dilettante hobbyist like myself to invest in the app, even if only to take limited advantage of the functions therein. But that experimentation led me into a couple areas where Mac OS Server was actually a phenomenal tool for casual users.

macOS SERVER: MY PERSONAL HISTORY

I came relatively late to macOS Server. Earlier on in life, when I was still a web developer, I spent time setting up test environments on my personal machine. There were packages to easily install tools like the mySQL database in addition to the existing personal web hosting services that Apple originally included in OS X.

But more complex tools were a bit beyond my knowledge. So when I wanted to set up a VPN (go.macworld.com/suvp) on my Mac mini, I turned to the Server app. With relatively little command-line intervention, I was able to set up a secure tunnel back to my home network for when I was on the road. (Yes, the Back To My Mac feature built into macOS is supposed

to provide similar features, but it's notoriously unreliable.)

The Server app's user interface for managing a VPN was surprisingly straightforward, putting a convenient wrapper around tools that can otherwise be complex. And I should know because I've since installed one on a server elsewhere (go. macworld.com/ryov). The same goes for other tools that can be complicated to manage, such as web servers and DNS support.

LOOKING FORWARD

Now that these tools are on their way out, what next? As my colleague Jason Snell pointed out in a recent conversation on this topic, Apple's presence in this area was probably enough to deter other companies from building friendly front-end tools for these services. After all, why invest in the market if Apple itself is selling the functionality for cheap?

Perhaps third parties' interest will be piqued now that Apple's not in the game anymore. Meanwhile, some of the tools that used to only be available as Server—such as Content Caching, which tries to prevent you from having to download the same data multiple times for multiple devices—have moved into the consumer-level OS. But others, such as web hosting or the aforementioned

VPN, don't seem to be heading that way. On the upside, though Apple has deprecated the tools, they will continue to work for the foreseeable future if you have them enabled. Just don't expect any new features.

I've already heard from a few people peeved about this decision, seeing it as Apple's abandonment of the network server market. And you know what? It probably is. Clearly, Apple doesn't want to spend the time in this arena anymore; it would rather relegate its pro efforts to creative software like Logic Pro and Final Cut Pro. The good news is that for as long as macOS relies on UNIX-based underpinnings, such tasks will still be possible—just not in as friendly a manner.

To paraphrase the late, great Douglas Adams: So long, macOS Server, and thanks for all the cache. ∎

MarsEdit 4: Content-creation tool for websites lets you focus on the important things

BY GLENN FLEISHMAN

D oes anyone still blog? Twitter, Facebook, and even Tumblr may have swallowed much of blogging's oomph, but it's still out there. It's probably more accurate to say that blogging morphed into different kinds of things that seemed less blog-like. Many publications use WordPress or other "blog" engines to power their sites.

This explains the persistence of

MarsEdit (go.macworld.com/rsme), a blog composing, previewing, and posting tool that was recently upgraded to version 4. This version comes nearly eight years after the previous one, but it will delight existing users and should attract folks dissatisfied with web-based posting.

At its core, MarsEdit is a way to easily compose entries and store local drafts as you work, while bringing in media and
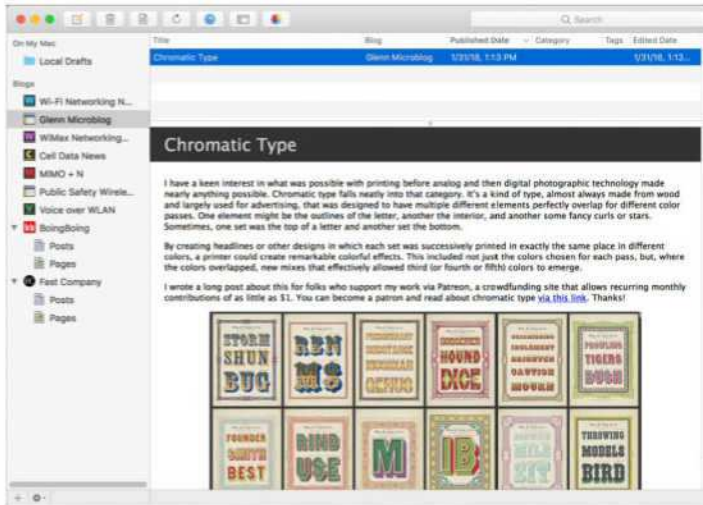
MarsEdit 4 has robust previews of items, using templates you can modify for an even closer match to the final post.

managing rich formatting. This all happens in a word-processing–style environment that's native-app-fast, works offline, and is comfortable for and familiar to Mac users.

NEW FEATURES

MarsEdit 4 continues to be a familiar engine for those who have used it. You configure a blog by entering its URL, which is enough for MarsEdit in many cases to sort out what platform you're using and what credentials it needs from you without mucking around further. Once you've entered a username and password, you can proceed. (Some hosted blogs may require a app-specific password or an API key that you obtain from your account.

MarsEdit doesn't prompt you where to look, so if a login fails, check your blog account's details.)

Version 4 supports blogging engines that date back to the earliest centrally-hosted and self-hosted platform days, like Movable Type, TypePad, and Blogger, as well as "newer" ones like Tumblr and WordPress. There's also richer support for WordPress, a dominant platform that continues to evolve. However, you can use a variety of other platforms that support standard MetaWeblog and AtomPub interfaces, which sweep in truly modern services, such as Micro.blog (go.macworld.com/mcbl).

I discovered in testing with a few WordPress blogs that MarsEdit has a lot of tricks up its sleeve to deal with multiple layers of authentication that some publications employ, but sometimes it's defeated. For one publication, there's an HTTP Authentication step (the pop-up window that gives you access to the website), then a pre-blog login page, then
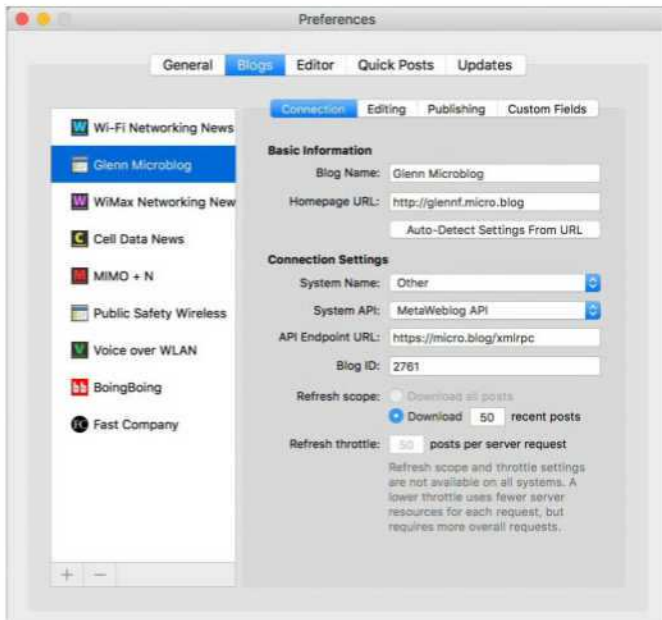
You can set up posting connections to many blogs across multiple platforms from a single interface.

a WordPress login. I don't blame MarsEdit for being stymied, and I'd need to talk to the system admin for a workaround. With another multilevel-entry site, MarsEdit coped just fine. You might encounter this with securely configured corporate accounts, but are unlikely to have it happen with blogs you set up and run yourself.

Once connected, MarsEdit pulls in the titles of previous posts, if any, and you can edit those. It can also download the complete archive for most blogs of everything you ever posted, giving you an

effective local copy and backup. This is great in general, but also makes it possible for you to migrate posts.

You can, of course, also create new posts, and save them locally as drafts while in progress. At one point, I had a set of several related wireless/mobile self-hosted MovableType-based blogs that I used MarsEdit to manage. Version 4 brought in all those settings and posts (and some nostalgia).

Blog services often support formatting text in one or more methods, whether it's plain text, HTML, Markdown, or Textile. You can use the Text Filter menu in MarsEdit to choose which type of formatting you're using, which then allows a preview of what you're composing or editing.

While there's a formatting bar with some frequently used items and a Format menu with many more—which allows custom entries to be added along with keystroke triggers—it's all for HTML. The app supports Markdown for previewing, but doesn't color code it in the editor and its formatting controls won't insert
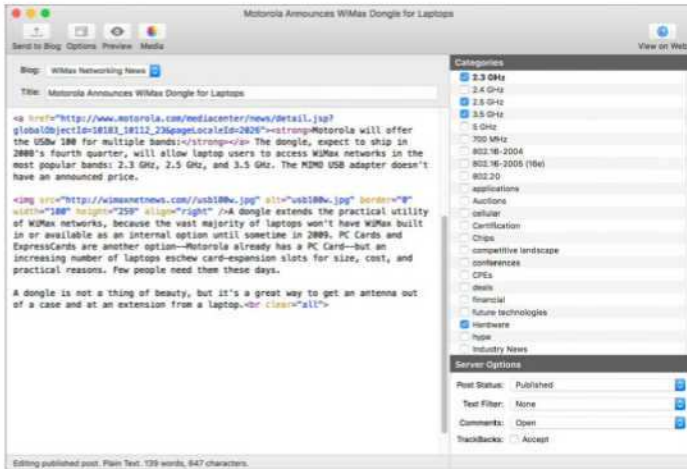
The post window shows color-coded HTML, a list of categories, blog metadata fields, and various preview and formatting options.

The preview feature of MarsEdit has always been a strong point, and the latest version updates as quickly as you type. Using included templates, MarsEdit takes your locally drafted post and simulates what it will look like on the Web site. If the template doesn't match closely enough, you can click an Edit Template button to make changes. The app can also create a dummy post, extract the HTML around the elements it inserts, and then delete that post to create a better template.

Markdown elements when you're writing Markdown. That seems like a lack that could be fixed, and the developer says it's under consideration.

MarsEdit lets you drag images in from the Finder or select them through a media browser, and then change the file title, the ALT text tag, and other fields, and resize an image. This can then be inserted into a blog entry and, if the publishing engine of the platform supports it, directly uploaded. You can also view images already placed in a blog and drag them into a post anew, but you can't resize or modify them at that point.

If you're managing multiple blogs, MarsEdit is a boon, because you don't have to switch among different websites and interfaces, reducing your learning and retention curve while also offering tools as good or better than those found in many blogging platforms. I find the distraction less

MarsEdit lets you drag images in from the Finder or select them through a media browser, and then change the file title, the ALT text tag, and other fields, and resize an image.
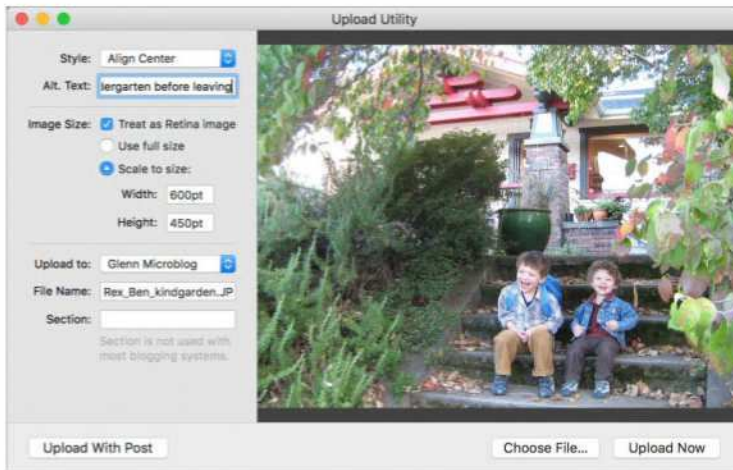
Drag an image into MarsEdit 4, and the app offers a set of fields and options to control how it's formatted, labeled, and inserted into a post.

page title, URL, and selected text.

MarsEdit includes an editing feature that I have begged other text editors to include: a "typewriter scrolling" mode that acts as if you have a piece of paper in which the currently active line is always vertically centered in the editor window. If you like to have a tall editing window and have a long post, compressing your neck to stare at the bottom is a pain, instead of referring the same comfortable center point for all composition.

in MarsEdit, too, so I'd prefer to write and edit there. You can also work offline with MarsEdit, rather than switching to a word processing that you have to copy and paste into a blog entry later.

A nifty addition to version 4 lets you turn selections in Safari into draft posts with a single button click. This requires installing a Safari extension—and remember to quit both MarsEdit and Safari and launch them again after installing. Then you simply select text, click the MarsEdit button in the toolbar, and MarsEdit uses a template that you can modify to pull in the

MarsEdit 4

PROS
- Supports all major platforms that allow third-party apps
- Saves drafts, avoiding web browser crashes
- Allows easy inclusion of Mac-stored media.

CONS
- No Markdown formatting bar, only HTML/rich text.

PRICE
$50

COMPANY
Red Sweater Software

BOTTOM LINE

I don't consider the term *blogger* an insult, but I don't really consider my online writing as *blogging* anymore, either. And MarsEdit 4 can more aptly be called a content-management system's content managing system: it shaves off the rough edges of web-based interfaces, letting you focus on composing messages and shaping their appearance. ■
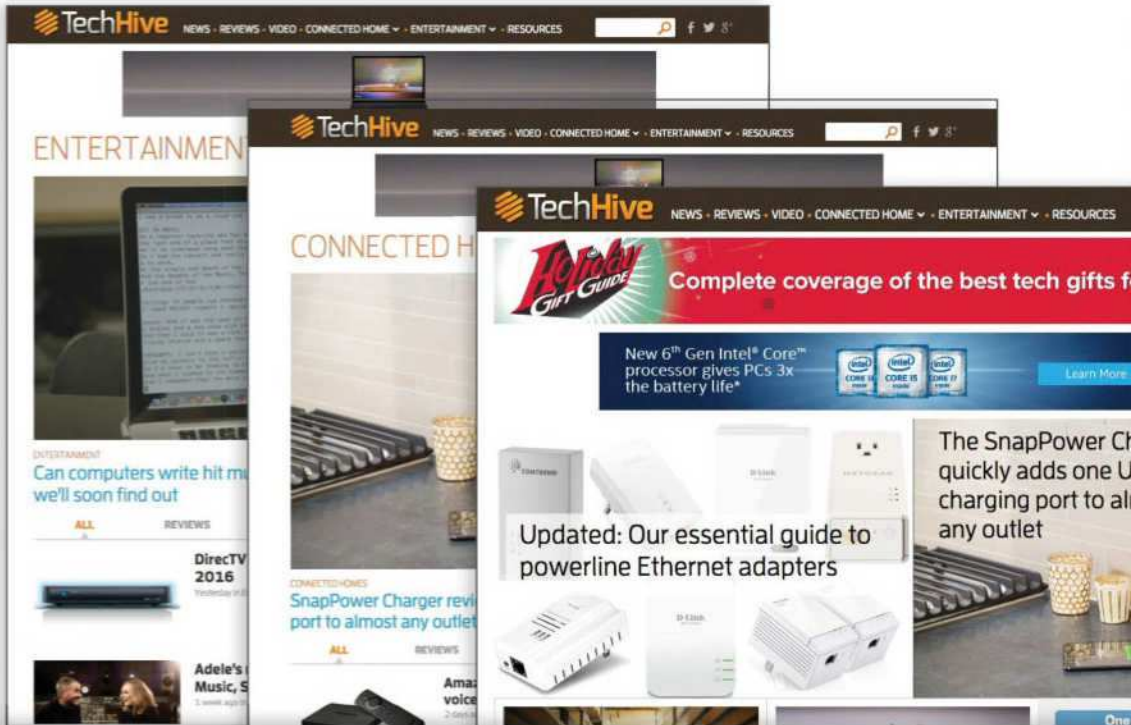
HomePod: Apple's smart speaker has plenty of room to grow

Now that the HomePod's out, it's quickly becoming apparent that there's a lot of room for Apple to improve it.

BY DAN MOREN

With the addition of the HomePod (go.macworld.com/h0mp) to my arsenal of smart speakers, we've reached a dangerous tipping point in my household: there are roughly double the number of smart speakers as people.

The past couple weeks of living with the HomePod has given me a bit of time not only to see what the device has to offer right now, but has also helped me sketch out some ideas about where the future might be able to take it.

In many ways, the HomePod reminds me a lot of the Apple Watch. But whereas the chief criticism of the latter upon its

release was that it tried to do too much, the HomePod follows more of a tried-and-true Apple pattern: it starts small.

But perhaps it starts too small.

As the Apple Watch evolved, it benefited from slimming down its portfolio to focus on a few key areas, but the HomePod instead has a lot of room to improve by deepening its focus on the areas that it's already in.

PLAY IT AGAIN, SIRI

It's pretty universally agreed that the HomePod's biggest strength is its audio quality. While I'm not an audiophile attuned to the fine details of woofers and tweeters, to my ears the HomePod sounds at least as good as my Sonos Play:1 (go.macworld. com/spl1), and a definite sight better than either my Echo (go.macworld.com/amec) or Echo Show (go.macworld.com/amsh).

That said, where the HomePod's musical abilities fall short for me is in its relationship with other devices in the Apple ecosystem. (Full disclosure: I'm not

an Apple Music subscriber, but I do use iTunes Match.) To this day it puzzles me that Apple has never implemented a Handoff-style feature that lets you pause a song on your iPhone and then resume playback on, for example, your Mac.

Yes, the HomePod's support for AirPlay does allow a pale simulacrum of this, but it's not quite the same as allowing seamless playback support across your devices. And honestly, it seems like something the HomePod is adroitly positioned to do. Having the ability to ask Siri to start playback from a different device (or resume a song playing on a different device) would also be a bit easier than fiddling with the AirPlay controls.

I'm also bummed that, as an iTunes Match subscriber, I can't take advantage of

the same "play songs that fit this mood" feature as a full Apple Music customer, but I understand that the tagging in my library is less precise and my available catalog of songs much smaller than are ideal for this functionality. Likewise, I get why Apple has no plans to integrate Siri support for third-party music services on the HomePod, much as I find it disappointing.

Yes, the HomePod's support for AirPlay does allow a pale simulacrum of this, but it's not quite the same as allowing seamless playback support across your devices.

NOBODY'S HOME

Home is right there in the HomePod name, and it's telling that the settings for the HomePod appear in the Home app on iOS. But while the HomePod does everything we expect it to in terms of controlling smart home appliances, Apple doesn't really push the envelope forward

in any meaningful way.

For example, you can of course tell Siri to turn devices on and off. You can even set lights to certain percentages of brightness, change light colors where applicable, and trigger scenes. But say, for example, you want to set a light to come on later. Try "Hey, Siri, turn on the desk lamp at 2:35pm" and all you'll get is Siri turning on the lamp right now. Or say you want to configure a particular scene. Or create a routine like "Turn on the porch light at sunset every day." In all of these cases, Siri isn't going to help you; you'll need to turn to the iOS app to configure these instead.

HomeKit is improving, and more devices that support it are hitting the market. But Apple's support for even its own devices is pretty limited. Amazon and Google have already started pushing what their smart speakers can do with their Fire TV and Chromecast streaming boxes, respectively, and even offer integration with third-party devices. The HomePod's awareness of my Apple TV, by comparison, is nonexistent. It's a bit of a head-scratcher that I exist in a world

where I can tell Alexa to turn on my Apple TV, but not Siri.

IN NEED OF ASSISTANCE

Perhaps the aspect of the HomePod that seems to have gotten the least love is Siri itself. Not only has the virtual assistant not received much (if any) new features on the smart speaker, but it even seems to have lost a few along the way: calendaring, email, and making phone calls (or even FaceTime!), just to name a few. There's also no support for features that its competitors boast, ranging from the simple—like multiple timers—to the admittedly more complex, like multiple users.

Yes, Siri can do most of the other things you've come to expect, like give you sports scores, tell you the weather, send text messages, and of course kick hard questions to web searches that it can't display on the HomePod. But all in all, though Apple has clearly spent time on Siri's natural-sounding voice and its parsing, it doesn't seem like the company has really dove deeply into beefing up its actual assistant functionality.

That wasn't such a big issue when Siri was just one way of interacting with your iPhone or iPad. But now that Siri has become a major part of not only all of Apple's platforms, but has taken front stage with the HomePod, it's about time we see a next generation of Apple's virtual assistant. Because voice interfaces aren't going away any time soon, and right now Siri's not one to talk. ■

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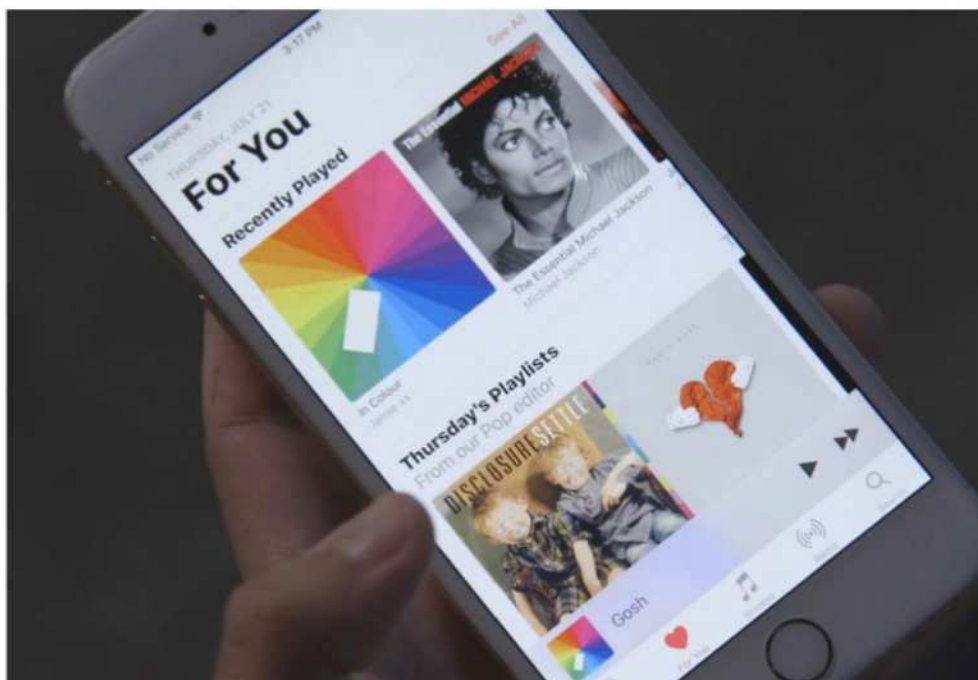
Apple Music overtaking Spotify in the U.S. shows why it needs a free tier more than ever

Apple Music has 36 million subscribers compared with 70 million Spotify listeners around the globe.

BY MICHAEL SIMON

According to *The Wall Street Journal* (go.macworld.com/twsj), Apple is on track to overtake Spotify in U.S. paid subscribers, a sign that the three-year-old music service is making serious inroads in a highly competitive landscape. The report states that Apple Music has been gaining U.S. subscribers at a 3 percent higher clip than Spotify, a trend that would give

Apple's music service a higher subscriber rate by the summer, assuming it continues.

But that doesn't tell the whole story. While it's hard to know for sure how many subscribers Apple Music has in the U.S., it trails Spotify mightily across the rest of the globe. At last count, Apple had around 36 million subscribers worldwide, compared to Spotify's 70 million. And that's

Apple Music has 36 million subscribers worldwide.

with a built-in marketing tool that Spotify doesn't have: premier placement on the home screen of hundreds of millions of iPhone and iPads sold every year.

And if you break it down further, Spotify is eclipsing Apple Music. When Apple Music launched in June 2015, Spotify had just passed 20 million subscribers (go. macworld.com/20ms). That means it's gained some 50 million users in the same span that Apple Music has gained just 36 million. You don't need to be an analyst to see which number is bigger. In the face of strong competition from the largest company in the world, Spotify has nearly quadrupled its subscriber base, all without a single piece of dedicated hardware.

The reason is its free tier. Unless you're counting the three-month trial period, Apple doesn't offer a non-paid level of Apple Music, but its gains in the U.S. only
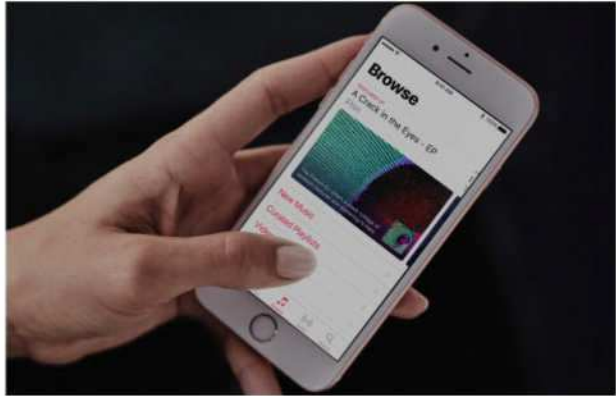
make me wonder why it doesn't. Along with 70 million paid subscribers, Spotify has more than 140 million active users who listen to its service with ads between tracks. Those are all potential paid customers, and I'm willing to bet that a large portion of Spotify's 70 million paid subscribers started out on the free tier.

THE VALUE OF FREE

With a free Apple Music tier, Apple would not only get music fans to flock to its service in droves, it could also use it as a way to advertise the HomePod as the best way to listen to Apple Music at home and AirPods as the ultimate on-the-go solution. With quick ads between songs, it would be speaking directly to a captive audience who shares a love for music. Simply put, there's no better way to advertise.

You might have heard that Apple's

HomePod smart speaker (go.macworld. com/hpfq) was released on Friday, February 9. With superior sound and room-scanning acoustic engineering, Apple is positioning the HomePod as a high-end audiophile product (a "music authority," if you will), but there's a catch: the cool Siri-powered controls only work with your iCloud Music Library, namely Apple Music.

Granted, most of the HomePod's customers will be Apple Music subscribers in the U.S., at least at first, but as Apple expands the HomePod's reach, it's actually selling two things: a $349 smart speaker and a $99/year music subscription service. For many potential buyers, that might be too steep of a price, especially when you can buy a Sonos One (go.macworld.com/ s1rv) or a Google Home Max (go.macworld.

A free tier of Apple Music could be a gateway to the HomePod.

com/hmrv) and play the same songs through your free Spotify subscription using Alexa and Google Assistant. A free Apple Music tier might not lead to a deluge of HomePod sales, but it would certainly help.

A STEADY STREAM OF NEW USERS

Streaming music has become one of the main uses for our mobile devices, which is why the only Android app Apple offers (other than Move To iOS) is Apple Music. Streaming subscribers, even those who use Android phones, are all potential customers. If 36 million people signed up to pay for a service, imagine how many more would agree to use an ad-supported version. They might not be paying customers, but they would be Apple customers. And perhaps more importantly, they wouldn't be Spotify customers.

There's a good reason why so many people have signed up for Apple Music: It's a great service. And it's even better when integrated into Apple's ecosystem. An Apple Music free tier would give Apple an opportunity to showcase its strengths in integration and ease of use, and be a great vehicle for selling customers on the benefits of hardware-software symbiosis.

It's not about chasing Spotify. It's about chasing music lovers and turning them into Apple fans. ■

Apple Music wish list: 17 ways to improve the app and service

Apple Music has 36 million subscribers compared with 70 million Spotify listeners around the globe.

BY JASON CROSS

A recent report in the Wall Street Journal (go.macworld.com/twsj) claimed that Apple Music was on pace to surpass Spotify in subscribers. That sounds amazing! But it's not quite so simple. The calculation was made by looking at Apple Music's current

number of paying subscribers (about 36 million), comparing it to Spotify's paid subscribers (about 70 million), and noting that with Apple Music's current 5 percent growth rate it will overtake Spotify, which has a 2 percent growth rate, this summer.

There are a couple of important

catches. First, it ignores Spotify's free tier, which stands at over 140 million. Apple Music doesn't have a free tier. Second, it assumes that the growth rate of these two services doesn't change. As Apple Music gets bigger, its growth rate is likely to taper off, but who knows when that will happen.

Apple Music's catalog is perhaps the

Now Playing needs more info when collapsed, and the Shuffle and Repeat buttons shouldn't be hidden beneath the fold.

strongest of any subscription service, but the app, particularly on iPhone (its lead platform), is full of issues that should be relatively easy for a company of Apple's size to address.

Here are a few of the things we think the company should do to improve Apple Music on iPhone.

1. IMPROVE THE NOW PLAYING CARD

Wherever you are in the Apple Music app, the track you're currently listening to is represented by a small banner just above the bottom row of tabs, along with a play/pause button and a next tack button. Tap it and a "card" slides up, obscuring most of

the screen.

This card needs work.

To start with, in its collapsed state it doesn't show enough info. There's plenty of room for the artist name and track time remaining.

When expanded, it doesn't use space well and hides useful controls below the bottom of the screen in a non-obvious area. With the AirPlay and overflow menu (the three dots) at the bottom, it doesn't even look like you can scroll down. Below that page break, you'll find the shuffle and repeat controls, along with the Up Next list. Oddly, "lyrics" isn't a button, but a separate line with a "show" link on the right. The Lyrics control is duplicated in the overflow

menu, too.

Shuffle and repeat belong on the main Now Playing card, and so do the love/dislike buttons that are stuffed into the overflow menu.

What's more, you should be able to move forward or back through the Now Playing list by swiping left and right on the album art.

2. MAKE BETTER RECOMMENDATIONS

It's sort of a running gag on the internet that Apple Music's recommendations are terrible. Sometimes it suggests similar artists that are not even remotely close to what you were listening to. Sometimes the custom radio stations and playlists that seem to ignore your music preferences.

Everyone agrees that recommendations get better after weeks of studiously rating songs with the Love and Dislike buttons, but it needs to be way better, way more quickly. Apple's obsession with privacy and anonymizing data might make it harder to recommend great songs, but there's just no excuse for a song recommendation system that causes me to skip half of the tracks it suggests.

3. HIT THE WEB

People want their music to follow them everywhere, and that's one of the best things about subscription services. But one does not always have access to iTunes or their mobile device. Let us log into Apple Music in a web browser and play our library music, listen to radio stations, and cobble together playlists.

A web presence would make it much easier to share playlists (more on that later) and would give everyone easy access to the free radio stuff: Beats 1, News, and Sports. Maybe that kind of easy exposure would help convince more listeners to sign up!

4. DROP CONNECT AND STREAMLINE SOCIAL SHARING

The social aspects of Apple Music are a disjointed mess. The Connect service, where users follow artists and can see a stream of posts by them promoting new releases and the like, is a failed experiment. Nobody talks about it, it has taken an ever-shrinking presence in the app, and the signal-to-noise ratio is terrible. It's time to shut it down.

Apple wants to show me what all my friends are listening to, and while that sounds like a good music discovery concept on paper, in practice it's not that useful. I might share very similar musical tastes with one or two friends, and like some of the same things a lot of my friends like. But lumping all the things all my friends are listening to into the same
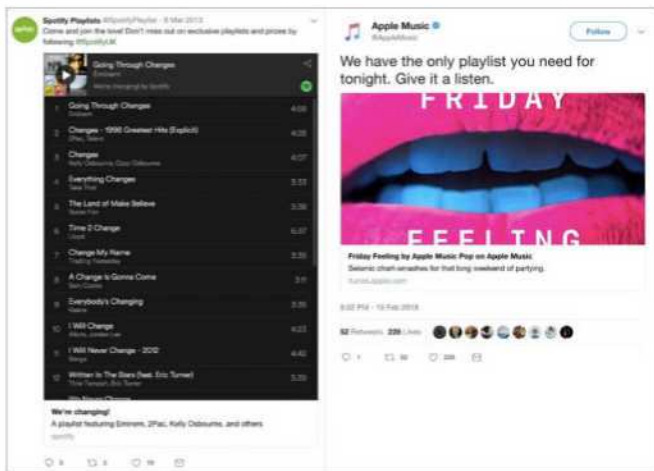
Sharing playlists on Twitter via Spotify (left) vs Apple Music (right). iTunes links just aren't a great solution

least public playlists show up in search.

Now if only Apple Music would let me invite friends to edit a playlist with me! It's the perfect thing for stringing together that Friday night party playlist or "greatest hits" lists. That's the kind of social interaction that drives the love of music, not major labels pushing marketing at you through Connect.

bucket just doesn't work. It's yet another way Apple wastes valuable, prominent screen space to suggest music I don't like.

Apple should stop trying to turn Apple Music into its own social network and embrace the networks people already use. Let us share albums, artists, tracks, and playlists via Twitter and Facebook by embedding a web player, like Spotify does. Right now, sharing to these services produces a static iTunes link that takes you to a webpage with nothing but a nearly useless preview button.

5. ALLOW COLLABORATIVE PLAYLISTS

Sharing playlists in general could be better (see the previous section), but at

6. CREATE MORE PERSONALIZED PLAYLISTS

There are three personalized playlists on the For You section: Chill Mix, New Music Mix, and My Favorites. The first two combine Apple Music editorial picks and an algorithm that uses your personal music tastes to generate a unique playlist for you every week.

These are awesome! We just need more of them.

Spotify's Discover Weekly is a huge hit in part because it surfaces forgotten favorites and "new to you" hits from years past. I'd love to see something similar on Apple's service. By contrast, Apple's New Music Mix playlist is closer to Spotify's Release Radar. I love Spotify's Summer Rewind and Time Capsule, too.
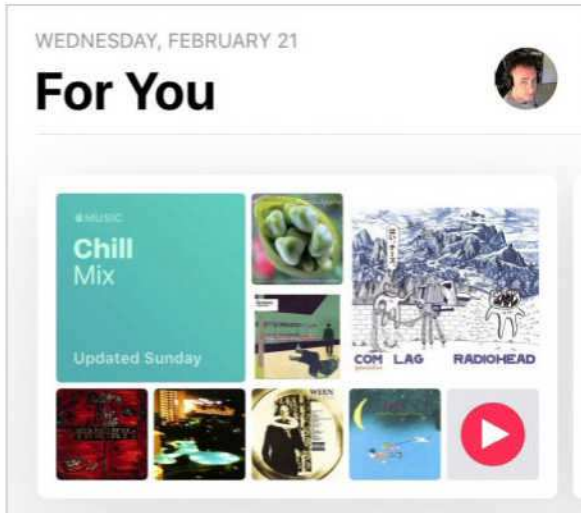
I'm all for a good Chill Mix, but I want a lot more of these personalized, dynamic playlists.

These dynamic, personalized, regularly updated playlists are a great way to discover music and to show off Apple's blend of professional curators and algorithmic personalization. I'd love to see several more, including a workout playlist and a few daily playlists. You can already ask Siri to "play some workout music" and get personalized picks, so it seems Apple's halfway there already.

7. HOW ABOUT A DARK THEME?

The entirety of iOS needs a proper dark mode, but until that happens, how about one just for Apple Music? The glaring white interface is a huge distraction in your car at

night, and it's eye-blindingly bright when you're winding down at home for the night.

A proper Apple Music dark mode should have an on/off toggle and also allow you to set scheduled hours.

8. CROSSFADE WOULD BE NICE

Crossfade is when the next song in the queue fades in just as the song you're listening to fades out. It makes a small, smooth transition so there's no silence.

Some people like it, some don't, but it's terribly useful when playing music for a party or background music while you're working. The gap between songs, and the sudden transition from one to the next, can be jarring in these situations. Give us a crossfade toggle to eliminate it if we want to. This is another feature of iTunes that needs to make the jump to mobile.

Gapless playback and crossfade options are common to music apps like Spotify and even iTunes, but absent on the Apple Music app.
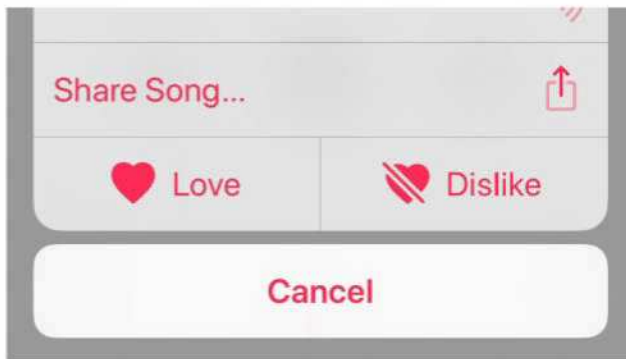
The Love and Dislike buttons are far too important to be buried inside an overflow menu on the Now Paying card.

9. LET US LOVE AND DISLIKE WITHOUT OPENING THE APP

Using the Love and Dislike buttons are critical to improving Apple Music's understanding of your taste in music. But in order to use them, you have to unlock your phone, open Apple Music, open the Now Playing card, hit the overflow menu, and then you can finally tap those buttons.

Not only should they be front and center on the Now Playing card, they should appear on the lock screen and Control Center music controls.

10. MOVE SEARCH INTO LIBRARY AND BROWSE TABS

One of the main navigation tabs at the bottom of the Apple Music interface is Search. Once you're there, you can type in search phrases, but you have to toggle whether you're searching Apple Music or your own library. It's functional, but it's sort of a waste of space and it's not the most intuitive place for this function.

The app already has separate sections for your library and everything on the service (that section is somewhat confusingly labeled "Browse.") Each one has a big chunk of white space up top—just put search bars there!

Not only is it more intuitive to search the section you're already in rather than head to a global "search" pane and then choose a section, but it would free up the fifth navigation tab for something else. That would be a great place to put Activities and Moods, which are great but under-utilized features.

11. MAKE NAVIGATION MORE CONSISTENT

Every section in Apple Music is laid out differently, with different combinations of text links, album art of various sizes, and lists that scroll horizontally in some places and vertically in others.

The different sections can't really be identical, but they could be a lot more consistent than they are now. For example, in the Library section, you have text links

to Playlists, Artists, Albums, and so on. To make it match the For You section, these could be horizontally scrolling truncated lists with album art and a "See All" link to show the whole list.

The Library section has an Edit button that lets you add or remove categories and reorder them. The For You section doesn't. Why not?

It feels like every tab in the Apple Music app behaves differently, and we have to learn four different ways of navigating and locating what we want. Lists (whether playlists, artists, or albums), should be sortable by name, artist, album, and track. And they should contain more info on the line, like track length.

12. GIVE US A TIMELINE

The recently played list shows albums and playlists, which makes sense, but there should also be a way to view your play

It feels like every tab in the Apple Music app behaves differently, and we have to learn four different ways of navigating and locating what we want.

history in detail. Give us a timeline feature that shows every track we listened to for more than 20 or 30 seconds (so it doesn't show songs we skipped), from any source: radio, playlists, albums, activities, you name it.

13. LET US CREATE SMART PLAYLISTS

Smart Playlists are a great way to sort and filter a big music library. It's just the thing for that all-you-can-eat Apple Music subscription. But you can only create them in iTunes on your computer. They sync over to your phone just fine, but we want to create them there.
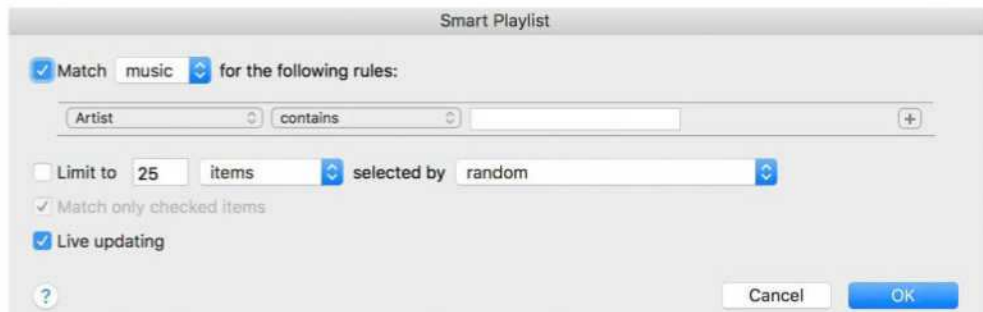
Smart Playlists are one of the best features of iTunes, and should really be a part of the mobile app.

The power and flexibility of Smart Playlists is way beyond what other music services offer on mobile, and it's just sitting there in iTunes, waiting to be ported over to the mobile app.

14. PROVIDE A BETTER EQUALIZER

To get to the equalizer in the Music app, you've got to jump out to the global Settings app on your iPhone or iPad. When you get there, you'll find a list of presets but no way to tweak the EQ yourself.

Spotify does a better job at this. You can keep the list of presets, but give us a custom EQ as well, and put it in the app where it belongs. Or at least link from the Music app directly to the EQ part of the Settings app so it's easier to find.

Apple could get really fancy and copy the audio profiling features found in a few Android phones. They play a series of tones at different frequencies and volumes in the left and right ears, and you tap a button when you hear the sound. It then creates a custom EQ for each ear that is tuned for your headphones and your ears.

15. LET US CREATE A WISH LIST

It's easy to add a song from a radio station
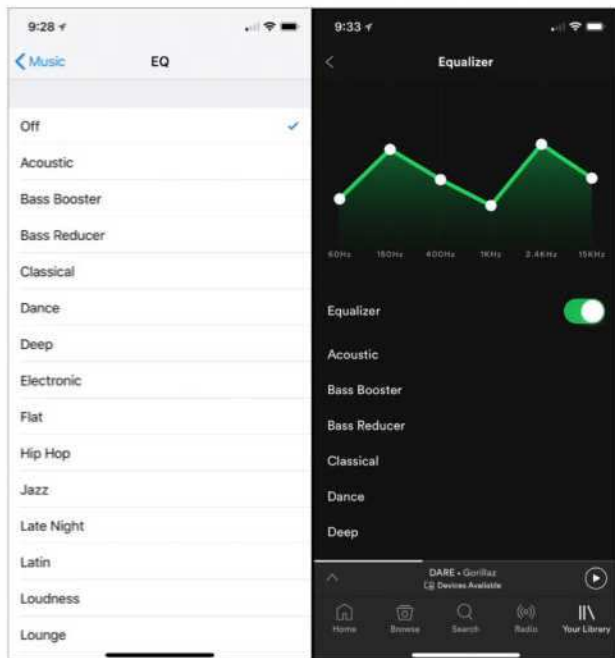
Apple Music's EQ (left) is just a list of presets. Spotify's (right) gives you more control.

or playlist to my library. There's a nice + button right there in the lower left. But Beats 1 sometimes plays music that isn't on Apple Music yet. When it does, change that + button behavior to add the song to a wish list, where it will automatically be downloaded when released.

The Apple Music catalog could list upcoming albums and singles, with an "add to wish list" button. Artist pages could have a wish list button that automatically adds any new music they release the moment it drops.

We should be able to see our Wish List in the library section, with dates showing when the track was added or when it will be available (for unreleased tracks).

16. IT'S TIME FOR A BEATS 2 RADIO STATION

Beats 1 is great, but it's not for everyone. Maybe it's time to spin up another live radio station or two, each of which focuses on musical tastes that are not well-represented in Beats 1? I'd love to hear the Apple equivalent of a college radio station, maybe even with college radio hosts!

17. LET US HANDOFF TO OTHER APPLE DEVICES

Imagine it: You arrive home while listening to Apple Music on your iPhone (with headphones or even in your car). A pop-up on your phone lets you keep listening on your HomePod right where you left off.

Later, you're settling in do some work on your Mac with your headphones on. A little icon in the dock lets you grab the music from HomePod and start paying it on your Mac, carrying on with the current song and upcoming queue.

In short, we need Handoff for Apple Music. With just a tap or two, we should be able to continue our listening session on any device logged into the same Apple ID and on the same network.

All of this should be easy to do with Siri, too. We could say, "Hey Siri, continue playing on my HomePod" or "Hey Siri, play this on my Mac." ∎
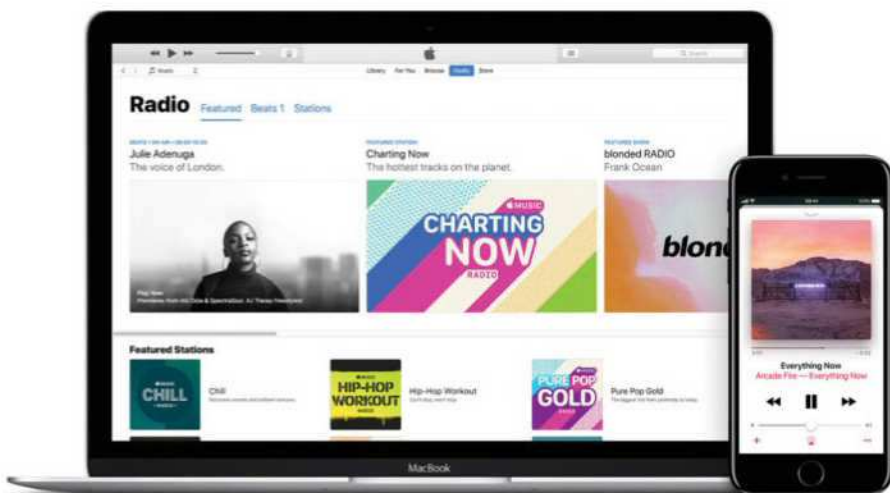
Accessorize your AirPods

Dress up your wireless earbuds with these sleeves, tips, skins, and straps.

BY JASON CROSS

We love our AirPods (go. macworld.com/arps), and if the millions of sales are any indication, you love them, too. But they're sort of...plain. Plain white case, plain white buds. Fortunately, there's a whole cottage industry of AirPod accessories to improve the look—and performance—of your wireless headphones. Here are some of the fun and useful ways to beef up your 'buds.

AIRPOD STRAPS

Yeah, the whole point of the AirPods is that they are *true* wireless headphones, not like the many dozens of Bluetooth earbuds sold over the years with a short cable stretching behind your head.

But what if you want that cable sometimes? What if you're worried that your workout is going to jostle one out of your ear and it'll drop and be gone forever? While we have never

experienced that, a little insurance isn't expensive. Clip-on straps typically cost around $10 or so.

Spigen's Compact AirPods Strap ($9.99 at go.macworld.com/spgn) is popular, but some of the lesser-known options add little magnets to hold your earbuds together when you're not wearing them.

There are two things you should know before buying a strap for your AirPods. First, the added weight tugging on the end of the stems may cause them to fall out of your ears more easily. AirPods stay in place in part because of their feather-light weight.

Second, you will of course have to take off the strap when you put your AirPods back in the case to charge them.

AIRPOD TIPS

Apple's earphone design is comfortable enough, but our ears come in many shapes and sizes. And if you bounce around a lot during your workout, it doesn't hurt to have a little extra something to keep the pods in place.

Slip-on silicone tips can serve double duty: They create a soft and snug fit in your ear canal (which often improves sound quality), and the wingtips hold on to the concha in your outer ear, keeping

EarBuddyz's 2.0 Apple Airpods and EarPods Covers and Hooks.

them in place through even the most vigorous activity. These really are some of the most useful AirPod accessories you can buy.

There are lots of brands out there selling slightly different styles, but they all share one thing in common: you'll have to remove them to put your AirPods back in the charging case. We recommend EarBuddyz's 2.0 Apple Airpods and EarPods Covers and Hooks ($19.95 at go.macworld.com/ebdz).

Make sure you buy a brand that has cutouts for the AirPods' sensors. Silicone

tips made for the regular wired EarPods that came with your iPhone will usually fit AirPods, but if they cover the sensors, your AirPods won't work properly. We've spent a lot of time with the latest EarBuddyz (available in white or black), and they're fantastic.

AIRPOD CASE COVERS

One of the secrets to AirPods' success is its tiny charging case—about the size of a pack of dental floss. It's easy to toss into a purse, bag, or pocket and so small, smooth, and rounded you can just forget about it.

But together with that "toss it in your bag" design comes "I tossed it in my bag" wear and tear. Before long your AirPods case will be covered in scratches, bumps,

PodSkinz AirPods Case Protective Silicone Cover and Skin for Apple Airpods Charging Case (Black).

scrapes, and scuffs. This is solved easily enough with a protective silicone case.

A basic silicone case costs about ten bucks. PodSkinz ($9.95 at go.macworld.com/podz) is a popular and well-received model from the same folks to make the excellent EarBuddyz, and they come in a variety of colors.

This is a perfect opportunity to add a little extra functionality to your AirPods. Some cases include keychains or carabiners, making them just a little more convenient to stow in your pocket or clip onto a bag. They cost a bit more, but it might be worth it.

Catalyst ($24.99 at go.macworld.com/ctly) is the popular choice in carabiner-case with lots of shock protection, and it comes in a variety of sporty colors, but it's a little more expensive than most of its competitors.

AIRPOD SKINS

Plain white doesn't do it for you? For around $15 or so, you can get a vinyl wrap that changes the look of your AirPods–for example, the Airpod Skins Protective Wraps, priced $11.95 at go.macworld.com/aspw.

Typically, these skins cover the stem and part of the "pod" part, but leave

Airpod Skins Protective Wraps.

plenty of the pod uncovered. The idea is to provide a normal, natural, comfortable fit and not to cover up any of the sensors.

Make sure the skins you buy don't cover any of the sensors, and are guaranteed to continue to allow your AirPods to fit inside the case. As long as the vinyl skin is fairly thin, that shouldn't be a problem.

Popular phone skin maker dbrand does not appear to make AirPod skins, but Slickwraps has dozens of colors and styles (go. macworld.com/slck), all for about $15. Plus, you build a skin with your own images and text for about $25.

COLORED AIRPODS

Skins not permanent enough for you? Not detailed enough? You can permanently change the color of the plastic on your AirPods! The latest solvent-based painting techniques can give you a product that you would swear is actually made out of different plastic. It's amazing, but it isn't cheap.

BlackPods (go.macworld.com/blpd) will sell you a set of AirPods in matte black or aero space grey for a substantial $299, or gloss black for $279. Already own a set of AirPods? You can ship them in to be customized for $99 (gloss black) or $119 (matte black).

Don't like black? ColorWare is taking preorders for its colored AirPods (go. macworld.com/clwr), but they won't ship until April 2018. You'll pay $299 for a pair

BlackPods look fantastic, but are priced to match.

You probably don't have to recharge your AirPod charging case very often. But when you do, wouldn't it be nice to just drop it on a dock instead of fussing with cables?

▬▬▬

of AirPods with a standard case, and an extra $40 if you want the case painted, too. But Colorware has the advantage of lots of different colors, regular and metallic, in both gloss and matte finishes. You can even make the case, left ear, and right ear different colors.

AIRPOD DOCKS

You probably don't have to recharge your AirPod charging case very often. But when you do, wouldn't it be nice to just drop it on a dock instead of fussing with cables?

Spigen has a popular and affordable dock that simply cradles your AirPods case–$13.99 at go. macworld.com/s313.

The price is right, but for about the same price you can get this well-received stand from Elago–$13.99 at go.macworld.com/eaps. We like the overall design of the Elago stand better, as

your AirPods case slides down about halfway into it. Plus, it comes in three colors.

If you want to get really fancy, and you have a lot of Apple stuff that charges in the same place every night, you can always go for a multi-device stand. YoFeW has one for $38.99 at go.macworld.com/yofw, which will charge your AirPods, Apple Watch, and iPhone all at once.

For each of these, you'll need to supply your own power adapters and cables, but if you're like us, you already have a permanent set hanging out on your desk or bedside table. ■
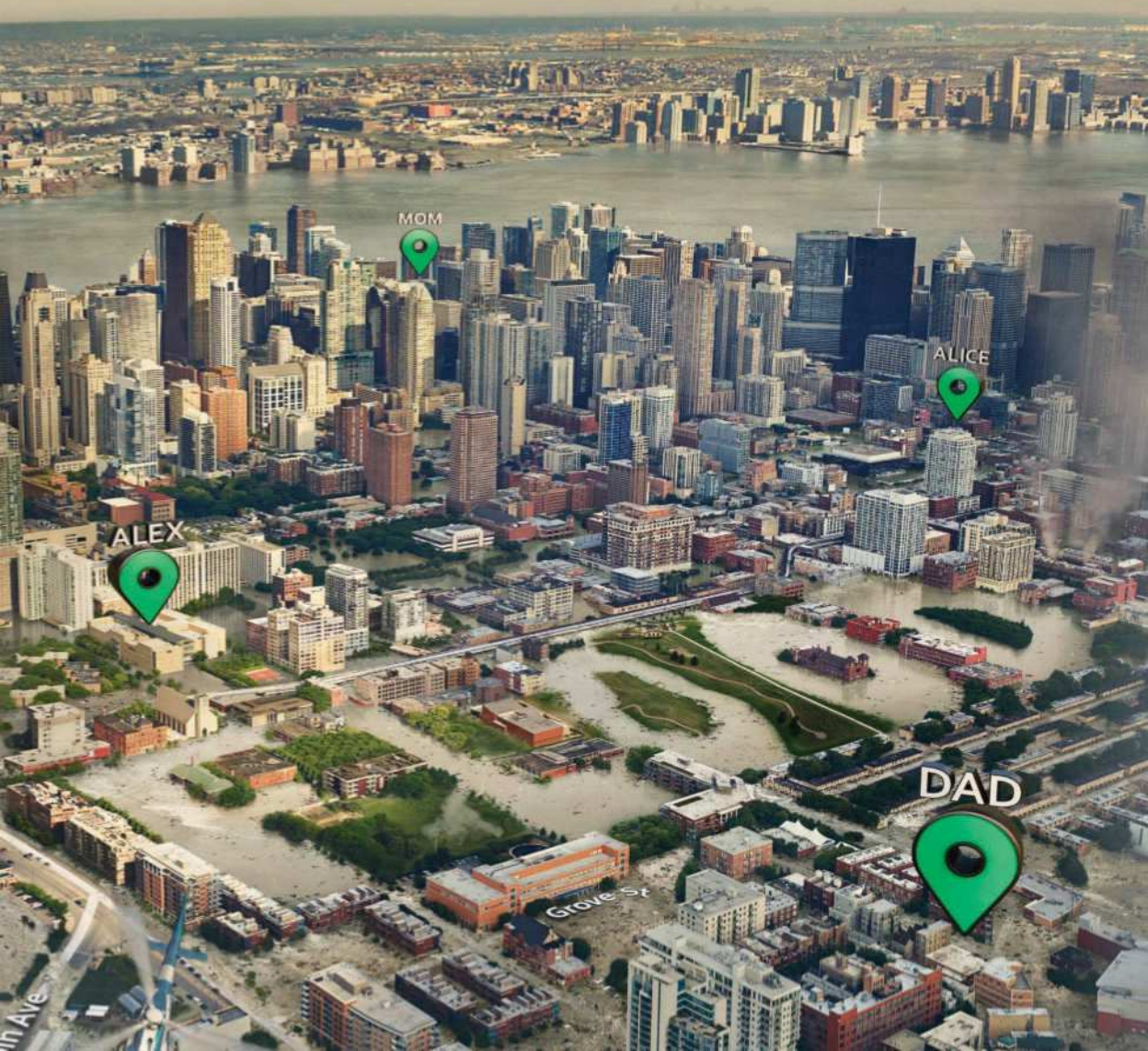

YoFeW's stand will charge all your devices.

Make sure you know where to find your family in an emergency

Ad Council | Ready ✓ | FEMA
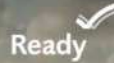
START YOUR PLAN AT READY.GOV

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Mac 911

Solutions to your most vexing Mac problems.

BY GLENN FLEISHMAN

Is iCloud required when you upgrade to iOS 11?

Safari for macOS lets you view the kind of data cached locally by websites in your browser. Select *Safari ➜ Preferences ➜ Privacy*, and then click M to remove them, or even go nuclear and click Remove All.

Apple certainly encourages iOS and macOS users to take advantage of its iCloud services, which vary in cost. A lot of the services rely on iCloud storage, and they're free…until you exceed the paltry 5GB of included service, at which point you pay monthly from $1 for 50GB to $10 for 1TB. That's not a terrible lot, but 5GB doesn't even cover the capacity of any of the iOS devices Apple sells. Other services, like iTunes Match ($25 per year) are not quite iCloud features, but rely on it.

Macworld reader Susan is still running iOS 10 and has apprehensions about upgrading to 11. She writes, "The information I find on iOS 11 suggests that it will automatically log me in to various things I do not use. Apple seems to be pushing a lot of features I am leery about,

especially too much storage of things in iCloud."

Fortunately, you're not forced to use anything. Apple doesn't turn on iCloud features by default, even though it offers them. You may be thinking of a feature new to iOS 11, Quick Start (go.macworld. com/qust), which is often called automatic setup. With that feature, you bring two iOS devices close together, one you're using as the template and one you're setting up. With a combination of Bluetooth to exchange some information and a visual pattern that requires the camera to complete, the transfer process starts. It's much more streamlined than other methods, and it brings most or all of your settings (you can choose some of those), including iCloud.

You can always review your iCloud service settings in iOS via *Settings* ➜ *account name* ➜ *iCloud*, and make


iOS prompts you when you first save an article to the Reading List.

sure there's nothing switched on that you didn't mean to enable.)

HOW TO SET OFFLINE ACCESS FOR SAFARI'S READING LIST FEATURE

Macworld reader Gavin, was on a cruise with his wife when she asked him, an IT professional, for help getting Safari's Reading List to work offline, as they had no internet connectivity. She'd saved articles
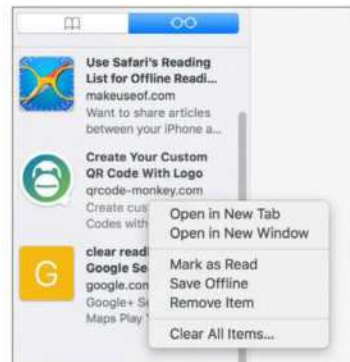
Safari in macOS lets you mark a preference or select articles one at a time for offline reading.

to it to read later. (I know: someone saved articles to read later and then actually tried to read those articles later. It happens! Even to me sometimes.)

She wasn't missing anything. Despite seemingly having all the right settings enabled to sync her Reading List across all the devices connected to her iCloud account, her marked items didn't show up and weren't available. What gives?

Turns out, Safari for both macOS and iOS have a setting you may never have noticed, since we so often have internet access (and perhaps so rarely consult Reading List).

In Safari for macOS, choose Safari ➔ Preferences and then click Advanced. You can then check next to the Reading List label Save Articles For Offline Reading. If that option isn't checked, you can also view the Reading List in the sidebar, right-click an item, and choose Save Offline.

With iOS Safari, you navigate to Settings ➔ Safari and swipe down to the bottom, and then tap the switch to on for Automatically

Save Offline. If you have that option disabled, which it is by default, you're prompted the first time you choose Add to Reading List from the Sharing sheet whether or not to save items from then for offline reading automatically.

HOW TO SIMULATE THE MAC'S DESKTOP FOLDER TO GET AROUND ICLOUD CONTINUOUS SYNC

With macOS 10.12 Sierra, Apple introduced a way to offload some of your Mac's storage dynamically using iCloud. The Documents & Desktop option had the most impact, in that it could not just sync your home folder's Documents and Desktop folders to iCloud and make them available through iOS, iCloud.com, and other Macs, but also delete the least-used
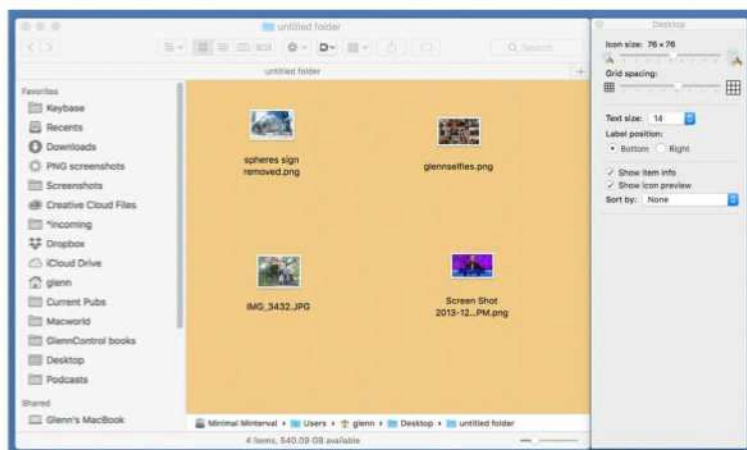
Create a faux Desktop folder to avoid syncing with iCloud.

and oldest documents from your Mac if local storage was under pressure. The copy kept in iCloud would be available on demand, so accessing an infrequent document retrieves it.

Macworld reader Chris is running up against this feature, because they use their Desktop for their active working documents. "Files I'm working on go there until finished, and then are moved to their various folders," he writes. However, he often works with large Photoshop files. This leads to excessive syncing.

Chris would prefer to only sync his Documents folder, and wonders if there's a way to do so. Unfortunately, Apple pairs Documents and the Desktop together. Even if you use the Finder spaces feature to create multiple desktops, macOS still stores the actual items in the same Desktop folder.

You could switch to another syncing service, like Dropbox, which only syncs the Dropbox folder, and store your documents there. You could also use a regular folder to simulate what you rely on with the Desktop through these steps:
> Create a new folder and place it anywhere.
> Name it something identifiable, like "Working Desktop."
> Select View ➜ Icons for a Desktop-like icon view.
> Select Show ➜ Show View Options, and

set a background color or picture.
> Add the folder to your sidebar so it can be reached from any open or save dialog.
> Click the green full-screen button on the folder's window in the Finder.

This might be close enough to what you need to let you keep using Desktop & Documents for synchronization without the constant Internet file updates to iCloud.

ANOTHER WARNING: DON'T CONVERT YOUR TIME MACHINE VOLUME FROM HFS+ TO APFS

Months after the release of macOS 10.13 High Sierra, folks are still having problems with limitations of the new Apple File System (go.macworld.com/4pf5) (APFS) format required for SSDs that run High Sierra, and which you can optionally upgrade other drives to use. That includes your columnist, who biffed a Time Machine question (go.macworld.com/tima) that's now updated for accuracy.

Time Machine can work with APFS volumes, but the shape looks like this:
> Time Machine can archive files from both HFS+ and APFS volumes.
> Time Machine volumes must be HFS+.
> You can use Disk Utility to upgrade a Time Machine HFS+ volume to APFS without a warning. You'd think Disk Utility would detect the Time Machine backup and stop you, but it doesn't.
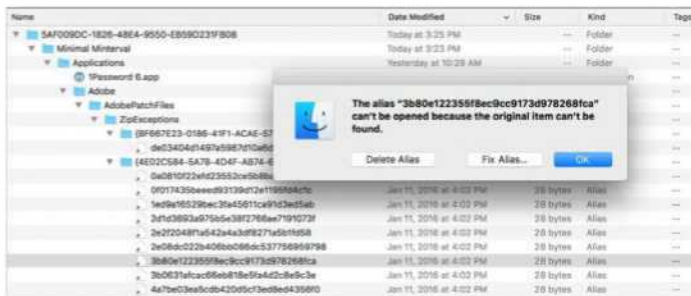
A Time Machine HFS+ volume is rendered effectively useless when converted to APFS.

> Once upgraded to APFS, the Time Machine backup archive is mostly useless, even though files aren't destroyed.

The archive becomes useless, because APFS doesn't support hard links. These are a special kind of alias. A soft link is a pointer to a destination file that looks to the operating system like a pointer. A hard link looks to the operating system like an actual file, even though it's just a pointer. This allows a single copy of a file to be in a filesystem, but have many pointers that reference it, and they can be manipulated and copied as if they exist in multiple places.

Time Machine backups start with a full backup of a drive for every file, and then in subsequent backups it creates folder-based snapshots that use a mix of hard links for files that haven't changed and new files for ones that have. This makes Time Machine accessible through the Finder as well as through the Time Machine app's graphical interface.

Because APFS lacks hard link support, converting an HFS+ volume to APFS destroys those links and replaces them with broken soft-link aliases. Thus, *Macworld* reader Yousif noted to me on Twitter that he'd upgraded his HFS+ Time Machine volume to APFS, but he couldn't copy the backups.backupdb folder, because the aliases were broken. He received a "the operation can't be completed because it isn't supported" error. I tried this with individual files that existed on the APFS volume and were not aliases, and received the same error.

It appears that all the individual copies of files that Time Machine made are intact, so you could manually browse folders to find older versions. That's better than entirely losing those archives, but it's not fun, and being unable to copy them directly make them near useless. There doesn't appear to be any way yet (and possibly ever) to copy that folder to another drive or to restore the hard links, though I would think a developer might be able to write a utility that could handle it.

You can reformat an APFS drive back to HFS+, but it requires erasing the drive

completely. Time Machine will offer to handle the erasure and formatting if you try to use an APFS drive for Time Machine. But that, of course, doesn't restore your archives, either.

There's no advantage to using APFS on hard drives, and the filesystem isn't ready for (or maybe will never come to?) Fusion drives that pair an SSD and hard drive for affordability, so I reiterate my advice: don't upgrade drives manually to APFS.

WHY YOU CAN'T USE THE IMAGE CAPTURE MAC APP TO DELETE PHOTOS ON YOUR IOS DEVICES

I often recommend the not-quite-hidden app Image Capture to people having trouble getting images transferred or sync from iOS devices, especially if they're using iTunes sync. It's a way to peer into photo storage on an iOS device, as well as camera cards and other places. (It handles scanners, too, but some readers have found in High Sierra that they had to use Preview with their scanner.)

However, *Macworld* reader Larry wrote in asking about an article from July 2017 in which we noted that Image Capture also let you delete images directly from an iOS device. (Actually, it was another publication that wrote that article, but we're happy to answer the question.)

Larry asks, "There is no delete button

and delete in the Edit menu is grayed out. What am I doing wrong?"

If you're using iCloud Photo Library on your iOS device, Image Capture disables the Delete button, as iCloud manages all the images and videos stored on that iOS device. If you could delete from Image Capture, it would have to prompt you about deleting from all other devices connected to iCloud Photo Library and from iCloud.com, and that goes beyond the task level assigned to Image Capture.

With iCloud Photo Library enabled, you have to use iCloud.com, or an iOS device or Mac with the feature enabled to delete images. Those images will then be deleted off every connected device and iCloud.com. ■

Ask Mac 911